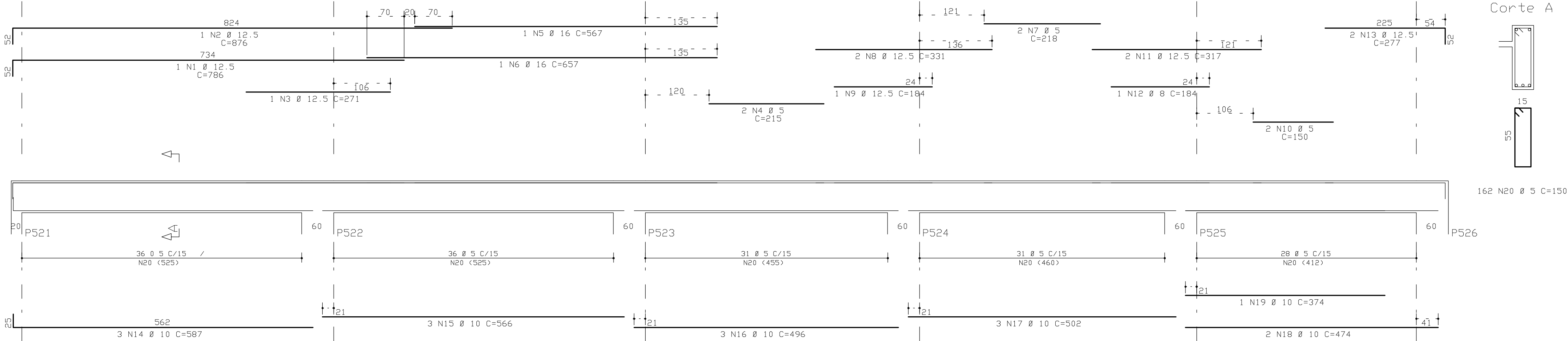
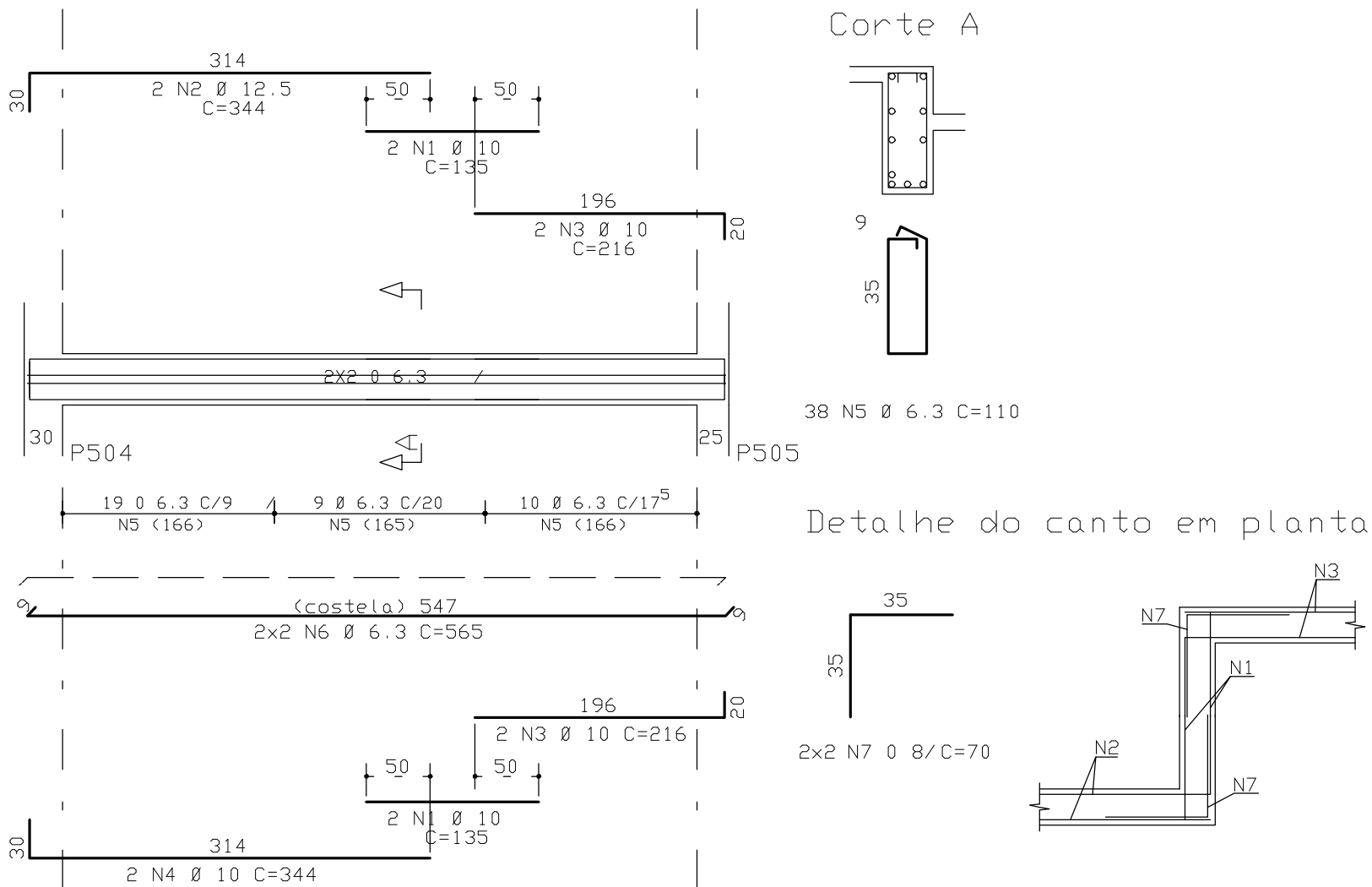


