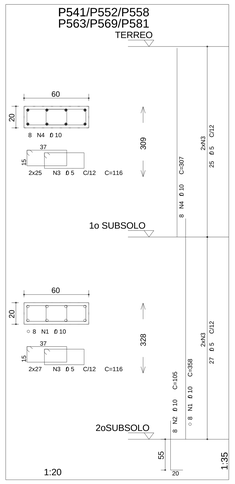
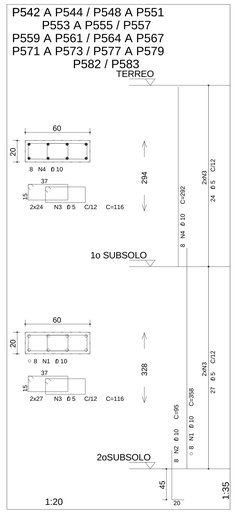
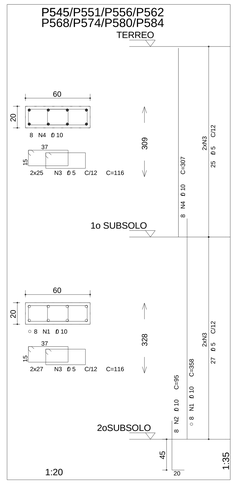
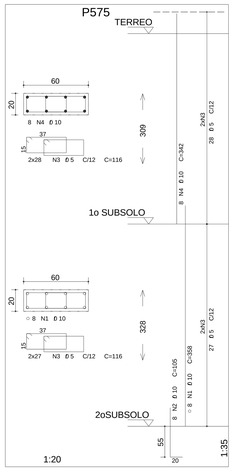
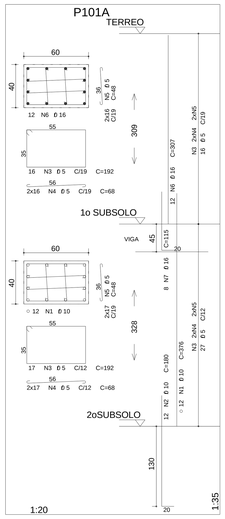
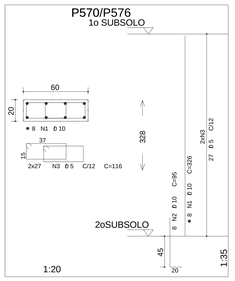


