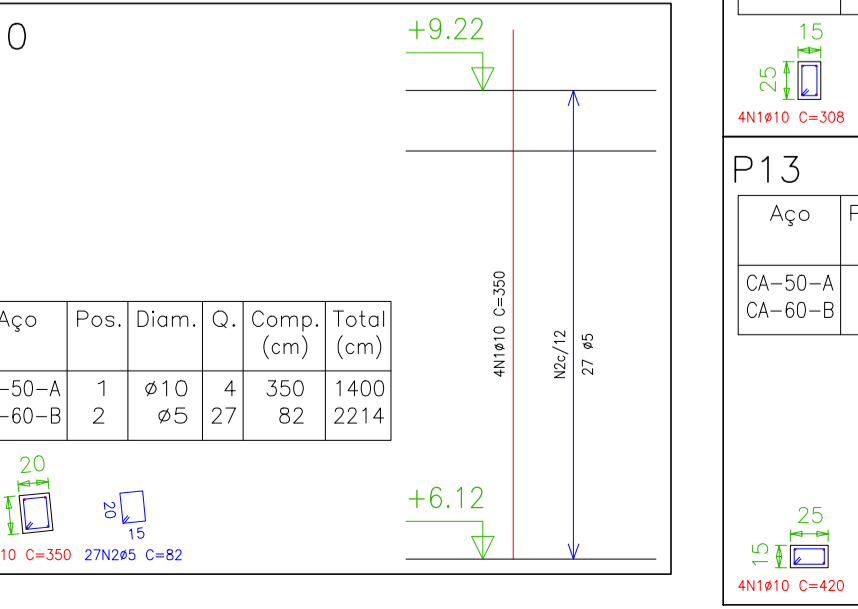
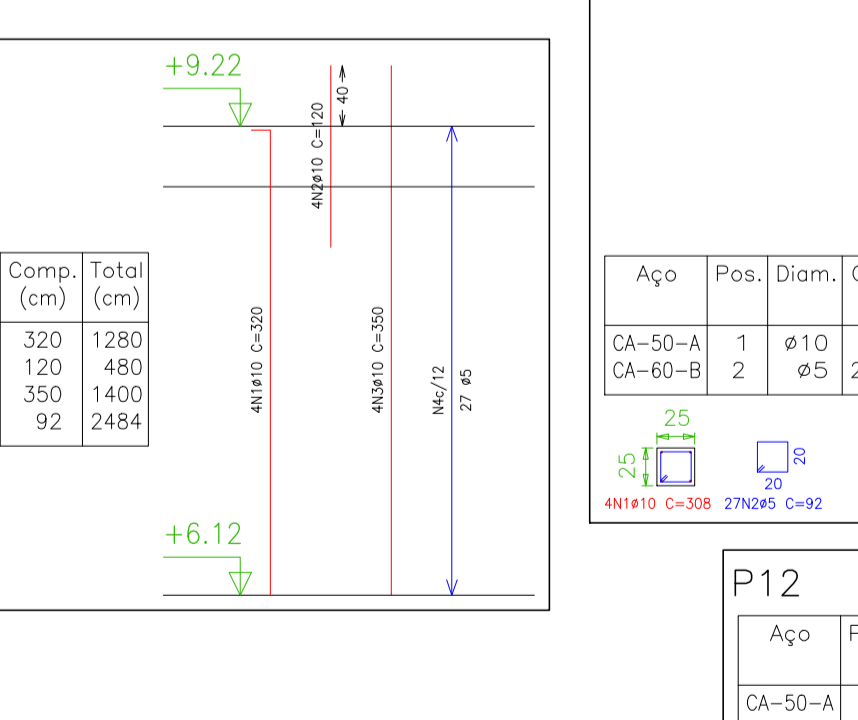
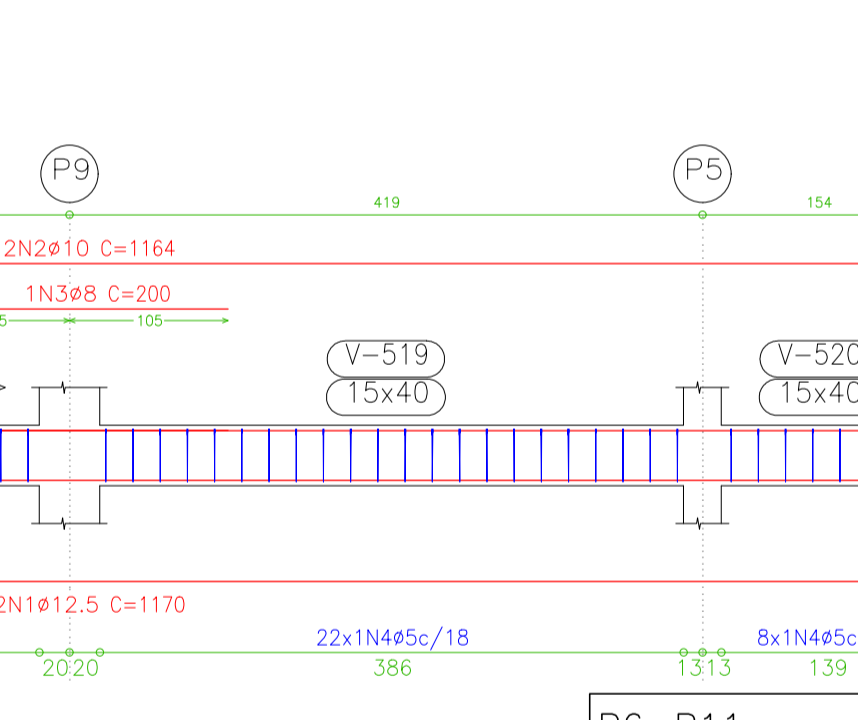
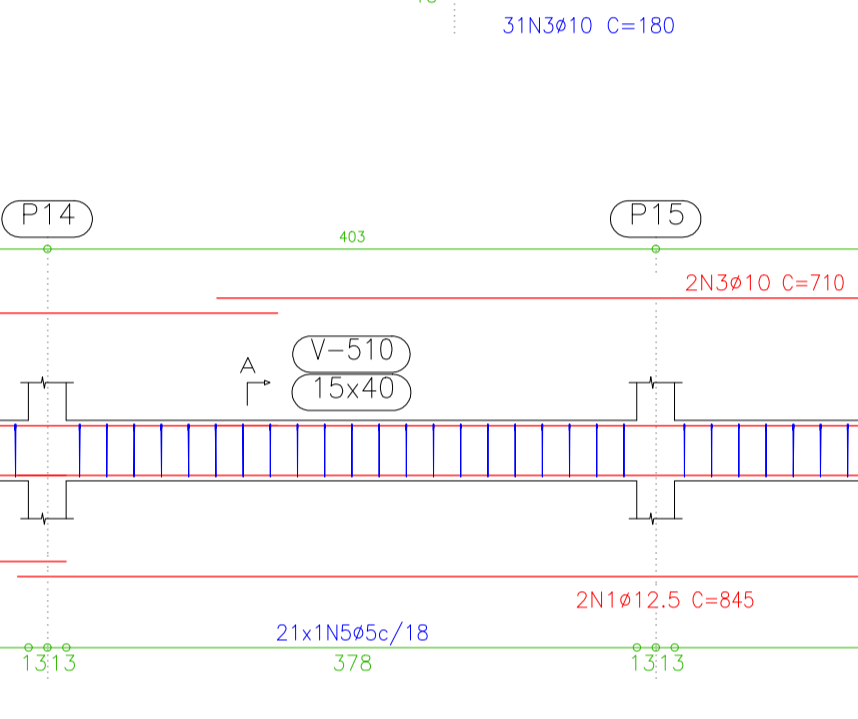
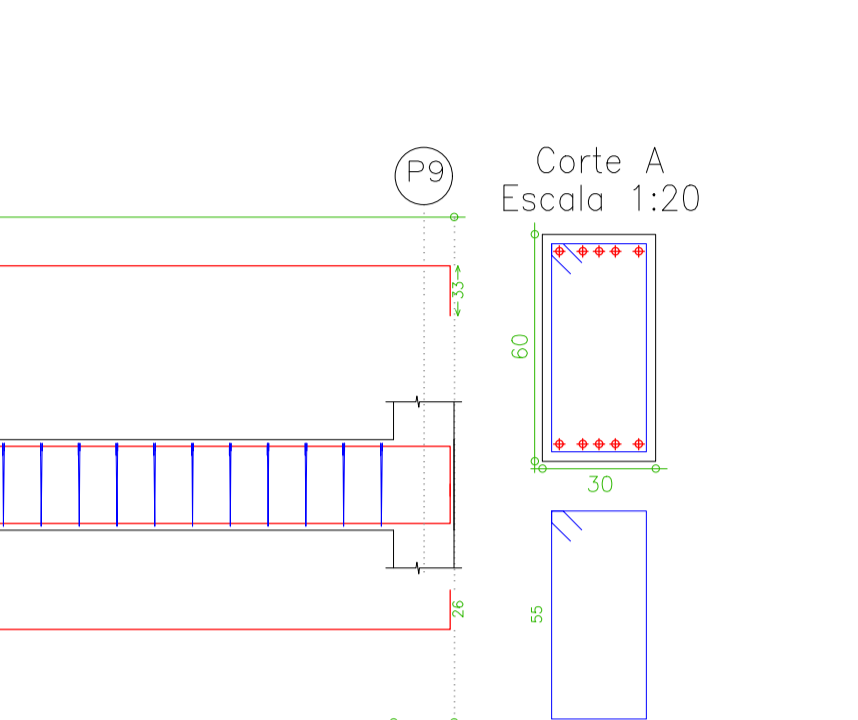
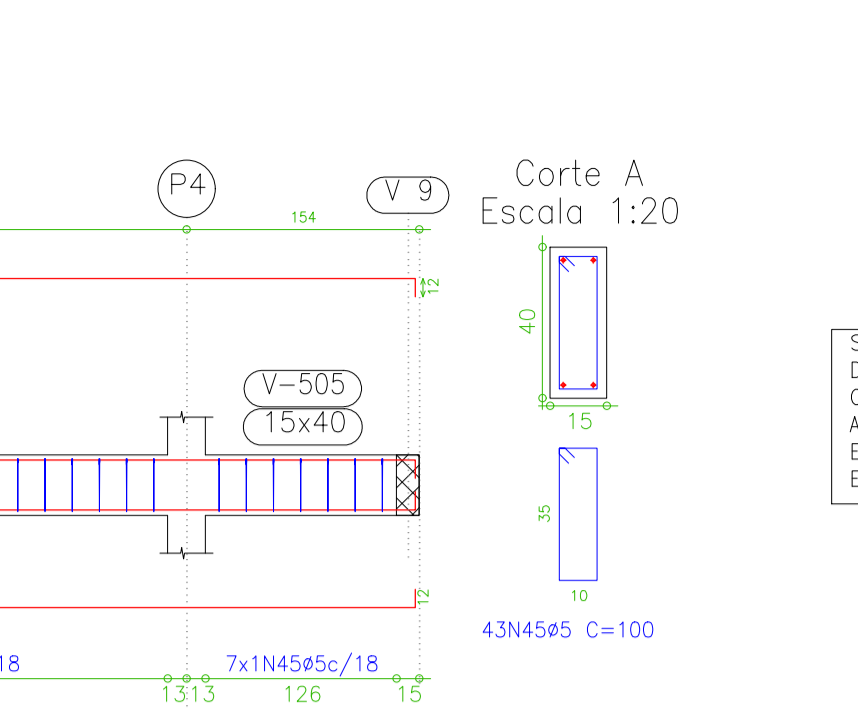
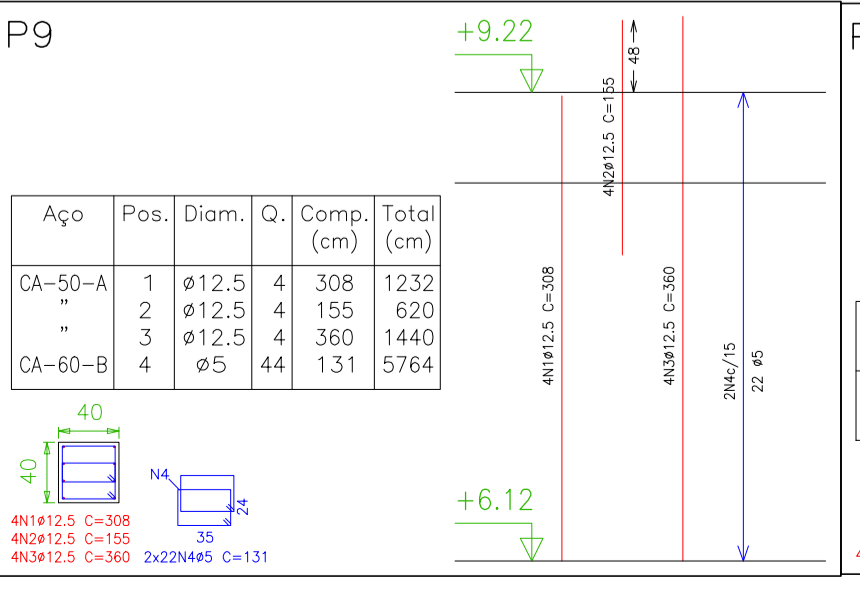
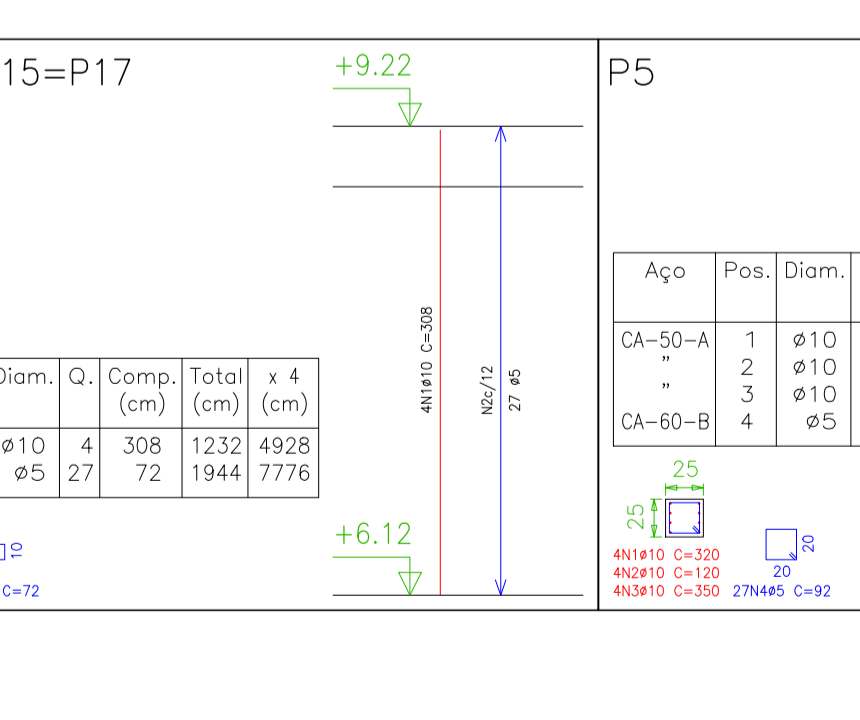
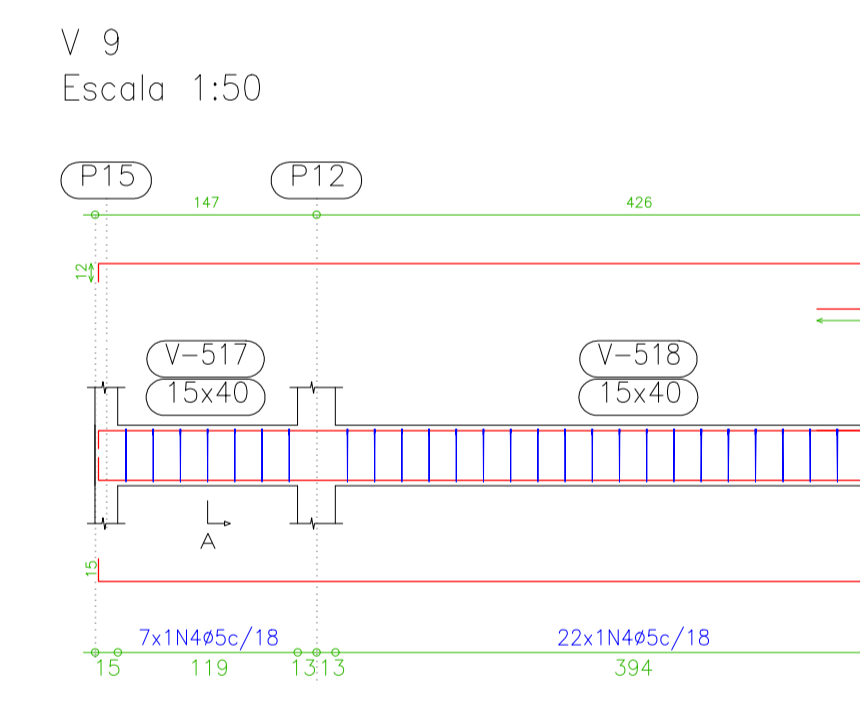
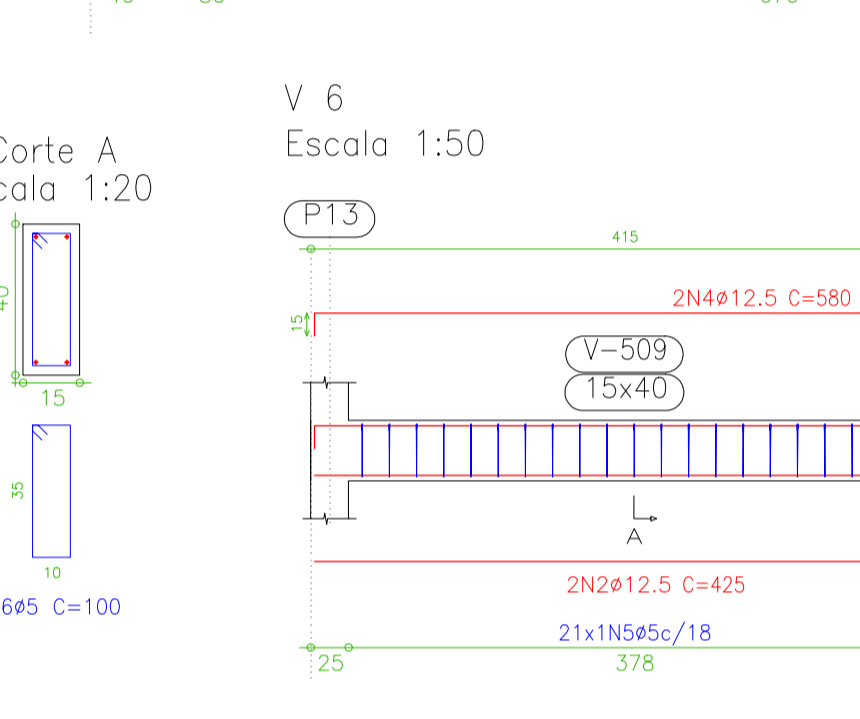
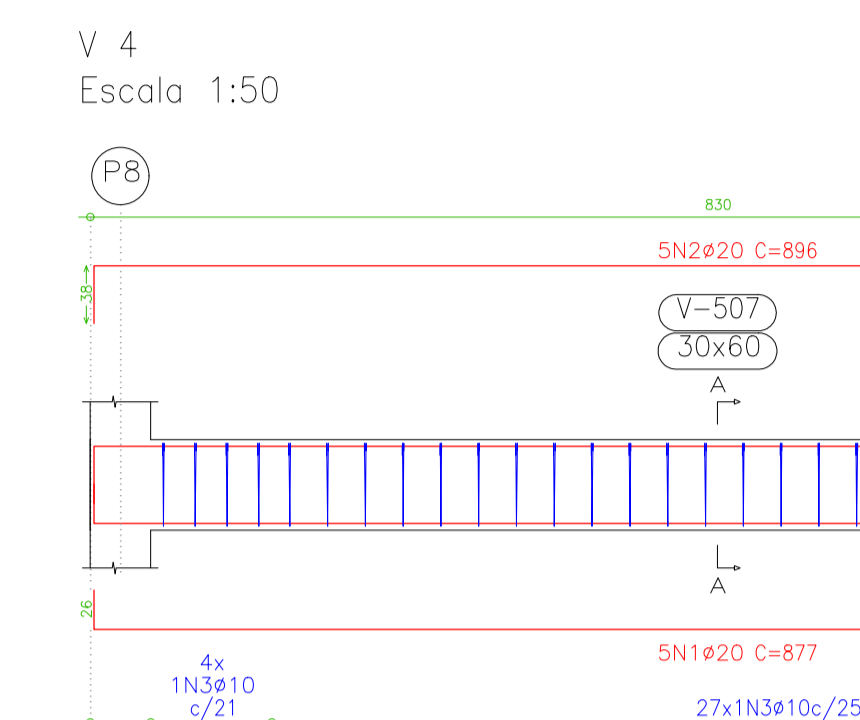
