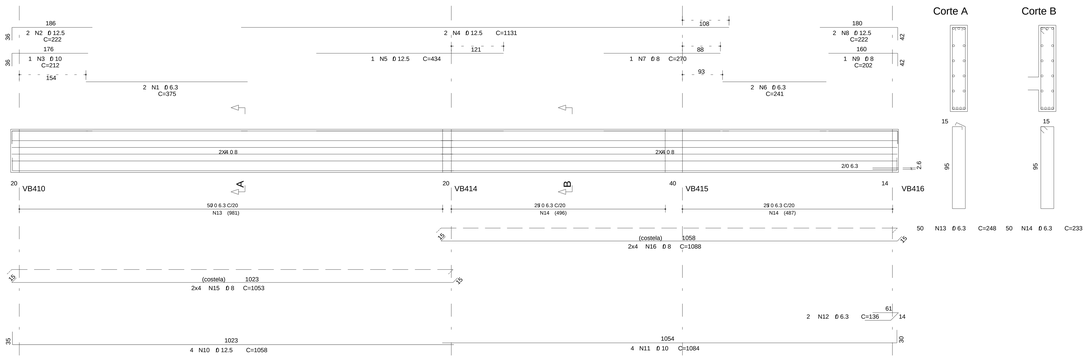
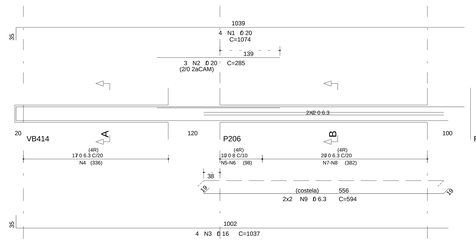
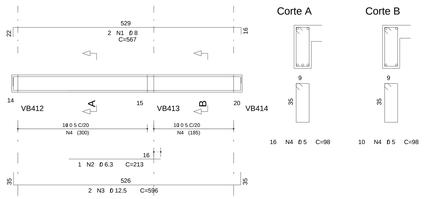
VB401 20/100



