

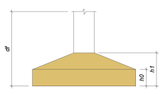
PLANTA DE LOCAÇÃO

Escala 1:50

Pilar

Nome	Seção (cm)	X (cm)	Y (cm)	Carga Máx. (tf)	Carga Mín. (tf)	Mx Máximo (kgf.m) Positivo	Mx Máximo (kgf.m) Negativo	My Máximo (kgf.m) Positivo	My Máximo (kgf.m) Negativo	Fz Máximo (tf) Positivo	Fz Máximo (tf) Negativo	Fundação Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / h0 (cm)	df (cm)
P1	15x30	15.00	3012.65	2.5	2.0	0	0	0	0	0.0	-0.5	0.1	0.0	55	70	30	40	120
P2	20x30	429.97	3012.65	5.1	4.1	0	0	0	0	0.4	-0.1	0.1	0.0	65	70	30	40	120
P3	15x30	845.00	3012.65	2.9	2.1	0	0	0	0	0.6	0.0	0.1	0.0	55	70	30	40	120
P4	15x30	15.00	2862.65	5.5	4.0	0	0	0	0	0.3	-0.2	0.1	0.0	65	80	25	40	120
P5	15x30	429.97	2862.65	9.2	6.1	0	0	0	0	0.4	-0.1	0.3	0.0	85	100	20	40	120
P6	15x30	845.00	2862.65	5.6	4.0	0	0	0	0	0.4	0.0	0.2	0.0	65	70	30	40	120
P7	15x30	15.00	2547.50	7.0	5.0	0	0	0	0	0.0	-0.5	0.0	-0.2	75	80	25	40	120
P8	15x30	430.00	2688.00	7.9	4.9	0	0	0	0	0.3	-0.2	0.0	-0.2	80	95	25	40	120
P9	15x30	572.50	2540.00	8.0	4.9	0	0	0	0	0.1	-0.4	0.3	-0.1	80	85	25	40	120
P10	15x30	852.50	2540.00	6.5	4.6	0	0	0	0	0.2	0.0	0.0	-0.2	75	80	25	40	120
P11	20x30	7.50	2282.50	8.0	5.0	0	0	0	0	0.0	-0.7	0.2	0.0	80	80	35	50	120
P12	15x30	580.00	2087.50	10.2	6.3	0	0	0	0	0.2	-0.3	0.0	-0.1	90	105	30	50	120
P13	15x30	852.50	2087.50	6.8	4.6	0	0	0	0	0.4	0.0	0.3	0.0	70	85	25	40	120
P14	15x30	7.50	1912.37	5.9	4.5	0	0	0	0	0.2	-0.1	0.1	-0.2	65	80	25	40	120
P15	20x30	290.00	1912.50	8.3	4.8	0	0	0	0	0.4	-0.2	0.1	0.0	80	95	25	40	120
P16	15x30	572.50	1912.80	2.2	1.7	0	0	0	0	0.3	0.0	0.2	0.0	55	70	30	40	120
P17	15x30	580.00	1737.50	9.8	6.1	0	0	0	0	0.2	-0.3	0.2	0.0	85	100	20	40	120
P18	15x30	852.50	1730.00	8.7	4.6	0	0	0	0	0.4	0.0	0.0	-0.2	70	85	25	40	120
P19	20x30	7.50	1544.96	9.0	4.9	0	0	0	0	0.0	-0.7	0.0	-0.3	80	90	35	50	120
P20	15x30	7.50	1277.50	4.5	3.5	0	0	0	0	0.2	-0.1	0.1	-0.2	60	75	30	40	120
P21	20x30	290.00	1277.50	6.9	4.2	0	0	0	0	0.3	-0.5	0.1	0.0	75	80	25	40	120
P22	15x30	572.50	1277.50	14.2	9.0	0	0	0	0	0.2	-0.3	0.1	0.0	105	120	20	40	120
P23	15x30	852.50	1277.50	8.6	4.5	0	0	0	0	0.3	0.0	0.1	0.0	75	85	25	40	120
P24	20x30	7.50	1012.30	8.0	4.9	0	0	0	0	0.0	-0.7	0.2	0.0	80	90	35	50	120
P25	15x30	580.00	817.50	9.8	6.1	0	0	0	0	0.3	-0.3	0.2	0.0	85	100	20	40	120
P26	15x30	852.50	825.00	6.8	4.6	0	0	0	0	0.4	0.0	0.2	0.0	70	85	25	40	120
P27	15x30	7.50	642.48	5.9	4.5	0	0	0	0	0.2	-0.2	0.1	0.0	65	80	25	40	120
P28	20x30	290.00	642.50	8.4	4.8	0	0	0	0	0.5	-0.2	0.1	0.0	80	95	25	40	120
P29	15x30	572.50	642.80	2.3	1.8	0	0	0	0	0.3	-0.2	0.1	-0.2	55	70	30	40	120
P30	15x30	580.00	467.50	10.0	6.2	0	0	0	0	0.3	-0.3	0.2	0.0	90	105	30	50	120
P31	15x30	852.50	460.00	6.9	4.7	0	0	0	0	0.5	0.0	0.0	-0.2	70	85	25	40	120
P32	20x30	7.50	272.67	8.0	4.9	0	0	0	0	0.0	-0.9	0.0	-0.3	80	80	35	50	120
P33	15x30	7.50	15.00	2.9	2.1	0	0	0	0	0.2	-0.1	0.0	-0.3	55	70	30	40	120
P34	20x30	290.00	7.50	4.8	3.4	0	0	0	0	0.3	-0.3	0.1	0.0	65	73	30	40	120
P35	15x30	572.50	15.00	8.2	5.7	0	0	0	0	0.3	-0.2	0.2	-0.2	80	95	35	50	120
P36	15x30	852.50	15.00	2.9	2.0	0	0	0	0	0.3	0.0	0.1	-0.1	55	70	30	40	120

