

Technical drawing of a reinforced concrete beam (V77) showing its cross-section and longitudinal view.

Corte A (Cross-section):

- Top flange width: 884
- Web width: 300
- Total height: 500
- Reinforcement: 3 N1 \varnothing 10 (top), 3 A2 \varnothing 8 (bottom)

Longitudinal View:

- Beam length: 884
- Reinforcement: 3 N3 C/15 (top), 57 A2 \varnothing 5 (bottom)
- Supports: V77, P49

Detail:

- Reinforcement: 3 A2 \varnothing 8 (top), 57 N3 \varnothing 5 C=151 (bottom)

Technical drawing of a reinforced concrete beam cross-section and elevation.

Corte A

Dimensions and reinforcement details:

- Top reinforcement: 3 N2 @ 10 C=186
- Bottom reinforcement: 2 N1 @ 8 C=400
- Section width: 136
- Section height: 50
- Reinforcement spacing: 96
- Reinforcement diameter: 12
- Reinforcement lap length: 180

Elevation View:

- Beam length: 624
- Top reinforcement: 3 N4 @ 10 C=151
- Bottom reinforcement: 3 N3 @ 16 C=672
- Section width: 136
- Section height: 50
- Reinforcement spacing: 24
- Reinforcement diameter: 12
- Reinforcement lap length: 180