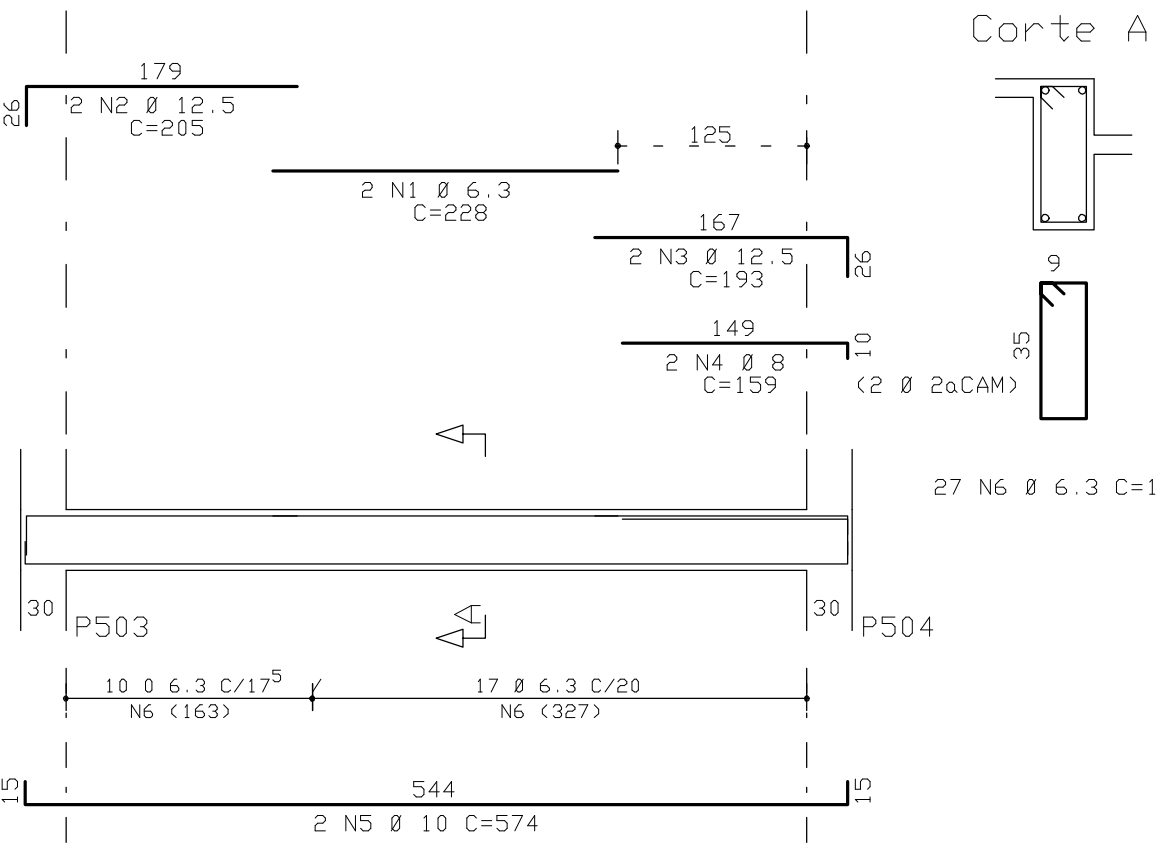
VE301 20/60



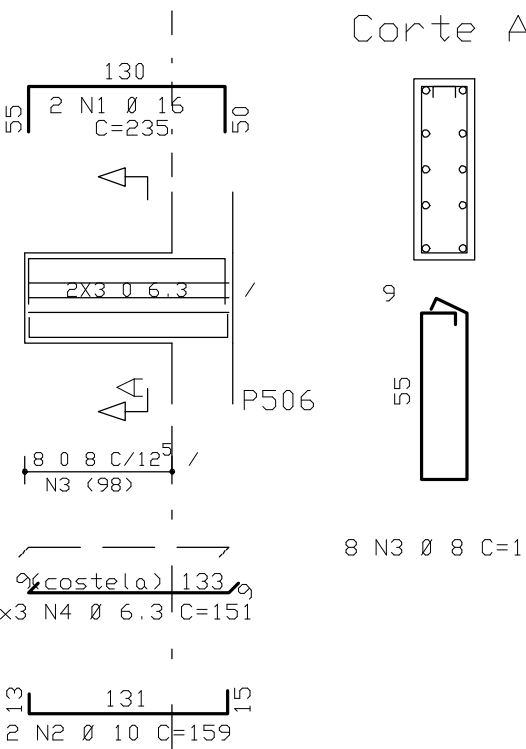
VE303 14/40



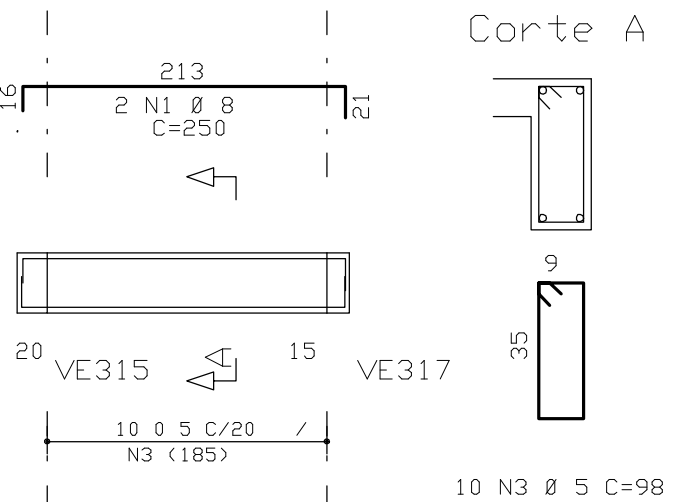
