

Technical drawing of a reinforced concrete slab (B1) showing dimensions and reinforcement details. The slab is 4.00m wide and 0.20m thick. It has a central span of 7.00m and two side spans of 2.25m. Reinforcement includes top bars (B1RE, B1T) and bottom bars (B1B). Dimensions for bar placement and spacing are provided.

Technical drawing of the front elevation of the 'Corte A' section of the 'Edificio de la Casa de la Cultura' in Bogotá. The drawing shows a symmetrical facade with a central entrance and two side wings. The central entrance has a pediment supported by columns. The side wings have a series of windows. The drawing includes dimensions for the overall height and width, and for individual architectural elements like windows and columns. A north arrow is located in the upper right corner.

Technical drawing of a rectangular plate with a central slot. The drawing includes a top view and a side view. The top view shows a plate with a central slot of width 2 Ø8 and a total width of 2 Ø8. The slot is 161 units long, and the plate is 14 units thick. The side view shows a plate with a total height of 161 units and a central slot of height 2 Ø8. The plate is 14 units thick. The drawing is labeled "Corte A" and "V2RE" and "V1RE".

Technical drawing of a mechanical part, showing a side view and a cross-section A-A.

Side View Dimensions:

- Total width: 160 mm (150 mm + 5 mm + 5 mm)
- Central slot width: 20 mm
- Slot depth: 14 mm
- Material: V2RE

Corte A (Cross-section A-A):

- Width: 20 mm
- Height: 15 mm
- Material: V1RE

[illegible]

	AÇO	POS	BIT	QUANT	COMPROMITO	
					UNIT	TOTAL
			mm		cm	
V1RE	5SA	1	10	2	450	980
	5SA	2	10	2	460	910
	5SA	3	10	2	370	740
	6GB	4	5	22	103	2266
V2RE	5SA	1	10	2	490	980
	5SA	2	10	2	460	920
	5SA	3	10	2	370	740
	6GB	4	5	22	103	2266
V3RE	5SA	1	10	2	195	390
	5SA	2	8	2	160	320
	5SA	3	5	6	103	618
	6GB	3	5	6	103	618
V4RE	5SA	1	8	2	185	370
	6GB	2	5	16	63	1008
	5SA	3	8	2	185	370
	6GB	3	8	2	185	370
V5RE	5SA	1	8	2	185	370
	6GB	2	5	16	63	1008
	5SA	3	8	2	185	370
	6GB	3	8	2	185	370
V6RE	5SA	1	8	2	185	370
	6GB	2	5	16	63	1008
	5SA	3	8	2	185	370
	6GB	3	8	2	185	370
V7RE	5SA	1	10	2	195	390
	5SA	2	5	16	63	1008
	5SA	3	10	2	160	320
	6GB	4	5	22	103	618

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
60B	5	88	14
50A	8	29	11
50A	10	61	37
Peso Total	60B =		14 kgf
Peso Total	50A =		49 kgf

Technical drawing of a mechanical part with dimensions and section A-A. The drawing includes a top view, a side view, and a section A-A. The top view shows a rectangular part with a central slot. Dimensions include 13.05, 0.9, N3 (116), 2.08, 2.08, 26, P105RE, P102RE, 160, 2, N1 08, C=172, 161, 2, N2 08, C=185, 13, N3 05, C=63. The side view shows a rectangular part with a central slot. Dimensions include 2.08, 2.08, 26, P105RE, P102RE, 160, 2, N1 08, C=172, 161, 2, N2 08, C=185, 13, N3 05, C=63. The section A-A shows a rectangular part with a central slot. Dimensions include 2.08, 2.08, 26, P105RE, P102RE, 160, 2, N1 08, C=172, 161, 2, N2 08, C=185, 13, N3 05, C=63.

Technical drawing of a mechanical part with dimensions and a cross-section A-A.

Dimensions:

- Top view: 13 Ø 5 C=9, 2 Ø 8, 26, 160, 2 N1 Ø 8 C=172, 161, 2 N2 Ø 8 C=185.
- Side view: 13 N3 Ø 5 C=63.

Section A-A:

- Section A-A shows a cross-section of the part with dimensions 2 Ø 8 and 2 Ø 8.

Technical drawing of a mechanical part with dimensions and section A-A.