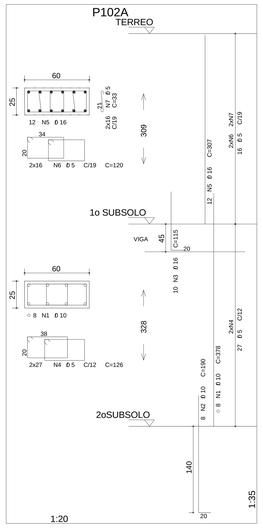


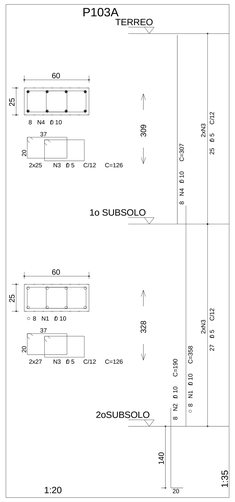


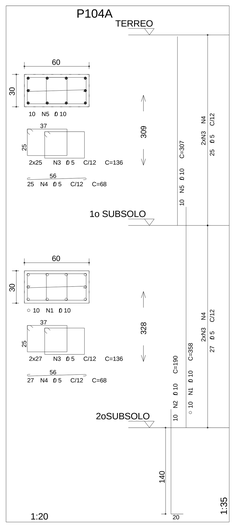


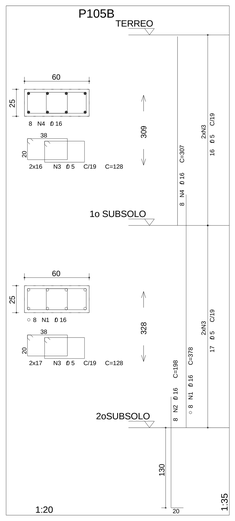


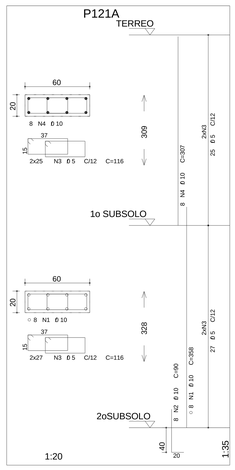


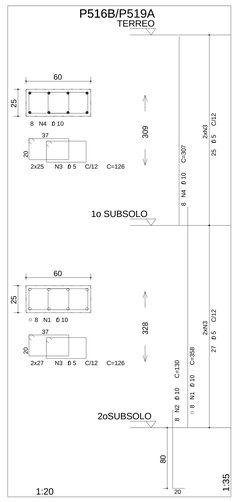


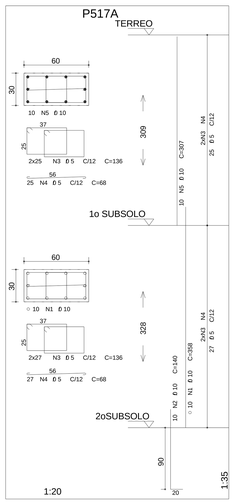


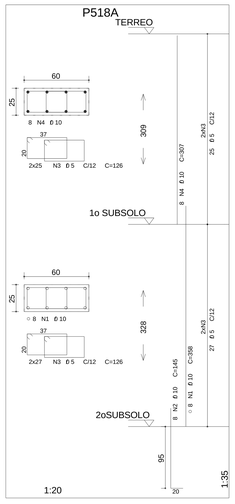


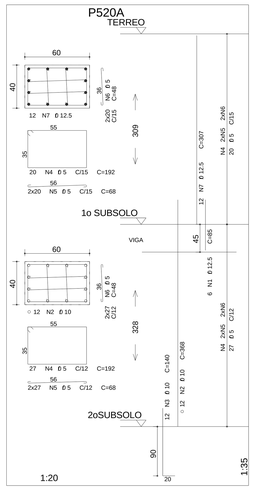


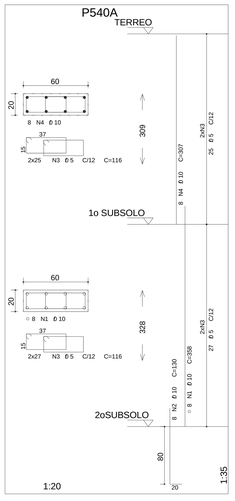


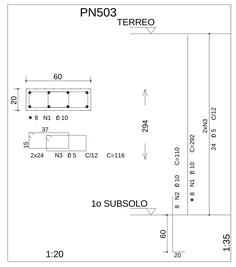


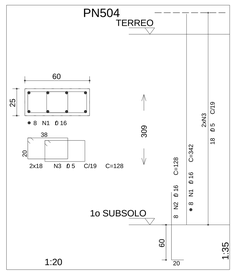


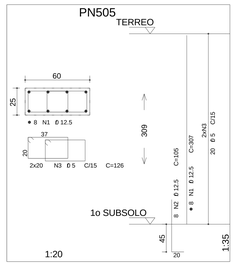




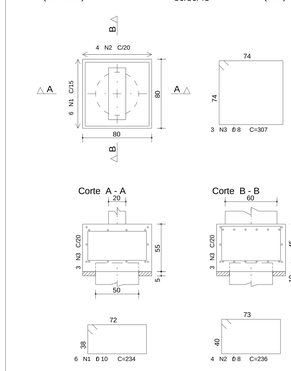




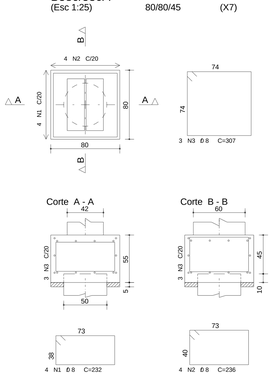




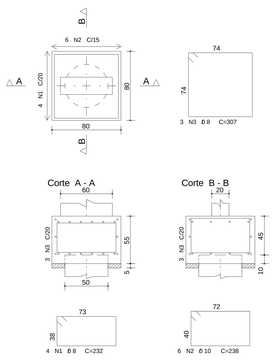
B542 a B544 / B547 / B549 / B550
B553 a B555 / B559 a B561 / B564
B566 / B567 / B572 / B573 / B578
B579 / B582 / B583
(Esc 1:25) 80/80/45 (X21)



