

An aerial photograph of the Port of Los Angeles. A red circle is drawn on the right side of the image, highlighting a specific area within the port's industrial and shipping facilities.

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CONGLOMERATO CEMENTIZIO PER OPERE IN FONDAZIONE ED ELEVAZIONE:
 - C15 C32/40 classe XS1 per plinti, cordoli, platee e strutture in elevazione
 Classe di consistenza S4 - diametro max aggregati 32 mm

- Acciaio B450C $f_{\text{tynom}} \geq 450 \text{ N/mm}^2$ $f_{\text{tnom}} \geq 540 \text{ N/mm}^2$
 $3 \leq (f_t/f_y)k \leq 1,35$

- Acciaio S 275 $f_{yk} \geq 275 \text{ N/mm}^2$ $f_{tk} \geq 430 \text{ N/mm}^2$ (per $t \leq 40 \text{ mm}$)

- a: cordone d'ancora = 4.24 mm b: larghezza minima saldatura = 6mm

- Livello di qualità ai sensi della UNI EN ISO 5817:2008
- Operatori certificati ai sensi della UNI EN ISO 3834:2006

- Classe 8.8	$f_y \geq 649 \text{ N/mm}^2$	$f_t \geq 800 \text{ N/mm}^2$
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CORRIFERRO DI BALLI PUNTI, CORDOLI, BARBETI, SOLETTI IN C.A. 500

alla superficie metallica esterna comprese le staffe od eventuali armature secondarie orizzontali.

SOVRAPPOSIZIONE ED ANCORAGGIO MINIMO DELLE BARRE DI ACCIAIO

Minimo 40 volte il diametro della barra.

NOTA BENE:

VERIFICARE IN OPERA TUTTE LE MISURE DEI VARI ELEMENTI STRUTTURALI PRIMA D

Piano primo

60 6a8/10
205 10a8/23
60 6a8/10
NON CONFINATO
13a8/6
70 10a8/7
240 11a8/24
70 10a8/7
CONFINATO

525
8a22 (L=360)
113
70
380
14a22 (L=360)
113
60
14a22 (L=360)
52

±8.15
±4.90
±0.40

Piano Terra

1a22
1022
40
40
30
90
STAFFE staffe 1a8 (L=136)

2a22
3a22
50
50
40
60
STAFFE = LEGATURE staffe 1a8 (L=176) legature 2a8 (L=360)

s22 nei vertici
s22 nei vertici

Technical drawing of a wall cross-section showing reinforcement details. The wall has a total height of 4.15m and a base width of 0.40m. It is divided into two levels: "Piano primo" (first floor) and "Piano Terra" (ground floor). The wall is 0.20m thick. Reinforcement includes vertical bars (ø22) and horizontal bars (3ø22). Details include "STAFFE a LEGATURE" (stirrups) and "STAFFE a LEGATURE" (stirrups) with dimensions. The drawing also shows the "NON CONFINATO" (unconfined) and "CONFINATO" (confined) sections.

Piano primo

60 6ø8/10

205 10ø8/23

60 6ø8/10

NON COFINATO
138x5

70 10ø8/7

240 11ø8/24

70 10ø8/7

CONFINATO

3.75

0.40

88/22 (L=352)

113

70

158/22 (L=352)

113

380

60

22

Piano Terra

0.40

113

22

Detail 1: Vertical reinforcement

1ø22

1ø22

40

30

40

ø22 nei vertici

Detail 2: Reinforcement and ties

2ø22

4ø22

50

40

50

ø22 nei vertici

STAFFE
staffe 1ø8 (L=130)

STAFFE e LEGATURE
staffe 1ø8 (L=110)
legature 3ø8 (L=52)

Piano primo

60 6ø8/10

205 10ø8/23

325

80/22 (ø22)

170

70

60 6ø8/10

NON CONFINATO

70 10ø8/7

240 11ø8/24

380

205/22 (ø22)

170

70 10ø8/7

CONFINATO

80

Piano Terra

40/22 (ø22)

40

STAFFE
staffe 1ø8 (L=136)

STAFFE + LEGATURE
staffe 1ø8 (L=175)
legature 6ø8 (L=52)

