

Technical drawing of a bridge section (Corte A) showing a cross-section of a bridge with two main spans. The drawing includes dimensions for the spans (20m, 28.3m, 1.4m), heights (4.0m, 1.4m, 0.5m), and various reinforcement details (e.g., 2NI 40B, 2NI 120/C, 16NI 505c/18). A scale of 1:20 is indicated.

The drawing shows a section of a staircase with a landing. The full view on the left includes a landing with a diameter of 75, a top slab labeled 2N1708 with a centerline C=94, a circular opening of diameter 40, and a landing slab labeled 2N1608 with a centerline C=94. Below the landing is a flight of stairs with a slab labeled 3x IN1605 with a centerline C=94. The total height of the section is 3.18. The detail on the right, labeled 'Corte A' and 'Escala 1:20', shows a vertical section of the landing with a height of 40 and a width of 14. Below this detail is a small rectangular element with a height of 18 and a width of 9, labeled 3N1605 C=98.

Technical drawing of a kitchen layout showing a plan view and a side elevation.

**Plan View:**

- Cabinets:** V 79 (width 127), V 82 (width 167), V 84 (width 167).
- Countertop:** 2N2 0206 C=319.
- Island:** 2N1 1926 C=329.
- Sinks:** 14x40 (top left), 14x40 (bottom right).
- Stove:** 14x40 (bottom right).
- Island Dimensions:** 6x1N2 Ø5, 10x1N2 Ø5pl/8.
- Dimensions:** 127, 167, 167, 127, 106, 77, 166, 14, 8.

**Side Elevation:**

- Scale:** 1:20.
- Dimensions:** 14, 8.

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Technical drawing of a door assembly, showing a side elevation and a cross-section (Corte A).

**Side Elevation:**

- Top left: P47
- Top right: V 49
- Top center: 2N4909 C=209
- Handle: 1x40
- Lock: A
- Bottom left: 40
- Bottom center: 152
- Bottom right: 9
- Bottom center: 2N4609 C=209
- Bottom center: 9x1N5005 c/1 Ø

**Corte A (Cross-section):**

- Top: 40
- Right: 14
- Bottom: 35
- Left: 9
- Bottom: 9N5005 C=96

Scale: Escala 1:20

Technical drawing of a reinforced concrete slab (V57) showing dimensions, reinforcement, and a cross-section (Corte A).

**Dimensions:**

- Overall width: 200
- Overall length: 174
- Clear width: 2N5206 C=389
- Clear length: 2N5106 C=389

**Reinforcement:**

- Top reinforcement: 10xN5305s/d 8
- Bottom reinforcement: 9xN5305s/d 8
- Vertical spacing: 150

**Corte A (Cross-section):**

- Scale: Escala 1:20
- Height: 40
- Width: 14
- Reinforcement: 19N5305 C=96

Technical drawing of a door assembly showing a front elevation and a side section (Corte A-A).

**Front Elevation:**

- Width: 134
- Height: 209
- Handle (A) and Lock (B) are indicated.
- Dimensions: 2N5506 C=209, 2N5408 C=209, 9x1N560521/ø

**Side Section (Corte A-A):**

- Thickness: 40
- Height: 209
- Handle (A) and Lock (B) are indicated.
- Dimensions: 2N5506 C=209, 9x1N560521/ø

**Labels:**

- V70
- P49
- Corte A-A
- Escala 1:20

Technical drawing of a reinforced concrete slab (V91) and its cross-section (Corte A).

**Plan View (V91):**

- Overall dimensions: 283m x 20m.
- Central circular column (a) with diameter 14x40.
- Reinforcement details:
  - INGO20 C=90 2ª camada
  - INGO20 C=90 1ª
  - INGO20 C=90 3ª
- Beam dimensions: 1N5000 C=265, 2N5700 C=332, 1x1N050d/10.
- Slab thickness: 24cm.
- Scale: 1:20.

**Corte A (Cross-section):**

- Dimensions: 14m x 20m.
- Reinforcement details: 1NG105 C=90.
- Scale: 1:20.

Technical drawing of a roof structure (Corte A) showing a cross-section with various beams and supports. The drawing includes dimensions for spans (320, 287, 313, 187) and heights (40, 14, 35). It also shows beam specifications like 2N6308 C=935, 2N7008 C=540, 2N6708 C=920, 2N6608 C=525, and 15xI NT1705d18. A scale of 1:20 is indicated.

Technical drawing of a metal structure, showing front and side views with dimensions and material specifications.

**Front View:**

- Top flange: V 93, P136, 134
- Top flange width: 2N7328 C=209
- Central hole: (a) 14x40
- Central hole position: A
- Bottom flange: 2N7208 C=209
- Bottom flange width: 10x1N7405d16
- Overall height: 40
- Overall width: 14

**Side View:**

- Side flange: 1N7425 C=96
- Side flange width: 14
- Side flange height: 40
- Side flange position: A

Technical drawing of a rectangular table (1ON7705 C=96) showing the top view and a side view (Corte A).

