Resumo Aço Piso 2 Vigas	Comp. total (m)	Peso+10% (kg)
CA-50-A	1.182,6	516
CA-60-B	1.411,80	244
Total	2.594,4	760

V 1	1	ø8	2	10	997	10	1017	2034	8.0	
	2	ø8	2	10	997	10	1017	2034	8.0	
	3	ø5	53				100	5300		8.3
								Total+10%:	17.6	9.1
V 7	4	ø8	2	10	1045	10	1065	2130	8.4	
	5	ø6.3	1		155		155	155	0.4	
	6	ø8	2	10	1045	10	1065	2130	8.4	
	7	ø5	56				100	5600		8.8
								Total+10%:	18.9	9.7
V 6	8	ø8	2	10	787	10	807	1614	6.3	
	9	ø6.3	1		260		260	260	0.6	
	10	ø8	2	10	787	10	807	1614	6.3	
	11	ø6.3	1		100		100	100	0.2	
	12	ø5	44				100	4400		6.9
								Total+10%:	14.7	7.6
V 9	13	ø8	2	10	913	10	933	1866	7.3	
	14	ø8	2	10	913	10	933	1866	7.3	
	15	ø5	48				100	4800		7.5
								Total+10%:	16.1	8.3
V 8	16	ø12.5	2	15	480	15	510	1020	10.0	
	17	ø8	2	10	480	10	500	1000	3.9	
	18	ø5	26				100	2600		4.1
								Total+10%:	15.3	4.5
V 14	19	ø8	2	10	960	10	980	1960	7.7	
	20	ø8	1		240		240	240	0.9	
	21	ø8	2	10	960	10	980	1960	7.7	
	22	ø8	1		90		90	90	0.4	
	23	ø5	51				100	5100		8.0
								Total+10%:	18.4	8.8
V 16	24	ø8	2	10	277	10	297	594	2.3	
	25	ø8	2	10	277	10	297	594	2.3	
	26	ø5	14				100	1400		2.2
								Total+10%:	5.1	2.4
V 18	27	ø8	2	10	795	10	815	1630	6.4	
	28	ø8	2	10	795	10	815	1630	6.4	
	29	ø5	42				100	4200		6.6
								Total+10%:	14.1	7.3
V 17	30	ø8	2	10	442	10	462	924	3.6	
	31	ø8	2	10	442	10	462	924	3.6	
	32	ø5	24				100	2400		3.8
								Total+10%:	7.9	4.2
V 2	33	ø8	2	10	997	10	1017	2034	8.0	
	34	ø8	1		580		580	580	2.3	
	35	ø8	2	10	995	10	1015	2030	8.0	
	36	ø10	1		135		135	135	0.8	
	37	ø5	53				100	5300		8.3
								Total+10%:	21.0	9.1
V 5	38	ø10	3	35	90	35	160	480	3.0	
	39	ø5	2	10	90	10	110	220		0.3
								Total+10%:	3.3	0.3
V 3	40	ø8	2	10	265	10	285	570	2.2	
	41	ø8	2	10	265	10	285	570	2.2	
	42	ø5	14				100	1400		2.2
								Total+10%:	4.8	2.4
V 4	43	ø10	3	35	90	35	160	480	3.0	
	44	ø6.3	2		88	12	100	200	0.5	
								Total+10%:	3.9	
V 15	45	ø8	2	10	645	10	665	1330	5.2	
	46	ø8	2	10	645	10	665	1330	5.2	
	47	ø5	35				100	3500		5.5
								Total+10%:	11.4	6.1
V 10	48	ø8	2	10	358	10	378	756	3.0	
	49	ø8	2	10	358	10	378	756	3.0	
	50	ø10	1	12	173		185	185	1.2	
	51	ø5	20				100	2000		3.1
								Total+10%:	7.9	3.4
V 11	52	ø8	2	10	277	10	297	594	2.3	
	53	ø8	2	10	277	10	297	594	2.3	
	54	ø5	14				100	1400		2.2
								Total+10%:	5.1	2.4
V 13	55	ø10	3	35	100	35	170	510	3.2	
