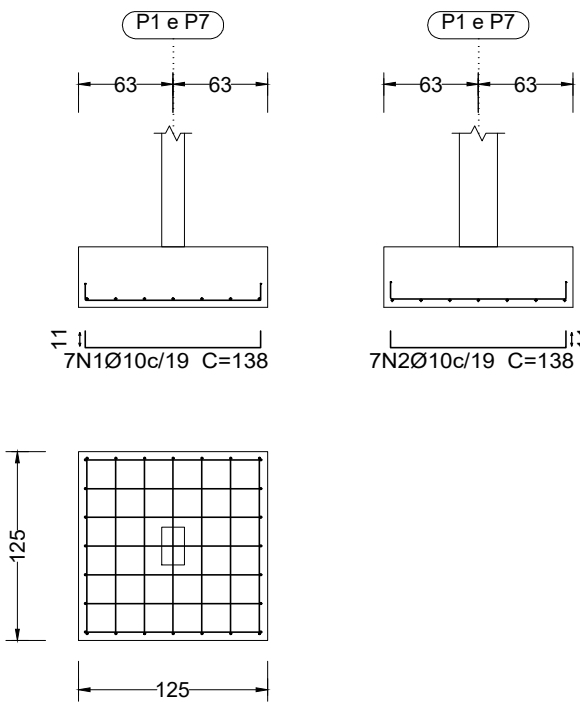


Resumo Aço Fundação	Detalhamento fundação	Comp. total (m)	Peso (kg)	Total
CA-50	Ø10	211.2	130	
CA-60	Ø12.5	61.6	59	189
CA-60	Ø5	24.5	4	4
Total				193

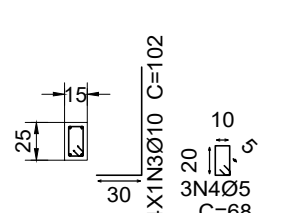
Fundação
Fôrmas
Concreto: C25, em geral
Escala: 1:50

