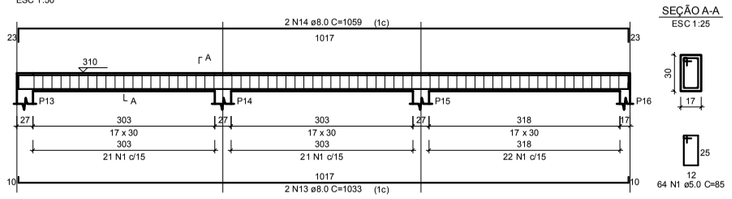
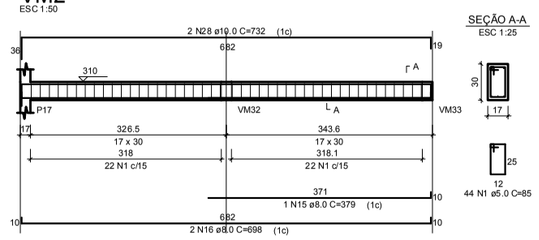
VM1
ESC 1:50

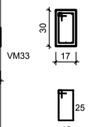


SEÇÃO A-A
ESC 1:25

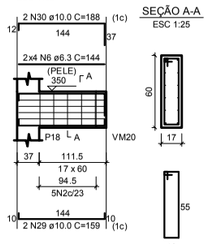
VM2
ESC 1:50



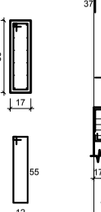
SEÇÃO A-A
ESC 1:25



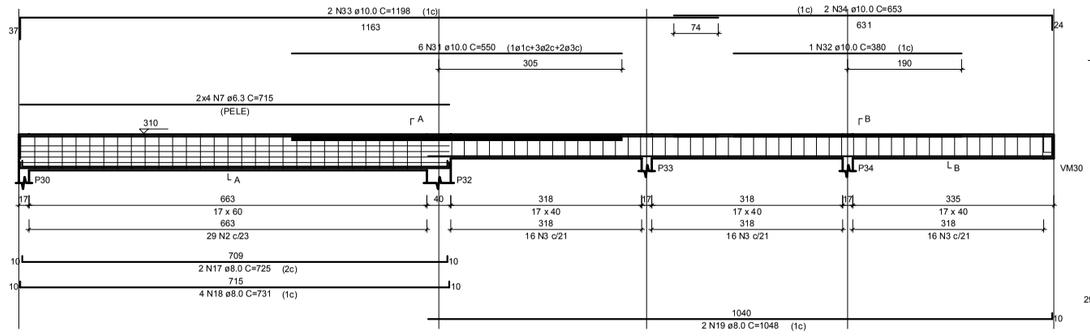
VM3
ESC 1:50



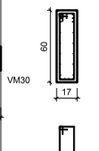
SEÇÃO A-A
ESC 1:25



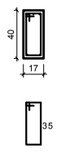
VM4
ESC 1:50



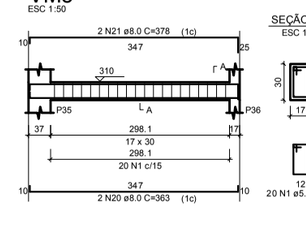
SEÇÃO A-A
ESC 1:25



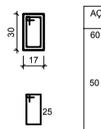
SEÇÃO B-B
ESC 1:25



VM5
ESC 1:50



SEÇÃO A-A
ESC 1:25



RELAÇÃO DO AÇO

VM1 VM2 VM3
VM4 VM5 VM6
VM7 VM8 VM9
VM10 VM11 VM12
VM13 VM14

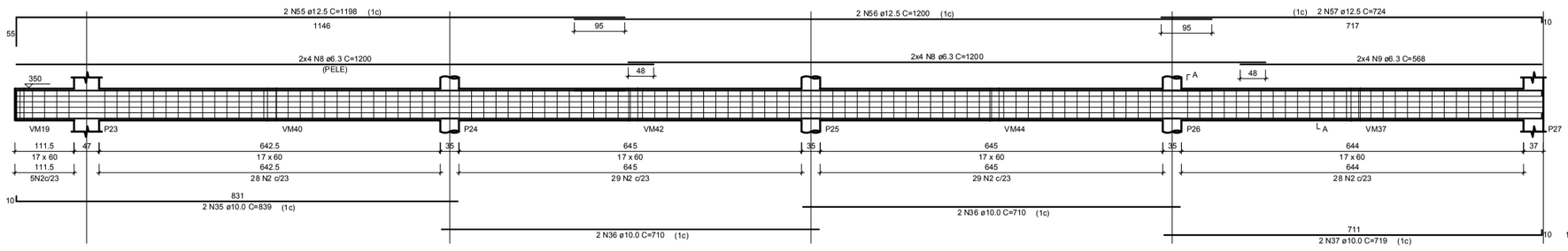
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
60	1	5.0	234	85	19890
	2	5.0	475	145	68875
	3	5.0	48	105	5040
	4	5.0	22	81	1782
	5	5.0	88	125	11000
	6	6.3	8	144	1152
	7	6.3	8	715	5720
	8	6.3	48	1200	57600
	9	6.3	16	568	9088
	10	6.3	16	230	3680
	11	6.3	3	83	249
	12	6.3	8	702	5616
	13	8.0	2	1033	2066
	14	8.0	2	1059	2118
	15	8.0	1	379	379
	16	8.0	2	698	1396
	17	8.0	2	725	1450
	18	8.0	4	731	2924
	19	8.0	2	1048	2096
	20	8.0	2	363	726
	21	8.0	2	378	756
	22	8.0	2	383	766
	23	8.0	1	357	357
	24	8.0	5	1037	5185