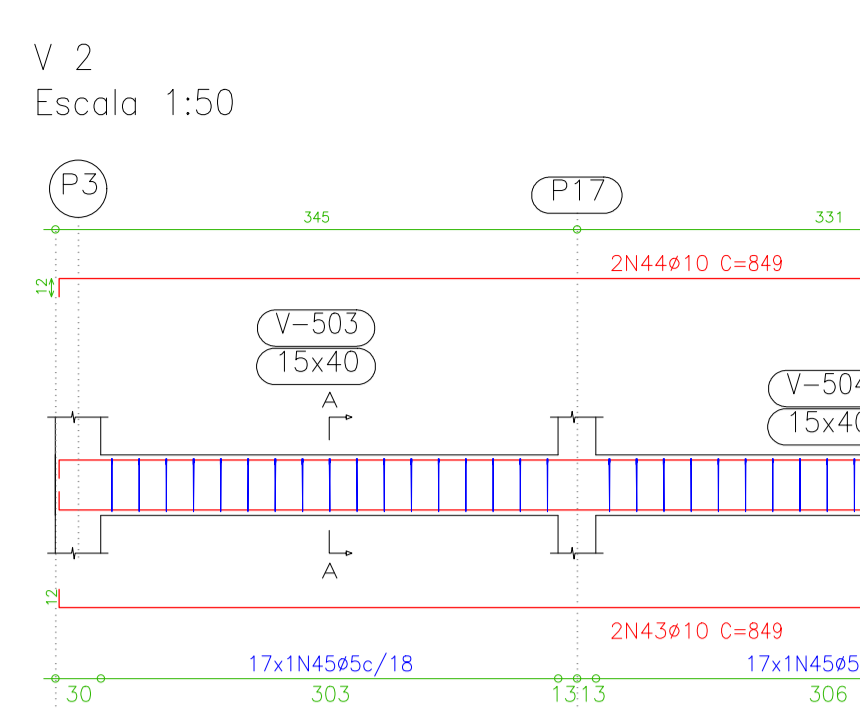
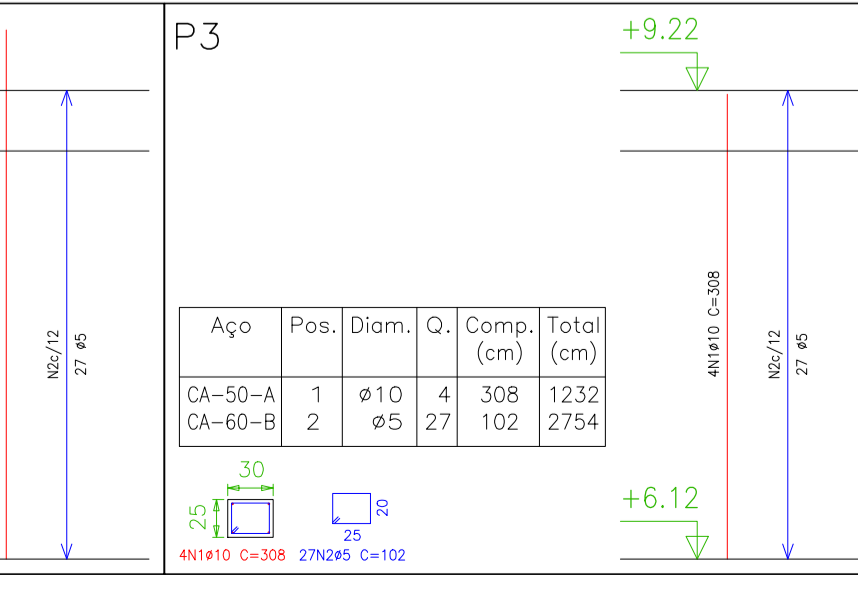
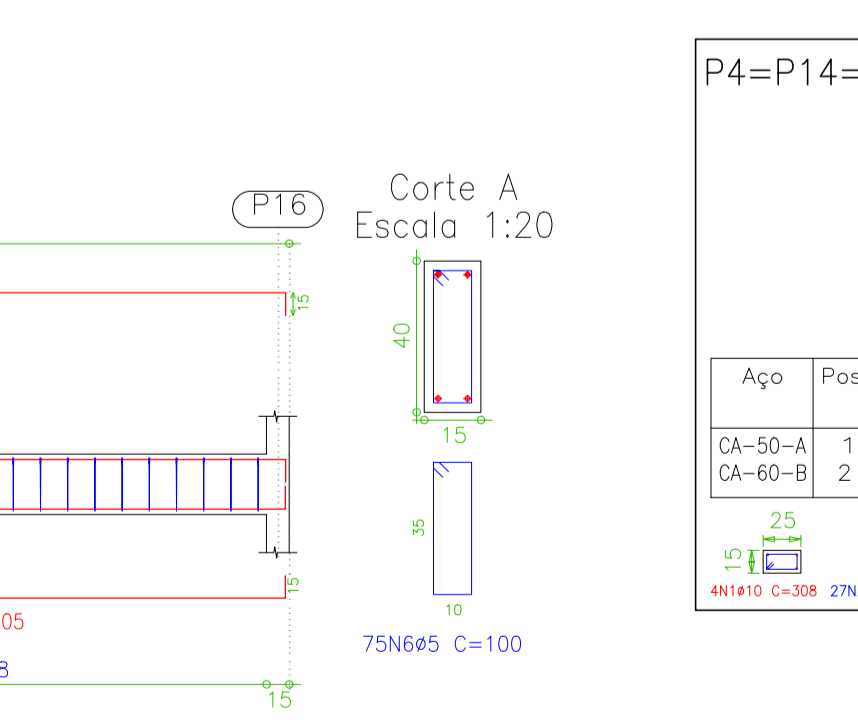
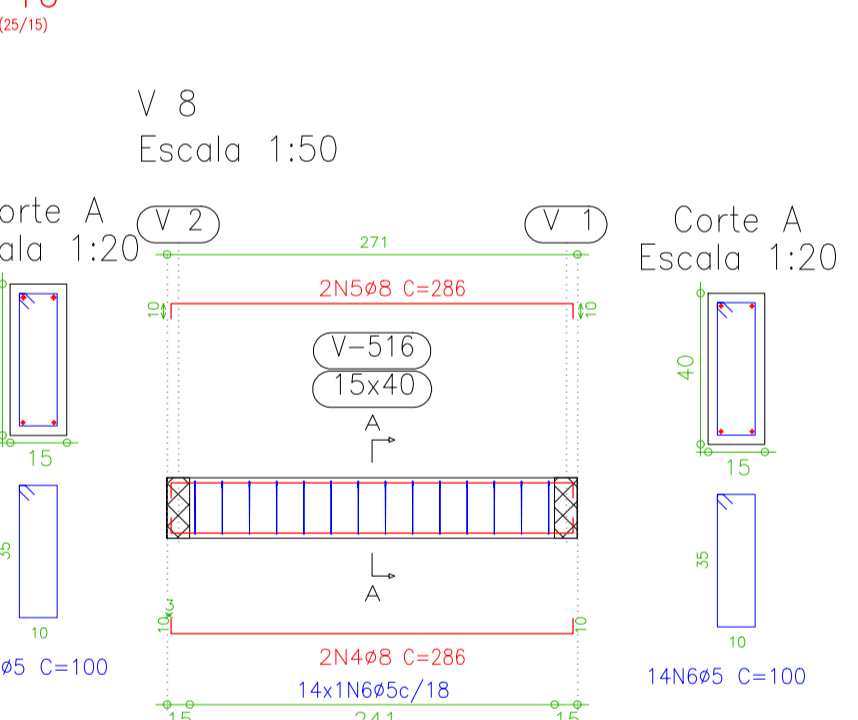
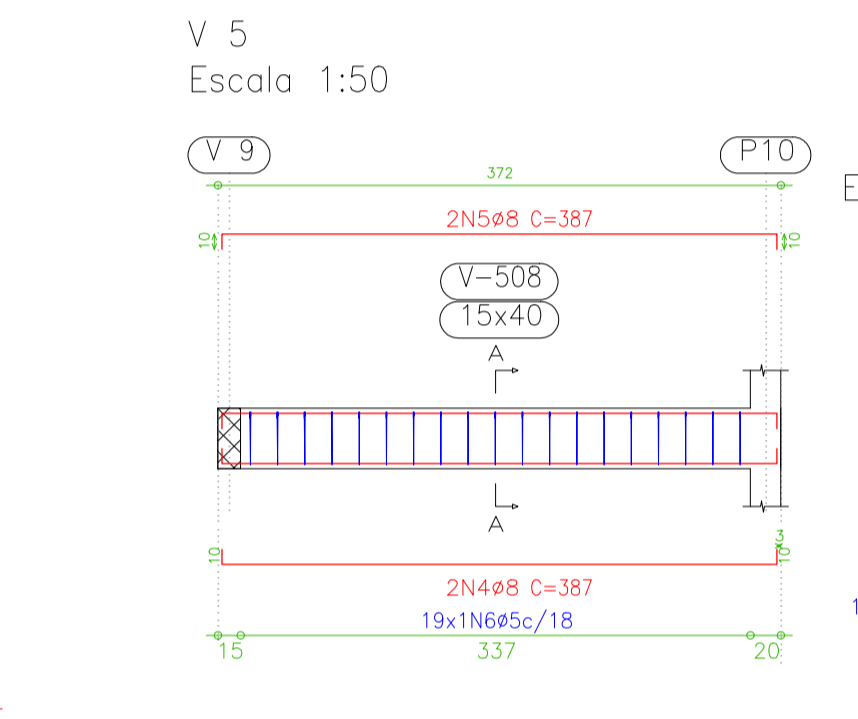
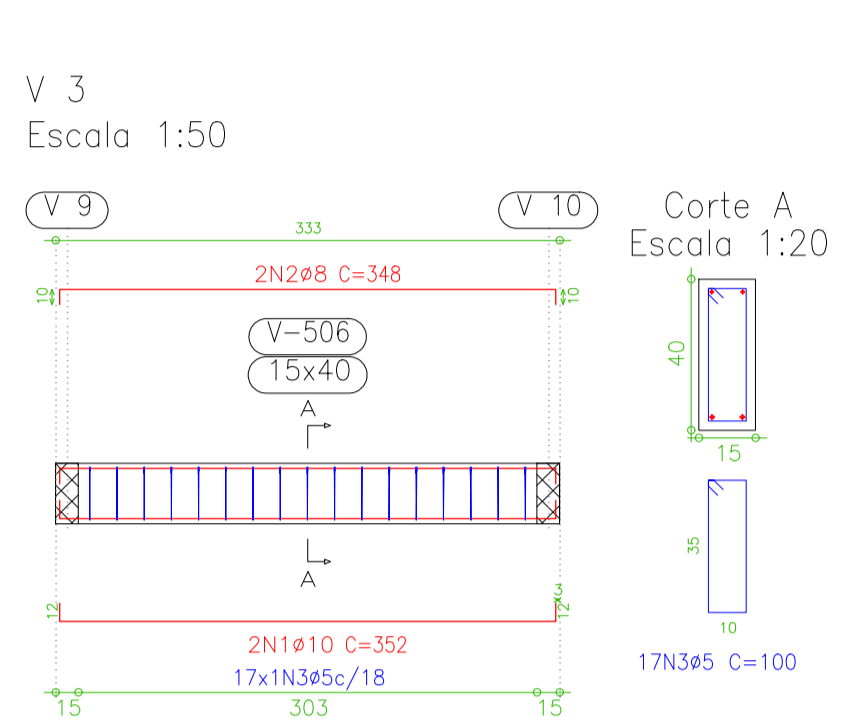
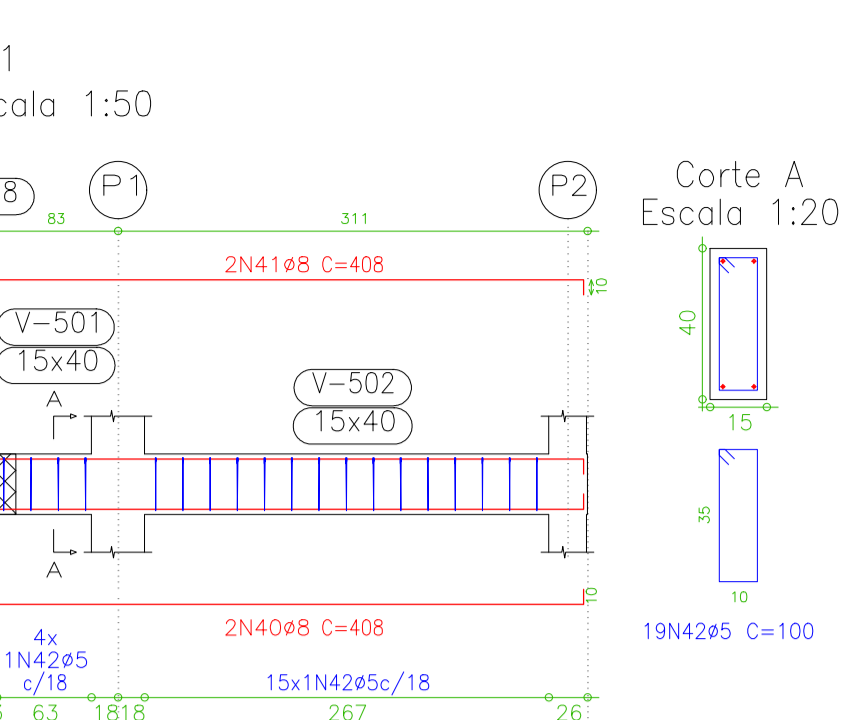
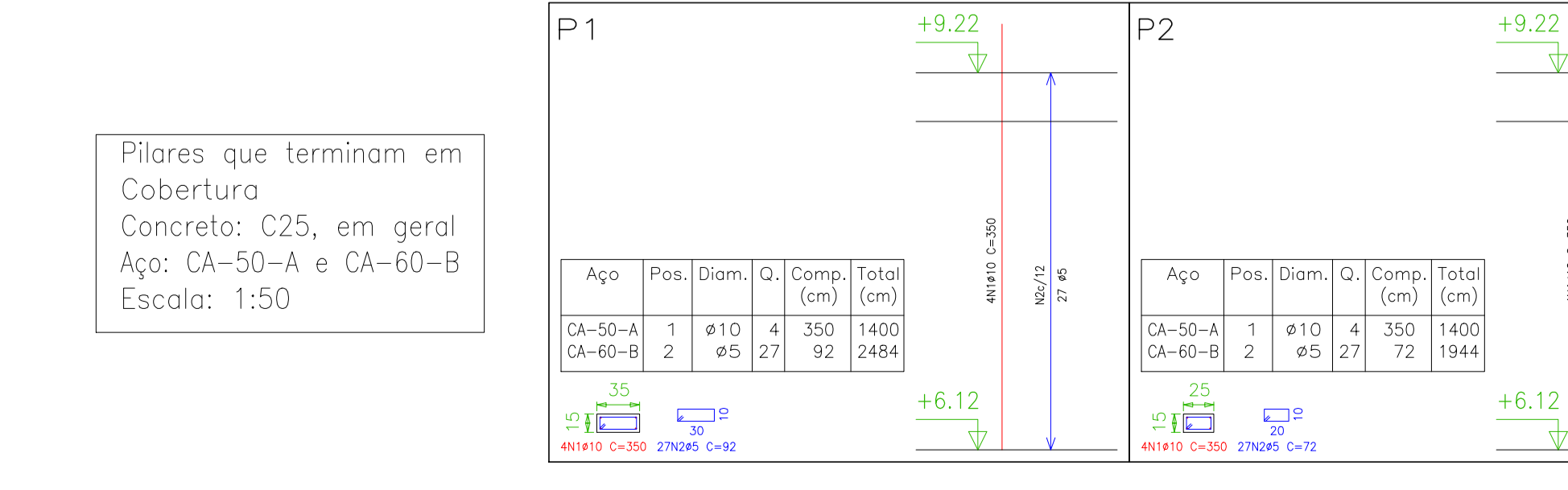
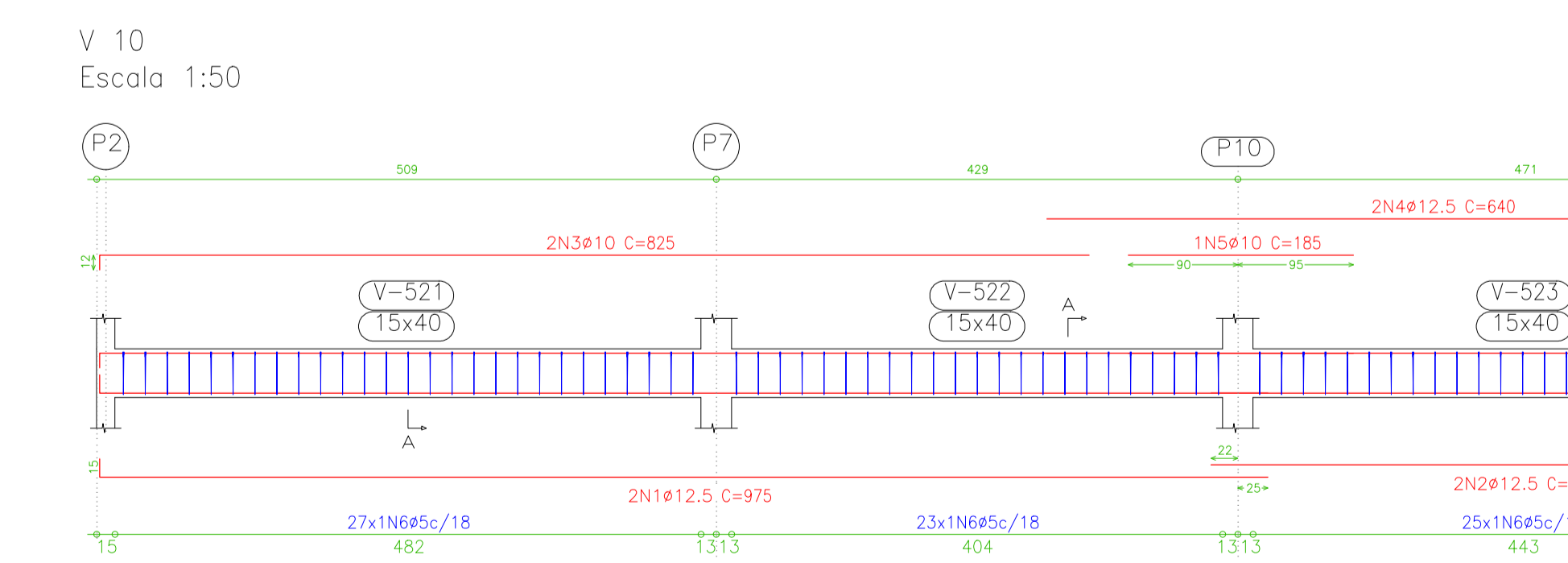
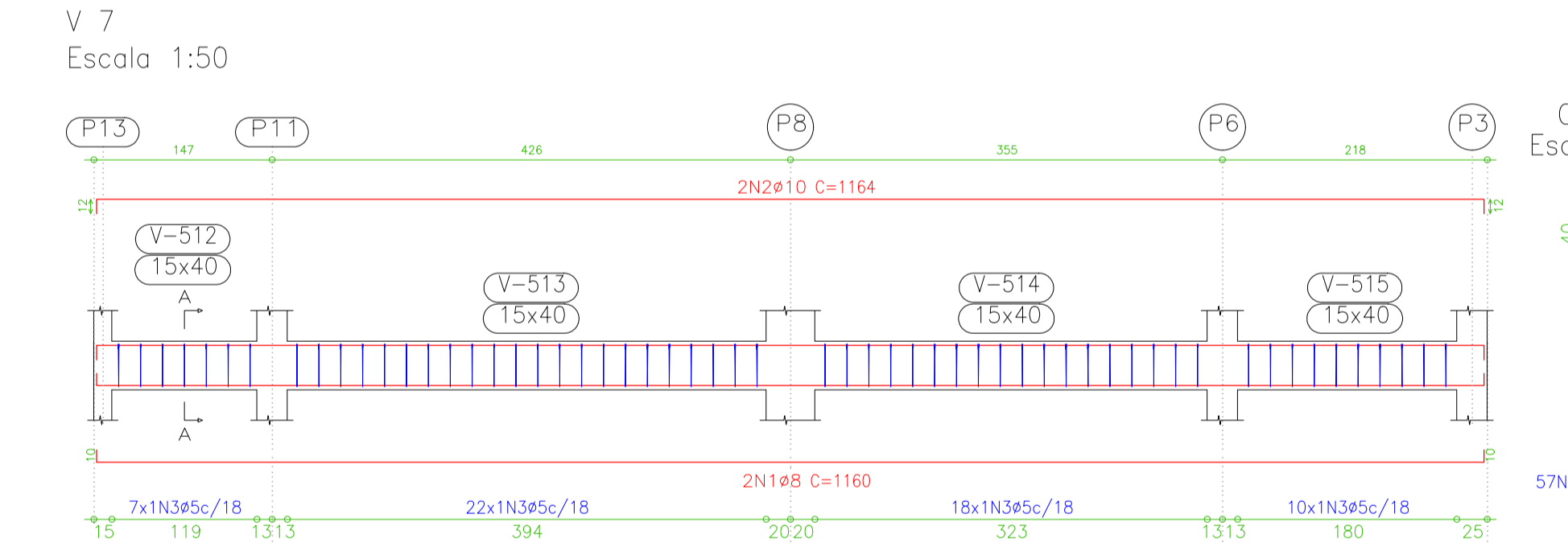