**Top View Dimensions:**

- Overall Width: 124
- Overall Depth: 209
- Central Oval Cutout Width: 40
- Central Oval Cutout Depth: 14
- Central Support Leg (A)
- Corner Legs (B)

**Side View (Corte A) Dimensions:**

- Table Height: 35
- Table Width: 96

**Labels:**

- V 93 (Top Left Corner)
- V 97 (Top Right Corner)
- 2N7606 C=209 (Top Edge)
- 2N7526 C=209 (Bottom Edge)
- 10x1N7705 col B (Bottom Edge)
- 1ON7705 C=96 (Bottom Edge)

Technical drawing of a roof structure (Corte A) showing a longitudinal section. The drawing includes dimensions for various components and materials.

**Dimensions and Components:**

- Top Chords:**
  - Left end: V 71
  - Supports: P 140, P 141, P 142, P 143, P 144
  - Distances between supports: 293, 314, 420, 560, 187
  - Material: 2N8008 C=1065
- Internal Bracing (a, b, c, d, e):**
  - Material: 14x40
  - Distances between bracing points: 264, 292, 406, 346, 166
  - Material: 15x1N8205d18, 17x1N8205d18, 23x1N8205d18, 20x1N8205d18, 10x1N8205d18
- Bottom Chords:**
  - Material: 2N7808 C=1040, 2N7908 C=560
  - Distances between bracing points: 264, 292, 406, 346, 166
  - Material: 15x1N8205d18, 17x1N8205d18, 23x1N8205d18, 20x1N8205d18, 10x1N8205d18
- End Conditions:**
  - Left end: 14
  - Right end: 14
  - Material: 85N8205 C=98
- Section Details:**
  - Section A: 40, 14, 2, 3
  - Section B: 40, 14, 2, 3
  - Section C: 40, 14, 2, 3

Technical drawing of a bridge structure, showing a plan view and a longitudinal section.

**Plan View (Top):**

- Spans and dimensions:
  - Span 1: 14x40
  - Span 2: 14x40
  - Span 3: 14x40
  - Span 4: 14x40
  - Span 5: 14x40
  - Span 6: 14x40
  - Span 7: 14x40
  - Span 8: 14x40
- Dimensions:
  - Span 1: 14x40
  - Span 2: 14x40
  - Span 3: 14x40
  - Span 4: 14x40
  - Span 5: 14x40
  - Span 6: 14x40
  - Span 7: 14x40
  - Span 8: 14x40

**Longitudinal Section (Bottom):**

- Bridge piers: P36, P37, P38, P39, P40, P41, P42, P43.
- Dimensions:
  - Span 1: 14x40
  - Span 2: 14x40
  - Span 3: 14x40
  - Span 4: 14x40
  - Span 5: 14x40
  - Span 6: 14x40
  - Span 7: 14x40
  - Span 8: 14x40

