

Technical drawing of a bridge deck cross-section showing reinforcement details. The drawing includes a top view of the deck with reinforcement bars (N1 to N9) and stirrups (C=190, C=210, C=200, C=295, C=430, C=350, C=1145). It also shows a side view of the deck with reinforcement bars (N10, N11, N12) and stirrups (C=295, C=430, C=345). Dimensions are given in centimeters (C).

Top View Details:

- Left side: 2 N2 ϕ 10 C=190, 138, 97, 2 N1 ϕ 5 C=210, 1 N4 ϕ 10 (1 ϕ 2 ϕ CAM) C=200, 90, 1 N4 ϕ 10 (1 ϕ 2 ϕ CAM) C=200, 87, 2 N1 ϕ 5 C=210.
- Right side: 2 N3 ϕ 10 C=515, 109, 2 N5 ϕ 10 C=185, 133.

Side View Details:

- Left side: 24 ϕ 5 C/17 N10 (393), PT1, P1, 2x3 N11 ϕ 6.3 C=430, 335, 1 N7 ϕ 10 C=350, 53, 1 N8 ϕ 10 C=150, 1115, 2 N6 ϕ 10 C=1145.
- Right side: 15 ϕ 5 C/17 N10 (255), PT2, P2, P3, 2x3 N12 ϕ 6.3 C=295, (costela), 2x3 N11 ϕ 6.3 C=430, 330, 1 N9 ϕ 10 C=345.

63 N9 ϕ 5 C=145

Technical drawing of a cable tray system layout, showing three sections (A, B, C) and their connections.

Section A:

- Top: 2 N1 ϕ 10 C=300 (248), 2 N3 ϕ 16 C=715 (155), 1 N4 ϕ 16 C=225 (96), 1 ϕ 2 ϕ CAM (134).
- Middle: 41 ϕ 5 C/17 N8 (690).
- Bottom: 2x3 N9 ϕ 6.3 C=728 (725), 2 N5 ϕ 12.5 C=740 (725).
- Labels: P11, V8, A.

Section B:

- Top: 2 N2 ϕ 5 C=330, 2 N3 ϕ 16 C=715 (76), 1 N4 ϕ 16 C=225 (154), 1 ϕ 2 ϕ CAM (248).
- Middle: 40 ϕ 5 C/15 N8 (690).
- Bottom: 2x3 N10 ϕ 6.3 C=640 (107), 2 N7 ϕ 12.5 C=385 (107), 2 N6 ϕ 12.5 C=640 (725).
- Labels: P12, V11, B.

Section C:

- Top: 2 N1 ϕ 10 C=300 (248), 2 N3 ϕ 16 C=715 (154), 1 N4 ϕ 16 C=300 (248).
- Middle: 41 ϕ 5 C/17 N8 (690).
- Bottom: 2x3 N9 ϕ 6.3 C=728 (725), 2 N5 ϕ 12.5 C=740 (725).
- Labels: P13, V11, C.

Connections:

- Section A to Section B: (costela) 2x3 N9 ϕ 6.3 C=728.
- Section B to Section C: (costela) 2x3 N9 ϕ 6.3 C=728.

40 NR ϕ 5 C=145

Technical drawing of a mechanical assembly showing a shaft and a pulley. The shaft is labeled "2 N1 Ø 6.3 C=666". The pulley is labeled "40 Ø 5 C/15 N4 (600)". The V-belt is labeled "V9". The drawing includes dimensions and a note "(1 Ø 2aCAM)".

40 N4 Ø 5 C=85

Technical drawing of a building facade section, showing structural details and reinforcement. The drawing includes the following elements:

- Top Section:**
 - Reinforcement: 2 N1 ϕ 10, C=795
 - Label: 723
 - Detail A-A is indicated on the right side.
- Middle Section:**
 - Reinforcement: 39 ϕ 5 C/17, N3 (650)
 - Detail A-A is indicated on the right side.
- Bottom Section:**
 - Reinforcement: 2x3 N4 ϕ 6.3, C=688
 - Label: (castella)
 - Reinforcement: 2 N2 ϕ 10, C=755
 - Label: 723
- Other Details:**
 - Label: 19
 - Label: P15
 - Label: 16
 - Label: 52

RESUMO AÇO CA 50-60			
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	473	73
50A	6,3	319	78
50A	10	122	75
50A	12,5	96	93
50A	16	33	52
Peso Total	60B =	73	ka
Peso Total	50A =	298	ka

FCX PARA VIGAS, LAJES, PILARES = 30 MPa			
FCX PARA FUNDAÇÕES = 30 MPa			
CORRIMENTO DA PEÇAS ESTRUTURAS			
FUNDAÇÕES = 5 cm	PILARES = 3 cm	VIGAS = 2,5 cm	
LAJES = 2 cm			

O CONCRETO DEVERÁ SER VIBRADO MECANICAMENTE.

COTAS EM CENTÍMETROS, NÍVEIS EM METROS

DIÂMETRO MÁXIMO CARACTERÍSTICO DO AGREGADO GRAUADO = BRITA 0

CONSUMO MÍNIMO DE CIMENTO POR m³ = 300KG

AÇO ESTRUTURAL, CASCA/CABO – FY = 500MPa – FY = 600MPa

RELAÇÃO ÁGUA/CIMENTO = 0,50

TODA PEÇA EM CONTATO DIRETO COM O SOLO DEVERÁ TER BASE EM CONCRETO MÓRDO COM A ESPESURA DE 5CM

TODO O TERRENO DEVERÁ SER APLIADO A 95% PN ANTES DA APLICAÇÃO DO CONCRETO GRÁUADO

ATENÇÃO - AS COTAS PREVALECEM SOBRE O DESENHO. NÃO TIRAR MEDIDAS A PARTIR DE RÉGUAS E/OU ESCALÍMETROS.