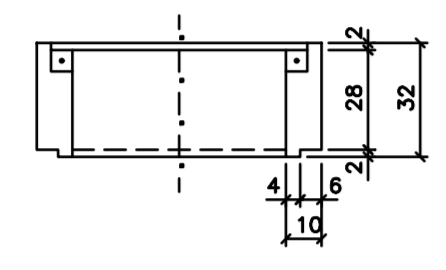
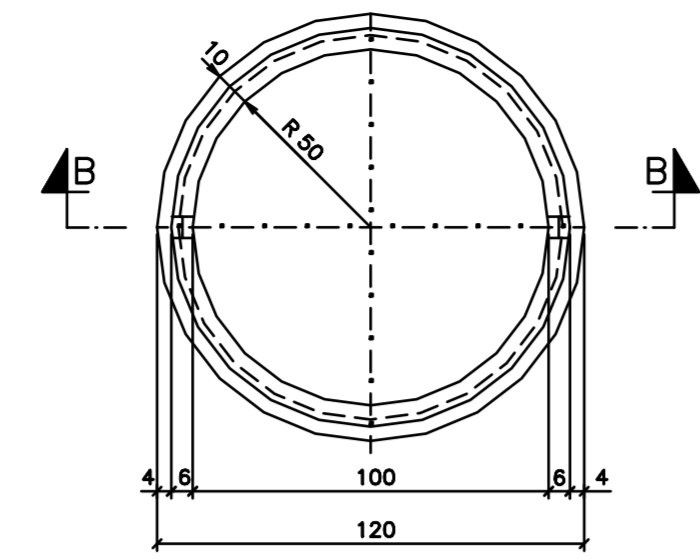


