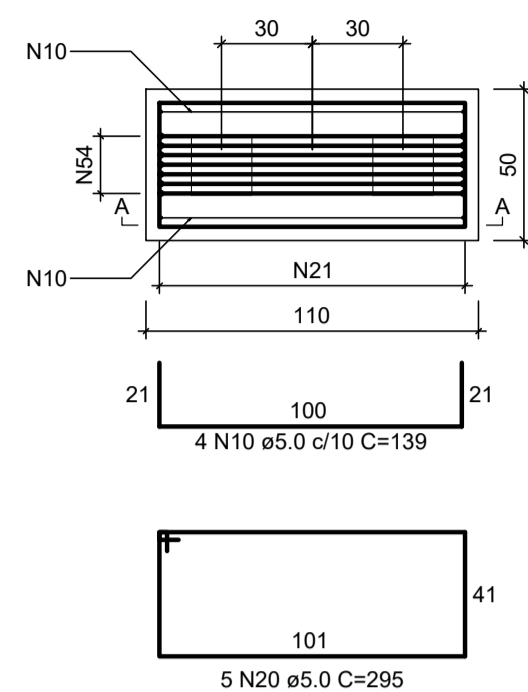
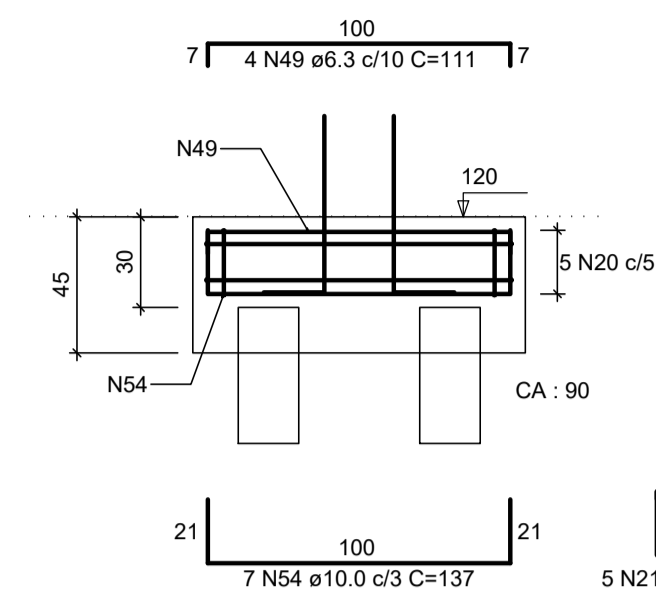


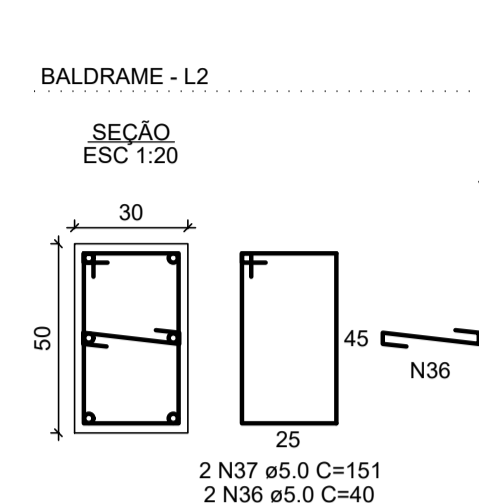
B25=B27=B33=B38=B45=B48
2xR25
PLANTA
ESC 1:25