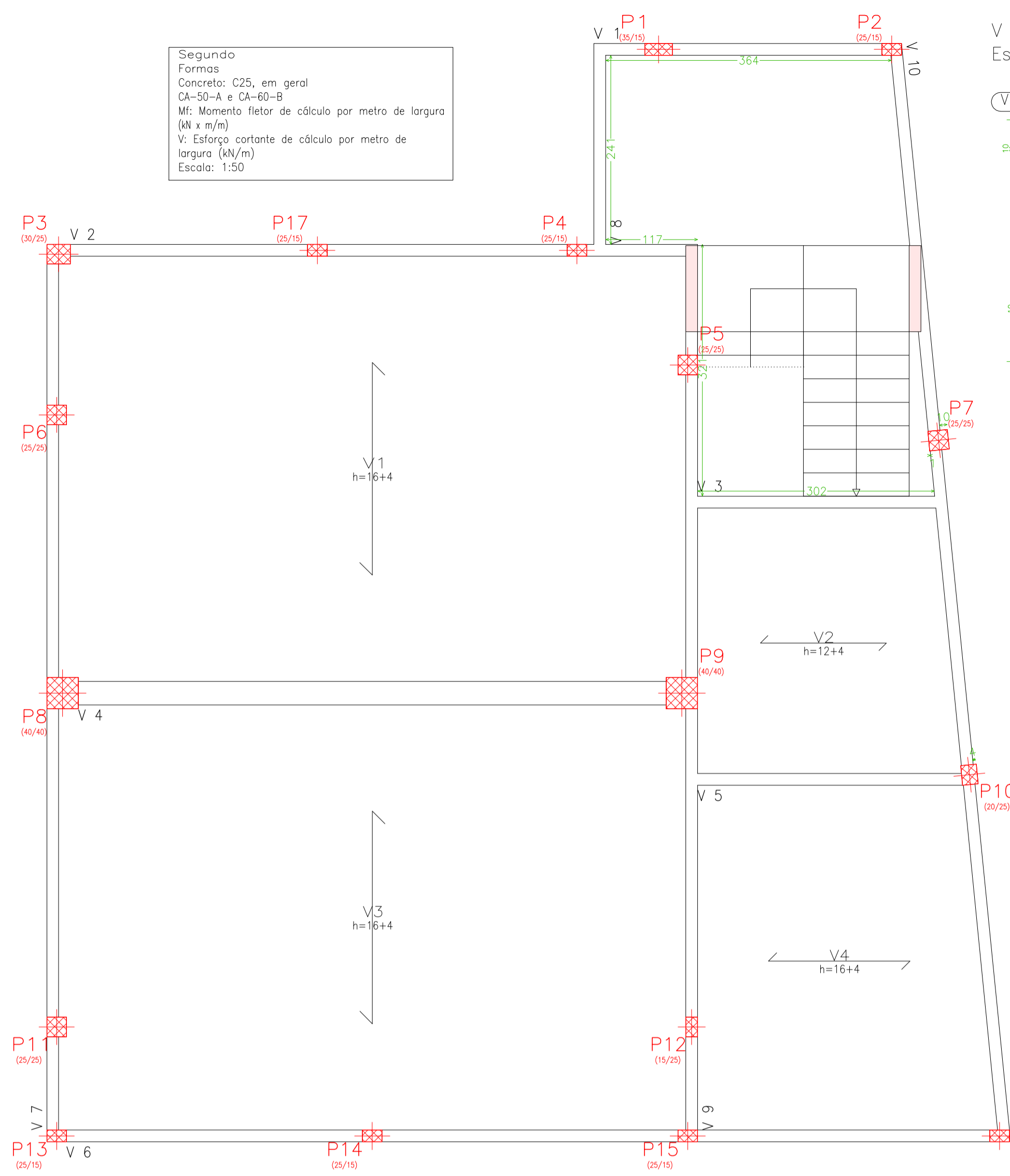


Segundo Formas  
 Concreto: C25, em geral  
 CA-50-A e CA-60-B  
 M: Momento fletor de cálculo por metro de largura (kN x m/m)  
 V: Esforço cortante de cálculo por metro de largura (kN/m)  
 Escala: 1:50

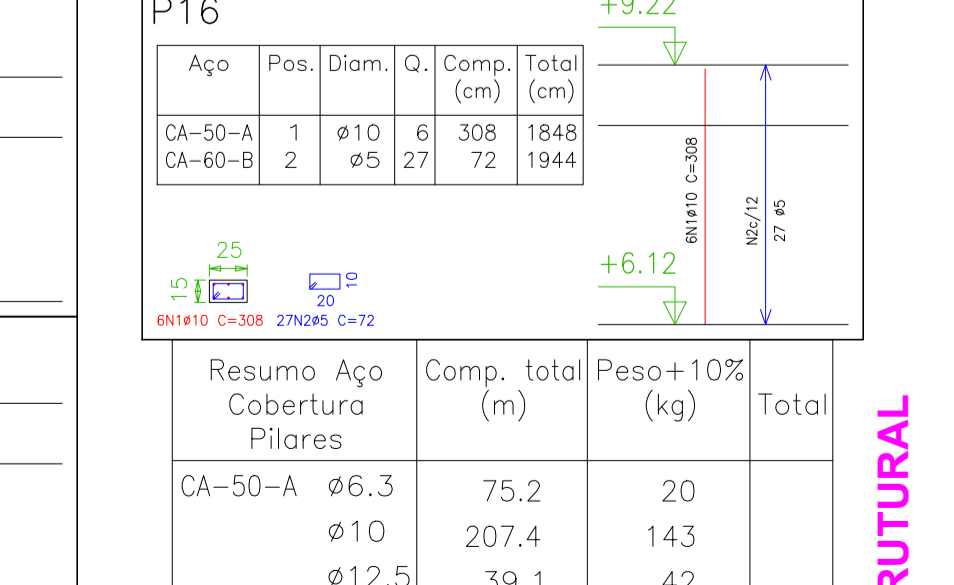
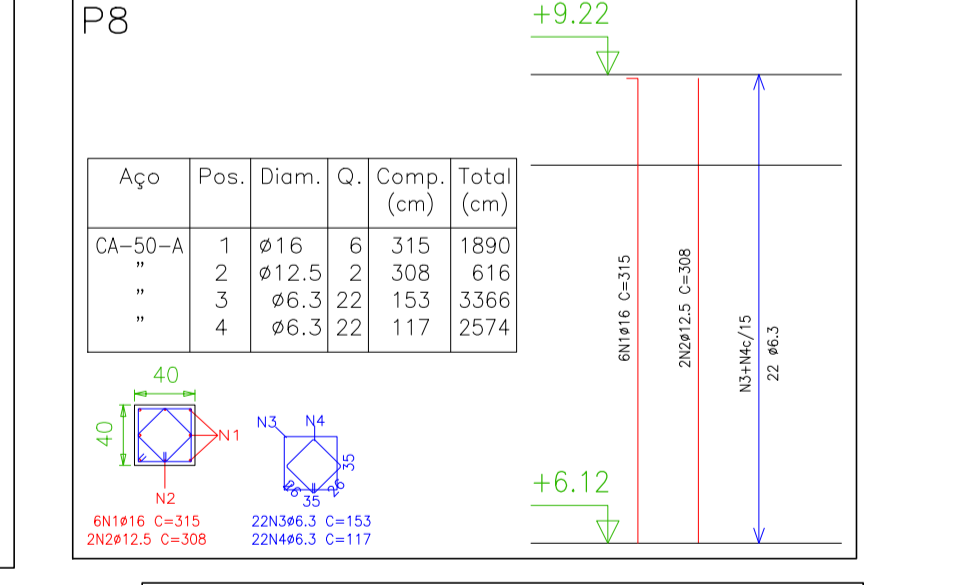
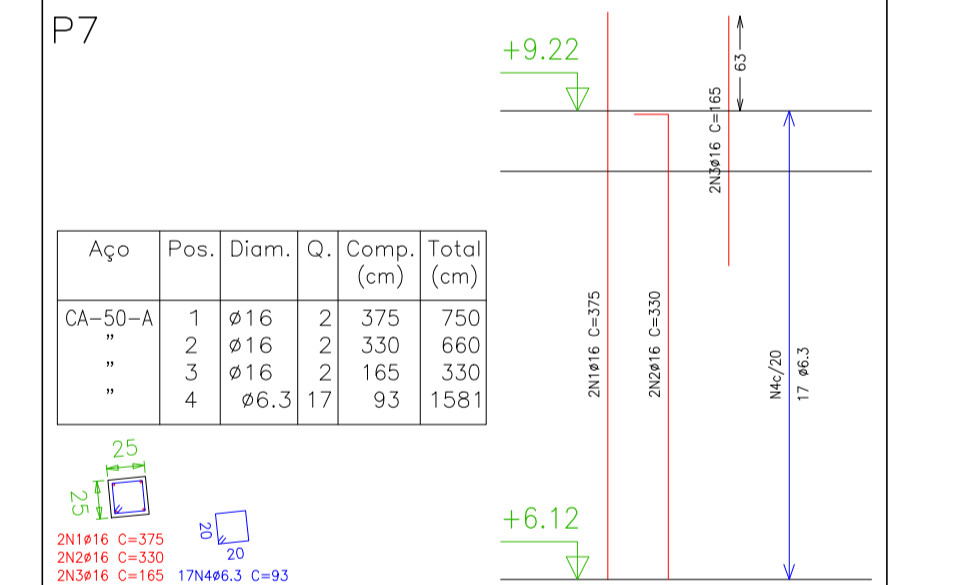
Segundo Desenho de vigas  
 Concreto: C25, em geral  
 Aço: CA-50-A e CA-60-B  