	25	8.0	2	700	1400
	26	8.0	2	1061	2122
	27	8.0	3	348	1044
	28	10.0	2	732	1464
	29	10.0	2	159	318
	30	10.0	2	188	376
	31	10.0	6	550	3300
	32	10.0	1	380	380
	33	10.0	2	1198	2396
	34	10.0	2	653	1306
	35	10.0	2	839	1678
	36	10.0	4	710	2840
	37	10.0	2	719	1438
	38	10.0	5	709	3545
	39	10.0	8	712	5696
	40	10.0	2	362	724
	41	10.0	1	665	665
	42	10.0	2	1198	2396
	43	10.0	2	587	1174
	44	10.0	12	712	8544
	45	10.0	2	840	1680
	46	10.0	2	108	216
	47	10.0	4	730	2920
	48	10.0	3	705	2115
	49	10.0	4	714	2856
	50	10.0	4	721	2884
	51	10.0	2	771	1542
	52	10.0	2	1198	2396
	53	10.0	2	967	1934
	54	10.0	1	947	947
	55	12.5	4	1198	4792
	56	12.5	8	1200	9600
	57	12.5	2	724	1448
	58	12.5	3	719	2157
	59	12.5	3	405	1215
	60	12.5	1	413	413
	61	12.5	2	550	1100
	62	12.5	2	545	1090
	63	12.5	2	800	1600
	64	12.5	1	1102	1102
	65	12.5	2	228	452
	66	12.5	1	1106	1106
	67	12.5	2	728	1456
	68	12.5	8	590	4720
	69	12.5	3	1197	3591
	70	12.5	3	321	963
	71	16.0	2	590	1180
	72	16.0	2	1196	2392
	73	16.0	2	376	752
	74	16.0	2	727	1454

RESUMO DO AÇO

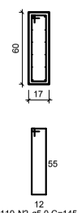
AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50	6.3	831.0	224.1
	8.0	250.8	109.0
	10.0	556.5	377.5
	12.5	368.1	390.3
	16.0	57.8	100.4
CA60	5.0	1070.2	181.3
PESO TOTAL			
CA50	1201.3		
CA60	181.3		

