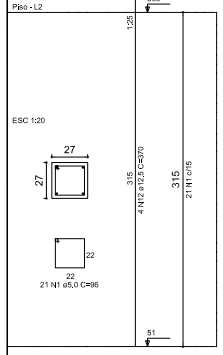
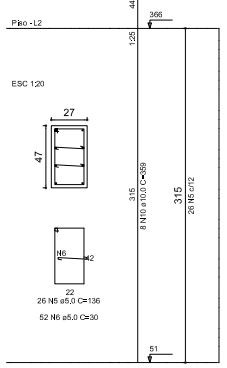
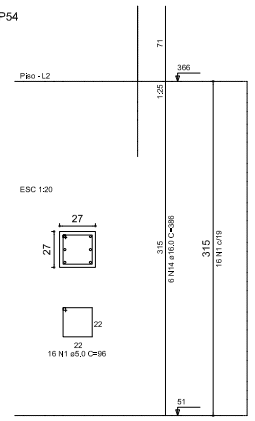
P1=P2=P3=P4=P9=P10=P11=P12=P14=P15=P17
=P20=P26=P27=P31=P32=P39=P40=P44=P45
=P48=P49=P52=P53=P56=P57=P60=P65=P72
=P75



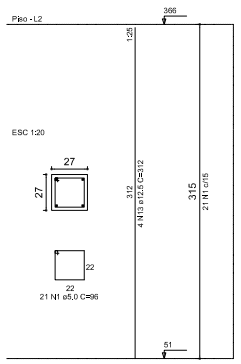
P13=P16=P21=P24=P43=P46=P47=P50=P51=P54
=P55=P58=P61=P64=P73=P74