 Escala vigas: 1:50  
 Escala seções: 1:20



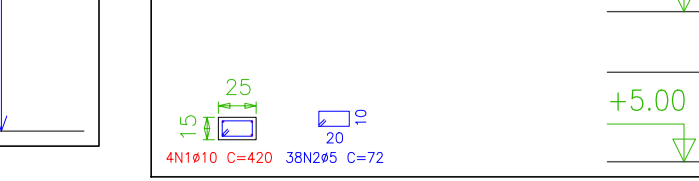
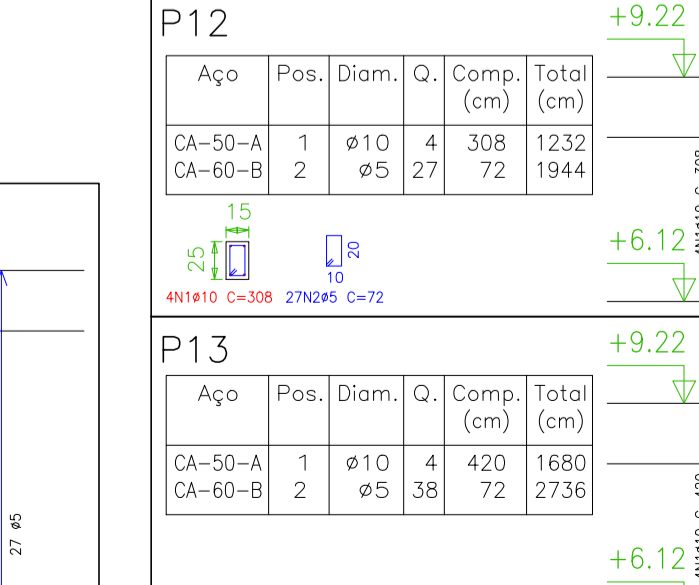
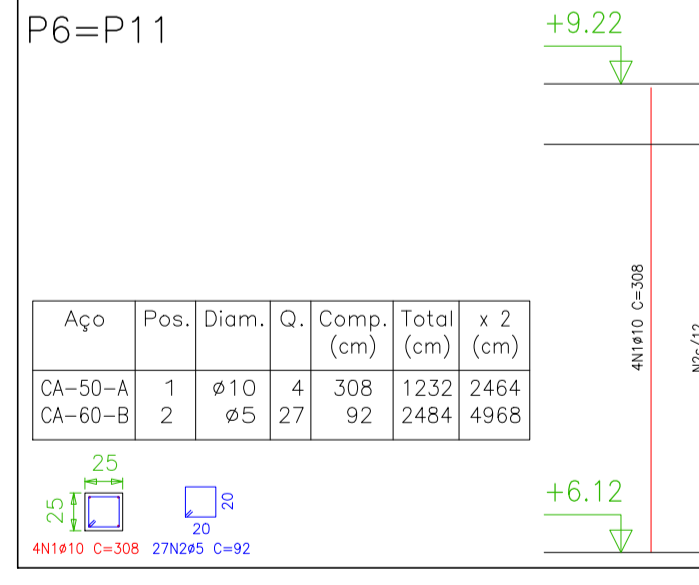
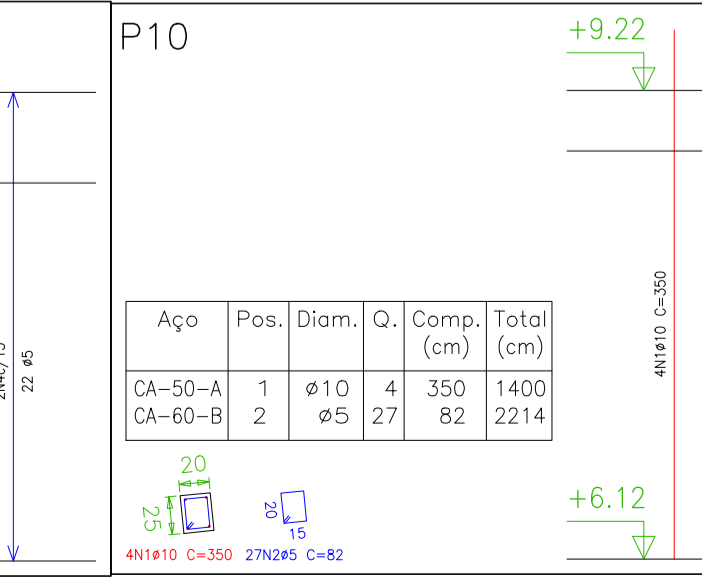
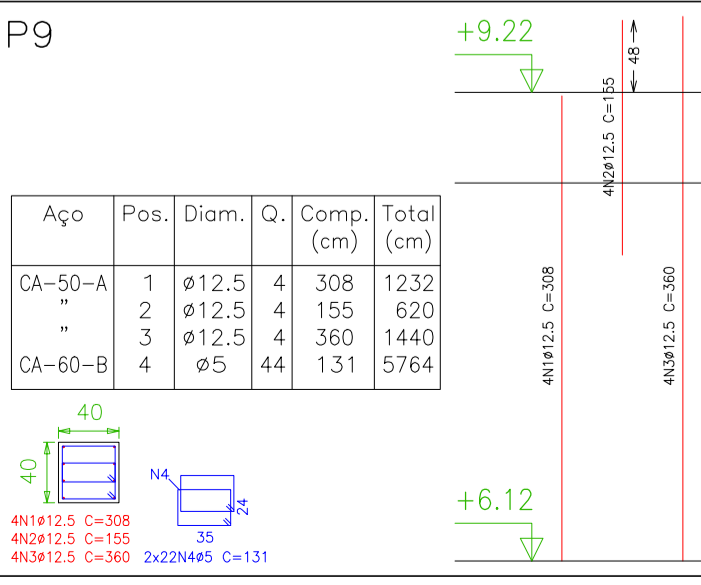
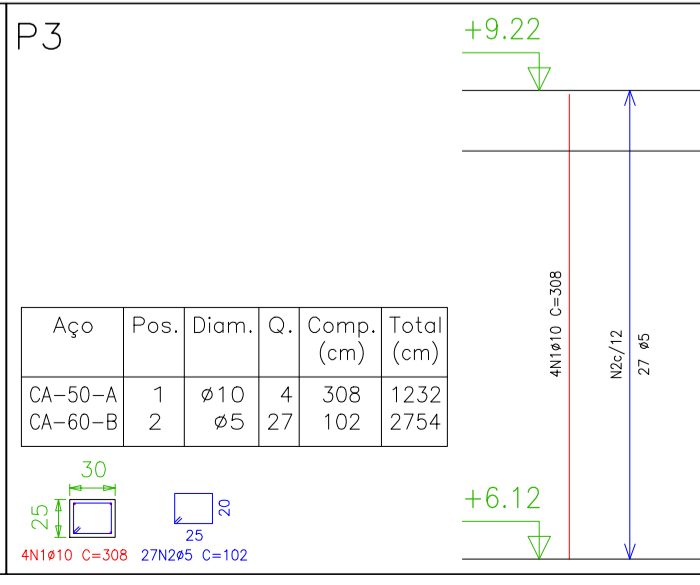
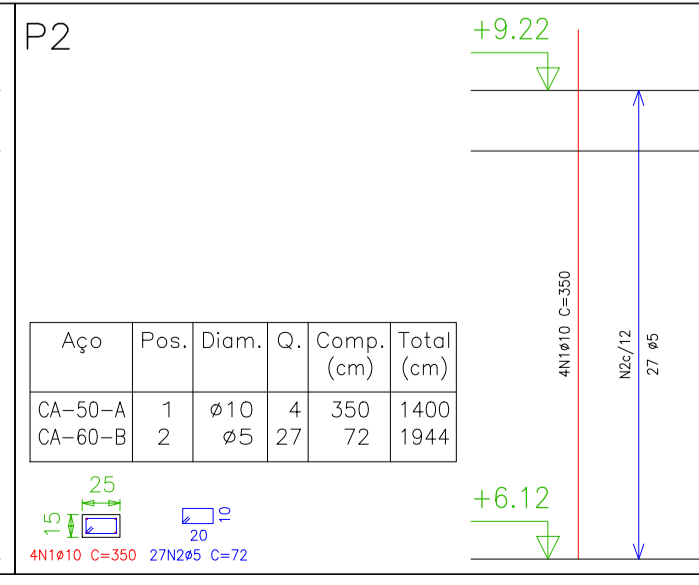
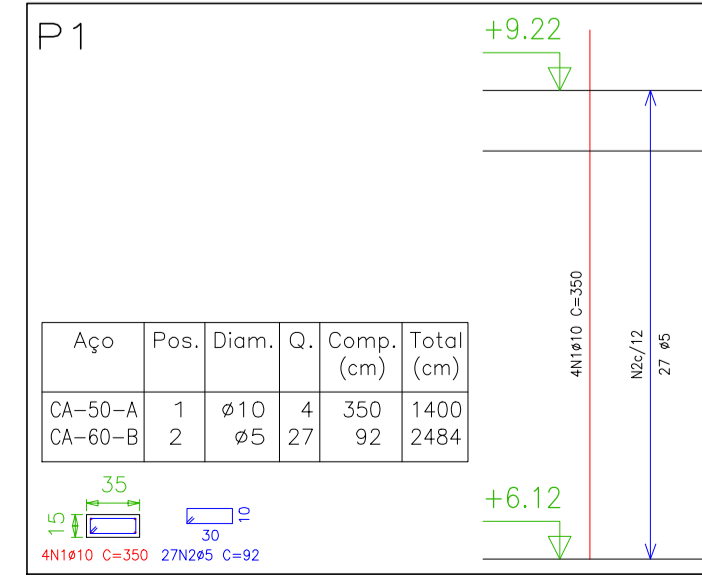
Elemento	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 1	40	ø8	2	10	388	10	408
