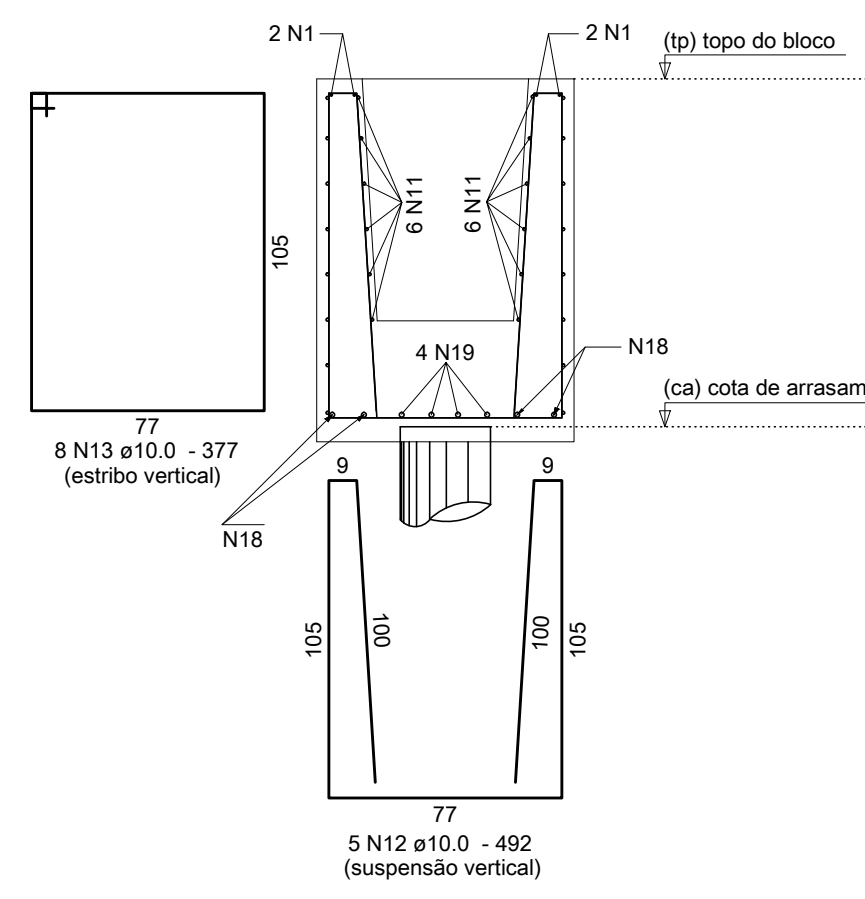
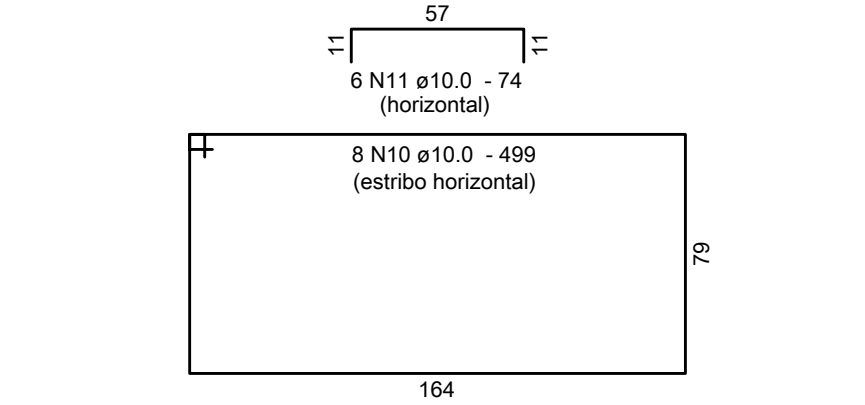
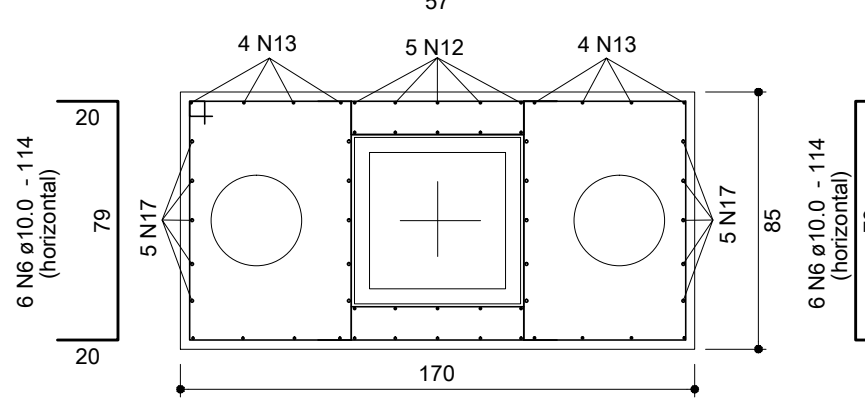


