

Technical drawing of a roof plan showing a rectangular building footprint with dimensions and structural details. The drawing includes a grid of points (P1, P2, P3, P4) and various structural elements like beams and columns. Dimensions are given in meters (m) and centimeters (cm). The drawing is oriented with North (N) at the top.

Key dimensions and structural details:

- Overall dimensions: 354m (width) x 1191m (length).
- Internal dimensions: 354m (width) x 1191m (length).
- Structural elements: 3 N13 e8.0 Ct=1198, 3 N14 e8.0 Ct=391, 2 N12 e8.0 Ct=985, 2 N11 e8.0 Ct=989, 1 N10 e8.0 Ct=370, 3 N7 e8.0 Ct=656, 3 N8 e8.0 Ct=576, 3 N9 e8.0 Ct=798, 24 N1 c17, 14 N1 c17, 33 N1 c17, 12 N1 c17.
- Points: P1, P2, P3, P4.
- Dimensions: 0, 20, 405, 30, 225, 30, 353.5, 20, 185.5, 30, 200, 795, 500, 195, 54, 3620, 2620.

The drawing shows a plan view of a road section with several lanes and shoulders. Key features include:

- Lane Widths and Dimensions:** Various dimensions are provided for different sections of the road, such as 0, 510, 680, 225, 40, 465, 79, 309, 175, 200, 25, 705, 120, 345, 17 N3 c21, 10 N3 c12, 10 N3 c21, 2 N46 ø12.5 Cl=707, 1 N43 ø12.5 Cl=490, 2 N46 ø12.5 Cl=900, 1 N45 ø12.5 Cl=696, 2 N48 ø12.5 Cl=421.
- Labels and Markings:** Labels like V16, P13, P14, L A, V22, P15, and 2 N17 ø8.0 Cl=771 are present. There are also blue dashed lines indicating lane boundaries or centerlines.
- Scale and Orientation:** The scale is indicated as ESC 1:25. The orientation is shown by a north arrow pointing towards the top right.

Technical drawing of a roof profile with dimensions and material specifications. The drawing shows a cross-section of the roof structure with various layers and components. Key dimensions and specifications include:

- Overall width: 24
- Top layer: 2 N21 e8.0 Ch=1198 (1176)
- Second layer: 2 N22 e8.0 Ch=380 (375)
- Third layer: 1 N20 e8.0 Ch=321 (296)
- Fourth layer: 2 N18 e8.0 Ch=1031
- Bottom layer: 2 N19 e8.0 Ch=556
- Dimensions: 495, 185, 33 N4 c/15, 25, 225, 15 N4 c/15, 20, 240, 16 N4 c/15, 25, 230, 16 N4 c/15, 20, 190, 12 N4 c/15, 20.
- Labels: P47, P18, P19, P20, P49.
- Notes: 0, 1 A, 1 A.

[illegible]

ESC 1:25

2 N13 e8.0 Ch=1198
1191

1 N34 e8.0 Ch=778

2 N35 e8.0 Ch=282
275

52

155

0

P43

29

432

29 N5 c15

20

P44

448

30 N5 c15

2 N32 e8.0 Ch=930

P45

20

455

31 N5 c15

2 N33 e8.0 Ch=480

P46

20

SEÇÃO A-A
ESC 1:30

20

24

90 N5 e5.0 Ch=67

SECÃO A-A
ESC: 1:30

30
150
25
10
59 N2 ø5.0 Ctr=

0

40 195 25 240 25 227.5 25 172.5 25

13 N2 ø15 16 N2 ø15 16 N2 ø15 14 N2 ø15

195 240 227.5 197.5

1 N15 ø8.0 Ctr=244

970 2 N16 ø8.0 Ctr=973

2 N42 ø12.5 Ctr=970

r A

L A

P7 P8 P9 P10 P11

Technical drawing of a door frame assembly. The main drawing shows a cross-section of the frame with dimensions: 2 N28 ø6.0 C1=284, 250, 0, 1, A, 215, 15 N4 ø15, 2 N27 ø8.0 C1=250. The frame is labeled P35 and P36. The door is labeled 1. The drawing also shows the door's profile with dimensions: 50, 20, 25, 15. The door is labeled 15 N4 ø5.0 C1=250. The drawing is titled 'SEÇÃO A-A' and 'ESQ 1.25'.

Technical drawing of the front view of a rectangular plate. The drawing shows a plate with a width of 489 and a height of 25. The plate has a central rectangular cutout with a width of 455 and a height of 20. The cutout is centered horizontally and vertically. The plate is labeled with '2 N31 e8.0 Ch=519' at the top center, 'P41' at the bottom left corner, and 'P42' at the bottom right corner. The drawing includes dimension lines and arrows indicating the measurements. The plate is shown in a perspective view, with the front face and the top edge visible. The drawing is labeled 'SEÇÃO A-A' and 'ESC. 1:30' in the top right corner. There is also a small icon of a smartphone with the number '14' next to it, and the text '31 N5 e5.0 Ch=87' at the bottom right.