	41	ø8	2	10	388	10	408
	42	ø5	19		100		1900
Total+10%						7.0	3.3
V 2	43	ø10	2	12	825	12	849
	44	ø10	2	12	825	12	849
	45	ø5	41		100		4100
Total+10%						23.5	7.0
V 3	1	ø10	2	12	328	12	352
	2	ø5	17		100		690
	3	ø5	17		100		690
Total+10%						4.4	2.7
V 4	1	ø20	5	26	825	26	877
	2	ø20	5	26	825	26	877
	3	ø10	31		180		5580
Total+10%						279.6	3.0
V 5	4	ø8	2	10	367	10	387
	5	ø8	2	10	367	10	387
	6	ø5	19		100		1900
Total+10%						6.6	3.3
V 6	1	ø12.5	2		850	15	845
	2	ø12.5	2		425	15	425
	3	ø10	2		698	12	710
Total+10%						11.4	9.9
V 7	1	ø8	2	10	1140	12	1160
	2	ø10	2	12	1140	12	1164
	3	ø5	57		100		5700
Total+10%						26.1	9.8
V 8	4	ø8	2	10	266	10	286
	5	ø8	2	10	266	10	286
	6	ø5	14		100		1400
Total+10%						4.8	2.4
V 9	1	ø12.5	2	15	1140	15	1170
	2	ø10	2	12	1140	12	1164
	3	ø8	1		200		200
Total+10%						42.2	10.2