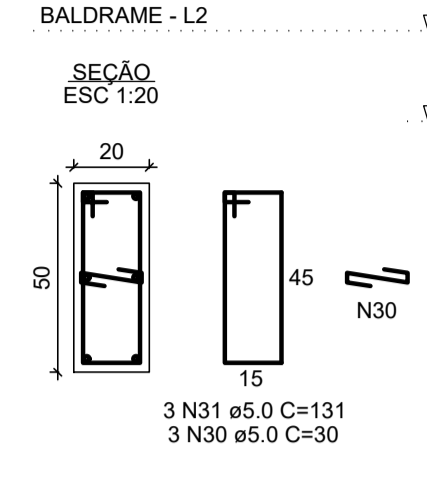
CORTE A-A
ESC 1:25



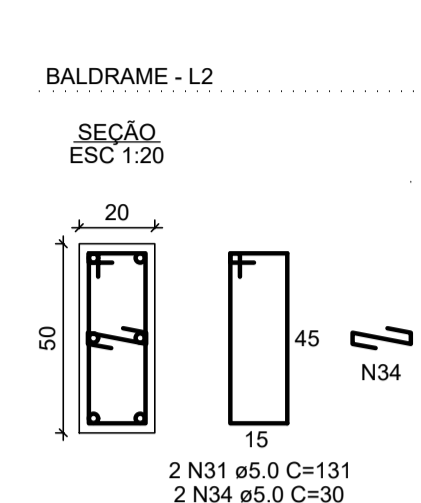
P25



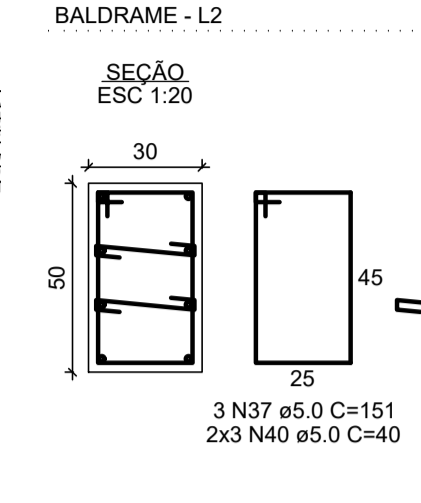
P27



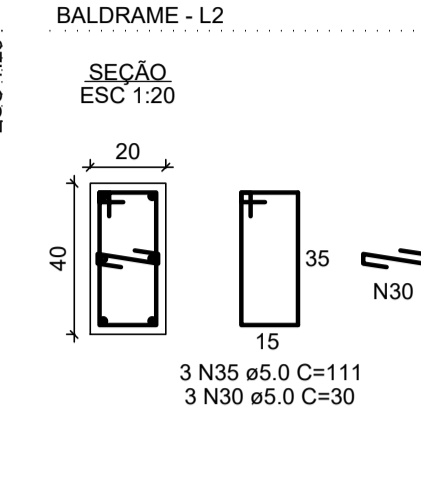
P33



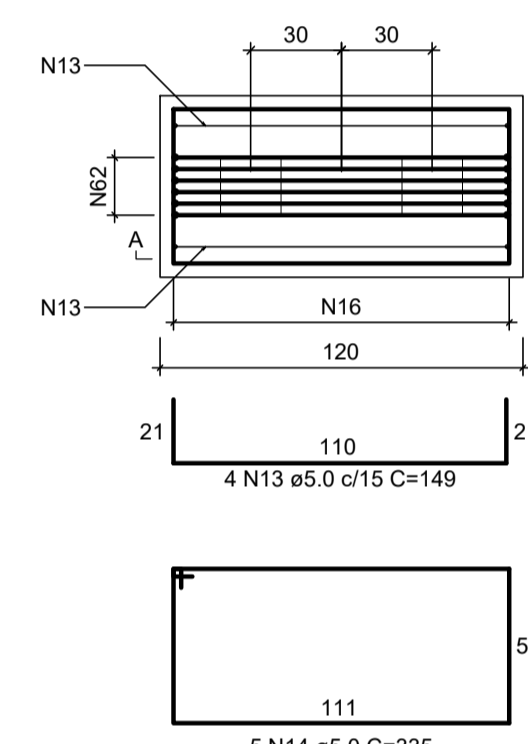
P38



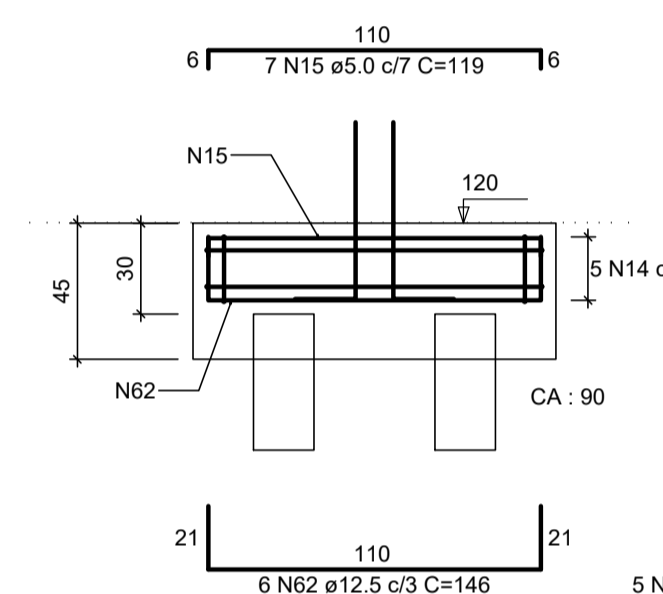
P45



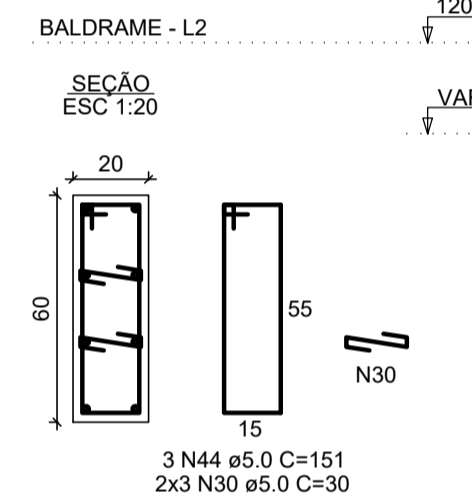
B34
2xR25
PLANTA
ESC 1:25



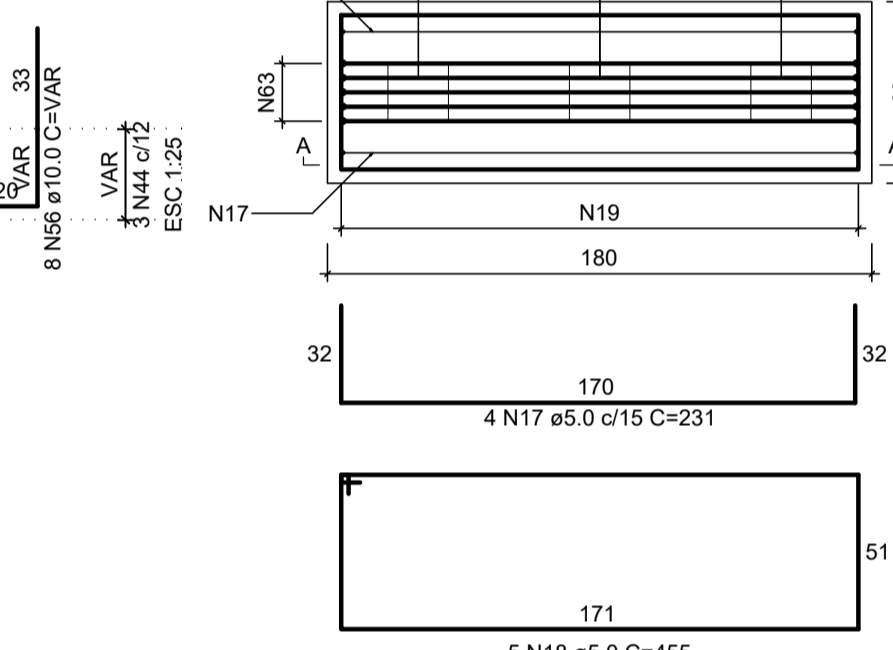
CORTE A-A
ESC 1:25



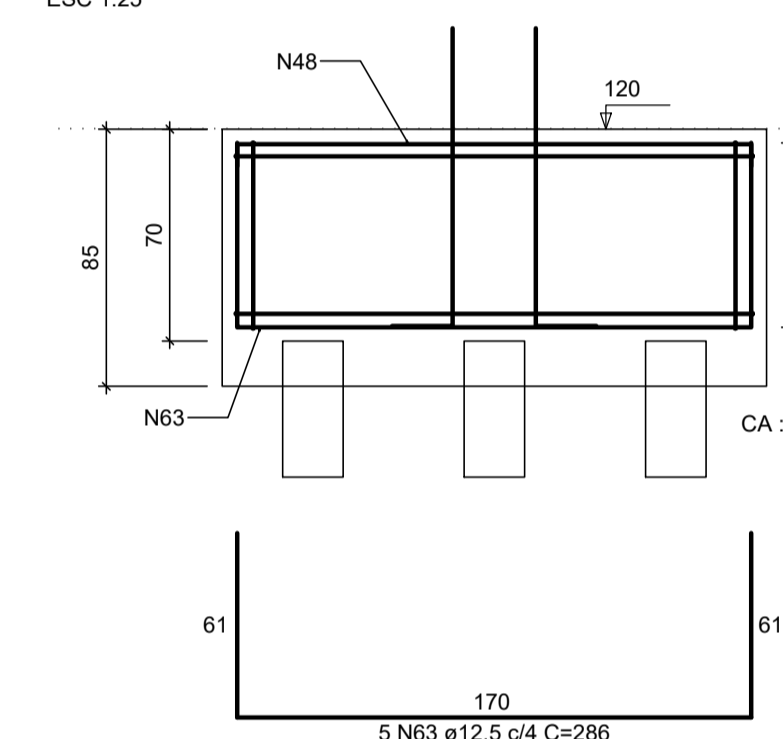
P34



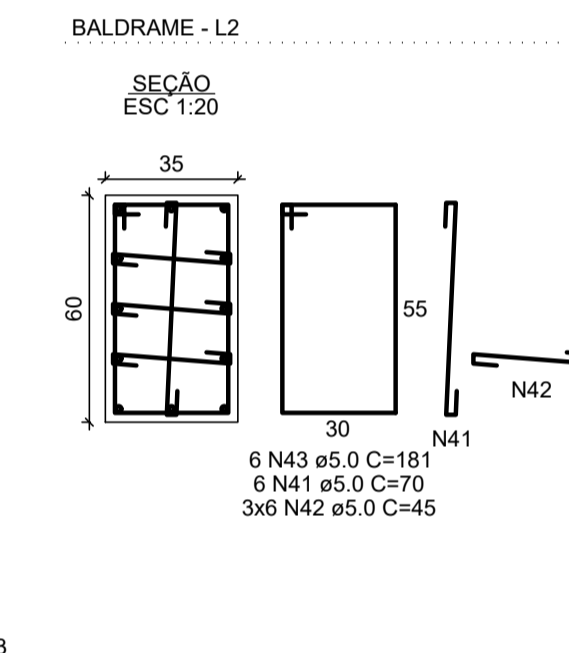
B35=B36
3xR25
PLANTA
ESC 1:25



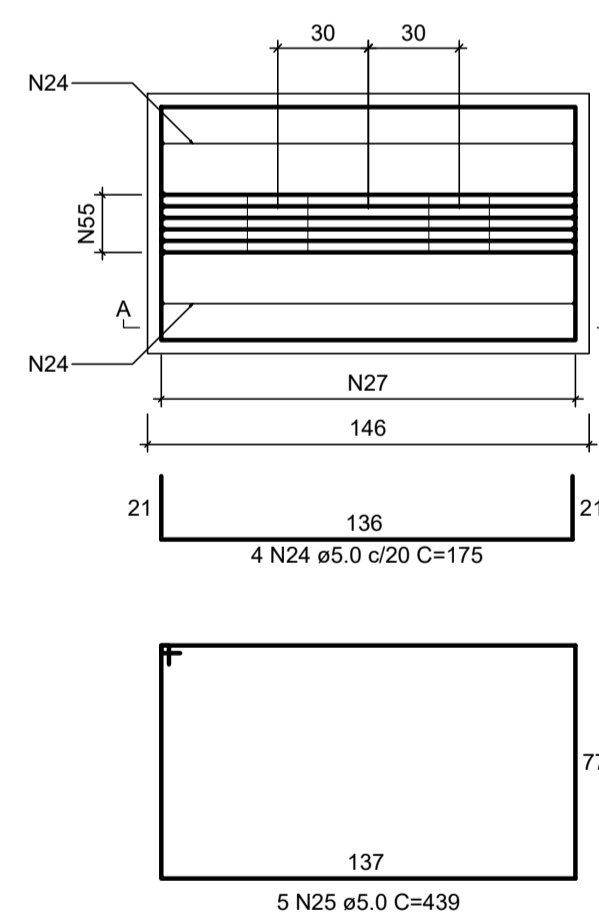
CORTE A-A
ESC 1:25



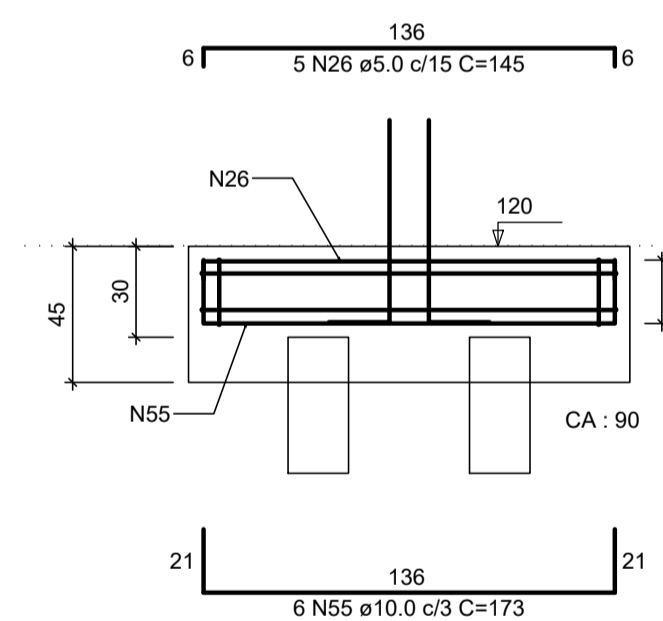
P35=P36