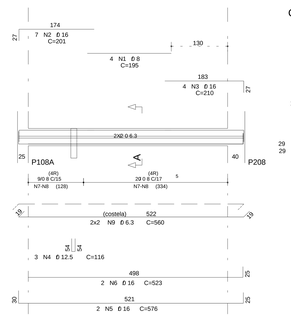
VB402 30/40



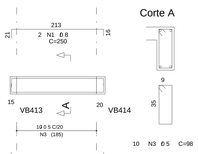
VB405 14/40



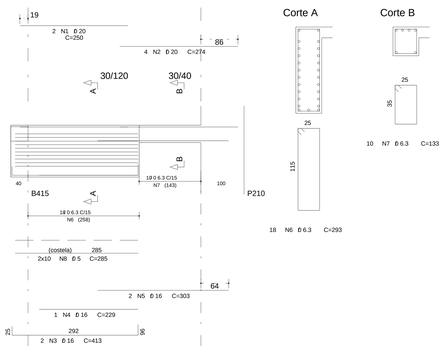
VB403 60/35



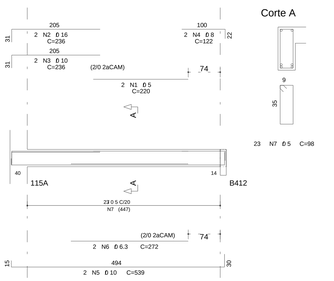
VB404 14/40



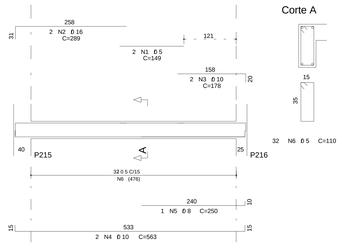
VB407 30/VAR



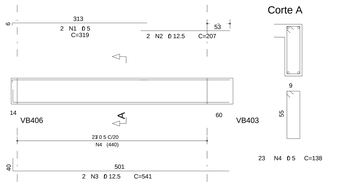
VB408 14/40



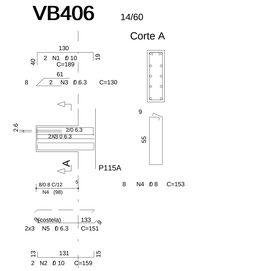
VB409 20/40



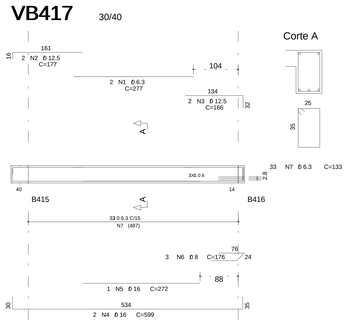
VB411 14/60



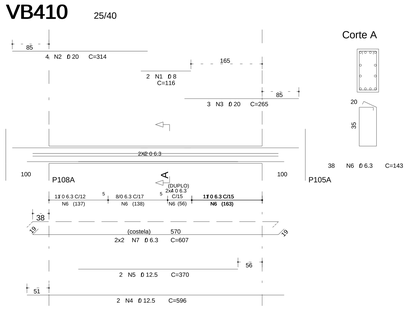
VB406 14/60



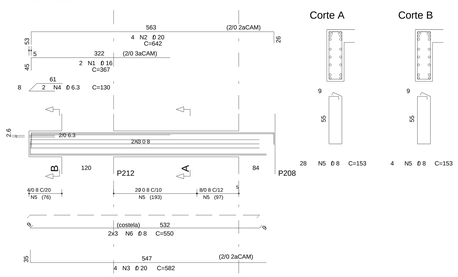
VB417 30/40



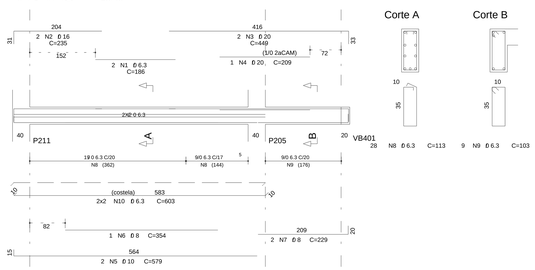
VB410 25/40



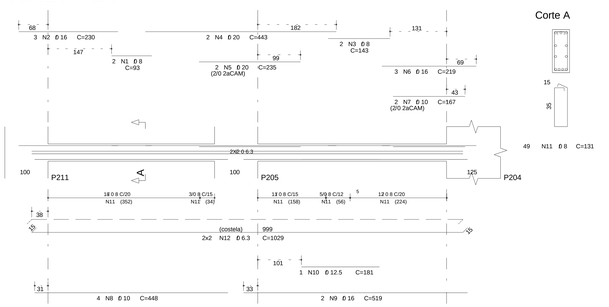
VB412 14/60



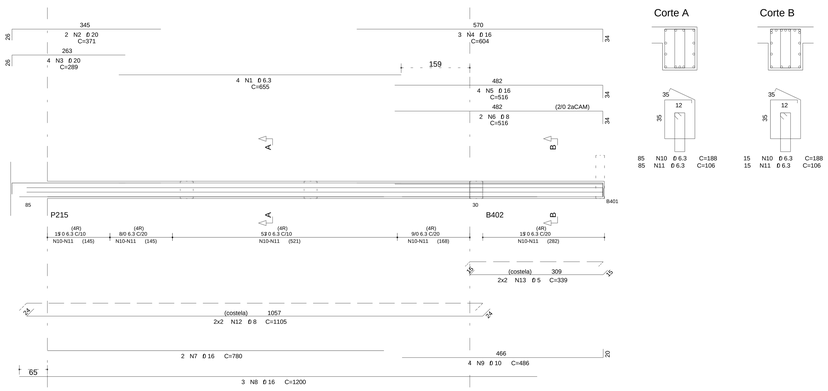
VB413 15/40



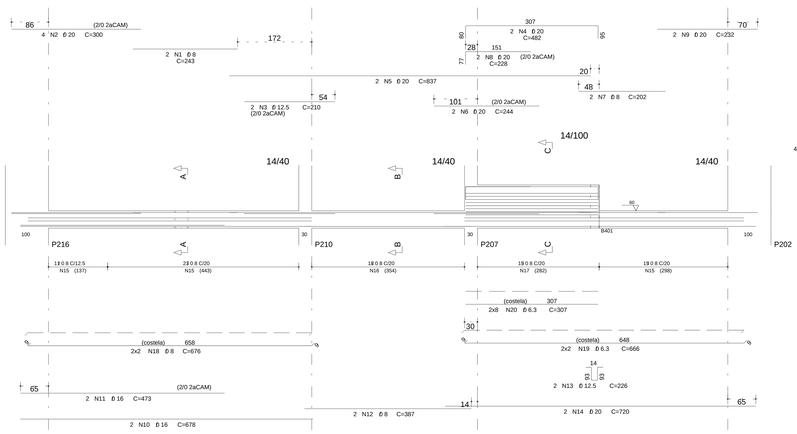
VB414 20/40



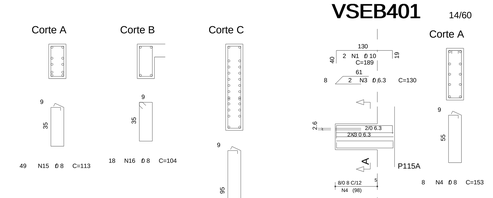
VB415 40/40



VB416 14/VAR



VSEB401 14/60



RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	209	33
50A	6.3	1136	281
50A	8	738	295
50A	10	142	89
50A	12.5	145	145
50A	16	277	443
50A	20	247	619
Peso Total 60B =		33 kg	
Peso Total 50A =		1873 kg	

ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VB401					
50A	1	6.3	2	375	750
50A	2	12.5	2	222	444
50A	3	10	1	212	212
50A	4	12.5	2	1131	2262
50A	5	12.5	1	434	434
50A	6	6.3	2	241	482
50A	7	8	1	270	270
50A	8	12.5	2	222	444
50A	9	8	1	202	202
50A	10	12.5	4	1058	4232
50A	11	10	4	1084	4336
50A	12	6.3	2	136	272
50A	13	6.3	50	248	12400
50A	14	6.3	50	233	11650
50A	15	8	8	1053	8424
50A	16	8	8	1088	8704
VB402					
50A	1	20	4	1074	4296
50A	2	20	3	285	855
50A	3	16	4	1037	4148
50A	4	6.3	34	116	3944
50A	5	8	10	161	1610
50A	6	8	10	103	1030
50A	7	6.3	20	158	3160
50A	8	6.3	20	99	1980
50A	9	6.3	4	594	2376
VB403					
50A	1	8	4	195	780
50A	2	16	7	201	1407
50A	3	16	4	210	840
50A	4	12.5	3	116	348
50A	5	16	2	576	1152
50A	6	16	2	523	1046
50A	7	8	29	241	6989
50A	8	8	29	113	3277
50A	9	6.3	4	560	2240
VB404					
50A	1	8	2	250	500
50A	2	8	2	254	508
60B	3	5	10	98	980
VB405					
50A	1	8	2	567	1134
50A	2	6.3	1	213	213
50A	3	12.5	2	596	1192
60B	4	5	26	98	2548
VB406					
50A	1	10	2	189	378
50A	2	10	2	159	318
50A	3	6.3	2	130	260
50A	4	8	8	153	1224
50A	5	6.3	6	151	906
VB407					
50A	1	20	2	250	500
50A	2	20	4	274	1096
