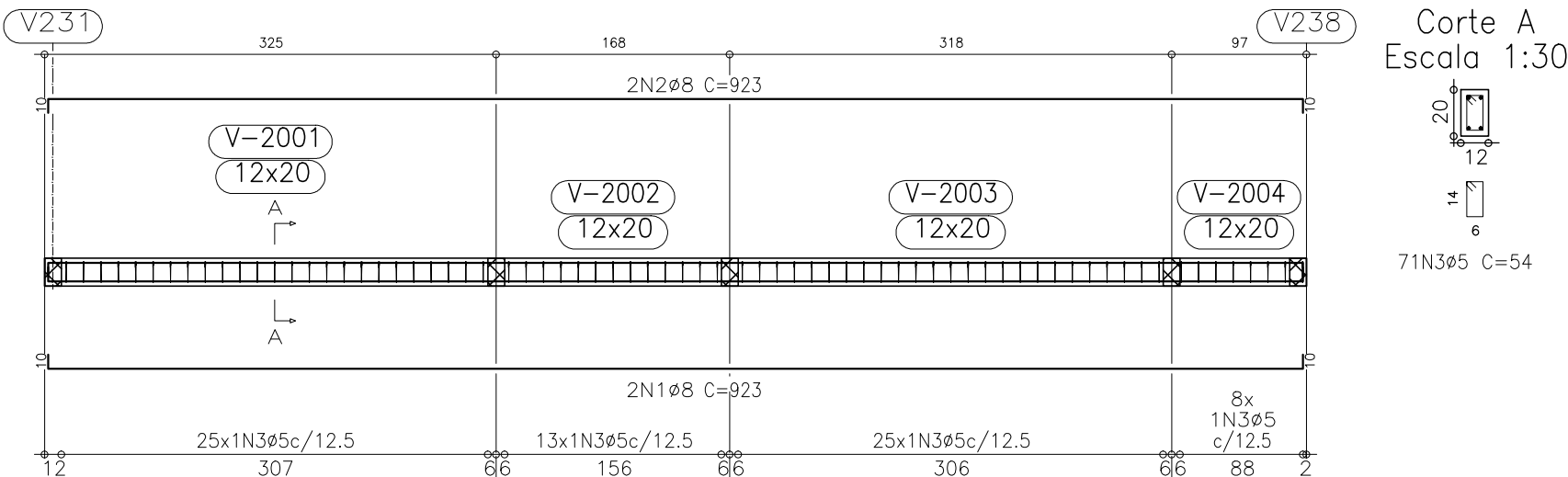
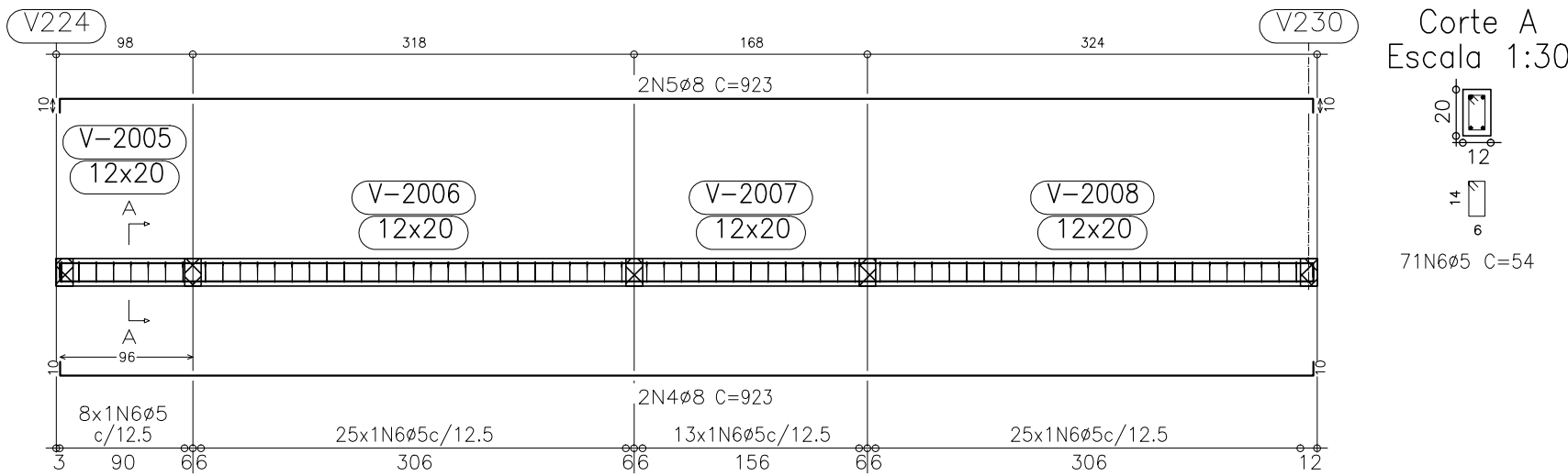