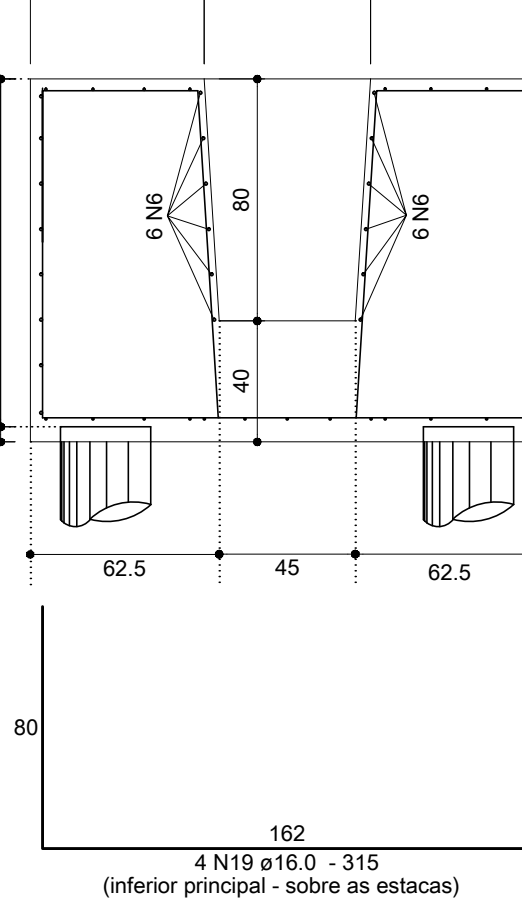
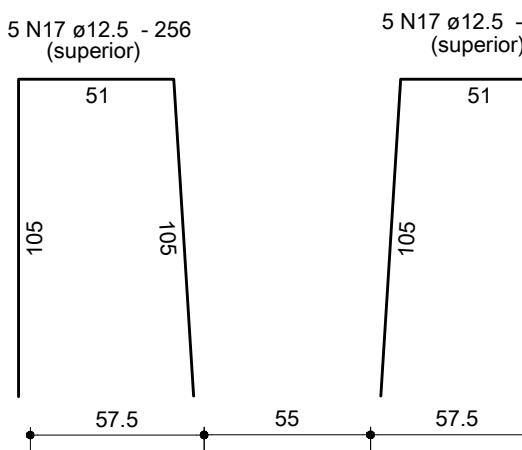
BLOCO TIPO 1
(43x)
2ø30cm



BLOCO TIPO 1 (43x)

B6, B16, B19, B20, B23, B24, B27, B28, B31, B32, B35, B36, B39, B40, B43, B45, B52, B53, B56, B57, B58, B60, B63, B64, B70, B72, B112, B190, B192, B193, B194, B195, B223, B267, B279, B309, B364, B421, B422, B423, B424, B425, B426.

