

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|--------------------------|---------------|
| 4740                          | Fl. 23    | -47306.4  | 9249.6                   | 211.2                    | 871.6                    |               |
|                               | sc 22     | -51534.9  | 9085.2                   | 198.4                    | -1238.1                  |               |
|                               | sc Med 23 | -47306.4  | 9249.6                   | 211.2                    | -1056                    |               |
|                               | sc Med 23 | -47306.4  | 9249.6                   | 211.2                    | -515                     |               |
| Combinazioni Frequenti        |           |           |                          |                          |                          |               |
| 3903                          | Fl. 28    | -48142.0  | -7006.4                  | -57.9                    | 402.4                    |               |
|                               | sc 27     | -49883.7  | -6986.6                  | -48.9                    | -999.8                   |               |
|                               | sc Max 27 | -49883.7  | -6986.6                  | -48.9                    | -81.9                    |               |
|                               | sc Med 27 | -49883.7  | -6986.6                  | -48.9                    | -40.7                    |               |
| 4740                          | Fl. 28    | -46529.5  | 7619.5                   | 57.5                     | 540.5                    |               |
|                               | sc 27     | -48571.2  | 7608.4                   | 47.6                     | -1054.1                  |               |
|                               | sc Max 27 | -48571.2  | 7608.4                   | 47.6                     | -87.6                    |               |
|                               | sc Med 27 | -48571.2  | 7608.4                   | 47.6                     | -43.5                    |               |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                          |               |
| 3903                          | Fl. 32    | -48433.7  | -6753.9                  | -46.8                    | 351.1                    |               |
|                               | sc 32     | -48433.7  | -6753.9                  | -46.8                    | -967.7                   |               |
|                               | sc Max 32 | -48433.7  | -6753.9                  | -46.8                    | -79.2                    |               |
|                               | sc Med 32 | -48433.7  | -6753.9                  | -46.8                    | -39.3                    |               |
| 4740                          | Fl. 32    | -47121.2  | 7356.0                   | 45.6                     | 483.8                    |               |
|                               | sc 32     | -47121.2  | 7356.0                   | 45.6                     | -1020.0                  |               |
|                               | sc Max 32 | -47121.2  | 7356.0                   | 45.6                     | -84.7                    |               |
|                               | sc Med 32 | -47121.2  | 7356.0                   | 45.6                     | -42.1                    |               |

▲Pilastro: 4740/5577 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm²] | σ <sub>13</sub><br>[kg/cm²] | σ <sub>14</sub><br>[kg/cm²] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-------|
| 4740 | 17   | -29744.0  | -5519.3                  | 1013.7                   | 1.00                     | 1.00                        | 0.35                        |                             |       |
| 5577 | 17   | -28900.2  | 5985.3                   | -1047.9                  | 1.00                     | 1.00                        | 0.37                        |                             |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | V <sub>12</sub><br>[kg] | V <sub>13</sub><br>[kg] | Staffe    |
|-----------|----------|--------------------------|--------------------------|-------------------------|-------------------------|-----------|
| 0.13      | 3.63     | 30799.1                  | 13595.1                  | 4403.4                  | 13595.1                 | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|--------------------------|---------------|
| Combinazioni Rare             |           |           |                          |                          |                          |               |
| 4740                          | Fl. 23    | -34355.7  | -3980.0                  | -105.4                   | 487.2                    |               |
|                               | sc 22     | -37702.5  | -3935.9                  | -96.9                    | -1062.2                  |               |
|                               | sc Max 22 | -37702.5  | -3935.9                  | -96.9                    | -94.3                    |               |
|                               | sc Med 22 | -37702.5  | -3935.9                  | -96.9                    | -46.2                    |               |
| 5577                          | Fl. 23    | -33511.9  | 4292.1                   | 110.6                    | 616.4                    |               |
|                               | sc 22     | -36558.7  | 4256.5                   | 101.4                    | -1112.7                  |               |
|                               | sc Max 22 | -36558.7  | 4256.5                   | 101.4                    | -100.5                   |               |
|                               | sc Med 22 | -36558.7  | 4256.5                   | 101.4                    | -49.3                    |               |
| Combinazioni Frequenti        |           |           |                          |                          |                          |               |
| 4740                          | Fl. 28    | -33922.7  | -3319.6                  | -29.1                    | 269.4                    |               |
|                               | sc 27     | -35135.0  | -3325.9                  | -23.2                    | -916.3                   |               |
|                               | sc Max 27 | -35135.0  | -3325.9                  | -23.2                    | -79.8                    |               |
|                               | sc Med 27 | -35135.0  | -3325.9                  | -23.2                    | -39.7                    |               |
| 5577                          | Fl. 28    | -33078.9  | 3397.5                   | 31.0                     | 377.7                    |               |
|                               | sc 27     | -34291.3  | 3608.7                   | 24.6                     | -959.1                   |               |
|                               | sc Max 27 | -34291.3  | 3608.7                   | 24.6                     | -85.1                    |               |
|                               | sc Med 27 | -34291.3  | 3608.7                   | 24.6                     | -42.3                    |               |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                          |               |
| 4740                          | Fl. 32    | -34061.4  | -3216.3                  | -22.1                    | 233.4                    |               |
|                               | sc 32     | -34061.4  | -3216.3                  | -22.1                    | -886.8                   |               |
|                               | sc Max 32 | -34061.4  | -3216.3                  | -22.1                    | -77.2                    |               |
|                               | sc Med 32 | -34061.4  | -3216.3                  | -22.1                    | -38.4                    |               |
| 5577                          | Fl. 32    | -33217.6  | 3490.1                   | 23.4                     | 382.2                    |               |
|                               | sc 32     | -33217.6  | 3490.1                   | 23.4                     | -928.0                   |               |
|                               | sc Max 32 | -33217.6  | 3490.1                   | 23.4                     | -82.3                    |               |
|                               | sc Med 32 | -33217.6  | 3490.1                   | 23.4                     | -41.0                    |               |

▲Pilastro: 3066/3903 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm²] | σ <sub>13</sub><br>[kg/cm²] | σ <sub>14</sub><br>[kg/cm²] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-------|
| 3066 | 36   | -47751.4  | -12078.7                 | -2.4                     | 1.00                     | 1.00                        | 0.37                        |                             |       |
| 3903 | 36   | -45938.9  | 12278.9                  | -13.4                    | 1.00                     | 1.00                        | 0.38                        |                             |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | V <sub>12</sub><br>[kg] | V <sub>13</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|-------------------------|-------------------------|------------|
| 0.13      | 3.63     | 20712.7                  | 22686.9                  | 8786.1                  | 19500.5                 | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|--------------------------|---------------|
| Combinazioni Rare             |           |           |                          |                          |                          |               |
| 3066                          | Fl. 23    | -62816.3  | -7454.5                  | -223.0                   | 257.5                    |               |
|                               | sc 22     | -68170.5  | -7185.9                  | -214.2                   | -1149.0                  |               |
|                               | sc Max 23 | -62816.3  | -7454.5                  | -223.0                   | -91.9                    |               |
|                               | sc Med 23 | -62816.3  | -7454.5                  | -223.0                   | -44.8                    |               |
| 3903                          | Fl. 23    | -61503.8  | 7713.8                   | 214.3                    | 317.8                    |               |
|                               | sc 22     | -66558.0  | 7465.5                   | 204.5                    | -1167.0                  |               |
|                               | sc Max 23 | -61503.8  | 7713.8                   | 214.3                    | -93.9                    |               |
|                               | sc Med 23 | -61503.8  | 7713.8                   | 214.3                    | -45.8                    |               |
| Combinazioni Frequenti        |           |           |                          |                          |                          |               |
| 3066                          | Fl. 28    | -62662.3  | -5920.6                  | -70.1                    | 30.0                     |               |
|                               | sc 27     | -65014.6  | -5854.9                  | -42.4                    | -987.5                   |               |
|                               | sc Max 27 | -65014.6  | -5854.9                  | -42.4                    | -76.8                    |               |
|                               | sc Med 27 | -65014.6  | -5854.9                  | -42.4                    | -38.1                    |               |
| 3903                          | Fl. 28    | -61349.8  | 6176.7                   | 61.9                     | 76.3                     |               |
|                               | sc 27     | -63702.1  | 6119.9                   | 53.8                     | -1002.1                  |               |
|                               | sc Max 27 | -63702.1  | 6119.9                   | 53.8                     | -78.4                    |               |
|                               | sc Med 27 | -63702.1  | 6119.9                   | 53.8                     | -39.0                    |               |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                          |               |
| 3066                          | Fl. 32    | -63186.0  | -5556.1                  | -60.2                    | -7.2                     |               |
|                               | sc 32     | -63186.0  | -5556.1                  | -60.2                    | -956.6                   |               |
|                               | sc Max 32 | -63186.0  | -5556.1                  | -60.2                    | -74.3                    |               |
|                               | sc Med 32 | -63186.0  | -5556.1                  | -60.2                    | -36.9                    |               |
| 3903                          | Fl. 32    | -61873.5  | 5913.8                   | 51.7                     | 36.1                     |               |
|                               | sc 32     | -61873.5  | 5913.8                   | 51.7                     | -970.4                   |               |
|                               | sc Max 32 | -61873.5  | 5913.8                   | 51.7                     | -75.9                    |               |
|                               | sc Med 32 | -61873.5  | 5913.8                   | 51.7                     | -37.7                    |               |

▲Pilastro: 3903/4740 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm²] | σ <sub>13</sub><br>[kg/cm²] | σ <sub>14</sub><br>[kg/cm²] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-------|
| 3903 | 36   | -37971.6  | -13002.5                 | 68.0                     | 1.00                     | 1.00                        | 0.42                        |                             |       |
| 4740 | 36   | -36559.1  | 13867.2                  | -82.9                    | 1.00                     | 1.00                        | 0.45                        |                             |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | V <sub>12</sub><br>[kg] | V <sub>13</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|-------------------------|-------------------------|------------|
| 0.13      | 3.63     | 19788.2                  | 22686.9                  | 8619.8                  | 19500.5                 | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | M <sub>14</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------|-----------|-----------|--------------------------|--------------------------|--------------------------|---------------|
| Combinazioni Rare |           |           |                          |                          |                          |               |
| 3903              | Fl. 23    | -8553.4   | -8553.4                  | -205.3                   | 703.9                    |               |
|                   | sc 22     | -52847.4  | -8375.6                  | -194.0                   | -1174.0                  |               |
|                   | sc Max 23 | -8553.4   | -8553.4                  | -205.3                   | -98.8                    |               |
|                   | sc Med 23 | -8553.4   | -8553.4                  | -205.3                   | -48.2                    |               |

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
|                               | sc Max 22 | -180238.2 | -3051.2                  | -578.1                   | -78.4                      |
|                               | sc Med 22 | -180239.2 | -3051.2                  | -578.1                   | -64.9                      |
| 561                           | Fl 23     | -165897.7 | 525.2                    | 633.3                    | -615.7                     |
|                               | sc Max 22 | -178270.5 | 4676.7                   | 641.5                    | -1196.7                    |
|                               | sc Max 22 | -178270.5 | 4676.7                   | 641.5                    | -83.4                      |
|                               | sc Med 22 | -178270.5 | 4676.7                   | 641.5                    | -64.2                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 14                            | Fl 28     | -166728.0 | -1871.0                  | -305.5                   | -803.3                     |
|                               | sc 31     | -169941.9 | -2322.3                  | -95.9                    | -1019.8                    |
|                               | sc Max 31 | -169941.9 | -2322.3                  | -95.9                    | -69.4                      |
|                               | sc Med 27 | -175515.9 | -1365.9                  | -281.0                   | -62.4                      |
| 561                           | Fl 31     | -167973.2 | 4142.7                   | 269.8                    | -717.9                     |
|                               | sc 31     | -167973.2 | 4142.7                   | 269.8                    | -1095.7                    |
|                               | sc Max 31 | -167973.2 | 4142.7                   | 269.8                    | -75.8                      |
|                               | sc Med 27 | -171551.2 | 3100.9                   | 454.0                    | -61.7                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 14                            | Fl 32     | -168850.6 | -1330.5                  | -272.8                   | -839.2                     |
|                               | sc 32     | -168850.6 | -1330.5                  | -272.8                   | -983.9                     |
|                               | sc Max 32 | -168850.6 | -1330.5                  | -272.8                   | -66.8                      |
|                               | sc Med 32 | -168850.6 | -1330.5                  | -272.8                   | -60.8                      |
| 561                           | Fl 32     | -166881.8 | 2988.8                   | 443.0                    | -749.1                     |
|                               | sc 32     | -166881.8 | 2988.8                   | 443.0                    | -1052.7                    |
|                               | sc Max 32 | -166881.8 | 2988.8                   | 443.0                    | -72.6                      |
|                               | sc Med 32 | -166881.8 | 2988.8                   | 443.0                    | -60.1                      |

▲Pilastro: 561/1398 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0'ø 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub> | σ <sub>13</sub> | Sd/σr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 561  | 1    | -190209.3 | -10023.2                 | -886.9                   | 1.00            | 1.00            | 0.34  |
| 1398 | 1    | -187649.9 | 11688.7                  | 777.9                    | 1.00            | 1.00            | 0.34  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>int</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ext</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 0.92     | 39064.2                  | 60284.1                  | 86721                    | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 39064.2                  | 44290.4                  | 86721                    | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 39064.2                  | 60284.1                  | 86721                    | 33178.0                  | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub> | σ <sub>13</sub> |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|-----------------|-----------------|
| Combinazioni Rare             |           |           |                          |                          |                 |                 |
| 561                           | Fl 23     | -133473.2 | -8339.4                  | -620.9                   | -32.9           | -1118.8         |
|                               | sc 22     | -142795.3 | -7407.6                  | -645.4                   | -79.8           | -51.4           |
|                               | sc Med 22 | -142795.3 | -7407.6                  | -645.4                   | -51.4           | -273.1          |
|                               | Fl 23     | -129904.4 | 9431.2                   | 951.9                    | -1154.0         | -82.7           |
|                               | sc Max 22 | -140826.6 | 8637.4                   | 951.9                    | -50.7           | -48.6           |
|                               | sc Med 22 | -140826.6 | 8637.4                   | 951.9                    | -48.6           | -48.6           |
| Combinazioni Frequenti        |           |           |                          |                          |                 |                 |
| 561                           | Fl 30     | -132465.5 | -6209.5                  | -483.9                   | -434.9          | -1024.4         |
|                               | sc 27     | -136981.0 | -5597.8                  | -487.2                   | -70.7           | -49.3           |
|                               | sc Max 27 | -136981.0 | -5597.8                  | -487.2                   | -49.3           | -390.6          |
|                               | sc Med 27 | -136981.0 | -5597.8                  | -487.2                   | -390.6          | -1027.1         |
| 1398                          | Fl 28     | -129693.8 | 6867.8                   | 395.9                    | -72.8           | -396.1          |
|                               | sc 27     | -135012.2 | 6986.9                   | 396.1                    | -72.8           | -396.1          |
|                               | sc Max 27 | -135012.2 | 6986.9                   | 396.1                    | -72.8           | -396.1          |
|                               | sc Med 27 | -135012.2 | 6986.9                   | 396.1                    | -72.8           | -396.1          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                 |                 |
| 561                           | Fl 32     | -133229.3 | -5387.5                  | -475.7                   | -465.6          | -972.7          |
|                               | sc 32     | -133229.3 | -5387.5                  | -475.7                   | -68.6           | -47.9           |
|                               | sc Max 32 | -133229.3 | -5387.5                  | -475.7                   | -47.9           | -421.1          |
|                               | sc Med 32 | -133229.3 | -5387.5                  | -475.7                   | -421.1          | -996.1          |
| 1398                          | Fl 32     | -131260.5 | 6341.7                   | 386.7                    | -86.7           | -996.1          |
|                               | sc 32     | -131260.5 | 6341.7                   | 386.7                    | -86.7           | -996.1          |

▲Pilastro: 5577/6414 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >

Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub> | σ <sub>13</sub> | Sd/σr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 5577 | 36   | -22249.1  | -6732.7                  | -1084.6                  | 1.00            | 1.00            | 0.44  |
| 6414 | 36   | -21405.4  | 7118.1                   | 1113.2                   | 1.00            | 1.00            | 0.47  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>int</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ext</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 10322.8                  | 13595.1                  | 4861.8                   | 13595.1                  | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub> | σ <sub>13</sub> |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|-----------------|-----------------|
| Combinazioni Rare             |           |           |                          |                          |                 |                 |
| 5577                          | Fl 23     | -20281.7  | -4896.1                  | -112.7                   | 1222.6          | -1099.3         |
|                               | sc 27     | -23057.6  | -4934.7                  | -101.8                   | -109.6          | -53.7           |
|                               | sc Max 22 | -23057.6  | -4934.7                  | -101.8                   | -109.6          | -53.7           |
|                               | sc Med 22 | -23057.6  | -4934.7                  | -101.8                   | -109.6          | -53.7           |
| 6414                          | Fl 23     | -19437.9  | 5228.2                   | 113.8                    | 1374.0          | -1155.1         |
|                               | sc 22     | -22213.8  | 5314.0                   | 101.4                    | -117.0          | -57.4           |
|                               | sc Max 22 | -22213.8  | 5314.0                   | 101.4                    | -117.0          | -57.4           |
|                               | sc Med 22 | -22213.8  | 5314.0                   | 101.4                    | -117.0          | -57.4           |
| Combinazioni Frequenti        |           |           |                          |                          |                 |                 |
| 5577                          | Fl 28     | -20283.8  | -4191.7                  | -33.9                    | 942.4           | -941.2          |
|                               | sc 27     | -21037.9  | -4226.1                  | -26.8                    | -93.0           | -46.2           |
|                               | sc Max 27 | -21037.9  | -4226.1                  | -26.8                    | -93.0           | -46.2           |
|                               | sc Med 27 | -21037.9  | -4226.1                  | -26.8                    | -93.0           | -46.2           |
| 6414                          | Fl 28     | -19440.1  | 4512.3                   | 32.1                     | 1087.1          | -988.1          |
|                               | sc 27     | -20194.1  | 4555.4                   | 24.3                     | -99.3           | -49.4           |
|                               | sc Max 27 | -20194.1  | 4555.4                   | 24.3                     | -99.3           | -49.4           |
|                               | sc Med 27 | -20194.1  | 4555.4                   | 24.3                     | -99.3           | -49.4           |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                 |                 |
| 5577                          | Fl 32     | -20339.7  | -4086.6                  | -25.5                    | 899.9           | -910.0          |
|                               | sc 32     | -20339.7  | -4086.6                  | -25.5                    | -89.9           | -44.7           |
|                               | sc Max 32 | -20339.7  | -4086.6                  | -25.5                    | -44.7           | -950.0          |
|                               | sc Med 32 | -20339.7  | -4086.6                  | -25.5                    | -950.0          | -96.0           |
| 6414                          | Fl 32     | -19496.0  | 4404.4                   | 23.1                     | 1043.2          | -950.0          |
|                               | sc 32     | -19496.0  | 4404.4                   | 23.1                     | -96.0           | -47.7           |
|                               | sc Max 32 | -19496.0  | 4404.4                   | 23.1                     | -96.0           | -47.7           |
|                               | sc Med 32 | -19496.0  | 4404.4                   | 23.1                     | -96.0           | -47.7           |

▲Pilastro: 14/561 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0'ø 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub> | σ <sub>13</sub> | Sd/σr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 14   | 20   | -223212.3 | 10916.8                  | -2202.0                  | 1.00            | 81.40           | 0.39  |
| 561  | 1    | -273704.3 | 6384.3                   | 886.0                    | 1.00            | 1.00            | 0.38  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>int</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ext</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 0.92     | 32022.1                  | 60284.1                  | 8537.5                   | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 32022.1                  | 44290.4                  | 8537.5                   | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 32022.1                  | 60284.1                  | 8537.5                   | 33178.0                  | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb  | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub> | σ <sub>13</sub> |
|-------------------|-------|-----------|--------------------------|--------------------------|-----------------|-----------------|
| Combinazioni Rare |       |           |                          |                          |                 |                 |
| 14                | Fl 23 | -165866.4 | -4186.0                  | -619.1                   | -682.8          | -1135.9         |
|                   | sc 22 | -180239.2 | -3051.2                  | -578.1                   | -78.4           | -64.9           |

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |           |           |                          |                          |                            |
| 2235                          | Fl. 23    | -81730.5  | -6674.3                  | -288.6                   | -56.4                      |
|                               | sfc 22    | -88600.7  | -6364.9                  | -263.3                   | -122.7                     |
|                               | sc Max 22 | -88600.7  | -6364.9                  | -263.3                   | -93.6                      |
|                               | sc Med 22 | -88600.7  | -6364.9                  | -263.3                   | -45.9                      |
| 3072                          | Fl. 23    | -80418.0  | 6917.3                   | 244.3                    | -23.3                      |
|                               | sfc 22    | -87288.2  | 6631.1                   | 214.4                    | -123.0                     |
|                               | sc Max 22 | -87288.2  | 6631.1                   | 214.4                    | -94.5                      |
|                               | sc Med 22 | -87288.2  | 6631.1                   | 214.4                    | -46.3                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 2235                          | Fl. 28    | -81274.3  | -5260.3                  | -130.6                   | -190.3                     |
|                               | sfc 27    | -84397.3  | -5173.2                  | -115.3                   | -1080.3                    |
|                               | sc Max 27 | -84397.3  | -5173.2                  | -115.3                   | -81.6                      |
|                               | sc Med 27 | -84397.3  | -5173.2                  | -115.3                   | -43.4                      |
| 3072                          | Fl. 28    | -79561.8  | 5508.9                   | 85.9                     | -164.1                     |
|                               | sfc 27    | -83084.8  | 5432.4                   | 68.4                     | -1086.9                    |
|                               | sc Max 27 | -83084.8  | 5432.4                   | 68.4                     | -82.4                      |
|                               | sc Med 27 | -83084.8  | 5432.4                   | 68.4                     | -42.8                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 2235                          | Fl. 32    | -82059.2  | -4996.1                  | -112.3                   | -219.4                     |
|                               | sfc 32    | -82059.2  | -4996.1                  | -112.3                   | -1047.7                    |
|                               | sc Max 32 | -82059.2  | -4996.1                  | -112.3                   | -79.1                      |
|                               | sc Med 32 | -82059.2  | -4996.1                  | -112.3                   | -42.2                      |
| 3072                          | Fl. 32    | -80746.7  | 5248.6                   | 66.8                     | -193.0                     |
|                               | sfc 32    | -80746.7  | 5248.6                   | 66.8                     | -1053.9                    |
|                               | sc Max 32 | -80746.7  | 5248.6                   | 66.8                     | -79.8                      |
|                               | sc Med 32 | -80746.7  | 5248.6                   | 66.8                     | -41.6                      |

▲Pilastrò: 3072/3909 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 3072 | 17   | -48098.2  | -11954.3                 | -321.6                   | 1.00                    | 1.00                    | 0.37  |
| 3909 | 17   | -46785.7  | 12098.6                  | 297.6                    | 1.00                    | 1.00                    | 0.38  |

▲Verifiche a Presso-Flessione S.L.U.

| Da<br>[m] | A<br>[m] | V <sub>12</sub><br>[kg] | V <sub>13</sub><br>[kg] | V <sub>12</sub><br>[kg] | V <sub>13</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>13</sub><br>[kg/cm <sup>2</sup> ] |
|-----------|----------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| 0.13      | 3.63     | 2074.3                  | 22686.9                 | 6571.7                  | 19500.5                 | ø 12/12.5'               |                          |                                          |                                          |

▲Verifiche a Taglio

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|
| Combinazioni Rare             |           |           |                          |                          |                                          |
| 3072                          | Fl. 23    | -63690.9  | -7358.7                  | -169.5                   | 2240                                     |
|                               | sfc 22    | -69089.5  | -7132.5                  | -132.2                   | -1141.1                                  |
|                               | sc Max 23 | -63690.9  | -7358.7                  | -169.5                   | -90.7                                    |
|                               | sc Med 23 | -63690.9  | -7358.7                  | -169.5                   | -44.5                                    |
| 3909                          | Fl. 23    | -62378.4  | 7555.6                   | 135.4                    | 269.9                                    |
|                               | sfc 22    | -67777.0  | 7343.3                   | 94.5                     | -1149.1                                  |
|                               | sc Max 23 | -62378.4  | 7555.6                   | 135.4                    | -91.8                                    |
|                               | sc Med 23 | -62378.4  | 7555.6                   | 135.4                    | -45.2                                    |
| Combinazioni Frequenti        |           |           |                          |                          |                                          |
| 3072                          | Fl. 28    | -63115.9  | -5986.7                  | -15.6                    | 27.5                                     |
|                               | sfc 27    | -65478.1  | -5939.6                  | 5.5                      | -992.8                                   |
|                               | sc Max 27 | -65478.1  | -5939.6                  | 5.5                      | -77.2                                    |
|                               | sc Med 27 | -65478.1  | -5939.6                  | 5.5                      | -38.6                                    |
| 3909                          | Fl. 28    | -61803.4  | 6178.7                   | -19.4                    | 66.7                                     |
|                               | sfc 27    | -64165.6  | 6337.5                   | -42.1                    | -1005.6                                  |
|                               | sc Max 27 | -64165.6  | 6337.5                   | -42.1                    | -78.6                                    |
|                               | sc Med 27 | -64165.6  | 6337.5                   | -42.1                    | -39.1                                    |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |
| 3072                          | Fl. 32    | -63640.6  | -5742.0                  | 4.9                      | -77.7                                    |
|                               | sfc 32    | -63640.6  | -5742.0                  | 4.9                      | -962.1                                   |
|                               | sc Max 32 | -63640.6  | -5742.0                  | 4.9                      | -74.7                                    |
|                               | sc Med 32 | -63640.6  | -5742.0                  | 4.9                      | -37.3                                    |
| 3909                          | Fl. 32    | -62328.1  | 5934.7                   | -40.4                    | 32.4                                     |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 1398              | sc Max 32 | -131260.5 | 6341.7                   | 386.7                    | 70.6                       |
|                   | sc Med 32 | -131260.5 | 6341.7                   | 386.7                    | -47.2                      |

▲Pilastrò: 1398/2235 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 2235 | 1    | -150598.2 | -5553.6                  | -467.3                   | 1.00                    | 1.00                    | 0.38  |
|      | 1    | -148891.9 | 6009.9                   | 450.0                    | 1.00                    | 1.00                    | 0.40  |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|
| Combinazioni Frequenti        |           |           |                          |                          |                                          |
| 1398                          | Fl. 23    | -104138.1 | -4444.7                  | -341.5                   | -413.6                                   |
|                               | sfc 22    | -112959.0 | -4105.4                  | -332.0                   | -1234.2                                  |
|                               | sc Max 22 | -112959.0 | -4105.4                  | -332.0                   | -90.5                                    |
|                               | sc Med 22 | -112959.0 | -4105.4                  | -332.0                   | -58.1                                    |
| 2235                          | Fl. 23    | -102825.6 | 5463.5                   | 334.0                    | -321.8                                   |
|                               | sfc 22    | -111646.5 | 5117.7                   | 318.5                    | -1304.7                                  |
|                               | sc Max 22 | -111646.5 | 5117.7                   | 318.5                    | -96.9                                    |
|                               | sc Med 22 | -111646.5 | 5117.7                   | 318.5                    | -57.5                                    |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |
| 1398                          | Fl. 28    | -103875.7 | -3281.6                  | -202.0                   | -518.3                                   |
|                               | sfc 27    | -107978.3 | -3164.4                  | -193.8                   | -1107.1                                  |
|                               | sc Max 27 | -107978.3 | -3164.4                  | -193.8                   | -80.0                                    |
|                               | sc Med 27 | -107978.3 | -3164.4                  | -193.8                   | -55.6                                    |
| 2235                          | Fl. 28    | -102563.2 | 4153.2                   | 185.3                    | -439.2                                   |
|                               | sfc 27    | -106665.8 | 4040.6                   | 174.5                    | -1166.1                                  |
|                               | sc Max 27 | -106665.8 | 4040.6                   | 174.5                    | -85.4                                    |
|                               | sc Med 27 | -106665.8 | 4040.6                   | 174.5                    | -54.9                                    |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |
| 1398                          | Fl. 32    | -104995.9 | -3050.2                  | -188.9                   | -546.8                                   |
|                               | sfc 32    | -104995.9 | -3050.2                  | -188.9                   | -1074.4                                  |
|                               | sc Max 32 | -104995.9 | -3050.2                  | -188.9                   | -77.6                                    |
|                               | sc Med 32 | -104995.9 | -3050.2                  | -188.9                   | -54.0                                    |
| 2235                          | Fl. 32    | -103683.4 | 3898.2                   | 170.0                    | -469.9                                   |
|                               | sfc 32    | -103683.4 | 3898.2                   | 170.0                    | -1131.1                                  |
|                               | sc Max 32 | -103683.4 | 3898.2                   | 170.0                    | -82.8                                    |
|                               | sc Med 32 | -103683.4 | 3898.2                   | 170.0                    | -53.4                                    |

▲Pilastrò: 2235/3072 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 2235 | 1    | -118265.6 | -8573.2                  | -377.4                   | 1.00                    | 1.00                    | 0.37  |
| 3072 | 1    | -116560.3 | 8927.4                   | 312.3                    | 1.00                    | 1.00                    | 0.38  |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|
| Combinazioni Frequenti        |           |           |                          |                          |                                          |
| 3072                          | Fl. 28    | -65478.1  | -5939.6                  | 5.5                      | -992.8                                   |
|                               | sfc 27    | -65478.1  | -5939.6                  | 5.5                      | -77.2                                    |
|                               | sc Max 27 | -65478.1  | -5939.6                  | 5.5                      | -38.6                                    |
|                               | sc Med 27 | -65478.1  | -5939.6                  | 5.5                      | -19.4                                    |
| 3909                          | Fl. 28    | -61803.4  | 6178.7                   | -19.4                    | 66.7                                     |
|                               | sfc 27    | -64165.6  | 6337.5                   | -42.1                    | -1005.6                                  |
|                               | sc Max 27 | -64165.6  | 6337.5                   | -42.1                    | -78.6                                    |
|                               | sc Med 27 | -64165.6  | 6337.5                   | -42.1                    | -39.1                                    |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |
| 3072                          | Fl. 32    | -63640.6  | -5742.0                  | 4.9                      | -77.7                                    |
|                               | sfc 32    | -63640.6  | -5742.0                  | 4.9                      | -962.1                                   |
|                               | sc Max 32 | -63640.6  | -5742.0                  | 4.9                      | -74.7                                    |
|                               | sc Med 32 | -63640.6  | -5742.0                  | 4.9                      | -37.3                                    |
| 3909                          | Fl. 32    | -62328.1  | 5934.7                   | -40.4                    | 32.4                                     |

▲Verifiche a Presso-Flessione S.L.E.

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb       | N<br>[kg] | Combinazioni Rare |        | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-------------------|--------|----------------------------|
|                               |            |           | Fl. 23            | s/c 22 |                            |
| 4746                          | Fl. 23     | 34611.1   | -4003.0           | -91.1  | 485.6                      |
|                               | s/c 22     | -38057.7  | -3962.8           | -60.2  | -1063.2                    |
|                               | s/c Max 23 | 34611.1   | -4003.0           | -91.1  | -94.4                      |
| 5583                          | s/c Med 23 | -38057.7  | -3962.8           | -60.2  | -46.6                      |
|                               | Fl. 23     | 33767.4   | 4345.1            | 105.8  | 627.0                      |
|                               | s/c 22     | 37214.0   | 4310.6            | 71.8   | -1119.7                    |
|                               | s/c Max 23 | -33767.4  | 4345.1            | 105.8  | -101.3                     |
|                               | s/c Med 22 | -37214.0  | 4310.6            | 71.8   | -49.9                      |
| Combinazioni Frequenti        |            |           |                   |        |                            |
| 4746                          | Fl. 28     | -34158.3  | -3382.1           | 1.9    | 278.3                      |
|                               | s/c 27     | -35409.7  | -3391.5           | 17.4   | -929.4                     |
|                               | s/c Max 27 | -35409.7  | -3391.5           | 17.4   | -81.1                      |
| 5583                          | s/c Med 27 | -35409.7  | -3391.5           | 17.4   | -40.4                      |
|                               | Fl. 28     | 33314.5   | 3684.5            | 5.1    | 395.4                      |
|                               | s/c 27     | -34665.9  | 3684.3            | -11.4  | -975.0                     |
|                               | s/c Max 27 | -34665.9  | 3684.3            | -11.4  | -86.8                      |
|                               | s/c Med 27 | -34665.9  | 3684.3            | -11.4  | -43.3                      |
| Combinazioni Quasi Permanenti |            |           |                   |        |                            |
| 4746                          | Fl. 32     | -34334.7  | -3281.1           | 16.9   | 246.1                      |
|                               | s/c 32     | -34334.7  | -3281.1           | 16.9   | -899.9                     |
|                               | s/c Max 32 | -34334.7  | -3281.1           | 16.9   | -78.5                      |
| 5583                          | s/c Med 32 | -34334.7  | -3281.1           | 16.9   | -39.1                      |
|                               | Fl. 32     | -33491.0  | 3578.2            | -11.1  | 357.7                      |
|                               | s/c 32     | -33491.0  | 3578.2            | -11.1  | -943.8                     |
|                               | s/c Max 32 | -33491.0  | 3578.2            | -11.1  | -84.0                      |
|                               | s/c Med 32 | -33491.0  | 3578.2            | -11.1  | -41.9                      |

▲Pilastro: 5583/6420 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ <sub>1,2</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>1,3</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|---------------------------|---------------------------|-------------------------------------------|-------------------------------------------|-------|
| 5583 | 17   | -18148.1  | -6940.3                   | -374.4                    | 1.00                                      | 1.00                                      | 0.45  |
| 6420 | 17   | -17304.4  | 7360.8                    | 393.3                     | 1.00                                      | 1.00                                      | 0.48  |

▲Verifiche a Taglio

| Da   | A    | V <sub>1,2</sub><br>[kg] | V <sub>1,3</sub><br>[kg] | V <sub>1,4</sub><br>[kg] | V <sub>1,5</sub><br>[kg] | Staffe     |
|------|------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13 | 3.63 | 98920.0                  | 13595.1                  | 4379.0                   | 13595.1                  | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb       | N<br>[kg] | M <sub>12</sub><br>[kgm] |        | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|--------------------------|--------|--------------------------|----------------------------|
|                               |            |           | Combinazioni Rare        |        |                          |                            |
| 5583                          | Fl. 23     | -20808.4  | -5004.3                  | -102.5 | 1244.3                   |                            |
|                               | s/c 22     | -23846.5  | -5046.6                  | -64.0  | -1116.0                  |                            |
|                               | s/c Max 22 | -23846.5  | -5046.6                  | -64.0  | -111.3                   |                            |
|                               | s/c Med 22 | -23846.5  | -5046.6                  | -64.0  | -54.9                    |                            |
| 6420                          | Fl. 23     | -19984.6  | 5356.3                   | 94.9   | 1401.1                   |                            |
|                               | s/c 22     | -22802.7  | 5440.0                   | 55.1   | -1173.7                  |                            |
|                               | s/c Max 22 | -22802.7  | 5440.0                   | 55.1   | -118.9                   |                            |
|                               | s/c Med 22 | -22802.7  | 5440.0                   | 55.1   | -58.8                    |                            |
| Combinazioni Frequenti        |            |           |                          |        |                          |                            |
| 5583                          | Fl. 28     | -20795.7  | -4327.7                  | 6.2    | 971.0                    |                            |
|                               | s/c 27     | -21584.3  | -4366.0                  | 25.4   | -970.3                   |                            |
|                               | s/c Max 27 | -21584.3  | -4366.0                  | 25.4   | -96.0                    |                            |
|                               | s/c Med 27 | -21584.3  | -4366.0                  | 25.4   | -47.7                    |                            |
| 6420                          | Fl. 28     | -19952.0  | 4665.3                   | 21.6   | 1126.0                   |                            |
|                               | s/c 27     | -20740.5  | 4713.2                   | -42.4  | -1024.6                  |                            |
|                               | s/c Max 27 | -20740.5  | 4713.2                   | -42.4  | -103.1                   |                            |
|                               | s/c Med 27 | -20740.5  | 4713.2                   | -42.4  | -51.1                    |                            |
| Combinazioni Quasi Permanenti |            |           |                          |        |                          |                            |
| 5583                          | Fl. 32     | -20875.3  | -4222.6                  | 25.0   | 933.9                    |                            |
|                               | s/c 32     | -20875.3  | -4222.6                  | 25.0   | -938.6                   |                            |
|                               | s/c Max 32 | -20875.3  | -4222.6                  | 25.0   | -92.9                    |                            |

| Nodo | Comb       | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|---------------------------|---------------------------|----------------------------|
|      | s/c 32     | -62328.1  | 5934.7                    | -40.4                     | -974.3                     |
|      | s/c Max 32 | -62328.1  | 5934.7                    | -40.4                     | -76.2                      |
|      | s/c Med 32 | -62328.1  | 5934.7                    | -40.4                     | -37.9                      |

▲Pilastro: 3909/4746 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ <sub>1,2</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>1,3</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|---------------------------|---------------------------|-------------------------------------------|-------------------------------------------|-------|
| 3909 | 17   | -38529.7  | -12846.8                  | -362.3                    | 1.00                                      | 1.00                                      | 0.41  |
| 4746 | 17   | -37217.2  | 13814.6                   | 411.4                     | 1.00                                      | 1.00                                      | 0.45  |

▲Verifiche a Taglio

| Da   | A    | V <sub>1,2</sub><br>[kg] | V <sub>1,3</sub><br>[kg] | V <sub>1,4</sub><br>[kg] | V <sub>1,5</sub><br>[kg] | Staffe     |
|------|------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13 | 3.63 | 19777.1                  | 22686.9                  | 7464.3                   | 19690.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb       | N<br>[kg] | M <sub>1,2</sub><br>[kgm] |        | M <sub>1,3</sub><br>[kgm] |  | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|---------------------------|--------|---------------------------|--|----------------------------|
|                               |            |           | Combinazioni Rare         |        |                           |  |                            |
| 3909                          | Fl. 23     | -49027.6  | -8394.2                   | -120.3 | 653.6                     |  |                            |
|                               | s/c 22     | -53349.7  | -8245.5                   | -72.1  | -1149.1                   |  |                            |
|                               | s/c Max 23 | -49027.6  | -8394.2                   | -120.3 | -96.3                     |  |                            |
| 4746                          | Fl. 23     | -47715.1  | 9144.4                    | 143.0  | 832.5                     |  |                            |
|                               | s/c 22     | -52037.2  | 9004.7                    | 90.1   | -1219.4                   |  |                            |
|                               | s/c Max 23 | -47715.1  | 9144.4                    | 143.0  | -103.8                    |  |                            |
|                               | s/c Med 23 | -47715.1  | 9144.4                    | 143.0  | -51.0                     |  |                            |
| Combinazioni Frequenti        |            |           |                           |        |                           |  |                            |
| 3909                          | Fl. 28     | -48395.4  | -6999.7                   | 38.6   | 394.4                     |  |                            |
|                               | s/c 27     | -50170.0  | -6993.2                   | 64.6   | -1004.0                   |  |                            |
|                               | s/c Max 27 | -50170.0  | -6993.2                   | 64.6   | -82.2                     |  |                            |
| 4746                          | Fl. 28     | -47082.9  | 7656.4                    | 29.8   | 539.2                     |  |                            |
|                               | s/c 27     | -48857.5  | 7657.5                    | 57.7   | -1061.9                   |  |                            |
|                               | s/c Max 27 | -48857.5  | 7657.5                    | 57.7   | -88.3                     |  |                            |
|                               | s/c Med 27 | -48857.5  | 7657.5                    | 57.7   | -43.8                     |  |                            |
| Combinazioni Quasi Permanenti |            |           |                           |        |                           |  |                            |
| 3909                          | Fl. 32     | -48718.2  | -6763.8                   | 62.3   | 349.8                     |  |                            |
|                               | s/c 32     | -48718.2  | -6763.8                   | 62.3   | -972.2                    |  |                            |
|                               | s/c Max 32 | -48718.2  | -6763.8                   | 62.3   | -79.5                     |  |                            |
| 4746                          | Fl. 32     | -47405.7  | 7407.0                    | 55.7   | 489.2                     |  |                            |
|                               | s/c 32     | -47405.7  | 7407.0                    | 55.7   | -1028.1                   |  |                            |
|                               | s/c Max 32 | -47405.7  | 7407.0                    | 55.7   | -85.4                     |  |                            |
|                               | s/c Med 32 | -47405.7  | 7407.0                    | 55.7   | -42.4                     |  |                            |

▲Pilastro: 4746/5583 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ <sub>1,2</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>1,3</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|---------------------------|---------------------------|-------------------------------------------|-------------------------------------------|-------|
| 4746 | 17   | -28790.7  | -5909.8                   | -280.2                    | 1.00                                      | 1.00                                      | 0.35  |
| 5583 | 17   | -27946.9  | 6336.8                    | 310.0                     | 1.00                                      | 1.00                                      | 0.38  |

▲Verifiche a Taglio

| Da   | A    | V <sub>1,2</sub><br>[kg] | V <sub>1,3</sub><br>[kg] | V <sub>1,4</sub><br>[kg] | V <sub>1,5</sub><br>[kg] | Staffe     |
|------|------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13 | 3.63 | 10711.7                  | 13595.1                  | 3899.5                   | 13595.1                  | ø 12/15.0' |

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 0.92     | 42348.8                 | 60284.1                  | 7079.8                   | 33178.0                  | ø 14/10.0 |
| 0.92      | 2.83     | 42348.8                 | 44290.4                  | 7079.8                   | 24375.6                  | ø 12/10.0 |
| 2.83      | 3.63     | 42348.8                 | 60284.1                  | 7079.8                   | 33178.0                  | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |           |                         |                         |                            |
| 567               | Fl. 23    | -133903.7 | -7816.4                 | 231.5                   | -383.2                     |
|                   | sf. 22    | -146542.8 | -6644.0                 | 303.0                   | -1085.9                    |
|                   | sc Max 22 | -146542.8 | -6644.0                 | 303.0                   | -766                       |
|                   | sc Med 22 | -146542.8 | -6644.0                 | 303.0                   | -527                       |
| 1404              | Fl. 23    | -133183.0 | 9469.9                  | -172.4                  | -306.7                     |
|                   | sf. 22    | -144574.1 | 8257.2                  | -236.5                  | -1138.1                    |
|                   | sc Max 22 | -144574.1 | 8257.2                  | -236.5                  | -80.8                      |
|                   | sc Med 22 | -144574.1 | 8257.2                  | -236.5                  | -52.0                      |

|                        |           |           |         |        |         |
|------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Frequenti |           |           |         |        |         |
| 567                    | Fl. 28    | -135199.9 | -4963.5 | 403.8  | -498.5  |
|                        | sf. 27    | -141195.7 | -4513.5 | 440.7  | -977.2  |
|                        | sc Max 27 | -141195.7 | -4513.5 | 440.7  | -68.4   |
|                        | sc Med 27 | -141195.7 | -4513.5 | 440.7  | -50.8   |
| 1404                   | Fl. 28    | -133231.2 | 6297.8  | -342.7 | -436.3  |
|                        | sf. 27    | -139227.0 | 5826.4  | -377.0 | -1017.1 |
|                        | sc Max 27 | -139227.0 | 5826.4  | -377.0 | -71.7   |
|                        | sc Med 27 | -139227.0 | 5826.4  | -377.0 | -50.1   |

|                               |           |           |         |        |        |
|-------------------------------|-----------|-----------|---------|--------|--------|
| Combinazioni Quasi Permanenti |           |           |         |        |        |
| 567                           | Fl. 32    | -137384.4 | -4318.8 | 484.6  | -535.1 |
|                               | sf. 32    | -137384.4 | -4318.8 | 484.6  | -948.2 |
|                               | sc Max 32 | -137384.4 | -4318.8 | 484.6  | -46.3  |
|                               | sc Med 32 | -137384.4 | -4318.8 | 484.6  | -49.4  |
| 1404                          | Fl. 32    | -135415.7 | 5988.1  | -372.5 | -475.7 |
|                               | sf. 32    | -135415.7 | 5988.1  | -372.5 | -986.4 |
|                               | sc Max 32 | -135415.7 | 5988.1  | -372.5 | -69.5  |
|                               | sc Med 32 | -135415.7 | 5988.1  | -372.5 | -48.7  |

▲Pilastro: 1404/2241 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ <sub>u</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 1404 | 1    | -152026.3 | -5614.0                 | 67.1                    | 1.00                                    | 1.00  |
| 2241 | 1    | -150320.1 | 7034.6                  | -52.3                   | 1.00                                    | 1.00  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe               |
|-----------|----------|-------------------------|--------------------------|--------------------------|----------------------|
| 0.13      | 3.63     | 20606.7                 | 22886.9                  | 4739.6                   | 19500.5<br>ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |           |                         |                         |                            |
| 1404              | Fl. 23    | -104952.3 | -4614.1                 | 300                     | -431.1                     |
|                   | sf. 22    | -114087.5 | -4135.2                 | 69.8                    | -1221.5                    |
|                   | sc Max 22 | -114087.5 | -4135.2                 | 69.8                    | -890                       |
|                   | sc Med 22 | -114087.5 | -4135.2                 | 69.8                    | -58.7                      |
| 2241              | Fl. 23    | -103249.8 | 5683.9                  | -19.8                   | -335.8                     |
|                   | sf. 22    | -112775.0 | 5194.5                  | -58.9                   | -1296.0                    |
|                   | sc Max 22 | -112775.0 | 5194.5                  | -58.9                   | -95.9                      |
|                   | sc Med 22 | -112775.0 | 5194.5                  | -58.9                   | -58.0                      |

|                        |           |           |         |        |         |
|------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Frequenti |           |           |         |        |         |
| 1404                   | Fl. 28    | -104870.1 | -3267.7 | 359.8  | -533.4  |
|                        | sf. 27    | -109318.6 | -3057.7 | 381.5  | -1107.5 |
|                        | sc Max 27 | -109318.6 | -3057.7 | 381.5  | -79.8   |
|                        | sc Med 27 | -109318.6 | -3057.7 | 381.5  | -56.3   |
| 2241                   | Fl. 28    | -103557.6 | 4148.9  | -150.7 | -450.4  |
|                        | sf. 27    | -108006.1 | 3970.0  | -172.0 | -1170.5 |

| Nodo | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|-------------------------|-------------------------|----------------------------|
|      | sc Med 32 | -20275.3  | -1222.6                 | 25.0                    | -46.2                      |
| 6420 | Fl. 32    | -20031.6  | 4556.9                  | -42.0                   | 1087.7                     |
|      | sf. 32    | -20031.6  | 4556.9                  | -42.0                   | -990.6                     |
|      | sc Max 32 | -20031.6  | 4556.9                  | -42.0                   | -99.7                      |
|      | sc Med 32 | -20031.6  | 4556.9                  | -42.0                   | -49.4                      |

▲Pilastro: 15/567 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0 x 80.0/ø 12/10.0 x 190.0/ø 14/10.0 x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ <sub>u</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 15   | 20   | -265017.8 | 15960.2                 | -340.2                  | 1.00                                    | 2.23  |
| 567  | 20   | -263049.1 | -12655.6                | -340.2                  | 1.00                                    | 1.00  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe               |
|-----------|----------|-------------------------|--------------------------|--------------------------|----------------------|
| 0.13      | 0.92     | 40119.1                 | 60284.1                  | 8697.6                   | 33178.0<br>ø 14/10.0 |
| 0.92      | 2.83     | 40119.1                 | 44290.4                  | 8697.6                   | 24375.6<br>ø 12/10.0 |
| 2.83      | 3.63     | 40119.1                 | 60284.1                  | 8697.6                   | 33178.0<br>ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |           |                         |                         |                            |
| 15                | Fl. 23    | -172143.9 | -4657.2                 | -210.9                  | -722.7                     |
|                   | sf. 22    | -188005.5 | -3194.3                 | -186.1                  | -1163.5                    |
|                   | sc Max 22 | -188005.5 | -3194.3                 | -186.1                  | -79.6                      |
|                   | sc Med 22 | -188005.5 | -3194.3                 | -186.1                  | -68.0                      |
| 567               | Fl. 23    | -170173.1 | 5205.1                  | -10.9                   | -701.9                     |
|                   | sf. 26    | -175723.4 | 4874.0                  | -497.3                  | -1182.1                    |
|                   | sc Max 26 | -175723.4 | 4874.0                  | -497.3                  | -82.3                      |
|                   | sc Med 27 | -186837.7 | 3996.1                  | -46.5                   | -67.2                      |

|                               |           |           |         |        |         |
|-------------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Quasi Permanenti |           |           |         |        |         |
| 15                            | Fl. 31    | -177139.2 | -2016.9 | 780.8  | -823.6  |
|                               | sf. 31    | -177139.2 | -2016.9 | 780.8  | -1088.9 |
|                               | sc Max 31 | -177139.2 | -2016.9 | 780.8  | -750    |
|                               | sc Med 27 | -182614.5 | -1158.5 | 70.6   | -65.7   |
| 567                           | Fl. 31    | -175170.5 | 3147.9  | -768.5 | -766.8  |
|                               | sf. 31    | -175170.5 | 3147.9  | -768.5 | -1124.5 |
|                               | sc Max 31 | -175170.5 | 3147.9  | -768.5 | -78.0   |
|                               | sc Med 27 | -180645.8 | 2163.9  | -208.7 | -65.0   |

|     |           |           |         |        |         |
|-----|-----------|-----------|---------|--------|---------|
| 15  | Fl. 32    | -177759.2 | -1123.8 | 74.6   | -908.4  |
|     | sf. 32    | -177759.2 | -1123.8 | 74.6   | -1031.1 |
|     | sc Max 32 | -177759.2 | -1123.8 | 74.6   | -68.2   |
|     | sc Med 32 | -177759.2 | -1123.8 | 74.6   | -64.0   |
| 567 | Fl. 32    | -175810.4 | 2067.9  | -208.2 | -850.2  |
|     | sf. 32    | -175810.4 | 2067.9  | -208.2 | -1048.0 |
|     | sc Max 32 | -175810.4 | 2067.9  | -208.2 | -71.4   |
|     | sc Med 32 | -175810.4 | 2067.9  | -208.2 | -63.3   |

▲Pilastro: 567/1404 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0 x 80.0/ø 12/10.0 x 190.0/ø 14/10.0 x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ <sub>u</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 567  | 20   | -202337.7 | 12504.4                 | 1043.6                  | 1.00                                    | 1.00  |
| 1404 | 20   | -200360.0 | -12723.9                | -996.1                  | 1.00                                    | 1.00  |

▲Verifiche a Taglio

▲Verifiche a Taglio

| Nodo | Comb       | N        | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3078 | Fl. 23     | -810294  | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6 | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6 | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294  | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 3078 | Fl. 23     | -79716.9 | 7438.9                 | 17.7                    | 19.9                    |                         |                            |
|      | s/c 22     | -86972.1 | 7027.8                 | -16.5                   | -1242.6                 |                         |                            |
|      | s/c Max 23 | -79716.9 | 7438.9                 | 17.7                    | -95.8                   |                         |                            |
|      | s/c Med 23 | -79716.9 | 7438.9                 | 17.7                    | -47.8                   |                         |                            |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3078 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 3915 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

▲Pilastro: 2241/3078 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1024 x 4 V + 1024 x 2 B + 1024 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb       | N        | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 2241 | Fl. 28     | -80760.0 | -5426.4                | 12.37                   | -173.5                  |                         |                            |
|      | s/c 27     | -84025.9 | -5275.6                | 143.7                   | -1088.3                 |                         |                            |
|      | s/c Max 27 | -84025.9 | -5275.6                | 143.7                   | -82.4                   |                         |                            |
|      | s/c Med 27 | -84025.9 | -5275.6                | 143.7                   | -43.2                   |                         |                            |
| 3078 | Fl. 28     | -79447.5 | 5792.6                 | -11.10                  | -134.7                  |                         |                            |
|      | s/c 27     | -82713.4 | 5658.1                 | -13.00                  | -1107.9                 |                         |                            |
|      | s/c Max 27 | -82713.4 | 5658.1                 | -13.00                  | -84.3                   |                         |                            |
|      | s/c Med 27 | -82713.4 | 5658.1                 | -13.00                  | -42.6                   |                         |                            |

▲Verifiche a Taglio

| Nodo | Comb       | N        | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 2241 | Fl. 28     | -80760.0 | -5426.4                | 12.37                   | -173.5                  |                         |                            |
|      | s/c 27     | -84025.9 | -5275.6                | 143.7                   | -1088.3                 |                         |                            |
|      | s/c Max 27 | -84025.9 | -5275.6                | 143.7                   | -82.4                   |                         |                            |
|      | s/c Med 27 | -84025.9 | -5275.6                | 143.7                   | -43.2                   |                         |                            |
| 3078 | Fl. 28     | -79447.5 | 5792.6                 | -11.10                  | -134.7                  |                         |                            |
|      | s/c 27     | -82713.4 | 5658.1                 | -13.00                  | -1107.9                 |                         |                            |
|      | s/c Max 27 | -82713.4 | 5658.1                 | -13.00                  | -84.3                   |                         |                            |
|      | s/c Med 27 | -82713.4 | 5658.1                 | -13.00                  | -42.6                   |                         |                            |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N        | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 2241 | Fl. 28     | -80760.0 | -5426.4                | 12.37                   | -173.5                  |                         |                            |
|      | s/c 27     | -84025.9 | -5275.6                | 143.7                   | -1088.3                 |                         |                            |
|      | s/c Max 27 | -84025.9 | -5275.6                | 143.7                   | -82.4                   |                         |                            |
|      | s/c Med 27 | -84025.9 | -5275.6                | 143.7                   | -43.2                   |                         |                            |
| 3078 | Fl. 28     | -79447.5 | 5792.6                 | -11.10                  | -134.7                  |                         |                            |
|      | s/c 27     | -82713.4 | 5658.1                 | -13.00                  | -1107.9                 |                         |                            |
|      | s/c Max 27 | -82713.4 | 5658.1                 | -13.00                  | -84.3                   |                         |                            |
|      | s/c Med 27 | -82713.4 | 5658.1                 | -13.00                  | -42.6                   |                         |                            |

Combinazioni Quasi Permanenti

| Nodo | Comb       | N        | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 2241 | Fl. 28     | -80760.0 | -5426.4                | 12.37                   | -173.5                  |                         |                            |
|      | s/c 27     | -84025.9 | -5275.6                | 143.7                   | -1088.3                 |                         |                            |
|      | s/c Max 27 | -84025.9 | -5275.6                | 143.7                   | -82.4                   |                         |                            |
|      | s/c Med 27 | -84025.9 | -5275.6                | 143.7                   | -43.2                   |                         |                            |
| 3078 | Fl. 28     | -79447.5 | 5792.6                 | -11.10                  | -134.7                  |                         |                            |
|      | s/c 27     | -82713.4 | 5658.1                 | -13.00                  | -1107.9                 |                         |                            |
|      | s/c Max 27 | -82713.4 | 5658.1                 | -13.00                  | -84.3                   |                         |                            |
|      | s/c Med 27 | -82713.4 | 5658.1                 | -13.00                  | -42.6                   |                         |                            |

Combinazioni Frequenti

| Nodo | Comb       | N        | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 2241 | Fl. 28     | -80760.0 | -5426.4                | 12.37                   | -173.5                  |                         |                            |
|      | s/c 27     | -84025.9 | -5275.6                | 143.7                   | -1088.3                 |                         |                            |
|      | s/c Max 27 | -84025.9 | -5275.6                | 143.7                   | -82.4                   |                         |                            |
|      | s/c Med 27 | -84025.9 | -5275.6                | 143.7                   | -43.2                   |                         |                            |
| 3078 | Fl. 28     | -79447.5 | 5792.6                 | -11.10                  | -134.7                  |                         |                            |
|      | s/c 27     | -82713.4 | 5658.1                 | -13.00                  | -1107.9                 |                         |                            |
|      | s/c Max 27 | -82713.4 | 5658.1                 | -13.00                  | -84.3                   |                         |                            |
|      | s/c Med 27 | -82713.4 | 5658.1                 | -13.00                  | -42.6                   |                         |                            |

▲Pilastro: 3078/3915 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1024 x 4 V + 1024 x 2 B + 1024 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3078 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 3915 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

▲Verifiche a Taglio

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3078 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 3915 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3078 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 3915 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

▲Pilastro: 3915/4752 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1024 x 4 V + 1024 x 2 B + 1024 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3915 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 4752 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

Combinazioni Quasi Permanenti

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3915 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 4752 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

Combinazioni Frequenti

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3915 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 4752 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

▲Verifiche a Taglio

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3915 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 4752 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N         | M <sub>u</sub><br>[kg] | V <sub>ed</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|------------------------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3915 | Fl. 23     | -810294   | -7079.6                | -6.9                    | -35.3                   |                         |                            |
|      | s/c 22     | -88184.6  | -6633.3                | 29.2                    | -1220.2                 |                         |                            |
|      | s/c Max 22 | -88184.6  | -6633.3                | 29.2                    | -93.4                   |                         |                            |
|      | s/c Med 23 | -810294   | -7079.6                | -6.9                    | -46.6                   |                         |                            |
| 4752 | Fl. 23     | -105028.9 | 3825.3                 | -17.15                  | -1135.7                 |                         |                            |
|      | s/c 22     | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Max 32 | -105028.9 | 3825.3                 | -17.15                  | -88.0                   |                         |                            |
|      | s/c Med 32 | -105028.9 | 3825.3                 | -17.15                  | -54.1                   |                         |                            |

Combinazioni Quasi Permanenti

|      |           |          |         |       |        |
|------|-----------|----------|---------|-------|--------|
| 3915 | Fl. 28    | -47542.1 | -7676.8 | 471   | 9363   |
|      | s/c 27    | -49250.1 | -7634.1 | 621   | -10625 |
|      | sc Max 27 | -49250.1 | -7634.1 | 621   | -882   |
|      | sc Med 27 | -49250.1 | -7634.1 | 621   | -437   |
| 4752 | Fl. 28    | -46229.6 | 8332.0  | -32.8 | 6877   |
|      | s/c 27    | -47937.6 | 8298.2  | -47.3 | -11192 |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>ed+st</sub><br>[kg] | V <sub>ed</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|----------------------------|-------------------------|------------|
| 0.13      | 3.63     | 1029.0                  | 13595.1                  | 3248.2                     | 13595.1                 | ø 12/15.0° |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|----------|-------------------------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |          |                         |                         |                         |                            |
| 5589              | Fl. 23    | -20301.4 | -5292.9                 | 48.9                    | 1364.8                  |                            |
|                   | s/c 22    | -23094.5 | -5320.6                 | -75.5                   | -1158.9                 |                            |
|                   | sc Max 22 | -23094.5 | -5320.6                 | -75.5                   | -1166                   |                            |
|                   | sc Med 22 | -23094.5 | -5320.6                 | -75.5                   | -57.6                   |                            |
| 6426              | Fl. 23    | -19457.6 | 9644.0                  | 89.6                    | 1524.2                  |                            |
|                   | s/c 22    | -22190.8 | 5721.9                  | 74.7                    | -1217.9                 |                            |
|                   | sc Max 22 | -22190.8 | 5721.9                  | 74.7                    | -124.6                  |                            |
|                   | sc Med 22 | -22190.8 | 5721.9                  | 74.7                    | -61.4                   |                            |

|      |           |          |         |       |         |  |
|------|-----------|----------|---------|-------|---------|--|
| 5589 | Fl. 28    | -20057.6 | -4669.7 | -22.3 | 1087.2  |  |
|      | s/c 27    | -20767.8 | -4597.9 | -16.5 | -999.5  |  |
|      | sc Max 27 | -20767.8 | -4597.9 | -16.5 | -100.2  |  |
|      | sc Med 27 | -20767.8 | -4597.9 | -16.5 | -49.9   |  |
| 6426 | Fl. 28    | -19213.8 | 4911.9  | 19.1  | 1240.7  |  |
|      | s/c 27    | -19924.0 | 4949.5  | 13.0  | -1049.5 |  |
|      | sc Max 27 | -19924.0 | 4949.5  | 13.0  | -106.8  |  |
|      | sc Med 27 | -19924.0 | 4949.5  | 13.0  | -53.3   |  |

|      |           |          |         |       |         |  |
|------|-----------|----------|---------|-------|---------|--|
| 5589 | Fl. 32    | -20087.8 | -4447.2 | -12.5 | 1038.5  |  |
|      | s/c 32    | -20087.8 | -4447.2 | -12.5 | -966.0  |  |
|      | sc Max 32 | -20087.8 | -4447.2 | -12.5 | -96.6   |  |
|      | sc Med 32 | -20087.8 | -4447.2 | -12.5 | -48.3   |  |
| 6426 | Fl. 32    | -19244.0 | 4786.7  | 8.8   | 1190.5  |  |
|      | s/c 32    | -19244.0 | 4786.7  | 8.8   | -1013.8 |  |
|      | sc Max 32 | -19244.0 | 4786.7  | 8.8   | -103.2  |  |
|      | sc Med 32 | -19244.0 | 4786.7  | 8.8   | -51.5   |  |

▲Pilastro: 16/573 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

AF: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >  
Staffe: ø 14/10.0° x 80.0/ø 12/10.0° x 190.0/ø 14/10.0° x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kg] | α <sub>u</sub> | α <sub>u</sub> | Sd/sr |
|------|------|-----------|------------------------|------------------------|----------------|----------------|-------|
| 16   | 20   | -213287.3 | 18889.5                | -4393.9                | 1.00           | 1.29           | 0.45  |
| 573  | 15   | -219345.7 | -3986.4                | 7354.8                 | 1.00           | 1.00           | 0.40  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>ed+st</sub><br>[kg] | V <sub>ed</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|----------------------------|-------------------------|------------|
| 0.13      | 0.92     | 35217.8                 | 60284.1                  | 12046.7                    | 33178.0                 | ø 14/10.0° |
| 0.92      | 2.83     | 35217.8                 | 44290.4                  | 12046.7                    | 24375.6                 | ø 12/10.0° |
| 2.83      | 3.63     | 35217.8                 | 60284.1                  | 12046.7                    | 33178.0                 | ø 14/10.0° |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N         | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |           |                         |                         |                         |                            |
| 16                | Fl. 23    | -179632.8 | -4066.6                 | -484.0                  | -655.2                  |                            |
|                   | s/c 22    | -186091.8 | -4285.4                 | -681.6                  | -1225.2                 |                            |
|                   | sc Max 25 | -177398.6 | -3633.1                 | -1789.8                 | -86.4                   |                            |
|                   | sc Med 22 | -186091.8 | -4285.4                 | -681.6                  | -67.0                   |                            |
| 573               | Fl. 23    | -171664.0 | 5551.6                  | 1213.6                  | -620.2                  |                            |
|                   | s/c 22    | -184123.0 | 4441.9                  | 1476.2                  | -1270.9                 |                            |
|                   | sc Max 25 | -175429.8 | 3668.3                  | 2465.4                  | -89.7                   |                            |
|                   | sc Med 22 | -184123.0 | 4441.9                  | 1476.2                  | -66.3                   |                            |

|    |           |           |         |        |         |  |
|----|-----------|-----------|---------|--------|---------|--|
| 16 | Fl. 31    | -168910.5 | -2921.5 | 1126.2 | -720.0  |  |
|    | s/c 31    | -168910.5 | -2921.5 | 1126.2 | -1103.7 |  |
|    | sc Max 31 | -168910.5 | -2921.5 | 1126.2 | -77.1   |  |
|    | sc Med 27 | -175176.7 | -1945.4 | -418.8 | -63.0   |  |

| Nodo | Comb      | N        | M <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|----------|------------------------|-------------------------|-------------------------|----------------------------|
|      | sc Max 27 | -47937.6 | 8298.2                 | -47.3                   | 94.2                    |                            |
|      | sc Med 27 | -47937.6 | 8298.2                 | -47.3                   | -46.9                   |                            |

|      |           |          |        |      |         |  |
|------|-----------|----------|--------|------|---------|--|
| 3915 | Fl. 32    | -47842.5 | 7382.1 | 65.2 | 477.5   |  |
|      | s/c 32    | -47842.5 | 7382.1 | 65.2 | -1029.3 |  |
|      | sc Max 32 | -47842.5 | 7382.1 | 65.2 | -85.4   |  |
|      | sc Med 32 | -47842.5 | 7382.1 | 65.2 | -42.3   |  |
| 4752 | Fl. 32    | -46330.0 | 8025.4 | 51.2 | 623.8   |  |
|      | s/c 32    | -46330.0 | 8025.4 | 51.2 | -1084.1 |  |
|      | sc Max 32 | -46330.0 | 8025.4 | 51.2 | -91.3   |  |
|      | sc Med 32 | -46330.0 | 8025.4 | 51.2 | -45.3   |  |

▲Pilastro: 4752/5589 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

AF: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0° x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kg] | α <sub>u</sub> | α <sub>u</sub> | Sd/sr |
|------|------|----------|------------------------|------------------------|------------------------|----------------|----------------|-------|
| 4752 | 37   | -39922.6 | -688.2                 | -218.8                 | 1.00                   | 1.00           | 0.40           |       |
| 5589 | 37   | -39078.9 | 7295.2                 | 227.1                  | 1.00                   | 1.00           | 0.43           |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>ed+st</sub><br>[kg] | V <sub>ed</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|----------------------------|-------------------------|------------|
| 0.13      | 3.63     | 10779.2                 | 13595.1                  | 3965.0                     | 13595.1                 | ø 12/15.0° |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|----------|-------------------------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |          |                         |                         |                         |                            |
| 4752              | Fl. 23    | -34259.1 | -4306.6                 | 68.6                    | 593.1                   |                            |
|                   | s/c 22    | -37525.6 | -4246.2                 | -58.9                   | -1108.6                 |                            |
|                   | sc Max 23 | -34259.1 | -4306.6                 | 68.6                    | -100.0                  |                            |
|                   | sc Med 23 | -34259.1 | -4306.6                 | 68.6                    | -49.3                   |                            |
| 5589              | Fl. 23    | -33415.3 | 4632.5                  | 85.6                    | 732.7                   |                            |
|                   | s/c 22    | -36681.9 | 4580.7                  | 77.5                    | -1163.8                 |                            |
|                   | sc Max 23 | -33415.3 | 4632.5                  | 85.6                    | -166.6                  |                            |
|                   | sc Med 22 | -36681.9 | 4580.7                  | 77.5                    | -52.5                   |                            |

|      |           |          |         |      |         |  |
|------|-----------|----------|---------|------|---------|--|
| 4752 | Fl. 28    | -33423.2 | -3623.9 | -8.8 | 373.7   |  |
|      | s/c 27    | -34581.9 | -3622.1 | -2.6 | -960.0  |  |
|      | sc Max 27 | -34581.9 | -3622.1 | -2.6 | -85.1   |  |
|      | sc Med 27 | -34581.9 | -3622.1 | -2.6 | -42.5   |  |
| 5589 | Fl. 28    | -32579.4 | 3916.5  | 22.9 | 494.6   |  |
|      | s/c 27    | -37382.2 | 3919.5  | 17.2 | -1007.8 |  |
|      | sc Max 27 | -37382.2 | 3919.5  | 17.2 | -91.0   |  |
|      | sc Med 27 | -37382.2 | 3919.5  | 17.2 | -45.3   |  |

|      |           |          |         |      |        |  |
|------|-----------|----------|---------|------|--------|--|
| 4752 | Fl. 32    | -33542.3 | -3503.6 | 0.4  | 330.5  |  |
|      | s/c 32    | -33542.3 | -3503.6 | 0.4  | -929.0 |  |
|      | sc Max 32 | -33542.3 | -3503.6 | 0.4  | -82.3  |  |
|      | sc Med 32 | -33542.3 | -3503.6 | 0.4  | -41.1  |  |
| 5589 | Fl. 32    | -32698.5 | 3791.7  | 13.6 | 447.7  |  |
|      | s/c 32    | -32698.5 | 3791.7  | 13.6 | -974.9 |  |
|      | sc Max 32 | -32698.5 | 3791.7  | 13.6 | -88.0  |  |
|      | sc Med 32 | -32698.5 | 3791.7  | 13.6 | -43.9  |  |

▲Pilastro: 5589/6426 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

AF: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0° x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | α <sub>u</sub> | α <sub>u</sub> | Sd/sr |
|------|------|----------|------------------------|-------------------------|-------------------------|----------------|----------------|-------|
| 5589 | 37   | -22803.8 | -7981.7                | -253.6                  | 1.00                    | 1.00           | 0.50           |       |
| 6426 | 37   | -22960.0 | 8290.4                 | 255.8                   | 1.00                    | 1.00           | 0.53           |       |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/VS |
|------|------|-----------|-----------------|-----------------|----------------|----------------|-------|
| 1410 | 15   | -139420.8 | 16984.4         | -6484.8         | 1.00           | 1.00           | 0.40  |
| 2247 | 15   | -138108.3 | -1743.0         | 6882.4          | 1.00           | 1.00           | 0.40  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Stafte    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| 0.13 | 3.63 | 17441.7         | 22666.9         | 10395.6         | 35600.5         | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | σ |
|-------------------------------|-----------|-----------|-----------------|-----------------|----------------|----------------|---|
| Combinazioni Rare             |           |           |                 |                 |                |                |   |
| 1410                          | Fl 28     | -109857.1 | -3424.7         | -1234.8         | -459.1         |                |   |
|                               | sfc 22    | -117806.6 | -2936.6         | -1471.2         | -1280.5        |                |   |
|                               | sc Max 22 | -117806.6 | -2936.6         | -1471.2         | -94.2          |                |   |
|                               | sc Med 22 | -117806.6 | -2936.6         | -1471.2         | -60.6          |                |   |
| 2247                          | Fl 28     | -108544.6 | 4040.8          | 1276.3          | -395.4         |                |   |
|                               | sfc 22    | -116494.1 | 3502.1          | 1524.6          | -1321.0        |                |   |
|                               | sc Max 22 | -116494.1 | 3502.1          | 1524.6          | -98.0          |                |   |
|                               | sc Med 22 | -116494.1 | 3502.1          | 1524.6          | -60.0          |                |   |
| Combinazioni Frequenti        |           |           |                 |                 |                |                |   |
| 1410                          | Fl 28     | -106928.6 | -2366.9         | -1129.6         | -531.6         |                |   |
|                               | sfc 27    | -110521.6 | -2183.0         | -1248.7         | -1143.2        |                |   |
|                               | sc Max 27 | -110521.6 | -2183.0         | -1248.7         | -83.2          |                |   |
|                               | sc Med 27 | -110521.6 | -2183.0         | -1248.7         | -56.9          |                |   |
| 2247                          | Fl 28     | -105616.1 | 2892.5          | 1171.8          | -478.4         |                |   |
|                               | sfc 27    | -109209.1 | 2652.8          | 1297.4          | -1175.4        |                |   |
|                               | sc Max 27 | -109209.1 | 2652.8          | 1297.4          | -86.3          |                |   |
|                               | sc Med 27 | -109209.1 | 2652.8          | 1297.4          | -56.2          |                |   |
| Combinazioni Quasi Permanenti |           |           |                 |                 |                |                |   |
| 1410                          | Fl 32     | -107602.6 | -2121.8         | -1187.3         | -551.4         |                |   |
|                               | sfc 32    | -107602.6 | -2121.8         | -1187.3         | -1110.1        |                |   |
|                               | sc Max 32 | -107602.6 | -2121.8         | -1187.3         | -80.7          |                |   |
|                               | sc Med 32 | -107602.6 | -2121.8         | -1187.3         | -55.4          |                |   |
| 2247                          | Fl 32     | -106290.1 | 2792.2          | 1232.9          | -500.2         |                |   |
|                               | sfc 32    | -106290.1 | 2579.2          | 1232.9          | -1141.1        |                |   |
|                               | sc Max 32 | -106290.1 | 2579.2          | 1232.9          | -83.7          |                |   |
|                               | sc Med 32 | -106290.1 | 2579.2          | 1232.9          | -54.7          |                |   |

▲Pilastro: 2247/3084 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 2247 | 17   | -65015.8 | -11408.3        | 1829.9          | 1.00            | 1.00            | 0.37  |
| 3084 | 17   | -63703.3 | 11368.3         | -1865.7         | 1.00            | 1.00            | 0.37  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Stafte    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| 0.13 | 3.63 | 19244.4         | 22666.9         | 12432.1         | 35600.5         | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | σ |
|------------------------|-----------|----------|-----------------|-----------------|----------------|----------------|---|
| Combinazioni Rare      |           |          |                 |                 |                |                |   |
| 2247                   | Fl 23     | -86550.4 | -4732.4         | -1304.6         | -167.1         |                |   |
|                        | sfc 22    | -92833.7 | -4175.0         | -1567.8         | -1196.8        |                |   |
|                        | sc Max 22 | -92833.7 | -4175.0         | -1567.8         | -91.1          |                |   |
|                        | sc Med 22 | -92833.7 | -4175.0         | -1567.8         | -47.6          |                |   |
| 3084                   | Fl 23     | -6527.9  | 4787.3          | 1295.2          | -153.4         |                |   |
|                        | sfc 22    | -91541.2 | 4299.9          | 1560.3          | -1191.2        |                |   |
|                        | sc Max 22 | -91541.2 | 4299.9          | 1560.3          | -90.8          |                |   |
|                        | sc Med 22 | -91541.2 | 4299.9          | 1560.3          | -47.1          |                |   |
| Combinazioni Frequenti |           |          |                 |                 |                |                |   |

| Nodo | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | σ |
|------|-----------|-----------|-----------------|-----------------|----------------|----------------|---|
| 573  | Fl 30     | -17034.3  | 1818.5          | 1551.9          | -684.1         |                |   |
|      | sfc 30    | -17034.3  | 1818.5          | 2551.9          | -1155.0        |                |   |
|      | sc Max 30 | -17034.3  | 1818.5          | 2551.9          | -82.3          |                |   |
|      | sc Med 27 | -173208.0 | 2956.4          | 1221.8          | -62.3          |                |   |

Combinazioni Quasi Permanenti

|     |           |           |         |        |         |  |  |
|-----|-----------|-----------|---------|--------|---------|--|--|
| 16  | Fl 32     | -170606.8 | -1914.6 | -370.8 | -818.3  |  |  |
|     | sfc 32    | -170606.8 | -1914.6 | -370.8 | -1023.7 |  |  |
|     | sc Max 32 | -170606.8 | -1914.6 | -370.8 | -69.9   |  |  |
|     | sc Med 32 | -170606.8 | -1914.6 | -370.8 | -61.4   |  |  |
| 573 | Fl 32     | -168638.0 | 2888.0  | 1156.6 | -718.0  |  |  |
|     | sfc 32    | -168638.0 | 2888.0  | 1156.6 | -1102.8 |  |  |
|     | sc Max 32 | -168638.0 | 2888.0  | 1156.6 | -77.0   |  |  |
|     | sc Med 32 | -168638.0 | 2888.0  | 1156.6 | -60.7   |  |  |

▲Pilastro: 573/1410 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/VS |
|------|------|-----------|-----------------|-----------------|----------------|----------------|-------|
| 573  | 15   | -176119.5 | 3427.4          | -8564.3         | 1.00           | 1.00           | 0.36  |
| 1410 | 15   | -174150.8 | -4012.1         | 8717.9          | 1.00           | 1.00           | 0.36  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Stafte     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| 0.13 | 0.92 | 38165.8         | 60284.1         | 15258.0         | 33178.0         | ø 14/10.0' |
| 0.92 | 2.83 | 38165.8         | 46250.4         | 15258.0         | 24575.6         | ø 12/10.0' |
| 2.83 | 3.63 | 38165.8         | 60284.1         | 15258.0         | 33178.0         | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | σ |
|------------------------|-----------|-----------|-----------------|-----------------|----------------|----------------|---|
| Combinazioni Rare      |           |           |                 |                 |                |                |   |
| 573                    | Fl 23     | -137902.5 | -7018.1         | -1750.4         | -343.4         |                |   |
|                        | sfc 22    | -147922.1 | -6088.2         | -2056.8         | -1179.4        |                |   |
|                        | sc Max 22 | -147922.1 | -6088.2         | -2056.8         | -85.4          |                |   |
|                        | sc Med 22 | -147922.1 | -6088.2         | -2056.8         | -53.2          |                |   |
| 1410                   | Fl 23     | -135933.7 | 7835.9          | 1725.3          | -299.7         |                |   |
|                        | sfc 22    | -145953.4 | 6738.6          | 2047.4          | -1196.0        |                |   |
|                        | sc Max 22 | -145953.4 | 6738.6          | 2047.4          | -86.9          |                |   |
|                        | sc Med 22 | -145953.4 | 6738.6          | 2047.4          | -52.5          |                |   |
| Combinazioni Frequenti |           |           |                 |                 |                |                |   |
| 573                    | Fl 28     | -134378.0 | -4994.9         | -1598.8         | -417.9         |                |   |
|                        | sfc 27    | -138976.0 | -4649.8         | -1752.1         | -1063.1        |                |   |
|                        | sc Max 27 | -138976.0 | -4649.8         | -1752.1         | -75.7          |                |   |
|                        | sc Med 27 | -138976.0 | -4649.8         | -1752.1         | -50.0          |                |   |
| 1410                   | Fl 28     | -132409.3 | 5402.5          | 1581.9          | -387.7         |                |   |
|                        | sfc 27    | -137007.3 | 5081.9          | 1743.6          | -1059.9        |                |   |
|                        | sc Max 27 | -137007.3 | 5081.9          | 1743.6          | -76.4          |                |   |
|                        | sc Med 27 | -137007.3 | 5081.9          | 1743.6          | -49.3          |                |   |

| Nodo                          | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | σ |
|-------------------------------|-----------|-----------|-----------------|-----------------|----------------|----------------|---|
| Combinazioni Quasi Permanenti |           |           |                 |                 |                |                |   |
| 573                           | Fl 32     | -135301.7 | -4524.5         | -1671.6         | -437.8         |                |   |
|                               | sfc 32    | -135301.7 | -4524.5         | -1671.6         | -1023.0        |                |   |
|                               | sc Max 32 | -135301.7 | -4524.5         | -1671.6         | -73.5          |                |   |
|                               | sc Med 32 | -135301.7 | -4524.5         | -1671.6         | -48.7          |                |   |
| 1410                          | Fl 32     | -133332.9 | 4943.2          | 1660.1          | -410.5         |                |   |
|                               | sfc 32    | -133332.9 | 4943.2          | 1660.1          | -1029.0        |                |   |
|                               | sc Max 32 | -133332.9 | 4943.2          | 1660.1          | -74.1          |                |   |
|                               | sc Med 32 | -133332.9 | 4943.2          | 1660.1          | -48.0          |                |   |

▲Pilastro: 1410/2247 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/sr |
|------|------|----------|-----------------|-----------------|----------------|----------------|-------|
| 3921 | 17   | -39022.9 | -11929.5        | 1945.8          | 1.00           | 1.00           | 0.40  |
| 4758 | 17   | -37710.4 | 12702.0         | -2028.4         | 1.00           | 1.00           | 0.43  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 19920.5         | 22686.9         | 1584.8          | 39600.5         | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|-------------------------------|-----------|----------|-----------------|-----------------|---------|
| Combinazioni Rare             |           |          |                 |                 |         |
| 3921                          | Fl. 23    | -50235.2 | -5402.4         | -1302.0         | 256.1   |
|                               | sfc 22    | -54209.3 | -4924.1         | -1381.6         | -985.3  |
|                               | sc Max 23 | -50235.2 | -5402.4         | -1302.0         | -79.8   |
|                               | sc Med 23 | -50235.2 | -5402.4         | -1302.0         | -33.8   |
| 4758                          | Fl. 23    | -48822.7 | 5793.4          | 1341.7          | 341.9   |
|                               | sfc 22    | -52896.8 | 5288.4          | 1631.6          | -1020.7 |
|                               | sc Max 23 | -48822.7 | 5793.4          | 1341.7          | -83.8   |
|                               | sc Med 23 | -48822.7 | 5793.4          | 1341.7          | -35.4   |
| Combinazioni Frequenti        |           |          |                 |                 |         |
| 3921                          | Fl. 28    | -48765.3 | -4360.6         | -1210.0         | 98.0    |
|                               | sfc 27    | -50342.3 | -4004.5         | -1351.2         | -846.8  |
|                               | sc Max 27 | -50342.3 | -4004.5         | -1351.2         | -67.3   |
|                               | sc Med 27 | -50342.3 | -4004.5         | -1351.2         | -28.7   |
| 4758                          | Fl. 28    | -47452.8 | 4472.0          | 1246.0          | 155.9   |
|                               | sfc 27    | -49029.8 | 4307.3          | 1392.4          | -872.4  |
|                               | sc Max 27 | -49029.8 | 4307.3          | 1392.4          | -70.0   |
|                               | sc Med 28 | -47452.8 | 4472.0          | 1246.0          | -29.3   |
| Combinazioni Quasi Permanenti |           |          |                 |                 |         |
| 3921                          | Fl. 32    | -48865.5 | -3891.6         | -1277.7         | 73.3    |
|                               | sfc 32    | -48865.5 | -3891.6         | -1277.7         | -819.5  |
|                               | sc Max 32 | -48865.5 | -3891.6         | -1277.7         | -65.1   |
|                               | sc Med 32 | -48865.5 | -3891.6         | -1277.7         | -27.8   |
| 4758                          | Fl. 32    | -47653.0 | 4386.2          | 1316.0          | 136.2   |
|                               | sfc 32    | -47653.0 | 4386.2          | 1316.0          | -843.9  |
|                               | sc Max 32 | -47653.0 | 4386.2          | 1316.0          | -67.6   |
|                               | sc Med 32 | -47653.0 | 4386.2          | 1316.0          | -28.4   |

▲Pilastro: 4758/5595 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 24 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/sr |
|------|------|----------|-----------------|-----------------|----------------|----------------|-------|
| 4758 | 17   | -27373.7 | -5308.4         | 992.3           | 1.00           | 1.00           | 0.33  |
| 5595 | 17   | -26530.0 | 5629.1          | -1030.7         | 1.00           | 1.00           | 0.36  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 10022.5         | 13595.1         | 9023.0          | 13595.1         | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|------------------------|-----------|----------|-----------------|-----------------|--------|
| Combinazioni Rare      |           |          |                 |                 |        |
| 4758                   | Fl. 23    | -34370.8 | -2460.2         | -681.1          | 142.0  |
|                        | sfc 22    | -37501.0 | -2259.2         | -829.0          | -886.7 |
|                        | sc Max 22 | -37501.0 | -2259.2         | -829.0          | -74.6  |
|                        | sc Med 23 | -34370.8 | -2460.2         | -681.1          | -31.8  |
| 5595                   | Fl. 23    | -33527.1 | 2618.8          | 700.8           | 203.5  |
|                        | sfc 22    | -36657.2 | 2405.2          | 853.9           | -909.8 |
|                        | sc Max 23 | -33527.1 | 2618.8          | 700.8           | -77.5  |
|                        | sc Med 23 | -33527.1 | 2618.8          | 700.8           | -33.1  |
| Combinazioni Frequenti |           |          |                 |                 |        |

| Nodo | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|------|-----------|----------|-----------------|-----------------|---------|
| 2247 | Fl. 28    | -84196.5 | -34500.0        | -205.3          | -261.9  |
|      | sfc 27    | -86974.3 | -3250.1         | -1336.6         | -1055.6 |
|      | sc Max 27 | -86974.3 | -3250.1         | -1336.6         | -79.5   |
|      | sc Med 27 | -86974.3 | -3250.1         | -1336.6         | -44.8   |
| 3084 | Fl. 28    | -82884.0 | 3511.6          | 1194.6          | -247.5  |
|      | sfc 27    | -85661.8 | 3316.1          | 1329.0          | -1050.1 |
|      | sc Max 27 | -85661.8 | 3316.1          | 1329.0          | -79.2   |
|      | sc Med 27 | -85661.8 | 3316.1          | 1329.0          | -44.1   |

| Combinazioni Quasi Permanenti |           |          |         |         |         |
|-------------------------------|-----------|----------|---------|---------|---------|
| 2247                          | Fl. 32    | -84679.6 | -3159.7 | -1268.4 | -283.1  |
|                               | sfc 32    | -84679.6 | -3159.7 | -1268.4 | -1024.4 |
|                               | sc Max 32 | -84679.6 | -3159.7 | -1268.4 | -77.0   |
|                               | sc Med 32 | -84679.6 | -3159.7 | -1268.4 | -43.6   |
| 3084                          | Fl. 32    | -83367.1 | 3224.0  | 1260.3  | -268.5  |
|                               | sfc 32    | -83367.1 | 3224.0  | 1260.3  | -1018.7 |
|                               | sc Max 32 | -83367.1 | 3224.0  | 1260.3  | -76.8   |
|                               | sc Med 32 | -83367.1 | 3224.0  | 1260.3  | -42.9   |

▲Pilastro: 3084/3921 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/sr |
|------|------|----------|-----------------|-----------------|----------------|----------------|-------|
| 3084 | 17   | -51066.8 | -11588.3        | 1881.4          | 1.00           | 1.00           | 0.37  |
| 3921 | 17   | -49754.3 | 11362.4         | -1903.5         | 1.00           | 1.00           | 0.37  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 19683.3         | 22686.9         | 14096.3         | 19500.5   |
|      |      |                 |                 |                 | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|-------------------------------|-----------|----------|-----------------|-----------------|---------|
| Combinazioni Rare             |           |          |                 |                 |         |
| 3084                          | Fl. 23    | -47065.4 | -4925.1         | -1286.0         | 7.6     |
|                               | sfc 22    | -72001.4 | -4421.5         | -1554.2         | -1056.0 |
|                               | sc Max 22 | -72001.4 | -4421.5         | -1554.2         | -82.2   |
|                               | sc Med 22 | -72001.4 | -4421.5         | -1554.2         | -37.8   |
| 3921                          | Fl. 23    | -65693.9 | 4976.4          | 1278.1          | 23.9    |
|                               | sfc 22    | -70688.9 | 4476.7          | 1546.8          | -1050.3 |
|                               | sc Max 22 | -70688.9 | 4476.7          | 1546.8          | -81.9   |
|                               | sc Med 22 | -70688.9 | 4476.7          | 1546.8          | -37.3   |
| Combinazioni Frequenti        |           |          |                 |                 |         |
| 3084                          | Fl. 28    | -45121.4 | -3696.7         | -1189.6         | -95.6   |
|                               | sfc 27    | -47236.6 | -3523.3         | -1325.4         | -924.3  |
|                               | sc Max 27 | -47236.6 | -3523.3         | -1325.4         | -71.2   |
|                               | sc Med 27 | -47236.6 | -3523.3         | -1325.4         | -34.7   |
| 3921                          | Fl. 28    | -63808.9 | 3745.8          | 1180.4          | -82.0   |
|                               | sfc 27    | -65924.1 | 3573.9          | 1316.4          | -917.6  |
|                               | sc Max 27 | -65924.1 | 3573.9          | 1316.4          | -70.8   |
|                               | sc Med 27 | -65924.1 | 3573.9          | 1316.4          | -34.1   |
| Combinazioni Quasi Permanenti |           |          |                 |                 |         |
| 3084                          | Fl. 32    | -45446.9 | -3424.6         | -1255.4         | -114.4  |
|                               | sfc 32    | -45446.9 | -3424.6         | -1255.4         | -896.2  |
|                               | sc Max 32 | -45446.9 | -3424.6         | -1255.4         | -68.9   |
|                               | sc Med 32 | -45446.9 | -3424.6         | -1255.4         | -33.7   |
| 3921                          | Fl. 32    | -64134.4 | 3473.9          | 1246.0          | -101.0  |
|                               | sfc 32    | -64134.4 | 3473.9          | 1246.0          | -889.2  |
|                               | sc Max 32 | -64134.4 | 3473.9          | 1246.0          | -68.5   |
|                               | sc Med 32 | -64134.4 | 3473.9          | 1246.0          | -33.1   |

▲Pilastro: 3921/4758 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 17   | 17   | -394884.4 | -261086.6       | 1452.0          | 1.00            | 1.00            | 0.39  |
| 576  | 1    | -139444.9 | 4225.3          | 2085.7          | 1.00            | 1.00            | 0.25  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 0.92 | 38795.5         | 60284.1         | 1212.8          | 33178.0         | 33178.0         | ø 14/10.0 |
| 0.92 | 2.83 | 38795.5         | 44290.4         | 1212.8          | 24375.6         | 24375.6         | ø 12/10.0 |
| 2.83 | 3.63 | 38795.5         | 60284.1         | 1212.8          | 33178.0         | 33178.0         | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------|------------|-----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare |            |           |                 |                 |                 |                 |        |
| 17                | Fl 23      | -109132.2 | -6573.1         | -779.6          | -779.6          | -779.6          | -267.4 |
|                   | s/c 23     | -109132.2 | -6573.1         | -779.6          | -779.6          | -779.6          | -910.9 |
|                   | s/c Max 23 | -109132.2 | -6573.1         | -779.6          | -779.6          | -779.6          | -65.7  |
|                   | s/c Med 22 | -113660.5 | -4517.9         | -945.6          | -945.6          | -945.6          | -41.4  |
| 576               | Fl 25      | -108124.5 | 2544.2          | 2436.5          | 2436.5          | 2436.5          | -325.4 |
|                   | s/c 25     | -108124.5 | 2544.2          | 2436.5          | 2436.5          | 2436.5          | -842.0 |
|                   | s/c Max 25 | -108124.5 | 2544.2          | 2436.5          | 2436.5          | 2436.5          | -61.6  |
|                   | s/c Med 22 | -113091.8 | 3095.9          | 1524.8          | 1524.8          | 1524.8          | -40.7  |

| Nodo                   | Comb       | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|------------------------|------------|-----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Frequenti |            |           |                 |                 |                 |                 |        |
| 17                     | Fl 31      | -106421.1 | -2842.6         | 921.8           | 921.8           | 921.8           | -398.7 |
|                        | s/c 31     | -106421.1 | -2842.6         | 921.8           | 921.8           | 921.8           | -750.3 |
|                        | s/c Max 30 | -107070.7 | -786.2          | -2062.2         | -2062.2         | -2062.2         | -53.2  |
|                        | s/c Med 27 | -106035.2 | -1832.2         | -452.0          | -452.0          | -452.0          | -39.2  |
| 576                    | Fl 30      | -105101.9 | 998.3           | 2508.9          | 2508.9          | 2508.9          | -368.7 |
|                        | s/c 30     | -105101.9 | 998.3           | 2508.9          | 2508.9          | 2508.9          | -766.1 |
|                        | s/c Max 30 | -105101.9 | 998.3           | 2508.9          | 2508.9          | 2508.9          | -55.8  |
|                        | s/c Med 27 | -107066.5 | 1810.0          | 1270.3          | 1270.3          | 1270.3          | -38.5  |

| Nodo                          | Comb       | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------------------|------------|-----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Quasi Permanenti |            |           |                 |                 |                 |                 |        |
| 17                            | Fl 32      | -106745.9 | -1814.4         | -572.7          | -572.7          | -572.7          | -465.1 |
|                               | s/c 32     | -106745.9 | -1814.4         | -572.7          | -572.7          | -572.7          | -687.5 |
|                               | s/c Max 32 | -106745.9 | -1814.4         | -572.7          | -572.7          | -572.7          | -47.8  |
|                               | s/c Med 32 | -106745.9 | -1814.4         | -572.7          | -572.7          | -572.7          | -38.4  |
| 576                           | Fl 32      | -104777.1 | 1783.6          | 1206.1          | 1206.1          | 1206.1          | -416.0 |
|                               | s/c 32     | -104777.1 | 1783.6          | 1206.1          | 1206.1          | 1206.1          | -715.3 |
|                               | s/c Max 32 | -104777.1 | 1783.6          | 1206.1          | 1206.1          | 1206.1          | -50.7  |
|                               | s/c Med 32 | -104777.1 | 1783.6          | 1206.1          | 1206.1          | 1206.1          | -37.7  |

▲Pilastro: 576/1413 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 576  | 1    | -134860.3 | -4345.7         | -2834.9         | 1.00            | 1.00            | 0.23  |
| 1413 | 1    | -132301.0 | 5024.6          | 3099.1          | 1.00            | 1.00            | 0.23  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 0.92 | 35165.6         | 60284.1         | 1439.1          | 33178.0         | 33178.0         | ø 14/10.0' |
| 0.92 | 2.83 | 35165.6         | 44290.4         | 1439.1          | 24375.6         | 24375.6         | ø 12/10.0' |
| 2.83 | 3.63 | 35165.6         | 60284.1         | 1439.1          | 33178.0         | 33178.0         | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------|------------|----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare |            |          |                 |                 |                 |                 |        |
| 576               | Fl 23      | -56161.5 | -3771.0         | -1902.0         | -1902.0         | -1902.0         | -243.4 |
|                   | s/c 22     | -10110.4 | -3213.6         | -2088.5         | -2088.5         | -2088.5         | -811.2 |
|                   | s/c Max 22 | -10110.4 | -3213.6         | -2088.5         | -2088.5         | -2088.5         | -59.3  |
|                   | s/c Med 22 | -10110.4 | -3213.6         | -2088.5         | -2088.5         | -2088.5         | -36.5  |
| 1413              | Fl 23      | -94192.8 | 4511.9          | 2069.1          | 2069.1          | 2069.1          | -191.5 |

| Nodo                          | Comb       | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------------------|------------|----------|-----------------|-----------------|-----------------|--------|
| Combinazioni Quasi Permanenti |            |          |                 |                 |                 |        |
| 4758                          | Fl 28      | -32412.7 | -1972.1         | -634.7          | -634.7          | -25.3  |
|                               | s/c 27     | -34515.4 | -1854.1         | -709.1          | -709.1          | -768.0 |
|                               | s/c Max 27 | -34515.4 | -1854.1         | -709.1          | -709.1          | -63.8  |
|                               | s/c Med 27 | -34515.4 | -1854.1         | -709.1          | -709.1          | -27.6  |
| 5595                          | Fl 28      | -32668.9 | 2042.0          | 652.4           | 652.4           | 67.5   |
|                               | s/c 27     | -33671.7 | 1975.3          | 729.5           | 729.5           | -784.3 |
|                               | s/c Max 27 | -33671.7 | 1975.3          | 729.5           | 729.5           | -65.8  |
|                               | s/c Med 27 | -33671.7 | 1975.3          | 729.5           | 729.5           | -28.0  |

| Nodo | Comb       | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|------|------------|----------|-----------------|-----------------|-----------------|--------|
| 4758 | Fl 32      | -33520.2 | -1801.5         | -669.7          | -669.7          | 7.5    |
|      | s/c 32     | -33520.2 | -1801.5         | -669.7          | -669.7          | -742.9 |
|      | s/c Max 32 | -33520.2 | -1801.5         | -669.7          | -669.7          | -61.7  |
|      | s/c Med 32 | -33520.2 | -1801.5         | -669.7          | -669.7          | -26.8  |
| 5595 | Fl 32      | -32676.5 | 1919.4          | 688.5           | 688.5           | 46.5   |
|      | s/c 32     | -32676.5 | 1919.4          | 688.5           | 688.5           | -758.3 |
|      | s/c Max 32 | -32676.5 | 1919.4          | 688.5           | 688.5           | -63.6  |
|      | s/c Med 32 | -32676.5 | 1919.4          | 688.5           | 688.5           | -27.1  |

▲Pilastro: 5595/6432 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >

Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 5595 | 17   | -16832.2 | -6138.8         | 1008.5          | 1.00            | 1.00            | 0.41  |
| 6432 | 17   | -15988.5 | 6533.3          | -966.6          | 1.00            | 1.00            | 0.44  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 9923.5          | 13595.1         | 10713.8         | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------|------------|----------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare |            |          |                 |                 |                 |        |
| 5595              | Fl 23      | -20262.7 | -3866.5         | -773.2          | -773.2          | 697.8  |
|                   | s/c 22     | -22830.3 | -2897.8         | -951.5          | -951.5          | -913.4 |
|                   | s/c Max 22 | -22830.3 | -2897.8         | -951.5          | -951.5          | -85.5  |
|                   | s/c Med 23 | -20262.7 | -3066.5         | -773.2          | -773.2          | -35.0  |
| 6432              | Fl 23      | -19418.9 | 3351.6          | 857.2           | 857.2           | 848.1  |
|                   | s/c 22     | -21986.6 | 3218.9          | 1058.2          | 1058.2          | -988.9 |
|                   | s/c Max 22 | -21986.6 | 3218.9          | 1058.2          | 1058.2          | -94.4  |
|                   | s/c Med 23 | -19418.9 | 3351.6          | 857.2           | 857.2           | -37.8  |

| Nodo                   | Comb       | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|------------------------|------------|----------|-----------------|-----------------|-----------------|--------|
| Combinazioni Frequenti |            |          |                 |                 |                 |        |
| 5595                   | Fl 28      | -19534.3 | -2478.4         | -732.8          | -732.8          | 487.5  |
|                        | s/c 27     | -20447.1 | -2422.4         | -816.4          | -816.4          | -779.6 |
|                        | s/c Max 27 | -20447.1 | -2422.4         | -816.4          | -816.4          | -72.1  |
|                        | s/c Med 28 | -19534.3 | -2478.4         | -732.8          | -732.8          | -29.1  |
| 6432                   | Fl 28      | -19090.6 | 2753.8          | 818.9           | 818.9           | 630.1  |
|                        | s/c 27     | -19803.4 | 2700.9          | 907.2           | 907.2           | -844.2 |
|                        | s/c Max 27 | -19803.4 | 2700.9          | 907.2           | 907.2           | -79.8  |
|                        | s/c Med 28 | -19090.6 | 2753.8          | 818.9           | 818.9           | -31.8  |

| Nodo                          | Comb       | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------------------|------------|----------|-----------------|-----------------|-----------------|--------|
| Combinazioni Quasi Permanenti |            |          |                 |                 |                 |        |
| 5595                          | Fl 32      | -19985.2 | -2353.1         | -771.0          | -771.0          | 451.4  |
|                               | s/c 32     | -19985.2 | -2353.1         | -771.0          | -771.0          | -752.4 |
|                               | s/c Max 32 | -19985.2 | -2353.1         | -771.0          | -771.0          | -69.6  |
|                               | s/c Med 32 | -19985.2 | -2353.1         | -771.0          | -771.0          | -27.9  |
| 6432                          | Fl 32      | -19141.5 | 2623.6          | 857.9           | 857.9           | 591.4  |
|                               | s/c 32     | -19141.5 | 2623.6          | 857.9           | 857.9           | -814.5 |
|                               | s/c Max 32 | -19141.5 | 2623.6          | 857.9           | 857.9           | -77.0  |
|                               | s/c Med 32 | -19141.5 | 2623.6          | 857.9           | 857.9           | -30.6  |

▲Pilastro: 17/576 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Pilastro: 2250/3087 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 2250 | 16   | -66903.9 | -7712.1         | -2357.8         | 1.00            | 1.00            | 0.30  |
| 3087 | 16   | -65591.4 | 7572.7          | 2393.3          | 1.00            | 1.00            | 0.29  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed2</sub> | V <sub>Ed2</sub> | V <sub>Ed2</sub> | V <sub>Ed2</sub> | Staffe    |
|------|------|------------------|------------------|------------------|------------------|-----------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |           |
| 0.13 | 3.63 | 18932.7          | 22686.9          | 12415.3          | 19500.5          | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                   |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Base |           |          |                 |                 |                 |          |
| 2250              | Fl. 23    | -68736.7 | -2839.2         | -2356.2         |                 | -105.8   |
|                   | sfc 22    | -72539.5 | -2316.8         | -2381.3         |                 | -963.6   |
|                   | sc Max 22 | -72539.5 | -2316.8         | -2381.3         |                 | -74.2    |
|                   | sc Med 22 | -72539.5 | -2316.8         | -2381.3         |                 | -37.3    |
| 3087              | Fl. 23    | -67424.2 | 2761.3          | 2218.3          |                 | -95.5    |
|                   | sfc 22    | -71227.0 | 2249.4          | 2451.4          |                 | -954.3   |
|                   | sc Max 22 | -71227.0 | 2249.4          | 2451.4          |                 | -73.6    |
|                   | sc Med 22 | -71227.0 | 2249.4          | 2451.4          |                 | -36.7    |

| Nodo                 | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|----------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                      |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Frenate |           |          |                 |                 |                 |          |
| 2250                 | Fl. 28    | -65844.8 | -1773.7         | -1983.9         |                 | -192.4   |
|                      | sfc 27    | -68209.6 | -1562.7         | -2070.2         |                 | -840.9   |
|                      | sc Max 27 | -68209.6 | -1562.7         | -2070.2         |                 | -63.9    |
|                      | sc Med 27 | -68209.6 | -1562.7         | -2070.2         |                 | -35.1    |
| 3087                 | Fl. 28    | -65272.3 | 1715.2          | 2024.3          |                 | -181.5   |
|                      | sfc 27    | -66897.1 | 1504.5          | 2135.2          |                 | -832.0   |
|                      | sc Max 27 | -66897.1 | 1504.5          | 2135.2          |                 | -63.3    |
|                      | sc Med 27 | -66897.1 | 1504.5          | 2135.2          |                 | -34.4    |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                               |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |          |
| 2250                          | Fl. 32    | -66699.5 | -1530.0         | -1983.7         |                 | -211.2   |
|                               | sfc 32    | -66699.5 | -1530.0         | -1983.7         |                 | -818.8   |
|                               | sc Max 32 | -66699.5 | -1530.0         | -1983.7         |                 | -62.1    |
|                               | sc Med 32 | -66699.5 | -1530.0         | -1983.7         |                 | -34.3    |
| 3087                          | Fl. 32    | -65387.0 | 1473.2          | 2045.8          |                 | -200.0   |
|                               | sfc 32    | -65387.0 | 1473.2          | 2045.8          |                 | -809.7   |
|                               | sc Max 32 | -65387.0 | 1473.2          | 2045.8          |                 | -61.6    |
|                               | sc Med 32 | -65387.0 | 1473.2          | 2045.8          |                 | -33.7    |

▲Pilastro: 3087/3924 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 3087 | 16   | -53099.8 | -7468.7         | -2442.2         | 1.00            | 1.00            | 0.27  |
| 3924 | 16   | -51787.3 | 7332.2          | 2455.3          | 1.00            | 1.00            | 0.27  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed2</sub> | V <sub>Ed2</sub> | V <sub>Ed2</sub> | V <sub>Ed2</sub> | Staffe    |
|------|------|------------------|------------------|------------------|------------------|-----------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |           |
| 0.13 | 3.63 | 19831.2          | 22686.9          | 14022.3          | 19500.5          | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                   |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Base |           |          |                 |                 |                 |          |
| 3087              | Fl. 23    | -54759.5 | -2698.8         | -2312.5         |                 | 13.3     |
|                   | sfc 22    | -57813.0 | -2215.7         | -2562.4         |                 | -860.0   |
|                   | sc Max 23 | -54759.5 | -2698.8         | -2312.5         |                 | -67.6    |
|                   | sc Med 22 | -57813.0 | -2215.7         | -2562.4         |                 | -30.5    |

| Nodo                 | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|----------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                      |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Frenate |           |          |                 |                 |                 |          |
| 3087                 | Fl. 23    | -54759.5 | -2698.8         | -2312.5         |                 | 13.3     |
|                      | sfc 22    | -57813.0 | -2215.7         | -2562.4         |                 | -860.0   |
|                      | sc Max 23 | -54759.5 | -2698.8         | -2312.5         |                 | -67.6    |
|                      | sc Med 22 | -57813.0 | -2215.7         | -2562.4         |                 | -30.5    |