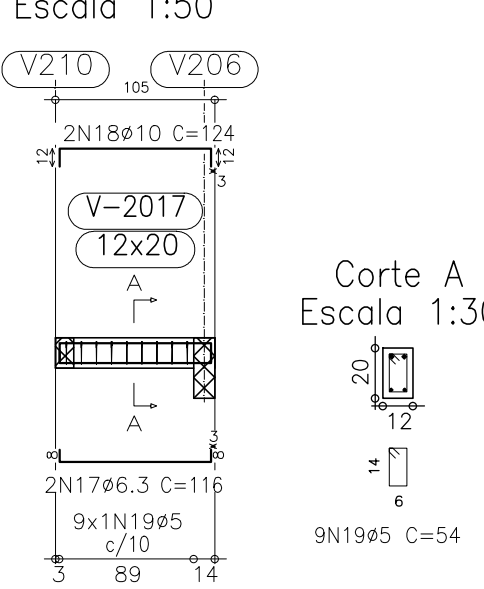
V201
Escala 1:50



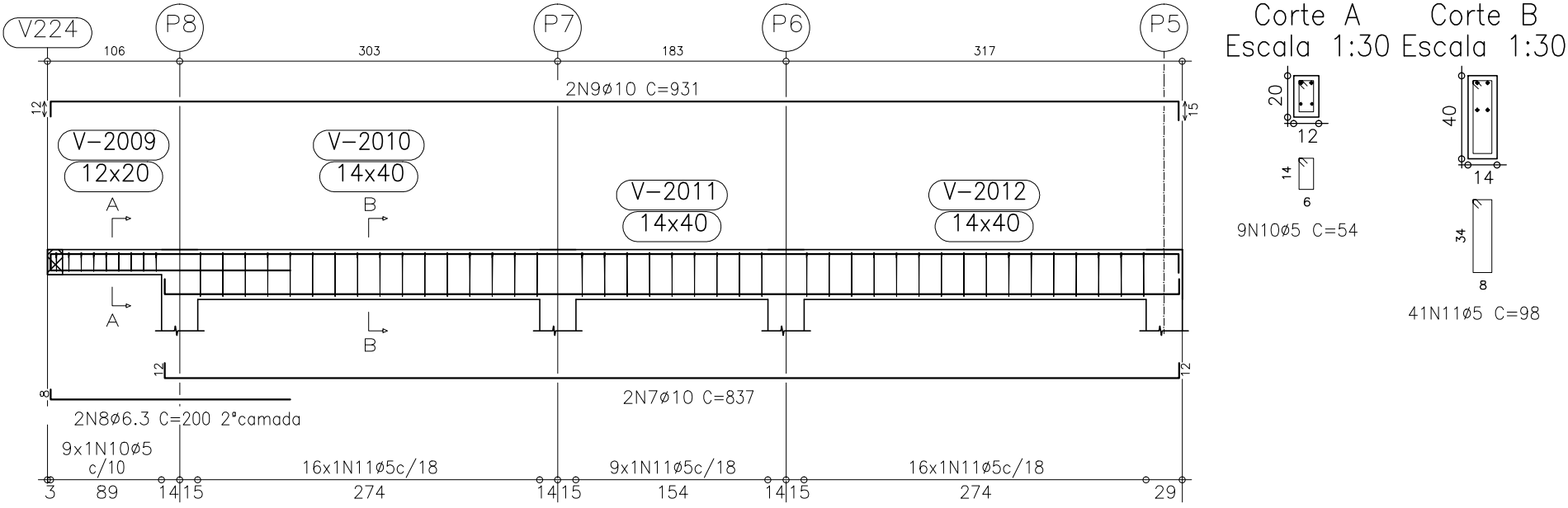
V202
Escala 1:50



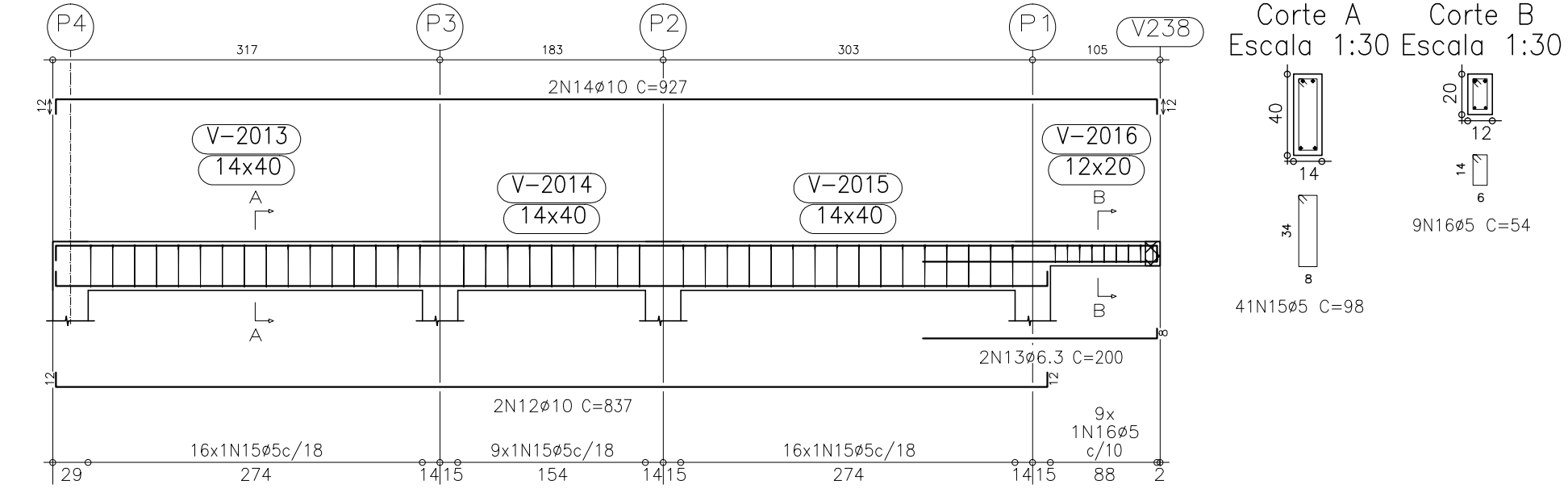
V205 V207 V213 V217
V226 V229 V232 V235
V236 V239 V240 V241
V243 V244
Escala 1:50