Technical drawing of a structural beam assembly. The drawing shows a cross-section of a beam with various dimensions and material specifications. The beam is composed of several layers, including a top flange, a web, and a bottom flange. The dimensions are given in millimeters (mm) and centimeters (cm). The material specifications are given in the form of a number followed by a diameter symbol and a number, such as 3 N2 Ø 10 C=185. The drawing also includes a detail view labeled 'Corte A' showing a cross-section of a corner joint. The detail view shows a corner joint with dimensions 3 Ø 10, 3 Ø 16, and 3 Ø 10. The main drawing shows a beam with a total length of 715 cm. The beam is supported by two columns, P54 and P62. The beam is connected to the columns using bolts and plates. The dimensions of the beam are 135 cm (width), 90 cm (height), and 715 cm (length). The material specifications for the beam are 3 N2 Ø 10 C=185, 2 N1 Ø 8 C=160, 3 N3 Ø 16 C=765, 3 N4 Ø 16 C=810, 3 N5 Ø 10 C=502, 3 N6 Ø 5 C=151, 3 N7 Ø 8 C=804, 3 N8 Ø 8 C=505, 3 N9 Ø 8 C=505, 3 N10 Ø 8 C=505, 3 N11 Ø 8 C=505, 3 N12 Ø 8 C=505, 3 N13 Ø 8 C=505, 3 N14 Ø 8 C=505, 3 N15 Ø 8 C=505, 3 N16 Ø 8 C=505, 3 N17 Ø 8 C=505, 3 N18 Ø 8 C=505, 3 N19 Ø 8 C=505, 3 N20 Ø 8 C=505, 3 N21 Ø 8 C=505, 3 N22 Ø 8 C=505, 3 N23 Ø 8 C=505, 3 N24 Ø 8 C=505, 3 N25 Ø 8 C=505, 3 N26 Ø 8 C=505, 3 N27 Ø 8 C=505, 3 N28 Ø 8 C=505, 3 N29 Ø 8 C=505, 3 N30 Ø 8 C=505, 3 N31 Ø 8 C=505, 3 N32 Ø 8 C=505, 3 N33 Ø 8 C=505, 3 N34 Ø 8 C=505, 3 N35 Ø 8 C=505, 3 N36 Ø 8 C=505, 3 N37 Ø 8 C=505, 3 N38 Ø 8 C=505, 3 N39 Ø 8 C=505, 3 N40 Ø 8 C=505, 3 N41 Ø 8 C=505, 3 N42 Ø 8 C=505, 3 N43 Ø 8 C=505, 3 N44 Ø 8 C=505, 3 N45 Ø 8 C=505, 3 N46 Ø 8 C=505, 3 N47 Ø 8 C=505, 3 N48 Ø 8 C=505, 3 N49 Ø 8 C=505, 3 N50 Ø 8 C=505, 3 N51 Ø 8 C=505, 3 N52 Ø 8 C=505, 3 N53 Ø 8 C=505, 3 N54 Ø 8 C=505, 3 N55 Ø 8 C=505, 3 N56 Ø 8 C=505, 3 N57 Ø 8 C=505, 3 N58 Ø 8 C=505, 3 N59 Ø 8 C=505, 3 N60 Ø 8 C=505, 3 N61 Ø 8 C=505, 3 N62 Ø 8 C=505, 3 N63 Ø 8 C=505, 3 N64 Ø 8 C=505, 3 N65 Ø 8 C=505, 3 N66 Ø 8 C=505, 3 N67 Ø 8 C=505, 3 N68 Ø 8 C=505, 3 N69 Ø 8 C=505, 3 N70 Ø 8 C=505, 3 N71 Ø 8 C=505, 3 N72 Ø 8 C=505, 3 N73 Ø 8 C=505, 3 N74 Ø 8 C=505, 3 N75 Ø 8 C=505, 3 N76 Ø 8 C=505, 3 N77 Ø 8 C=505, 3 N78 Ø 8 C=505, 3 N79 Ø 8 C=505, 3 N80 Ø 8 C=505, 3 N81 Ø 8 C=505, 3 N82 Ø 8 C=505, 3 N83 Ø 8 C=505, 3 N84 Ø 8 C=505, 3 N85 Ø 8 C=505, 3 N86 Ø 8 C=505, 3 N87 Ø 8 C=505, 3 N88 Ø 8 C=505, 3 N89 Ø 8 C=505, 3 N90 Ø 8 C=505, 3 N91 Ø 8 C=505, 3 N92 Ø 8 C=505, 3 N93 Ø 8 C=505, 3 N94 Ø 8 C=505, 3 N95 Ø 8 C=505, 3 N96 Ø 8 C=505, 3 N97 Ø 8 C=505, 3 N98 Ø 8 C=505, 3 N99 Ø 8 C=505, 3 N100 Ø 8 C=505, 3 N101 Ø 8 C=505, 3 N102 Ø 8 C=505, 3 N103 Ø 8 C=505, 3 N104 Ø 8 C=505, 3 N105 Ø 8 C=505, 3 N106 Ø 8 C=505, 3 N107 Ø 8 C=505, 3 N108 Ø 8 C=505, 3 N109 Ø 8 C=505, 