4 N1 ø8.0 - 162 (superior-complementar)



Relação do aço - Bloco Tipo 1

43xBLOCO TIPO 1

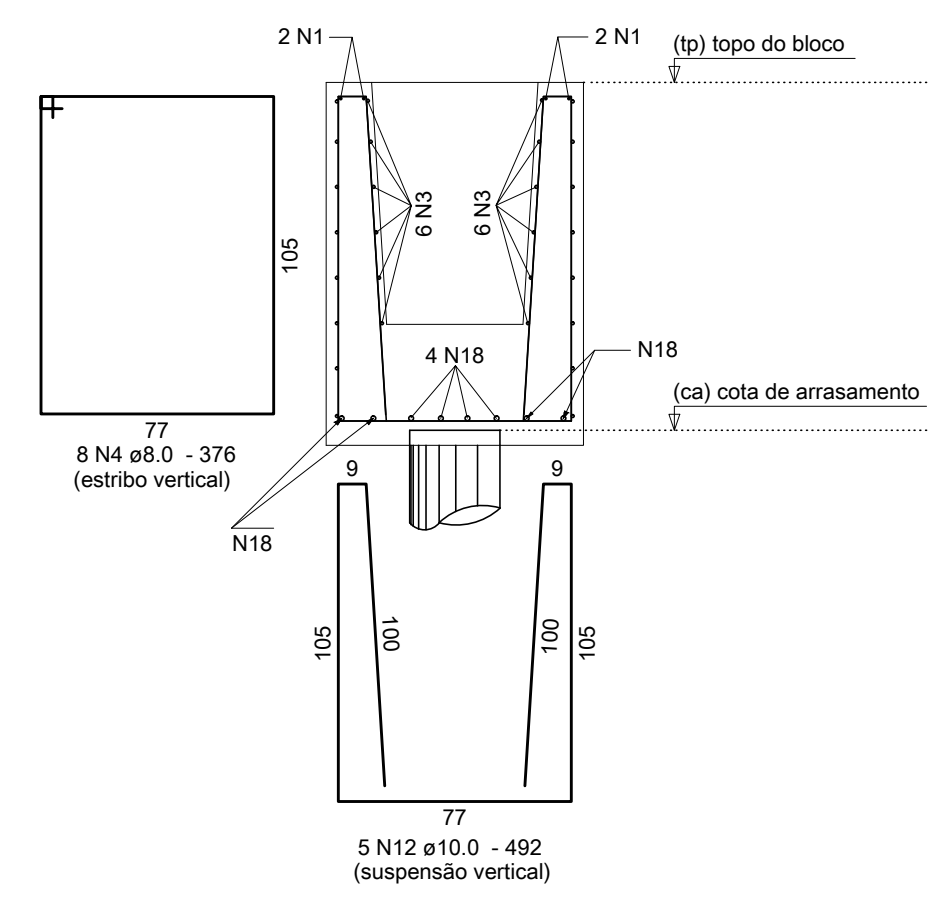
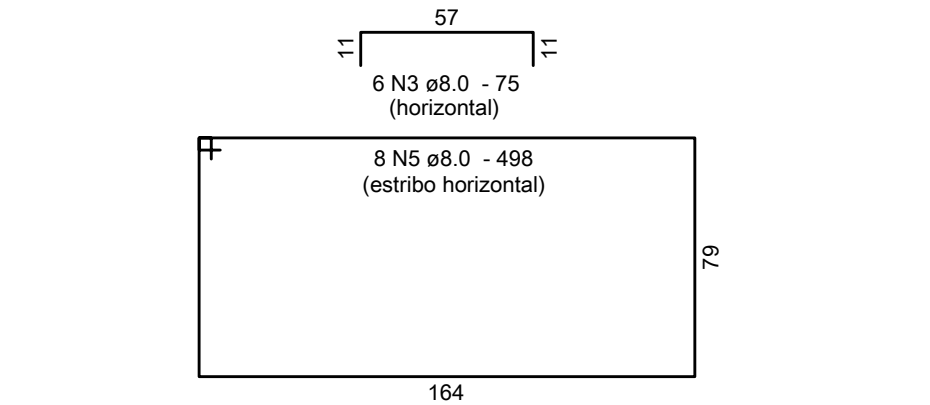
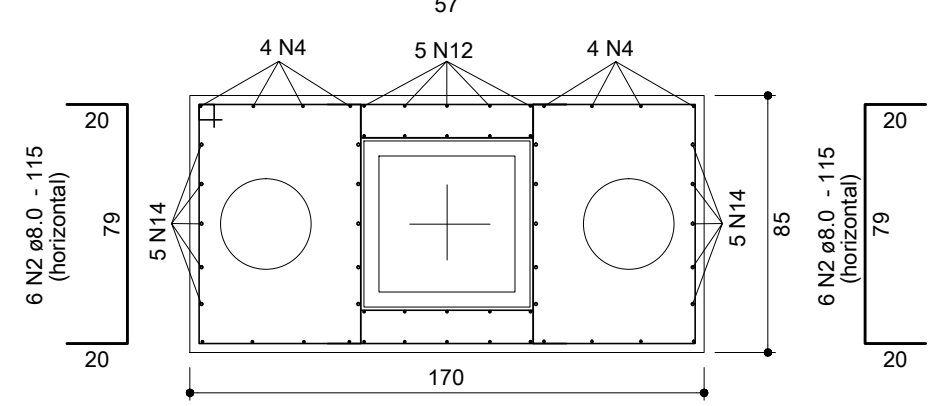
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	172	162	27864
	6	10.0	516	114	58624
	11	10.0	516	74	38184
	12	10.0	215	492	105780
	13	10.0	344	377	129688
	10	10.0	344	499	171656
	17	12.5	430	256	110080
	18	12.5	172	316	54352
	19	16.0	172	315	54180

