

Technical drawing of a structural connection showing a top view, a side view, and a cross-section.

Top View: A rectangular plate with dimensions 120 (width) and 35 (height). It contains 14 N2 Ø12.5 bolts arranged in two rows of 7 bolts each.

Side View: A rectangular plate with dimensions 53 (width) and 74 (height). It contains 14 N2 Ø12.5 bolts arranged in two rows of 7 bolts each.

Cross-section: A vertical plate with a height of 408. It contains 14 N2 Ø12.5 bolts arranged in two rows of 7 bolts each. The bolts are labeled N2-14 Ø12.5 C=398. The plate is labeled N3-2x27 Ø6.3 C/15 C=210. The distance from the top edge to the first row of bolts is 8.25, and the distance from the bottom edge to the first row of bolts is 4.17.

120

35

14 N5 Ø12.5

53

N4-3x29 Ø6.3 C/15

74

25

N3-2x29 Ø6.3 C/15

9.75

433

5.42

N5-14 Ø12.5 C/423

2x29 N3 C/15

Technical drawing showing the cross-section of a reinforced concrete slab and beam.

Slab Section (Top):

- Width: 120
- Height: 35
- Reinforcement: 14 N6 Ø12.5

Beam Section (Bottom):

- Width: 74
- Height: 25
- Reinforcement: N3-2x36 Ø6.3 C/15

Dimensions and Spacing:

- Clear height of slab above beam: 543
- Effective depth of slab: 11.25
- Effective depth of beam: 5.82

Reinforcement Details:

- Slab reinforcement: N4-3x36 Ø6.3 C/15
- Beam reinforcement: N3-2x36 Ø6.3 C/15

15.75
14.25
12.75

120

35

● 14 N7 Ø12.5

53

N4-3x43 Ø6.3 C/15

74

25

N3-2x43 Ø6.3 C/15

653

○ N7-14 Ø12.5 C-643

2x43 N3 C/15

9.22
7.72
6.22

Technical drawing of a structural connection, showing a side view and a cross-section.

Side View (Left):

- Vertical dimension: 235
- Horizontal dimension: 35
- Reinforcement: 28 N8 Ø12.5 (circles), 4 N4-6x48 Ø6.3 C/15 (U-shaped bars).

Cross-Section (Right):

- Vertical dimension: 150
- Horizontal dimension: 25
- Reinforcement: 2 N9-2x48 Ø6.3 C/15 (circles), 2 N8-28 Ø12.5 C-7/14 (circles).

Dimensions and Spacing:

- Top spacing: 18.09
- Bottom spacing: 10.85
- Central spacing: 724

35

120

14 N10 Ø12.5

53

N4-3x45 Ø6.3 C/15

74

25

2x45 N3 C/15

110-14 Ø12.5 C-668

678

18.09

11.31

Technical drawing of a door assembly, showing front and side views with dimensions and specifications.

Front View (Left):

- Overall width: 35
- Overall height: 120
- Door panel: 14 N11 Ø12.5
- Door frame: N4-3x15 Ø6.3 C/15

Side View (Right):

- Overall width: 74
- Overall height: 25
- Door panel: N3-2x15 Ø6.3 C/15
- Door frame: N4-3x15 Ø6.3 C/15
- Door panel thickness: 17.26
- Door frame thickness: 15.01
- Door panel material: Ø10 C=215
- Door frame material: 2x10 N3 C/15

LISTA DE FERROS					
	N	Ø (mm)	Q	COMPRIMENTO	
				UNIT.(cm)	TOTAL(cm)
6x	1	6,3	24	188	4512
2x	2	12,5	28	398	11144
2x	3	6,3	1124	210	236040
2x	4	6,3	2454	53	130062
2x	5	12,5	28	423	11844
2x	6	12,5	28	533	14924
6x	7	12,5	84	643	54012
2x	8	12,5	56	714	39984
2x	9	6,3	192	362	69504
2x	10	12,5	28	668	18704
2x	11	10	28	215	6020
2x	12	20	4	179	716
2x	13	10	4	86	344
2x	14	12,5	10	381	3810
2x	15	6,3	8	114	912
10x	16	10	20	200	4000
10x	17	10	100	230	23000
10x	18	16	40	243	9720
10x	19	6,3	80	188	15040
14x	20	16	84	432	36288
14x	21	12,5	56	440	24640
14x	22	10	140	440	61600
14x	23	10	406	188	76328
6x	24	16	24	207	4968
6x	25	10	60	105	6300
6x	26	10	12	90	1080
4x	27	12,5	24	100	2400
14x	28	6,3	112	165	18480
14x	29	6,3	112	140	15680

[illegible]

VT MOLDADA NO LOCAL

CORTE 2

2 N18

2 N16

2x5 N17

25

60

N1-4 Ø6.3
C=188

85

DOBRA NA HORIZONTAL

R12

N24-2x2 Ø16 C=207

85

80

25

N25-2x5 Ø10 C=105

10

80

N26-2 Ø10 C=90

[illegible]

DETALHE 2

C	B	16/09/2019	T.MENDES	F.MIHALK	-----	-----
REV.	TIPO DE EMIS.	DATA	ELABORADO POR	VERIFICADO POR	VALIDADO POR	DESCRIÇÃO DA REVISÃO
(A)	PRELIMINAR	(B) PARA APROVAÇÃO	(C) PARA INFORMAÇÃO	(D) PARA COTAÇÃO	(E) APROVADO / PARA CONSTRUÇÃO	(F) COMO COMPRADO (G) COMO CONSTRUÍDO (H) CANCELADO



PROJETO EXECUTIVO - PONTA DA ESPERA
ARMADAÇÃO PILARES

Nº EMAP: 2018.15-DE-EST-2001-0023 DATA: SETEMBRO/2019 REVISÃO: C

PROJETO EXECUTIVO ESTRUTURAL - PONTA DA ESPERA

PROJETISTA: FERNANDO M. MIHALIK CREA/CAU: 2603750747 Nº CONTRATADA:

RESP. TÉCNICO: VERA LÚCIA F. B. LOURENÇO CONTRATADA: FALÇAO BAUER ESCALA: INDICADA Nº PRANCHA: 23

PLOT 1 = 1		
PEN	COLOR	WIDTH
1	7	0.150
2	7	0.200
3	7	0.300
4	7	0.400
5	7	0.500
6	7	0.600
7	7	0.150
8	7	0.100
9	7	0.050
10	10	0.180
111	111	0.180
246	246	0.600
250	250	0.300
251	251	0.180
252	252	0.180
253	253	0.180
254	254	0.180