Top View:

- Overall width: 162
- Overall length: 161
- Internal width: 120
- Internal length: 100
- Internal width (inner): 100
- Internal length (inner): 100
- Internal width (outer): 120
- Internal length (outer): 100
- Internal width (outer): 120
- Internal length (outer): 100

Section A-A:

- Section A-A is a cross-section of the part.
- Dimensions: 12 N3 Ø 5 C=63
- Dimensions: 2 N1 Ø 8 C=174
- Dimensions: 2 N2 Ø 8 C=185
- Dimensions: 2 N3 Ø 5 C=63

Other Dimensions:

- 12 N3 Ø 5 C=63
- 2 N1 Ø 8 C=174
- 2 N2 Ø 8 C=185
- 12 N3 Ø 5 C=63

	AQO	POS	BIT	QUANT	COMPIMENTO	
					UNIT	TOTAL
			mm			cm
V50RE	50A	1	8	2	485	970
	60B	2	5	47	63	2961
	50A	3	8	2	485	970
V51RE	50A	1	8	2	185	370
	60B	2	5	13	63	819
	50A	3	8	2	185	370
V52RE	50A	1	8	2	172	344
	50A	2	8	2	185	370
	60B	3	5	13	63	819
V53RE	50A	1	8	2	172	344
	50A	2	8	2	185	370
	60B	3	5	13	63	819
V54RE	50A	1	8	2	136	272
	50A	2	8	2	145	290
	60B	3	3	12	63	358
V55RE	50A	1	8	2	174	348
	50A	2	8	2	185	370
	60B	3	5	12	63	756
V56RE	50A	1	8	2	185	370
	60B	2	5	13	63	819
	50A	3	8	2	185	370

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
60B	5	77	12
50A	8	61	24
Peso Total	60B =		12 kgf
Peso Total	50A =		24 kgf

The technical drawing shows a rectangular reinforced concrete beam cross-section. The top reinforcement consists of 20 bars of diameter 8 mm, spaced at 125 mm, labeled as 20 Ø 8 C/125. The bottom reinforcement consists of 2 bars of diameter 16 mm, spaced at 100 mm, labeled as 2 N2 Ø 16 C=100. The total width of the beam is 461 mm. The effective depth is 458 mm. The drawing also indicates a stirrup cage with 2 legs of diameter 8 mm, spaced at 100 mm, labeled as 2 N2 Ø 8 C=100.

Technical drawing of a beam (Corte A) showing dimensions and material specifications. The drawing includes a side view and a cross-section view.

Side View Dimensions:

- Overall length: 20 N3 Ø 5 C=22
- Length of section 1: 2 Ø 15
- Length of section 2: 2 Ø 15
- Section 1 material: P3RE
- Section 2 material: P4RE
- Section 1 height: 14
- Section 2 height: 14

Cross-section View (Corte A):

- Overall height: 2 Ø 15
- Section 1 height: 2 Ø 15
- Section 2 height: 2 Ø 15
- Section 1 material: P3RE
- Section 2 material: P4RE
- Section 1 width: 14
- Section 2 width: 14

Material Specifications:

- Section 1: 2 N2 Ø 10 C=461
- Section 2: 2 N2 Ø 10 C=490

Technical drawing of a mechanical part with dimensions and section A-A.

Dimensions:

- Top: $\varnothing 8$ N3 C=15
- Top: 20.8
- Top: 20.8
- Top: 30
- Top: 30
- Bottom: 24
- Bottom: 2 N1 $\varnothing 8$ C=155
- Bottom: 160
- Bottom: 2 N2 $\varnothing 8$ C=200

Section A-A:

- Section A-A is indicated by a line with arrows pointing to the section.
- Section A-A shows a cross-section of the part with dimensions: $\varnothing 8$ N3 $\varnothing 5$ C=83.

	AÇO	POS	BIT	QUANT	COMPROMISSO	
					UNIT	TOTAL
			mm		cm	cm
V101RE	50A	1	10	2	545	1090
	50A	2	10	2	490	980
	60B	3	5	20	123	2460
V102RE	50A	1	10	2	545	1090
	50A	2	10	2	490	980
	60B	3	5	20	123	2460
V103RE	50A	1	8	2	205	410
	50A	2	8	2	200	400
	60B	3	5	8	83	664
V104RE	50A	1	8	2	155	310
	50A	2	8	2	150	300
	60B	3	5	8	83	664

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
60B	5	62	10
50A	8	15	6
50A	10	41	26
Peso Total	60B =		10 kgf
Peso Total	50A =		32 kgf

