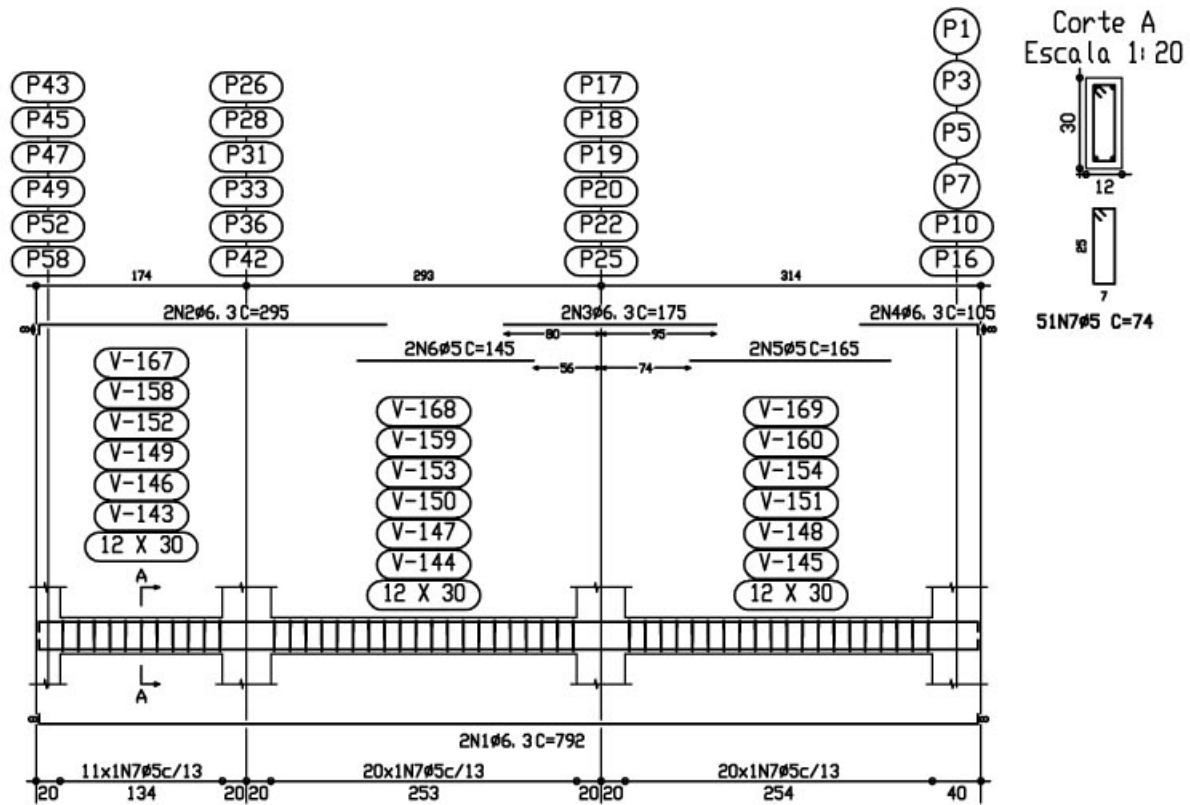
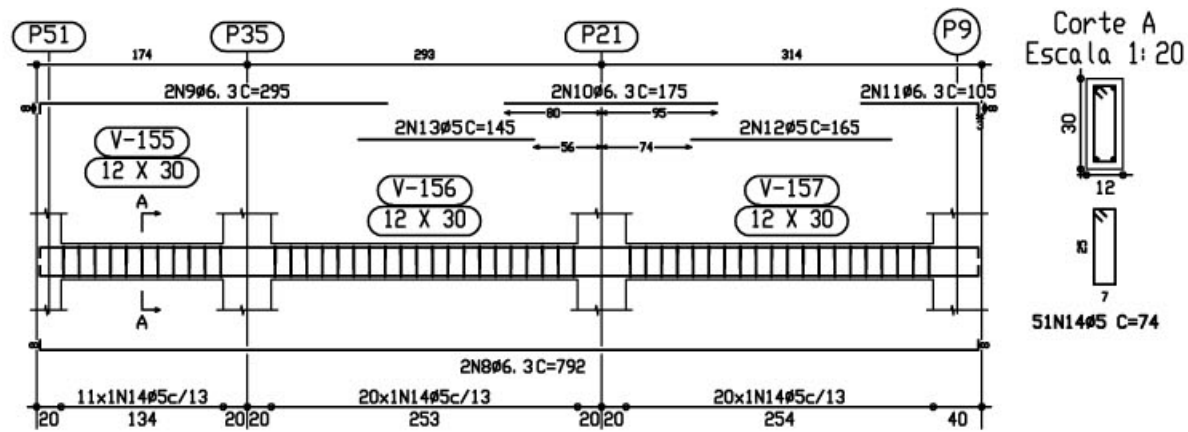


Pórtico 7
Pórtico 8
Pórtico 9
Pórtico 10
Pórtico 12
Pórtico 15
Escala 1:50



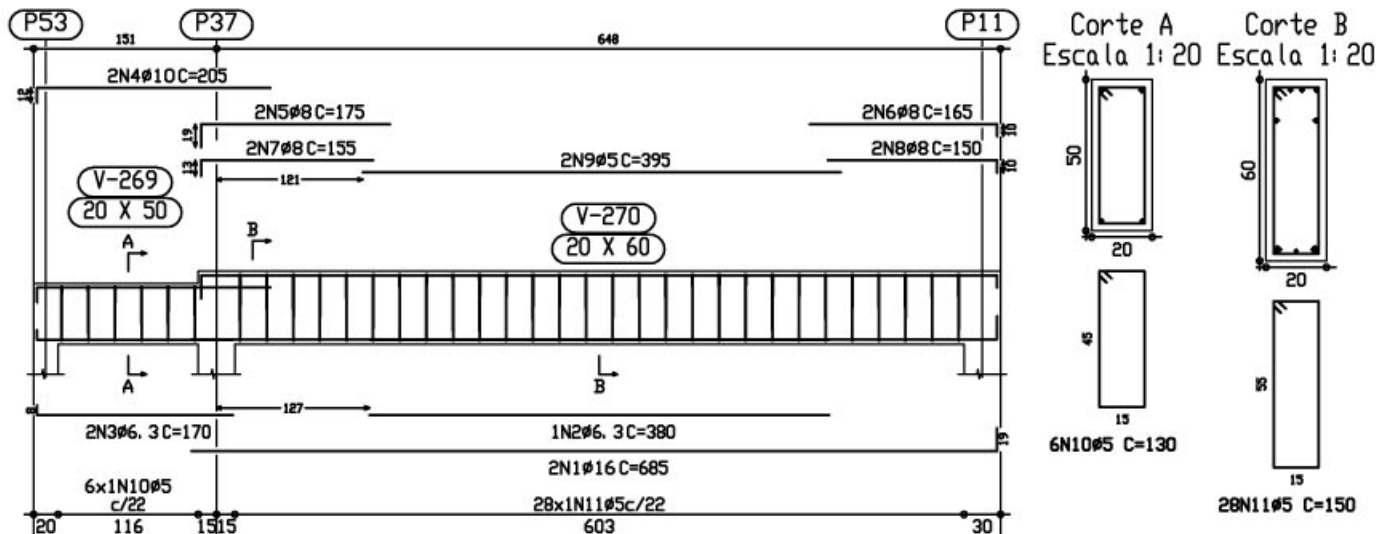
Pórtico 11
Escala 1:50



CINTAS
Desenho de vigas
Betoão C20, em geral
Aço CA-50-A e CA-60-B
Escala pórticos 1:50
Escala seções 1:20

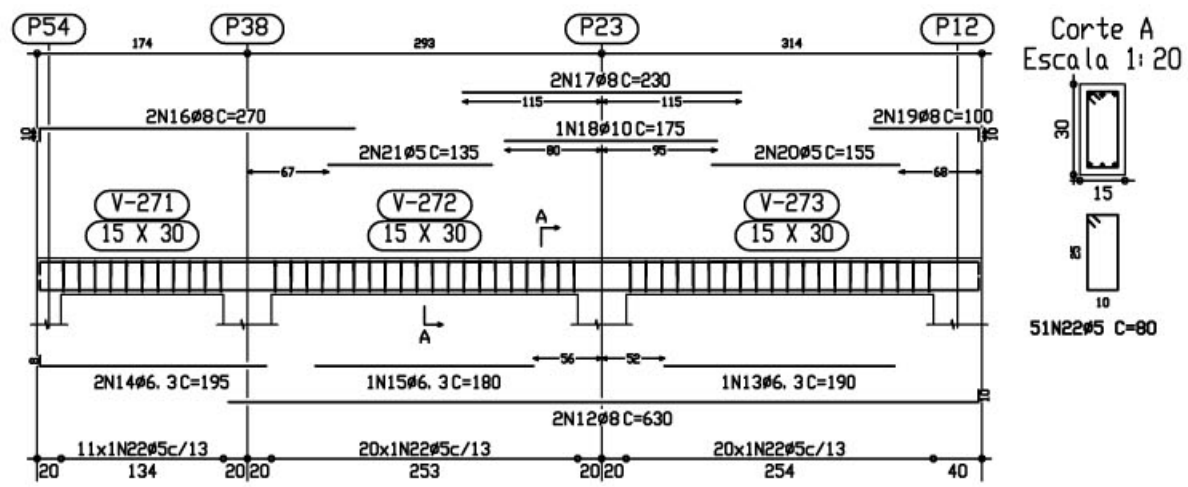
Elemento	Pos.	Diam.	Q.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Total (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 11	1	#6.3	2	8	776	8	792	1568	3.9	
	2	#6.3	2	8	287	8	295	590	1.5	
	3	#6.3	2	8	175	8	175	350	0.9	
	4	#6.3	2	8	97	8	105	210	0.3	
	5	#5	2		165		165	330		0.5
	6	#5	2		145		145	290		0.3
	7	#5	5		74		3774			5.9
Total+102									7.6	7.6
									45.0	45.6
Pórtico 12	8	#6.3	2	8	776	8	792	1568	3.9	
	9	#6.3	2	8	287	8	295	590	1.5	
	10	#6.3	2	8	175	8	175	350	0.9	
	11	#6.3	2	8	97	8	105	210	0.3	
	12	#5	2		165		165	330		0.5
	13	#5	2		145		145	290		0.5
	14	#5	5		74		3774			5.9
Total+102									7.6	7.6
									45.0	45.6
Pórtico 15	15	#6.3	2	8	776	8	792	1568	3.9	
	16	#6.3	2	8	287	8	295	590	1.5	
	17	#6.3	2	8	175	8	175	350	0.9	
	18	#6.3	2	8	97	8	105	210	0.3	
	19	#5	2		165		165	330		0.5
	20	#5	2		145		145	290		0.5
	21	#5	5		74		3774			5.9
Total+102									7.6	7.6
									45.0	45.6

Pórtico 17
Escala 1:50



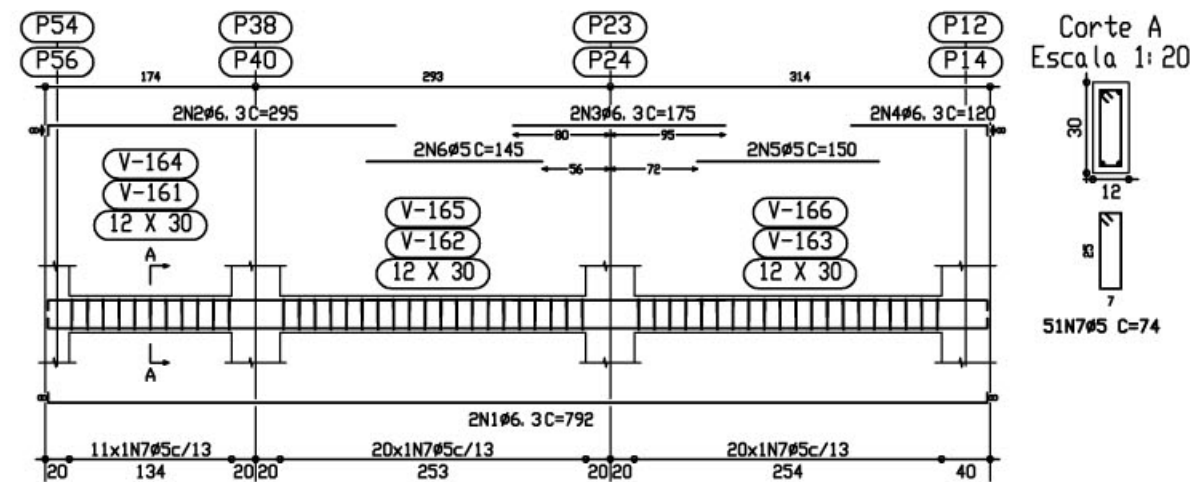
Elemento	Pos.	Diam.	Q.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Total (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 17	1	#16	2	8	666	19	685	1370	21.5	
	2	#6.3	2	8	380	8	380	760	0.9	
	3	#6.3	2	8	162	8	162	324	0.8	
	4	#10	2	12	193	12	193	386	2.6	
	5	#8	2	19	156	19	156	312	1.4	
	6	#8	2	13	142	13	142	284	1.2	
	7	#8	2	10	140	10	140	280	1.2	
	8	#5	2		395		395	790		1.2
	9	#5	2		135		135	270		0.4
	10	#5	2		135		135	270		0.4
	11	#5	28		80		4200			6.4
Total+102									34.0	9.9
Pórtico 18	12	#8	2	19	620	19	639	1260	4.9	
	13	#6.3	2	8	187	8	187	374	0.5	
	14	#6.3	2	8	187	8	187	374	0.5	
	15	#6.3	2	8	187	8	187	374	0.5	
	16	#8	2	10	260	10	260	520	1.0	
	17	#8	2	10	230	10	230	460	0.8	
	18	#10	2	12	175	12	175	350	1.1	
	19	#8	2	9	90	9	90	180	0.8	
	20	#5	2		135		135	270		0.5
	21	#5	2		135		135	270		0.4
	22	#5	5		74		3774			5.9
Total+102									13.9	8.0
									47.9	17.9

Pórtico 18
Escala 1:50



TETO
Desenho de vigas
Betoão C20, em geral
Aço CA-50-A e CA-60-B
Escala pórticos 1:50
Escala seções 1:20

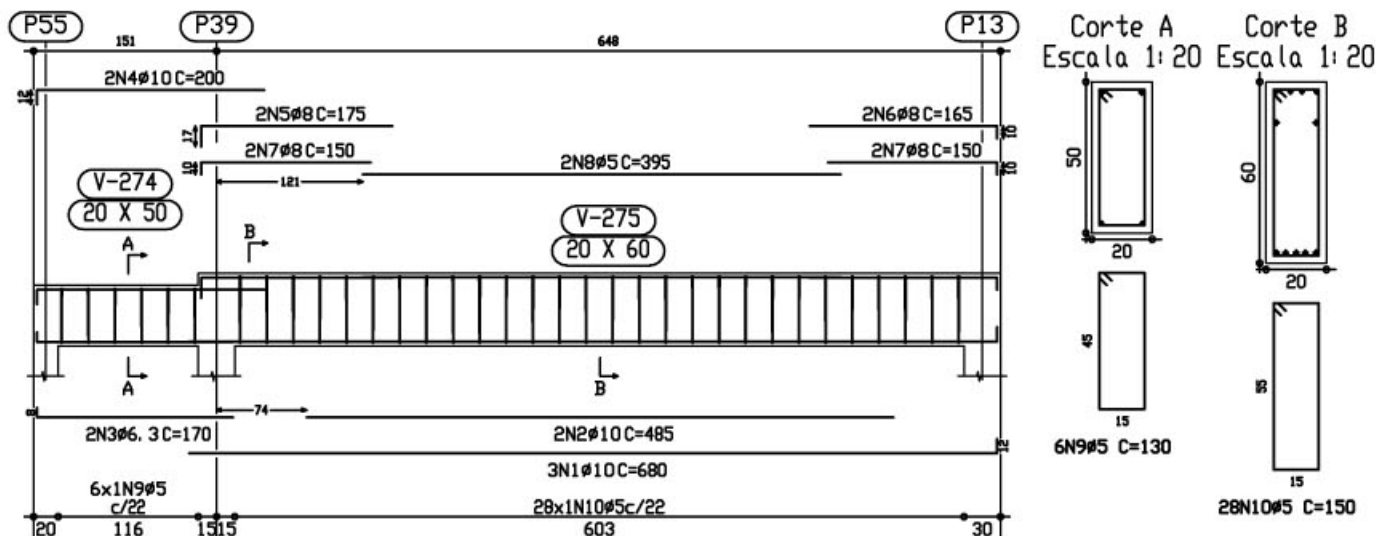
Pórtico 13
Pórtico 14
Escala 1:50



CINTAS
Desenho de vigas
Betoão C20, em geral
Aço CA-50-A e CA-60-B
Escala pórticos 1:50
Escala seções 1:20

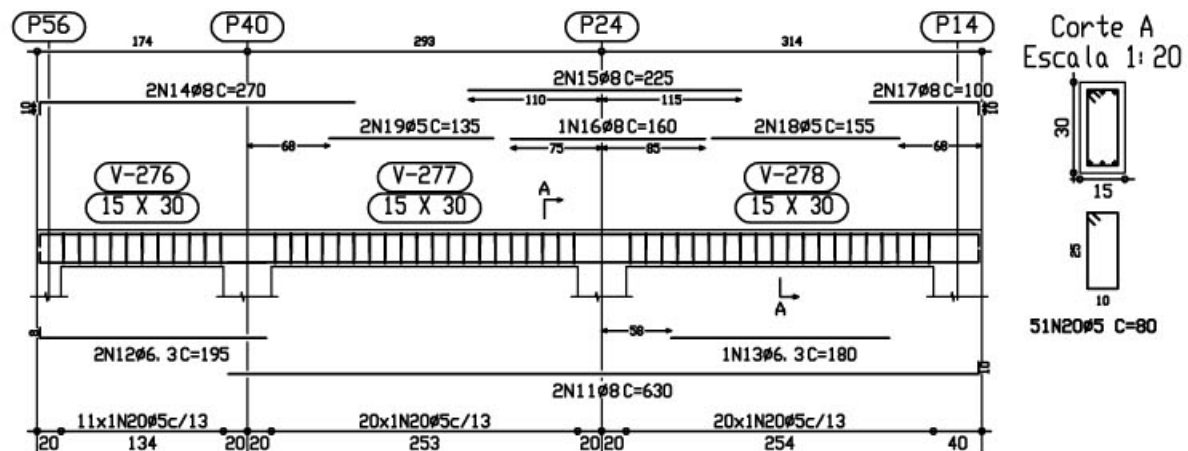
Elemento	Pos.	Diam.	Q.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Total (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 13/Pórtico 14	1	#6.3	2	8	776	8	792	1568	3.9	
	2	#6.3	2	8	287	8	295	590	1.5	
	3	#6.3	2	8	175	8	175	350	0.9	
	4	#6.3	2	8	112	8	120	240	0.6	
	5	#5	2		150		150	300		0.5
	6	#5	2		145		145	290		0.3
	7	#5	5		74		3774			5.9
Total+102									7.6	7.6
									45.0	45.6
Pórtico 15	15	#6.3	2	8	776	8	792	1568	3.9	
	16	#6.3	2	8	287	8	295	590	1.5	
	17	#6.3	2	8	175	8	175	350	0.9	
	18	#6.3	2	8	97	8	105	210	0.3	
	19	#5	2		165		165	330		0.5
	20	#5	2		145		145	290		0.3
	21	#5	5		74		3774			5.9
Total+102									7.6	7.6
									45.0	45.6

Pórtico 19
Escala 1:50



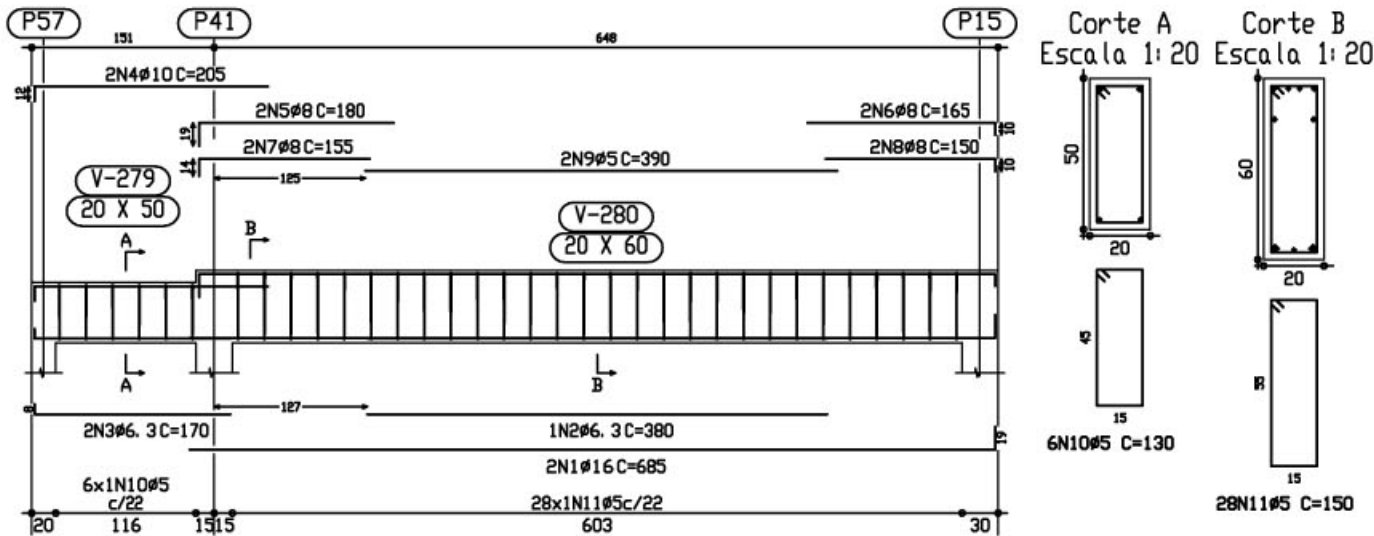
Elemento	Pos.	Diam.	Q.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Total (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 19	1	#10	2	8	668	12	680	1360	12.8	
	2	#10	2	8	485	8	485	970	6.1	
	3	#6.3	2	8	162	8	162	324	0.8	
	4	#10	2	12	188	12	188	376	2.5	
	5	#8	2	17	158	17	158	316	1.4	
	6	#8	2	13	155	13	155	310	1.3	
	7	#8	2	10	140	10	140	280	1.2	
	8	#5	2		395		395	790		1.2
	9	#5	2		130		130	260		0.4
	10	#5	28		80		4200			6.4
Total+102									30.0	9.9
Pórtico 20	11	#8	2	19	620	19	639	1260	4.9	
	12	#6.3	2	8	187	8	187	374	0.5	
	13	#6.3	2	8	187	8	187	374	0.5	
	14	#8	2	10	260	10	260	520	1.0	
	15	#8	2	10	225	10	225	450	0.8	
	16	#8	2	9	90	9	90	180	0.6	
	17	#5	2		135		135	270		0.5
	18	#5	2		135		135	270		0.4
	19	#5	2		135		135	270		0.4
	20	#5	5		74		3774			5.9
Total+102									10.8	8.0
									42.8	17.9

Pórtico 20
Escala 1:50



TETO
Desenho de vigas
Betoão C20, em geral
Aço CA-50-A e CA-60-B
Escala pórticos 1:50
Escala seções 1:20

Pórtico 21
Escala 1:50



Elemento	Pos.	Diam.	Q.	Pat (cm)	Recta (cm)	Pat (cm)	Comp (cm)	Total (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 21	1	#16	2	8	666	19	685	1370	21.5	
	2	#6.3	2	8	380	8	380	760	0.9	
	3	#6.3	2	8	162	8	162	324	0.8	
	4	#10	2	12	193	12	193	386	2.6	
	5	#8	2	19	161	19	161	322	1.4	
	6	#8	2	14	155	14	155	310	1.3	
	7	#8	2	14	141	14	141	282	1.2	
	8	#8	2	10	140	10	140	280	1.2	
	9	#5	2		390		390	780		1.2
	10	#5	2		130		130	260		0.4
	11	#5	28		80		4200			6.4
Total+102									34.0	9.9
Pórtico 22	12	#8	2	19	620	19	639	1260	4.9	
	13	#6.3	2	8	187	8	187	374	0.5	
	14	#8	2	10	265	10	265	530	1.0	
	15	#8	2	10	225	10	225	450	0.8	
	16	#8	2	9	95	9	95	190	0.7	
	17	#5	2		160		160	320		0.5
	18	#5	2		135		135	270		0.4
	19	#5	5		74		3774			5.9
Total+102									11.7	8.0
			#5	6	2	0	0	0	0	0
			#6	16	2	0	0	0	0	0
			#10	2	0	0	0	0	0	0
			#16	23	0	0	0	0	0	0
			Total	43	7	0	0	0	0	0