Technical drawing of a reinforced concrete slab (L. 120) showing reinforcement details. The drawing includes a cross-section at the top and a plan view below. The cross-section shows a slab with a width of 25 cm and a height of 120 cm. The reinforcement consists of 2 N26 bars at the top and 21 N2 bars at the bottom. The plan view shows the slab with a width of 25 cm and a height of 120 cm. The reinforcement consists of 2 N26 bars at the top and 21 N2 bars at the bottom. The drawing is labeled 'L. 120' and '2 N26 ø8.0 Cl=1012'.

SEÇÃO A-A
ESC 1:30

40
15
35

47 N3 ø12.5 C1=101

2 N53 ø12.5 C1=539

25 N3 ø21

443

22 N3 ø21

34155 ±0.0 C1=454

1012

2 N54 ø12.5 C1=1057

14

15

30

20

0

P27

V14

L A

V15

P28

P29

r A

Technical drawing of a door frame assembly. The drawing shows a side view of the frame with dimensions in millimeters (mm). The top horizontal member is labeled "3 N39 aB 0 Ch=505" with a length of 479. The bottom horizontal member is labeled "3 N38 aB 0 Ch=479". The vertical member on the left is labeled "P43" and has a height of 20. The vertical member on the right is labeled "V9" and has a height of 21. The distance between the vertical members is 465. The total width of the frame is 450. The drawing also shows a cross-section of the frame with dimensions 14, 20, and 34. The cross-section is labeled "SEÇÃO A-A" and "ESQ 1:30". The door is labeled "27 N6 aB 0 Ch=479".

Technical drawing of a rectangular frame. The drawing shows a top view and a side view. The top view is a rectangle with dimensions 129 (width) and 109 (height). The side view is a rectangle with dimensions 129 (width) and 20 (height). The drawing includes labels for dimensions and components: 129, 109, 9, 6, 2 N41 eB.0 Cn=143, r A, P45, L-A, 95, P41, 20, 7 N5 c15, 129, 2 N40 eB.0 Cn=137, 10, 20, 14, 24, 7 N5 s6 Cn=87, ESC 1.20, SEÇÃO A-A, ESC 1.30, 30, 20, 14, 24, 7 N5 s6 Cn=87, OBRA, CONSTRUÇÃO.

SEÇÃO A-A
Escala 1:30

30

12.0

11.0

3 N37 a8 0 Ch-B14

3 N36 a8 0 Ch-795

P37

P31

23 N1 c/17

45 N1 a8 0 Ch-115

RELAÇÃO DO AÇO						
V1	V2	V3				
V4	V5	V6				
V7	V8	V9				
V10	V11	V12				
V13	V14	V15				
AÇO	N	DIAM	QUANT	C UNIT	C TOTAL	
CABO	1	5,0	151	111	16776	
	2	5,0	81	81	6573	
	3	5,0	186	101	18786	
	4	5,0	107	107	8559	
CABO	5	5,0	128	87	11136	
	6	5,0	281	181	50766	
	7	8,0	3	696	2088	
	8	8,0	107	576	61632	
	9	8,0	3	789	2367	
	10	8,0	171	370	63270	
	11	8,0	2	989	1978	
	12	8,0	107	589	63013	
	13	8,0	5	1198	5990	
	14	8,0	3	381	1143	
	15	8,0	24	244	5856	
	16	8,0	2	973	1946	
	17	8,0	107	582	62214	
	18	8,0	2	1031	2062	
	19	8,0	2	1121	2242	
	20	8,0	2	328	656	
	21	8,0	2	1198	2396	
	22	8,0	2	380	760	
	23	8,0	2	330	660	
	24	8,0	2	464	928	
	25	8,0	4	1012	4048	
	26	8,0	2	500	1000	
	27	8,0	2	264	528	
	28	8,0	2	480	960	
	29	8,0	2	738	1476	
	30	8,0	2	480	960	
	31	8,0	2	480	960	
	32	8,0	2	778	1556	
	33	8,0	2	282	564	
	34	8,0	2	282	564	
	35	8,0	2	586	1172	
	36	8,0	2	586	1172	
	37	8,0	3	814	2442	
	38	8,0	4	1437	5748	
	39	8,0	2	505	1010	
	40	8,0	2	1137	2274	
	41	8,0	2	143	286	
	42	8,0	2	1040	2080	
	43	12,5	1	490	490	
	44	12,5	1	707	707	
	45	12,5	1	896	896	
	46	12,5	1	896	896	
	47	12,5	2	1197	2394	
	48	12,5	2	421	842	
	49	12,5	2	479	958	
	50	12,5	2	804	1608	
	51	12,5	2	129	258	
	52	12,5	2	903	1806	
	53	12,5	2	907	1814	
	54	12,5	2	1057	2114	
	55	12,5	2	1138	2276	
	56	12,5	2	1200	2400	
	57	12,5	2	1200	2400	

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	498.5	216.4
	12.5	217.4	230.4
CA60	5.0	731.6	124.4

Volume de concreto (C-30) = 8.49 m³
Área de forma = 121.28 m²