

CALCOLO
TRAVICELLO $n = 4,24 \frac{\text{kN}}{\text{m}} \times 1,10 \text{ m}$
 $n = 4,24 \frac{\text{kN}}{\text{m}}$

APPOGGIATO SU DUE TRAVI UPN
 A DISTANZA 1,10 m

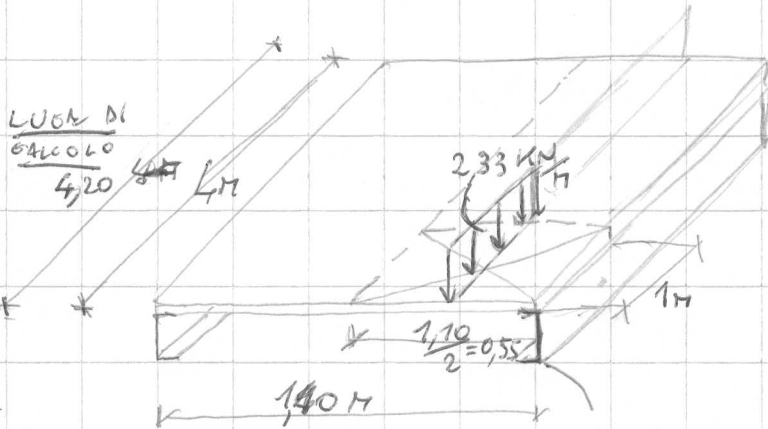
$$M_{\text{MAX}} = \frac{q \cdot l^2}{8} = \frac{4,24 \times 1,10^2}{8}$$

$$M_{\text{MAX}} = \frac{4,24 \frac{\text{kN}}{\text{m}} \times 1,10^2 \text{ m}^2}{8} = 0,64 \frac{\text{kNm}}{\text{m}}$$

$$W = \frac{b \cdot h^2}{6}$$

$$W = \frac{100 \text{ cm} \times 3 \text{ cm}^2}{6} = 150 \text{ cm}^3$$

$$\sigma_{\text{MAX}} = \frac{M_{\text{MAX}}}{W} = \frac{64000 \text{ Ncm}}{150 \text{ cm}^3} = 427 \frac{\text{N}}{\text{cm}^2}$$



CALCOLO
DUE TRAVI UPN 120

$$n = 4,24 \frac{\text{kN}}{\text{m}} \times 1,10 \text{ m} \times \frac{1}{2} = 2,33 \frac{\text{kN}}{\text{m}}$$

TRAVI APPOGGIATE SU 2 APPOGGI
 A DISTANZA 4 m; $4 \times 1,05 = 4,20 \text{ m}$

$$\text{UPN } 120 \rightarrow W_x = 60,7 \text{ cm}^3$$

$$\sigma_{\text{MAX}} = \frac{M_{\text{MAX}}}{W_x} = \frac{514000 \text{ Ncm}}{60,7 \text{ cm}^3} = 8468 \frac{\text{N}}{\text{cm}^2}$$

$$M_{\text{MAX}} = \frac{2,33 \frac{\text{kN}}{\text{m}} \times 4,20^2 \text{ m}^2}{8} = 5,16 \frac{\text{kNm}}{\text{m}}$$