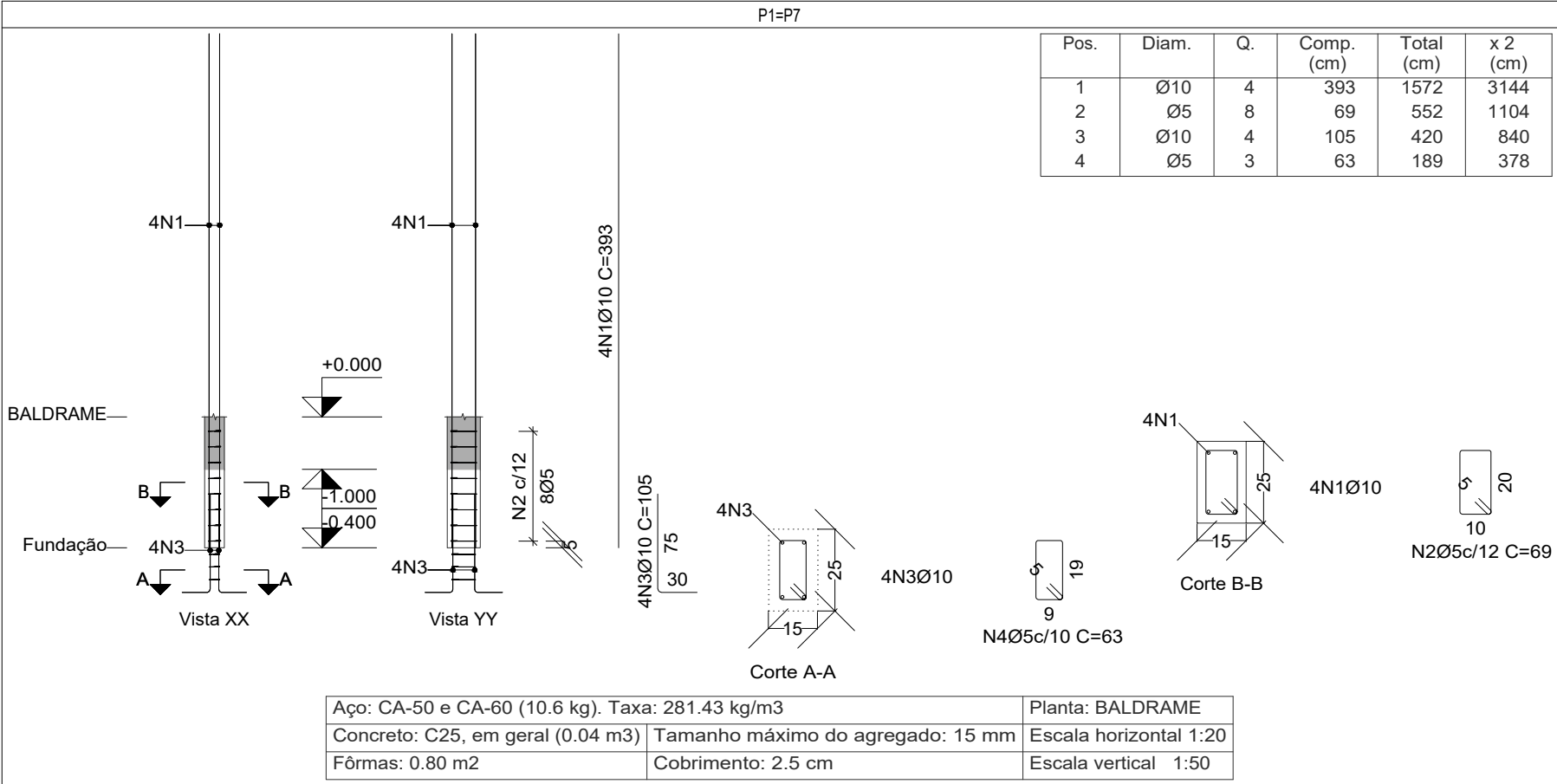
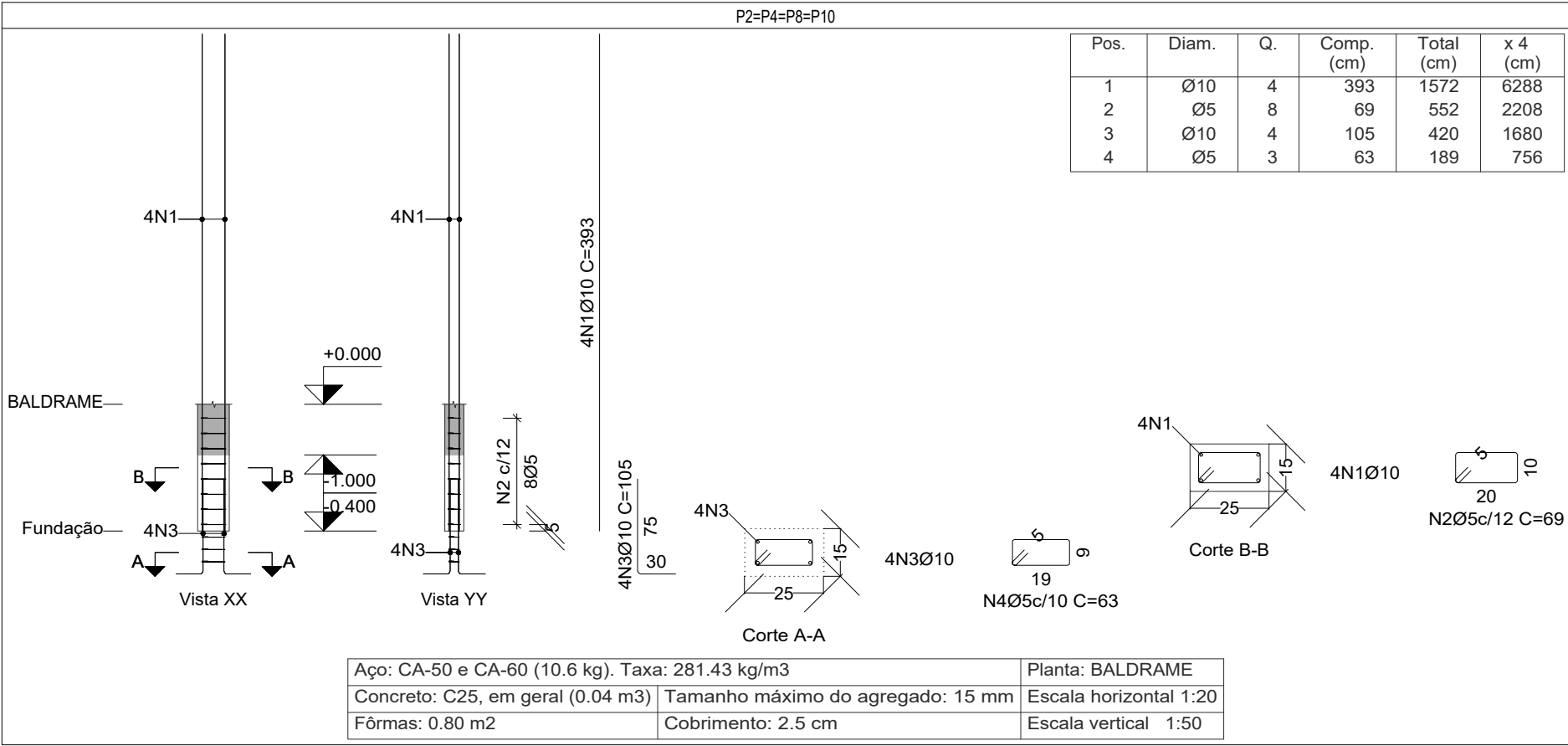
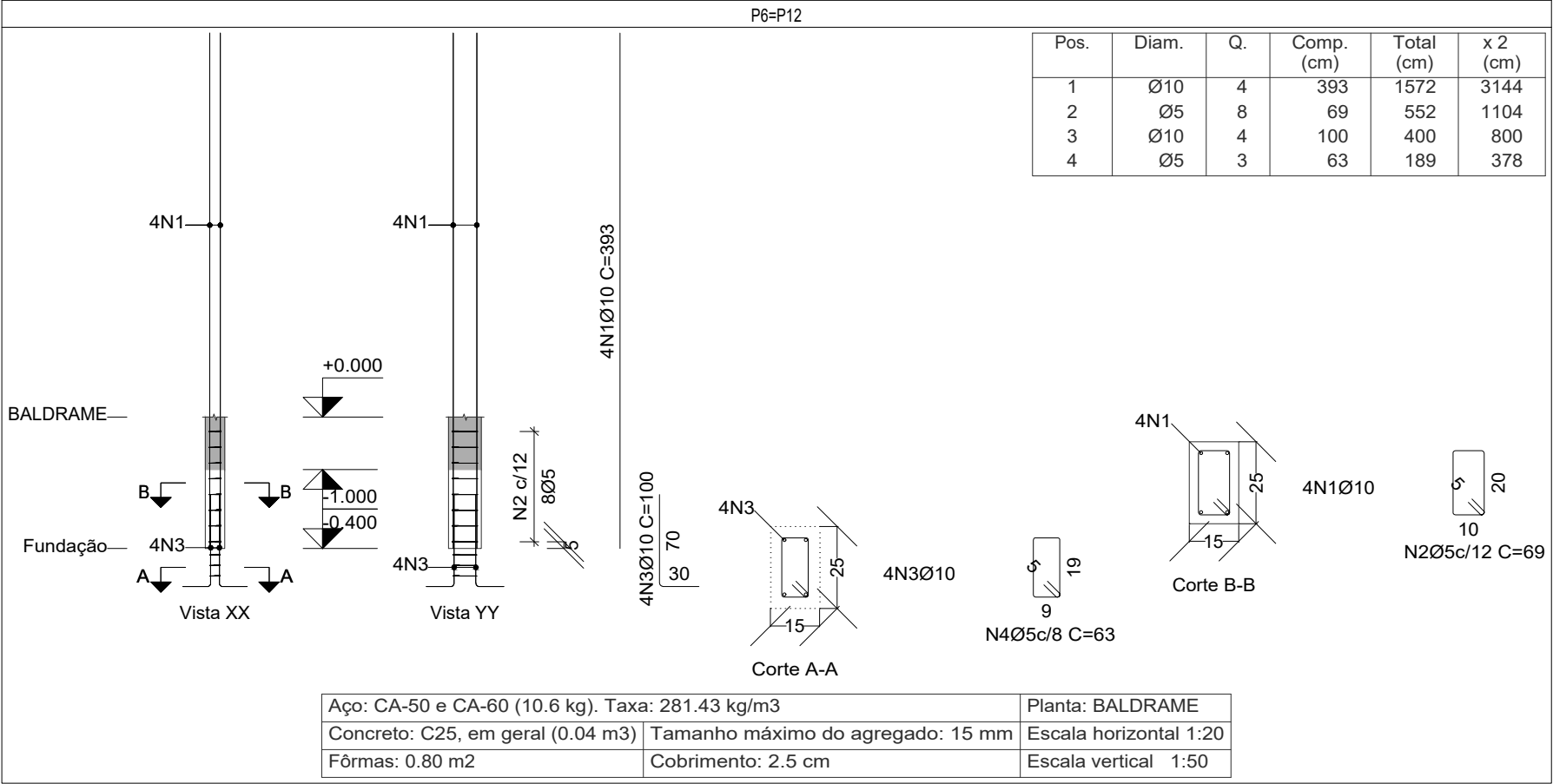
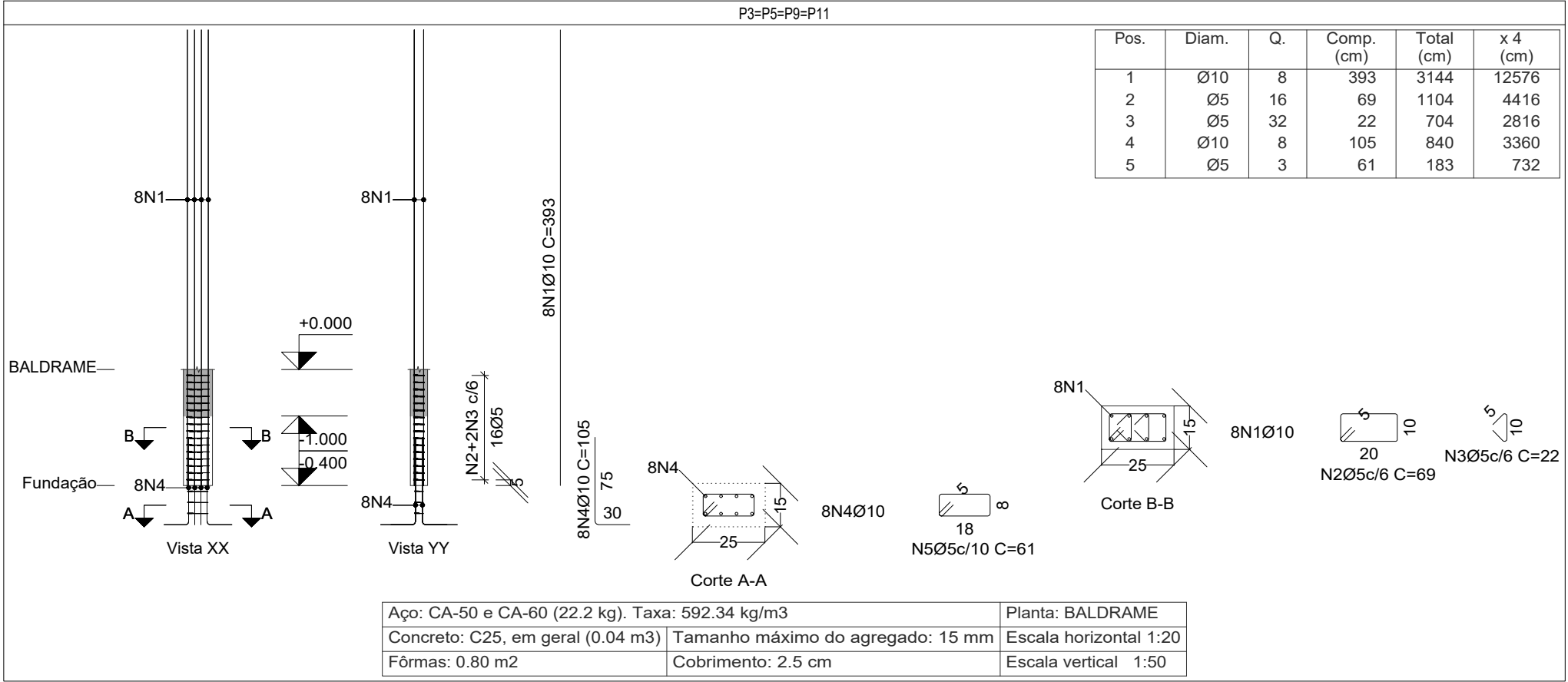




Planta: BALDRAME
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60



Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1=P7	1	Ø10	4		393	1572	9.7	
	2	Ø5	8		69	552		0.9
	3	Ø10	4		105	420	2.6	
	4	Ø5	3		63	189		0.3
	Total: (x2):						12.3 24.6	1.2 2.4
P6=P12	1	Ø10	4		393	1572	9.7	
	2	Ø5	8		69	552		0.9
	3	Ø10	4		100	400	2.5	
	4	Ø5	3		63	189		0.3
	Total: (x2):						12.2 24.4	1.2 2.4
P2=P4=P8=P10	1	Ø10	4		393	1572	9.7	
	2	Ø5	8		69	552		0.9
	3	Ø10	4		105	420	2.6	
	4	Ø5	3		63	189		0.3
	Total: (x4):						12.3 49.2	1.2 4.8
P3=P5=P9=P11	1	Ø10	8		393	3144	19.4	
	2	Ø5	16		69	1104		1.7
	3	Ø5	32		22	704		1.1
	4	Ø10	8		105	840	5.2	
	5	Ø5	3		61	183		0.3
	Total: (x4):						24.6 98.4	3.1 12.4
						Ø5: Total:	0.0 196.6	22.0 0.0 22.0



Resumo Aço Pilares	Comp. total (m)	Peso (kg)	Total
CA-50 Ø10	318.3	196	196
CA-60 Ø5	138.9	22	22
Total			218

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	04/08	