PLANTA

14
30
13
50
50

CORTE A - A

14
50
30
13

CORTE B - B

30
50
13
14

N2 Ø 8 C=182

4 N3 Ø 8 C=184

AÇO	POS	BIT mm	QUANT	COMPRIMENTO	
				UNIT cm	TOTAL cm
BLOCOS DOS RESÍDUOS (x4)					
50A	1	6,3	12	196	2352
50A	2	8	16	182	2912
50A	3	8	16	184	2944

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
50A	6,3	24	6
50A	8	59	23
Peso Total	50A =		29 kgf

Technical drawing of a rectangular plate. The drawing shows a rectangle with a central hole. The outer dimensions are 127 mm by 127 mm. The inner dimensions of the hole are 6.3 mm by 6.3 mm. The hole is labeled "FURO" and "Ø 6.3". The plate is labeled "P1RE" and "P101RE". The drawing includes a scale bar indicating 6 mm and a dimension line for the hole diameter.

Technical drawing of a rectangular plate. The plate has a width of 11 N2 and a height of 10. The center is marked with a crosshair. The distance from the center to the top edge is 6.3, and the distance from the center to the bottom edge is 14.7. The distance from the center to the left edge is 5, and the distance from the center to the right edge is 5. The plate is labeled with 'P101RE' at the top left and 'P101RE' at the top right. The center is labeled 'FURO' and 'L1RE'. The bottom edge is labeled '103'.

Technical drawing of a rectangular plate. The plate has a central hole labeled "FURO". The overall dimensions are 127 (width) and 128 (height). The hole has a diameter of 6.3 and is positioned 13 units from the top and bottom edges. The plate is labeled with corner identifiers: P1RE (top-left), P101RE (top-right), P3RE (bottom-left), and P104RE (bottom-right). The central hole is labeled "FURO". The dimensions are: 128 (height), 127 (width), 13 (distance from top/bottom edges to hole center), 6.3 (hole diameter), and 6 (distance from side edges to hole center).

Technical drawing of a rectangular plate. The plate has a central rectangular area labeled "LIRE" and a circular hole labeled "FURO" with a diameter of $\varnothing 10$. The overall dimensions are 148 mm in width and 138 mm in height. The central area is 103 mm wide. The distance from the top edge to the center of the hole is 5 mm. The distance from the bottom edge to the center of the hole is 5 mm. The distance from the left edge to the center of the hole is 5 mm. The distance from the right edge to the center of the hole is 5 mm. The labels P1RE, P101RE, P3RE, and P104RE are positioned around the plate.

AÇO	POS	BIT mm	QUANT	COMPRIMENTO	
				UNIT cm	TOTAL cm
Intermediário - Resíduos					
50A	1	6,3	13	139	1807
50A	2	6,3	11	147	1617
50A	3	6,3	13	139	1807
50A	4	6,3	11	148	1628

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
50A	6.3	69	17
Peso Total	50A =		17 kgf

ESPECIFICAÇÕES DE PROJETO

1. UNIDADES EM CENTÍMETROS, NÍVEIS EM METROS, EXCETO ONDE INDICADO O CONTRÁRIO;
2. ESTE PROJETO ATENDE AS ESPECIFICAÇÕES DA NORMA NBR-6118:2014;
3. AS ARMADURAS DEVERÃO ESTAR LIMPAS, DE ACORDO COM O QUE SE ESTABELEÇA NAS NORMAS DE EXECUÇÃO, COM AS PERÇAS DEVIDAMENTE POSICIONADAS CONFORME INDICA O PROJETO, UTILIZANDO-SE DE CILINDROS E ESPACADORES ADEQUADOS, GARANTINDO OS COBERTURAS;
4. AÇO: C40 (fy ≥ 500 MPa) / C40A (fy ≥ 600 MPa);
5. PREVER INSETS METÁLICOS PARA FIXAÇÃO DA ESTRUTURA METÁLICA, NOS ELEMENTOS PERTINENTES (VER PROJETO DE ESTRUTURA METÁLICA);
6. DEMAIS CONSIDERAÇÕES VIDE PRANCHA DE FORMAS;
7. TODAS AS MEDIDAS E DIMENSÕES DEVERÃO SER CONFERIDAS NA OBRA.

COBRIMENTOS MÍNIMOS	
ELEMENTOS	VALORES (cm)
VIGAS E PILARES	2,5
LAJES	2,0
FUNDAÇÕES	2,5

REVISÕES

REVISÃO	DATA	ASSUNTO
R03	01/04/2022	EMISSÃO INICIAL
R01	18/04/2022	REVISÃO GERAL
R02	22/04/2022	REVISÃO CONFORME PARECER 073/2022