

[illegible]

Technical drawing of a reinforced concrete slab (L.1) showing top and side views with dimensions and reinforcement details.

**Top View:**

- Overall width: 16 m  $\phi$  6.3 C/20 N3 (316)
- Overall length: 17 m  $\phi$  6.3 C/20 N3 (330)
- Reinforcement: 2  $\phi$  10
- Supports: PAR21, PAR7, PAR21
- Internal dimensions: 669, 2 N1  $\phi$  10 C=755
- Bottom reinforcement: 2x4 N4  $\phi$  6.3 C=685
- Bottom reinforcement: 2 N2  $\phi$  10 C=695
- Bottom reinforcement: 33 N3  $\phi$  6.3 C=160

**Side View:**

- Height: 9
- Width: 64
- Reinforcement: 2  $\phi$  10

16.0m x 13.0m

16  $\varnothing$  6.3 C/20 N6 (310)

13  $\varnothing$  6.3 C/20 N6 (121)

4  $\varnothing$  12.5

2  $\varnothing$  12.5

3  $\varnothing$  16

V14

P6

V17

43

727

2 N1  $\varnothing$  12.5 C=813

94

2 N2  $\varnothing$  12.5 C=226

20

(costela) 727

2x3 N7  $\varnothing$  8 C=767

45

1 N5  $\varnothing$  16 C=257

444

2 N4  $\varnothing$  16 C=464

16

379

2 N3  $\varnothing$  12.5 C=395

20

42 N6  $\varnothing$  6.3 C=164

Technical drawing of a reinforced concrete slab (P7) showing reinforcement details. The drawing includes a top view and a side view.

**Top View:**

- Overall dimensions: 539 (width) x 567 (length).
- Reinforcement details:
  - Top reinforcement: 3  $\phi$  12.5 (N1), C=643.
  - Bottom reinforcement: 2x3 N8  $\phi$  8 C=567 (castela).
  - Side reinforcement: 2 N2  $\phi$  12.5 C=158.
  - End reinforcement: (1  $\phi$  2 $\phi$ CAM, 1  $\phi$  3 $\phi$ CAM) and 2 N4  $\phi$  20 C=321.
  - Bottom reinforcement: 5 N3  $\phi$  20 C=591.

**Side View:**

- Overall height: 60.
- Reinforcement details:
  - Top reinforcement: 7 N5  $\phi$  10 C=162.
  - Bottom reinforcement: 11 N6  $\phi$  6.3 C=154.
  - Bottom reinforcement: 15 N7  $\phi$  8 C=158.

Technical drawing of a wooden bench with dimensions and material specifications:

- Top Rail:** 16 Ø 6.3 C/20 N3 (316), 2 Ø 8
- Backrest:** 14, 69, 9, 64
- Seat:** 2 Ø 10, 345, 2 N2 Ø 8 C=451, 2x4 N4 Ø 6.3 C=361, 343, 2 N2 Ø 10 C=371
- Legs:** PAR21, P3, 43, 21
- Dimensions:** 345, 343, 345
- Material:** 16 N3 Ø 6.3 C=160

Technical drawing of a roof structure for a building with a 12.5% slope. The drawing includes a plan view of the roof layout with dimensions and reinforcement details, and a cross-section view showing the roof profile and reinforcement.

**Plan View Details:**

- Left slope: 11 Ø 6.3 C/20 N4 (219)
- Right slope: 4 Ø 6.3 C/20 N4 (67)
- Bottom slope: 2 Ø 12.5
- Central ridge: 474
- Left side label: V15
- Right side label: P5
- Bottom slope label: 2 N3 Ø 12.5 C=506
- Bottom slope label: 2x3 N5 Ø 8 C=512
- Bottom slope label: (costola) 472
- Bottom slope label: 2 N2 Ø 12.5 C=281
- Bottom slope label: 2 N1 Ø 12.5 C=576
- Bottom slope label: 226
- Bottom slope label: 51
- Bottom slope label: 16
- Bottom slope label: 474
- Bottom slope label: 2 N3 Ø 12.5 C=506

**Cross-section View Details:**

- Width: 25
- Height: 60
- Reinforcement: 27 N4 Ø 6.3 C=164
- Bottom slope: 2 N2 Ø 12.5 C=281
- Bottom slope: 2 N1 Ø 12.5 C=576
- Bottom slope: 226
- Bottom slope: 51
- Bottom slope: 16
- Bottom slope: 474
- Bottom slope: 2 N3 Ø 12.5 C=506
- Bottom slope: 2x3 N5 Ø 8 C=512
- Bottom slope: (costola) 472
- Bottom slope: 2 N2 Ø 12.5 C=281
- Bottom slope: 2 N1 Ø 12.5 C=576
- Bottom slope: 226
- Bottom slope: 51
- Bottom slope: 16
- Bottom slope: 474
- Bottom slope: 2 N3 Ø 12.5 C=506

Technical drawing of a reinforced concrete beam (PAR11) showing top, side, and cross-section views.

**Top View:**

- Beam length: 709 cm.
- Reinforcement: 19  $\phi$  6.3 C/20 (top), 18  $\phi$  6.3 C/20 (bottom).
- Section labels: PAR11.
- Cost: 795.

**Side View:**

- Beam height: 43 cm.
- Beam width: 31 cm.
- Section label: PAR11.