Resumo do aço - Bloco Tipo 1

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	278.7	109.9
	10.0	5041.4	3108.2
	12.5	1644.4	1584
	16.0	541.8	855.1
PESO TOTAL (kg)			
CA50			5657.3

Vol. concreto = 65.88 m³
Área formas = 338.84 m²

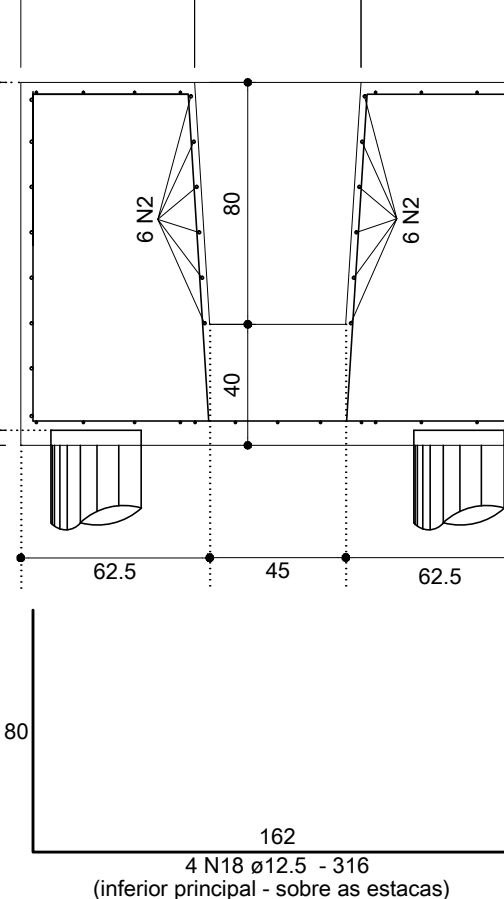
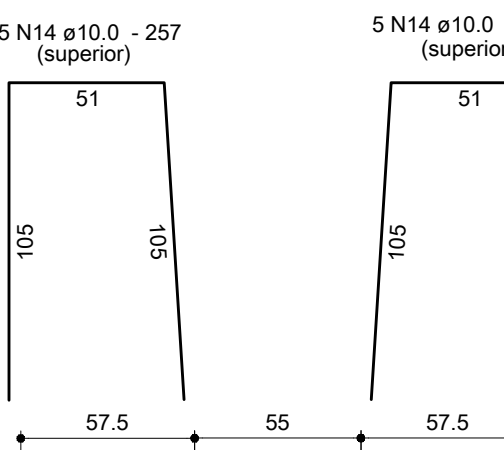
BLOCO TIPO 2
(14x)
2ø30cm



BLOCO TIPO 2 (14x)

B1, B2, B3, B4, B5, B7, B15, B44, B54, B55, B59, B191, B280, B427.