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                        |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Frequenti |           |          |                 |                 |                 |          |
| 576                    | Fl. 28    | -93345.3 | -2531.0         | -1714.1         |                 | -291.4   |
|                        | sfc 27    | -95607.0 | -2296.6         | -1804.2         |                 | -724.5   |
|                        | sc Max 27 | -95607.0 | -2296.6         | -1804.2         |                 | -52.6    |
|                        | sc Med 27 | -95607.0 | -2296.6         | -1804.2         |                 | -34.4    |
| 1413                   | Fl. 28    | -91376.5 | 2835.7          | 1864.1          |                 | -258.8   |
|                        | sfc 27    | -94582.2 | 2497.1          | 1965.5          |                 | -732.4   |
|                        | sc Max 27 | -94582.2 | 2497.1          | 1965.5          |                 | -53.5    |
|                        | sc Med 27 | -94582.2 | 2497.1          | 1965.5          |                 | -33.7    |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                               |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |          |
| 576                           | Fl. 32    | -93555.8 | -2249.3         | -1730.2         |                 | -303.2   |
|                               | sfc 32    | -93555.8 | -2249.3         | -1730.2         |                 | -706.9   |
|                               | sc Max 32 | -93555.8 | -2249.3         | -1730.2         |                 | -51.3    |
|                               | sc Med 32 | -93555.8 | -2249.3         | -1730.2         |                 | -33.7    |
| 1413                          | Fl. 32    | -91587.1 | 2448.7          | 1883.2          |                 | -274.8   |
|                               | sfc 32    | -91587.1 | 2448.7          | 1883.2          |                 | -714.1   |
|                               | sc Max 32 | -91587.1 | 2448.7          | 1883.2          |                 | -52.1    |
|                               | sc Med 32 | -91587.1 | 2448.7          | 1883.2          |                 | -33.0    |

▲Pilastro: 1413/2250 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 1413 | 1    | -115841.5 | -2247.8         | -2592.3         | 1.00            | 1.00            | 0.29  |
| 2250 | 1    | -114135.3 | 2746.3          | 2873.1          | 1.00            | 1.00            | 0.29  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed2</sub> | V <sub>Ed2</sub> | V <sub>Ed2</sub> | V <sub>Ed2</sub> | Staffe    |
|------|------|------------------|------------------|------------------|------------------|-----------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |           |
| 0.13 | 3.63 | 16785.9          | 22686.9          | 10346.7          | 19500.5          | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                   |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Base |           |          |                 |                 |                 |          |
| 1413              | Fl. 23    | -82489.9 | -2144.1         | -1731.8         |                 | -306.3   |
|                   | sfc 22    | -86947.1 | -1726.9         | -1907.4         |                 | -984.1   |
|                   | sc Max 22 | -86947.1 | -1726.9         | -1907.4         |                 | -73.3    |
|                   | sc Med 22 | -86947.1 | -1726.9         | -1907.4         |                 | -44.8    |
| 2250              | Fl. 23    | -81177.4 | 2501.5          | 1921.0          |                 | -250.1   |
|                   | sfc 22    | -85634.6 | 2023.9          | 2115.2          |                 | -1036.8  |
|                   | sc Max 22 | -85634.6 | 2023.9          | 2115.2          |                 | -76.5    |
|                   | sc Med 22 | -85634.6 | 2023.9          | 2115.2          |                 | -44.1    |

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                        |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Frequenti |           |          |                 |                 |                 |          |
| 1413                   | Fl. 28    | -79906.6 | -1289.6         | -1557.8         |                 | -371.2   |
|                        | sfc 27    | -81838.6 | -1112.7         | -1642.3         |                 | -870.9   |
|                        | sc Max 27 | -81838.6 | -1112.7         | -1642.3         |                 | -64.0    |
|                        | sc Med 27 | -81838.6 | -1112.7         | -1642.3         |                 | -42.1    |
| 2250                   | Fl. 28    | -78594.1 | 1535.4          | 1735.6          |                 | -325.9   |
|                        | sfc 27    | -80526.1 | 1324.8          | 1828.8          |                 | -894.8   |
|                        | sc Max 27 | -80526.1 | 1324.8          | 1828.8          |                 | -66.5    |
|                        | sc Med 27 | -80526.1 | 1324.8          | 1828.8          |                 | -41.4    |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                               |           | [kg]     | [kgm]           | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |          |
| 1413                          | Fl. 32    | -80048.0 | -1090.1         | -1572.8         |                 | -387.1   |
|                               | sfc 32    | -80048.0 | -1090.1         | -1572.8         |                 | -848.9   |
|                               | sc Max 32 | -80048.0 | -1090.1         | -1572.8         |                 | -62.4    |
|                               | sc Med 32 | -80048.0 | -1090.1         | -1572.8         |                 | -41.2    |
| 2250                          | Fl. 32    | -78735.4 | 1298.2          | 1752.0          |                 | -343.9   |
|                               | sfc 32    | -78735.4 | 1298.2          | 1752.0          |                 | -871.9   |
|                               | sc Max 32 | -78735.4 | 1298.2          | 1752.0          |                 | -64.7    |
|                               | sc Med 32 | -78735.4 | 1298.2          | 1752.0          |                 | -40.5    |

▲Pilastro: 4761/5598 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 4761 | 16   | -24690.6 | -3750.9         | -1535.1         | 1.00            | 1.00            | 0.27  |
| 5598 | 16   | -23846.9 | -4068.8         | -1652.0         | 1.00            | 1.00            | 0.29  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 10348.0         | 13595.1         | 9527.3          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                               |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| Combinazioni Rare             |           |          |                 |                 |                 |          |
| 4761                          | Fl. 23    | -26661.4 | -1397.6         | -154.0          | -154.0          | 204.9    |
|                               | sfc 22    | -28129.9 | -1163.6         | -1685.5         | -1685.5         | -7590    |
|                               | sc Max 23 | -26661.4 | -1397.6         | -154.0          | -154.0          | -66.1    |
|                               | sc Med 22 | -28129.9 | -1163.6         | -1685.5         | -1685.5         | -25.5    |
| 5598                          | Fl. 23    | -25817.6 | 1504.7          | 1625.1          | 1625.1          | 276.2    |
|                               | sfc 23    | -23817.6 | 1504.7          | 1625.1          | 1625.1          | -793.3   |
|                               | sc Max 23 | -23817.6 | 1504.7          | 1625.1          | 1625.1          | -70.2    |
|                               | sc Med 22 | -27286.2 | 1246.5          | 1810.9          | 1810.9          | -26.2    |
| Combinazioni Frequenti        |           |          |                 |                 |                 |          |
| 4761                          | Fl. 28    | -25676.4 | -512.2          | -1403.2         | -1403.2         | 87.6     |
|                               | sfc 27    | -26246.1 | -821.4          | -1481.4         | -1481.4         | -644.3   |
|                               | sc Max 27 | -26246.1 | -821.4          | -1481.4         | -1481.4         | -54.6    |
|                               | sc Med 27 | -26246.1 | -821.4          | -1481.4         | -1481.4         | -22.2    |
| 5598                          | Fl. 28    | -24832.7 | 975.1           | 1506.4          | 1506.4          | 138.7    |
|                               | sfc 27    | -25402.3 | 875.1           | 1590.3          | 1590.3          | -666.3   |
|                               | sc Max 27 | -25402.3 | 875.1           | 1590.3          | 1590.3          | -57.3    |
|                               | sc Med 27 | -25402.3 | 875.1           | 1590.3          | 1590.3          | -22.7    |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |          |
| 4761                          | Fl. 32    | -25649.1 | -802.3          | -1418.7         | -1418.7         | 69.0     |
|                               | sfc 32    | -25649.1 | -802.3          | -1418.7         | -1418.7         | -624.4   |
|                               | sc Max 32 | -25649.1 | -802.3          | -1418.7         | -1418.7         | -52.8    |
|                               | sc Med 32 | -25649.1 | -802.3          | -1418.7         | -1418.7         | -21.6    |
| 5598                          | Fl. 32    | -24805.4 | 855.0           | 1522.8          | 1522.8          | 116.9    |
|                               | sfc 32    | -24805.4 | 855.0           | 1522.8          | 1522.8          | -645.2   |
|                               | sc Max 32 | -24805.4 | 855.0           | 1522.8          | 1522.8          | -55.3    |
|                               | sc Med 32 | -24805.4 | 855.0           | 1522.8          | 1522.8          | -22.0    |

▲Pilastro: 5598/6435 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 5598 | 16   | -14221.1 | -4510.4         | -1865.2         | 1.00            | 1.00            | 0.34  |
| 6435 | 16   | -13377.3 | -4875.9         | -2053.3         | 1.00            | 1.00            | 0.37  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 10509.7         | 13595.1         | 10065.6         | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                   |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| Combinazioni Rare |           |          |                 |                 |                 |          |
| 5598              | Fl. 23    | -11361.6 | -1789.5         | -1885.2         | -1885.2         | 768.4    |
|                   | sfc 23    | -11361.6 | -1789.5         | -1885.2         | -1885.2         | -819.6   |
|                   | sc Max 23 | -11361.6 | -1789.5         | -1885.2         | -1885.2         | -80.3    |
|                   | sc Med 22 | -14150.4 | -1527.3         | -2112.3         | -2112.3         | -27.3    |

| Nodo | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|------|-----------|----------|-----------------|-----------------|-----------------|----------|
|      |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| 3924 | Fl. 23    | -53487.0 | -2656.1         | -2341.5         | -2341.5         | 24.2     |
|      | sfc 22    | -56500.5 | 2169.3          | 2598.2          | 2598.2          | -849.9   |
|      | sc Max 23 | -53447.0 | 2656.1          | 2341.5          | 2341.5          | -67.0    |
|      | sc Med 22 | -56500.5 | 2169.3          | 2598.2          | 2598.2          | -30.0    |

|                        |           |          |         |         |         |        |
|------------------------|-----------|----------|---------|---------|---------|--------|
| Combinazioni Frequenti |           |          |         |         |         |        |
| 3087                   | Fl. 28    | -52986.7 | -1705.4 | -2124.2 | -2124.2 | -78.2  |
|                        | sfc 27    | -54279.2 | -1510.1 | -2242.2 | -2242.2 | -744.8 |
|                        | sc Max 27 | -54279.2 | -1510.1 | -2242.2 | -2242.2 | -57.8  |
|                        | sc Med 27 | -54279.2 | -1510.1 | -2242.2 | -2242.2 | -28.0  |
| 3924                   | Fl. 28    | -51686.2 | 1662.6  | 2153.8  | 2153.8  | 68.6   |
|                        | sfc 27    | -52986.7 | 1465.5  | 2274.6  | 2274.6  | -734.0 |
|                        | sc Max 27 | -52986.7 | 1465.5  | 2274.6  | 2274.6  | -57.1  |
|                        | sc Med 27 | -52986.7 | 1465.5  | 2274.6  | 2274.6  | -27.4  |

|                               |           |          |         |         |         |        |
|-------------------------------|-----------|----------|---------|---------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |         |         |         |        |
| 3087                          | Fl. 32    | -53067.2 | -1477.3 | -2148.2 | -2148.2 | -95.2  |
|                               | sfc 32    | -53067.2 | -1477.3 | -2148.2 | -2148.2 | -724.2 |
|                               | sc Max 32 | -53067.2 | -1477.3 | -2148.2 | -2148.2 | -56.1  |
|                               | sc Med 32 | -53067.2 | -1477.3 | -2148.2 | -2148.2 | -27.4  |
| 3924                          | Fl. 32    | -51754.7 | 1433.9  | 2179.1  | 2179.1  | 86.7   |
|                               | sfc 32    | -51754.7 | 1433.9  | 2179.1  | 2179.1  | -713.4 |
|                               | sc Max 32 | -51754.7 | 1433.9  | 2179.1  | 2179.1  | -55.4  |
|                               | sc Med 32 | -51754.7 | 1433.9  | 2179.1  | 2179.1  | -26.7  |

▲Pilastro: 3924/4761 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1024 x 4 V + 1424 x 2 B + 1424 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 3924 | 16   | -38816.5 | -7797.1         | -2608.4         | 1.00            | 1.00            | 0.28  |
| 4761 | 16   | -37504.0 | -8508.7         | -2816.5         | 1.00            | 1.00            | 0.31  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 19955.0         | 22686.9         | 15876.0         | 35500.5         | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                        |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| Combinazioni Rare      |           |          |                 |                 |                 |          |
| 3924                   | Fl. 23    | -40662.6 | -2885.4         | -2551.2         | -2551.2         | 213.9    |
|                        | sfc 23    | -40662.6 | -2885.4         | -2551.2         | -2551.2         | -810.0   |
|                        | sc Max 23 | -40662.6 | -2885.4         | -2551.2         | -2551.2         | -66.5    |
|                        | sc Med 22 | -43887.4 | -2392.6         | -2846.5         | -2846.5         | -26.0    |
| 4761                   | Fl. 23    | -39350.1 | 3148.5          | 2749.1          | 2749.1          | 297.6    |
|                        | sfc 23    | -39350.1 | 3148.5          | 2749.1          | 2749.1          | -854.1   |
|                        | sc Max 23 | -39350.1 | 3148.5          | 2749.1          | 2749.1          | -71.0    |
|                        | sc Med 22 | -41574.9 | 2606.1          | 3057.4          | 3057.4          | -26.8    |
| Combinazioni Frequenti |           |          |                 |                 |                 |          |
| 3924                   | Fl. 28    | -39251.3 | -1864.8         | -2359.6         | -2359.6         | 84.2     |
|                        | sfc 27    | -40157.4 | -1670.3         | -2492.7         | -2492.7         | -681.6   |
|                        | sc Max 27 | -40157.4 | -1670.3         | -2492.7         | -2492.7         | -54.8    |
|                        | sc Med 27 | -40157.4 | -1670.3         | -2492.7         | -2492.7         | -22.9    |
| 4761                   | Fl. 28    | -37938.8 | 2029.7          | 2542.0          | 2542.0          | 141.9    |
|                        | sfc 27    | -38844.9 | 1815.3          | 2685.0          | 2685.0          | -708.6   |
|                        | sc Max 28 | -37938.8 | 2029.7          | 2542.0          | 2542.0          | -57.7    |
|                        | sc Med 27 | -38844.9 | 1815.3          | 2685.0          | 2685.0          | -23.3    |

|                               |           |          |         |         |         |        |
|-------------------------------|-----------|----------|---------|---------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |         |         |         |        |
| 3924                          | Fl. 32    | -39256.7 | -1632.6 | -2387.7 | -2387.7 | 63.0   |
|                               | sfc 32    | -39256.7 | -1632.6 | -2387.7 | -2387.7 | -661.1 |
|                               | sc Max 32 | -39256.7 | -1632.6 | -2387.7 | -2387.7 | -53.1  |
|                               | sc Med 32 | -39256.7 | -1632.6 | -2387.7 | -2387.7 | -22.2  |
| 4761                          | Fl. 32    | -37944.2 | 1774.6  | 2571.8  | 2571.8  | 116.7  |
|                               | sfc 32    | -37944.2 | 1774.6  | 2571.8  | 2571.8  | -686.6 |
|                               | sc Max 32 | -37944.2 | 1774.6  | 2571.8  | 2571.8  | -55.8  |
|                               | sc Med 32 | -37944.2 | 1774.6  | 2571.8  | 2571.8  | -22.6  |

▲Pilastro: 645/1482 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/5f |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 645  | 19   | -125076.9 | 3928.6          | 7823.7          | 1.00            | 1.00            | 0.28  |
| 1482 | 19   | -123108.2 | -5078.7         | -7637.9         | 1.00            | 1.00            | 0.28  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 0.92 | 21809.4         | 60284.1         | 17153.8         | 33178.0         | ø 14/10.0' |
| 0.92 | 2.83 | 21809.4         | 44290.4         | 17153.8         | 24375.6         | ø 12/10.0' |
| 2.83 | 3.63 | 21809.4         | 60284.1         | 17153.8         | 33178.0         | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------------------|-----------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Rare             |           |           |                 |                 |                 |   |
| 645                           | Ft 23     | -102121.7 | -935.5          | 3224.7          | -310.4          |   |
|                               | sfc 22    | -108668.0 | -477.3          | 3593.1          | -831.6          |   |
|                               | sc Max 22 | -108668.0 | -477.3          | 3593.1          | -61.7           |   |
|                               | sc Med 22 | -108668.0 | -477.3          | 3593.1          | -39.1           |   |
| 1482                          | Ft 23     | -100155.0 | 1358.4          | -2811.5         | -388.1          |   |
|                               | sfc 22    | -106699.2 | 710.8           | -3178.8         | -804.7          |   |
|                               | sc Max 22 | -106699.2 | 710.8           | -3178.8         | -59.4           |   |
|                               | sc Med 22 | -106699.2 | 710.8           | -3178.8         | -38.4           |   |
| Combinazioni Frequenti        |           |           |                 |                 |                 |   |
| 645                           | Ft 31     | -101285.5 | 510.6           | 3815.2          | -286.5          |   |
|                               | sfc 31    | -101285.5 | 510.6           | 3815.2          | -807.1          |   |
|                               | sc Max 31 | -101285.5 | 510.6           | 3815.2          | -60.5           |   |
|                               | sc Med 31 | -101285.5 | 510.6           | 3815.2          | -37.4           |   |
| 1482                          | Ft 31     | -99316.8  | -193.2          | -3212.0         | -322.6          |   |
|                               | sfc 27    | -101848.6 | -152.1          | -3221.3         | -758.0          |   |
|                               | sc Max 27 | -101848.6 | -152.1          | -3221.3         | -56.0           |   |
|                               | sc Med 27 | -101848.6 | -152.1          | -3221.3         | -36.7           |   |
| Combinazioni Quasi Permanenti |           |           |                 |                 |                 |   |
| 645                           | Ft 32     | -101477.8 | 127.6           | 3485.3          | -324.1          |   |
|                               | sfc 32    | -101477.8 | 127.6           | 3485.3          | -771.5          |   |
|                               | sc Max 32 | -101477.8 | 127.6           | 3485.3          | -57.3           |   |
|                               | sc Med 32 | -101477.8 | 127.6           | 3485.3          | -36.3           |   |
| 1482                          | Ft 32     | -99509.1  | -144.4          | -3111.8         | -336.2          |   |
|                               | sfc 32    | -99509.1  | -144.4          | -3111.8         | -738.2          |   |
|                               | sc Max 32 | -99509.1  | -144.4          | -3111.8         | -54.5           |   |
|                               | sc Med 32 | -99509.1  | -144.4          | -3111.8         | -35.8           |   |

▲Pilastro: 1482/2319 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>13</sub> | α <sub>Ed</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 1482 | 19   | -107522.7 | 2528.8          | 5623.5          | 1.00            | 1.00            | 0.33  |
| 2319 | 19   | -106210.2 | -2785.5         | -5881.9         | 1.00            | 1.00            | 0.33  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 10924.3         | 22868.9         | 10938.7         | 15000.5         | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb | N | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------|------|---|-----------------|-----------------|---|
| Combinazioni Rare |      |   |                 |                 |   |
|                   |      |   |                 |                 |   |

| Nodo | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|------|-----------|----------|-----------------|-----------------|--------|
| 645  | Ft 23     | -12517.8 | 1569.2          | 2074.1          | 916.9  |
|      | sfc 22    | -13306.6 | 1704.7          | 2331.9          | -889.4 |
|      | sc Max 23 | -12517.8 | 1995.2          | 2074.1          | -88.3  |
|      | sc Med 22 | -13306.6 | 1704.7          | 2331.9          | -30.0  |

Combinazioni Frequenti

|     |           |          |         |         |        |
|-----|-----------|----------|---------|---------|--------|
| 598 | Ft 28     | -12882.4 | -1216.2 | -1758.0 | 565.5  |
|     | sfc 27    | -13158.8 | -1113.7 | -1856.7 | -676.3 |
|     | sc Max 28 | -12882.4 | -1216.2 | -1758.0 | -65.1  |
|     | sc Med 27 | -13158.8 | -1113.7 | -1856.7 | -23.1  |
| 645 | Ft 28     | -12038.6 | 1362.6  | 1937.7  | 697.7  |
|     | sfc 27    | -12335.1 | 1255.1  | 2046.6  | -735.6 |
|     | sc Max 27 | -12335.1 | 1255.1  | 2046.6  | -72.2  |
|     | sc Med 27 | -12335.1 | 1255.1  | 2046.6  | -25.3  |

Combinazioni Quasi Permanenti

|     |           |          |         |         |        |
|-----|-----------|----------|---------|---------|--------|
| 598 | Ft 32     | -12856.2 | -1086.7 | -1776.9 | 536.1  |
|     | sfc 32    | -12856.2 | -1086.7 | -1776.9 | -653.3 |
|     | sc Max 32 | -12856.2 | -1086.7 | -1776.9 | -62.8  |
|     | sc Med 32 | -12856.2 | -1086.7 | -1776.9 | -22.2  |
| 645 | Ft 32     | -12012.4 | 1224.4  | 1958.2  | 665.8  |
|     | sfc 32    | -12012.4 | 1224.4  | 1958.2  | -730.4 |
|     | sc Max 32 | -12012.4 | 1224.4  | 1958.2  | -69.6  |
|     | sc Med 32 | -12012.4 | 1224.4  | 1958.2  | -24.3  |

▲Pilastro: 42/645 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 42   | 21   | -130846.2 | 17206.7         | 3892.9          | 1.00            | 2.04            | 0.34  |
| 645  | 19   | -140709.2 | -6025.4         | -5606.4         | 1.00            | 1.00            | 0.28  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 0.92 | 28924.2         | 60284.1         | 12111.1         | 33178.0         | ø 14/10.0' |
| 0.92 | 2.83 | 28924.2         | 44290.4         | 12111.1         | 24375.6         | ø 12/10.0' |
| 2.83 | 3.63 | 28924.2         | 60284.1         | 12111.1         | 33178.0         | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | σ      |
|-------------------------------|-----------|-----------|-----------------|-----------------|--------|
| Combinazioni Rare             |           |           |                 |                 |        |
| 42                            | Ft 26     | -116490.4 | -2432.7         | -2395.9         | -377.7 |
|                               | sfc 26    | -116490.4 | -2432.7         | -2395.9         | -880.0 |
|                               | sc Max 26 | -116490.4 | -2432.7         | -2395.9         | -64.0  |
|                               | sc Med 22 | -123594.6 | -1287.3         | -1270.8         | -44.5  |
| 645                           | Ft 25     | -115225.6 | -101.5          | -2369.7         | -469.3 |
|                               | sfc 25    | -115225.6 | -101.5          | -2369.7         | -774.8 |
|                               | sc Max 25 | -115225.6 | -101.5          | -2369.7         | -55.7  |
|                               | sc Med 25 | -121625.8 | 458.8           | -1532.0         | -43.8  |
| Combinazioni Frequenti        |           |           |                 |                 |        |
| 42                            | Ft 31     | -115109.0 | -320.1          | -2290.0         | -464.6 |
|                               | sfc 31    | -115109.0 | -320.1          | -2290.0         | -778.2 |
|                               | sc Max 31 | -115109.0 | -320.1          | -2290.0         | -55.9  |
|                               | sc Med 27 | -118477.7 | 865.1           | -491.5          | -42.5  |
| 645                           | Ft 30     | -114020.1 | -1412.7         | -2857.9         | -377.8 |
|                               | sfc 30    | -114020.1 | -1412.7         | -2857.9         | -853.3 |
|                               | sc Max 30 | -114020.1 | -1412.7         | -2857.9         | -62.4  |
|                               | sc Med 27 | -116179.0 | -582.7          | -1671.6         | -41.8  |
| Combinazioni Quasi Permanenti |           |           |                 |                 |        |
| 42                            | Ft 32     | -115548.9 | 832.3           | -901.4          | -532.7 |
|                               | sfc 32    | -115548.9 | 832.3           | -901.4          | -714.8 |
|                               | sc Max 32 | -115548.9 | 832.3           | -901.4          | -49.6  |
|                               | sc Med 32 | -115548.9 | 832.3           | -901.4          | -41.6  |
| 645                           | Ft 32     | -11380.2  | -564.4          | -1605.5         | -489.1 |
|                               | sfc 32    | -11380.2  | -564.4          | -1605.5         | -737.2 |
|                               | sc Max 32 | -11380.2  | -564.4          | -1605.5         | -52.1  |
|                               | sc Med 32 | -11380.2  | -564.4          | -1605.5         | -40.9  |

| Nodo | Comb      | N<br>[kg] | M <sub>0</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|-------------------------|-------------------------|----------------------------|
|      | sc Max 32 | -72768.4  | 95.0                    | -2090.2                 | -37.5                      |
|      | sc Med 32 | -72768.4  | 95.0                    | -2090.2                 | -37.5                      |

▲Pilastro: 3156/3993 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>0</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ <sub>0</sub><br>[kg] | σ <sub>1</sub><br>[kg] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|------------------------|------------------------|-------|
| 3156 | 19   | -73518.9  | 27022                   | 9852.9                  | 1.00                   | 1.00                   | 0.28  |
| 3993 | 19   | -72206.4  | -2698.3                 | -5774.0                 | 1.00                   | 1.00                   | 0.28  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>02</sub><br>[kg] | V <sub>022</sub><br>[kg] | V <sub>03</sub><br>[kg] | V <sub>033</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 13510.19                | 22686.9                  | 13372.4                 | 19600.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>03</sub><br>[kgm] | σ <sub>02</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>03</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| Combinazioni Rare |           |           |                          |                          |                                          |                                          |
| 3156              | Fl. 23    | -61001.7  | -1004.9                  | 1704.1                   | -234.2                                   | -735.2                                   |
|                   | sfc 22    | -65034.7  | -661.0                   | 1978.5                   | -735.2                                   | -735.2                                   |
|                   | sc Max 22 | -65034.7  | -661.0                   | 1978.5                   | -55.0                                    | -55.0                                    |
|                   | sc Med 22 | -65034.7  | -661.0                   | 1978.5                   | -33.5                                    | -33.5                                    |
| 3993              | Fl. 23    | -59689.2  | 1040.6                   | -1648.3                  | -227.1                                   | -227.1                                   |
|                   | sfc 22    | -63722.2  | 686.0                    | -197.7                   | -721.5                                   | -721.5                                   |
|                   | sc Max 22 | -63722.2  | 686.0                    | -197.7                   | -54.0                                    | -54.0                                    |
|                   | sc Med 22 | -63722.2  | 686.0                    | -197.7                   | -32.8                                    | -32.8                                    |

| Nodo                   | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>03</sub><br>[kgm] | σ <sub>02</sub><br>[kg] | σ <sub>03</sub><br>[kg] | Sd/Sr  |
|------------------------|-----------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|--------|
| Combinazioni Frequenti |           |           |                          |                          |                         |                         |        |
| 3156                   | Fl. 28    | -60232.8  | -313.3                   | 1939.7                   | -263.6                  | -678.4                  | -678.4 |
|                        | sfc 27    | -61902.9  | -165.6                   | 2060.3                   | -50.5                   | -31.9                   | -31.9  |
|                        | sc Max 27 | -61902.9  | -165.6                   | 2060.3                   | -31.9                   | -31.9                   | -31.9  |
|                        | sc Med 27 | -61902.9  | -165.6                   | 2060.3                   | -31.9                   | -31.9                   | -31.9  |
| 3993                   | Fl. 28    | -58900.3  | 334.9                    | -1883.4                  | -256.6                  | -664.6                  | -664.6 |
|                        | sfc 27    | -60590.4  | 386.5                    | -2002.1                  | -49.5                   | -31.2                   | -31.2  |
|                        | sc Max 27 | -60590.4  | 386.5                    | -2002.1                  | -49.5                   | -49.5                   | -49.5  |
|                        | sc Med 27 | -60590.4  | 386.5                    | -2002.1                  | -49.5                   | -49.5                   | -49.5  |

| Nodo                          | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>03</sub><br>[kgm] | σ <sub>02</sub><br>[kg] | σ <sub>03</sub><br>[kg] | Sd/Sr  |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|--------|
| Combinazioni Quasi Permanenti |           |           |                          |                          |                         |                         |        |
| 3156                          | Fl. 32    | -60408.2  | -163.9                   | 1981.2                   | -273.3                  | -659.5                  | -659.5 |
|                               | sfc 32    | -60408.2  | -163.9                   | 1981.2                   | -49.1                   | -31.1                   | -31.1  |
|                               | sc Max 32 | -60408.2  | -163.9                   | 1981.2                   | -31.1                   | -31.1                   | -31.1  |
|                               | sc Med 32 | -60408.2  | -163.9                   | 1981.2                   | -31.1                   | -31.1                   | -31.1  |
| 3993                          | Fl. 32    | -59095.7  | 384.2                    | -1924.6                  | -645.9                  | -48.0                   | -48.0  |
|                               | sfc 32    | -59095.7  | 384.2                    | -1924.6                  | -48.0                   | -48.0                   | -48.0  |
|                               | sc Max 32 | -59095.7  | 384.2                    | -1924.6                  | -48.0                   | -48.0                   | -48.0  |
|                               | sc Med 32 | -59095.7  | 384.2                    | -1924.6                  | -48.0                   | -48.0                   | -48.0  |

| Nodo                          | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>03</sub><br>[kgm] | σ <sub>02</sub><br>[kg] | σ <sub>03</sub><br>[kg] | Sd/Sr  |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|--------|
| Combinazioni Quasi Permanenti |           |           |                          |                          |                         |                         |        |
| 3156                          | Fl. 32    | -60408.2  | -163.9                   | 1981.2                   | -273.3                  | -659.5                  | -659.5 |
|                               | sfc 32    | -60408.2  | -163.9                   | 1981.2                   | -49.1                   | -31.1                   | -31.1  |
|                               | sc Max 32 | -60408.2  | -163.9                   | 1981.2                   | -31.1                   | -31.1                   | -31.1  |
|                               | sc Med 32 | -60408.2  | -163.9                   | 1981.2                   | -31.1                   | -31.1                   | -31.1  |
| 3993                          | Fl. 32    | -59095.7  | 384.2                    | -1924.6                  | -645.9                  | -48.0                   | -48.0  |
|                               | sfc 32    | -59095.7  | 384.2                    | -1924.6                  | -48.0                   | -48.0                   | -48.0  |
|                               | sc Max 32 | -59095.7  | 384.2                    | -1924.6                  | -48.0                   | -48.0                   | -48.0  |
|                               | sc Med 32 | -59095.7  | 384.2                    | -1924.6                  | -48.0                   | -48.0                   | -48.0  |

▲Pilastro: 3993/4830 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>0</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ <sub>0</sub><br>[kg] | σ <sub>1</sub><br>[kg] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|------------------------|------------------------|-------|
| 3993 | 19   | -56382.5  | 2627.6                  | 9928.9                  | 1.00                   | 1.00                   | 0.26  |
| 4830 | 19   | -55070.0  | -2855.0                 | -6355.7                 | 1.00                   | 1.00                   | 0.28  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>02</sub><br>[kg] | V <sub>022</sub><br>[kg] | V <sub>03</sub><br>[kg] | V <sub>033</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 14902.3                 | 22686.9                  | 15233.4                 | 19600.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb      | N<br>[kg] | M <sub>0</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| 1482 | Fl. 23    | -88084.8  | -687.7                  | 1735.0                  | -466.9                     |
|      | sfc 22    | -93813.4  | -374.1                  | 1966.1                  | -935.8                     |
|      | sc Max 22 | -93813.4  | -374.1                  | 1966.1                  | -67.9                      |
|      | sc Med 22 | -93813.4  | -374.1                  | 1966.1                  | -48.3                      |
| 2319 | Fl. 23    | -86772.3  | 818.0                   | -1840.6                 | -436.7                     |
|      | sfc 22    | -92500.9  | 464.4                   | -2116.6                 | -943.9                     |
|      | sc Max 22 | -92500.9  | 464.4                   | -2116.6                 | -68.9                      |
|      | sc Med 22 | -92500.9  | 464.4                   | -2116.6                 | -47.6                      |

| Combinazioni Frequenti |           |          |       |         |        |        |
|------------------------|-----------|----------|-------|---------|--------|--------|
| 1482                   | Fl. 30    | -87591.1 | 63.1  | -2027.6 | -486.2 | -486.2 |
|                        | sfc 27    | -89547.1 | 49.1  | 2063.3  | -882.6 | -882.6 |
|                        | sc Max 27 | -89547.1 | 49.1  | 2063.3  | -63.9  | -63.9  |
|                        | sc Med 27 | -89547.1 | 49.1  | 2063.3  | -46.1  | -46.1  |
| 2319                   | Fl. 28    | -85926.8 | 137.0 | -2066.8 | -464.7 | -464.7 |
|                        | sfc 27    | -88234.6 | -15.9 | -2185.9 | -881.0 | -881.0 |
|                        | sc Max 27 | -88234.6 | -15.9 | -2185.9 | -64.1  | -64.1  |
|                        | sc Med 27 | -88234.6 | -15.9 | -2185.9 | -45.4  | -45.4  |

| Combinazioni Quasi Permanenti |           |          |       |         |        |        |
|-------------------------------|-----------|----------|-------|---------|--------|--------|
| 1482                          | Fl. 32    | -87484.3 | 46.1  | 1987.5  | -491.3 | -491.3 |
|                               | sfc 32    | -87484.3 | 46.1  | 1987.5  | -859.6 | -859.6 |
|                               | sc Max 32 | -87484.3 | 46.1  | 1987.5  | -62.2  | -62.2  |
|                               | sc Med 32 | -87484.3 | 46.1  | 1987.5  | -45.0  | -45.0  |
| 2319                          | Fl. 32    | -86171.8 | -13.7 | -2105.6 | -473.0 | -473.0 |
|                               | sfc 32    | -86171.8 | -13.7 | -2105.6 | -857.6 | -857.6 |
|                               | sc Max 32 | -86171.8 | -13.7 | -2105.6 | -62.3  | -62.3  |
|                               | sc Med 32 | -86171.8 | -13.7 | -2105.6 | -44.4  | -44.4  |

▲Pilastro: 2319/3156 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>0</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ <sub>0</sub><br>[kg] | σ <sub>1</sub><br>[kg] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|------------------------|------------------------|-------|
| 2319 | 19   | -90624.4  | 2972.9                  | 6346.8                  | 1.00                   | 1.00                   | 0.32  |
| 3156 | 19   | -89311.9  | -2906.9                 | -6058.0                 | 1.00                   | 1.00                   | 0.31  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>02</sub><br>[kg] | V <sub>022</sub><br>[kg] | V <sub>03</sub><br>[kg] | V <sub>033</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 13608.5                 | 22686.9                  | 12321.5                 | 19500.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>0</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ <sub>0</sub><br>[kg] | σ <sub>1</sub><br>[kg] | Sd/Sr  |
|-------------------|-----------|-----------|-------------------------|-------------------------|------------------------|------------------------|--------|
| Combinazioni Rare |           |           |                         |                         |                        |                        |        |
| 2319              | Fl. 23    | -74080.9  | -951.2                  | 1871.7                  | -329.9                 | -856.6                 | -856.6 |
|                   | sfc 22    | -79575.7  | -572.2                  | 2159.0                  | -63.4                  | -63.4                  | -63.4  |
|                   | sc Max 22 | -79575.7  | -572.2                  | 2159.0                  | -41.0                  | -41.0                  | -41.0  |
|                   | sc Med 22 | -79575.7  | -572.2                  | 2159.0                  | -41.0                  | -41.0                  | -41.0  |
| 3156              | Fl. 23    | -73384.4  | 990.1                   | -1807.6                 | -322.4                 | -843.7                 | -843.7 |
|                   | sfc 22    | -78263.2  | 614.8                   | -2090.4                 | -62.4                  | -62.4                  | -62.4  |
|                   | sc Max 22 | -78263.2  | 614.8                   | -2090.4                 | -62.4                  | -62.4                  | -62.4  |
|                   | sc Med 22 | -78263.2  | 614.8                   | -2090.4                 | -62.4                  | -62.4                  | -62.4  |

| Combinazioni Frequenti |           |          |        |         |        |        |
|------------------------|-----------|----------|--------|---------|--------|--------|
| 2319                   | Fl. 28    | -73871.7 | -213.7 | 2112.2  | -361.3 | -361.3 |
|                        | sfc 27    | -75863.3 | -52.5  | 2237.1  | -795.0 | -795.0 |
|                        | sc Max 27 | -75863.3 | -52.5  | 2237.1  | -58.4  | -58.4  |
|                        | sc Med 27 | -75863.3 | -52.5  | 2237.1  | -39.0  | -39.0  |
| 3156                   | Fl. 28    | -72559.2 | 254.8  | -2048.5 | -353.6 | -353.6 |
|                        | sfc 27    | -74550.8 | 95.2   | -2171.9 | -780.4 | -780.4 |
|                        | sc Max 27 | -74550.8 | 95.2   | -2171.9 | -57.5  | -57.5  |
|                        | sc Med 27 | -74550.8 | 95.2   | -2171.9 | -38.4  | -38.4  |

| Combinazioni Quasi Permanenti |           |          |       |         |        |        |
|-------------------------------|-----------|----------|-------|---------|--------|--------|
| 2319                          | Fl. 32    | -74080.9 | -53.3 | 2154.0  | -372.1 | -372.1 |
|                               | sfc 32    | -74080.9 | -53.3 | 2154.0  | -771.8 | -771.8 |
|                               | sc Max 32 | -74080.9 | -53.3 | 2154.0  | -56.8  | -56.8  |
|                               | sc Med 32 | -74080.9 | -53.3 | 2154.0  | -38.1  | -38.1  |
| 3156                          | Fl. 32    | -72768.4 | 95.0  | -2090.2 | -364.4 | -364.4 |
|                               | sfc 32    | -72768.4 | 95.0  | -2090.2 | -759.3 | -759.3 |

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
|                   | s/c 32    | -32050.3  | 1573                     | -11634                   | -5493                      |
|                   | sc Max 32 | -32050.3  | 1573                     | -11634                   | -430                       |
|                   | sc Med 32 | -32050.3  | 1573                     | -11634                   | -236                       |

▲Pilastro: 5667/6504 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 5667 | 19   | -23812.2  | 1195.6                   | 3820.1                   | 1.00                    | 1.00                    | 0.26  |
| 6504 | 19   | -22988.4  | 1242.8                   | -4008.1                  | 1.00                    | 1.00                    | 0.27  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed1</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 10077.1                 | 13595.1                  | 10561.4                  | 13595.1                  | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |      |           |                          |                          |                            |

|      |           |          |        |         |        |
|------|-----------|----------|--------|---------|--------|
| 5667 | Fl. 23    | -20277.3 | -605.8 | 1086.5  | 41.5   |
|      | s/c 22    | -21277.9 | -433.8 | 1298.6  | -504.1 |
|      | sc Max 22 | -21277.9 | -433.8 | 1298.6  | -42.3  |
|      | sc Med 22 | -21277.9 | -433.8 | 1298.6  | -18.1  |
| 6504 | Fl. 23    | -19433.6 | 614.9  | -1158.9 | 72.2   |
|      | s/c 22    | -20884.1 | 436.3  | -1402.0 | -515.4 |
|      | sc Max 22 | -20884.1 | 436.3  | -1402.0 | -43.8  |
|      | sc Med 22 | -20884.1 | 436.3  | -1402.0 | -18.6  |

|                        |           |          |        |         |        |
|------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Frequenti |           |          |        |         |        |
| 5667                   | Fl. 28    | -19696.4 | -251.2 | 1252.5  | 17.9   |
|                        | s/c 27    | -20395.9 | -181.7 | 1341.6  | -457.0 |
|                        | sc Max 27 | -20395.9 | -181.7 | 1341.6  | -38.1  |
|                        | sc Med 27 | -20395.9 | -181.7 | 1341.6  | -17.6  |
| 6504                   | Fl. 28    | -18852.7 | 250.8  | -1320.7 | 49.5   |
|                        | s/c 27    | -19532.2 | 178.6  | -1428.8 | -464.0 |
|                        | sc Max 27 | -19532.2 | 178.6  | -1428.8 | -39.2  |
|                        | sc Med 27 | -19532.2 | 178.6  | -1428.8 | -18.2  |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 5667                          | Fl. 32    | -19763.2 | -179.2 | 1283.6  | 10.8   |
|                               | s/c 32    | -19763.2 | -179.2 | 1283.6  | -440.5 |
|                               | sc Max 32 | -19763.2 | -179.2 | 1283.6  | -36.7  |
|                               | sc Med 32 | -19763.2 | -179.2 | 1283.6  | -16.9  |
| 6504                          | Fl. 32    | -18919.4 | 176.7  | -1363.1 | 42.6   |
|                               | s/c 32    | -18919.4 | 176.7  | -1363.1 | -446.2 |
|                               | sc Max 32 | -18919.4 | 176.7  | -1363.1 | -37.6  |
|                               | sc Med 32 | -18919.4 | 176.7  | -1363.1 | -17.4  |

▲Pilastro: 6504/7066 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 6504 | 19   | -8302.3   | 610.3                    | 2095.9                   | 1.00                    | 1.00                    | 0.14  |
| 7066 | 1    | -8922.9   | 6.0                      | -16.6                    | 1.00                    | 1.00                    | 0.03  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed1</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 5753.8                  | 13595.1                  | 5781.2                   | 13595.1                  | ø 12/15.0 |

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 3993              | Fl. 23    | -47128.7  | -1103.9                  | 1688.6                   | -121.3                     |
|                   | s/c 22    | -50320.3  | -749.0                   | 1972.9                   | -628.2                     |
|                   | sc Max 22 | -50320.3  | -749.0                   | 1972.9                   | -48.0                      |
|                   | sc Med 22 | -50320.3  | -749.0                   | 1972.9                   | -25.9                      |
| 4830              | Fl. 23    | -45181.6  | 1207.8                   | -1782.3                  | -94.3                      |
|                   | s/c 22    | -49007.8  | 822.9                    | -2087.2                  | -634.4                     |
|                   | sc Max 22 | -49007.8  | 822.9                    | -2087.2                  | -48.8                      |
|                   | sc Med 22 | -49007.8  | 822.9                    | -2087.2                  | -25.2                      |

|                        |           |          |        |         |        |
|------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Frequenti |           |          |        |         |        |
| 3993                   | Fl. 28    | -46444.3 | -391.5 | 1933.9  | -151.4 |
|                        | s/c 27    | -47791.3 | -246.0 | 2059.3  | -575.8 |
|                        | sc Max 27 | -47791.3 | -246.0 | 2059.3  | -43.8  |
|                        | sc Med 27 | -47791.3 | -246.0 | 2059.3  | -24.6  |
| 4830                   | Fl. 28    | -45131.8 | 433.2  | -2047.7 | -127.5 |
|                        | s/c 27    | -46478.8 | 274.9  | -2182.0 | -579.2 |
|                        | sc Max 27 | -46478.8 | 274.9  | -2182.0 | -44.4  |
|                        | sc Med 27 | -46478.8 | 274.9  | -2182.0 | -23.9  |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 3993                          | Fl. 32    | -46587.8 | -242.6 | 1978.2  | -160.5 |
|                               | s/c 32    | -46587.8 | -242.6 | 1978.2  | -558.9 |
|                               | sc Max 32 | -46587.8 | -242.6 | 1978.2  | -42.5  |
|                               | sc Med 32 | -46587.8 | -242.6 | 1978.2  | -24.0  |
| 4830                          | Fl. 32    | -45275.3 | 270.9  | -2095.3 | -137.4 |
|                               | s/c 32    | -45275.3 | 270.9  | -2095.3 | -561.7 |
|                               | sc Max 32 | -45275.3 | 270.9  | -2095.3 | -43.0  |
|                               | sc Med 32 | -45275.3 | 270.9  | -2095.3 | -23.3  |

▲Pilastro: 4830/5667 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 4830 | 19   | -39658.2  | 1122.1                   | 3558.4                   | 1.00                    | 1.00                    | 0.25  |
| 5667 | 19   | -38614.4  | -1217.5                  | -3582.8                  | 1.00                    | 1.00                    | 0.26  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed1</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 8378.0                  | 13595.1                  | 8833.6                   | 13595.1                  | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |      |           |                          |                          |                            |

|      |           |          |        |         |        |
|------|-----------|----------|--------|---------|--------|
| 4830 | Fl. 23    | -33404.3 | -525.1 | 942.4   | -152.4 |
|      | s/c 22    | -35742.3 | -369.3 | 1106.9  | -613.7 |
|      | sc Max 22 | -35742.3 | -369.3 | 1106.9  | -48.0  |
|      | sc Med 22 | -35742.3 | -369.3 | 1106.9  | -26.4  |
| 5667 | Fl. 23    | -32560.6 | 573.3  | -981.1  | -130.2 |
|      | s/c 22    | -34898.6 | 405.5  | -1154.7 | -616.8 |
|      | sc Max 22 | -34898.6 | 405.5  | -1154.7 | -48.6  |
|      | sc Med 22 | -34898.6 | 405.5  | -1154.7 | -25.7  |

|                        |           |          |        |         |        |
|------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Frequenti |           |          |        |         |        |
| 4830                   | Fl. 28    | -32786.7 | -206.6 | 1084.8  | -171.6 |
|                        | s/c 27    | -33810.5 | -143.4 | 1157.4  | -566.4 |
|                        | sc Max 27 | -33810.5 | -143.4 | 1157.4  | -44.0  |
|                        | sc Med 27 | -33810.5 | -143.4 | 1157.4  | -24.9  |
| 5667                   | Fl. 28    | -31942.9 | 228.3  | -1135.4 | -151.5 |
|                        | s/c 27    | -32966.8 | 159.8  | -1212.1 | -567.6 |
|                        | sc Max 27 | -32966.8 | 159.8  | -1212.1 | -44.4  |
|                        | sc Med 27 | -32966.8 | 159.8  | -1212.1 | -24.3  |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 4830                          | Fl. 32    | -32894.1 | -141.2 | 1111.0  | -178.6 |
|                               | s/c 32    | -32894.1 | -141.2 | 1111.0  | -549.1 |
|                               | sc Max 32 | -32894.1 | -141.2 | 1111.0  | -42.6  |
|                               | sc Med 32 | -32894.1 | -141.2 | 1111.0  | -24.3  |
| 5667                          | Fl. 32    | -32050.3 | 157.3  | -1163.4 | -159.1 |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare             |           |           |                         |                         |                            |
| 6504                          | Fr. 22    | -7337.2   | -215.0                  | 791.5                   | 120.2                      |
|                               | sfc 22    | -7337.2   | -215.0                  | 791.5                   | -250.7                     |
|                               | sc Max 22 | -7337.2   | -215.0                  | 791.5                   | -22.7                      |
|                               | sc Med 22 | -7337.2   | -215.0                  | 791.5                   | -9.5                       |
| 7066                          | Fr. 23    | -6254.5   | 6.0                     | -10.5                   | -66.7                      |
|                               | sfc 22    | -6254.5   | 6.0                     | -10.5                   | -66.7                      |
|                               | sc Max 22 | -6693.5   | 4.4                     | -12.5                   | -76.5                      |
|                               | sc Med 22 | -6693.5   | 4.4                     | -12.5                   | -5.2                       |
| Combinazioni Frequenti        |           |           |                         |                         |                            |
| 6504                          | Fr. 27    | -6975.8   | -84.3                   | 795.2                   | 107.4                      |
|                               | sfc 27    | -6975.8   | -84.3                   | 795.2                   | -221.5                     |
|                               | sc Max 27 | -6975.8   | -84.3                   | 795.2                   | -20.1                      |
|                               | sc Med 27 | -6975.8   | -84.3                   | 795.2                   | -9.2                       |
| 7066                          | Fr. 28    | -5805.1   | 2.7                     | -11.8                   | -62.1                      |
|                               | sfc 27    | -5805.1   | 2.7                     | -11.8                   | -62.1                      |
|                               | sc Max 27 | -6332.0   | 2.0                     | -13.0                   | -70.0                      |
|                               | sc Med 27 | -6332.0   | 2.0                     | -13.0                   | -4.7                       |
| Combinazioni Quasi Permanenti |           |           |                         |                         |                            |
| 6504                          | Fr. 32    | -6678.3   | -83.4                   | 757.0                   | 101.9                      |
|                               | sfc 32    | -6678.3   | -83.4                   | 757.0                   | -211.7                     |
|                               | sc Max 32 | -6678.3   | -83.4                   | 757.0                   | -19.2                      |
|                               | sc Med 32 | -6678.3   | -83.4                   | 757.0                   | -8.8                       |
| 7066                          | Fr. 32    | -5834.5   | 2.0                     | -12.2                   | -62.4                      |
|                               | sfc 32    | -5834.5   | 2.0                     | -12.2                   | -66.6                      |
|                               | sc Max 32 | -5834.5   | 2.0                     | -12.2                   | -4.5                       |
|                               | sc Med 32 | -5834.5   | 2.0                     | -12.2                   | -4.3                       |

▲ Pilastro: 67/678 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

AF: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | α <sub>u</sub> | α <sub>1</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 67   | 17   | -95193.3  | -26772.6                | 980.5                   | 1.00           | 36.04          | 0.40  |
| 678  | 16   | -107632.3 | 11200.6                 | 3149.4                  | 1.00           | 1.00           | 0.25  |

▲ Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 0.92     | 3872.4                  | 60284.1                  | 14127.2                 | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 3872.4                  | 44290.4                  | 14127.2                 | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 3872.4                  | 60284.1                  | 14127.2                 | 33178.0                  | ø 14/10.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare             |           |           |                         |                         |                            |
| 67                            | Fr. 23    | -101288.2 | -5576.1                 | -1018.3                 | -251.5                     |
|                               | sfc 23    | -101288.2 | -5576.1                 | -1018.3                 | -842.1                     |
|                               | sc Max 23 | -101288.2 | -5576.1                 | -1018.3                 | -60.9                      |
|                               | sc Med 22 | -106616.0 | -3460.8                 | -1131.6                 | -38.4                      |
| 678                           | Fr. 25    | -99319.2  | 1092.0                  | 2790.8                  | -315.9                     |
|                               | sfc 25    | -99319.2  | 1092.0                  | 2790.8                  | -756.4                     |
|                               | sc Max 25 | -99319.2  | 1092.0                  | 2790.8                  | -55.7                      |
|                               | sc Med 22 | -104647.2 | 1252.6                  | 1936.3                  | -37.7                      |
| Combinazioni Frequenti        |           |           |                         |                         |                            |
| 67                            | Fr. 30    | -97451.5  | -56.8                   | -2080.1                 | -393.4                     |
|                               | sfc 30    | -97451.5  | -56.8                   | -2080.1                 | -658.8                     |
|                               | sc Max 30 | -97451.5  | -56.8                   | -2080.1                 | -47.4                      |
|                               | sc Med 27 | -99133.2  | -475.0                  | -210.5                  | -35.7                      |
| 678                           | Fr. 30    | -95482.8  | -448.1                  | 2730.2                  | -325.8                     |
|                               | sfc 30    | -95482.8  | -448.1                  | 2730.2                  | -705.2                     |
|                               | sc Max 30 | -95482.8  | -448.1                  | 2730.2                  | -51.8                      |
|                               | sc Med 27 | -97164.5  | -157.9                  | 1520.9                  | -35.0                      |
| Combinazioni Quasi Permanenti |           |           |                         |                         |                            |
| 67                            | Fr. 32    | -97886.5  | -458.8                  | 452.9                   | -464.2                     |

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |           |                         |                         |                            |
|                   | sfc 32    | -97086.5  | -458.8                  | 452.9                   | -584.2                     |
|                   | sc Max 32 | -97086.5  | -458.8                  | 452.9                   | -40.5                      |
|                   | sc Med 32 | -97086.5  | -458.8                  | 452.9                   | -24.9                      |
|                   | Fr. 32    | -95117.8  | -156.4                  | 1453.8                  | -415.9                     |
| 678               | sfc 32    | -95117.8  | -156.4                  | 1453.8                  | -611.1                     |
|                   | sc Max 32 | -95117.8  | -156.4                  | 1453.8                  | -43.3                      |
|                   | sc Med 32 | -95117.8  | -156.4                  | 1453.8                  | -34.2                      |

▲ Pilastro: 678/1515 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

AF: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | α <sub>u</sub> | α <sub>1</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 678  | 15   | -105444.4 | 4460.5                  | -5650.4                 | 1.00           | 1.00           | 0.23  |
| 1515 | 15   | -104475.6 | -5392.2                 | 5988.6                  | 1.00           | 1.00           | 0.24  |

▲ Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 0.92     | 32660.5                 | 60284.1                  | 17407.5                 | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 32660.5                 | 44290.4                  | 17407.5                 | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 32660.5                 | 60284.1                  | 17407.5                 | 33178.0                  | ø 14/10.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare             |           |           |                         |                         |                            |
| 678                           | Fr. 23    | -87786.9  | -1197.3                 | -2444.9                 | -272.9                     |
|                               | sfc 22    | -92693.0  | -527.7                  | -2589.7                 | -684.6                     |
|                               | sc Max 22 | -92693.0  | -527.7                  | -2589.7                 | -50.3                      |
|                               | sc Med 22 | -92693.0  | -527.7                  | -2589.7                 | -33.4                      |
| 1515                          | Fr. 23    | -85881.1  | 1844.1                  | 2463.9                  | -233.0                     |
|                               | sfc 22    | -90724.3  | 942.0                   | 2650.1                  | -694.9                     |
|                               | sc Max 23 | -85881.1  | 1844.1                  | 2463.9                  | -51.4                      |
|                               | sc Med 22 | -90724.3  | 942.0                   | 2650.1                  | -32.7                      |
| Combinazioni Frequenti        |           |           |                         |                         |                            |
| 678                           | Fr. 31    | -84433.5  | 465.4                   | -2365.8                 | -288.2                     |
|                               | sfc 31    | -84433.5  | 465.4                   | -2365.8                 | -623.4                     |
|                               | sc Max 31 | -84433.5  | 465.4                   | -2365.8                 | -45.8                      |
|                               | sc Med 27 | -86351.4  | 344.6                   | -2130.8                 | -31.1                      |
| 1515                          | Fr. 29    | -82878.6  | -253.0                  | 2157.8                  | -301.7                     |
|                               | sfc 27    | -84382.6  | -244.2                  | 2175.9                  | -602.0                     |
|                               | sc Max 27 | -84382.6  | -244.2                  | 2175.9                  | -43.9                      |
|                               | sc Med 27 | -84382.6  | -244.2                  | 2175.9                  | -30.4                      |
| Combinazioni Quasi Permanenti |           |           |                         |                         |                            |
| 678                           | Fr. 32    | -84532.8  | 340.5                   | -2052.8                 | -313.6                     |
|                               | sfc 32    | -84532.8  | 340.5                   | -2052.8                 | -599.1                     |
|                               | sc Max 32 | -84532.8  | 340.5                   | -2052.8                 | -43.6                      |
|                               | sc Med 32 | -84532.8  | 340.5                   | -2052.8                 | -30.4                      |
| 1515                          | Fr. 32    | -82564.0  | -241.8                  | 2091.4                  | -586.8                     |
|                               | sfc 32    | -82564.0  | -241.8                  | 2091.4                  | -42.8                      |
|                               | sc Max 32 | -82564.0  | -241.8                  | 2091.4                  | -291.4                     |
|                               | sc Med 32 | -82564.0  | -241.8                  | 2091.4                  | -29.7                      |

▲ Pilastro: 1515/2352 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

AF: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 350.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>1</sub><br>[kgm] | α <sub>u</sub> | α <sub>1</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 1515 | 15   | -80985.5  | 2678.4                  | -4861.5                 | 1.00           | 1.00           | 0.29  |
| 2352 | 20   | -78486.0  | -6461.4                 | 3122.7                  | 1.00           | 1.00           | 0.30  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | Staffe     |
|-----------|----------|------------------|-------------------|------------------|-------------------|------------|
| 0.13      | 3.63     | 1679.8           | 2266.9            | 11424.7          | 19500.5           | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo                          | Comb        | N<br>[kg] | $M_{ed}$<br>[kgm] | $M_{s}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|-------------------|------------------|-----------------------------------|
| Combinazioni Quasi Permanenti |             |           |                   |                  |                                   |
| 1515                          | Fl. 23      | -74545.2  | -1064.0           | -1782.8          | -327.2                            |
|                               | sfc. 22     | -78891.5  | -620.1            | -1947.7          | -836.0                            |
|                               | sc. Max. 22 | -78891.5  | -620.1            | -1947.7          | -616.                             |
|                               | sc. Med. 22 | -78891.5  | -620.1            | -1947.7          | -405.                             |
| 2352                          | Fl. 23      | -73232.7  | 1170.9            | 1881.5           | -299.9                            |
|                               | sfc. 22     | -77579.0  | 669.8             | 2058.4           | -840.0                            |
|                               | sc. Max. 22 | -77579.0  | 669.8             | 2058.4           | -62.2                             |
|                               | sc. Med. 22 | -77579.0  | 669.8             | 2058.4           | -39.9                             |

|                        |             |          |        |         |        |
|------------------------|-------------|----------|--------|---------|--------|
| Combinazioni Frequenti |             |          |        |         |        |
| 1515                   | Fl. 28      | -71979.5 | -222.1 | -1530.7 | -398.8 |
|                        | sfc. 27     | -73581.8 | -165.  | -1593.3 | -714.1 |
|                        | sc. Max. 28 | -71979.5 | -222.1 | -1530.7 | -516.  |
|                        | sc. Med. 27 | -73581.8 | -165.  | -1593.3 | -379.  |
| 2352                   | Fl. 28      | -70667.0 | 226.9  | 1620.9  | -380.1 |
|                        | sfc. 27     | -72269.3 | -4.4   | 1690.7  | -711.8 |
|                        | sc. Max. 28 | -70667.0 | 226.9  | 1620.9  | -51.7  |
|                        | sc. Med. 27 | -72269.3 | -4.4   | 1690.7  | -37.2  |

|                               |             |          |       |         |        |
|-------------------------------|-------------|----------|-------|---------|--------|
| Combinazioni Quasi Permanenti |             |          |       |         |        |
| 1515                          | Fl. 32      | -72004.9 | -13.6 | -1528.1 | -416.1 |
|                               | sfc. 32     | -72004.9 | -13.6 | -1528.1 | -695.7 |
|                               | sc. Max. 32 | -72004.9 | -13.6 | -1528.1 | -501.  |
|                               | sc. Med. 32 | -72004.9 | -13.6 | -1528.1 | -37.1  |
| 2352                          | Fl. 32      | -70692.4 | -6.9  | 1620.9  | -398.1 |
|                               | sfc. 32     | -70692.4 | -6.9  | 1620.9  | -693.5 |
|                               | sc. Max. 32 | -70692.4 | -6.9  | 1620.9  | -50.2  |
|                               | sc. Med. 32 | -70692.4 | -6.9  | 1620.9  | -36.4  |

▲Pilastro: 2352/3189 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | $M_{ed}$<br>[kgm] | $M_{s}$<br>[kgm] | $\alpha_{s}$<br>[kg] | $\sigma_{s}$<br>[kg/cm <sup>2</sup> ] |
|------|------|-----------|-------------------|------------------|----------------------|---------------------------------------|
| 2352 | 20   | -66581.6  | 6957.9            | -3316.7          | 1.00                 | 1.00                                  |
| 3189 | 20   | -65269.1  | -6859.4           | 3337.8           | 1.00                 | 1.00                                  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | Staffe     |
|-----------|----------|------------------|-------------------|------------------|-------------------|------------|
| 0.13      | 3.63     | 18878.1          | 22666.9           | 13240.0          | 19500.5           | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo              | Comb        | N<br>[kg] | $M_{ed}$<br>[kgm] | $M_{s}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------|-------------|-----------|-------------------|------------------|-----------------------------------|
| Combinazioni Rare |             |           |                   |                  |                                   |
| 2352              | Fl. 23      | -62209.0  | -1343.7           | -1995.0          | -190.5                            |
|                   | sfc. 22     | -65884.5  | -813.2            | -2300.7          | -773.3                            |
|                   | sc. Max. 23 | -62209.0  | -1343.7           | -1995.0          | -586.                             |
|                   | sc. Med. 22 | -65884.5  | -813.2            | -2190.7          | -33.9                             |
| 3189              | Fl. 23      | -60896.5  | 1364.7            | 2023.2           | -176.1                            |
|                   | sfc. 22     | -64572.0  | 836.9             | 2220.9           | -767.8                            |
|                   | sc. Max. 23 | -60896.5  | 1364.7            | 2023.2           | -58.3                             |
|                   | sc. Med. 22 | -64572.0  | 836.9             | 2220.9           | -33.2                             |

|                        |             |          |        |         |        |
|------------------------|-------------|----------|--------|---------|--------|
| Combinazioni Frequenti |             |          |        |         |        |
| 2352                   | Fl. 28      | -60115.7 | -334.0 | -1729.3 | -280.1 |
|                        | sfc. 28     | -60115.7 | -334.0 | -1729.3 | -648.1 |
|                        | sc. Max. 28 | -60115.7 | -334.0 | -1729.3 | -480.  |
|                        | sc. Med. 27 | -61484.9 | -91.6  | -1807.7 | -316.  |
| 3189                   | Fl. 28      | -58803.2 | 358.5  | 1754.8  | -265.7 |
|                        | sfc. 28     | -58803.2 | 358.5  | 1754.8  | -642.3 |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>red2</sub><br>[kg] | V <sub>red</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|---------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 20284.4                 | 22666.9                   | 16191.9                  | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 4026                          | Fl. 23    | -35997.0  | -1587.2                  | -21997.7                 | 68.6                       |
|                               | s/c 23    | -35997.0  | -1587.2                  | -21997.7                 | -615.7                     |
|                               | sc Max 23 | -35997.0  | -1587.2                  | -21997.7                 | -49.6                      |
|                               | sc Med 23 | -35997.0  | -1587.2                  | -21997.7                 | -21.2                      |
| 4863                          | Fl. 23    | -34684.5  | 1706.0                   | 2337.1                   | 114.3                      |
|                               | s/c 23    | -34684.5  | 1706.0                   | 2337.1                   | -634.1                     |
|                               | sc Max 23 | -34684.5  | 1706.0                   | 2337.1                   | -51.6                      |
|                               | sc Med 23 | -34684.5  | 1706.0                   | 2337.1                   | -21.3                      |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 4026                          | Fl. 28    | -34955.9 | -608.1 | -1924.5 | -45.4  |
|                               | s/c 28    | -34955.9 | -608.1 | -1924.5 | -404.1 |
|                               | sc Max 28 | -34955.9 | -608.1 | -1924.5 | -38.7  |
|                               | sc Med 28 | -34955.9 | -608.1 | -1924.5 | -18.5  |
| 4863                          | Fl. 28    | -33643.4 | 646.5  | 2046.3  | -18.8  |
|                               | s/c 28    | -33643.4 | 646.5  | 2046.3  | -499.4 |
|                               | sc Max 28 | -33643.4 | 646.5  | 2046.3  | -39.5  |
|                               | sc Med 28 | -33643.4 | 646.5  | 2046.3  | -18.3  |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 4026                          | Fl. 32    | -35019.8 | -371.1 | -1929.4 | -65.2  |
|                               | s/c 32    | -35019.8 | -371.1 | -1929.4 | -475.6 |
|                               | sc Max 32 | -35019.8 | -371.1 | -1929.4 | -37.0  |
|                               | sc Med 32 | -35019.8 | -371.1 | -1929.4 | -18.1  |
| 4863                          | Fl. 32    | -33707.3 | 389.6  | 2052.8  | -41.3  |
|                               | s/c 32    | -33707.3 | 389.6  | 2052.8  | -478.7 |
|                               | sc Max 32 | -33707.3 | 389.6  | 2052.8  | -37.6  |
|                               | sc Med 32 | -33707.3 | 389.6  | 2052.8  | -17.7  |

▲Pilastro: 4863/5700 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

AF 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | α <sub>02</sub> | α <sub>01</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 4863 | 20   | -25604.2  | 2982.7                   | -2028.4                  | 1.00            | 1.00            | 0.25  |
| 5700 | 20   | -24760.4  | -3212.4                  | 2175.8                   | 1.00            | 1.00            | 0.27  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>red2</sub><br>[kg] | V <sub>red</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|---------------------------|--------------------------|------------|
| 0.13      | 3.63     | 10668.9                 | 13595.1                   | 9631.3                   | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 4863                          | Fl. 23    | -28939.0  | -770.4                   | -1259.9                  | 68.9                       |
|                               | s/c 23    | -28939.0  | -770.4                   | -1259.9                  | -566.9                     |
|                               | sc Max 23 | -28939.0  | -770.4                   | -1259.9                  | -48.1                      |
|                               | sc Med 23 | -28939.0  | -770.4                   | -1259.9                  | -20.2                      |
| 5700                          | Fl. 23    | -22195.2  | 827.7                    | 1343.0                   | 113.5                      |
|                               | s/c 23    | -22195.2  | 827.7                    | 1343.0                   | -584.9                     |
|                               | sc Max 23 | -22195.2  | 827.7                    | 1343.0                   | -50.3                      |
|                               | sc Med 23 | -22195.2  | 827.7                    | 1343.0                   | -20.6                      |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 4863                          | Fl. 28    | -22433.4 | -322.5 | -1109.5 | -33.9  |
|                               | s/c 28    | -22433.4 | -322.5 | -1109.5 | -461.3 |
|                               | sc Max 28 | -22433.4 | -322.5 | -1109.5 | -37.7  |
|                               | sc Med 28 | -22433.4 | -322.5 | -1109.5 | -17.4  |
| 5700                          | Fl. 28    | -21589.7 | 346.4  | 1185.2  | -5.6   |
|                               | s/c 28    | -21589.7 | 346.4  | 1185.2  | -468.8 |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | α <sub>02</sub> | α <sub>01</sub> | Sd/Sr |
|------|-----------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
|      | sc Max 28 | -21589.7  | 346.4                    | 1185.2                   | 1.00            | 1.00            | 0.38  |
|      | sc Med 28 | -21589.7  | 346.4                    | 1185.2                   | 1.00            | 1.00            | -17.5 |

|                               |           |          |        |         |        |  |  |
|-------------------------------|-----------|----------|--------|---------|--------|--|--|
| Combinazioni Quasi Permanenti |           |          |        |         |        |  |  |
| 4863                          | Fl. 32    | -22493.9 | -214.5 | -1113.7 | -51.4  |  |  |
|                               | s/c 32    | -22493.9 | -214.5 | -1113.7 | -445.8 |  |  |
|                               | sc Max 32 | -22493.9 | -214.5 | -1113.7 | -36.1  |  |  |
|                               | sc Med 32 | -22493.9 | -214.5 | -1113.7 | -16.9  |  |  |
| 5700                          | Fl. 32    | -21650.1 | 230.1  | 1190.1  | -25.5  |  |  |
|                               | s/c 32    | -21650.1 | 230.1  | 1190.1  | -451.6 |  |  |
|                               | sc Max 32 | -21650.1 | 230.1  | 1190.1  | -37.0  |  |  |
|                               | sc Med 32 | -21650.1 | 230.1  | 1190.1  | -16.9  |  |  |

▲Pilastro: 5700/6537 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

AF 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | α <sub>02</sub> | α <sub>01</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 5700 | 20   | -12294.5  | 3303.3                   | -2406.6                  | 1.00            | 1.00            | 0.30  |
| 6537 | 20   | -11550.8  | -3540.6                  | 2576.7                   | 1.00            | 1.00            | 0.32  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>red2</sub><br>[kg] | V <sub>red</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|---------------------------|--------------------------|------------|
| 0.13      | 3.63     | 9598.3                  | 13595.1                   | 10091.7                  | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 5700              | Fl. 23    | -10905.9  | -936.7                   | -1481.5                  | 449.9                      |
|                   | s/c 23    | -10905.9  | -936.7                   | -1481.5                  | -552.1                     |
|                   | sc Max 23 | -10905.9  | -936.7                   | -1481.5                  | -53.0                      |
|                   | sc Med 23 | -10905.9  | -936.7                   | -1481.5                  | -19.6                      |
| 6537              | Fl. 23    | -10662.2  | 977.6                    | 1566.8                   | 517.8                      |
|                   | s/c 23    | -10662.2  | 977.6                    | 1566.8                   | -571.2                     |
|                   | sc Max 23 | -10662.2  | 977.6                    | 1566.8                   | -55.2                      |
|                   | sc Med 23 | -10662.2  | 977.6                    | 1566.8                   | -20.4                      |

|                        |           |          |        |         |        |
|------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Frequenti |           |          |        |         |        |
| 5700                   | Fl. 28    | -10623.8 | -422.5 | -1305.3 | 261.9  |
|                        | s/c 28    | -10623.8 | -422.5 | -1305.3 | -412.8 |
|                        | sc Max 28 | -10623.8 | -422.5 | -1305.3 | -38.4  |
|                        | sc Med 28 | -10623.8 | -422.5 | -1305.3 | -16.0  |
| 6537                   | Fl. 28    | -9780.1  | 430.6  | 1370.6  | 311.0  |
|                        | s/c 28    | -9780.1  | 430.6  | 1370.6  | -420.3 |
|                        | sc Max 28 | -9780.1  | 430.6  | 1370.6  | -39.8  |
|                        | sc Med 28 | -9780.1  | 430.6  | 1370.6  | -16.6  |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 5700                          | Fl. 32    | -10664.5 | -299.3 | -1312.3 | 234.5  |
|                               | s/c 32    | -10664.5 | -299.3 | -1312.3 | -390.0 |
|                               | sc Max 32 | -10664.5 | -299.3 | -1312.3 | -36.1  |
|                               | sc Med 32 | -10664.5 | -299.3 | -1312.3 | -15.3  |
| 6537                          | Fl. 32    | -9820.8  | 299.3  | 1378.8  | 281.7  |
|                               | s/c 32    | -9820.8  | 299.3  | 1378.8  | -395.4 |
|                               | sc Max 32 | -9820.8  | 299.3  | 1378.8  | -37.3  |
|                               | sc Med 32 | -9820.8  | 299.3  | 1378.8  | -15.8  |

▲Pilastro: 116/718 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

AF 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>02</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | α <sub>02</sub> | α <sub>01</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 116  | 16   | -102853.1 | -17677.8                 | -3980.9                  | 1.00            | 1.00            | 0.31  |
| 718  | 18   | -136933.1 | 6815.4                   | -5096.5                  | 1.00            | 1.00            | 0.27  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>res2</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>res1</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|---------------------------|-------------------------|---------------------------|-----------|
| 0.13      | 0.92     | 28909.1                 | 60284.1                   | 12365.8                 | 33178.0                   | ø 14/10.0 |
| 0.92      | 2.83     | 28909.1                 | 46290.4                   | 12365.8                 | 24375.6                   | ø 12/10.0 |
| 2.83      | 3.63     | 28909.1                 | 60284.1                   | 12365.8                 | 33178.0                   | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Base |           |           |                         |                         |                            |
| 116               | Fl. 26    | -116892.0 | -47761.1                | -21483.3                | -298.1                     |
|                   | sfc 26    | -116892.0 | -47761.1                | -21483.3                | -963.9                     |
|                   | sc Max 26 | -116892.0 | -47761.1                | -21483.3                | -70.5                      |
| 718               | sc Med 22 | -123734.1 | -45959.9                | -10333.9                | -44.5                      |
|                   | Fl. 25    | -115304.0 | 20362.2                 | -2519.5                 | -864.9                     |
| 718               | sfc 25    | -115304.0 | 20362.2                 | -2519.5                 | -380.0                     |
|                   | sc Max 25 | -115304.0 | 20362.2                 | -2519.5                 | -63.0                      |
|                   | sc Med 22 | -121765.3 | 23581.1                 | -16945.5                | -43.8                      |

|                        |           |           |          |         |        |
|------------------------|-----------|-----------|----------|---------|--------|
| Combinazioni Frequenti |           |           |          |         |        |
| 116                    | Fl. 31    | -115046.0 | -27082.2 | -2106.6 | -376.6 |
|                        | sfc 31    | -115046.0 | -27082.2 | -2106.6 | -865.5 |
|                        | sc Max 31 | -115046.0 | -27082.2 | -2106.6 | -62.7  |
|                        | sc Med 27 | -117877.9 | -23490.0 | -721.7  | -42.4  |
| 718                    | Fl. 30    | -113553.2 | 9470.0   | -2941.8 | -389.3 |
|                        | sfc 30    | -113553.2 | 9470.0   | -2941.8 | -836.7 |
|                        | sc Max 30 | -113553.2 | 9470.0   | -2941.8 | -61.2  |
|                        | sc Med 27 | -115590.2 | 12641.1  | -1773.9 | -41.7  |

|                               |           |           |         |         |        |
|-------------------------------|-----------|-----------|---------|---------|--------|
| Combinazioni Quasi Permanenti |           |           |         |         |        |
| 116                           | Fl. 32    | -115284.0 | -2287.6 | -734.3  | -483.4 |
|                               | sfc 32    | -115284.0 | -2287.6 | -734.3  | -763.3 |
|                               | sc Max 32 | -115284.0 | -2287.6 | -734.3  | -53.4  |
|                               | sc Med 32 | -115284.0 | -2287.6 | -734.3  | -41.5  |
| 718                           | Fl. 32    | -113315.3 | 1231.4  | -1706.5 | -453.7 |
|                               | sfc 32    | -113315.3 | 1231.4  | -1706.5 | -769.8 |
|                               | sc Max 32 | -113315.3 | 1231.4  | -1706.5 | -54.9  |
|                               | sc Med 32 | -113315.3 | 1231.4  | -1706.5 | -40.8  |

▲Pilastro: 718/1555 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0 x 80.0/ø 12/10.0 x 190.0/ø 14/10.0 x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb   | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|--------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 718  | Fl. 19 | -123930.0 | 3274.3                  | 7746.4                  | 1.00           | 1.00           | 0.28  |
| 1555 | 19     | -321961.2 | -42950.5                | -7514.9                 | 1.00           | 1.00           | 0.28  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>res2</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>res1</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|---------------------------|-------------------------|---------------------------|-----------|
| 0.13      | 0.92     | 22624.3                 | 60284.1                   | 17371.1                 | 33178.0                   | ø 14/10.0 |
| 0.92      | 2.83     | 22624.3                 | 46290.4                   | 17371.1                 | 24375.6                   | ø 12/10.0 |
| 2.83      | 3.63     | 22624.3                 | 60284.1                   | 17371.1                 | 33178.0                   | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Base |           |           |                         |                         |                            |
| 718               | Fl. 26    | -102506.7 | -1106.9                 | 3694.9                  | -275.9                     |
|                   | sfc 22    | -108407.6 | -1223.9                 | 3695.0                  | -867.6                     |
|                   | sc Max 22 | -108407.6 | -1223.9                 | 3695.0                  | -64.7                      |
|                   | sc Med 22 | -108407.6 | -1223.9                 | 3695.0                  | -39.0                      |
| 1555              | Fl. 23    | -100396.1 | 2168.2                  | -2958.9                 | -266.5                     |
|                   | sfc 22    | -106438.9 | 1712.7                  | -3265.0                 | -850.4                     |
|                   | sc Max 22 | -106438.9 | 1712.7                  | -3265.0                 | -63.1                      |
|                   | sc Med 22 | -106438.9 | 1712.7                  | -3265.0                 | -38.3                      |

|                        |        |           |        |        |        |
|------------------------|--------|-----------|--------|--------|--------|
| Combinazioni Frequenti |        |           |        |        |        |
| 718                    | Fl. 31 | -100742.8 | -476.3 | 3873.1 | -281.4 |
|                        | sfc 27 | -103082.6 | -588.8 | 3630.8 | -808.5 |

| Nodo | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|-------------------------|-------------------------|----------------------------|
|      | sc Max 31 | -100742.8 | -476.3                  | 3873.1                  | -60.2                      |
|      | sc Med 27 | -103082.6 | -589.8                  | 3630.8                  | -371.1                     |
| 1555 | Fl. 28    | -98713.6  | 1067.6                  | -3106.7                 | -293.9                     |
|      | sfc 27    | -101113.8 | 826.1                   | -3233.4                 | -782.8                     |
|      | sc Max 27 | -101113.8 | 826.1                   | -3233.4                 | -58.0                      |
|      | sc Med 27 | -101113.8 | 826.1                   | -3233.4                 | -36.4                      |

|                               |           |           |        |         |        |
|-------------------------------|-----------|-----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |           |        |         |        |
| 718                           | Fl. 32    | -100760.3 | -578.7 | 3518.2  | -299.4 |
|                               | sfc 32    | -100760.3 | -578.7 | 3518.2  | -788.4 |
|                               | sc Max 32 | -100760.3 | -578.7 | 3518.2  | -58.8  |
|                               | sc Med 32 | -100760.3 | -578.7 | 3518.2  | -36.5  |
| 1555                          | Fl. 32    | -98791.6  | 807.9  | -3125.2 | -303.9 |
|                               | sfc 32    | -98791.6  | 807.9  | -3125.2 | -762.7 |
|                               | sc Max 32 | -98791.6  | 807.9  | -3125.2 | -56.5  |
|                               | sc Med 32 | -98791.6  | 807.9  | -3125.2 | -35.6  |

▲Pilastro: 1555/2392 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 1555 | 19   | -106306.7 | 2237.3                  | 5438.6                  | 1.00           | 1.00           | 0.32  |
| 2392 | 19   | -104994.2 | -2516.2                 | -5639.5                 | 1.00           | 1.00           | 0.32  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>res2</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>res1</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|---------------------------|-------------------------|---------------------------|-----------|
| 0.13      | 3.63     | 11104.7                 | 22686.9                   | 10844.7                 | 19500.5                   | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |           |           |                         |                         |                            |
| 1555              | Fl. 23    | -88123.5  | -977.0                  | 1807.0                  | -437.3                     |
|                   | sfc 22    | -93342.7  | -753.6                  | 2032.7                  | -964.4                     |
|                   | sc Max 22 | -93342.7  | -753.6                  | 2032.7                  | -70.5                      |
|                   | sc Med 22 | -93342.7  | -753.6                  | 2032.7                  | -48.0                      |
| 2392              | Fl. 23    | -86811.0  | 1093.1                  | -1877.4                 | -411.4                     |
|                   | sfc 22    | -92030.2  | 842.9                   | -2091.7                 | -968.6                     |
|                   | sc Max 22 | -92030.2  | 842.9                   | -2091.7                 | -71.1                      |
|                   | sc Med 22 | -92030.2  | 842.9                   | -2091.7                 | -47.4                      |

|                        |           |          |        |         |        |
|------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Frequenti |           |          |        |         |        |
| 1555                   | Fl. 28    | -86507.9 | -445.3 | 1932.1  | -456.5 |
|                        | sfc 27    | -86605.3 | -327.6 | 2018.8  | -893.8 |
|                        | sc Max 27 | -86605.3 | -327.6 | 2018.8  | -65.1  |
|                        | sc Med 27 | -86605.3 | -327.6 | 2018.8  | -45.6  |
| 2392                   | Fl. 28    | -85195.4 | 496.4  | -2005.6 | -435.5 |
|                        | sfc 27    | -87292.8 | 362.8  | -2095.6 | -893.5 |
|                        | sc Max 27 | -87292.8 | 362.8  | -2095.6 | -65.3  |
|                        | sc Med 27 | -87292.8 | 362.8  | -2095.6 | -44.9  |

|                               |           |          |        |         |        |
|-------------------------------|-----------|----------|--------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |        |         |        |
| 1555                          | Fl. 32    | -86564.5 | -320.4 | 1945.6  | -465.8 |
|                               | sfc 32    | -86564.5 | -320.4 | 1945.6  | -870.9 |
|                               | sc Max 32 | -86564.5 | -320.4 | 1945.6  | -63.3  |
|                               | sc Med 32 | -86564.5 | -320.4 | 1945.6  | -44.6  |
| 2392                          | Fl. 32    | -85252.0 | 354.9  | -2019.3 | -446.2 |
|                               | sfc 32    | -85252.0 | 354.9  | -2019.3 | -870.2 |
|                               | sc Max 32 | -85252.0 | 354.9  | -2019.3 | -63.5  |
|                               | sc Med 32 | -85252.0 | 354.9  | -2019.3 | -43.9  |

▲Pilastro: 2392/3229 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 3229 | 19   | -89501.6 | 2788.5          | 5830.1          | 1.00            | 1.00            | 0.31  |
| 3229 | 19   | -88189.1 | -2805.8         | -5702.6         | 1.00            | 1.00            | 0.30  |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 13527.9         | 22686.9         | 32254.3         | 35500.5         | ø 12/12.5" |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ      |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare             |           |          |                 |                 |                 |                 |        |
| 2392                          | Fl 23     | -74584.5 | -1136.7         | 1856.8          |                 |                 | -315.4 |
|                               | sfc 22    | -79011.8 | -870.9          | 2073.3          |                 |                 | -868.7 |
|                               | sc Max 22 | -79011.8 | -870.9          | 2073.3          |                 |                 | -64.5  |
| 3229                          | sc Med 22 | -79011.8 | -870.9          | 2073.3          |                 |                 | -40.7  |
|                               | Fl 23     | -73272.0 | 1094.8          | -1765.5         |                 |                 | -316.7 |
|                               | sfc 22    | -77699.3 | 830.5           | -1976.8         |                 |                 | -846.5 |
|                               | sc Max 22 | -77699.3 | 830.5           | -1976.8         |                 |                 | -62.7  |
|                               | sc Med 22 | -77699.3 | 830.5           | -1976.8         |                 |                 | -40.0  |
| Combinazioni Frequenti        |           |          |                 |                 |                 |                 |        |
| 2392                          | Fl 28     | -73089.0 | -501.7          | 1991.3          |                 |                 | -342.9 |
|                               | sfc 27    | -74895.7 | -359.0          | 2082.8          |                 |                 | -796.3 |
|                               | sc Max 27 | -74895.7 | -359.0          | 2082.8          |                 |                 | -58.8  |
|                               | sc Med 27 | -74895.7 | -359.0          | 2082.8          |                 |                 | -38.5  |
| 3229                          | Fl 28     | -71776.5 | 466.6           | -1901.1         |                 |                 | -343.8 |
|                               | sfc 27    | -73583.2 | 323.7           | -1989.9         |                 |                 | -774.9 |
|                               | sc Max 27 | -73583.2 | 323.7           | -1989.9         |                 |                 | -57.1  |
|                               | sc Med 27 | -73583.2 | 323.7           | -1989.9         |                 |                 | -37.9  |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |        |
| 2392                          | Fl 32     | -73134.5 | -351.6          | 2005.5          |                 |                 | -354.1 |
|                               | sfc 32    | -73134.5 | -351.6          | 2005.5          |                 |                 | -775.1 |
|                               | sc Max 32 | -73134.5 | -351.6          | 2005.5          |                 |                 | -57.2  |
|                               | sc Med 32 | -73134.5 | -351.6          | 2005.5          |                 |                 | -37.6  |
| 3229                          | Fl 32     | -71822.0 | 317.1           | -1914.8         |                 |                 | -355.0 |
|                               | sfc 32    | -71822.0 | 317.1           | -1914.8         |                 |                 | -754.0 |
|                               | sc Max 32 | -71822.0 | 317.1           | -1914.8         |                 |                 | -55.5  |
|                               | sc Med 32 | -71822.0 | 317.1           | -1914.8         |                 |                 | -37.0  |

▲Pilastro: 3229/4066 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5" x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 3229 | 19   | -72655.7 | 2691.7          | 5463.2          | 1.00            | 1.00            | 0.27  |
| 4066 | 19   | -71343.2 | -2733.9         | -5358.6         | 1.00            | 1.00            | 0.27  |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 14749.5         | 22686.9         | 33172.5         | 35500.5         | ø 12/12.5" |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ      |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare      |           |          |                 |                 |                 |                 |        |
| 3229                   | Fl 23     | -60951.2 | -1004.6         | 1628.0          |                 |                 | -241.6 |
|                        | sfc 22    | -64596.8 | -759.0          | 1824.9          |                 |                 | -725.9 |
|                        | sc Max 22 | -64596.8 | -759.0          | 1824.9          |                 |                 | -54.2  |
|                        | sc Med 22 | -64596.8 | -759.0          | 1824.9          |                 |                 | -33.2  |
| 4066                   | Fl 23     | -59638.7 | 989.1           | -1555.8         |                 |                 | -239.2 |
|                        | sfc 22    | -63283.3 | 741.8           | -1747.3         |                 |                 | -707.2 |
|                        | sc Max 22 | -63283.3 | 741.8           | -1747.3         |                 |                 | -52.7  |
|                        | sc Med 22 | -63283.3 | 741.8           | -1747.3         |                 |                 | -32.6  |
| Combinazioni Frequenti |           |          |                 |                 |                 |                 |        |

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ      |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |        |
| 3229                          | Fl 28     | -59290.3 | -177.2          | 175.9           |                 |                 | -266.5 |
|                               | sfc 27    | -61103.5 | -284.0          | 1840.5          |                 |                 | -661.6 |
|                               | sc Max 27 | -61103.5 | -284.0          | 1840.5          |                 |                 | -49.1  |
|                               | sc Med 27 | -61103.5 | -284.0          | 1840.5          |                 |                 | -31.5  |
| 4066                          | Fl 28     | -58277.8 | 400.0           | -1683.0         |                 |                 | -264.8 |
|                               | sfc 27    | -59791.0 | 265.3           | -1764.9         |                 |                 | -643.3 |
|                               | sc Max 27 | -59791.0 | 265.3           | -1764.9         |                 |                 | -47.6  |
|                               | sc Med 27 | -59791.0 | 265.3           | -1764.9         |                 |                 | -30.8  |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |        |
| 3229                          | Fl 32     | -59623.8 | -278.3          | 1769.1          |                 |                 | -277.2 |
|                               | sfc 32    | -59623.8 | -278.3          | 1769.1          |                 |                 | -643.4 |
|                               | sc Max 32 | -59623.8 | -278.3          | 1769.1          |                 |                 | -47.7  |
|                               | sc Med 32 | -59623.8 | -278.3          | 1769.1          |                 |                 | -30.7  |
| 4066                          | Fl 32     | -58311.3 | 260.1           | -1695.6         |                 |                 | -275.2 |
|                               | sfc 32    | -58311.3 | 260.1           | -1695.6         |                 |                 | -625.2 |
|                               | sc Max 32 | -58311.3 | 260.1           | -1695.6         |                 |                 | -46.2  |
|                               | sc Med 32 | -58311.3 | 260.1           | -1695.6         |                 |                 | -30.0  |

▲Pilastro: 4066/4903 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5" x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 4066 | 19   | -55862.5 | 2699.3          | 5475.8          | 1.00            | 1.00            | 0.25  |
| 4903 | 19   | -54550.0 | -2962.9         | -5848.4         | 1.00            | 1.00            | 0.27  |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 17164.2         | 22686.9         | 14932.3         | 19500.5         | ø 12/12.5" |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ      |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare             |           |          |                 |                 |                 |                 |        |
| 4066                          | Fl 23     | -47296.2 | -987.4          | 1566.3          |                 |                 | -143.1 |
|                               | sfc 22    | -50164.9 | -746.6          | 1764.4          |                 |                 | -607.8 |
|                               | sc Max 22 | -50164.9 | -746.6          | 1764.4          |                 |                 | -46.1  |
|                               | sc Med 22 | -50164.9 | -746.6          | 1764.4          |                 |                 | -25.8  |
| 4903                          | Fl 23     | -45983.7 | 1062.7          | -1638.1         |                 |                 | -120.4 |
|                               | sfc 22    | -48852.3 | 800.7           | -1848.0         |                 |                 | -609.7 |
|                               | sc Max 22 | -48852.3 | 800.7           | -1848.0         |                 |                 | -46.6  |
|                               | sc Med 22 | -48852.3 | 800.7           | -1848.0         |                 |                 | -25.1  |
| Combinazioni Frequenti        |           |          |                 |                 |                 |                 |        |
| 4066                          | Fl 28     | -46079.1 | -485.4          | 1694.8          |                 |                 | -169.1 |
|                               | sfc 27    | -47297.7 | -273.3          | 1779.8          |                 |                 | -548.8 |
|                               | sc Max 27 | -47297.7 | -273.3          | 1779.8          |                 |                 | -41.4  |
|                               | sc Med 27 | -47297.7 | -273.3          | 1779.8          |                 |                 | -24.3  |
| 4903                          | Fl 28     | -44766.6 | 431.3           | -1776.4         |                 |                 | -149.5 |
|                               | sfc 27    | -45985.2 | 287.1           | -1866.3         |                 |                 | -547.7 |
|                               | sc Max 27 | -45985.2 | 287.1           | -1866.3         |                 |                 | -41.5  |
|                               | sc Med 27 | -45985.2 | 287.1           | -1866.3         |                 |                 | -23.7  |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |        |
| 4066                          | Fl 32     | -46099.5 | -268.2          | 1708.1          |                 |                 | -179.2 |
|                               | sfc 32    | -46099.5 | -268.2          | 1708.1          |                 |                 | -532.7 |
|                               | sc Max 32 | -46099.5 | -268.2          | 1708.1          |                 |                 | -40.1  |
|                               | sc Med 32 | -46099.5 | -268.2          | 1708.1          |                 |                 | -23.7  |
| 4903                          | Fl 32     | -44787.0 | 281.8           | -1790.2         |                 |                 | -160.5 |
|                               | sfc 32    | -44787.0 | 281.8           | -1790.2         |                 |                 | -531.1 |
|                               | sc Max 32 | -44787.0 | 281.8           | -1790.2         |                 |                 | -40.2  |
|                               | sc Med 32 | -44787.0 | 281.8           | -1790.2         |                 |                 | -23.1  |

▲Pilastro: 4903/5740 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >

Staffe: ø 12/15.0" x 3500

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ    |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|------|
| 4903 | 19   | -38825.6 | 1170.6          | 3068.6          | 1.00            | 1.00            | 0.24 |
| 5740 | 19   | -37981.8 | -1288.4         | -3254.3         | 1.00            | 1.00            | 0.25 |

▲ Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Stafte     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 7798.9          | 13595.1         | 8542.7          | 13595.1         | ø 12/15.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | σ      |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare |           |          |                 |                 |                 |        |
| 4903              | Fl. 23    | -33769.6 | -444.8          | 846.5           |                 | -182.5 |
|                   | sic 22    | -35872.2 | -339.9          | 956.2           |                 | -588.5 |
|                   | sc Max 22 | -38872.2 | -339.9          | 956.2           |                 | -45.4  |
|                   | sc Med 22 | -35872.2 | -339.9          | 956.2           |                 | -26.5  |
| 5740              | Fl. 23    | -32925.9 | 275.6           | -864.8          |                 | -165.9 |
|                   | sic 22    | -35028.5 | 361.1           | -978.2          |                 | -585.6 |
|                   | sc Max 22 | -35028.5 | 361.1           | -978.2          |                 | -45.4  |
|                   | sc Med 22 | -35028.5 | 361.1           | -978.2          |                 | -25.8  |

|                        |           |          |        |        |  |        |
|------------------------|-----------|----------|--------|--------|--|--------|
| Combinazioni Frequenti |           |          |        |        |  |        |
| 4903                   | Fl. 28    | -32716.7 | -189.1 | 917.8  |  | -198.1 |
|                        | sic 27    | -33648.5 | -131.6 | 955.0  |  | -534.4 |
|                        | sc Max 27 | -33648.5 | -131.6 | 955.0  |  | -40.9  |
|                        | sc Med 27 | -33648.5 | -131.6 | 955.0  |  | -24.8  |
| 5740                   | Fl. 28    | -33873.0 | 198.6  | -942.7 |  | -183.7 |
|                        | sic 27    | -32804.7 | 135.9  | -991.7 |  | -529.7 |
|                        | sc Max 27 | -32804.7 | 135.9  | -991.7 |  | -40.7  |
|                        | sc Med 27 | -32804.7 | 135.9  | -991.7 |  | -24.2  |

|                               |           |          |        |        |  |        |
|-------------------------------|-----------|----------|--------|--------|--|--------|
| Combinazioni Quasi Permanenti |           |          |        |        |  |        |
| 4903                          | Fl. 32    | -32727.5 | -129.3 | 925.0  |  | -206.0 |
|                               | sic 32    | -32727.5 | -129.3 | 925.0  |  | -518.0 |
|                               | sc Max 32 | -32727.5 | -129.3 | 925.0  |  | -39.6  |
|                               | sc Med 32 | -32727.5 | -129.3 | 925.0  |  | -24.1  |
| 5740                          | Fl. 32    | -33883.8 | 133.6  | -960.2 |  | -192.3 |
|                               | sic 32    | -33883.8 | 133.6  | -950.2 |  | -513.0 |
|                               | sc Max 32 | -33883.8 | 133.6  | -950.2 |  | -39.4  |
|                               | sc Med 32 | -33883.8 | 133.6  | -950.2 |  | -23.5  |

▲ Pilastro: 5740/6577 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >

Stafte: ø 12/15.0' x 3500

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ    |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|------|
| 5740 | 19   | -23700.8 | 1255.2          | 3452.6          | 1.00            | 1.00            | 0.24 |
| 6577 | 19   | -22857.0 | -1298.6         | -3611.1         | 1.00            | 1.00            | 0.25 |

▲ Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Stafte     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 9756.4          | 13595.1         | 10233.1         | 13595.1         | ø 12/15.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | σ      |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare |           |          |                 |                 |                 |        |
| 5740              | Fl. 23    | -20841.8 | -496.4          | 948.6           |                 | -12.6  |
|                   | sic 22    | -22174.9 | -383.5          | 1091.5          |                 | -465.3 |
|                   | sc Max 22 | -22174.9 | -383.5          | 1091.5          |                 | -38.2  |
|                   | sc Med 22 | -22174.9 | -383.5          | 1091.5          |                 | -17.1  |
| 6577              | Fl. 23    | -19998.1 | 510.9           | -1010.4         |                 | 12.4   |
|                   | sic 22    | -21331.1 | 395.9           | -1179.0         |                 | -473.3 |
|                   | sc Max 22 | -21331.1 | 395.9           | -1179.0         |                 | -39.3  |
|                   | sc Med 22 | -21331.1 | 395.9           | -1179.0         |                 | -17.1  |

Combinazioni Frequenti

▲ Pilastro: 6577/7150 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >

Stafte: ø 12/15.0' x 3500

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N       | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | σ    |
|------|------|---------|-----------------|-----------------|-----------------|-----------------|------|
| 6577 | 19   | -8525.0 | 621.2           | 1874.8          | 1.00            | 1.00            | 0.13 |
| 7150 | 1    | -9505.7 | 4.2             | -12.3           | 1.00            | 1.00            | 0.03 |

▲ Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Stafte     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 5654.8          | 13595.1         | 5732.3          | 13595.1         | ø 12/15.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N       | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | σ      |
|-------------------|-----------|---------|-----------------|-----------------|-----------------|--------|
| Combinazioni Rare |           |         |                 |                 |                 |        |
| 6577              | Fl. 22    | -7958.7 | -196.6          | 663.0           |                 | 66.5   |
|                   | sic 22    | -7958.7 | -196.6          | 663.0           |                 | -226.0 |
|                   | sc Max 22 | -7958.7 | -196.6          | 663.0           |                 | -13.8  |
|                   | sc Med 22 | -7958.7 | -196.6          | 663.0           |                 | -8.3   |
| 7150              | Fl. 24    | -6667.5 | 2.9             | -7.5            |                 | -72.2  |
|                   | sic 22    | -7115.0 | 2.9             | -9.2            |                 | -80.5  |
|                   | sc Max 22 | -7115.0 | 2.9             | -9.2            |                 | -5.4   |
|                   | sc Med 22 | -7115.0 | 2.9             | -9.2            |                 | -5.2   |

|                        |           |         |        |       |  |        |
|------------------------|-----------|---------|--------|-------|--|--------|
| Combinazioni Frequenti |           |         |        |       |  |        |
| 6577                   | Fl. 28    | -6963.6 | -108.0 | 602.6 |  | 31.5   |
|                        | sic 27    | -7267.1 | -76.0  | 640.5 |  | -194.0 |
|                        | sc Max 27 | -7267.1 | -76.0  | 640.5 |  | -16.9  |
|                        | sc Med 27 | -7267.1 | -76.0  | 640.5 |  | -7.8   |
| 7150                   | Fl. 29    | -6092.8 | 0.8    | -8.1  |  | -66.1  |
|                        | sic 27    | -6423.4 | 0.7    | -9.2  |  | -72.5  |
|                        | sc Max 27 | -6423.4 | 0.7    | -9.2  |  | -4.9   |
|                        | sc Med 27 | -6423.4 | 0.7    | -9.2  |  | -4.7   |

|                               |           |         |       |       |  |        |
|-------------------------------|-----------|---------|-------|-------|--|--------|
| Combinazioni Quasi Permanenti |           |         |       |       |  |        |
| 6577                          | Fl. 32    | -6959.6 | -74.0 | 607.5 |  | 46.1   |
|                               | sic 32    | -6959.6 | -74.0 | 607.5 |  | -185.0 |
|                               | sc Max 32 | -6959.6 | -74.0 | 607.5 |  | -16.1  |
|                               | sc Med 32 | -6959.6 | -74.0 | 607.5 |  | -7.4   |
| 7150                          | Fl. 32    | -6115.9 | 0.7   | -8.5  |  | -66.3  |
|                               | sic 32    | -6115.9 | 0.7   | -8.5  |  | -69.0  |
|                               | sc Max 32 | -6115.9 | 0.7   | -8.5  |  | -4.6   |
|                               | sc Med 32 | -6115.9 | 0.7   | -8.5  |  | -4.5   |

▲ Pilastro: 141/751 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Stafte: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 141  | 16   | -102614.2 | -27336.9        | -3160.2         | 1.00            | 1.09            | 0.43            |       |
| 751  | 16   | -100645.5 | 13277.0         | 3160.2          | 1.00            | 1.00            | 0.26            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed2</sub> | V <sub>Ed</sub> | V <sub>Ed2</sub> | Stirpe    |
|------|------|-----------------|------------------|-----------------|------------------|-----------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]            | [kg]             |           |
| 0.13 | 0.92 | 38576.4         | 60284.1          | 33183.7         | 33178.0          | ø 14/10.0 |
| 0.92 | 2.83 | 38576.4         | 44290.4          | 33183.7         | 24375.6          | ø 12/10.0 |
| 2.83 | 3.63 | 38576.4         | 60284.1          | 33183.7         | 33178.0          | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub>       |
|-------------------------------|-----------|-----------|-----------------|-----------------|-----------------|-----------------------|
|                               |           | [kg]      | [kg]            | [kg]            | [kg]            | [kg/cm <sup>2</sup> ] |
| Combinazioni Rare             |           |           |                 |                 |                 |                       |
| 141                           | Fr. 23    | -102921.5 | -5935.0         | -1075.3         | -241.8          |                       |
|                               | sfc 23    | -102921.5 | -5935.0         | -1075.3         | -869.4          |                       |
|                               | sc Max 25 | -103204.0 | -4144.0         | -2156.8         | -63.5           |                       |
|                               | sc Med 22 | -108637.0 | -4051.8         | -1150.4         | -39.1           |                       |
| 751                           | Fr. 25    | -101255.3 | 2404.1          | 2771.5          | -273.0          |                       |
|                               | sfc 25    | -101255.3 | 2404.1          | 2771.5          | -820.0          |                       |
|                               | sc Max 25 | -101255.3 | 2404.1          | 2771.5          | -60.6           |                       |
|                               | sc Med 22 | -106888.2 | 2295.9          | 1923.9          | -38.4           |                       |
| Combinazioni Frequenti        |           |           |                 |                 |                 |                       |
| 141                           | Fr. 30    | -99516.2  | -1152.0         | -2034.0         | -361.9          |                       |
|                               | sfc 30    | -99516.2  | -1152.0         | -2034.0         | -712.5          |                       |
|                               | sc Max 30 | -99516.2  | -1152.0         | -2034.0         | -51.5           |                       |
|                               | sc Med 27 | -101305.5 | -898.8          | -477.3          | -36.5           |                       |
| 751                           | Fr. 30    | -97547.4  | 969.7           | 2699.4          | -317.2          |                       |
|                               | sfc 30    | -97547.4  | 969.7           | 2699.4          | -736.0          |                       |
|                               | sc Max 30 | -97547.4  | 969.7           | 2699.4          | -54.1           |                       |
|                               | sc Med 27 | -99336.7  | 746.6           | 1500.8          | -35.8           |                       |
| Combinazioni Quasi Permanenti |           |           |                 |                 |                 |                       |
| 141                           | Fr. 32    | -99170.7  | -866.8          | -621.0          | -460.5          |                       |
|                               | sfc 32    | -99170.7  | -866.8          | -621.0          | -610.3          |                       |
|                               | sc Max 32 | -99170.7  | -866.8          | -621.0          | -42.2           |                       |
|                               | sc Med 32 | -99170.7  | -866.8          | -621.0          | -35.7           |                       |
| 751                           | Fr. 32    | -97201.9  | 725.3           | 1434.5          | -404.7          |                       |
|                               | sfc 32    | -97201.9  | 725.3           | 1434.5          | -644.7          |                       |
|                               | sc Max 32 | -97201.9  | 725.3           | 1434.5          | -45.8           |                       |
|                               | sc Med 32 | -97201.9  | 725.3           | 1434.5          | -35.0           |                       |

▲Pilastro: 751/1588 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 751  | 14   | -109541.0 | -5144.7         | -5918.5         | 1.00            | 1.00            | 0.24  |
| 1588 | 16   | -95201.8  | 12093.6         | 3948.9          | 1.00            | 1.00            | 0.26  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed2</sub> | V <sub>Ed</sub> | V <sub>Ed2</sub> | Stirpe    |
|------|------|-----------------|------------------|-----------------|------------------|-----------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]            | [kg]             |           |
| 0.13 | 0.92 | 33255.8         | 60284.1          | 16356.5         | 33178.0          | ø 14/10.0 |
| 0.92 | 2.83 | 33255.8         | 44290.4          | 16356.5         | 24375.6          | ø 12/10.0 |
| 2.83 | 3.63 | 33255.8         | 60284.1          | 16356.5         | 33178.0          | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub>       |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------------|
|                   |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm <sup>2</sup> ] |
| Combinazioni Rare |           |          |                 |                 |                 |                       |
| 751               | Fr. 23    | -90563.4 | -2350.2         | -2349.5         | -244.1          |                       |
|                   | sfc 22    | -95478.2 | -1807.9         | -2539.8         | -749.6          |                       |
|                   | sc Max 22 | -95478.2 | -1807.9         | -2539.8         | -55.2           |                       |
|                   | sc Med 22 | -95478.2 | -1807.9         | -2539.8         | -34.4           |                       |
| 1588              | Fr. 23    | -88594.7 | 2830.7          | 2451.9          | -207.1          |                       |

▲ **Pilastro: 2425/3262 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]**  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12,5 x 3500

▲ **Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 2425 | 16   | -71013.4  | -7417.7                  | -3659.8                  | 1.00            | 1.00            | 0.32  |
| 3262 | 16   | -69700.9  | 7264.0                   | 3685.9                   | 1.00            | 1.00            | 0.31  |

▲ **Verifiche a Taglio**

| Da<br>[m] | A<br>[m] | V <sub>Ed</sub><br>[kg] | V <sub>Ed2</sub><br>[kg] | V <sub>Ed1</sub><br>[kg] | V <sub>Ed1</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 18562.3                 | 22686.9                  | 12965.4                  | 19500.5                  | ø 12/12,5' |

▲ **Verifiche a Presso-Flessione S.L.E.**

| Nodo                          | Comb       | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | σ<br>[kg/cm²] |
|-------------------------------|------------|-----------|--------------------------|--------------------------|-----------------|-----------------|---------------|
| Combinazioni Rare             |            |           |                          |                          |                 |                 |               |
| 2425                          | Fl. 23     | -65632.0  | -1546.8                  | -2331.9                  |                 |                 | -188.1        |
|                               | s/c 23     | -69118.2  | -1102.6                  | -2268.3                  |                 |                 | -828.7        |
|                               | s/c Max 23 | -65632.0  | -1546.8                  | -2331.9                  |                 |                 | -63.0         |
|                               | s/c Med 22 | -69118.2  | -1102.6                  | -2268.3                  |                 |                 | -35.6         |
| 3262                          | Fl. 23     | -64319.5  | 1454.8                   | 2163.2                   |                 |                 | -182.6        |
|                               | s/c 23     | -67805.7  | 1008.9                   | 2300.7                   |                 |                 | -813.9        |
|                               | s/c Max 23 | -64319.5  | 1454.8                   | 2163.2                   |                 |                 | -61.9         |
|                               | s/c Med 22 | -67805.7  | 1008.9                   | 2300.7                   |                 |                 | -34.9         |
| Combinazioni Frequenti        |            |           |                          |                          |                 |                 |               |
| 2425                          | Fl. 28     | -62620.5  | -558.1                   | -1747.6                  |                 |                 | -279.7        |
|                               | s/c 28     | -62620.5  | -558.1                   | -1747.6                  |                 |                 | -687.2        |
|                               | s/c Max 28 | -62620.5  | -558.1                   | -1747.6                  |                 |                 | -51.0         |
|                               | s/c Med 27 | -63932.3  | -318.8                   | -1797.8                  |                 |                 | -32.9         |
| 3262                          | Fl. 28     | -61308.0  | 475.6                    | 1774.3                   |                 |                 | -273.8        |
|                               | s/c 28     | -61308.0  | 475.6                    | 1774.3                   |                 |                 | -672.9        |
|                               | s/c Max 28 | -61308.0  | 475.6                    | 1774.3                   |                 |                 | -50.0         |
|                               | s/c Med 27 | -62619.8  | 234.7                    | 1824.0                   |                 |                 | -32.2         |
| Combinazioni Quasi Permanenti |            |           |                          |                          |                 |                 |               |
| 2425                          | Fl. 32     | -62501.1  | -309.8                   | -1722.6                  |                 |                 | -301.1        |
|                               | s/c 32     | -62501.1  | -309.8                   | -1722.6                  |                 |                 | -664.0        |
|                               | s/c Max 32 | -62501.1  | -309.8                   | -1722.6                  |                 |                 | -49.0         |
|                               | s/c Med 31 | -62501.1  | -309.8                   | -1722.6                  |                 |                 | -32.2         |
| 3262                          | Fl. 32     | -61188.6  | 228.4                    | 1749.1                   |                 |                 | -295.1        |
|                               | s/c 32     | -61188.6  | 228.4                    | 1749.1                   |                 |                 | -649.7        |
|                               | s/c Max 32 | -61188.6  | 228.4                    | 1749.1                   |                 |                 | -48.0         |
|                               | s/c Med 31 | -61188.6  | 228.4                    | 1749.1                   |                 |                 | -31.5         |

