

SEÇÃO A-A

Top reinforcement details (from left to right):

- 2 N18 ϕ 16.0 - 480 (434)
- 1 N41 ϕ 25.0 - 1000
- 3 N50 ϕ 25.0 c/20 - 545 (280)
- 1 N50 ϕ 25.0 - 545 (2^{ca}camada) (300)
- 2x3 N7 ϕ 10.0 - 1200 (armadura pele)
- 1e2^{ca}camada (75.3)
- 1 N41 ϕ 25.0 - 1200 (170)
- 2 N38 ϕ 25.0 ϕ 40 - 505 (270)
- 1 N41 ϕ 25.0 - 1200 (170)
- 2 N39 ϕ 25.0 ϕ 40 - 510 (275)
- 1 N41 ϕ 25.0 - 1200 (170)
- 2 N39 ϕ 25.0 ϕ 40 - 510 (275)
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- 2 N39 ϕ 25.0 ϕ 40 - 510 (275)
- 1 N41 ϕ 25.0 - 1200 (170)
- 2 N39 ϕ 25.0 ϕ 40 - 510 (275)
- 1 N42 ϕ 25.0 - 762 (170)
- 3 N40 ϕ 25.0 c/20 - 525 (280)
- 2 N45 ϕ 25.0 - 425 (175)
- 2 N46 ϕ 25.0 - 765 (708)

Bottom reinforcement details (from left to right):

- 25 N1 c/20 (55)
- 1 N47 ϕ 25.0 - 540 (647)
- 1 N48 ϕ 25.0 - 675 (818)
- 2 N49 ϕ 25.0 - 846
- 22 N1 c/7.5 (165)
- 22 N1 c/20 (160)
- 16 N1 ϕ 10.0 (220)
- 22 N1 c/7.5 (165)
- 21 N1 c/20 (165)
- 22 N1 c/7.5 (225)
- 1 N15 ϕ 16.0 - 355
- 22 N1 c/7.5 (165)
- 21 N1 c/20 (225)
- 1 N14 ϕ 16.0 - 355
- 22 N1 c/7.5 (165)
- 21 N1 c/20 (225)
- 1 N14 ϕ 16.0 - 355
- 22 N1 c/7.5 (165)
- 21 N1 c/20 (220)
- 1 N15 ϕ 16.0 - 350
- 22 N1 c/7.5 (165)
- 21 N1 c/20 (210)
- 2 N16 ϕ 16.0 c/40 - 375 (1061)
- 9 N1 c/20 (140)
- 28 N1 c/5 (140)

Section properties and dimensions:

- Overall width: 64
- Overall height: 30
- Effective depth: 24
- Bottom reinforcement spacing: 479 N1 ϕ 6.3 - 188

[illegible]

2 N23 ø16.0 - 936
829

64

2x3 N10 ø10.0 - 829
(armadura pele)

0.00

A

P196

22 N1 ø15

110

190

25 N1 ø20

13 N1 ø12.5

162.5

V51

1 N61 ø25.0 - 500

772

1 N62 ø25.0 - 800

829

4 N63 ø25.0 - 884

35

35

SEÇÃO A-A

70

30

64

24

60 N1 ø6.3 - 188

Technical drawing of a reinforced concrete slab (LA) showing reinforcement details. The drawing includes a top view and a side view.

Top View:

- Overall dimensions: 818 (width) x 881 (length).
- Reinforcement: 2 N24 ϕ 16.0 - 881 (top bars), 2x3 N11 ϕ 10.0 - 818 (armadura pele) (bottom bars).
- Supports: P274(J) on the right side.
- Section line A-A is indicated.

Side View:

- Overall dimensions: 818 (width) x 930 (height).
- Reinforcement: 4 N37 ϕ 20.0 - 930 (vertical bars), 38 N1 ϕ 20 (horizontal bars).
- Section line A-A is indicated.

Section A-A:

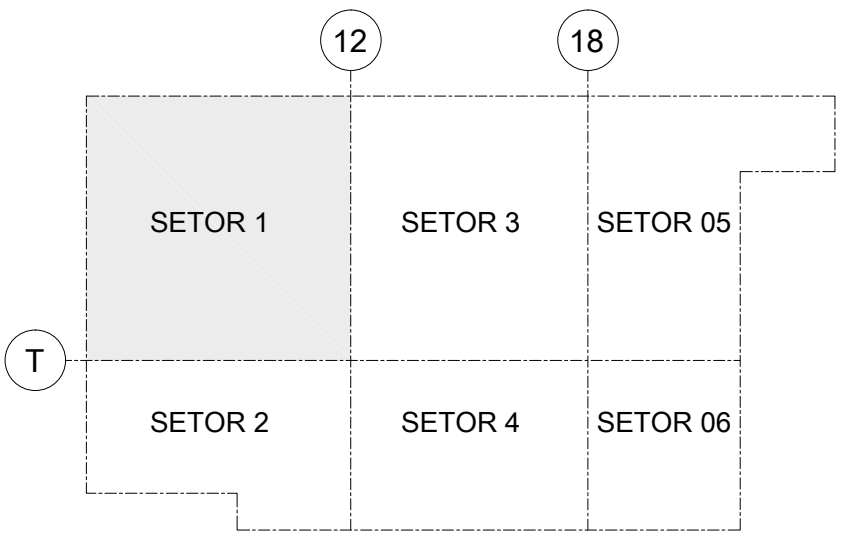
- Overall dimensions: 818 (width) x 64 (height).
- Reinforcement: 24 (top bars), 38 N1 ϕ 6.3 - 188 (bottom bars).

