

$$1) \tau_{max_TOR} = d \frac{M_t}{a b^2}$$

$$d = 3 + 1.8 \frac{b}{a}$$

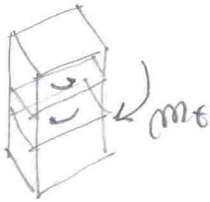
$$2) \tau_{TOT} = \tau_{max_TAGLIO} + \tau_{max_TOR} \leq 1.1 \tau_{cb}$$

NUCLEO CLS CERCHIATO

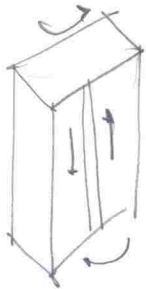
$$A_{LONG} = \frac{(a'+b')M_t}{a' b' \tau_d}$$

$$A_{ST} / \mu L = \frac{M_t \times 100}{2 a' b' \tau_d}$$

SI SOMMANO
ARM. FLESS. +
TAGLIO!



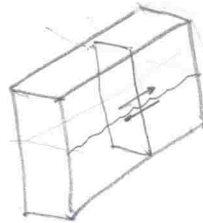
SCORRIMENTO
TRASVERSALE
→ A_{LONG}



SCORRIMENTO
LONGITUDINALE
→ A_{ST/STB}

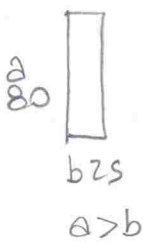


NEL TAGLIO SEZIONE RESISTENTE
STIRRE



NEUT. FOLGIONE SEZ. RESIST.

ESEMPLO



$$M_t = 17500 \text{ kgm}$$

$$\tau_{max} = \left(3 + 1.8 \frac{25}{80} \right) \frac{17500}{80 \cdot 25^2} = 12.47 \text{ kg/cm}^2 > 9.33 < 16.87$$

$$A_L = \frac{175000 (73+18)}{73 \cdot 18 \cdot 2600} = 1.66 \text{ cm}^2$$

$$8 \phi 10 = 6.32 \text{ cm}^2$$

$$A_{ST} / \mu L = \frac{175000 \times 100}{2 \times 73 \times 18 \times 2600} = 2.56 \text{ cm}^2 / \mu L$$

$$a' = 80 - 3.5 - 3.5 = 73 \text{ cm}$$

$$b' = 25 - 3.5 - 3.5 = 18 \text{ cm}$$

$$n \times \phi 8: \frac{2.56}{0.5} = 5.12 \rightarrow \text{PASSO } 19 \text{ cm } \text{ST } \phi 8 / 19''$$

$$n \text{ST } \phi 10: \frac{2.56}{0.79} = 3.24 \rightarrow \text{PASSO } 25 \text{ cm } \text{ST } \phi 10 / 25''$$

DH 1992: $A_{ST} / \mu L \geq 0.15 B \rightarrow 0.15 \times 25 = 3.75 \text{ cm}^2 / \mu L \rightarrow n \phi 10 = \frac{3.75}{0.79} = 4.75 \rightarrow 5 \text{ ST} / \mu L$

PASSO MAX = $\frac{\text{PERIMETRO CERCHIATO}}{8} = \frac{2(73+18)}{8} = 22.8 \text{ cm}$

MIN = 20 cm

INSIEME ST $\phi 10 / 20''$

MAX DIST. ARM. LONGIT. → 35 cm