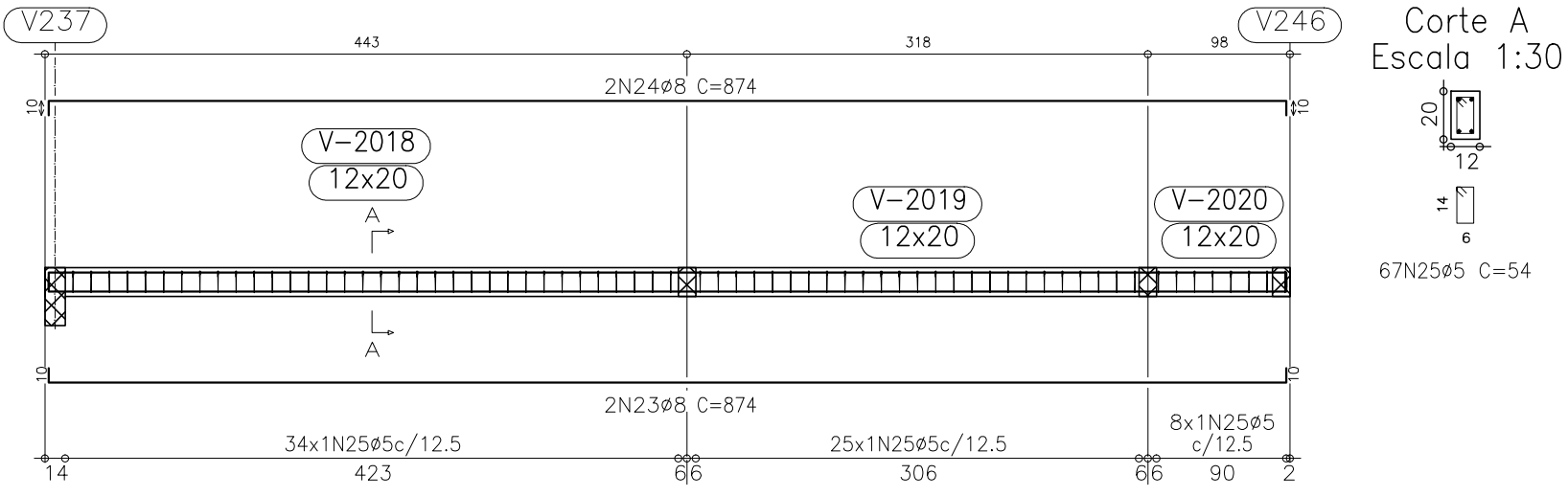
V203
Escala 1:50



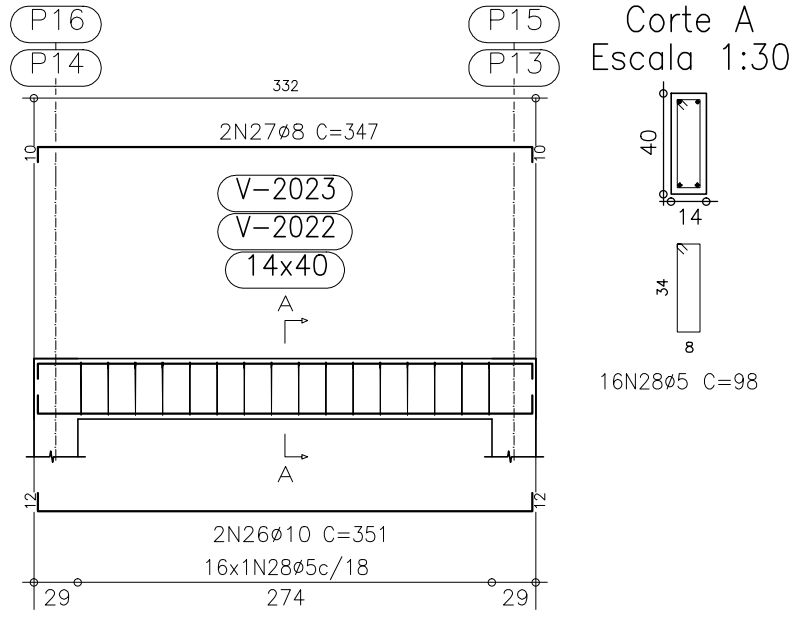
V204
Escala 1:50



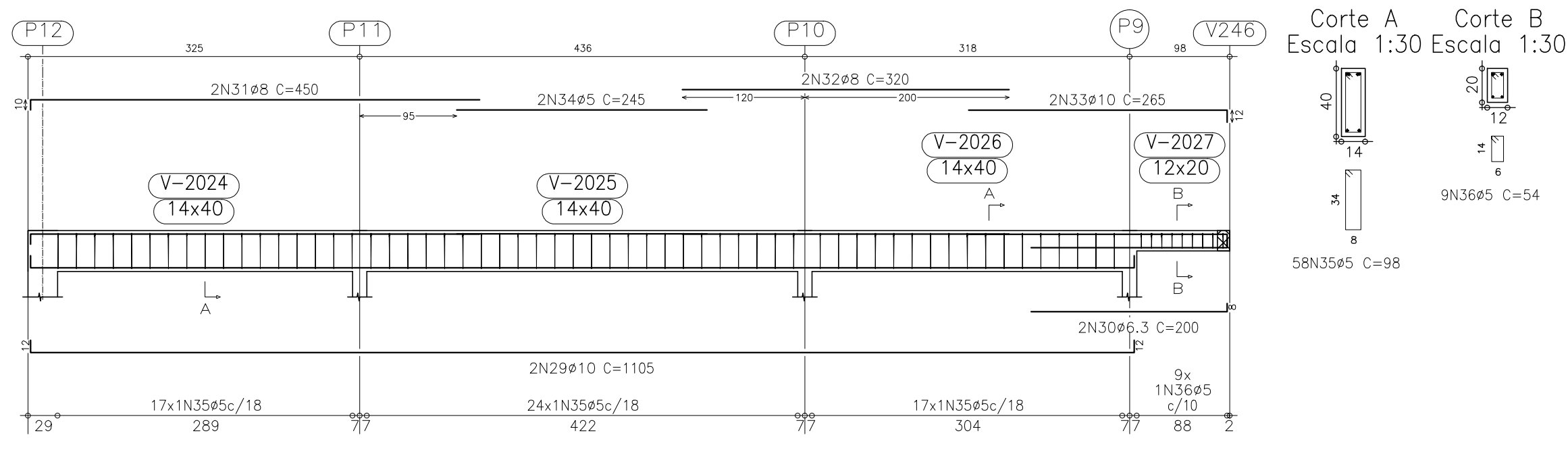
