AM15-AB-B2

PROBLEMA 1

$A_b = \frac{\pi}{4}(2cm)^2 = 3,142\ cm^2$

$F_{v'Rd} = \frac{0,4 \times 3,142cm^2 \times 82,5\ kN/cm^2}{1,35} = 76,80\ cm^2$ //

$l_{f_{FF}} = 90mm - (20+1,5)mm = 68,5mm$ //

$l_{f_{FB}} = 50mm - \frac{(20+1,5)}{2}mm = 39,25mm$ //

$F_{c'Rd_1} = \frac{1,2 \times 3,925cm \times 0,79cm \times 40\ kN/cm^2}{1,35} = 110,25\ kN$

$F_{c'Rd_2} = \frac{2,4 \times 2,0cm \times 0,79cm \times 40\ kN/cm^2}{1,35} = 112,36\ kN$

$F_{c'Rd} = 110,25\ kN$ //

$F_{TB} = 142\ kN$ //

$\begin{cases} \mu = 0,50 \\ Ch = 1,00 \\ n_s = 1,0 \end{cases}$ $F_{t,sk} = 0$

$F_{f,RK} = 980 \times 0,50 \times 1 \times 142kN \times 1 = 56,8\ kN$

$F_{f'RK} = F_{f'Rd} \times 0,70$ logo $F_{f'Rd} = 56,8kN / 0,7 = 81,14\ kN$

CORTE => $3 \times 76,8 = 230,4\ kN$

PRESSÃO DE CONTATO => $3 \times 110,2 = 330,6\ kN$

DESLIZAMENTO => $3 \times 81,14\ kN = 243,42\ kN$