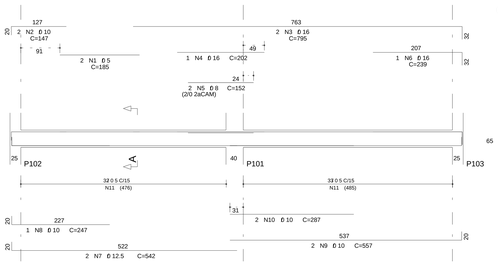
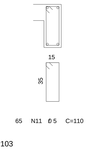
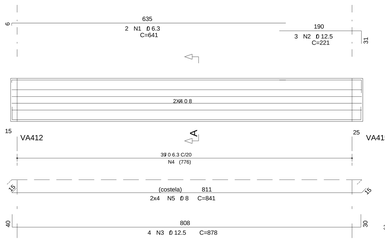
VA401 20/40



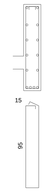
Corte A



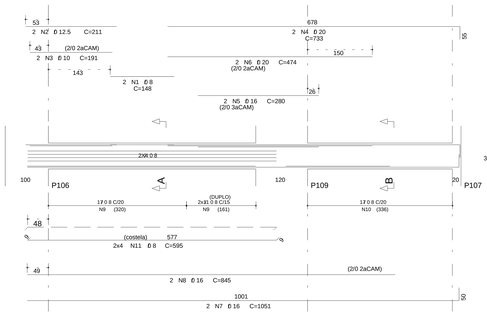
VA402 20/100



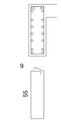
Corte A



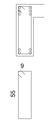
VA403 14/60



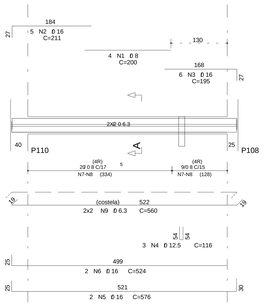
Corte A



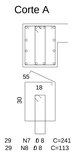
Corte B



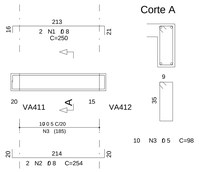
VA404 60/35



Corte A

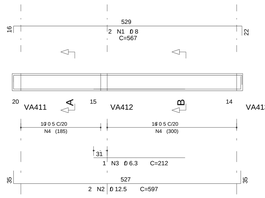


VA405 14/40



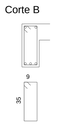
Corte A

VA406 14/40

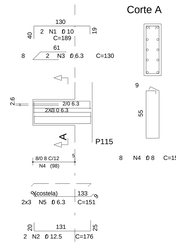


Corte A

Corte B

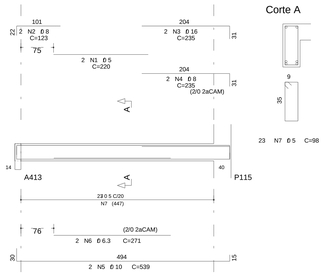


VA407 14/60



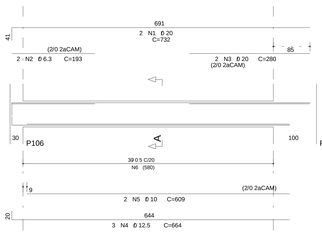
Corte A

VA408 14/40



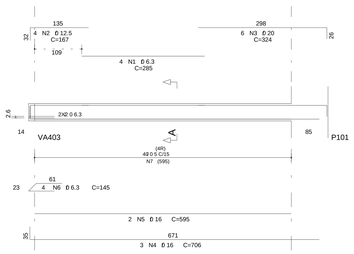
Corte A

VA409 14/60

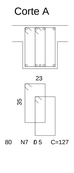


Corte A

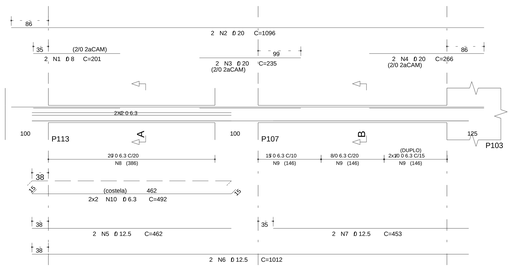
VA410 40/40



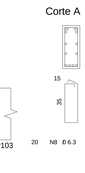
Corte A



VA411 20/40

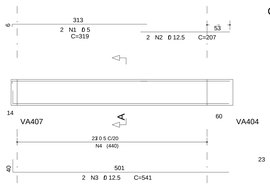


Corte A



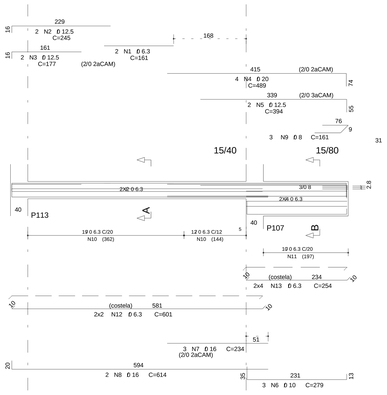
Corte B

VA414 14/60

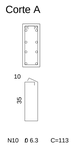


Corte A

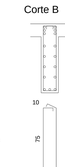
VA412 15/VAR



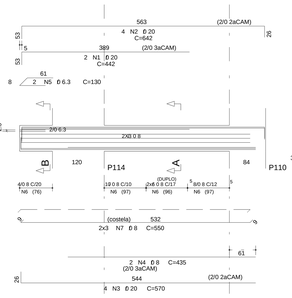
Corte A



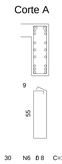
Corte B



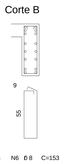
VA413 14/60



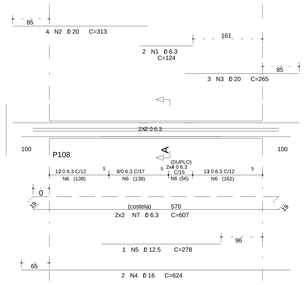
Corte A



Corte B

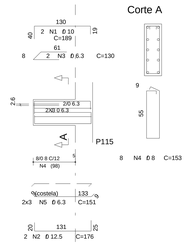


VA415 25/40



Corte A

VSEA401 14/60



Corte A

	ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VA401						
	60B	1	5	2	185	370
	50A	2	10	2	147	294
	50A	3	16	2	795	1590
	50A	4	16	1	202	202
	50A	5	8	2	152	304
	50A	6	16	1	239	239