Reinforcement Details:

- Vertical bars: 1ø22, 4ø22
- Horizontal bars: 6ø8/10, 7ø10/ø7
- Stirrups: ø22 nei verticali

The drawing shows a reinforced concrete slab with the following details:

- Piano primo (Top Floor):**
 - Overall width: 60 ea8/10
 - Central width: 205 10e8/23
 - Bottom width: 60 ea8/10
 - Reinforcement: 2ø22 (top), 1ø22 (bottom)
 - Section view: 40x40 cm, STAFFE a LEGATURE (ø22 L=156), legature 200 (L=151)
- Piano Terra (Ground Floor):**
 - Overall width: 70 10e8/7
 - Central width: 240 11e8/24
 - Bottom width: 70 10e8/7
 - Reinforcement: 5ø22 (top), 1ø22 (bottom)
 - Section view: 50x50 cm, STAFFE a LEGATURE (ø22 L=170), legature 200 (L=162)
- Dimensions and Spacing:**
 - Vertical spacing: 325, 70, 380, 80
 - Horizontal spacing: 1362, 1362, 1362
 - Overall height: 1170, 1130
- Reinforcement Details:**
 - 2ø22 (top reinforcement)
 - 1ø22 (bottom reinforcement)
 - 5ø22 (top reinforcement)
 - 1ø22 (bottom reinforcement)
- Section Views:**
 - 40x40 cm section for Piano primo
 - 50x50 cm section for Piano Terra
- Labels:**
 - CONFINATO (Confined)
 - STAFFE a LEGATURE (Reinforcement bars)
 - ø22 nei vertici (ø22 at the corners)

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Technical drawing of a reinforced concrete wall section, showing two levels: Piano primo and Piano Terra.

Dimensions and Levels:

- Overall height: 3.25
- Level 1 (Piano primo): +4.90
- Level 2 (Piano Terra): +0.40

Reinforcement Details:

- Vertical Reinforcement:** 10ø8/10 (top), 10ø8/7 (bottom)
- Horizontal Reinforcement:** 205 10ø8/23 (top), 240 11ø8/24 (bottom)
- Reinforcement Layouts:**
 - Top Layout (Piano primo):** Shows vertical bars 1ø22 and horizontal bars 3ø22. Dimensions: 40 (width), 30 (height), 40 (width), 40 (height).
 - Bottom Layout (Piano Terra):** Shows vertical bars 2ø22 and horizontal bars 3ø22. Dimensions: 40 (width), 30 (height), 40 (width), 50 (height).
- Labels:** STAFFE e LEGATURE, staffe 1ø8 (Δ=130), legature 1ø8 (Δ=51) for the top layout; STAFFE e LEGATURE, staffe 1ø8 (Δ=178), legature 2ø8 (Δ=40) for the bottom layout.

Technical drawing of a reinforced concrete wall section, showing two floors (Piano primo and Piano Terra) and their respective reinforcement details.

Piano primo:

