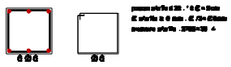
P'2

Q = 442.20 KN

N = 442.20-1-1.05 = 464.31 KN

$A = \frac{464.31 \cdot 10}{20.72} = 224.09\ cm^2$ ⇒ _ATO A = 15 cm
_ATO B = 15 cm

As = 6.868-15-1.5 = 1.8 cm² ⇒ 6 Ø 8



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/9 = 42 ∆

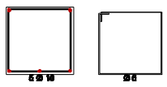
P''

Q = 442.20 KN

N = 442.20-2-1.05 = 928.62 KN

$A = \frac{928.62 \cdot 10}{20.72} = 448.17\ cm^2$ ⇒ _ATO A = 22 cm
_ATO B = 22 cm

As = 6.868-22.22 = 3.87 cm² ⇒ 5 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

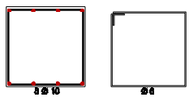
P'0

Q = 442.20 KN

N = 442.20-3-1.05 = 1392.3 KN

$A = \frac{1392.3 \cdot 10}{20.72} = 671.96\ cm^2$ ⇒ _ATO A = 26 cm
_ATO B = 26 cm

As = 6.868-26.06 = 5.40 cm² ⇒ 8 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

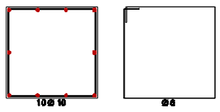
P9

Q = 442.20 KN

N = 442.20-4-1.05 = 1857.24 KN

$A = \frac{1857.24 \cdot 10}{20.72} = 896.35\ cm^2$ ⇒ _ATO A = 30 cm
_ATO B = 30 cm

As = 6.868-30.06 = 7.20 cm² ⇒ 10 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

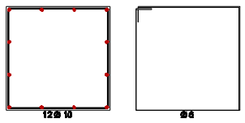
P8

Q = 442.20 KN

N = 442.20-5-1.05 = 2321.55 KN

$A = \frac{2321.55 \cdot 10}{20.72} = 1120.43\ cm^2$ ⇒ _ATO A = 34 cm
_ATO B = 34 cm

As = 6.868-34.04 = 9.24 cm² ⇒ 12 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

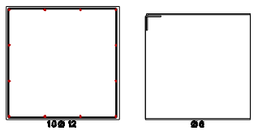
P7

Q = 442.20 KN

N = 442.20-6-1.05 = 2785.86 KN

$A = \frac{2785.86 \cdot 10}{20.72} = 1344.62\ cm^2$ ⇒ _ATO A = 37 cm
_ATO B = 37 cm

As = 6.868-37.07 = 10.95 cm² ⇒ 16 Ø 12



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

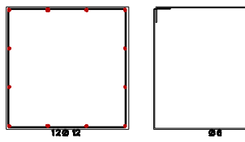
P6

Q = 442.20 KN

N = 442.20-7-1.05 = 3250.17 KN

$A = \frac{3250.17 \cdot 10}{20.72} = 1568.81\ cm^2$ ⇒ _ATO A = 40 cm
_ATO B = 40 cm

As = 6.868-40.4-8 = 12.56 cm² ⇒ 12 Ø 12



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

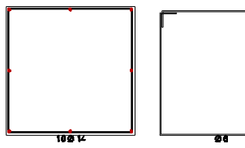
P5

Q = 442.20 KN

N = 442.20-8-1.05 = 3714.48 KN

$A = \frac{3714.48 \cdot 10}{20.72} = 1792.7\ cm^2$ ⇒ _ATO A = 42 cm
_ATO B = 42 cm

As = 6.868-42.42 = 14.11 cm² ⇒ 16 Ø 14



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

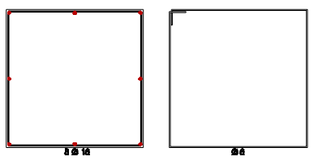
P4

Q = 442.20 KN

N = 442.20-9-1.05 = 4178.79 KN

$A = \frac{4178.79 \cdot 10}{20.72} = 2016.8\ cm^2$ ⇒ _ATO A = 45 cm
_ATO B = 45 cm

As = 6.868-45.45 = 16.2 cm² ⇒ 8 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

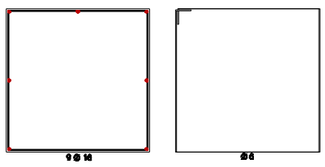
P3

Q = 442.20 KN

N = 442.20-10-1.05 = 4643.10 KN

$A = \frac{4643.10 \cdot 10}{20.72} = 2240.88\ cm^2$ ⇒ _ATO A = 47 cm
_ATO B = 47 cm

As = 6.868-47.47 = 17.67 cm² ⇒ 9 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