▲ **Pilastro: 3262/4099 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]**  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12,5 x 3500

▲ **Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 3262 | 16   | -57314.3  | -7048.0                  | -3714.2                  | 1.00            | 1.00            | 0.30  |
| 4099 | 16   | -56001.8  | 6973.1                   | 3718.5                   | 1.00            | 1.00            | 0.29  |

▲ **Verifiche a Taglio**

| Da<br>[m] | A<br>[m] | V <sub>Ed</sub><br>[kg] | V <sub>Ed2</sub><br>[kg] | V <sub>Ed1</sub><br>[kg] | V <sub>Ed1</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 19810.8                 | 22686.9                  | 14346.8                  | 19500.5                  | ø 12/12,5' |

▲ **Verifiche a Presso-Flessione S.L.E.**

| Nodo              | Comb       | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | σ<br>[kg/cm²] |
|-------------------|------------|-----------|--------------------------|--------------------------|-----------------|-----------------|---------------|
| Combinazioni Rare |            |           |                          |                          |                 |                 |               |
| 3262              | Fl. 23     | -52813.5  | -1351.2                  | -2201.5                  |                 |                 | -98.6         |
|                   | s/c 23     | -55611.0  | -929.8                   | -2339.9                  |                 |                 | -716.9        |
|                   | s/c Max 23 | -52813.5  | -1351.2                  | -2201.5                  |                 |                 | -55.5         |
|                   | s/c Med 22 | -55611.0  | -929.8                   | -2339.9                  |                 |                 | -28.6         |

| Nodo | Comb       | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | σ<br>[kg/cm²] |
|------|------------|-----------|--------------------------|--------------------------|-----------------|-----------------|---------------|
| 4099 | Fl. 23     | -51501.0  | -1387.1                  | -2212.7                  |                 |                 | -93.6         |
|      | s/c 23     | -51501.0  | -1387.1                  | -2212.7                  |                 |                 | -702.6        |
|      | s/c Max 23 | -51501.0  | -1387.1                  | -2212.7                  |                 |                 | -54.5         |
|      | s/c Med 22 | -54298.5  | -860.1                   | -2351.7                  |                 |                 | -27.9         |

|                        |            |          |        |         |  |  |        |
|------------------------|------------|----------|--------|---------|--|--|--------|
| Combinazioni Frequenti |            |          |        |         |  |  |        |
| 3262                   | Fl. 28     | -50304.0 | -624.2 | -1810.3 |  |  | -189.7 |
|                        | s/c 28     | -50304.0 | -624.2 | -1810.3 |  |  | -587.0 |
|                        | s/c Max 28 | -50304.0 | -624.2 | -1810.3 |  |  | -44.3  |
|                        | s/c Med 27 | -51364.2 | -139.3 | -1863.8 |  |  | -26.4  |
| 4099                   | Fl. 28     | -48891.5 | 360.2  | 1819.5  |  |  | -183.9 |
|                        | s/c 28     | -48891.5 | 360.2  | 1819.5  |  |  | -572.6 |
|                        | s/c Max 28 | -48891.5 | 360.2  | 1819.5  |  |  | -43.2  |
|                        | s/c Med 27 | -50051.7 | 127.9  | 1873.9  |  |  | -25.8  |

|                               |            |          |        |         |  |  |        |
|-------------------------------|------------|----------|--------|---------|--|--|--------|
| Combinazioni Quasi Permanenti |            |          |        |         |  |  |        |
| 3262                          | Fl. 32     | -50193.7 | -189.5 | -1784.6 |  |  | -210.2 |
|                               | s/c 32     | -50193.7 | -189.5 | -1784.6 |  |  | -564.9 |
|                               | s/c Max 32 | -50193.7 | -189.5 | -1784.6 |  |  | -42.3  |
|                               | s/c Med 31 | -50193.7 | -189.5 | -1784.6 |  |  | -25.8  |
| 4099                          | Fl. 32     | -48881.2 | 124.4  | 1793.9  |  |  | -204.5 |
|                               | s/c 32     | -48881.2 | 124.4  | 1793.9  |  |  | -550.5 |
|                               | s/c Max 32 | -48881.2 | 124.4  | 1793.9  |  |  | -41.3  |
|                               | s/c Med 31 | -48881.2 | 124.4  | 1793.9  |  |  | -25.2  |

▲ **Pilastro: 4099/4936 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]**  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12,5 x 3500

▲ **Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------------|-----------------|-------|
| 4099 | 16   | -43279.6  | -7156.7                  | -3959.6                  | 1.00            | 1.00            | 0.30  |
| 4936 | 16   | -41967.1  | 7683.6                   | 4267.6                   | 1.00            | 1.00            | 0.33  |

▲ **Verifiche a Taglio**

| Da<br>[m] | A<br>[m] | V <sub>Ed</sub><br>[kg] | V <sub>Ed2</sub><br>[kg] | V <sub>Ed1</sub><br>[kg] | V <sub>Ed1</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 28522.9                 | 22686.9                  | 16236.3                  | 35500.5                  | ø 12/12,5' |

▲ **Verifiche a Presso-Flessione S.L.E.**

| Nodo              | Comb       | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | α <sub>Ed</sub> | α <sub>Ed</sub> | σ<br>[kg/cm²] |
|-------------------|------------|-----------|--------------------------|--------------------------|-----------------|-----------------|---------------|
| Combinazioni Rare |            |           |                          |                          |                 |                 |               |
| 4099              | Fl. 23     | -39582.9  | -1300.7                  | -2364.5                  |                 |                 | 23.7          |
|                   | s/c 23     | -39582.9  | -1300.7                  | -2364.5                  |                 |                 | -630.6        |
|                   | s/c Max 23 | -39582.9  | -1300.7                  | -2364.5                  |                 |                 | -50.3         |
|                   | s/c Med 22 | -41671.4  | -876.6                   | -2512.3                  |                 |                 | -22.3         |
| 4936              | Fl. 23     | -38270.4  | 1356.9                   | 2322.7                   |                 |                 | 62.7          |
|                   | s/c 23     | -38270.4  | 1356.9                   | 2322.7                   |                 |                 | -644.8        |
|                   | s/c Max 23 | -38270.4  | 1356.9                   | 2322.7                   |                 |                 | -51.9         |
|                   | s/c Med 22 | -40358.9  | 894.4                    | 2600.7                   |                 |                 | -22.4         |

|                        |            |          |        |         |  |  |        |
|------------------------|------------|----------|--------|---------|--|--|--------|
| Combinazioni Frequenti |            |          |        |         |  |  |        |
| 4099                   | Fl. 28     | -37594.6 | -370.8 | -1944.6 |  |  | -83.7  |
|                        | s/c 28     | -37594.6 | -370.8 | -1944.6 |  |  | -496.8 |
|                        | s/c Max 28 | -37594.6 | -370.8 | -1944.6 |  |  | -38.5  |
|                        | s/c Med 27 | -38887.5 | -138.4 | -2002.3 |  |  | -19.8  |
| 4936                   | Fl. 28     | -36282.1 | 352.4  | 2076.7  |  |  | -62.9  |
|                        | s/c 28     | -36282.1 | 352.4  | 2076.7  |  |  | -497.2 |
|                        | s/c Max 28 | -36282.1 | 352.4  | 2076.7  |  |  | -38.8  |
|                        | s/c Med 27 | -37075.0 | 98.4   | 2138.0  |  |  | -19.1  |

|                               |            |          |        |         |  |  |        |
|-------------------------------|------------|----------|--------|---------|--|--|--------|
| Combinazioni Quasi Permanenti |            |          |        |         |  |  |        |
| 4099                          | Fl. 32     | -37492.1 | -134.2 | -1915.5 |  |  | -104.7 |
|                               | s/c 32     | -37492.1 | -134.2 | -1915.5 |  |  | -474.2 |
|                               | s/c Max 32 | -37492.1 | -134.2 | -1915.5 |  |  | -36.5  |
|                               | s/c Med 31 | -37492.1 | -134.2 | -1915.5 |  |  | -19.3  |
| 4936                          | Fl. 32     | -36179.6 | 95.8   | 2044.5  |  |  | -86.0  |
|                               | s/c 32     | -36179.6 | 95.8   | 2044.5  |  |  | -472.7 |
|                               | s/c Max 32 | -36179.6 | 95.8   | 2044.5  |  |  | -36.6  |
|                               | s/c Med 31 | -36179.6 | 95.8   | 2044.5  |  |  | -18.6  |

▲Pilastro: 4936/5773 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 4936 | 16   | -29152.6 | -3275.4         | -2327.2         | 1.00            | 1.00            | 0.28            |       |
| 5773 | 16   | -28308.9 | 3506.8          | 2511.0          | 1.00            | 1.00            | 0.30            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| 0.13 | 3.63 | 10275.2         | 13595.1         | 9588.6          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Raro |           |          |                 |                 |                 |                 |                 |
| 4936              | Fl 23     | -26470.5 | -574.6          | -1379.6         |                 |                 | 6.0             |
|                   | sf 23     | -26470.5 | -574.6          | -1379.6         |                 |                 | -586.9          |
|                   | sc Max 23 | -26470.5 | -574.6          | -1379.6         |                 |                 | -48.7           |
|                   | sc Med 22 | -27876.5 | -379.1          | -1467.2         |                 |                 | -21.6           |
| 5773              | Fl 23     | -25626.8 | 587.1           | 1483.4          |                 |                 | 40.8            |
|                   | sf 23     | -25626.8 | 587.1           | 1483.4          |                 |                 | -598.8          |
|                   | sc Max 23 | -25626.8 | 587.1           | 1483.4          |                 |                 | -50.3           |
|                   | sc Med 22 | -27032.8 | 373.2           | 1579.1          |                 |                 | -21.9           |

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Frequenti |           |          |                 |                 |                 |                 |                 |
| 4936                   | Fl 28     | -25035.3 | -149.9          | -1130.8         |                 |                 | -87.4           |
|                        | sf 28     | -25035.3 | -149.9          | -1130.8         |                 |                 | -466.4          |
|                        | sc Max 28 | -25035.3 | -149.9          | -1130.8         |                 |                 | -37.2           |
|                        | sc Med 27 | -25580.4 | -42.8           | -1163.8         |                 |                 | -18.9           |
| 5773                   | Fl 28     | -24191.6 | 130.0           | 1215.2          |                 |                 | -68.2           |
|                        | sf 28     | -24191.6 | 130.0           | 1215.2          |                 |                 | -466.8          |
|                        | sc Max 28 | -24191.6 | 130.0           | 1215.2          |                 |                 | -37.6           |
|                        | sc Med 27 | -24736.6 | 13.0            | 1250.4          |                 |                 | -18.3           |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |                 |
| 4936                          | Fl 32     | -24956.5 | -41.6           | -1112.1         |                 |                 | -105.5          |
|                               | sf 32     | -24956.5 | -41.6           | -1112.1         |                 |                 | -446.7          |
|                               | sc Max 32 | -24956.5 | -41.6           | -1112.1         |                 |                 | -35.3           |
|                               | sc Med 32 | -24956.5 | -41.6           | -1112.1         |                 |                 | -18.4           |
| 5773                          | Fl 32     | -24112.7 | 13.0            | 1194.6          |                 |                 | -88.0           |
|                               | sf 32     | -24112.7 | 13.0            | 1194.6          |                 |                 | -445.4          |
|                               | sc Max 32 | -24112.7 | 13.0            | 1194.6          |                 |                 | -35.5           |
|                               | sc Med 32 | -24112.7 | 13.0            | 1194.6          |                 |                 | -17.8           |

▲Pilastro: 5773/6610 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 5773 | 16   | -15404.9 | -3550.5         | -2726.2         | 1.00            | 1.00            | 0.32            |       |
| 6610 | 16   | -14561.2 | 3627.1          | 2825.0          | 1.00            | 1.00            | 0.33            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| 0.13 | 3.63 | 10210.1         | 13595.1         | 10536.8         | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Raro |           |          |                 |                 |                 |                 |                 |
| 5773              | Fl 23     | -13936.4 | -610.2          | -1627.8         |                 |                 | 327.7           |
|                   | sf 23     | -13936.4 | -610.2          | -1627.8         |                 |                 | -536.5          |
|                   | sc Max 23 | -13936.4 | -610.2          | -1627.8         |                 |                 | -49.7           |
|                   | sc Med 22 | -14468.0 | -397.8          | -1733.7         |                 |                 | -20.3           |

▲Pilastro: 166/820 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]  
Af: 1.0 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/100' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N          | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|------|------------|----------------|----------------|----------------|----------------|-------|
| 166  | 19   | -155441.4  | 9519.8         | 5284.5         | 1.00           | 1.45           | 0.32  |
| 820  | 4    | -1811229.0 | 437.3          | -4130.3        | 1.00           | 1.00           | 0.30  |

▲Verifiche a Taglio

| Da   | A    | V <sub>ed</sub> | V <sub>max</sub> | V <sub>ed</sub> | V <sub>max</sub> | Staffe     |
|------|------|-----------------|------------------|-----------------|------------------|------------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]            | [kg]             |            |
| 0.13 | 0.92 | 20073.3         | 60284.1          | 11259.0         | 33178.0          | ø 14/10.0' |
| 0.92 | 2.83 | 20073.3         | 44290.4          | 11259.0         | 24375.6          | ø 12/10.0' |
| 2.83 | 3.63 | 20073.3         | 60284.1          | 11259.0         | 33178.0          | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb        | N         | M <sub>u</sub> | M <sub>u</sub> | σ      |
|-------------------|-------------|-----------|----------------|----------------|--------|
| Combinazioni Rare |             |           |                |                |        |
| 166               |             |           |                |                |        |
|                   | Fr. 26      | -138584.4 | -1621.4        | -1852.6        | -564.7 |
|                   | sfc. 26     | -138584.4 | -1621.4        | -1852.6        | -931.6 |
|                   | sc. Max. 26 | -138584.4 | -1621.4        | -1852.6        | -66.1  |
|                   | sc. Med. 22 | -145406.0 | -2073.6        | -725.8         | -52.3  |
| 820               |             |           |                |                |        |
|                   | Fr. 25      | -136987.0 | 156.0          | -3002.7        | -544.9 |
|                   | sfc. 25     | -136987.0 | 156.0          | -3002.7        | -934.2 |
|                   | sc. Max. 25 | -136987.0 | 156.0          | -3002.7        | -67.4  |
|                   | sc. Med. 22 | -143637.2 | 41.8           | -2132.6        | -51.6  |

| Nodo                   | Comb        | N         | M <sub>u</sub> | M <sub>u</sub> | σ      |
|------------------------|-------------|-----------|----------------|----------------|--------|
| Combinazioni Frequenti |             |           |                |                |        |
| 166                    |             |           |                |                |        |
|                        | Fr. 31      | -134203.4 | 56.1           | -1899.3        | -603.1 |
|                        | sfc. 31     | -134203.4 | 56.1           | -1899.3        | -845.8 |
|                        | sc. Max. 31 | -134203.4 | 56.1           | -1899.3        | -59.6  |
|                        | sc. Med. 27 | -137201.5 | -301.5         | -486.4         | -49.5  |
| 820                    |             |           |                |                |        |
|                        | Fr. 30      | -132698.8 | -508.6         | -3292.4        | -488.9 |
|                        | sfc. 30     | -132698.8 | -508.6         | -3292.4        | -943.8 |
|                        | sc. Max. 30 | -132698.8 | -508.6         | -3292.4        | -68.7  |
|                        | sc. Med. 27 | -135532.7 | -758.6         | -2168.2        | -48.8  |

| Nodo                          | Comb        | N         | M <sub>u</sub> | M <sub>u</sub> | σ      |
|-------------------------------|-------------|-----------|----------------|----------------|--------|
| Combinazioni Quasi Permanenti |             |           |                |                |        |
| 166                           |             |           |                |                |        |
|                               | Fr. 32      | -134493.5 | -263.6         | -506.5         | -683.1 |
|                               | sfc. 32     | -134493.5 | -263.6         | -506.5         | -768.4 |
|                               | sc. Max. 32 | -134493.5 | -263.6         | -506.5         | -52.2  |
|                               | sc. Med. 32 | -134493.5 | -263.6         | -506.5         | -48.4  |
| 820                           |             |           |                |                |        |
|                               | Fr. 32      | -132466.7 | -760.1         | -2089.0        | -552.6 |
|                               | sfc. 32     | -132466.7 | -760.1         | -2089.0        | -877.6 |
|                               | sc. Max. 32 | -132466.7 | -760.1         | -2089.0        | -62.4  |
|                               | sc. Med. 32 | -132466.7 | -760.1         | -2089.0        | -47.7  |

▲Pilastro: 820/1657 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]  
Af: 1.0 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/100' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|------|-----------|----------------|----------------|----------------|----------------|-------|
| 820  | 1    | -162654.0 | 1386.0         | 5727.0         | 1.00           | 0.30           |       |
| 1657 | 19   | -129125.8 | -5897.3        | -6933.5        | 1.00           | 1.00           | 0.28  |

▲Verifiche a Taglio

| Da   | A    | V <sub>ed</sub> | V <sub>max</sub> | V <sub>ed</sub> | V <sub>max</sub> | Staffe     |
|------|------|-----------------|------------------|-----------------|------------------|------------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]            | [kg]             |            |
| 0.13 | 0.92 | 16172.9         | 60284.1          | 15661.6         | 33178.0          | ø 14/10.0' |
| 0.92 | 2.83 | 16172.9         | 44290.4          | 15661.6         | 24375.6          | ø 12/10.0' |
| 2.83 | 3.63 | 16172.9         | 60284.1          | 15661.6         | 33178.0          | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb | N | M <sub>u</sub> | M <sub>u</sub> | σ |
|-------------------|------|---|----------------|----------------|---|
| Combinazioni Rare |      |   |                |                |   |

| Nodo | Comb        | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|-------------|-----------|----------------|----------------|----------------|----------------|-------|
| 820  |             |           |                |                |                |                |       |
|      | Fr. 26      | -136236.5 | 596.5          | 4376.3         | -312.8         |                |       |
|      | sfc. 22     | -122263.0 | 1148.0         | 4291.2         | -976.6         |                |       |
|      | sc. Max. 22 | -122263.0 | 1148.0         | 4291.2         | -72.9          |                |       |
|      | sc. Med. 22 | -122263.0 | 1148.0         | 4291.2         | -44.0          |                |       |
| 1657 |             |           |                |                |                |                |       |
|      | Fr. 26      | -114460.7 | -776.9         | -3604.7        | -359.8         |                |       |
|      | sfc. 22     | -120294.3 | -824.1         | -3785.9        | -920.9         |                |       |
|      | sc. Max. 22 | -120294.3 | -824.1         | -3785.9        | -68.2          |                |       |
|      | sc. Med. 22 | -120294.3 | -824.1         | -3785.9        | -43.3          |                |       |

| Combinazioni Frequenti |             |           |         |         |        |  |  |
|------------------------|-------------|-----------|---------|---------|--------|--|--|
| 820                    |             |           |         |         |        |  |  |
|                        | Fr. 31      | -112688.7 | 1411.4  | 4411.9  | -274.5 |  |  |
|                        | sfc. 27     | -115642.9 | 1627.5  | 4098.0  | -948.7 |  |  |
|                        | sc. Max. 31 | -112688.7 | 1411.4  | 4411.9  | -71.1  |  |  |
|                        | sc. Med. 27 | -115642.9 | 1627.5  | 4098.0  | -41.6  |  |  |
| 1657                   |             |           |         |         |        |  |  |
|                        | Fr. 31      | -110920.0 | -1372.8 | -3597.2 | -316.4 |  |  |
|                        | sfc. 27     | -113674.2 | -1504.6 | -3628.8 | -903.5 |  |  |
|                        | sc. Max. 27 | -113674.2 | -1504.6 | -3628.8 | -67.1  |  |  |
|                        | sc. Med. 27 | -113674.2 | -1504.6 | -3628.8 | -40.9  |  |  |

| Combinazioni Quasi Permanenti |             |           |         |         |        |  |  |
|-------------------------------|-------------|-----------|---------|---------|--------|--|--|
| 820                           |             |           |         |         |        |  |  |
|                               | Fr. 32      | -113019.1 | 1598.0  | 3970.4  | -295.0 |  |  |
|                               | sfc. 32     | -113019.1 | 1598.0  | 3970.4  | -925.3 |  |  |
|                               | sc. Max. 32 | -113019.1 | 1598.0  | 3970.4  | -69.2  |  |  |
|                               | sc. Med. 32 | -113019.1 | 1598.0  | 3970.4  | -40.7  |  |  |
| 1657                          |             |           |         |         |        |  |  |
|                               | Fr. 32      | -111050.4 | -1482.1 | -3507.2 | -318.2 |  |  |
|                               | sfc. 32     | -111050.4 | -1482.1 | -3507.2 | -880.8 |  |  |
|                               | sc. Max. 32 | -111050.4 | -1482.1 | -3507.2 | -65.4  |  |  |
|                               | sc. Med. 32 | -111050.4 | -1482.1 | -3507.2 | -40.0  |  |  |

▲Pilastro: 1657/2494 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >  
Staffe: ø 12/12.5' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|------|-----------|----------------|----------------|----------------|----------------|-------|
| 1657 | 1    | -135324.3 | 162.6          | 3071.9         | 1.00           | 1.00           | 0.32  |
| 2494 | 19   | -107899.5 | -3219.7        | -5046.1        | 1.00           | 1.00           | 0.32  |

▲Verifiche a Taglio

| Da   | A    | V <sub>ed</sub> | V <sub>max</sub> | V <sub>ed</sub> | V <sub>max</sub> | Staffe     |
|------|------|-----------------|------------------|-----------------|------------------|------------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]            | [kg]             |            |
| 0.13 | 3.63 | 7960.7          | 22686.9          | 9753.7          | 19500.5          | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb        | N         | M <sub>u</sub> | M <sub>u</sub> | σ       |
|-------------------|-------------|-----------|----------------|----------------|---------|
| Combinazioni Base |             |           |                |                |         |
| 1657              |             |           |                |                |         |
|                   | Fr. 25      | -96852.3  | 237.2          | 2345.8         | -533.6  |
|                   | sfc. 22     | -101672.7 | 191.4          | 2298.7         | -1009.1 |
|                   | sc. Max. 22 | -101672.7 | 191.4          | 2298.7         | -73.2   |
|                   | sc. Med. 22 | -101672.7 | 191.4          | 2298.7         | -52.3   |
| 2494              |             |           |                |                |         |
|                   | Fr. 25      | -95539.8  | -287.7         | -2361.0        | -518.2  |
|                   | sfc. 22     | -100360.2 | -230.2         | -2333.5        | -1005.3 |
|                   | sc. Max. 22 | -100360.2 | -230.2         | -2333.5        | -73.1   |
|                   | sc. Med. 22 | -100360.2 | -230.2         | -2333.5        | -51.7   |

| Combinazioni Frequenti |             |          |        |         |        |
|------------------------|-------------|----------|--------|---------|--------|
| 1657                   |             |          |        |         |        |
|                        | Fr. 30      | -93983.8 | 552.0  | 2354.7  | -485.4 |
|                        | sfc. 27     | -96277.2 | 533.1  | 2218.4  | -986.7 |
|                        | sc. Max. 27 | -96277.2 | 533.1  | 2218.4  | -72.1  |
|                        | sc. Med. 27 | -96277.2 | 533.1  | 2218.4  | -49.5  |
| 2494                   |             |          |        |         |        |
|                        | Fr. 30      | -92671.3 | -643.4 | -2368.4 | -466.6 |
|                        | sfc. 27     | -94814.7 | -621.7 | -2252.8 | -986.8 |
|                        | sc. Max. 27 | -94814.7 | -621.7 | -2252.8 | -72.4  |
|                        | sc. Med. 27 | -94814.7 | -621.7 | -2252.8 | -48.8  |

| Combinazioni Quasi Permanenti |             |          |        |         |        |
|-------------------------------|-------------|----------|--------|---------|--------|
| 1657                          |             |          |        |         |        |
|                               | Fr. 32      | -93912.0 | 526.6  | 2337.8  | -488.4 |
|                               | sfc. 32     | -93912.0 | 526.6  | 2337.8  | -961.7 |
|                               | sc. Max. 32 | -93912.0 | 526.6  | 2337.8  | -70.2  |
|                               | sc. Med. 32 | -93912.0 | 526.6  | 2337.8  | -48.3  |
| 2494                          |             |          |        |         |        |
|                               | Fr. 32      | -92599.5 | -614.4 | -2170.1 | -468.2 |
|                               | sfc. 32     | -92599.5 | -614.4 | -2170.1 | -961.6 |

| Nodo                          | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |           |           |                          |                          |                            |
| 3331                          | Fl. 25    | -63496.9  | 158.2                    | 1732.4                   | -320.2                     |
|                               | sfc 22    | -66847.4  | 61.4                     | 1911.8                   | -694.6                     |
|                               | sc Max 22 | -66847.4  | 61.4                     | 1911.8                   | -51.0                      |
| 4168                          | Fl. 23    | -62246.2  | 165.1                    | 1911.8                   | -34.4                      |
|                               | sfc 22    | -65535.0  | -16.3                    | -10783.3                 | -314.9                     |
|                               | sc Max 22 | -65535.0  | -16.3                    | -1813.6                  | -49.2                      |
|                               | sc Med 22 | -65535.0  | -16.3                    | -1813.6                  | -33.7                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 3331                          | Fl. 30    | -61549.3  | 513.8                    | 1734.0                   | -276.2                     |
|                               | sfc 27    | -63014.2  | 460.7                    | 1840.9                   | -690.9                     |
|                               | sc Max 27 | -63014.2  | 460.7                    | 1840.9                   | -51.3                      |
| 4168                          | sc Med 27 | -63014.2  | 460.7                    | 1840.9                   | -32.4                      |
|                               | Fl. 30    | -60236.8  | -47.3                    | -1640.2                  | -278.0                     |
|                               | sfc 27    | -61701.7  | -41.9                    | -1745.3                  | -668.8                     |
|                               | sc Max 27 | -61701.7  | -41.9                    | -1745.3                  | -49.6                      |
|                               | sc Med 27 | -61701.7  | -41.9                    | -1745.3                  | -31.8                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 3331                          | Fl. 32    | -61499.3  | 458.3                    | 1766.6                   | -277.4                     |
|                               | sfc 32    | -61499.3  | 458.3                    | 1766.6                   | -672.3                     |
|                               | sc Max 32 | -61499.3  | 458.3                    | 1766.6                   | -49.9                      |
| 4168                          | sc Med 32 | -61499.3  | 458.3                    | 1766.6                   | -31.7                      |
|                               | Fl. 32    | -60186.8  | -418.6                   | -1073.6                  | -278.9                     |
|                               | sfc 32    | -60186.8  | -418.6                   | -1073.6                  | -650.5                     |
|                               | sc Max 32 | -60186.8  | -418.6                   | -1073.6                  | -48.2                      |
|                               | sc Med 32 | -60186.8  | -418.6                   | -1073.6                  | -31.0                      |

▲Pilastro: 4168/5005 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo                          | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ <sub>Ed</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>St</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| Combinazioni Rare             |           |           |                          |                          |                                          |                                          |
| 4168                          | Fl. 23    | -50919.9  | -40.9                    | 1802.3                   | -41.8                                    |                                          |
|                               | sfc 22    | -50919.9  | -40.9                    | 1802.3                   | -560.1                                   |                                          |
|                               | sc Max 22 | -50919.9  | -40.9                    | 1802.3                   | -41.8                                    |                                          |
| 5005                          | Fl. 23    | -46941.6  | 260.5                    | -1727.0                  | -184.6                                   |                                          |
|                               | sfc 22    | -49607.4  | 82.8                     | -1867.6                  | -559.2                                   |                                          |
|                               | sc Max 22 | -49607.4  | 82.8                     | -1867.6                  | -42.0                                    |                                          |
|                               | sc Med 22 | -49607.4  | 82.8                     | -1867.6                  | -25.5                                    |                                          |
| Combinazioni Frequenti        |           |           |                          |                          |                                          |                                          |
| 4168                          | Fl. 30    | -47905.5  | 363.5                    | 1726.2                   | -556.0                                   |                                          |
|                               | sfc 27    | -47905.5  | 363.5                    | 1726.2                   | -41.9                                    |                                          |
|                               | sc Max 27 | -47905.5  | 363.5                    | 1726.2                   | -24.7                                    |                                          |
| 5005                          | Fl. 30    | -45435.9  | -429.6                   | -1073.2                  | -164.2                                   |                                          |
|                               | sfc 27    | -46593.0  | -362.5                   | -1789.0                  | -551.4                                   |                                          |
|                               | sc Max 27 | -46593.0  | -362.5                   | -1789.0                  | -41.7                                    |                                          |
|                               | sc Med 27 | -46593.0  | -362.5                   | -1789.0                  | -24.0                                    |                                          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |                                          |
| 4168                          | Fl. 32    | -46705.3  | 364.6                    | 1652.8                   | -181.1                                   |                                          |
|                               | sfc 32    | -46705.3  | 364.6                    | 1652.8                   | -540.1                                   |                                          |
|                               | sc Max 32 | -46705.3  | 364.6                    | 1652.8                   | -40.7                                    |                                          |
| 5005                          | Fl. 32    | -45392.8  | -364.8                   | -1711.8                  | -165.6                                   |                                          |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo                          | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ <sub>Ed</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>St</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| Combinazioni Rare             |           |           |                          |                          |                                          |                                          |
| 4168                          | Fl. 23    | -48254.1  | -205.5                   | 1667.0                   | -204.6                                   |                                          |
|                               | sfc 22    | -50919.9  | -40.9                    | 1802.3                   | -560.1                                   |                                          |
|                               | sc Max 22 | -50919.9  | -40.9                    | 1802.3                   | -41.8                                    |                                          |
| 5005                          | Fl. 23    | -46941.6  | 260.5                    | -1727.0                  | -184.6                                   |                                          |
|                               | sfc 22    | -49607.4  | 82.8                     | -1867.6                  | -559.2                                   |                                          |
|                               | sc Max 22 | -49607.4  | 82.8                     | -1867.6                  | -42.0                                    |                                          |
|                               | sc Med 22 | -49607.4  | 82.8                     | -1867.6                  | -25.5                                    |                                          |
| Combinazioni Frequenti        |           |           |                          |                          |                                          |                                          |
| 4168                          | Fl. 30    | -47905.5  | 363.5                    | 1726.2                   | -556.0                                   |                                          |
|                               | sfc 27    | -47905.5  | 363.5                    | 1726.2                   | -41.9                                    |                                          |
|                               | sc Max 27 | -47905.5  | 363.5                    | 1726.2                   | -24.7                                    |                                          |
| 5005                          | Fl. 30    | -45435.9  | -429.6                   | -1073.2                  | -164.2                                   |                                          |
|                               | sfc 27    | -46593.0  | -362.5                   | -1789.0                  | -551.4                                   |                                          |
|                               | sc Max 27 | -46593.0  | -362.5                   | -1789.0                  | -41.7                                    |                                          |
|                               | sc Med 27 | -46593.0  | -362.5                   | -1789.0                  | -24.0                                    |                                          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |                                          |
| 4168                          | Fl. 32    | -46705.3  | 364.6                    | 1652.8                   | -181.1                                   |                                          |
|                               | sfc 32    | -46705.3  | 364.6                    | 1652.8                   | -540.1                                   |                                          |
|                               | sc Max 32 | -46705.3  | 364.6                    | 1652.8                   | -40.7                                    |                                          |
| 5005                          | Fl. 32    | -45392.8  | -364.8                   | -1711.8                  | -165.6                                   |                                          |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
|                   | sc Max 32 | -92599.5  | 614.4                    | -2170.1                  | 70.5                       |
|                   | sc Med 32 | -92599.5  | 614.4                    | -2170.1                  | -47.7                      |

▲Pilastro: 2494/3331 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo                          | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ <sub>Ed</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>St</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| Combinazioni Rare             |           |           |                          |                          |                                          |                                          |
| 2494                          | Fl. 25    | -79589.8  | 302.6                    | 2043.2                   | -404.5                                   |                                          |
|                               | sfc 22    | -83649.9  | 219.0                    | 2243.3                   | -867.2                                   |                                          |
|                               | sc Max 22 | -83649.9  | 219.0                    | 2243.3                   | -63.6                                    |                                          |
| 3331                          | Fl. 25    | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | sfc 22    | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | sc Max 22 | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | sc Med 22 | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | Fl. 25    | -78277.3  | -238.1                   | -1921.8                  | -410.6                                   |                                          |
|                               | sfc 22    | -82337.4  | -151.7                   | -2111.3                  | -839.6                                   |                                          |
|                               | sc Max 22 | -82337.4  | -151.7                   | -2111.3                  | -61.4                                    |                                          |
|                               | sc Med 22 | -82337.4  | -151.7                   | -2111.3                  | -42.4                                    |                                          |
| Combinazioni Frequenti        |           |           |                          |                          |                                          |                                          |
| 2494                          | Fl. 30    | -77191.1  | 687.6                    | 2048.3                   | -354.4                                   |                                          |
|                               | sfc 27    | -78979.9  | 643.4                    | 2168.0                   | -858.6                                   |                                          |
|                               | sc Max 27 | -78979.9  | 643.4                    | 2168.0                   | -63.6                                    |                                          |
| 3331                          | Fl. 30    | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | sfc 27    | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | sc Max 27 | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | sc Med 27 | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | Fl. 30    | -75878.6  | -619.2                   | -1927.9                  | -360.7                                   |                                          |
|                               | sfc 27    | -77667.4  | -576.0                   | -2039.4                  | -831.3                                   |                                          |
|                               | sc Max 27 | -77667.4  | -576.0                   | -2039.4                  | -61.4                                    |                                          |
|                               | sc Med 27 | -77667.4  | -576.0                   | -2039.4                  | -40.0                                    |                                          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |                                          |
| 2494                          | Fl. 32    | -77129.2  | 636.7                    | 2086.0                   | -354.6                                   |                                          |
|                               | sfc 32    | -77129.2  | 636.7                    | 2086.0                   | -836.3                                   |                                          |
|                               | sc Max 32 | -77129.2  | 636.7                    | 2086.0                   | -61.9                                    |                                          |
| 3331                          | Fl. 32    | -77129.2  | 636.7                    | 2086.0                   | -39.7                                    |                                          |
|                               | sfc 32    | -75816.7  | -570.9                   | -1960.4                  | -361.2                                   |                                          |
|                               | sc Max 32 | -75816.7  | -570.9                   | -1960.4                  | -809.5                                   |                                          |
|                               | sc Med 32 | -75816.7  | -570.9                   | -1960.4                  | -59.7                                    |                                          |

▲Pilastro: 3331/4168 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo                          | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ <sub>Ed</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>St</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| Combinazioni Rare             |           |           |                          |                          |                                          |                                          |
| 3331                          | Fl. 25    | -92599.5  | 614.4                    | -2170.1                  | 70.5                                     |                                          |
|                               | sc Max 32 | -92599.5  | 614.4                    | -2170.1                  | -47.7                                    |                                          |
| 4168                          | Fl. 23    | -48254.1  | -205.5                   | 1667.0                   | -204.6                                   |                                          |
|                               | sfc 22    | -50919.9  | -40.9                    | 1802.3                   | -560.1                                   |                                          |
|                               | sc Max 22 | -50919.9  | -40.9                    | 1802.3                   | -41.8                                    |                                          |
| 5005                          | Fl. 23    | -46941.6  | 260.5                    | -1727.0                  | -184.6                                   |                                          |
|                               | sfc 22    | -49607.4  | 82.8                     | -1867.6                  | -559.2                                   |                                          |
|                               | sc Max 22 | -49607.4  | 82.8                     | -1867.6                  | -42.0                                    |                                          |
|                               | sc Med 22 | -49607.4  | 82.8                     | -1867.6                  | -25.5                                    |                                          |
| Combinazioni Frequenti        |           |           |                          |                          |                                          |                                          |
| 3331                          | Fl. 30    | -47905.5  | 363.5                    | 1726.2                   | -556.0                                   |                                          |
|                               | sfc 27    | -47905.5  | 363.5                    | 1726.2                   | -41.9                                    |                                          |
|                               | sc Max 27 | -47905.5  | 363.5                    | 1726.2                   | -24.7                                    |                                          |
| 4168                          | Fl. 30    | -45435.9  | -429.6                   | -1073.2                  | -164.2                                   |                                          |
|                               | sfc 27    | -46593.0  | -362.5                   | -1789.0                  | -551.4                                   |                                          |
|                               | sc Max 27 | -46593.0  | -362.5                   | -1789.0                  | -41.7                                    |                                          |
|                               | sc Med 27 | -46593.0  | -362.5                   | -1789.0                  | -24.0                                    |                                          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |                                          |
| 3331                          | Fl. 32    | -46705.3  | 364.6                    | 1652.8                   | -181.1                                   |                                          |
|                               | sfc 32    | -46705.3  | 364.6                    | 1652.8                   | -540.1                                   |                                          |
|                               | sc Max 32 | -46705.3  | 364.6                    | 1652.8                   | -40.7                                    |                                          |
| 4168                          | Fl. 32    | -45392.8  | -364.8                   | -1711.8                  | -165.6                                   |                                          |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo                          | Comb      | N<br>[kg] | M <sub>Ed</sub><br>[kgm] | M <sub>Ed</sub><br>[kgm] | σ <sub>Ed</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>St</sub><br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|
| Combinazioni Rare             |           |           |                          |                          |                                          |                                          |
| 2494                          | Fl. 25    | -79589.8  | 302.6                    | 2043.2                   | -404.5                                   |                                          |
|                               | sfc 22    | -83649.9  | 219.0                    | 2243.3                   | -867.2                                   |                                          |
|                               | sc Max 22 | -83649.9  | 219.0                    | 2243.3                   | -63.6                                    |                                          |
| 3331                          | Fl. 25    | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | sfc 22    | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | sc Max 22 | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | sc Med 22 | -83649.9  | 219.0                    | 2243.3                   | -43.1                                    |                                          |
|                               | Fl. 25    | -78277.3  | -238.1                   | -1921.8                  | -410.6                                   |                                          |
|                               | sfc 22    | -82337.4  | -151.7                   | -2111.3                  | -839.6                                   |                                          |
|                               | sc Max 22 | -82337.4  | -151.7                   | -2111.3                  | -61.4                                    |                                          |
|                               | sc Med 22 | -82337.4  | -151.7                   | -2111.3                  | -42.4                                    |                                          |
| Combinazioni Frequenti        |           |           |                          |                          |                                          |                                          |
| 2494                          | Fl. 30    | -77191.1  | 687.6                    | 2048.3                   | -354.4                                   |                                          |
|                               | sfc 27    | -78979.9  | 643.4                    | 2168.0                   | -858.6                                   |                                          |
|                               | sc Max 27 | -78979.9  | 643.4                    | 2168.0                   | -63.6                                    |                                          |
| 3331                          | Fl. 30    | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | sfc 27    | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | sc Max 27 | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | sc Med 27 | -78979.9  | 643.4                    | 2168.0                   | -40.7                                    |                                          |
|                               | Fl. 30    | -75878.6  | -619.2                   | -1927.9                  | -360.7                                   |                                          |
|                               | sfc 27    | -77667.4  | -576.0                   | -2039.4                  | -831.3                                   |                                          |
|                               | sc Max 27 | -77667.4  | -576.0                   | -2039.4                  | -61.4                                    |                                          |
|                               | sc Med 27 | -77667.4  | -576.0                   | -2039.4                  | -40.0                                    |                                          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                                          |                                          |
| 2494                          | Fl. 32    | -77129.2  | 636.7                    | 2086.0                   | -354.6                                   |                                          |
|                               | sfc 32    | -77129.2  | 636.7                    | 2086.0                   | -836.3                                   |                                          |
|                               | sc Max 32 | -77129.2  | 636.7                    | 2086.0                   | -61.9                                    |                                          |
| 3331                          | Fl. 32    | -77129.2  | 636.7                    | 2086.0                   | -39.7                                    |                                          |
|                               | sfc 32    | -75816.7  | -570.9                   | -1960.4                  | -361.2                                   |                                          |
|                               | sc Max 32 | -75816.7  | -570.9                   | -1960.4                  | -809.5                                   |                                          |
|                               | sc Med 32 | -75816.7  | -570.9                   | -1960.4                  | -59.7                                    |                                          |

▲Verifiche a Presso-Flessione S.L.E.

▲Verifiche a Presso-Flessione S.L.E.

| Combinazioni Rare             |        |                               |          |        |         |
|-------------------------------|--------|-------------------------------|----------|--------|---------|
| 5842                          | Fl. 23 | Combinazioni Rari             |          |        |         |
|                               |        | sc 22                         | -22284.9 | -135.6 | 1052.1  |
|                               |        | sc Max 22                     | -22284.9 | -135.6 | 1052.1  |
|                               |        | sc Med 22                     | -22284.9 | -135.6 | 1052.1  |
| 6679                          | Fl. 23 | Combinazioni Rari             |          |        |         |
|                               |        | sc 22                         | -19898.6 | 208.2  | -1032.9 |
|                               |        | sc 22                         | -21441.1 | 122.6  | -1166.5 |
|                               |        | sc Max 22                     | -21441.1 | 122.6  | -1166.5 |
| Combinazioni Frequenti        |        |                               |          |        |         |
| 5842                          | Fl. 30 | Combinazioni Frequenti        |          |        |         |
|                               |        | sc 27                         | -20647.6 | 72.2   | 987.3   |
|                               |        | sc Max 27                     | -20647.6 | 72.2   | 987.3   |
|                               |        | sc Med 27                     | -20647.6 | 72.2   | 987.3   |
| 6679                          | Fl. 30 | Combinazioni Frequenti        |          |        |         |
|                               |        | sc 27                         | -19175.9 | -126.0 | -999.1  |
|                               |        | sc 27                         | -19803.8 | -87.1  | -1078.0 |
|                               |        | sc Max 27                     | -19803.8 | -87.1  | -1078.0 |
| Combinazioni Quasi Permanenti |        |                               |          |        |         |
| 5842                          | Fl. 32 | Combinazioni Quasi Permanenti |          |        |         |
|                               |        | sc 32                         | -20002.1 | 77.0   | 939.5   |
|                               |        | sc Max 32                     | -20002.1 | 77.0   | 939.5   |
|                               |        | sc Med 32                     | -20002.1 | 77.0   | 939.5   |
| 6679                          | Fl. 32 | Combinazioni Quasi Permanenti |          |        |         |
|                               |        | sc 32                         | -19158.3 | -91.8  | -1023.9 |
|                               |        | sc Max 32                     | -19158.3 | -91.8  | -1023.9 |
|                               |        | sc Med 32                     | -19158.3 | -91.8  | -1023.9 |

▲Pilastro: 6679/7252 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg/cm <sup>2</sup> ] | σ <sub>13</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|------------------------------------------|------------------------------------------|-------|
|      |      |           |                          |                          |                                          |                                          |       |
| 6679 | 19   | -7551.2   | 704.2                    | 1544.6                   | 1.00                                     | 1.00                                     | 0.12  |
| 7252 | 1    | -8670.5   | 3.6                      | -131                     | 1.00                                     | 1.00                                     | 0.03  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>100</sub><br>[kg] | V <sub>100</sub><br>[kg] | V <sub>100</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
|           |          |                          |                          |                          |                          |                          |                            |
| 0.13      | 3.63     | 4768.9                   | 13595.1                  | 5481.8                   | 13595.1                  | 13595.1                  | ø 12/15.0'                 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                         | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
|                              |           |           |                          |                          |                            |
| Combinazioni Rare            |           |           |                          |                          |                            |
| 6679                         | Fl. 22    | -7316.6   | -41.8                    | 670.3                    | 50.9                       |
|                              | sfc 22    | -7316.6   | -41.8                    | 670.3                    | -193.6                     |
|                              | sc Max 22 | -7316.6   | -41.8                    | 670.3                    | -16.9                      |
|                              | sc Med 22 | -7316.6   | -41.8                    | 670.3                    | -8.1                       |
| 7252                         | Fl. 23    | -4020.1   | 3.1                      | -8.8                     | -64.8                      |
|                              | sfc 22    | -4472.8   | 2.4                      | -9.7                     | -73.4                      |
|                              | sc Max 22 | -4472.8   | 2.4                      | -9.7                     | -4.9                       |
|                              | sc Med 22 | -4472.8   | 2.4                      | -9.7                     | -4.8                       |
| Combinazioni Frequent        |           |           |                          |                          |                            |
| 6679                         | Fl. 27    | -6650.2   | 62.2                     | 610.4                    | 51.3                       |
|                              | sfc 27    | -6650.2   | 62.2                     | 610.4                    | -180.6                     |
|                              | sc Max 27 | -6650.2   | 62.2                     | 610.4                    | -15.8                      |
|                              | sc Med 27 | -6650.2   | 62.2                     | 610.4                    | -7.3                       |
| 7252                         | Fl. 28    | -5470.9   | 0.9                      | -8.2                     | -59.2                      |
|                              | sfc 27    | -5806.5   | 0.4                      | -8.8                     | -65.6                      |
|                              | sc Max 27 | -5806.5   | 0.4                      | -8.8                     | -4.4                       |
|                              | sc Med 27 | -5806.5   | 0.4                      | -8.8                     | -4.3                       |
| Combinazioni Quasi Permanent |           |           |                          |                          |                            |
| 6679                         | Fl. 32    | -6333.2   | 64.7                     | 579.2                    | 49.3                       |
|                              | sfc 32    | -6333.2   | 64.7                     | 579.2                    | -172.6                     |
|                              | sc Max 32 | -6333.2   | 64.7                     | 579.2                    | -15.1                      |

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 0.92     | 39897                   | 60284.1                  | 9462.3                   | 33178.0                  | ø 14/10.0 |
| 0.92      | 2.83     | 39897                   | 44290.4                  | 9462.3                   | 24375.6                  | ø 12/10.0 |
| 2.83      | 3.63     | 39897                   | 60284.1                  | 9462.3                   | 33178.0                  | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb        | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare             |             |           |                         |                         |                            |
| 832                           | Pl. 26      | -145985.3 | 1764.7                  | 267.8                   | -694.4                     |
|                               | sfc. 22     | -152975.3 | 1432.5                  | 271.9                   | -901.5                     |
|                               | sc. Max. 22 | -152975.3 | 1432.5                  | 271.9                   | -61.3                      |
| 1669                          | Pl. 25      | -143116.5 | -2874.3                 | -314.5                  | -633.6                     |
|                               | sfc. 22     | -151006.5 | -2776.3                 | -320.8                  | -950.6                     |
|                               | sc. Max. 22 | -151006.5 | -2776.3                 | -320.8                  | -65.4                      |
|                               | sc. Max. 22 | -151006.5 | -2776.3                 | -320.8                  | -54.3                      |
| Combinazioni Frequenti        |             |           |                         |                         |                            |
| 832                           | Pl. 30      | -134726.9 | 2902.2                  | 377.3                   | -582.4                     |
|                               | sfc. 27     | -138511.1 | 2489.7                  | 386.4                   | -875.3                     |
|                               | sc. Max. 30 | -134726.9 | 2902.2                  | 377.3                   | -60.4                      |
| 1669                          | Pl. 30      | -138511.1 | 2489.7                  | 386.4                   | -49.8                      |
|                               | sfc. 27     | -132758.2 | -4005.2                 | -448.7                  | -522.3                     |
|                               | sc. Max. 27 | -136542.3 | -3845.5                 | -432.2                  | -923.8                     |
|                               | sc. Max. 27 | -136542.3 | -3845.5                 | -432.2                  | -64.4                      |
|                               | sc. Max. 27 | -136542.3 | -3845.5                 | -432.2                  | -49.1                      |
| Combinazioni Quasi Permanenti |             |           |                         |                         |                            |
| 832                           | Pl. 32      | -134672.2 | 2944.7                  | 367.0                   | -606.5                     |
|                               | sfc. 32     | -134672.2 | 2944.7                  | 367.0                   | -847.4                     |
|                               | sc. Max. 32 | -134672.2 | 2944.7                  | 367.0                   | -58.4                      |
| 1669                          | Pl. 32      | -132703.5 | -3654.9                 | -410.6                  | -538.9                     |
|                               | sfc. 32     | -132703.5 | -3654.9                 | -410.6                  | -893.9                     |
|                               | sc. Max. 32 | -132703.5 | -3654.9                 | -410.6                  | -62.3                      |
|                               | sc. Max. 32 | -132703.5 | -3654.9                 | -410.6                  | -47.8                      |

▲Pilastro: 1669/2506 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8.0 24 Af=36.19 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5 x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ <sub>u</sub><br>[kg/cm <sup>2</sup> ] | Sd/sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 1669 | 1    | -159290.5 | 2261.0                  | 480.2                   | 1.00                                    | 0.35  |
| 2506 | 1    | -157584.3 | -3216.6                 | -631.9                  | 1.00                                    | 0.36  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 15592.8                 | 22886.9                  | 5973.8                   | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb        | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------------------------|-------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare      |             |           |                         |                         |                            |
| 1669                   | Pl. 26      | -112777.3 | 1633.0                  | 350.0                   | -702.2                     |
|                        | sfc. 22     | -118862.0 | 1778.6                  | 370.4                   | -1095.3                    |
|                        | sc. Max. 22 | -118862.0 | 1778.6                  | 370.4                   | -77.1                      |
| 2506                   | Pl. 26      | -110964.8 | -2321.3                 | -464.4                  | -626.9                     |
|                        | sfc. 22     | -117969.5 | -2503.0                 | -483.8                  | -1154.0                    |
|                        | sc. Max. 22 | -117969.5 | -2503.0                 | -483.8                  | -82.6                      |
|                        | sc. Max. 22 | -117969.5 | -2503.0                 | -483.8                  | -60.5                      |
| Combinazioni Frequenti |             |           |                         |                         |                            |
| 1669                   | Pl. 31      | -104865.7 | 2055.7                  | 451.8                   | -599.3                     |
|                        | sfc. 27     | -107915.1 | 2189.2                  | 442.0                   | -1050.3                    |
|                        | sc. Max. 27 | -107915.1 | 2189.2                  | 442.0                   | -75.0                      |
| 2506                   | Pl. 31      | -103153.2 | -2750.2                 | -552.5                  | -523.9                     |
|                        | sfc. 27     | -106402.6 | -2906.7                 | -547.8                  | -1107.8                    |

| Nodo | Comb        | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-------------|-----------|-------------------------|-------------------------|----------------------------|
| 7252 | sc. Max. 32 | 6333.2    | 68.7                    | 579.2                   | -7.0                       |
|      | Pl. 32      | -5489.5   | 0.4                     | -8.1                    | -59.5                      |
|      | sfc. 32     | -5489.5   | 0.4                     | -8.1                    | -62.0                      |
|      | sc. Max. 32 | -5489.5   | 0.4                     | -8.1                    | -4.2                       |
|      | sc. Max. 32 | -5489.5   | 0.4                     | -8.1                    | -4.0                       |

▲Pilastro: 168/832 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 1.0 24 Af=45.24 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0 x 80.0/ø 12/10.0 x 190.0/ø 14/10.0 x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ <sub>u</sub><br>[kg/cm <sup>2</sup> ] | Sd/sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 168  | 1    | -262664.7 | 2916.9                  | -104.4                  | 1.00                                    | 0.39  |
| 832  | 1    | -260105.3 | -1528.5                 | -134.1                  | 1.00                                    | 0.37  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 0.92     | 27631.5                 | 60284.1                  | 8478.8                   | ø 14/10.0 |
| 0.92      | 2.83     | 27631.5                 | 44290.4                  | 8478.8                   | ø 12/10.0 |
| 2.83      | 3.63     | 27631.5                 | 60284.1                  | 8478.8                   | ø 14/10.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb        | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare             |             |           |                         |                         |                            |
| 168                           | Pl. 26      | -186941.8 | 2851.4                  | -450.4                  | -861.3                     |
|                               | sfc. 22     | -196048.9 | 2277.3                  | -74.1                   | -1161.7                    |
|                               | sc. Max. 26 | -186941.8 | 2851.4                  | -450.4                  | -79.5                      |
| 832                           | Pl. 26      | -186973.0 | -1645.1                 | 227.8                   | -916.0                     |
|                               | sfc. 22     | -194080.2 | -1320.1                 | -109.2                  | -1109.4                    |
|                               | sc. Max. 22 | -194080.2 | -1320.1                 | -109.2                  | -74.9                      |
|                               | sc. Max. 22 | -194080.2 | -1320.1                 | -109.2                  | -69.8                      |
| Combinazioni Frequenti        |             |           |                         |                         |                            |
| 168                           | Pl. 31      | -175555.4 | 4166.1                  | -471.7                  | -734.4                     |
|                               | sfc. 31     | -175555.4 | 4166.1                  | -471.7                  | -1139.4                    |
|                               | sc. Max. 31 | -175555.4 | 4166.1                  | -471.7                  | -79.1                      |
| 832                           | Pl. 31      | -175586.7 | -2709.1                 | 224.0                   | -799.8                     |
|                               | sfc. 27     | -175330.2 | -2301.7                 | -184.2                  | -1053.6                    |
|                               | sc. Max. 31 | -175586.7 | -2709.1                 | 224.0                   | -72.1                      |
|                               | sc. Max. 27 | -175330.2 | -2301.7                 | -184.2                  | -63.1                      |
| Combinazioni Quasi Permanenti |             |           |                         |                         |                            |
| 168                           | Pl. 32      | -172502.1 | 3865.3                  | -16.8                   | -790.5                     |
|                               | sfc. 32     | -172502.1 | 3865.3                  | -16.8                   | -1072.0                    |
|                               | sc. Max. 32 | -172502.1 | 3865.3                  | -16.8                   | -73.4                      |
| 832                           | Pl. 32      | -170533.4 | -2200.2                 | -172.1                  | -818.5                     |
|                               | sfc. 32     | -170533.4 | -2200.2                 | -172.1                  | -1022.7                    |
|                               | sc. Max. 32 | -170533.4 | -2200.2                 | -172.1                  | -69.7                      |
|                               | sc. Max. 32 | -170533.4 | -2200.2                 | -172.1                  | -61.4                      |

▲Pilastro: 832/1669 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 1.0 24 Af=45.24 [cm<sup>2</sup>] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0 x 80.0/ø 12/10.0 x 190.0/ø 14/10.0 x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | σ <sub>u</sub><br>[kg/cm <sup>2</sup> ] | Sd/sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 832  | 1    | -204985.5 | 1627.8                  | 342.3                   | 1.00                                    | 0.30  |
| 1669 | 1    | -202426.1 | -3428.5                 | -408.2                  | 1.00                                    | 0.31  |

▲Verifiche a Taglio

### ▲Verifiche a Taglio

| Da   |      | A       | V <sub>422</sub> | V <sub>423</sub> | V <sub>431</sub> | V <sub>4233</sub> | Staffe |
|------|------|---------|------------------|------------------|------------------|-------------------|--------|
| [m]  | [m]  | [m]     | [kg]             | [kg]             | [kg]             | [kg]              |        |
| 0.13 | 3.63 | 19626.9 | 22886.9          | 7881.0           | 19500.5          | ø 12/12.5'        |        |

**▲Verifiche a Presso-Flessione S.L.E.**

| Node | Comb      | N       | M <sub>21</sub><br>[kg] | M <sub>22</sub><br>[kg] | M <sub>23</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|---------|-------------------------|-------------------------|-------------------------|----------------------------|
| 3343 | Fl 26     | -678817 | 4300.3                  | 842.5                   | 891.6                   |                            |
|      | sf 22     | -722092 | 4563.1                  | 8691                    | -1005.5                 |                            |
|      | sc Max 22 | -722092 | 4563.1                  | 8691                    | -7773                   |                            |
| 4180 | sc Med 22 | -722092 | 4563.1                  | 8691                    | -373                    |                            |
|      | Fl 26     | -665692 | 4578.5                  | 8897                    | -60.8                   |                            |
|      | sf 22     | -708867 | 4855.6                  | 9136                    | -1024.6                 |                            |
|      | sc Max 22 | -708867 | 4855.6                  | 9136                    | -793                    |                            |
|      | sc Med 22 | -708867 | 4855.6                  | 9136                    | -372                    |                            |

|      |      | Combinations Frequent |         |        |       |       |
|------|------|-----------------------|---------|--------|-------|-------|
| 4180 | 3343 | fr 31                 | -636327 | 4924   | 9118  | -326  |
|      |      | sc 27                 | -658278 | 47715  | 8991  | -9781 |
|      |      | sc Med 27             | -658278 | 47715  | 8991  | -760  |
|      |      | sc Med 27             | -658278 | 47715  | 8991  | -351  |
|      |      | fr 31                 | -623092 | -48513 | -9551 | 85    |
|      |      | sc 27                 | -645153 | -50863 | -9443 | -9966 |
|      |      | sc Med 27             | -645153 | -50863 | -9443 | -780  |
|      |      | sc Med 27             | -645153 | -50863 | -9443 | -353  |
|      |      |                       |         |        |       |       |
|      |      |                       |         |        |       |       |

|      |           | Combinazioni Quasi Permanenti |        |        |        |
|------|-----------|-------------------------------|--------|--------|--------|
|      |           | fr 32                         | fr 32  | fr 32  | fr 32  |
| 3343 |           | -63884.0                      | 4396.0 | 865.2  | -39.2  |
|      | fr 32     | -63884.0                      | 4396.0 | 865.2  | -945.5 |
|      | sc Min 32 | -63884.0                      | 4396.0 | 865.2  | -73.5  |
|      | sc Med 32 | -63884.0                      | 4396.0 | 865.2  | -34.0  |
|      | fr 32     | -62571.5                      | 4852.9 | -909.0 | 1.4    |
| 4180 |           | -62571.5                      | 4852.9 | -909.0 | -963.1 |
|      | fr 32     | -62571.5                      | 4852.9 | -909.0 | -75.3  |
|      | sc Min 32 | -62571.5                      | 4852.9 | -909.0 | -34.2  |
|      | sc Med 32 | -62571.5                      | 4852.9 | -909.0 |        |

▲Pilastro: 4180/5017 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

$$\text{Af. } 8 \text{ } \emptyset \text{ } 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1 \text{ } \emptyset \text{ } 24 \times 4 \text{ V} + 1 \text{ } \emptyset \text{ } 24 \times 2 \text{ B} + 1 \text{ } \emptyset \text{ } 24 \times 2 \text{ H} >$$

**Staffe: Ø 12/12.5' x 350.0**

**▲Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | $\alpha_2$ | $\alpha_3$ | Sd/Sr |
|------|------|----------|-----------------|-----------------|------------|------------|-------|
| 4180 | 21   | -43999.5 | 10338.4         | 2871.9          | 1.00       | 1.00       | 0.36  |
| 5017 | 21   | -42687.0 | -11056.0        | -3033.7         | 1.00       | 1.00       | 0.39  |

### ▲Verifiche a Taglio

| Da   | A    | Staffe           |                  |                  |
|------|------|------------------|------------------|------------------|
|      |      | V <sub>622</sub> | V <sub>623</sub> | V <sub>624</sub> |
| [m]  | [m]  | [kg]             | [kg]             | [kg]             |
| 0.13 | 3.63 | 19518.3          | 8295.3           | 19500.5          |
|      |      |                  |                  | ø 12°/12.5°      |

**▲Verifiche a Presso-Flessione S.L.E.**

| Nodo | Comb    | N<br>[kg] | M <sub>12</sub><br>[kg] | σ<br>[kg] | σ <sub>g</sub><br>[kg/cm <sup>2</sup> ] |
|------|---------|-----------|-------------------------|-----------|-----------------------------------------|
| 4180 | Fr. 22  | -563987   | 56661                   | 1089.2    | 184.1                                   |
|      | sc. 46c | -563987   | 56661                   | 1089.2    | -1020.0                                 |
|      | sc. 46c | -563987   | 56661                   | 1089.2    | -81.9                                   |
|      | sc. 46c | -563987   | 56661                   | 1089.2    | -35.9                                   |
| 5037 | Fr. 22  | -550862   | -6240.5                 | -131.4    | 298.7                                   |
|      | sc. 46c | -550862   | -6240.5                 | -131.4    | -1082.9                                 |
|      | sc. 46c | -550862   | -6240.5                 | -131.4    | -88.1                                   |
|      | sc. 46c | -550862   | -6240.5                 | -131.4    | -38.3                                   |

|      |           | Combinations Frequency |         |
|------|-----------|------------------------|---------|
| 4180 | Pl. 27    | -51448.6               | 5748.3  |
|      | sfc 27    | -51448.6               | 5748.3  |
|      | sc Max 27 | -51448.6               | 5748.3  |
|      | sc Med 27 | -51448.6               | 5748.3  |
| 5017 | Pl. 27    | -50136.1               | -6297.2 |
|      | sfc 27    | -50136.1               | -6297.2 |

| Nodo | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|--------------------------|--------------------------|----------------------------|
|      | sc Max 27 | -106602,6 | -2906,7                  | -547,8                   | -80,4                      |
|      | sc Med 27 | -106602,6 | -2906,7                  | -547,8                   | -54,9                      |

|      |  | FI 32     | -104871.4 | 2095.1  | 422.4  | -401.9  |
|------|--|-----------|-----------|---------|--------|---------|
| 1669 |  | sf 32     | -104871.4 | 2095.1  | 422.4  | -1017.4 |
|      |  | sc 32     | -104871.4 | 2095.1  | 422.4  | -726    |
|      |  | sc Med 32 | -104871.4 | 2095.1  | 422.4  | -540    |
| 2906 |  | FI 32     | -103558.9 | -2787.8 | -524.8 | -526.5  |
|      |  | sf 32     | -103558.9 | -2787.8 | -524.8 | -10726  |
|      |  | sc 32     | -103558.9 | -2787.8 | -524.8 | -77.8   |
|      |  | sc Med 32 | -103558.9 | -2787.8 | -524.8 | -53.3   |

▲Pilastro: 2506/3343 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

$$\text{Af: } 8 \text{ } \emptyset \text{ } 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1 \text{ } \emptyset \text{ } 24 \text{ x } 4 \text{ V} + 1 \text{ } \emptyset \text{ } 24 \text{ x } 2 \text{ B} + 1 \text{ } \emptyset \text{ } 24 \text{ x } 2 \text{ H} >$$

**Staffe: Ø 12/12.5' x 350.0**

**▲ Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N        | M <sub>32</sub> | M <sub>33</sub> | $\alpha_{32}$ | $\alpha_{33}$ | Sd/Sr |
|------|------|----------|-----------------|-----------------|---------------|---------------|-------|
| 2506 | 21   | -68259.0 | 9177.8          | 2524.2          | 1.00          | 1.00          | 0.33  |
| 3343 | 21   | -66946.5 | -9382.7         | -2581.7         | 1.00          | 1.00          | 0.34  |

### ▲ Verifiche a Taglio

| Da   | A    | $V_{012}$ | $V_{012}$ | $V_{013}$ | $V_{013}$ | Staffe    |
|------|------|-----------|-----------|-----------|-----------|-----------|
| [m]  | [m]  | [kg]      | [kg]      | [kg]      | [kg]      |           |
| 0,13 | 3,63 | 18556,4   | 27686,9   | 7176,6    | 19500,5   | ø 12/12,5 |

**▲ Verifiche a Presso-Flessione S.L.E.**

| Node | Comb      | N<br>[log] | Combinatorial Rate | M <sub>21</sub><br>[log] | M <sub>20</sub><br>[log] | σ<br>[log cm <sup>2</sup> ] |
|------|-----------|------------|--------------------|--------------------------|--------------------------|-----------------------------|
| 2506 | F1 26     | 8719±8     | 3319.3             | 652.7                    | 345.5                    |                             |
|      | sc 22     | -952±8     | 3544.0             | 669.8                    | -1061.7                  |                             |
|      | sc Max 22 | -952±8     | 3544.0             | 669.8                    | -77.6                    |                             |
|      | sc Med 22 | -952±8     | 3544.0             | 669.8                    | -47.6                    |                             |
| 3343 | F1 26     | 8881.3     | -3692.0            | -716.2                   | -299.5                   |                             |
|      | sc 22     | -921±3     | -3929.2            | -736.9                   | -1088.8                  |                             |
|      | sc Max 22 | -921±3     | -3929.2            | -736.9                   | -81.4                    |                             |
|      | sc Med 22 | -921±3     | -3929.2            | -736.9                   | -46.9                    |                             |

|      |  | Comenzaron a fumar |         |         |       |        |   |
|------|--|--------------------|---------|---------|-------|--------|---|
|      |  | Hombres            |         | Mujeres |       | Total  |   |
|      |  | Nº                 | %       | Nº      | %     | Nº     | % |
| 2506 |  | Ft. 31             | -813835 | 37119   | 7380  | -2612  |   |
|      |  | sc Med 27          | -841863 | 3885.1  | 7222  | -10297 |   |
|      |  | sc Max 27          | -841863 | 3885.1  | 7222  | -774   |   |
|      |  | sc Med 27          | -841863 | 3885.1  | 7222  | -433   |   |
| 3343 |  | Ft. 31             | -800710 | 40560   | -7970 | -2179  |   |
|      |  | sc 27              | -828738 | 42300   | -7828 | -10529 |   |
|      |  | sc Med 27          | -828738 | 42300   | -7828 | -797   |   |
|      |  | sc Med 27          | -828738 | 42300   | -7828 | -427   |   |

|      |  | Competition |         | Quest  |       | emblem |        |
|------|--|-------------|---------|--------|-------|--------|--------|
| 2506 |  | Flt 32      | -817749 | 37346  | 6938  |        | -2664  |
|      |  | sc Max 32   | -817749 | 37346  | 6938  |        | -9963  |
|      |  | sc Max 32   | -817749 | 37346  | 6938  |        | -748   |
|      |  | sc Med 32   | -817749 | 37346  | 6938  |        | -421   |
| 3343 |  | Flt 32      | -804624 | -40698 | -7525 |        | -2738  |
|      |  | sc 32       | -804624 | -40698 | -7525 |        | -10186 |
|      |  | sc Max 32   | -804624 | -40698 | -7525 |        | -770   |
|      |  | sc Med 32   | -804624 | -40698 | -7525 |        | -414   |

▲ Pilastro: 3343/4180 / L 3.50[m] / Sezione 2 B 35 [cm] H 40 [cm]

$$\text{Af: } 8 \sigma_{24} \text{ Af} = 36.19 [\text{cm}^2] < 1024 \times 4 \text{ V} + 1024 \times 2 \text{ B} + 1024 \times 2 \text{ H} >$$

**Staffe: Ø 12/12.5' x 350.0**

**▲ Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | $\alpha_{12}$ | $\alpha_{13}$ | Sd/Sr |
|------|------|----------|-----------------|-----------------|---------------|---------------|-------|
| 3343 | 21   | -54586.0 | 9628.5          | 2674.8          | 1.00          | 1.00          | 0.34  |
| 4180 | 21   | -53273.5 | -9823.1         | -2716.7         | 1.00          | 1.00          | 0.34  |

▲Verifiche a Taglio

| D <sub>a</sub><br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe     |
|-----------------------|----------|-------------------------|--------------------------|--------------------------|------------|
| 0.13                  | 3.63     | 10755.5                 | 13595.1                  | 6748.4                   | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |            |           |                         |                         |                            |
| 5854              | Fl. 22     | -28673.5  | 3501.2                  | 907.1                   | 644.4                      |
|                   | s/c 22     | -38673.5  | 3501.2                  | 907.1                   | -1063.7                    |
|                   | s/c Max 22 | -28673.5  | 3501.2                  | 907.1                   | -985                       |
|                   | s/c Med 22 | -28673.5  | 3501.2                  | 907.1                   | -410                       |
| 6691              | Fl. 22     | -27829.7  | -3753.8                 | -966.1                  | 770.8                      |
|                   | s/c 22     | -27829.7  | -3753.8                 | -966.1                  | -1116.1                    |
|                   | s/c Max 22 | -27829.7  | -3753.8                 | -966.1                  | -104.9                     |
|                   | s/c Med 22 | -27829.7  | -3753.8                 | -966.1                  | -43.4                      |

Combinazioni Frequenti

|      |            |          |         |        |         |
|------|------------|----------|---------|--------|---------|
| 5854 | Fl. 27     | -25703.4 | 3416.7  | 868.7  | 688.5   |
|      | s/c 27     | -25703.4 | 3416.7  | 868.7  | -1016.7 |
|      | s/c Max 27 | -25703.4 | 3416.7  | 868.7  | -954    |
|      | s/c Med 27 | -25703.4 | 3416.7  | 868.7  | -396    |
| 6691 | Fl. 27     | -24859.6 | -3640.3 | -921.0 | 805.3   |
|      | s/c 27     | -24859.6 | -3640.3 | -921.0 | -1061.9 |
|      | s/c Max 27 | -24859.6 | -3640.3 | -921.0 | -101.0  |
|      | s/c Med 27 | -24859.6 | -3640.3 | -921.0 | -41.0   |

Combinazioni Quasi Permanenti

|      |            |          |         |        |         |
|------|------------|----------|---------|--------|---------|
| 5854 | Fl. 32     | -24705.4 | 3294.7  | 837.0  | 666.0   |
|      | s/c 32     | -24705.4 | 3294.7  | 837.0  | -979.6  |
|      | s/c Max 32 | -24705.4 | 3294.7  | 837.0  | -919    |
|      | s/c Med 32 | -24705.4 | 3294.7  | 837.0  | -381    |
| 6691 | Fl. 32     | -23861.7 | -3509.8 | -887.3 | 779.4   |
|      | s/c 32     | -23861.7 | -3509.8 | -887.3 | -1022.8 |
|      | s/c Max 32 | -23861.7 | -3509.8 | -887.3 | -97.3   |
|      | s/c Med 32 | -23861.7 | -3509.8 | -887.3 | -40.2   |

▲Pilastro: 6691/7264 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1q22 x 4 V + 1q22 x 2 B + 1q22 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ <sub>1</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 6691 | 1    | -13114.2  | 2725.5                  | 720.5                   | 1.00                                    | 0.18  |
| 7264 | 1    | -12017.3  | -45.6                   | -11.5                   | 1.00                                    | 0.04  |

▲Verifiche a Taglio

| D <sub>a</sub><br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe     |
|-----------------------|----------|-------------------------|--------------------------|--------------------------|------------|
| 0.13                  | 3.63     | 5709.3                  | 13595.1                  | 3362.0                   | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |            |           |                         |                         |                            |
| 6691              | Fl. 22     | -9946.3   | 2035.0                  | 536.1                   | 576.6                      |
|                   | s/c 22     | -9946.3   | 2035.0                  | 536.1                   | -564.9                     |
|                   | s/c Max 22 | -9946.3   | 2035.0                  | 536.1                   | -561                       |
|                   | s/c Med 22 | -9946.3   | 2035.0                  | 536.1                   | -227                       |
| 7264              | Fl. 25     | -8770.8   | -31.9                   | -7.8                    | -91.1                      |
|                   | s/c 22     | -9102.5   | -34.2                   | -8.6                    | -107.0                     |
|                   | s/c Max 22 | -9102.5   | -34.2                   | -8.6                    | -7.3                       |
|                   | s/c Med 22 | -9102.5   | -34.2                   | -8.6                    | -6.7                       |

Combinazioni Frequenti

|      |            |         |        |       |        |
|------|------------|---------|--------|-------|--------|
| 6691 | Fl. 27     | -8878.8 | 1962.9 | 506.6 | 576.6  |
|      | s/c 27     | -8878.8 | 1962.9 | 506.6 | -536.4 |
|      | s/c Max 27 | -8878.8 | 1962.9 | 506.6 | -538   |
|      | s/c Med 27 | -8878.8 | 1962.9 | 506.6 | -218   |
| 7264 | Fl. 30     | -7476.8 | -31.7  | -7.7  | -76.9  |
|      | s/c 27     | -8035.1 | -32.8  | -8.2  | -94.9  |

| Nodo                          | Comb       | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Quasi Permanenti |            |           |                         |                         |                            |
| 5017                          | s/c Max 27 | -50136.1  | -6297.2                 | -1189.0                 | 87.2                       |
|                               | s/c Med 27 | -50136.1  | -6297.2                 | -1189.0                 | -37.8                      |

|      |            |          |         |         |         |
|------|------------|----------|---------|---------|---------|
| 4180 | Fl. 32     | -49846.1 | 5541.9  | 1053.3  | 251.1   |
|      | s/c 32     | -49846.1 | 5541.9  | 1053.3  | -966.2  |
|      | s/c Max 32 | -49846.1 | 5541.9  | 1053.3  | -78.4   |
|      | s/c Med 32 | -49846.1 | 5541.9  | 1053.3  | -34.2   |
| 5017 | Fl. 32     | -48532.6 | -6072.2 | -1145.3 | 368.4   |
|      | s/c 32     | -48532.6 | -6072.2 | -1145.3 | -1025.3 |
|      | s/c Max 32 | -48532.6 | -6072.2 | -1145.3 | -84.4   |
|      | s/c Med 32 | -48532.6 | -6072.2 | -1145.3 | -36.5   |

▲Pilastro: 5017/5854 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1q22 x 4 V + 1q22 x 2 B + 1q22 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ <sub>1</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 5854 | 1    | -56244.8  | 9638.6                  | 928.3                   | 1.00                                    | 0.29  |
|      | 1    | -55148.0  | -3980.0                 | -1020.4                 | 1.00                                    | 0.31  |

▲Verifiche a Taglio

| D <sub>a</sub><br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe     |
|-----------------------|----------|-------------------------|--------------------------|--------------------------|------------|
| 0.13                  | 3.63     | 10476.6                 | 13595.1                  | 5722.3                   | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|------------|-----------|-------------------------|-------------------------|----------------------------|
| Combinazioni Rare |            |           |                         |                         |                            |
| 5017              | Fl. 26     | -38707.9  | 2581.7                  | 666.5                   | 94.4                       |
|                   | s/c 22     | -41704.8  | 2740.0                  | 697.2                   | -988.6                     |
|                   | s/c Max 22 | -41704.8  | 2740.0                  | 697.2                   | -83.3                      |
|                   | s/c Med 22 | -41704.8  | 2740.0                  | 697.2                   | -36.3                      |
| 5854              | Fl. 26     | -37864.2  | -2836.9                 | -730.9                  | 185.2                      |
|                   | s/c 22     | -40861.1  | -3011.1                 | -765.9                  | -1042.5                    |
|                   | s/c Max 22 | -40861.1  | -3011.1                 | -765.9                  | -69.3                      |
|                   | s/c Med 22 | -40861.1  | -3011.1                 | -765.9                  | -38.6                      |

Combinazioni Frequenti

|      |            |          |         |        |         |
|------|------------|----------|---------|--------|---------|
| 5017 | Fl. 27     | -37901.6 | 2733.9  | 681.9  | 148.2   |
|      | s/c 27     | -37901.6 | 2733.9  | 681.9  | -951.1  |
|      | s/c Max 27 | -37901.6 | 2733.9  | 681.9  | -81.2   |
|      | s/c Med 27 | -37901.6 | 2733.9  | 681.9  | -35.2   |
| 5854 | Fl. 27     | -37057.8 | -2990.2 | -745.2 | 245.5   |
|      | s/c 27     | -37057.8 | -2990.2 | -745.2 | -1002.9 |
|      | s/c Max 27 | -37057.8 | -2990.2 | -745.2 | -87.0   |
|      | s/c Med 27 | -37057.8 | -2990.2 | -745.2 | -37.4   |

Combinazioni Quasi Permanenti

|      |            |          |         |        |        |
|------|------------|----------|---------|--------|--------|
| 5017 | Fl. 32     | -36617.2 | 2636.6  | 657.0  | 141.6  |
|      | s/c 32     | -36617.2 | 2636.6  | 657.0  | -917.7 |
|      | s/c Max 32 | -36617.2 | 2636.6  | 657.0  | -78.3  |
|      | s/c Med 32 | -36617.2 | 2636.6  | 657.0  | -34.0  |
| 5854 | Fl. 32     | -35773.5 | -2883.8 | -718.0 | 235.9  |
|      | s/c 32     | -35773.5 | -2883.8 | -718.0 | -967.3 |
|      | s/c Max 32 | -35773.5 | -2883.8 | -718.0 | -83.9  |
|      | s/c Med 32 | -35773.5 | -2883.8 | -718.0 | -36.1  |

▲Pilastro: 5854/6691 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1q22 x 4 V + 1q22 x 2 B + 1q22 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ <sub>1</sub><br>[kg/cm <sup>2</sup> ] | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|-----------------------------------------|-------|
| 5854 | 1    | -39037.0  | 4655.6                  | 1213.5                  | 1.00                                    | 0.32  |
| 6691 | 1    | -37940.1  | -5011.0                 | -1295.5                 | 1.00                                    | 0.33  |

|      |   |           |         |        |      |      |      |
|------|---|-----------|---------|--------|------|------|------|
| 838  | 1 | -222765.1 | 4495.9  | -553.2 | 1.00 | 1.00 | 0.34 |
| 1675 | 1 | -219717.2 | -5454.6 | 139.8  | 1.00 | 1.00 | 0.34 |

▲Verifiche a Taglio

| Nodo              | Comb       | A [m]     | V <sub>ed</sub> [kg] | V <sub>max</sub> [kg] | V <sub>ed</sub> [kg] | V <sub>max</sub> [kg] | σ [kg/cm <sup>2</sup> ] |
|-------------------|------------|-----------|----------------------|-----------------------|----------------------|-----------------------|-------------------------|
| Combinazioni Rara |            |           |                      |                       |                      |                       |                         |
| 838               | Fl. 25     | -156269.5 | 3869.5               | -393.0                | -393.0               | -658.3                |                         |
|                   | s/c 22     | -165789.8 | 3889.5               | -401.6                | -401.6               | -1069.2               |                         |
|                   | s/c Max 22 | -165789.8 | 3889.5               | -401.6                | -401.6               | -73.9                 |                         |
|                   | s/c Med 22 | -165789.8 | 3889.5               | -401.6                | -401.6               | -59.7                 |                         |
| 1675              | Fl. 25     | -154300.8 | -4435.5              | 106.8                 | 106.8                | -642.2                |                         |
|                   | s/c 22     | -163821.0 | -4344.8              | 95.2                  | 95.2                 | -1070.7               |                         |
|                   | s/c Max 22 | -163821.0 | -4344.8              | 95.2                  | 95.2                 | -73.9                 |                         |
|                   | s/c Med 22 | -163821.0 | -4344.8              | 95.2                  | 95.2                 | -59.0                 |                         |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb       | N [kg]    | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|-------------------|------------|-----------|-----------------------|-----------------------|-------------------------|
| Combinazioni Rara |            |           |                       |                       |                         |
| 838               | Fl. 30     | -144491.3 | 5064.6                | -266.2                | -553.1                  |
|                   | s/c 27     | -149725.6 | 4657.2                | -268.3                | -1018.4                 |
|                   | s/c Max 27 | -149725.6 | 4657.2                | -268.3                | -70.9                   |
|                   | s/c Med 27 | -149725.6 | 4657.2                | -268.3                | -53.9                   |
| 1675              | Fl. 30     | -142522.6 | -5792.4               | 17.6                  | -527.8                  |
|                   | s/c 27     | -147756.8 | -5599.6               | 6.1                   | -1030.5                 |
|                   | s/c Max 27 | -147756.8 | -5599.6               | 6.1                   | -71.8                   |
|                   | s/c Med 27 | -147756.8 | -5599.6               | 6.1                   | -53.2                   |

| Nodo                   | Comb       | N [kg]    | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|------------------------|------------|-----------|-----------------------|-----------------------|-------------------------|
| Combinazioni Frequenti |            |           |                       |                       |                         |
| 838                    | Fl. 30     | -144491.3 | 5064.6                | -266.2                | -553.1                  |
|                        | s/c 27     | -149725.6 | 4657.2                | -268.3                | -1018.4                 |
|                        | s/c Max 27 | -149725.6 | 4657.2                | -268.3                | -70.9                   |
|                        | s/c Med 27 | -149725.6 | 4657.2                | -268.3                | -53.9                   |
| 1675                   | Fl. 30     | -142522.6 | -5792.4               | 17.6                  | -527.8                  |
|                        | s/c 27     | -147756.8 | -5599.6               | 6.1                   | -1030.5                 |
|                        | s/c Max 27 | -147756.8 | -5599.6               | 6.1                   | -71.8                   |
|                        | s/c Med 27 | -147756.8 | -5599.6               | 6.1                   | -53.2                   |

| Nodo                          | Comb       | N [kg]    | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-----------------------|-----------------------|-------------------------|
| Combinazioni Quasi Permanenti |            |           |                       |                       |                         |
| 838                           | Fl. 32     | -145509.2 | 4461.3                | -265.2                | -583.7                  |
|                               | s/c 32     | -145509.2 | 4461.3                | -265.2                | -987.3                  |
|                               | s/c Max 32 | -145509.2 | 4461.3                | -265.2                | -68.7                   |
|                               | s/c Med 32 | -145509.2 | 4461.3                | -265.2                | -52.4                   |
| 1675                          | Fl. 32     | -143540.4 | -5361.2               | 9.0                   | -551.8                  |
|                               | s/c 32     | -143540.4 | -5361.2               | 9.0                   | -998.0                  |
|                               | s/c Max 32 | -143540.4 | -5361.2               | 9.0                   | -69.0                   |
|                               | s/c Med 32 | -143540.4 | -5361.2               | 9.0                   | -51.7                   |

▲Pilastro: 1675/2512 / L 3.50(m) / Sezione 2 B 35 (cm)H 40 (cm)

Af: 8 ø 24 Af=36.19 (cm²) < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | σ <sub>12</sub> | σ <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 1675 | 1    | -175903.5 | 2859.1          | 179.4           | 1.00            | 1.00            | 0.39  |
| 2512 | 1    | -174197.3 | -4093.3         | -183.8          | 1.00            | 1.00            | 0.41  |

▲Verifiche a Taglio

| Nodo | Comb | A [m]   | V <sub>ed</sub> [kg] | V <sub>max</sub> [kg] | V <sub>ed</sub> [kg] | V <sub>max</sub> [kg] | σ [kg/cm <sup>2</sup> ] |
|------|------|---------|----------------------|-----------------------|----------------------|-----------------------|-------------------------|
| 013  | 3.63 | 17332.9 | 22686.9              | 5902.7                | 15900.5              | ø 12/12.5'            |                         |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb       | N [kg]    | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|------------------------|------------|-----------|-----------------------|-----------------------|-------------------------|
| Combinazioni Rara      |            |           |                       |                       |                         |
| 1675                   | Fl. 25     | -123807.3 | 2172.4                | 135.3                 | -767.9                  |
|                        | s/c 22     | -131205.1 | 2525.9                | 139.5                 | -1207.8                 |
|                        | s/c Max 22 | -131205.1 | 2525.9                | 139.5                 | -84.9                   |
|                        | s/c Med 22 | -131205.1 | 2525.9                | 139.5                 | -67.5                   |
| 2512                   | Fl. 25     | -122648.8 | -3073.1               | -142.6                | -684.3                  |
|                        | s/c 22     | -129821.6 | -3387.5               | -142.7                | -1273.5                 |
|                        | s/c Max 22 | -129821.6 | -3387.5               | -142.7                | -91.0                   |
|                        | s/c Med 22 | -129821.6 | -3387.5               | -142.7                | -66.9                   |
| Combinazioni Frequenti |            |           |                       |                       |                         |
| 1675                   | Fl. 30     | -114891.7 | 2747.0                | 183.4                 | -648.3                  |

| Nodo | Comb       | N [kg]   | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|------|------------|----------|-----------------------|-----------------------|-------------------------|
|      | s/c Max 27 | -80351.1 | -32.8                 | -8.2                  | -6.5                    |
|      | s/c Med 27 | -80351.1 | -32.8                 | -8.2                  | -5.9                    |

| Nodo                          | Comb       | N [kg]  | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|-------------------------------|------------|---------|-----------------------|-----------------------|-------------------------|
| Combinazioni Quasi Permanenti |            |         |                       |                       |                         |
| 6691                          | Fl. 32     | -8386.0 | 1892.6                | 488.0                 | 561.4                   |
|                               | s/c 32     | -8386.0 | 1892.6                | 488.0                 | -515.5                  |
|                               | s/c Max 32 | -8386.0 | 1892.6                | 488.0                 | -51.8                   |
|                               | s/c Med 32 | -8386.0 | 1892.6                | 488.0                 | -20.9                   |
| 7264                          | Fl. 32     | -7542.3 | -31.6                 | -7.9                  | -77.6                   |
|                               | s/c 32     | -7542.3 | -31.6                 | -7.9                  | -89.3                   |
|                               | s/c Max 32 | -7542.3 | -31.6                 | -7.9                  | -61                     |
|                               | s/c Med 32 | -7542.3 | -31.6                 | -7.9                  | -5.6                    |

▲Pilastro: 169/838 / L 3.50(m) / Sezione 1 B 35 (cm)H 60 (cm)

Af: 10 ø 24 Af=45.24 (cm²) < 1q24 x 4 V + 1q24 x 2 B + 2q24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | σ <sub>12</sub> | σ <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 169  | 1    | -276951.3 | 1274.8          | -357.8          | 1.00            | 1.00            | 0.40  |
| 838  | 1    | -274591.9 | -2663.0         | 700.1           | 1.00            | 1.00            | 0.40  |

▲Verifiche a Taglio

| Nodo              | Comb       | A [m]     | V <sub>ed</sub> [kg] | V <sub>max</sub> [kg] | V <sub>ed</sub> [kg] | V <sub>max</sub> [kg] | σ [kg/cm <sup>2</sup> ] |
|-------------------|------------|-----------|----------------------|-----------------------|----------------------|-----------------------|-------------------------|
| Combinazioni Rara |            |           |                      |                       |                      |                       |                         |
| 169               | Fl. 26     | -197415.4 | 1739.8               | -148.3                | -148.3               | -984.2                |                         |
|                   | s/c 22     | -206645.5 | 1173.6               | -248.3                | -248.3               | -1179.8               |                         |
|                   | s/c Max 22 | -206645.5 | 1173.6               | -248.3                | -248.3               | -79.7                 |                         |
|                   | s/c Med 22 | -206645.5 | 1173.6               | -248.3                | -248.3               | -74.4                 |                         |
| 838               | Fl. 26     | -195446.6 | -2650.1              | 399.9                 | 399.9                | -920.0                |                         |
|                   | s/c 22     | -206676.8 | -2187.8              | 508.2                 | 508.2                | -1227.6               |                         |
|                   | s/c Max 22 | -206676.8 | -2187.8              | 508.2                 | 508.2                | -83.9                 |                         |
|                   | s/c Med 22 | -206676.8 | -2187.8              | 508.2                 | 508.2                | -73.7                 |                         |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb       | N [kg]    | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|------------------------|------------|-----------|-----------------------|-----------------------|-------------------------|
| Combinazioni Frequenti |            |           |                       |                       |                         |
| 169                    | Fl. 31     | -182211.1 | 3251.1                | 42.1                  | -851.4                  |
|                        | s/c 31     | -183211.1 | 3251.1                | 42.1                  | -1126.7                 |
|                        | s/c Max 31 | -183211.1 | 3251.1                | 42.1                  | -77.0                   |
|                        | s/c Med 31 | -183211.1 | 3251.1                | 42.1                  | -77.0                   |
| 838                    | Fl. 31     | -182423.3 | -384.1                | 225.2                 | -806.0                  |
|                        | s/c 27     | -184660.4 | -3207.8               | 346.6                 | -1151.8                 |
|                        | s/c Max 31 | -182423.3 | -384.1                | 225.2                 | -79.2                   |
|                        | s/c Med 31 | -184660.4 | -3207.8               | 346.6                 | -66.5                   |

| Nodo                          | Comb       | N [kg]    | M <sub>12</sub> [kgm] | M <sub>13</sub> [kgm] | σ [kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-----------------------|-----------------------|-------------------------|
| Combinazioni Quasi Permanenti |            |           |                       |                       |                         |
| 169                           | Fl. 32     | -181487.7 | 2451.7                | -80.5                 | -872.9                  |
|                               | s/c 32     | -181487.7 | 2451.7                | -80.5                 | -1086.6                 |
|                               | s/c Max 32 | -181487.7 | 2451.7                | -80.5                 | -73.9                   |
|                               | s/c Med 32 | -181487.7 | 2451.7                | -80.5                 | -65.3                   |
| 838                           | Fl. 32     | -179518.9 | -3051.6               | 341.2                 | -839.4                  |
|                               | s/c 32     | -179518.9 | -3051.6               | 341.2                 | -1118.8                 |
|                               | s/c Max 32 | -179518.9 | -3051.6               | 341.2                 | -76.9                   |
|                               | s/c Med 32 | -179518.9 | -3051.6               | 341.2                 | -64.6                   |

▲Pilastro: 838/1675 / L 3.50(m) / Sezione 1 B 35 (cm)H 60 (cm)

Af: 10 ø 24 Af=45.24 (cm²) < 1q24 x 4 V + 1q24 x 2 B + 2q24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N | M <sub>12</sub> | M <sub>13</sub> | σ <sub>12</sub> | σ <sub>13</sub> | Sd/Sr |
|------|------|---|-----------------|-----------------|-----------------|-----------------|-------|
|------|------|---|-----------------|-----------------|-----------------|-----------------|-------|

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 3349 | 21   | -58179.7 | 120211          | -290.7          | 1.00            | 1.00            | 0.36  |
| 4186 | 21   | -56867.2 | -122660         | 291.3           | 1.00            | 1.00            | 0.37  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 207777          | 22686.9         | 5983.2          | 19500.5         | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>Ed</sub>   | M <sub>Ed</sub> | M <sub>Ed</sub> | σ                     |
|-------------------------------|-----------|----------|-------------------|-----------------|-----------------|-----------------------|
|                               |           |          | Combinazioni Rare | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| 3349                          | Fl. 25    | -77380.6 | 5421.5            | 246.3           | -136.7          |                       |
|                               | sc Fl. 22 | -82163.1 | 5680.7            | 239.4           | -1115.4         |                       |
|                               | sc Max 22 | -82163.1 | 5680.7            | 239.4           | -85.1           |                       |
|                               | sc Med 22 | -82163.1 | 5680.7            | 239.4           | -42.3           |                       |
| 4186                          | Fl. 25    | -76688.1 | -5753.8           | -350.0          | -96.7           |                       |
|                               | sc Fl. 22 | -80850.6 | -6035.1           | -253.1          | -1135.8         |                       |
|                               | sc Max 22 | -80850.6 | -6035.1           | -253.1          | -87.2           |                       |
|                               | sc Med 22 | -80850.6 | -6035.1           | -253.1          | -42.5           |                       |
| Combinazioni Frequenti        |           |          |                   |                 |                 |                       |
| 3349                          | Fl. 30    | -72322.6 | 5830.6            | 284.1           | -54.6           |                       |
|                               | sc Fl. 27 | -74632.2 | 5973.3            | 260.4           | -1085.4         |                       |
|                               | sc Max 27 | -74632.2 | 5973.3            | 260.4           | -83.8           |                       |
|                               | sc Med 27 | -74632.2 | 5973.3            | 260.4           | -40.8           |                       |
| 4186                          | Fl. 30    | -71010.1 | -6339.4           | -395.4          | -9.2            |                       |
|                               | sc Fl. 27 | -73319.7 | -6295.1           | -272.3          | -1105.7         |                       |
|                               | sc Max 27 | -73319.7 | -6295.1           | -272.3          | -85.9           |                       |
|                               | sc Med 27 | -73319.7 | -6295.1           | -272.3          | -41.7           |                       |
| Combinazioni Quasi Permanenti |           |          |                   |                 |                 |                       |
| 3349                          | Fl. 32    | -72391.7 | 5762.0            | 251.0           | -65.1           |                       |
|                               | sc Fl. 32 | -72391.7 | 5762.0            | 251.0           | -1049.9         |                       |
|                               | sc Max 32 | -72391.7 | 5762.0            | 251.0           | -81.0           |                       |
|                               | sc Med 32 | -72391.7 | 5762.0            | 251.0           | -39.4           |                       |
| 4186                          | Fl. 32    | -71079.2 | -6074.1           | -362.6          | -20.2           |                       |
|                               | sc Fl. 32 | -71079.2 | -6074.1           | -362.6          | -1069.2         |                       |
|                               | sc Max 32 | -71079.2 | -6074.1           | -362.6          | -83.1           |                       |
|                               | sc Med 32 | -71079.2 | -6074.1           | -362.6          | -40.4           |                       |

▲Pilastro: 4186/5023 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 4186 | 21   | -48080.9 | 12964.8         | -308.0          | 1.00            | 1.00            | 0.41  |
| 5023 | 21   | -46768.4 | -13858.3        | 328.7           | 1.00            | 1.00            | 0.44  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 20303.8         | 22686.9         | 7192.5          | 19500.5         | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub>   | M <sub>Ed</sub> | M <sub>Ed</sub> | σ                     |
|------------------------|-----------|----------|-------------------|-----------------|-----------------|-----------------------|
|                        |           |          | Combinazioni Rare | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| 4186                   | Fl. 25    | -61277.0 | 6672.5            | 303.5           | 171.0           |                       |
|                        | sc Fl. 22 | -65335.9 | 7008.5            | 300.3           | -1123.1         |                       |
|                        | sc Max 22 | -65335.9 | 7008.5            | 300.3           | -89.3           |                       |
|                        | sc Med 22 | -65335.9 | 7008.5            | 300.3           | -43.2           |                       |
| 5023                   | Fl. 25    | -59964.5 | -7386.2           | -315.9          | 292.6           |                       |
|                        | sc Fl. 22 | -64023.4 | -7713.9           | -313.6          | -1186.4         |                       |
|                        | sc Max 22 | -64023.4 | -7713.9           | -313.6          | -95.7           |                       |
|                        | sc Med 22 | -64023.4 | -7713.9           | -313.6          | -46.2           |                       |
| Combinazioni Frequenti |           |          |                   |                 |                 |                       |

| Nodo | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | σ                     |
|------|-----------|-----------|-----------------|-----------------|-----------------------|
|      |           | [kg]      | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
|      | sc Fl. 27 | -116769.7 | 2788.3          | 177.9           | -1158.6               |
|      | sc Max 27 | -116769.7 | 2788.3          | 177.9           | -82.7                 |
|      | sc Med 27 | -116769.7 | 2788.3          | 177.9           | -61.1                 |
| 2512 | Fl. 30    | -113579.2 | -3654.4         | -191.0          | -564.1                |
|      | sc Fl. 30 | -113579.2 | -3654.4         | -191.0          | -1223.1               |
|      | sc Max 27 | -117457.2 | -3709.1         | -180.0          | -88.6                 |
|      | sc Med 27 | -117457.2 | -3709.1         | -180.0          | -60.5                 |

| Combinazioni Quasi Permanenti |           |           |         |        |         |
|-------------------------------|-----------|-----------|---------|--------|---------|
| 1075                          | Fl. 32    | -115363.9 | 2675.6  | 171.5  | -658.8  |
|                               | sc Fl. 32 | -115363.9 | 2675.6  | 171.5  | -1122.6 |
|                               | sc Max 32 | -115363.9 | 2675.6  | 171.5  | -80.1   |
|                               | sc Med 32 | -115363.9 | 2675.6  | 171.5  | -59.4   |
| 2512                          | Fl. 32    | -114051.4 | -3565.9 | -173.4 | -576.5  |
|                               | sc Fl. 32 | -114051.4 | -3565.9 | -173.4 | -1184.6 |
|                               | sc Max 32 | -114051.4 | -3565.9 | -173.4 | -85.8   |
|                               | sc Med 32 | -114051.4 | -3565.9 | -173.4 | -58.7   |

▲Pilastro: 2512/3349 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 2512 | 1    | -138993.2 | 9813.5          | 224.4           | 1.00            | 1.00            | 0.36  |
| 3349 | 1    | -137287.0 | -6426.0         | -250.6          | 1.00            | 1.00            | 0.37  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 19952.5         | 22686.9         | 5684.1          | 19500.5         | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N         | M <sub>Ed</sub>   | M <sub>Ed</sub> | M <sub>Ed</sub> | σ                     |
|------------------------|-----------|-----------|-------------------|-----------------|-----------------|-----------------------|
|                        |           |           | Combinazioni Rare | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| 2512                   | Fl. 25    | -97790.7  | 4285.5            | 180.5           | -391.3          |                       |
|                        | sc Fl. 22 | -103649.2 | 4479.8            | 172.9           | -1178.1         |                       |
|                        | sc Max 22 | -103649.2 | 4479.8            | 172.9           | -87.0           |                       |
|                        | sc Med 22 | -103649.2 | 4479.8            | 172.9           | -53.3           |                       |
| 3349                   | Fl. 25    | -96478.2  | -4724.5           | -199.9          | -344.7          |                       |
|                        | sc Fl. 22 | -102336.7 | -4936.4           | -192.2          | -1206.7         |                       |
|                        | sc Max 22 | -102336.7 | -4936.4           | -192.2          | -89.8           |                       |
|                        | sc Med 22 | -102336.7 | -4936.4           | -192.2          | -52.7           |                       |
| Combinazioni Frequenti |           |           |                   |                 |                 |                       |

|                               |           |          |         |        |         |  |
|-------------------------------|-----------|----------|---------|--------|---------|--|
| 2512                          | Fl. 30    | -91065.0 | 4835.5  | 229.8  | -292.0  |  |
|                               | sc Fl. 27 | -94008.7 | 4922.8  | 207.7  | -1142.7 |  |
|                               | sc Max 27 | -94008.7 | 4922.8  | 207.7  | -85.5   |  |
|                               | sc Med 27 | -94008.7 | 4922.8  | 207.7  | -48.4   |  |
| 3349                          | Fl. 30    | -89752.5 | -5217.8 | -246.1 | -248.7  |  |
|                               | sc Fl. 27 | -92696.2 | -5332.0 | -223.3 | -1167.1 |  |
|                               | sc Max 27 | -92696.2 | -5332.0 | -223.3 | -87.9   |  |
|                               | sc Med 27 | -92696.2 | -5332.0 | -223.3 | -47.7   |  |
| Combinazioni Quasi Permanenti |           |          |         |        |         |  |

|      |           |          |         |        |         |  |
|------|-----------|----------|---------|--------|---------|--|
| 2512 | Fl. 32    | -91269.6 | 4741.5  | 200.1  | -303.1  |  |
|      | sc Fl. 32 | -91269.6 | 4741.5  | 200.1  | -1106.2 |  |
|      | sc Max 32 | -91269.6 | 4741.5  | 200.1  | -82.7   |  |
|      | sc Med 32 | -91269.6 | 4741.5  | 200.1  | -47.0   |  |
| 3349 | Fl. 32    | -89957.1 | -5138.9 | -215.2 | -259.5  |  |
|      | sc Fl. 32 | -89957.1 | -5138.9 | -215.2 | -1129.6 |  |
|      | sc Max 32 | -89957.1 | -5138.9 | -215.2 | -85.1   |  |
|      | sc Med 32 | -89957.1 | -5138.9 | -215.2 | -46.3   |  |

▲Pilastro: 3349/4186 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|----------------|----------------|-------|
| 5860 | 21   | -25597.2 | 6608.1          | -233.5          | 1.00           | 1.00           | 0.40  |
| 6697 | 21   | -24753.4 | -6906.1         | 268.0           | 1.00           | 1.00           | 0.42  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 30488.1         | 13595.1         | 3742.8          | 13595.1         | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Rare             |           |          |                 |                 |                 |   |
| 5860                          | Fl. 22    | -33457.2 | 4325.3          | 170.6           | 641.8           |   |
|                               | sc 22     | -33457.2 | 4325.3          | 170.6           | -1107.7         |   |
|                               | sc Max 22 | -33457.2 | 4325.3          | 170.6           | -102.1          |   |
|                               | sc Med 22 | -33457.2 | 4325.3          | 170.6           | -49.4           |   |
| 6697                          | Fl. 22    | -32613.5 | -4642.5         | -128.6          | 767.3           |   |
|                               | sc 22     | -32613.5 | -4642.5         | -128.6          | -1147.4         |   |
|                               | sc Max 22 | -32613.5 | -4642.5         | -128.6          | -107.5          |   |
|                               | sc Med 22 | -32613.5 | -4642.5         | -128.6          | -52.4           |   |
| Combinazioni Frequenti        |           |          |                 |                 |                 |   |
| 5860                          | Fl. 27    | -29914.1 | 4258.1          | 165.6           | 713.8           |   |
|                               | sc 27     | -29914.1 | 4258.1          | 165.6           | -1062.2         |   |
|                               | sc Max 27 | -29914.1 | 4258.1          | 165.6           | -99.5           |   |
|                               | sc Med 27 | -29914.1 | 4258.1          | 165.6           | -48.1           |   |
| 6697                          | Fl. 27    | -29070.4 | -4541.9         | -128.6          | 831.3           |   |
|                               | sc 27     | -29070.4 | -4541.9         | -128.6          | -1096.4         |   |
|                               | sc Max 27 | -29070.4 | -4541.9         | -128.6          | -104.3          |   |
|                               | sc Med 27 | -29070.4 | -4541.9         | -128.6          | -50.8           |   |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |   |
| 5860                          | Fl. 32    | -28756.6 | 4111.0          | 159.2           | 692.5           |   |
|                               | sc 32     | -28756.6 | 4111.0          | 159.2           | -1024.3         |   |
|                               | sc Max 32 | -28756.6 | 4111.0          | 159.2           | -96.0           |   |
|                               | sc Med 32 | -28756.6 | 4111.0          | 159.2           | -46.4           |   |
| 6697                          | Fl. 32    | -27912.9 | -4384.9         | -123.2          | 806.7           |   |
|                               | sc 32     | -27912.9 | -4384.9         | -123.2          | -1056.8         |   |
|                               | sc Max 32 | -27912.9 | -4384.9         | -123.2          | -100.6          |   |
|                               | sc Med 32 | -27912.9 | -4384.9         | -123.2          | -49.0           |   |