3 N110 Ø 8 C=505, 3 N111 Ø 8 C=505, 3 N112 Ø 8 C=505, 3 N113 Ø 8 C=505, 3 N114 Ø 8 C=505, 3 N115 Ø 8 C=505, 3 N116 Ø 8 C=505, 3 N117 Ø 8 C=505, 3 N118 Ø 8 C=505, 3 N119 Ø 8 C=505, 3 N120 Ø 8 C=505, 3 N121 Ø 8 C=505, 3 N122 Ø 8 C=505, 3 N123 Ø 8 C=505, 3 N124 Ø 8 C=505, 3 N125 Ø 8 C=505, 3 N126 Ø 8 C=505, 3 N127 Ø 8 C=505, 3 N128 Ø 8 C=505, 3 N129 Ø 8 C=505, 3 N130 Ø 8 C=505, 3 N131 Ø 8 C=505, 3 N132 Ø 8 C=505, 3 N133 Ø 8 C=505, 3 N134 Ø 8 C=505, 3 N135 Ø 8 C=505, 3 N136 Ø 8 C=505, 3 N137 Ø 8 C=505, 3 N138 Ø 8 C=505, 3 N139 Ø 8 C=505, 3 N140 Ø 8 C=505, 3 N141 Ø 8 C=505, 3 N142 Ø 8 C=505, 3 N143 Ø 8 C=505, 3 N144 Ø 8 C=505, 3 N145 Ø 8 C=505, 3 N146 Ø 8 C=505, 3 N147 Ø 8 C=505, 3 N148 Ø 8 C=505, 3 N149 Ø 8 C=505, 3 N150 Ø 8 C=505, 3 N151 Ø 8 C=505, 3 N152 Ø 8 C=505, 3 N153 Ø 8 C=505, 3 N154 Ø 8 C=505, 3 N155 Ø 8 C=505, 3 N156 Ø 8 C=505, 3 N157 Ø 8 C=505, 3 N158 Ø 8 C=505, 3 N159 Ø 8 C=505, 3 N160 Ø 8 C=505, 3 N161 Ø 8 C=505, 3 N162 Ø 8 C=505, 3 N163 Ø 8 C=505, 3 N164 Ø 8 C=505, 3 N165 Ø 8 C=505, 3 N166 Ø 8 C=505, 3 N167 Ø 8 C=505, 3 N168 Ø 8 C=505, 3 N169 Ø 8 C=505, 3 N170 Ø 8 C=505, 3 N171 Ø 8 C=505, 3 N172 Ø 8 C=505, 3 N173 Ø 8 C=505, 3 N174 Ø 8 C=505, 3 N175 Ø 8 C=505, 3 N176 Ø 8 C=505, 3 N177 Ø 8 C=505, 3 N178 Ø 8 C=505, 3 N179 Ø 8 C=505, 3 N180 Ø 8 C=505, 3 N181 Ø 8 C=505, 3 N182 Ø 8 C=505, 3 N183 Ø 8 C=505, 3 N184 Ø 8 C=505, 3 N185 Ø 8 C=505, 3 N186 Ø 8 C=505, 3 N187 Ø 8 C=505, 3 N188 Ø 8 C=505, 3 N189 Ø 8 C=505, 3 N190 Ø 8 C=505, 3 N191 Ø 8 C=505, 3 N192 Ø 8 C=505, 3 N193 Ø 8 C=505, 3 N194 Ø 8 C=505, 3 N195 Ø 8 C=505, 3 N196 Ø 8 C=505, 3 N197 Ø 8 C=505, 3 N198 Ø 8 C=505, 3 N199 Ø 8 C=505, 3 N200 Ø 8 C=505, 3 N201 Ø 8 C=505, 3 N202 Ø 8 C=505, 3 N203 Ø 8 C=505, 3 N204 Ø 8 C=505, 3 N205 Ø 8 C=505, 3 N206 Ø 8 C=505, 3 N207 Ø 8 C=505, 3 N208 Ø 8 C=505, 3 N209 Ø 8 C=505, 3 N210 Ø 8 C=505, 3 N211 Ø 8 C=505, 3 N212 Ø 8 C=505, 3 N213 Ø 8 C=505, 3 N214 Ø 8 C=505, 3 N215 Ø 8 C=505, 3 N216 Ø 8 C=505, 3 N217 Ø 8 C=505, 3 N218 Ø 8 C=505, 3 N219 Ø 8 C=505, 3 N220 Ø 8 C=505, 3 N221 Ø 8 C=505, 3 N222 Ø 8 C=505, 3 N223 Ø 8 C=505, 3 N224 Ø 8 C=505, 3 N225 Ø 8 C=505, 3 N226 Ø 8 C=505, 3 N227 Ø 8 C=505, 3 N228 Ø 8 C=505, 3 N229 Ø 8 C=505, 3 N230 Ø 8 C=505, 3 N231 Ø 8 C=505, 3 N232 Ø 8 C=505, 3 N233 Ø 8 C=505, 3 N234 Ø 8 C=505, 3 N235 Ø 8 C=505, 3 N236 Ø 8 C=505, 3 N237 Ø 8 C=505, 3 N238 Ø 8 C=505, 3 N239 Ø 8 C=505, 3 N240 Ø 8 C=505, 3 N241 Ø 8 C=505, 3 N242 Ø 8 C=505, 3 N243 Ø 8 C=505, 3 N244 Ø 8 C=505, 3 N245 Ø 8 C=505, 3 N246 Ø 8 C=505, 3 N247 Ø 8 C=505, 3 N248 Ø 8 C=505, 3 N249 Ø 8 C=505, 3 N250 Ø 8 C=505, 3 N251 Ø 8 C=505, 3 N252 Ø 8 C=505, 3 N253 Ø 8 C=505, 3 N254 Ø 8 C=505, 3 N255 Ø 8 C=505, 3 N256 Ø 8 C=505, 3 N257 Ø 8 C=505, 3 N258 Ø 8 C=505, 3 N259 Ø 8 C=505, 3 N260 Ø 8 C=505, 3 N261 Ø 8 C=505, 3 N262 Ø 8 C=505, 3 N263 Ø 8 C=505,