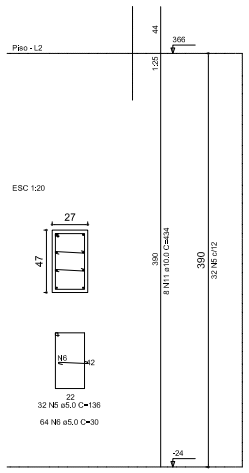
P18=P19



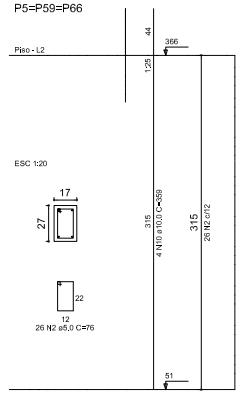
P22=P23



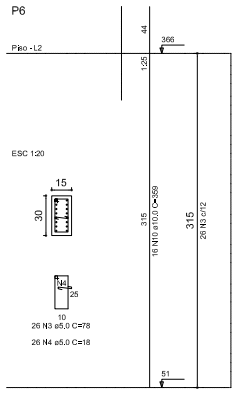
P25=P28=P30=P33=P38=P41



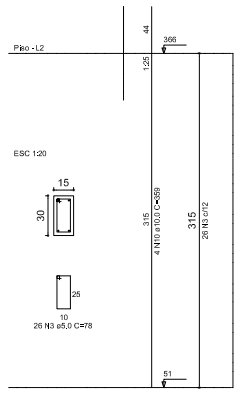
P5=P59=P66



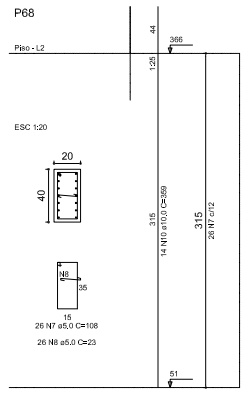
P6



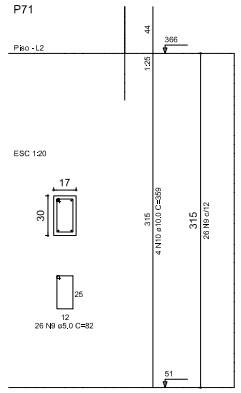
P62=P63=P69=P70



P68



P71



RELAÇÃO DO AÇO

30xP1 3xP5 P6
16xP13 2xP18 2xP22
6xP25 4xP62 P68
P71
5

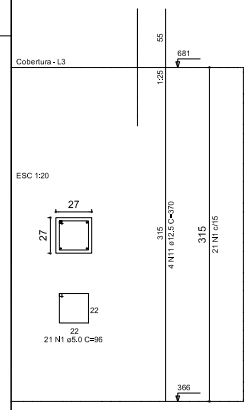
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
50	1	5,0	704	96	67584
	2	5,0	78	76	5928
	3	5,0	130	78	10140
	4	5,0	26	18	468
	5	5,0	608	136	82688
	6	5,0	1216	30	36480
	7	5,0	26	108	2808
	8	5,0	26	23	598
	9	5,0	26	82	2132
	10	10,0	190	359	68210
	11	10,0	48	434	20832
	12	12,5	120	370	44400
	13	12,5	8	312	2496
	14	16,0	12	386	4632

RESUMO DO AÇO

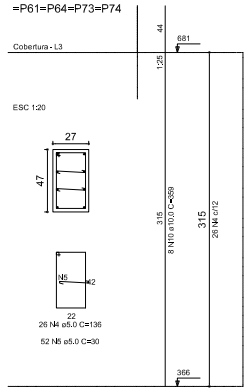
AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50	5,0	2093,8	354,6
	10,0	890,4	604,0
	12,5	469,0	497,2
	16,0	46,3	80,5
PESO TOTAL			
CA50	1536,4		

Vol. de concreto total = 18,73 m³
Área de forma total = 254,12 m²

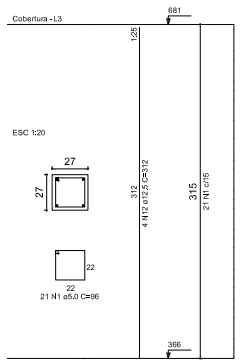
P1=P2=P3=P4=P9=P10=P11=P12=P14=P15=P17
=P20=P26=P27=P31=P32=P52=P53=P56=P57
=P60=P65=P72=P75



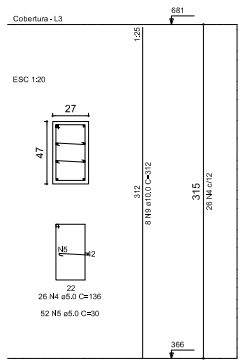
P13=P16=P25=P28=P30=P33=P51=P54=P55=P58
=P61=P64=P73=P74



