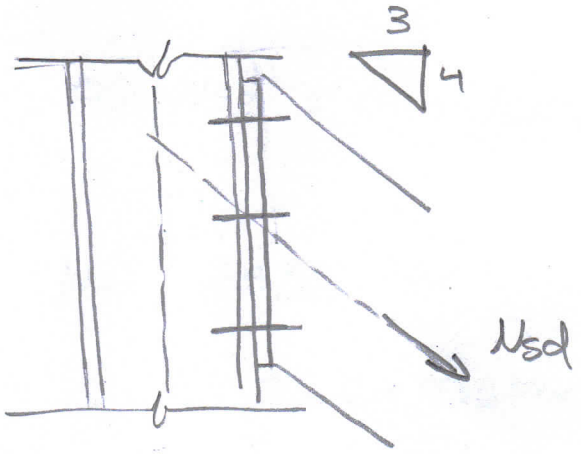
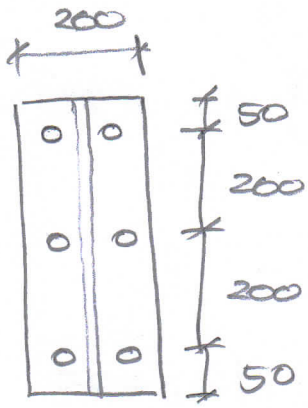
B2T5M4Q612 — 9,5 PONTOS

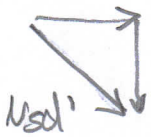




- CHAPAS MR250
- FURO PADRÃO
- ASTM A325 d=3/4'
- SUPERFÍCIES JATEADAS E SEM PINTURA
- LIGAÇÃO TIPO ATRITO;

PEDE-SE: MÁXIMO Nsd P/ — Q01) VERIF. DE DESLIZAMENTO; Q02) VERIF DE TRAÇÃO E CORTE SIMUL.

- DECOMPOSIÇÃO DE Nsd':



PARA ELS:
$T'_{SK} = 0,7 \times 0,6\ N_{sd}' = 0,42\ N_{sd}'$
$V'_{SK} = 0,7 \times 0,8\ N_{sd}' = 0,56\ N_{sd}'$

$N_{sd}' = N_{sd}/n = N_{sd}/6$

$A_b = \pi/4 (1,905)^2 = 2,8502\ cm^2$

- VERIF. DE CORTE:

$F'_{vRd} = 0,4 \times 2,8502\ cm^2 \times 82,5\ kN/cm^2 / 1,35 = \underline{69,672\ kN}$

- VERIF. DE TRAÇÃO:

$F't_{Rd} = 0,75 \times 2,8502\ cm^2 \times 82,5\ kN/cm^2 / 1,35 = \underline{130,63\ kN}$

- VERIF. DE TRAÇÃO E CORTE SIMULT.:

$F't_{sd} = 0,6\ N_{sd}'$ $\quad F'_{vsd} = 0,8\ N_{sd}'$

$$\left(\frac{0,6\ N_{sd}'}{130,63}\right)^2 + \left(\frac{0,8\ N_{sd}'}{69,672}\right)^2 = 1 \begin{cases} -80,86\ kN \\ +80,86\ kN \end{cases}$$

$N_{sd} = 6 \times 80,86\ kN = \underline{485,16\ kN}$ (Q02)

- DESLIZAMIENTO: $C_h = 1 \quad n_s = 1 \quad F_{Tb} = 125\,kN$

$\mu = 0{,}5$

$$0{,}56\,N_{sd}' = 0{,}80 \times 1 \times 0{,}5 \times 125\,kN \times 1 \left(1 - \frac{0{,}42\,N_{sd}}{0{,}80 \times 125\,kN}\right)$$

$$N_{sd}' = 64{,}935\,kN$$

$$N_{sd} = 6 \times 64{,}935\,kN = \underline{389{,}61\,kN} \quad (CQO1)$$