4 N1 ø8.0 - 162 (superior-complementar)



Relação do aço

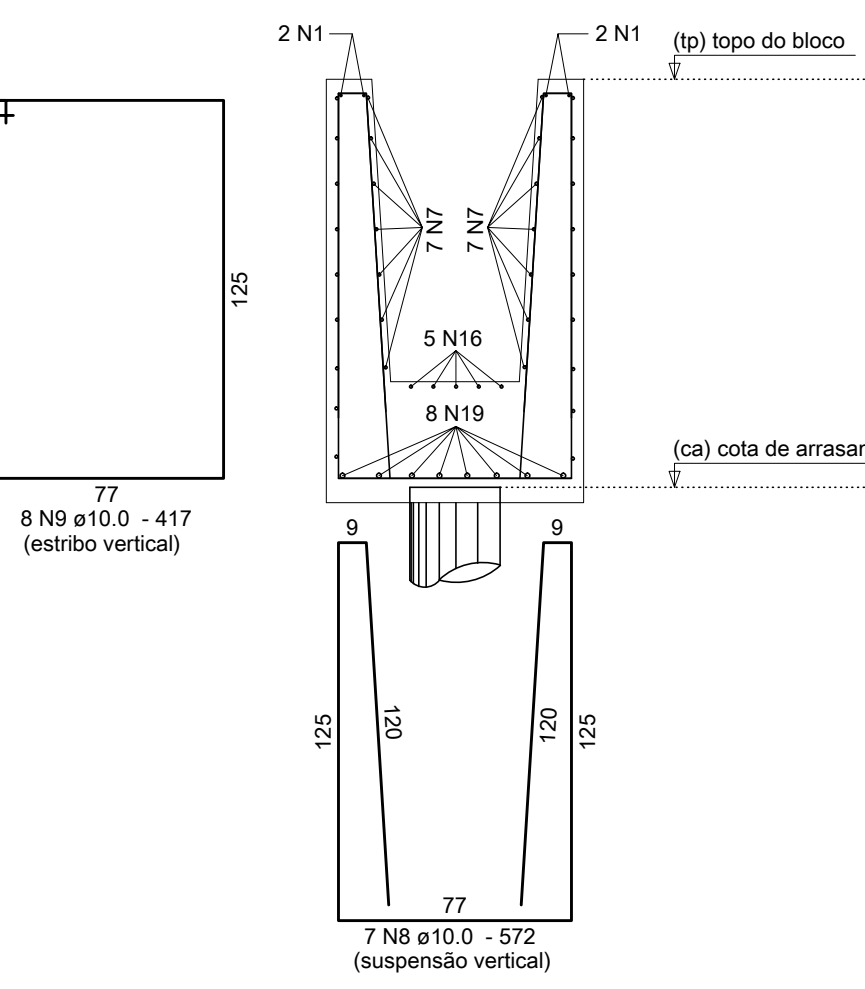
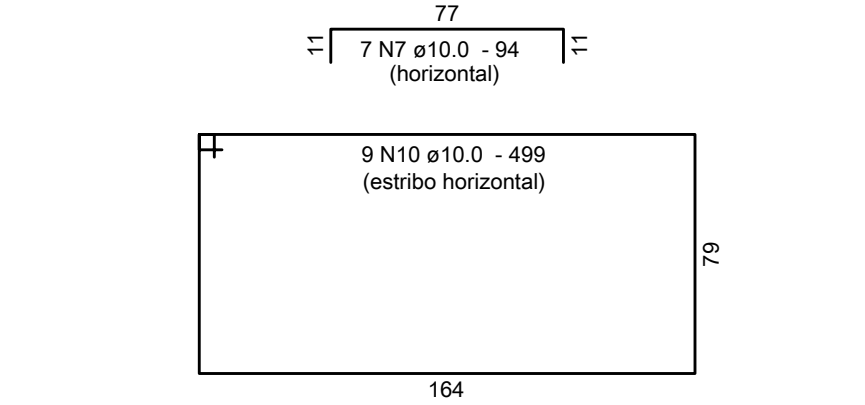
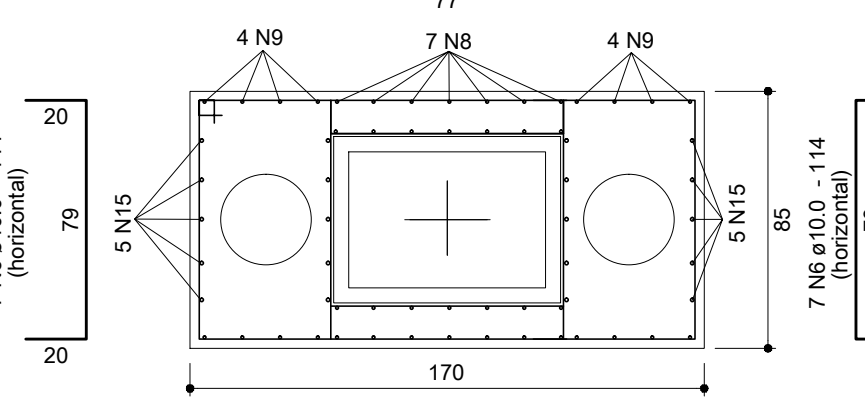
43xBLOCO TIPO 1			22xBLOCO TIPO 3		
AÇO	N	DIAM	Q	UNIT	C.TOTAL
CA50	1	8.0	316	162	51192
	2	8.0	168	115	19320
	3	8.0	168	75	12600
	4	8.0	112	376	42112
	5	8.0	112	498	55776
	6	10.0	824	114	93936
	7	10.0	308	94	28952
	8	10.0	154	572	88088
	9	10.0	176	417	73392
	10	10.0	542	499	270458
	11	10.0	516	74	38184
	12	10.0	285	492	140220
	13	10.0	344	377	129688
	14	10.0	140	257	35980
	15	12.5	220	286	62920
	16	12.5	110	216	23760
	17	12.5	430	256	110080
	18	12.5	284	316	89744
	19	16.0	348	315	109620