VE304 14/40



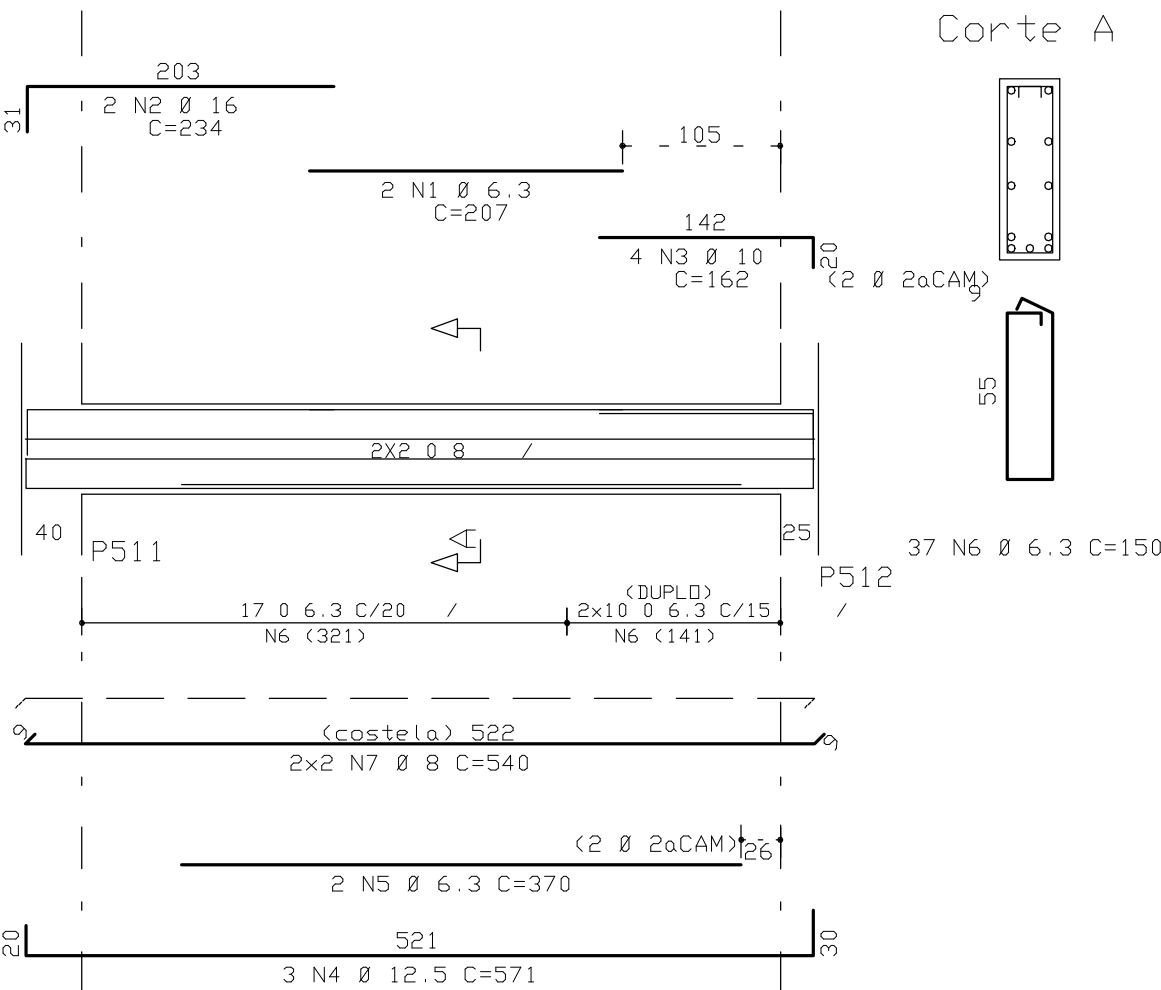
VE305 14/60



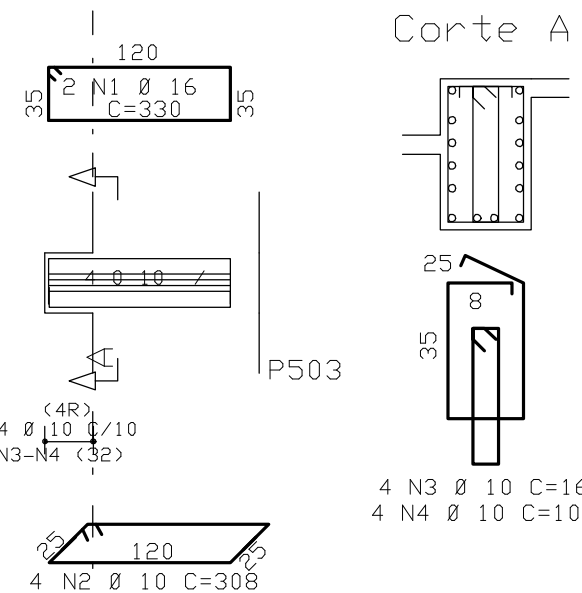