▲Pilastro: 6697/7270 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|----------------|----------------|-------|
| 6697 | 21   | -10004.1 | 3583.8          | -140.0          | 1.00           | 1.00           | 0.23  |
| 7270 | 1    | -15576.0 | -55.5           | -2.5            | 1.00           | 1.00           | 0.05  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 9639.4          | 13595.1         | 1761.2          | 13595.1         | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Rare      |           |          |                 |                 |                 |   |
| 6697                   | Fl. 22    | -12588.6 | 2503.3          | 58.8            | 556.9           |   |
|                        | sc 22     | -12588.6 | 2503.3          | 58.8            | -568.2          |   |
|                        | sc Max 22 | -12588.6 | 2503.3          | 58.8            | -56.1           |   |
|                        | sc Med 22 | -12588.6 | 2503.3          | 58.8            | -27.4           |   |
| 7270                   | Fl. 25    | -11279.0 | -39.1           | -1.9            | -118.7          |   |
|                        | sc 22     | -11744.8 | -41.7           | -1.9            | -136.4          |   |
|                        | sc Max 22 | -11744.8 | -41.7           | -1.9            | -9.3            |   |
|                        | sc Med 22 | -11744.8 | -41.7           | -1.9            | -8.7            |   |
| Combinazioni Frequenti |           |          |                 |                 |                 |   |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |   |
| 4186                          | Fl. 30    | -57485.4 | 6975.6          | 330.3           | 274.2           |   |
|                               | sc 27     | -59368.0 | 7161.1          | 308.6           | -1103.0         |   |
|                               | sc Max 27 | -59368.0 | 7161.1          | 308.6           | -89.0           |   |
|                               | sc Med 27 | -59368.0 | 7161.1          | 308.6           | -42.9           |   |
| 5023                          | Fl. 27    | -58055.5 | -7839.4         | -321.4          | 407.8           |   |
|                               | sc 27     | -58055.5 | -7839.4         | -321.4          | -1165.1         |   |
|                               | sc Max 27 | -58055.5 | -7839.4         | -321.4          | -95.3           |   |
|                               | sc Med 27 | -58055.5 | -7839.4         | -321.4          | -45.9           |   |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |   |
| 4186                          | Fl. 32    | -57491.9 | 6912.5          | 297.6           | 260.3           |   |
|                               | sc 32     | -57491.9 | 6912.5          | 297.6           | -1065.7         |   |
|                               | sc Max 32 | -57491.9 | 6912.5          | 297.6           | -85.9           |   |
|                               | sc Med 32 | -57491.9 | 6912.5          | 297.6           | -41.4           |   |
| 5023                          | Fl. 32    | -56179.4 | -7568.0         | -310.0          | 391.3           |   |
|                               | sc 32     | -56179.4 | -7568.0         | -310.0          | -1125.5         |   |
|                               | sc Max 32 | -56179.4 | -7568.0         | -310.0          | -92.0           |   |
|                               | sc Med 32 | -56179.4 | -7568.0         | -310.0          | -44.4           |   |

▲Pilastro: 5023/5860 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|----------------|----------------|-------|
| 5023 | 20   | -37817.5 | 5572.1          | -704.2          | 1.00           | 1.00           | 0.34  |
| 5860 | 20   | -36973.8 | -5968.2         | 739.0           | 1.00           | 1.00           | 0.36  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 10748.2         | 13595.1         | 3660.0          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Rare      |           |          |                 |                 |                 |   |
| 5023                   | Fl. 25    | -46525.6 | 3215.7          | 176.2           | 41.4            |   |
|                        | sc 22     | -46058.5 | 3386.0          | 178.8           | -1083.8         |   |
|                        | sc Max 22 | -46058.5 | 3386.0          | 178.8           | -90.2           |   |
|                        | sc Med 22 | -46058.5 | 3386.0          | 178.8           | -43.6           |   |
| 5860                   | Fl. 25    | -44781.9 | -3533.9         | -185.5          | 137.4           |   |
|                        | sc 22     | -48214.8 | -3723.6         | -186.7          | -1136.0         |   |
|                        | sc Max 22 | -48214.8 | -3723.6         | -186.7          | -96.1           |   |
|                        | sc Med 22 | -48214.8 | -3723.6         | -186.7          | -46.5           |   |
| Combinazioni Frequenti |           |          |                 |                 |                 |   |
| 5023                   | Fl. 30    | -42911.2 | 3313.2          | 186.1           | 114.0           |   |
|                        | sc 27     | -44416.8 | 3406.5          | 176.2           | -1043.1         |   |
|                        | sc Max 27 | -44416.8 | 3406.5          | 176.2           | -88.2           |   |
|                        | sc Med 27 | -44416.8 | 3406.5          | 176.2           | -42.6           |   |
| 5860                   | Fl. 30    | -42067.5 | -3623.0         | -193.6          | 216.3           |   |
|                        | sc 27     | -43573.1 | -3727.0         | -183.5          | -1093.6         |   |
|                        | sc Max 27 | -43573.1 | -3727.0         | -183.5          | -94.0           |   |
|                        | sc Med 27 | -43573.1 | -3727.0         | -183.5          | -45.4           |   |

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |   |
| 5023                          | Fl. 32    | -42901.4 | 3288.7          | 169.9           | 104.9           |   |
|                               | sc 32     | -42901.4 | 3288.7          | 169.9           | -1007.2         |   |
|                               | sc Max 32 | -42901.4 | 3288.7          | 169.9           | -85.1           |   |
|                               | sc Med 32 | -42901.4 | 3288.7          | 169.9           | -41.1           |   |
| 5860                          | Fl. 32    | -42057.6 | -3598.2         | -177.0          | 206.4           |   |
|                               | sc 32     | -42057.6 | -3598.2         | -177.0          | -1055.7         |   |
|                               | sc Max 32 | -42057.6 | -3598.2         | -177.0          | -90.8           |   |
|                               | sc Med 32 | -42057.6 | -3598.2         | -177.0          | -43.8           |   |

▲Pilastro: 5860/6697 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

Af: 10 ø 24 Af=45.24 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 844  | 16   | -215546.8 | -13868.8        | 1224.4          | 1.00            | 1.00            | 0.39  |
| 1681 | 16   | -213578.0 | 13750.1         | -1165.1         | 1.00            | 1.00            | 0.39  |

▲Verifiche a Taglio

| Da   | A    | V <sub>ed</sub> | V <sub>ed2</sub> | V <sub>ed3</sub> | V <sub>ed4</sub> | Staffe     |
|------|------|-----------------|------------------|------------------|------------------|------------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]             | [kg]             |            |
| 0.13 | 0.92 | 42642.7         | 60284.1          | 5405.7           | 33178.0          | ø 14/10.0' |
| 0.92 | 2.83 | 42642.7         | 44290.4          | 5405.7           | 24375.6          | ø 12/10.0' |
| 2.83 | 3.63 | 42642.7         | 60284.1          | 5405.7           | 33178.0          | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|-------------------|-----------|-----------|-----------------|-----------------|----------|
|                   |           | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Rare |           |           |                 |                 |          |
| 844               | Fl. 25    | -161646.0 | 1917.7          | 662.5           | -751.5   |
|                   | sfc 22    | -170176.2 | 1770.3          | 982.5           | -1028.7  |
|                   | sc Max 22 | -170176.2 | 1770.3          | 982.5           | -70.5    |
|                   | sc Med 22 | -170176.2 | 1770.3          | 982.5           | -61.2    |
| 1681              | Fl. 25    | -159677.3 | -3014.2         | -566.7          | -701.4   |
|                   | sfc 22    | -168207.4 | -3095.6         | -564.9          | -1072.0  |
|                   | sc Max 22 | -168207.4 | -3095.6         | -564.9          | -74.1    |
|                   | sc Med 22 | -168207.4 | -3095.6         | -564.9          | -60.5    |

| Nodo                   | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|------------------------|-----------|-----------|-----------------|-----------------|----------|
|                        |           | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Frequenti |           |           |                 |                 |          |
| 844                    | Fl. 30    | -146684.2 | 3741.8          | 666.7           | -594.5   |
|                        | sfc 27    | -150559.6 | 3983.2          | 951.8           | -996.1   |
|                        | sc Max 27 | -150559.6 | 3983.2          | 951.8           | -69.3    |
|                        | sc Med 27 | -150559.6 | 3983.2          | 951.8           | -54.2    |
| 1681                   | Fl. 30    | -144665.5 | -4888.5         | -961.2          | -542.9   |
|                        | sfc 27    | -148590.9 | -4974.0         | -544.6          | -1042.8  |
|                        | sc Max 27 | -148590.9 | -4974.0         | -544.6          | -73.2    |
|                        | sc Med 27 | -148590.9 | -4974.0         | -544.6          | -53.5    |

| Nodo | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|-----------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 844  | Fl. 32    | -146352.3 | 3410.9          | 941.5           | -614.5          |                 |       |
|      | sfc 32    | -146352.3 | 3410.9          | 941.5           | -965.6          |                 |       |
|      | sc Max 32 | -146352.3 | 3410.9          | 941.5           | -67.2           |                 |       |
|      | sc Med 32 | -146352.3 | 3410.9          | 941.5           | -52.7           |                 |       |
| 1681 | Fl. 32    | -144383.5 | -4754.9         | -594.3          | -548.6          |                 |       |
|      | sfc 32    | -144383.5 | -4754.9         | -594.3          | -1010.3         |                 |       |
|      | sc Max 32 | -144383.5 | -4754.9         | -594.3          | -70.9           |                 |       |
|      | sc Med 32 | -144383.5 | -4754.9         | -594.3          | -52.0           |                 |       |

▲Pilastro: 1681/2518 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 1681 | 16   | -166937.5 | -5224.1         | 703.2           | 1.00            | 1.00            | 0.40  |
| 2518 | 1    | -177304.4 | -3653.3         | -391.2          | 1.00            | 1.00            | 0.41  |

▲Verifiche a Taglio

| Da   | A    | V <sub>ed</sub> | V <sub>ed2</sub> | V <sub>ed3</sub> | Staffe  |
|------|------|-----------------|------------------|------------------|---------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]             |         |
| 0.13 | 3.63 | 20315.3         | 22686.9          | 3521.2           | 19500.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|-------------------|-----------|-----------|-----------------|-----------------|----------|
|                   |           | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Rare |           |           |                 |                 |          |
| 1681              | Fl. 25    | -126465.9 | 1847.2          | 348.3           | -795.4   |
|                   | sfc 22    | -133243.4 | 1972.8          | 322.8           | -1217.5  |
|                   | sc Max 22 | -133243.4 | 1972.8          | 322.8           | -85.5    |
|                   | sc Med 22 | -133243.4 | 1972.8          | 322.8           | -68.6    |

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | σ        |
|-------------------------------|-----------|----------|-----------------|-----------------|----------|
|                               |           | [kg]     | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Quasi Permanenti |           |          |                 |                 |          |
| 6697                          | Fl. 27    | -11231.5 | 2456.8          | 58.1            | -573.6   |
|                               | sfc 27    | -11231.5 | 2456.8          | 58.1            | -543.0   |
|                               | sc Max 27 | -11231.5 | 2456.8          | 58.1            | -54.3    |
|                               | sc Med 27 | -11231.5 | 2456.8          | 58.1            | -26.5    |
| 7270                          | Fl. 30    | -9783.6  | -39.2           | -1.8            | -102.1   |
|                               | sfc 27    | -10387.8 | -40.4           | -1.8            | -121.1   |
|                               | sc Max 27 | -10387.8 | -40.4           | -1.8            | -8.3     |
|                               | sc Med 27 | -10387.8 | -40.4           | -1.8            | -7.7     |

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 170  | 16   | -280332.5 | -15565.5        | -1811.2         | 1.00            | 1.00            | 0.50  |
| 844  | 16   | -278363.8 | 13227.7         | -393.2          | 1.00            | 1.00            | 0.48  |

| Da   | A    | V <sub>ed</sub> | V <sub>ed2</sub> | V <sub>ed3</sub> | Staffe  |
|------|------|-----------------|------------------|------------------|---------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]             |         |
| 0.13 | 0.92 | 38603.0         | 60284.1          | 6873.4           | 33178.0 |
| 0.92 | 2.83 | 38603.0         | 44290.4          | 6873.4           | 24375.6 |
| 2.83 | 3.63 | 38603.0         | 60284.1          | 6873.4           | 33178.0 |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 170  | 16   | -280332.5 | -15565.5        | -1811.2         | 1.00            | 1.00            | 0.50  |
| 844  | 16   | -278363.8 | 13227.7         | -393.2          | 1.00            | 1.00            | 0.48  |

▲Verifiche a Taglio

| Da   | A    | V <sub>ed</sub> | V <sub>ed2</sub> | V <sub>ed3</sub> | Staffe  |
|------|------|-----------------|------------------|------------------|---------|
| [m]  | [m]  | [kg]            | [kg]             | [kg]             |         |
| 0.13 | 0.92 | 38603.0         | 60284.1          | 6873.4           | 33178.0 |
| 0.92 | 2.83 | 38603.0         | 44290.4          | 6873.4           | 24375.6 |
| 2.83 | 3.63 | 38603.0         | 60284.1          | 6873.4           | 33178.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|-------------------|-----------|-----------|-----------------|-----------------|----------|
|                   |           | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Rare |           |           |                 |                 |          |
| 170               | Fl. 25    | -207883.7 | -1481.6         | -679.1          | -1018.2  |
|                   | sfc 23    | -213948.3 | -2195.7         | -172.1          | -1256.9  |
|                   | sc Max 23 | -213948.3 | -2195.7         | -172.1          | -85.3    |
|                   | sc Med 22 | -218771.9 | -915.2          | -163.9          | -78.7    |
| 844               | Fl. 26    | -205683.7 | -579.6          | -524.6          | -1053.4  |
|                   | sfc 23    | -211979.5 | 1229.2          | -129.3          | -1203.5  |
|                   | sc Max 23 | -211979.5 | 1229.2          | -129.3          | -81.1    |
|                   | sc Med 22 | -216803.2 | 52.2            | -119.7          | -78.0    |

| Nodo                   | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|------------------------|-----------|-----------|-----------------|-----------------|----------|
|                        |           | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Frequenti |           |           |                 |                 |          |
| 170                    | Fl. 31    | -187710.6 | 3857.2          | 716.1           | -891.4   |
|                        | sfc 31    | -187710.6 | 3857.2          | 716.1           | -1135.3  |
|                        | sc Max 31 | -187710.6 | 3857.2          | 716.1           | -77.9    |
|                        | sc Med 27 | -193113.3 | 1126.3          | 64.7            | -69.5    |
| 844                    | Fl. 31    | -185741.9 | -2425.3         | -719.4          | -856.9   |
|                        | sfc 31    | -185741.9 | -2425.3         | -719.4          | -1148.5  |
|                        | sc Max 31 | -185741.9 | -2425.3         | -719.4          | -79.1    |
|                        | sc Med 27 | -191144.5 | -1711.4         | -210.4          | -68.8    |

| Nodo                         | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|------------------------------|-----------|-----------|-----------------|-----------------|----------|
|                              |           | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Combinazioni Quasi Permanent |           |           |                 |                 |          |
| 170                          | Fl. 32    | -187855.2 | 2096.4          | 67.7            | -964.4   |
|                              | sfc 32    | -187855.2 | 2096.4          | 67.7            | -1063.9  |
|                              | sc Max 32 | -187855.2 | 2096.4          | 67.7            | -71.6    |
|                              | sc Med 32 | -187855.2 | 2096.4          | 67.7            | -67.6    |
| 844                          | Fl. 32    | -185886.4 | -1627.7         | -209.1          | -922.8   |
|                              | sfc 32    | -185886.4 | -1627.7         | -209.1          | -1084.2  |
|                              | sc Max 32 | -185886.4 | -1627.7         | -209.1          | -73.5    |
|                              | sc Med 32 | -185886.4 | -1627.7         | -209.1          | -66.9    |

▲Pilastro: 844/1681 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

▲Pilastro: 3355/4192 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 3355 | 21   | -45648.5 | 14105.6         | -189.0          | 1.00            | 1.00            | 0.45            |       |
| 4192 | 21   | -44336.0 | -14326.8        | 199.1           | 1.00            | 1.00            | 0.46            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 20645.8         | 22686.9         | 3493.6          | 19500.5         | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|---------|
| Combinazioni Rare |           |          |                 |                 |                 |         |
| 3355              | Rt. 25    | -77669.0 | 5365.3          | 195.8           |                 | -164.2  |
|                   | sfc 22    | -82278.9 | 5466.4          | 185.4           |                 | -1094.1 |
|                   | sc Max 22 | -82278.9 | 5466.4          | 185.4           |                 | -83.2   |
|                   | sc Med 22 | -82278.9 | 5466.4          | 185.4           |                 | -42.3   |
| 4192              | Rt. 25    | -76356.5 | -5526.1         | -173.4          |                 | -126.7  |
|                   | sfc 22    | -80966.4 | -5846.9         | -163.0          |                 | -1112.8 |
|                   | sc Max 22 | -80966.4 | -5846.9         | -163.0          |                 | -85.1   |
|                   | sc Med 22 | -80966.4 | -5846.9         | -163.0          |                 | -41.9   |

Combinazioni Frequenti

|      |           |          |         |        |  |         |
|------|-----------|----------|---------|--------|--|---------|
| 3355 | Rt. 27    | -73867.4 | 5962.2  | 202.4  |  | -63.6   |
|      | sfc 27    | -73867.4 | 5962.2  | 202.4  |  | -1073.4 |
|      | sc Max 27 | -73867.4 | 5962.2  | 202.4  |  | -82.9   |
|      | sc Med 27 | -73867.4 | 5962.2  | 202.4  |  | -40.5   |
| 4192 | Rt. 27    | -72554.9 | -6304.0 | -184.2 |  | -17.9   |
|      | sfc 27    | -72554.9 | -6304.0 | -184.2 |  | -1092.5 |
|      | sc Max 27 | -72554.9 | -6304.0 | -184.2 |  | -84.9   |
|      | sc Med 27 | -72554.9 | -6304.0 | -184.2 |  | -41.6   |

Combinazioni Quasi Permanenti

|      |           |          |         |        |  |         |
|------|-----------|----------|---------|--------|--|---------|
| 3355 | Rt. 32    | -71661.1 | 5755.4  | 200.5  |  | -64.1   |
|      | sfc 32    | -71661.1 | 5755.4  | 200.5  |  | -1039.2 |
|      | sc Max 32 | -71661.1 | 5755.4  | 200.5  |  | -80.2   |
|      | sc Med 32 | -71661.1 | 5755.4  | 200.5  |  | -39.2   |
| 4192 | Rt. 32    | -70348.6 | -6086.9 | -182.8 |  | -19.6   |
|      | sfc 32    | -70348.6 | -6086.9 | -182.8 |  | -1057.5 |
|      | sc Max 32 | -70348.6 | -6086.9 | -182.8 |  | -82.1   |
|      | sc Med 32 | -70348.6 | -6086.9 | -182.8 |  | -40.2   |

▲Pilastro: 4192/5029 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 4192 | 21   | -39246.4 | 15046.0         | 1064.6          | 1.00            | 1.00            | 0.50            |       |
| 5029 | 21   | -37933.9 | -16025.1        | -1085.6         | 1.00            | 1.00            | 0.54            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 20473.7         | 22686.9         | 3490.7          | 19500.5         | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|---------|
| Combinazioni Rare |           |          |                 |                 |                 |         |
| 4192              | Rt. 25    | -61169.4 | 6460.7          | 146.4           |                 | 125.5   |
|                   | sfc 22    | -65179.3 | 6832.7          | 135.8           |                 | -1087.7 |
|                   | sc Max 22 | -65179.3 | 6832.7          | 135.8           |                 | -86.0   |
|                   | sc Med 22 | -65179.3 | 6832.7          | 135.8           |                 | -42.4   |

| Nodo                   | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|------------------------|-----------|-----------|-----------------|-----------------|-----------------|---------|
| Combinazioni Frequenti |           |           |                 |                 |                 |         |
| 2518                   | Rt. 25    | -325153.4 | 2722.4          | 311.1           |                 | -717.9  |
|                        | sfc 22    | -131930.9 | -2689.2         | -298.9          |                 | -1279.3 |
|                        | sc Max 22 | -131930.9 | -2689.2         | -298.9          |                 | -91.2   |
|                        | sc Med 22 | -131930.9 | -2689.2         | -298.9          |                 | -67.9   |

|      |           |           |         |        |  |         |
|------|-----------|-----------|---------|--------|--|---------|
| 1081 | Rt. 30    | -115417.8 | 2575.7  | 368.5  |  | -649.4  |
|      | sfc 27    | -118516.9 | 2692.1  | 328.1  |  | -1162.5 |
|      | sc Max 27 | -118516.9 | 2692.1  | 328.1  |  | -83.1   |
|      | sc Med 27 | -118516.9 | 2692.1  | 328.1  |  | -61.0   |
| 2518 | Rt. 30    | -114105.3 | -3479.9 | -326.5 |  | -569.9  |
|      | sfc 27    | -117204.4 | -3620.5 | -304.2 |  | -1225.2 |
|      | sc Max 27 | -117204.4 | -3620.5 | -304.2 |  | -88.9   |
|      | sc Med 27 | -117204.4 | -3620.5 | -304.2 |  | -60.3   |

Combinazioni Quasi Permanenti

|      |           |           |         |        |  |         |
|------|-----------|-----------|---------|--------|--|---------|
| 1081 | Rt. 32    | -115142.9 | 2585.2  | 322.0  |  | -650.7  |
|      | sfc 32    | -115142.9 | 2585.2  | 322.0  |  | -1127.2 |
|      | sc Max 32 | -115142.9 | 2585.2  | 322.0  |  | -80.6   |
|      | sc Med 32 | -115142.9 | 2585.2  | 322.0  |  | -59.3   |
| 2518 | Rt. 32    | -113830.4 | -3483.0 | -299.2 |  | -570.1  |
|      | sfc 32    | -113830.4 | -3483.0 | -299.2 |  | -1187.6 |
|      | sc Max 32 | -113830.4 | -3483.0 | -299.2 |  | -86.2   |
|      | sc Med 32 | -113830.4 | -3483.0 | -299.2 |  | -58.6   |

▲Pilastro: 2518/3355 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ <sub>Ed</sub> | σ <sub>Ed</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 2518 | 21   | -54202.4 | 13615.2         | -140.1          | 1.00            | 1.00            | 0.42            |       |
| 3355 | 21   | -52889.9 | -13838.7        | 166.6           | 1.00            | 1.00            | 0.43            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 20847.6         | 22686.9         | 3591.3          | 35900.5         | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ       |
|-------------------|-----------|-----------|-----------------|-----------------|-----------------|---------|
| Combinazioni Rare |           |           |                 |                 |                 |         |
| 2518              | Rt. 25    | -98921.1  | 3946.4          | 268.9           |                 | -420.2  |
|                   | sfc 22    | -104420.7 | 4182.5          | 253.7           |                 | -1167.4 |
|                   | sc Max 22 | -104420.7 | 4182.5          | 253.7           |                 | -86.0   |
|                   | sc Med 22 | -104420.7 | 4182.5          | 253.7           |                 | -53.7   |
| 3355              | Rt. 26    | -97305.2  | -4429.5         | -202.0          |                 | -374.8  |
|                   | sfc 22    | -103108.2 | -4677.8         | -223.8          |                 | -1194.6 |
|                   | sc Max 22 | -103108.2 | -4677.8         | -223.8          |                 | -88.6   |
|                   | sc Med 22 | -103108.2 | -4677.8         | -223.8          |                 | -53.1   |

Combinazioni Frequenti

|      |           |          |         |        |  |         |
|------|-----------|----------|---------|--------|--|---------|
| 2518 | Rt. 30    | -90796.6 | 4670.1  | 288.6  |  | -297.2  |
|      | sfc 27    | -93309.0 | 4854.3  | 264.9  |  | -1136.9 |
|      | sc Max 27 | -93309.0 | 4854.3  | 264.9  |  | -85.2   |
|      | sc Med 27 | -93309.0 | 4854.3  | 264.9  |  | -48.0   |
| 3355 | Rt. 31    | -89104.8 | -5112.2 | -214.6 |  | -255.1  |
|      | sfc 27    | -91996.5 | -5292.5 | -238.3 |  | -1159.8 |
|      | sc Max 27 | -91996.5 | -5292.5 | -238.3 |  | -87.4   |
|      | sc Med 27 | -91996.5 | -5292.5 | -238.3 |  | -47.4   |

Combinazioni Quasi Permanenti

|      |           |          |         |        |  |         |
|------|-----------|----------|---------|--------|--|---------|
| 2518 | Rt. 32    | -90607.0 | 4678.7  | 261.3  |  | -297.5  |
|      | sfc 32    | -90607.0 | 4678.7  | 261.3  |  | -1101.6 |
|      | sc Max 32 | -90607.0 | 4678.7  | 261.3  |  | -82.5   |
|      | sc Med 32 | -90607.0 | 4678.7  | 261.3  |  | -46.6   |
| 3355 | Rt. 32    | -89294.5 | -5104.4 | -235.4 |  | -255.3  |
|      | sfc 32    | -89294.5 | -5104.4 | -235.4 |  | -1123.5 |
|      | sc Max 32 | -89294.5 | -5104.4 | -235.4 |  | -84.6   |
|      | sc Med 32 | -89294.5 | -5104.4 | -235.4 |  | -46.0   |

▲Pilastro: 5866/6703 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s1</sub> | α <sub>s2</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 5866 | 21   | -34180.5 | 7446.7          | 497.8           | 1.00            | 1.00            | 1.00            | 0.45  |
| 6703 | 21   | -33336.7 | -7732.0         | 246.7           | 1.00            | 1.00            | 1.00            | 0.46  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 1070.5          | 13595.1         | 2188.2          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                               |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| Combinazioni Rare             |           |          |                 |                 |                 |          |
| 5866                          | Fl 22     | -34562.1 | 4259.0          | -13.0           | 557.8           |          |
|                               | s/c 22    | -34562.1 | 4259.0          | -13.0           | -1074.6         |          |
|                               | sc Max 22 | -34562.1 | 4259.0          | -13.0           | -98.0           |          |
|                               | sc Med 22 | -34562.1 | 4259.0          | -13.0           | -48.9           |          |
| 6703                          | Fl 22     | -33718.3 | -4574.2         | 31.3            | 692.8           |          |
|                               | s/c 22    | -33718.3 | -4574.2         | 31.3            | -1125.8         |          |
|                               | sc Max 22 | -33718.3 | -4574.2         | 31.3            | -104.5          |          |
|                               | sc Med 22 | -33718.3 | -4574.2         | 31.3            | -51.9           |          |
| Combinazioni Frequenti        |           |          |                 |                 |                 |          |
| 5866                          | Fl 27     | -30802.9 | 4276.6          | 4.6             | 662.5           |          |
|                               | s/c 27    | -30802.9 | 4276.6          | 4.6             | -1040.7         |          |
|                               | sc Max 27 | -30802.9 | 4276.6          | 4.6             | -96.9           |          |
|                               | sc Med 27 | -30802.9 | 4276.6          | 4.6             | -48.4           |          |
| 6703                          | Fl 27     | -29959.1 | -4557.3         | 13.6            | 787.2           |          |
|                               | s/c 27    | -29959.1 | -4557.3         | 13.6            | -1083.4         |          |
|                               | sc Max 27 | -29959.1 | -4557.3         | 13.6            | -102.5          |          |
|                               | sc Med 27 | -29959.1 | -4557.3         | 13.6            | -51.1           |          |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |          |
| 5866                          | Fl 32     | -29619.9 | 4131.1          | 7.4             | 644.0           |          |
|                               | s/c 32    | -29619.9 | 4131.1          | 7.4             | -1004.6         |          |
|                               | sc Max 32 | -29619.9 | 4131.1          | 7.4             | -93.6           |          |
|                               | sc Med 32 | -29619.9 | 4131.1          | 7.4             | -46.7           |          |
| 6703                          | Fl 32     | -28776.1 | -4401.2         | 10.2            | 764.0           |          |
|                               | s/c 32    | -28776.1 | -4401.2         | 10.2            | -1044.2         |          |
|                               | sc Max 32 | -28776.1 | -4401.2         | 10.2            | -98.9           |          |
|                               | sc Med 32 | -28776.1 | -4401.2         | 10.2            | -49.3           |          |

▲Pilastro: 6703/7276 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>s1</sub> | α <sub>s2</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 6703 | 21   | -13930.1 | 3956.0          | -123.5          | 1.00            | 1.00            | 1.00            | 0.25  |
| 7276 | 1    | -16402.4 | -54.1           | -0.1            | 1.00            | 1.00            | 1.00            | 0.05  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 5646.0          | 13595.1         | 1155.9          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|-------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                   |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| Combinazioni Rare |           |          |                 |                 |                 |          |
| 6703              | Fl 22     | -13195.4 | 2449.0          | -10.7           | 588.1           |          |
|                   | s/c 22    | -13195.4 | 2449.0          | -10.7           | -554.5          |          |
|                   | sc Max 22 | -13195.4 | 2449.0          | -10.7           | -54.1           |          |
|                   | sc Med 22 | -13195.4 | 2449.0          | -10.7           | -27.0           |          |

| Nodo | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|------|-----------|----------|-----------------|-----------------|-----------------|----------|
|      |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| 5029 | Fl 22     | -63866.8 | -7551.0         | 108.0           | 244.3           |          |
|      | s/c 22    | -63866.8 | -7551.0         | -108.0          | -1146.5         |          |
|      | sc Max 22 | -63866.8 | -7551.0         | -108.0          | -91.9           |          |
|      | sc Med 22 | -63866.8 | -7551.0         | -108.0          | -45.4           |          |

Combinazioni Frequenti

|      |           |          |         |        |         |  |
|------|-----------|----------|---------|--------|---------|--|
| 4392 | Fl 27     | -58741.9 | 7184.5  | 157.6  | 268.6   |  |
|      | s/c 27    | -58741.9 | 7184.5  | 157.6  | -1084.7 |  |
|      | sc Max 27 | -58741.9 | 7184.5  | 157.6  | -87.4   |  |
|      | sc Med 27 | -58741.9 | 7184.5  | 157.6  | -42.9   |  |
| 5029 | Fl 27     | -57429.4 | -7881.3 | -136.2 | 403.7   |  |
|      | s/c 27    | -57429.4 | -7881.3 | -136.2 | -1144.1 |  |
|      | sc Max 27 | -57429.4 | -7881.3 | -136.2 | -93.5   |  |
|      | sc Med 27 | -57429.4 | -7881.3 | -136.2 | -46.0   |  |

Combinazioni Quasi Permanenti

|      |           |          |         |        |         |  |
|------|-----------|----------|---------|--------|---------|--|
| 4392 | Fl 32     | -56893.8 | 6940.1  | 157.3  | 257.8   |  |
|      | s/c 32    | -56893.8 | 6940.1  | 157.3  | -1049.3 |  |
|      | sc Max 32 | -56893.8 | 6940.1  | 157.3  | -84.6   |  |
|      | sc Med 32 | -56893.8 | 6940.1  | 157.3  | -41.5   |  |
| 5029 | Fl 32     | -55581.3 | -7613.8 | -136.9 | 388.9   |  |
|      | s/c 32    | -55581.3 | -7613.8 | -136.9 | -1106.5 |  |
|      | sc Max 32 | -55581.3 | -7613.8 | -136.9 | -90.5   |  |
|      | sc Med 32 | -55581.3 | -7613.8 | -136.9 | -44.5   |  |

▲Pilastro: 5029/5866 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1422 x 2 B + 1422 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 5029 | 21   | -50692.4 | 6641.2          | 527.2           | 1.00            | 1.00            | 0.41  |
| 5866 | 21   | -49848.6 | -7070.6         | -530.9          | 1.00            | 1.00            | 0.43  |

▲Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 30264.1         | 13595.1         | 2551.2          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ        |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|----------|
|                        |           | [kg]     | [kg]            | [kg]            | [kg]            | [kg/cm²] |
| Combinazioni Rare      |           |          |                 |                 |                 |          |
| 5029                   | Fl 25     | -45703.4 | 3147.8          | 39.4            | 0.9             |          |
|                        | s/c 22    | -49179.2 | 3330.2          | 30.8            | -1051.0         |          |
|                        | sc Max 22 | -49179.2 | 3330.2          | 30.8            | -86.8           |          |
|                        | sc Med 22 | -49179.2 | 3330.2          | 30.8            | -43.2           |          |
| 5866                   | Fl 25     | -44852.7 | -3469.3         | -19.7           | 89.9            |          |
|                        | s/c 22    | -48335.5 | -3670.9         | -8.6            | -1097.3         |          |
|                        | sc Max 22 | -48335.5 | -3670.9         | -8.6            | -92.1           |          |
|                        | sc Med 22 | -48335.5 | -3670.9         | -8.6            | -46.0           |          |
| Combinazioni Frequenti |           |          |                 |                 |                 |          |
| 5029                   | Fl 27     | -44290.8 | 3409.2          | 46.3            | 94.4            |          |
|                        | s/c 27    | -44290.8 | 3409.2          | 46.3            | -1023.4         |          |
|                        | sc Max 27 | -44290.8 | 3409.2          | 46.3            | -86.3           |          |
|                        | sc Med 27 | -44290.8 | 3409.2          | 46.3            | -42.8           |          |
| 5866                   | Fl 27     | -43447.0 | -3755.5         | -28.6           | 196.0           |          |
|                        | s/c 27    | -43447.0 | -3755.5         | -28.6           | -1069.7         |          |
|                        | sc Max 27 | -43447.0 | -3755.5         | -28.6           | -91.8           |          |
|                        | sc Med 27 | -43447.0 | -3755.5         | -28.6           | -45.6           |          |

Combinazioni Quasi Permanenti

|      |           |          |         |       |         |  |
|------|-----------|----------|---------|-------|---------|--|
| 5029 | Fl 32     | -42785.0 | 3313.2  | 47.5  | 91.8    |  |
|      | s/c 32    | -42785.0 | 3313.2  | 47.5  | -989.2  |  |
|      | sc Max 32 | -42785.0 | 3313.2  | 47.5  | -83.4   |  |
|      | sc Med 32 | -42785.0 | 3313.2  | 47.5  | -41.3   |  |
| 5866 | Fl 32     | -41941.2 | -3628.3 | -30.5 | 190.6   |  |
|      | s/c 32    | -41941.2 | -3628.3 | -30.5 | -1033.7 |  |
|      | sc Max 32 | -41941.2 | -3628.3 | -30.5 | -88.7   |  |
|      | sc Med 32 | -41941.2 | -3628.3 | -30.5 | -44.1   |  |

▲Pilastro: 850/1687 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

**Af:**  $10 \text{ } \emptyset \text{ } 24 \text{ Af}=45.24 \text{ [cm}^2\text{]} < 1 \phi 24 \times 4 \text{ V} + 1 \phi 24 \times 2 \text{ B} + 2 \phi 24 \times 2 \text{ H} >$

**Staffe:** Ø 14/10.0' x 80.0/Ø 12/10.0' x 190.0/Ø 14/10.0' x 80.0

**▲Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | $\alpha_{12}$ | $\alpha_{13}$ | Sd/Sr |
|------|------|-----------|-----------------|-----------------|---------------|---------------|-------|
| 850  | 14   | -19129.7  | -5604.7         | -8734.0         | 1.00          | 1.00          | 0.38  |
| 1687 | 14   | -189324.0 | 6343.0          | 8908.5          | 1.00          | 1.00          | 0.39  |

### ▲ Verifiche a Taglio

| D <sub>a</sub><br>[m] | A<br>[m] | V <sub>432</sub><br>[kg] | V <sub>442</sub><br>[kg] | V <sub>433</sub><br>[kg] | V <sub>463</sub><br>[kg] | Surfpe    |
|-----------------------|----------|--------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13                  | 0.92     | 375990                   | 602841                   | 14415.9                  | 331780                   | ø 14/100' |
| 0.92                  | 2.83     | 375990                   | 442904                   | 14415.9                  | 243756                   | ø 12/100' |
| 2.83                  | 3.63     | 375990                   | 602841                   | 14415.9                  | 331780                   | ø 14/100' |

**▲Verifiche a Presso-Flessione S.L.E.**

| Nodo | Comb | N<br>[kg] | $M_{1,2}$<br>[kgm] | $M_{1,3}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|------|------|-----------|--------------------|--------------------|-----------------------------------|
|------|------|-----------|--------------------|--------------------|-----------------------------------|

| Combination Rate |                                                                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 850              | Fl. 24 2378.5<br>sc 22 -161985.2<br>sc Med 22 2527.7<br>sc Med 21 -161985.2<br>Fl. 25 2527.7<br>Fl. 25 -152720.4<br>sc 22 -1600016.4<br>sc Med 22 -160016.4<br>sc Med 21 -160016.4 |
| 1687             | 2378.5<br>2527.7<br>2527.7<br>2527.7<br>2527.7<br>-2806.5<br>-2759.5<br>-2759.5<br>-2759.5<br>-2759.5                                                                              |
|                  | -2703.8<br>-2629.4<br>-2629.4<br>-2629.4<br>-2629.4<br>2585.6<br>2551.9<br>2551.9<br>2551.9<br>2551.9                                                                              |
|                  | -567.3<br>-1144.2<br>-58.3<br>-545.9<br>-1144.6<br>-57.3<br>-57.6                                                                                                                  |

[illegible]

| Combinazioni Quasi Permanenti |            | 1687    |         | 850     |  |
|-------------------------------|------------|---------|---------|---------|--|
| ft 32                         | -147.783.4 | 3965.2  | -1665.0 | -496.5  |  |
| sc 32                         | -147.783.4 | 3965.2  | -1665.0 | 1034.4  |  |
| sc Med 32                     | -147.783.4 | 3965.2  | -1665.0 | 73.9    |  |
| sc Med 32                     | -147.783.4 | 3965.2  | -1665.0 | -51.0   |  |
| sf 32                         | -1398.146  | -4417.3 | 1650.9  | -467.9  |  |
| sc 32                         | -1398.146  | -4417.3 | 1650.9  | -1041.6 |  |
| sc Med 32                     | -1398.146  | -4417.3 | 1650.9  | -74.6   |  |
| sc Med 32                     | -1398.146  | -4417.3 | 1650.9  | -50.3   |  |

▲Pilastro: 1687/2524 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

**Af:**  $8 \times 24 \text{ Af} = 36.19 \text{ [cm}^2\text{]} < 1024 \times 4 \text{ V} + 1024 \times 2 \text{ B} + 1024 \times 2 \text{ H} >$

**Staffe:** Ø 12/12.5' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>23</sub> | α <sub>23</sub> | α <sub>31</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-------|
| 1687 | 14   | -151695.3 | -2806.0         | -6597.7         | 1.00            | 1.00  |
| 2524 | 14   | -150382.8 | 2921.0          | 6799.9          | 1.00            | 1.00  |

### ▲ Verifiche a Taqlio

| Da<br>[m] | A<br>[m] | $V_{d12}$<br>[kg] | $V_{d13}$<br>[kg] | $V_{d13}$<br>[kg] | Staffe    |
|-----------|----------|-------------------|-------------------|-------------------|-----------|
| 0.13      | 3.63     | 17068.4           | 22886.9           | 19500.5           | ø 12/125' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------|------|-----------|---------------------------|---------------------------|-----------------------------------|
| Combinazioni Rare |      |           |                           |                           |                                   |

| Nodo | Comb       | N<br>[kg] | M <sub>h2</sub><br>[kgm] | M <sub>h3</sub><br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|--------------------------|--------------------------|-----------------------------------|
| 7276 | Flt 25     | -11865.9  | -38.1                    | -0.2                     | -125.5                            |
|      | sfc 22     | -12351.7  | -40.7                    | -0.1                     | -142.7                            |
|      | sc Max 22  | -12351.7  | -40.7                    | -0.1                     | -9.7                              |
|      | sc Mied 22 | -12351.7  | -40.7                    | -0.1                     | -9.1                              |

| Concentrazioni frequenz |           |          |       |        |
|-------------------------|-----------|----------|-------|--------|
| 6703                    | Fl. 27    | 2024,7   | -4,8  | 5446   |
|                         | sc 27     | -11642,9 | -4,8  | -533,3 |
|                         | sc Max 27 | -11642,9 | -4,8  | -533,3 |
|                         | sc Med 27 | -11642,9 | -4,8  | -266,4 |
|                         | Fl. 30    | -10351,1 | -38,8 | -3,3   |
| 7276                    | sc 30     | -10799,2 | -40,2 | -325,4 |
|                         | sc Med 27 | -10799,2 | -40,2 | -8,6   |
|                         | sc Max 27 | -10799,2 | -40,2 | -8,6   |
|                         | sc Min 27 | -10799,2 | -40,2 | -8,6   |
|                         | sc Med 27 | -10799,2 | -40,2 | -0,2   |

| Comptabilizări Quasi Permanent |                                                                                                                                                                                                                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6703                           | Ft. 32 -11031.5 2941.2 -3.2 5320<br>sf. 32 -11031.5 2941.2 -3.2 -5125<br>sc. Max 32 -11031.5 2941.2 -3.2 -511<br><br>sc. Med 32 -11031.5 2941.2 -3.2 -255<br><br>Ft. 32 -11037.8 -38.8 -0.2 -1069<br>sf. 32 -10378.8 -38.8 -0.2 -1185<br>sc. Med 32 -10378.8 -38.8 -0.2 -81<br><br>sc. Med 32 -10378.8 -38.8 -0.2 -75 |

▲ Pilastro: 171/850 / L 3.50[m] / Sezione 1 B 35 [cm] H 60 [cm]

**Af:**  $10 \times 24 \text{ Af} = 45.24 \text{ [cm}^2\text{]} < 1 \times 24 \times 4 \text{ V} + 1 \times 24 \times 2 \text{ B} + 2 \times 24 \times 2 \text{ H} >$

**Staffe:** Ø 14/10.0' x 80.0/Ø 12/10.0' x 190.0/Ø 14/10.0' x 80.0

**▲ Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | $\alpha_{12}$ | $\alpha_{13}$ | Sd/Sr |
|------|------|-----------|-----------------|-----------------|---------------|---------------|-------|
| 171  | 16   | -2340830  | -20275.5        | -5479.2         | 1.00          | 1.24          | 0.50  |
| 850  | 14   | -238055.5 | 5856.9          | 7435.9          | 1.00          | 1.00          | 0.43  |

### ▲ Verifiche a Taglio

| Da   | A    | $V_{A12}$ | $V_{A23}$ | $V_{A33}$ | $V_{A33}$ | Stoffe               |
|------|------|-----------|-----------|-----------|-----------|----------------------|
| [m]  | [m]  | [kg]      | [kg]      | [kg]      | [kg]      |                      |
| 0.13 | 0.92 | 35118.1   | 60284.1   | 12010.0   | 33178.0   | $\emptyset 14/10.0'$ |
| 0.92 | 2.83 | 35118.1   | 44290.4   | 12010.0   | 24375.6   | $\emptyset 12/10.0'$ |
| 2.83 | 3.63 | 35118.1   | 60284.1   | 12010.0   | 33178.0   | $\emptyset 14/10.0'$ |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb | N    | $M_{12}$ | $M_{13}$ | $\sigma$              |
|------|------|------|----------|----------|-----------------------|
|      |      | [kg] | [kgm]    | [kgm]    | [kg/cm <sup>2</sup> ] |

[illegible]

|     |           | Combinazioni Frequenti |          |
|-----|-----------|------------------------|----------|
| 171 | Pr. 31    | -176502.9              | 21886.6  |
|     | sc 31     | -176502.9              | 21886.6  |
|     | sc Wav 31 | -176502.9              | 21886.6  |
|     | sc Med 27 | -182951.3              | 12520.0  |
| 850 | Pr. 30    | -177663.3              | -14826.6 |
|     | sc 30     | -177663.3              | -14826.6 |
|     | sc Wav 30 | -177663.3              | -14826.6 |
|     | sc Med 27 | -180982.6              | -2524.3  |

| Combinatorial Quasi Permanent |                                          |
|-------------------------------|------------------------------------------|
| 171                           | Pr 32 -178067.5 1247.4 -334.8 -888.5     |
|                               | sc 32 -178067.5 1247.4 -334.8 -1034.1    |
|                               | sc Wav 32 -178067.5 1247.4 -334.8 -703.2 |
|                               | sc Med 32 -178067.5 1247.4 -334.8 -64.1  |
| 850                           | Pr 32 -176908.7 -249.6 1163.1 -1126.1    |
|                               | sc 32 -176908.7 -249.6 1163.1 -78.4      |
|                               | sc Wav 32 -176908.7 -249.6 1163.1 -63.4  |
|                               | sc Med 32 -176908.7 -249.6 1163.1 -163.4 |

| Nodo | Comb      | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|----------------------------|
|      | sc Max 32 | -89245.9  | -2902.7                  | -2902.7                  | -89245.9  | -2902.7                  | -2902.7                  | -45.9                      |
|      | sc Med 32 | -89245.9  | -2902.7                  | -2902.7                  | -89245.9  | -2902.7                  | -2902.7                  | -45.9                      |

▲Pilastro: 3361/4198 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 3361 | 21   | -53129.3  | 11582.3                  | 2969.4                   | 1.00      | 1.00                     | 0.40                     |                |                |       |
| 4198 | 21   | -51816.8  | -11632.9                 | -2961.2                  | 1.00      | 1.00                     | 0.40                     |                |                |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 19709.2                 | 22686.9                  | 13207.8                 | 19500.5                  |                         |                          | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ |
|-------------------|-----------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|---|
| Combinazioni Rare |           |           |                          |                          |           |                          |                          |   |
| 3361              | Fl. 24    | -77464.3  | 2170.2                   | -2043.1                  | -237.1    |                          |                          |   |
|                   | sfc 22    | -81534.4  | 2287.8                   | -1980.5                  | -995.1    |                          |                          |   |
|                   | sc Max 22 | -81534.4  | 2287.8                   | -1980.5                  | -75.3     |                          |                          |   |
|                   | sc Med 22 | -81534.4  | 2287.8                   | -1980.5                  | -42.0     |                          |                          |   |
| 4198              | Fl. 24    | -76151.8  | -2279.9                  | 2096.5                   | -2187     |                          |                          |   |
|                   | sfc 22    | -80231.9  | -2402.5                  | 1983.6                   | -993.7    |                          |                          |   |
|                   | sc Max 22 | -80231.9  | -2402.5                  | 1983.6                   | -75.4     |                          |                          |   |
|                   | sc Med 22 | -80231.9  | -2402.5                  | 1983.6                   | -41.3     |                          |                          |   |

| Nodo                   | Comb      | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ |
|------------------------|-----------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|---|
| Combinazioni Frequenti |           |           |                          |                          |           |                          |                          |   |
| 3361                   | Fl. 29    | -71863.5  | 2969.2                   | -1275.4                  | -199.0    |                          |                          |   |
|                        | sfc 27    | -73695.6  | 3096.1                   | -1256.1                  | -933.3    |                          |                          |   |
|                        | sc Max 27 | -73695.6  | 3096.1                   | -1256.1                  | -70.8     |                          |                          |   |
|                        | sc Med 27 | -73695.6  | 3096.1                   | -1256.1                  | -37.9     |                          |                          |   |
| 4198                   | Fl. 29    | -70551.0  | -3069.1                  | 1266.3                   | -181.4    |                          |                          |   |
|                        | sfc 27    | -72383.1  | -3198.8                  | 1240.6                   | -930.9    |                          |                          |   |
|                        | sc Max 27 | -72383.1  | -3198.8                  | 1240.6                   | -70.8     |                          |                          |   |
|                        | sc Med 27 | -72383.1  | -3198.8                  | 1240.6                   | -37.3     |                          |                          |   |

| Nodo                          | Comb      | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|---|
| Combinazioni Quasi Permanenti |           |           |                          |                          |           |                          |                          |   |
| 3361                          | Fl. 32    | -71595.6  | 302.5                    | -1188.7                  | -201.3    |                          |                          |   |
|                               | sfc 32    | -71595.6  | 302.5                    | -1188.7                  | -904.2    |                          |                          |   |
|                               | sc Max 32 | -71595.6  | 302.5                    | -1188.7                  | -68.6     |                          |                          |   |
|                               | sc Med 32 | -71595.6  | 302.5                    | -1188.7                  | -36.9     |                          |                          |   |
| 4198                          | Fl. 32    | -70283.1  | -3111.9                  | 1181.5                   | -183.7    |                          |                          |   |
|                               | sfc 32    | -70283.1  | -3111.9                  | 1181.5                   | -901.5    |                          |                          |   |
|                               | sc Max 32 | -70283.1  | -3111.9                  | 1181.5                   | -68.6     |                          |                          |   |
|                               | sc Med 32 | -70283.1  | -3111.9                  | 1181.5                   | -36.2     |                          |                          |   |

| Nodo | Comb | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 4198 | 21   | -42774.6  | 12036.2                  | 3066.7                   | 1.00      | 1.00                     | 0.43                     |                |                |       |
| 5035 | 21   | -41462.1  | -12850.6                 | -3172.9                  | 1.00      | 1.00                     | 0.46                     |                |                |       |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 4198 | 21   | -42774.6  | 12036.2                  | 3066.7                   | 1.00      | 1.00                     | 0.43                     |                |                |       |
| 5035 | 21   | -41462.1  | -12850.6                 | -3172.9                  | 1.00      | 1.00                     | 0.46                     |                |                |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 20783.6                 | 22686.9                  | 14709.4                 | 19500.5                  |                         |                          | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb      | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ |
|------|-----------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|---|
| 1687 | Fl. 26    | -32071.5  | 110.9                    | 1787.4                   | -650.3    |                          |                          |   |
|      | sfc 22    | -129514.6 | 1111.3                   | -1896.8                  | -1262.0   |                          |                          |   |
|      | sc Max 22 | -129514.6 | 1111.3                   | -1896.8                  | -90.7     |                          |                          |   |
|      | sc Med 22 | -129514.6 | 1111.3                   | -1896.8                  | -66.7     |                          |                          |   |
| 2524 | Fl. 26    | -120759.0 | -1501.6                  | 1849.8                   | -643.0    |                          |                          |   |
|      | sfc 22    | -128202.1 | -1521.5                  | 1966.6                   | -1291.3   |                          |                          |   |
|      | sc Max 22 | -128202.1 | -1521.5                  | 1966.6                   | -93.6     |                          |                          |   |
|      | sc Med 22 | -128202.1 | -1521.5                  | 1966.6                   | -66.0     |                          |                          |   |

| Combinazioni Quasi Permanenti |           |           |         |         |         |  |  |  |
|-------------------------------|-----------|-----------|---------|---------|---------|--|--|--|
| 1687                          | Fl. 31    | -312823.8 | 1830.1  | -1163.5 | -617.6  |  |  |  |
|                               | sfc 27    | -116751.1 | 1886.1  | -1222.9 | -1164.9 |  |  |  |
|                               | sc Max 27 | -116751.1 | 1886.1  | -1222.9 | -84.0   |  |  |  |
|                               | sc Med 27 | -116751.1 | 1886.1  | -1222.9 | -60.1   |  |  |  |
| 2524                          | Fl. 31    | -111511.3 | -2291.0 | 1199.3  | -566.8  |  |  |  |
|                               | sfc 27    | -115438.6 | -2372.7 | 1266.2  | -1198.0 |  |  |  |
|                               | sc Max 27 | -115438.6 | -2372.7 | 1266.2  | -87.2   |  |  |  |
|                               | sc Med 27 | -115438.6 | -2372.7 | 1266.2  | -59.4   |  |  |  |

| Combinazioni Quasi Permanenti |           |           |         |         |         |  |  |  |
|-------------------------------|-----------|-----------|---------|---------|---------|--|--|--|
| 1687                          | Fl. 32    | -113551.7 | 1855.3  | -1163.2 | -622.7  |  |  |  |
|                               | sfc 32    | -113551.7 | 1855.3  | -1163.2 | -1130.7 |  |  |  |
|                               | sc Max 32 | -113551.7 | 1855.3  | -1163.2 | -81.5   |  |  |  |
|                               | sc Med 32 | -113551.7 | 1855.3  | -1163.2 | -58.4   |  |  |  |
| 2524                          | Fl. 32    | -112239.2 | -2308.5 | 1203.5  | -570.6  |  |  |  |
|                               | sfc 32    | -112239.2 | -2308.5 | 1203.5  | -1162.5 |  |  |  |
|                               | sc Max 32 | -112239.2 | -2308.5 | 1203.5  | -84.6   |  |  |  |
|                               | sc Med 32 | -112239.2 | -2308.5 | 1203.5  | -57.8   |  |  |  |

▲Pilastro: 2524/3361 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ |
|------|------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|---|
| 2524 | 21   | -65232.6  | 11730.4                  | 2862.2                   | 1.00      | 1.00                     | 0.40                     |   |
| 3361 | 21   | -63920.1  | -11728.2                 | -2894.4                  | 1.00      | 1.00                     | 0.40                     |   |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 18398.5                 | 22686.9                  | 11679.2                 | 19500.5                  |                         |                          | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | N<br>[kg] | M <sub>10</sub><br>[kgm] | M <sub>15</sub><br>[kgm] | σ |
|-------------------|-----------|-----------|--------------------------|--------------------------|-----------|--------------------------|--------------------------|---|
| Combinazioni Rare |           |           |                          |                          |           |                          |                          |   |
| 2524              | Fl. 24    | -98280.7  | 1870.6                   | -2075.9                  | -439.1    |                          |                          |   |
|                   | sfc 22    | -103152.1 | 1977.9                   | -2016.8                  | -1139.4   |                          |                          |   |
|                   | sc Max 22 | -103152.1 | 1977.9                   | -2016.8                  | -84.4     |                          |                          |   |
|                   | sc Med 22 | -103152.1 | 1977.9                   | -2016.8                  | -53.1     |                          |                          |   |
| 3361              | Fl. 24    | -96968.2  | -2001.5                  | 2069.3                   | -399.0    |                          |                          |   |
|                   | sfc 22    | -101839.6 | -2144.6                  | 2011.0                   | -1139.8   |                          |                          |   |
|                   | sc Max 22 | -101839.6 | -2144.6                  | 2011.0                   | -84.7     |                          |                          |   |
|                   | sc Med 22 | -101839.6 | -2144.6                  | 2011.0                   | -52.4     |                          |                          |   |

| Combinazioni Frequenti |           |          |         |         |         |  |  |  |
|------------------------|-----------|----------|---------|---------|---------|--|--|--|
| 2524                   | Fl. 31    | -90331.4 | 2761.7  | -1238.1 | -360.2  |  |  |  |
|                        | sfc 27    | -93141.4 | 2867.9  | -1284.7 | -1067.6 |  |  |  |
|                        | sc Max 27 | -93141.4 | 2867.9  | -1284.7 | -79.4   |  |  |  |
|                        | sc Med 27 | -93141.4 | 2867.9  | -1284.7 | -47.9   |  |  |  |
| 3361                   | Fl. 31    | -88818.9 | -2867.6 | 1230.4  | -342.2  |  |  |  |
|                        | sfc 27    | -91828.9 | -2983.5 | 1276.3  | -1066.1 |  |  |  |
|                        | sc Max 27 | -91828.9 | -2983.5 | 1276.3  | -79.5   |  |  |  |
|                        | sc Med 27 | -91828.9 | -2983.5 | 1276.3  | -47.3   |  |  |  |

| Combinazioni Quasi Permanenti |           |          |         |         |         |  |  |  |
|-------------------------------|-----------|----------|---------|---------|---------|--|--|--|
| 2524                          | Fl. 32    | -90558.4 | 2790.7  | -1218.9 | -362.9  |  |  |  |
|                               | sfc 32    | -90558.4 | 2790.7  | -1218.9 | -1055.5 |  |  |  |
|                               | sc Max 32 | -90558.4 | 2790.7  | -1218.9 | -77.0   |  |  |  |
|                               | sc Med 32 | -90558.4 | 2790.7  | -1218.9 | -46.6   |  |  |  |
| 3361                          | Fl. 32    | -89245.9 | -2902.7 | 1209.7  | -344.5  |  |  |  |
|                               | sfc 32    | -89245.9 | -2902.7 | 1209.7  | -1033.6 |  |  |  |

| Nodo | Comb   | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|--------|-----------|--------------------------|--------------------------|----------------------------|
|      | s/c 32 | -403.500  | -180.8                   | 644.5                    | -788.6                     |
|      |        | sc Max 32 | -403.500                 | -180.8                   | 644.5                      |
|      |        | sc Med 32 | -403.500                 | -180.8                   | 644.5                      |

▲Pilastro: 5872/6709 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 5872 | 21   | -23881.7  | 5873.0                   | 1624.7                   | 1.00                    | 1.00                    | 0.40  |
|      | 6709 | 21        | -23087.9                 | 6120.4                   | -1564.7                 | 1.00                    | 0.41  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ass</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ass</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe    |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 10740.4                  | 13595.1                  | 9660.9                   | 13595.1                  | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kgm] | σ <sub>13</sub><br>[kgm] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Combinazioni Rare             |           |           |                          |                          |                          |                          |
| 5872                          | Fl. 24    | -30741.9  | 1537.9                   | -1201.4                  | 96.9                     |                          |
|                               | s/c 22    | -33370.7  | 1641.7                   | -1200.2                  | -803.4                   |                          |
|                               | sc Max 22 | -33370.7  | 1641.7                   | -1200.2                  | -678                     |                          |
|                               | sc Med 22 | -33370.7  | 1641.7                   | -1200.2                  | -276                     |                          |
|                               | Fl. 24    | -29888.2  | -1695.4                  | 1282.4                   | 163.3                    |                          |
| 6709                          | s/c 22    | -32526.9  | -1838.4                  | 1286.4                   | -848.6                   |                          |
|                               | sc Max 22 | -32526.9  | -1838.4                  | 1286.4                   | -728                     |                          |
|                               | sc Med 22 | -32526.9  | -1838.4                  | 1286.4                   | -286                     |                          |
| Combinazioni Frequenti        |           |           |                          |                          |                          |                          |
| 5872                          | Fl. 29    | -28631.9  | 1891.5                   | -773.9                   | 121.6                    |                          |
|                               | s/c 27    | -29682.2  | 1966.7                   | -773.8                   | -754.6                   |                          |
|                               | sc Max 27 | -29682.2  | 1966.7                   | -773.8                   | -645                     |                          |
|                               | sc Med 27 | -29682.2  | 1966.7                   | -773.8                   | -265                     |                          |
|                               | Fl. 27    | -28838.4  | -2148.4                  | 855.8                    | 200.4                    |                          |
| 6709                          | s/c 27    | -28838.4  | -2148.4                  | 855.8                    | -796.4                   |                          |
|                               | sc Max 27 | -28838.4  | -2148.4                  | 855.8                    | -692                     |                          |
|                               | sc Med 27 | -28838.4  | -2148.4                  | 855.8                    | -280                     |                          |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                          |                          |
| 5872                          | Fl. 32    | -28550.3  | 1913.0                   | -729.2                   | 118.9                    |                          |
|                               | s/c 32    | -28550.3  | 1913.0                   | -729.2                   | -727.1                   |                          |
|                               | sc Max 32 | -28550.3  | 1913.0                   | -729.2                   | -622                     |                          |
|                               | sc Med 32 | -28550.3  | 1913.0                   | -729.2                   | -25.6                    |                          |
|                               | Fl. 32    | -27706.6  | -2089.4                  | 807.7                    | 196.1                    |                          |
| 6709                          | s/c 32    | -27706.6  | -2089.4                  | 807.7                    | -767.4                   |                          |
|                               | sc Max 32 | -27706.6  | -2089.4                  | 807.7                    | -667                     |                          |
|                               | sc Med 32 | -27706.6  | -2089.4                  | 807.7                    | -271                     |                          |

▲Pilastro: 6709/7282 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 6709 | 21   | -10271.2 | 3057.2          | 770.5           | 1.00            | 1.00            | 0.21  |
| 7282 | 1    | -18158.8 | -18.7           | 15.7            | 1.00            | 1.00            | 0.05  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ass</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ass</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe    |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 5897.1                   | 13595.1                  | 5860.1                   | 13595.1                  | ø 12/15.0 |

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |           |           |                          |                          |                            |
| 4198                          | Fl. 24    | -60600.4  | 2586.6                   | -2069.6                  | -672                       |
|                               | s/c 22    | -63516.3  | 2702.0                   | -2022.4                  | -892.7                     |
|                               | sc Max 22 | -63516.3  | 2702.0                   | -2022.4                  | -69.3                      |
|                               | sc Med 22 | -63516.3  | 2702.0                   | -2022.4                  | -32.9                      |
|                               | Fl. 24    | -58747.9  | -2826.1                  | 2141.0                   | -27.2                      |
| 5035                          | s/c 22    | -62203.8  | -2972.5                  | 2093.3                   | -911.9                     |
|                               | sc Max 22 | -62203.8  | -2972.5                  | 2093.3                   | -71.2                      |
|                               | sc Med 22 | -62203.8  | -2972.5                  | 2093.3                   | -32.6                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 4198                          | Fl. 29    | -55839.4  | 3341.0                   | -1287.0                  | -42.1                      |
|                               | s/c 27    | -57363.6  | 3479.6                   | -1271.7                  | -840.9                     |
|                               | sc Max 27 | -57363.6  | 3479.6                   | -1271.7                  | -65.4                      |
|                               | sc Med 27 | -57363.6  | 3479.6                   | -1271.7                  | -30.1                      |
|                               | Fl. 29    | -54526.9  | -3639.6                  | 1330.9                   | 0.7                        |
| 5035                          | s/c 27    | -56051.1  | -3789.5                  | 1315.9                   | -862.3                     |
|                               | sc Max 27 | -56051.1  | -3789.5                  | 1315.9                   | -67.6                      |
|                               | sc Med 27 | -56051.1  | -3789.5                  | 1315.9                   | -30.1                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 4198                          | Fl. 32    | -55641.5  | 3385.5                   | -1200.8                  | -45.0                      |
|                               | s/c 32    | -55641.5  | 3385.5                   | -1200.8                  | -813.4                     |
|                               | sc Max 32 | -55641.5  | 3385.5                   | -1200.8                  | -63.3                      |
|                               | sc Med 32 | -55641.5  | 3385.5                   | -1200.8                  | -29.2                      |
|                               | Fl. 32    | -54329.0  | -3686.5                  | 1241.8                   | -2.4                       |
| 5035                          | s/c 32    | -54329.0  | -3686.5                  | 1241.8                   | -833.7                     |
|                               | sc Max 32 | -54329.0  | -3686.5                  | 1241.8                   | -65.3                      |
|                               | sc Med 32 | -54329.0  | -3686.5                  | 1241.8                   | -29.2                      |

▲Pilastro: 5035/5872 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 5035 | 21   | -32808.7 | 5292.7          | 1592.5          | 1.00            | 1.00            | 0.36  |
| 5872 | 21   | -31964.9 | -5642.2         | -1643.4         | 1.00            | 1.00            | 0.38  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ass</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>ass</sub><br>[kg] | V <sub>max</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 10180.6                  | 13595.1                  | 8281.2                   | 13595.1                  | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |           |           |                          |                          |                            |
| 5035                          | Fl. 24    | -44176.5  | 1203.1                   | -1072.7                  | -151.9                     |
|                               | s/c 22    | -47125.0  | 1264.1                   | -1052.0                  | -863.9                     |
|                               | sc Max 22 | -47125.0  | 1264.1                   | -1052.0                  | -68.7                      |
|                               | sc Med 22 | -47125.0  | 1264.1                   | -1052.0                  | -34.7                      |
|                               | Fl. 24    | -43332.7  | -1319.9                  | 1109.5                   | -119.5                     |
| 5872                          | s/c 22    | -46281.2  | -1385.7                  | 1088.6                   | -878.0                     |
|                               | sc Max 22 | -46281.2  | -1385.7                  | 1088.6                   | -70.4                      |
|                               | sc Med 22 | -46281.2  | -1385.7                  | 1088.6                   | -34.2                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 5035                          | Fl. 29    | -41128.9  | 1528.8                   | -667.1                   | -130.0                     |
|                               | s/c 27    | -42384.9  | 1591.2                   | -663.7                   | -802.1                     |
|                               | sc Max 27 | -42384.9  | 1591.2                   | -663.7                   | -64.3                      |
|                               | sc Med 27 | -42384.9  | 1591.2                   | -663.7                   | -31.3                      |
|                               | Fl. 29    | -40285.1  | -1660.6                  | 689.6                    | -97.0                      |
| 5872                          | s/c 27    | -41541.1  | -1728.1                  | 684.5                    | -816.9                     |
|                               | sc Max 27 | -41541.1  | -1728.1                  | 684.5                    | -66.0                      |
|                               | sc Med 27 | -41541.1  | -1728.1                  | 684.5                    | -31.0                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 5035                          | Fl. 32    | -40993.8  | 1547.9                   | -623.5                   | -132.1                     |
|                               | s/c 32    | -40993.8  | 1547.9                   | -623.5                   | -774.7                     |
|                               | sc Max 32 | -40993.8  | 1547.9                   | -623.5                   | -62.0                      |
|                               | sc Med 32 | -40993.8  | 1547.9                   | -623.5                   | -30.3                      |
|                               | Fl. 32    | -40150.0  | -1680.8                  | 644.5                    | -99.3                      |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N<br>[kg] | M <sub>u</sub><br>[kgm] |            | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|-------------------------|------------|----------------------------|
|      |            |           | Combinazioni Rare       | Permanenti |                            |
| 6709 | Fr. 22     | -14493.3  | 962.1                   | -696.2     | 131.1                      |
|      | sf. 22     | -14493.3  | 962.1                   | -696.2     | -426.8                     |
|      | sc. Max 22 | -14493.3  | 962.1                   | -696.2     | -37.5                      |
|      | sc. Med 22 | -14493.3  | 962.1                   | -696.2     | -14.1                      |
| 7882 | Fr. 25     | -130384   | -140                    | 102        | -140.5                     |
|      | sf. 22     | -13649.6  | -14.6                   | 11.3       | -154.8                     |
|      | sc. Max 22 | -13649.6  | -14.6                   | 11.3       | -10.4                      |
|      | sc. Med 22 | -13649.6  | -14.6                   | 11.3       | -10.1                      |
| 6709 | Fr. 30     | -120615.7 | 1096.6                  | -428.8     | 157.2                      |
|      | sf. 27     | -12784.2  | 1115.8                  | -465.7     | -400.6                     |
|      | sc. Max 27 | -12784.2  | 1115.8                  | -465.7     | -35.7                      |
|      | sc. Med 27 | -12784.2  | 1115.8                  | -465.7     | -14.1                      |
| 7882 | Fr. 30     | -112127.7 | -170                    | 69         | -120.5                     |
|      | sf. 27     | -11940.5  | -17.3                   | 7.5        | -135.7                     |
|      | sc. Max 27 | -11940.5  | -17.3                   | 7.5        | -9.2                       |
|      | sc. Med 27 | -11940.5  | -17.3                   | 7.5        | -8.8                       |
| 6709 | Fr. 32     | -12125.5  | 1085.4                  | -439.9     | 154.9                      |
|      | sf. 32     | -12125.5  | 1085.4                  | -439.9     | -384.9                     |
|      | sc. Max 32 | -12125.5  | 1085.4                  | -439.9     | -34.4                      |
|      | sc. Med 32 | -12125.5  | 1085.4                  | -439.9     | -13.6                      |
| 7882 | Fr. 32     | -11281.8  | -16.8                   | 7.1        | -121.3                     |
|      | sf. 32     | -11281.8  | -16.8                   | 7.1        | -128.3                     |
|      | sc. Max 32 | -11281.8  | -16.8                   | 7.1        | -8.7                       |
|      | sc. Med 32 | -11281.8  | -16.8                   | 7.1        | -8.3                       |

▲ Pilastro: 172/853 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0'ø 190.0/ø 14/10.0' x 80.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 172  | 16   | -130424.0 | -23946.7                | -3330.4                 | 1.00           | 1.02           | 0.40  |
| 853  | 16   | -128455.2 | 9895.2                  | 3330.4                  | 1.00           | 1.00           | 0.26  |

▲ Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 0.92     | 37928.1                 | 60284.1                  | 11139.9                 | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 37928.1                 | 44290.4                  | 11139.9                 | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 37928.1                 | 60284.1                  | 11139.9                 | 33178.0                  | ø 14/10.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N<br>[kg] | M <sub>u</sub><br>[kgm] |            | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|-------------------------|------------|----------------------------|
|      |            |           | Combinazioni Rare       | Permanenti |                            |
| 172  | Fr. 25     | -119106.8 | -2712.4                 | -2168.3    | -394.5                     |
|      | sf. 25     | -119106.8 | -2712.4                 | -2168.3    | -891.5                     |
|      | sc. Max 25 | -119106.8 | -2712.4                 | -2168.3    | -64.6                      |
|      | sc. Med 22 | -124011.4 | -2155.3                 | -1114.3    | -44.8                      |
| 853  | Fr. 25     | -11738.0  | 431.1                   | 2616.8     | -450.5                     |
|      | sf. 25     | -11738.0  | 431.1                   | 2616.8     | -814.2                     |
|      | sc. Max 25 | -11738.0  | 431.1                   | 2616.8     | -58.9                      |
|      | sc. Med 22 | -122442.7 | -98.4                   | 1730.5     | -44.1                      |
| 172  | Fr. 31     | -112349.6 | 1808.9                  | 950.7      | -471.8                     |
|      | sf. 31     | -112349.6 | 1808.9                  | 950.7      | -741.2                     |
|      | sc. Max 30 | -112881.8 | -112.6                  | -1950.6    | -52.4                      |
|      | sc. Med 27 | -115548.9 | 827.0                   | -556.5     | -41.4                      |
| 853  | Fr. 30     | -110913.0 | -670.5                  | 2450.6     | -417.3                     |
|      | sf. 30     | -110913.0 | -670.5                  | 2450.6     | -780.2                     |
|      | sc. Max 30 | -110913.0 | -670.5                  | 2450.6     | -56.5                      |
|      | sc. Med 27 | -113380.2 | -1444.7                 | 1250.7     | -40.7                      |
| 172  | Fr. 32     | -112615.7 | 848.1                   | -500.0     | -541.4                     |

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb       | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr  |
|------|------------|-----------|-------------------------|-------------------------|----------------|----------------|--------|
|      | sf. 32     | -120615.7 | 848.1                   | -500.0                  | 1.00           | 1.00           | -674.5 |
|      | sc. Max 32 | -120615.7 | 848.1                   | -500.0                  | 1.00           | 1.00           | -46.5  |
|      | sc. Med 32 | -120615.7 | 848.1                   | -500.0                  | 1.00           | 1.00           | -40.5  |
|      | Fr. 32     | -110646.9 | -1432.0                 | 1187.0                  | 1.00           | 1.00           | -463.5 |
|      | sf. 32     | -110646.9 | -1432.0                 | 1187.0                  | 1.00           | 1.00           | -731.2 |
|      | sc. Max 32 | -110646.9 | -1432.0                 | 1187.0                  | 1.00           | 1.00           | -51.5  |
|      | sc. Med 32 | -110646.9 | -1432.0                 | 1187.0                  | 1.00           | 1.00           | -39.8  |

▲ Pilastro: 853/1690 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 2ø24 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0'ø 190.0/ø 14/10.0' x 80.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 853  | 1    | -146032.8 | 1309.4                  | -3042.7                 | 1.00           | 1.00           | 0.24  |
| 1690 | 1    | -143473.5 | -1007.7                 | 3844.9                  | 1.00           | 1.00           | 0.24  |

▲ Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>esd</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 0.92     | 34784.7                 | 60284.1                  | 13566.7                 | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 34784.7                 | 44290.4                  | 13566.7                 | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 34784.7                 | 60284.1                  | 13566.7                 | 33178.0                  | ø 14/10.0' |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb       | N<br>[kg] | M <sub>u</sub><br>[kgm] |            | σ<br>[kg/cm <sup>2</sup> ] |
|------|------------|-----------|-------------------------|------------|----------------------------|
|      |            |           | Combinazioni Rare       | Permanenti |                            |
| 853  | Fr. 24     | -105006.0 | 1152.3                  | -2175.2    | -382.7                     |
|      | sf. 22     | -109487.9 | 1144.0                  | -2226.8    | -778.1                     |
|      | sc. Max 22 | -109487.9 | 1144.0                  | -2226.8    | -56.2                      |
|      | sc. Med 22 | -109487.9 | 1144.0                  | -2226.8    | -39.4                      |
| 1690 | Fr. 24     | -103037.3 | -1009.2                 | 2383.0     | -365.0                     |
|      | sf. 22     | -107519.1 | -979.2                  | 2444.7     | -774.3                     |
|      | sc. Max 22 | -107519.1 | -979.2                  | 2444.7     | -56.2                      |
|      | sc. Med 22 | -107519.1 | -979.2                  | 2444.7     | -38.7                      |
| 853  | Fr. 31     | -99272.6  | 1443.2                  | -2077.7    | -345.8                     |
|      | sf. 27     | -101464.4 | 1934.9                  | -1783.3    | -739.8                     |
|      | sc. Max 27 | -101464.4 | 1934.9                  | -1783.3    | -53.4                      |
|      | sc. Med 27 | -101464.4 | 1934.9                  | -1783.3    | -36.5                      |
| 1690 | Fr. 30     | -97115.5  | -2244.6                 | 1786.9     | -319.1                     |
|      | sf. 27     | -99495.7  | -2110.4                 | 1946.0     | -746.7                     |
|      | sc. Max 27 | -99495.7  | -2110.4                 | 1946.0     | -54.2                      |
|      | sc. Med 27 | -99495.7  | -2110.4                 | 1946.0     | -35.8                      |
| 853  | Fr. 32     | -99178.4  | 1902.4                  | -1710.2    | -349.3                     |
|      | sf. 32     | -99178.4  | 1902.4                  | -1710.2    | -721.6                     |
|      | sc. Max 32 | -99178.4  | 1902.4                  | -1710.2    | -52.0                      |
|      | sc. Med 32 | -99178.4  | 1902.4                  | -1710.2    | -35.7                      |
| 1690 | Fr. 32     | -97209.6  | -2077.4                 | 1863.4     | -321.8                     |
|      | sf. 32     | -97209.6  | -2077.4                 | 1863.4     | -727.8                     |
|      | sc. Max 32 | -97209.6  | -2077.4                 | 1863.4     | -52.8                      |
|      | sc. Med 32 | -97209.6  | -2077.4                 | 1863.4     | -35.0                      |

▲ Pilastro: 1690/2527 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >

Staffe: ø 12/12.5' x 350.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 1690 | 1    | -26319.2  | 163.9                   | -2782.7                 | 1.00           | 1.00           | 0.30  |
| 2527 | 16   | -94927.0  | 5373.7                  | 3462.0                  | 1.00           | 1.00           | 0.30  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 16551.2                 | 22686.9                  | 9723.8                   | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 1690                          | Fl. 24    | -90507.6  | 257.3                    | -14983.6                 | -497.9                     |
|                               | sfc 22    | -94509.8  | 235.5                    | -2033.9                  | -932.4                     |
|                               | sc Max 22 | -94509.8  | 235.5                    | -2033.9                  | -676                       |
|                               | sc Med 22 | -94509.8  | 235.5                    | -2033.9                  | -486                       |
| 2527                          | Fl. 24    | -89195.1  | -402.5                   | 2194.1                   | 456.9                      |
|                               | sfc 22    | -93197.3  | -379.5                   | 2256.1                   | -955.0                     |
|                               | sc Max 22 | -93197.3  | -379.5                   | 2256.1                   | -69.8                      |
|                               | sc Med 22 | -93197.3  | -379.5                   | 2256.1                   | -48.0                      |

|                               |           |          |         |         |        |
|-------------------------------|-----------|----------|---------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |         |         |        |
| 1690                          | Fl. 29    | -85780.7 | 819.0   | -1595.7 | -451.2 |
|                               | sfc 27    | -87572.1 | 834.5   | -1620.1 | -890.7 |
|                               | sc Max 27 | -87572.1 | 834.5   | -1620.1 | -64.8  |
|                               | sc Med 27 | -87572.1 | 834.5   | -1620.1 | -45.1  |
| 2527                          | Fl. 29    | -84468.2 | -1037.0 | 1779.4  | -406.7 |
|                               | sfc 27    | -86259.6 | -1058.1 | 1809.2  | -915.8 |
|                               | sc Max 27 | -86259.6 | -1058.1 | 1809.2  | -67.3  |
|                               | sc Med 27 | -86259.6 | -1058.1 | 1809.2  | -44.4  |

|                               |           |          |         |         |        |
|-------------------------------|-----------|----------|---------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |         |         |        |
| 1690                          | Fl. 32    | -85550.5 | 823.1   | -1551.4 | -453.1 |
|                               | sfc 32    | -85550.5 | 823.1   | -1551.4 | -867.9 |
|                               | sc Max 32 | -85550.5 | 823.1   | -1551.4 | -63.1  |
|                               | sc Med 32 | -85550.5 | 823.1   | -1551.4 | -44.0  |
| 2527                          | Fl. 32    | -84238.0 | -1042.3 | 1733.1  | -408.8 |
|                               | sfc 32    | -84238.0 | -1042.3 | 1733.1  | -892.0 |
|                               | sc Max 32 | -84238.0 | -1042.3 | 1733.1  | -65.5  |
|                               | sc Med 32 | -84238.0 | -1042.3 | 1733.1  | -43.4  |

▲Pilastro: 2527/3364 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|----------------|-------|
| 2527 | 16   | -81162.5  | -5918.1                  | -3892.4                  | 1.00           | 1.00  |
| 3364 | 16   | -79850.0  | 5844.3                   | 4017.6                   | 1.00           | 1.00  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 18811.7                 | 22686.9                  | 11616.2                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Base |           |           |                          |                          |                            |
| 2527              | Fl. 24    | -76359.4  | 469.4                    | -2463.1                  | -328.0                     |
|                   | sfc 22    | -79843.3  | 439.2                    | -2539.7                  | -882.5                     |
|                   | sc Max 22 | -79843.3  | 439.2                    | -2539.7                  | -65.8                      |
|                   | sc Med 22 | -79843.3  | 439.2                    | -2539.7                  | -41.1                      |
| 3364              | Fl. 24    | -75046.9  | -460.6                   | 2543.0                   | -311.3                     |
|                   | sfc 22    | -78530.8  | -430.4                   | 2624.5                   | -879.4                     |
|                   | sc Max 22 | -78530.8  | -430.4                   | 2624.5                   | -65.8                      |
|                   | sc Med 22 | -78530.8  | -430.4                   | 2624.5                   | -40.4                      |

|                        |           |          |         |         |        |
|------------------------|-----------|----------|---------|---------|--------|
| Combinazioni Frequenti |           |          |         |         |        |
| 2527                   | Fl. 29    | -72322.7 | 1148.5  | -2005.3 | -283.8 |
|                        | sfc 27    | -73920.9 | 1171.4  | -2041.8 | -850.8 |
|                        | sc Max 27 | -73920.9 | 1171.4  | -2041.8 | -63.8  |
|                        | sc Med 27 | -73920.9 | 1171.4  | -2041.8 | -38.0  |
| 3364                   | Fl. 29    | -71060.2 | -1134.1 | 2071.5  | -268.9 |
|                        | sfc 27    | -72608.4 | -1157.6 | 2110.2  | -845.7 |

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
|                               | sc Max 27 | -72608.4  | 1157.6                   | 2110.2                   | -63.0                      |
|                               | sc Med 27 | -72608.4  | 1157.6                   | 2110.2                   | -37.4                      |

|      |           |          |         |         |        |
|------|-----------|----------|---------|---------|--------|
| 2527 | Fl. 32    | -72180.0 | 1154.7  | -1956.0 | -286.3 |
|      | sfc 32    | -72180.0 | 1154.7  | -1956.0 | -828.2 |
|      | sc Max 32 | -72180.0 | 1154.7  | -1956.0 | -62.0  |
|      | sc Med 32 | -72180.0 | 1154.7  | -1956.0 | -37.2  |
| 3364 | Fl. 32    | -70867.5 | -1140.5 | 2021.3  | -271.4 |
|      | sfc 32    | -70867.5 | -1140.5 | 2021.3  | -822.9 |
|      | sc Max 32 | -70867.5 | -1140.5 | 2021.3  | -61.8  |
|      | sc Med 32 | -70867.5 | -1140.5 | 2021.3  | -36.5  |

▲Pilastro: 3364/4201 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 3364 | 16   | -65229.6  | -5745.8                  | -4214.9                  | 1.00           | 1.00           | 0.29  |
| 4201 | 16   | -65987.1  | 5710.1                   | 4295.0                   | 1.00           | 1.00           | 0.29  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>ed2</sub><br>[kg] | V <sub>ed3</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 19705.0                 | 22686.9                  | 13090.3                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Base |           |           |                          |                          |                            |
| 3364              | Fl. 24    | -61866.6  | 390.8                    | -2651.6                  | -205.3                     |
|                   | sfc 22    | -64800.1  | 354.5                    | -2743.8                  | -778.1                     |
|                   | sc Max 22 | -64800.1  | 354.5                    | -2743.8                  | -59.1                      |
|                   | sc Med 22 | -64800.1  | 354.5                    | -2743.8                  | -33.4                      |
| 4201              | Fl. 24    | -60554.1  | -398.9                   | 2697.4                   | -190.4                     |
|                   | sfc 22    | -63487.6  | -363.6                   | 2792.4                   | -773.1                     |
|                   | sc Max 22 | -63487.6  | -363.6                   | 2792.4                   | -59.0                      |
|                   | sc Med 22 | -63487.6  | -363.6                   | 2792.4                   | -32.7                      |

|                        |           |          |         |         |        |
|------------------------|-----------|----------|---------|---------|--------|
| Combinazioni Frequenti |           |          |         |         |        |
| 3364                   | Fl. 29    | -58739.0 | 1027.9  | -2163.5 | -174.0 |
|                        | sfc 27    | -60036.9 | 1048.5  | -2207.0 | -748.7 |
|                        | sc Max 27 | -60036.9 | 1048.5  | -2207.0 | -57.1  |
|                        | sc Med 27 | -60036.9 | 1048.5  | -2207.0 | -30.9  |
| 4201                   | Fl. 29    | -57406.5 | -1086.2 | 2199.5  | -159.9 |
|                        | sfc 27    | -58734.4 | -1057.8 | 2244.1  | -742.6 |
|                        | sc Max 27 | -58734.4 | -1057.8 | 2244.1  | -56.6  |
|                        | sc Med 27 | -58734.4 | -1057.8 | 2244.1  | -30.2  |

|                               |           |          |         |         |        |
|-------------------------------|-----------|----------|---------|---------|--------|
| Combinazioni Quasi Permanenti |           |          |         |         |        |
| 3364                          | Fl. 32    | -58992.0 | 1034.4  | -2113.6 | -176.8 |
|                               | sfc 32    | -58992.0 | 1034.4  | -2113.6 | -727.9 |
|                               | sc Max 32 | -58992.0 | 1034.4  | -2113.6 | -55.5  |
|                               | sc Med 32 | -58992.0 | 1034.4  | -2113.6 | -30.2  |
| 4201                          | Fl. 32    | -57279.5 | -1042.9 | 2148.8  | -162.8 |
|                               | sfc 32    | -57279.5 | -1042.9 | 2148.8  | -721.6 |
|                               | sc Max 32 | -57279.5 | -1042.9 | 2148.8  | -55.2  |
|                               | sc Med 32 | -57279.5 | -1042.9 | 2148.8  | -29.5  |

▲Pilastro: 4201/5038 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 4201 | 16   | -49147.2  | -5970.9                  | -4657.0                  | 1.00           | 1.00           | 0.29  |
| 5038 | 16   | -47884.7  | 6511.5                   | 4994.1                   | 1.00           | 1.00           | 0.32  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | Staffe    |
|-----------|----------|------------------|-------------------|------------------|-------------------|-----------|
| 0.13      | 3.63     | 20748.0          | 22686.9           | 14897.8          | 19500.5           | ø 12/12.5 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb       | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-------------------|-------------------|-----------------------------------|
| Combinazioni Quali Permanenti |            |           |                   |                   |                                   |
| 4201                          | Fl. 24     | -47160.6  | 401.2             | -24927.3          | -64.7                             |
|                               | s/c 22     | -49519.3  | 357.7             | -30407            | -697.7                            |
|                               | s/c Max 22 | -49519.3  | 357.7             | -30407            | -53.9                             |
|                               | s/c Med 22 | -49519.3  | 357.7             | -30407            | -25.9                             |
| 5038                          | Fl. 24     | -45848.1  | -462.4            | 31531             | -23.8                             |
|                               | s/c 22     | -48206.8  | -416.7            | 3277.4            | -706.1                            |
|                               | s/c Max 22 | -48206.8  | -416.7            | 3277.4            | -55.9                             |
|                               | s/c Med 22 | -48206.8  | -416.7            | 3277.4            | -26.4                             |

|                               |            |          |         |          |        |
|-------------------------------|------------|----------|---------|----------|--------|
| Combinazioni Quali Permanenti |            |          |         |          |        |
| 4201                          | Fl. 29     | -44990.4 | 1051.3  | -23960.0 | -43.3  |
|                               | s/c 27     | -46032.7 | 1072.3  | -24480   | -665.3 |
|                               | s/c Max 27 | -46032.7 | 1072.3  | -24480   | -52.2  |
|                               | s/c Med 27 | -46032.7 | 1072.3  | -24480   | -24.2  |
| 5038                          | Fl. 29     | -45677.9 | -1176.1 | 2583.5   | -1.4   |
|                               | s/c 27     | -44720.2 | -1200.6 | 2641.3   | -685.6 |
|                               | s/c Max 27 | -44720.2 | -1200.6 | 2641.3   | -54.4  |
|                               | s/c Med 27 | -44720.2 | -1200.6 | 2641.3   | -24.2  |

|                               |            |          |         |         |        |
|-------------------------------|------------|----------|---------|---------|--------|
| Combinazioni Quali Permanenti |            |          |         |         |        |
| 4201                          | Fl. 32     | -44895.3 | 1059.0  | -2344.3 | -46.9  |
|                               | s/c 32     | -44895.3 | 1059.0  | -2344.3 | -645.8 |
|                               | s/c Max 32 | -44895.3 | 1059.0  | -2344.3 | -50.7  |
|                               | s/c Med 32 | -44895.3 | 1059.0  | -2344.3 | -23.5  |
| 5038                          | Fl. 32     | -43582.8 | -1184.9 | 2528.0  | -5.7   |
|                               | s/c 32     | -43582.8 | -1184.9 | 2528.0  | -664.8 |
|                               | s/c Max 32 | -43582.8 | -1184.9 | 2528.0  | -52.7  |
|                               | s/c Med 32 | -43582.8 | -1184.9 | 2528.0  | -23.5  |

▲Pilastro: 5038/5875 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\alpha_{12}$<br>[kg] | $\alpha_{13}$<br>[kg] | Sd/sr |
|------|------|-----------|-------------------|-------------------|-----------------------|-----------------------|-------|
| 5038 | 16   | -34749.7  | -2878.3           | -2708.3           | 1.00                  | 1.00                  | 0.28  |
| 5875 | 16   | -33905.9  | 3142.6            | 2913.5            | 1.00                  | 1.00                  | 0.30  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | Staffe     |
|-----------|----------|------------------|-------------------|------------------|-------------------|------------|
| 0.13      | 3.63     | 10542.0          | 13595.1           | 8782.5           | 13595.1           | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb       | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-------------------|-------------------|-----------------------------------|
| Combinazioni Quali Permanenti |            |           |                   |                   |                                   |
| 5038                          | Fl. 24     | -33000.0  | 169.0             | -1725.4           | -83.5                             |
|                               | s/c 22     | -34789.3  | 146.4             | -1799.7           | -673.1                            |
|                               | s/c Max 22 | -34789.3  | 146.4             | -1799.7           | -54.2                             |
|                               | s/c Med 22 | -34789.3  | 146.4             | -1799.7           | -26.1                             |
| 5875                          | Fl. 24     | -32156.3  | -192.3            | 1863.2            | -45.2                             |
|                               | s/c 22     | -33945.5  | -167.6            | 1945.3            | -690.5                            |
|                               | s/c Max 22 | -33945.5  | -167.6            | 1945.3            | -56.3                             |
|                               | s/c Med 22 | -33945.5  | -167.6            | 1945.3            | -26.9                             |

|                               |            |          |        |         |        |
|-------------------------------|------------|----------|--------|---------|--------|
| Combinazioni Quali Permanenti |            |          |        |         |        |
| 5038                          | Fl. 29     | -31528.7 | 480.2  | -1420.3 | -67.4  |
|                               | s/c 27     | -32418.9 | 480.1  | -1454.4 | -647.0 |
|                               | s/c Max 27 | -32418.9 | 480.1  | -1454.4 | -52.5  |
|                               | s/c Med 27 | -32418.9 | 480.1  | -1454.4 | -24.3  |
| 5875                          | Fl. 29     | -30784.9 | -532.4 | 1535.0  | -29.4  |
|                               | s/c 27     | -31575.1 | -543.8 | 1572.5  | -665.2 |

| Nodo                          | Comb       | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-------------------|-------------------|-----------------------------------|
| Combinazioni Quali Permanenti |            |           |                   |                   |                                   |
|                               | s/c Max 27 | -31575.1  | -543.8            | 1572.5            | -54.0                             |
|                               | s/c Med 27 | -31575.1  | -543.8            | 1572.5            | -24.4                             |

|                               |            |          |        |         |        |
|-------------------------------|------------|----------|--------|---------|--------|
| Combinazioni Quali Permanenti |            |          |        |         |        |
| 5038                          | Fl. 32     | -31575.8 | 484.5  | -1391.4 | -70.7  |
|                               | s/c 32     | -31575.8 | 484.5  | -1391.4 | -627.4 |
|                               | s/c Max 32 | -31575.8 | 484.5  | -1391.4 | -50.8  |
|                               | s/c Med 32 | -31575.8 | 484.5  | -1391.4 | -23.7  |
| 5875                          | Fl. 32     | -30732.1 | -537.2 | 1504.0  | -33.4  |
|                               | s/c 32     | -30732.1 | -537.2 | 1504.0  | -644.4 |
|                               | s/c Max 32 | -30732.1 | -537.2 | 1504.0  | -52.8  |
|                               | s/c Med 32 | -30732.1 | -537.2 | 1504.0  | -23.1  |

▲Pilastro: 5875/6712 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\alpha_{12}$<br>[kg] | $\alpha_{13}$<br>[kg] | Sd/sr |
|------|------|-----------|-------------------|-------------------|-----------------------|-----------------------|-------|
| 5875 | 16   | -17821.5  | -3228.7           | -3245.4           | 1.00                  | 1.00                  | 0.33  |
| 6712 | 16   | -16977.8  | 3299.7            | 3421.3            | 1.00                  | 1.00                  | 0.34  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | $V_{ed}$<br>[kg] | $V_{red}$<br>[kg] | Staffe     |
|-----------|----------|------------------|-------------------|------------------|-------------------|------------|
| 0.13      | 3.63     | 10617.0          | 13595.1           | 9734.6           | 13595.1           | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb       | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|------------|-----------|-------------------|-------------------|-----------------------------------|
| Combinazioni Quali Permanenti |            |           |                   |                   |                                   |
| 5875                          | Fl. 22     | -21244.5  | 186.3             | -2192.3           | -237.1                            |
|                               | s/c 22     | -21244.5  | 186.3             | -2192.3           | -619.0                            |
|                               | s/c Max 22 | -21244.5  | 186.3             | -2192.3           | -55.1                             |
|                               | s/c Med 22 | -21244.5  | 186.3             | -2192.3           | -25.8                             |
| 6712                          | Fl. 22     | -20400.7  | -240.4            | 2323.7            | -312.2                            |
|                               | s/c 22     | -20400.7  | -240.4            | 2323.7            | -646.1                            |
|                               | s/c Max 22 | -20400.7  | -240.4            | 2323.7            | -58.6                             |
|                               | s/c Med 22 | -20400.7  | -240.4            | 2323.7            | -27.0                             |

|                               |            |          |        |         |        |
|-------------------------------|------------|----------|--------|---------|--------|
| Combinazioni Quali Permanenti |            |          |        |         |        |
| 5875                          | Fl. 27     | -19814.6 | 582.4  | -1774.0 | -222.1 |
|                               | s/c 27     | -19814.6 | 582.4  | -1774.0 | -603.4 |
|                               | s/c Max 27 | -19814.6 | 582.4  | -1774.0 | -53.6  |
|                               | s/c Med 27 | -19814.6 | 582.4  | -1774.0 | -21.9  |
| 6712                          | Fl. 27     | -18970.8 | -643.7 | 1878.4  | -288.8 |
|                               | s/c 27     | -18970.8 | -643.7 | 1878.4  | -628.8 |
|                               | s/c Max 27 | -18970.8 | -643.7 | 1878.4  | -56.8  |
|                               | s/c Med 27 | -18970.8 | -643.7 | 1878.4  | -22.9  |

|                               |            |          |        |         |        |
|-------------------------------|------------|----------|--------|---------|--------|
| Combinazioni Quali Permanenti |            |          |        |         |        |
| 5875                          | Fl. 32     | -19251.6 | 576.3  | -1695.1 | -209.4 |
|                               | s/c 32     | -19251.6 | 576.3  | -1695.1 | -582.7 |
|                               | s/c Max 32 | -19251.6 | 576.3  | -1695.1 | -51.7  |
|                               | s/c Med 32 | -19251.6 | 576.3  | -1695.1 | -21.1  |
| 6712                          | Fl. 32     | -18407.9 | -636.2 | 1793.7  | -273.6 |
|                               | s/c 32     | -18407.9 | -636.2 | 1793.7  | -606.7 |
|                               | s/c Max 32 | -18407.9 | -636.2 | 1793.7  | -54.7  |
|                               | s/c Med 32 | -18407.9 | -636.2 | 1793.7  | -22.0  |

▲Pilastro: 6712/7285 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af 8 ø 22 Af=30.41 [cm<sup>2</sup>] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | $M_{12}$<br>[kgm] | $M_{13}$<br>[kgm] | $\alpha_{12}$<br>[kg] | $\alpha_{13}$<br>[kg] | Sd/sr |
|------|------|-----------|-------------------|-------------------|-----------------------|-----------------------|-------|
| 6712 | 16   | -4543.1   | -1672.3           | -3815.4           | 1.00                  | 1.00                  | 0.19  |
| 7285 | 1    | -8991.0   | 1.8               | 31.0              | 1.00                  | 1.00                  | 0.03  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 57022                   | 135951                   | 53436                    | 135951                   | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 6712              | Fl. 22    | -7561.3   | 564                      | -1238.7                  | -241.9                     |
|                   | sfc 22    | -7561.3   | 564                      | -1238.7                  | -300.0                     |
|                   | sc Max 22 | -7561.3   | 564                      | -1238.7                  | -28.6                      |
|                   | sc Med 22 | -7561.3   | 564                      | -1238.7                  | -138                       |
| 7285              | Fl. 23    | -6884.6   | 2.9                      | 21.5                     | -63.7                      |
|                   | sfc 22    | -6717.5   | 0.6                      | 22.6                     | -77.7                      |
|                   | sc Max 22 | -6717.5   | 0.6                      | 22.6                     | -5.3                       |
|                   | sc Med 22 | -6717.5   | 0.6                      | 22.6                     | -5.0                       |

|                        |           |         |      |         |        |
|------------------------|-----------|---------|------|---------|--------|
| Combinazioni Frequenti |           |         |      |         |        |
| 6712                   | Fl. 27    | -7142.7 | 2703 | -1000.9 | -216.5 |
|                        | sfc 27    | -7142.7 | 2703 | -1000.9 | -297.9 |
|                        | sc Max 27 | -7142.7 | 2703 | -1000.9 | -28.2  |
|                        | sc Med 27 | -7142.7 | 2703 | -1000.9 | -11.5  |
| 7285                   | Fl. 28    | -5949.7 | -2.1 | 17.6    | -62.9  |
|                        | sfc 27    | -6099.0 | -3.4 | 18.1    | -72.9  |
|                        | sc Max 27 | -6099.0 | -3.4 | 18.1    | -5.0   |
|                        | sc Med 27 | -6099.0 | -3.4 | 18.1    | -4.6   |

|                               |           |         |       |        |        |
|-------------------------------|-----------|---------|-------|--------|--------|
| Combinazioni Quasi Permanenti |           |         |       |        |        |
| 6712                          | Fl. 32    | -6875.4 | 268.7 | -955.2 | -207.5 |
|                               | sfc 32    | -6875.4 | 268.7 | -955.2 | -287.0 |
|                               | sc Max 32 | -6875.4 | 268.7 | -955.2 | -27.1  |
|                               | sc Med 32 | -6875.4 | 268.7 | -955.2 | -11.0  |
| 7285                          | Fl. 32    | -6031.7 | -3.4  | 17.3   | -63.7  |
|                               | sfc 32    | -6031.7 | -3.4  | 17.3   | -69.8  |
|                               | sc Max 32 | -6031.7 | -3.4  | 17.3   | -4.7   |
|                               | sc Med 32 | -6031.7 | -3.4  | 17.3   | -4.4   |

▲Pilastro: 182/1002 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | α <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 182  | 1    | -309598.8 | -6385.5                  | 705.6                    | 1.00           | 1.00           | 0.48  |
| 1002 | 1    | -307039.4 | 6204.6                   | -717.7                   | 1.00           | 1.00           | 0.47  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 0.92     | 152740                  | 60284.1                  | 7567.8                   | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 152740                  | 44290.4                  | 7567.8                   | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 152740                  | 60284.1                  | 7567.8                   | 33178.0                  | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 182               | Fl. 25    | -222085.4 | -4520.6                  | 915.6                    | -937.2                     |
|                   | sfc 22    | -232418.5 | -4642.0                  | 594.7                    | -1484.7                    |
|                   | sc Max 22 | -232418.5 | -4642.0                  | 594.7                    | -102.5                     |
|                   | sc Med 22 | -232418.5 | -4642.0                  | 594.7                    | -83.6                      |
| 1002              | Fl. 25    | -220096.7 | 5307.8                   | -877.9                   | -912.8                     |
|                   | sfc 22    | -230449.8 | 4561.9                   | -583.4                   | -1470.0                    |
|                   | sc Max 25 | -220096.7 | 5307.8                   | -877.9                   | -102.0                     |
|                   | sc Med 22 | -230449.8 | 4561.9                   | -583.4                   | -82.9                      |

|                        |           |           |         |        |         |
|------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Frequenti |           |           |         |        |         |
| 182                    | Fl. 30    | -267088   | -3741.2 | 1382.9 | -873.9  |
|                        | sfc 30    | -267088   | -3741.2 | 1382.9 | -1357.9 |
|                        | sc Max 30 | -267088   | -3741.2 | 1382.9 | -94.9   |
|                        | sc Med 27 | -213093.4 | -3256.7 | 970.7  | -76.7   |

▲Verifiche a Taglio

| Nodo | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| 1002 | Fl. 30    | -204740.0 | -4620.2                  | 1208.6                   | -837.2                     |
|      | sfc 30    | -204740.0 | -4620.2                  | 1208.6                   | -1372.6                    |
|      | sc Max 30 | -204740.0 | -4620.2                  | 1208.6                   | -96.1                      |
|      | sc Med 27 | -211124.6 | 3555.5                   | -827.7                   | -76.0                      |

|                               |           |           |         |        |         |
|-------------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Quasi Permanenti |           |           |         |        |         |
| 182                           | Fl. 32    | -207563.0 | -3151.4 | 942.9  | -930.6  |
|                               | sfc 32    | -207563.0 | -3151.4 | 942.9  | -1310.4 |
|                               | sc Max 32 | -207563.0 | -3151.4 | 942.9  | -90.7   |
|                               | sc Med 32 | -207563.0 | -3151.4 | 942.9  | -74.7   |
| 1002                          | Fl. 32    | -205594.3 | 3438.5  | -803.4 | -916.8  |
|                               | sfc 32    | -205594.3 | 3438.5  | -803.4 | -1303.0 |
|                               | sc Max 32 | -205594.3 | 3438.5  | -803.4 | -90.1   |
|                               | sc Med 32 | -205594.3 | 3438.5  | -803.4 | -74.0   |

▲Pilastro: 1002/1839 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >

Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.E.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | α <sub>u</sub> | σ <sub>u</sub> | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|----------------|----------------|-------|
| 1002 | 1    | -270734.5 | -6989.9                  | 773.2                    | 1.00           | 1.00           | 0.43  |
| 1839 | 1    | -268175.2 | 7735.5                   | -898.8                   | 1.00           | 1.00           | 0.43  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | V <sub>est</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 0.92     | 16466.4                 | 62084.1                  | 6988.9                   | 33178.0                  | ø 14/10.0' |
| 0.92      | 2.83     | 16466.4                 | 44290.4                  | 6988.9                   | 24375.6                  | ø 12/10.0' |
| 2.83      | 3.63     | 16466.4                 | 62084.1                  | 6988.9                   | 33178.0                  | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 1002              | Fl. 26    | -195057.0 | -5607.4                  | 671.8                    | -778.3                     |
|                   | sfc 22    | -203102.5 | -5151.6                  | 614.4                    | -1348.8                    |
|                   | sc Max 22 | -203102.5 | -5151.6                  | 614.4                    | -93.8                      |
|                   | sc Med 22 | -203102.5 | -5151.6                  | 614.4                    | -73.1                      |
| 1839              | Fl. 26    | -193988.2 | 5688.8                   | -683.1                   | -765.5                     |
|                   | sfc 22    | -201133.8 | 5680.7                   | -713.3                   | -1366.3                    |
|                   | sc Max 22 | -201133.8 | 5680.7                   | -713.3                   | -95.4                      |
|                   | sc Med 22 | -201133.8 | 5680.7                   | -713.3                   | -72.4                      |

|                        |           |           |         |        |         |
|------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Frequenti |           |           |         |        |         |
| 1002                   | Fl. 31    | -181960.8 | -4824.0 | 893.1  | -726.2  |
|                        | sfc 31    | -181960.8 | -4824.0 | 893.1  | -1238.6 |
|                        | sc Max 31 | -181960.8 | -4824.0 | 893.1  | -86.2   |
|                        | sc Med 27 | -186017.5 | -4105.1 | 801.1  | -66.9   |
| 1839                   | Fl. 31    | -180012.0 | 4576.2  | -906.3 | -725.0  |
|                        | sfc 27    | -184048.7 | 4442.3  | -921.7 | -1235.7 |
|                        | sc Max 27 | -184048.7 | 4442.3  | -921.7 | -86.4   |
|                        | sc Med 27 | -184048.7 | 4442.3  | -921.7 | -66.2   |

|                               |           |           |         |        |         |
|-------------------------------|-----------|-----------|---------|--------|---------|
| Combinazioni Quasi Permanenti |           |           |         |        |         |
| 1002                          | Fl. 32    | -181966.3 | -3957.0 | 715.2  | -764.7  |
|                               | sfc 32    | -181966.3 | -3957.0 | 715.2  | -1190.4 |
|                               | sc Max 32 | -181966.3 | -3957.0 | 715.2  | -82.8   |
|                               | sc Med 32 | -181966.3 | -3957.0 | 715.2  | -65.2   |
| 1839                          | Fl. 32    | -179117.5 | 4272.2  | -892.3 | -733.7  |
|                               | sfc 32    | -179117.5 | 4272.2  | -892.3 | -1200.2 |
|                               | sc Max 32 | -179117.5 | 4272.2  | -892.3 | -83.9   |
|                               | sc Med 32 | -179117.5 | 4272.2  | -892.3 | -64.5   |

▲Pilastro: 1839/2676 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1424 x 4 V + 1424 x 2 B + 1424 x 2 H >

Staffe: ø 12/12.5' x 350.0

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 1839 | 1    | -233829.5 | -380.2          | 972.2           | 1.00            | 1.00            | 0.52  |
| 2676 | 1    | -232423.2 | 3975.5          | -1191.8         | 1.00            | 1.00            | 0.52  |

▲ Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| 0.13 | 3.63 | 7350.3          | 22686.9         | 5185.0          | 15600.5         | ø 12/12.5 |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb        | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------|-------------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Base |             |           |                 |                 |                 |   |
| 1839              | Fl. 25      | -166877.4 | -2398.0         | 733.6           | -1031.1         |   |
|                   | sfc. 27     | -175598.7 | -2470.5         | 758.5           | -1622.0         |   |
|                   | sc. Max. 22 | -175598.7 | -2470.5         | 758.5           | -114.4          |   |
|                   | sc. Med. 22 | -175598.7 | -2470.5         | 758.5           | -90.2           |   |
| 2676              | Fl. 25      | -355564.9 | 2726.9          | -887.4          | -977.2          |   |
|                   | sfc. 22     | -173986.2 | 2906.1          | -924.6          | -1662.2         |   |
|                   | sc. Max. 22 | -173986.2 | 2906.1          | -924.6          | -118.3          |   |
|                   | sc. Med. 22 | -173986.2 | 2906.1          | -924.6          | -89.6           |   |

|                        |             |           |         |         |         |  |
|------------------------|-------------|-----------|---------|---------|---------|--|
| Combinazioni Frequenti |             |           |         |         |         |  |
| 1839                   | Fl. 30      | -155385.5 | -1798.8 | 889.5   | -973.5  |  |
|                        | sfc. 27     | -160445.0 | -1856.5 | 896.5   | -1470.2 |  |
|                        | sc. Max. 27 | -160445.0 | -1856.5 | 896.5   | -103.5  |  |
|                        | sc. Med. 27 | -160445.0 | -1856.5 | 896.5   | -82.6   |  |
| 2676                   | Fl. 30      | -154072.0 | 2075.9  | -1041.9 | -927.1  |  |
|                        | sfc. 27     | -159132.5 | 2198.0  | -1059.1 | -1502.5 |  |
|                        | sc. Max. 27 | -159132.5 | 2198.0  | -1059.1 | -106.7  |  |
|                        | sc. Med. 27 | -159132.5 | 2198.0  | -1059.1 | -81.9   |  |

|                               |             |           |         |         |         |  |
|-------------------------------|-------------|-----------|---------|---------|---------|--|
| Combinazioni Quasi Permanenti |             |           |         |         |         |  |
| 1839                          | Fl. 32      | -156116.0 | -1782.6 | 868.7   | -982.3  |  |
|                               | sfc. 32     | -156116.0 | -1782.6 | 868.7   | -1428.3 |  |
|                               | sc. Max. 32 | -156116.0 | -1782.6 | 868.7   | -100.5  |  |
|                               | sc. Med. 32 | -156116.0 | -1782.6 | 868.7   | -80.4   |  |
| 2676                          | Fl. 32      | -154803.5 | 2109.6  | -1026.6 | -931.4  |  |
|                               | sfc. 32     | -154803.5 | 2109.6  | -1026.6 | -1458.9 |  |
|                               | sc. Max. 32 | -154803.5 | 2109.6  | -1026.6 | -103.5  |  |
|                               | sc. Med. 32 | -154803.5 | 2109.6  | -1026.6 | -79.7   |  |

