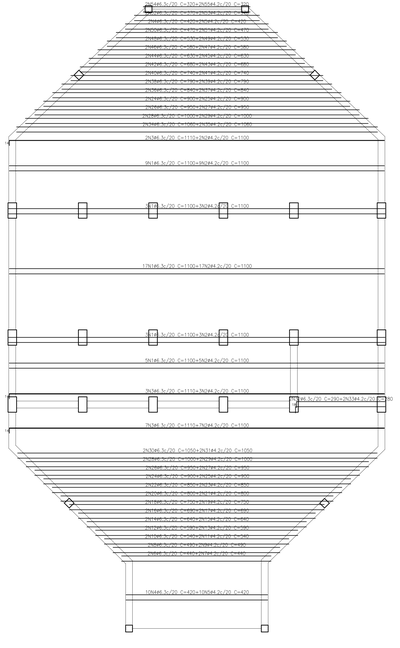
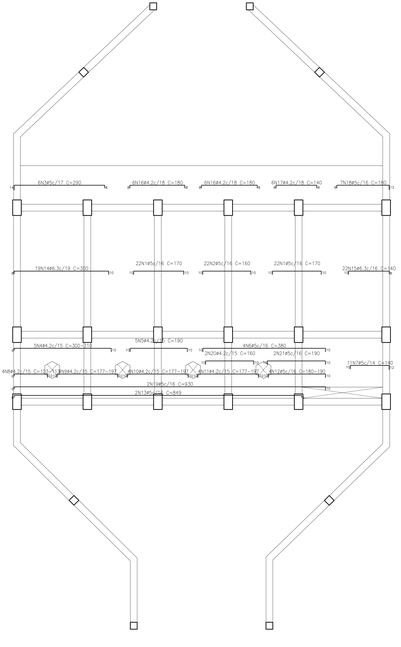
Térreo
Armadura longitudinal superior
Concreto: C25, usinado
CA-50-A e CA-60-B
Escala: 1:50



Elemento	Pos.	Diam.	Q	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
Armadura longitudinal superior	1	ø6.3	37				1100	40700	100.6	58.8
	2	ø4.2	48				1100	53900		
	3	ø6.3	12	14			1096	13320	32.9	5.5
	4	ø6.3	12				420	5040	12.5	
	5	ø4.2	12				420	5040		
	6	ø6.3	2				440	880	2.2	1.0
	7	ø4.2	2				440	880		
	8	ø6.3	2				480	960	2.4	1.1
	9	ø4.2	2				480	960		
	10	ø6.3	2				540	1080	2.7	1.2
	11	ø4.2	2				540	1080		
	12	ø6.3	2				590	1180	2.9	1.3
	13	ø4.2	2				590	1180		
	14	ø6.3	2				640	1280	3.2	1.4
	15	ø4.2	2				640	1280		
	16	ø6.3	2				690	1380	3.4	1.5
	17	ø4.2	2				690	1380		
	18	ø6.3	2				750	1500	3.7	1.6
	19	ø4.2	2				750	1500		
	20	ø6.3	2				800	1600	4.0	1.7
	21	ø4.2	2				800	1600		
	22	ø6.3	2				850	1700	4.2	1.9
	23	ø4.2	2				850	1700		
	24	ø6.3	4				900	3600	8.9	3.9
	25	ø4.2	4				900	3600		
	26	ø6.3	4				950	3800	9.4	4.1
	27	ø4.2	4				950	3800		
	28	ø6.3	4				1000	4000	9.9	4.4
	29	ø4.2	4				1000	4000		
	30	ø6.3	2				1050	2100	5.2	2.3
	31	ø4.2	2				1050	2100		
	32	ø6.3	2	18	272		290	580	1.4	0.6
	33	ø4.2	2	18	272		290	580		
	34	ø6.3	2				1060	2120	5.2	2.3
	35	ø4.2	2				1060	2120		
	36	ø6.3	2				840	1680	4.2	1.8
	37	ø4.2	2				840	1680		
	38	ø6.3	2				790	1580	3.9	1.7
	39	ø4.2	2				790	1580		
	40	ø6.3	2				740	1480	3.7	1.6
	41	ø4.2	2				740	1480		
	42	ø6.3	2				680	1360	3.4	1.5
	43	ø4.2	2				680	1360		
	44	ø6.3	2				630	1260	3.1	1.4
	45	ø4.2	2				630	1260		
	46	ø6.3	2				580	1160	2.9	1.3
	47	ø4.2	2				580	1160		
	48	ø6.3	2				530	1060	2.6	1.2
	49	ø4.2	2				530	1060		
	50	ø6.3	2				470	940	2.3	1.0
	51	ø4.2	2				470	940		
	52	ø6.3	2				370	740	1.8	0.8
	53	ø4.2	2				370	740		
	54	ø6.3	2				320	640	1.6	0.7
	55	ø4.2	2				320	640		
								Total+10%	268.6	118.4
								ø4.2:	0.0	118.4
								ø6.3:	268.6	0.0
								Total:	268.6	118.4