Fundação
Detalhamento fundação
Concreto: C25, em geral
Escala: 1:50

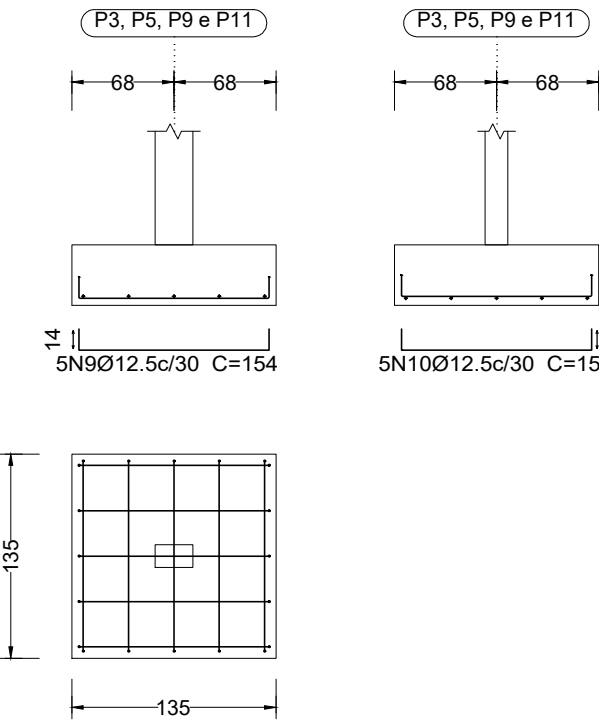
P1 e P7



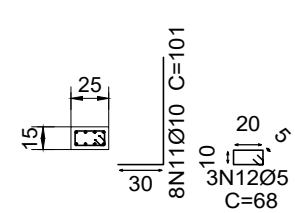
P1 e P7



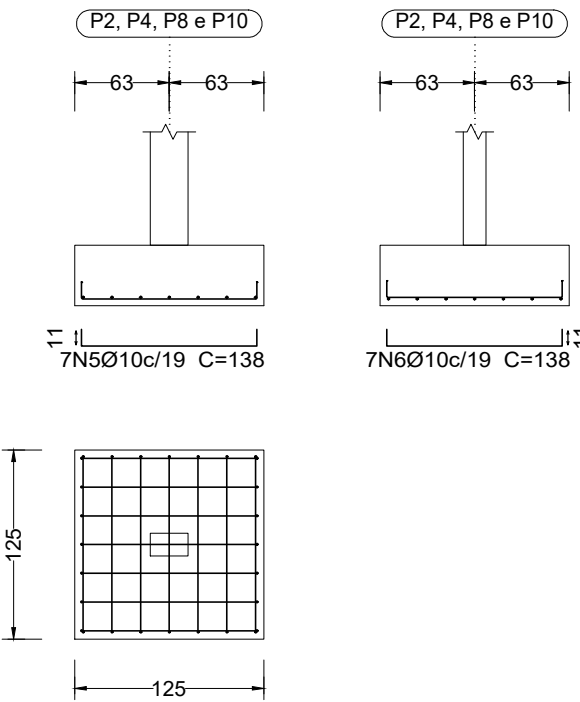
P3, P5, P9 e P11



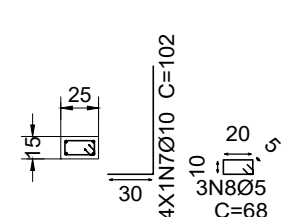
P3, P5, P9 e P11



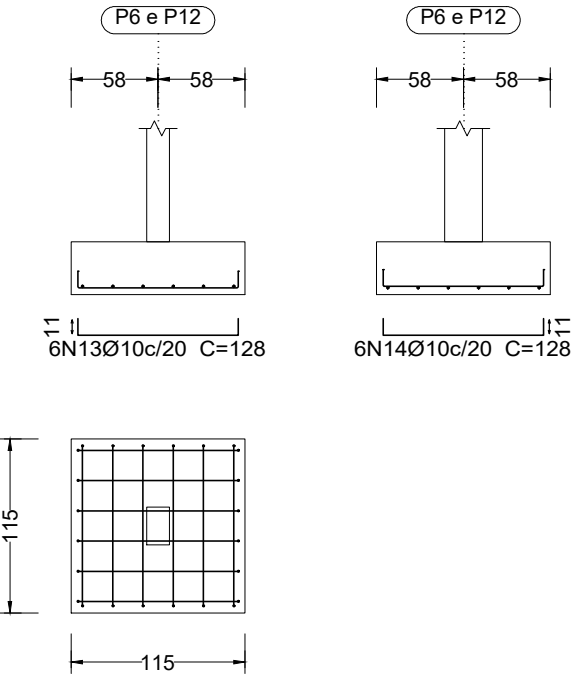
P2, P4, P8 e P10



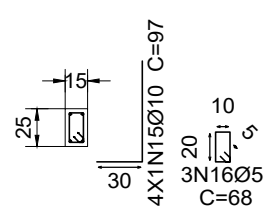
P2, P4, P8 e P10



P6 e P12



P6 e P12



Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1=P7	1	Ø10	7	11	116	11	138	966	6.0	
	2	Ø10	7	11	116	11	138	966	6.0	
	3	Ø10	4	30	72		102	408	2.5	
	4	Ø5	3		68		68	204		0.3
Total: (x2):									14.5	0.3
P2=P4=P8=P10	5	Ø10	7	11	116	11	138	966	6.0	
	6	Ø10	7	11	116	11	138	966	6.0	
	7	Ø10	4	30	72		102	408	2.5	
	8	Ø5	3		68		68	204		0.3
Total: (x4):									58.0	1.2
P3=P5=P9=P11	9	Ø12.5	5	14	126	14	154	770	7.4	
	10	Ø12.5	5	14	126	14	154	770	7.4	
	11	Ø10	8	30	71		101	608	5.0	
	12	Ø5	3		68		68	204		0.3
Total: (x4):									19.8	0.3
P6=P12	13	Ø10	6	11	106	11	128	768	4.7	
	14	Ø10	6	11	106	11	128	768	4.7	
	15	Ø10	4	30	67		97	388	2.4	
	16	Ø5	3		68		68	204		0.3
Total: (x2):									11.8	0.3
									23.6	0.6
									Ø5:	0.0
									Ø10:	130.6
									Ø12.5:	59.2
									Total:	189.8

Projeto: 022/2025	EDUCACIONAL	Data: 09/2026
Local: Novorizonte - MG		
Nome: Prefeitura Municipal de Novorizonte - MG		
Des.no.:	Planta: Cálculo Estrutural	Reforma/Adequação e Ampliação da Escola Municipal de Havana
Autor: Paloma Almeida Duarte - CREA-MG 366944	01/08	