▲ Pilastro: 2676/3513 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 2676 | 1    | -198513.4 | -4933.0         | 1551.4          | 1.00            | 1.00            | 0.46  |
| 3513 | 1    | -196807.1 | 4346.5          | -1680.7         | 1.00            | 1.00            | 0.46  |

▲ Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| 0.13 | 3.63 | 9673.7          | 22686.9         | 6868.6          | 15600.5         | ø 12/12.5 |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb        | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------|-------------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Base |             |           |                 |                 |                 |   |
| 2676              | Fl. 23      | -143723.2 | -3342.3         | 1055.5          | -743.6          |   |
|                   | sfc. 22     | -148701.0 | -3181.4         | 1195.9          | -1513.9         |   |
|                   | sc. Max. 22 | -148701.0 | -3181.4         | 1195.9          | -109.5          |   |
|                   | sc. Med. 22 | -148701.0 | -3181.4         | 1195.9          | -76.5           |   |
| 3513              | Fl. 23      | -142410.7 | 3191.1          | -1149.4         | -737.1          |   |
|                   | sfc. 22     | -147388.5 | 3025.3          | -1292.6         | -1499.9         |   |
|                   | sc. Max. 22 | -147388.5 | 3025.3          | -1292.6         | -108.6          |   |
|                   | sc. Med. 22 | -147388.5 | 3025.3          | -1292.6         | -75.9           |   |

Staffe: ø 12/12.5' x 3500

▲ Pilastro: 4350/5187 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5' x 3500

| Nodo | Comb        | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|------|-------------|-----------|-----------------|-----------------|-----------------|---|
| 2676 | Fl. 26      | -132215.4 | -2679.8         | 1243.7          | -715.5          |   |
|      | sfc. 27     | -135598.0 | -2412.8         | 1322.5          | -1365.0         |   |
|      | sc. Max. 27 | -135598.0 | -2412.8         | 1322.5          | -98.5           |   |
|      | sc. Med. 27 | -135598.0 | -2412.8         | 1322.5          | -70.0           |   |
| 3513 | Fl. 26      | -131502.9 | 2339.5          | -1329.5         | -708.5          |   |
|      | sfc. 27     | -134668.4 | 2268.3          | -1409.9         | -1351.1         |   |
|      | sc. Max. 27 | -134668.4 | 2268.3          | -1409.9         | -97.6           |   |
|      | sc. Med. 27 | -134668.4 | 2268.3          | -1409.9         | -69.3           |   |

|                               |             |           |         |         |         |  |
|-------------------------------|-------------|-----------|---------|---------|---------|--|
| Combinazioni Quasi Permanenti |             |           |         |         |         |  |
| 2676                          | Fl. 32      | -132243.5 | -2313.4 | 1282.1  | -717.5  |  |
|                               | sfc. 32     | -132243.5 | -2313.4 | 1282.1  | -1324.4 |  |
|                               | sc. Max. 32 | -132243.5 | -2313.4 | 1282.1  | -95.6   |  |
|                               | sc. Med. 32 | -132243.5 | -2313.4 | 1282.1  | -68.1   |  |
| 3513                          | Fl. 32      | -130931.0 | 2173.2  | -1367.1 | -711.0  |  |
|                               | sfc. 32     | -130931.0 | 2173.2  | -1367.1 | -1310.7 |  |
|                               | sc. Max. 32 | -130931.0 | 2173.2  | -1367.1 | -94.6   |  |
|                               | sc. Med. 32 | -130931.0 | 2173.2  | -1367.1 | -67.4   |  |

▲ Pilastro: 3513/4350 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >

Staffe: ø 12/12.5' x 3500

▲ Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | α <sub>Ed</sub> | α <sub>Ed</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 3513 | 1    | -163517.3 | -3813.8         | 1931.2          | 1.00            | 1.00            | 0.39  |
| 4350 | 1    | -161811.1 | 3654.8          | -2017.9         | 1.00            | 1.00            | 0.38  |

▲ Verifiche a Taglio

| Da   | A    | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | V <sub>Ed</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| 0.13 | 3.63 | 10588.3         | 22686.9         | 8362.7          | 19500.5         | ø 12/12.5 |

▲ Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb        | N         | M <sub>Ed</sub> | M <sub>Ed</sub> | M <sub>Ed</sub> | σ |
|-------------------|-------------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Base |             |           |                 |                 |                 |   |
| 3513              | Fl. 23      | -117866.3 | -2933.4         | 1328.8          | -552.2          |   |
|                   | sfc. 22     | -122350.8 | -2778.5         | 1479.2          | -1303.6         |   |
|                   | sc. Max. 22 | -122350.8 | -2778.5         | 1479.2          | -95.5           |   |
|                   | sc. Med. 22 | -122350.8 | -2778.5         | 1479.2          | -63.0           |   |
| 4350              | Fl. 23      | -116553.8 | 2820.4          | -1392.5         | -545.4          |   |
|                   | sfc. 22     | -121038.3 | 2658.1          | -1543.8         | -1289.6         |   |
|                   | sc. Max. 22 | -121038.3 | 2658.1          | -1543.8         | -94.5           |   |
|                   | sc. Med. 22 | -121038.3 | 2658.1          | -1543.8         | -62.3           |   |

|                        |             |           |         |         |         |  |
|------------------------|-------------|-----------|---------|---------|---------|--|
| Combinazioni Frequenti |             |           |         |         |         |  |
| 3513                   | Fl. 26      | -109368.2 | -2313.6 | 1491.1  | -536.7  |  |
|                        | sfc. 27     | -111757.5 | -2064.6 | 1575.2  | -1172.8 |  |
|                        | sc. Max. 27 | -111757.5 | -2064.6 | 1575.2  | -85.7   |  |
|                        | sc. Med. 27 | -111757.5 | -2064.6 | 1575.2  | -57.5   |  |
| 4350                   | Fl. 26      | -108055.7 | 2021.2  | -1548.0 | -530.3  |  |
|                        | sfc. 27     | -110445.0 | 1949.4  | -1632.7 | -1158.5 |  |
|                        | sc. Max. 27 | -110445.0 | 1949.4  | -1632.7 | -84.7   |  |
|                        | sc. Med. 27 | -110445.0 | 1949.4  | -1632.7 | -56.8   |  |

|                               |             |           |         |         |         |  |
|-------------------------------|-------------|-----------|---------|---------|---------|--|
| Combinazioni Quasi Permanenti |             |           |         |         |         |  |
| 3513                          | Fl. 32      | -108686.6 | -1975.1 | 1327.5  | -540.1  |  |
|                               | sfc. 32     | -108686.6 | -1975.1 | 1327.5  | -1136.9 |  |
|                               | sc. Max. 32 | -108686.6 | -1975.1 | 1327.5  | -83.0   |  |
|                               | sc. Med. 32 | -108686.6 | -1975.1 | 1327.5  | -55.9   |  |
| 4350                          | Fl. 32      | -107296.1 | 1863.4  | -1583.4 | -534.0  |  |
|                               | sfc. 32     | -107296.1 | 1863.4  | -1583.4 | -1122.8 |  |
|                               | sc. Max. 32 | -107296.1 | 1863.4  | -1583.4 | -82.0   |  |
|                               | sc. Med. 32 | -107296.1 | 1863.4  | -1583.4 | -55.2   |  |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| 4350 | 1    | -128910.9 | -3792.6         | 2411.3          | 1.00            | 1.00            | 0.33  |
| 5187 | 1    | -127204.7 | 4092.0          | -2687.7         | 1.00            | 1.00            | 0.33  |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 12958.8         | 22668.9         | 10784.3         | 19500.5         | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Rare             |           |          |                 |                 |                 |                 |
| 4350                          | Fl 23     | -92313.7 | -2904.6         | 1666.6          | -326.6          |                 |
|                               | sf 22     | -96296.1 | -2758.2         | 1839.4          | -1133.5         |                 |
|                               | sc Max 22 | -96296.1 | -2758.2         | 1839.4          | -85.0           |                 |
|                               | sc Med 22 | -96296.1 | -2758.2         | 1839.4          | -49.6           |                 |
| 5187                          | Fl 23     | -91001.2 | 3135.3          | -1860.6         | -280.2          |                 |
|                               | sf 22     | -94983.6 | 2972.7          | -2048.4         | -1159.6         |                 |
|                               | sc Max 22 | -94983.6 | 2972.7          | -2048.4         | -87.6           |                 |
|                               | sc Med 22 | -94983.6 | 2972.7          | -2048.4         | -48.9           |                 |
| Combinazioni Frequenti        |           |          |                 |                 |                 |                 |
| 4350                          | Fl 28     | -85788.6 | -2099.1         | 1816.9          | -327.7          |                 |
|                               | sf 27     | -87800.8 | -2035.6         | 1913.0          | -1016.1         |                 |
|                               | sc Max 27 | -87800.8 | -2035.6         | 1913.0          | -76.0           |                 |
|                               | sc Med 27 | -87800.8 | -2035.6         | 1913.0          | -45.2           |                 |
| 5187                          | Fl 28     | -84476.1 | 2251.1          | -2013.4         | -287.2          |                 |
|                               | sf 27     | -86488.3 | 2179.5          | -2119.6         | -1036.4         |                 |
|                               | sc Max 27 | -86488.3 | 2179.5          | -2119.6         | -78.1           |                 |
|                               | sc Med 27 | -86488.3 | 2179.5          | -2119.6         | -44.5           |                 |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |
| 4350                          | Fl 32     | -85235.7 | -1943.0         | 1854.9          | -332.6          |                 |
|                               | sf 32     | -85235.7 | -1943.0         | 1854.9          | -983.6          |                 |
|                               | sc Max 32 | -85235.7 | -1943.0         | 1854.9          | -73.6           |                 |
|                               | sc Med 32 | -85235.7 | -1943.0         | 1854.9          | -43.9           |                 |
| 5187                          | Fl 32     | -83923.2 | 2078.9          | -2055.3         | -293.3          |                 |
|                               | sf 32     | -83923.2 | 2078.9          | -2055.3         | -1002.6         |                 |
|                               | sc Max 32 | -83923.2 | 2078.9          | -2055.3         | -75.6           |                 |
|                               | sc Med 32 | -83923.2 | 2078.9          | -2055.3         | -43.2           |                 |

▲Pilastro: 5187/6024 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 5187 | 1    | -94793.2 | -1730.5         | 1627.7          | 1.00            | 1.00            | 0.34  |
| 6024 | 1    | -93696.3 | 1839.1          | -1821.6         | 1.00            | 1.00            | 0.34  |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Staffe    |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |           |
| 0.13 | 3.63 | 6279.2          | 23595.1         | 6158.1          | 13595.1         | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                   | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> |
|------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Rare      |           |          |                 |                 |                 |                 |
| 5187                   | Fl 23     | -67160.4 | -1330.6         | 1133.1          | -378.3          |                 |
|                        | sf 22     | -70598.9 | -1257.6         | 1236.7          | -1149.9         |                 |
|                        | sc Max 22 | -70598.9 | -1257.6         | 1236.7          | -88.6           |                 |
|                        | sc Med 22 | -70598.9 | -1257.6         | 1236.7          | -52.1           |                 |
| 6024                   | Fl 23     | -66536.6 | 1421.1          | -1270.0         | -355.4          |                 |
|                        | sf 22     | -69755.2 | 1386.5          | -1383.0         | -1173.9         |                 |
|                        | sc Max 22 | -69755.2 | 1386.5          | -1383.0         | -91.3           |                 |
|                        | sc Med 22 | -69755.2 | 1386.5          | -1383.0         | -51.4           |                 |
| Combinazioni Frequenti |           |          |                 |                 |                 |                 |

| Nodo | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> |
|------|-----------|----------|-----------------|-----------------|-----------------|-----------------|
| 5187 | Fl 28     | -62087.2 | -197.2          | 1397.9          | -373.8          |                 |
|      | sf 27     | -64029.9 | -916.9          | 1255.3          | -1030.4         |                 |
|      | sc Max 27 | -64029.9 | -916.9          | 1255.3          | -79.1           |                 |
|      | sc Med 27 | -64029.9 | -916.9          | 1255.3          | -47.3           |                 |
| 6024 | Fl 28     | -61643.5 | 1000.8          | -1334.7         | -336.3          |                 |
|      | sf 27     | -63259.1 | 966.7           | -1397.6         | -1049.5         |                 |
|      | sc Max 27 | -63259.1 | 966.7           | -1397.6         | -81.3           |                 |
|      | sc Med 27 | -63259.1 | 966.7           | -1397.6         | -46.6           |                 |

|                               |           |          |        |         |         |  |
|-------------------------------|-----------|----------|--------|---------|---------|--|
| Combinazioni Quasi Permanenti |           |          |        |         |         |  |
| 5187                          | Fl 32     | -62114.1 | -873.5 | 1217.1  | -377.1  |  |
|                               | sf 32     | -62114.1 | -873.5 | 1217.1  | -996.5  |  |
|                               | sc Max 32 | -62114.1 | -873.5 | 1217.1  | -76.4   |  |
|                               | sc Med 32 | -62114.1 | -873.5 | 1217.1  | -45.8   |  |
| 6024                          | Fl 32     | -61270.4 | 920.0  | -1354.8 | -341.1  |  |
|                               | sf 32     | -61270.4 | 920.0  | -1354.8 | -1014.2 |  |
|                               | sc Max 32 | -61270.4 | 920.0  | -1354.8 | -78.5   |  |
|                               | sc Med 32 | -61270.4 | 920.0  | -1354.8 | -45.2   |  |

▲Pilastro: 6024/6861 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-------|
| 6024 | 1    | -61816.4 | -2332.7         | 2200.7          | 1.00            | 1.00            | 0.29  |
| 6861 | 1    | -60719.5 | 2714.2          | -2360.0         | 1.00            | 1.00            | 0.30  |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>12</sub> | V <sub>13</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|------------|
| [m]  | [m]  | [kg]            | [kg]            | [kg]            | [kg]            |            |
| 0.13 | 3.63 | 8588.3          | 13595.1         | 8403.6          | 13595.1         | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | α <sub>12</sub> | α <sub>13</sub> |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|-----------------|
| Combinazioni Rare             |           |          |                 |                 |                 |                 |
| 6024                          | Fl 23     | -42803.9 | -1692.3         | 125.7           | -15.9           |                 |
|                               | sf 22     | -45762.4 | -1678.1         | 1665.1          | -1007.7         |                 |
|                               | sc Max 22 | -45762.4 | -1678.1         | 1665.1          | -83.5           |                 |
|                               | sc Med 22 | -45762.4 | -1678.1         | 1665.1          | -35.8           |                 |
| 6861                          | Fl 23     | -42087.2 | 1883.1          | -1629.6         | -83.8           |                 |
|                               | sf 22     | -44918.7 | 1933.9          | -1782.0         | -1062.1         |                 |
|                               | sc Max 22 | -44918.7 | 1933.9          | -1782.0         | -89.3           |                 |
|                               | sc Med 22 | -44918.7 | 1933.9          | -1782.0         | -36.7           |                 |
| Combinazioni Frequenti        |           |          |                 |                 |                 |                 |
| 6024                          | Fl 28     | -39955.4 | -1274.4         | 1589.1          | -8.6            |                 |
|                               | sf 27     | -41149.6 | -1252.2         | 1663.4          | -891.4          |                 |
|                               | sc Max 27 | -41149.6 | -1252.2         | 1663.4          | -73.6           |                 |
|                               | sc Med 27 | -41149.6 | -1252.2         | 1663.4          | -31.9           |                 |
| 6861                          | Fl 28     | -39111.7 | 1473.9          | -1694.1         | -59.0           |                 |
|                               | sf 27     | -40305.8 | 1457.9          | -1772.5         | -935.3          |                 |
|                               | sc Max 27 | -40305.8 | 1457.9          | -1772.5         | -78.4           |                 |
|                               | sc Med 27 | -40305.8 | 1457.9          | -1772.5         | -32.5           |                 |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |                 |
| 6024                          | Fl 32     | -39728.6 | -1192.2         | 1611.8          | -16.1           |                 |
|                               | sf 32     | -39728.6 | -1192.2         | 1611.8          | -858.9          |                 |
|                               | sc Max 32 | -39728.6 | -1192.2         | 1611.8          | -70.9           |                 |
|                               | sc Med 32 | -39728.6 | -1192.2         | 1611.8          | -30.8           |                 |
| 6861                          | Fl 32     | -38884.9 | 1388.8          | -1717.2         | -50.4           |                 |
|                               | sf 32     | -38884.9 | 1388.8          | -1717.2         | -900.6          |                 |
|                               | sc Max 32 | -38884.9 | 1388.8          | -1717.2         | -75.4           |                 |
|                               | sc Med 32 | -38884.9 | 1388.8          | -1717.2         | -31.4           |                 |

▲Pilastro: 6861/7434 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >

Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ <sub>12</sub> | σ <sub>13</sub> | σ <sub>11</sub> | Sd/Sr |
|------|------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 6861 | 1    | -22534.5 | -1586.5         | 1328.5          | 1.00            | 1.00            | 1.00            | 0.15            |       |
| 7434 | 1    | -21437.6 | 23.6            | -25.3           | 1.00            | 1.00            | 1.00            | 0.06            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>11</sub> | V <sub>12</sub> | V <sub>13</sub> | V <sub>11</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|
| 0.13 | 3.63 | 4921.5          | 3359.1          | 5286.3          | 1359.1          | 1359.1          | 1359.1          | ø 12/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------|---|
| Combinazioni Frequenti        |           |          |                 |                 |                 |   |
| 6861                          | Fl. 22    | -16724.6 | -1123.0         | 1001.1          | 204.3           |   |
|                               | sfc 22    | -16724.6 | -1123.0         | 1001.1          | -532.7          |   |
|                               | sc Max 22 | -16724.6 | -1123.0         | 1001.1          | -47.4           |   |
|                               | sc Med 22 | -16724.6 | -1123.0         | 1001.1          | -17.3           |   |
| 7434                          | Fl. 25    | -14717.9 | 14.8            | -18.1           | -157.9          |   |
|                               | sfc 22    | -15880.9 | 16.8            | -19.1           | -181.0          |   |
|                               | sc Max 22 | -15880.9 | 16.8            | -19.1           | -12.2           |   |
|                               | sc Med 22 | -15880.9 | 16.8            | -19.1           | -11.7           |   |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |   |
| 6861                          | Fl. 28    | -14044.2 | -858.1          | 944.8           | 176.6           |   |
|                               | sfc 27    | -14659.5 | -854.2          | 987.8           | -463.1          |   |
|                               | sc Max 27 | -14659.5 | -854.2          | 987.8           | -41.2           |   |
|                               | sc Med 27 | -14659.5 | -854.2          | 987.8           | -15.0           |   |
| 7434                          | Fl. 30    | -13084.2 | 10.8            | -18.3           | -139.9          |   |
|                               | sfc 27    | -13815.7 | 11.9            | -18.8           | -157.4          |   |
|                               | sc Max 27 | -13815.7 | 11.9            | -18.8           | -10.6           |   |
|                               | sc Med 27 | -13815.7 | 11.9            | -18.8           | -10.2           |   |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                 |   |
| 6861                          | Fl. 32    | -13949.5 | -813.6          | 956.9           | 170.3           |   |
|                               | sfc 32    | -13949.5 | -813.6          | 956.9           | -444.1          |   |
|                               | sc Max 32 | -13949.5 | -813.6          | 956.9           | -39.5           |   |
|                               | sc Med 32 | -13949.5 | -813.6          | 956.9           | -14.4           |   |
| 7434                          | Fl. 32    | -13105.8 | 11.1            | -18.2           | -140.6          |   |
|                               | sfc 32    | -13105.8 | 11.1            | -18.2           | -149.3          |   |
|                               | sc Max 32 | -13105.8 | 11.1            | -18.2           | -10.1           |   |
|                               | sc Med 32 | -13105.8 | 11.1            | -18.2           | -9.7            |   |

▲Pilastro: 183/1008 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ <sub>12</sub> | σ <sub>13</sub> | σ <sub>11</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 183  | 1    | -332164.4 | -3377.0         | 141.8           | 1.00            | 1.00            | 1.00            | 0.49            |       |
| 1008 | 1    | -329605.0 | 5182.3          | 204.9           | 1.00            | 1.00            | 1.00            | 0.50            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>11</sub> | V <sub>12</sub> | V <sub>13</sub> | V <sub>11</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|
| 0.13 | 0.92 | 13621.8         | 60284.1         | 5745.0          | 33178.0         | 33178.0         | 33178.0         | ø 14/10.0' |
| 0.92 | 2.83 | 13621.8         | 44290.4         | 5745.0          | 24375.6         | 24375.6         | 24375.6         | ø 12/10.0' |
| 2.83 | 3.63 | 13621.8         | 60284.1         | 5745.0          | 33178.0         | 33178.0         | 33178.0         | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ |
|-------------------|-----------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Rare |           |           |                 |                 |                 |   |
| 183               | Fl. 25    | -238583.9 | -2993.0         | 47.6            | -1160.7         |   |
|                   | sfc 22    | -249336.5 | -2567.0         | 331.2           | -1452.5         |   |
|                   | sc Max 22 | -249336.5 | -2567.0         | 331.2           | -98.4           |   |
|                   | sc Med 22 | -249336.5 | -2567.0         | 331.2           | -49.7           |   |
| 1008              | Fl. 25    | -236615.2 | 4757.9          | 197.9           | -1067.4         |   |
|                   | sfc 22    | -247367.8 | 3764.2          | 136.7           | -1500.2         |   |
|                   | sc Max 22 | -247367.8 | 3764.2          | 136.7           | -102.3          |   |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo                          | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ |
|-------------------------------|-----------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Frequenti        |           |           |                 |                 |                 |   |
| 183                           | Fl. 30    | -22824.8  | -1913.8         | 208.0           | -1110.4         |   |
|                               | sfc 27    | -229019.6 | -1060.1         | 302.5           | -1299.3         |   |
|                               | sc Max 30 | -22824.8  | -1913.8         | 208.0           | -87.8           |   |
|                               | sc Med 27 | -229019.6 | -1060.1         | 302.5           | -82.4           |   |
| 1008                          | Fl. 30    | -220856.0 | 3993.5          | 75.3            | -1021.8         |   |
|                               | sfc 30    | -220856.0 | 3993.5          | 75.3            | -1362.8         |   |
|                               | sc Max 30 | -220856.0 | 3993.5          | 75.3            | -93.2           |   |
|                               | sc Med 27 | -227050.9 | 2636.0          | -0.9            | -81.7           |   |
| Combinazioni Quasi Permanenti |           |           |                 |                 |                 |   |
| 183                           | Fl. 32    | -222950.5 | -1006.6         | 292.0           | -1143.5         |   |
|                               | sfc 32    | -222950.5 | -1006.6         | 292.0           | -1263.7         |   |
|                               | sc Max 32 | -222950.5 | -1006.6         | 292.0           | -85.3           |   |
|                               | sc Med 32 | -222950.5 | -1006.6         | 292.0           | -80.2           |   |
| 1008                          | Fl. 32    | -220981.7 | 2537.6          | 0.9             | -1087.6         |   |
|                               | sfc 32    | -220981.7 | 2537.6          | 0.9             | -1298.4         |   |
|                               | sc Max 32 | -220981.7 | 2537.6          | 0.9             | -88.0           |   |
|                               | sc Med 32 | -220981.7 | 2537.6          | 0.9             | -79.5           |   |

▲Pilastro: 1008/1845 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]

Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/10.0' x 80.0/ø 12/10.0' x 190.0/ø 14/10.0' x 80.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N         | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ <sub>12</sub> | σ <sub>13</sub> | σ <sub>11</sub> | Sd/Sr |
|------|------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|
| 1008 | 1    | -295149.6 | -7303.8         | -329.1          | 1.00            | 1.00            | 1.00            | 0.46            |       |
| 1845 | 1    | -292590.2 | 7609.1          | 232.2           | 1.00            | 1.00            | 1.00            | 0.46            |       |

▲Verifiche a Taglio

| Da   | A    | V <sub>12</sub> | V <sub>13</sub> | V <sub>11</sub> | V <sub>12</sub> | V <sub>13</sub> | V <sub>11</sub> | Staffe     |
|------|------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|
| 0.13 | 0.92 | 17886.3         | 60284.1         | 4959.2          | 33178.0         | 33178.0         | 33178.0         | ø 14/10.0' |
| 0.92 | 2.83 | 17886.3         | 44290.4         | 4959.2          | 24375.6         | 24375.6         | 24375.6         | ø 12/10.0' |
| 2.83 | 3.63 | 17886.3         | 60284.1         | 4959.2          | 33178.0         | 33178.0         | 33178.0         | ø 14/10.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N         | M <sub>12</sub> | M <sub>13</sub> | M <sub>11</sub> | σ |
|-------------------------------|-----------|-----------|-----------------|-----------------|-----------------|---|
| Combinazioni Rare             |           |           |                 |                 |                 |   |
| 1008                          | Fl. 26    | -211821.2 | -5881.0         | -218.0          | -885.7          |   |
|                               | sfc 22    | -221411.5 | -5344.3         | -234.9          | -1431.9         |   |
|                               | sc Max 22 | -221411.5 | -5344.3         | -234.9          | -98.8           |   |
|                               | sc Med 22 | -221411.5 | -5344.3         | -234.9          | -79.7           |   |
| 1845                          | Fl. 28    | -212033.4 | 5911.2          | 147.6           | -890.1          |   |
|                               | sfc 22    | -219442.8 | 5359.0          | 160.6           | -1424.7         |   |
|                               | sc Max 22 | -219442.8 | 5359.0          | 160.6           | -98.3           |   |
|                               | sc Med 22 | -219442.8 | 5359.0          | 160.6           | -79.0           |   |
| Combinazioni Frequenti        |           |           |                 |                 |                 |   |
| 1008                          | Fl. 31    | -197970.0 | -4875.5         | -100.1          | -860.1          |   |
|                               | sfc 31    | -197970.0 | -4875.5         | -100.1          | -1277.4         |   |
|                               | sc Max 31 | -197970.0 | -4875.5         | -100.1          | -88.0           |   |
|                               | sc Med 27 | -203212.6 | -4034.0         | -120.0          | -73.1           |   |
| 1845                          | Fl. 31    | -196001.3 | 4194.9          | 124.4           | -883.2          |   |
|                               | sfc 27    | -20245.9  | 4038.5          | 42.6            | -1256.2         |   |
|                               | sc Max 27 | -20245.9  | 4038.5          | 42.6            | -86.1           |   |
|                               | sc Med 27 | -20245.9  | 4038.5          | 42.6            | -72.4           |   |
| Combinazioni Quasi Permanenti |           |           |                 |                 |                 |   |
| 1008                          | Fl. 32    | -197719.4 | -3879.9         | -118.5          | -898.9          |   |
|                               | sfc 32    | -197719.4 | -3879.9         | -118.5          | -1235.9         |   |
|                               | sc Max 32 | -197719.4 | -3879.9         | -118.5          | -84.7           |   |
|                               | sc Med 32 | -197719.4 | -3879.9         | -118.5          | -71.2           |   |
| 1845                          | Fl. 32    | -195750.6 | 3869.4          | 42.9            | -893.4          |   |
|                               | sfc 32    | -195750.6 | 3869.4          | 42.9            | -1220.1         |   |
|                               | sc Max 32 | -195750.6 | 3869.4          | 42.9            | -83.6           |   |
|                               | sc Med 32 | -195750.6 | 3869.4          | 42.9            | -70.4           |   |

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 3519                          | Fl. 23    | -159724.4 | 352.48                   | -63.3                    | -943.2                     |
|                               | s/c 22    | -165865.7 | 3262.3                   | -55.6                    | -1549.4                    |
|                               | sc Max 22 | -165865.7 | 3262.3                   | -55.6                    | -109.3                     |
|                               | sc Med 22 | -165865.7 | 3262.3                   | -55.6                    | -85.4                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 2682                          | Fl. 28    | -149805.9 | -2533.6                  | 118.2                    | -941.0                     |
|                               | s/c 27    | -153392.1 | -2419.5                  | 114.4                    | -1388.7                    |
|                               | sc Max 27 | -153392.1 | -2419.5                  | 114.4                    | -97.2                      |
| 3519                          | Fl. 28    | -148093.4 | 2423.6                   | -140.2                   | -78.8                      |
|                               | s/c 27    | -151879.6 | 2366.0                   | -136.5                   | -977.8                     |
|                               | sc Max 27 | -151879.6 | 2366.0                   | -136.5                   | -1371.4                    |
|                               | sc Med 27 | -151879.6 | 2366.0                   | -136.5                   | -95.9                      |
|                               | sc Med 27 | -151879.6 | 2366.0                   | -136.5                   | -78.2                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 2682                          | Fl. 32    | -148912.5 | -2313.4                  | 109.7                    | -952.7                     |
|                               | s/c 32    | -148912.5 | -2313.4                  | 109.7                    | -1346.7                    |
|                               | sc Max 32 | -148912.5 | -2313.4                  | 109.7                    | -94.2                      |
| 3519                          | Fl. 32    | -147600.0 | 2203.4                   | -131.3                   | -949.5                     |
|                               | s/c 32    | -147600.0 | 2203.4                   | -131.3                   | -1328.6                    |
|                               | sc Max 32 | -147600.0 | 2203.4                   | -131.3                   | -92.9                      |
|                               | sc Med 32 | -147600.0 | 2203.4                   | -131.3                   | -76.0                      |

▲Pilastro: 3519/4356 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 3519 | 1    | -186209.5 | -4259.4                  | 150.7                    | 1.00                    | 1.00                    | 0.43  |
|      | 4356 | 1         | -184503.2                | 4121.5                   | 1.00                    | 1.00                    | 0.43  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 34637                    | 22866.9                  | 5432.0                   | 39508.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |           |           |                          |                          |                            |
| 3519                          | Fl. 23    | -133821.0 | -3319.8                  | 126.7                    | -753.2                     |
|                               | s/c 22    | -139344.8 | -3081.2                  | 123.1                    | -1336.1                    |
|                               | sc Max 22 | -139344.8 | -3081.2                  | 123.1                    | -94.9                      |
| 4356                          | Fl. 23    | -132508.5 | 3222.1                   | -142.8                   | -749.6                     |
|                               | s/c 22    | -138032.3 | 2976.5                   | -139.4                   | -1319.0                    |
|                               | sc Max 22 | -138032.3 | 2976.5                   | -139.4                   | -93.6                      |
|                               | sc Med 22 | -138032.3 | 2976.5                   | -139.4                   | -71.0                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 3519                          | Fl. 28    | -124608.6 | -2273.6                  | 197.3                    | -760.3                     |
|                               | s/c 27    | -127548.0 | -2161.7                  | 195.9                    | -1177.3                    |
|                               | sc Max 27 | -127548.0 | -2161.7                  | 195.9                    | -82.8                      |
| 4356                          | Fl. 28    | -122596.1 | 2177.0                   | -212.5                   | -756.6                     |
|                               | s/c 27    | -126235.5 | 2060.4                   | -211.1                   | -1160.4                    |
|                               | sc Max 27 | -126235.5 | 2060.4                   | -211.1                   | -81.6                      |
|                               | sc Med 27 | -126235.5 | 2060.4                   | -211.1                   | -65.0                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 3519                          | Fl. 32    | -123904.4 | -2063.2                  | 188.8                    | -772.6                     |
|                               | s/c 32    | -123904.4 | -2063.2                  | 188.8                    | -1140.6                    |
|                               | sc Max 32 | -123904.4 | -2063.2                  | 188.8                    | -80.2                      |
| 4356                          | Fl. 32    | -122591.9 | 1965.0                   | -203.7                   | -769.1                     |
|                               | s/c 32    | -122591.9 | 1965.0                   | -203.7                   | -1123.9                    |
|                               | sc Max 32 | -122591.9 | 1965.0                   | -203.7                   | -78.9                      |
|                               | sc Med 32 | -122591.9 | 1965.0                   | -203.7                   | -63.1                      |

▲Pilastro: 1845/2682 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 1845 | 1    | -259216.6 | 3402.7                   | -56.6                    | 1.00                    | 1.00                    | 0.57  |
|      | 2682 | 1         | -257510.3                | 4114.3                   | 44.2                    | 1.00                    | 0.57  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 8099.6                   | 22686.9                  | 3682.3                   | 19500.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |           |           |                          |                          |                            |
| 1845                          | Fl. 23    | -187593.2 | -2688.7                  | -20.8                    | -1229.0                    |
|                               | s/c 22    | -194330.9 | -2464.6                  | -32.3                    | -1702.6                    |
|                               | sc Max 22 | -194330.9 | -2464.6                  | -32.3                    | -118.0                     |
| 2682                          | Fl. 23    | -186280.7 | 3227.8                   | 11.1                     | -1176.2                    |
|                               | s/c 22    | -193018.4 | 2983.1                   | 22.9                     | -1733.5                    |
|                               | sc Max 22 | -193018.4 | 2983.1                   | 22.9                     | -121.0                     |
|                               | sc Med 22 | -193018.4 | 2983.1                   | 22.9                     | -99.3                      |
| Combinazioni Frequenti        |           |           |                          |                          |                            |
| 1845                          | Fl. 28    | -174420.7 | -1820.1                  | 56.6                     | -1194.3                    |
|                               | s/c 27    | -178246.2 | -1717.0                  | 50.9                     | -1519.6                    |
|                               | sc Max 27 | -178246.2 | -1717.0                  | 50.9                     | -104.5                     |
| 2682                          | Fl. 28    | -173108.2 | 2222.0                   | -66.5                    | -1150.8                    |
|                               | s/c 27    | -176933.7 | 2109.5                   | -60.6                    | -1542.1                    |
|                               | sc Max 27 | -176933.7 | 2109.5                   | -60.6                    | -106.7                     |
|                               | sc Med 27 | -176933.7 | 2109.5                   | -60.6                    | -91.1                      |
| Combinazioni Quasi Permanenti |           |           |                          |                          |                            |
| 1845                          | Fl. 32    | -173349.2 | -1642.1                  | 48.3                     | -1201.2                    |
|                               | s/c 32    | -173349.2 | -1642.1                  | 48.3                     | -1475.5                    |
|                               | sc Max 32 | -173349.2 | -1642.1                  | 48.3                     | -101.4                     |
| 2682                          | Fl. 32    | -172036.7 | 2017.9                   | -57.7                    | -1159.8                    |
|                               | s/c 32    | -172036.7 | 2017.9                   | -57.7                    | -1496.6                    |
|                               | sc Max 32 | -172036.7 | 2017.9                   | -57.7                    | -103.5                     |
|                               | sc Med 32 | -172036.7 | 2017.9                   | -57.7                    | -88.5                      |

▲Pilastro: 2682/3519 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>12</sub><br>[kg] | σ <sub>13</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|-------------------------|-------------------------|-------|
| 2682 | 1    | -223173.8 | -4664.4                  | 26.9                     | 1.00                    | 1.00                    | 0.51  |
|      | 3519 | 1         | -221467.6                | 4593.8                   | -60.0                   | 1.00                    | 0.51  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | V <sub>max</sub><br>[kg] | V <sub>min</sub><br>[kg] | Staffe     |
|-----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
| 0.13      | 3.63     | 10418.8                  | 22686.9                  | 4557.0                   | 19500.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-----------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |           |           |                          |                          |                            |
| 2682              | Fl. 23    | -161036.9 | -3622.8                  | 38.7                     | -946.0                     |
|                   | s/c 22    | -167178.2 | -3383.9                  | 30.8                     | -1567.1                    |
|                   | sc Max 22 | -167178.2 | -3383.9                  | 30.8                     | -110.6                     |
|                   | sc Med 22 | -167178.2 | -3383.9                  | 30.8                     | -86.0                      |

| Nodo                          | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------------------|-----------|-----------|-------------------------|-------------------------|-------------------------|---------------|
| 6030                          | Pl. 23    | -37546.0  | 1782.5                  | 163.0                   |                         | -570.2        |
|                               | sc 22     | -81721.0  | 1655.0                  | -162.1                  |                         | -1172.7       |
|                               | sc Max 22 | -81721.0  | 1655.0                  | -162.1                  |                         | -86.9         |
|                               | sc Med 22 | -81721.0  | 1655.0                  | -162.1                  |                         | -60.3         |
| Combinazioni Frequenti        |           |           |                         |                         |                         |               |
| 5193                          | Pl. 28    | -73213.9  | -1114.8                 | 178.5                   |                         | -618.4        |
|                               | sc 27     | -75209.9  | -1062.6                 | 178.8                   |                         | -1015.5       |
|                               | sc Max 27 | -75209.9  | -1062.6                 | 178.8                   |                         | -73.6         |
|                               | sc Med 27 | -75209.9  | -1062.6                 | 178.8                   |                         | -55.5         |
| 6030                          | Pl. 28    | -72370.1  | 1205.6                  | -192.9                  |                         | -593.6        |
|                               | sc 27     | -74366.2  | 1446.1                  | -193.1                  |                         | -1021.0       |
|                               | sc Max 27 | -74366.2  | 1446.1                  | -193.1                  |                         | -74.5         |
|                               | sc Med 27 | -74366.2  | 1446.1                  | -193.1                  |                         | -54.8         |
| Combinazioni Quasi Permanenti |           |           |                         |                         |                         |               |
| 5193                          | Pl. 32    | -72873.8  | -1011.1                 | 172.5                   |                         | -630.9        |
|                               | sc 32     | -72873.8  | -1011.1                 | 172.5                   |                         | -981.1        |
|                               | sc Max 32 | -72873.8  | -1011.1                 | 172.5                   |                         | -71.1         |
|                               | sc Med 32 | -72873.8  | -1011.1                 | 172.5                   |                         | -53.7         |
| 6030                          | Pl. 32    | -72030.0  | 1091.8                  | -186.3                  |                         | -607.6        |
|                               | sc 32     | -72030.0  | 1091.8                  | -186.3                  |                         | -985.6        |
|                               | sc Max 32 | -72030.0  | 1091.8                  | -186.3                  |                         | -71.8         |
|                               | sc Med 32 | -72030.0  | 1091.8                  | -186.3                  |                         | -53.1         |

▲Pilastro: 6030/6867 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 6030 | 16   | -52598.4  | -4468.3                 | -873.2                  | 1.00           | 1.00           | 0.32  |
| 6867 | 16   | -51754.7  | 4818.0                  | 928.6                   | 1.00           | 1.00           | 0.34  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>res</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>res</sub><br>[kg] | Staffe    |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|-----------|
| 0.13      | 3.63     | 9307.5                  | 13595.1                  | 5626.5                  | 13595.1                  | ø 12/15.0 |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------------------|-----------|-----------|-------------------------|-------------------------|-------------------------|---------------|
| 6030                          | Pl. 23    | -50697.0  | -2157.1                 | 197.6                   |                         | -212.4        |
|                               | sc 22     | -54050.0  | -2106.4                 | 198.0                   |                         | -938.8        |
|                               | sc Max 22 | -54050.0  | -2106.4                 | 198.0                   |                         | -73.6         |
|                               | sc Med 22 | -54050.0  | -2106.4                 | 198.0                   |                         | -39.9         |
| 6867                          | Pl. 23    | -49853.2  | 2380.8                  | -196.6                  |                         | -188.6        |
|                               | sc 22     | -53206.3  | 2411.1                  | -192.6                  |                         | -973.7        |
|                               | sc Max 22 | -53206.3  | 2411.1                  | -192.6                  |                         | -77.4         |
|                               | sc Med 22 | -53206.3  | 2411.1                  | -192.6                  |                         | -39.2         |
| Combinazioni Frequenti        |           |           |                         |                         |                         |               |
| 6030                          | Pl. 28    | -47390.6  | -1565.1                 | 225.6                   |                         | -259.2        |
|                               | sc 27     | -48850.6  | -1520.2                 | 226.9                   |                         | -798.8        |
|                               | sc Max 27 | -48850.6  | -1520.2                 | 226.9                   |                         | -61.6         |
|                               | sc Med 27 | -48850.6  | -1520.2                 | 226.9                   |                         | -36.0         |
| 6867                          | Pl. 28    | -46546.9  | 1802.1                  | -223.6                  |                         | -215.1        |
|                               | sc 27     | -48006.9  | 1763.8                  | -224.5                  |                         | -825.2        |
|                               | sc Max 27 | -48006.9  | 1763.8                  | -224.5                  |                         | -64.5         |
|                               | sc Med 27 | -48006.9  | 1763.8                  | -224.5                  |                         | -35.4         |
| Combinazioni Quasi Permanenti |           |           |                         |                         |                         |               |
| 6030                          | Pl. 32    | -47190.5  | -1446.7                 | 218.8                   |                         | -275.5        |
|                               | sc 32     | -47190.5  | -1446.7                 | 218.8                   |                         | -768.4        |
|                               | sc Max 32 | -47190.5  | -1446.7                 | 218.8                   |                         | -59.2         |
|                               | sc Med 32 | -47190.5  | -1446.7                 | 218.8                   |                         | -34.8         |
| 6867                          | Pl. 32    | -46346.7  | 1679.6                  | -216.5                  |                         | -232.1        |
|                               | sc 32     | -46346.7  | 1679.6                  | -216.5                  |                         | -793.1        |
|                               | sc Max 32 | -46346.7  | 1679.6                  | -216.5                  |                         | -61.9         |
|                               | sc Med 32 | -46346.7  | 1679.6                  | -216.5                  |                         | -34.2         |

▲Pilastro: 4356/5193 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 4356 | 1    | -148669.6 | -4407.5                 | -263.3                  | 1.00           | 1.00           | 0.36  |
| 5193 | 1    | -146963.3 | -4817.3                 | -286.4                  | 1.00           | 1.00           | 0.36  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>res</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>res</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 14111.0                 | 22686.9                  | 7025.8                  | 19500.5                  | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------------------|-----------|-----------|-------------------------|-------------------------|-------------------------|---------------|
| 4356                          | Pl. 23    | -100203.0 | -3414.6                 | 206.6                   |                         | -525.1        |
|                               | sc 22     | -111087.8 | -3184.4                 | 207.2                   |                         | -1133.9       |
|                               | sc Max 22 | -111087.8 | -3184.4                 | 207.2                   |                         | -81.8         |
|                               | sc Med 22 | -111087.8 | -3184.4                 | 207.2                   |                         | -57.2         |
| 5193                          | Pl. 23    | -104890.5 | 3730.7                  | -224.9                  |                         | -487.8        |
|                               | sc 22     | -109776.3 | 3477.8                  | -225.1                  |                         | -1149.2       |
|                               | sc Max 22 | -109776.3 | 3477.8                  | -225.1                  |                         | -83.4         |
|                               | sc Med 22 | -109776.3 | 3477.8                  | -225.1                  |                         | -56.5         |
| Combinazioni Frequenti        |           |           |                         |                         |                         |               |
| 4356                          | Pl. 28    | -99851.0  | -2339.3                 | 272.1                   |                         | -550.9        |
|                               | sc 27     | -101535.8 | -2230.2                 | 272.9                   |                         | -989.0        |
|                               | sc Max 27 | -101535.8 | -2230.2                 | 272.9                   |                         | -70.6         |
|                               | sc Med 27 | -101535.8 | -2230.2                 | 272.9                   |                         | -52.3         |
| 5193                          | Pl. 28    | -97738.5  | 2546.9                  | -294.2                  |                         | -522.0        |
|                               | sc 27     | -100223.3 | 2426.1                  | -294.7                  |                         | -996.7        |
|                               | sc Max 27 | -100223.3 | 2426.1                  | -294.7                  |                         | -71.5         |
|                               | sc Med 27 | -100223.3 | 2426.1                  | -294.7                  |                         | -51.6         |
| Combinazioni Quasi Permanenti |           |           |                         |                         |                         |               |
| 4356                          | Pl. 32    | -98541.0  | -2125.0                 | 263.4                   |                         | -565.1        |
|                               | sc 32     | -98541.0  | -2125.0                 | 263.4                   |                         | -956.5        |
|                               | sc Max 32 | -98541.0  | -2125.0                 | 263.4                   |                         | -68.2         |
|                               | sc Med 32 | -98541.0  | -2125.0                 | 263.4                   |                         | -50.7         |
| 5193                          | Pl. 32    | -97228.5  | 2310.4                  | -284.5                  |                         | -538.0        |
|                               | sc 32     | -97228.5  | 2310.4                  | -284.5                  |                         | -963.3        |
|                               | sc Max 32 | -97228.5  | 2310.4                  | -284.5                  |                         | -69.1         |
|                               | sc Med 32 | -97228.5  | 2310.4                  | -284.5                  |                         | -50.0         |

▲Pilastro: 5193/6030 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 350.0

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | α <sub>u</sub> | α <sub>s</sub> | Sd/Sr |
|------|------|-----------|-------------------------|-------------------------|----------------|----------------|-------|
| 5193 | 1    | -110783.8 | -2112.3                 | 193.4                   | 1.00           | 1.00           | 0.38  |
| 6030 | 1    | -109866.9 | -2290.5                 | -210.2                  | 1.00           | 1.00           | 0.38  |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>ed</sub><br>[kg] | V <sub>res</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>res</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|--------------------------|-------------------------|--------------------------|------------|
| 0.13      | 3.63     | 67285.5                 | 13595.1                  | 3826.1                  | 13595.1                  | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo              | Comb      | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | M <sub>s</sub><br>[kgm] | σ<br>[kg/cm²] |
|-------------------|-----------|-----------|-------------------------|-------------------------|-------------------------|---------------|
| Combinazioni Rare |           |           |                         |                         |                         |               |
| 5193              | Pl. 23    | -78389.8  | -1659.0                 | 148.8                   |                         | -602.5        |
|                   | sc 22     | -82564.8  | -1525.9                 | 149.4                   |                         | -1161.1       |
|                   | sc Max 22 | -82564.8  | -1525.9                 | 149.4                   |                         | -85.4         |
|                   | sc Med 22 | -82564.8  | -1525.9                 | 149.4                   |                         | -60.9         |

▲ **Pilastro: 6867/7440 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]**  
Af: 8 ø 22 Af=30.41 [cm²] < 1422 x 4 V + 1424 x 2 B + 1424 x 2 H >  
Staffe: ø 12/15.0° x 3500

▲ **Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N        | M <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|------|----------|----------------|----------------|----------------|----------------|----------------|-------|
| 6867 | 36   | -19697.6 | -2993.0        | -420.6         | 1.00           | 1.00           | 0.16           |       |
| 7440 | 1    | -26869.4 | 30.4           | -3.5           | 1.00           | 1.00           | 0.08           |       |

▲ **Verifiche a Taglio**

| Da   | A    | V <sub>red</sub> | V <sub>max</sub> | V <sub>red</sub> | V <sub>max</sub> | Staffe     |
|------|------|------------------|------------------|------------------|------------------|------------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |            |
| 0.13 | 3.63 | 5372.9           | 13595.1          | 3348.8           | 13595.1          | ø 12/15.0° |

▲ **Verifiche a Presso-Flessione S.L.E.**

| Nodo              | Comb       | N        | M <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | α <sub>u</sub> |
|-------------------|------------|----------|----------------|----------------|----------------|----------------|----------------|
| Combinazioni Base |            |          |                |                |                |                |                |
| 6867              | Fl 23      | -19699.1 | -1362.6        | 131.3          | 131.3          | 21.3           |                |
|                   | s/c 22     | -20875.6 | -1409.6        | 128.6          | 128.6          | -46.46         |                |
|                   | s/c Max 22 | -20875.6 | -1409.6        | 128.6          | 128.6          | -38.7          |                |
|                   | s/c Med 22 | -20875.6 | -1409.6        | 128.6          | 128.6          | -18.3          |                |
| 7440              | Fl 25      | -18697.3 | 19.2           | -2.6           | -203.6         |                |                |
|                   | s/c 22     | -20031.8 | 21.7           | -2.7           | -225.2         |                |                |
|                   | s/c Max 22 | -20031.8 | 21.7           | -2.7           | -15.1          |                |                |
|                   | s/c Med 22 | -20031.8 | 21.7           | -2.7           | -14.8          |                |                |

| Combinazioni Frequenti |            |          |         |       |        |        |  |
|------------------------|------------|----------|---------|-------|--------|--------|--|
| 6867                   | Fl 28      | -17797.7 | -1061.5 | 141.2 | 141.2  | -13.4  |  |
|                        | s/c 27     | -18551.0 | -1046.5 | 142.4 | 142.4  | -38.27 |  |
|                        | s/c Max 27 | -18551.0 | -1046.5 | 142.4 | 142.4  | -31.3  |  |
|                        | s/c Med 27 | -18551.0 | -1046.5 | 142.4 | 142.4  | -14.6  |  |
| 7440                   | Fl 30      | -16866.2 | 13.7    | -2.9  | -184.1 |        |  |
|                        | s/c 27     | -17707.3 | 15.0    | -2.9  | -198.5 |        |  |
|                        | s/c Max 27 | -17707.3 | 15.0    | -2.9  | -13.3  |        |  |
|                        | s/c Med 27 | -17707.3 | 15.0    | -2.9  | -13.1  |        |  |

| Combinazioni Quasi Permanenti |            |          |        |       |        |        |  |
|-------------------------------|------------|----------|--------|-------|--------|--------|--|
| 6867                          | Fl 32      | -17724.5 | -996.9 | 137.4 | 137.4  | -25.3  |  |
|                               | s/c 32     | -17724.5 | -996.9 | 137.4 | 137.4  | -365.3 |  |
|                               | s/c Max 32 | -17724.5 | -996.9 | 137.4 | 137.4  | -29.9  |  |
|                               | s/c Med 32 | -17724.5 | -996.9 | 137.4 | 137.4  | -13.9  |  |
| 7440                          | Fl 32      | -16880.7 | 14.0   | -2.9  | -184.2 |        |  |
|                               | s/c 32     | -16880.7 | 14.0   | -2.9  | -189.2 |        |  |
|                               | s/c Max 32 | -16880.7 | 14.0   | -2.9  | -12.7  |        |  |
|                               | s/c Med 32 | -16880.7 | 14.0   | -2.9  | -12.4  |        |  |

▲ **Pilastro: 184/1014 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]**  
Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/10.0° x 80.0/ø 12/10.0° x 190.0/ø 14/10.0° x 80.0

▲ **Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|------|-----------|----------------|----------------|----------------|-------|
| 184  | 1    | -379977.2 | -1688.2        | -293.6         | 1.00           | 0.56  |
| 1014 | 1    | -377417.8 | 6391.7         | -490.6         | 1.00           | 0.57  |

▲ **Verifiche a Taglio**

| Da   | A    | V <sub>red</sub> | V <sub>max</sub> | V <sub>red</sub> | V <sub>max</sub> | Staffe     |
|------|------|------------------|------------------|------------------|------------------|------------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |            |
| 0.13 | 0.92 | 13107.7          | 60284.1          | 6220.4           | 33178.0          | ø 14/10.0° |
| 0.92 | 2.83 | 13107.7          | 44290.4          | 6220.4           | 24375.6          | ø 12/10.0° |
| 2.83 | 3.63 | 13107.7          | 60284.1          | 6220.4           | 33178.0          | ø 14/10.0° |

▲ **Verifiche a Presso-Flessione S.L.E.**

| Nodo              | Comb   | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | σ       |
|-------------------|--------|-----------|----------------|----------------|----------------|---------|
| Combinazioni Base |        |           |                |                |                |         |
| 184               | Fl 25  | -273581.0 | -1790.3        | -2196.2        | 1.00           | -1265.0 |
|                   | s/c 22 | -285249.6 | -1077.5        | -1692.9        | 1.00           | -1690.7 |

| Nodo              | Comb       | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | σ       |
|-------------------|------------|-----------|----------------|----------------|----------------|---------|
| Combinazioni Base |            |           |                |                |                |         |
|                   | s/c Max 25 | -273581.0 | -1790.3        | -2196.2        | 1.00           | -117.2  |
|                   | s/c Med 22 | -285249.6 | -1077.5        | -1692.9        | 1.00           | -102.7  |
| 1014              | Fl 25      | -271612.3 | 5477.3         | 73.0           | 1.00           | -1234.3 |
|                   | s/c 22     | -283280.8 | 4511.7         | -393.4         | 1.00           | -1741.2 |
|                   | s/c Max 22 | -283280.8 | 4511.7         | -393.4         | 1.00           | -119.2  |
|                   | s/c Med 22 | -283280.8 | 4511.7         | -393.4         | 1.00           | -102.0  |

| Combinazioni Frequenti |            |           |        |         |      |         |
|------------------------|------------|-----------|--------|---------|------|---------|
| 184                    | Fl 30      | -255114.4 | -705.2 | -2072.5 | 1.00 | -1218.1 |
|                        | s/c 30     | -255114.4 | -705.2 | -2072.5 | 1.00 | -1536.4 |
|                        | s/c Max 30 | -255114.4 | -705.2 | -2072.5 | 1.00 | -106.3  |
|                        | s/c Med 27 | -263144.8 | 233.4  | -138.6  | 1.00 | -94.2   |
| 1014                   | Fl 30      | -253145.6 | 4607.3 | 105.0   | 1.00 | -1168.7 |
|                        | s/c 27     | -259646.0 | 3260.9 | -483.9  | 1.00 | -1567.4 |
|                        | s/c Max 27 | -259646.0 | 3260.9 | -483.9  | 1.00 | -107.1  |
|                        | s/c Med 27 | -259646.0 | 3260.9 | -483.9  | 1.00 | -93.4   |

| Combinazioni Quasi Permanenti |            |           |        |         |      |         |
|-------------------------------|------------|-----------|--------|---------|------|---------|
| 184                           | Fl 32      | -254803.8 | 263.2  | -1339.4 | 1.00 | -1280.7 |
|                               | s/c 32     | -254803.8 | 263.2  | -1339.4 | 1.00 | -1470.4 |
|                               | s/c Max 32 | -254803.8 | 263.2  | -1339.4 | 1.00 | -100.4  |
|                               | s/c Med 32 | -254803.8 | 263.2  | -1339.4 | 1.00 | -91.7   |
| 1014                          | Fl 32      | -252835.0 | 3144.6 | -482.8  | 1.00 | -1204.1 |
|                               | s/c 32     | -252835.0 | 3144.6 | -482.8  | 1.00 | -1525.7 |
|                               | s/c Max 32 | -252835.0 | 3144.6 | -482.8  | 1.00 | -104.3  |
|                               | s/c Med 32 | -252835.0 | 3144.6 | -482.8  | 1.00 | -91.0   |

▲ **Pilastro: 1014/1851 / L 3.50[m] / Sezione 1 B 35 [cm]H 60 [cm]**  
Af: 10 ø 24 Af=45.24 [cm²] < 1424 x 4 V + 1424 x 2 B + 2424 x 2 H >  
Staffe: ø 14/10.0° x 80.0/ø 12/10.0° x 190.0/ø 14/10.0° x 80.0

▲ **Verifiche a Presso-Flessione S.L.U.**

| Nodo | Comb | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | Sd/Sr |
|------|------|-----------|----------------|----------------|----------------|-------|
| 1014 | 1    | -332421.4 | -10373.6       | 3014.4         | 1.00           | 0.54  |
| 1851 | 1    | -329862.1 | 10350.2        | -2486.9        | 1.00           | 0.53  |

▲ **Verifiche a Taglio**

| Da   | A    | V <sub>red</sub> | V <sub>max</sub> | V <sub>red</sub> | V <sub>max</sub> | Staffe     |
|------|------|------------------|------------------|------------------|------------------|------------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |            |
| 0.13 | 0.92 | 19651.3          | 60284.1          | 7449.5           | 33178.0          | ø 14/10.0° |
| 0.92 | 2.83 | 19651.3          | 44290.4          | 7449.5           | 24375.6          | ø 12/10.0° |
| 2.83 | 3.63 | 19651.3          | 60284.1          | 7449.5           | 33178.0          | ø 14/10.0° |

▲ **Verifiche a Presso-Flessione S.L.E.**

| Nodo              | Comb       | N         | M <sub>u</sub> | M <sub>u</sub> | α <sub>u</sub> | σ       |
|-------------------|------------|-----------|----------------|----------------|----------------|---------|
| Combinazioni Base |            |           |                |                |                |         |
| 1014              | Fl 26      | -238421.3 | -833.4         | 2092.2         | 1.00           | -822.5  |
|                   | s/c 22     | -249383.5 | -7632.4        | 2280.6         | 1.00           | -1806.0 |
|                   | s/c Max 22 | -249383.5 | -7632.4        | 2280.6         | 1.00           | -128.4  |
|                   | s/c Med 22 | -249383.5 | -7632.4        | 2280.6         | 1.00           | -89.8   |
| 1851              | Fl 23      | -239870.0 | 7988.3         | -1920.5        | 1.00           | -842.9  |
|                   | s/c 22     | -247414.7 | 7575.2         | -1884.7        | 1.00           | -1768.2 |
|                   | s/c Max 22 | -247414.7 | 7575.2         | -1884.7        | 1.00           | -125.2  |
|                   | s/c Med 22 | -247414.7 | 7575.2         | -1884.7        | 1.00           | -89.0   |

| Combinazioni Frequenti |            |           |         |         |      |         |
|------------------------|------------|-----------|---------|---------|------|---------|
| 1014                   | Fl 31      | -222397.7 | -6751.9 | 1965.4  | 1.00 | -796.1  |
|                        | s/c 27     | -228487.7 | -6016.0 | 2156.4  | 1.00 | -1618.4 |
|                        | s/c Max 27 | -228487.7 | -6016.0 | 2156.4  | 1.00 | -114.8  |
|                        | s/c Med 27 | -228487.7 | -6016.0 | 2156.4  | 1.00 | -82.2   |
| 1851                   | Fl 28      | -222069.1 | 5943.8  | -1808.3 | 1.00 | -838.8  |
|                        | s/c 27     | -226519.0 | 5762.8  | -1797.9 | 1.00 | -1574.8 |
|                        | s/c Max 27 | -226519.0 | 5762.8  | -1797.9 | 1.00 | -111.2  |
|                        | s/c Med 27 | -226519.0 | 5762.8  | -1797.9 | 1.00 | -81.5   |

| Combinazioni Quasi Permanenti |            |           |         |         |      |         |
|-------------------------------|------------|-----------|---------|---------|------|---------|
| 1014                          | Fl 32      | -222416.8 | -5812.9 | 2112.5  | 1.00 | -827.0  |
|                               | s/c 32     | -222416.8 | -5812.9 | 2112.5  | 1.00 | -1574.4 |
|                               | s/c Max 32 | -222416.8 | -5812.9 | 2112.5  | 1.00 | -111.7  |
|                               | s/c Med 32 | -222416.8 | -5812.9 | 2112.5  | 1.00 | -80.0   |
| 1851                          | Fl 32      | -220448.0 | 5549.5  | -1762.5 | 1.00 | -849.2  |
|                               | s/c 32     | -220448.0 | 5549.5  | -1762.5 | 1.00 | -1530.9 |

| Nodo                          | Comb        | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |             |           |                          |                          |                            |
| 2688                          | Fl. 23      | -176790.4 | -4434.0                  | 1105.5                   | -9860                      |
|                               | sfc. 22     | -183088.0 | -4160.5                  | 1071.1                   | -1847.2                    |
|                               | sc. Max. 22 | -183088.0 | -4160.5                  | 1071.1                   | -133.2                     |
| 3525                          | sc. Med. 27 | -183088.0 | -4160.5                  | 1071.1                   | -94.2                      |
|                               | Fl. 23      | -175477.9 | 4226.8                   | -1034.5                  | -919.1                     |
|                               | sfc. 22     | -181775.5 | 3946.5                   | -997.0                   | -1813.0                    |
|                               | sc. Max. 22 | -181775.5 | 3946.5                   | -997.0                   | -130.4                     |
|                               | sc. Med. 27 | -181775.5 | 3946.5                   | -997.0                   | -93.6                      |
| Combinazioni Frequenti        |             |           |                          |                          |                            |
| 2688                          | Fl. 28      | -165963.5 | -3164.7                  | 1067.9                   | -913.1                     |
|                               | sfc. 27     | -167455.7 | -3038.6                  | 1055.2                   | -1634.3                    |
|                               | sc. Max. 27 | -167455.7 | -3038.6                  | 1055.2                   | -117.0                     |
| 3525                          | sc. Med. 27 | -167455.7 | -3038.6                  | 1055.2                   | -86.2                      |
|                               | Fl. 28      | -162451.0 | 2969.7                   | -1000.6                  | -924.8                     |
|                               | sfc. 27     | -166143.2 | 2838.3                   | -986.1                   | -1601.7                    |
|                               | sc. Max. 27 | -166143.2 | 2838.3                   | -986.1                   | -114.3                     |
|                               | sc. Med. 27 | -166143.2 | 2838.3                   | -986.1                   | -85.5                      |
| Combinazioni Quasi Permanenti |             |           |                          |                          |                            |
| 2688                          | Fl. 32      | -162849.5 | -2916.0                  | 1036.8                   | -927.4                     |
|                               | sfc. 32     | -162849.5 | -2916.0                  | 1036.8                   | -1587.2                    |
|                               | sc. Max. 32 | -162849.5 | -2916.0                  | 1036.8                   | -113.6                     |
| 3525                          | sc. Med. 32 | -162849.5 | -2916.0                  | 1036.8                   | -83.8                      |
|                               | Fl. 32      | -161537.0 | 2721.5                   | -969.6                   | -939.1                     |
|                               | sfc. 32     | -161537.0 | 2721.5                   | -969.6                   | -1555.2                    |
|                               | sc. Max. 32 | -161537.0 | 2721.5                   | -969.6                   | -110.9                     |
|                               | sc. Med. 32 | -161537.0 | 2721.5                   | -969.6                   | -83.1                      |

▲Pilastro: 3525/4362 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub><br>[kg] | σ <sub>u</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|------------------------|------------------------|-------|
| 3525 | 1    | -301456.4 | -5027.9                  | 1371.5                   | 1.00                   | 1.00                   | 0.46  |
| 4362 | 1    | -199393.2 | 4815.7                   | -1093.7                  | 1.00                   | 1.00                   | 0.47  |

▲Verifiche a Presso-Flessione S.L.U.

| Nodo   | Comb  | N<br>[kg]            | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub><br>[kg] | σ <sub>u</sub><br>[kg] | Sd/Sr  |
|--------|-------|----------------------|--------------------------|--------------------------|------------------------|------------------------|--------|
| Da [m] | A [m] | V <sub>ed</sub> [kg] | V <sub>ed</sub> [kg]     | V <sub>ed</sub> [kg]     | V <sub>ed</sub> [kg]   | V <sub>ed</sub> [kg]   | Staffe |
| 0.13   | 3.63  | 12162.1              | 22686.9                  | 5921.0                   | 19500.5                | ø 12/12.5'             |        |

▲Verifiche a Taglio

| Nodo                          | Comb        | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |             |           |                          |                          |                            |
| 3525                          | Fl. 23      | -145220.8 | -3911.2                  | 933.7                    | -720.3                     |
|                               | sfc. 22     | -150885.8 | -3642.8                  | 895.2                    | -1540.7                    |
|                               | sc. Max. 22 | -150885.8 | -3642.8                  | 895.2                    | -111.4                     |
|                               | sc. Med. 22 | -150885.8 | -3642.8                  | 895.2                    | -77.7                      |
| 4362                          | Fl. 23      | -143918.3 | 3759.7                   | -877.8                   | -727.5                     |
|                               | sfc. 22     | -149573.3 | 3482.4                   | -837.0                   | -1512.3                    |
|                               | sc. Max. 22 | -149573.3 | 3482.4                   | -837.0                   | -109.1                     |
|                               | sc. Med. 22 | -149573.3 | 3482.4                   | -837.0                   | -77.0                      |
| Combinazioni Frequenti        |             |           |                          |                          |                            |
| 3525                          | Fl. 28      | -134821.4 | -2708.2                  | 905.4                    | -739.8                     |
|                               | sfc. 27     | -137844.7 | -2580.9                  | 880.0                    | -1353.7                    |
|                               | sc. Max. 27 | -137844.7 | -2580.9                  | 880.0                    | -97.0                      |
|                               | sc. Med. 27 | -137844.7 | -2580.9                  | 880.0                    | -70.9                      |
| 4362                          | Fl. 28      | -133519.9 | 2560.6                   | -853.4                   | -746.3                     |
|                               | sfc. 27     | -136532.2 | 2427.6                   | -866.7                   | -1326.4                    |
|                               | sc. Max. 27 | -136532.2 | 2427.6                   | -866.7                   | -94.8                      |
|                               | sc. Med. 27 | -136532.2 | 2427.6                   | -866.7                   | -70.3                      |
| Combinazioni Quasi Permanenti |             |           |                          |                          |                            |
| 3525                          | Fl. 32      | -133960.3 | -2470.8                  | 875.9                    | -755.0                     |
|                               | sfc. 32     | -133960.3 | -2470.8                  | 875.9                    | -1313.5                    |
|                               | sc. Max. 32 | -133960.3 | -2470.8                  | 875.9                    | -94.1                      |
|                               | sc. Med. 32 | -133960.3 | -2470.8                  | 875.9                    | -68.9                      |
| 4362                          | Fl. 32      | -132647.8 | 2322.1                   | -824.2                   | -761.5                     |

| Nodo              | Comb        | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------|-------------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare |             |           |                          |                          |                            |
|                   | sc. Max. 32 | -220448.0 | 5549.5                   | -1762.5                  | -108.1                     |
|                   | sc. Med. 32 | -220448.0 | 5549.5                   | -1762.5                  | -79.3                      |

▲Pilastro: 1851/2688 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub><br>[kg] | σ <sub>u</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|------------------------|------------------------|-------|
| 1851 | 1    | -287543.5 | -4322.3                  | 1346.6                   | 1.00                   | 1.00                   | 0.64  |
| 2688 | 1    | -285837.2 | 5313.7                   | -1412.0                  | 1.00                   | 1.00                   | 0.65  |

▲Verifiche a Taglio

| Nodo                          | Comb        | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |             |           |                          |                          |                            |
| 1851                          | Fl. 23      | -208621.4 | -3380.3                  | 1054.7                   | -1241.6                    |
|                               | sfc. 22     | -215575.9 | -3144.8                  | 1025.1                   | -2011.7                    |
|                               | sc. Max. 22 | -215575.9 | -3144.8                  | 1025.1                   | -142.2                     |
|                               | sc. Med. 22 | -215575.9 | -3144.8                  | 1025.1                   | -111.0                     |
| 2688                          | Fl. 23      | -207308.9 | 4010.9                   | -1107.5                  | -1175.7                    |
|                               | sfc. 22     | -214363.4 | 3749.9                   | -1075.3                  | -2055.1                    |
|                               | sc. Max. 22 | -214363.4 | 3749.9                   | -1075.3                  | -146.3                     |
|                               | sc. Med. 22 | -214363.4 | 3749.9                   | -1075.3                  | -110.3                     |
| Combinazioni Frequenti        |             |           |                          |                          |                            |
| 1851                          | Fl. 28      | -193400.3 | -2387.1                  | 1016.6                   | -1207.9                    |
|                               | sfc. 27     | -197385.4 | -2278.6                  | 1006.0                   | -1799.5                    |
|                               | sc. Max. 27 | -197385.4 | -2278.6                  | 1006.0                   | -126.5                     |
|                               | sc. Med. 27 | -197385.4 | -2278.6                  | 1006.0                   | -101.6                     |
| 2688                          | Fl. 28      | -192087.8 | 2895.8                   | -1066.2                  | -1155.2                    |
|                               | sfc. 27     | -196072.9 | 2736.6                   | -1054.7                  | -1830.8                    |
|                               | sc. Max. 27 | -196072.9 | 2736.6                   | -1054.7                  | -129.5                     |
|                               | sc. Med. 27 | -196072.9 | 2736.6                   | -1054.7                  | -100.9                     |
| Combinazioni Quasi Permanenti |             |           |                          |                          |                            |
| 1851                          | Fl. 32      | -192052.8 | -2188.8                  | 987.1                    | -1216.2                    |
|                               | sfc. 32     | -192052.8 | -2188.8                  | 987.1                    | -1749.3                    |
|                               | sc. Max. 32 | -192052.8 | -2188.8                  | 987.1                    | -122.9                     |
|                               | sc. Med. 32 | -192052.8 | -2188.8                  | 987.1                    | -98.9                      |
| 2688                          | Fl. 32      | -190740.3 | 2628.5                   | -1035.4                  | -1166.1                    |
|                               | sfc. 32     | -190740.3 | 2628.5                   | -1035.4                  | -1779.1                    |
|                               | sc. Max. 32 | -190740.3 | 2628.5                   | -1035.4                  | -125.8                     |
|                               | sc. Med. 32 | -190740.3 | 2628.5                   | -1035.4                  | -98.2                      |

▲Pilastro: 2688/3525 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]  
Af: 8 ø 24 Af=36.19 [cm<sup>2</sup>] < 1q24 x 4 V + 1q24 x 2 B + 1q24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ <sub>u</sub><br>[kg] | σ <sub>u</sub><br>[kg] | Sd/Sr |
|------|------|-----------|--------------------------|--------------------------|------------------------|------------------------|-------|
| 2688 | 1    | -244413.8 | -5718.4                  | 1404.9                   | 1.00                   | 1.00                   | 0.57  |
| 3525 | 1    | -242707.5 | 5435.1                   | -1306.4                  | 1.00                   | 1.00                   | 0.57  |

▲Verifiche a Taglio

| Nodo                          | Comb        | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|--------------------------|--------------------------|----------------------------|
| Combinazioni Rare             |             |           |                          |                          |                            |
| 2688                          | Fl. 23      | -176790.4 | -4434.0                  | 1105.5                   | -9860                      |
|                               | sfc. 22     | -183088.0 | -4160.5                  | 1071.1                   | -1847.2                    |
|                               | sc. Max. 22 | -183088.0 | -4160.5                  | 1071.1                   | -133.2                     |
| 3525                          | sc. Med. 27 | -183088.0 | -4160.5                  | 1071.1                   | -94.2                      |
|                               | Fl. 23      | -175477.9 | 4226.8                   | -1034.5                  | -919.1                     |
|                               | sfc. 22     | -181775.5 | 3946.5                   | -997.0                   | -1813.0                    |
|                               | sc. Max. 22 | -181775.5 | 3946.5                   | -997.0                   | -130.4                     |
|                               | sc. Med. 27 | -181775.5 | 3946.5                   | -997.0                   | -93.6                      |
| Combinazioni Frequenti        |             |           |                          |                          |                            |
| 2688                          | Fl. 28      | -165963.5 | -3164.7                  | 1067.9                   | -913.1                     |
|                               | sfc. 27     | -167455.7 | -3038.6                  | 1055.2                   | -1634.3                    |
|                               | sc. Max. 27 | -167455.7 | -3038.6                  | 1055.2                   | -117.0                     |
| 3525                          | sc. Med. 27 | -167455.7 | -3038.6                  | 1055.2                   | -86.2                      |
|                               | Fl. 28      | -162451.0 | 2969.7                   | -1000.6                  | -924.8                     |
|                               | sfc. 27     | -166143.2 | 2838.3                   | -986.1                   | -1601.7                    |
|                               | sc. Max. 27 | -166143.2 | 2838.3                   | -986.1                   | -114.3                     |
|                               | sc. Med. 27 | -166143.2 | 2838.3                   | -986.1                   | -85.5                      |
| Combinazioni Quasi Permanenti |             |           |                          |                          |                            |
| 2688                          | Fl. 32      | -162849.5 | -2916.0                  | 1036.8                   | -927.4                     |
|                               | sfc. 32     | -162849.5 | -2916.0                  | 1036.8                   | -1587.2                    |
|                               | sc. Max. 32 | -162849.5 | -2916.0                  | 1036.8                   | -113.6                     |
| 3525                          | sc. Med. 32 | -162849.5 | -2916.0                  | 1036.8                   | -83.8                      |
|                               | Fl. 32      | -161537.0 | 2721.5                   | -969.6                   | -939.1                     |
|                               | sfc. 32     | -161537.0 | 2721.5                   | -969.6                   | -1555.2                    |
|                               | sc. Max. 32 | -161537.0 | 2721.5                   | -969.6                   | -110.9                     |
|                               | sc. Med. 32 | -161537.0 | 2721.5                   | -969.6                   | -83.1                      |

▲Verifiche a Presso-Flessione S.L.E.

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb        | N<br>[kg] | Combinazioni Rare        |                          |                          |                          | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
|                               |             |           | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] |                          |                            |
| 5199                          | Fl. 23      | -83215.0  | -1814.8                  | 438.1                    | -587.1                   |                          |                          |                            |
|                               | sfc. 22     | -87542.0  | -1081.9                  | 409.4                    | -1277.7                  |                          |                          |                            |
|                               | sc. Max. 22 | -87542.0  | -1081.9                  | 409.4                    | -95.2                    |                          |                          |                            |
|                               | sc. Med. 22 | -87542.0  | -1081.9                  | 409.4                    | -64.6                    |                          |                          |                            |
| 6036                          | Fl. 23      | -82371.3  | 1948.4                   | -429.6                   | -559.3                   |                          |                          |                            |
|                               | sfc. 22     | -86698.2  | 1297.6                   | -395.6                   | -1283.4                  |                          |                          |                            |
|                               | sc. Max. 22 | -86698.2  | 1297.6                   | -395.6                   | -86.1                    |                          |                          |                            |
|                               | sc. Med. 22 | -86698.2  | 1297.6                   | -395.6                   | -63.9                    |                          |                          |                            |
| Combinazioni Frequenti        |             |           |                          |                          |                          |                          |                          |                            |
| 5199                          | Fl. 28      | -77522.7  | -1219.4                  | 427.6                    | -613.8                   |                          |                          |                            |
|                               | sfc. 27     | -79563.8  | -1157.2                  | 416.2                    | -1112.8                  |                          |                          |                            |
|                               | sc. Max. 27 | -79563.8  | -1157.2                  | 416.2                    | -81.7                    |                          |                          |                            |
|                               | sc. Med. 27 | -79563.8  | -1157.2                  | 416.2                    | -58.7                    |                          |                          |                            |
| 6036                          | Fl. 28      | -76678.9  | 1295.6                   | -421.3                   | -594.1                   |                          |                          |                            |
|                               | sfc. 27     | -78720.1  | 1226.7                   | -408.2                   | -1112.6                  |                          |                          |                            |
|                               | sc. Max. 27 | -78720.1  | 1226.7                   | -408.2                   | -82.0                    |                          |                          |                            |
|                               | sc. Med. 27 | -78720.1  | 1226.7                   | -408.2                   | -58.0                    |                          |                          |                            |
| Combinazioni Quasi Permanenti |             |           |                          |                          |                          |                          |                          |                            |
| 5199                          | Fl. 32      | -77104.3  | -1103.1                  | 411.4                    | -628.8                   |                          |                          |                            |
|                               | sfc. 32     | -77104.3  | -1103.1                  | 411.4                    | -1076.9                  |                          |                          |                            |
|                               | sc. Max. 32 | -77104.3  | -1103.1                  | 411.4                    | -79.0                    |                          |                          |                            |
|                               | sc. Med. 32 | -77104.3  | -1103.1                  | 411.4                    | -56.9                    |                          |                          |                            |
| 6036                          | Fl. 32      | -76260.5  | 1168.3                   | -404.3                   | -610.8                   |                          |                          |                            |
|                               | sfc. 32     | -76260.5  | 1168.3                   | -404.3                   | -1076.2                  |                          |                          |                            |
|                               | sc. Max. 32 | -76260.5  | 1168.3                   | -404.3                   | -79.3                    |                          |                          |                            |
|                               | sc. Med. 32 | -76260.5  | 1168.3                   | -404.3                   | -56.2                    |                          |                          |                            |

▲Pilastro: 6036/6873 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] | Sd/Sr |
|------|------|-----------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------|
| 6036 | 16   | -57889.5  | -5253.2                 | 981.0                    | 1.00                     | 1.00                     | 0.37                     |       |
| 6873 | 16   | -56345.8  | -5637.7                 | -1051.4                  | 1.00                     | 1.00                     | 0.38                     |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>u2</sub><br>[kg] | V <sub>u3</sub><br>[kg] | V <sub>u4</sub><br>[kg] | V <sub>u5</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|-------------------------|-------------------------|-------------------------|------------|
| 0.13      | 3.63     | 9118.8                  | 13595.1                 | 5340.0                  | 13595.1                 | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb        | N<br>[kg]   | Combinazioni Rare        |                          |                          |                          | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
|                               |             |             | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] |                          |                            |
| 6036                          | Fl. 23      | -53299.3    | -2327.6                  | 487.1                    | -173.0                   |                          |                          |                            |
|                               | sfc. 22     | -56851.5    | -2254.8                  | 469.5                    | -1031.9                  |                          |                          |                            |
|                               | sc. Max. 22 | -56851.5    | -2254.8                  | 469.5                    | -81.8                    |                          |                          |                            |
|                               | sc. Med. 22 | -56851.5    | -2254.8                  | 469.5                    | -41.9                    |                          |                          |                            |
| 6873                          | Fl. 23      | -52455.6    | 2962.7                   | -528.0                   | -121.0                   |                          |                          |                            |
|                               | sfc. 22     | -56007.8    | 2965.3                   | -530.8                   | -1077.8                  |                          |                          |                            |
|                               | sc. Max. 22 | -56007.8    | 2965.3                   | -530.8                   | -86.7                    |                          |                          |                            |
|                               | sc. Med. 22 | -56007.8    | 2965.3                   | -530.8                   | -41.6                    |                          |                          |                            |
| Combinazioni Frequenti        |             |             |                          |                          |                          |                          |                          |                            |
| 6036                          | Fl. 28      | -49697.3    | -1653.1                  | 483.6                    | -233.6                   |                          |                          |                            |
|                               | sfc. 27     | -51204.1    | -1595.1                  | 470.9                    | -872.0                   |                          |                          |                            |
|                               | sc. Max. 27 | -51204.1    | -1595.1                  | 470.9                    | -68.0                    |                          |                          |                            |
|                               | sc. Med. 27 | -51204.1    | -1595.1                  | 470.9                    | -37.8                    |                          |                          |                            |
| 6873                          | Fl. 28      | -48853.5    | 1891.3                   | -534.8                   | -181.4                   |                          |                          |                            |
|                               | sfc. 27     | -50360.4    | 1899.4                   | -523.3                   | -906.6                   |                          |                          |                            |
|                               | sc. Max. 27 | -50360.4    | 1899.4                   | -523.3                   | -71.7                    |                          |                          |                            |
|                               | sc. Med. 27 | -50360.4    | 1899.4                   | -523.3                   | -37.1                    |                          |                          |                            |
| Combinazioni Quasi Permanenti |             |             |                          |                          |                          |                          |                          |                            |
| 6036                          | Fl. 32      | -49449.1    | -1519.5                  | 465.5                    | -253.2                   |                          |                          |                            |
|                               | sfc. 32     | -49449.1    | -1519.5                  | 465.5                    | -840.6                   |                          |                          |                            |
|                               |             | sc. Max. 32 | -49449.1                 | -1519.5                  | 465.5                    | -65.5                    |                          |                            |

| Nodo | Comb        | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|------|-------------|-----------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
|      | sfc. 32     | -132647.8 | 2322.1                  | 824.2                    | -1286.7                  |                          |                          |                            |
|      | sc. Max. 32 | -132647.8 | 2322.1                  | 824.2                    | -91.9                    |                          |                          |                            |
|      | sc. Med. 32 | -132647.8 | 2322.1                  | 824.2                    | -68.3                    |                          |                          |                            |

▲Pilastro: 4362/5199 / L 3.50[m] / Sezione 2 B 35 [cm]H 40 [cm]

Af: 8 ø 24 Af=36.19 [cm²] < 1ø24 x 4 V + 1ø24 x 2 B + 1ø24 x 2 H >  
Staffe: ø 12/12.5' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] | Sd/Sr |
|------|------|-----------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------|
| 4362 | 16   | -124315.0 | -947.9                  | 1648.3                   | 1.00                     | 1.00                     | 0.40                     |       |
| 5199 | 16   | -123002.5 | -960.3                  | -1711.5                  | 1.00                     | 1.00                     | 0.42                     |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>u2</sub><br>[kg] | V <sub>u3</sub><br>[kg] | V <sub>u4</sub><br>[kg] | V <sub>u5</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|-------------------------|-------------------------|-------------------------|------------|
| 0.13      | 3.63     | 14700.3                 | 22686.9                 | 7241.9                  | 19600.5                 | ø 12/12.5' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb        | N<br>[kg] | Combinazioni Rare        |                          |                          |                          | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|-------------------------------|-------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
|                               |             |           | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] |                          |                            |
| 4362                          | Fl. 23      | -114004.0 | -3916.7                  | 867.5                    | -484.7                   |                          |                          |                            |
|                               | sfc. 22     | -119021.2 | -3648.6                  | 822.6                    | -1288.6                  |                          |                          |                            |
|                               | sc. Max. 22 | -119021.2 | -3648.6                  | 822.6                    | -94.5                    |                          |                          |                            |
|                               | sc. Med. 22 | -119021.2 | -3648.6                  | 822.6                    | -61.3                    |                          |                          |                            |
| 5199                          | Fl. 23      | -113691.5 | 4238.1                   | -983.3                   | -448.2                   |                          |                          |                            |
|                               | sfc. 22     | -117088.7 | 3931.9                   | -931.9                   | -1302.2                  |                          |                          |                            |
|                               | sc. Max. 22 | -117088.7 | 3931.9                   | -931.9                   | -95.9                    |                          |                          |                            |
|                               | sc. Med. 22 | -117088.7 | 3931.9                   | -931.9                   | -60.6                    |                          |                          |                            |
| Combinazioni Frequenti        |             |           |                          |                          |                          |                          |                          |                            |
| 4362                          | Fl. 28      | -106034.0 | -2677.9                  | 841.0                    | -525.8                   |                          |                          |                            |
|                               | sfc. 27     | -108573.3 | -2549.2                  | 822.3                    | -1119.0                  |                          |                          |                            |
|                               | sc. Max. 27 | -108573.3 | -2549.2                  | 822.3                    | -81.2                    |                          |                          |                            |
|                               | sc. Med. 27 | -108573.3 | -2549.2                  | 822.3                    | -55.9                    |                          |                          |                            |
| 5199                          | Fl. 28      | -104721.5 | 2869.9                   | -858.8                   | -498.5                   |                          |                          |                            |
|                               | sfc. 27     | -107260.8 | 2726.7                   | -838.0                   | -1124.7                  |                          |                          |                            |
|                               | sc. Max. 27 | -107260.8 | 2726.7                   | -838.0                   | -81.9                    |                          |                          |                            |
|                               | sc. Med. 27 | -107260.8 | 2726.7                   | -838.0                   | -55.2                    |                          |                          |                            |
| Combinazioni Quasi Permanenti |             |           |                          |                          |                          |                          |                          |                            |
| 4362                          | Fl. 32      | -105404.9 | -2434.9                  | 810.9                    | -543.3                   |                          |                          |                            |
|                               | sfc. 32     | -105404.9 | -2434.9                  | 810.9                    | -1084.3                  |                          |                          |                            |
|                               | sc. Max. 32 | -105404.9 | -2434.9                  | 810.9                    | -78.6                    |                          |                          |                            |
|                               | sc. Med. 32 | -105404.9 | -2434.9                  | 810.9                    | -54.3                    |                          |                          |                            |
| 5199                          | Fl. 32      | -104092.4 | 2602.6                   | -827.2                   | -518.1                   |                          |                          |                            |
|                               | sfc. 32     | -104092.4 | 2602.6                   | -827.2                   | -1089.2                  |                          |                          |                            |
|                               | sc. Max. 32 | -104092.4 | 2602.6                   | -827.2                   | -79.3                    |                          |                          |                            |
|                               | sc. Med. 32 | -104092.4 | 2602.6                   | -827.2                   | -53.6                    |                          |                          |                            |

▲Pilastro: 5199/6036 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]

Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | M <sub>u4</sub><br>[kgm] | M <sub>u5</sub><br>[kgm] | Sd/Sr |
|------|------|-----------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------|
| 5199 | 1    | -117514.7 | -2329.6                 | 531.1                    | 1.00                     | 1.00                     | 0.40                     |       |
| 6036 | 16   | -89099.7  | -4719.3                 | -902.3                   | 1.00                     | 1.00                     | 0.41                     |       |

▲Verifiche a Taglio

| Da<br>[m] | A<br>[m] | V <sub>u2</sub><br>[kg] | V <sub>u3</sub><br>[kg] | V <sub>u4</sub><br>[kg] | V <sub>u5</sub><br>[kg] | Staffe     |
|-----------|----------|-------------------------|-------------------------|-------------------------|-------------------------|------------|
| 0.13      | 3.63     | 7029.4                  | 13595.1                 | 3940.3                  | 13595.1                 | ø 12/15.0' |

| Nodo | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | N | M <sub>12</sub> | M <sub>13</sub> | σ                     |
|------|-----------|----------|-----------------|-----------------|---|-----------------|-----------------|-----------------------|
|      |           | [kg]     | [kgm]           | [kgm]           |   | [kg]            | [kgm]           | [kg/cm <sup>2</sup> ] |
| 6873 | sc Med 32 | -48049.1 | -1519.5         | 605.5           |   |                 |                 | -36.5                 |
|      | Pl 32     | -48005.3 | 1753.0          | -516.2          |   |                 |                 | -201.9                |
|      | sc 32     | -48005.3 | 1753.0          | -516.2          |   |                 |                 | -873.3                |
|      | sc Max 32 | -48005.3 | 1753.0          | -516.2          |   |                 |                 | -69.1                 |
|      | sc Med 32 | -48005.3 | 1753.0          | -516.2          |   |                 |                 | -35.8                 |

▲Pilastr: 6873/7446 / L 3.50[m] / Sezione 3 B 30 [cm]H 30 [cm]  
Af: 8 ø 22 Af=30.41 [cm²] < 1ø22 x 4 V + 1ø22 x 2 B + 1ø22 x 2 H >  
Staffe: ø 12/15.0' x 3500

▲Verifiche a Presso-Flessione S.L.U.

| Nodo | Comb | N        | M <sub>12</sub> | M <sub>13</sub> | σ <sub>u</sub> | σ <sub>u</sub> | Sd/s |
|------|------|----------|-----------------|-----------------|----------------|----------------|------|
|      |      |          |                 |                 |                |                |      |
| 6873 | 16   | -20503.9 | -3022.2         | 575.9           | 1.00           | 1.00           | 0.19 |
| 7446 | 1    | -27225.4 | 31.6            | -4.0            | 1.00           | 1.00           | 0.08 |

▲Verifiche a Taglio

| Dn   | A    | V <sub>red</sub> | V <sub>red</sub> | V <sub>red</sub> | V <sub>red</sub> | Staffe     |
|------|------|------------------|------------------|------------------|------------------|------------|
| [m]  | [m]  | [kg]             | [kg]             | [kg]             | [kg]             |            |
| 0.13 | 3.63 | 5237.3           | 13595.1          | 3644.0           | 13595.1          | ø 12/15.0' |

▲Verifiche a Presso-Flessione S.L.E.

| Nodo                          | Comb      | N        | M <sub>12</sub> | M <sub>13</sub> | σ                     |
|-------------------------------|-----------|----------|-----------------|-----------------|-----------------------|
|                               |           | [kg]     | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| Combinazioni Rare             |           |          |                 |                 |                       |
| 6873                          | Pl 23     | -19864.9 | -1469.2         | 324.6           | 80.5                  |
|                               | sc 22     | -21045.1 | -1510.4         | 338.5           | -519.7                |
|                               | sc Max 22 | -21045.1 | -1510.4         | 338.5           | -44.2                 |
|                               | sc Med 22 | -21045.1 | -1510.4         | 338.5           | -39.4                 |
| 7446                          | Pl 26     | -18899.9 | 20.2            | -2.5            | -204.7                |
|                               | sc 22     | -20201.3 | 22.5            | -2.9            | -227.2                |
|                               | sc Max 22 | -20201.3 | 22.5            | -2.9            | -15.3                 |
|                               | sc Med 22 | -20201.3 | 22.5            | -2.9            | -14.9                 |
| Combinazioni Frequenti        |           |          |                 |                 |                       |
| 6873                          | Pl 28     | -17772.9 | -1125.9         | 329.8           | 34.4                  |
|                               | sc 27     | -18558.6 | -1104.3         | 326.0           | -422.2                |
|                               | sc Max 28 | -17772.9 | -1125.9         | 329.8           | -35.3                 |
|                               | sc Med 27 | -18558.6 | -1104.3         | 326.0           | -35.3                 |
| 7446                          | Pl 31     | -16801.2 | 14.1            | -2.5            | -183.4                |
|                               | sc 27     | -17714.9 | 15.0            | -2.8            | -198.6                |
|                               | sc Max 27 | -17714.9 | 15.0            | -2.8            | -13.3                 |
|                               | sc Med 27 | -17714.9 | 15.0            | -2.8            | -13.1                 |
| Combinazioni Quasi Permanenti |           |          |                 |                 |                       |
| 6873                          | Pl 32     | -17682.1 | -1053.0         | 320.4           | 18.4                  |
|                               | sc 32     | -17682.1 | -1053.0         | 320.4           | -404.1                |
|                               | sc Max 32 | -17682.1 | -1053.0         | 320.4           | -33.8                 |
|                               | sc Med 32 | -17682.1 | -1053.0         | 320.4           | -34.6                 |
| 7446                          | Pl 32     | -16838.3 | 14.0            | -2.7            | -183.8                |
|                               | sc 32     | -16838.3 | 14.0            | -2.7            | -188.7                |
|                               | sc Max 32 | -16838.3 | 14.0            | -2.7            | -12.7                 |
|                               | sc Med 32 | -16838.3 | 14.0            | -2.7            | -12.4                 |

- [En.Ex.Sys. WinStand](#)
- [Verifiche pilastri](#)

## **11.4. Allegato A4 – Verifica Setti**

## ▲En.Ex.Sys. WinStrand

### ▲Structural Analysis & Design

|                                                                                                          |
|----------------------------------------------------------------------------------------------------------|
| <b>Ditta produttrice:</b><br><i>En.Ex.Sys. s.r.l.</i> - Via Tizzano 46/2 - Casalecchio di Reno (Bologna) |
| <b>Sigla:</b><br>WinStrand                                                                               |
| <b>Piattaforma software:</b><br>Microsoft Windows XP Home, Microsoft Windows XP Home Professional        |
| <b>Documentazione in uso:</b><br>Manuale teorico - Manuale d'uso                                         |
| <b>Campo di applicazione:</b><br>Analisi statica e dinamica di strutture in campo elastico lineare.      |

### ▲Elementi finiti implementati

- Truss.
- Beam (Modellazione di Travi e Pilastri).
- Travi su suolo elastico alla Winkler.
- Plinti su suolo elastico alla Winkler.
- Elementi Shear Wall per la modellazione di pareti di taglio.
- Elementi shell (lastra/pietra) equivalenti.
- Elementi Isoparametrici a 8 Nodi Shell (lastra/pietra).

### ▲Schemi di Carico

- Carichi nodali concentrati.
- Carichi applicati direttamente agli elementi.
- Carichi Superficiali.

### ▲Tipo di Risoluzione

- Analisi statica e/o dinamica in campo lineare con il metodo dell'equilibrio.
- Fattorizzazione LDL<sup>T</sup>.
- Analisi Statica:

- modellazione generale 6 gradi di libertà per nodo.
- ipotesi di sola infinitamente rigidi nel proprio piano (3 gradi di libertà per nodo + 3 per impalcato).

- Analisi dinamica. (Nel caso di analisi modale gli autovettori ed autovalori possono essere calcolati mediante *subspace iteration* oppure tramite il *metodo dei vettori di Ritz*);

•

- Via statica equivalente.
- Modale con il metodo dello spettro di risposta.

### ▲Normativa di riferimento

La normativa italiana cui viene fatto riferimento nelle fasi di calcolo e progettazione è la seguente:

- Circolare del 2 Febbraio 2009, n. 617 "Istruzioni per l'applicazione delle "Norme tecniche per le costruzioni" di cui al D.M. 14 gennaio 2008"
- D.M. del 14 Gennaio 2008 "Approvazione delle nuove norme tecniche per le costruzioni"
- Ordinanza n. 3274 del 20 Marzo 2003. "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica"
- Ordinanza n. 3316. "Modifiche ed integrazioni all'ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 Marzo 2003"
- D.M. del 16 Gennaio 1996. "Norme tecniche relative ai «Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi»"
- D.M. del 16 Gennaio 1996. "Norme tecniche per le costruzioni in zone sismiche"
- D.M. del 9 Gennaio 1996. "Norme Tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".

- D.M. del 14 Febbraio 1992. "Norme Tecniche per l'esecuzione delle opere in C.A. normale e precompresso e per le strutture metalliche".
- D.M. del 3 Ottobre 1978. "Criteri generali per la verifica della sicurezza delle costruzioni e dei carichi e sovraccarichi".
- D.M. del 3 Marzo 1975. "Disposizioni concernenti l'applicazione delle norme tecniche per le costruzioni in zone sismiche".
- D.M. del 3 Marzo 1975. "Approvazione delle norme tecniche per le costruzioni in zone sismiche".
- Legge n. 64 del 2 Febbraio 1974. "Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche".
- Legge n. 1086 del 5 Novembre 1971. "Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso, ed a struttura metallica".
- Istruzioni per la valutazione delle: Azioni sulle Costruzioni. (C.N.R. 10012/85)

### ▲Verifiche setti in c.a.

#### ▲Modalità di verifica

Le pareti in c.a. vengono verificate come setti/diaframmi o nuclei.

La verifica dei setti/diaframmi viene condotta a pressoflessione retta e a taglio. Viene calcolato lo sforzo normale medio agente sul setto e il momento ad esso associato. Quando previsto, sono introdotti ferri verticali aggiuntivi da disporre sulle estremità del setto stesso.

La verifica dei nuclei viene condotta a pressoflessione deviata sulla sezione compressiva e a taglio sulle singole pareti costituenti il nucleo.