50A	3	16	2	413	826
50A	4	16	1	229	229
50A	5	16	2	303	606
50A	6	6.3	18	293	5274
50A	7	6.3	10	133	1330
60B	8	5	20	285	5700
VB408					
60B	1	5	2	220	440
50A	2	16	2	236	472
50A	3	10	2	236	472
50A	4	8	2	122	244
50A	5	10	2	539	1078
50A	6	6.3	2	272	544
60B	7	5	23	98	2254
VB409					
60B	1	5	2	149	298
50A	2	16	2	289	578
50A	3	10	2	178	356
50A	4	10	2	563	1126
50A	5	8	1	250	250
60B	6	5	32	110	3520
VB410					
50A	1	8	2	116	232
50A	2	20	4	314	1256
50A	3	20	3	265	795
50A	4	12.5	2	596	1192
50A	5	12.5	2	370	740
50A	6	6.3	38	143	5434
50A	7	6.3	4	607	2428
VB411					
60B	1	5	2	319	638
50A	2	12.5	2	207	414
50A	3	12.5	2	541	1082
60B	4	5	23	138	3174
VB412					
50A	1	16	2	367	734
50A	2	20	4	642	2568
50A	3	20	4	562	2248
50A	4	6.3	2	130	260
50A	5	8	32	153	4896
50A	6	8	6	550	3300
VB413					
50A	1	6.3	2	186	372
50A	2	16	2	235	470
50A	3	20	2	449	898
50A	4	20	1	579	579
50A	5	20	2	579	1158
50A	6	8	2	364	728
50A	7	8	2	229	458
50A	8	6.3	28	113	3164
50A	9	6.3	9	103	927
50A	10	6.3	4	603	2412
VB414					
50A	1	8	2	93	186
50A	2	16	3	230	690
50A	3	8	2	143	286
50A	4	20	2	443	886
50A	5	20	2	235	470
50A	6	16	3	219	657
50A	7	10	2	167	334
50A	8	10	4	448	1792
50A	9	16	2	519	1038
50A	10	12.5	1	181	181
50A	11	8	49	131	6419
50A	12	6.3	4	1009	4036
VB415					
50A	1	6.3	4	655	2620
50A	2	20	2	371	742
50A	3	20	4	289	1156
50A	4	16	3	604	1812
50A	5	16	4	516	2064
50A	6	8	2	516	1032
50A	7	16	2	780	1560
50A	8	16	3	1200	3600
50A	9	10	4	486	1944
50A	10	6.3	100	188	18800
50A	11	6.3	100	106	10600
50A	12	8	4	1105	4420
60B	13	5	4	339	1356
VB416					
50A	1	8	2	243	486
50A	2	20	4	300	1200
50A	3	12.5	2	210	420
50A	4	20	2	482	964
50A	5	20	2	837	1674
50A	6	8	2	202	404
50A	7	20	2	228	456
50A	8	20	2	232	464
50A	9	20	2	232	464
50A	10	16	2	678	1356
50A	11	16	2	473	946
50A	12	8	2	387	774
50A	13	12.5	2	226	452
50A	14	20	2	720	1440
50A	15	8	49	113	5537
50A	16	8	18	104	1872
50A	17	8	15	233	3495
50A	18	8	4	676	2704
50A	19	6.3	4	666	2664
50A	20	6.3	16	307	4912
VB417					
50A	1	6.3	2	277	554
50A	2	12.5	2	177	354
50A	3	12.5	2	166	332
50A	4	16	2	599	1198
50A	5	16	1	272	272
50A	6	8	3	176	528
50A	7	6.3	33	133	4389
VSEB401					
50A	1	10	2	189	378
50A	2	10	2	159	318
50A	3	6.3	2	130	260
50A	4	8	8	153	1224
50A	5	6.3	6	151	906