V 10	1	ø12.5	2	15	960	15	975
	2	ø12.5	2	15	490	15	505
	3	ø10	2	12	1140	12	1164
Total+10%						58.5	13.0

Resumo Aço Segundo Vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A ø8	75.4	33	
ø10	175.9	122	
ø12.5	102.8	111	
ø20	88.7	24.1	
CA-60-B ø5	364.0	63	
<b>Total</b>		<b>570</b>	

Segundo - Superfície total: 126.39 m²			
Elemento	Formas (m²)	Volumes (m³)	Barros (kg)
LAJES	115.40	11.84	139
Vigas: fundo	11.94	5.70	569
Forma lateral	45.28		
Pilares (Sup. Formas)	37.00	2.23	325
Escadões	12.61	1.75	114
<b>Total</b>	<b>220.23</b>	<b>21.52</b>	<b>1183</b>
Índices (por m²)	1.742	0.170	9.36



Resumo Aço Cobertura Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A ø6.3	75.2	20	
ø10	207.4	143	
ø12.5	39.1	42	
ø16	36.3	63	
CA-60-B ø5	370.1	64	
<b>Total</b>		<b>332</b>	



Pilares que terminam em Cobertura  
 Concreto: C25, em geral  
 Aço: CA-50-A e CA-60-B  
 Escala: 1:50