Vol. de concreto total (C-25) = 14.86 m³
Área de forma total = 204.50 m²

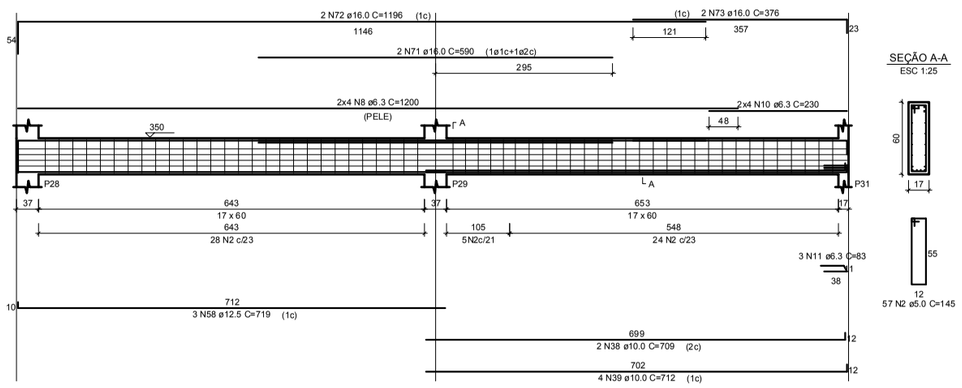
VM6
ESC 1:50



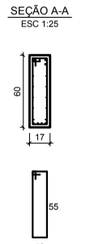
SEÇÃO A-A
ESC 1:25



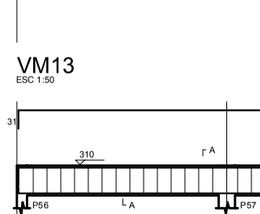
VM7
ESC 1:50



SEÇÃO A-A
ESC 1:25

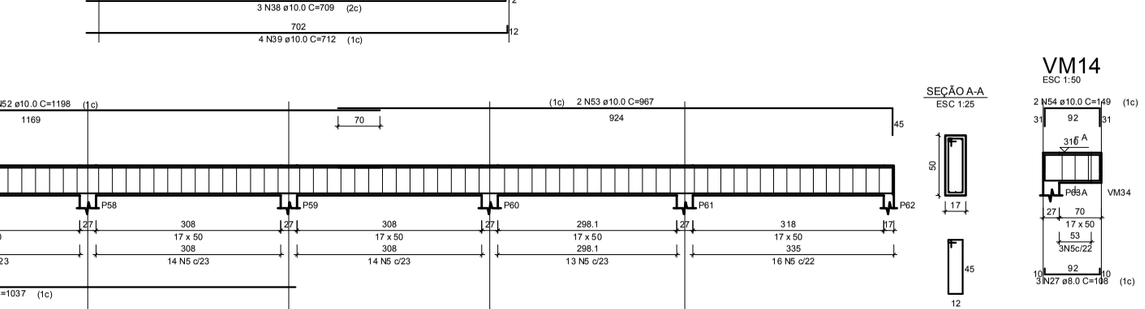


VM8
ESC 1:50



SEÇÃO A-A
ESC 1:25

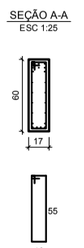
VM9
ESC 1:50



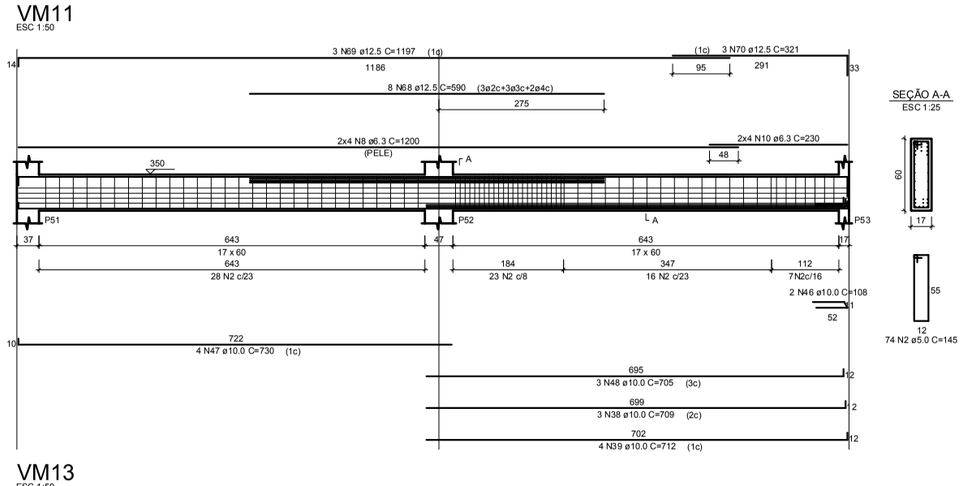
SEÇÃO A-A
ESC 1:25

VM10
ESC 1:50

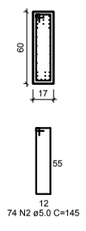
SEÇÃO A-A
ESC 1:25



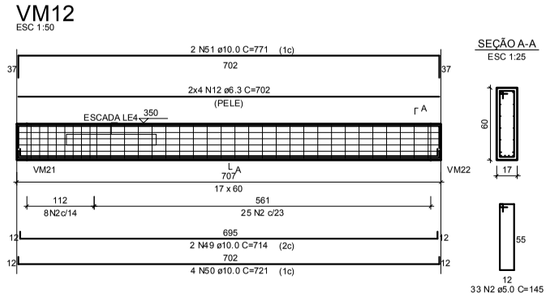
VM11
ESC 1:50



SEÇÃO A-A
ESC 1:25



VM12
ESC 1:50

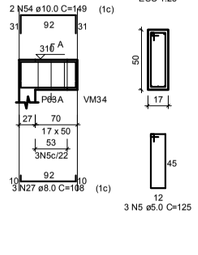


SEÇÃO A-A
ESC 1:25

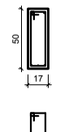
VM13
ESC 1:50

SEÇÃO A-A
ESC 1:25

VM14
ESC 1:50



SEÇÃO A-A
ESC 1:25

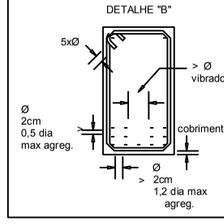


OBSERVAÇÕES:

FCK=200,0 Kg/cm² para fundação.
FCK=250,0 Kg/cm² para a estrutura.
Recobrimento de pilares = 2,5 cm.
Recobrimento de vigas = 2,5 cm.
Recobrimento de vigas baldrames = 2,5 cm.
Capeamento de laje pré-moldada = 5,0 cm (Mínimo)
Slump 5 ± 1 cm.
Os fundos de vigas baldrames deverá ser, agulado e posteriormente apiolados, com soquetes de 20,0 Kgf.

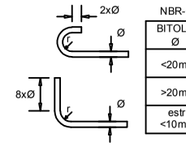