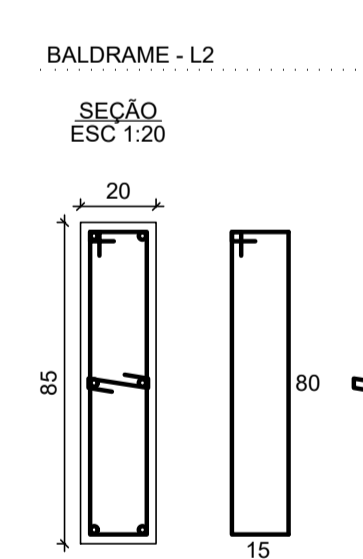
B50
2xR25
PLANTA
ESC 1:25



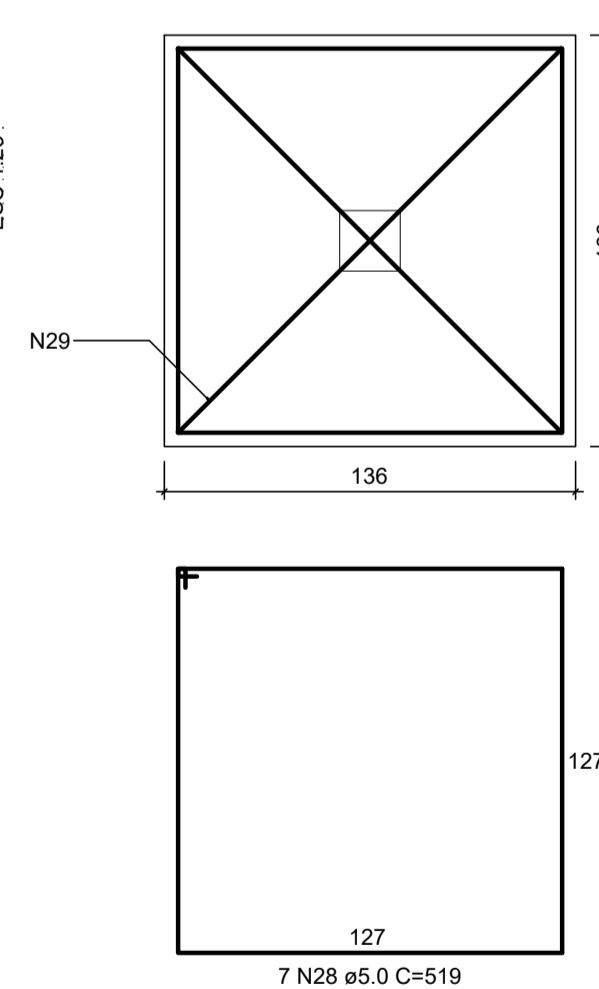
CORTE A-A
ESC 1:25



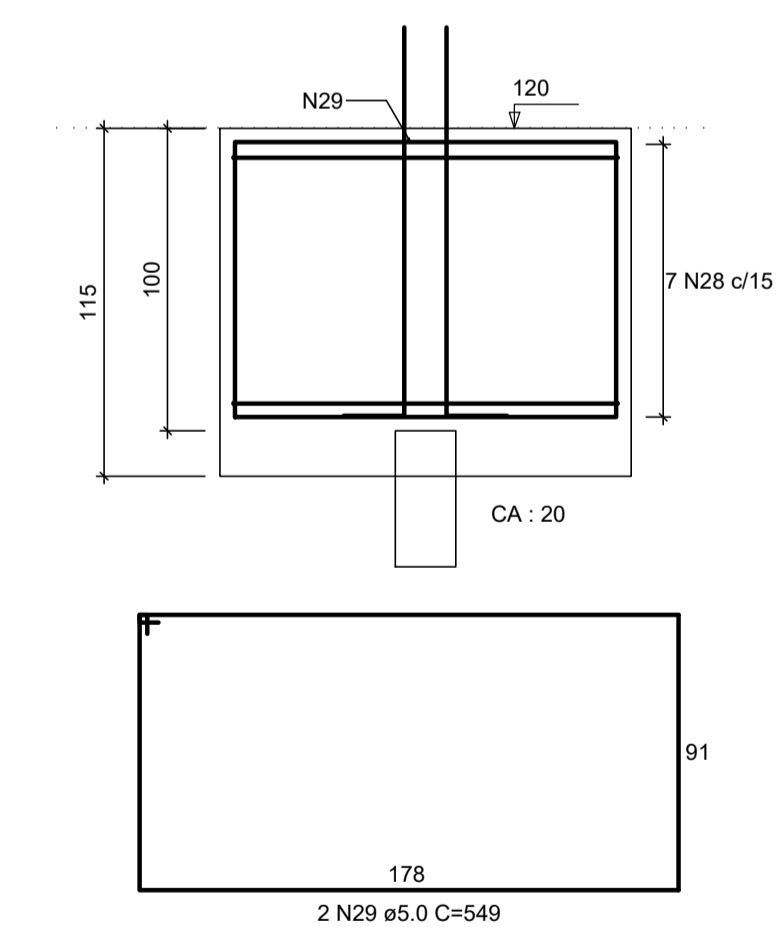
P50



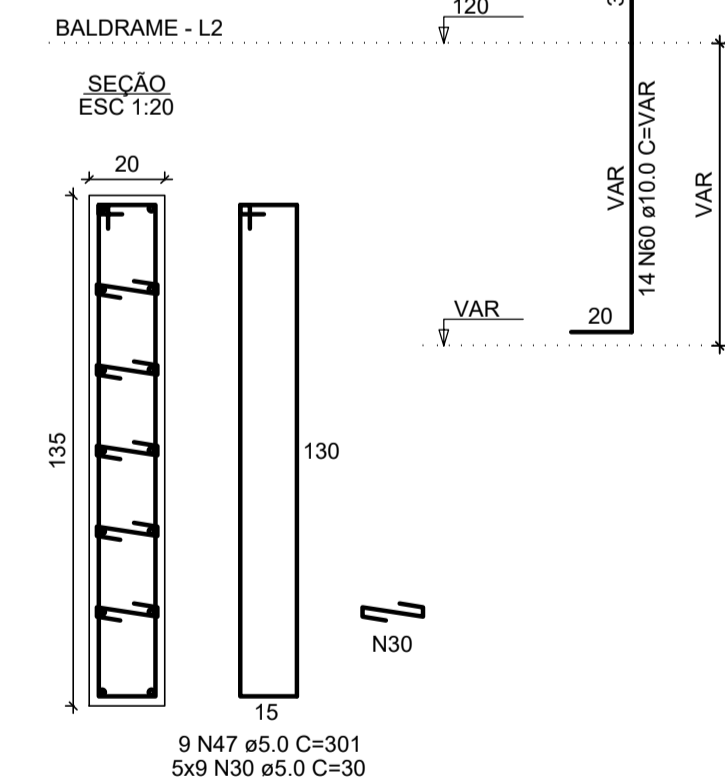
B51
1xR25
PLANTA
ESC 1:25



CORTE
ESC 1:25



P51



RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	50	VAR	VAR
	2	5.0	46	435	20010
	3	5.0	55	VAR	VAR
	4	5.0	75	VAR	VAR
	5	5.0	80	VAR	VAR
	6	5.0	50	VAR	VAR
	7	5.0	55	VAR	VAR
	8	5.0	22	163	3586
	9	5.0	22	127	2794
	10	5.0	64	139	8896
	11	5.0	10	415	4150
	12	5.0	28	109	3052
	13	5.0	4	149	596
	14	5.0	5	335	1675
	15	5.0	7	119	833
	16	5.0	5	153	765
	17	5.0	8	231	1848
	18	5.0	10	455	4550
	19	5.0	16	233	3728
