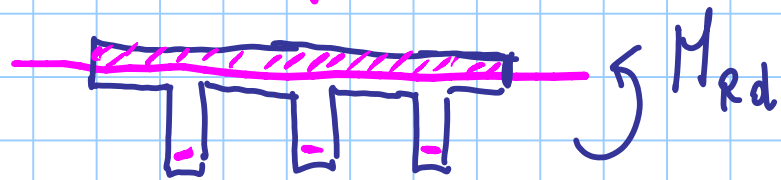


$$M_{Rd} = \frac{b d^2}{\gamma'_{f2}} = \frac{1 \times 0,22^2}{0,022} = 121 \text{ KNm}$$

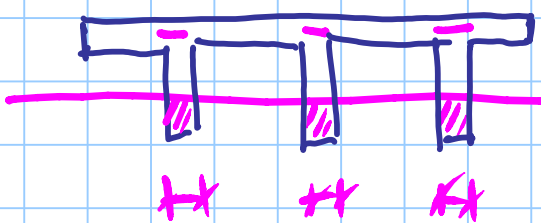
Momento Maximum position



$$b = 100 \text{ mm}$$

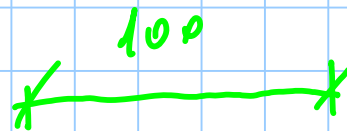
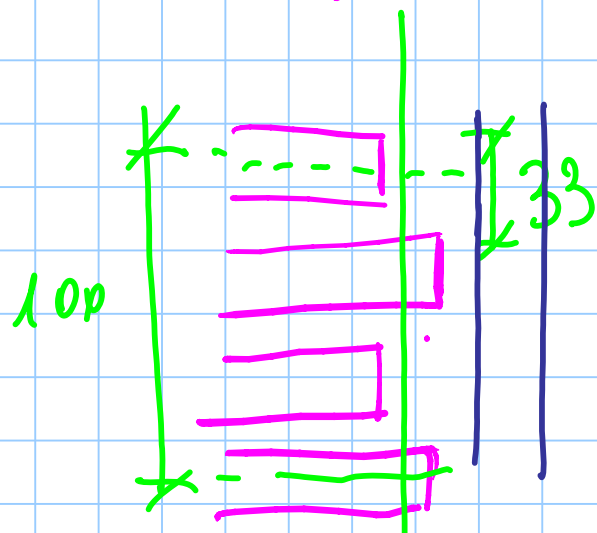


$$M_{Rd} = \frac{b d^2}{\gamma'_{f2}} = \frac{0,24 \times 0,22^2}{0,019^2} = 32,2 \text{ KNm}$$