V206
Escala 1:50



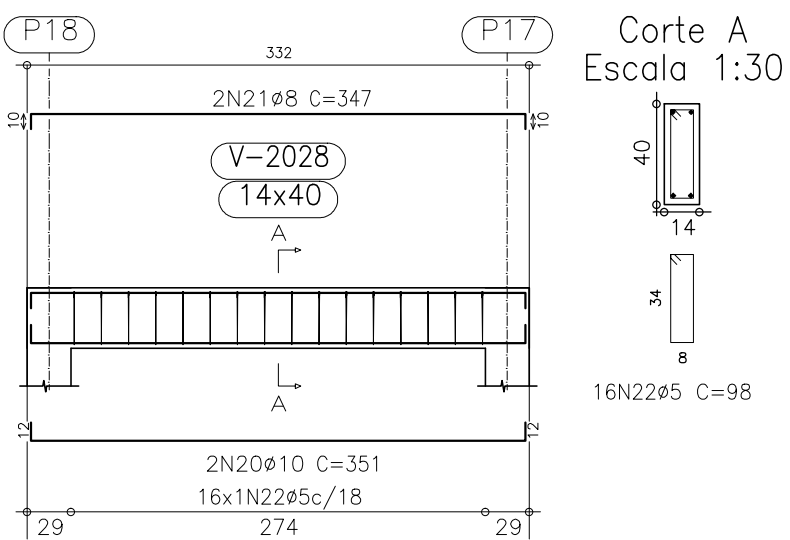
V208
V209
Escala 1:50



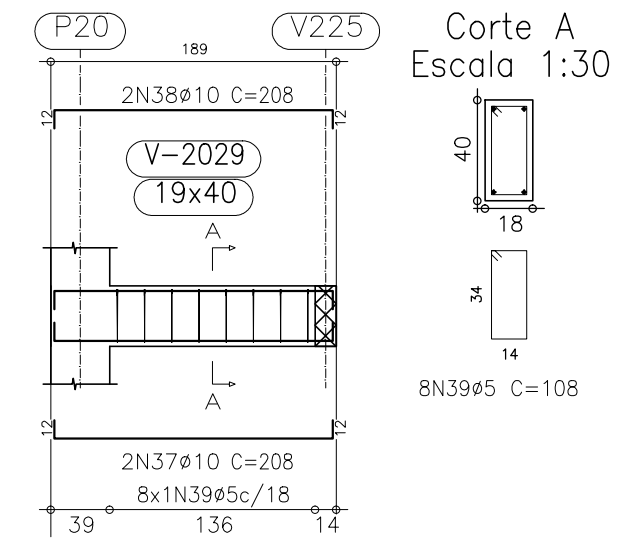
V210