	20	5.0	30	295	8850
	21	5.0	133	3890	38900
	22	5.0	10	175	1750
	23	5.0	4	177	708
	24	5.0	4	175	700
	25	5.0	5	439	2195
	26	5.0	5	145	725
	27	5.0	6	205	1230
	28	5.0	7	519	3633
	29	5.0	2	549	1098
	30	5.0	89	30	2670
	31	5.0	27	131	3537
	32	5.0	16	45	720
	33	5.0	16	161	2576
	34	5.0	30	120	3600
	35	5.0	15	111	1665
	36	5.0	11	40	440
	37	5.0	24	151	3624
	38	5.0	6	25	150
	39	5.0	6	101	606
	40	5.0	26	40	1040
	41	5.0	18	70	1260
	42	5.0	54	45	2430
	43	5.0	18	181	3258
	44	5.0	3	151	453
	45	5.0	2	30	60
	46	5.0	2	201	402
	47	5.0	9	301	2709
	48	6.3	6	181	1086
	49	6.3	24	111	2664
	50	8.0	55	176	9680
	51	8.0	150	190	28500
	52	10.0	24	209	5016
	53	10.0	135	179	24165
	54	10.0	42	137	5754
	55	10.0	6	173	1038
	56	10.0	116	VAR	VAR
	57	10.0	12	VAR	VAR
	58	10.0	20	VAR	VAR
	59	10.0	24	VAR	VAR
	60	10.0	14	VAR	VAR
	61	12.5	24	VAR	VAR
	62	12.5	6	146	876
	63	12.5	10	286	2860
	64	12.5	6	VAR	VAR
	65	12.5	6	VAR	VAR
	66	12.5	18	VAR	VAR
	67	12.5	6	VAR	VAR
	68	16.0	24	VAR	VAR
	69	16.0	12	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	41.1	11.1
	8.0	333.2	170.7
	10.0	521.6	353.8
	12.5	104.8	111.1
	16.0	35.4	61.5
	5.0	1711.1	290.1
CA60			
PESO TOTAL (kg)			
CA50		708	
CA60		290.1	

Volume de concreto (C-30) = 18.40 m³
Área de forma = 92.27 m²

ESPECIFICAÇÕES

Carga	Concreto	Aços	Execução
sobre carga útil	400kg/m2	fck=30mpa CA 50A fyk 5000kg/cm2	de acordo com as normas estruturais brasileiras