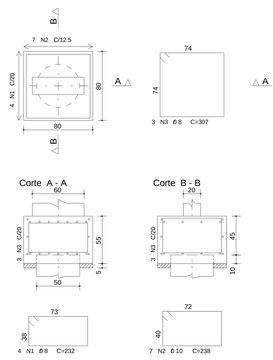
B545/545A / B551/551A /
B556/556A / B562/562A /
B568/568A / B574/574A /
B580/580A
(Esc 1:25) 80/80/45 (X7)



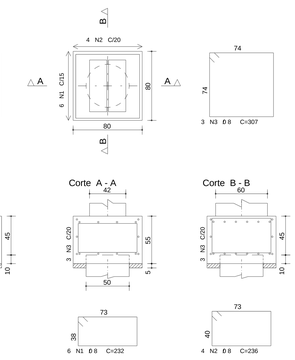
B548 / B557 / B565 / B570 / B571
(Esc 1:25) 80/80/45 (X5)



B576 / B577
(Esc 1:25) 80/80/45 (X2)



B584/584A
(Esc 1:25) 80/80/45



	ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
P541 (X6)						
	50A	1	10	48	358	17184
	50A	2	10	48	105	5040
	60B	3	5	624	116	72384
	50A	4	10	48	307	14736
P542 (X26)						
	50A	1	10	208	358	74464
	50A	2	10	208	95	19760
	60B	3	5	2652	116	307632
	50A	4	10	208	292	60736
P545 (X8)						
	50A	1	10	64	358	22912
	50A	2	10	64	95	6080
	60B	3	5	832	116	96512
	50A	4	10	64	307	19648
P570 (X2)						
	50A	1	10	16	326	5216
	50A	2	10	16	95	1520
	60B	3	5	108	116	12528
P575						
	50A	1	10	8	358	2864
	50A	2	10	8	105	840
	60B	3	5	110	116	12760
	50A	4	10	8	342	2736
P516B (X2)						
	50A	1	10	16	358	5728
	50A	2	10	16	130	2080
	60B	3	5	208	126	26208
	50A	4	10	16	307	4912
P121A						
	50A	1	10	8	358	2864
	50A	2	10	8	90	720
	60B	3	5	104	116	12064
	50A	4	10	8	307	2456
P102A						
	50A	1	10	8	378	3024
	50A	2	10	8	190	1520
	50A	3	16	10	115	1150
	60B	4	5	54	126	6804
	50A	5	16	12	307	3684
	60B	6	5	32	120	3840
	50A	7	5	32	33	1056
P101A						
	50A	1	10	12	376	4512
	50A	2	10	12	180	2160
	60B	3	5	33	192	6336
	50A	4	5	66	68	4488
	60B	5	5	66	48	3168
	50A	6	16	12	307	3684
	50A	7	16	8	115	920
P103A						
	50A	1	10	8	358	2864
	50A	2	10	8	190	1520
	60B	3	5	104	126	13104
	50A	4	10	8	307	2456
P104A						
	50A	1	10	10	358	3580
	50A	2	10	10	190	1900
	60B	3	5	104	136	14144
	60B	4	5	52	68	3536
	50A	5	10	10	307	3070
P105B						
	50A	1	16	8	378	3024
	50A	2	16	8	188	1504
	60B	3	5	66	128	8448
	50A	4	16	8	307	2456
P517A						
	50A	1	10	10	358	3580
	50A	2	10	10	140	1400
	60B	3	5	104	136	14144
	60B	4	5	52	68	3536
	50A	5	10	10	307	3070
P540A						
	50A	1	10	8	358	2864
	50A	2	10	8	130	1040
	60B	3	5	104	116	12064
	50A	4	10	8	307	2456
P520A						
	50A	1	12.5	6	85	510
	50A	2	10	12	368	4416
	50A	3	10	12	140	1680
	60B	4	5	47	192	9024
	60B	5	5	94	68	6392
	60B	6	5	94	48	4512
	50A	7	12.5	12	307	3684
P518A						
	50A	1	10	8	358	2864
	50A	2	10	8	145	1160
	60B	3	5	104	126	13104
	50A	4	10	8	307	2456
PN503						
	50A	1	10	8	292	2336
	50A	2	10	8	110	880
	60B	3	5	48	116	5568
PN504						
	50A	1	16	8	342	2736
	50A	2	16	8	128	1024
	60B	3	5	36	128	4608
PN505						
	50A	1	12.5	8	307	2456
	50A	2	12.5	8	105	840
	60B	3	5	40	126	5040

