

The diagram shows a 2D grid with the following labels and features:

- Top-left corner:** Labeled **P13A** in blue. A blue horizontal bar is at the top left, and a blue vertical bar is at the bottom left.
- Left side:** Labeled **V328A** in blue. A vertical line is labeled **11** at both the top and bottom.
- Top edge:** Labeled **PT201A h=15** in blue. Below this, a vertical line is labeled **22 NZ Ø 6.3 C/10 C=VAR (sup)** in blue.
- Bottom edge:** Labeled **P20A** in blue. A vertical line is labeled **22 NI Ø 10 C/10 C=VAR (inf)** in blue.
- Grid:** A grid of 10 columns and 2 rows. The top row is labeled **E201A h=15** in blue. The bottom row is labeled **E202A h=15** in blue.
- Right side:** Labeled **V323A** in blue. A vertical line is labeled **V420A** in blue.
- Arrows:** A blue arrow labeled **Desce** points right from the top-left corner. A blue arrow labeled **Desce** points left from the bottom-right corner.
- Other labels:** **B** and **A** are labeled in blue with a small triangle icon next to them. **L416A** is labeled in blue at the bottom right.

The diagram shows a 2x2 grid of rooms. The top-left room is labeled PT301A h=15. The top-right room is labeled E301A h=15. The bottom-left room is labeled E302A h=15. The bottom-right room is labeled L516A. The rooms are separated by walls. There are doors on the right wall of PT301A and E302A, and on the left wall of E301A and L516A. There are windows on the top wall of PT301A and E301A, and on the bottom wall of E302A and L516A. The rooms are labeled with their names and heights. The top-left room is labeled PT301A h=15. The top-right room is labeled E301A h=15. The bottom-left room is labeled E302A h=15. The bottom-right room is labeled L516A. The rooms are separated by walls. There are doors on the right wall of PT301A and E302A, and on the left wall of E301A and L516A. There are windows on the top wall of PT301A and E301A, and on the bottom wall of E302A and L516A. The rooms are labeled with their names and heights. The top-left room is labeled PT301A h=15. The top-right room is labeled E301A h=15. The bottom-left room is labeled E302A h=15. The bottom-right room is labeled L516A.

[illegible]

**V**

256  
16 N6 Ø 6.3 C/15 C=331

**L**

51  
16 N6 Ø 6.3 C/15 C=502  
18 Ø 6.3 Ø15  
18 Ø 6.3 C/10  
39 N4 Ø 6.3 C/10 C=246  
31 N2 Ø 12.5 C/7.5 C=670

**F**

239  
N2 Ø 6.3 C/10  
N1 Ø 10 C/10

AÇO	POS	BIT	QUANT	COMPRIMENTO UNIT	TOTAL
				cm	m
<b>ARMADURA LANCES ESCADAS - 3 PAV (E301A E E302A)</b>					
S0A	1	10	22	--VAR--	10824
S0A	2	6.3	22	--VAR--	10824
S0A	3	12.5	31	670	20770
S0A	4	6.3	68	248	16728
S0A	5	6.3	16	562	8992
S0A	6	6.3	16	331	5296
S0A	7	12.5	23	715	16468
S0A	8	8	35	236	8260
S0A	9	6.3	15	518	7770
S0A	10	6.3	22	236	5192
S0A	11	12.5	29	785	22855

[illegible]

Technical drawing of a staircase showing plan and elevation views with dimensions and reinforcement details.

**Plan View (Top):**

- Overall width: 218
- Reinforcement: 9 | 22 N10 Ø 6.3 C/20 C=236 | 9
- Staircase width: 15
- Reinforcement: 15 NØ Ø 6.3 C/15 C=318
- Staircase length: 443
- Reinforcement: 31Ø 6.3 C/20
- Staircase width: 186
- Reinforcement: 23 N11 Ø 12.5 C/10 C=282
- Staircase length: 222
- Staircase width: 38
- Reinforcement: 35 N8 Ø 8 C/12.5 C=236
- Staircase length: 64

**Elevation View (Bottom):**

- Overall width: 218
- Reinforcement: 9 | 22 N10 Ø 6.3 C/20 C=236 | 9
- Staircase width: 15
- Reinforcement: 15 NØ Ø 6.3 C/15 C=318
- Staircase length: 443
- Reinforcement: 31Ø 6.3 C/20
- Staircase width: 186
- Reinforcement: 23 N11 Ø 12.5 C/10 C=282
- Staircase length: 222
- Staircase width: 38
- Reinforcement: 35 N8 Ø 8 C/12.5 C=236
- Staircase length: 64

AÇO	POS	BIT	QUANT	COMPROMIMENTO	
				UNIT	TOTAL
			mm	cm	cm
<b>ARMADURA LANCES ESCADAS - 2 PAV (E201A E E202A)</b>					
S0A	1	10	27	10824	10824
S0A	2	6,3	27	..VAR-	10824
S0A	3	12,5	31	20770	20770
S0A	4	10	19	246	4674
S0A	5	6,3	16	562	8952
S0A	6	6,3	29	246	7134
S0A	7	6,3	16	331	5296
S0A	8	12,5	27	715	16468
S0A	9	8	21	236	4956
S0A	10	6,3	15	518	7770
S0A	11	6,3	27	236	5192
S0A	12	12,5	23	287	6601

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
50A	6,3	452	111
50A	8	50	20
50A	10	155	96
50A	12,5	438	422
Peso Total	50A =	648 kgf	

AÇO	POS	BIT	QUANT	COMPRIIMENTO	
				UNIT	TOTAL
		mm		cm	cm
ARMADURA LANCES ESCADAS - 3 PAV (E301A E E302A)					
50A	1	10	22	--VAR-	10824
50A	2	6,3	22	--VAR-	10824
50A	3	12,5	31	670	20730
50A	4	6,3	68	246	16728
50A	5	6,3	16	562	8992
50A	6	6,3	16	331	5296
50A	7	12,5	22	716	16468
50A	8	8	35	236	8260
50A	9	6,3	15	118	7770
50A	10	6,3	22	236	5192
50A	11	12,5	27	385	6555

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
50A	6,3	548	134
50A	8	83	33
50A	10	108	67
50A	12,5	438	422
Peso Total	50A =		655 kgf

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 DEVEM ESTAR LIMPAS, DE ACORDO COM O QUE SE ESTABELECE NAS NORMAS DE EXECUÇÃO, COM AS FERRAGENS DEVIDAMENTE POSICIONADAS CONFORME INDICA O PROJETO, UTILIZANDO-SE DE POSICIONADORES E ESCOAVAMENTOS ADEQUADOS, GARANTINDO OS COBRIMENTOS;
4. ACOS: CASO (Fy  $\geq$  500MPa) / CA60 (Fy  $\geq$  600MPa);
5. PREVER INJETAR METÁLICOS PARA FIXAÇÃO DA ESTRUTURA METÁLICA, NOS ELEMENTOS PERTINENTES (VER PROJETO DE ESTRUTURA METÁLICA);
6. DEMAIS CONSIDERAÇÕES VIDE FRANCHA DE FORMAS;
7. TODAS AS MEDIDAS E DIMENSÕES DEVEM SER CONFERIDAS NA OBRA.

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

[illegible]