VE306/VE307 14/40



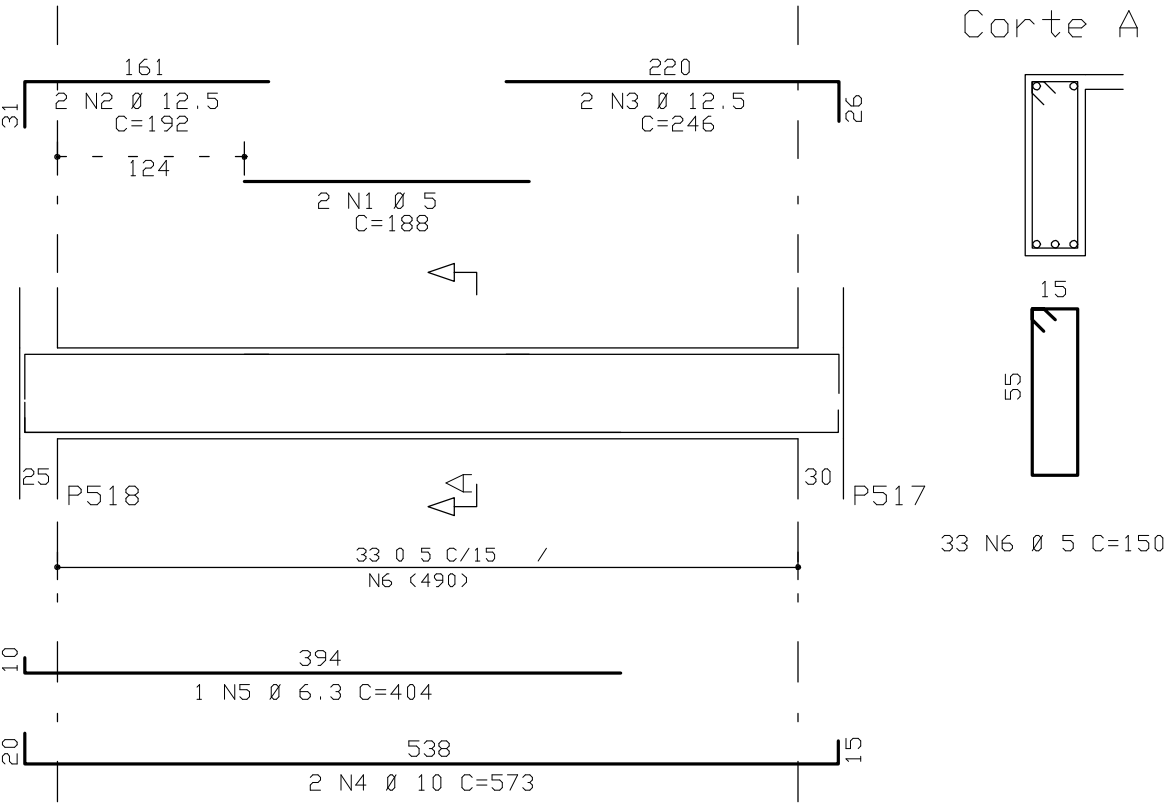
VE308 14/60



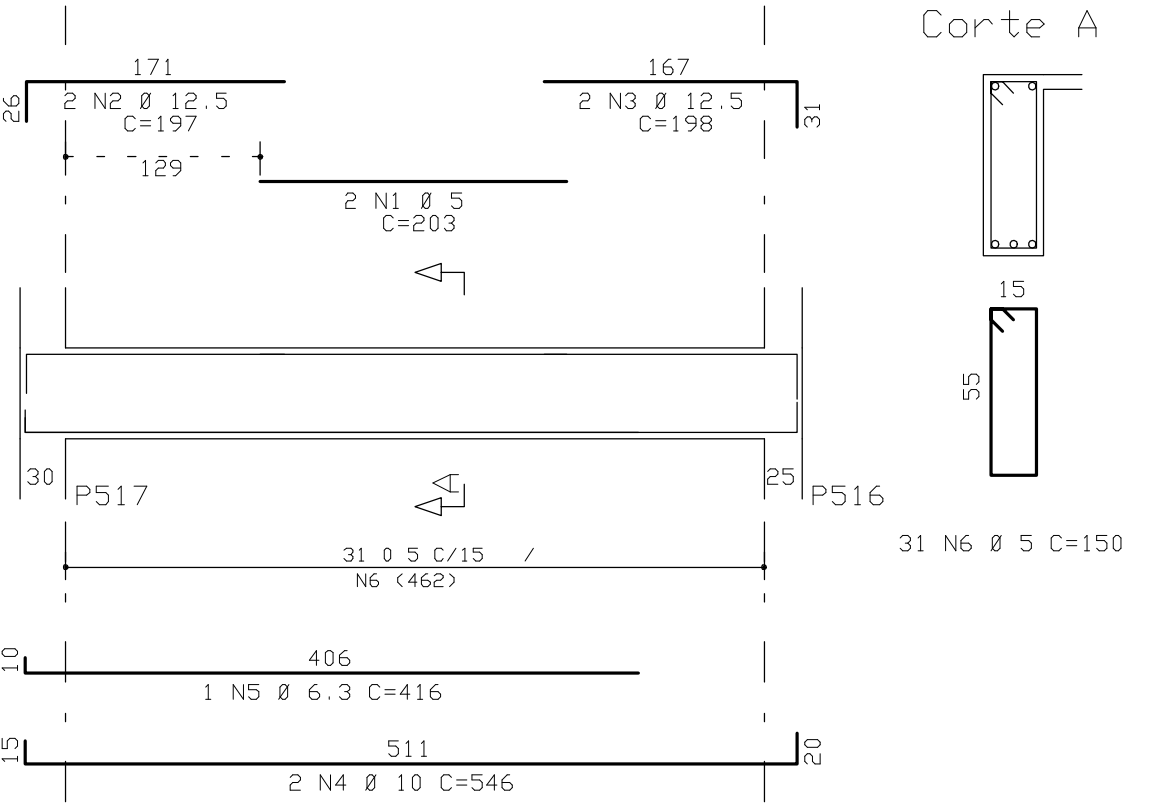
VE316 30/40