ANEL DE CONCRETO ϕ 60
ESC. 1:20

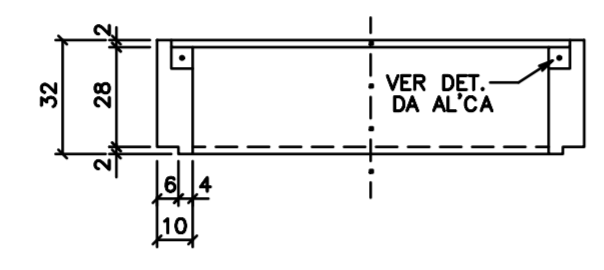


CORTE A - A
ESC. 1:20

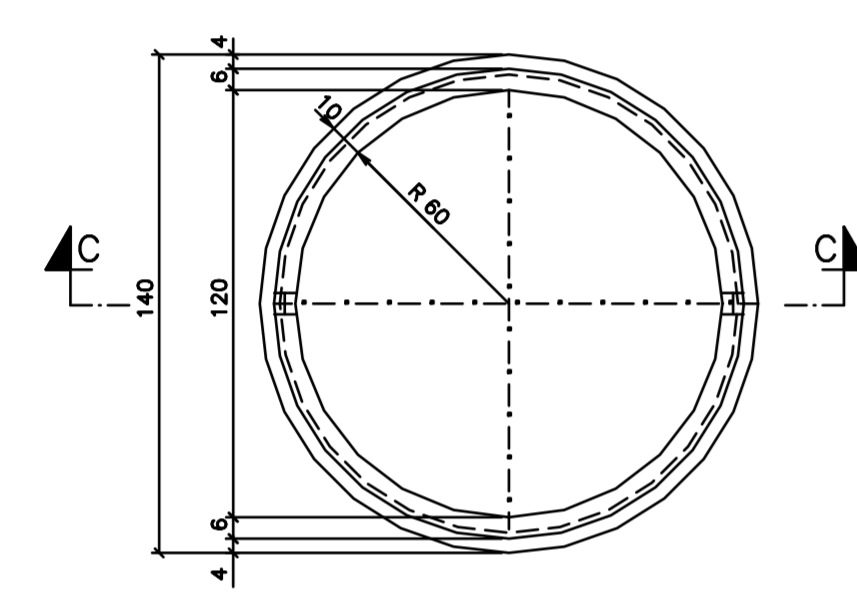
FORMA



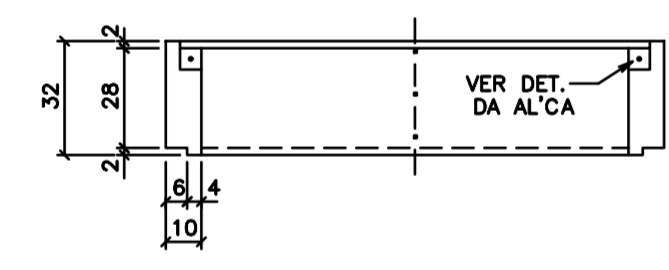
ANEL DE CONCRETO ϕ 100
ESC. 1:20



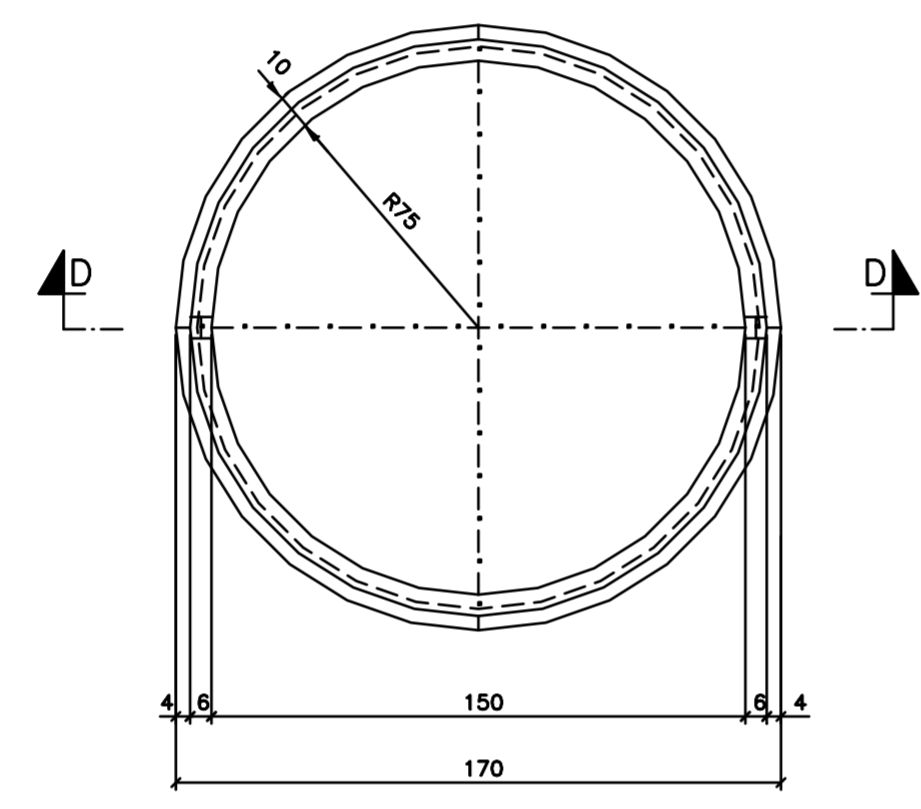
CORTE B - B
ESC. 1:20



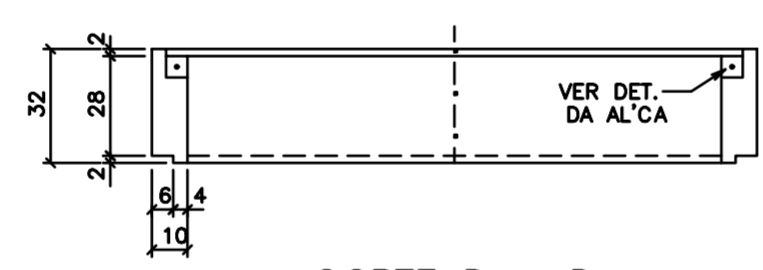
ANEL DE CONCRETO ϕ 120
ESC. 1:20



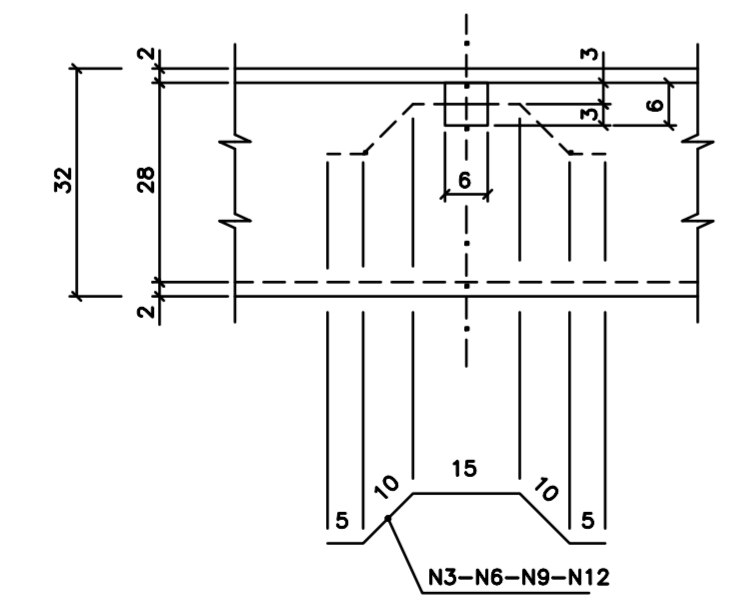
CORTE C - C
ESC. 1:20



ANEL DE CONCRETO ϕ 150
ESC. 1:20

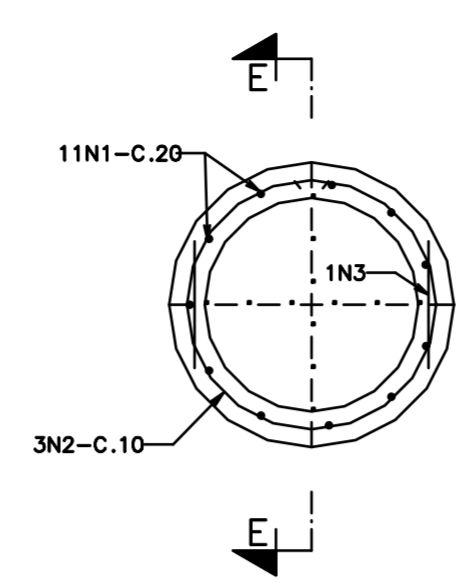


CORTE D - D
ESC. 1:20

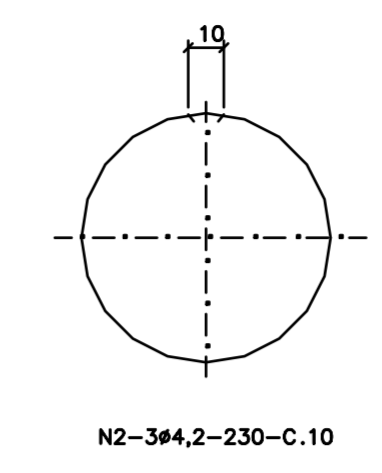


DETALHE DA ALÇA
ESC. 1:10

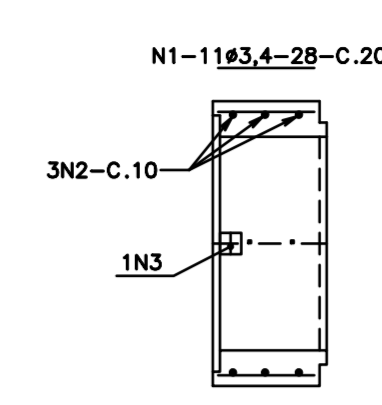