Resumo dos materiais

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	1810	714.2
	10.0	8989	5542
	12.5	2865.1	2760
	16.0	1096.2	1730.2
PESO TOTAL (kg)			
CA50			10746.4

Vol. concreto = 124.06 m³
Área formas = 663.44 m²

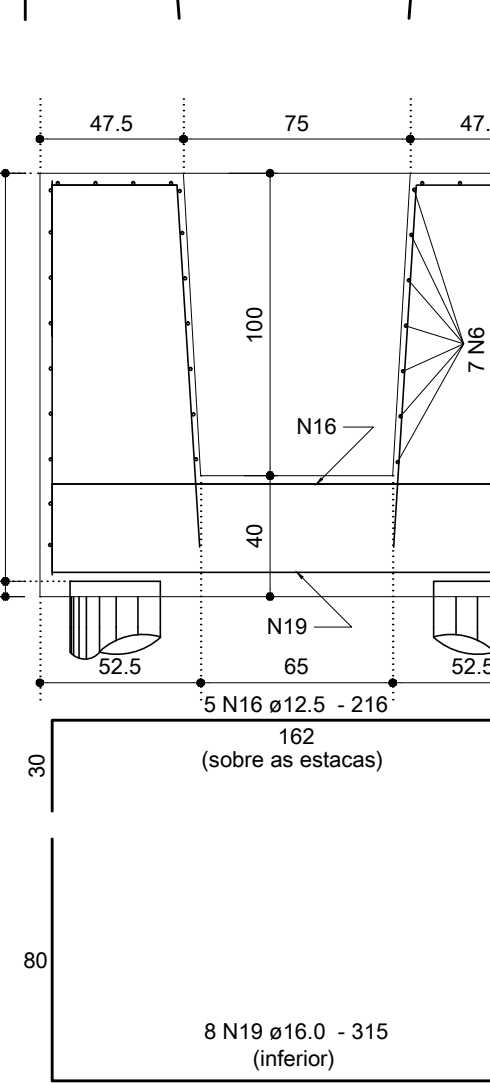
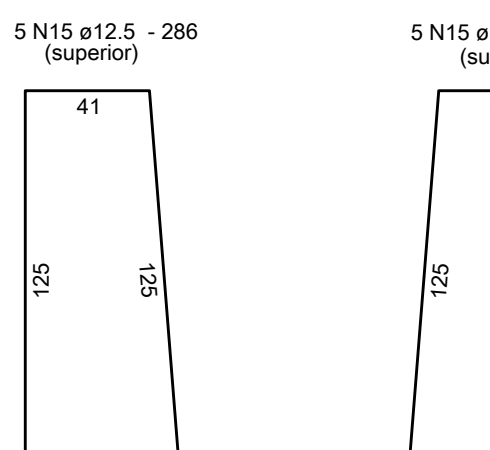
BLOCO TIPO 3
(22x)
2ø30cm



BLOCO TIPO 3 (22x)

B8, B9, B10, B11, B12, B13, B14, B67, B68, B69, B77, B78, B79, B116, B139, B167, B187, B281, B305, B329, B369, B405.