	50A	7	12.5	2	542	1084
	50A	8	10	1	247	247
	50A	9	10	2	557	1114
	50A	10	10	2	287	574
	60B	11	5	65	110	7150
VA402						
	50A	1	6.3	2	641	1282
	50A	2	12.5	3	221	663
	50A	3	12.5	4	878	3512
	50A	4	6.3	39	248	9672
	50A	5	8	8	841	6728
VA403						
	50A	1	8	2	148	296
	50A	2	12.5	2	211	422
	50A	3	10	2	231	462
	50A	4	12.5	2	793	1586
	50A	5	16	2	730	1460
	50A	6	20	2	474	948
	50A	7	16	2	1051	2102
	50A	8	16	2	845	1690
	50A	9	8	39	153	5967
	50A	10	8	17	144	2448
	50A	11	8	8	595	4760
VA404						
	50A	1	8	4	200	800
	50A	2	16	5	211	1055
	50A	3	16	6	195	1170
	50A	4	12.5	3	116	348
	50A	5	16	2	576	1152
	50A	6	16	2	524	1048
	50A	7	8	29	241	6989
	50A	8	8	29	113	3277
	50A	9	6.3	4	560	2240
VA405						
	50A	1	8	2	250	500
	50A	2	8	2	254	508
	60B	3	5	10	98	980
VA406						
	50A	1	8	2	567	1134
	50A	2	12.5	2	597	1194
	50A	3	6.3	1	212	212
	60B	4	5	26	98	2548
VA407						
	50A	1	10	2	189	378
	50A	2	12.5	2	176	352
	50A	3	6.3	2	130	260
	50A	4	8	8	153	1224
	50A	5	6.3	6	151	906
VA408						
	60B	1	5	2	220	440
	50A	2	8	2	123	246
	50A	3	16	2	235	470
	50A	4	8	2	235	470
	50A	5	10	2	539	1078
	50A	6	6.3	2	271	542
	60B	7	5	23	98	2254
VA409						
	50A	1	20	2	732	1464
	50A	2	6.3	2	193	386
	50A	3	20	2	280	560
	50A	4	12.5	3	664	1992
	50A	5	10	2	609	1218
	60B	6	5	30	138	4140
VA410						
	50A	1	6.3	4	285	1140
	50A	2	12.5	4	167	668
	50A	3	20	6	324	1944
	50A	4	16	3	706	2118
	50A	5	16	2	595	1190
	50A	6	6.3	4	145	580
	60B	7	5	80	127	10160
VA411						
	50A	1	8	2	201	402
	50A	2	20	2	1096	2192
	50A	3	20	2	235	470
	50A	4	20	2	266	532
	50A	5	12.5	2	462	924
	50A	6	12.5	2	1012	2024
	50A	7	12.5	2	453	906
	50A	8	6.3	20	128	2560
	50A	9	6.3	43	113	4859
	50A	10	6.3	4	492	1968
VA412						
	50A	1	6.3	2	161	322
	50A	2	12.5	2	245	490
	50A	3	12.5	2	177	354
	50A	4	20	4	489	1956
	50A	5	12.5	2	394	788
	50A	6	10	3	279	837