ARMA'ÇÃO



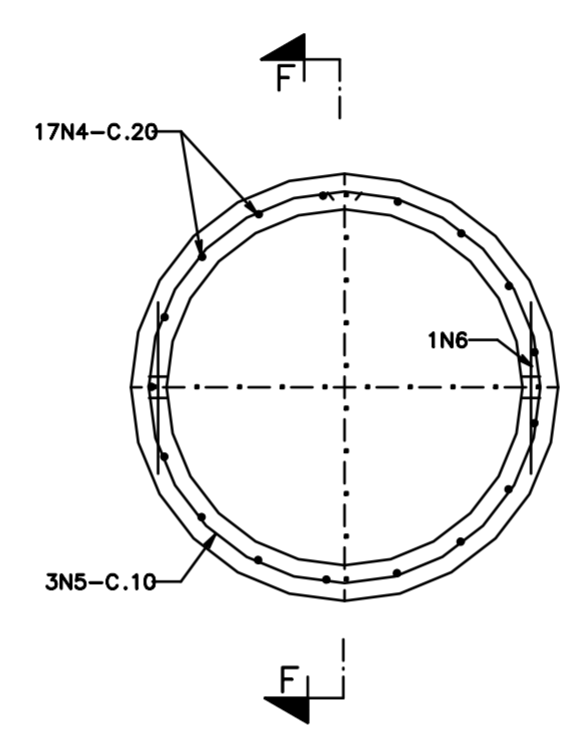
ANEL DE CONCRETO ϕ 60
ESC. 1:20



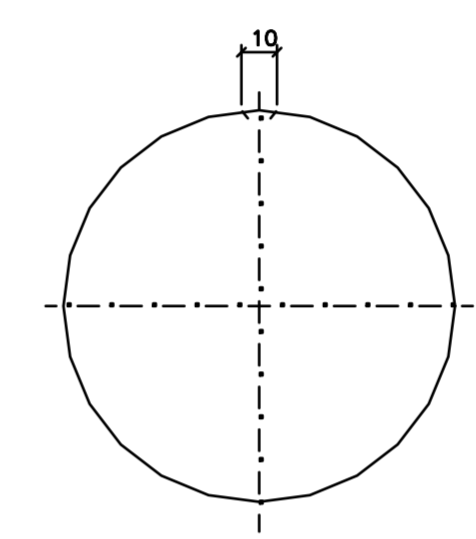
N2-3 ϕ 4,2-230-C.10



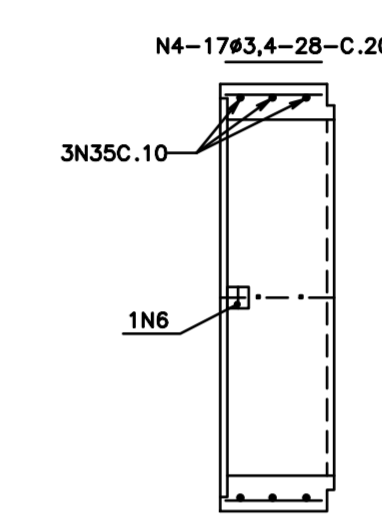
CORTE E - E
ESC. 1:20



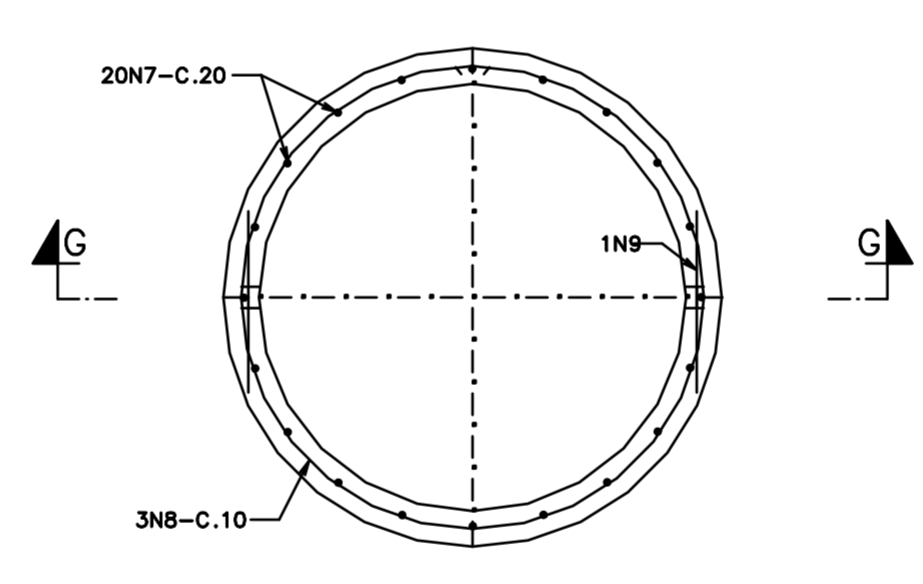
ANEL DE CONCRETO ϕ 100
ESC. 1:20



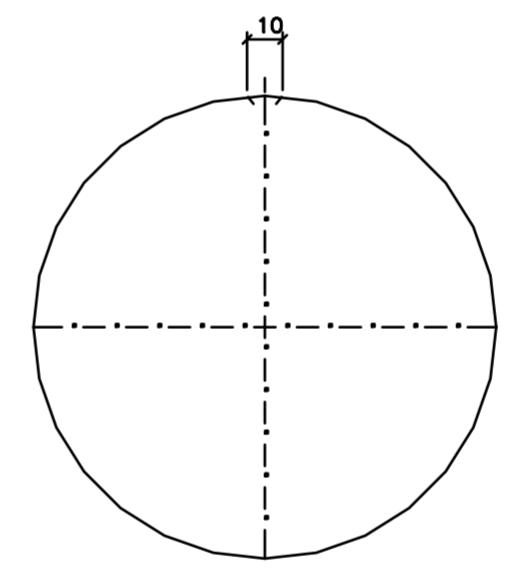
N5-3 ϕ 4,2-355-C.10



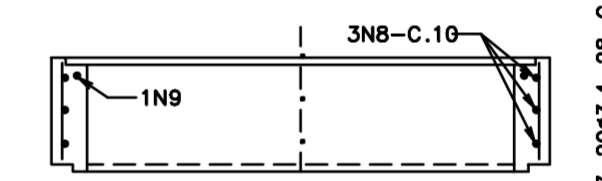
CORTE F - F
ESC. 1:20



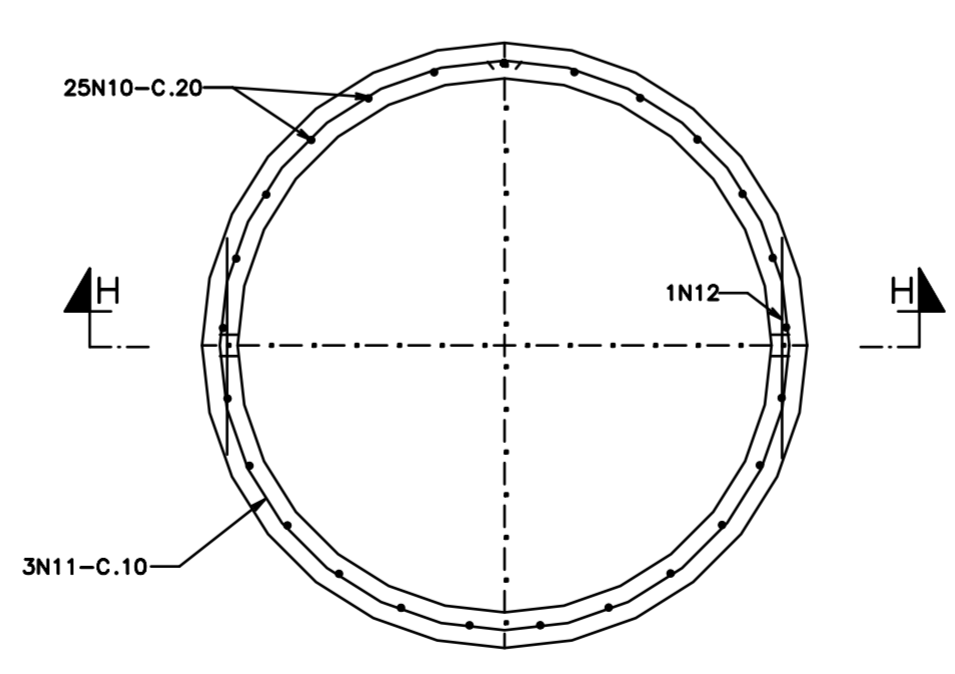
ANEL DE CONCRETO ϕ 120
ESC. 1:20



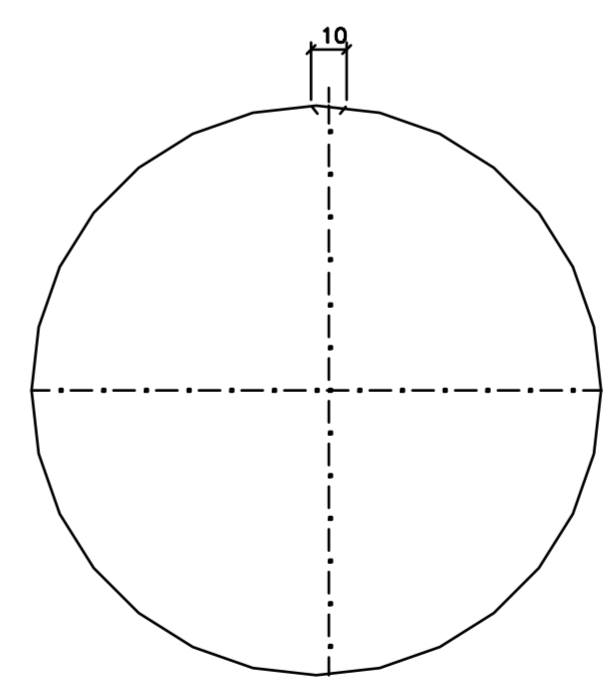
N8-3 ϕ 5-420-C.10



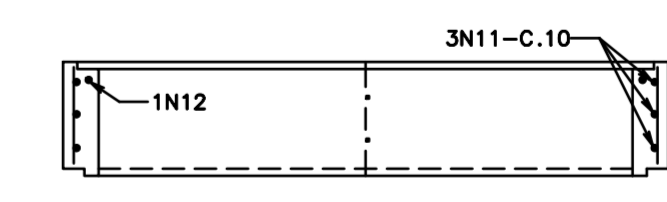
CORTE G - G
ESC. 1:20



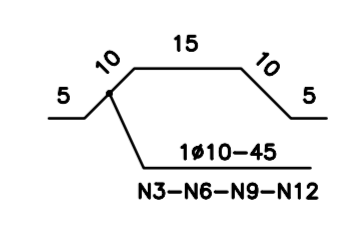