alvenaria	1200kg/m2		verificar cotas na obra
revestimentos	50kg/m2		
enchimentos	-----	CA 60 fyk 6000kg/cm2	em caso de dúvida consulte o resp. técnico
coberturas	50kg/m2		

PROJETO ESTRUTURAL 05/30

Obra: Câmara Municipal de Fazenda Rio Grande
Local: Rua Farid Stephens, 173 - Bairro Pioneiros - Fazenda Rio Grande - Pr

PROPRIETÁRIO: Câmara Municipal de Fazenda Rio Grande

Referência: BLOCO: Armação (Baldrame) 02/02

Data: 07/02/2019 Projeto

Escala: Indicada Eng. Civil - Adelson Luiz Klem
CREA - MS 1.064 / D. Visto 64069 - Pr

Notas

- Executar passagens para tubulação de água, esgoto e eletricidade.
- Molhar bem as formas antes da concretagem.
- Conservar úmidas as peças concretadas durante a cura.
- Verificar a limpeza das formas e da estrutura em contato com o concreto.
- Usar apoios para manter a armadura negativa na posição durante a concretagem.
- Dobrar as barras conforme a NBR 6118.

Tempo de desforma

Peça estrutural	Tempo
- Escada.	07 dias
- Forma lateral de viga.	01 dia
- Fundo de viga com menos de 3m de vão.	07 dias
- Fundo de viga entre 3m e 6m de vão.	14 dias
- Fundo de viga com mais de 6m de vão.	21 dias
- Laje com vão menor de 3m.	07 dias
- Laje com vão entre de 3m e 6m.	14 dias
- Laje com vão maior de 6m.	21 dias
- Marquise e Sacada.	21 dias
- Parede.	01 dia
- Pilar.	03 dias