Escala 1:50



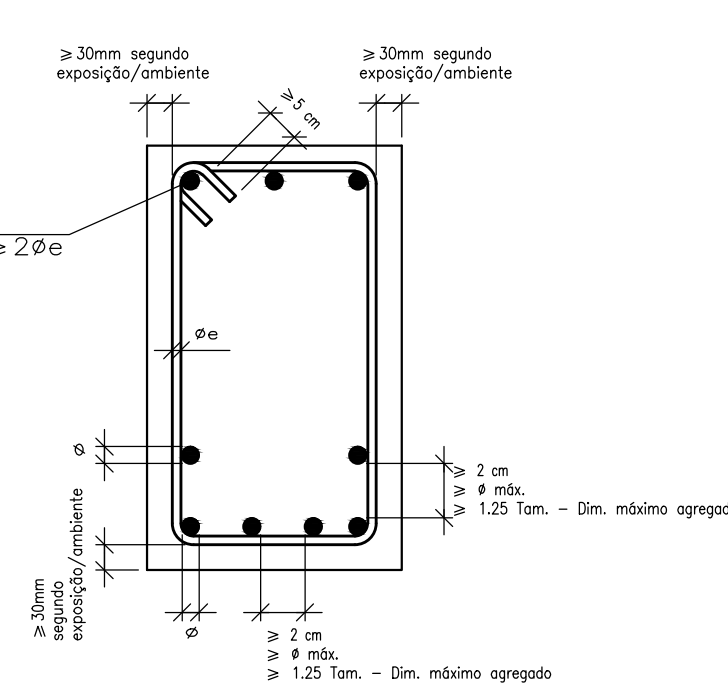
V211
Escala 1:50



V212
Escala 1:50



Cobrimentos e espaçamentos entre barras em vigas.



