

The drawing consists of two parts: a cross-section (top) and a longitudinal section (bottom).

Cross-section (top): Shows a rectangular beam with a width of 200 mm and a height of 400 mm. The reinforcement includes 2N2Ø10 bars at the top and 2N1Ø10 bars at the bottom. The concrete strength is C=515. The top reinforcement is labeled with circles containing 'a' and 'a', and the bottom reinforcement is labeled with circles containing 'b' and 'b'. The dimensions 238 and 243 are indicated for the top reinforcement layout.

Longitudinal section (bottom): Shows the beam's length with a total length of 201 mm. The reinforcement is labeled with circles containing 'a' and 'a' at the top and 'b' and 'b' at the bottom. The dimensions 25, 201, 111, 211, and 20 are indicated for the longitudinal section layout.

Fig. 10.10

Technical drawing of a reinforced concrete beam (Fig. 10.10). The drawing shows the beam's profile with dimensions and reinforcement details. The top reinforcement consists of 3N6Ø10 bars with a center-to-center spacing of 1012 mm. The bottom reinforcement consists of 2N5Ø10 bars with a center-to-center spacing of 365 mm. The beam is divided into three sections: a left section with 28x1N7Ø6.3c/16 bars, a middle section with 2N4Ø10 bars, and a right section with 14x1N7Ø6.3c/16 bars. The total length of the beam is 520 mm. The width of the beam is 200 mm. The drawing also shows a cross-section 'Corte A' with dimensions 40 mm height and 20 mm width. The reinforcement is labeled with 'a' and 'b' for top bars and 'c' for bottom bars. The beam is supported by two points, with a span of 250 mm between them. The drawing includes a scale bar and a north arrow.

Technical drawing of a reinforced concrete beam (Fig. 10.10). The drawing includes a plan view (top) and a cross-section (right).

Plan View:

- Beam length: 427 units.
- Supports: E28, E30, E31, E57.
- Span lengths: 49 (E28-E30), 301 (E30-E31), 77 (E31-E57).
- Reinforcement: 3N13Ø10 C=1015 (top), 2N12Ø10 C=445 (bottom).
- Column dimensions: 20x40 (E28, E30, E31), 20x40 (E57).

Cross-section (Corte A):

- Width: 20 units.
- Height: 40 units.
- Reinforcement: 3N14Ø6.3 (top), 2N12Ø10 (bottom).

Technical drawing of a beam-column joint (Corte A) showing reinforcement details.

Plan View (Top):

- Beam length: 253 + 265 = 518 mm.
- Beam reinforcement: 2N9Ø10 C=552.
- Column width: 20 mm.
- Column reinforcement: 14x1N10Ø6.3c/16 and 9x1N10Ø6.3c/16.
- Column reinforcement: 23N10Ø6.3 C=113.
- Joint label: Corte A.

Section View (Right):

- Beam height: 40 mm.
- Beam width: 20 mm.
- Column height: 35 mm.
- Column width: 15 mm.

Technical drawing of a reinforced concrete beam (Fig. 10.10). The drawing shows the beam's cross-section and longitudinal reinforcement. The top reinforcement consists of 2N16 bars with a center-to-center spacing of 712 mm. The bottom reinforcement consists of 2N15 bars with a center-to-center spacing of 712 mm. The beam is divided into three sections: a left section with 20x1N17 bars at 315 mm spacing, a middle section with 20x1N17 bars at 315 mm spacing, and a right section with 18x1N17 bars at 287 mm spacing. The total length of the beam is 352 mm. The cross-section is 40 mm high and 20 mm wide. The beam is labeled "Corte A" and "38N17Ø6.3 C=113".

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Technical drawing of a beam cross-section and elevation. The cross-section (top) shows a rectangular beam with a width of 261 and a height of 32. It has a central hole of diameter 20x40. The beam is labeled B85 on the left and P34 on the right. The elevation (bottom) shows a beam with a length of 221 and a height of 32. It has a central hole of diameter 20x40. The beam is labeled 2N22Ø10 C=295. The cross-section is labeled Corte A. The elevation is labeled 14N23Ø6,3 C=113.

Technical drawing of a composite beam cross-section and elevation.

Corte A (Cross-section):

- Overall dimensions: 40 (height) x 20 (width).
- Reinforcement: 2N19Ø10 C=844.

Beam Elevation (Top View):

- Overall length: 844 cm.
- Reinforcement: 2N19Ø10 C=844.
- Sections: 20x40 (three sections).

Beam Elevation (Bottom View):

- Overall length: 844 cm.
- Reinforcement: 2N18Ø10 C=844.
- Sections: 7x1N20Ø6.3 c/16, 19x1N20Ø6.3/c/16, 20x1N20Ø6.3/c/16.
- Dimensions: 3, 105, 20, 20, 290, 20, 20, 313, 20.

Fig. 1.1

ESCALA 1/50 - ESCALA 1/20 (CORTES)

FCK=30.0 MPa - FATOR H₂O/CIMENTO=0.58



OBRA:
ARENA - CENTRO DE EVENTOS

PROPRIETÁRIO:
PREFEITURA MUNICIPAL DE SÃO JORGE DO IVAI

CONTEÚDO:
ARMADURA DAS VIGAS DO TÉRREO (04/04)

LOCAL: RUA DR. MICHEL FELIPE - LOTE 126-B - GLEBA ANDIRÁ - SÃO JORGE DO IVAI - PARANÁ

141220-EST_L3_R0.dwg RESPONSÁVEL TÉCNICO PELO PROJETO

DATA: MARÇO/2015

<p>Nº PÁGINAS</p> <p>21/28</p>	<p>PAULO LEÃO</p> <p>ENGENHEIRO CIVIL</p> <p>CREA - PR-72.041/D</p>	<p>LEÃO Projetos Complementares LTDA</p> <p>Av. Cerro Azul, 2688 - Jardim Novo Horizonte - 44.3026-1860</p> <p>CNPJ 08.956.061/0001-39 - CREA nº 45577</p> <p>pauloleao@leao projetos.com.br</p> <p>www.leao projetos.com.br</p>
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