Os esforços indicados nesta tabela são os valores máximos obtidos pela envoltória de todas as combinações definidas para as fundações. Para análises complementares, deve-se consultar o relatório de esforços na fundação, que apresenta os valores calculados para cada combinação.



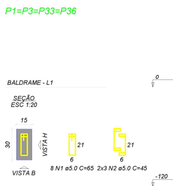
Locação no eixo X

Coordenadas (cm)	Nome
7.50	P11, P14, P19, P20, P24, P27, P32, P33
15.00	P1, P4, P7
290.00	P15, P21, P28, P34
429.97	P2, P5
430.00	P8
572.50	P9, P16, P22, P29, P35
580.00	P12, P17, P25, P30
845.00	P3, P6
852.50	P10, P13, P18, P23, P26, P31, P36

Locação no eixo Y

Coordenadas (cm)	Nome
3012.65	P1, P2, P3
2862.65	P4, P5, P6
2555.00	P8
2547.50	P7
2540.00	P9, P10
2282.50	P11
2093.00	P13
2087.50	P12
1912.80	P16
1912.50	P15
1912.37	P14
1737.50	P17
1730.00	P18
1544.96	P19
1277.50	P20, P21, P22, P23
1012.30	P24
825.00	P26
817.50	P25
642.80	P29
642.50	P28
642.48	P27
467.50	P30
460.00	P31
272.67	P32
15.00	P33, P35, P36
7.50	P34

P1=P3=P33=P36



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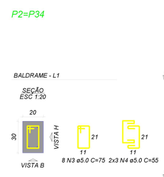

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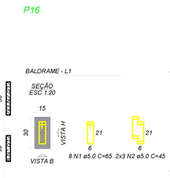
P17=P25



P7



P16



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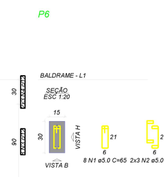