#### ▲Sezioni Impiegate:

| Sez. Num. | Info | Dimensioni | Criterio | Calcestruzzo | $f_{ctd}$<br>[kg/cm <sup>2</sup> ] | $f_{ctd}$<br>[kg/cm <sup>2</sup> ] | $\sigma_{max}$<br>[kg/cm <sup>2</sup> ] | $\sigma_{max}$<br>[kg/cm <sup>2</sup> ] | $\sigma_{cp}$<br>[kg/cm <sup>2</sup> ] | Acciaio | $f_{yk}$<br>[kg/cm <sup>2</sup> ] | $f_{yk}$<br>[kg/cm <sup>2</sup> ] | $\sigma_{max}$<br>[kg/cm <sup>2</sup> ] | $\sigma_{max}$<br>[kg/cm <sup>2</sup> ] | $\sigma_{cp}$<br>[kg/cm <sup>2</sup> ] | Coprittero |
|-----------|------|------------|----------|--------------|------------------------------------|------------------------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|---------|-----------------------------------|-----------------------------------|-----------------------------------------|-----------------------------------------|----------------------------------------|------------|
| 1         | Muro | 35         |          | C35/45       | 350.0                              | 198.3                              | 210.0                                   | 350.0                                   | 157.5                                  | B 450   | 45000                             | 39130                             | 36000                                   | 4500.0                                  | 4500.0                                 | 4500.0     |
| 2         | Muro | 30         |          | C35/45       | 350.0                              | 198.3                              | 210.0                                   | 350.0                                   | 157.5                                  | B 450   | 45000                             | 39130                             | 36000                                   | 4500.0                                  | 4500.0                                 | 4500.0     |
| 3         | Muro | 25         |          | C35/45       | 350.0                              | 198.3                              | 210.0                                   | 350.0                                   | 157.5                                  | B 450   | 45000                             | 39130                             | 36000                                   | 4500.0                                  | 4500.0                                 | 4500.0     |
| 4         | Muro | 20         |          | C35/45       | 350.0                              | 198.3                              | 210.0                                   | 350.0                                   | 157.5                                  | B 450   | 45000                             | 39130                             | 36000                                   | 4500.0                                  | 4500.0                                 | 4500.0     |

#### Taglio di progetto pari al taglio di calcolo

EC2. 4.3.2.4.4. Verifica a taglio con il metodo dell'inclinazione variabile del traliccio. cotg  $\theta$  = 1.00

#### ▲Verifiche Setti:

**ANUCLEO 139 138 137 136 135 134 133 114 90 65 64 63 62 61 60 59 / Nodi: 2131 2133 2136 2201 2514 2884 3165 2236 2537 2788 2789 2908 3010 3034 3035 3248**

#### ▲Armature Nucleo

| Nodi      | Sezione Numero | B   | H  | Spessore | Armatura Verticale | Armatura Orizzontale |
|-----------|----------------|-----|----|----------|--------------------|----------------------|
| 2131 2133 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2133 2136 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2136 2201 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2201 2514 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2514 2884 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2884 3165 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2131 2236 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2236 2537 | 1              | 103 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2537 2788 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2788 2789 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2789 2908 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 2908 3010 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 3010 3034 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 3034 3035 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |
| 3035 3248 | 1              | 100 | 94 | 35       | 2x $\phi$ 2015     | 2x $\phi$ 1415       |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | Sd/sr |
|---------|-------|------------------------|-------------------------|-------------------------|-------|
| Base    | 17    | -1002511.7             | -1311706.5              | -735702.1               | 0.21  |
| Somma   | 17    | -990837.5              | -1222381.6              | -681688.3               | 0.20  |

| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u</sub><br>[kgm] | M <sub>u</sub><br>[kgm] | $\sigma$<br>[kg/cm <sup>2</sup> ] |
|---------|--------------|------------|-------------------------|-------------------------|-----------------------------------|
| Base    |              |            |                         |                         |                                   |
| sc. Max | 32           | -1066625.3 | -692177                 | -458435.6               | -24.3                             |
| sc. Med | 32           | -1066625.3 | -692177                 | -458435.6               | -16.7                             |

ANUCLEO 298 297 296 295 294 293 292 278 276 274 273 272 271 270 269 268 / Nodi: 2130 2132 2135 2199  
2512 2870 2871 2134 2137 2256 2552 2906 3009 3337 3568 3574

AArmature Nucleo

| Nodi      | Sezione |      |         | B    |             |             | H    |      |      | Spessore |      |      | Armatura  |      |      | Armatura    |      |      |
|-----------|---------|------|---------|------|-------------|-------------|------|------|------|----------|------|------|-----------|------|------|-------------|------|------|
|           | Numero  | [cm] | critica | [cm] | [cm]        | [cm]        | [cm] | [cm] | [cm] | [cm]     | [cm] | [cm] | Verticale | [cm] | [cm] | Orizzontale | [cm] | [cm] |
| 2130 2132 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2132 2135 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2135 2199 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2199 2512 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2512 2870 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2870 2871 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2130 2134 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2134 2137 | 1       | 103  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2137 2256 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2256 2552 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2552 2906 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2906 3009 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3009 3337 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3337 3568 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3568 3574 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -970698.7              | -1145217.8               | -634937.1                | 0.19  |
| Sommila | 16    | -1098452.3             | -1113189.9               | -1331.8                  | 0.18  |

| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|------------|--------------------------|--------------------------|---------------|
| Base    |              |            |                          |                          |               |
| sc Max  | 32           | -1041959.6 | -698672                  | -364511.7                | -22.5         |
| sc Med  | 32           | -1041959.6 | -698672                  | -364511.7                | -16.3         |
| st      | 23           | -1088660.3 | -335443.8                | -298469.9                | -143.6        |
| sc      | 32           | -1041959.6 | -698672                  | -364511.7                | -337.9        |
| Sommila |              |            |                          |                          |               |
| sc Max  | 32           | -1041959.6 | -698672                  | -364511.7                | -22.5         |
| sc Med  | 32           | -1041959.6 | -698672                  | -364511.7                | -16.3         |
| st      | 23           | -1088660.3 | -335443.8                | -298469.9                | -143.6        |
| sc      | 32           | -1041959.6 | -698672                  | -364511.7                | -337.9        |

AAVerifiche a taglio dei diaframmi

| Diaframma                          |     | B    | H  | Comb.      | V <sub>u</sub><br>[kg] | α         | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kg] | V <sub>u</sub><br>[kg] | V <sub>u</sub><br>[kg] | S/R  |
|------------------------------------|-----|------|----|------------|------------------------|-----------|------------------------|------------------------|------------------------|------------------------|------------------------|------|
| 2256-2552-2906-3009-3337-3568-3574 | 600 | 0.94 | 21 | -1467945.1 | 1.00                   | -146794.5 | 45603.76               | 57320.5                | 93282.6                | 431530.4               | 1357130.5              | 0.34 |
| 2130-2134-2137-2256                | 303 | 0.94 | 21 | -90988.6   | 1.00                   | -90988.6  | 28575.17               | 80837.5                | 469157.9               | 217161.5               | 458569.1               | 0.42 |
| 2130-2132-2135-2199-2512-2870-2871 | 600 | 0.94 | 17 | -140109.5  | 1.00                   | -140109.5 | 69481.46               | 4650857.3              | 932828.6               | 431530.4               | 1357155.8              | 0.32 |

ANUCLEO 360 359 358 357 356 355 354 340 338 336 335 334 333 332 331 330 / Nodi: 1812 1813 1909 2198  
2498 2499 2829 1814 1894 2255 2551 2628 3007 3336 3569 3580

AArmature Nucleo

| Nodi      | Sezione |      |         | B    |             |             | H    |      |      | Spessore |      |      | Armatura  |      |      | Armatura    |      |      |
|-----------|---------|------|---------|------|-------------|-------------|------|------|------|----------|------|------|-----------|------|------|-------------|------|------|
|           | Numero  | [cm] | critica | [cm] | [cm]        | [cm]        | [cm] | [cm] | [cm] | [cm]     | [cm] | [cm] | Verticale | [cm] | [cm] | Orizzontale | [cm] | [cm] |
| 1812 1813 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 1813 1909 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 1909 2198 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2198 2498 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2498 2499 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2499 2829 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 1812 1814 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 1814 1894 | 1       | 103  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2255 2255 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2551 2628 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2628 3007 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3007 3336 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |

|         |    |            |           |           |        |
|---------|----|------------|-----------|-----------|--------|
| st      | 23 | -11143260  | -382257.4 | -370584.1 | -129.0 |
| sc      | 32 | -1066625.3 | -692127.7 | -459436.6 | -364.1 |
| Sommila |    |            |           |           |        |
| sc Max  | 32 | -1066625.3 | -692127.7 | -459436.6 | -24.3  |
| sc Med  | 32 | -1066625.3 | -692127.7 | -459436.6 | -16.7  |
| st      | 23 | -11143260  | -382257.4 | -370584.1 | -129.0 |
| sc      | 32 | -1066625.3 | -692127.7 | -459436.6 | -364.1 |

AAVerifiche a taglio dei diaframmi

| Diaframma                          |     | B    | H  | Comb.     | V <sub>u</sub><br>[kg] | α         | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u</sub><br>[kg] | V <sub>u</sub><br>[kg] | S/R  |
|------------------------------------|-----|------|----|-----------|------------------------|-----------|------------------------|------------------------|-------------------------|------------------------|------------------------|------|
| 2788-2789-2908-3010-3034-3035-3248 | 600 | 0.94 | 21 | -157630.7 | 1.00                   | -157630.7 | 706724.3               | 576945.4               | 93282.6                 | 431530.4               | 1357130.5              | 0.37 |
| 2131-2226-2357-2789                | 303 | 0.94 | 21 | -81735.5  | 1.00                   | -81735.5  | 314081.0               | 94652.9                | 469157.9                | 217161.5               | 397786.3               | 0.38 |
| 2131-2133-2136-2201-2514-2884-3165 | 600 | 0.94 | 17 | -152908.3 | 1.00                   | -152908.3 | 749030.1               | 473106.7               | 93282.6                 | 431530.4               | 1357135.8              | 0.35 |

ANUCLEO 236 235 234 233 232 231 230 216 214 212 211 210 209 208 207 206 / Nodi: 2165 2166 2167 2200  
2513 2872 3196 2234 2239 2257 2553 2907 3198 3335 3365 3366

AArmature Nucleo

| Nodi      | Sezione |      |         | B    |             |             | H    |      |      | Spessore |      |      | Armatura  |      |      | Armatura    |      |      |
|-----------|---------|------|---------|------|-------------|-------------|------|------|------|----------|------|------|-----------|------|------|-------------|------|------|
|           | Numero  | [cm] | critica | [cm] | [cm]        | [cm]        | [cm] | [cm] | [cm] | [cm]     | [cm] | [cm] | Verticale | [cm] | [cm] | Orizzontale | [cm] | [cm] |
| 2165 2166 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2166 2167 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2167 2200 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2200 2513 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2513 2872 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2872 3196 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2165 2324 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2234 2239 | 1       | 103  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2239 2257 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2257 2553 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2553 2907 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 2907 3198 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3198 3335 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3335 3365 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |
| 3365 3366 | 1       | 100  | 94      | 35   | 2x ø 20 15' | 2x ø 14 15' |      |      |      |          |      |      |           |      |      |             |      |      |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -990069.9              | -1225210.6               | -689803.5                | 0.20  |
| Sommila | 17    | -971895.9              | -1156984.5               | -602104.4                | 0.19  |

| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|------------|--------------------------|--------------------------|---------------|
| Base    |              |            |                          |                          |               |
| sc Max  | 32           | -1054292.5 | -69541.7                 | -411475.0                | -23.4         |
| sc Med  | 32           | -1054292.5 | -69541.7                 | -411475.0                | -16.5         |
| st      | 23           | -1101993.1 | -358848.6                | -334526.0                | -136.3        |
| sc      | 32           | -1054292.5 | -69541.7                 | -411475.0                | -351.0        |
| Sommila |              |            |                          |                          |               |
| sc Max  | 32           | -1054292.5 | -69541.7                 | -411475.0                | -23.4         |
| sc Med  | 32           | -1054292.5 | -69541.7                 | -411475.0                | -16.5         |
| st      | 23           | -1101993.1 | -358848.6                | -334526.0                | -136.3        |
| sc      | 32           | -1054292.5 | -69541.7                 | -411475.0                | -351.0        |

AAVerifiche a taglio dei diaframmi

| Diaframma                          |     | B    | H  | Comb.     | V <sub>u</sub><br>[kg] | α         | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u</sub><br>[kg] | V <sub>u</sub><br>[kg] | S/R  |
|------------------------------------|-----|------|----|-----------|------------------------|-----------|------------------------|------------------------|-------------------------|------------------------|------------------------|------|
| 2257-2553-2907-3198-3335-3365-3366 | 600 | 0.94 | 21 | -149753.0 | 1.00                   | -149753.0 | 680535.9               | 472665.8               | 93282.6                 | 431530.4               | 1357130.5              | 0.35 |
| 2165-2234-2239-2257                | 303 | 0.94 | 21 | -90922.8  | 1.00                   | -90922.8  | 301216.8               | 87211.4                | 469157.9                | 217161.5               | 427527.3               | 0.42 |
| 2165-2166-2167-2200-2513-2872-3196 | 600 | 0.94 | 17 | -143379.2 | 1.00                   | -143379.2 | 721965.3               | 660204.5               | 93282.6                 | 431530.4               | 1357135.8              | 0.33 |



| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|-------------------------|--------------------------|---------------|
| Base    | sc Max       | 32        | -941177.6               | -77966.3                 | -133397.6     |
|         | sc Med       | 32        | -941177.6               | -77966.3                 | -133397.6     |
|         | sc           | 30        | -934374.9               | -82425.3                 | -135.5        |
|         | sc           | 32        | -941177.6               | -77966.3                 | -133397.6     |
| Sommità | sc Max       | 32        | -941177.6               | -77966.3                 | -133397.6     |
|         | sc Med       | 32        | -941177.6               | -77966.3                 | -133397.6     |
|         | sc           | 30        | -934374.9               | -82425.3                 | -135.5        |
|         | sc           | 32        | -941177.6               | -77966.3                 | -133397.6     |

▲Verifiche a taglio dei diaframmi

| Diaframma                          |  | B<br>[m] | H<br>[m] | Comb. | V <sub>ed</sub><br>[kg] | α    | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>u,d</sub><br>[kg] | V <sub>u,sc</sub><br>[kg] | V <sub>u,scsommità</sub><br>S/R<br>[kg] |
|------------------------------------|--|----------|----------|-------|-------------------------|------|------------------------|------------------------|--------------------------|--------------------------|---------------------------|-----------------------------------------|
| 1936-2215-2259-2597-3000-3328-3329 |  | 6.00     | 0.94     | 21    | -158043.6               | 1.00 | -158043.6              | 477482.6               | -478281.8                | 932282.6                 | 43130.4                   | 1298816.5                               |
| 1504-1506-1566-1936                |  | 3.03     | 0.94     | 21    | -109992.9               | 1.00 | -109992.9              | 214830.2               | 37888.1                  | 469157.9                 | 217161.5                  | 603377.7                                |
| 1504-1505-1575-1864-2174-2175-2479 |  | 6.00     | 0.94     | 17    | -150093.5               | 1.00 | -150093.5              | 519067.0               | -545304.8                | 932282.6                 | 43130.4                   | 1336565.5                               |

▲NUCLEO 1582 1581 1580 1579 1578 1577 1576 1548 1528 1509 1508 1507 1506 1505 1504 1503 / Nodi:  
1235 1474 1570 1859 1860 2173 2446 1456 1562 2078 2079 2258 2595 2998 3062 3275

▲Armature Nucleo

| Diaframma |  | Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|--|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1235 1474 |  | 1235 1474 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1474 1570 |  | 1474 1570 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1570 1859 |  | 1570 1859 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1859 1860 |  | 1859 1860 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1860 2173 |  | 1860 2173 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2173 2446 |  | 2173 2446 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1235 1456 |  | 1235 1456 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1456 1562 |  | 1456 1562 | 21                | 103       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 1562 2078 |  | 1562 2078 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2078 2079 |  | 2078 2079 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2079 2258 |  | 2079 2258 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2258 2595 |  | 2258 2595 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2595 2998 |  | 2595 2998 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2998 3062 |  | 2998 3062 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3062 3275 |  | 3062 3275 | 21                | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -1296171.4             | -278219.2                | -93234.4                 | 0.17  |
| Sommità | 1     | -1282429.3             | -253985.5                | -75596.9                 | 0.17  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|-------------------------|--------------------------|---------------|
| Base    | sc Max       | 32        | -874618.6               | -82193.5                 | -107824.1     |
|         | sc Med       | 32        | -874618.6               | -82193.5                 | -107824.1     |
|         | sc           | 30        | -867657.8               | -86521.6                 | -1496.1       |
|         | sc           | 32        | -874618.6               | -82193.5                 | -107824.1     |
| Sommità | sc Max       | 32        | -874618.6               | -82193.5                 | -107824.1     |
|         | sc Med       | 32        | -874618.6               | -82193.5                 | -107824.1     |
|         | sc           | 30        | -867657.8               | -86521.6                 | -1496.1       |
|         | sc           | 32        | -874618.6               | -82193.5                 | -107824.1     |

▲Verifiche a taglio dei diaframmi

| Diaframma                          |  | B<br>[m] | H<br>[m] | Comb. | V <sub>ed</sub><br>[kg] | α    | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>u,d</sub><br>[kg] | V <sub>u,sc</sub><br>[kg] | V <sub>u,scsommità</sub><br>S/R<br>[kg] |
|------------------------------------|--|----------|----------|-------|-------------------------|------|------------------------|------------------------|--------------------------|--------------------------|---------------------------|-----------------------------------------|
| 2078-2079-2258-2595-2998-3062-3275 |  | 6.00     | 0.94     | 21    | -141503.9               | 1.00 | -141503.9              | -466794.4              | -458611.6                | 799099.4                 | 43130.4                   | 1109563.3                               |
| 1235-1456-1562-2078                |  | 3.03     | 0.94     | 21    | -110452.4               | 1.00 | -110452.4              | -208054.8              | -41926.6                 | 402135.3                 | 217161.5                  | 478822.9                                |

|           |   |     |    |    |            |            |
|-----------|---|-----|----|----|------------|------------|
| 1583 1865 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 1865 2177 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 2177 2494 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 2494 2495 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 1537 1582 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 1582 1584 | 1 | 103 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 1584 1937 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 1937 2216 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 2216 2524 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 2524 2598 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 2598 3002 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 3002 3331 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |
| 3331 3566 | 1 | 100 | 94 | 35 | 2x ø 20.15 | 2x ø 14.15 |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 4     | -1313492.1             | -286880.1                | -566806.1                | 0.16  |
| Sommità | 4     | -1303459.4             | -263320.4                | -494175.5                | 0.15  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|-------------------------|--------------------------|---------------|
| Base    | sc Max       | 32        | -953510.4               | -76886.6                 | -185056.9     |
|         | sc Med       | 32        | -953510.4               | -76886.6                 | -185056.9     |
|         | sc           | 30        | -946707.9               | -81374.6                 | -502386.1     |
|         | sc           | 32        | -953510.4               | -76886.6                 | -185056.9     |
| Sommità | sc Max       | 32        | -953510.4               | -76886.6                 | -185056.9     |
|         | sc Med       | 32        | -953510.4               | -76886.6                 | -185056.9     |
|         | sc           | 30        | -946707.9               | -81374.6                 | -502386.1     |
|         | sc           | 32        | -953510.4               | -76886.6                 | -185056.9     |

▲Verifiche a taglio dei diaframmi

| Diaframma                          |  | B<br>[m] | H<br>[m] | Comb. | V <sub>ed</sub><br>[kg] | α    | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>u,d</sub><br>[kg] | V <sub>u,sc</sub><br>[kg] | V <sub>u,scsommità</sub><br>S/R<br>[kg] |
|------------------------------------|--|----------|----------|-------|-------------------------|------|------------------------|------------------------|--------------------------|--------------------------|---------------------------|-----------------------------------------|
| 1937-2216-2524-2598-3002-3331-3566 |  | 6.00     | 0.94     | 21    | -160585.9               | 1.00 | -160585.9              | 528632.8               | -506836.9                | 932282.6                 | 43130.4                   | 1335095.5                               |
| 1537-1582-1584-1937                |  | 3.03     | 0.94     | 21    | -116025.5               | 1.00 | -116025.5              | 234927.5               | 51263.3                  | 469157.9                 | 217161.5                  | 551008.8                                |
| 1537-1581-1883-1865-2177-2494-2495 |  | 6.00     | 0.94     | 17    | -153792.8               | 1.00 | -153792.8              | 567618.7               | -567999.9                | 932282.6                 | 43130.4                   | 1357135.8                               |

▲NUCLEO 1197 1196 1195 1194 1193 1192 1191 1177 1175 1173 1172 1171 1170 1169 1168 1167 / Nodi:  
1504 1505 1575 1864 2174 2175 2479 1506 1566 1936 2215 2259 2597 3000 3328 3329

▲Armature Nucleo

| Diaframma |  | Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|--|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1504 1505 |  | 1504 1505 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1505 1575 |  | 1505 1575 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1575 1864 |  | 1575 1864 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1864 2174 |  | 1864 2174 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 2174 2175 |  | 2174 2175 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 2175 2479 |  | 2175 2479 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1504 1506 |  | 1504 1506 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1506 1566 |  | 1506 1566 | 1                 | 103       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1566 1936 |  | 1566 1936 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 1936 2215 |  | 1936 2215 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 2215 2259 |  | 2215 2259 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 2259 2597 |  | 2259 2597 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 2597 3000 |  | 2597 3000 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 3000 3328 |  | 3000 3328 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |
| 3328 3329 |  | 3328 3329 | 1                 | 100       | 94        | 35               | 2x ø 20.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 4     | -1303459.4             | -26332.4                 | -494175.5                | 0.15  |
| Sommità | 1     | -1385644.9             | -238535.5                | -48233.8                 | 0.15  |

1235-1474-1570-1859-1860-2173-2446 [6,00] 0,94 17 -133618,0 1,00 -133618,0 512057,8 -532588,6 799099,4 431530,4 1145379,9 0,31

▲ NUCLEO 1910 1909 1908 1907 1906 1905 1904 1890 1888 1886 1885 1884 1883 1882 1881 1880 / Nodi:  
1258 1308 1559 1561 1857 2172 2478 1309 1560 1603 1881 2187 2504 2594 2925 3200

▲ Armature Nudeo

| Nodi        |   | Sezione |    | B    |            | H          |  | Spessore |  | Armatura Verticale |  | Armatura Orizzontale |  |
|-------------|---|---------|----|------|------------|------------|--|----------|--|--------------------|--|----------------------|--|
| Numero [cm] |   | [cm]    |    | [cm] |            | [cm]       |  | [cm]     |  | [cm]               |  | [cm]                 |  |
| 1258 1308   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1308 1559   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1559 1561   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1561 1857   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1857 2172   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2172 2478   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1258 1309   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1309 1560   | 2 | 103     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1560 1603   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1603 1881   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1881 2187   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2187 2504   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2504 2594   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2594 2925   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2925 3200   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |

| Sezione |  | Comb. |  | N <sub>u</sub> [kg] |  | M <sub>u2</sub> [kgm] |  | M <sub>u3</sub> [kgm] |  | Sd/Sr |  |
|---------|--|-------|--|---------------------|--|-----------------------|--|-----------------------|--|-------|--|
| Base    |  | 1     |  | -1282429,0          |  | -253986,1             |  | -75593,3              |  | 0,17  |  |
| Sommità |  | 1     |  | -1268686,6          |  | -229773,1             |  | -57952,2              |  | 0,16  |  |

| S.L.E.  |  | Combinazione |  | N [kg]    |  | M <sub>u2</sub> [kgm] |  | M <sub>u3</sub> [kgm] |  | σ [kg/cm²] |  |
|---------|--|--------------|--|-----------|--|-----------------------|--|-----------------------|--|------------|--|
| Base    |  | 32           |  | -864047,7 |  | -82565,3              |  | -84957,8              |  | -18,7      |  |
| sc Max  |  | 32           |  | -864047,7 |  | -82565,3              |  | -84957,8              |  | -15,9      |  |
| sc Med  |  | 30           |  | -857086,9 |  | -864510,8             |  | -328587,9             |  | -157,6     |  |
| st      |  | 32           |  | -864047,7 |  | -82565,3              |  | -84957,8              |  | -279,3     |  |
| Sommità |  |              |  |           |  |                       |  |                       |  |            |  |
| sc Max  |  | 32           |  | -864047,7 |  | -82565,3              |  | -84957,8              |  | -18,7      |  |
| sc Med  |  | 32           |  | -864047,7 |  | -82565,3              |  | -84957,8              |  | -15,9      |  |
| st      |  | 30           |  | -857086,9 |  | -864510,8             |  | -328587,9             |  | -157,6     |  |
| sc      |  | 32           |  | -864047,7 |  | -82565,3              |  | -84957,8              |  | -279,3     |  |

▲ Verifiche a taglio dei diaframmi

| Diaframma                          |      | B       |    | H         |      | V <sub>ed</sub> |           | α         |          | V <sub>u2</sub> [kg] |           | M <sub>u2</sub> [kgm] |  | V <sub>u3</sub> [kg] |  | V <sub>u3,corrente</sub> S/R |  |
|------------------------------------|------|---------|----|-----------|------|-----------------|-----------|-----------|----------|----------------------|-----------|-----------------------|--|----------------------|--|------------------------------|--|
| Numero [cm]                        |      | critica |    | [cm]      |      | [kg]            |           | [cm]      |          | [kg]                 |           | [kgm]                 |  | [kg]                 |  | [kg]                         |  |
| 1603-1881-2187-2504-2594-2925-3200 | 6,00 | 0,94    | 21 | -140539,1 | 1,00 | -140539,1       | -425203,6 | -431050,5 | 799099,4 | 431530,4             | 1081924,0 | 0,33                  |  |                      |  |                              |  |
| 1258-1309-1560-1603                | 3,03 | 0,94    | 21 | -117826,2 | 1,00 | -117826,2       | 198322,2  | 30285,2   | 402155,3 | 217161,5             | 513274,2  | 0,54                  |  |                      |  |                              |  |
| 1258-1308-1559-1561-1857-2172-2478 | 6,00 | 0,94    | 17 | -132994,7 | 1,00 | -132994,7       | -470530,9 | -498665,5 | 799099,4 | 431530,4             | 1116675,9 | 0,31                  |  |                      |  |                              |  |

▲ NUCLEO 1972 1971 1970 1969 1968 1967 1966 1962 1952 1950 1948 1947 1946 1945 1944 1943 1942 / Nodi:  
1255 1303 1305 1558 1856 2170 2171 1304 1306 1602 1880 2186 2253 2593 2923 3199

▲ Armature Nudeo

| Nodi        |   | Sezione |    | B    |            | H          |  | Spessore |  | Armatura Verticale |  | Armatura Orizzontale |  |
|-------------|---|---------|----|------|------------|------------|--|----------|--|--------------------|--|----------------------|--|
| Numero [cm] |   | [cm]    |    | [cm] |            | [cm]       |  | [cm]     |  | [cm]               |  | [cm]                 |  |
| 1255 1303   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1303 1305   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1305 1558   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1558 1856   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1856 2170   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2170 2171   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1255 1304   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1304 1306   | 2 | 103     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1306 1602   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1602 1880   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1880 2186   | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |

|           |   |     |    |    |            |            |
|-----------|---|-----|----|----|------------|------------|
| 2186 2253 | 2 | 100 | 94 | 30 | 2x ø 18 15 | 2x ø 14 15 |
| 2253 2593 | 2 | 100 | 94 | 30 | 2x ø 18 15 | 2x ø 14 15 |
| 2593 2923 | 2 | 100 | 94 | 30 | 2x ø 18 15 | 2x ø 14 15 |
| 2923 3199 | 2 | 100 | 94 | 30 | 2x ø 18 15 | 2x ø 14 15 |

| Sezione |  | Comb. |  | N <sub>u</sub> [kg] |  | M <sub>u2</sub> [kgm] |  | M <sub>u3</sub> [kgm] |  | Sd/Sr |  |
|---------|--|-------|--|---------------------|--|-----------------------|--|-----------------------|--|-------|--|
| Base    |  | 1     |  | -1268686,6          |  | -229758,8             |  | -57944,0              |  | 0,16  |  |
| Sommità |  | 1     |  | -1254944,5          |  | -205543,5             |  | -40306,6              |  | 0,16  |  |

| S.L.E.  |  | Combinazione |  | N [kg]    |  | M <sub>u2</sub> [kgm] |  | M <sub>u3</sub> [kgm] |  | σ [kg/cm²] |  |
|---------|--|--------------|--|-----------|--|-----------------------|--|-----------------------|--|------------|--|
| Base    |  | 32           |  | -853476,8 |  | -82961,1              |  | -62083,4              |  | -18,1      |  |
| sc Max  |  | 32           |  | -853476,8 |  | -82961,1              |  | -62083,4              |  | -15,7      |  |
| st      |  | 30           |  | -846515,7 |  | -86396,6              |  | -268522,6             |  | -165,7     |  |
| sc      |  | 32           |  | -853476,8 |  | -82961,1              |  | -62083,4              |  | -270,6     |  |
| Sommità |  |              |  |           |  |                       |  |                       |  |            |  |
| sc Max  |  | 32           |  | -853476,8 |  | -82961,1              |  | -62083,4              |  | -18,1      |  |
| sc Med  |  | 32           |  | -853476,8 |  | -82961,1              |  | -62083,4              |  | -15,7      |  |
| st      |  | 30           |  | -846515,7 |  | -86396,6              |  | -268522,6             |  | -165,7     |  |
| sc      |  | 32           |  | -853476,8 |  | -82961,1              |  | -62083,4              |  | -270,6     |  |

▲ Verifiche a taglio dei diaframmi

| Diaframma                          |      | B       |    | H         |      | V <sub>ed</sub> |          | α         |          | V <sub>u2</sub> [kg] |           | N <sub>u2</sub> [kg] |  | M <sub>u2</sub> [kgm] |  | V <sub>u2</sub> [kg] |  | V <sub>u2,corrente</sub> S/R |  |
|------------------------------------|------|---------|----|-----------|------|-----------------|----------|-----------|----------|----------------------|-----------|----------------------|--|-----------------------|--|----------------------|--|------------------------------|--|
| Numero [cm]                        |      | critica |    | [cm]      |      | [kg]            |          | [cm]      |          | [kg]                 |           | [kg]                 |  | [kgm]                 |  | [kg]                 |  | [kg]                         |  |
| 1602-1880-2186-2253-2593-2923-3199 | 6,00 | 0,94    | 21 | -140096,3 | 1,00 | -140096,3       | 374405,4 | -392731,2 | 799099,4 | 431530,4             | 1045365,9 | 0,32                 |  |                       |  |                      |  |                              |  |
| 1255-1304-1306-1602                | 3,03 | 0,94    | 21 | -117654,0 | 1,00 | -117654,0       | 185313,6 | 16127,4   | 402135,3 | 217161,5             | 507973,0  | 0,54                 |  |                       |  |                      |  |                              |  |
| 1255-1303-1305-1558-1856-2170-2171 | 6,00 | 0,94    | 17 | -132791,7 | 1,00 | -132791,7       | -42507,9 | -473512,8 | 799099,4 | 431530,4             | 1089522,8 | 0,31                 |  |                       |  |                      |  |                              |  |

▲ NUCLEO 2034 2033 2032 2031 2030 2029 2028 2014 2012 2010 2009 2008 2007 2006 2005 2004 / Nodi:  
1229 1230 1300 1557 1853 1854 2146 1231 1292 1601 1879 1940 2252 2591 2920 2921

▲ Armature Nucleo

| Nodi      |   | Sezione |    | B    |            | H          |  | Spessore |  | Armatura Verticale |  | Armatura Orizzontale |  |
|-----------|---|---------|----|------|------------|------------|--|----------|--|--------------------|--|----------------------|--|
| Numero    |   | [cm]    |    | [cm] |            | [cm]       |  | [cm]     |  | [cm]               |  | [cm]                 |  |
| 1229 1230 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1230 1300 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1300 1557 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1557 1853 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1853 1854 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1854 2146 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1229 1231 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1231 1282 | 2 | 103     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1282 1601 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1601 1879 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1879 1940 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 1940 2562 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2252 2591 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2591 2920 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |
| 2920 2921 | 2 | 100     | 94 | 30   | 2x ø 18 15 | 2x ø 14 15 |  |          |  |                    |  |                      |  |

|           |   |     |    |    |           |           |
|-----------|---|-----|----|----|-----------|-----------|
| 1014.1057 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1057.1282 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1282.1284 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1284.1551 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1551.1851 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1851.2145 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1014.1058 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1058.1283 | 2 | 103 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1283.1320 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1320.1565 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1565.1862 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 1862.2176 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 2176.2249 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 2249.2550 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |
| 2550.2833 | 2 | 100 | 94 | 30 | 2xø 18.15 | 2xø 14.15 |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -111833.96             | -199708.2                | -351.698                 | 0.14  |
| Sommila | 1     | -1104597.5             | -181174.2                | -276206                  | 0.14  |

| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|------------|--------------------------|--------------------------|---------------|
| Base    |              |            |                          |                          |               |
| sc Max  | 32           | -753.306.5 | -86341.9                 | -36706.6                 | -15.8         |
| sc Med  | 32           | -753.306.5 | -86341.9                 | -36706.6                 | -13.9         |
| st      | 30           | -747.312.6 | -88600.9                 | -150166.5                | -15.93        |
| sc      | 32           | -753.306.5 | -86341.9                 | -36706.6                 | -237.1        |
| Sommila |              |            |                          |                          |               |
| sc Max  | 32           | -753.306.5 | -86341.9                 | -36706.6                 | -15.8         |
| sc Med  | 32           | -753.306.5 | -86341.9                 | -36706.6                 | -13.9         |
| st      | 30           | -747.312.6 | -88600.9                 | -150166.5                | -15.93        |
| sc      | 32           | -753.306.5 | -86341.9                 | -36706.6                 | -237.1        |

▲Verifiche a taglio dei diaframmi

| Diaframma                          | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>[kg] | α    | V <sub>u2</sub><br>[kg] | N <sub>u2</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | V <sub>u3</sub><br>[kg] | M <sub>u3</sub><br>[kgm] | S/R              |
|------------------------------------|----------|----------|-------|------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------------|
| 1320-1565-1862-2176-2249-2550-2833 | 6.00     | 0.94     | 21    | -120415.3              | 1.00 | -120415.3               | 310894.1                | -335439.1                | 799099.4                | 431530.4                 | 1002661.4 / 0.28 |
| 1014-1058-1283-1320                | 3.03     | 0.94     | 21    | -97220.2               | 1.00 | -97220.2                | 160911.9                | -8829.2                  | 402135.3                | 217161.5                 | 491712.4 / 0.45  |
| 1014-1057-1282-1284-1551-1851-2145 | 6.00     | 0.94     | 17    | -113505.0              | 1.00 | -113505.0               | 362345.2                | -402869.6                | 799099.4                | 431530.4                 | 1041066.2 / 0.26 |

▲NUCLEO 2809 2808 2807 2806 2805 2804 2803 2789 2787 2785 2782 2783 2782 2781 2780 2779 / Nodi:  
1013 1052 1054 1281 1550 1849 1850 1053 1055 1053 1319 1564 1861 1935 2248 2548 2832

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1013.1052 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1052.1054 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1054.1281 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1281.1550 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1550.1849 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1849.1850 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1013.1053 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1053.1055 | 2                 | 103       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1055.1319 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1319.1564 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1564.1861 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1861.1935 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1935.2248 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 2248.2548 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 2548.2832 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -1104597.5             | -181174.2                | -276185                  | 0.14  |
| Sommila | 1     | -1090855.0             | -162667.0                | -200620                  | 0.14  |

|        |    |            |          |           |        |
|--------|----|------------|----------|-----------|--------|
| sc Med | 32 | -842.905.1 | -83356.6 | -39197.6  | -15.5  |
| st     | 30 | -835.944.7 | -86312.9 | -206458.9 | -173.7 |
| sc     | 32 | -842.905.5 | -83356.6 | -39197.6  | -261.8 |

▲Verifiche a taglio dei diaframmi

| Diaframma                          | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>[kg] | α    | V <sub>u2</sub><br>[kg] | N <sub>u2</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | V <sub>u3</sub><br>[kg] | M <sub>u3</sub><br>[kgm] | S/R              |
|------------------------------------|----------|----------|-------|------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------------|
| 1601-1879-1940-2252-2591-2920-2921 | 6.00     | 0.94     | 21    | -137505.1              | 1.00 | -137505.1               | 332581.2                | -375017.8                | 799099.4                | 431530.4                 | 1020093.4 / 0.32 |
| 1229-1231-1292-1601                | 3.03     | 0.94     | 20    | -108038.0              | 1.00 | -108038.0               | 178579.6                | 7074.0                   | 402135.3                | 217161.5                 | 501923.6 / 0.50  |
| 1229-1230-1300-1557-1853-1854-2146 | 6.00     | 0.94     | 17    | -129153.0              | 1.00 | -129153.0               | 391606.5                | -449821.9                | 799099.4                | 431530.4                 | 1063810.6 / 0.30 |

▲NUCLEO 2419 2418 2417 2416 2415 2414 2413 2385 2365 2346 2345 2344 2343 2342 2341 2340 / Nodi:  
996 1204 1295 1553 1554 1554 1852 2108 996 1172 1172 1285 1285 1746 1746 1747 1747 1939 1939 2250 2250 2589 2589 2648 2648 2905

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 996.1204  | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1204.1295 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1295.1553 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1553.1554 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1554.1852 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1852.2108 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 996.1172  | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1172.1285 | 2                 | 103       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1285.1746 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1746.1747 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1747.1939 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 1939.2250 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 2250.2589 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 2589.2648 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |
| 2648.2905 | 2                 | 100       | 94        | 30               | 2xø 18.15             | 2xø 14.15               |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -1132081.9             | -218240.0                | -47272.8                 | 0.15  |
| Sommila | 1     | -1118339.5             | -199714.5                | -35166.0                 | 0.14  |

| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|------------|--------------------------|--------------------------|---------------|
| Base    |              |            |                          |                          |               |
| sc Max  | 32           | -763.877.6 | -85559.3                 | -50886.8                 | -16.3         |
| sc Med  | 32           | -763.877.6 | -85559.3                 | -50886.8                 | -14.1         |
| st      | 30           | -757.883.5 | -87985.1                 | -187106.5                | -155.6        |
| sc      | 32           | -763.877.6 | -85559.3                 | -50886.8                 | -243.5        |
| Sommila |              |            |                          |                          |               |
| sc Max  | 32           | -763.877.6 | -85559.3                 | -50886.8                 | -16.3         |
| sc Med  | 32           | -763.877.6 | -85559.3                 | -50886.8                 | -14.1         |
| st      | 30           | -757.883.5 | -87985.1                 | -187106.5                | -155.6        |
| sc      | 32           | -763.877.6 | -85559.3                 | -50886.8                 | -243.5        |

▲Verifiche a taglio dei diaframmi

| Diaframma                          | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>[kg] | α    | V <sub>u2</sub><br>[kg] | N <sub>u2</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | V <sub>u3</sub><br>[kg] | M <sub>u3</sub><br>[kgm] | S/R              |
|------------------------------------|----------|----------|-------|------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------------|
| 1746-1747-1939-2250-2589-2648-2905 | 6.00     | 0.94     | 21    | -120349.2              | 1.00 | -120349.2               | 344102.4                | -361543.2                | 799099.4                | 431530.4                 | 1025501.4 / 0.28 |
| 996-1172-1285-1746                 | 3.03     | 0.94     | 21    | -91129.5               | 1.00 | -91129.5                | 168054.0                | 17385.5                  | 402135.3                | 217161.5                 | 497897.3 / 0.42  |
| 996-1204-1295-1553-1554-1852-2108  | 6.00     | 0.94     | 17    | -112501.2              | 1.00 | -112501.2               | 397699.1                | -440573.8                | 799099.4                | 431530.4                 | 1066489.8 / 0.26 |

▲NUCLEO 2747 2746 2745 2744 2743 2742 2741 2737 2725 2723 2722 2721 2720 2719 2718 2717 / Nodi:  
1014 1057 1282 1284 1551 1851 2145 1058 1283 1320 1565 1862 2176 2249 2550 2833

▲Armature Nucleo

| Nodi | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
|------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|





|         | Base | 20 | -502829.4 | -576397.8 | -126373.6 | 0.11 |
|---------|------|----|-----------|-----------|-----------|------|
| Sommità |      | 20 | -494615.3 | -564219.1 | -127277.7 | 0.10 |

| S.I.E.  | Combinazione | N  | M <sub>2</sub><br>[kg] | M <sub>10</sub><br>[kg] | σ [g/cm <sup>3</sup> ] |
|---------|--------------|----|------------------------|-------------------------|------------------------|
| Sommità | Base         | 32 | -4908123               | -965237                 | -199005                |
|         | sc Max       | 32 | -4908123               | -965237                 | -199005                |
|         | sc Med       | 32 | -4908123               | -965237                 | -199005                |
|         | st           | 32 | -4872764               | -977385                 | -183454                |
|         | sc           | 30 | -4872764               | -977385                 | -183454                |
|         | st           | 32 | -4908123               | -965237                 | -199005                |
| Sommità | Base         | 32 | -4908123               | -965237                 | -199005                |
|         | sc Max       | 32 | -4908123               | -965237                 | -199005                |
|         | sc Med       | 32 | -4908123               | -965237                 | -199005                |
|         | st           | 32 | -4872764               | -977385                 | -183454                |
|         | sc           | 30 | -4872764               | -977385                 | -183454                |
|         | st           | 32 | -4908123               | -965237                 | -199005                |

### ▲ Verifiche a taglio dei diaframmi

| Diagramma                          | B    | H    | Comb. | V <sub>crit</sub> | α    | V <sub>rel</sub> | N <sub>rel</sub> | M <sub>rel</sub> | V <sub>rel</sub> | V <sub>rel</sub> | S/R      |         |
|------------------------------------|------|------|-------|-------------------|------|------------------|------------------|------------------|------------------|------------------|----------|---------|
|                                    |      |      |       |                   |      |                  |                  |                  |                  |                  |          | critica |
| 861-1-039-1276-1549-1638-1947-2159 | 6,00 | 0,94 | 21    | 89001,6           | 1,00 | 89001,6          | -181862          | 56228,6          | 799009,4         | 431530,4         | 277655,8 | 0,32    |
| 586-630-816-861                    | 3,03 | 0,94 | 20    | -70789,3          | 1,00 | -70790,0         | -171357,8        | -45006,2         | 402239,3         | 271761,5         | 892011,7 | 0,15    |
| 586-639-815-817-1023-1261-1511     | 6,00 | 0,94 | 18    | -65380,3          | 1,00 | -65380,3         | -180831,1        | -32595,2         | 799009,4         | 431530,4         | 327100,4 | 0,33    |

▲NUCLEO 4483 4482 4481 4480 4479 4478 4477 4463 4461 4459 4458 4457 4456 4455 4454 4453 / Nodi: 585 630 632 814 1022 1259 1260 631 633 860 1038 1275 1404 1617 1945 2158

**▲Armature Nucleo**

| Nodi | Sezione |      | B | H   | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |            |
|------|---------|------|---|-----|------------------|-----------------------|-------------------------|------------|
|      | Numero  | Area |   |     |                  |                       |                         |            |
| 1    | 585     | 630  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 630     | 632  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 632     | 814  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 814     | 1022 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
| 2    | 1022    | 259  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 1229    | 260  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 585     | 631  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 631     | 633  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
| 3    | 633     | 860  | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 860     | 1038 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 1038    | 1275 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 1275    | 1404 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
| 4    | 1404    | 1617 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 1617    | 1945 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 1945    | 2158 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |
|      | 2158    | 2400 | 2 | 100 | 94               | 30                    | 2xø 18 15'              | 2xø 14 15' |

| Sezione | Comb. | N <sub>sd</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 20    | -496112.5               | -554968.9                | -122041.3                | 0.10  |
| Sommità | 20    | -487803.9               | -557020.8                | -130107.9                | 0.10  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>2</sub><br>[kg/m] | M <sub>3</sub><br>[kg/m] | σ<br>[kg/cm <sup>2</sup> ] |
|---------|--------------|-----------|--------------------------|--------------------------|----------------------------|
| Base    | 32           | -480241,3 | -98133,7                 | -82207                   | -105                       |
|         | sc Max       |           |                          |                          |                            |
|         | 32           | -480241,3 | -98133,7                 | -82207                   | -89                        |
|         | sc Med       |           |                          |                          |                            |
|         | 32           | -476705,4 | -99259,0                 | -154846                  | -1062                      |
|         | sc           |           |                          |                          |                            |
| Sommità | 32           | -480241,3 | -98133,7                 | -82207                   | -1569                      |
|         | sc Max       |           |                          |                          |                            |
|         | 32           | -480241,3 | -98133,7                 | -82207                   | -105                       |
|         | sc Med       |           |                          |                          |                            |
|         | 32           | -476705,4 | -99259,0                 | -154846                  | -1062                      |
|         | sc           |           |                          |                          |                            |

### ▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B   | H  | Spessore<br>[cm] | Armatura  |             | Armatura<br>Orizzontale |
|-----------|-------------------|-----|----|------------------|-----------|-------------|-------------------------|
|           |                   |     |    |                  | Verticale | Orizzontale |                         |
| 574 731   | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 731 834   | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 834 1025  | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1025 1026 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1026 1266 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1266 1436 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 574 688   | 2                 | 103 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 668 818   | 2                 | 103 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 818 1140  | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1140 141  | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 141 1321  | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1321 1597 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1597 1926 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1926 1953 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |
| 1953 2222 | 2                 | 100 | 94 | 30               | 2xø 18 15 | 2xø 14 15   |                         |

| Sezione | Comb. | N <sub>tot</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|--------------------------|--------------------------|--------------------------|-------|
| Base    | 20    | -545942.9                | -519167.7                | -271450.7                | 0.11  |
| Sommità | 20    | -503128.0                | -574210.8                | -126074.1                | 0.11  |

| S.L.E.  | Combinazione | N         | M <sub>2</sub><br>[kgm] | M <sub>3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|---------|--------------|-----------|-------------------------|-------------------------|----------------------------|
| Base    | 32           | -50.383.3 | -949.177                | -31757.3                | -11.2                      |
|         | sc Max       |           |                         |                         |                            |
|         | 32           | -50.383.3 | -949.177                | -31757.3                | -9.2                       |
|         | sc Med       |           |                         |                         |                            |
|         | 32           | -49.784.7 | -961.852                | -48178.4                | -106.9                     |
|         | sc           |           |                         |                         |                            |
| Sommità | 32           | -50.383.3 | -949.177                | -31757.3                | -168.1                     |
|         | sc Max       |           |                         |                         |                            |
|         | 32           | -50.383.3 | -949.177                | -31757.3                | -11.2                      |
|         | sc Med       |           |                         |                         |                            |
|         | 32           | -49.784.7 | -961.852                | -48178.4                | -106.9                     |
|         | sc           |           |                         |                         |                            |

### ▲ Verifiche a taglio dei diaframmi

| Diagrams                             | B    | H    | Comb. | $V_{rel}$<br>critica | $\alpha$ | $V_{rel}$<br>[km] | $N_{rel}$<br>[kg] | $M_{rel}$<br>[kg] | $V_{rel}$<br>[km] | $V_{rel}$<br>[km] | S/R      |                   |
|--------------------------------------|------|------|-------|----------------------|----------|-------------------|-------------------|-------------------|-------------------|-------------------|----------|-------------------|
|                                      |      |      |       |                      |          |                   |                   |                   |                   |                   |          | $V_{rel}$<br>[km] |
| 1140-1141-132-131-597-1026-1955-2222 | 6.00 | 0.94 | 21    | 877.820              | 1.00     | 877.820           | -200.826          | -526.022          | 799.994           | 43.15304          | 353.6685 | 0.25              |
| 1026-1028-1318-1140-3.03             | 0.94 | 0.94 | 21    | 877.820              | 1.00     | 877.820           | -194.9821         | -405.716          | 799.994           | 43.15304          | 389.782  | 0.11              |
| 574-731-834-1026-1028-1266-1436      | 6.00 | 0.94 | 20    | 581.575              | 1.00     | 581.575           | -1.998584         | -367.5208         | 320.093           | 43.15304          | 835.524  | 0.13              |

▲▲NUCLEO 4421 4420 4419 4418 4417 4416 4415 4401 4399 4397 4396 4395 4394 4393 4392 4391 / Nodi:  
886 639 815 817 1023 1261 1511 640 816 861 1039 1276 1549 1618 1947 2159

### ▲Armature Nucleo

|     | Sapone<br>Numero | B | H   | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----|------------------|---|-----|------------------|-----------------------|-------------------------|
| 947 | 586/539          | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 639 815          | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 815 817          | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 817 1023         | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1023 1261        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1261 1511        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 586 640          | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 640 816          | 2 | 103 | 94               | 30                    | 2xø 18 15'              |
|     | 816 861          | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 861 1039         | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1039 1276        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1276 1549        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1549 1618        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1618 1947        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |
|     | 1947 2159        | 2 | 100 | 94               | 30                    | 2xø 18 15'              |

| Sezione | Comb. | Sd/Sr |
|---------|-------|-------|
| 1       | 1     | 1     |
| 2       | 2     | 2     |
| 3       | 3     | 3     |
| 4       | 4     | 4     |
| 5       | 5     | 5     |
| 6       | 6     | 6     |
| 7       | 7     | 7     |
| 8       | 8     | 8     |
| 9       | 9     | 9     |
| 10      | 10    | 10    |
| 11      | 11    | 11    |
| 12      | 12    | 12    |
| 13      | 13    | 13    |
| 14      | 14    | 14    |
| 15      | 15    | 15    |
| 16      | 16    | 16    |
| 17      | 17    | 17    |
| 18      | 18    | 18    |
| 19      | 19    | 19    |
| 20      | 20    | 20    |
| 21      | 21    | 21    |
| 22      | 22    | 22    |
| 23      | 23    | 23    |
| 24      | 24    | 24    |
| 25      | 25    | 25    |
| 26      | 26    | 26    |
| 27      | 27    | 27    |
| 28      | 28    | 28    |
| 29      | 29    | 29    |
| 30      | 30    | 30    |
| 31      | 31    | 31    |
| 32      | 32    | 32    |
| 33      | 33    | 33    |
| 34      | 34    | 34    |
| 35      | 35    | 35    |
| 36      | 36    | 36    |
| 37      | 37    | 37    |
| 38      | 38    | 38    |
| 39      | 39    | 39    |
| 40      | 40    | 40    |
| 41      | 41    | 41    |
| 42      | 42    | 42    |
| 43      | 43    | 43    |
| 44      | 44    | 44    |
| 45      | 45    | 45    |
| 46      | 46    | 46    |
| 47      | 47    | 47    |
| 48      | 48    | 48    |
| 49      | 49    | 49    |
| 50      | 50    | 50    |
| 51      | 51    | 51    |
| 52      | 52    | 52    |
| 53      | 53    | 53    |
| 54      | 54    | 54    |
| 55      | 55    | 55    |
| 56      | 56    | 56    |
| 57      | 57    | 57    |
| 58      | 58    | 58    |
| 59      | 59    | 59    |
| 60      | 60    | 60    |
| 61      | 61    | 61    |
| 62      | 62    | 62    |
| 63      | 63    | 63    |
| 64      | 64    | 64    |
| 65      | 65    | 65    |
| 66      | 66    | 66    |
| 67      | 67    | 67    |
| 68      | 68    | 68    |
| 69      | 69    | 69    |
| 70      | 70    | 70    |
| 71      | 71    | 71    |
| 72      | 72    | 72    |
| 73      | 73    | 73    |
| 74      | 74    | 74    |
| 75      | 75    | 75    |
| 76      | 76    | 76    |
| 77      | 77    | 77    |
| 78      | 78    | 78    |
| 79      | 79    | 79    |
| 80      | 80    | 80    |
| 81      | 81    | 81    |
| 82      | 82    | 82    |
| 83      | 83    | 83    |
| 84      | 84    | 84    |
| 85      | 85    | 85    |
| 86      | 86    | 86    |
| 87      | 87    | 87    |
| 88      | 88    | 88    |
| 89      | 89    | 89    |
| 90      | 90    | 90    |
| 91      | 91    | 91    |
| 92      | 92    | 92    |
| 93      | 93    | 93    |
| 94      | 94    | 94    |
| 95      | 95    | 95    |
| 96      | 96    | 96    |
| 97      | 97    | 97    |
| 98      | 98    | 98    |
| 99      | 99    | 99    |
| 100     | 100   | 100   |

▲Verifiche a taglio dei diaframmi

| Diaframma                         | B    |      | H  | Comb.    | V <sub>ed</sub><br>[m] | α        | V <sub>re</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>re</sub><br>[kgm] | V <sub>re</sub><br>[kg] | V <sub>re,concrete</sub> |      | S/R |
|-----------------------------------|------|------|----|----------|------------------------|----------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------|-----|
|                                   | [m]  | [m]  |    |          |                        |          |                         |                         |                          |                         | [kg]                     | [kg] |     |
| 860-1038-1275-1404-1617-1945-2138 | 6,00 | 0,94 | 21 | 59003.3  | 1,00                   | 59003.3  | 14962.3                 | -59812.0                | 799099.4                 | 431530.4                | 263209.4                 | 0.22 |     |
| 585-631-633-860                   | 3,03 | 0,94 | 20 | -70607.2 | 1,00                   | -70607.2 | -115458.0               | -43333.0                | 402135.3                 | 217161.5                | 400676.2                 | 0.33 |     |
| 585-630-632-814-1022-1259-1260    | 6,00 | 0,94 | 18 | -64972.7 | 1,00                   | -64972.7 | -331849.7               | -77947.2                | 799099.4                 | 431530.4                | 800085.0                 | 0.15 |     |

▲NUCLEO 4545 4544 4543 4542 4541 4540 4539 4525 4523 4521 4520 4519 4518 4517 4516 4515 / Nodi:  
568 569 619 813 1016 1017 1237 570 607 859 1037 1150 1402 1615 1943 2157

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B   | H  | Spessore<br>[cm] | Armatura    |             |
|-----------|-------------------|-----|----|------------------|-------------|-------------|
|           |                   |     |    |                  | Verticale   | Orizzontale |
| 568/569   | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 569/619   | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 619/813   | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 813/1016  | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1016/1017 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1017/1237 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 568/570   | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 570/607   | 2                 | 103 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 607/859   | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 859/1037  | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1037/1150 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1150/1402 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1402/1615 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1615/1943 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 1943/2157 | 2                 | 100 | 94 | 30               | 2x ø 18 15' | 2x ø 14 15' |

| Sezione |  | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|--|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    |  | 20    | -487283.1               | -529556.6                | -124601.6                | 0.10  |
| Sommità |  | 20    | -478809.4               | -534862.1                | -125659.3                | 0.10  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|---------|--------------|-----------|--------------------------|--------------------------|----------------------------|
| Base    |              |           |                          |                          |                            |
| sc      | Max          | 32        | -469670.3                | -99741.6                 | 3545.0                     |
|         |              |           |                          |                          | -10.2                      |
|         | sc Med       | 32        | -469670.3                | -99741.6                 | 3545.0                     |
|         |              |           |                          |                          | -8.7                       |
| st      |              | 30        | -466134.4                | -100852.9                | 8574                       |
|         |              |           |                          |                          | -105.8                     |
| sc      |              | 32        | -469670.3                | -99741.6                 | 3545.0                     |
|         |              |           |                          |                          | -153.4                     |
| Sommità |              |           |                          |                          |                            |
| sc      | Max          | 32        | -469670.3                | -99741.6                 | 3545.0                     |
|         |              |           |                          |                          | -10.2                      |
|         | sc Med       | 32        | -469670.3                | -99741.6                 | 3545.0                     |
|         |              |           |                          |                          | -8.7                       |
| st      |              | 30        | -466134.4                | -100852.9                | 8574                       |
|         |              |           |                          |                          | -105.8                     |
| sc      |              | 32        | -469670.3                | -99741.6                 | 3545.0                     |
|         |              |           |                          |                          | -153.4                     |

▲Verifiche a taglio dei diaframmi

| Diaframma                         | B    |      | H  | Comb.    | V <sub>ed</sub><br>[m] | α        | V <sub>re</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>re</sub><br>[kgm] | V <sub>re</sub><br>[kg] | V <sub>re,concrete</sub> |      | S/R |
|-----------------------------------|------|------|----|----------|------------------------|----------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------|-----|
|                                   | [m]  | [m]  |    |          |                        |          |                         |                         |                          |                         | [kg]                     | [kg] |     |
| 859-1037-1150-1402-1615-1943-2157 | 6,00 | 0,94 | 21 | 56613.5  | 1,00                   | 56613.5  | -27337.7                | -76597.0                | 799099.4                 | 431530.4                | 352240.8                 | 0.16 |     |
| 568-570-607-859                   | 3,03 | 0,94 | 20 | -24494.8 | 1,00                   | -24494.8 | -113997.5               | -413488.8               | 402135.3                 | 217161.5                | 402532.0                 | 0.11 |     |
| 568-569-619-813-1016-1017-1237    | 6,00 | 0,94 | 18 | -55498.0 | 1,00                   | -55498.0 | -187104.1               | -364040.3               | 799099.4                 | 431530.4                | 787559.4                 | 0.13 |     |

▲NUCLEO 4930 4929 4928 4927 4926 4925 4924 4896 4876 4857 4856 4855 4854 4853 4852 4851 / Nodi:  
414 526 614 806 807 1015 1159 477 606 889 931 1148 1400 1613 1941 1948

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura    |             |
|-----------|-------------------|-----------|-----------|------------------|-------------|-------------|
|           |                   |           |           |                  | Verticale   | Orizzontale |
| 414 526   | 3                 | 100       | 94        | 25               | 2x ø 18 15' |             |
| 526 614   | 3                 | 100       | 94        | 25               | 2x ø 18 15' |             |
| 614 806   | 3                 | 100       | 94        | 25               | 2x ø 18 15' |             |
| 806 807   | 3                 | 100       | 94        | 25               | 2x ø 18 15' |             |
| 807 1015  | 3                 | 100       | 94        | 25               | 2x ø 18 15' |             |
| 1015 1159 | 3                 | 100       | 94        | 25               | 2x ø 18 15' |             |

|           |   |     |    |    |             |             |
|-----------|---|-----|----|----|-------------|-------------|
| 414 477   | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 477 606   | 3 | 103 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 606 889   | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 889 931   | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 931 1148  | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1148 1400 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1400 1613 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1613 1941 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1941 1948 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |

| Sezione |         | Comb. | N <sub>ed</sub><br>[kg] | M <sub>re</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|---------|-------|-------------------------|--------------------------|--------------------------|-------|
|         | Base    | 20    | -402894.7               | -430262.7                | -227516.7                | 0.10  |
|         | Sommità | 20    | -361259.3               | -456881.2                | -122208.8                | 0.09  |

| S.L.E.  | Combinazione | N  | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[log·cm <sup>-1</sup> ] |
|---------|--------------|----|--------------------------|--------------------------|------------------------------|
| Base    |              |    |                          |                          |                              |
| sc      | Max          | 32 | -362314.9                | -101522.0                | -32101.3                     |
| sc      | Med          | 32 | -362314.9                | -101522.0                | -32101.3                     |
| st      |              | 30 | -359823.0                | -102498.2                | -36737.5                     |
| sc      |              | 32 | -362314.9                | -101522.0                | -32101.3                     |
| Sommità |              |    |                          |                          |                              |
| sc      | Max          | 32 | -362314.9                | -101522.0                | -32101.3                     |
| sc      | Med          | 32 | -362314.9                | -101522.0                | -32101.3                     |
| st      |              | 30 | -359823.0                | -102498.2                | -36737.5                     |
| sc      |              | 32 | -362314.9                | -101522.0                | -32101.3                     |

▲Verifiche a taglio dei diaframmi

che a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb. | V <sub>ed</sub> | α    | V <sub>re</sub> | N <sub>ed</sub> | M <sub>re</sub> | V <sub>re</sub> | V <sub>re,concrete</sub> | S/R      |      |
|-------------------------------|------|------|-------|-----------------|------|-----------------|-----------------|-----------------|-----------------|--------------------------|----------|------|
| 889-931-1400-1613-1941-1948   | 6,00 | 0,94 | 21    | 37743.5         | 1,00 | 37743.5         | -13083.9        | -243307.7       | 665916.2        | 117042.8                 | 229019.6 | 0.16 |
| 414-477-606-889               | 3,03 | 0,94 | 21    | -24281.4        | 1,00 | -24281.4        | -79283.9        | -33912.8        | 33512.8         | 159547.2                 | 403362.4 | 0.15 |
| 414-526-614-806-807-1015-1159 | 6,00 | 0,94 | 18    | -38769.6        | 1,00 | -38769.6        | -145930.0       | -278460.6       | 665916.2        | 117042.8                 | 786064.5 | 0.12 |

▲ANUCLEO 5258 5257 5256 5255 5254 5253 5252 5238 5236 5234 5233 5232 5231 5230 5229 5228 / Nodi:  
430 459 597 599 802 804 805 460 598 720 929 1146 1328 1612 1887 2149

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura    |             |
|-----------|-------------------|-----------|-----------|------------------|-------------|-------------|
|           |                   |           |           |                  | Verticale   | Orizzontale |
| 430/459   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 459/597   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 597/599   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 599/802   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 802/804   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 804/805   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 805/806   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 430/460   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 460/598   | 3                 | 103       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 598/720   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 720/929   | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 929/1146  | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 1146/1328 | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 1328/1612 | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 1612/1887 | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |
| 1887/2149 | 3                 | 100       | 94        | 25               | 2x ø 18 15' | 2x ø 12 15' |

| Sezione |  | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|--|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    |  | 20    | -364440.7               | -474612.8                | -120994.5                | 0.09  |
| Sommità |  | 20    | -355959.8               | -465889.1                | -121089.8                | 0.09  |

| S.L.E. |  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
|--------|--|--------------|-----------|--------------------------|--------------------------|----------------------------|
| Base   |  |              |           |                          |                          |                            |
| sc Max |  | 32           | -353505.6 | -103748.9                | -21221.4                 | -9.8                       |

ANUCLEO 5382 5381 5380 5379 5378 5377 5376 5362 5358 5357 5356 5355 5354 5353 5352 / Nodi:  
406 407 441 442 515 690 792 408 553 718 927 1144 1325 1608 1883 1884

AArmature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|-------------|-----------------------|-------------------------|
|           | Numero  | [cm] |    |    |             | [cm]                  |                         |
| 406-407   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 407-441   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 441-442   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 442-515   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 515-690   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 690-792   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 406-408   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 408-553   | 3       | 103  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 553-718   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 718-927   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 927-1144  | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1144-1325 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1325-1608 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1608-1883 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1883-1884 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Base    | 20    | -353896.0              | -432783.5               | -116095.9                | 0.09  |
| Sommità | 20    | -345176.0              | -434160.8               | -119085.3                | 0.09  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -335887.3 | -108191.7                | 531.9                    | -9.1          |
| sc Med  | 32           | -335887.3 | -108191.7                | 531.9                    | -7.2          |
| st      | 30           | -332356.4 | -108595.1                | 2407.1                   | -78.3         |
| sc      | 32           | -335887.3 | -108191.7                | 531.9                    | -136.4        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -335887.3 | -108191.7                | 531.9                    | -9.1          |
| sc Med  | 32           | -335887.3 | -108191.7                | 531.9                    | -7.2          |
| st      | 30           | -333356.4 | -108595.1                | 2407.1                   | -78.3         |
| sc      | 32           | -335887.3 | -108191.7                | 531.9                    | -136.4        |

▲Verifiche a taglio dei diaframmi

| Diaframma                        | B    |      | H  | Comb.    | V <sub>e</sub><br>[kg] | α        | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u</sub><br>[kg] | V <sub>u, resistenza</sub><br>[kg] | S/R  |
|----------------------------------|------|------|----|----------|------------------------|----------|------------------------|------------------------|-------------------------|------------------------|------------------------------------|------|
|                                  | [m]  | [m]  |    |          |                        |          |                        |                        |                         |                        |                                    |      |
| 718-927-1144-1325-1608-1883-1884 | 6.00 | 0.94 | 9  | 20454.9  | 1.00                   | 20454.9  | -181271.3              | -248466.9              | 665916.2                | 117042.8               | 915174.8                           | 0.06 |
| 406-408-553-718                  | 3.03 | 0.94 | 20 | -25284.1 | 1.00                   | -25284.1 | -86011.8               | -33746.8               | 335112.8                | 159547.2               | 361341.1                           | 0.16 |
| 406-407-441-442-515-690-792      | 6.00 | 0.94 | 19 | -35116.7 | 1.00                   | -35116.7 | -203911.2              | -369882.2              | 665916.2                | 117042.8               | 904567.0                           | 0.11 |

ANUCLEO 5767 5766 5765 5764 5763 5762 5761 5733 5713 5694 5693 5692 5691 5690 5689 5688 / Nodi:  
298 318 319 378 514 689 907 333 552 721 926 1142 1323 1606 1827 1799

AArmature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|-------------|-----------------------|-------------------------|
|           | Numero  | [cm] |    |    |             | [cm]                  |                         |
| 298-318   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 318-319   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 319-378   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 378-514   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 514-689   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 689-907   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 298-333   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 333-552   | 3       | 103  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 552-721   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 721-926   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 926-1142  | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1142-1323 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1323-1606 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |

|         |    |           |           |          |        |
|---------|----|-----------|-----------|----------|--------|
| sc Med  | 32 | -353505.6 | -103748.9 | -21221.4 | -7.6   |
| st      | 30 | -351013.8 | -104663.8 | -23688.9 | -80.2  |
| sc      | 32 | -353505.6 | -103748.9 | -21221.4 | -146.5 |
| Sommità |    |           |           |          |        |
| sc Max  | 32 | -353505.6 | -103748.9 | -21221.4 | -9.8   |
| sc Med  | 32 | -353505.6 | -103748.9 | -21221.4 | -7.6   |
| st      | 30 | -351013.8 | -104663.8 | -23688.9 | -80.2  |
| sc      | 32 | -353505.6 | -103748.9 | -21221.4 | -146.5 |

▲Verifiche a taglio dei diaframmi

| Diaframma                        | B    |      | H  | Comb.    | V <sub>e</sub><br>[kg] | α        | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u</sub><br>[kg] | V <sub>u, resistenza</sub><br>[kg] | S/R  |
|----------------------------------|------|------|----|----------|------------------------|----------|------------------------|------------------------|-------------------------|------------------------|------------------------------------|------|
|                                  | [m]  | [m]  |    |          |                        |          |                        |                        |                         |                        |                                    |      |
| 720-925-1146-1328-1612-1887-2149 | 6.00 | 0.94 | 19 | -48802.5 | 1.00                   | -48802.5 | -73972.0               | -184466.0              | 665916.2                | 317042.8               | 521789.6                           | 0.15 |
| 430-460-598-720                  | 3.03 | 0.94 | 8  | 57015.9  | 1.00                   | 57015.9  | -86176.6               | 158066.6               | 335112.8                | 159547.2               | 444516.2                           | 0.36 |
| 430-459-597-599-802-804-805      | 6.00 | 0.94 | 18 | -50157.9 | 1.00                   | -50157.9 | -142482.6              | -267778.5              | 665916.2                | 317042.8               | 787421.8                           | 0.16 |

ANUCLEO 5320 5319 5318 5317 5316 5315 5314 5300 5298 5296 5295 5294 5293 5292 5291 5290 / Nodi:  
427 449 451 590 591 691 793 450 514 719 928 1145 1327 1610 1886 2148

AArmature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|-------------|-----------------------|-------------------------|
|           | Numero  | [cm] |    |    |             | [cm]                  |                         |
| 427-449   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 449-451   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 451-590   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 590-591   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 591-691   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 691-793   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 427-450   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 450-554   | 3       | 103  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 554-719   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 719-928   | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 928-1145  | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1145-1327 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1327-1610 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1610-1886 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |
| 1886-2148 | 3       | 100  | 94 | 25 | 2x ø 18.15' | 2x ø 12.15'           |                         |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Base    | 20    | -358976.2              | -463990.3               | -121510.9                | 0.09  |
| Sommità | 20    | -348902.1              | -464492.1               | -124173.5                | 0.09  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -344696.5 | -105967.9                | -10345.1                 | -9.4          |
| sc Med  | 32           | -344696.5 | -105967.9                | -10345.1                 | -7.4          |
| st      | 30           | -342204.6 | -106827.4                | -10641.4                 | -79.5         |
| sc      | 32           | -344696.5 | -105967.9                | -10345.1                 | -140.9        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -344696.5 | -105967.9                | -10345.1                 | -9.4          |
| sc Med  | 32           | -344696.5 | -105967.9                | -10345.1                 | -7.4          |
| st      | 30           | -342204.6 | -106827.4                | -10641.4                 | -79.5         |
| sc      | 32           | -344696.5 | -105967.9                | -10345.1                 | -140.9        |

▲Verifiche a taglio dei diaframmi

| Diaframma                        | B    |      | H  | Comb.    | V <sub>e</sub><br>[kg] | α        | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u</sub><br>[kg] | V <sub>u, resistenza</sub><br>[kg] | S/R  |
|----------------------------------|------|------|----|----------|------------------------|----------|------------------------|------------------------|-------------------------|------------------------|------------------------------------|------|
|                                  | [m]  | [m]  |    |          |                        |          |                        |                        |                         |                        |                                    |      |
| 719-928-1145-1327-1610-1886-2148 | 6.00 | 0.94 | 19 | -48423.0 | 1.00                   | -48423.0 | -71350.9               | -193059.9              | 665916.2                | 317042.8               | 499731.3                           | 0.15 |
| 427-450-554-719                  | 3.03 | 0.94 | 8  | 56974.2  | 1.00                   | 56974.2  | -83615.1               | 142045.1               | 335112.8                | 159547.2               | 445558.5                           | 0.36 |
| 427-449-451-590-591-691-793      | 6.00 | 0.94 | 19 | -53274.9 | 1.00                   | -53274.9 | -205935.4              | -355968.1              | 665916.2                | 317042.8               | 941981.9                           | 0.16 |

|            |       |                        |                         |                          |                          |             |
|------------|-------|------------------------|-------------------------|--------------------------|--------------------------|-------------|
| 1.606.1827 | 3     | 100                    | 94                      | 25                       | 2x ø 18.15'              | 2x ø 12.15' |
| 1827.1799  | 3     | 100                    | 94                      | 25                       | 2x ø 18.15'              | 2x ø 12.15' |
|            |       |                        |                         |                          |                          |             |
| Sezione    | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr       |
| Base       | 15    | -265813.0              | -167756.4               | -314391.5                | 0.06                     |             |
| Sommità    | 20    | -240556.6              | -329357.3               | -154628.6                | 0.07                     |             |

|         |              |            |                          |                          |               |
|---------|--------------|------------|--------------------------|--------------------------|---------------|
| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
| Base    | 32           | -228.370.2 | -110065.5                | -43994.8                 | -7.7          |
| sc Max  | 32           | -228.370.2 | -110065.5                | -43994.8                 | -7.7          |
| sc Med  | 32           | -228.370.2 | -110065.5                | -43994.8                 | -4.9          |
| st      | 30           | -226.841.0 | -110795.0                | -45784.0                 | -34.2         |
| sc      | 32           | -228.370.2 | -110065.5                | -43994.8                 | -114.8        |
| Sommità |              |            |                          |                          |               |
| sc Max  | 32           | -228.370.2 | -110065.5                | -43994.8                 | -7.7          |
| sc Med  | 32           | -228.370.2 | -110065.5                | -43994.8                 | -4.9          |
| st      | 30           | -226.841.0 | -110795.0                | -45784.0                 | -34.2         |
| sc      | 32           | -228.370.2 | -110065.5                | -43994.8                 | -114.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                        |       |          |          |               |                         |             |                         |                        |                         |
|----------------------------------|-------|----------|----------|---------------|-------------------------|-------------|-------------------------|------------------------|-------------------------|
| Sezione                          | Comb. | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α           | V <sub>ed</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] |
| 721-926-1142-1323-1606-1827-1799 | 6.00  | 0.94     | 16       | 18291.3       | 1.00                    | -18291.3    | -111483.8               | -100197.3              | 665916.2                |
| 401.417                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 417.439                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 439.513                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 513.680                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 680.791                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 399.403                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 403.551                          | 3     | 103      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 551.716                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 716.924                          | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 924.1068                         | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 1068.1317                        | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 1317.1596                        | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 1596.1873                        | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |
| 1873.1875                        | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        | 856745.1                |

▲NUCLEO 6095 6094 6093 6092 6091 6090 6089 6075 6073 6071 6070 6069 6068 6067 6066 6065 / Nodi:  
399 401 417 439 513 680 791 403 551 716 924 1068 1317 1596 1873 1875

▲Armature Nucleo

|         |       |                        |                         |                          |                          |       |
|---------|-------|------------------------|-------------------------|--------------------------|--------------------------|-------|
| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr |
| Base    | 20    | -240807.2              | -344072.4               | -132104.5                | 0.07                     |       |
| Sommità | 20    | -221773.5              | -335361.1               | -104479.8                | 0.06                     |       |

|         |              |            |                          |                          |               |
|---------|--------------|------------|--------------------------|--------------------------|---------------|
| S.L.E.  | Combinazione | N<br>[kg]  | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
| Base    | 32           | -219.561.0 | -110899.8                | -27962.2                 | -7.2          |
| sc Max  | 32           | -219.561.0 | -110899.8                | -27962.2                 | -7.2          |
| sc Med  | 32           | -219.561.0 | -110899.8                | -27962.2                 | -4.7          |
| st      | 24           | -231.443.4 | -111661.4                | -49657.4                 | -34.6         |
| sc      | 32           | -219.561.0 | -110899.8                | -27962.2                 | -107.3        |
| Sommità |              |            |                          |                          |               |
| sc Max  | 32           | -219.561.0 | -110899.8                | -27962.2                 | -7.2          |
| sc Med  | 32           | -219.561.0 | -110899.8                | -27962.2                 | -4.7          |
| st      | 24           | -231.443.4 | -111661.4                | -49657.4                 | -34.6         |

|    |    |           |           |          |        |
|----|----|-----------|-----------|----------|--------|
| sc | 32 | -219561.0 | -110899.8 | -27962.2 | -107.3 |
|----|----|-----------|-----------|----------|--------|

▲Verifiche a taglio dei diaframmi

| Diaframma                        |       |          |          |               |                         |          |                         |                        |                         |
|----------------------------------|-------|----------|----------|---------------|-------------------------|----------|-------------------------|------------------------|-------------------------|
| Sezione                          | Comb. | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α        | V <sub>ed</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] |
| 716-924-1068-1317-1596-1873-1875 | 6.00  | 0.94     | 16       | 15988.7       | 1.00                    | -15988.7 | -120535.6               | -117042.8              | 665916.2                |
| 399-403-551-716                  | 3.03  | 0.94     | 17       | 49032.7       | 1.00                    | -49032.7 | -27981.1                | 9534.4                 | 335112.8                |
| 399-401-417-439-513-680-791      | 6.00  | 0.94     | 12       | 32082.3       | 1.00                    | -32082.3 | -179143.9               | -186346.8              | 665916.2                |

▲NUCLEO 6157 6156 6155 6154 6153 6152 6151 6137 6135 6133 6132 6131 6130 6129 6128 6127 / Nodi:  
423 424 426 440 579 679 790 425 550 715 923 1067 1316 1594 1872 2147

▲Armature Nucleo

| Diaframma |       |          |          |               |                         |             |                         |                        |                         |
|-----------|-------|----------|----------|---------------|-------------------------|-------------|-------------------------|------------------------|-------------------------|
| Sezione   | Comb. | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α           | V <sub>ed</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] |
| 423-424   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 424-426   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 426-440   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 440-579   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 579-679   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 679-790   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 423-425   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 425-550   | 3     | 103      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 550-715   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 715-923   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 923-1067  | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 1067-1316 | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 1316-1594 | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 1594-1872 | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 1872-2147 | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |

|         |       |                        |                         |                          |       |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | Sd/Sr |
| Base    | 20    | -222007.3              | -349234.0               | -102921.5                | 0.07  |
| Sommità | 20    | -213466.8              | -343164.3               | -95426.2                 | 0.06  |

|         |              |           |                          |                          |               |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
| Base    | 32           | -210751.8 | -111731.9                | -11926.0                 | -6.7          |
| sc Max  | 32           | -210751.8 | -111731.9                | -11926.0                 | -6.7          |
| sc Med  | 32           | -210751.8 | -111731.9                | -11926.0                 | -4.5          |
| st      | 29           | -211567.8 | -111794.5                | -16808.8                 | -35.0         |
| sc      | 32           | -210751.8 | -111731.9                | -11926.0                 | -99.9         |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -210751.8 | -111731.9                | -11926.0                 | -6.7          |
| sc Med  | 32           | -210751.8 | -111731.9                | -11926.0                 | -4.5          |
| st      | 29           | -211567.8 | -111794.5                | -16808.8                 | -35.0         |
| sc      | 32           | -210751.8 | -111731.9                | -11926.0                 | -99.9         |

▲Verifiche a taglio dei diaframmi

| Diaframma                        |       |          |          |               |                         |          |                         |                        |                         |
|----------------------------------|-------|----------|----------|---------------|-------------------------|----------|-------------------------|------------------------|-------------------------|
| Sezione                          | Comb. | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α        | V <sub>ed</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] |
| 715-923-1067-1316-1594-1872-2147 | 6.00  | 0.94     | 17       | 14655.1       | 1.00                    | -14655.1 | -122692.5               | -117042.8              | 665916.2                |
| 423-425-550-715                  | 3.03  | 0.94     | 17       | 49069.6       | 1.00                    | -49069.6 | -30329.3                | 9807.1                 | 335112.8                |
| 423-424-426-440-579-679-790      | 6.00  | 0.94     | 12       | 31183.1       | 1.00                    | -31183.1 | -174536.8               | -185316.3              | 665916.2                |

▲NUCLEO 6219 6218 6217 6216 6215 6214 6213 6199 6197 6195 6194 6193 6192 6191 6190 6189 / Nodi:  
400 402 405 438 504 678 789 404 549 714 922 1066 1314 1592 1871 1874

▲Armature Nucleo

| Diaframma |       |          |          |               |                         |             |                         |                        |                         |
|-----------|-------|----------|----------|---------------|-------------------------|-------------|-------------------------|------------------------|-------------------------|
| Sezione   | Comb. | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α           | V <sub>ed</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] |
| 400-402   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |
| 402-405   | 3     | 100      | 94       | 25            | 2x ø 18.15'             | 2x ø 12.15' |                         |                        |                         |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              | 32        | -92914.1                 | -1.068966                | -40452.5      |
|         | sc Max       |           |                          |                          | -4.7          |
|         | sc Med       |           |                          |                          | -2.3          |
| st      |              | 32        | -92914.1                 | -1.068966                | -40452.5      |
|         |              |           |                          |                          | 7.6           |
|         | sc           |           |                          |                          | -70.0         |
| Sommità |              | 32        | -92914.1                 | -1.068966                | -40452.5      |
|         | sc Max       |           |                          |                          | -4.7          |
|         | sc Med       |           |                          |                          | -2.3          |
| sc      |              | 32        | -92914.1                 | -1.068966                | -40452.5      |
|         |              |           |                          |                          | 7.6           |
|         | sc           |           |                          |                          | -70.0         |

▲Verifiche a taglio dei diaframmi

| Diaframma                        | B<br>[m] | H<br>[m] | Comb. | V <sub>α</sub><br>[kg] | α    | V <sub>αα</sub><br>[kg] | N <sub>αα</sub><br>[kg] | M <sub>αα</sub><br>[kgm] | V <sub>αα</sub><br>[kg] | V <sub>αα,scissure</sub><br>[kg] | S/R      |      |
|----------------------------------|----------|----------|-------|------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|----------|------|
| 717-921-1064-1312-1590-1817-1795 | 6.00     | 0.94     | 19    | -12121.8               | 1.00 | -12121.8                | 11023.1                 | -13.6543                 | 665916.2                | 317042.8                         | 229019.6 | 0.05 |
| 299-326-547-717                  | 3.03     | 0.94     | 16    | -19566.7               | 1.00 | -19566.7                | -26855.3                | -3027.3                  | 335112.8                | 119547.2                         | 376463.8 | 0.12 |
| 299-300-317-369-502-677-898      | 6.00     | 0.94     | 2     | -11343.9               | 1.00 | -11343.9                | -91996.0                | -91978.0                 | 665916.2                | 317042.8                         | 844138.3 | 0.04 |

▲NUCLEO 6926 6925 6924 6923 6922 6921 6920 6906 6904 6902 6901 6900 6899 6898 6897 6896 / Nodi:  
409 410 412 437 503 608 609 411 548 713 831 1030 1269 1540 1541 1542

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 409-410   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 410-412           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 412-437           | 3         | 100       | 94               | 25                    | 2x ø 12.15              |
| 437-503   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 503-608           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 608-609           | 3         | 100       | 94               | 25                    | 2x ø 12.15              |
| 409-411   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 409-411           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 411-548           | 3         | 103       | 94               | 25                    | 2x ø 18.15              |
| 548-713   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 713-831           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 831-1030          | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
| 1030-1269 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 1269-1540         | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 1540-1541         | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
| 1541-1542 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |

| Sezione | Comb. | N <sub>αα</sub><br>[kg] | M <sub>αα</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 20    | -100901.6               | -194259.1                | -138358.5                | 0.04  |
| Sommità | 15    | -98147.9                | -124680.0                | -172963.1                | 0.03  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              | 32        | -84105.0                 | -1.097079                | -32896.7      |
|         | sc Max       |           |                          |                          | -4.5          |
|         | sc Med       |           |                          |                          | -2.3          |
| st      |              | 32        | -84105.0                 | -1.097079                | -32896.7      |
|         |              |           |                          |                          | 11.3          |
|         | sc           |           |                          |                          | -66.4         |
| Sommità |              | 32        | -84105.0                 | -1.097079                | -32896.7      |
|         | sc Max       |           |                          |                          | -4.5          |
|         | sc Med       |           |                          |                          | -2.3          |
| sc      |              | 32        | -84105.0                 | -1.097079                | -32896.7      |
|         |              |           |                          |                          | 11.3          |
|         | sc           |           |                          |                          | -66.4         |

▲Verifiche a taglio dei diaframmi

| Diaframma                        | B    | H    | Comb. | V <sub>α</sub> | α    | V <sub>αα</sub> | N <sub>αα</sub> | M <sub>αα</sub> | V <sub>αα</sub> | V <sub>αα,scissure</sub> | S/R      |      |
|----------------------------------|------|------|-------|----------------|------|-----------------|-----------------|-----------------|-----------------|--------------------------|----------|------|
|                                  | m    | m    |       | critica        |      | [kg]            | [kg]            | [kgm]           | [kg]            | [kg]                     |          |      |
| 713-831-1030-1269-1540-1541-1542 | 6.00 | 0.94 | 19    | 7049.3         | 1.00 | 7049.3          | 14586.9         | -8233.0         | 665916.2        | 317042.8                 | 229019.6 | 0.03 |
| 409-411-548-713                  | 3.03 | 0.94 | 17    | -17023.8       | 1.00 | -17023.8        | -44676.6        | -1958.5         | 335112.8        | 119547.2                 | 396321.4 | 0.11 |

|           |   |     |    |    |            |            |
|-----------|---|-----|----|----|------------|------------|
| 405-438   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 438-504   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 504-678   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 678-789   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 400-404   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 404-549   | 3 | 103 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 549-714   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 714-922   | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 922-1066  | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 1066-1314 | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 1314-1592 | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 1592-1871 | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |
| 1871-1874 | 3 | 100 | 94 | 25 | 2x ø 18.15 | 2x ø 12.15 |

| Sezione | Comb. | N <sub>αα</sub><br>[kg] | M <sub>αα</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 20    | -213916.8               | -318969.2                | -97688.5                 | 0.06  |
| Sommità | 15    | -240418.4               | -170941.8                | -295003.8                | 0.06  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              | 32        | -201942.7                | -112564.7                | 4108.1        |
|         | sc Max       |           |                          |                          | -6.4          |
|         | sc Med       |           |                          |                          | -4.3          |
| st      |              | 30        | -200413.5                | -113099.0                | 6535.2        |
|         |              |           |                          |                          | -33.3         |
|         | sc           |           |                          |                          | -95.3         |
| Sommità |              | 32        | -201942.7                | -112564.7                | 4108.1        |
|         | sc Max       |           |                          |                          | -6.4          |
|         | sc Med       |           |                          |                          | -4.3          |
| sc      |              | 30        | -200413.5                | -113099.0                | 6535.2        |
|         |              |           |                          |                          | -33.3         |
|         | sc           |           |                          |                          | -95.3         |

▲Verifiche a taglio dei diaframmi

| Diaframma                        | B    | H    | Comb. | V <sub>α</sub> | α    | V <sub>αα</sub> | N <sub>αα</sub> | M <sub>αα</sub> | V <sub>αα,scissure</sub> |                 |          |      |
|----------------------------------|------|------|-------|----------------|------|-----------------|-----------------|-----------------|--------------------------|-----------------|----------|------|
|                                  |      |      |       |                |      |                 |                 |                 | V <sub>αα</sub>          | V <sub>αα</sub> | S/R      |      |
| 714-922-1066-1314-1592-1871-1874 | 6.00 | 0.94 | 17    | -14649.7       | 1.00 | -14649.7        | -110898.8       | -167332.1       | 665916.2                 | 317042.8        | 863891.1 | 0.05 |
| 400-404-549-714                  | 3.03 | 0.94 | 17    | -45034.3       | 1.00 | -45034.3        | -25037.4        | -7317.0         | 335112.8                 | 119547.2        | 409852.4 | 0.28 |
| 400-402-405-438-504-678-789      | 6.00 | 0.94 | 21    | -19259.8       | 1.00 | -19259.8        | -180294.4       | -246279.1       | 665916.2                 | 317042.8        | 914236.6 | 0.06 |

▲NUCLEO 6604 6603 6602 6601 6600 6599 6598 6570 6550 6531 6530 6529 6528 6527 6526 6525 / Nodi:  
299 300 317 369 502 677 898 326 547 717 921 1064 1312 1590 1817 1795

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 299-300   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 300-317           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 317-369           | 3         | 100       | 94               | 25                    | 2x ø 12.15              |
| 369-502   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 502-677           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 677-898           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
| 299-326   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 326-547           | 3         | 103       | 94               | 25                    | 2x ø 18.15              |
|           | 547-717           | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
| 717-921   | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 921-1064          | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 1064-1312         | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
| 1312-1590 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
|           | 1590-1817         | 3         | 100       | 94               | 25                    | 2x ø 18.15              |
|           | 1817-1795         | 3         | 100       | 94               | 25                    | 2x ø 18.15              |

| Sezione | Comb. | N <sub>αα</sub><br>[kg] | M <sub>αα</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 15    | -113636.3               | -26024.5                 | -197145.7                | 0.04  |
| Sommità | 20    | -103862.7               | -171846.7                | -26686.9                 | 0.04  |

▲ NUCLEO 6980 6979 6978 6977 6976 6975 6974 6960 6958 6956 6955 6954 6953 6952 6951 6950 / Nodi:  
428 452 454 455 589 610 611 453 555 712 830 1029 1264 1265 1279 1516

▲Armature Nudo

| Nodi      |  | Sezione |  | B    |  | H    |  | Spessore    |  | Armatura Verticale |  | Armatura Orizzontale |  |
|-----------|--|---------|--|------|--|------|--|-------------|--|--------------------|--|----------------------|--|
| Numero    |  | [cm]    |  | [cm] |  | [cm] |  | [cm]        |  | [cm]               |  | [cm]                 |  |
| 428-452   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 452-454   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 454-455   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 455-589   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 589-610   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 610-611   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 428-453   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 453-555   |  | 3 103   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 555-712   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 712-830   |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 830-1029  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 1029-1264 |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 1264-1265 |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 1265-1279 |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 1279-1516 |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |

| Sezione |  | Comb. |  | N <sub>ed</sub> |  | M <sub>ed</sub> |  | M <sub>12</sub> |  | Sd/Sr |  |
|---------|--|-------|--|-----------------|--|-----------------|--|-----------------|--|-------|--|
| Base    |  | 15    |  | -1.00021.8      |  | -1.28354.4      |  | -1.67380.0      |  | 0.03  |  |
| Sommità |  | 15    |  | -94426.2        |  | -1.34946.0      |  | -1.47906.8      |  | 0.03  |  |

| S.L.E.  | Combinazione | N        | M <sub>12</sub><br>[kg] | M <sub>13</sub><br>[kg] | σ<br>[kg/cm <sup>2</sup> ] |       |
|---------|--------------|----------|-------------------------|-------------------------|----------------------------|-------|
| Base    | 32           | -75295.8 | -112519.0               | -25340.5                | -4.2                       |       |
|         | sc Max       | 32       | -75295.8                | -112519.0               | -25340.5                   | -2.9  |
|         | sc Med       | 32       | -75295.8                | -112519.0               | -25340.5                   | 17.9  |
|         | sc           | 32       | -75295.8                | -112519.0               | -25340.5                   | -62.8 |
| Sommità | 32           | -75295.8 | -112519.0               | -25340.5                | -4.2                       |       |
|         | sc Max       | 32       | -75295.8                | -112519.0               | -25340.5                   | -2.9  |
|         | sc Med       | 32       | -75295.8                | -112519.0               | -25340.5                   | 17.9  |
|         | sc           | 32       | -75295.8                | -112519.0               | -25340.5                   | -62.8 |

▲Verifiche a taglio dei diaframmi

| Diaframma                        |  | B         |  | H   |  | Comb.    |  | V <sub>ed</sub> |  | V <sub>ed</sub> |  | M <sub>ed</sub> |  | V <sub>ed</sub> |  | V <sub>ed,sc,cr,risolto</sub> |  | S/R      |  |
|----------------------------------|--|-----------|--|-----|--|----------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-------------------------------|--|----------|--|
| [m]                              |  | [m]       |  | [m] |  | critica  |  | [kg]            |  | [kg]            |  | [kg]            |  | [kg]            |  | [kg]                          |  | [kg]     |  |
| 712-830-1029-1264-1265-1279-1516 |  | 6.00 0.94 |  | 18  |  | -6875.2  |  | 1.00            |  | -6875.2         |  | 6561.7          |  | -27056.6        |  | 665916.2                      |  | 317042.8 |  |
| 428-453-555-712                  |  | 3.03 0.94 |  | 17  |  | -16988.6 |  | 1.00            |  | -16988.6        |  | -7474.7         |  | -3222.2         |  | 335112.8                      |  | 159547.2 |  |
| 428-452-454-555-589-610-611      |  | 6.00 0.94 |  | 21  |  | -19650.7 |  | 1.00            |  | -19650.7        |  | -87454.0        |  | -104192.5       |  | 665916.2                      |  | 317042.8 |  |

▲ NUCLEO 7034 7033 7032 7031 7030 7029 7028 7014 7012 7010 7009 7008 7007 7006 7005 7004 / Nodi:  
429 456 600 602 603 800 801 457 601 711 829 1020 1021 1042 1278 1515

▲Armature Nudo

| Nodi     |  | Sezione |  | B    |  | H    |  | Spessore    |  | Armatura Verticale |  | Armatura Orizzontale |  |
|----------|--|---------|--|------|--|------|--|-------------|--|--------------------|--|----------------------|--|
| Numero   |  | [cm]    |  | [cm] |  | [cm] |  | [cm]        |  | [cm]               |  | [cm]                 |  |
| 429-456  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 456-600  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 600-602  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 602-603  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 603-800  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 800-801  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 429-457  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 457-601  |  | 3 103   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 601-711  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 711-829  |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |
| 829-1020 |  | 3 100   |  | 94   |  | 25   |  | 2x ø 18 15' |  | 2x ø 12 15'        |  |                      |  |

|           |       |    |    |             |             |
|-----------|-------|----|----|-------------|-------------|
| 1020-1021 | 3 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1021-1042 | 3 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1042-1278 | 3 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 1278-1515 | 3 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 15    | -89185.0                | -130036.6                | -155927.0                | 0.03  |
| Sommità | 15    | -83174.2                | -136872.1                | -144091.2                | 0.03  |

| S.L.E.  | Combinazione | N        | M <sub>12</sub>       | M <sub>13</sub>       | σ                     |       |
|---------|--------------|----------|-----------------------|-----------------------|-----------------------|-------|
|         |              | [kg]     | [kg/cm <sup>2</sup> ] | [kg/cm <sup>2</sup> ] | [kg/cm <sup>2</sup> ] |       |
| Base    | 32           | -66486.6 | -115330.4             | -17785.3              | -3.8                  |       |
|         | sc Max       | 32       | -66486.6              | -115330.4             | -17785.3              | -3.0  |
|         | sc Med       | 32       | -66486.6              | -115330.4             | -17785.3              | -3.0  |
|         | st           | 32       | -66486.6              | -115330.4             | -17785.3              | 31.1  |
| Sommità | 32           | -66486.6 | -115330.4             | -17785.3              | -56.3                 |       |
|         | sc Max       | 32       | -66486.6              | -115330.4             | -17785.3              | -3.8  |
|         | sc Med       | 32       | -66486.6              | -115330.4             | -17785.3              | -3.0  |
|         | st           | 32       | -66486.6              | -115330.4             | -17785.3              | 31.1  |
| sc      | 32           | -66486.6 | -115330.4             | -17785.3              | -56.3                 |       |
|         | sc           | 32       | -66486.6              | -115330.4             | -17785.3              | -56.3 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,scrimato</sub><br>[kg] | S/R        |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|------------|
| 3875-3876-3879-4213-4659-4716 | 5.50     | 0.94     | 17               | 87626.4                 | 1.00 | 87626.4                 | 1664783.3               | -430839.5                | 488115.4                | 290489.7                         | 0.0 [0.30] |

▲NUCLEO 358 354 352 351 350 349 / Nodi: 4208 4209 4210 4211 4212 4660 4718

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 4208 4209 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4209 4210 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4210 4211 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4211 4212 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4660 4718 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 2     | -770882.3               | -174894.0                | -0.0                     | 0.38  |
| Sommità | 2     | -767530.8               | -137045.7                | -0.0                     | 0.37  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -526470.4 | -46532.3                 | -0.0                     | -42.1         |
| sc Med  | 32           | -526470.4 | -46532.3                 | -0.0                     | -38.4         |
| st      | 26           | -563655.9 | -121140.2                | -0.0                     | -47.2         |
| sc      | 32           | -526470.4 | -46532.3                 | -0.0                     | -63.2         |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -526470.4 | -46532.3                 | -0.0                     | -42.1         |
| sc Med  | 32           | -526470.4 | -46532.3                 | -0.0                     | -38.4         |
| st      | 26           | -563655.9 | -121140.2                | -0.0                     | -47.2         |
| sc      | 32           | -526470.4 | -46532.3                 | -0.0                     | -63.2         |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,scrimato</sub><br>[kg] | S/R        |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|------------|
| 4208-4209-4210-4211-4660-4718 | 5.50     | 0.94     | 17               | 87295.2                 | 1.00 | 87295.2                 | 1663111.4               | -350069.3                | 488115.4                | 290489.7                         | 0.0 [0.30] |

▲NUCLEO 986 952 918 884 850 816 / Nodi: 4673 4674 4675 4676 4677 4845

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 4673 4674 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4674 4675 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4675 4676 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4676 4677 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4677 4845 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -599568.0               | -34603.9                 | -0.0                     | 0.35  |
| Sommità | 2     | -681380.9               | -138275.3                | -0.0                     | 0.33  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -467833.2 | -30804.5                 | -0.0                     | -36.6         |
| sc Med  | 32           | -467833.2 | -30804.5                 | -0.0                     | -34.1         |
| st      | 26           | -501260.0 | -121261.2                | -0.0                     | -40.9         |
| sc      | 32           | -467833.2 | -30804.5                 | -0.0                     | -54.4         |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -467833.2 | -30804.5                 | -0.0                     | -36.6         |
| sc Med  | 32           | -467833.2 | -30804.5                 | -0.0                     | -34.1         |

▲NUCLEO 238 234 232 231 230 229 / Nodi: 3531 3533 3878 4212 4658 4717

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3531 3533 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 3533 3878 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 3878 4212 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4212 4658 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4658 4717 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -673848.4               | -507194.0                | -0.0                     | 0.42  |
| Sommità | 17    | -669046.6               | -428746.5                | -0.0                     | 0.40  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -531626.6 | -66785.4                 | -0.0                     | -44.1         |
| sc Med  | 32           | -531626.6 | -66785.4                 | -0.0                     | -38.8         |
| st      | 23           | -584162.8 | -182503.5                | -0.0                     | -42.6         |
| sc      | 32           | -531626.6 | -66785.4                 | -0.0                     | -66.0         |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -531626.6 | -66785.4                 | -0.0                     | -44.1         |
| sc Med  | 32           | -531626.6 | -66785.4                 | -0.0                     | -38.8         |
| st      | 23           | -584162.8 | -182503.5                | -0.0                     | -42.6         |
| sc      | 32           | -531626.6 | -66785.4                 | -0.0                     | -66.0         |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,scrimato</sub><br>[kg] | S/R              |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|------------------|
| 3531-3533-3878-4212-4658-4717 | 5.50     | 0.94     | 17               | 89132.0                 | 1.00 | 89132.0                 | 1673848.4               | -507194.0                | 488115.4                | 290489.7                         | 0.71236.6 [0.31] |

▲NUCLEO 298 294 292 291 290 289 / Nodi: 3875 3876 3879 4213 4659 4716

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3875 3876 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 3876 3879 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 3879 4213 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4213 4659 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |
| 4659 4716 | 4                 | 110       | 94        | 20               | 2x ø 16 15            | 2x ø 12 15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -664783.3               | -430839.5                | -0.0                     | 0.40  |
| Sommità | 2     | -770882.3               | -178380.5                | -0.0                     | 0.38  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -529048.5 | -56656.9                 | -0.0                     | -43.1         |
| sc Med  | 32           | -529048.5 | -56656.9                 | -0.0                     | -38.6         |
| st      | 23           | -581584.6 | -153930.1                | -0.0                     | -45.2         |
| sc      | 32           | -529048.5 | -56656.9                 | -0.0                     | -64.6         |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -529048.5 | -56656.9                 | -0.0                     | -43.1         |
| sc Med  | 32           | -529048.5 | -56656.9                 | -0.0                     | -38.6         |
| st      | 23           | -581584.6 | -153930.1                | -0.0                     | -45.2         |
| sc      | 32           | -529048.5 | -56656.9                 | -0.0                     | -64.6         |

|         |    |           |          |      |        |
|---------|----|-----------|----------|------|--------|
| st      | 31 | -461385.3 | -70576.0 | -0.0 | -420.6 |
| sc      | 32 | -462676.9 | -30306.2 | -0.0 | -542.1 |
| Sommità |    |           |          |      |        |
| sc Max  | 32 | -462676.9 | -30306.2 | -0.0 | -36.1  |
| sc Med  | 32 | -462676.9 | -30306.2 | -0.0 | -33.7  |
| st      | 31 | -461385.3 | -70576.0 | -0.0 | -420.6 |
| sc      | 32 | -462676.9 | -30306.2 | -0.0 | -542.1 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb. | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R  |
|-------------------------------|------|------|-------|-----------------|------|-----------------|-----------------|-----------------|------------------|-----------------|--------------------------|------|
|                               | [m]  | [m]  |       | [kg]            |      | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                     |      |
| 5308-5309-5310-5311-5312-5313 | 5.50 | 0.94 | 17    | 58824.3         | 1.00 | 58824.3         | -589783.7       | -245454.0       | 488115.4         | 290489.7        | 0.0                      | 0.20 |

▲NUCLEO 1191 1187 1185 1183 1182 / Nodi: 5382 5383 5384 5385 5386 5387

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 5382 5383 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5383 5384 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5384 5385 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5385 5386 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5386 5387 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -691510.6               | -73668.4                 | -0.0                     | 0.32  |
| Sommità | 1     | -688159.1               | -60504.6                 | -0.0                     | 0.32  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -460098.8 | -30064.6                 | -0.0                     | -35.9         |
| sc Max  | 32           | -460098.8 | -30064.6                 | -0.0                     | -33.5         |
| sc Med  | 31           | -458807.2 | -63527.0                 | -0.0                     | -42.62        |
| st      | 32           | -460098.8 | -30064.6                 | -0.0                     | -539.0        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -460098.8 | -30064.6                 | -0.0                     | -35.9         |
| sc Med  | 32           | -460098.8 | -30064.6                 | -0.0                     | -33.5         |
| st      | 31           | -458807.2 | -63527.0                 | -0.0                     | -42.62        |
| sc      | 32           | -460098.8 | -30064.6                 | -0.0                     | -539.0        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb. | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R |      |
|-------------------------------|------|------|-------|-----------------|------|-----------------|-----------------|------------------|-----------------|--------------------------|-----|------|
|                               | [m]  | [m]  |       | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                     |     |      |
| 5382-5383-5384-5385-5386-5387 | 5.50 | 0.94 | 17    | 59184.7         | 1.00 | 59184.7         | -602599.6       | -183531.8        | 488115.4        | 290489.7                 | 0.0 | 0.20 |

▲NUCLEO 1819 1785 1751 1717 1683 1649 / Nodi: 5696 5697 5695 5694 5693 5692

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 5696 5697 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5697 5695 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5695 5694 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5694 5693 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5693 5692 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -530173.6               | -227044.3                | -0.0                     | 0.29  |
| Sommità | 1     | -608759.2               | -54306.5                 | -0.0                     | 0.28  |

|    |    |           |           |      |        |
|----|----|-----------|-----------|------|--------|
| st | 26 | -501326.0 | -121261.2 | -0.0 | -403.9 |
| sc | 32 | -467833.2 | -30804.5  | -0.0 | -548.4 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R |      |
|-------------------------------|------|------|---------|-----------------|------|-----------------|-----------------|------------------|-----------------|--------------------------|-----|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                     |     |      |
| 4673-4674-4675-4676-4677-4845 | 5.50 | 0.94 | 17      | 59046.6         | 1.00 | 59046.6         | -599368.0       | -346033.9        | 488115.4        | 290489.7                 | 0.0 | 0.20 |

▲NUCLEO 1071 1067 1065 1064 1063 1062 / Nodi: 4990 4991 4992 4993 4994 4995

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 4990-4991 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 4991-4992 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 4992-4993 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 4993-4994 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 4994-4995 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 17    | -598954.3               | -294440.3                | -0.0                     | 0.33  |
| Sommità | 1     | -694862.2               | -86832.2                 | -0.0                     | 0.33  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -465255.1 | -30557.3                 | -0.0                     | -36.4         |
| sc Max  | 32           | -465255.1 | -30557.3                 | -0.0                     | -33.9         |
| sc Med  | 31           | -463963.4 | -77624.7                 | -0.0                     | -415.0        |
| st      | 32           | -465255.1 | -30557.3                 | -0.0                     | -545.3        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -465255.1 | -30557.3                 | -0.0                     | -36.4         |
| sc Med  | 32           | -465255.1 | -30557.3                 | -0.0                     | -33.9         |
| st      | 31           | -463963.4 | -77624.7                 | -0.0                     | -415.0        |
| sc      | 32           | -465255.1 | -30557.3                 | -0.0                     | -545.3        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R |      |
|-------------------------------|------|------|---------|-----------------|------|-----------------|-----------------|------------------|-----------------|--------------------------|-----|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                     |     |      |
| 4990-4991-4992-4993-4994-4995 | 5,50 | 0,94 | 17      | 58822,8         | 1,00 | 58822,8         | -598954,3       | -294440,3        | 488115,4        | 290489,7                 | 0,0 | 0,20 |

▲NUCLEO 1131 1127 1125 1124 1123 1122 / Nodi: 5308 5309 5310 5311 5312 5313

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 5308 5309 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5309 5310 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5310 5311 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5311 5312 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 5312 5313 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -694862.1               | -86831.8                 | -0.0                     | 0.33  |
| Sommità | 1     | -691510.7               | -73664.9                 | -0.0                     | 0.32  |

| S.L.E. | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base   |              |           |                          |                          |               |
| sc Max | 32           | -462676.9 | -30306.2                 | -0.0                     | -36.1         |
| sc Med | 32           | -462676.9 | -30306.2                 | -0.0                     | -33.7         |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 1            | -405407.6 | -47489.6                 | -0.0                     | 0.28          |
| Sommità | 1            | -602056.1 | -40661.2                 | -0.0                     | 0.28          |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -403220.7 | -19998.6                 | -0.0                     | -31.0         |
| sc Max  | 32           | -403220.7 | -19998.6                 | -0.0                     | -29.4         |
| sc Med  | 31           | -402788.2 | -35661.7                 | -0.0                     | -398.1        |
| st      | 32           | -403220.7 | -19998.6                 | -0.0                     | -464.8        |
| Sommità | 32           | -403220.7 | -19998.6                 | -0.0                     | -31.0         |
| sc Max  | 32           | -403220.7 | -19998.6                 | -0.0                     | -29.4         |
| sc Med  | 31           | -402788.2 | -35661.7                 | -0.0                     | -398.1        |
| st      | 32           | -403220.7 | -19998.6                 | -0.0                     | -464.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ac</sub><br>[kg] | α    | N <sub>1d</sub><br>[kg] | M <sub>1d</sub><br>[kgm] | V <sub>tot</sub><br>[kg] | V <sub>dis</sub><br>[kg] | V <sub>dis,coefficient</sub><br>[kg] | S/R      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------------------|----------|
| 6087-6086-6085-6084-6082-6083 | 5.50     | 0.94     | 20               | -57785.9                | 1.00 | -57785.9                | -279808.4                | 93287.5                  | 488115.4                 | 290489.7                             | 0.0 0.20 |

▲NUCLEO 2024 2020 2018 2017 2016 2015 / Nodi: 6111 6110 6109 6108 6106 6107

▲Armature Nucleo

| Nodi      | Sezione | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|-------------|-----------|------------------|-----------------------|-------------------------|
| 6111 6110 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6110 6109 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6109 6108 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6108 6106 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6106 6107 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>12</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -602056.1               | -40664.8                 | -0.0                     | 0.28  |
| Sommità | 1     | -598704.5               | -33844.0                 | -0.0                     | 0.27  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -400642.5 | -23339.1                 | -0.0                     | -31.1         |
| sc Max  | 32           | -400642.5 | -23339.1                 | -0.0                     | -29.2         |
| sc Med  | 31           | -400210.1 | -34704.4                 | -0.0                     | -396.4        |
| st      | 32           | -400642.5 | -23339.1                 | -0.0                     | -466.0        |
| Sommità | 32           | -400642.5 | -23339.1                 | -0.0                     | -31.1         |
| sc Max  | 32           | -400642.5 | -23339.1                 | -0.0                     | -29.2         |
| sc Med  | 31           | -400210.1 | -34704.4                 | -0.0                     | -396.4        |
| st      | 32           | -400642.5 | -23339.1                 | -0.0                     | -466.0        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | N <sub>1d</sub><br>[kg] | M <sub>1d</sub><br>[kgm] | V <sub>rod</sub><br>[kg] | V <sub>eds</sub><br>[kg] | V <sub>eds,comments</sub><br>[kg] | S/R      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|-----------------------------------|----------|
| 6111-6110-6109-6108-6106-6107 | 5.50     | 0.94     | 20               | -58136.7                | 1.00 | -58136.7                | -266765.8                | 44819.3                  | 488115.4                 | 290489.7                          | 0.0 0.20 |

▲NUCLEO 2652 2618 2584 2550 2516 2482 / Nodi: 6048 6049 6047 6046 6045 6044

▲Armature Nucleo

| Nodi      | Sezione | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|-------------|-----------|------------------|-----------------------|-------------------------|
| 6048 6049 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -408376.9 | -13328.9                 | -0.0                     | -30.8         |
| sc Max  | 32           | -408376.9 | -13328.9                 | -0.0                     | -29.8         |
| sc Med  | 31           | -407944.4 | -37572.9                 | -0.0                     | -401.4        |
| st      | 32           | -408376.9 | -13328.9                 | -0.0                     | -462.5        |
| Sommità | 32           | -408376.9 | -13328.9                 | -0.0                     | -30.8         |
| sc Max  | 32           | -408376.9 | -13328.9                 | -0.0                     | -29.8         |
| sc Med  | 31           | -407944.4 | -37572.9                 | -0.0                     | -401.4        |
| st      | 32           | -408376.9 | -13328.9                 | -0.0                     | -462.5        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |  |  | B    | H    | Comb.   | $V_{ed}$ | $\alpha$ | $N_{ed}$ | $M_{ed}$  | $V_{ed}$ | $V_{acc}$ | S/R      |          |
|-------------------------------|--|--|------|------|---------|----------|----------|----------|-----------|----------|-----------|----------|----------|
|                               |  |  | [m]  | [m]  | critica | [kg]     |          | [kg]     | [kgm]     | [kg]     | [kg]      |          |          |
| 5696-5697-5695-5694-5693-5692 |  |  | 5.50 | 0.94 | 20      | -58167.5 | 1.00     | -58167.5 | -286580.3 | 200391.4 | 488115.4  | 290489.7 | 0.0 0.20 |

▲NUCLEO 1904 1900 1898 1897 1896 1895 / Nodi: 5964 5963 5962 5961 5960 5959

▲Armature Nucleo

| Nodi      | Sezione | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|-------------|-----------|------------------|-----------------------|-------------------------|
| 5964 5963 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 5963 5962 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 5962 5961 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 5961 5960 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 5960 5959 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>12</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -608759.2               | -54310.5                 | -0.0                     | 0.28  |
| Sommità | 1     | -605407.7               | -47482.1                 | -0.0                     | 0.28  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -405798.8 | -16661.9                 | -0.0                     | -30.9         |
| sc Max  | 32           | -405798.8 | -16661.9                 | -0.0                     | -29.6         |
| sc Med  | 31           | -405366.3 | -36615.7                 | -0.0                     | -399.8        |
| st      | 32           | -405798.8 | -16661.9                 | -0.0                     | -463.7        |
| Sommità | 32           | -405798.8 | -16661.9                 | -0.0                     | -30.9         |
| sc Max  | 32           | -405798.8 | -16661.9                 | -0.0                     | -29.6         |
| sc Med  | 31           | -405366.3 | -36615.7                 | -0.0                     | -399.8        |
| st      | 32           | -405798.8 | -16661.9                 | -0.0                     | -463.7        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>(m) | H<br>(m) | Comb.<br>critica | V <sub>dc</sub><br>(kg) | α    | N <sub>dc</sub><br>(kg) | M <sub>dc</sub><br>(kgm) | V <sub>dc</sub><br>(kg) | V <sub>accidente</sub><br>(kg) | S/R      |          |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|-------------------------|--------------------------------|----------|----------|
| 5964-5963-5962-5961-5960-5959 | 5.50     | 0.94     | 20               | -57818.7                | 1.00 | -57818.7                | -280557.9                | 148195.3                | 488115.4                       | 290489.7 | 0.0 0.20 |

▲NUCLEO 1964 1960 1958 1957 1956 1955 / Nodi: 6087 6086 6085 6084 6082 6083

▲Armature Nucleo

| Nodi      | Sezione | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|-------------|-----------|------------------|-----------------------|-------------------------|
| 6087 6086 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6086 6085 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6085 6084 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6084 6082 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6082 6083 | 4       | 110         | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| Sezione | Comb. | Sd/Sr |
|---------|-------|-------|
|---------|-------|-------|

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6549 6549 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6549 6548 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6548 6547 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6547 6545 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6545 6546 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Base    | 1     | -511819.7              | -25980.1                | -0.0                     | 0.23  |
| Sommità | 1     | -512468.1              | -24951.1                | -0.0                     | 0.23  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -343766.3 | -16598.7                 | -0.0                     | -26.4         |
| sc Med  | 32           | -343766.3 | -16598.7                 | -0.0                     | -25.1         |
| st      | 31           | -343581.0 | -20796.3                 | -0.0                     | -351.0        |
| sc      | 32           | -343766.3 | -16598.7                 | -0.0                     | -395.8        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -343766.3 | -16598.7                 | -0.0                     | -26.4         |
| sc Med  | 32           | -343766.3 | -16598.7                 | -0.0                     | -25.1         |
| st      | 31           | -343581.0 | -20796.3                 | -0.0                     | -351.0        |
| sc      | 32           | -343766.3 | -16598.7                 | -0.0                     | -395.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>critica<br>[kg] | α    | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u2</sub><br>[kg] | V <sub>u1</sub><br>[kg] | V <sub>u2</sub> / V <sub>u1</sub> | S/R  |
|-------------------------------|----------|----------|-------|-----------------------------------|------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|------|
| 6550-6549-6548-6547-6545-6546 | 5.50     | 0.94     | 20    | -51136.4                          | 1.00 | -51136.4               | -303734.1              | -111816.8               | 148115.4                | 290489.7                | 0.0                               | 0.18 |

▲NUCLEO 2857 2853 2851 2850 2849 2848 / Nodi: 6568 6567 6566 6565 6563 6564

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6568 6567 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6567 6566 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6566 6565 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6565 6563 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6563 6564 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Base    | 1     | -512468.1              | -24951.1                | -0.0                     | 0.23  |
| Sommità | 1     | -509116.6              | -23918.3                | -0.0                     | 0.23  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -341188.2 | -22305.1                 | -0.0                     | -26.6         |
| sc Med  | 32           | -341188.2 | -22305.1                 | -0.0                     | -24.9         |
| st      | 31           | -341002.8 | -25065.7                 | -0.0                     | -343.1        |
| sc      | 32           | -341188.2 | -22305.1                 | -0.0                     | -399.7        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -341188.2 | -22305.1                 | -0.0                     | -26.6         |
| sc Med  | 32           | -341188.2 | -22305.1                 | -0.0                     | -24.9         |
| st      | 31           | -341002.8 | -25065.7                 | -0.0                     | -343.1        |
| sc      | 32           | -341188.2 | -22305.1                 | -0.0                     | -399.7        |