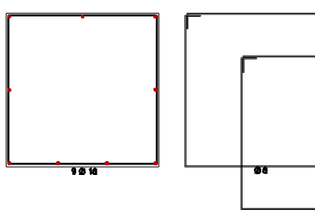
P2

Q = 442.20 KN

N = 442.20-11-1.05 = 5107.41 KN

$A = \frac{5107.41 \cdot 10}{20.72} = 2464.56\ cm^2$ ⇒ _ATO A = 50 cm
_ATO B = 50 cm

As = 6.868-50.50 = 20 cm² ⇒ 9 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

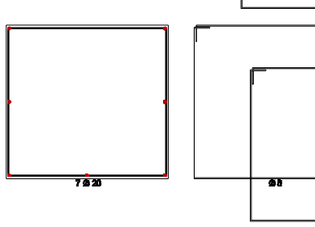
P'

Q = 442.20 KN

N = 442.20-12-1.05 = 5107.41 KN

$A = \frac{5107.41 \cdot 10}{20.72} = 2688.85\ cm^2$ ⇒ _ATO A = 53 cm
_ATO B = 53 cm

As = 6.868-53.53 = 21.2 cm² ⇒ 7 Ø 20



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

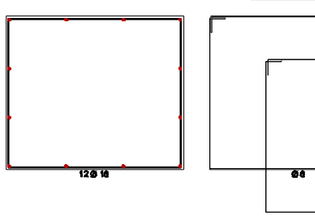
P0

Q = 442.20 KN

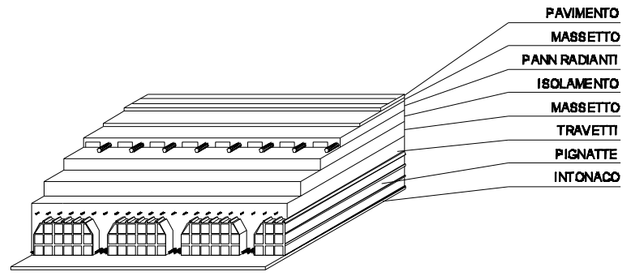
N = 442.20-13-1.05 = 6963.03 KN

$A = \frac{6963.03 \cdot 10}{20.72} = 2913.14\ cm^2$ ⇒ _ATO A = 55 cm
_ATO B = 55 cm

As = 6.868-55.55 = 23.23 cm² ⇒ 12 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆



P'2

Q = 120.7 KN

N = 120.7-1-1.05 = 126.79 KN

$A = \frac{126.79 \cdot 10}{20.72} = 61.18\ cm^2$ ⇒ _ATO A = 8 cm
_ATO B = 8 cm

As = 0.068-8-8 = 0.51 cm² ⇒ 4 Ø 8

passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

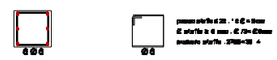
P''

Q = 120.7 KN

N = 120.7-2-1.05 = 253.47 KN

$A = \frac{253.47 \cdot 10}{20.72} = 122.33\ cm^2$ ⇒ _ATO A = 12 cm
_ATO B = 12 cm

As = 0.068-12-12 = 1.15 cm² ⇒ 6 Ø 8



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

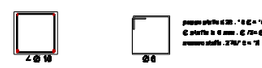
P'0

Q = 120.7 KN

N = 120.7-3-1.05 = 386.39 KN

$A = \frac{380.20 \cdot 10}{20.72} = 183.48\ cm^2$ ⇒ _ATO A = 14 cm
_ATO B = 14 cm

As = 0.068-14-14 = 1.68 cm² ⇒ 7 Ø 10



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

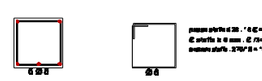
P9

Q = 120.7 KN

N = 120.7-4-1.05 = 634.94 KN

$A = \frac{508.24 \cdot 10}{20.72} = 244.66\ cm^2$ ⇒ _ATO A = 16 cm
_ATO B = 16 cm

As = 0.068-16-16 = 2.56 cm² ⇒ 6 Ø 12



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

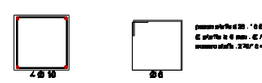
P8

Q = 120.7 KN

N = 120.7-5-1.05 = 883.67 KN

$A = \frac{639.67 \cdot 10}{20.72} = 345.52\ cm^2$ ⇒ _ATO A = 18 cm
_ATO B = 18 cm

As = 0.068-18-18 = 2.88 cm² ⇒ 4 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

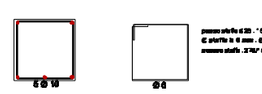
P7

Q = 120.7 KN

N = 120.7-6-1.05 = 760.41 KN

$A = \frac{760.41 \cdot 10}{20.72} = 365.99\ cm^2$ ⇒ _ATO A = 20 cm
_ATO B = 20 cm