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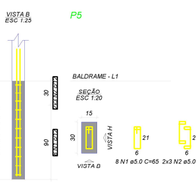

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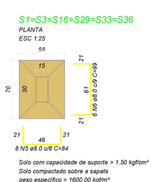

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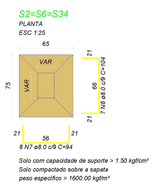

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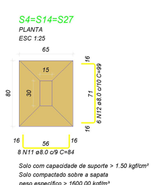

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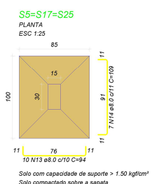

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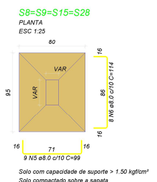

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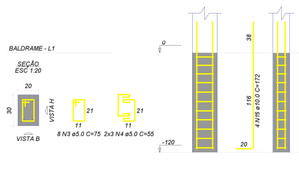

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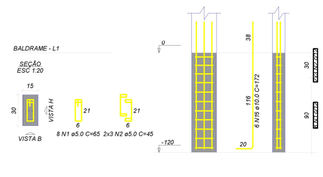

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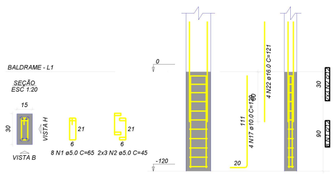

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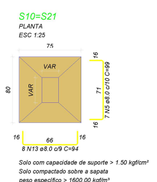

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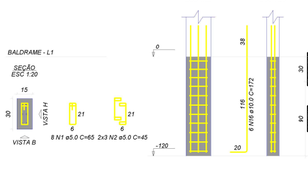

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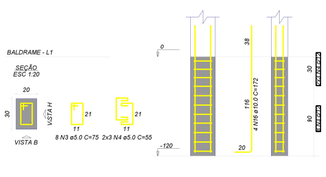

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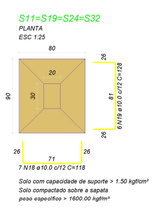

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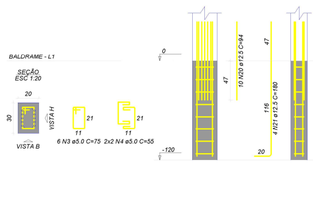

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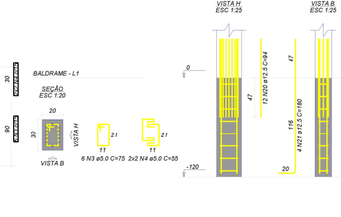

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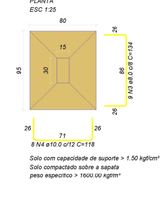

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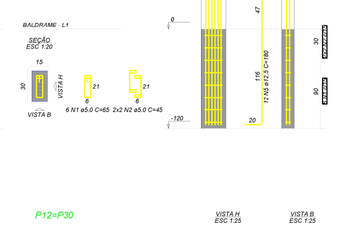

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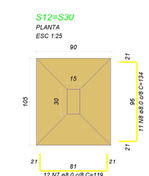

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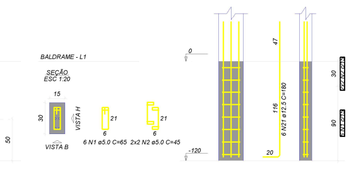

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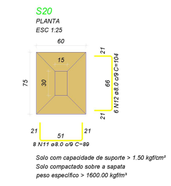

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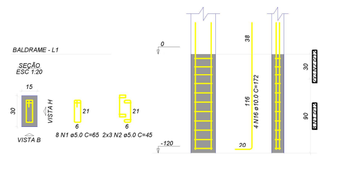

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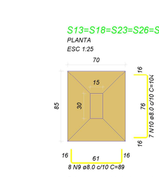

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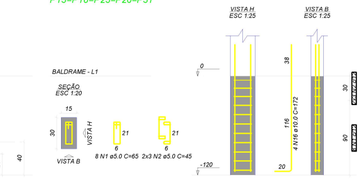