ESPECIFICAÇÕES

- 1 - CONCRETO ESTRUTURAL $f_{ck} \geq 25$ MPa $E_c \geq 25000$ MPa
- 2 - AÇO CA-50A e CA-60B
- 3 - COBRIMENTO DAS ARMADURA $e=3,0$ cm
- 4 - UTILIZAR ESPAÇADORES EM TODAS AS PEÇAS DE CONCRETO ARMADO
- 5 - CONFERIR TODAS AS MEDIDAS EM OBRA
- 6 - ESTA OBRA DEVERÁ SER EXECUTADA COM CONTROLE RIGOROSO, CONFORME NBR 6118-2003

Elemento	Pos.	Diam.	Q.	Dob.	Reta	Dob.	Comp.	Tota	CA-50-A	CA-60-B
V201	1	Ø8	2	10	903	10	923	1846	7.2	
	2	Ø8	2	10	903	10	923	1846	7.2	
	3	Ø5	7	1			54	3834	6.0	
								Total+10%	15.8	6.6
V202	4	Ø8	2	10	903	10	923	1846	7.2	
	5	Ø8	2	10	903	10	923	1846	7.2	
	6	Ø5	7	1			54	3834	6.0	
								Total+10%	15.8	6.6
V203	7	Ø10	2	12	813	12	837	1674	10.5	
	8	Ø6.3	2	12	813	12	837	1674	10.5	
	9	Ø10	2	12	813	12	837	1674	10.5	
	10	Ø5	9	1			54	4018	6.3	
	11	Ø5	4	1			54	4018	6.3	
								Total+10%	25.5	7.8
V204	12	Ø10	2	12	813	12	837	1674	10.5	
	13	Ø6.3	2	12	813	12	837	1674	10.5	
	14	Ø10	2	12	813	12	837	1674	10.5	
	15	Ø5	9	1			54	4018	6.3	
	16	Ø5	4	1			54	4018	6.3	
								Total+10%	25.5	7.8
V205=V207=V213	17	Ø6.3	2	8	100	8	116	232	2.4	
V217=V226=V229	18	Ø10	2	12	100	12	124	248	1.6	
V232=V235=V236	19	Ø5	9	1			54	4018	6.3	
V239=V240=V241	20	Ø10	2	12	327	12	351	702	4.4	
V243=V244	21	Ø8	2	10	327	10	347	694	2.7	
	22	Ø5	16	1			98	1568	5.7	
								Total+10%	7.8	2.8
V206	23	Ø8	2	10	854	10	874	1748	6.9	
	24	Ø8	2	10	854	10	874	1748	6.9	
	25	Ø5	6	1			54	3618	5.7	
								Total+10%	15.2	6.3
V208=V209	26	Ø10	2	12	327	12	351	702	4.4	
	27	Ø8	2	10	327	10	347	694	2.7	
	28	Ø5	16	1			98	1568	5.7	
								Total+10%	7.8	2.8
								(v2):	15.6	5.6
V210	29	Ø10	2	12	1081	12	1105	2210	13.9	
	30	Ø6.3	2	10	192	8	200	400	1.0	
	31	Ø8	2	10	440	10	450	900	3.5	
	32	Ø8	2	10	330	10	340	680	2.5	
	33	Ø10	2	12	203	12	215	430	3.3	
	34	Ø5	6	1			54	3618	5.7	
	35	Ø5	58	1			98	1568	5.7	
	36	Ø5	9	1			54	4018	6.3	
								Total+10%	26.6	11.6
V212	37	Ø10	2	12	184	12	208	416	2.6	
	38	Ø10	2	12	184	12	208	416	2.6	
	39	Ø5	8	1			108	864	1.4	
								Total+10%	5.7	1.5
								Ø5:	0.0	69.2
								Ø6.3:	13.1	0.0
								Ø8:	62.4	0.0
								Ø10:	111.5	0.0
								Total:	187.0	69.2

Resumo Aço	Comp. total	Peso+10%	Total
EL + 3,14m Vigas	(m)	(kg)	
CA-50-A Ø6.3	245.6	67	
Ø8	450.5	195	
Ø10	776.7	537	
Ø12.5	113.3	122	921
CA-60-B Ø5	1755.5	303	303
Total			1224