Technical drawing of a reinforced concrete slab (P64) and its cross-section (Corte A).

Plan View (Top):

- Overall dimensions: 143m (width) x 310m (length).
- Top reinforcement: 4 N2 \varnothing 10, C=276.
- Bottom reinforcement: 2 N1 \varnothing 8, C=310.
- Supports: P64 (left and right walls).
- Dimensions: 4 \varnothing 10, 2 \varnothing 8, 3 \varnothing 10.

Corte A (Cross-section):

- Slab thickness: 12.5.
- Top reinforcement: 3 N3 \varnothing 10, C=186.
- Bottom reinforcement: 2 N1 \varnothing 8, C=310.
- Support: 37 N5 \varnothing 5, C=151.
- Dimensions: 4 \varnothing 10, 3 \varnothing 12.5, 3 \varnothing 10.

Technical drawing of a roof structure showing a plan view and a cross-section 'Corte A'.

Plan View:

- Roof slope: 12%
- Supports: V77 (Wall), P66 (Column)
- Beams and Dimensions:
 - 3 N2 Ø 10 C=166
 - 2 N1 Ø 8 C=510
 - 3 N3 Ø 20 C=351
 - 4 N5 Ø 6.3 C=152
 - 4 N4 Ø 16 C=934
- Other dimensions: 136, 90, 300, 85, 41, 0, 6, 3, 2 x 8, 3 x 10, 4 x 10, 884, 2x3 NG Ø 8 C=898, 884, 25.

Corte A:

- Shows the vertical arrangement of the beams and the roof profile.
- Dimensions: 300, 25, 3 Ø 10, > 3x2 Ø 8, > 4 Ø 16.





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AÇO	POS	BIT	QUANT	COMPROMETIMENTO	
				UNIT	TOTAL
			mm	cm	
V17-COBERTURA					
50A	1	8	2	520	1040
50A	2	12,5	3	186	558
50A	3	16	4	336	1680
50A	4	16	4	934	3736
60A	5	5	55	151	8305
50A	6	8	6	898	5388
V18-COBERTURA					
50A	1	8	2	220	440
50A	2	12,5	3	180	540
50A	3	8	2	450	900
50A	4	20	8	515	2575
50A	5	10	3	166	498
50A	6	12,5	3	715	2145
50A	7	16	4	3280	8200
50A	8	6,3	74	152	11248
50A	9	8	8	695	4170
50A	10	8	6	809	4854
V19-COBERTURA					
50A	1	10	3	984	2952
50A	2	16	4	934	3736
60A	3	5	57	151	8607
50A	4	8	6	912	5472
V20-COBERTURA					
50A	1	8	2	400	800
50A	2	10	3	186	558
50A	3	16	3	672	2016
60A	4	5	40	151	6040
50A	5	8	6	652	3912
V21-COBERTURA					
50A	1	8	2	380	760
50A	2	16	3	315	945
50A	3	10	3	495	1485
50A	4	16	5	565	2260
50A	5	16	2	285	570
50A	6	12,5	3	902	2706
50A	7	12,5	4	800	3204
60A	8	5	103	151	15553
50A	9	8	8	896	5376
50A	10	8	6	795	4770
V22-COBERTURA					
50A	1	8	2	360	720
50A	2	10	3	165	495
50A	3	16	3	510	1020
50A	4	12,5	3	1110	3330
50A	5	12,5	2	210	420
60A	6	6	46	166	988
50A	7	12,5	3	685	2055
50A	8	16	3	789	2367
50A	9	9	9	151	1359
50A	10	8	6	683	4098
50A	11	8	6	782	4692
V23-COBERTURA					
50A	1	8	2	460	920
50A	2	10	3	185	555
50A	3	16	3	765	2295
50A	4	16	3	810	2430
50A	5	10	5	1506	4518
60A	6	5	80	151	12080
50A	7	7	8	804	4824
50A	8	8	6	505	3030
V24-COBERTURA					
50A	1	10	2	310	620
50A	2	10	4	276	1104
50A	3	10	3	186	558
50A	4	12,5	5	660	1992
60A	5	5	37	151	5587
50A	6	8	6	638	3828
V25-COBERTURA					
50A	1	8	2	510	1020
50A	2	10	3	166	498
50A	3	20	3	351	1053
50A	4	16	4	934	3736
50A	5	15	4	152	608
50A	6	8	6	898	5388
V26-COBERTURA					
50A	1	8	2	215	430
50A	2	16	2	295	590
50A	3	10	3	435	1305
50A	4	20	3	515	1545
50A	5	10	3	166	498
50A	6	16	2	2900	722
50A	7	12,5	4	815	3260
50A	8	6,3	67	152	10184
50A	9	8	8	705	4230
50A	10	8	6	809	4854
V27-COBERTURA					
50A	1	8	2	455	910
50A	2	16	3	245	735
50A	3	10	3	365	1095
50A	4	20	3	570	1710
50A	5	10	3	305	915
50A	6	16	2	186	558
50A	7	16	4	907	3628
50A	8	12,5	4	800	3204
50A	9	6,3	77	152	11704
50A	10	8	6	896	5376
50A	11	8	6	795	4770