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	6830	1093
50A	10	3293	2075
50A	12.5	75	75
50A	16	203	324
Peso Total 60B =			1093 kg
Peso Total 50A =			2474 kg

PAVIMENTO: 1o SUBSOLO			
RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kgf)
60B	5	3573	572
50A	10	2074	1306
50A	12.5	5	5
50A	16	67	107
Peso Total 60B =			572 kg
Peso Total 50A =			1418 kg

PAVIMENTO: TERREO			
RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kgf)
60B	5	3257	521
50A	10	1219	768
50A	12.5	70	70
50A	16	136	217
Peso Total 60B =			521 kg
Peso Total 50A =			1055 kg

	ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
B542 (X21)						
	50A	1	10	126	234	29484
	50A	2	8	84	236	19824
	50A	3	8	63	307	19341
B545/545A (X7)						
	50A	1	8	28	232	6496
	50A	2	8	28	236	6608
	50A	3	8	21	307	6447
B548 (X5)						
	50A	1	8	20	232	4640
	50A	2	10	30	238	7140
	50A	3	8	15	307	4605
B576 (X2)						
	50A	1	8	8	232	1856
	50A	2	10	14	238	3332
	50A	3	8	6	307	1842
B584/584A						
	50A	1	8	6	232	1392
	50A	2	8	4	236	944
	50A	3	8	3	307	921

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
50A	8	749	300
50A	10	400	252
Peso Total 50A =			551 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	15/12/2009	SUBSTITUIR PRANCHA ANTERIOR: MANTIDO ARRANQUES DOS PILARES DE JUNTA, ALTERAR ARRANQUES DO P121A E ACRESCENTAR BLOCOS
0	14/07/2009	EMISSAO INICIAL

Simetria Engenharia
PROJETOS ESTRUTURAIS
SIA QUADRA 02 No 01 SALAS 201a 205
BRASILIA-DF CEP: 71200-045
FAX: (0XX61) 3036-9615
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE:	DISCO INCORPORADORA E IMOBILIARIA LTDA		
OBRA:	EDIFICIO RESIDENCIAL OLIMPIQUE	No OBRA:	001
ENDEREOCO OBRA:	SRIA AREA ESPECIAL 04 LOTES G e H - GUARA/DF		
DESCRICAO:	ARMACAO DE BLOCOS E PILARES EMBASAMENTO - JUNTA I	DESENHO No:	138-XXX

DESENHISTA	DATA	ESCALA	UNIDADE	No PROJ. SIMETRIA
TQSI HELENA	14/07/2009	1:20	cm	421

ARQUIVO PLT: 421 -EST- 138-XXX -R01 .PLT

PROPRIETARIO: RESPONSAVEL TECNICO:

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2705/RF

SIMETRIA ENGENHARIA DE PROJETOS S/C LTDA PC C:\TQSWIN\QVWPC\JUNTA\PILARES ALTERSAO\SPILARES-R1.PLT 15/12/2009 15:48:30