	50A	7	16	3	234	702
	50A	8	16	2	254	508
	50A	9	8	3	161	483
	50A	10	6.3	31	113	3503
	50A	11	6.3	10	193	1930
	50A	12	6.3	4	601	2404
	50A	13	6.3	8	254	2032
VA413						
	50A	1	20	2	442	884
	50A	2	20	4	642	2568
	50A	3	20	4	570	2280
	50A	4	8	2	435	870
	50A	5	6.3	2	130	260
	50A	6	8	34	153	5202
	50A	7	8	6	550	3300
VA414						
	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
VA415						
	50A	1	6.3	2	124	248
	50A	2	20	4	313	1252
	50A	3	20	3	265	795
	50A	4	16	2	624	1248
	50A	5	12.5	1	278	278
	50A	6	6.3	41	143	5863
	50A	7	6.3	4	607	2428
VSEA401						
	50A	1	10	2	189	378
	50A	2	12.5	2	176	352
	50A	3	6.3	2	130	260
	50A	4	8	8	153	1224
	50A	5	6.3	6	151	906

RESUMO ACO CA 50-60

ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	319	51
50A	6.3	468	117
50A	8	471	189
50A	10	65	41
50A	12.5	178	178
50A	16	178	284
50A	20	193	483
Peso Total	60B =		51 kg
Peso Total	50A =		1292 kg

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	18/03/2010	ALTERACAO DA VIGA VA408
0	07/08/2009	EMISSAO INICIAL

Simetria Engenharia
PROJETOS ESTRUTURAIS
SIA QUADRA AC No 51 SALAS 203 a 203
BRASILIA - DF 71200-045
FAX: (0XX61) 3306-9620
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE:	DISCO INCORPORADORA E IMOBILIARIA LTDA		
OBRA:	EDIFICIO RESIDENCIAL OLIMPIQUE	No OBRA:	001
ENDEREC0 OBRA:	SRIA AREA ESPECIAL 04 LOTES G e H - GUARA/DF		
DESCRICAO	ARMACAO DAS VIGAS DO MEZANINO TORRE A - JUNTA A	DESENHO No:	140-XXX

DESENHISTA:	DATA:	ESCALA:	UNIDADE	No PROJ. SIMETRIA:
TQS/ HELENA	07/08/2009	1:50	cm	421

ARQUIVO PLT:
421 -EST- 140-XXX -R01 .PLT

PROPRIETARIO: RESPONSAVEL TECNICO

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2725/RF

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA-PL C:\TQS\WINDOWS\MPC\MPC\JUNTA-A-TORRE-A\04-MEZANINO\MGA5\VIG MEZ A-01.PLT 18/03/2010 08:38:17