As = 0.068-20-20 = 3.20 cm² ⇒ 5 Ø 16



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

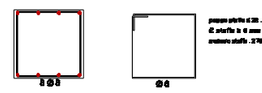
P6

Q = 120.7 KN

N = 120.7-7-1.05 = 887.14 KN

$A = \frac{887.14 \cdot 10}{20.72} = 426.16\ cm^2$ ⇒ _ATO A = 21 cm
_ATO B = 21 cm

As = 0.068-21-21 = 3.82 cm² ⇒ 8 Ø 8



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

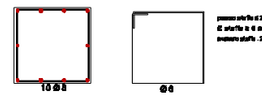
P5

Q = 120.7 KN

N = 120.7-8-1.05 = 1013.88 KN

$A = \frac{1013.88 \cdot 10}{20.72} = 486.92\ cm^2$ ⇒ _ATO A = 25 cm
_ATO B = 25 cm

As = 0.068-25-25 = 5 cm² ⇒ 10 Ø 8



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

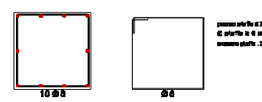
P4

Q = 120.7 KN

N = 120.7-9-1.05 = 1140.61 KN

$A = \frac{1140.61 \cdot 10}{20.72} = 550.48\ cm^2$ ⇒ _ATO A = 25 cm
_ATO B = 25 cm

As = 0.068-25-25 = 5 cm² ⇒ 10 Ø 8



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

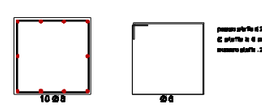
P3

Q = 120.7 KN

N = 120.7-10-1.05 = 1267.35 KN

$A = \frac{1267.35 \cdot 10}{20.72} = 611.65\ cm^2$ ⇒ _ATO A = 25 cm
_ATO B = 25 cm

As = 0.068-25-25 = 5 cm² ⇒ 10 Ø 8



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

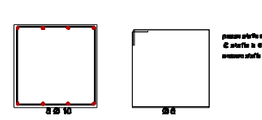
P2

Q = 120.7 KN

N = 120.7-11-1.05 = 1394.09 KN

$A = \frac{1394.09 \cdot 10}{20.72} = 672.82\ cm^2$ ⇒ _ATO A = 27 cm
_ATO B = 27 cm

As = 0.068-27-27 = 5.83 cm² ⇒ 8 Ø 10



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

P'

Q = 120.7 KN

N = 120.7-12-1.05 = 1520.82 KN

$A = \frac{1520.82 \cdot 10}{20.72} = 733.95\ cm^2$ ⇒ _ATO A = 28 cm
_ATO B = 28 cm

As = 0.068-28-28 = 6.27 cm² ⇒ 6 Ø 12

passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆

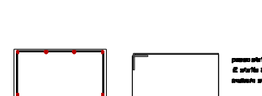
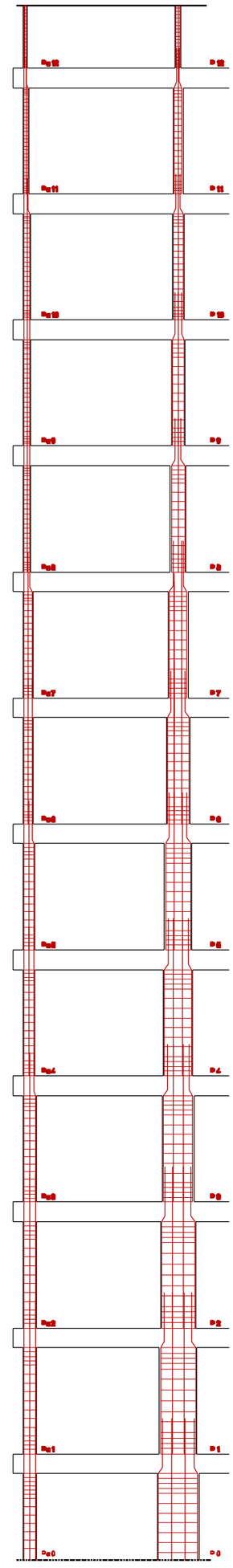
P0

Q = 120.7 KN

N = 120.7-13-1.05 = 1647.55 KN

$A = \frac{1647.55 \cdot 10}{20.72} = 795.16\ cm^2$ ⇒ _ATO A = 30 cm
_ATO B = 30 cm

As = 0.068-30-30 = 7.2 cm² ⇒ 10 Ø 12



passo staffe ≤ 20 : * 6 Ø = 9cm
Ø staffe ≥ 6 mm : Ø /3= Ø8mm
numero staffe : 375/7 = 53 ∆