ANEL DE CONCRETO ϕ 150
ESC. 1:20



N11-3 ϕ 5-510-C.10



CORTE H - H
ESC. 1:20



QUADRO DE A'ÇOS					
ANEL ϕ	N	ϕ	Q	COMPRIMENTOS	
				UNIT.cm	TOT.m
60	1	3,4	11	230	3
	2	4,2	3	45	1
	3	10	2	45	1
100	4	3,4	17	28	5
	5	4,2	3	355	11
	6	10	2	45	1
120	7	3,4	20	28	6
	8	5	3	420	13
	9	10	2	45	1
150	10	3,4	25	28	7
	11	5	3	510	15
	12	10	2	45	1

ANEL ϕ 60				
RESUMO DE A'CO CA 60B				
ϕ	COMP. m	PESO kg	PESO+10% kg	
3,4	3	1	1,1	
4,2	7	1	1,1	
10	1	0,60	0,7	
TOTAIS	2,60		2,9	

ANEL ϕ 100				
RESUMO DE A'CO CA 60B				
ϕ	COMP. m	PESO kg	PESO+10% kg	
3,4	5	1	1,1	
4,2	11	1,2	1,3	
10	1	0,60	0,7	
TOTAIS	2,80		3,1	

ANEL ϕ 120				
RESUMO DE A'CO CA 60B				
ϕ	COMP. m	PESO kg	PESO+10% kg	
3,4	6	1	1,1	
5	13	2,0	2,2	
10	1	0,60	0,7	
TOTAIS	3,60		4,0	

ANEL ϕ 150				
RESUMO DE A'CO CA 60B				
ϕ	COMP. m	PESO kg	PESO+10% kg	
3,4	7	1	1,1	
5	15	2,4	2,6	
10	1	0,60	0,7	
TOTAIS	4,00		4,4	

c			
b			
a	JAN/02	MIKIKÁ	
		REVISÃO GERAL/INCLUSÃO #150	
	DATA	EXECUT.	VISTO APROV.
	ALTERA'ÇÕES		

- NOTAS
- 1 - DIMENSÕES EM CENTÍMETRO, EXCETO ONDE INDICADO.
 - 2 - CONCRETO ESTRUTURAL $f_{ck} > 20,0$ MPa.
 - 3 - O ANEL DE CONCRETO ϕ 60 EQUIVALE AO ANEL CHAMINÉ.
 - 4 - OS ANÉIS DE CONCRETO ϕ 100, ϕ 120 E ϕ 150 EQUIVALEM AO ANEL DE CÂMARA DE INSPEÇÃO.