▲Verifiche a taglio dei diaframmi

| Diaframma | α | S/R |
|-----------|---|-----|
|           |   |     |

|           |   |     |    |    |             |             |
|-----------|---|-----|----|----|-------------|-------------|
| 6049 6047 | 4 | 110 | 94 | 20 | 2x ø 16.15' | 2x ø 12.15' |
| 6047 6046 | 4 | 110 | 94 | 20 | 2x ø 16.15' | 2x ø 12.15' |
| 6046 6045 | 4 | 110 | 94 | 20 | 2x ø 16.15' | 2x ø 12.15' |
| 6045 6044 | 4 | 110 | 94 | 20 | 2x ø 16.15' | 2x ø 12.15' |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Base    | 17    | -457640.1              | -152556.1               | -0.0                     | 0.24  |
| Sommità | 1     | -519171.3              | -27099.2                | -0.0                     | 0.24  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -348922.5 | -5188.0                  | -0.0                     | -25.9         |
| sc Med  | 32           | -348922.5 | -5188.0                  | -0.0                     | -25.4         |
| st      | 31           | -348737.3 | -12259.1                 | -0.0                     | -366.8        |
| sc      | 32           | -348922.5 | -5188.0                  | -0.0                     | -387.8        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -348922.5 | -5188.0                  | -0.0                     | -25.9         |
| sc Med  | 32           | -348922.5 | -5188.0                  | -0.0                     | -25.4         |
| st      | 31           | -348737.3 | -12259.1                 | -0.0                     | -366.8        |
| sc      | 32           | -348922.5 | -5188.0                  | -0.0                     | -387.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>critica<br>[kg] | α    | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u2</sub><br>[kg] | V <sub>u1</sub><br>[kg] | V <sub>u2</sub> / V <sub>u1</sub> | S/R  |
|-------------------------------|----------|----------|-------|-----------------------------------|------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|------|
| 6048-6049-6047-6046-6045-6044 | 5.50     | 0.94     | 20    | -50591.4                          | 1.00 | -50591.4               | -240205.0              | -142179.8               | 148115.4                | 290489.7                | 0.0                               | 0.17 |

▲NUCLEO 2737 2733 2731 2730 2729 2728 / Nodi: 6446 6445 6444 6443 6442 6441

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6446 6445 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6445 6444 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6444 6443 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6443 6442 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6442 6441 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|-------------------------|--------------------------|-------|
| Base    | 1     | -513171.3              | -27007.1                | -0.0                     | 0.24  |
| Sommità | 1     | -515819.7              | -25976.3                | -0.0                     | 0.23  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -346344.4 | -10894.4                 | -0.0                     | -26.1         |
| sc Med  | 32           | -346344.4 | -10894.4                 | -0.0                     | -25.3         |
| st      | 31           | -346159.1 | -16528.5                 | -0.0                     | -358.9        |
| sc      | 32           | -346344.4 | -10894.4                 | -0.0                     | -391.8        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -346344.4 | -10894.4                 | -0.0                     | -26.1         |
| sc Med  | 32           | -346344.4 | -10894.4                 | -0.0                     | -25.3         |
| st      | 31           | -346159.1 | -16528.5                 | -0.0                     | -358.9        |
| sc      | 32           | -346344.4 | -10894.4                 | -0.0                     | -391.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>critica<br>[kg] | α    | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>u2</sub><br>[kg] | V <sub>u1</sub><br>[kg] | V <sub>u2</sub> / V <sub>u1</sub> | S/R  |
|-------------------------------|----------|----------|-------|-----------------------------------|------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|------|
| 6446-6445-6444-6443-6442-6441 | 5.50     | 0.94     | 20    | -51198.0                          | 1.00 | -51198.0               | -250857.8              | -51433.9                | 488115.4                | 290489.7                | 0.0                               | 0.18 |

▲NUCLEO 2797 2793 2791 2790 2789 2788 / Nodi: 6550 6549 6548 6547 6545 6546

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kgm] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>red,corretto</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|-----------------------------------|-----|------|
| 6823-6822-6819-6817-6815-6813 | 5,50     | 0,94     | 20               | -47542,3                | 1,00 | -47542,3                | -248304,8                | -97118,7                 | 488115,4                 | 290489,7                          | 0,0 | 0,16 |

▲NUCLEO 3630 3626 3624 3623 3622 3621 / Nodi: 6886 6885 6884 6883 6882 6881 6880

▲Armature Nucleo

| Nodi      | Sezione                 |                          |                          |                  | Armatura    |             |           |             | Armatura  |             |           |             |
|-----------|-------------------------|--------------------------|--------------------------|------------------|-------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
|           | Numero                  | B<br>[cm]                | H<br>[cm]                | Spessore<br>[cm] | Verticale   | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale |
| 6886 6885 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6885 6884 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6884 6883 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6883 6881 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6881 6882 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| Sezione   |                         |                          |                          |                  |             |             |           |             |           |             |           |             |
| Comb.     | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr            |             |             |           |             |           |             |           |             |
| Base      | 1                       | -427256,7                | -16208,0                 | -0,0             | 0,19        |             |           |             |           |             |           |             |
| Sommità   | 1                       | -423905,1                | -19419,0                 | -0,0             | 0,19        |             |           |             |           |             |           |             |

| S.L.E.  | Combinazione |           |          |      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|----------|------|-----------|--------------------------|--------------------------|---------------|
|         | Base         | sc Max    | sc Med   | st   | sc        | sc                       | sc                       | sc            |
| Base    | 32           | -284867,6 | -16120,8 | -0,0 | -221,1    |                          |                          |               |
| sc Max  | 32           | -284867,6 | -16120,8 | -0,0 | -208      |                          |                          |               |
| sc Med  | 31           | -284744,8 | -17087,2 | -0,0 | -291,1    |                          |                          |               |
| st      | 32           | -284867,6 | -16120,8 | -0,0 | -330,8    |                          |                          |               |
| Sommità | 32           | -284867,6 | -16120,8 | -0,0 | -221,1    |                          |                          |               |
| sc Max  | 32           | -284867,6 | -16120,8 | -0,0 | -208      |                          |                          |               |
| sc Med  | 32           | -284867,6 | -16120,8 | -0,0 | -208      |                          |                          |               |
| st      | 31           | -284744,8 | -17087,2 | -0,0 | -291,1    |                          |                          |               |
| sc      | 32           | -284867,6 | -16120,8 | -0,0 | -330,8    |                          |                          |               |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>dc</sub><br>[kg] | N <sub>dc</sub><br>[kg] | M <sub>dc</sub><br>[kgm] | V <sub>ecol</sub><br>[kg] | V <sub>rel</sub><br>[kg] | S/R | V <sub>Relicamento</sub><br>[kg] |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|---------------------------|--------------------------|-----|----------------------------------|
| 6886-6885-6884-6883-6881-6882 | 5,50     | 0,94     | 20               | -47454,4                | 1,00 | -47454,4                | -267150,9               | -151001,1                | 488115,4                  | 290489,7                 | 0,0 | 0,16                             |

▲NUCLEO 3690 3686 3684 3683 3682 3681 / Nodi: 6821 6820 6818 6816 6814 6812

▲Armature Nucleo

| Nodi      | Sezione                 |                          |                          |                  | Armatura    |             |           |             | Armatura  |             |           |             |
|-----------|-------------------------|--------------------------|--------------------------|------------------|-------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
|           | Numero                  | B<br>[cm]                | H<br>[cm]                | Spessore<br>[cm] | Verticale   | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale |
| 6821 6820 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6820 6818 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6818 6816 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6816 6814 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6814 6812 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| Sezione   |                         |                          |                          |                  |             |             |           |             |           |             |           |             |
| Comb.     | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr            |             |             |           |             |           |             |           |             |
| Base      | 1                       | -423905,1                | -19423,0                 | -0,0             | 0,19        |             |           |             |           |             |           |             |
| Sommità   | 1                       | -420553,6                | -22635,9                 | -0,0             | 0,19        |             |           |             |           |             |           |             |

| S.L.E.  | Combinazione |           |          |      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|----------|------|-----------|--------------------------|--------------------------|---------------|
|         | Base         | sc Max    | sc Med   | st   | sc        | sc                       | sc                       | sc            |
| Base    | 32           | -282289,4 | -23524,8 | -0,0 | -225      |                          |                          |               |
| sc Max  | 32           | -282289,4 | -23524,8 | -0,0 | -206      |                          |                          |               |
| sc Med  | 29           | -28196,3  | -23984,2 | -0,0 | -279,7    |                          |                          |               |
| st      | 32           | -282289,4 | -23524,8 | -0,0 | -336,8    |                          |                          |               |
| Sommità | 32           | -282289,4 | -23524,8 | -0,0 | -225      |                          |                          |               |

| B                             | H    | Comb.   | V <sub>dc</sub> | V <sub>dc</sub> | N <sub>dc</sub> | M <sub>dc</sub> | V <sub>Red</sub> | V <sub>Red</sub> | V <sub>Red,corretto</sub> |
|-------------------------------|------|---------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|---------------------------|
| [m]                           | [m]  | critica | [kg]            | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]             | [kg]                      |
| 6568-6567-6566-6565-6563-6564 | 5,50 | 0,94    | 20              | -51377,8        | 1,00            | -51377,8        | -297165,7        | -139175,9        | 488115,4                  |
|                               |      |         |                 |                 |                 |                 |                  | 290489,7         | 0,0                       |
|                               |      |         |                 |                 |                 |                 |                  |                  | 0,18                      |

▲NUCLEO 3485 3451 3417 3383 3349 3315 / Nodi: 6473 6474 6472 6471 6470 6469

▲Armature Nucleo

| Nodi      | Sezione                 |                          |                          |                  | Armatura    |             |           |             | Armatura  |             |           |             |
|-----------|-------------------------|--------------------------|--------------------------|------------------|-------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
|           | Numero                  | B<br>[cm]                | H<br>[cm]                | Spessore<br>[cm] | Verticale   | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale |
| 6473 6474 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6474 6472 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6472 6471 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6471 6470 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6470 6469 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| Sezione   |                         |                          |                          |                  |             |             |           |             |           |             |           |             |
| Comb.     | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr            |             |             |           |             |           |             |           |             |
| Base      | 1                       | -433959,8                | -9782,0                  | -0,0             | 0,19        |             |           |             |           |             |           |             |
| Sommità   | 1                       | -430608,3                | -12995,2                 | -0,0             | 0,19        |             |           |             |           |             |           |             |

| S.L.E.  | Combinazione |           |        |      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------|------|-----------|--------------------------|--------------------------|---------------|
|         | Base         | sc Max    | sc Med | st   | sc        | sc                       | sc                       | sc            |
| Base    | 32           | -290023,8 | -13181 | -0,0 | -21,3     |                          |                          |               |
| sc Max  | 32           | -290023,8 | -13181 | -0,0 | -21,1     |                          |                          |               |
| sc Med  | 31           | -289901,1 | -34206 | -0,0 | -313,0    |                          |                          |               |
| st      | 32           | -290023,8 | -13181 | -0,0 | -318,8    |                          |                          |               |
| Sommità | 32           | -290023,8 | -13181 | -0,0 | -21,3     |                          |                          |               |
| sc Max  | 32           | -290023,8 | -13181 | -0,0 | -21,3     |                          |                          |               |
| sc Med  | 32           | -290023,8 | -13181 | -0,0 | -21,1     |                          |                          |               |
| st      | 31           | -289901,1 | -34206 | -0,0 | -313,0    |                          |                          |               |
| sc      | 32           | -290023,8 | -13181 | -0,0 | -318,8    |                          |                          |               |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>dd</sub><br>[kg] | N <sub>dd</sub><br>[kg] | M <sub>dd</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>dd,scrimento</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|-----------------------------------|-----|------|
| 6473-6474-6472-6471-6470-6469 | 5.50     | 0.94     | 20               | -47314.7                | 1.00 | -47314.7                | -273170.6               | -31841.0                 | 488115.4                 | 290489.7                          | 0.0 | 0.16 |

▲NUCLEO 3570 3566 3564 3563 3562 3561 / Nodi: 6823 6822 6819 6817 6815 6813

▲Armature Nucleo

| Nodi      | Sezione                 |                          |                          |                  | Armatura    |             |           |             | Armatura  |             |           |             |
|-----------|-------------------------|--------------------------|--------------------------|------------------|-------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|
|           | Numero                  | B<br>[cm]                | H<br>[cm]                | Spessore<br>[cm] | Verticale   | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale | Verticale | Orizzontale |
| 6823 6822 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6822 6819 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6819 6817 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6817 6815 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| 6815 6813 | 4                       | 110                      | 94                       | 20               | 2x ø 16 15' | 2x ø 12 15' | 20        | 2x ø 16 15' | 20        | 2x ø 16 15' | 20        | 2x ø 12 15' |
| Sezione   |                         |                          |                          |                  |             |             |           |             |           |             |           |             |
| Comb.     | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr            |             |             |           |             |           |             |           |             |
| Base      | 1                       | -430608,3                | -12995,0                 | -0,0             | 0,19        |             |           |             |           |             |           |             |
| Sommità   | 1                       | -427256,7                | -16208,0                 | -0,0             | 0,19        |             |           |             |           |             |           |             |

| S.L.E.  | Combinazione |           |          |      | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|----------|------|-----------|--------------------------|--------------------------|---------------|
|         | Base         | sc Max    | sc Med   | st   | sc        | sc                       | sc                       | sc            |
| Base    | 32           | -287445,7 | -8720,3  | -0,0 | -21,7     |                          |                          |               |
| sc Max  | 32           | -287445,7 | -8720,3  | -0,0 | -21,0     |                          |                          |               |
| sc Med  | 31           | -287323,0 | -10952,6 | -0,0 | -302,0    |                          |                          |               |
| st      | 32           | -287445,7 | -8720,3  | -0,0 | -324,8    |                          |                          |               |
| Sommità | 32           | -287445,7 | -8720,3  | -0,0 | -21,7     |                          |                          |               |
| sc Max  | 32           | -287445,7 | -8720,3  | -0,0 | -21,0     |                          |                          |               |
| sc Med  | 31           | -287323,0 | -10952,6 | -0,0 | -302,0    |                          |                          |               |
| st      | 32           | -287445,7 | -8720,3  | -0,0 | -324,8    |                          |                          |               |

|         |    |           |         |      |        |
|---------|----|-----------|---------|------|--------|
| sc Max  | 32 | -228967.7 | -8288.2 | -0.0 | -17.4  |
| sc Med  | 32 | -228967.7 | -8288.2 | -0.0 | -16.7  |
| st      | 31 | -228850.6 | -8759.7 | -0.0 | -23.99 |
| sc      | 32 | -228967.7 | -8288.2 | -0.0 | -260.3 |
| Sommita |    |           |         |      |        |
| sc Max  | 32 | -228967.7 | -8288.2 | -0.0 | -17.4  |
| sc Med  | 32 | -228967.7 | -8288.2 | -0.0 | -16.7  |
| st      | 31 | -228850.6 | -8759.7 | -0.0 | -23.99 |
| sc      | 32 | -228967.7 | -8288.2 | -0.0 | -260.3 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>eds</sub><br>[kg] | V <sub>Requisito</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------------|------|
| 6562-6561-6560-6559-6557-6558 | 5.50     | 0.94     | 20               | -43862.5                | 1.00 | -43862.5                | -211815.9               | -119780.0                | 488115.4                | 290489.7                 | 0.0                            | 0.15 |

▲NUCLEO 4463 4459 4457 4456 4455 4454 / Nodi: 6544 6543 6542 6541 6539 6540

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6544-6543 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6543-6542 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6542-6541 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6541-6539 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6539-6540 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -339709.1               | -12988.6                 | -0.0                     | 0.15  |
| Sommita | 1     | -336357.5               | -13019.4                 | -0.0                     | 0.15  |

S.L.E. Combinazione N M<sub>ed</sub> M<sub>13</sub> σ

|         |    |           |          |      |        |
|---------|----|-----------|----------|------|--------|
| Base    |    |           |          |      |        |
| sc Max  | 32 | -226389.5 | -16441.0 | -0.0 | -17.8  |
| sc Med  | 32 | -226389.5 | -16441.0 | -0.0 | -16.5  |
| st      | 29 | -226026.2 | -16661.9 | -0.0 | -227.4 |
| sc      | 32 | -226389.5 | -16441.0 | -0.0 | -267.2 |
| Sommita |    |           |          |      |        |
| sc Max  | 32 | -226389.5 | -16441.0 | -0.0 | -17.8  |
| sc Med  | 32 | -226389.5 | -16441.0 | -0.0 | -16.5  |
| st      | 29 | -226026.2 | -16661.9 | -0.0 | -227.4 |
| sc      | 32 | -226389.5 | -16441.0 | -0.0 | -267.2 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |  |  | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>dis</sub><br>[kg] | V <sub>dis</sub> richiesto<br>[kg] | S/R  |
|-------------------------------|--|--|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------------------------------------|------|
| 6544-6543-6542-6541-6539-6540 |  |  | 5.50     | 0.94     | 20               | -43750.9                | 1.00 | -43750.9                | -206730.3               | -131271.3                | 488115.4                | 290489.7                 | 0.0                                | 0.15 |

▲NUCLEO 4523 4519 4517 4516 4515 4514 / Nodi: 6440 6439 6438 6437 6436 6435

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6440-6439 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6439-6438 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6438-6437 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6437-6436 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6436-6435 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -336357.5               | -13021.0                 | -0.0                     | 0.15  |
| Sommita | 1     | -333005.9               | -25053.5                 | -0.0                     | 0.15  |

|        |    |           |          |      |        |
|--------|----|-----------|----------|------|--------|
| sc Max | 32 | -282289.4 | -23524.8 | -0.0 | -22.5  |
| sc Med | 32 | -282289.4 | -23524.8 | -0.0 | -20.6  |
| st     | 29 | -281796.3 | -23938.2 | -0.0 | -279.7 |
| sc     | 32 | -282289.4 | -23524.8 | -0.0 | -336.8 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed</sub> richiesto<br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|-----------------------------------|-----|------|
| 6821-6820-6818-6816-6814-6812 | 5.50     | 0.94     | 20               | -46812.7                | 1.00 | -46812.7                | -259276.2               | -172583.2                | 488115.4                | 290489.7                          | 0.0 | 0.16 |

▲NUCLEO 4318 4284 4250 4216 4182 4148 / Nodi: 6466 6465 6464 6463 6462 6461

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6466-6465 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6465-6464 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6464-6463 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6463-6462 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6462-6461 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -346412.2               | -929.4                   | -0.0                     | 0.15  |
| Sommita | 1     | -343060.6               | -6960.0                  | -0.0                     | 0.15  |

S.L.E. Combinazione N M<sub>ed</sub> M<sub>13</sub> σ

|         |    |           |        |      |        |
|---------|----|-----------|--------|------|--------|
| Base    |    |           |        |      |        |
| sc Max  | 32 | -231545.8 | -136.0 | -0.0 | -16.9  |
| sc Med  | 32 | -231545.8 | -136.0 | -0.0 | -16.9  |
| st      | 31 | -231428.8 | -937.3 | -0.0 | -252.0 |
| sc      | 32 | -231545.8 | -136.0 | -0.0 | -253.4 |
| Sommita |    |           |        |      |        |
| sc Max  | 32 | -231545.8 | -136.0 | -0.0 | -16.9  |
| sc Med  | 32 | -231545.8 | -136.0 | -0.0 | -16.9  |
| st      | 31 | -231428.8 | -937.3 | -0.0 | -252.0 |
| sc      | 32 | -231545.8 | -136.0 | -0.0 | -253.4 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | N <sub>id</sub><br>[kg] | M <sub>id</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>dis</sub><br>[kg] | V <sub>dis,ac,el,mecc</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-----|------|
| 6466-6465-6464-6463-6462-6461 | 5.50     | 0.94     | 20               | -39574.2                | 1.00 | -39574.2                | -211647.5                | -127939.5                | 488115.4                 | 290489.7                            | 0.0 | 0.14 |

▲NUCLEO 4403 4399 4397 4396 4395 4394 / Nodi: 6562 6561 6560 6559 6557 6558

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6562-6561 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6561-6560 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6560-6559 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6559-6557 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |
| 6557-6558 | 4                 | 110       | 94        | 20               | 2x ø 16.15'           | 2x ø 12.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -343000.7               | -6958.2                  | -0.0                     | 0.15  |
| Sommita | 1     | -339709.1               | -12988.6                 | -0.0                     | 0.15  |

| S.L.E. Combinazione N M <sub>ed</sub> M <sub>13</sub> σ |  |  |  |  |  |
|---------------------------------------------------------|--|--|--|--|--|
| Base                                                    |  |  |  |  |  |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>s1</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -25703.7                | -0.0                     | -575.2                   | 0.11  |
| Sommità | 1     | -252352.2               | -11460.4                 | -0.0                     | 0.11  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>s1</sub><br>[kgm] | M <sub>s2</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -170304.8 | -8991.2                  | -0.0                     | -131.1        |
| sc Med  | 32           | -170304.8 | -8991.2                  | -0.0                     | -12.4         |
| st      | 31           | -170173.7 | -9298.7                  | -0.0                     | -175.1        |
| sc      | 32           | -170304.8 | -8991.2                  | -0.0                     | -197.0        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -170304.8 | -8991.2                  | -0.0                     | -131.1        |
| sc Med  | 32           | -170304.8 | -8991.2                  | -0.0                     | -12.4         |
| st      | 31           | -170173.7 | -9298.7                  | -0.0                     | -175.1        |
| sc      | 32           | -170304.8 | -8991.2                  | -0.0                     | -197.0        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>da</sub><br>[kg] | N <sub>da</sub><br>[kg] | M <sub>da</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>da</sub><br>[kg] | V <sub>Residuo</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|------------------------------|------|
| 6434-6433-6430-6428-6426-6424 | 5.50     | 0.94     | 20               | -48001.5                | 1.00 | -48001.5                | -148358.6               | -91102.5                 | 488115.4                | 290489.7                | 0.0                          | 0.17 |

▲NUCLEO 5296 5292 5290 5289 5288 5287 / Nodi: 6538 6537 6536 6535 6533 6534

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6538-6537 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6537-6536 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6536-6535 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6535-6533 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6533-6534 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>s1</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -252352.2               | -11460.4                 | -0.0                     | 0.11  |
| Sommità | 1     | -249000.6               | -17345.5                 | -0.0                     | 0.11  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>s1</sub><br>[kgm] | M <sub>s2</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -167726.7 | -17191.0                 | -0.0                     | -13.6         |
| sc Med  | 32           | -167726.7 | -17191.0                 | -0.0                     | -12.2         |
| st      | 29           | -167477.6 | -17434.3                 | -0.0                     | -162.4        |
| sc      | 32           | -167726.7 | -17191.0                 | -0.0                     | -203.9        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -167726.7 | -17191.0                 | -0.0                     | -13.6         |
| sc Med  | 32           | -167726.7 | -17191.0                 | -0.0                     | -12.2         |
| st      | 29           | -167477.6 | -17434.3                 | -0.0                     | -162.4        |
| sc      | 32           | -167726.7 | -17191.0                 | -0.0                     | -203.9        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ris</sub><br>[kg] | V <sub>ris,contorno</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-----------------------------------|------|
| 6538-6537-6536-6535-6533-6534 | 5.50     | 0.94     | 20               | -47860.4                | 1.00 | -47860.4                | -140123.8               | -104007.0                | 488115.4                | 290489.7                 | 0.0                               | 0.16 |

▲NUCLEO 5356 5352 5350 5349 5348 5347 / Nodi: 6432 6431 6429 6427 6425 6423

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6432-6431 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>s1</sub><br>[kgm] | M <sub>s2</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -22381.4  | -24590.2                 | -0.0                     | -18.3         |
| sc Med  | 32           | -22381.4  | -24590.2                 | -0.0                     | -16.3         |
| st      | 29           | -223448.1 | -24996.5                 | -0.0                     | -214.6        |
| sc      | 32           | -22381.4  | -24590.2                 | -0.0                     | -274.1        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -22381.4  | -24590.2                 | -0.0                     | -18.3         |
| sc Med  | 32           | -22381.4  | -24590.2                 | -0.0                     | -16.3         |
| st      | 29           | -223448.1 | -24996.5                 | -0.0                     | -214.6        |
| sc      | 32           | -22381.4  | -24590.2                 | -0.0                     | -274.1        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>eds,accanto</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|-----|------|
| 6440-6439-6438-6437-6436-6435 | 5.50     | 0.94     | 20               | -38941.6                | 1.00 | -38941.6                | -199250.3               | -149271.8                | 488115.4                | 290489.7                         | 0.0 | 0.13 |

▲NUCLEO 5151 5117 5083 5049 5015 4981 / Nodi: 6043 6042 6041 6040 6039 6038

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6043-6042 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6042-6041 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6041-6040 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6040-6039 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6039-6038 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>s1</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -250955.3               | 310.0                    | -0.0                     | 0.11  |
| Sommità | 1     | -255703.7               | -5576.2                  | -0.0                     | 0.11  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>s1</sub><br>[kgm] | M <sub>s2</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -172882.9 | -792.5                   | -0.0                     | -12.7         |
| sc Med  | 32           | -172882.9 | -792.5                   | -0.0                     | -12.6         |
| st      | 31           | -172751.8 | -1312.1                  | -0.0                     | -187.4        |
| sc      | 32           | -172882.9 | -792.5                   | -0.0                     | -190.0        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -172882.9 | -792.5                   | -0.0                     | -12.7         |
| sc Med  | 32           | -172882.9 | -792.5                   | -0.0                     | -12.6         |
| st      | 31           | -172751.8 | -1312.1                  | -0.0                     | -187.4        |
| sc      | 32           | -172882.9 | -792.5                   | -0.0                     | -190.0        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,accanto</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|---------------------------------|-----|------|
| 6043-6042-6041-6040-6039-6038 | 5.50     | 0.94     | 20               | -40894.5                | 1.00 | -40894.5                | -149367.7               | -102399.8                | 488115.4                | 290489.7                        | 0.0 | 0.14 |

▲NUCLEO 5236 5232 5230 5229 5228 5227 / Nodi: 6434 6433 6430 6428 6426 6424

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6434-6433 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6433-6430 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6430-6428 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6428-6426 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6426-6424 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

▲Armature Nucleo

▲Verifiche a taglio dei diaframmi

S/R

|           |   |                   |           |           |                  |                                                  |
|-----------|---|-------------------|-----------|-----------|------------------|--------------------------------------------------|
| 6431 6429 | 4 | 110               | 94        | 20        | 2x ø 16.15       | 2x ø 12.15                                       |
| 6429 6427 | 4 | 110               | 94        | 20        | 2x ø 16.15       | 2x ø 12.15                                       |
| 6427 6425 | 4 | 110               | 94        | 20        | 2x ø 16.15       | 2x ø 12.15                                       |
| 6425 6423 | 4 | 110               | 94        | 20        | 2x ø 16.15       | 2x ø 12.15                                       |
| Sezione   |   |                   |           |           |                  |                                                  |
| Nodi      |   | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale<br>Armatura<br>Orizzontale |
| Base      |   | 1                 | 24900.6   | -17346.5  | -0.0             | 0.11                                             |
| Sommità   |   | 1                 | -245649.0 | -23230.6  | -0.0             | 0.11                                             |

|         |  |              |           |                          |                          |                            |
|---------|--|--------------|-----------|--------------------------|--------------------------|----------------------------|
| S.L.E.  |  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
| Base    |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -14.1                      |
| sc Max  |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -12.0                      |
| sc Med  |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -14.1                      |
| st      |  | 29           | -164899.5 | -25800.8                 | -0.0                     | -149.6                     |
| sc      |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -210.9                     |
| Sommità |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -14.1                      |
| sc Max  |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -12.0                      |
| sc Med  |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -14.1                      |
| st      |  | 29           | -164899.5 | -25800.8                 | -0.0                     | -149.6                     |
| sc      |  | 32           | -165148.5 | -25388.7                 | -0.0                     | -210.9                     |

▲Verifiche a taglio dei diaframmi

|                               |  |          |          |                  |                         |      |                         |                          |                          |                         |                             |      |
|-------------------------------|--|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|-------------------------|-----------------------------|------|
| Diaframma                     |  | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>max,cr</sub><br>[kg] | S/R  |
| 6432-6431-6429-6427-6425-6423 |  | 5.50     | 0.94     | 15               | -32550.8                | 1.00 | -131306.9               | -108808.8                | 488115.4                 | 290489.7                | 0.0                         | 0.11 |

▲NUCLEO 5984 5950 5916 5882 5848 5814 / Nodi: 6030 6031 6029 6028 6027 6026

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6030 6031 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6031 6029 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6029 6028 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6028 6027 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6027 6026 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

|         |  |       |                         |                          |                          |       |
|---------|--|-------|-------------------------|--------------------------|--------------------------|-------|
| Sezione |  | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
| Base    |  | 17    | -139593.9               | 60978.9                  | 0.0                      | 0.08  |
| Sommità |  | 1     | -167749.5               | -1985.1                  | -0.0                     | 0.07  |

|         |  |              |           |                          |                          |                            |
|---------|--|--------------|-----------|--------------------------|--------------------------|----------------------------|
| S.L.E.  |  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
| Base    |  | 32           | -113063.8 | -32602                   | -0.0                     | -8.5                       |
| sc Max  |  | 32           | -113063.8 | -32602                   | -0.0                     | -8.2                       |
| sc Med  |  | 32           | -113063.8 | -32602                   | -0.0                     | -8.2                       |
| st      |  | 31           | -112950.6 | -38537                   | -0.0                     | -119.0                     |
| sc      |  | 32           | -113063.8 | -32602                   | -0.0                     | -127.5                     |
| Sommità |  | 32           | -113063.8 | -32602                   | -0.0                     | -8.5                       |
| sc Max  |  | 32           | -113063.8 | -32602                   | -0.0                     | -8.2                       |
| sc Med  |  | 32           | -113063.8 | -32602                   | -0.0                     | -8.2                       |
| st      |  | 31           | -112950.6 | -38537                   | -0.0                     | -119.0                     |
| sc      |  | 32           | -113063.8 | -32602                   | -0.0                     | -127.5                     |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |  | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ac</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>max</sub><br>[kg] | S/R |      |
|-------------------------------|--|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-----|------|
| 6030-6031-6029-6028-6027-6026 |  | 5.50     | 0.94     | 14               | -21986.5                | 1.00 | -21986.5                | -99531.8                | 9128.9                   | 488115.4                | 290489.7                 | 0.0 | 0.08 |

▲NUCLEO 6069 6065 6063 6062 6061 6060 / Nodi: 6420 6419 6417 6415 6413 6411

▲Armature Nucleo

▲Verifiche a taglio dei diaframmi

|           |   |     |    |    |            |            |
|-----------|---|-----|----|----|------------|------------|
| 6420 6419 | 4 | 110 | 94 | 20 | 2x ø 16.15 | 2x ø 12.15 |
| 6419 6417 | 4 | 110 | 94 | 20 | 2x ø 16.15 | 2x ø 12.15 |
| 6417 6415 | 4 | 110 | 94 | 20 | 2x ø 16.15 | 2x ø 12.15 |
| 6415 6413 | 4 | 110 | 94 | 20 | 2x ø 16.15 | 2x ø 12.15 |
| 6413 6411 | 4 | 110 | 94 | 20 | 2x ø 16.15 | 2x ø 12.15 |

|         |  |       |                         |                          |                          |       |
|---------|--|-------|-------------------------|--------------------------|--------------------------|-------|
| Sezione |  | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
| Base    |  | 1     | -167749.5               | -1986.0                  | -0.0                     | 0.07  |
| Sommità |  | 1     | -163797.9               | -5943.8                  | -0.0                     | 0.07  |

|         |  |              |           |                          |                          |                            |
|---------|--|--------------|-----------|--------------------------|--------------------------|----------------------------|
| S.L.E.  |  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
| Base    |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -8.8                       |
| sc Max  |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -8.1                       |
| sc Med  |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -109.8                     |
| st      |  | 31           | -110372.5 | -9141.0                  | -0.0                     | -131.5                     |
| Sommità |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -8.8                       |
| sc Max  |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -8.1                       |
| sc Med  |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -109.8                     |
| st      |  | 31           | -110372.5 | -9141.0                  | -0.0                     | -131.5                     |
| Sommità |  | 32           | -110485.7 | -8917.2                  | -0.0                     | -8.8                       |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>tot</sub> | V <sub>dis</sub> | V <sub>dis,corrente</sub> | S/R |      |
|-------------------------------|-----|------|------|---------|-----------------|------|-----------------|-----------------|------------------|------------------|---------------------------|-----|------|
|                               | [m] | [m]  |      | critica | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]             | [kg]                      |     |      |
| 6420-6419-6417-6415-6413-6411 |     | 5.50 | 0.94 | 15      | -22273.6        | 1.00 | -22273.6        | -94593.8        | -44870.5         | 488115.4         | 290489.7                  | 0.0 | 0.08 |

▲NUCLEO 6129 6125 6123 6122 6121 6120 / Nodi: 6532 6531 6530 6529 6527 6528

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6532 6531 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6531 6530 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6530 6529 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6529 6527 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6527 6528 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

|         |  |       |                         |                          |                          |       |
|---------|--|-------|-------------------------|--------------------------|--------------------------|-------|
| Sezione |  | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | Sd/Sr |
| Base    |  | 1     | -163797.9               | -5942.9                  | -0.0                     | 0.07  |
| Sommità |  | 1     | -169446.3               | -9906.6                  | -0.0                     | 0.07  |

|         |  |              |           |                          |                          |                            |
|---------|--|--------------|-----------|--------------------------|--------------------------|----------------------------|
| S.L.E.  |  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>11</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |
| Base    |  | 32           | -107907.6 | -14575.9                 | -0.0                     | -9.0                       |
| sc Max  |  | 32           | -107907.6 | -14575.9                 | -0.0                     | -7.9                       |
| sc Med  |  | 29           | -107756.3 | -14926.0                 | -0.0                     | -100.1                     |
| st      |  | 32           | -107907.6 | -14575.9                 | -0.0                     | -135.4                     |
| Sommità |  | 32           | -107907.6 | -14575.9                 | -0.0                     | -9.0                       |
| sc Max  |  | 32           | -107907.6 | -14575.9                 | -0.0                     | -7.9                       |
| sc Med  |  | 29           | -107756.3 | -14926.0                 | -0.0                     | -100.1                     |
| st      |  | 32           | -107907.6 | -14575.9                 | -0.0                     | -135.4                     |

▲Verifiche a taglio dei diaframmi

Diaframma

α

▲Verifiche a taglio dei diaframmi

| Diaframma |      | B    | H   | Comb.    | V <sub>ed</sub> | α        | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R  |
|-----------|------|------|-----|----------|-----------------|----------|-----------------|-----------------|-----------------|-----------------|--------------------------|------|
|           |      | [m]  | [m] | critica  | [kg]            |          | [kg]            | [kg]            | [kgm]           | [kg]            | [kg]                     |      |
| 6033-6032 | 1.10 | 0.94 | 20  | -12644.5 | 1.00            | -12644.5 | -10408.9        | -311.7          | 95481.3         | 56823.3         | 96365.2                  | 0.22 |
| 6037-6036 | 1.10 | 0.94 | 1   | 3946.5   | 1.00            | 3946.5   | -29938.4        | 109.6           | 95481.3         | 56823.3         | 109854.2                 | 0.07 |

▲NUCLEO 6897 6893 6891 6890 / Nodi: 6390 6391 6386 6387

▲Armature Nucleo

| Nodi      |   | Sezione | B    | H    | Spessore   | Armatura   | Armatura  | Armatura    |
|-----------|---|---------|------|------|------------|------------|-----------|-------------|
|           |   | Numero  | [cm] | [cm] | [cm]       | Verticale  | Verticale | Orizzontale |
| 6390-6391 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6386-6387 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |

| Sezione |    | Comb.    | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|----|----------|-----------------|-----------------|-----------------|-----------------|-------|
|         |    |          | [kg]            | [kgm]           | [kgm]           | [kgm]           |       |
| Base    | 18 | -51975.1 | 387.357         | -19280          | 0.10            |                 |       |
| Sommità | 17 | -52098.1 | 48942.9         | 166.2           | 0.08            |                 |       |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | α                     |
|---------|--------------|----------|-----------------|-----------------|-----------------------|
|         |              | [kg]     | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| Base    |              |          |                 |                 |                       |
| sc Max  | 32           | -42915.7 | 20344           | -7145           | -118                  |
| sc Med  | 32           | -42915.7 | 20344           | -7145           | -78                   |
| st      | 23           | -46860.2 | 10050.4         | -851.8          | -708                  |
| sc      | 32           | -42915.7 | 20344           | -7145           | -155.7                |
| Sommità |              |          |                 |                 |                       |
| sc Max  | 32           | -42915.7 | 20344           | -7145           | -118                  |
| sc Med  | 32           | -42915.7 | 20344           | -7145           | -78                   |
| st      | 23           | -46860.2 | 10050.4         | -851.8          | -708                  |
| sc      | 32           | -42915.7 | 20344           | -7145           | -155.7                |

▲Verifiche a taglio dei diaframmi

| Diaframma |      | B    | H   | Comb.    | V <sub>ed</sub> | α        | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R  |
|-----------|------|------|-----|----------|-----------------|----------|-----------------|-----------------|-----------------|-----------------|--------------------------|------|
|           |      | [m]  | [m] | critica  | [kg]            |          | [kg]            | [kg]            | [kgm]           | [kg]            | [kg]                     |      |
| 6386-6387 | 1.10 | 0.94 | 20  | -12600.1 | 1.00            | -12600.1 | -7314.5         | -414.4          | 95481.3         | 56823.3         | 104666.8                 | 0.22 |
| 6390-6391 | 1.10 | 0.94 | 1   | 3946.5   | 1.00            | 3946.5   | -29678.0        | 90.8            | 95481.3         | 56823.3         | 128284.9                 | 0.07 |

▲NUCLEO 6952 6948 6946 6945 / Nodi: 6517 6518 6515 6516

▲Armature Nucleo

| Nodi      |   | Sezione | B    | H    | Spessore   | Armatura   | Armatura  | Armatura    |
|-----------|---|---------|------|------|------------|------------|-----------|-------------|
|           |   | Numero  | [cm] | [cm] | [cm]       | Verticale  | Verticale | Orizzontale |
| 6517-6518 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6515-6516 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |

| Sezione |    | Comb.    | N <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|----|----------|-----------------|-----------------|-----------------|-------|
|         |    |          | [kg]            | [kgm]           | [kgm]           |       |
| Base    | 17 | -52086.4 | 48960.8         | 166.3           | 0.08            |       |
| Sommità | 18 | -49595.3 | 45513.5         | 2250.8          | 0.11            |       |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | α                     |
|---------|--------------|----------|-----------------|-----------------|-----------------------|
|         |              | [kg]     | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| Base    |              |          |                 |                 |                       |
| sc Max  | 32           | -41884.5 | -41.2           | 50.0            | -79                   |
| sc Med  | 32           | -41884.5 | -41.2           | 50.0            | -76                   |
| st      | 23           | -45828.9 | 9183.6          | 61.1            | -108.3                |
| sc      | 32           | -41884.5 | -41.2           | 50.0            | -117.1                |
| Sommità |              |          |                 |                 |                       |
| sc Max  | 32           | -41884.5 | -41.2           | 50.0            | -79                   |
| sc Med  | 32           | -41884.5 | -41.2           | 50.0            | -76                   |
| st      | 23           | -45828.9 | 9183.6          | 61.1            | -108.3                |
| sc      | 32           | -41884.5 | -41.2           | 50.0            | -117.1                |

| B         |      | H    | Comb.     | V <sub>ed</sub> | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>Red</sub> | V <sub>Red,aportamento</sub> |          |          |          |          |     |      |
|-----------|------|------|-----------|-----------------|-----------------|-----------------|-----------------|------------------|------------------------------|----------|----------|----------|----------|-----|------|
| [m]       |      | [m]  | critica   | [kg]            | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]                         |          |          |          |          |     |      |
| 6532-6531 | 6530 | 6529 | 6527-6528 | 5.50            | 0.94            | 15              | -22789.2        | 1.00             | -22789.2                     | -88523.7 | -75214.2 | 488115.4 | 290489.7 | 0.0 | 0.08 |

▲NUCLEO 6189 6185 6183 6182 6181 6180 / Nodi: 6422 6421 6418 6416 6414 6412

▲Armature Nucleo

| Nodi      |   | Sezione | B    | H    | Spessore   | Armatura   | Armatura  | Armatura    |
|-----------|---|---------|------|------|------------|------------|-----------|-------------|
|           |   | Numero  | [cm] | [cm] | [cm]       | Verticale  | Verticale | Orizzontale |
| 6422-6421 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6421-6418 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6418-6416 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6416-6414 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6414-6412 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |

| Sezione |    | Comb.     | N <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|----|-----------|-----------------|-----------------|-----------------|-------|
|         |    |           | [kg]            | [kgm]           | [kgm]           |       |
| Base    | 17 | -130226.0 | 78321.9         | 0.0             | 0.08            |       |
| Sommità | 20 | -77182.3  | -142205.1       | -0.0            | 0.08            |       |

| S.L.E.  | Combinazione | N         | M <sub>12</sub> | M <sub>13</sub> | α                     |
|---------|--------------|-----------|-----------------|-----------------|-----------------------|
|         |              | [kg]      | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| Base    |              |           |                 |                 |                       |
| sc Max  | 32           | -105329.4 | -20232.3        | -0.0            | -9.3                  |
| sc Med  | 32           | -105329.4 | -20232.3        | -0.0            | -7.7                  |
| st      | 29           | -105178.2 | -20776.0        | -0.0            | -90.3                 |
| sc      | 32           | -105329.4 | -20232.3        | -0.0            | -139.3                |
| Sommità |              |           |                 |                 |                       |
| sc Max  | 32           | -105329.4 | -20232.3        | -0.0            | -9.3                  |
| sc Med  | 32           | -105329.4 | -20232.3        | -0.0            | -7.7                  |
| st      | 29           | -105178.2 | -20776.0        | -0.0            | -90.3                 |
| sc      | 32           | -105329.4 | -20232.3        | -0.0            | -139.3                |

▲Verifiche a taglio dei diaframmi

| Diaframma |                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,corrente</sub> | S/R |      |
|-----------|---------------------|------|------|---------|-----------------|------|-----------------|-----------------|-----------------|-----------------|--------------------------|-----|------|
|           |                     | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]            | [kgm]           | [kg]            | [kg]                     |     |      |
| 6422-6421 | 6418-6416-6414-6412 | 5.50 | 0.94 | 15      | -22420.6        | 1.00 | -22420.6        | -83930.8        | -102287.7       | 488115.4        | 290489.7                 | 0.0 | 0.08 |

▲NUCLEO 6817 6783 6681 6647 / Nodi: 6037 6036 6033 6032

▲Armature Nucleo

| Nodi      |   | Sezione | B    | H    | Spessore   | Armatura   | Armatura  | Armatura    |
|-----------|---|---------|------|------|------------|------------|-----------|-------------|
|           |   | Numero  | [cm] | [cm] | [cm]       | Verticale  | Verticale | Orizzontale |
| 6037-6036 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |
| 6033-6032 | 4 | 110     | 94   | 20   | 2x ø 16.15 | 2x ø 12.15 |           |             |

| Sezione |    | Comb.    | N <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|----|----------|-----------------|-----------------|-----------------|-------|
|         |    |          | [kg]            | [kgm]           | [kgm]           |       |
| Base    | 18 | -52458.1 | 33794.7         | -4185.0         | 0.15            |       |
| Sommità | 18 | -51992.1 | 38730.6         | -1928.0         | 0.10            |       |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | α                     |
|---------|--------------|----------|-----------------|-----------------|-----------------------|
|         |              | [kg]     | [kgm]           | [kgm]           | [kg/cm <sup>2</sup> ] |
| Base    |              |          |                 |                 |                       |
| sc Max  | 32           | -43947.0 | 4110.3          | -1478.9         | -16.3                 |
| sc Med  | 32           | -43947.0 | 4110.3          | -1478.9         | -8.1                  |
| st      | 23           | -47891.4 | 10917.0         | -1764.6         | -25.5                 |
| sc      | 32           | -43947.0 | 4110.3          | -1478.9         | -199.4                |
| Sommità |              |          |                 |                 |                       |
| sc Max  | 32           | -43947.0 | 4110.3          | -1478.9         | -16.3                 |
| sc Med  | 32           | -43947.0 | 4110.3          | -1478.9         | -8.1                  |
| st      | 23           | -47891.4 | 10917.0         | -1764.6         | -25.5                 |
| sc      | 32           | -43947.0 | 4110.3          | -1478.9         | -199.4                |

|    |    |           |      |          |        |
|----|----|-----------|------|----------|--------|
| sc | 32 | -391035.4 | -0.0 | -30096.3 | -301.2 |
|----|----|-----------|------|----------|--------|

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>rob</sub><br>[kg] | V <sub>Measurement</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|----------------------------------|------|
| 3871-4131-4465-4772-4846-5351 | 5.00     | 0.94     | 18               | -113494.0               | 1.00 | -113494.0               | -40566.1                | 661.388                  | 776121.4                 | 359247.2                 | 799316.7                         | 0.32 |

▲NUCLEO 222 221 220 219 218 217 / Nodi: 3966 4129 4463 4470 4761 5030

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3966 4129 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4129 4463 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4463 4470 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4470 4761 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4761 5030 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 18    | -404429.5                | -0.0                      | -541070.7                 | 0.23  |
| Sommità | 18    | -400829.6                | -0.0                      | -427079.9                 | 0.20  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -386933.8 | -0.0                      | -27947.4                  | -19.8         |
| sc Med  | 32           | -386933.8 | -0.0                      | -27947.4                  | -18.2         |
| st      | 31           | -381890.8 | -0.0                      | -28086.6                  | -245.6        |
| sc      | 32           | -386933.8 | -0.0                      | -27947.4                  | -296.5        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -386933.8 | -0.0                      | -27947.4                  | -19.8         |
| sc Med  | 32           | -386933.8 | -0.0                      | -27947.4                  | -18.2         |
| st      | 31           | -381890.8 | -0.0                      | -28086.6                  | -245.6        |
| sc      | 32           | -386933.8 | -0.0                      | -27947.4                  | -296.5        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>stab</sub><br>[kg] | V <sub>Measurements</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------|-----------------------------------|------|
| 3966-4129-4463-4470-4761-5030 | 5.00     | 0.94     | 18               | -113379.7               | 1.00 | -113379.7               | -404429.5               | 541070.7                 | 776121.4                 | 359247.2                  | 851139.4                          | 0.32 |

▲NUCLEO 282 281 280 279 278 277 / Nodi: 3971 4128 4136 4451 4760 5029

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3971 4128 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4128 4136 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4136 4451 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4451 4760 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4760 5029 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 18    | -405686.6               | -0.0                      | -434544.0                 | 0.20  |
| Sommità | 18    | -400110.1               | -0.0                      | -312990.0                 | 0.17  |

| S.L.E. | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base   |              |           |                           |                           |               |
| sc Max | 32           | -382832.3 | -0.0                      | -25798.4                  | -19.5         |
| sc Med | 32           | -382832.3 | -0.0                      | -25798.4                  | -18.0         |
| st     | 31           | -377789.3 | -0.0                      | -25073.7                  | -245.2        |

▲Verifiche a taglio dei diaframmi

| Diaframma | B<br>[m] | H<br>[m] | Comb.<br>critica | $V_{ec}$ | $\alpha$ | $V_{ed}$ | $N_{ed}$ | $M_{ed}$ | $V_{res}$ | $V_{res,corrente}$ | S/R           |
|-----------|----------|----------|------------------|----------|----------|----------|----------|----------|-----------|--------------------|---------------|
| 6515-6516 | 1.10     | 0.94     | 20               | -12552.3 | 1.00     | -12552.3 | -4922.6  | -500.4   | 95481.3   | 56823.3            | 100177.2 0.22 |
| 6517-6518 | 1.10     | 0.94     | 1                | 3946.5   | 1.00     | 3946.5   | -29417.5 | 72.0     | 95481.3   | 56823.3            | 129152.0 0.07 |

▲NUCLEO 7007 7003 7001 7000 / Nodi: 6388 6389 6384 6385

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 6388 6389 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |
| 6384 6385 | 4                 | 110       | 94        | 20               | 2x ø 16 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 18    | -49381.4                | 45526.0                   | 2250.8                    | 0.11  |
| Sommità | 18    | -48646.8                | 49711.1                   | 4165.0                    | 0.16  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -40853.2  | -2116.8                   | 814.5                     | -12.0         |
| sc Med  | 32           | -40853.2  | -2116.8                   | 814.5                     | -7.4          |
| st      | 23           | -44797.7  | 8316.8                    | 974.0                     | -61.8         |
| sc      | 32           | -40853.2  | -2116.8                   | 814.5                     | -155.1        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -40853.2  | -2116.8                   | 814.5                     | -12.0         |
| sc Med  | 32           | -40853.2  | -2116.8                   | 814.5                     | -7.4          |
| st      | 23           | -44797.7  | 8316.8                    | 974.0                     | -61.8         |
| sc      | 32           | -40853.2  | -2116.8                   | 814.5                     | -155.1        |

▲Verifiche a taglio dei diaframmi

| Diaframma | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>res</sub><br>[kg] | V <sub>res,corrente</sub><br>[kg] | S/R      |      |
|-----------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|-----------------------------------|----------|------|
| 6384-6385 | 1.10     | 0.94     | 20               | -12501.3                | 1.00 | -12501.3                | -2598.9                 | 589.3                    | 95481.3                  | 56823.3                           | 69588.1  | 0.22 |
| 6388-6389 | 1.10     | 0.94     | 1                | 3946.5                  | 1.00 | 3946.5                  | -29157.1                | 53.2                     | 95481.3                  | 56823.3                           | 125016.3 | 0.07 |

▲NUCLEO 127 126 125 124 123 122 / Nodi: 3871 4131 4465 4772 4846 5351

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3871 4131 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4131 4465 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4465 4772 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4772 4846 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |
| 4846 5351 | 1                 | 100       | 94        | 35               | 2x ø 20 15'           | 2x ø 14 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 18    | -405661.1               | -0.0                      | -661138.8                 | 0.27  |
| Sommità | 18    | -397590.2               | -0.0                      | -553861.9                 | 0.24  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -391035.4 | -0.0                      | -30096.3                  | -20.1         |
| sc Med  | 32           | -391035.4 | -0.0                      | -30096.3                  | -18.4         |
| st      | 31           | -385992.4 | -0.0                      | -31098.5                  | -245.9        |
| sc      | 32           | -391035.4 | -0.0                      | -30096.3                  | -301.2        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -391035.4 | -0.0                      | -30096.3                  | -20.1         |
| sc Med  | 32           | -391035.4 | -0.0                      | -30096.3                  | -18.4         |
| st      | 31           | -385992.4 | -0.0                      | -31098.5                  | -245.9        |

|         |        | N    |           | M <sub>12</sub> |          | M <sub>13</sub> |       | σ                     |        |
|---------|--------|------|-----------|-----------------|----------|-----------------|-------|-----------------------|--------|
|         |        | [kg] |           | [kgm]           |          | [kgm]           |       | [kg/cm <sup>2</sup> ] |        |
| Base    | sc     | 32   | -361293.9 | -0.0            | -16108.4 | -17.9           | -17.0 | -238.6                | -268.4 |
|         | sc Max |      |           |                 |          |                 |       |                       |        |
|         | sc Med |      |           |                 |          |                 |       |                       |        |
|         | st     |      |           |                 |          |                 |       |                       |        |
| Sommità | sc     | 32   | -361293.9 | -0.0            | -16108.4 | -17.9           | -17.0 | -238.6                | -268.4 |
|         | sc Max |      |           |                 |          |                 |       |                       |        |
|         | sc Med |      |           |                 |          |                 |       |                       |        |
|         | st     |      |           |                 |          |                 |       |                       |        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>ed,accanto</sub><br>[kg] | S/R        |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------------|------------|
| 3559-3791-4094-4442-4524-4837 | 5.00     | 0.94     | 18               | -84929.6                | 1.00 | -84929.6                | -374721.3               | 350464.5                 | 776121.4                 | 359247.2                        | 0.0   0.24 |

▲NUCLEO 1055 1054 1053 1052 1051 1050 / Nodi: 3605 3779 4082 4083 4427 4690

▲Armature Nucleo

|         |        | N    |           | M <sub>12</sub> |          | M <sub>13</sub> |       | σ                     |        |
|---------|--------|------|-----------|-----------------|----------|-----------------|-------|-----------------------|--------|
|         |        | [kg] |           | [kgm]           |          | [kgm]           |       | [kg/cm <sup>2</sup> ] |        |
| Base    | sc     | 32   | -357192.3 | -0.0            | -13726.6 | -17.6           | -16.8 | -237.0                | -263.5 |
|         | sc Max |      |           |                 |          |                 |       |                       |        |
|         | sc Med |      |           |                 |          |                 |       |                       |        |
|         | st     |      |           |                 |          |                 |       |                       |        |
| Sommità | sc     | 32   | -357192.3 | -0.0            | -13726.6 | -17.6           | -16.8 | -237.0                | -263.5 |
|         | sc Max |      |           |                 |          |                 |       |                       |        |
|         | sc Med |      |           |                 |          |                 |       |                       |        |
|         | st     |      |           |                 |          |                 |       |                       |        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>elab</sub><br>[kg] | V <sub>data/comments</sub><br>[kg] | S/R        |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------|------------------------------------|------------|
| 3605-3779-4082-4083-4427-4690 | 5.00     | 0.94     | 18               | -86179.3                | 1.00 | -86179.3                | -374749.5               | 259456.6                 | 776121.4                 | 359247.2                  |                                    | 0.0   0.24 |

▲NUCLEO 1115 1114 1113 1112 1111 1110 / Nodi: 3600 3772 3773 4064 4405 4689

▲Armature Nucleo

|         |        | N    |           | M <sub>12</sub> |          | M <sub>13</sub> |       | σ                     |        |
|---------|--------|------|-----------|-----------------|----------|-----------------|-------|-----------------------|--------|
|         |        | [kg] |           | [kgm]           |          | [kgm]           |       | [kg/cm <sup>2</sup> ] |        |
| Base    | sc     | 32   | -357192.3 | -0.0            | -13726.6 | -17.6           | -16.8 | -237.0                | -263.5 |
|         | sc Max |      |           |                 |          |                 |       |                       |        |
|         | sc Med |      |           |                 |          |                 |       |                       |        |
|         | st     |      |           |                 |          |                 |       |                       |        |
| Sommità | sc     | 32   | -357192.3 | -0.0            | -13726.6 | -17.6           | -16.8 | -237.0                | -263.5 |
|         | sc Max |      |           |                 |          |                 |       |                       |        |
|         | sc Med |      |           |                 |          |                 |       |                       |        |
|         | st     |      |           |                 |          |                 |       |                       |        |

|           |   |     |    |    |             |             |
|-----------|---|-----|----|----|-------------|-------------|
| 3386.3675 | 2 | 100 | 94 | 30 | 2x ø 18.15' | 2x ø 14.15' |
| 3675.4030 | 2 | 100 | 94 | 30 | 2x ø 18.15' | 2x ø 14.15' |
| 4030.4172 | 2 | 100 | 94 | 30 | 2x ø 18.15' | 2x ø 14.15' |
| 4172.4656 | 2 | 100 | 94 | 30 | 2x ø 18.15' | 2x ø 14.15' |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -486403.9               | 0.0                       | 5349.0                    | 0.17  |
| Sommità | 1     | -481833.6               | 0.0                       | 2325.9                    | 0.17  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -325662.9 | -0.0                      | -5922.5                   | -18.4         |
| sc Med  | 32           | -325662.9 | -0.0                      | -5922.5                   | -18.0         |
| st      | 31           | -318366.6 | -0.0                      | -5350.9                   | -259.2        |
| sc      | 32           | -325662.9 | -0.0                      | -5922.5                   | -276.5        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -325662.9 | -0.0                      | -5922.5                   | -18.4         |
| sc Med  | 32           | -325662.9 | -0.0                      | -5922.5                   | -18.0         |
| st      | 31           | -318366.6 | -0.0                      | -5350.9                   | -259.2        |
| sc      | 32           | -325662.9 | -0.0                      | -5922.5                   | -276.5        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>1,2</sub> combinato<br>[kg] | S/R  |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|---------------------------|---------------------------|-------------------------|------------------------------------|------|
| 3193-3386-3675-4030-4172-4656 | 5.00     | 0.94     | 18            | -64197.7                | 1.00 | -336887.9               | 200100.8                  | 1655246.9                 | 359247.2                | 0.0                                | 0.18 |

▲ANUCLEO 1888 1887 1886 1885 1884 1883 / Nodi: 3235 3385 3674 3808 4108 4328

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3235.3385 | 2                 | 100       | 94        | 30               | 2x ø 18.15'           | 2x ø 14.15'             |
| 3385.3674 | 2                 | 100       | 94        | 30               | 2x ø 18.15'           | 2x ø 14.15'             |
| 3674.3808 | 2                 | 100       | 94        | 30               | 2x ø 18.15'           | 2x ø 14.15'             |
| 3808.4108 | 2                 | 100       | 94        | 30               | 2x ø 18.15'           | 2x ø 14.15'             |
| 4108.4328 | 2                 | 100       | 94        | 30               | 2x ø 18.15'           | 2x ø 14.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -481833.6               | 0.0                       | 2326.6                    | 0.17  |
| Sommità | 1     | -47783.2                | -0.0                      | -694.3                    | 0.16  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -322147.3 | -0.0                      | -4894.7                   | -18.2         |
| sc Med  | 32           | -322147.3 | -0.0                      | -4894.7                   | -17.8         |
| st      | 31           | -314850.9 | -0.0                      | -4693.5                   | -256.9        |
| sc      | 32           | -322147.3 | -0.0                      | -4894.7                   | -272.5        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -322147.3 | -0.0                      | -4894.7                   | -18.2         |
| sc Med  | 32           | -322147.3 | -0.0                      | -4894.7                   | -17.8         |
| st      | 31           | -314850.9 | -0.0                      | -4693.5                   | -256.9        |
| sc      | 32           | -322147.3 | -0.0                      | -4894.7                   | -272.5        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>12</sub><br>[kg] | V <sub>13</sub><br>[kg] | S/R      |     |      |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|--------------------------|-------------------------|-------------------------|----------|-----|------|
| 3235-3385-3674-3808-4108-4328 | 5.00     | 0.94     | 18            | -63658.0                | 1.00 | -63658.0                | 336303.1                 | 110701.1                | 665246.9                | 359247.2 | 0.0 | 0.18 |

▲ANUCLEO 1948 1947 1946 1945 1944 1943 / Nodi: 3232 3384 3432 3807 4100 4327

|         |                         |                           |                           |               |      |
|---------|-------------------------|---------------------------|---------------------------|---------------|------|
|         | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |      |
| Base    | 1                       | -527414.4                 | -0.0                      | -2525.0       | 0.15 |
| Sommità | 1                       | -522082.4                 | -0.0                      | -5149.6       | 0.15 |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -353090.8 | -0.0                      | -11346.8                  | -17.2         |
| sc Med  | 32           | -353090.8 | -0.0                      | -11346.8                  | -16.6         |
| st      | 31           | -345871.3 | -0.0                      | -10066.2                  | -235.4        |
| sc      | 32           | -353090.8 | -0.0                      | -11346.8                  | -258.6        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -353090.8 | -0.0                      | -11346.8                  | -17.2         |
| sc Med  | 32           | -353090.8 | -0.0                      | -11346.8                  | -16.6         |
| st      | 31           | -345871.3 | -0.0                      | -10066.2                  | -235.4        |
| sc      | 32           | -353090.8 | -0.0                      | -11346.8                  | -258.6        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>12</sub><br>[kg] | S/R      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|-------------------------|-------------------------|----------|
| 3600-3772-3773-4064-4405-4689 | 5.00     | 0.94     | 18               | -86067.9                | 1.00 | -86067.9                | 186336.1                 | 776121.4                | 359247.2                | 0.0 0.24 |

▲ANUCLEO 1175 1174 1173 1172 1171 1170 / Nodi: 3536 3537 3718 4031 4403 4404

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3536.3537 | 1                 | 100       | 94        | 35               | 2x ø 20.15'           | 2x ø 14.15'             |
| 3537.3718 | 1                 | 100       | 94        | 35               | 2x ø 20.15'           | 2x ø 14.15'             |
| 3718.4031 | 1                 | 100       | 94        | 35               | 2x ø 20.15'           | 2x ø 14.15'             |
| 4031.4403 | 1                 | 100       | 94        | 35               | 2x ø 20.15'           | 2x ø 14.15'             |
| 4403.4404 | 1                 | 100       | 94        | 35               | 2x ø 20.15'           | 2x ø 14.15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -522082.4               | -0.0                      | -5190.2                   | 0.15  |
| Sommità | 1     | -516750.4               | -0.0                      | -7773.8                   | 0.15  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -344889.2 | -0.0                      | -8965.1                   | -16.9         |
| sc Med  | 32           | -344889.2 | -0.0                      | -8965.1                   | -16.4         |
| st      | 31           | -341769.8 | -0.0                      | -8546.7                   | -233.8        |
| sc      | 32           | -344889.2 | -0.0                      | -8965.1                   | -253.7        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -344889.2 | -0.0                      | -8965.1                   | -16.9         |
| sc Med  | 32           | -344889.2 | -0.0                      | -8965.1                   | -16.4         |
| st      | 31           | -341769.8 | -0.0                      | -8546.7                   | -233.8        |
| sc      | 32           | -344889.2 | -0.0                      | -8965.1                   | -253.7        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>Recl</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|---------------------------|------|
| 3536-3537-3718-4031-4403-4404 | 5.00     | 0.94     | 18               | -82930.8                | 1.00 | -82930.8                | -362987.8                | 116936.7                | 776121.4                 | 359247.2                | 0.0                       | 0.23 |

▲ANUCLEO 1560 1559 1558 1557 1556 1555 / Nodi: 3193 3386 3675 4030 4172 4656

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3193.3386 | 2                 | 100       | 94        | 30               | 2x ø 18.15'           | 2x ø 14.15'             |



|        |    |           |      |         |        |
|--------|----|-----------|------|---------|--------|
| sc Max | 32 | -277157.6 | -0.0 | -671.1  | -15.4  |
| sc Med | 32 | -277157.6 | -0.0 | -671.1  | -15.4  |
| st     | 31 | -270747.1 | -0.0 | -1058.7 | -223.9 |
| sc     | 32 | -277157.6 | -0.0 | -671.1  | -230.9 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed</sub><br>[kg] | V <sub>ed</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-----|------|
| 2782-2783-3050-3403-3731-3732 | 5.00     | 0.94     | 18            | -57264.7                | 1.00 | -57264.7                | -288602.6                | -54784.6                | 665246.9                | 359247.2                | 0.0 | 0.16 |

▲NUCLEO 3226 3225 3224 3223 3222 3221 / Nodi: 2474 2680 3046 3401 3440 3902

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2474-2680 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2680-3046 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3046-3401 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3401-3440 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3440-3902 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -366263.8               | -0.0                     | -3544.9                   | 0.13                      |       |
| Sommità | 1     | -361693.4               | -0.0                     | -4587.9                   | 0.13                      |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -244661.0 | -0.0                      | -4894.6                   | -13.9         |
| sc Med  | 32           | -244661.0 | -0.0                      | -4894.6                   | -13.6         |
| st      | 31           | -239447.5 | -0.0                      | -4855.6                   | -194.1        |
| sc      | 32           | -244661.0 | -0.0                      | -4894.6                   | -208.1        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -244661.0 | -0.0                      | -4894.6                   | -13.9         |
| sc Med  | 32           | -244661.0 | -0.0                      | -4894.6                   | -13.6         |
| st      | 31           | -239447.5 | -0.0                      | -4855.6                   | -194.1        |
| sc      | 32           | -244661.0 | -0.0                      | -4894.6                   | -208.1        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>ed,accidentale</sub><br>[kg] | S/R      |     |      |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|--------------------------|--------------------------|-------------------------------------|----------|-----|------|
| 2474-2680-3046-3401-3440-3902 | 5.00     | 0.94     | 18            | -51870.1                | 1.00 | -51870.1                | -249737.6                | 62978.5                  | 665246.9                            | 359247.2 | 0.0 | 0.14 |

▲NUCLEO 3554 3553 3552 3551 3550 3549 / Nodi: 2491 2586 2915 3033 3361 3573

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2491-2586 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2586-2915 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2915-3033 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3033-3361 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3361-3573 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -361693.4               | -0.0                     | -4587.4                   | 0.13                      |       |
| Sommità | 1     | -357123.1               | -0.0                     | -5629.2                   | 0.12                      |       |

| S.L.E. | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base   |              |           |                           |                           |               |

ne a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>ed,accidentale</sub><br>[kg] | S/R      |     |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|-------------------------------------|----------|-----|------|
| 2867-2994-3312-3412-3738-3946 | 5.00     | 0.94     | 18               | -57038.9                | 1.00 | -57038.9                | -296177.5                | 63755.5                  | 665246.9                            | 359247.2 | 0.0 | 0.16 |

▲NUCLEO 2781 2780 2779 2778 2777 2776 / Nodi: 2840 2979 3056 3407 3734 3945

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2840-2979 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2979-3056 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3056-3407 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3407-3734 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3734-3945 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -421087.3               | -0.0                     | -2333.1                   | 0.14                      |       |
| Sommità | 1     | -416516.9               | -0.0                     | -4593.1                   | 0.14                      |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -280673.2 | -0.0                      | -1693.9                   | -15.7         |
| sc Med  | 32           | -280673.2 | -0.0                      | -1693.9                   | -15.5         |
| st      | 31           | -274262.8 | -0.0                      | -2032.2                   | -225.9        |
| sc      | 32           | -280673.2 | -0.0                      | -1693.9                   | -234.9        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -280673.2 | -0.0                      | -1693.9                   | -15.7         |
| sc Med  | 32           | -280673.2 | -0.0                      | -1693.9                   | -15.5         |
| st      | 31           | -274262.8 | -0.0                      | -2032.2                   | -225.9        |
| sc      | 32           | -280673.2 | -0.0                      | -1693.9                   | -234.9        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>de</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>Red</sub><br>[kg] | V <sub>Red, sordinamento</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|----------------------------------------|------|
| 2840-2979-3056-3407-3734-3945 | 5.00     | 0.94     | 18            | -56893.1                | 1.00 | -56893.1                | -292408.8               | -28044.3                 | 665246.9                 | 359247.2                 | 0.0                                    | 0.16 |

▲NUCLEO 2841 2840 2839 2838 2837 2836 / Nodi: 2782 2783 3050 3403 3731 3732

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2782-2783 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 2783-3050 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3050-3403 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3403-3731 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3731-3732 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -416517.0               | -0.0                     | -4592.8                   | 0.14                      |       |
| Sommità | 1     | -411946.7               | -0.0                     | -4855.2                   | 0.14                      |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -277157.6 | -0.0                      | -671.1                    | -15.4         |
| sc Med  | 32           | -277157.6 | -0.0                      | -671.1                    | -15.4         |
| st      | 31           | -270747.1 | -0.0                      | -1058.7                   | -223.9        |
| sc      | 32           | -277157.6 | -0.0                      | -671.1                    | -230.9        |
| Sommità |              |           |                           |                           |               |

|         |    |           |      |         |        |
|---------|----|-----------|------|---------|--------|
| sc Max  | 32 | -241146.3 | -0.0 | -3468.9 | -13.6  |
| sc Med  | 32 | -241146.3 | -0.0 | -3468.9 | -13.4  |
| st      | 31 | -235931.9 | -0.0 | -3474.4 | -192.6 |
| sc      | 32 | -241146.3 | -0.0 | -3468.9 | -203.8 |
| Sommila |    |           |      |         |        |
| sc Max  | 32 | -241146.3 | -0.0 | -3468.9 | -13.6  |
| sc Med  | 32 | -241146.3 | -0.0 | -3468.9 | -13.4  |
| st      | 31 | -235931.9 | -0.0 | -3474.4 | -192.6 |
| sc      | 32 | -241146.3 | -0.0 | -3468.9 | -203.8 |

▲Verifiche a taglio dei diaframmi

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2491.2586 | 2915.3033 | 3611.3571 | 5.00            | 0.94 | 18              | -53237.0        | -251664.7        | 408293          | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

▲NUCLEO 3614 3613 3612 3611 3610 3609 / Nodi: 2489 2583 2642 3028 3357 3572

▲Armature Nucleo

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2491.2586 | 2915.3033 | 3611.3571 | 5.00            | 0.94 | 18              | -53237.0        | -251664.7        | 408293          | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2491.2586 | 2915.3033 | 3611.3571 | 5.00            | 0.94 | 18              | -53237.0        | -251664.7        | 408293          | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2491.2586 | 2915.3033 | 3611.3571 | 5.00            | 0.94 | 18              | -53237.0        | -251664.7        | 408293          | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

▲Verifiche a taglio dei diaframmi

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2489.2583 | 2642.3028 | 3357.3572 | 5.00            | 0.94 | 18              | -53063.7        | -247702.5        | 41118.7         | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

▲NUCLEO 3674 3673 3672 3671 3670 3669 / Nodi: 2461 2462 2636 3024 3354 3355

▲Armature Nucleo

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2489.2583 | 2642.3028 | 3357.3572 | 5.00            | 0.94 | 18              | -53063.7        | -247702.5        | 41118.7         | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2489.2583 | 2642.3028 | 3357.3572 | 5.00            | 0.94 | 18              | -53063.7        | -247702.5        | 41118.7         | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

| Diaframma |           |           |                 |      |                 |                 |                  |                 |                                  |
|-----------|-----------|-----------|-----------------|------|-----------------|-----------------|------------------|-----------------|----------------------------------|
| B         | H         | Comb.     | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>ed</sub> | V <sub>red,accidentale</sub> S/R |
| [m]       | [m]       | critica   | [kg]            |      | [kg]            | [kgm]           | [kg]             | [kg]            | [kg]                             |
| 2489.2583 | 2642.3028 | 3357.3572 | 5.00            | 0.94 | 18              | -53063.7        | -247702.5        | 41118.7         | 665246.9                         |
|           |           |           |                 |      |                 |                 |                  | 359247.2        | 0.0                              |
|           |           |           |                 |      |                 |                 |                  |                 | 0.15                             |

|            |   |     |    |    |             |             |
|------------|---|-----|----|----|-------------|-------------|
| 21.18 2282 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 2282 2616  | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 2616 2941  | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 2941 2942  | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -282839.8               | -0.0                      | -9678.7                   | 0.10  |
| Sommità | 1     | -278269.5               | -0.0                      | -9608.7                   | 0.10  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -187275.7 | -0.0                      | -2270.9                   | -10.5         |
| sc Med  | 32           | -187275.7 | -0.0                      | -2270.9                   | -10.4         |
| st      | 31           | -183270.7 | -0.0                      | -2239.1                   | -1.500        |
| sc      | 32           | -187275.7 | -0.0                      | -2270.9                   | -1.579        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -187275.7 | -0.0                      | -2270.9                   | -10.5         |
| sc Med  | 32           | -187275.7 | -0.0                      | -2270.9                   | -10.4         |
| st      | 31           | -183270.7 | -0.0                      | -2239.1                   | -1.500        |
| sc      | 32           | -187275.7 | -0.0                      | -2270.9                   | -1.579        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |          |          |       |                         |      |                         |                          |                         |                                  |     |      |
|-------------------------------|----------|----------|-------|-------------------------|------|-------------------------|--------------------------|-------------------------|----------------------------------|-----|------|
|                               | B<br>[m] | H<br>[m] | Comb. | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,corretto</sub><br>[kg] | S/R |      |
| 2127-2128-2282-2616-2941-2942 | 5.00     | 0.94     | 18    | -47284.2                | 1.00 | -47284.2                | -98103.8                 | 665246.9                | 359247.2                         | 0.0 | 0.13 |

▲NUCLEO 4892 4891 4890 4889 4888 4887 / Nodi: 1815 2025 2278 2614 2677 3190

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1815 2025 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2025 2278 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2278 2614 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2614 2677 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2677 3190 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -227126.0               | -0.0                      | -14423.6                  | 0.09  |
| Sommità | 1     | -223317.4               | -0.0                      | -12893.8                  | 0.09  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -151237.2 | -0.0                      | -9409.9                   | -10.4         |
| sc Med  | 32           | -151237.2 | -0.0                      | -9409.9                   | -9.7          |
| st      | 31           | -146332.2 | -0.0                      | -9150.7                   | -1.325        |
| sc      | 32           | -151237.2 | -0.0                      | -9409.9                   | -1.567        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -151237.2 | -0.0                      | -9409.9                   | -10.4         |
| sc Med  | 32           | -151237.2 | -0.0                      | -9409.9                   | -9.7          |
| st      | 31           | -146332.2 | -0.0                      | -9150.7                   | -1.325        |
| sc      | 32           | -151237.2 | -0.0                      | -9409.9                   | -1.567        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>1,2</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>red,corretto</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|-------|-------------------------|------|-------------------------|--------------------------|---------------------------|--------------------------|-----------------------------------|-----|------|
| 1815-2025-2278-2614-2677-3190 | 5,00     | 0,94     | 18    | -41542,9                | 1,00 | -41542,9                | -150759,7                | 30317,4                   | 554372,4                 | 263936,8                          | 0,0 | 0,16 |

▲NUCLEO 5220 5219 5218 5217 5216 5215 / Nodi: 1848 1923 2197 2354 2570 2571

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -291980.4               | -0.0                      | -9819.5                   | 0.10  |
| Sommità | 1     | -287410.1               | -0.0                      | -9749.3                   | 0.10  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -194307.0 | -0.0                      | -5656.1                   | -11.1         |
| sc Med  | 32           | -194307.0 | -0.0                      | -5656.1                   | -10.8         |
| st      | 31           | -190302.0 | -0.0                      | -5498.8                   | -1.526        |
| sc      | 32           | -194307.0 | -0.0                      | -5656.1                   | -1.67.1       |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -194307.0 | -0.0                      | -5656.1                   | -11.1         |
| sc Med  | 32           | -194307.0 | -0.0                      | -5656.1                   | -10.8         |
| st      | 31           | -190302.0 | -0.0                      | -5498.8                   | -1.526        |
| sc      | 32           | -194307.0 | -0.0                      | -5656.1                   | -1.67.1       |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>red</sub> | V <sub>ed,corretto</sub> | S/R  |
|-------------------------------|------|------|---------|-----------------|------|-----------------|-----------------|-----------------|------------------|--------------------------|------|
| (m)                           | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kgm]           | [kg]            | [kg]             | [kg]                     |      |
| 2168-2241-2536-2625-2948-3205 | 5.00 | 0.94 | 18      | -48729.2        | 1.00 | -48729.2        | -204100.1       | -76035.3        | 665246.9         | 359247.2                 | 0.0  |
|                               |      |      |         |                 |      |                 |                 |                 |                  |                          | 0.14 |

▲NUCLEO 4447 4446 4445 4444 4443 4442 / Nodi: 2164 2233 2288 2620 2944 3204

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2164 2233 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 2233 2288 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 2288 2620 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 2620 2944 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 2944 3204 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -287410.1               | -0.0                      | -9749.3                   | 0.10  |
| Sommità | 1     | -282839.8               | -0.0                      | -9678.9                   | 0.10  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -190791.3 | -0.0                      | -3963.6                   | -10.8         |
| sc Med  | 32           | -190791.3 | -0.0                      | -3963.6                   | -10.6         |
| st      | 31           | -186786.4 | -0.0                      | -3869.8                   | -1.51.3       |
| sc      | 32           | -190791.3 | -0.0                      | -3963.6                   | -1.62.5       |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -190791.3 | -0.0                      | -3963.6                   | -10.8         |
| sc Med  | 32           | -190791.3 | -0.0                      | -3963.6                   | -10.6         |
| st      | 31           | -186786.4 | -0.0                      | -3869.8                   | -1.51.3       |
| sc      | 32           | -190791.3 | -0.0                      | -3963.6                   | -1.62.5       |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,corretto</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|-----|------|
| 2164-2233-2288-2620-2944-3204 | 5.00     | 0.94     | 18               | -48482.8                | 1.00 | -48482.8                | -199700.5               | -70443.8                 | 665246.9                | 359247.2                         | 0.0 | 0.13 |

▲NUCLEO 4507 4506 4505 4504 4503 4502 / Nodi: 2127 2128 2282 2616 2941 2942

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2127 2128 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |

▲Armature Nudo

| Nodi      | Sezione | B<br>Numero            | H<br>[cm]                | Spessore<br>[cm]         | Armatura  |             | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr |
|-----------|---------|------------------------|--------------------------|--------------------------|-----------|-------------|--------------------------|--------------------------|-------|
|           |         |                        |                          |                          | Verticale | Orizzontale |                          |                          |       |
| 1848 1923 |         | 3                      | 100                      | 94                       | 25        | 2x ø 18 15' | 2x ø 12 15'              |                          |       |
| 1923 2197 |         | 3                      | 100                      | 94                       | 25        | 2x ø 18 15' | 2x ø 12 15'              |                          |       |
| 2197 2354 |         | 3                      | 100                      | 94                       | 25        | 2x ø 18 15' | 2x ø 12 15'              |                          | 0.09  |
| 2354 2570 |         | 3                      | 100                      | 94                       | 25        | 2x ø 18 15' | 2x ø 12 15'              |                          | 0.09  |
| 2570 2571 |         | 3                      | 100                      | 94                       | 25        | 2x ø 18 15' | 2x ø 12 15'              |                          |       |
| Sezione   | Comb.   | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Armatura  |             | Sd/Sr                    |                          |       |
|           |         |                        |                          |                          | Verticale | Orizzontale |                          |                          |       |
| Base      | 1       | -223317.4              | -0.0                     | -12893.3                 |           |             | 0.09                     |                          |       |
| Sommità   | 1       | -219508.8              | -0.0                     | -11363.0                 |           |             | 0.09                     |                          |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -148307.5 | -0.0                     | -7047.7                  | -10.1         |
| sc Max  | 32           | -148307.5 | -0.0                     | -7047.7                  | -9.5          |
| sc Med  | 31           | -145402.5 | -0.0                     | -6859.8                  | -132.3        |
| st      | 32           | -148307.5 | -0.0                     | -7047.7                  | -151.2        |
| Sommità | 32           | -148307.5 | -0.0                     | -7047.7                  | -10.1         |
| sc Max  | 32           | -148307.5 | -0.0                     | -7047.7                  | -9.5          |
| sc Med  | 31           | -145402.5 | -0.0                     | -6859.8                  | -132.3        |
| st      | 32           | -148307.5 | -0.0                     | -7047.7                  | -151.2        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>dc</sub><br>[kg] | α    | N <sub>id</sub><br>[kg] | M <sub>id</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>ids</sub><br>[kg] | V <sub>ids,accidento</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|-------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|------------------------------------|-----|------|
| 1848-1923-2197-2354-2570-2571 | 5.00     | 0.94     | 18    | -44374.0                | 1.00 | -44374.0                | -156465.0                | -57106.8                 | 554372.4                 | 263936.8                           | 0.0 | 0.17 |

▲NUCLEO 5280 5279 5278 5277 5276 5275 / Nodi: 1837 1901 2022 2349 2471 2472

▲Armature Nudo

| Nodi      | Sezione |                        | B                        | H                        | Spessore    | Armatura    |  | Armatura<br>Orizzontale |
|-----------|---------|------------------------|--------------------------|--------------------------|-------------|-------------|--|-------------------------|
|           | Numero  | [cm]                   |                          |                          |             | Verticale   |  |                         |
| 1837 1901 | 3       | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |  |                         |
| 1901 2022 | 3       | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |  |                         |
| 2022 2349 | 3       | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |  |                         |
| 2349 2471 | 3       | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |  |                         |
| 2471 2472 | 3       | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |  |                         |
| Sezione   | Comb.   | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr       |             |  |                         |
|           |         |                        |                          |                          |             |             |  |                         |
| Base      | 1       | -219508.8              | -0.0                     | -11362.7                 | 0.09        |             |  |                         |
| Sommità   |         | -215700.2              | -0.0                     | -9832.7                  | 0.09        |             |  |                         |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -145377.8 | -0.0                     | -4684.4                  | -9.7          |
| sc Max  | 32           | -145377.8 | -0.0                     | -4684.4                  | -9.3          |
| sc Med  | 31           | -142472.8 | -0.0                     | -4568.5                  | -132.1        |
| st      | 32           | -145377.8 | -0.0                     | -4684.4                  | -145.6        |
| Sommità | 32           | -145377.8 | -0.0                     | -4684.4                  | -9.7          |
| sc Max  | 32           | -145377.8 | -0.0                     | -4684.4                  | -9.3          |
| sc Med  | 31           | -142472.8 | -0.0                     | -4568.5                  | -132.1        |
| st      | 32           | -145377.8 | -0.0                     | -4684.4                  | -145.6        |

▲Verifiche a taglio dei diaframmi

| Diaframma | α | S/R |
|-----------|---|-----|
|-----------|---|-----|

| B                             | H    | Comb.   | V <sub>dc</sub> | V <sub>del</sub> | N <sub>del</sub> | M <sub>del</sub> | V <sub>del</sub> | V <sub>del</sub> | V <sub>del</sub> | V <sub>del</sub> |
|-------------------------------|------|---------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| [m]                           | [m]  | critica | [kg]            | [kg]             | [kg]             | [kgm]            | [kg]             | [kg]             | [kg]             | [kg]             |
| 1837-1901-2022-2349-2471-2472 | 5.00 | 0.94    | 18              | -44109.6         | 1.00             | -44109.6         | -152809.0        | -64713.0         | 554372.4         | 263936.8         |
|                               |      |         |                 |                  |                  |                  |                  |                  |                  | 0.0              |
|                               |      |         |                 |                  |                  |                  |                  |                  |                  | 0.17             |

▲NUCLEO 5340 5339 5338 5337 5336 5335 / Nodi: 1776 1777 2016 2016 2343 2561 2563

▲Armature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore<br>[cm] | Armatura    |  | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|------------------|-------------|--|-------------------------|
|           | Numero  | [cm] |    |    |                  | Verticale   |  |                         |
| 1776/1777 | 3       | 100  | 94 | 25 | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 1777/2016 | 3       | 100  | 94 | 25 | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 2016/2343 | 3       | 100  | 94 | 25 | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 2343/2561 | 3       | 100  | 94 | 25 | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 2561/2563 | 3       | 100  | 94 | 25 | 2x ø 18 15'      | 2x ø 12 15' |  |                         |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -215700.2              | -0.0                     | -9832.7                  | 0.09  |
| Sommità | 18    | -147209.5              | 0.0                      | 132587.9                 | 0.09  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -142448.1 | -0.0                     | -2322.2                  | -9.3          |
| sc Max  | 32           | -142448.1 | -0.0                     | -2322.2                  | -9.2          |
| sc Med  | 31           | -139543.2 | -0.0                     | -2277.5                  | -131.9        |
| st      | 32           | -142448.1 | -0.0                     | -2322.2                  | -140.1        |
| Sommità | 32           | -142448.1 | -0.0                     | -2322.2                  | -9.3          |
| sc Max  | 32           | -142448.1 | -0.0                     | -2322.2                  | -9.2          |
| sc Med  | 31           | -139543.2 | -0.0                     | -2277.5                  | -131.9        |
| st      | 32           | -142448.1 | -0.0                     | -2322.2                  | -140.1        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>dc</sub><br>[kg] | α    | V <sub>sd</sub><br>[kg] | N <sub>sd</sub><br>[kg] | M <sub>sd</sub><br>[kgm] | V <sub>sd</sub><br>[kg] | V <sub>sd</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|-------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-----|------|
| 1776-1777-2016-2343-2561-2563 | 5.00     | 0.94     | 18    | -40925.7                | 1.00 | -40925.7                | -149906.9               | -97997.5                 | 554372.4                | 263936.8                | 0.0 | 0.16 |

▲NUCLEO 5725 5724 5723 5722 5721 5720 / Nodi: 1490 1670 2012 2344 2564 3044

▲Armature Nucleo

| Nodi      | Sezione |     | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura    |  | Armatura<br>Orizzontale |
|-----------|---------|-----|-----------|-----------|------------------|-------------|--|-------------------------|
|           | Numero  |     |           |           |                  | Verticale   |  |                         |
| 1490/1670 | 3       | 100 | 94        | 25        | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 1670/2012 | 3       | 100 | 94        | 25        | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 2012/2344 | 3       | 100 | 94        | 25        | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 2344/2564 | 3       | 100 | 94        | 25        | 2x ø 18 15'      | 2x ø 12 15' |  |                         |
| 2564/3044 | 3       | 100 | 94        | 25        | 2x ø 18 15'      | 2x ø 12 15' |  |                         |

| Sezione | Comb. | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | Sd/Sr |
|---------|-------|------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -161518.5              | -0.0                     | -15531.1                 | 0.07  |
| Sommità | 1     | -157709.9              | -0.0                     | -12674.2                 | 0.06  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    | 32           | -107578.4 | -0.0                     | -9181.9                  | -7.6          |
| sc Max  | 32           | -107578.4 | -0.0                     | -9181.9                  | -6.9          |
| sc Med  | 31           | -105652.7 | -0.0                     | -8952.3                  | -91.6         |
| st      | 32           | -107578.4 | -0.0                     | -9181.9                  | -114.4        |
| Sommità | 32           | -107578.4 | -0.0                     | -9181.9                  | -7.6          |
| sc Max  | 32           | -107578.4 | -0.0                     | -9181.9                  | -6.9          |
| sc Med  | 31           | -105652.7 | -0.0                     | -8952.3                  | -91.6         |
| st      | 32           | -107578.4 | -0.0                     | -9181.9                  | -114.4        |

|        |    |           |      |         |        |
|--------|----|-----------|------|---------|--------|
| sc Max | 32 | -101719.0 | -0.0 | -3442.6 | -6.8   |
| sc Med | 32 | -101719.0 | -0.0 | -3442.6 | -6.5   |
| st     | 31 | -99793.3  | -0.0 | -3369.5 | -9.2.4 |
| sc     | 32 | -101719.0 | -0.0 | -3442.6 | -102.1 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,accidentale</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|--------------------------|-------------------------|-------------------------------------|-----|------|
| 1487-1666-2009-2340-2469-2470 | 5.00     | 0.94     | 18            | -41291.0                | 1.00 | -108142.3               | -64408.0                 | 554372.4                | 263936.8                            | 0.0 | 0.16 |

▲NUCLEO 6173 6172 6171 6170 6169 6168 / Nodi: 1486 1665 2008 2336 2558 2559

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1486 1665 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 1665 2008 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2008 2336 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2336 2558 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2558 2559 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 18    | -105501.2               | 0.0                      | 95486.3                  | 0.07  |
| Sommità | 18    | -102531.7               | 0.0                      | 129934.8                 | 0.08  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -98789.3  | -0.0                     | -572.8                   | -6.4          |
| sc Med  | 32           | -98789.3  | -0.0                     | -572.8                   | -6.4          |
| st      | 29           | -98850.8  | -0.0                     | -2489.2                  | -92.5         |
| sc      | 32           | -98789.3  | -0.0                     | -572.8                   | -95.9         |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -98789.3  | -0.0                     | -572.8                   | -6.4          |
| sc Med  | 32           | -98789.3  | -0.0                     | -572.8                   | -6.4          |
| st      | 29           | -98850.8  | -0.0                     | -2489.2                  | -92.5         |
| sc      | 32           | -98789.3  | -0.0                     | -572.8                   | -95.9         |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | N <sub>dc</sub><br>[kg] | M <sub>dc</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>red</sub><br>[kg] | S/R      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|----------|
| 1486-1665-2008-2336-2558-2559 | 5.00     | 0.94     | 18               | -36327.3                | 1.00 | -105501.2               | -95486.3                 | 554372.4                 | 263936.8                 | 0.0 0.14 |

▲NUCLEO 6558 6557 6556 6555 6554 6553 / Nodi: 1489 1664 2006 2337 2672 3089

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1489 1664 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 1664 2006 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2006 2337 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2337 2672 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2672 3089 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>12</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -95304.9                | -0.0                     | -11487.1                 | 0.04  |
| Sommità | 1     | -91496.3                | -0.0                     | -6009.1                  | 0.04  |

| S.L.E. | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base   |              |           |                          |                          |               |

ne a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>e</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>ed,accidentale</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------------------|-----|------|
| 1490-1670-2012-2344-2564-3044 | 5.00     | 0.94     | 18               | -37610.2               | 1.00 | -37610.2                | -109822.1               | 19712.1                  | 554372.4                | 263936.8                            | 0.0 | 0.14 |

▲NUCLEO 6053 6052 6051 6050 6049 6048 / Nodi: 1488 1667 2010 2341 2560 2562

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1488 1667 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 1667 2010 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2010 2341 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2341 2560 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2560 2562 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -157709.9               | -0.0                     | -12674.3                 | 0.06  |
| Sommità | 1     | -153901.3               | -0.0                     | -9817.6                  | 0.06  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -104648.7 | -0.0                     | -6312.4                  | -7.2          |
| sc Med  | 32           | -104648.7 | -0.0                     | -6312.4                  | -6.7          |
| st      | 31           | -102723.0 | -0.0                     | -6161.2                  | -92.0         |
| sc      | 32           | -104648.7 | -0.0                     | -6312.4                  | -108.2        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -104648.7 | -0.0                     | -6312.4                  | -7.2          |
| sc Med  | 32           | -104648.7 | -0.0                     | -6312.4                  | -6.7          |
| st      | 31           | -102723.0 | -0.0                     | -6161.2                  | -92.0         |
| sc      | 32           | -104648.7 | -0.0                     | -6312.4                  | -108.2        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>fd</sub><br>[kg] | N <sub>fd</sub><br>[kg] | M <sub>fd</sub><br>[kgm] | V <sub>Red</sub><br>[kg] | V <sub>Red</sub><br>[kg] | V <sub>Ed,accidentale</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|------|
| 1488-1667-2010-2341-2560-2562 | 5.00     | 0.94     | 18               | -41599.4                | 1.00 | -41599.4                | -110317.4               | -40505.1                 | 554372.4                 | 263936.8                 | 0.0                                 | 0.16 |

▲NUCLEO 6113 6112 6111 6110 6109 6108 / Nodi: 1487 1666 2009 2340 2469 2470

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1487 1666 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 1666 2009 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2009 2340 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2340 2469 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |
| 2469 2470 | 3                 | 100       | 94        | 25               | 2x ø 18.15            | 2x ø 12.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|--------------------------|-------|
| Base    | 1     | -153901.3               | -0.0                     | -9817.3                  | 0.06  |
| Sommità | 18    | -105803.3               | 0.0                      | 98051.9                  | 0.07  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -101719.0 | -0.0                     | -3442.6                  | -6.8          |
| sc Med  | 32           | -101719.0 | -0.0                     | -3442.6                  | -6.5          |
| st      | 31           | -99793.3  | -0.0                     | -3369.5                  | -9.2.4        |
| sc      | 32           | -101719.0 | -0.0                     | -3442.6                  | -102.1        |
| Sommità |              |           |                          |                          |               |

| S.L.E.  | Combinazione | N        | M <sub>1,2</sub> | M <sub>1,3</sub> | σ                     |
|---------|--------------|----------|------------------|------------------|-----------------------|
|         |              | [kg]     | [kg/m]           | [kg/m]           | [kg/cm <sup>2</sup> ] |
| Base    |              |          |                  |                  |                       |
| sc Max  | 32           | -57784.2 | 0.0              | 1797.7           | -3.9                  |
| sc Med  | 32           | -57784.2 | 0.0              | 1797.7           | -3.7                  |
| st      | 31           | -56786.6 | 0.0              | 1949.1           | -52.5                 |
| sc      | 32           | -57784.2 | 0.0              | 1797.7           | -58.0                 |
| Sommila |              |          |                  |                  |                       |
| sc Max  | 32           | -57784.2 | 0.0              | 1797.7           | -3.9                  |
| sc Med  | 32           | -57784.2 | 0.0              | 1797.7           | -3.7                  |
| st      | 31           | -56786.6 | 0.0              | 1949.1           | -52.5                 |
| sc      | 32           | -57784.2 | 0.0              | 1797.7           | -58.0                 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>1,2</sub> | M <sub>1,2</sub> | V <sub>red</sub> | V <sub>red</sub> | S/R       |
|-------------------------------|------|------|---------|-----------------|------|-----------------|------------------|------------------|------------------|------------------|-----------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]             | [kg/m]           | [kg]             | [kg]             |           |
| 1836-1899-2011-2339-2674-2836 | 5.00 | 0.94 | 18      | -32824.0        | 1.00 | -32824.0        | -63029.5         | -68570.0         | 594372.4         | 263936.8         | 0.0 [0.2] |

▲NUCLEO 6993 6992 6991 6990 6989 6988 / Nodi: 1828 1900 2196 2342 2675 2837

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura    | Armatura    |
|-----------|---------|------|------|----------|-------------|-------------|
|           | Numero  | [cm] | [cm] | [cm]     | Verticale   | Orizzontale |
| 1828 1900 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 1900 2196 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2196 2342 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2342 2675 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2675 2837 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |

| Sezione | Comb. | N <sub>1,2</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | Sd/Sr |
|---------|-------|------------------|------------------|------------------|-------|
|         |       | [kg]             | [kg/m]           | [kg/m]           |       |
| Base    | 18    | -60493.8         | 0.0              | 96689.2          | 0.05  |
| Sommila | 18    | -57929.9         | 0.0              | 125719.0         | 0.06  |

| S.L.E.  | Combinazione | N        | M <sub>1,2</sub> | M <sub>1,3</sub> | σ                     |
|---------|--------------|----------|------------------|------------------|-----------------------|
|         |              | [kg]     | [kg/m]           | [kg/m]           | [kg/cm <sup>2</sup> ] |
| Base    |              |          |                  |                  |                       |
| sc Max  | 32           | -54854.5 | 0.0              | 6269.5           | -4.0                  |
| sc Med  | 32           | -54854.5 | 0.0              | 6269.5           | -3.5                  |
| st      | 31           | -53855.9 | 0.0              | 6135.2           | -44.9                 |
| sc      | 32           | -54854.5 | 0.0              | 6269.5           | -60.1                 |
| Sommila |              |          |                  |                  |                       |
| sc Max  | 32           | -54854.5 | 0.0              | 6269.5           | -4.0                  |
| sc Med  | 32           | -54854.5 | 0.0              | 6269.5           | -3.5                  |
| st      | 31           | -53855.9 | 0.0              | 6135.2           | -44.9                 |
| sc      | 32           | -54854.5 | 0.0              | 6269.5           | -60.1                 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>1,2</sub> | M <sub>1,2</sub> | V <sub>red</sub> | V <sub>red</sub> | S/R       |
|-------------------------------|------|------|---------|-----------------|------|-----------------|------------------|------------------|------------------|------------------|-----------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]             | [kg/m]           | [kg]             | [kg]             |           |
| 1828-1900-2196-2342-2675-2837 | 5.00 | 0.94 | 18      | -30884.9        | 1.00 | -30884.9        | -60491.8         | -96689.2         | 594372.4         | 263936.8         | 0.0 [0.2] |

▲NUCLEO 56 55 54 53 52 51 / Nodi: 4277 4510 4800 5099 5138 5514

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura    | Armatura    |
|-----------|---------|------|------|----------|-------------|-------------|
|           | Numero  | [cm] | [cm] | [cm]     | Verticale   | Orizzontale |
| 4277 4510 | 1       | 100  | 94   | 35       | 2x ø 20.15' | 2x ø 14.15' |
| 4510 4800 | 1       | 100  | 94   | 35       | 2x ø 20.15' | 2x ø 14.15' |
| 4800 5099 | 1       | 100  | 94   | 35       | 2x ø 20.15' | 2x ø 14.15' |
| 5099 5138 | 1       | 100  | 94   | 35       | 2x ø 20.15' | 2x ø 14.15' |
| 5138 5514 | 1       | 100  | 94   | 35       | 2x ø 20.15' | 2x ø 14.15' |

|         |    |          |      |         |       |
|---------|----|----------|------|---------|-------|
| sc Max  | 32 | -63643.6 | -0.0 | -6600.3 | -4.6  |
| sc Med  | 32 | -63643.6 | -0.0 | -6600.3 | -4.1  |
| st      | 31 | -62646.0 | -0.0 | -6423.2 | -53.0 |
| sc      | 32 | -63643.6 | -0.0 | -6600.3 | -69.0 |
| Sommila |    |          |      |         |       |
| sc Max  | 32 | -63643.6 | -0.0 | -6600.3 | -4.6  |
| sc Med  | 32 | -63643.6 | -0.0 | -6600.3 | -4.1  |
| st      | 31 | -62646.0 | -0.0 | -6423.2 | -53.0 |
| sc      | 32 | -63643.6 | -0.0 | -6600.3 | -69.0 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>1,2</sub> | M <sub>1,2</sub> | V <sub>red</sub> | V <sub>red</sub> | S/R       |
|-------------------------------|------|------|---------|-----------------|------|-----------------|------------------|------------------|------------------|------------------|-----------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]             | [kg/m]           | [kg]             | [kg]             |           |
| 1489-1664-2006-2337-2672-3089 | 5.00 | 0.94 | 18      | -32788.6        | 1.00 | -32788.6        | -64505.0         | -5661.6          | 554372.4         | 263936.8         | 0.0 [0.2] |

▲NUCLEO 6883 6882 6881 6880 6879 6878 / Nodi: 1774 1775 2007 2338 2673 2835

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura    | Armatura    |
|-----------|---------|------|------|----------|-------------|-------------|
|           | Numero  | [cm] | [cm] | [cm]     | Verticale   | Orizzontale |
| 1774 1775 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 1775 2007 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2007 2338 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2338 2673 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2673 2835 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |

| Sezione | Comb. | N <sub>1,2</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | Sd/Sr |
|---------|-------|------------------|------------------|------------------|-------|
|         |       | [kg]             | [kg/m]           | [kg/m]           |       |
| Base    | 14    | -67313.6         | -0.0             | -65405.8         | 0.04  |
| Sommila | 18    | -63993.8         | 0.0              | 67264.7          | 0.04  |

| S.L.E.  | Combinazione | N        | M <sub>1,2</sub> | M <sub>1,3</sub> | σ                     |
|---------|--------------|----------|------------------|------------------|-----------------------|
|         |              | [kg]     | [kg/m]           | [kg/m]           | [kg/cm <sup>2</sup> ] |
| Base    |              |          |                  |                  |                       |
| sc Max  | 32           | -60713.9 | -0.0             | -2310.4          | -4.1                  |
| sc Med  | 32           | -60713.9 | -0.0             | -2310.4          | -3.9                  |
| st      | 31           | -59716.3 | -0.0             | -2237.0          | -55.0                 |
| sc      | 32           | -60713.9 | -0.0             | -2310.4          | -61.2                 |
| Sommila |              |          |                  |                  |                       |
| sc Max  | 32           | -60713.9 | -0.0             | -2310.4          | -4.1                  |
| sc Med  | 32           | -60713.9 | -0.0             | -2310.4          | -3.9                  |
| st      | 31           | -59716.3 | -0.0             | -2237.0          | -55.0                 |
| sc      | 32           | -60713.9 | -0.0             | -2310.4          | -61.2                 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>1,2</sub> | M <sub>1,2</sub> | V <sub>red</sub> | V <sub>red</sub> | S/R       |
|-------------------------------|------|------|---------|-----------------|------|-----------------|------------------|------------------|------------------|------------------|-----------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]             | [kg/m]           | [kg]             | [kg]             |           |
| 1774-1775-2007-2338-2673-2835 | 5.00 | 0.94 | 18      | -33029.9        | 1.00 | -33029.9        | -66030.9         | -39133.1         | 554372.4         | 263936.8         | 0.0 [0.3] |

▲NUCLEO 6938 6937 6936 6935 6934 6933 / Nodi: 1836 1899 2011 2339 2674 2836

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura    | Armatura    |
|-----------|---------|------|------|----------|-------------|-------------|
|           | Numero  | [cm] | [cm] | [cm]     | Verticale   | Orizzontale |
| 1836 1899 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 1899 2011 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2011 2339 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2339 2674 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |
| 2674 2836 | 3       | 100  | 94   | 25       | 2x ø 18.15' | 2x ø 12.15' |

| Sezione | Comb. | N <sub>1,2</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | Sd/Sr |
|---------|-------|------------------|------------------|------------------|-------|
|         |       | [kg]             | [kg/m]           | [kg/m]           |       |
| Base    | 18    | -63029.5         | 0.0              | 68570.0          | 0.04  |
| Sommila | 18    | -60245.5         | 0.0              | 97057.0          | 0.05  |

|           |   |     |    |    |           |           |
|-----------|---|-----|----|----|-----------|-----------|
| 4502.4536 | 1 | 100 | 94 | 35 | 2xø 20.15 | 2xø 14.15 |
| 4536.4852 | 1 | 100 | 94 | 35 | 2xø 20.15 | 2xø 14.15 |
| 4852.5136 | 1 | 100 | 94 | 35 | 2xø 20.15 | 2xø 14.15 |
| 5136.5378 | 1 | 100 | 94 | 35 | 2xø 20.15 | 2xø 14.15 |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 19    | -31087.6                | -0.0                      | -400021.1                 | 0.17  |
| Sommità | 19    | -304157.3               | -0.0                      | -297557.8                 | 0.15  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -291199.4 | -0.0                      | -14445.2                  | -14.5         |
| sc Med  | 32           | -291199.4 | -0.0                      | -14445.2                  | -13.7         |
| st      | 24           | -291254.9 | 0.0                       | 29704.0                   | -180.3        |
| sc      | 32           | -291199.4 | -0.0                      | -14445.2                  | -217.6        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -291199.4 | -0.0                      | -14445.2                  | -14.5         |
| sc Med  | 32           | -291199.4 | -0.0                      | -14445.2                  | -13.7         |
| st      | 24           | -291254.9 | 0.0                       | 29704.0                   | -180.3        |
| sc      | 32           | -291199.4 | -0.0                      | -14445.2                  | -217.6        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>richieduto</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|-------------------------|---------------------------|---------------------------|-------------------------|---------------------------------|------|
| 4362.4502-4536-4852-5136-5378 | 5.00     | 0.94     | 14            | 120112.0                | 1.00 | 120112.0                | 273311.3                | -37130.2                  | 776321.4                  | 359247.2                | 0.0                             | 0.33 |

▲NUCLEO 319 318 317 316 315 314 / Nodi: 4263 4264 4534 4849 5134 5135

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 4263.4264 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 4264.4534 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 4534.4849 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 4849.5134 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 5134.5135 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 19    | -301945.7               | -0.0                      | -287254.4                 | 0.15  |
| Sommità | 19    | -298129.1               | -0.0                      | -191472.2                 | 0.12  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -287097.8 | -0.0                      | -15729.1                  | -14.4         |
| sc Med  | 32           | -287097.8 | -0.0                      | -15729.1                  | -13.5         |
| st      | 31           | -279328.9 | -0.0                      | 17206.7                   | -182.5        |
| sc      | 32           | -287097.8 | -0.0                      | -15729.1                  | -215.8        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -287097.8 | -0.0                      | -15729.1                  | -14.4         |
| sc Med  | 32           | -287097.8 | -0.0                      | -15729.1                  | -13.5         |
| st      | 31           | -279328.9 | -0.0                      | 17206.7                   | -182.5        |
| sc      | 32           | -287097.8 | -0.0                      | -15729.1                  | -215.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>richieduto</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|-------------------------|---------------------------|---------------------------|-------------------------|---------------------------------|------|
| 4263.4264-4534-4849-5134-5135 | 5.00     | 0.94     | 14            | 115562.9                | 1.00 | 115562.9                | 272500.0                | -26787.5                  | 776321.4                  | 359247.2                | 0.0                             | 0.32 |