4 N1 ø8.0 - 162 (superior-complementar)



Relação do aço - Bloco Tipo 3

22xBLOCO TIPO 3

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	88	162	14256
	6	10.0	308	114	35112
	7	10.0	308	94	28952
	8	10.0	154	572	88088
	9	10.0	176	417	73392
	10	10.0	198	499	98802
	15	12.5	220	286	62920
	16	12.5	110	216	23760
	19	16.0	176	315	55440

Resumo do aço - Bloco Tipo 3

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	142.6	56.3
	10.0	3243.5	1999.7
	12.5	866.8	835
	16.0	554.4	875
PESO TOTAL (kg)			
CA50			3766

Vol. concreto = 36.74 m³
Área formas = 214.28 m²

Relação do aço - Bloco Tipo 2

14xBLOCO TIPO 2

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	56	162	9072
	2	8.0	168	115	19320
	3	8.0	168	75	12600
	4	8.0	112	376	42112
	5	8.0	112	498	55776
	12	10.0	70	492	34440
	14	10.0	140	257	35980
	18	12.5	112	316	35392

Resumo do aço - Bloco Tipo 2

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	1388.8	548
	10.0	704.2	434.2
	12.5	354	340.9
PESO TOTAL (kg)			
CA50			1323.1

Vol. concreto = 21.45 m³
Área formas = 110.32 m²

BLOCOS DO DESENHO:

BLOCO TIPO 1 (43x)

B6, B16, B19, B20, B23, B24, B27, B28, B31, B32, B35, B36, B39, B40, B43, B45, B52, B53, B56, B57, B58, B60, B63, B64, B70, B72, B112, B190, B192, B193, B194, B195, B223, B267, B279, B309, B364, B421, B422, B423, B424, B425, B426.

BLOCO TIPO 2 (14x)

B1, B2, B3, B4, B5, B7, B15, B44, B54, B55, B59, B191, B280, B427.

BLOCO TIPO 3 (22x)

B8, B9, B10, B11, B12, B13, B14, B67, B68, B69, B77, B78, B79, B116, B139, B167, B187, B281, B305, B329, B369, B405.

Anotações:



Notas:

01 NBR6118:2007 - Classe de Agressividade Ambiental = II.
02 NBR6118:2007 - Concreto com fck=25MPa - Aço CA-50.
03 NBR6118:2007 - Cobrimento para arranques e blocos: 3,0cm.
04 Unidades: diâmetro do aço em milímetro; espaçamento e comprimento em centímetro;
05 Para definição de formas e níveis consultar planta geral das fundações (FOR 01).

	Proger Engenharia Ltda		Av. Pres. Vargas, 590 – grupos 1309 a 1311 Centro, Rio de Janeiro, RJ CEP:20.071-000 Tel./Fax:(21)2432.0811/Cel.:(21)9987.9477 dionisio@progerengenharia.com.br dionisio@progerengenharia.com.br http://www.progerengenharia.com.br
	PROJETOS ESTRUTURAIS - CONSULTORIA - GERENCIAMENTO DIONISIO AUGUSTO AMERICO DE NEVES E SOUZA Engenheiro Civil – CREA-RJ 52.791-D IMB/FAU – Professor		
CLIENTE: PÁTIOMIX LINHARES SHOPPING CENTER SPE S.A.			DESENHO: 407_erm01_17_0.dwg
OBRA: SHOPPING PÁTIOMIX LINHARES Linhares – ES			ESCALA: 1:25
PROJETO ESTRUTURAL			DATA – REVISÃO: 12/05/12 – R0
BLOCOS DE PILARES PRÉ-MOLDADOS – 01/03			PROJETO: E407
			ARMATUÇÕES ARMOI-17