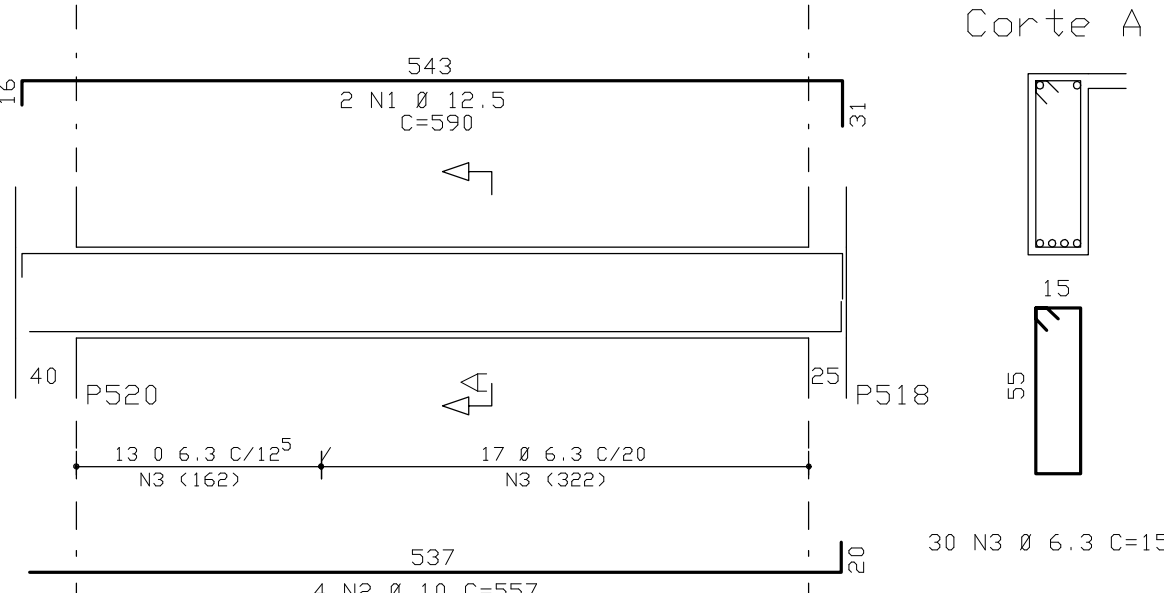
VE309 20/60



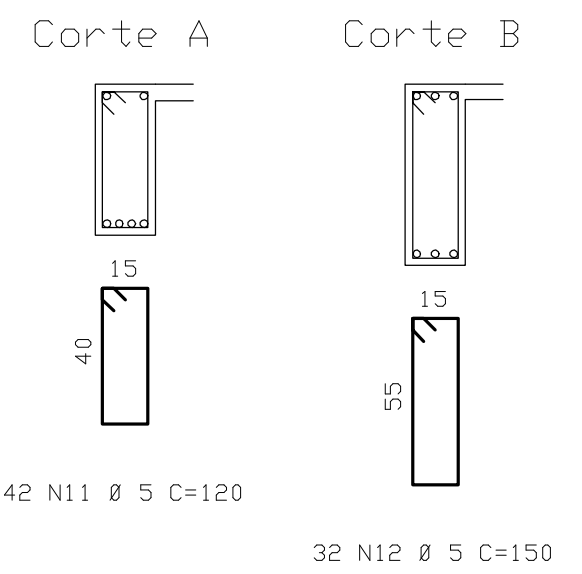
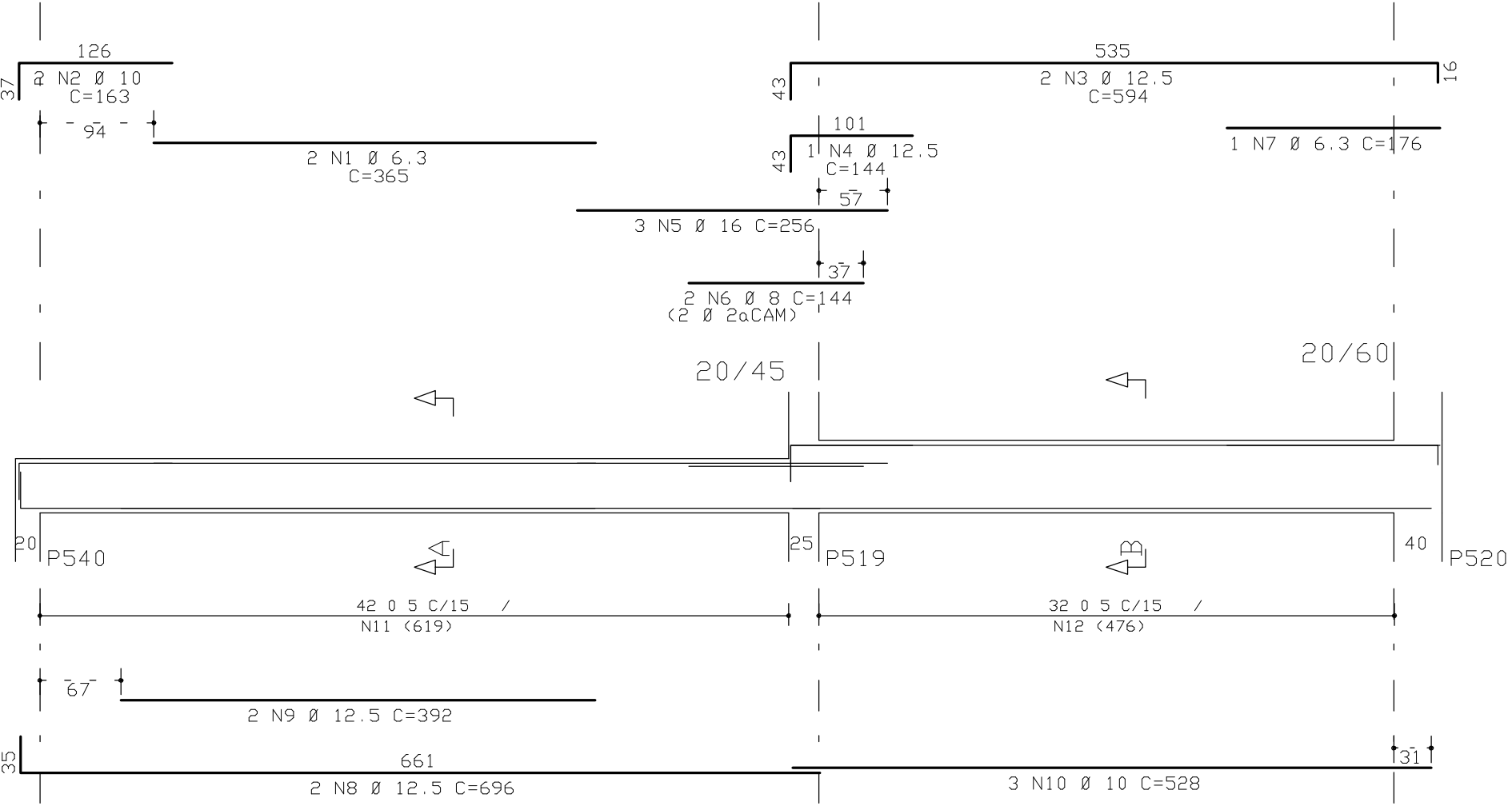
VE310 20/60