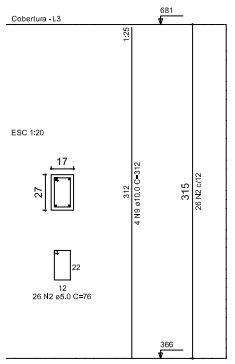
P18=P19=P39=P40=P44=P45=P48=P49



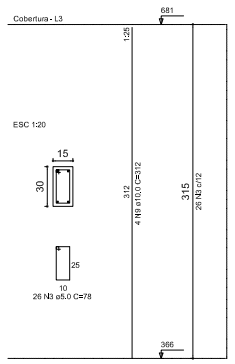
P21=P24=P38=P41=P43=P46=P47=P50



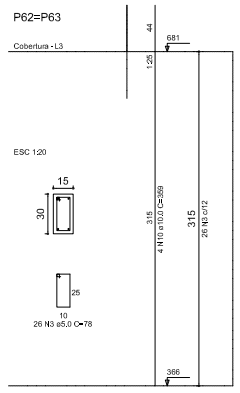
P5=P59=P66



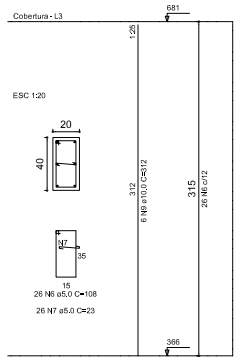
P6=P69=P70



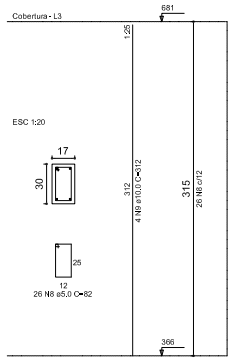
P62=P63



P67=P68



P71



RELAÇÃO DO AÇO

24xP1 3xP5 3xP6
14xP13 8xP18 8xP21
2xP62 2xP67 P71

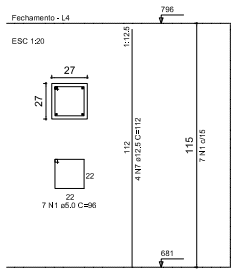
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
50	1	5,0	672	96	64512
	2	5,0	78	76	5928
	3	5,0	130	78	10140
	4	5,0	572	136	77792
	5	5,0	144	30	34320
	6	5,0	52	108	5616
	7	5,0	52	23	1196
	8	5,0	26	82	2132
	9	10,0	104	312	32448
	10	10,0	120	359	43080
	11	12,5	96	370	35520
	12	12,5	32	312	9984

RESUMO DO AÇO

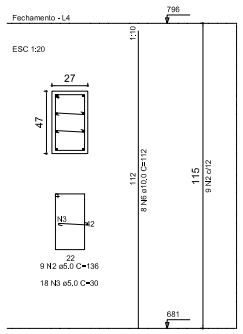
AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50	5,0	2021,8	342,4
	10,0	755,3	512,4
	12,5	455,0	482,5
PESO TOTAL			
CA50	1337,3		

Vol. de concreto total = 17,95 m³
Área de forma total = 244,44 m²

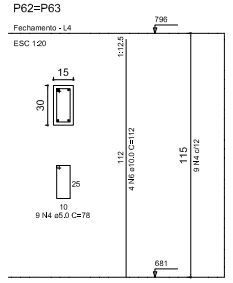
P1=P2=P3=P4=P9=P10=P11=P12=P14=P15=P17
=P20=P26=P27=P31=P32=P52=P53=P56=P57
=P60=P65=P72=P75



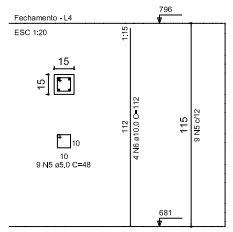
P13=P16=P25=P28=P30=P33=P51=P54=P55=P58
=P61=P64=P73=P74



P62=P63



P76=P77=P78=P79=P80=P81=P82=P83



RELAÇÃO DO AÇO

24xP1 14xP13 2xP62
8xP76

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
50	1	5,0	168	96	16128
	2	5,0	126	136	17136
	3	5,0	252	30	7560
	4	5,0	18	78	1404
	5	5,0	72	48	3456
	6	10,0	152	112	17024
	7	12,5	96	112	10752

RESUMO DO AÇO

AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50	5,0	458,3	77,6
	10,0	170,2	115,5
	12,5	107,5	114,0
PESO TOTAL			
CA50	307,1		

Vol. de concreto total = 4,37 m³
Área de forma total = 61,23 m²

ELITE ENGENHARIA

Rua Bougainville, Qd. 03, Lt. 46 – Box 5 – Conjunto Solidã, Setor do Cerrado CEP – e-mail: brazcampos@uol.com.br – Fones: (62) 3541-6808 / (62) 9911-6693

ESTRUTURAL

Instituto Federal Farroupilha
Campus de João de Castilho

Interessado: Instituto Federal Farroupilha - RS

Autor: Engº Braz Campos - CREA 7946/D - GO

ARQUIVO
R1 - RS - João de Castilho - Administrativo - Estrutural - 13.12.11.dwg

ÁREA DO TERRENO: -

ÁREA PERMEÁVEL: -

ÁREA CONSTRUÍDA: Área Total : 1914,83 m²

Nº PAVIMENTOS 02 (Dois)

CONTEÚDO
Plantas Piso
Plantas Cobertura
Plantas fechamento

DESENHISTA Filadélfio Borges

FOLHA 07/17

ENDEREÇO
Rua São João do Barro Preto - Interior, João de Castilhos, RS

DATA Dezembro/2011

REVISÃO:

	DATA	MOTIVO	REVISOR

APROVAÇÃO: