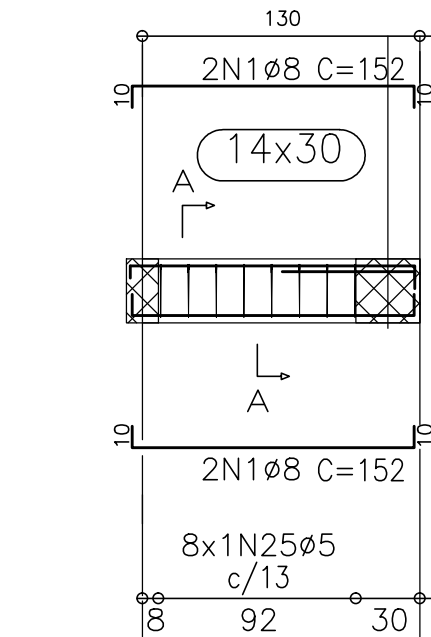
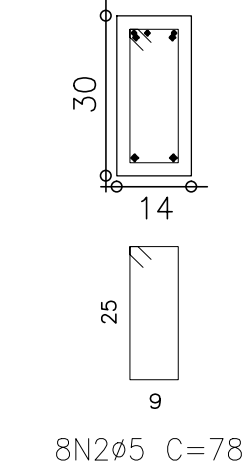


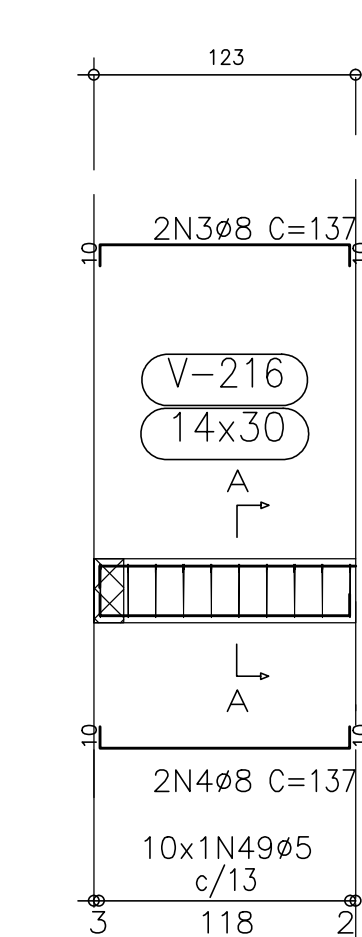
V 1 = V 2
Escala 1:50



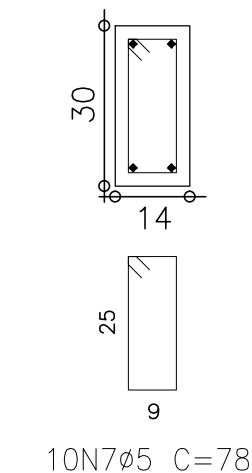
Corte A
Escala 1:20



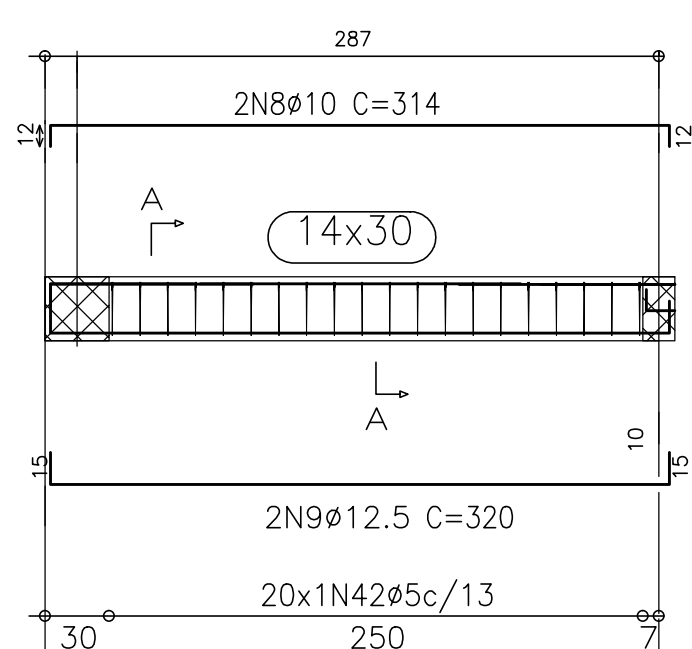
V 3
Escala 1:50



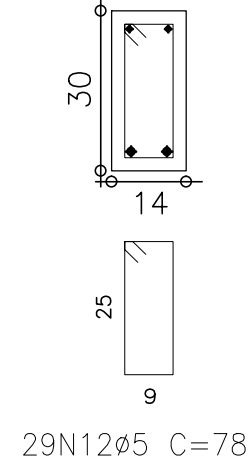
Corte A
Escala 1:20



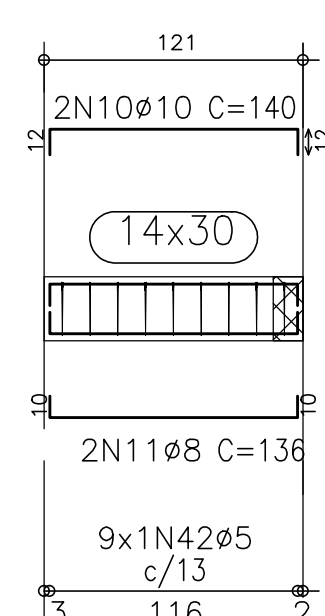
V 4
Escala 1:50



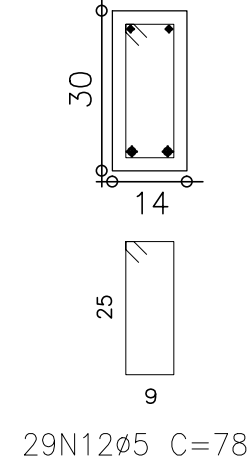
Corte A
Escala 1:20



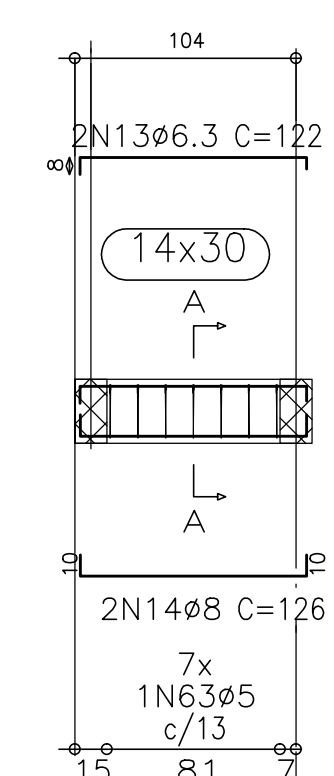
V 5
Escala 1:50



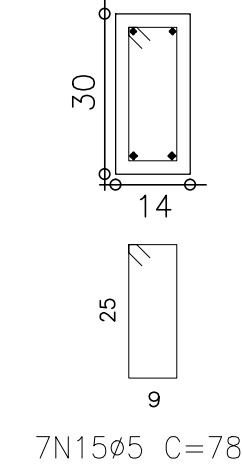
Corte A
Escala 1:20



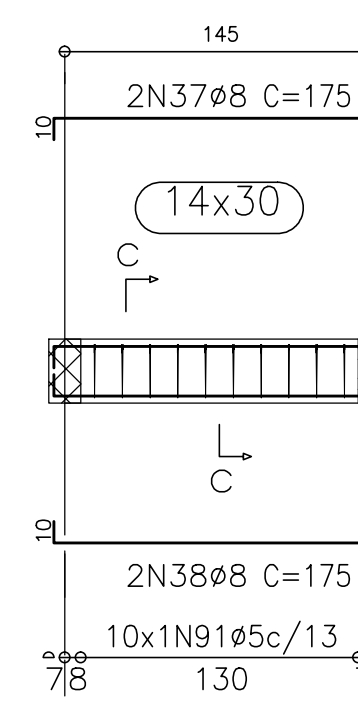
V 6 = V 7
Escala 1:50



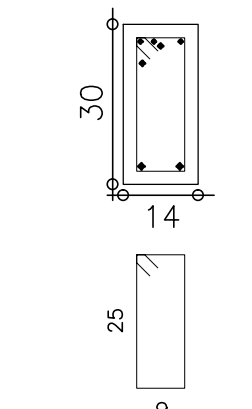
Corte A
Escala 1:20



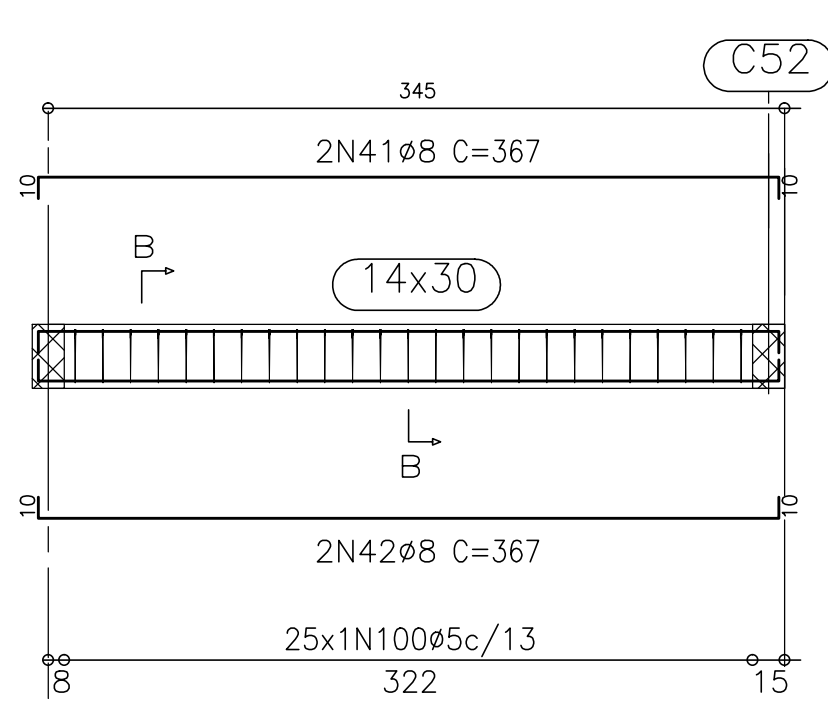
V 8 = V 9
Escala 1:50



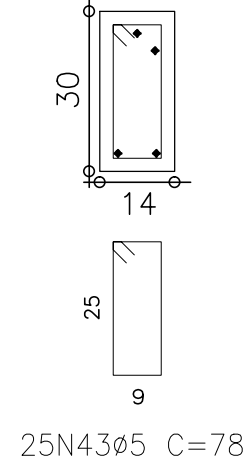
Corte C
Escala 1:20



V 10 = V 11
Escala 1:50

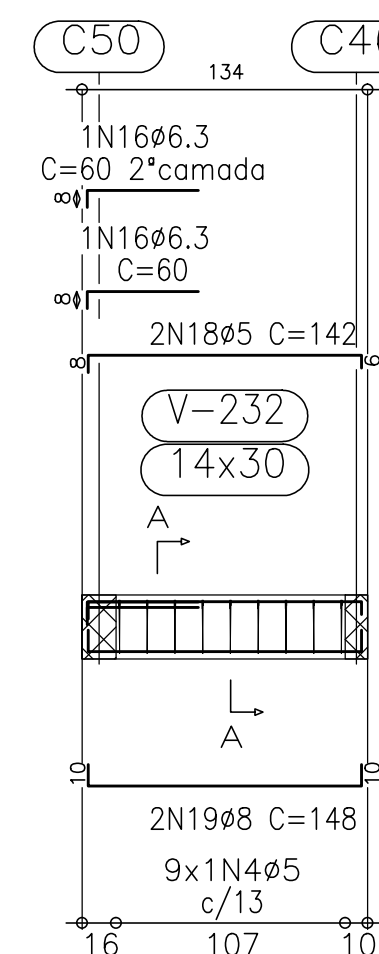


Corte B
Escala 1:20

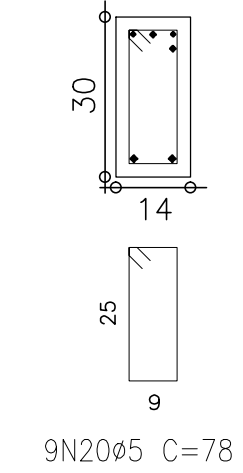


TIPO: 1
Desenho de vigas
Concreto: C25, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

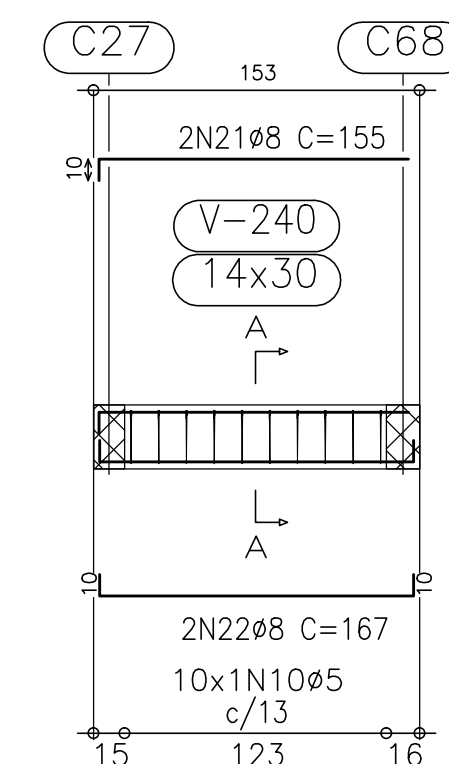
V 15 = V 16
Escala 1:50



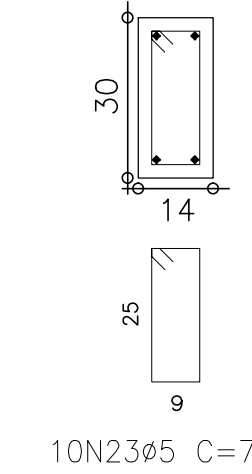
Corte A
Escala 1:20



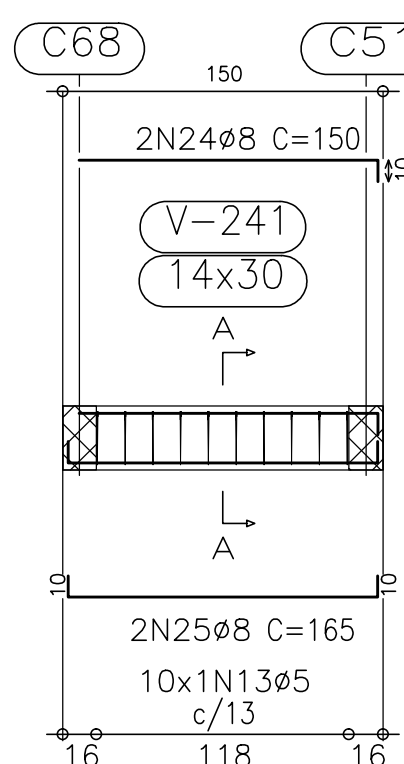
V 17 = V 18
Escala 1:50



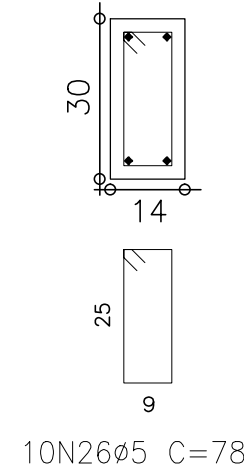
Corte A
Escala 1:20



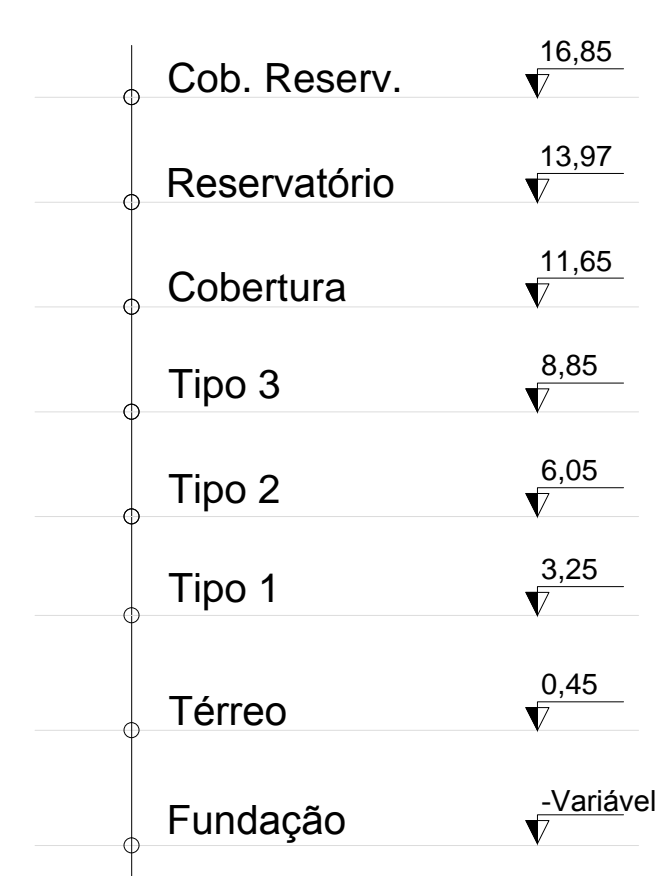
V 19 = V 20
Escala 1:50



Corte A
Escala 1:20



NOTA:
- ESPESSURA DA ARGAMASSA DE
ASSENTAMENTO É DE 1cm, PROIBIDO
A EXECUÇÃO DE JUNTA SECA;



Corte Esquemático
s/ esc.

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Retd (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 7	1	ø8	4	10	132	10	152	608	2.2	
	2	ø5	8					624		1.0
Total+10%									2.2	1.0
V 14	3	ø8	2	10	117	10	137	274	1.1	
	4	ø8	2	10	117	10	137	274	1.1	
	6	ø8	2	20	150	20	190	360	1.5	
	6	ø8	2	20	150	20	190	360	1.5	
	7	ø5	10				78	780		1.2
	7	ø5	8				100	800		1.3
	Total+10%									5.7
V 15	8	ø10	2	12	290	12	314	628	3.9	
	9	ø12.5	2	15	290	15	320	640	6.3	
	10	ø10	2	12	116	12	140	280	0.8	
	11	ø8	2	10	116	10	136	272	1.1	
	12	ø5	29				78	2262		3.6
	Total+10%									15.3
V 18	13	ø6.3	2	8	106	8	122	244	0.6	
	14	ø8	2	10	106	10	126	252	1.0	
	15	ø5	7				78	546		0.9
Total+10%									1.6	0.9
V 23	16	ø6.3	2	8	52		60	120	0.3	
	18	ø5	2	8	128	6	142	284		0.4
	19	ø8	2	10	128	10	148	296	1.2	
	20	ø5	9				78	702		1.1
Total+10%									1.7	1.7
V 31	21	ø8	2	10	145		155	310	1.2	
	22	ø8	2	10	147		167	334	1.3	
	23	ø5	10				78	780		1.2
Total+10%									2.8	1.3
V 32	24	ø8	2		140	10	150	300	1.2	
	25	ø8	2	10	145	10	165	330	1.3	
	26	ø5	10				78	780		1.2
Total+10%									2.8	1.3
V 34	27	ø8	2	10	852	10	872	1744	6.8	
	28	ø8	2	10	852	10	872	1744	6.8	
	29	ø5	46				100	4600		7.2
Total+10%									15.0	7.9
V 49	30	ø8	2	10	310		320	640	2.6	
	31	ø10	1		150		150	150	1.0	
	32	ø8	2	10	290		300	600	3.6	
	33	ø5	19				80	1520		2.4
Total+10%									7.2	2.4
V 51	34	ø8	1		100		100	100	0.4	
	35	ø10	2	12	188		200	400	2.5	
	36	ø8	2	10	170		180	360	1.5	
	37	ø8	2	10	155	10	175	350	1.4	
	38	ø8	2	10	155	10	175	350	1.4	
	39	ø5	9				80	720		1.1
	40	ø5	10				78	780		1.2
Total+10%									7.2	2.3
V 52	41	ø8	2	10	347	10	367	734	2.9	
	42	ø8	2	10	347	10	367	734	2.9	
	43	ø5	25				78	1950		3.1
Total+10%									5.8	3.1
									ø5:	0.0
									ø6.3:	0.9
									ø8:	49.8
									Total:	50.7
										29.9

Concreto $F_{ck} = 25\text{Mpa}$

CABREIRA RODRIGUES
Equipe Técnica
Eng.º Civil Cristian Vitorrei Fernandes
Eng.º Civil Fabrício Ferreira Rodrigues
Eng.º Civil Diego Augusto De Cesaro
Eng. Civil / Eletrotéc. Fábio Ferreira
Acad. Eng. Civil Amanda Bianchini

SOLUÇÕES EM ENGENHARIA

PROJETO	ESTRUTURAL			
RESPONSÁVEL PELO PROJETO	RESPONSÁVEL PELA EXECUÇÃO			
Eng.º Civil Fabrício Ferreira Rodrigues CREA/SC 41413-0				
OBRA / PROPRIETÁRIO	ASSUNTO:			
Vivendas De Barcelona Rua Salvador e Rua Xingu, Bairro Brasília Criciúma - Santa Catarina	VIGAS TIPO 2 E TIPO 3			
ARQUIVO	FOLHA			
C:\CR\CR1\BARCELONA\ESTR.	34/35			
DATA	OBRA	ÁREA	ESCALA	DESENHO
JAN/13	008/CR1	7.846,24m²	1/50	Diego Augusto