Technical drawing of a rectangular plate. The top view shows a rectangle with overall dimensions 70 (height) and 30 (width). It features a central rectangular area with a smaller inner rectangle. The bottom view shows a rectangle with overall dimensions 64 (height) and 24 (width). A small cross symbol is located in the top-left corner of the bottom view.

Relação do Aço						
V13, V28, V60, V63, V65.						
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)	
CA50	1	6,3	1253	188	235664	
	2	6,3	2	240	480	
	3	6,3	2	185	370	
	4	6,3	2	170	340	
	5	6,3	2	175	350	
	6	8,0	35	188	6580	
	7	10,0	78	1200	93600	
	8	10,0	6	215	1290	
	9	10,0	12	1120	13440	
	10	10,0	6	829	4974	
	11	10,0	6	818	4908	
	12	12,5	3	835	2505	
	13	16,0	55	844	46420	
	14	16,0	3	355	1065	
	15	16,0	4	350	1400	
	16	16,0	2	375	750	
	17	16,0	4	1107	4428	
	18	16,0	2	480	960	
	19	16,0	2	844	1688	
	20	16,0	1	345	345	
	21	16,0	1	335	335	
	22	16,0	2	510	1020	
	23	16,0	2	936	1872	
	24	16,0	2	881	1762	
	25	16,0	5	860	4300	
	26	16,0	2	325	650	
	27	16,0	2	1120	2240	
	28	16,0	3	445	1335	
	29	16,0	2	645	1290	
	30	16,0	2	425	850	
	31	16,0	4	670	2680	
	32	16,0	2	430	860	
	33	16,0	2	420	840	
	34	16,0	2	600	1800	
	35	16,0	4	490	1960	
	36	16,0	2	1200	2400	
37	20,0	4	930	3720		
38	25,0	2	505	1010		
39	25,0	11	510	5610		
40	25,0	6	725	3150		
41	25,0	13	1200	15600		
42	25,0	1	562	762		
43	25,0	1	1000	1000		
44	25,0	1	965	965		
45	25,0	2	725	1450		
46	25,0	2	465	930		
47	25,0	1	540	540		
48	25,0	1	675	675		
49	25,0	2	846	1692		
50	25,0	5	545	2725		
51	25,0	1	715	715		
52	25,0	2	872	1744		
53	25,0	2	940	1880		
54	25,0	2	515	1030		
55	25,0	1	995	995		
56	25,0	1	650	650		
57	25,0	1	1200	1200		
58	25,0	1	1115	1115		
59	25,0	1	530	2650		
60	25,0	1	840	840		
61	25,0	1	500	500		
62	25,0	1	800	800		
63	25,0	1	884	3536		

Resumo dos Materiais

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	2371.1	580.2
	8.0	65.8	26
	10.0	1182.2	728.8
	12.5	25.1	24.1
	16.0	832.5	1314
	20.0	37.2	91.7
	25.0	528.3	2035.5
PESO TOTAL (kg)		Vol. concreto = 41.34 m³ Área formas = 318.75 m²	
CA50	4800.3		



DIÂMETRO (D) DOS PINOS DE DORMENTAMENTO PARA GANCHOS

SEM ESCALA

ESPAÇADOR PARA CAMADAS DE SEÇÃO TRANSVERSAL

SEM ESCALA

BITOLA (Ø)	CA50	CA60
<20mm	5xØ	6xØ
≥20mm	8xØ	—
estribo ≤10mm	3xØ	3xØ
estribo ≥10mm	3xØ	3xØ

NBR-6118:2003 (Itens 4.2.3 e 9.4.6.1)

01 NBR6118:2007 - Classe de Agressividade Ambiental = II.
02 NBR6118:2007 - Concreto com $f_{ck}=25\text{MPa}$ - Aço CA-50.
03 NBR6118:2007 - Cobrimento para vigas, em todas as faces: 3,0cm.
04 Unidades: diâmetro do aço em milímetro; espaçamento e comprimento em centímetro;

01	05/07/12	Correção no detalhamento da V65.	Dionísio
00	02/07/12	Emissão inicial.	Dionísio
REVISÃO	DATA	MODIFICAÇÕES	RESP.



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CLIENTE:	PATIOMIX LINHARES SHOPPING CENTER SPE S.A.		DESENHO:	407_err03_19_r1.dwg
OBRA:	SHOPPING PÂTIOMIX LINHARES Linhares - ES		ESCALA:	seções: 1:25 vigas: 1:100
PROJETO ESTRUTURAL TETO DO SUBSOLO - VIGAS - SETOR 1 - 04/04			DATA - REVISÃO:	05/07/12 - R1
			PROJETO:	E407
			ARMAÇÕES	ARMOS-19