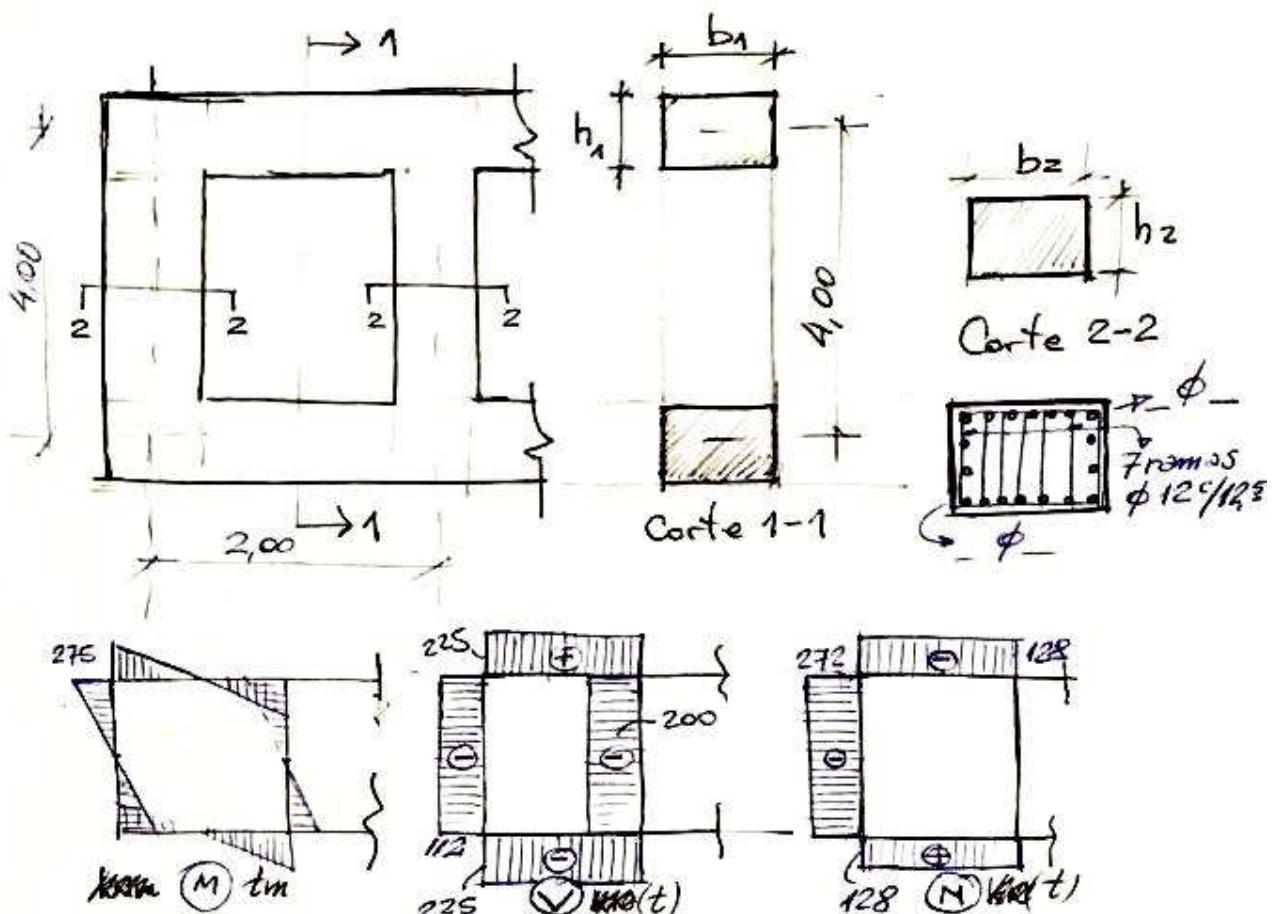


$$\sum x = 0, \sum y = 0, \sum M = 0$$



1) Cordones y M → Dimensionar a flexo-compresión y flexo-tracción
Mortantes

e) Predimensionando el corte

Se adopta H-30 y todos de = dimensiones

$$V_u \leq \phi \left(\frac{5}{6} \sqrt{f_c} \cdot b \cdot d \right)$$

$$b \cdot d = V_u / (\phi \cdot \frac{5}{6} \sqrt{f_c}) = 225.000 \text{ N} / (0,75 \cdot \frac{5}{6} \sqrt{30}) = 657257 \text{ mm}^2$$

Adopto $b = 900 \text{ mm}$ → $d = 730 \text{ mm}$ → Adopto $H = 900 \text{ mm}$.

$$V_c = \frac{1}{6} \sqrt{f_c} \cdot b \cdot d = \frac{1}{6} \sqrt{30} \cdot 900 \cdot 870 = 714,7 \text{ kN} \approx 715 \text{ kN}$$

$$V_s = \frac{V_u}{\phi} - V_c = \frac{2250000 \text{ N}}{0,75} - 715000 \text{ N} = 2285000 \text{ N} = 2285 \text{ kN}$$

$$\frac{A_s}{sep} = \frac{V_s}{f_y \cdot d} = \frac{2285000 \text{ N}}{420 \text{ N/mm}^2 \cdot 870 \text{ mm}} = 6,25 \frac{\text{mm}^2}{\text{mm}} = 0,625 \text{ cm}^2$$

$$\frac{sep}{sep} = \frac{6 \cdot 420 \text{ N/mm}^2 \cdot 870 \text{ mm} \cdot 113 \text{ mm}^2}{2285000 \text{ N}} = 108 \text{ mm}$$

$\left\{ \begin{array}{l} 6 \text{ ranuras} \\ \phi 12 \text{ c/10 cm} \\ 7 ranuras \\ \phi 12 c/12 s \end{array} \right.$