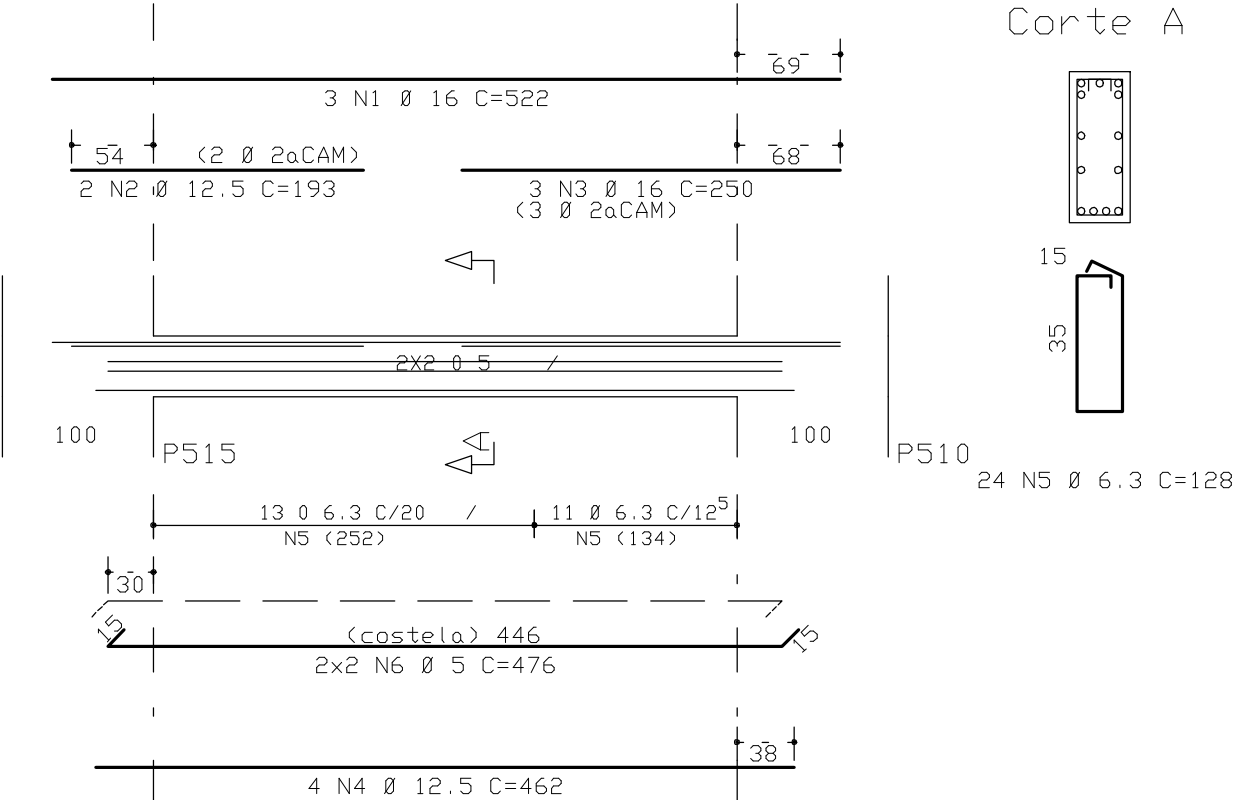
VE311 20/60



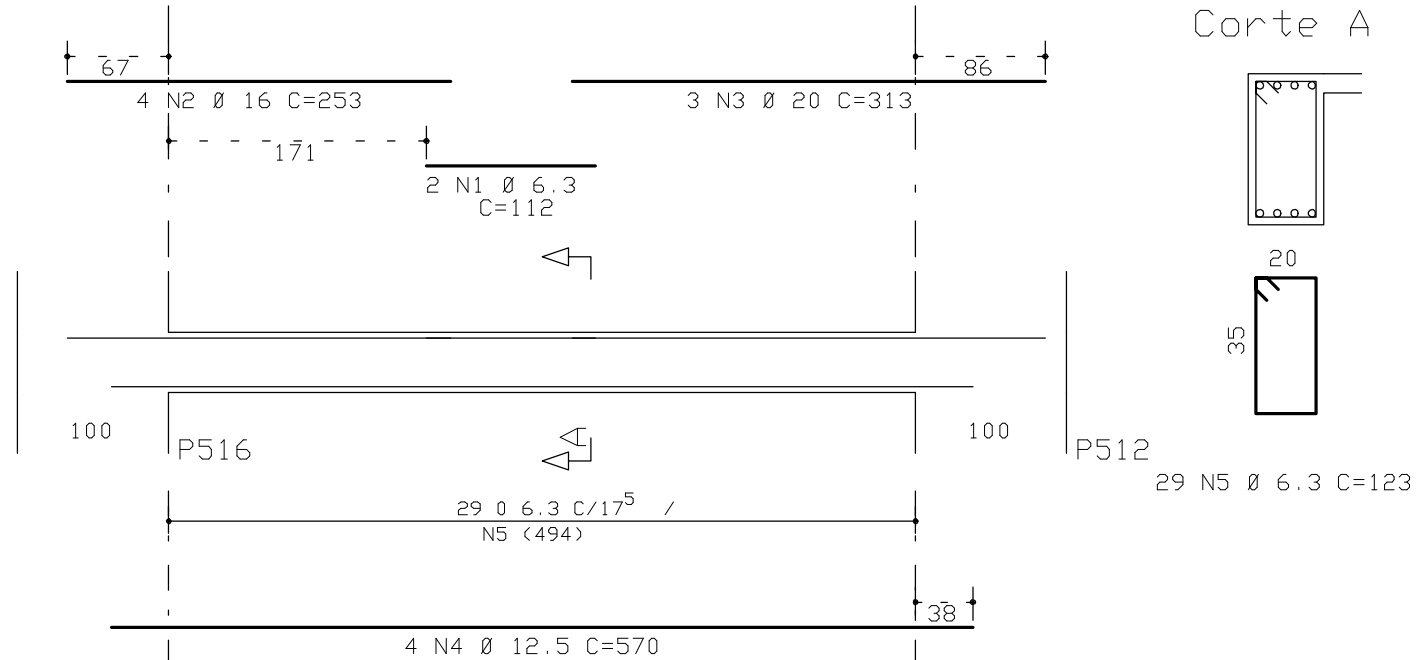
VE312 20/VAR



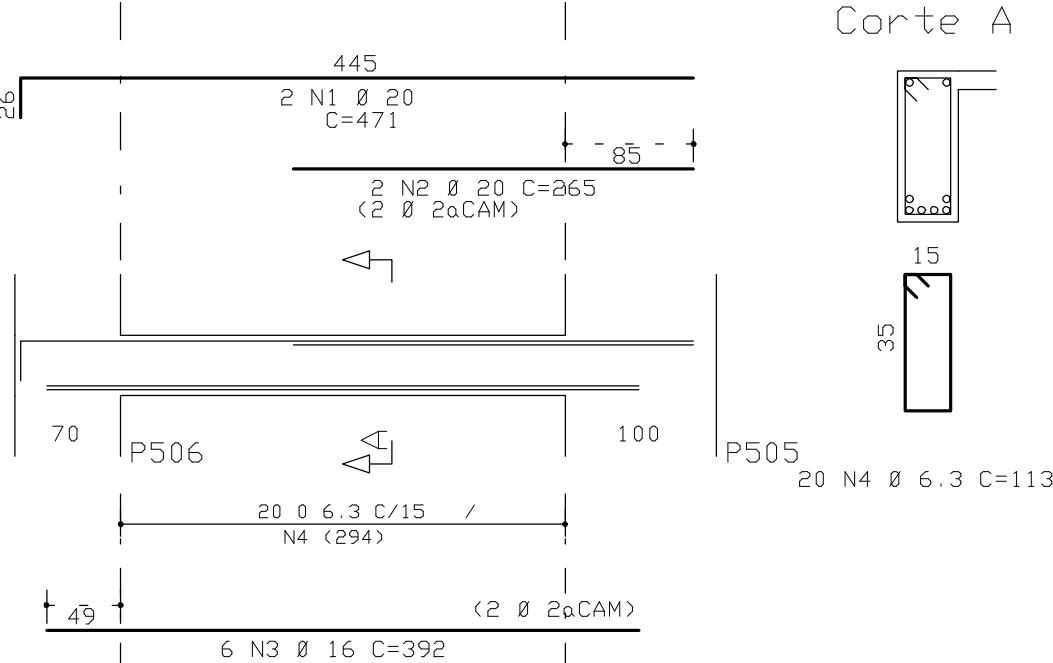
VE315 20/40



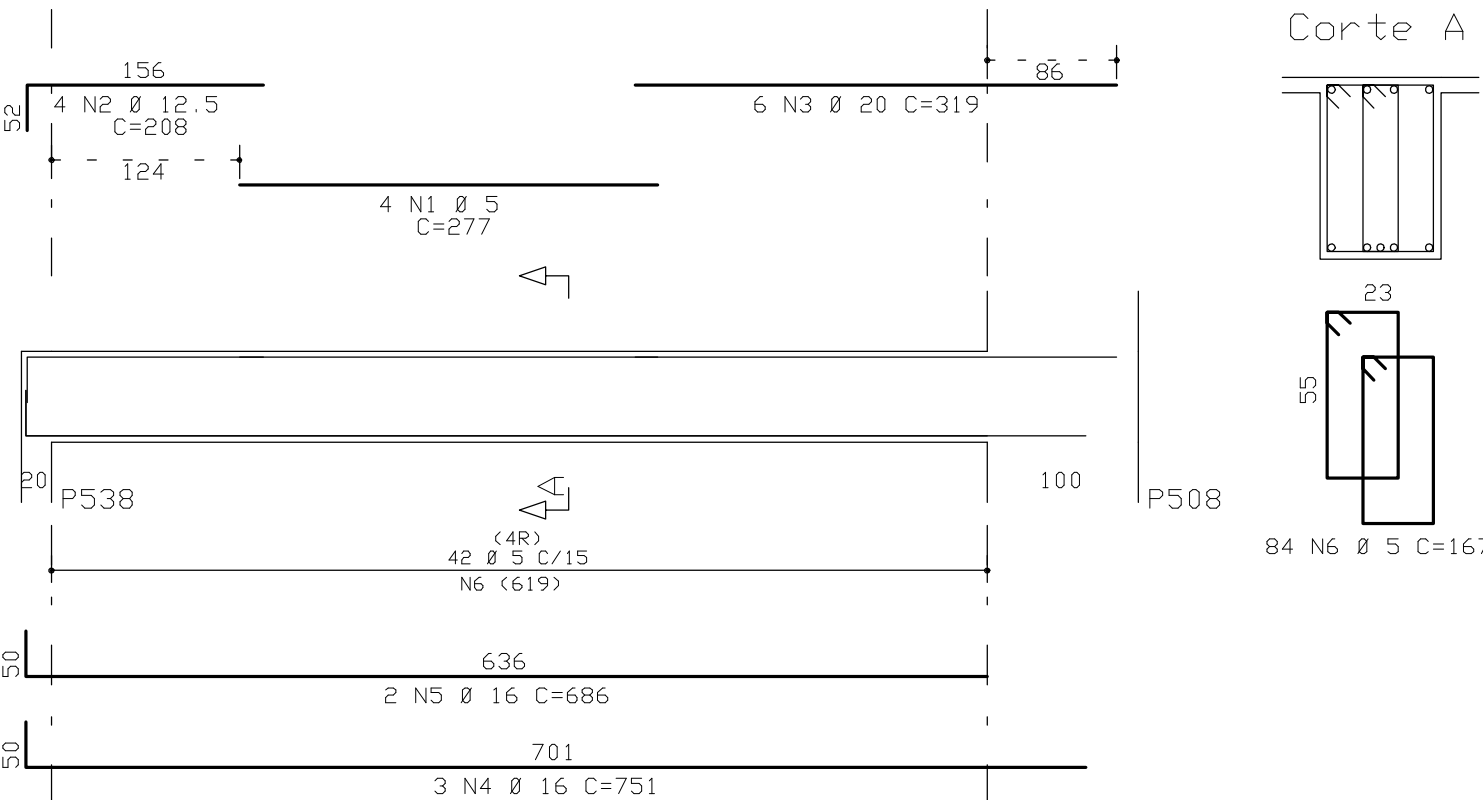
VE319 25/40



VE320 20/40



VE324 40/60



ACD	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
VE301					
50A	1	12.5	1	786	786
50A	2	12.5	1	876	876
50A	3	12.5	1	271	271
50A	4	5	2	215	430
50A	5	16	1	567	567
50A	6	16	1	657	657
50A	7	5	2	218	436
50A	8	12.5	2	331	662
50A	9	12.5	1	184	184
50A	10	5	3	150	450
50A	11	12.5	3	317	951
50A	12	8	1	184	184
50A	13	12.5	2	277	554
50A	14	10	3	587	1761
50A	15	10	3	566	1698
50A	16	10	3	496	1488
50A	17	10	3	502	1506
50A	18	10	3	474	1422
50A	19	10	1	374	374
50A	20	5	162	150	24300
VE309					
60B	1	5	2	188	376
60B	2	12.5	2	192	384
60B	3	12.5	2	246	492
60B	4	12.5	2	573	1146
60B	5	6.3	1	404	404
60B	6	5	33	150	4950
VE310					
60B	1	5	2	203	406
60B	2	12.5	2	197	394
60B	3	12.5	2	198	396
60B	4	10	2	546	1092
60B	5	6.3	1	416	416
60B	6	5	31	150	4650
VE311					
50A	1	12.5	2	590	1180
50A	3	6.3	30	153	4590