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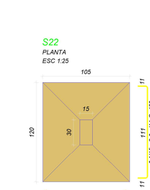

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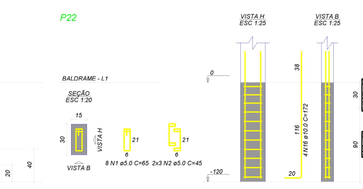

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	6	65	390
	2	5.0	8	45	180
CA50	3	8.0	8	134	1206
	4	8.0	4	180	720
	5	12.5	12	180	2160

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	12.1	9.3
	12.5	21.6	22.9
CA60	5.0	5.7	1
PESO TOTAL (kg)			
CA50	34.5		
CA60	1		

Volume de concreto (C-25) = 0.35 m³
Área de forma = 1.66 m²

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	112	65	7280
	2	5.0	64	45	2880
	3	5.0	64	55	3520
	4	5.0	15	180	2700
CA50	5	8.0	68	94	6392
	6	8.0	24	94	2256
	7	8.0	24	94	2256
	8	8.0	24	94	2256
	9	8.0	9	94	846
	10	8.0	7	94	658
	11	8.0	64	94	6016
	12	10.0	64	172	11008
	13	8.0	30	94	2820
	14	12.5	8	172	1376
	15	10.0	78	172	13416
	16	12.5	6	172	1032

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	225.8	87.8
	10.0	198.7	84
CA60	5.0	139.2	31.9
PESO TOTAL (kg)			
CA50	191.9		
CA60	21.9		

Volume de concreto (C-25) = 3.36 m³
Área de forma = 33.82 m²

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	93	65	6045
	2	5.0	68	45	3060
	3	5.0	30	55	1650
	4	5.0	34	55	1870
CA50	5	8.0	56	112	6272
	6	8.0	24	94	2256
	7	8.0	24	94	2256
	8	8.0	23	134	3082
	9	8.0	23	94	2162
	10	8.0	40	88	3520
	11	8.0	35	104	3640
	12	8.0	8	88	704
	13	8.0	6	104	624
	14	8.0	16	94	1504
	15	8.0	12	112	1344
	16	8.0	12	134	1608
	17	10.0	36	172	6192
	18	10.0	24	172	4128
	19	10.0	24	172	4128
	20	12.5	24	172	4128
	21	12.5	46	84	4032
	22	12.5	28	180	5040
	23	16.0	4	172	688

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	269.1	177.7
	10.0	185.4	157.4
	12.5	93.6	99.3
	16.0	24.8	40.2
CA60	5.0	145.1	24.6
PESO TOTAL (kg)			
CA50	532.1		
CA60	24.6		

Volume de concreto (C-25) = 5.47 m³
Área de forma = 31.40 m²

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PREFEITURA MUNICIPAL DE ARARANGUA - SC
SECRETARIA DE OBRAS, VIAÇÃO E SERVIÇOS URBANOS
RUA Dr. VIRGULINO DE QUEI .200 - CENTRO
ADM. CESAR ANTONIO CESA / CRISTIANO DA SILVA COSTA

OBRA: CEI SÃO JOSÉ

PROJETO: ESTRUTURAL

BAIRRO :
LOCAL :
REFERÊNCIA:

RESP. TECNICO: CRISTIANO CORAL

ASSUNTO: LOCAÇÃO SALAS NOVAS FUNDAÇÕES SAPATAS SALAS

AREA DA EDIFICAÇÃO:	1177,55m²
TAXA DE OCUPAÇÃO:	0,0%
PERMEABILIDADE:	0,0%
AREA DO TERRENO:	
ESCALA:	1:50
DATA:	AGOSTO 2026

LEVANTAMENTO: CRISTIANO CORAL
PROJETO: CRISTIANO CORAL
DESENHO: CRISTIANO CORAL

FRANCHA: 17