

31

138

4 N9 ø6.3 C1=522

VAR

7 N6  $\phi$ 6.3 c/18 Ct=VAR

7

65

55

N6

N7

4 N9 c/1

N20

N20

46

147

3x5 N20  $\phi$ 16.0 c/7 Ct=235

Technical drawing of a square window frame. The overall width is 181 and the overall height is 181. The inner opening is 150 wide and 165 high. There are four circular cutouts, one in each quadrant. The distance from the left edge to the center of the left cutouts is 65, and from the right edge to the center of the right cutouts is 65. The distance between the centers of the two cutouts in each row is 45. The distance from the top edge to the center of the top cutouts is 45, and from the bottom edge to the center of the bottom cutouts is 45. The distance from the left edge to the center of the left cutouts is labeled N17, and from the right edge to the center of the right cutouts is labeled N17. The distance from the top edge to the center of the top cutouts is labeled N16, and from the bottom edge to the center of the bottom cutouts is labeled N16. The distance between the centers of the two cutouts in each row is labeled B. The distance from the left edge to the center of the left cutouts is labeled A, and from the right edge to the center of the right cutouts is labeled A. The distance from the top edge to the center of the top cutouts is labeled N2, and from the bottom edge to the center of the bottom cutouts is labeled N2.

Technical drawing of a rectangular structure, likely a component of a machine. The drawing shows a top-down view with dimensions and labels.

- The overall width is labeled as 181.
- The overall height is labeled as 7.
- The width of the central section is labeled as 7 N14 ø6,3 ø20 Ct=192.
- The drawing includes a grid of lines representing the structure's internal components.
- Labels N13 and N14 point to specific features on the left side.
- Labels N16 and N17 point to features at the bottom left corner.

Technical drawing of a triangular roof plan. The drawing shows a triangle with internal lines representing roof structure. Dimensions are provided in meters (m). Key dimensions include: top width segments of 46.5 m each; a total top width of 93 m; a height of 53.7 m from the top vertex to the base; a base width of 162.3 m; and a side length of 140.5 m. Labels include N5, N4, N19, and A. A red crosshair is centered on the triangle. A scale bar at the bottom indicates 0 N4 = 5.0 m VAR.

VAR

7 | 7 N6 ø6.3 c/18 Ct=VAR | 7

635

55

N6

N7

N19

N19

46

130

3x5 N19 ø12.5 c/7 Ct=216

VAR

8 N7 ø6.3 c/19 Ct=VAR

N7

N6

N19

N10


Technical drawing of a rectangular plate with two circular holes. The drawing shows the front view with dimensions: total width 180, total height 75, hole diameter 50, and distance between hole centers 110. It also shows a side view with dimensions: total width 170, total height 65, and hole diameter 50. The drawing is labeled with 'N1' and 'N11'.

Technical drawing of a reinforced concrete slab cross-section. The drawing shows a rectangular slab with a width of 168 cm and a total height of 55 cm. The top reinforcement consists of 4 N15 bars with a spacing of 10.0 cm, with a clear distance (C) of 187 cm between the outer bars. The bottom reinforcement consists of 5 N18 bars with a spacing of 12.5 cm, with a clear distance (C) of 234 cm between the outer bars. The slab is supported by two columns. The drawing includes dimension lines and labels for the reinforcement bars and their spacing.

Technical drawing of a rectangular frame assembly. The drawing shows a cross-section of the frame with labels N15 and N1. A dimension line indicates a width of 63. A label N18 points to a specific feature. Below the main drawing, a smaller rectangular detail is shown with dimensions 7 N11 ø6.3 c/25 Ct=210 and 36.