 - 5 - TODOS OS ANÉIS DEVEM TER AS ALÇAS, COMO MOSTRA O DETALHE, PARA FACILITAR O TRANSPORTE E ASSENTAMENTO DOS MESMOS.
 - 6 - PESOS APROXIMADOS DOS ANÉIS DE CONCRETO: ϕ 60cm=140kg, ϕ 100cm=233kg, ϕ 120cm=279kg E ϕ 150cm=349kg.

PROJETO PADRÃO		COPASA	
ASS.	CREA: 44.341/D	VISTO SPEP	
RT	NOME: CLEBIO ANTÔNIO BATISTA	MÁRIO ROZENBRUCH	
PROJ.	VISTO NÔRMA TÉCNICA	APROV. DRTM	
	CLEBIO A. BATISTA	SILVIO R. G. MICHELINI	
DES.	VISTO DVEA	RUBENS COELHO DE MELLO	
	PROJECT	LUIZ F. SILVESTRE	
		DATA	JANEIRO/2002

COMPANHIA DE SANEAMENTO DE MINAS GERAIS
P.104/1
ANÉIS DE CONCRETO
 ϕ (60, 100, 120, 150)
FORMA E ARMAÇÃO

ESCALA	INDICADA	FORM.	A1
NÚMERO			
FOLHA	01 DE 01		

ORIGINAL ASSINADO NO ARQUIVO TÉCNICO