	56	ø5	3	10	100	10	120	360		0.6
								Total+10%:	3.5	0.7
V 12	57	ø10	3	35	100	35	170	510	3.2	
	58	ø6.3	2	12	98		110	220	0.5	
								Total+10%:	4.1	
V 20	1	ø8	2	10	920		930	1860	7.3	
	2	ø8	2		405	10	415	830	3.3	
	3	ø8	1		320		320	320	1.3	
	4	ø8	1		300		300	300	1.2	
	5	ø8	2	10	1020		1030	2060	8.1	
	6	ø8	1		155		155	155	0.6	
	7	ø6.3	1		155		155	155	0.4	
	8	ø8	2		295	10	305	610	2.4	
	9	ø5	70				100	7000		11.0
								Total+10%:	27.1	12.1
V 21	10	ø8	2	10	1190		1200	2400	9.4	
	11	ø8	2		185	10	195	390	1.5	
	12	ø8	2	10	1190		1200	2400	9.4	
	13	ø8	2		185	10	195	390	1.5	
	14	ø5	73				100	7300		11.5
								Total+10%:	24.0	12.7
V 24	15	ø8	2	10	1020		1030	2060	8.1	
	16	ø8	2		360	10	370	740	2.9	
	17	ø8	2	10	1020		1030	2060	8.1	
	18	ø8	2		360	10	370	740	2.9	
	19	ø5	74				100	7400		11.6
								Total+10%:	24.2	12.8
V 27	20	ø8	2	10	348	10	368	736	2.9	
	21	ø8	1		270		270	270	1.1	
	22	ø8	2	10	348	10	368	736	2.9	
	23	ø5	18				100	1800		2.8
								Total+10%:	7.6	3.1
V 28=V 32	24	ø8	2	10	280	10	300	600	2.4	
	25	ø6.3	1		165		165	165	0.4	
	26	ø8	2	10	280	10	300	600	2.4	
	27	ø5	14				100	1400		2.2
								Total+10%:	5.7	2.4
								(x2):	11.4	4.8
V 22	28	ø8	2	10	461	10	481	962	3.8	
	29	ø8	2	10	461	10	481	962	3.8	
	30	ø5	25				100	2500		3.9
								Total+10%:	8.4	4.3
V 29	31	ø8	2	10	480	10	500	1000	3.9	
	32	ø6.3	1		350		350	350	0.9	
	33	ø8	2	10	480	10	500	1000	3.9	
	34	ø6.3	1		145		145	145	0.4	
	35	ø5	25				100	2500		3.9
								Total+10%:	10.0	4.3
V 33	36	ø8	2	10	480	10	500	1000	3.9	
	37	ø6.3	1		170		170	170	0.4	
	38	ø8	2	10	480	10	500	1000	3.9	
	39	ø5	25				100	2500		3.9
								Total+10%:	9.0	4.3
V 34	40	ø8	2	10	445	10	465	930	3.7	
	41	ø8	2	10	445	10	465	930	3.7	
	42	ø5	24				100	2400		3.8
								Total+10%:	8.1	4.2
V 35	43	ø8	2	10	480	10	500	1000	3.9	
	44	ø8	2	10	480	10	500	1000	3.9	
	45	ø5	25				100	2500		3.9
								Total+10%:	8.6	4.3
V 31	46	ø8	2	10	480	10	500	1000	3.9	
	47	ø8	2	10	480	10	500	1000	3.9	
	48	ø5	25				100	2500		3.9
								Total+10%:	8.6	4.3
V 19	49	ø8	2	10	910		920	1840	7.2	
	50	ø8	2		395	10	405	810	3.2	
	51	ø6.3	2		260		260	520	1.3	
	52	ø8	2	10	910		920	1840	7.2	
	53	ø8	2		400	10	410	820	3.2	
	54	ø5	70				100	7000		11.0
								Total+10%:	24.3	12.1
V 25=V 30	58	ø8	2	10	280	10	300	600	2.4	
	59	ø6.3	2	8	280	8	296	592	1.5	
	60	ø5	14				100	1400		2.2
								Total+10%:	4.3	2.4
								(x2):	8.6	4.8
V 23	61	ø8	2	10	310	10	330	660	2.6	
	62	ø8	2	10	310	10	330	660	2.6	
	63	ø5	16				100	1600		2.5
								Total+10%:	5.7	2.8
V 43	7	ø8	2	10	525	10	545	1090	4.3	
	8	ø8	1		305		305	305	1.2	
	9	ø8	2	10	525	10	545	1090	4.3	
	10	ø8	1		100		100	100	0.4	
	11	ø5	27				100	2700		4.2
								Total+10%:	11.2	4.6
V 44	12	ø8	2	10	280	10	300	600	2.4	
	13	ø6.3	1		175		175	175	0.4	
	14	ø8	2	10	280	10	300	600	2.4	
	15	ø5	14				100	1400		2.2
								Total+10%:	5.7	2.4
V 46	16	ø8	2	10	960	10	980	1960	7.7	
	17	ø8	2	10	959	10	979	1958	7.7	
	18	ø5	51				100	5100		8.0
								Total+10%:	16.9	8.8
V 45	19	ø8	2	10	222	10	242	484	1.9	
	20	ø8	2	10	222	10	242	484	1.9	
	21	ø5	11				100	1100		1.7
								Total+10%:	4.2	1.9
V 36	22	ø8	2	10	958	10	978	1956	7.7	
	23	ø6.3	1		260		260	260	0.6	
	24	ø8	2	10	956	10	976	1952	7.7	
	25	ø6.3	1		145		145	145	0.4	
	26	ø5	52				100	5200		8.2
								Total+10%:	18.0	9.0
V 40	27	ø8	2	11	445	10	466	932	3.7	
	28	ø6.3	2	8	445	8	461	922	2.3	
	29	ø8	1		190		190	190	0.7	
	30	ø5	23				100	2300		3.6
								Total+10%:	7.4	4.0
V 38	31	ø8	2	10	445	10	465	930	3.7	
	32	ø8	2	10	445	10	465	930	3.7	
	33	ø5	23				100	2300		3.6
								Total+10%:	8.1	4.0
V 42	34	ø8	2	10	580	10	600	1200	4.7	
	35	ø8	2		580	10	590	1180	4.6	
	36	ø5	30				100	3000		4.7
								Total+10%:	10.2	5.2
V 37	37	ø8	2	10	523	10	543	1086	4.3	
	38	ø8	1		310		310	310	1.2	
	39	ø8	2	10	523	10	543	1086	4.3	
	40	ø8	1		110		110	110	0.4	
	41	ø5	28				100	2800		4.4
								Total+10%:	11.2	4.8
V 39	42	ø8	2	10	575	10	595	1190	4.7	
	43	ø8	2	10	575	10	595	1190	4.7	
	44	ø5	30				100	3000		4.7
								Total+10%:	10.3	5.2
V 41	45	ø8	2	10	269	10	289	578	2.3	
	46	ø8	2	10	269	10	289	578	2.3	
	47	ø5	14				100	1400		2.2
								Total+10%:	5.1	2.4

C L P ENGENHARIA E PROJETOS LTDA

CNPJ 13.166.504/0001-28
RUA ESPIRITO SANTO, 70 - CHARQUEADAS - RS
ENG.CIVIL JOÃO BATISTA COLPO - CREA 42.629 - RS
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ENGENHARIA E PROJETOS LTDA

UNIDADE BÁSICA DE SAÚDE DA FAMÍLIA

ENDEREÇO: Rua Quintino Bocaiúva nº 375 Vila São Miguel - Rio Grande - RS

PROPRIETÁRIO: PREFEITURA MUNICIPAL DE RIO GRANDE

RESP. TÉCNICOS: ENGº CIVIL JOÃO BATISTA COLPO CREA 42.629

DATA: JUNHO 2012

ESCALA: 1:100

DESENHO: João

PROJETO ESTRUTURAL

VIGAS 1º PAVIMENTO

PRANCHA: 6/8