- 1 – ESTACAS TIPO HÉLICE CONTÍNUA
- CONCRETO ESTRUTURAL C20 –  $f_{ck} \geq 20 \text{ MPa}$  e  $E \geq 25 \text{ GPa}$
- CONSUMO DE CIMENTOS TIPO CPIII  $\geq 400 \text{ kg/m}^3$
- SLUMP TEST:  $22 \pm 3 \text{ cm}$
- FATOR ÁGUA CIMENTO A/C = 0.55
- AÇO CA – 50A E CA – 60B
- AS ESTACAS COM DISTÂNCIA ENTRE EIXOS MENOR QUE 5Ø (DA MAIOR ESTACA) NÃO PODERÃO SER EXECUTADAS EM INTERVALO DE TEMPO MENOR QUE 12 (DOZE) HORAS
- AS ESTACAS DEVERÃO SER ARRASADAS CONFORME DETALHE GENÉRICO E FICAR COM AS “CABEÇAS” PLANAS E A SEÇÃO TRANSVERSAL PLENA
- AS ESTACAS DEVERÃO SER CONCRETADAS ATÉ 10 cm ACIMA DA COTA DE ARRASAMENTO PARA POSTERIOR PREPARO DAS “CABEÇAS”
- TERMINADA A EXECUÇÃO DEVERÁ SER FEITO LEVANTAMENTO DA POSIÇÃO DE CADA ESTACA NA COTA DE ARRASAMENTO PARA VERIFICAÇÃO DA NECESSIDADE DE CORREÇÕES ESTRUTURAIS
- EXECUÇÃO DAS FUNDAÇÕES: CONFORME RECOMENDAÇÕES DA ABNT NBR 6122/2010 - PROJETO E EXECUÇÃO DA FUNDAÇÕES A SER ACOMPANHADA POR ENGENHEIRO DE FUNDAÇÕES
- 2 – ESTRUTURA EM CONCRETO MOLDADA EM LÓCO
- CONCRETO ESTRUTURAL C35 –  $f_{ck} \geq 35 \text{ MPa}$  e  $E \geq 33 \text{ GPa}$
- CONSUMO DE CIMENTOS TIPO CPIII  $\geq 280 \text{ kg/m}^3$
- SLUMP TEST:  $10 \pm 2 \text{ cm}$
- FATOR ÁGUA CIMENTO A/C = 0.55
- AÇO CA – 50A E CA – 60B
- COBRIMENTOS: BLOCOS DE FUNDAÇÃO  $e = 4 \text{ cm}$ ; PISO ARMADO (VER DETALHES FL04/24); VIGAS  $e = 3 \text{ cm}$ ; PILARES  $e = 3 \text{ cm}$ ; LAJES  $e = 2.5 \text{ cm}$
- UTILIZAR ESPAÇADORES EM TODAS AS PEÇAS DE CONCRETO ARMADO
- 3 – AS COTAS DE EMBASAMENTO FORAM VERIFICADAS COM OS DADOS DA HIDRÁULICA
- 4 – CONFERIR TODAS AS MEDIDAS EM OBRA
- 5- ESTA OBRA FOI CALCULADA E DEVERÁ SER EXECUTADA COM CONTROLE RIGOROSO, CONFORME NORMAS VIGENTES APRESENTADAS EM MEMORIAL
- 6 – UNIDADES EM CENTÍMETROS, EXCETO QUANDO INDICADO
- 7 – LEGENDA
- EL = ELEVAÇÃO
- SOBC = SOBRECARGA
- A = COTA DE ARRASAMENTO

NOTAS:  
1 - MEDIDAS EM CENTIMETROS.  
2 - ART DESTE PROJETO: 2620241743904

ENGENHARIA		PROJETO DE ESTRUTURAS		Institucional						
		<p>CLIENTE CARVENG CONSTRUÇÕES LTDA.</p> <hr/> <p>ENDEREÇO Biblioteca do Instituto de Estudos da Linguagem – UNICAMP – Campinas – SP</p> <hr/> <table border="1"> <tr> <td>PROJETADO ENG.º WALDIR PEREIRA</td> <td>DESENHADO ENG. CAMILA VIANA</td> </tr> </table> <p>ASSINTO</p>				PROJETADO ENG.º WALDIR PEREIRA	DESENHADO ENG. CAMILA VIANA			
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<p>P&amp;P CONSULTING LTDA. RUA BENEDITO OSWALDO LEQUES, 51 SALA 007 – D. AGUIARUS SÃO JOSÉ DOS CAMPOS – SP TEL/FAX: 12 3064254 www.pponlineing.com.br</p>		<p>ARMAÇÃO DOS BLOCO DAS ESTACAS A EXECUTAR</p> <table border="1"> <tr> <td>DATA 07/10/2024</td> <td>DES. Nº PPC-WP-CCL-390-04</td> <td>ESC. indicada</td> <td>REV. C</td> <td>F.º 01/01</td> </tr> </table>				DATA 07/10/2024	DES. Nº PPC-WP-CCL-390-04	ESC. indicada	REV. C	F.º 01/01
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