VE312					
50A	1	6.3	2	365	730
50A	2	10	2	163	326
50A	3	12.5	2	594	1188
50A	4	12.5	1	144	144
50A	5	8	2	256	512
50A	6	8	2	144	288
50A	7	6.3	1	176	176
50A	8	12.5	2	696	1392
50A	9	12.5	2	392	784
50A	10	10	3	520	1560
60B	11	5	42	120	5040
60B	12	5	32	150	4800
VE315					
50A	1	16	3	522	1566
50A	2	12.5	3	193	579
50A	3	16	3	250	750
50A	4	12.5	3	462	1386
50A	5	6.3	24	138	3312
60B	6	5	4	476	1904
VE316					
50A	1	16	2	330	660
50A	2	10	4	308	1232
50A	3	10	4	165	660
50A	4	10	4	107	428
VE319					
50A	1	6.3	2	112	224
50A	2	16	4	203	812
50A	3	10	4	312	1248
50A	4	12.5	4	570	2280
50A	5	6.3	29	122	3538
VE320					
50A	1	20	2	471	942
50A	2	16	6	392	2352
50A	3	16	20	113	2260
VE324					
60B	1	5	4	277	1108
60B	2	12.5	4	277	1108
60B	3	20	6	319	1914
60B	4	16	3	701	2803
60B	5	16	2	686	1372
60B	6	5	84	167	14028

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (cm)	PESO (kg)
60B	6.3	178	115
50A	6.3	327	82
50A	10	237	65
50A	12.5	189	149
50A	16	151	242
50A	20	43	108
Peso Total			608 = 115 kg
Peso Total			50A = 796 kg

COBRIMENTO DA ARMADURA:

- LAJES = 2,0 cm
 - VIGAS E PILARES = 2,5 cm
 - BLOCOS, BALDRAMES E CONTENEDORES (FACE EM CONTATO COM A TERRA) = 3,0 cm
1. ESSES COBRIMENTOS DEVEM SER GARANTIDOS COM O USO DE ESPACADORES DE PLASTICO.
- COBRIMENTOS ESPECIFICADOS EM CONTRARIO AOS VALORES INDICADOS ACIMA. ESTAO INDICADOS NOS DESENHOS DE FORMAS DOS PAVIMENTOS.

NORMAS UTILIZADAS:

NBR-6118/2003 - PROJETO E EXECUCAO DE OBRAS DE CONCRETO ARMADO
NBR-6120/1980 - CARGAS PARA O CALCULO DE ESTRUTURAS DE EDIFICACOES

INDICE:

VE301 A VE312 / VE315 / VE316 / VE319 / VE320
VE324

FCK = 35 MPa

EC = 28 GPa

A/C = 0,65

(MÓDULO DE ELASTICIDADE SECANTE AOS 28 DIAS).

(FATOR AGUA CIMENTO)

0	09/07/2009	EMISSAO INICIAL	
REV	DATA	DESCRICAO	
Simetria Engenharia SIA QUADRA AC No 21 SALAS 201 e 203 BRASILIA-DF CEP: 71200-545 PABX: (61) 3026-9630 e-mail: contato@simetria-eng.com.br			
PROJETO ESTRUTURAL			
CLIENTE:	DISCO INCORPORADORA E IMOBILIARIA LTDA		
OBRA:	EDIFICIO RESIDENCIAL OLIMPIQUE		
ENFEREIRO OBRA:	SRIA AREA ESPECIAL 04 LOTES G e H - GUARA/DF		
DESCRIAO:	ARMACAO DAS VIG		