**Cross-section:**

- Top flange width: 14 cm.
- Web width: 9 cm.
- Bottom flange height: 69 cm.
- Bottom flange width: 64 cm.
- Section label: PAR11.

Technical drawing of a reinforced concrete slab (P6) showing top, side, and detail views.

**Top View:**

- Overall dimensions: 16.0m x 6.3m C/20
- Central hole: N4 (310)
- Reinforcement: 2 Ø 10
- Slab thickness: 3 Ø 16
- Reinforcement: 2 N1 Ø 10 C=509
- Reinforcement: 2x3 N5 Ø 8 C=433
- Reinforcement: 1 N3 Ø 16 C=275
- Reinforcement: 2 N2 Ø 16 C=445

**Side View:**

- Height: 15

**Detail View:**

- Dimensions: 20, 60, 15
- Reinforcement: 16 N4 Ø 6.3 C=154

ESC 1:25

14  
29

9  
24

13 N3 Ø 5 C/15 C=77

20 190  
2 N1 Ø 8 C=230

20 190  
2 N2 Ø 8 C=230

ESC 1:25

14  
49  
9  
44

28 N49 # 5 C/15 C=117

404

2 N47 # 10 C=444

2 N48 # 10 C=444

404

The technical drawing illustrates a rectangular frame assembly with the following specifications:

- Front View (Top):** Shows a horizontal bar with a total length of 1600 mm, composed of two segments of 800 mm each (labeled "2 x 800"). The bar has a diameter of  $\varnothing 6.3$  C=20. It is supported by four vertical legs, each with a diameter of  $\varnothing 10$ .
- Side View (Bottom):** Shows the profile of the frame with a height of 345 mm. The top rail has a diameter of  $\varnothing 10$  (labeled "2 N1  $\varnothing 10$  C=447"). The bottom rail has a diameter of  $\varnothing 12.5$  (labeled "2 N2  $\varnothing 12.5$  C=377"). The distance between the rails is 2x3 N4  $\varnothing 8$  C=373.
- Detail View (Right):** A cross-section of the corner joint showing a 90-degree angle. The dimensions are 20 mm for the top flange, 60 mm for the vertical leg, and 15 mm for the bottom flange. The overall width is 55 mm.

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Technical drawing of a 12 N3 Ø 6.3 C=20 cable assembly. The drawing includes a top view showing a cable with 12 conductors (N3) and a length of 290 mm. A side view shows the cable's profile with a diameter of 6.3 mm and a length of 290 mm. A detail view shows the cable's cross-section with 12 conductors (N3) and a length of 290 mm. The drawing also includes a table of dimensions and a list of components.

View	Dimensions
Top View	290, 12 N3 Ø 6.3 C=20
Side View	290, 12 N3 Ø 6.3 C=20
Detail View	290, 12 N3 Ø 6.3 C=20

12 N3 Ø 6.3 C=20

Technical drawings of reinforcement bars (V6 and V1) showing dimensions and specifications.

**V6:** A horizontal reinforcement bar with a total length of 289. It has 2 N1 # 10 bars with a center-to-center spacing (C) of 391. The bar is shown with a cross-section of 13 # 6.3 C/20 N3 (250) and a width of 2 # 10. The bar is labeled with a hook symbol at the right end.

**V1:** A vertical reinforcement bar with a total length of 287. It has 2 N1 # 10 bars with a center-to-center spacing (C) of 317. The bar is shown with a cross-section of 13 # 6.3 C/20 N3 (250) and a width of 2 # 10. The bar is labeled with a hook symbol at the bottom end.

**13 N3 # 6.3 C=154:** A horizontal reinforcement bar with a total length of 289. It has 3 N2 # 12.5 bars with a center-to-center spacing (C) of 321. The bar is shown with a cross-section of 13 # 6.3 C/20 N3 (250) and a width of 2 # 10. The bar is labeled with a hook symbol at the right end.

ESC 1:25

14  
29

9  
24

11 N49  $\phi$  5 C/15 C=77

20 155  
2 N47  $\phi$  8 C=195

20 155  
2 N48  $\phi$  8 C=195

ESC 1:25

14  
29

9  
24

27 N3  $\phi$  5 C/15 C=77

20 390  
2 N1  $\phi$  8 C=430

20 390  
2 N2  $\phi$  8 C=430

[illegible]

Technical drawing of a metal structure, likely a railing or fence section, showing dimensions and part numbers.

**Top View:**

- Overall width: 460
- Top rail: 2 N1  $\phi$  10, C=564
- Bottom rail: 2 N3  $\phi$  20, C=305
- Vertical posts: 2 N2  $\phi$  20, C=512
- End caps: 2 N4  $\phi$  6.3 C=17.5
- Intermediate caps: 2 N4 (115)

**Side View:**

- Overall height: 150
- Top rail height: 20
- Post height: 130
- Post diameter:  $\phi$  20
- Post spacing: C=564

**Detail View (Costela):**

- Width: 458
- Height: 2x3 N5  $\phi$  8, C=488

RESUMO AÇO CA 50-60			
AÇO	IT (mm)	COMP (m)	PESO (kg)
60B	5	61	10
50A	6,3	643	161
8A	8	337	133
50A	10	166	103
50A	12,5	118	118
50A	16	49	79
50A	20	49	123
Peso Total	60B =	10	kg
Peso Total	50A =	717	kg