Elemento	Pos.	Diam.	Q.	Comp. (cm)	CA-50-A (cm)	CA-60-B (kg)
V 12	1	Ø8	2	334	1828	7.3
	2	Ø8	2	195	370	1.5
	3	Ø8	1	155	155	0.6
	4	Ø8	1	145	145	0.6
	5	Ø8	2	934	1868	7.3
	6	Ø8	2	150	300	1.2
	7	Ø8	2	130	260	1.0
	8	Ø8	2	120	240	0.9
	9	Ø8	2	60	120	0.5
	10	Ø5	35	118	4130	
Total+10%:					23.0	7.2
V 13	11	Ø10	2	336	672	4.2
	12	Ø10	1	190	190	1.2
	13	Ø8	2	344	688	2.7
	14	Ø8	4	100	400	1.6
	15	Ø5	16	98	1568	
Total+10%:					10.7	2.8
V 14	16	Ø8	2	94	188	0.7
	17	Ø8	2	94	188	0.7
	18	Ø5	3	96	294	
Total+10%:					1.5	0.6
V 15	19	Ø8	2	329	658	2.6
	20	Ø8	2	98	196	2.5
	21	Ø5	16	98	1568	
Total+10%:					5.6	2.8
V 16	22	Ø8	2	1100	2200	8.6
	23	Ø8	2	1085	2170	8.5
	24	Ø10	2	540	1080	6.5
	25	Ø10	2	525	1050	6.6
	26	Ø8	1	515	515	2.0
	27	Ø8	1	310	620	2.4
	28	Ø8	1	305	305	1.2
	29	Ø8	1	300	300	1.2
	30	Ø8	4	1120	4480	17.7
	31	Ø8	2	1070	2140	8.4
	32	Ø8	2	225	450	1.8
	33	Ø10	2	190	380	2.4
	34	Ø8	2	180	360	1.4
	35	Ø8	4	175	700	2.7
	36	Ø8	1	165	165	0.6
	37	Ø8	1	160	160	0.6
	38	Ø8	2	1125	2250	1.0
	39	Ø8	2	125	250	1.0
	40	Ø8	1	115	115	0.5
	41	Ø5	163	98	15974	
	Total+10%:					82.9
V 17	42	Ø10	1	372	372	2.3
	43	Ø8	2	381	764	3.1
	44	Ø8	2	400	800	3.1
	45	Ø8	4	110	440	1.7
	46	Ø8	2	90	160	0.7
	47	Ø5	20	98	1960	
	Total+10%:					12.0
V 18	48	Ø8	2	209	418	1.6
	49	Ø8	2	209	418	1.6
	50	Ø5	9	98	882	
Total+10%:					3.5	1.4
V 19	51	Ø8	2	389	778	3.1
	52	Ø8	2	389	778	3.1
	53	Ø5	19	98	1862	
Total+10%:					6.8	2.9
V 20	54	Ø8	2	209	418	1.6
	55	Ø8	2	209	418	1.6
	56	Ø5	9	98	882	
Total+10%:					3.5	1.4
V 21	57	Ø8	2	332	664	2.6
	58	Ø8	1	265	265	1.0
	59	Ø8	2	316	632	2.6
	60	Ø8	4	90	360	1.4
	61	Ø5	16	98	1568	
	Total+10%:					8.4
V 22	62	Ø8	2	1100	2200	8.6
	63	Ø8	2	345	690	2.7
	64	Ø8	2	110	220	0.7
	65	Ø8	2	355	710	2.8
	66	Ø5	69	98	6762	
Total+10%:					25.1	10.6
V 23	67	Ø8	2	920	1840	7.2
	68	Ø8	2	525	1050	6.3
	69	Ø8	2	110	220	0.7
	70	Ø8	2	540	1080	4.2
	71	Ø5	69	98	6762	
Total+10%:					25.1	10.6
V 44	72	Ø8	2	209	418	1.6
	73	Ø8	2	209	418	
	74	Ø5	10	98	980	
Total+10%:					3.5	1.7
V 45	75	Ø8	2	209	418	1.6
	76	Ø8	2	209	418	1.6
	77	Ø5	10	98	980	
Total+10%:					3.5	1.7
V 46	78	Ø8	2	1040	2080	8.2
	79	Ø8	2	560	1120	4.4
	80	Ø8	2	1055	2110	8.4
	81	Ø8	2	585	1170	4.6
	82	Ø5	85	98	8330	
	Total+10%:					28.2
Ø5:					0.0	94.6
Ø8:					217.6	0.0
Ø10:					25.7	0.0
Total:					243.3	94.6

Escala 1:50

REVISÃO:	03		
REVISÃO:	02		
REVISÃO:	01		
EMIÇÃO INICIAL:	*	24/05/2013	1ª ENTREGA PARA A PREFEITURA

  

	<p align="center"><b>PREFEITURA MUNICIPAL DE JOINVILLE</b></p> <p>END.: Av. Herman August Lepper, nº10, Centro TEL.: (47)3431-3233 – Joinville – Santa Catarina CNPJ: 83.169.623/0001-10</p>	<p><b>COORDENAÇÃO DE PROJETOS:</b></p> <p><b>SOLAR</b>  <small>ENGENHARIA</small>  <b>SOLAR CONSTRUÇÕES, PROJETOS E CONSULTORIA LTDA.</b>  CNPJ: 13.411.864/0001-48  TEL: (31)3568-2814 - BH/MG  <b>eken@solarengenharia.eng.br</b></p>
	<p align="center"><b>CEI CONJ. HAB. IRMÃ M. DA GRAÇA BRAZ</b></p>	<p>ÁREA DO TERRENO:</p> <p align="center">9.099,00 m²</p> <p>ÁREA CONSTRUÍDA:</p> <p>ÁREA PERMEÁVEL:</p>

  

<p>PREFEITURA MUNICIPAL DE JOINVILLE</p> <p>CNPJ: 83.169.623/0001-10</p> <p align="center">CONTRATANTE</p>	<p align="center">EDUARDO KEN MIZUTA</p> <p align="center">CREA: 139067/D</p> <p align="center">RESPONSÁVEL TÉCNICO</p>
<p>ENDEREÇO:</p> <p>RUA PAPA JOÃO PAULO I, (232) – JARDIM IRIRÍ – JOINVILLE</p>	<p>ARQUIVO:</p> <p>001-006-2013-EXE-EST-05</p>
<p>DETALHES:</p> <p>DETALHAMENTO VIGAS BALDRAME</p> <p>PARTE 1</p>	<p>PROJETO:</p> <p align="center"><b>ESTRUTURAL</b></p> <p>DESENHISTA:</p> <p>ISABELLA TEOTONIO DIAS</p>

<p>DATA:</p> <p>MAIO/2013</p>	<p>FOLHA:</p> <p align="right">05 / 15</p>
<p>ESCALA:</p> <p>INDICADA</p>	