1-AS DIMENSOES ESTAO EM CENTIMETRO, A BITOLA DOS FERROS EM MILIMETRO.
2-A EXECUCAO DAS ARMADURAS DEVERA OBEDECER AS PRESCRICOES DA NORMA NBR-6118, E DA EB-3.
3-AS ESPECIFICACOES CONTIDAS NESTE PROJETO NAO PODERAO SER ALTERADAS SEM A CONSULTA PRE-VIA AO PROJETISTA.
4-CASO SEJA NECESSARIO A EMENDA DE BARRAS NAO ESPECIFICADA NESTE PROJETO, ESTA DEVERA SER FEITA CONFORME AS ESPECIFICACOES DO ITEM 6.3.5 DA NBR-6118.
5-OS GANCHOS NAS EXTREMIDADES DAS BARRAS DA ARMADURA SERAO EM ANGULO RETO, COM RAIO DE CURVATURA E PONTA RETA CONFORME O DETALHE "C".
6-OS ESPACAMENTOS VERTICAIS E HORIZONTAIS ENTRE AS BARRAS LONGITUDINAIS DEVERAO RESPEITAR OS VALORES MINIMOS INDICADOS NO DETALHE "B".
7-AS BARRAS DA ARMADURA DEVERAO SER MANTIDAS COM SEGURANCA NOS LUGARES PREVISTOS DURANTE O LANCAMENTO E O ADENSAMENTO DO CONCRETO. USAR ESPACADORES ADEQUADOS PARA GARANTIR O COBRIMENTO DE CONCRETO.
8-NA MONTAGEM DAS ARMADURAS DAS VIGAS NAS FORMAS, AS BARRAS LONGITUDINAIS DAS VIGAS APOIADAS DEVERAO FICAR POR CIMA DAS BARRAS DA VIGA QUE LHE SERVE DE APOIO.
9-CONFERIR TODAS AS MEDIDAS ANTES DO CORTE, DOBRAMENTO E MONTAGEM DAS ARMADURAS.

DETALHE "B"



DETALHE "C"

RAIO (r) DE DOBRAMENTO PARA GANCHOS NBR-6118 (item 6.3.4.1.)



BITOLA Ø	CA50	CA60
<20mm	2,5xØ	3xØ
>20mm	4xØ	—
estribo <10mm	1,5xØ	1,5xØ