- Reinforcement: 4ø22, 1ø22, ø22 nei vertici.
- Dimensions: 60, 100, 140, 180, 220, 260, 300, 340, 380, 420, 460, 500, 540, 580, 620, 660, 700, 740, 780, 820, 860, 900, 940, 980, 1020, 1060, 1100, 1140, 1180, 1220, 1260, 1300, 1340, 1380, 1420, 1460, 1500, 1540, 1580, 1620, 1660, 1700, 1740, 1780, 1820, 1860, 1900, 1940, 1980, 2020, 2060, 2100, 2140, 2180, 2220, 2260, 2300, 2340, 2380, 2420, 2460, 2500, 2540, 2580, 2620, 2660, 2700, 2740, 2780, 2820, 2860, 2900, 2940, 2980, 3020, 3060, 3100, 3140, 3180, 3220, 3260, 3300, 3340, 3380, 3420, 3460, 3500, 3540, 3580, 3620, 3660, 3700, 3740, 3780, 3820, 3860, 3900, 3940, 3980, 4020, 4060, 4100, 4140, 4180, 4220, 4260, 4300, 4340, 4380, 4420, 4460, 4500, 4540, 4580, 4620, 4660, 4700, 4740, 4780, 4820, 4860, 4900, 4940, 4980, 5020, 5060, 5100, 5140, 5180, 5220, 5260, 5300, 5340, 5380, 5420, 5460, 5500, 5540, 5580, 5620, 5660, 5700, 5740, 5780, 5820, 5860, 5900, 5940, 5980, 6020, 6060, 6100, 6140, 6180, 6220, 6260, 6300, 6340, 6380, 6420, 6460, 6500, 6540, 6580, 6620, 6660, 6700, 6740, 6780, 6820, 6860, 6900, 6940, 6980, 7020, 7060, 7100, 7140, 7180, 7220, 7260, 7300, 7340, 7380, 7420, 7460, 7500, 7540, 7580, 7620, 7660, 7700, 7740, 7780, 7820, 7860, 7900, 7940, 7980, 8020, 8060, 8100, 8140, 8180, 8220, 8260, 8300, 8340, 8380, 8420, 8460, 8500, 8540, 8580, 8620, 8660, 8700, 8740, 8780, 8820, 8860, 8900, 8940, 8980, 9020, 9060, 9100, 9140, 9180, 9220, 9260, 9300, 9340, 9380, 9420, 9460, 9500, 9540, 9580, 9620, 9660, 9700, 9740, 9780, 9820, 9860, 9900, 9940, 9980, 10000.

Piano Terra:

- Reinforcement: 2x5ø22, 1ø22, ø22 nei vertici.
- Dimensions: 60, 100, 140, 180, 220, 260, 300, 340, 380, 420, 460, 500, 540, 580, 620, 660, 700, 740, 780, 820, 860, 900, 940, 980, 1020, 1060, 1100, 1140, 1180, 1220, 1260, 1300, 1340, 1380, 1420, 1460, 1500, 1540, 1580, 1620, 1660, 1700, 1740, 1780, 1820, 1860, 1900, 1940, 1980, 2020, 2060, 2100, 2140, 2180, 2220, 2260, 2300, 2340, 2380, 2420, 2460, 2500, 2540, 2580, 2620, 2660, 2700, 2740, 2780, 2820, 2860, 2900, 2940, 2980, 3020, 3060, 3100, 3140, 3180, 3220

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Piano primo

60 6ø8/10
205 10ø8/23
60 6ø8/10
NON CONFINATO
70 10ø8/7
240 11ø8/24
70 10ø8/7
CONFINATO

4.90
3.25
70
390
80
20

Piano Terra

100
170
170

STAFFE « LEGATURE »
staffe 1ø8 (L=130)
legature 2ø8 (L=511)

STAFFE « LEGATURE »
staffe 1ø8 (L=170)
legature 2ø8 (L=102)

ø22 nei verticali

ø22 nei verticali

[illegible]

Architectural drawing showing the longitudinal section and reinforcement details of a wall.

Section Details:

- Piano primo:** Height 3.25m. Wall thickness 22cm. Reinforcement: 60 cm spacing.
- Piano Terra:** Height 3.80m. Wall thickness 22cm. Reinforcement: 60 cm spacing.
- Non-confined section:** Height 70 cm. Reinforcement: 60 cm spacing.
- Confined section:** Height 70 cm. Reinforcement: 60 cm spacing.

Reinforcement Details:

- Vertical bars:** ø22 nei vertici.
- Horizontal bars:** ø22 nei vertici.
- Reinforcement layout:** Shows the placement of vertical and horizontal bars.

Legend:

- STAFFE** (stirrups): ø8 (L=130).
- STAFFE e LEGATURE** (stirrups and ties): ø8 (L=170), ø8 (L=150).

1. posizionare i ferri perimetrali e le staffe
2. posizionare i ferri ausiliari nei terzi medi della libbra libera dei pilastri (H/3, con H libbra libera pilastro) legandoli ai ferri verticali perimetrali e alle staffe
3. inserire dall'alto i ferri in seconda fila e legarli nei terzi medi ai ferri ausiliari
4. inserire i ganci che legano i ferri in prima e in seconda fila
5. tagliare le legature dei ferri ausiliari e rimuoverli