Resumo Aço Térreo Armadura longitudinal superior		Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	ø6.3	987.4	269	269
CA-60-B	ø4.2	986.0	118	118
Total				387

Piso 1
Armadura longitudinal superior
Concreto: C25, usinado
CA-50-A e CA-60-B
Escala: 1:50

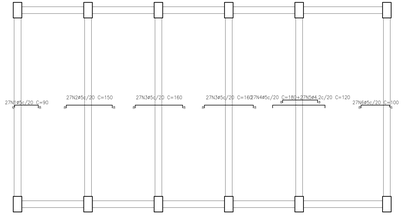


Elemento	Pos.	Diam.	Q	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
Armadura longitudinal superior	1	ø5	44	10	130	10	170	7480		11.7
	2	ø5	22	10	140	10	160	3520		5.5
	3	ø5	6	14	268	8	290	1740		2.7
	4	ø4.2	5	6	VAR.	10	VAR.	1515		1.7
	5	ø4.2	5	10	170	10	190	950		1.0
	6	ø5	4	10	360	10	380	1520		2.4
	7	ø5	11	10	118	12	140	1540		2.4
	8	ø5	11	10	118	12	140	1540		2.4
	9	ø4.2	4	10	VAR.	10	VAR.	748		0.8
	10	ø4.2	4	10	VAR.	10	VAR.	748		0.8
	11	ø4.2	4	10	VAR.	10	VAR.	748		0.8
	12	ø5	4	10	VAR.	10	VAR.	740		1.2
	13	ø5	2	6	837	6	849	1698		2.7
	14	ø6.3	19	8	282	10	300	5700	14.1	
	15	ø6.3	22	10	122	8	140	3080	7.6	
	16	ø4.2	12	8	164	8	180	2160		2.4
	17	ø5	7	8	154	13	180	1260		0.9
	18	ø5	7	8	158	13	180	1260		2.0
	19	ø5	2	6	914	10	930	1860		2.9
	20	ø4.2	2	10	140	10	160	320		0.3
	21	ø5	2	10	170	10	190	380		0.6
								Total+10%	23.9	47.6
								ø4.2:	0.0	10.1
								ø5:	0.0	37.5
								ø6.3:	23.9	0.0
								Total:	23.9	47.6

Resumo Aço Piso 1 Armadura longitudinal superior		Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	ø6.3	87.8	24	24
CA-60-B	ø4.2	84.6	10	
	ø5	217.4	38	48
Total				72

Resumo Aço Piso 2 Armadura longitudinal superior		Comp. total (m)	Peso+10% (kg)	Total
CA-60-B	ø4.2	32.4	4	
	ø5	226.8	39	43

Piso 2
Armadura longitudinal superior
Concreto: C25, usinado
CA-50-A e CA-60-B
Escala: 1:50



Elemento	Pos.	Diam.	Q	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
Armadura longitudinal superior	1	ø5	27	6	76	8	90	2430		3.8
	2	ø5	27	8	134	8	150	4050		6.4
	3	ø5	54	8	144	8	160	8640		13.6
	4	ø5	27	8	164	8	180	4860		7.6
	5	ø4.2	27	8	104	8	120	3240		3.5
	6	ø5	27	8	86	6	100	2700		4.2
								Total+10%		43.0
								ø4.2:	0.0	3.8
								ø5:	0.0	39.2
								Total:	0.0	43.0

PREFEITURA MUNICIPAL DO RIO GRANDE
UNIDADE GESTORA DE PROJETOS - UGP
RIO GRANDE 2010 UMA VISÃO DE FUTURO

OBRA/LOCAL:
PROJETO DE ESTRUTURAL DA CASA DE BOMBAS PADRÃO

CASA DE BOMBAS

RESP. PROJETO: Engº Mauro Lippert - CREA 37973
Engº Gilberto Arabodan Junior - CREA/RS 159864
Engº Ataualpa da Silva Agostinho - CREA/RS 060757

DESENHO: GILBERTO A. JR. | ESCALA: 1/50 | DATA: AGOSTO/2010 | PRANCHA: 04/10

ESPECIFICAÇÃO: ARMAÇÃO DAS LAJES - LONGITUDINAL SUPERIOR