▲NUCLEO 652 651 650 649 648 647 / Nodi: 3929 4261 4532 4847 4874 5201

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 19    | -310698.7               | -0.0                      | -638645.3                 | 0.25  |
| Sommità | 19    | -310677.6               | -0.0                      | -522133.6                 | 0.21  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -299402.6 | -0.0                      | -11878.5                  | -14.7         |
| sc Med  | 32           | -299402.6 | -0.0                      | -11878.5                  | -14.1         |
| st      | 24           | -299458.0 | 0.0                       | 58264.6                   | -162.0        |
| sc      | 32           | -299402.6 | -0.0                      | -11878.5                  | -221.2        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -299402.6 | -0.0                      | -11878.5                  | -14.7         |
| sc Med  | 32           | -299402.6 | -0.0                      | -11878.5                  | -14.1         |
| st      | 24           | -299458.0 | 0.0                       | 58264.6                   | -162.0        |
| sc      | 32           | -299402.6 | -0.0                      | -11878.5                  | -221.2        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>richieduto</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|-------------------------|---------------------------|---------------------------|-------------------------|---------------------------------|------|
| 4277.4510-4800-5099-5138-5514 | 5.00     | 0.94     | 14            | 127104.5                | 1.00 | 127104.5                | 288106.3                | -614890.3                 | 776321.4                  | 359247.2                | 725387.0                        | 0.35 |

▲NUCLEO 199 198 197 196 195 194 / Nodi: 4365 4509 4790 4853 5137 5379

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 4365.4509 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 4509.4790 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 4790.4853 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 4853.5137 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |
| 5137.5379 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 19    | -309499.6               | -0.0                      | -521748.8                 | 0.21  |
| Sommità | 19    | -311468.1               | -0.0                      | -400504.8                 | 0.17  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -295301.0 | -0.0                      | -13161.8                  | -14.6         |
| sc Med  | 32           | -295301.0 | -0.0                      | -13161.8                  | -13.9         |
| st      | 24           | -295356.5 | 0.0                       | 43984.7                   | -171.1        |
| sc      | 32           | -295301.0 | -0.0                      | -13161.8                  | -219.4        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -295301.0 | -0.0                      | -13161.8                  | -14.6         |
| sc Med  | 32           | -295301.0 | -0.0                      | -13161.8                  | -13.9         |
| st      | 24           | -295356.5 | 0.0                       | 43984.7                   | -171.1        |
| sc      | 32           | -295301.0 | -0.0                      | -13161.8                  | -219.4        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. critica | V <sub>ed</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>richieduto</sub><br>[kg] | S/R  |
|-------------------------------|----------|----------|---------------|-------------------------|------|-------------------------|-------------------------|---------------------------|---------------------------|-------------------------|---------------------------------|------|
| 4365-4509-4790-4853-5137-5379 | 5.00     | 0.94     | 14            | 122466.5                | 1.00 | 122466.5                | 281102.4                | -495425.1                 | 776321.4                  | 359247.2                | 747428.0                        | 0.34 |

▲NUCLEO 259 258 257 256 255 254 / Nodi: 4362 4502 4536 4852 5136 5378

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 4362.4502 | 1                 | 100       | 94        | 35               | 2xø 20.15             | 2xø 14.15               |

▲Armature Nudo

| Nodi                                                          | Sezione         | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale | Sd/Sr                     |                           |      |
|---------------------------------------------------------------|-----------------|-------------|-----------|------------------|-----------------------|-------------------------|---------------------------|---------------------------|------|
|                                                               |                 |             |           |                  |                       |                         | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | 0.16 |
| 3929-4261<br>4261-4532<br>4532-4847<br>4847-4874<br>4874-5201 | Base<br>Sommità | 1           | 100       | 94               | 35                    | 2x ø 20.15'             | 2x ø 14.15'               | -356938.1                 | 0.16 |
|                                                               |                 | 1           | 100       | 94               | 35                    | 2x ø 20.15'             | 2x ø 14.15'               | -265869.3                 | 0.13 |
|                                                               |                 | 1           | 100       | 94               | 35                    | 2x ø 20.15'             | 2x ø 14.15'               |                           |      |
|                                                               |                 | 1           | 100       | 94               | 35                    | 2x ø 20.15'             | 2x ø 14.15'               |                           |      |
|                                                               |                 | 1           | 100       | 94               | 35                    | 2x ø 20.15'             | 2x ø 14.15'               |                           |      |
|                                                               |                 | 1           | 100       | 94               | 35                    | 2x ø 20.15'             | 2x ø 14.15'               |                           |      |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |        |
|---------|--------------|-----------|---------------------------|---------------------------|----------------------------|--------|
| Base    | 32           | -279728.8 | -0.0                      | -7051.2                   | -13.5                      |        |
|         | sc Max       | 32        | -279728.8                 | -0.0                      | -7051.2                    | -13.2  |
|         | sc Med       | 32        | -279728.8                 | -0.0                      | -7051.2                    | -13.2  |
|         | st           | 24        | -279495.6                 | 0.0                       | 29809.2                    | -171.9 |
| Sommità | 32           | -279728.8 | -0.0                      | -7051.2                   | -203.2                     |        |
|         | sc           | 32        | -279728.8                 | -0.0                      | -7051.2                    | -203.2 |
|         | sc Max       | 32        | -279728.8                 | -0.0                      | -7051.2                    | -13.5  |
|         | sc Med       | 32        | -279728.8                 | -0.0                      | -7051.2                    | -13.2  |
|         | 24           | -279495.6 | 0.0                       | 29809.2                   | -171.9                     |        |
|         | st           | 32        | -279728.8                 | -0.0                      | -7051.2                    | -203.2 |
|         | sc           | 32        | -279728.8                 | -0.0                      | -7051.2                    | -171.9 |
|         | sc           | 32        | -279728.8                 | -0.0                      | -7051.2                    | -203.2 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | V <sub>ed</sub> | V <sub>1,2</sub> | V <sub>1,3</sub> | S/R  |
|-------------------------------|------|------|---------|-----------------|------|-----------------|-----------------|------------------|------------------|-----------------|------------------|------------------|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]            | [kgm]            | [kgm]            | [kg]            | [kg]             | [kg]             | [kg] |
| 3929-4261-4532-4847-4874-5201 | 5.00 | 0.94 | 14      | 87642.4         | 1.00 | 87642.4         | -268448.3       | -342835.2        | 776121.4         | 359247.2        | 0.0              | 0.24             |      |

▲NUCLEO 1032 1031 1030 1029 1028 1027 / Nodi: 3982 4152 4471 4531 4817 5038

▲Armature Nudo

| Nodi      | Sezione | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |                           |                           |       |      |  |
|-----------|---------|-------------|-----------|------------------|-----------------------|-------------------------|---------------------------|---------------------------|-------|------|--|
|           |         |             |           |                  |                       |                         | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |      |  |
| 3982-4152 | Base    | 1           | 100       | 94               | 35                    | 2x ø 20.15"             | 2x ø 14.15"               |                           |       | 0.13 |  |
|           |         | 4152-4471   | 1         | 100              | 94                    | 35                      | 2x ø 20.15"               | 2x ø 14.15"               |       |      |  |
|           |         | 4471-4531   | 1         | 100              | 94                    | 35                      | 2x ø 20.15"               | 2x ø 14.15"               |       |      |  |
|           |         | 4531-4817   | 1         | 100              | 94                    | 35                      | 2x ø 20.15"               | 2x ø 14.15"               |       |      |  |
| 4817-5038 | Sommità | 1           | 100       | 94               | 35                    | 2x ø 20.15"             | 2x ø 14.15"               |                           |       | 0.11 |  |
|           |         | 4817-5038   | 1         | 100              | 94                    | 35                      | 2x ø 20.15"               | 2x ø 14.15"               |       |      |  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg] |
|---------|--------------|-----------|---------------------------|---------------------------|-----------|
| Base    |              | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc Max       | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc Med       | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | st           | 24        | -275394.0                 | 0.0                       | 20339.8   |
| Sommità |              | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc           | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc Max       | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc Med       | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         |              | 24        | -275394.0                 | 0.0                       | 20339.8   |
|         | st           | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc           | 32        | -275627.2                 | -0.0                      | -7220.7   |
|         | sc           | 32        | -275627.2                 | -0.0                      | -7220.7   |

▲Verifiche a taglio dei diaframmi

| Diaframma | α | S/R |
|-----------|---|-----|
|-----------|---|-----|

|                               |      |      |    |         |      |         |           |           |          |          |     |      |  |
|-------------------------------|------|------|----|---------|------|---------|-----------|-----------|----------|----------|-----|------|--|
| 3982-4152-4471-4531-4817-5038 | 5.00 | 0.94 | 14 | 86942.4 | 1.00 | 86942.4 | -260838.1 | -250218.9 | 776121.4 | 359247.2 | 0.0 | 0.24 |  |
|-------------------------------|------|------|----|---------|------|---------|-----------|-----------|----------|----------|-----|------|--|

▲NUCLEO 1092 1091 1090 1089 1088 1087 / Nodi: 3973 4142 4171 4529 4815 5037

▲Armature Nucleo

| Nodi      | Sezione   |      | B   | H  | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |  |
|-----------|-----------|------|-----|----|------------------|-----------------------|-------------------------|--|
|           | Numero    | [cm] |     |    |                  |                       |                         |  |
| 3973-4142 | 1         | 100  | 94  | 35 | 2x ø 20.15'      | 2x ø 14.15'           |                         |  |
|           | 4142-4171 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |
|           | 4171-4529 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |
|           | 4529-4815 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |
| 4815-5037 | 1         | 100  | 94  | 35 | 2x ø 20.15'      | 2x ø 14.15'           |                         |  |
|           | 4815-5037 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |

| Sezione | Comb.   | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr   |
|---------|---------|-------------------------|---------------------------|---------------------------|---------|
| Base    | 19      | -284349.7               | -0.0                      | -187690.6                 | 0.12    |
|         | Sommità | 1                       | -379204.6                 | -0.0                      | -2164.1 |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |        |
|---------|--------------|-----------|---------------------------|---------------------------|----------------------------|--------|
| Base    | 32           | -271525.7 | -0.0                      | -7390.0                   | -13.2                      |        |
|         | sc Max       | 32        | -271525.7                 | -0.0                      | -7390.0                    | -12.8  |
|         | sc Med       | 31        | -262058.7                 | -0.0                      | -7874.1                    | -178.2 |
|         | st           | 32        | -271525.7                 | -0.0                      | -7390.0                    | -197.7 |
| Sommità | 32           | -271525.7 | -0.0                      | -7390.0                   | -13.2                      |        |
|         | sc Max       | 32        | -271525.7                 | -0.0                      | -7390.0                    | -12.8  |
|         | sc Med       | 31        | -262058.7                 | -0.0                      | -7874.1                    | -178.2 |
|         | st           | 32        | -271525.7                 | -0.0                      | -7390.0                    | -197.7 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | V <sub>ed</sub> | V <sub>1,2</sub> | V <sub>1,3</sub> | S/R  |
|-------------------------------|------|------|---------|-----------------|------|-----------------|-----------------|------------------|------------------|-----------------|------------------|------------------|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]            | [kg]            | [kgm]            | [kgm]            | [kg]            | [kg]             | [kg]             | [kg] |
| 3973-4142-4171-4529-4815-5037 | 5.00 | 0.94 | 14      | 86958.5         | 1.00 | 86958.5         | -238701.5       | -172912.1        | 776121.4         | 359247.2        | 0.0              | 0.24             |      |

▲NUCLEO 1152 1151 1150 1149 1148 1147 / Nodi: 3895 3896 4169 4527 4812 4813

▲Armature Nucleo

| Nodi      | Sezione   |      | B   | H  | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |  |
|-----------|-----------|------|-----|----|------------------|-----------------------|-------------------------|--|
|           | Numero    | [cm] |     |    |                  |                       |                         |  |
| 3895-3896 | 1         | 100  | 94  | 35 | 2x ø 20.15'      | 2x ø 14.15'           |                         |  |
|           | 3896-4169 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |
|           | 4169-4527 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |
|           | 4527-4812 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |
| 4812-4813 | 1         | 100  | 94  | 35 | 2x ø 20.15'      | 2x ø 14.15'           |                         |  |
|           | 4812-4813 | 1    | 100 | 94 | 35               | 2x ø 20.15'           | 2x ø 14.15'             |  |

| Sezione | Comb.   | N <sub>ed</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr    |
|---------|---------|-------------------------|--------------------------|--------------------------|----------|
| Base    | 1       | -379204.6               | -0.0                     | -2165.1                  | 0.11     |
|         | Sommità | 1                       | -373872.5                | -0.0                     | -12315.0 |

| S.L.E.  | Combinazione | N    | M <sub>1,2</sub> | M <sub>1,3</sub> | σ                     |
|---------|--------------|------|------------------|------------------|-----------------------|
|         |              | [kg] | [kgm]            | [kgm]            | [kg/cm <sup>2</sup> ] |
| Base    |              | 32   | -267424.1        | -0.0             | -7558.1               |
|         | sc Max       | 32   | -267424.1        | -0.0             | -7558.1               |
|         | sc Med       | 32   | -267424.1        | -0.0             | -7558.1               |
|         | st           | 31   | -257957.2        | -0.0             | -7478.2               |
| Sommità |              | 32   | -267424.1        | -0.0             | -7558.1               |
|         | sc Max       | 32   | -267424.1        | -0.0             | -7558.1               |
|         | sc Med       | 32   | -267424.1        | -0.0             | -7558.1               |
|         | st           | 31   | -257957.2        | -0.0             | -7478.2               |
|         |              | 32   | -267424.1        | -0.0             | -7558.1               |
|         | sc           | 32   | -267424.1        | -0.0             | -7558.1               |

|        |    |           |      |         |        |
|--------|----|-----------|------|---------|--------|
| sc Max | 32 | -247279.5 | -0.0 | -2559.7 | -13.9  |
| sc Med | 32 | -247279.5 | -0.0 | -2559.7 | -13.7  |
| st     | 26 | -239956.3 | 0.0  | 6113.5  | -193.3 |
| sc     | 32 | -247279.5 | -0.0 | -2559.7 | -208.0 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>res,accrescente</sub><br>[kg] | S/R      |     |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------------------|----------|-----|------|
| 3607-3780-4084-4166-4485-4697 | 5.00     | 0.94     | 14               | 72236.4                 | 1.00 | 72236.4                 | -234301.1                | -118334.3                | 665246.9                             | 359247.2 | 0.0 | 0.20 |

▲NUCLEO 1925 1924 1923 1922 1921 1920 / Nodi: 3601 3774 3820 4164 4483 4696

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3601 3774 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3774 3820 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3820 4164 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4164 4483 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4483 4696 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -3463371.3              | 0.0                      | 1345.5                    | 0.12                      |       |
| Sommità | 1     | -340801.1               | -0.0                     | -7099.5                   | 0.12                      |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -243763.9 | -0.0                      | -3057.8                   | -13.7         |
| sc Med  | 32           | -243763.9 | -0.0                      | -3057.8                   | -13.5         |
| st      | 31           | -234929.7 | -0.0                      | -2462.2                   | -192.7        |
| sc      | 32           | -243763.9 | -0.0                      | -3057.8                   | -205.6        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -243763.9 | -0.0                      | -3057.8                   | -13.7         |
| sc Med  | 32           | -243763.9 | -0.0                      | -3057.8                   | -13.5         |
| st      | 31           | -234929.7 | -0.0                      | -2462.2                   | -192.7        |
| sc      | 32           | -243763.9 | -0.0                      | -3057.8                   | -205.6        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>d</sub><br>[kg] | N <sub>d</sub><br>[kg] | M <sub>td</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>res,corrente</sub><br>[kg] | S/R      |
|-------------------------------|----------|----------|------------------|-------------------------|------|------------------------|------------------------|--------------------------|--------------------------|-----------------------------------|----------|
| 3601-3774-3820-4164-4483-4696 | 5.00     | 0.94     | 14               | 72235.0                 | 1.00 | 72235.0                | -232062.6              | -61596.1                 | 665246.9                 | 359247.2                          | 0.0 0.20 |

▲NUCLEO 1985 1984 1983 1982 1981 1980 / Nodi: 3540 3541 3818 4162 4480 4481

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3540 3541 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3541 3818 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3818 4162 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4162 4480 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4480 4481 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -340801.1               | -0.0                     | -7010.5                   | 0.12                      |       |
| Sommità | 1     | -336230.7               | -0.0                     | -15364.1                  | 0.12                      |       |

| S.L.E. | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base   |              |           |                           |                           |               |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>e</sub><br>[kg] | α    | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>ca</sub><br>[kg] | V <sub>accrescimento</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|------------------------|------|-------------------------|--------------------------|--------------------------|-------------------------|------------------------------------|-----|------|
| 3895-3896-4169-4527-4812-4813 | 5.00     | 0.94     | 14               | 87932.3                | 1.00 | 87932.3                 | -254048.3                | -99955.2                 | 776321.4                | 359247.2                           | 0.0 | 0.24 |

▲NUCLEO 1485 1484 1483 1482 1481 1480 / Nodi: 3561 3893 4167 4525 4537 4973

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3561 3893 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3893 4167 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4167 4525 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4525 4537 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4537 4973 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 19    | -264837.7               | -0.0                     | -208696.3                 | 0.14                      |       |
| Sommità | 1     | -349941.7               | 0.0                      | 9699.6                    | 0.12                      |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -250795.2 | -0.0                      | -2061.7                   | -14.0         |
| sc Med  | 32           | -250795.2 | -0.0                      | -2061.7                   | -13.9         |
| st      | 23           | -244950.0 | 0.0                       | 13609.4                   | -190.0        |
| sc      | 32           | -250795.2 | -0.0                      | -2061.7                   | -210.4        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -250795.2 | -0.0                      | -2061.7                   | -14.0         |
| sc Med  | 32           | -250795.2 | -0.0                      | -2061.7                   | -13.9         |
| st      | 23           | -244950.0 | 0.0                       | 13609.4                   | -190.0        |
| sc      | 32           | -250795.2 | -0.0                      | -2061.7                   | -210.4        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>res,accrescente</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------------------|-----|------|
| 3561-3893-4167-4525-4537-4973 | 5.00     | 0.94     | 14               | 72974.0                 | 1.00 | 72974.0                 | -236752.7               | -204571.4                | 665246.9                 | 359247.2                             | 0.0 | 0.20 |

▲NUCLEO 1865 1864 1863 1862 1861 1860 / Nodi: 3607 3780 4084 4166 4485 4697

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 3607 3780 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 3780 4084 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4084 4166 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4166 4485 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |
| 4485 4697 | 2                 | 100       | 94        | 30               | 2x ø 18.15            | 2x ø 14.15              |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|--------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -349941.7               | 0.0                      | 9698.6                    | 0.12                      |       |
| Sommità | 1     | -345371.3               | 0.0                      | 1345.5                    | 0.12                      |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -247279.5 | -0.0                      | -2559.7                   | -13.9         |
| sc Med  | 32           | -247279.5 | -0.0                      | -2559.7                   | -13.7         |
| st      | 26           | -239956.3 | 0.0                       | 6113.5                    | -193.3        |
| sc      | 32           | -247279.5 | -0.0                      | -2559.7                   | -208.0        |
| Sommità |              |           |                           |                           |               |

|         |    |           |      |         |        |
|---------|----|-----------|------|---------|--------|
| sc Max  | 32 | -240248.3 | -0.0 | -3556.4 | -13.5  |
| sc Med  | 32 | -240248.3 | -0.0 | -3556.4 | -13.3  |
| st      | 26 | -232925.0 | -0.0 | -4281.9 | -189.3 |
| sc      | 32 | -240248.3 | -0.0 | -3556.4 | -203.2 |
| Sommila |    |           |      |         |        |
| sc Max  | 32 | -240248.3 | -0.0 | -3556.4 | -13.5  |
| sc Med  | 32 | -240248.3 | -0.0 | -3556.4 | -13.3  |
| st      | 26 | -232925.0 | -0.0 | -4281.9 | -189.3 |
| sc      | 32 | -240248.3 | -0.0 | -3556.4 | -203.2 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | N <sub>ed</sub> | M <sub>ed</sub> |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kgm]           |
| 3540-3541-3818-4162-4480-4481 | 5.00 | 0.94    | 14              | 73228.5 | 1.00            | 73228.5         |
|                               |      |         |                 |         |                 | 228176.5        |
|                               |      |         |                 |         |                 | 665246.9        |
|                               |      |         |                 |         |                 | 359247.2        |
|                               |      |         |                 |         |                 | 0.0             |
|                               |      |         |                 |         |                 | 0.0             |

▲NUCLEO 2318 2317 2316 2315 2314 2313 / Nodi: 3194 3538 3816 4160 4173 4621

▲Armature Nucleo

| Nodi      |   | Sezione | B               | H               | Spessore        | Armadura Verticale | Armadura Orizzontale |
|-----------|---|---------|-----------------|-----------------|-----------------|--------------------|----------------------|
|           |   | Numero  | [cm]            | [cm]            | [cm]            |                    |                      |
| 3194-3538 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 3538-3816 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 3816-4160 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 4160-4173 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 4173-4621 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| Sezione   |   | Comb.   | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>ed</sub> | Sd/Sr              |                      |
|           |   |         | [kg]            | [kgm]           | [kgm]           |                    |                      |
| Base      | 1 |         | -308401.3       | 0.0             | 13328.7         | 0.11               |                      |
| Sommila   | 1 |         | -303831.0       | 0.0             | 5805.8          | 0.11               |                      |

| S.L.E.  | Combinazione | N         | M <sub>ed</sub> | M <sub>ed</sub> | σ        |
|---------|--------------|-----------|-----------------|-----------------|----------|
|         |              | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Base    |              |           |                 |                 |          |
| sc Max  | 32           | -218129.6 | -0.0            | -24.1           | -12.1    |
| sc Med  | 32           | -218129.6 | -0.0            | -24.1           | -12.1    |
| st      | 23           | -212915.8 | 0.0             | 10158.7         | -166.8   |
| sc      | 32           | -218129.6 | -0.0            | -24.1           | -181.3   |
| Sommila |              |           |                 |                 |          |
| sc Max  | 32           | -218129.6 | -0.0            | -24.1           | -12.1    |
| sc Med  | 32           | -218129.6 | -0.0            | -24.1           | -12.1    |
| st      | 23           | -212915.8 | 0.0             | 10158.7         | -166.8   |
| sc      | 32           | -218129.6 | -0.0            | -24.1           | -181.3   |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | N <sub>ed</sub> | M <sub>ed</sub> |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kgm]           |
| 3194-3538-3816-4160-4173-4621 | 5.00 | 0.94    | 14              | 66971.5 | 1.00            | 66971.5         |
|                               |      |         |                 |         |                 | -208062.5       |
|                               |      |         |                 |         |                 | -135434.0       |
|                               |      |         |                 |         |                 | 665246.9        |
|                               |      |         |                 |         |                 | 359247.2        |
|                               |      |         |                 |         |                 | 0.0             |
|                               |      |         |                 |         |                 | 0.0             |

▲NUCLEO 2698 2697 2696 2695 2694 2693 / Nodi: 3236 3388 3719 3815 4115 4332

▲Armature Nucleo

| Nodi      |   | Sezione | B               | H               | Spessore        | Armadura Verticale | Armadura Orizzontale |
|-----------|---|---------|-----------------|-----------------|-----------------|--------------------|----------------------|
|           |   | Numero  | [cm]            | [cm]            | [cm]            |                    |                      |
| 3236-3388 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 3388-3719 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 3719-3815 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 3815-4115 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| 4115-4332 | 2 | 100     | 94              | 30              | 2x ø 18.15      | 2x ø 14.15         |                      |
| Sezione   |   | Comb.   | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>ed</sub> | Sd/Sr              |                      |
|           |   |         | [kg]            | [kgm]           | [kgm]           |                    |                      |
| Base      | 1 |         | -263831.0       | 0.0             | 5805.8          | 0.11               |                      |
| Sommila   | 1 |         | -299260.7       | -0.0            | -17159.0        | 0.10               |                      |

|           |   |     |    |    |             |             |
|-----------|---|-----|----|----|-------------|-------------|
| 2995 3323 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 3323 3419 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 3419 3748 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 3748 3948 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -248873.6               | 0.0                       | 26925                     | 0.09  |
| Sommità | 1     | -244303.3               | -0.0                      | -42936.6                  | 0.08  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -175882.0 | -0.0                      | -308.2                    | -9.8          |
| sc Med  | 32           | -175882.0 | -0.0                      | -308.2                    | -9.7          |
| st      | 23           | -171273.9 | 0.0                       | 2413.8                    | -1.399        |
| sc      | 32           | -175882.0 | -0.0                      | -308.2                    | -1.464        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -175882.0 | -0.0                      | -308.2                    | -9.8          |
| sc Med  | 32           | -175882.0 | -0.0                      | -308.2                    | -9.7          |
| st      | 23           | -171273.9 | 0.0                       | 2413.8                    | -1.399        |
| sc      | 32           | -175882.0 | -0.0                      | -308.2                    | -1.464        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>dc</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>ed</sub><br>[kg] | V <sub>dc,accidenti</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|-------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|-----------------------------------|-----|------|
| 2868-2995-3323-3419-3748-3948 | 5.00     | 0.94     | 14               | 60003.3                 | 1.00 | 60003.3                 | -167317.8               | -43076.2                 | 665246.9                | 359247.2                          | 0.0 | 0.17 |

▲NUCLEO 3591 3590 3589 3588 3587 3586 / Nodi: 2843 2990 3061 3417 3746 3947

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2843 2990 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 2990 3061 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3061 3417 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3417 3746 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3746 3947 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -244303.3               | -0.0                      | -4293.8                   | 0.08  |
| Sommità | 15    | -185817.4               | -0.0                      | -107756.8                 | 0.09  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -172366.4 | -0.0                      | -900.6                    | -9.6          |
| sc Med  | 32           | -172366.4 | -0.0                      | -900.6                    | -9.5          |
| st      | 26           | -167314.0 | -0.0                      | -2679.0                   | -1.363        |
| sc      | 32           | -172366.4 | -0.0                      | -900.6                    | -1.441        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -172366.4 | -0.0                      | -900.6                    | -9.6          |
| sc Med  | 32           | -172366.4 | -0.0                      | -900.6                    | -9.5          |
| st      | 26           | -167314.0 | -0.0                      | -2679.0                   | -1.363        |
| sc      | 32           | -172366.4 | -0.0                      | -900.6                    | -1.441        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb.<br>critica | V <sub>a</sub><br>[kg] | α    | V <sub>fd</sub><br>[kg] | N <sub>fd</sub><br>[kg] | M <sub>fd</sub><br>[kgm] | V <sub>fd</sub><br>[kg] | V <sub>fd, sordinamento</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|------------------|------------------------|------|-------------------------|-------------------------|--------------------------|-------------------------|---------------------------------------|-----|------|
| 2843-2990-3061-3417-3746-3947 | 5.00     | 0.94     | 14               | 59851.1                | 1.00 | 59851.1                 | -163870.6               | 45392.2                  | 665246.9                | 359247.2                              | 0.0 | 0.17 |

▲NUCLEO 3651 3650 3649 3648 3647 3646 / Nodi: 2795 2796 3059 3415 3743 3744

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -294690.3               | -0.0                      | -9237.4                   | 0.10  |
| Sommità | 15    | -222673.8               | -0.0                      | -144343.2                 | 0.11  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -207582.7 | -0.0                      | -1741.7                   | -11.6         |
| sc Med  | 32           | -207582.7 | -0.0                      | -1741.7                   | -11.5         |
| st      | 23           | -202368.9 | -0.0                      | -6800.4                   | -1.614        |
| sc      | 32           | -207582.7 | -0.0                      | -1741.7                   | -174.2        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -207582.7 | -0.0                      | -1741.7                   | -11.6         |
| sc Med  | 32           | -207582.7 | -0.0                      | -1741.7                   | -11.5         |
| st      | 23           | -202368.9 | -0.0                      | -6800.4                   | -1.614        |
| sc      | 32           | -207582.7 | -0.0                      | -1741.7                   | -174.2        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>dc</sub><br>critica [kg] | α    | N <sub>fd</sub><br>[kg] | M <sub>1,d</sub><br>[kgm] | V <sub>Kod</sub><br>[kg] | V <sub>fd</sub><br>[kg] | V <sub>fd,accidente</sub><br>[kg] | S/R        |
|-------------------------------|----------|----------|-------|---------------------------------|------|-------------------------|---------------------------|--------------------------|-------------------------|-----------------------------------|------------|
| 3181-3182-3435-3811-4110-4111 | 5.00     | 0.94     | 14    | 64887.7                         | 1.00 | 64887.7                 | -197804.6                 | 64226.7                  | 665246.9                | 359247.2                          | 0.0   0.18 |

▲NUCLEO 3151 3150 3149 3148 3147 3146 / Nodi: 2826 3179 3433 3809 3822 4226

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2826 3179 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3179 3433 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3433 3809 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3809 3822 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |
| 3822 4226 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 1     | -253444.0               | 0.0                       | 9678.4                    | 0.09  |
| Sommità | 1     | -248873.6               | 0.0                       | 26925                     | 0.09  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -179397.6 | 0.0                       | 284.8                     | -10.0         |
| sc Med  | 32           | -179397.6 | 0.0                       | 284.8                     | -9.9          |
| st      | 23           | -174789.5 | 0.0                       | 7714.3                    | -1.37.5       |
| sc      | 32           | -179397.6 | 0.0                       | 284.8                     | -149.3        |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -179397.6 | 0.0                       | 284.8                     | -10.0         |
| sc Med  | 32           | -179397.6 | 0.0                       | 284.8                     | -9.9          |
| st      | 23           | -174789.5 | 0.0                       | 7714.3                    | -1.37.5       |
| sc      | 32           | -179397.6 | 0.0                       | 284.8                     | -149.3        |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>e</sub><br>critica [kg] | α    | N <sub>id</sub><br>[kg] | M <sub>1,d</sub><br>[kgm] | V <sub>1,d</sub><br>[kg] | M <sub>1,d</sub><br>[kgm] | V <sub>1,d</sub><br>[kg] | V <sub>1,d,comb</sub><br>[kg] | S/R      |
|-------------------------------|----------|----------|-------|--------------------------------|------|-------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------------|----------|
| 2826-3179-3433-3809-3822-4226 | 5.00     | 0.94     | 14    | 58160.6                        | 1.00 | 58160.6                 | -174821.1                 | -68402.0                 | 665246.9                  | 359247.2                 |                               | 0.0 0.16 |

▲NUCLEO 3531 3530 3529 3528 3527 3526 / Nodi: 2868 2995 3323 3419 3748 3948

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 2868 2995 | 2                 | 100       | 94        | 30               | 2x ø 18 15'           | 2x ø 14 15'             |

▲Armature Nudo

| Nodi      | Sezione |           | B                | H                | Spessore         | Armatura         |             | Armatura    |
|-----------|---------|-----------|------------------|------------------|------------------|------------------|-------------|-------------|
|           | Numero  | [cm]      |                  |                  |                  | [cm]             | Verticale   | Orizzontale |
| 2795 2796 | 2       | 100       | 94               | 30               | 2x ø 18 15'      | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 2796 3059 | 2       | 100       | 94               | 30               | 2x ø 18 15'      | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 3059 3415 | 2       | 100       | 94               | 30               | 2x ø 18 15'      | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 3415 3743 | 2       | 100       | 94               | 30               | 2x ø 18 15'      | 30               | 2x ø 18 15' | 2x ø 14 15' |
| 3743 3744 | 2       | 100       | 94               | 30               | 2x ø 18 15'      | 30               | 2x ø 18 15' | 2x ø 14 15' |
| Sezione   | Comb.   |           | N <sub>tot</sub> | N <sub>tot</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | Sd/Sr       |             |
|           | Numero  | [cm]      |                  |                  |                  |                  | [kg]        | [kg]        |
| Base      | 15      | -185427.6 | -0.0             | -108652.2        | 0.09             |                  |             |             |
| Sommità   | 15      | -181517.7 | -0.0             | -157515.7        | 0.10             |                  |             |             |

| S.L.E.  | Combinazione |           | N    | M <sub>1,2</sub> | M <sub>1,3</sub> | σ    |          |
|---------|--------------|-----------|------|------------------|------------------|------|----------|
|         | Numero       | [cm]      |      |                  |                  | [kg] | [kg/cm²] |
| Base    | 32           | -168850.7 | -0.0 | -1493.1          | -9.5             |      |          |
| sc Max  | 32           | -168850.7 | -0.0 | -1493.1          | -9.4             |      |          |
| sc Med  | 23           | -164242.6 | -0.0 | -8189.0          | -128.3           |      |          |
| st      | 32           | -168850.7 | -0.0 | -1493.1          | -141.8           |      |          |
| Sommità | 32           | -168850.7 | -0.0 | -1493.1          | -9.5             |      |          |
| sc Max  | 32           | -168850.7 | -0.0 | -1493.1          | -9.5             |      |          |
| sc Med  | 32           | -168850.7 | -0.0 | -1493.1          | -9.4             |      |          |
| st      | 23           | -164242.6 | -0.0 | -8189.0          | -128.3           |      |          |
| sc      | 32           | -168850.7 | -0.0 | -1493.1          | -141.8           |      |          |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>tot</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | V <sub>res</sub> | V <sub>max</sub> | V <sub>max,accettabile</sub> | S/R  |
|-------------------------------|------|------|---------|-----------------|------|------------------|------------------|------------------|------------------|------------------|------------------------------|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]             | [kg]             | [kg]             | [kg]             | [kg]             | [kg]                         |      |
| 2795-2796-3059-3415-3743-3744 | 5.00 | 0.94 | 14      | 60227.3         | 1.00 | 60227.3          | -159706.3        | 1119882.4        | 665246.9         | 359247.2         | 0.0                          | 0.17 |

▲NUCLEO 3984 3983 3982 3981 3980 3979 / Nodi: 2477 2793 3057 3413 3439 3884

▲Armature Nudo

| Nodi      | Sezione<br>Numero | B                      | H                          | Spessore                   | Armatura    |    | Armatura<br>Orizzontale |
|-----------|-------------------|------------------------|----------------------------|----------------------------|-------------|----|-------------------------|
|           |                   |                        |                            |                            | Verticale   |    |                         |
| 2477 2793 | 2                 | 100                    | 94                         | 30                         | 2x ø 18 15' | 30 | 2x ø 14 15'             |
| 2793 3057 | 2                 | 100                    | 94                         | 30                         | 2x ø 18 15' | 30 | 2x ø 14 15'             |
| 3057 3413 | 2                 | 100                    | 94                         | 30                         | 2x ø 18 15' | 30 | 2x ø 14 15'             |
| 3413 3439 | 2                 | 100                    | 94                         | 30                         | 2x ø 18 15' | 30 | 2x ø 14 15'             |
| 3439 3884 | 2                 | 100                    | 94                         | 30                         | 2x ø 18 15' | 30 | 2x ø 14 15'             |
| Sezione   | Comb.             | N <sub>u</sub><br>[kg] | M <sub>1,2</sub><br>[kg/m] | M <sub>1,3</sub><br>[kg/m] | Sd/Sr       |    |                         |
| Base      | 1                 | -191511.8              | 0.0                        | 5954.5                     | 0.07        |    |                         |
| Sommità   | 15                | -145392.6              | -0.0                       | 92725.7                    | 0.07        |    |                         |

| S.L.E.  | Combinazione |            | N    | M <sub>1,2</sub> | M <sub>1,3</sub> | σ    |          |
|---------|--------------|------------|------|------------------|------------------|------|----------|
|         | Numero       | [cm]       |      |                  |                  | [kg] | [kg/cm²] |
| Base    | 32           | -135980.0  | -0.0 | -408.9           | -7.6             |      |          |
| sc Max  | 32           | -135980.0  | -0.0 | -408.9           | -7.5             |      |          |
| sc Med  | 23           | -1318158.0 | 0.0  | 5211.1           | -104.4           |      |          |
| st      | 32           | -135980.0  | -0.0 | -408.9           | -113.4           |      |          |
| Sommità | 32           | -135980.0  | -0.0 | -408.9           | -7.6             |      |          |
| sc Max  | 32           | -135980.0  | -0.0 | -408.9           | -7.5             |      |          |
| sc Med  | 23           | -1318158.0 | 0.0  | 5211.1           | -104.4           |      |          |
| st      | 32           | -135980.0  | -0.0 | -408.9           | -113.4           |      |          |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>tot</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | V <sub>res</sub> | V <sub>max</sub> | V <sub>max,accettabile</sub> | S/R  |
|-------------------------------|------|------|---------|-----------------|------|------------------|------------------|------------------|------------------|------------------|------------------------------|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]             | [kg]             | [kg]             | [kg]             | [kg]             | [kg]                         |      |
| 2795-2796-3059-3415-3743-3744 | 5.00 | 0.94 | 14      | 60227.3         | 1.00 | 60227.3          | -159706.3        | 1119882.4        | 665246.9         | 359247.2         | 0.0                          | 0.17 |

| 2477-2793-3057-3413-3439-3884 | 5.00 | 0.94 | 14 | 54939.5 | 1.00 | 54939.5 | -133197.1 | -47325.1 | 665246.9 | 359247.2 | 0.0 | 0.15 |
|-------------------------------|------|------|----|---------|------|---------|-----------|----------|----------|----------|-----|------|
|                               |      |      |    |         |      |         |           |          |          |          |     |      |

▲NUCLEO 4364 4363 4362 4361 4360 4359 / Nodi: 2493 2588 2916 3021 3351 3571

▲Armature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura |             | Armatura    |
|-----------|---------|------|----|----|-------------|----------|-------------|-------------|
|           | Numero  | [cm] |    |    |             | [cm]     | Verticale   | Orizzontale |
| 2493 2588 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 2588 2916 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 2916 3021 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 3021 3351 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 3351 3571 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |

| Sezione | Comb.  |           | N <sub>tot</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | Sd/Sr |      |
|---------|--------|-----------|------------------|------------------|------------------|-------|------|
|         | Numero | [cm]      |                  |                  |                  | [kg]  | [kg] |
| Base    | 15     | -146511.6 | -0.0             | -92919.4         | 0.07             |       |      |
| Sommità | 15     | -142975.4 | -0.0             | -77249.7         | 0.06             |       |      |

| S.L.E.  | Combinazione |           | N    | M <sub>1,2</sub> | M <sub>1,3</sub> | σ    |          |
|---------|--------------|-----------|------|------------------|------------------|------|----------|
|         | Numero       | [cm]      |      |                  |                  | [kg] | [kg/cm²] |
| Base    | 32           | -132464.3 | -0.0 | -1158.6          | -7.4             |      |          |
| sc Max  | 32           | -132464.3 | -0.0 | -1158.6          | -7.3             |      |          |
| sc Med  | 31           | -128199.9 | -0.0 | -879.1           | -105.6           |      |          |
| st      | 32           | -132464.3 | -0.0 | -1158.6          | -111.2           |      |          |
| Sommità | 32           | -132464.3 | -0.0 | -1158.6          | -7.4             |      |          |
| sc Max  | 32           | -132464.3 | -0.0 | -1158.6          | -7.3             |      |          |
| sc Med  | 31           | -128199.9 | -0.0 | -879.1           | -105.6           |      |          |
| st      | 32           | -132464.3 | -0.0 | -1158.6          | -111.2           |      |          |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B    | H    | Comb.   | V <sub>ed</sub> | α    | N <sub>tot</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | V <sub>res</sub> | V <sub>max</sub> | V <sub>max,accettabile</sub> | S/R  |
|-------------------------------|------|------|---------|-----------------|------|------------------|------------------|------------------|------------------|------------------|------------------------------|------|
|                               | [m]  | [m]  | critica | [kg]            |      | [kg]             | [kg]             | [kg]             | [kg]             | [kg]             | [kg]                         |      |
| 2493-2588-2916-3021-3351-3571 | 5.00 | 0.94 | 14      | 56491.0         | 1.00 | 56491.0          | -123546.2        | 88958.9          | 665246.9         | 359247.2         | 0.0                          | 0.16 |

▲NUCLEO 4424 4423 4422 4421 4420 4419 / Nodi: 2490 2584 2647 3019 3349 3570

▲Armature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura |             | Armatura    |
|-----------|---------|------|----|----|-------------|----------|-------------|-------------|
|           | Numero  | [cm] |    |    |             | [cm]     | Verticale   | Orizzontale |
| 2490 2584 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 2584 2647 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 2647 3019 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 3019 3349 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |
| 3349 3570 | 2       | 100  | 94 | 30 | 2x ø 18 15' | 30       | 2x ø 18 15' | 2x ø 14 15' |

| Sezione | Comb.  |           | N <sub>tot</sub> | M <sub>1,2</sub> | M <sub>1,3</sub> | Sd/Sr |      |
|---------|--------|-----------|------------------|------------------|------------------|-------|------|
|         | Numero | [cm]      |                  |                  |                  | [kg]  | [kg] |
| Base    | 15     | -142914.2 | -0.0             | -82826.2         | 0.07             |       |      |
| Sommità | 15     | -140243.2 | -0.0             | -109704.9        | 0.07             |       |      |

| S.L.E.  | Combinazione |           | N    | M <sub>1,2</sub> | M <sub>1,3</sub> | σ    |          |
|---------|--------------|-----------|------|------------------|------------------|------|----------|
|         | Numero       | [cm]      |      |                  |                  | [kg] | [kg/cm²] |
| Base    | 32           | -128948.7 | -0.0 | -1908.1          | -7.3             |      |          |
| sc Max  | 32           | -128948.7 | -0.0 | -1908.1          | -7.1             |      |          |
| sc Med  | 23           | -124826.7 | -0.0 | -4927.4          | -98.8            |      |          |
| st      | 32           | -128948.7 | -0.0 | -1908.1          | -109.0           |      |          |
| Sommità | 32           | -128948.7 | -0.0 | -1908.1          | -7.3             |      |          |
| sc Max  | 32           | -128948.7 | -0.0 | -1908.1          | -7.1             |      |          |
| sc Med  | 23           | -124826.7 | -0.0 | -4927.4          | -98.8            |      |          |
| st      | 32           | -128948.7 | -0.0 | -1908.1          | -109.0           |      |          |

|        |    |          |      |         |       |
|--------|----|----------|------|---------|-------|
| sc Max | 32 | -91707,5 | -0,0 | -1590,5 | -6,0  |
| sc Med | 32 | -91707,5 | -0,0 | -1590,5 | -5,9  |
| st     | 23 | -88176,9 | 0,0  | 2771,2  | -81,8 |
| sc     | 32 | -91707,5 | -0,0 | -1590,5 | -90,3 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |                 |                             |          |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|-----------------|-----------------------------|----------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,accresciuta</sub> | S/R      |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kgm]           | [kg]            | [kg]                        |          |
| 2144-2465-2643-3015-3080-3529 | 5,00 | 0,94    | 14              | 46680,1 | 1,00            | 46680,1         | -22862,2        | 1554372,4                   | 263936,8 |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,0      |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,18     |

▲NUCLEO 5197 5196 5195 5194 5193 5192 / Nodi: 2169 2243 2535 2663 3078 3213

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|------|------|----------|--------------------|----------------------|
| Numero    | Numero  | [cm] | [cm] | [cm]     |                    |                      |
| 2169 2243 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2243 2535 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2535 2663 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2663 3078 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 3078 3213 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |

| Sezione | Comb. | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-----------------|-------|
|         |       | [kg]            | [kg]            | [kgm]           | [kgm]           |       |
| Base    | 15    | -100437,6       | -0,0            | -67344,9        | 0,06            |       |
| Sommità | 15    | -96497,2        | -0,0            | -80069,3        | 0,06            |       |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | σ        |
|---------|--------------|----------|-----------------|-----------------|----------|
|         |              | [kg]     | [kgm]           | [kgm]           | [kg/cm²] |
| Base    |              |          |                 |                 |          |
| sc Max  | 32           | -88777,8 | -0,0            | -2163,6         | -5,9     |
| sc Med  | 32           | -88777,8 | -0,0            | -2163,6         | -5,7     |
| st      | 26           | -85502,8 | -0,0            | -2501,0         | -79,6    |
| sc      | 32           | -88777,8 | -0,0            | -2163,6         | -88,1    |
| Sommità |              |          |                 |                 |          |
| sc Max  | 32           | -88777,8 | -0,0            | -2163,6         | -5,9     |
| sc Med  | 32           | -88777,8 | -0,0            | -2163,6         | -5,7     |
| st      | 26           | -85502,8 | -0,0            | -2501,0         | -79,6    |
| sc      | 32           | -88777,8 | -0,0            | -2163,6         | -88,1    |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |                 |                             |          |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|-----------------|-----------------------------|----------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,accresciuta</sub> | S/R      |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kgm]           | [kg]            | [kg]                        |          |
| 2169-2243-2535-2663-3078-3213 | 5,00 | 0,94    | 14              | 49349,7 | 1,00            | 49349,7         | 48154,7         | 1554372,4                   | 263936,8 |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,0      |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,19     |

▲NUCLEO 5257 5256 5255 5254 5253 5252 / Nodi: 2162 2230 2301 2661 3076 3212

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|------|------|----------|--------------------|----------------------|
| Numero    | Numero  | [cm] | [cm] | [cm]     |                    |                      |
| 2162 2230 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2230 2301 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2301 2661 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2661 3076 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 3076 3212 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |

| Sezione | Comb. | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-----------------|-------|
|         |       | [kg]            | [kg]            | [kgm]           | [kgm]           |       |
| Base    | 15    | -97267,7        | -0,0            | -77637,0        | 0,06            |       |
| Sommità | 15    | -94414,3        | -0,0            | -111607,1       | 0,07            |       |

| S.L.E. | Combinazione | N    | M <sub>12</sub> | M <sub>13</sub> | σ        |
|--------|--------------|------|-----------------|-----------------|----------|
|        |              | [kg] | [kgm]           | [kgm]           | [kg/cm²] |
| Base   |              |      |                 |                 |          |

| Diaframma                     |      |         |                 |         |                 |                 |                 |                             |          |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|-----------------|-----------------------------|----------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,accresciuta</sub> | S/R      |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kgm]           | [kg]            | [kg]                        |          |
| 2480-2584-2647-3019-3349-3570 | 5,00 | 0,94    | 14              | 56226,4 | 1,00            | 56226,4         | -122232,6       | 1665246,5                   | 159247,2 |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,0      |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,16     |

▲NUCLEO 4484 4483 4482 4481 4480 4479 / Nodi: 2467 2468 2645 3017 3346 3347

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|------|------|----------|--------------------|----------------------|
| Numero    | Numero  | [cm] | [cm] | [cm]     |                    |                      |
| 2467 2468 | 2       | 100  | 94   | 30       | 2x ø 18 15'        | 2x ø 14 15'          |
| 2468 2645 | 2       | 100  | 94   | 30       | 2x ø 18 15'        | 2x ø 14 15'          |
| 2645 3017 | 2       | 100  | 94   | 30       | 2x ø 18 15'        | 2x ø 14 15'          |
| 3017 3346 | 2       | 100  | 94   | 30       | 2x ø 18 15'        | 2x ø 14 15'          |
| 3346 3347 | 2       | 100  | 94   | 30       | 2x ø 18 15'        | 2x ø 14 15'          |

| Sezione | Comb. | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-----------------|-------|
|         |       | [kg]            | [kgm]           | [kgm]           | [kgm]           |       |
| Base    | 15    | -139825,3       | -0,0            | -111122,7       | 0,07            |       |
| Sommità | 15    | -136464,6       | -0,0            | -155210,5       | 0,08            |       |

| S.L.E.  | Combinazione | N         | M <sub>12</sub> | M <sub>13</sub> | σ        |
|---------|--------------|-----------|-----------------|-----------------|----------|
|         |              | [kg]      | [kgm]           | [kgm]           | [kg/cm²] |
| Base    |              |           |                 |                 |          |
| sc Max  | 32           | -125433,1 | -0,0            | -2657,8         | -7,1     |
| sc Med  | 32           | -125433,1 | -0,0            | -2657,8         | -6,9     |
| st      | 24           | -124681,4 | -0,0            | -13109,8        | -90,5    |
| sc      | 32           | -125433,1 | -0,0            | -2657,8         | -106,9   |
| Sommità |              |           |                 |                 |          |
| sc Max  | 32           | -125433,1 | -0,0            | -2657,8         | -7,1     |
| sc Med  | 32           | -125433,1 | -0,0            | -2657,8         | -6,9     |
| st      | 24           | -124681,4 | -0,0            | -13109,8        | -90,5    |
| sc      | 32           | -125433,1 | -0,0            | -2657,8         | -106,9   |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |                 |                             |           |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|-----------------|-----------------------------|-----------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>ed</sub> | V <sub>ed,accresciuta</sub> | S/R       |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kgm]           | [kg]            | [kg]                        |           |
| 2467-2468-2645-3017-3346-3347 | 5,00 | 0,94    | 14              | 55034,5 | 1,00            | 55034,5         | -118032,2       | 118047,6                    | 1665246,9 |
|                               |      |         |                 |         |                 |                 |                 |                             | 139247,2  |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,0       |
|                               |      |         |                 |         |                 |                 |                 |                             | 0,15      |

▲NUCLEO 4817 4816 4815 4814 4813 4812 / Nodi: 2144 2465 2643 3015 3080 3529

▲Armature Nucleo

| Nodi      | Sezione | B    | H    | Spessore | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|------|------|----------|--------------------|----------------------|
| Numero    | Numero  | [cm] | [cm] | [cm]     |                    |                      |
| 2144 2465 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2465 2643 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 2643 3015 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 3015 3080 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |
| 3080 3529 | 3       | 100  | 94   | 25       | 2x ø 18 15'        | 2x ø 12 15'          |

| Sezione | Comb. | N <sub>ed</sub> | M <sub>ed</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-----------------|-------|
|         |       | [kg]            | [kg]            | [kgm]           | [kgm]           |       |
| Base    | 1     | -1283,201       | 0,0             | 2370,5          | 0,05            |       |
| Sommità | 15    | -99835,0        | -0,0            | -65239,9        | 0,05            |       |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | σ        |
|---------|--------------|----------|-----------------|-----------------|----------|
|         |              | [kg]     | [kgm]           | [kgm]           | [kg/cm²] |
| Base    |              |          |                 |                 |          |
| sc Max  | 32           | -91707,5 | -0,0            | -1590,5         | -6,0     |
| sc Med  | 32           | -91707,5 | -0,0            | -1590,5         | -5,9     |
| st      | 23           | -88176,9 | 0,0             | 2771,2          | -81,8    |
| sc      | 32           | -91707,5 | -0,0            | -1590,5         | -90,3    |
| Sommità |              |          |                 |                 |          |

| S.L.E.  | Combinazione | N       | M <sub>12</sub> | M <sub>13</sub> | σ     |
|---------|--------------|---------|-----------------|-----------------|-------|
| [kg]    |              |         |                 |                 |       |
| Base    |              |         |                 |                 |       |
| sc Max  | 22           | -508564 | 0.0             | 2279            | -3.3  |
| sc Med  | 32           | -493225 | -0.0            | -19078          | -3.2  |
| st      | 23           | -465180 | 0.0             | 18719           | -42.7 |
| sc      | 22           | -508564 | 0.0             | 2279            | -49.3 |
| Sommila |              |         |                 |                 |       |
| sc Max  | 22           | -508564 | 0.0             | 2279            | -3.3  |
| sc Med  | 32           | -493225 | -0.0            | -19078          | -3.2  |
| st      | 23           | -465180 | 0.0             | 18719           | -42.7 |
| sc      | 22           | -508564 | 0.0             | 2279            | -49.3 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |          |                 |                 |                 |                  |                             |
|-------------------------------|------|---------|-----------------|----------|-----------------|-----------------|-----------------|------------------|-----------------------------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α        | V <sub>12</sub> | N <sub>12</sub> | M <sub>12</sub> | V <sub>12d</sub> | V <sub>12d,accensione</sub> |
| [m]                           | [m]  | critica | [kg]            |          | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]                        |
| 1800-2118-2297-2657-3072-3390 | 5.00 | 0.94    | 19              | -38633.7 | 1.00            | -38633.7        | -51025.1        | 9939.2           | 554372.4                    |
|                               |      |         |                 |          |                 |                 |                 | 263936.8         | 0.0                         |
|                               |      |         |                 |          |                 |                 |                 |                  | 0.15                        |

▲NUCLEO 6030 6029 6028 6027 6026 6025 / Nodi: 1794 1972 2295 2655 3069 3210

▲Armature Nucleo

| Nodi        | Sezione | B   | H  | Spessore | Armatura Verticale | Armatura Orizzontale |
|-------------|---------|-----|----|----------|--------------------|----------------------|
| Numero [cm] |         |     |    |          |                    |                      |
| 1794 1972   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 1972 2295   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2295 2655   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2655 3069   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 3069 3210   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |

| Sezione | Comb. | N <sub>12</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-------|
| [kg]    |       |                 |                 |                 |       |
| Base    | 15    | -54295.6        | -0.0            | -55183.1        | 0.04  |
| Sommila | 15    | -51652.8        | -0.0            | -68152.7        | 0.09  |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | σ     |
|---------|--------------|----------|-----------------|-----------------|-------|
| [kg]    |              |          |                 |                 |       |
| Base    |              |          |                 |                 |       |
| sc Max  | 32           | -46392.8 | -0.0            | -15925          | -3.1  |
| sc Med  | 32           | -46392.8 | -0.0            | -15925          | -3.0  |
| st      | 24           | -45267.9 | -0.0            | -33688          | -39.8 |
| sc      | 32           | -46392.8 | -0.0            | -15925          | -46.6 |
| Sommila |              |          |                 |                 |       |
| sc Max  | 32           | -46392.8 | -0.0            | -15925          | -3.1  |
| sc Med  | 32           | -46392.8 | -0.0            | -15925          | -3.0  |
| st      | 24           | -45267.9 | -0.0            | -33688          | -39.8 |
| sc      | 32           | -46392.8 | -0.0            | -15925          | -46.6 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |          |                 |                 |                 |                  |                             |
|-------------------------------|------|---------|-----------------|----------|-----------------|-----------------|-----------------|------------------|-----------------------------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α        | V <sub>12</sub> | N <sub>12</sub> | M <sub>12</sub> | V <sub>12d</sub> | V <sub>12d,accensione</sub> |
| [m]                           | [m]  | critica | [kg]            |          | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]                        |
| 1794-1972-2295-2655-3069-3210 | 5.00 | 0.94    | 19              | -39419.1 | 1.00            | -39419.1        | -50900.2        | 44953.3          | 554372.4                    |
|                               |      |         |                 |          |                 |                 |                 | 263936.8         | 0.0                         |
|                               |      |         |                 |          |                 |                 |                 |                  | 0.15                        |

▲NUCLEO 6090 6089 6088 6087 6086 6085 / Nodi: 1793 1971 2294 2654 3067 3209

▲Armature Nucleo

| Nodi        | Sezione | B   | H  | Spessore | Armatura Verticale | Armatura Orizzontale |
|-------------|---------|-----|----|----------|--------------------|----------------------|
| Numero [cm] |         |     |    |          |                    |                      |
| 1793 1971   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 1971 2294   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2294 2654   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2654 3067   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 3067 3209   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |

|         |    |          |      |         |       |
|---------|----|----------|------|---------|-------|
| sc Max  | 32 | -85848.1 | -0.0 | -2736.2 | -5.7  |
| sc Med  | 32 | -85848.1 | -0.0 | -2736.2 | -5.5  |
| st      | 24 | -84859.5 | -0.0 | -8622.2 | -71.9 |
| sc      | 32 | -85848.1 | -0.0 | -2736.2 | -86.0 |
| Sommila |    |          |      |         |       |
| sc Max  | 32 | -85848.1 | -0.0 | -2736.2 | -5.7  |
| sc Med  | 32 | -85848.1 | -0.0 | -2736.2 | -5.5  |
| st      | 24 | -84859.5 | -0.0 | -8622.2 | -71.9 |
| sc      | 32 | -85848.1 | -0.0 | -2736.2 | -86.0 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |                 |                  |                             |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|-----------------|------------------|-----------------------------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | V <sub>12</sub> | N <sub>12</sub> | M <sub>12</sub> | V <sub>12d</sub> | V <sub>12d,accensione</sub> |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]                        |
| 2102-2230-2301-2661-3076-3212 | 5.00 | 0.94    | 14              | 49050.8 | 1.00            | 49050.8         | 179712.7        | 78482.2          | 554372.4                    |
|                               |      |         |                 |         |                 |                 |                 | 263936.8         | 0.0                         |
|                               |      |         |                 |         |                 |                 |                 |                  | 0.19                        |

▲NUCLEO 5317 5316 5315 5314 5313 5312 / Nodi: 2120 2121 2299 2659 3074 3211

▲Armature Nucleo

| Nodi        | Sezione | B   | H  | Spessore | Armatura Verticale | Armatura Orizzontale |
|-------------|---------|-----|----|----------|--------------------|----------------------|
| Numero [cm] |         |     |    |          |                    |                      |
| 2120 2121   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2121 2299   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2299 2659   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2659 3074   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 3074 3211   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |

| Sezione | Comb. | N <sub>12</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-------|
| [kg]    |       |                 |                 |                 |       |
| Base    | 15    | -94640.1        | -0.0            | -110973.7       | 0.07  |
| Sommila | 14    | -73742.9        | -0.0            | -155243.0       | 0.08  |

| S.L.E.  | Combinazione | N        | M <sub>12</sub> | M <sub>13</sub> | σ     |
|---------|--------------|----------|-----------------|-----------------|-------|
| [kg]    |              |          |                 |                 |       |
| Base    |              |          |                 |                 |       |
| sc Max  | 32           | -82918.4 | -0.0            | -3309.2         | -5.6  |
| sc Med  | 32           | -82918.4 | -0.0            | -3309.2         | -5.3  |
| st      | 24           | -81529.9 | -0.0            | -13528.8        | -63.4 |
| sc      | 32           | -82918.4 | -0.0            | -3309.2         | -83.8 |
| Sommila |              |          |                 |                 |       |
| sc Max  | 32           | -82918.4 | -0.0            | -3309.2         | -5.6  |
| sc Med  | 32           | -82918.4 | -0.0            | -3309.2         | -5.3  |
| st      | 24           | -81529.9 | -0.0            | -13528.8        | -63.4 |
| sc      | 32           | -82918.4 | -0.0            | -3309.2         | -83.8 |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |         |                 |         |                 |                 |                 |                  |                             |
|-------------------------------|------|---------|-----------------|---------|-----------------|-----------------|-----------------|------------------|-----------------------------|
| B                             | H    | Comb.   | V <sub>ed</sub> | α       | V <sub>12</sub> | N <sub>12</sub> | M <sub>12</sub> | V <sub>12d</sub> | V <sub>12d,accensione</sub> |
| [m]                           | [m]  | critica | [kg]            |         | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]                        |
| 2120-2121-2299-2659-3074-3211 | 5.00 | 0.94    | 14              | 46386.1 | 1.00            | 46386.1         | 76693.7         | 117331.6         | 554372.4                    |
|                               |      |         |                 |         |                 |                 |                 | 263936.8         | 0.0                         |
|                               |      |         |                 |         |                 |                 |                 |                  | 0.18                        |

▲NUCLEO 5650 5649 5648 5647 5646 5645 / Nodi: 1800 2118 2297 2657 3072 3390

▲Armature Nucleo

| Nodi        | Sezione | B   | H  | Spessore | Armatura Verticale | Armatura Orizzontale |
|-------------|---------|-----|----|----------|--------------------|----------------------|
| Numero [cm] |         |     |    |          |                    |                      |
| 1800 2118   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2118 2297   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2297 2657   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 2657 3072   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |
| 3072 3390   | 3       | 100 | 94 | 25       | 2x ø 18.15'        | 2x ø 12.15'          |

| Sezione | Comb. | N <sub>12</sub> | M <sub>12</sub> | M <sub>13</sub> | Sd/Sr |
|---------|-------|-----------------|-----------------|-----------------|-------|
| [kg]    |       |                 |                 |                 |       |
| Base    | 1     | -67355.5        | 0.0             | -7564           | 0.03  |
| Sommila | 15    | -54047.1        | -0.0            | -52335.4        | 0.03  |

|           |   |     |    |    |             |             |
|-----------|---|-----|----|----|-------------|-------------|
| 1969 2291 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 2291 2650 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 2650 3063 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |
| 3063 3463 | 3 | 100 | 94 | 25 | 2x ø 18 15' | 2x ø 12 15' |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 16    | -5971,2                 | 0,0                       | 12056,8                   | 0,01  |
| Sommità | 17    | 4448,0                  | 0,0                       | 21587,0                   | 0,02  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -8108,4   | 0,0                       | 3113,6                    | -0,8          |
| sc Med  | 23           | -5785,9   | 0,0                       | 7509,4                    | -0,5          |
| st      | 28           | -7681,2   | 0,0                       | 4003,0                    | -2,8          |
| sc      | 32           | -8108,4   | 0,0                       | 3113,6                    | -11,4         |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -8108,4   | 0,0                       | 3113,6                    | -0,8          |
| sc Med  | 23           | -5785,9   | 0,0                       | 7509,4                    | -0,5          |
| st      | 28           | -7681,2   | 0,0                       | 4003,0                    | -2,8          |
| sc      | 32           | -8108,4   | 0,0                       | 3113,6                    | -11,4         |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |      |      |         |                 |      |                 |                 |                 |                  |                                          |      |      |
|-------------------------------|------|------|---------|-----------------|------|-----------------|-----------------|-----------------|------------------|------------------------------------------|------|------|
|                               | B    | H    | Comb.   | V <sub>ed</sub> | α    | V <sub>ed</sub> | N <sub>ed</sub> | M <sub>ed</sub> | V <sub>red</sub> | V <sub>M<sub>ed</sub>, scissamenti</sub> | S/R  |      |
| [m]                           | [m]  |      | critica | [kg]            |      | [kg]            | [kg]            | [kgm]           | [kg]             | [kg]                                     | [kg] |      |
| 1797-1969-2291-2650-3063-3463 | 5,00 | 0,94 | 14      | 22236,1         | 1,00 | 22236,1         | -7899,0         | -10651,9        | 554372,4         | 263936,8                                 | 0,0  | 0,08 |

▲NUCLEO 6860 6859 6858 6857 6856 6855 / Nodi: 1632 1968 2276 2613 2939 3203

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1632 1968 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 1968 2276 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2276 2613 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2613 2939 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2939 3203 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 17    | 6470,8                  | 0,0                       | 22544,9                   | 0,02  |
| Sommità | 18    | 1860,0                  | 0,0                       | 35396,4                   | 0,03  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 23           | -2856,2   | 0,0                       | 3793,4                    | -0,5          |
| sc Med  | 25           | -4140,1   | 0,0                       | 2909,6                    | -0,3          |
| st      | 28           | -4751,5   | 0,0                       | 2738,8                    | -1,4          |
| sc      | 23           | -2856,2   | 0,0                       | 3793,4                    | -7,5          |
| Sommità |              |           |                           |                           |               |
| sc Max  | 23           | -2856,2   | 0,0                       | 3793,4                    | -0,5          |
| sc Med  | 25           | -4140,1   | 0,0                       | 2909,6                    | -0,3          |
| st      | 28           | -4751,5   | 0,0                       | 2738,8                    | -1,4          |
| sc      | 23           | -2856,2   | 0,0                       | 3793,4                    | -7,5          |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>M<sub>ed</sub>, scissamento</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|-------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------------------------------|-----|------|
| 1632-1968-2276-2613-2939-3203 | 5,00     | 0,94     | 14    | 18101,1                 | 1,00 | 18101,1                 | -1882,8                 | 8976,7                   | 554372,4                 | 263936,8                                         | 0,0 | 0,07 |

▲NUCLEO 6915 6914 6913 6912 6911 6910 / Nodi: 1631 1967 2275 2612 2938 3202

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 15    | -52122,9                | -0,0                      | -67484,0                  | 0,04  |
| Sommità | 14    | -34883,4                | -0,0                      | -102700,2                 | 0,05  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -43463,1  | -0,0                      | -1277,2                   | -2,9          |
| sc Med  | 32           | -43463,1  | -0,0                      | -1277,2                   | -2,8          |
| st      | 24           | -42338,3  | -0,0                      | -6566,3                   | -33,2         |
| sc      | 32           | -43463,1  | -0,0                      | -1277,2                   | -43,4         |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -43463,1  | -0,0                      | -1277,2                   | -2,9          |
| sc Med  | 32           | -43463,1  | -0,0                      | -1277,2                   | -2,8          |
| st      | 24           | -42338,3  | -0,0                      | -6566,3                   | -33,2         |
| sc      | 32           | -43463,1  | -0,0                      | -1277,2                   | -43,4         |

▲Verifiche a taglio dei diaframmi

| Diaframma                     | B<br>[m] | H<br>[m] | Comb. | V <sub>ec</sub><br>[kg] | α    | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>M<sub>ed</sub>, scissamento</sub><br>[kg] | S/R |      |
|-------------------------------|----------|----------|-------|-------------------------|------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------------------------------|-----|------|
| 1793-1971-2294-2654-3067-3209 | 5,00     | 0,94     | 19    | -39041,2                | 1,00 | -39041,2                | -48573,6                | -66607,9                 | 554372,4                 | 263936,8                                         | 0,0 | 0,15 |

▲NUCLEO 6150 6149 6148 6147 6146 6145 / Nodi: 1792 1970 2293 2652 3065 3208

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1792 1970 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 1970 2293 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2293 2652 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 2652 3065 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |
| 3065 3208 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |

| Sezione | Comb. | N <sub>ed</sub><br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | Sd/Sr |
|---------|-------|-------------------------|---------------------------|---------------------------|-------|
| Base    | 14    | -35279,9                | -0,0                      | -102431,6                 | 0,05  |
| Sommità | 14    | -32561,6                | -0,0                      | -133776,8                 | 0,07  |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>1,2</sub><br>[kgm] | M <sub>1,3</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|---------------------------|---------------------------|---------------|
| Base    |              |           |                           |                           |               |
| sc Max  | 32           | -40533,4  | -0,0                      | -962,0                    | -2,7          |
| sc Med  | 32           | -40533,4  | -0,0                      | -962,0                    | -2,6          |
| st      | 24           | -39408,6  | -0,0                      | -9763,4                   | -26,7         |
| sc      | 32           | -40533,4  | -0,0                      | -962,0                    | -40,2         |
| Sommità |              |           |                           |                           |               |
| sc Max  | 32           | -40533,4  | -0,0                      | -962,0                    | -2,7          |
| sc Med  | 32           | -40533,4  | -0,0                      | -962,0                    | -2,6          |
| st      | 24           | -39408,6  | -0,0                      | -9763,4                   | -26,7         |
| sc      | 32           | -40533,4  | -0,0                      | -962,0                    | -40,2         |

▲Verifiche a taglio dei diaframmi

| Diaframma | B<br>(m)                      | H<br>(m) | Comb.<br>critica | V <sub>ed</sub><br>[kg] | α        | V <sub>ed</sub><br>[kg] | N <sub>ed</sub><br>[kg] | M <sub>ed</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>M<sub>ed</sub>, scissamento</sub><br>[kg] | S/R      |     |      |
|-----------|-------------------------------|----------|------------------|-------------------------|----------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------------------------------|----------|-----|------|
|           | 1792-1970-2293-2652-3065-3208 | 5,00     | 0,94             | 19                      | -37895,8 | 1,00                    | -37895,8                | -45786,8                 | -100507,3                | 554372,4                                         | 263936,8 | 0,0 | 0,14 |

▲NUCLEO 6483 6482 6481 6480 6479 6478 / Nodi: 1797 1969 2291 2650 3063 3463

▲Armature Nucleo

| Nodi      | Sezione<br>Numero | B<br>[cm] | H<br>[cm] | Spessore<br>[cm] | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|-------------------|-----------|-----------|------------------|-----------------------|-------------------------|
| 1797 1969 | 3                 | 100       | 94        | 25               | 2x ø 18 15'           | 2x ø 12 15'             |

| Nodi      | Sezione<br>Numero | B                      | H                        | Spessore<br>[cm]         | Armatura    |             | Sd/Sr |
|-----------|-------------------|------------------------|--------------------------|--------------------------|-------------|-------------|-------|
|           |                   |                        |                          |                          | Verticale   | Orizzontale |       |
| 1631.1967 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 1967.2275 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 2275.2612 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 2612.2938 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 2938.2022 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| Sezione   | Comb.             | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr       |             |       |
|           |                   |                        |                          |                          |             |             |       |
| Base      | 18                | 1962.7                 | 0.0                      | 3795.38                  |             | 0.03        |       |
| Somma     | 14                | 3611.4                 | -0.0                     | -50240.4                 |             | 0.04        |       |

| S.L.E. | Combinazione |         | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|---------|-----------|--------------------------|--------------------------|---------------|
| Base   | 24           | -756.5  | -0.0      | -964.2                   | -0.1                     |               |
| sc Max | 25           | -1210.5 | 0.0       | 52.9                     | -0.1                     |               |
| sc Med | 31           | -1712.0 | 0.0       | 1437.6                   | 0.0                      |               |
| st     | 24           | -756.5  | -0.0      | -964.2                   | -1.9                     |               |
| Somma  |              |         |           |                          |                          |               |
| sc Max | 24           | -756.5  | -0.0      | -964.2                   | -0.1                     |               |
| sc Med | 25           | -1210.5 | 0.0       | 52.9                     | -0.1                     |               |
| st     | 31           | -1712.0 | 0.0       | 1437.6                   | 0.0                      |               |
| sc     | 24           | -756.5  | -0.0      | -964.2                   | -1.9                     |               |

▲Verifiche a taglio dei diaframmi

| Diaframma                     |  | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>[kg] | α    | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>u2</sub><br>[kg] | S/R      |
|-------------------------------|--|----------|----------|-------|------------------------|------|------------------------|--------------------------|--------------------------|--------------------------|-------------------------|----------|
| 1631-1967-2275-2612-2938-3202 |  | 5.00     | 0.94     | 14    | 18456.6                | 1.00 | 18456.6                | 3777.6                   | 33778.4                  | 554372.4                 | 263936.8                | 0.0 0.07 |

▲NUCLEO 6970 6969 6968 6967 6966 6965 / Nodi: 1630 1966 2274 2611 2937 3201

| Nodi      | Sezione<br>Numero | B                      | H                        | Spessore<br>[cm]         | Armatura    |             | Sd/Sr |
|-----------|-------------------|------------------------|--------------------------|--------------------------|-------------|-------------|-------|
|           |                   |                        |                          |                          | Verticale   | Orizzontale |       |
| 1630.1966 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 1966.2274 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 2274.611  | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 2611.2937 | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| 2937.201  | 3                 | 100                    | 94                       | 25                       | 2x ø 18 15' | 2x ø 12 15' |       |
| Sezione   | Comb.             | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr       |             |       |
|           |                   |                        |                          |                          |             |             |       |
| Base      | 14                | 4157.6                 | -0.0                     | -48077.1                 | 0.04        |             |       |
| Somma     | 14                | 6847.8                 | -0.0                     | -68674.2                 | 0.05        |             |       |

| S.L.E. | Combinazione |        | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|--------|-----------|--------------------------|--------------------------|---------------|
| Base   | 32           | 680.7  | 0.0       | 626.2                    | -0.0                     |               |
| sc Max | 22           | 2540.5 | -0.0      | -2848.3                  | 0.0                      |               |
| sc Med | 32           | 680.7  | 0.0       | 626.2                    | 7.0                      |               |
| st     | 32           | 680.7  | 0.0       | 626.2                    | -0.2                     |               |
| sc     |              |        |           |                          |                          |               |
| Somma  |              |        |           |                          |                          |               |
| sc Max | 32           | 680.7  | 0.0       | 626.2                    | -0.0                     |               |
| sc Med | 22           | 2540.5 | -0.0      | -2848.3                  | 0.0                      |               |
| st     | 32           | 680.7  | 0.0       | 626.2                    | 7.0                      |               |
| sc     | 32           | 680.7  | 0.0       | 626.2                    | -0.2                     |               |

▲Verifiche a taglio dei diaframmi

| Diaframma |  | α | S/R |
|-----------|--|---|-----|
|-----------|--|---|-----|

| B                             |  | H    | Comb. | V <sub>u</sub><br>[kg] | V <sub>u2</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | V <sub>u1</sub><br>[kg] | V <sub>u2</sub><br>[kg] | V <sub>u2</sub> accidentale<br>[kg] | S/R      |
|-------------------------------|--|------|-------|------------------------|-------------------------|------------------------|--------------------------|-------------------------|-------------------------|-------------------------------------|----------|
| 1630-1966-2274-2611-2937-3201 |  | 5.00 | 0.94  | 14                     | 17945.3                 | 1.00                   | 17945.3                  | 4157.6                  | 554372.4                | 263936.8                            | 0.0 0.07 |

▲NUCLEO 120 119 118 117 116 115 114 90 67 49 48 47 46 45 44 43 / Nodi: 5890 6057 6022 6021 6020 6019 6018 6264 6643 5982 6297 6678 6949 6958 6959 6960

| Nodi      | Sezione<br>Numero | B                      | H<br>[cm]                | Spessore<br>[cm]         | Armatura<br>Verticale    |                          | Armatura<br>Orizzontale | Sd/Sr |
|-----------|-------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------|
|           |                   |                        |                          |                          | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] |                         |       |
| 5890.6057 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6057.6022 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6022.6021 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6021.6020 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6020.6019 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6019.6018 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6018.6264 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6264.6643 | 1                 | 103                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 5982.6297 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6297.6678 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6678.6949 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6949.6958 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6958.6959 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6959.6960 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| 6643.6960 | 1                 | 100                    | 94                       | 35                       | 2x ø 20.15'              | 2x ø 14.15'              |                         |       |
| Sezione   | Comb.             | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | Sd/Sr                    |                          |                         |       |
| Base      | 15                | -879604.8              | 403171.3                 | 1724031.9                | 0.19                     |                          |                         |       |
| Somma     | 15                | -868785.1              | 355017.1                 | 1534938.4                | 0.18                     |                          |                         |       |

| S.L.E. | Combinazione |            | N<br>[kg] | M <sub>u2</sub><br>[kgm] | M <sub>u1</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|------------|-----------|--------------------------|--------------------------|---------------|
| Base   | 32           | -1046997.5 | -4441.7   | 426224.0                 | -22.7                    |               |
| sc Max | 32           | -1046997.5 | -4441.7   | 426224.0                 | -164                     |               |
| sc Med | 26           | -1056985.5 | -168331.5 | 651293.4                 | -113.9                   |               |
| st     | 32           | -1046997.5 | -4441.7   | 426224.0                 | -339.9                   |               |
| Somma  |              |            |           |                          |                          |               |
| sc Max | 32           | -1046997.5 | -4441.7   | 426224.0                 | -22.7                    |               |
| sc Med | 32           | -1046997.5 | -4441.7   | 426224.0                 | -164                     |               |
| st     | 26           | -1056985.5 | -168331.5 | 651293.4                 | -113.9                   |               |
| sc     | 32           | -1046997.5 | -4441.7   | 426224.0                 | -339.9                   |               |

▲Verifiche a taglio dei diaframmi

| Diaframma                          |  | B<br>[m] | H<br>[m] | Comb. | V <sub>u</sub><br>[kg] | α    | N <sub>u</sub><br>[kg] | M <sub>u2</sub><br>[kgm] | V <sub>u1</sub><br>[kg] | V <sub>u2</sub><br>[kg] | V <sub>u2</sub> accidentale<br>[kg] | S/R  |
|------------------------------------|--|----------|----------|-------|------------------------|------|------------------------|--------------------------|-------------------------|-------------------------|-------------------------------------|------|
| 6018-6264-6643-6960                |  | 3.03     | 0.94     | 20    | -61105.6               | 1.00 | -61105.6               | -310717.3                | 63431.7                 | 469157.9                | 217161.5                            | 0.28 |
| 5982-6297-6678-6949-6959-6960      |  | 6.00     | 0.94     | 15    | 124780.4               | 1.00 | 124780.4               | -364597.1                | -94219.8                | 932282.6                | 431530.4                            | 0.29 |
| 5890-6057-6022-6021-6020-6019-6018 |  | 6.00     | 0.94     | 5     | 154895.5               | 1.00 | 154895.5               | 576290.2                 | 413008.8                | 932282.6                | 431530.4                            | 0.36 |

▲NUCLEO 216 215 214 213 212 211 210 208 206 193 192 191 190 189 188 187 / Nodi: 6063 6064 6104 6103 6200 6203 6206 6265 6644 6332 6334 6676 6951 7142 7144 6961

| Nodi      | Sezione |     | B<br>Numero | H<br>[cm] | Spessore<br>[cm] | Armatura    |             | Sd/Sr |
|-----------|---------|-----|-------------|-----------|------------------|-------------|-------------|-------|
|           |         |     |             |           |                  | Verticale   | Orizzontale |       |
| 6063.6064 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6064.6104 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6104.6103 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6103.6200 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6200.6203 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6203.6206 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6206.6265 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6265.6644 | 1       | 103 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |
| 6332.6334 | 1       | 100 | 94          | 35        | 2x ø 20 15'      | 2x ø 14 15' |             |       |



▲Armature Nudo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|------|----|----|-------------|--------------------|----------------------|
|           | Numero  | [cm] |    |    |             |                    |                      |
| 5704 5705 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5705 5706 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5706 5857 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5857 5859 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5859 5860 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5860 5861 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5861 6283 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6283 6669 | 1       | 103  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6017 6247 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6247 6585 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6585 6913 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6913 6932 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6932 6933 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6933 6934 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6669 6934 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |

| Sezione |   | Comb.      | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|---|------------|------------------------|--------------------------|--------------------------|-------|
|         |   |            |                        |                          |                          |       |
| Base    | 4 | -1267945.9 | -2689757               | 812497.3                 | 0.16                     |       |
| Sommità | 4 | -1251913.4 | -2452652               | 711264.3                 | 0.16                     |       |

| S.L.E.  | Combinazione | N         | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm <sup>2</sup> ] |        |
|---------|--------------|-----------|--------------------------|--------------------------|----------------------------|--------|
| Base    | 32           | -958236.3 | -367777                  | 225440.3                 | -18.8                      |        |
|         | sc Max       | 32        | -958236.3                | -367777                  | 225440.3                   | -15.0  |
|         | sc Med       | 25        | -960151.1                | -184341.2                | 568565.1                   | -101.0 |
|         | sc           | 32        | -958236.3                | -367777                  | 225440.3                   | -281.3 |
| Sommità | 32           | -958236.3 | -367777                  | 225440.3                 | -18.8                      |        |
|         | sc Max       | 32        | -958236.3                | -367777                  | 225440.3                   | -15.0  |
|         | sc Med       | 25        | -960151.1                | -184341.2                | 568565.1                   | -101.0 |
|         | sc           | 32        | -958236.3                | -367777                  | 225440.3                   | -281.3 |

▲Verifiche a taglio dei diaframmi

| Diaframma                          |       | B    | H  | Comb.    | V <sub>cr</sub><br>[cm] | α        | V <sub>cr</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | V <sub>cr,max</sub><br>[kg] | V <sub>cr,min</sub><br>[kg] | S/R |
|------------------------------------|-------|------|----|----------|-------------------------|----------|-------------------------|------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|-----|
|                                    |       |      |    |          |                         |          |                         |                        |                          |                          |                             |                             |     |
| 5861 6283 6669 6934                | 3 03  | 0.94 | 20 | -73656.8 | 1.00                    | -73656.8 | -26545.09               | 48580.0                | 469357.9                 | 217161.5                 | 0.0                         | 0.34                        |     |
| 6017 6247 6585 6913 6932 6933 6934 | 6 00  | 0.94 | 15 | 143808.7 | 1.00                    | 143808.7 | -12861.2                | 932282.6               | 431530.4                 | 0.0                      | 0.33                        |                             |     |
| 5704 5705 5706 5857 5859 5860 5861 | 16 00 | 0.94 | 14 | 110499.6 | 1.00                    | 110499.6 | -253641.8               | -98727.1               | 932282.6                 | 431530.4                 | 0.0                         | 0.36                        |     |

▲NUCLEO 1049 1048 1047 1046 1045 1044 1043 1041 1039 1026 1025 1024 1023 1022 1021 1020 / Nodi:  
5729 5730 5788 5858 6196 6201 6204 6284 6670 6102 6246 6584 6611 6929 7134 6930

▲Armature Nudo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|------|----|----|-------------|--------------------|----------------------|
|           | Numero  | [cm] |    |    |             |                    |                      |
| 5729 5730 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5730 5788 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5788 5858 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 5858 6196 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6196 6201 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6201 6204 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6204 6284 | 1       | 103  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6284 6670 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6102 6246 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6246 6584 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6584 6611 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6611 6929 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6929 7134 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 7134 6930 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |
| 6670 6930 | 1       | 100  | 94 | 35 | 2x ø 20 15' | 2x ø 14 15'        |                      |

| Sezione |   | Comb.      | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|---|------------|------------------------|--------------------------|--------------------------|-------|
|         |   |            |                        |                          |                          |       |
| Base    | 4 | -1267945.9 | -2689757               | 812497.3                 | 0.16                     |       |
| Sommità | 4 | -1251913.4 | -2452652               | 711264.3                 | 0.16                     |       |



▲Verifiche a taglio dei diaframmi

| Diaframma                          |      | B    | H  | Comb.    | V <sub>cr</sub><br>[cm] | α        | V <sub>cr</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | V <sub>cr,max</sub><br>[kg] | V <sub>cr,min</sub><br>[kg] | S/R |
|------------------------------------|------|------|----|----------|-------------------------|----------|-------------------------|------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|-----|
|                                    |      |      |    |          |                         |          |                         |                        |                          |                          |                             |                             |     |
| 6204 6284 6670 6930                | 3 03 | 0.94 | 20 | -75750.2 | 1.00                    | -75750.2 | -248873.2               | 43730.9                | 469157.9                 | 217161.5                 | 0.0                         | 0.35                        |     |
| 6102 6246 6584 6611 6929 7134 6930 | 6 00 | 0.94 | 15 | 144664.6 | 1.00                    | 144664.6 | -319476.6               | 46214.7                | 932282.6                 | 431530.4                 | 0.0                         | 0.34                        |     |
| 5729 5730 5788 5858 6196 6201 6204 | 6 00 | 0.94 | 14 | 115155.7 | 1.00                    | 115155.7 | -253413.3               | -37357.8               | 932282.6                 | 431530.4                 | 0.0                         | 0.27                        |     |

▲NUCLEO 1109 1108 1107 1106 1105 1104 1103 1101 1099 1086 1085 1084 1083 1082 1081 1080 / Nodi:  
5723 5724 5787 6114 6197 6489 6491 6620 6671 6092 6245 6248 6610 6928 7133 6931

▲Armature Nucleo

| Nodi      | Sezione |     | Numero | B  | H           | Spessore    | Armatura Verticale | Armatura Orizzontale |
|-----------|---------|-----|--------|----|-------------|-------------|--------------------|----------------------|
|           |         |     |        |    |             |             |                    |                      |
| 5723 5724 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 5724 5787 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 5787 6114 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6114 6197 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6197 6489 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6489 6491 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6491 6620 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6620 6671 | 1       | 103 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6092 6245 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6245 6248 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6248 6610 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6610 6928 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6928 7133 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 7133 6931 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |
| 6671 6931 | 1       | 100 | 94     | 35 | 2x ø 20 15' | 2x ø 14 15' |                    |                      |

| Sezione |   | Comb.      | N <sub>u</sub><br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | Sd/Sr |
|---------|---|------------|------------------------|--------------------------|--------------------------|-------|
|         |   |            |                        |                          |                          |       |
| Base    | 4 | -1235880.5 | -219553.6              | 610036.6                 | 0.15                     |       |
| Sommità | 4 | -1215847.9 | -195823.4              | 538803.4                 | 0.14                     |       |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>12</sub><br>[kgm] | M <sub>13</sub><br>[kgm] | σ<br>[kg/cm²] |        |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|--------|
| Base    | 32           | -933570.6 | -41672.1                 | 125366.8                 | -17.0         |        |
|         | sc Max       | 32        | -933570.6                | -41672.1                 | 125366.8      | -14.6  |
|         | sc Med       | 25        | -935485.4                | -15213.8                 | 421558.2      | -124.1 |
|         | sc           | 32        | -933570.6                | -41672.1                 | 125366.8      | -254.6 |
| Sommità |              |           |                          |                          |               |        |
| sc      | 32           | -933570.6 | -41672.1                 | 125366.8                 | -17.0         |        |
|         | sc Max       | 32        | -933570.6                | -41672.1                 | 125366.8      | -14.6  |
|         | sc Med       | 25        | -935485.4                | -15213.8                 | 421558.2      | -124.1 |
|         | sc           | 32        | -933570.6                | -41672.1                 | 125366.8      | -254.6 |

▲Verifiche a taglio dei diaframmi

| Diaframma                          | B    |      | H  | Comb.     | V <sub>ca</sub><br>[kg] | α         | V <sub>ca</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u1</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>Max,verif.anno</sub> |      | S/R |
|------------------------------------|------|------|----|-----------|-------------------------|-----------|-------------------------|------------------------|--------------------------|--------------------------|-----------------------------|------|-----|
|                                    | [m]  | [m]  |    |           |                         |           |                         |                        |                          |                          | [kg]                        | [kg] |     |
| 6491-6620-6671-6931                | 3.03 | 0.94 | 20 | -75664.7  | 1.00                    | -75664.7  | 1234082.4               | 35584.5                | 469157.9                 | 217161.5                 | 0.0                         | 0.35 |     |
| 6092-6245-6248-6610-6928-7133-6931 | 6.00 | 0.94 | 15 | 144369.0  | 1.00                    | 144369.0  | 311731.2                | 104312.3               | 93282.6                  | 431530.4                 | 0.0                         | 0.33 |     |
| 5723-5724-5787-6114-6197-6489-6491 | 6.00 | 0.94 | 14 | 1144848.0 | 1.00                    | 1144848.0 | 277784.8                | 52954.2                | 193282.6                 | 431530.4                 | 0.0                         | 0.27 |     |

▲ANUCLEO 1169 1168 1167 1166 1165 1164 1163 1161 1159 1146 1145 1144 1143 1142 1141 1140 / Nodi:  
5683 5684 5786 6113 6476 6480 6510 6655 6903 5969 5970 6184 6605 6925 6926 6927

▲Armature Nucleo

| Nodi      | Sezione |       | B  | H  | Spessore<br>[cm] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | N <sub>u</sub><br>[kg] | Armatura  |           | Armatura<br>Orizzontale |
|-----------|---------|-------|----|----|------------------|--------------------------|--------------------------|------------------------|-----------|-----------|-------------------------|
|           | Numero  | Comb. |    |    |                  |                          |                          |                        | Verticale | Verticale |                         |
| 5683 5684 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 5684 5786 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 5786 6113 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6113 6476 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6476 6480 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6480 6510 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6510 6655 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6655 6903 | 1       | 103   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 5969 5970 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 5970 6184 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6184 6605 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6605 6925 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6925 6926 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6926 6927 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6903 6927 | 1       | 100   | 94 | 35 | 2x ø 20 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |

| Sezione |   | Comb. | N <sub>u</sub><br>[kg] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | Sd/Sr |      |
|---------|---|-------|------------------------|--------------------------|--------------------------|-------|------|
|         |   |       |                        |                          |                          | [kgm] | [kg] |
| Base    | 4 |       | -1219847.8             | -195851.7                | 508805.1                 | 0.14  |      |
| Sommità | 4 |       | -1203815.1             | -172127.5                | 407573.8                 | 0.14  |      |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
|         |              |           |                          |                          |               |
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -921237.8 | -441205                  | 75330.9                  | -16.1         |
| sc Med  | 32           | -921237.8 | -441205                  | 75330.9                  | -14.4         |
| st      | 25           | -923152.6 | -137663.2                | 348009.2                 | -135.7        |
| sc      | 32           | -921237.8 | -441205                  | 75330.9                  | -241.2        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -921237.8 | -441205                  | 75330.9                  | -16.1         |
| sc Med  | 32           | -921237.8 | -441205                  | 75330.9                  | -14.4         |
| st      | 25           | -923152.6 | -137663.2                | 348009.2                 | -135.7        |
| sc      | 32           | -921237.8 | -441205                  | 75330.9                  | -241.2        |

▲Verifiche a taglio dei diaframmi

| Diaframma                          | B    |      | H  | Comb.    | V <sub>ca</sub><br>[kg] | α        | V <sub>ca</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u1</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>Max,verif.anno</sub> |      | S/R |
|------------------------------------|------|------|----|----------|-------------------------|----------|-------------------------|------------------------|--------------------------|--------------------------|-----------------------------|------|-----|
|                                    | [m]  | [m]  |    |          |                         |          |                         |                        |                          |                          | [kg]                        | [kg] |     |
| 6510-6655-6903-6927                | 3.03 | 0.94 | 21 | -64870.8 | 1.00                    | -64870.8 | 1201230.61              | 29634.1                | 469157.9                 | 217161.5                 | 0.0                         | 0.30 |     |
| 5969-5970-6184-6605-6925-6926-6927 | 6.00 | 0.94 | 15 | 142534.2 | 1.00                    | 142534.2 | 312450.5                | 104254.6               | 93282.6                  | 431530.4                 | 0.0                         | 0.33 |     |
| 5683-5684-5786-6113-6476-6480-6510 | 6.00 | 0.94 | 14 | 1083796  | 1.00                    | 1083796  | 294597.7                | 168133.2               | 193282.6                 | 431530.4                 | 0.0                         | 0.25 |     |

▲ANUCLEO 1553 1552 1551 1550 1549 1548 1547 1526 1505 1478 1477 1476 1475 1474 1473 1472 / Nodi:  
5361 5505 5739 6112 6122 6268 6269 6656 6938 5707 5846 6170 6604 6612 6937 7125

▲Armature Nucleo

| Nodi      | Sezione |       | B  | H  | Spessore<br>[cm] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | N <sub>u</sub><br>[kg] | Armatura  |           | Armatura<br>Orizzontale |
|-----------|---------|-------|----|----|------------------|--------------------------|--------------------------|------------------------|-----------|-----------|-------------------------|
|           | Numero  | Comb. |    |    |                  |                          |                          |                        | Verticale | Verticale |                         |
| 5361 5505 | 2       | 100   | 94 | 30 | 2x ø 18 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 5505 5739 | 2       | 100   | 94 | 30 | 2x ø 18 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 5739 6112 | 2       | 100   | 94 | 30 | 2x ø 18 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6112 6122 | 2       | 100   | 94 | 30 | 2x ø 18 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6122 6268 | 2       | 100   | 94 | 30 | 2x ø 18 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |
| 6268 6269 | 2       | 100   | 94 | 30 | 2x ø 18 15'      |                          |                          |                        |           |           | 2x ø 14 15'             |

|           |   |     |    |    |             |             |
|-----------|---|-----|----|----|-------------|-------------|
| 6269 6656 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 6656 6938 | 2 | 103 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 5707 5846 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 5846 6170 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 6170 6604 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 6604 6612 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 6612 6937 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 6937 7125 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |
| 6938 7125 | 2 | 100 | 94 | 30 | 2x ø 18 15' | 2x ø 14 15' |

| Sezione |   | Comb. | N <sub>u</sub><br>[kg] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | Sd/Sr |      |
|---------|---|-------|------------------------|--------------------------|--------------------------|-------|------|
|         |   |       |                        |                          |                          | [kgm] | [kg] |
| Base    | 4 |       | -1133765.6             | -206003.8                | 468610.3                 | 0.16  |      |
| Sommità | 4 |       | -1200231               | -179837.7                | 395546.1                 | 0.15  |      |

| S.L.E.  | Combinazione | N<br>[kg] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | σ<br>[kg/cm²] |
|---------|--------------|-----------|--------------------------|--------------------------|---------------|
|         |              |           |                          |                          |               |
| Base    |              |           |                          |                          |               |
| sc Max  | 32           | -855845.1 | -44522.9                 | 58883.1                  | -17.5         |
| sc Med  | 32           | -855845.1 | -44522.9                 | 58883.1                  | -15.8         |
| st      | 25           | -858327.1 | -144512.4                | 319118.1                 | -146.7        |
| sc      | 32           | -855845.1 | -44522.9                 | 58883.1                  | -261.8        |
| Sommità |              |           |                          |                          |               |
| sc Max  | 32           | -855845.1 | -44522.9                 | 58883.1                  | -17.5         |
| sc Med  | 32           | -855845.1 | -44522.9                 | 58883.1                  | -15.8         |
| st      | 25           | -858327.1 | -144512.4                | 319118.1                 | -146.7        |
| sc      | 32           | -855845.1 | -44522.9                 | 58883.1                  | -261.8        |

▲Verifiche a taglio dei diaframmi

| Diaframma                          | B    |      | H  | Comb.    | V <sub>ca</sub><br>[kg] | α        | V <sub>ca</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u1</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>Max,verif.anno</sub> |      | S/R |
|------------------------------------|------|------|----|----------|-------------------------|----------|-------------------------|------------------------|--------------------------|--------------------------|-----------------------------|------|-----|
|                                    | [m]  | [m]  |    |          |                         |          |                         |                        |                          |                          | [kg]                        | [kg] |     |
| 6269-6656-6938-7125                | 3.03 | 0.94 | 17 | 62342.7  | 1.00                    | 62342.7  | 150805.3                | 41347.2                | 402135.3                 | 217161.5                 | 0.0                         | 0.29 |     |
| 5707-5846-6170-6604-6612-6937-7125 | 6.00 | 0.94 | 15 | 126998.2 | 1.00                    | 126998.2 | 276967.5                | 94056.1                | 299099.4                 | 431530.4                 | 0.0                         | 0.29 |     |
| 5361-5505-5739-6112-6122-6268-6269 | 6.00 | 0.94 | 14 | 92385.3  | 1.00                    | 92385.3  | 265509.4                | 73375.1                | 799099.4                 | 431530.4                 | 0.0                         | 0.21 |     |

▲ANUCLEO 1882 1881 1880 1879 1878 1877 1876 1874 1872 1859 1858 1857 1856 1855 1854 1853 / Nodi:  
5407 5504 5738 5754 6121 6479 6648 6657 6939 5731 5845 6169 6185 6609 6936 7136

▲Armature Nucleo

| Nodi      | Sezione |     | B<br>[mm] | H<br>[mm] | Spessore<br>[cm] | Armatura    |  | Armatura<br>Orizzontale |
|-----------|---------|-----|-----------|-----------|------------------|-------------|--|-------------------------|
|           | Numero  |     |           |           |                  | Verticale   |  |                         |
| 5407/5504 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 5504/5738 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 5738/5754 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 5754/6121 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6121/6479 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6479/6648 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6648/6657 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6657/6939 | 2       | 103 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 5731/5845 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 5845/6169 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6169/6185 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6185/6609 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6609/6936 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6936/7136 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |
| 6939/7136 | 2       | 100 | 94        | 30        | 2x ø 18 15'      | 2x ø 14 15' |  |                         |

| Sezione |   | Comb. | N <sub>u</sub><br>[kg] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | Sd/Sr |      |
|---------|---|-------|------------------------|--------------------------|--------------------------|-------|------|
|         |   |       |                        |                          |                          | [kgm] | [kg] |
| Base    | 4 |       | -1200234               | -385542.5                | 179833.1                 | 0.15  |      |
| Sommità | 4 |       | -1106281.0             | -153668.7                | 302475.7                 | 0.15  |      |

| S.L.E. | Combinazione | N<br>[kg] | M <sub>u1</sub><br>[kgm] | M <sub>u2</sub><br>[kgm] | σ<br>[kg/cm²] |
|--------|--------------|-----------|--------------------------|--------------------------|---------------|
|        |              |           |                          |                          |               |
| Base   |              |           |                          |                          |               |
| sc Max | 32           | -845274.1 | -42945.7                 | 39988.3                  | -16.9         |

ANUCLEO 2002 2001 2000 1999 1998 1997 1996 1994 1992 1979 1978 1977 1976 1975 1974 1973 / Nodi:  
5341 5342 5459 5752 6119 6166 6649 6922 7132 5681 5682 5843 6182 6607 6674 6923

AArmature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|-------------|-----------------------|-------------------------|
|           | Numero  | [cm] |    |    |             |                       |                         |
| 5341 5342 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5342 5459 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5459 5752 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5752 6119 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6119 6166 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6166 6649 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6649 6922 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6922 7132 | 2       | 103  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5681 5682 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5682 5843 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5843 6182 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6182 6607 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6607 6674 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6674 6923 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 7132 6923 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |

| Sezione | Comb. | N <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | Sd/Sr |
|---------|-------|----------------|----------------|----------------|----------------|-------|
|         |       | [kg]           | [kgm]          | [kgm]          | [kgm]          |       |
| Base    | 1     | -117381.19     | -107582.5      | 234113.5       | 0.14           |       |
| Sommità | 1     | -116069.95     | -85902.2       | -168562        | 0.14           |       |

| S.L.E.  | Combinazione | N         | M <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | σ        |
|---------|--------------|-----------|----------------|----------------|----------------|----------|
|         |              | [kg]      | [kgm]          | [kgm]          | [kgm]          | [kg/cm²] |
| Base    |              |           |                |                |                |          |
| sc Max  | 32           | -824132.2 | -39790.5       | 2205.1         | -15.8          |          |
| sc Med  | 32           | -824132.2 | -39790.5       | 2205.1         | -15.2          |          |
| st      | 25           | -82661.41 | -91358.9       | 146258.5       | -181.3         |          |
| sc      | 32           | -824132.2 | -39790.5       | 2205.1         | -237.3         |          |
| Sommità |              |           |                |                |                |          |
| sc Max  | 32           | -824132.2 | -39790.5       | 2205.1         | -15.8          |          |
| sc Med  | 32           | -824132.2 | -39790.5       | 2205.1         | -15.2          |          |
| st      | 25           | -82661.41 | -91358.9       | 146258.5       | -181.3         |          |
| sc      | 32           | -824132.2 | -39790.5       | 2205.1         | -237.3         |          |

▲ Verifiche a taglio dei diaframmi

| Diaframma | B | H | Comb. | V <sub>u</sub><br>[m] | α | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kg] | V <sub>u</sub><br>[kg] | V <sub>u</sub><br>[kg] | S/R |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  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    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     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|-----------|---|---|-------|-----------------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|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|           |   |   |       |                       |   |                        |                        |                        |                        |                        |     | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] 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[m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] | [m] |

ANUCLEO 2386 2385 2384 2383 2382 2381 2380 2359 2338 2311 2310 2309 2308 2307 2306 2305 / Nodi:  
5021 5160 5457 5751 5827 6165 6651 6920 6924 5360 5676 5842 6181 6285 6673 6947

AArmature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|-------------|-----------------------|-------------------------|
|           | Numero  | [cm] |    |    |             |                       |                         |
| 5021 5160 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5160 5457 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5457 5751 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5751 5827 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5827 6165 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6165 6651 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6651 6920 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6920 6924 | 2       | 103  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5360 5676 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5676 5842 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5842 6181 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6181 6285 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6285 6673 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |

|         |    |           |           |          |        |  |
|---------|----|-----------|-----------|----------|--------|--|
| sc Med  | 32 | -845274.1 | -4294.57  | 39988.3  | -15.6  |  |
| st      | 25 | -847756.1 | -12679.22 | 261495.6 | -158.2 |  |
| sc      | 32 | -845274.1 | -4294.57  | 39988.3  | -253.6 |  |
| Sommità |    |           |           |          |        |  |
| sc Max  | 32 | -845274.1 | -4294.57  | 39988.3  | -16.9  |  |
| sc Med  | 32 | -845274.1 | -4294.57  | 39988.3  | -15.6  |  |
| st      | 25 | -847756.1 | -12679.22 | 261495.6 | -158.2 |  |
| sc      | 32 | -845274.1 | -4294.57  | 39988.3  | -253.6 |  |

▲ Verifiche a taglio dei diaframmi

| Diaframma | B<br>[m]                           | H<br>[m] | Comb. | V <sub>u</sub><br>[kg] | α        | V <sub>u</sub><br>[kg] | N <sub>u</sub><br>[kg] | M <sub>u</sub><br>[kgm] | V <sub>red</sub><br>[kg] | V <sub>max</sub><br>[kg] | S/R<br>[g/g] |     |      |
|-----------|------------------------------------|----------|-------|------------------------|----------|------------------------|------------------------|-------------------------|--------------------------|--------------------------|--------------|-----|------|
|           |                                    |          |       |                        |          |                        |                        |                         |                          |                          |              |     |      |
|           | 6648-6657-6939-7136                | 3.03     | 0.94  | 17                     | 71324.1  | 100                    | 71324.1                | 150449.0                | -23976.1                 | 402335.3                 | 217161.5     | 0.0 | 0.33 |
|           | 5731-5845-6169-6185-6609-6936-7136 | 6.00     | 0.94  | 15                     | 127640.5 | 100                    | 127640.5               | 276128.7                | 141178.9                 | 799099.4                 | 431530.4     | 0.0 | 0.30 |
|           | 5407-5504-5738-5754-6121-6478-6648 | 6.00     | 0.94  | 14                     | 96417.8  | 100                    | 96417.8                | 250325.3                | 111255.9                 | 799099.4                 | 431530.4     | 0.0 | 0.22 |

ANUCLEO 1942 1941 1940 1939 1938 1937 1936 1934 1932 1919 1918 1917 1916 1915 1914 1913 / Nodi:  
5400 5503 5506 5753 6120 6478 6650 6921 6940 5722 5844 5847 6183 6608 6935 6941

AArmature Nucleo

| Nodi      | Sezione |      | B  | H  | Spessore    | Armatura<br>Verticale | Armatura<br>Orizzontale |
|-----------|---------|------|----|----|-------------|-----------------------|-------------------------|
|           | Numero  | [cm] |    |    |             |                       |                         |
| 5400 5503 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5503 5506 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5506 5753 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5753 6120 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6120 6478 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6478 6650 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6650 6921 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6921 6940 | 2       | 103  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5722 5844 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5844 5847 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 5847 6183 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6183 6608 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6608 6935 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6935 6941 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |
| 6940 6941 | 2       | 100  | 94 | 30 | 2x ø 18.15' | 2x ø 14.15'           |                         |

| Sezione | Comb. | N <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | Sd/Sr |
|---------|-------|----------------|----------------|----------------|----------------|-------|
|         |       | [kg]           | [kgm]          | [kgm]          | [kgm]          |       |
| Base    | 4     | -1106281.0     | -15368.7       | 302475.6       | 0.15           |       |
| Sommità | 1     | -1173811.8     | -107596.7      | 234172         | 0.14           |       |

| S.L.E.  | Combinazione | N         | M <sub>u</sub> | M <sub>u</sub> | M <sub>u</sub> | σ        |
|---------|--------------|-----------|----------------|----------------|----------------|----------|
|         |              | [kg]      | [kgm]          | [kgm]          | [kgm]          | [kg/cm²] |
| Base    |              |           |                |                |                |          |
| sc Max  | 32           | -834703.1 | -41366.1       | 21094.7        | -16.4          |          |
| sc Med  | 32           | -834703.1 | -41366.1       | 21094.7        | -15.4          |          |
| st      | 25           | -837185.1 | -10908.31      | 203879.0       | -169.8         |          |
| sc      | 32           | -834703.1 | -41366.1       | 21094.7        | -245.5         |          |
| Sommità |              |           |                |                |                |          |
| sc Max  | 32           | -834703.1 | -41366.1       | 21094.7        | -16.4          |          |
| sc Med  | 32           | -834703.1 | -41366.1       | 21094.7        | -15.4          |          |
| st      | 25           | -837185.1 | -10908.31      | 203879.0       | -169.8         |          |
| sc      | 32           | -834703.1 | -41366.1       | 21094.7        | -245.5         |          |

▲ Verifiche a taglio dei diaframmi

| Diaframma | B                                  | H    | Comb. | V <sub>u</sub> | α        | V <sub>u</sub> | N <sub>u</sub> | M <sub>u</sub> | V <sub>u</sub> | V <sub>u</sub> | S/R      |     |      |
|-----------|------------------------------------|------|-------|----------------|----------|----------------|----------------|----------------|----------------|----------------|----------|-----|------|
|           |                                    |      |       |                |          |                |                |                |                |                |          | [m] | [m]  |
|           | 6650-6921-6940-6941                | 3.03 | 0.94  | 17             | 70924.8  | 100            | 70924.8        | 154634.8       | -19667.8       | 402335.3       | 217161.5 | 0.0 | 0.33 |
|           | 5722-5844-5847-6183-6608-6935-6941 | 6.00 | 0.94  | 15             | 127263.1 | 100            | 127263.1       | 253372.7       | 188036.5       | 799099.4       | 431530.4 | 0.0 | 0.29 |
|           | 5400-5503-5506-5753-6120-6478-6650 | 6.00 | 0.94  | 14             | 96211.5  | 100            | 96211.5        | 281850.0       | 1226508.8      | 799099.4       | 431530.4 | 0.0 | 0.22 |