SIGLAS:		
C.A.F = COTA DE ASSENTAMENTO DA FUNDAÇÃO		
C.F = CONTRA - FLECHA		
SIGLA DOS ELEMENTOS ESTRUTURAIS:		
B=BLOCO	P=PILAR	V=VIGA
C=CINTA	R=RADIER	VE=VIGA ESCADA
E=ESTACA	S=SAPATA	VEQ=VIGA DE EQUILÍBRIO
L=LAJE	T=TUBULÃO	VT=VIGA DE TRANSIÇÃO

OBSERVAÇÃO:
FOI FORNECIDO UMA SONDAGEM PELO CONTRATANTE PRÓXIMO AO LOCAL DA OBRA A QUAL FOI UTILIZADA COMO BASE PARA O CÁLCULO DA FUNDAÇÃO

LEGENDA DE PILARES:

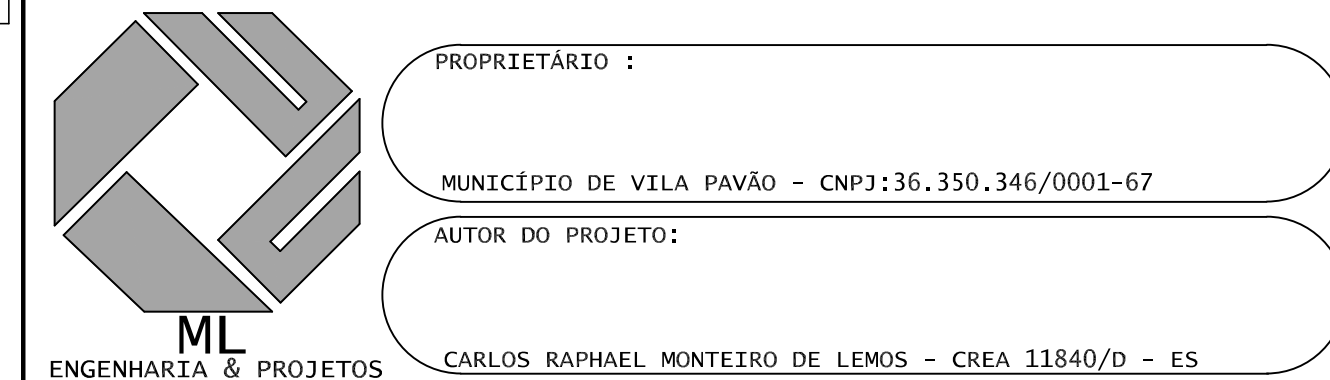
 = PROSSEGUE  = MORRE  = REDUZ  = NASCE

NOTAS :	10-Fator Estatístico:S3 = 1,0
1-Cotas e Dimensões em cm.	11-Velocidade Básica do Vento:V = 30m/s
2-Concreto Estrutural : Fck = 30MPa	12-Cobrimento das Armaduras :
Módulo de Elasticidade : Ecs = 26GPa	Lajes: 2.5cm Sapatas: 3.0cm
3-Aços :	Pilares: 3.0cm Vigas: 3.0cm
CA-50 - Fyk = 500 MPa CA-60 - Fyk = 600 MPa	8locos: 3.0cm Tubulão: 3.0cm
4-Concreto de regularização:FCK = 10MPa	Radier: 3.0cm
Módulo de Elasticidade : Ecs = 15GPa	
Espessura : 5.0cm	
5-As cotas prevalecem sobre o desenho	
6-Classe de Agressividade Ambiental = II	
7-Fator do Terreno:S1 = 1,0	
8-Categoria de Rugosidade:S2 = II	
9-Classe da Edificação:S2 = c	

PROJETOS DE REFERÊNCIA :
PROJETO ARQUITETÔNICO, PLANTAS BAIXAS, CORTES E FACHADAS

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PROJETO ESTRUTURAL



INFORMAÇÕES DA OBRA

DESCRIÇÃO DA PLANTA:		
ARMACÉM DAS VIGAS DA COBERTURA		
TÍTULO DA OBRA :		
CONSTRUÇÃO DA EMEF ESTHER DA COSTA SANTOS		
ENDEREÇO DA OBRA :		
RUA ADEOLFINO DUARES, S/Nº - BAIRRO NOVA MUNIQUE		
DESENHOS:	DATA:	ESCALA:
EQUIPE ML	JANEIRO/2022	1:100
Nº DO ARQUIVO CAD:	Nº DO PROJETO:	Nº DA PRANCHA:
0844-020-EST-802.DWG	EST0844	20/27
AVENIDA ELDES SCHERRER DE SOUZA, N 1025, CENTRO EMPRESARIAL DA SERRA, SALA 616-CEP: 215, 105-680-PARQUE RESIDENCIAL DE LARANJEIRAS-SERRAS/RS		