COBRIMENTO DA ARMADURA:

- LAJES = 2,0 cm
- VIGAS E PILARES = 2,5 cm
- BLOCOS,BALDRAMES E CONTENCOES (FACE EM CONTATO COM A TERRA) = 3,0 cm

1. ESSES COBRIMENTOS DEVERAO SER GARANTIDOS COM O USO DE ESPACADORES OU PASTILHAS.

COBRIMENTOS ESPECIFICOS 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

FCK= 35 MPa
EC = 28 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).
A/C = 0,65 (FATOR AGUA CIMENTO)

REV	DATA	DESCRICAO
1	18/03/2009	ALTERACAO DAS VIGAS QUE APOIAM A ESCADA (VB407, VB415, VB416) E INCLUSAO DA VB417, E VIGA VB408
0	07/08/2009	EMISSAO INICIAL

Simetria Engenharia
PROJETOS ESTRUTURAIS
SIA QUADRA AC NO 51 MAIS 959 a 999
BRASILIA-DF CEP: 71200-045
FAX: (0061) 3036-9833
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE: DISCO INCORPORADORA E IMOBILIARIA LTDA
OBRA: EDIFICIO RESIDENCIAL OLIMPIQUE — No OBRA: 001
ENDERECO OBRA: SRIA AREA ESPECIAL 04 LOTES G e H - GUARA/DF
DESCRICAO: ARMACAO DAS VIGAS DO MEZANINO TORRE A - JUNTA B
DESENHO No: 141-XXX
DESENHISTA: TQS/ HELENA — DATA: 07/08/2009 — ESCALA: 1:50 — UNIDADE: cm — No PROJ. SIMETRIA: 421
ARQUIVO PLT: 421 -EST- 141-XXX -R01 .PLT
PROPRIETARIO: RESPONSAVEL TECNICO:

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL:
SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2725/RF

"SIMETRIA ENGENHARIA DE PROJETOS S/C LTDA PL:C:\TQS\WINQ\LTMP\C:\ARTWORK\ARMEZANINO\VIGAS\VIG MEZ R-01.PLT 18/03/2010 09:34:04"