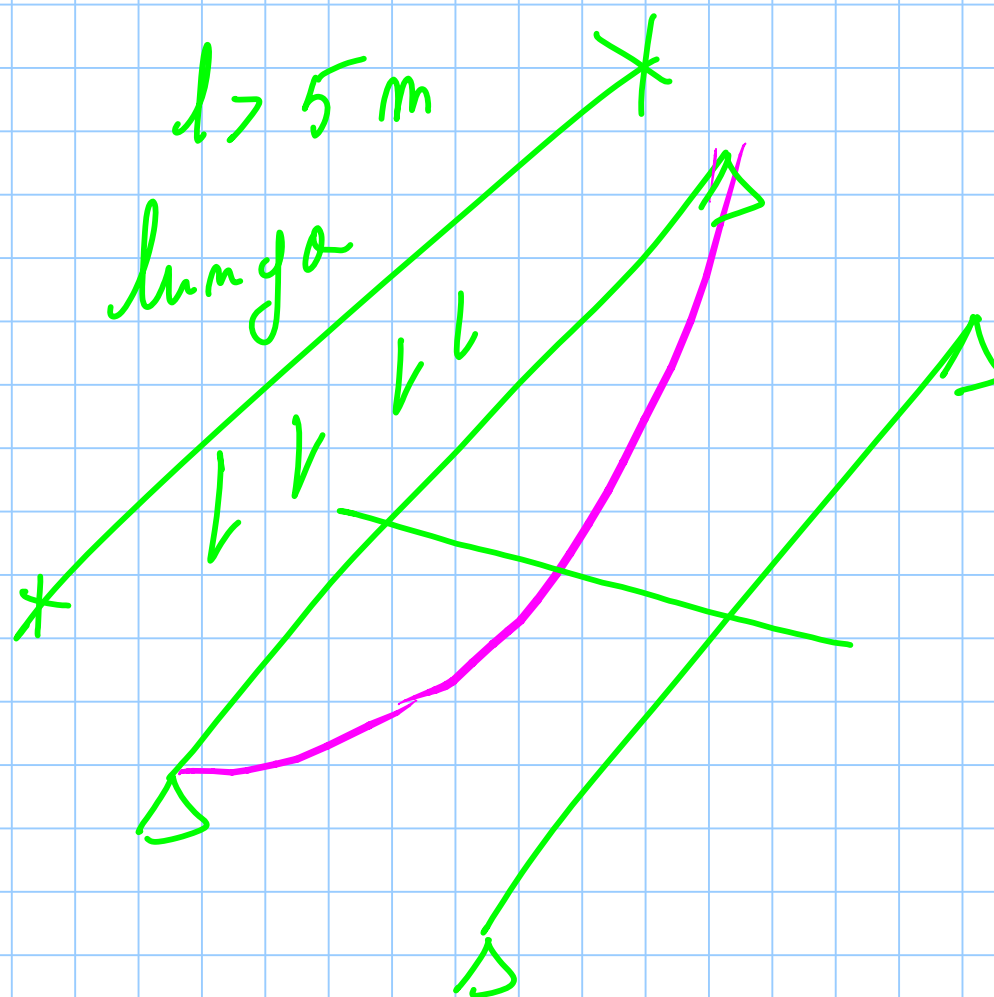
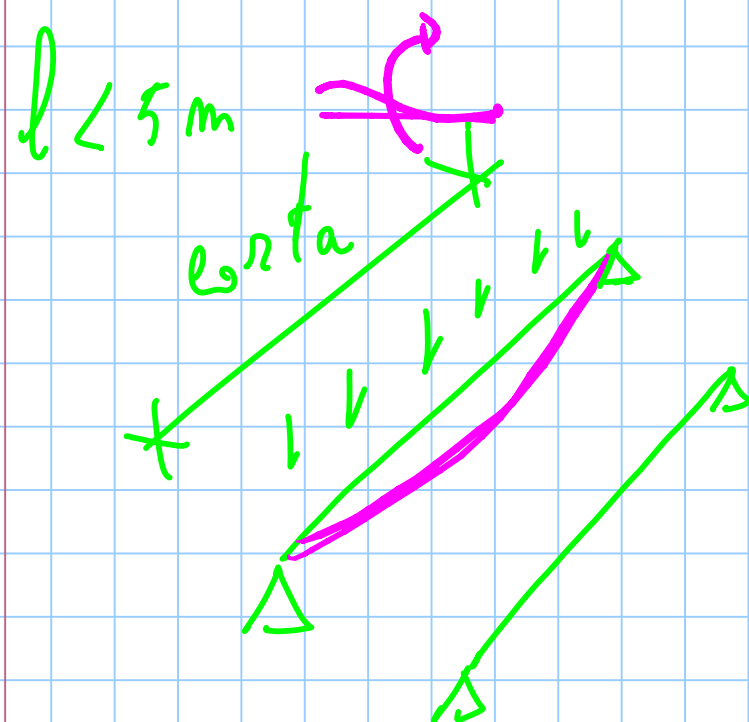
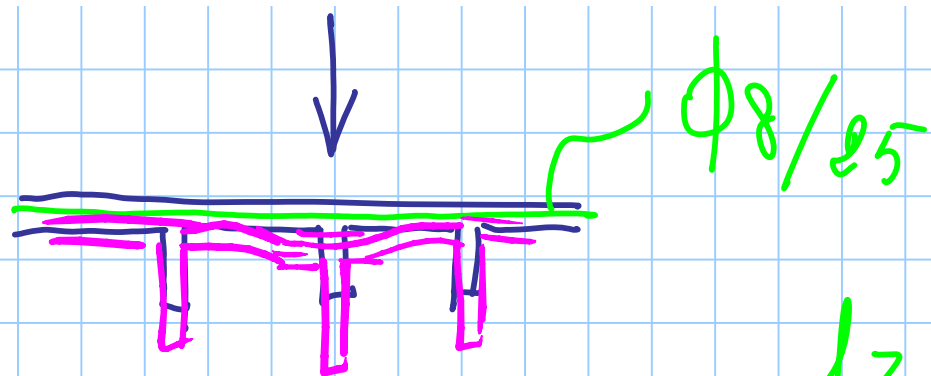


$$\Rightarrow M_{Ed} \quad M_{Rd} = \frac{0,58 \times 0,22^2}{0,019^2} = 47,7 \text{ KNm}$$

24 cm



$$\frac{33}{2} + 16 + 25 = 57,5 \text{ cm}$$

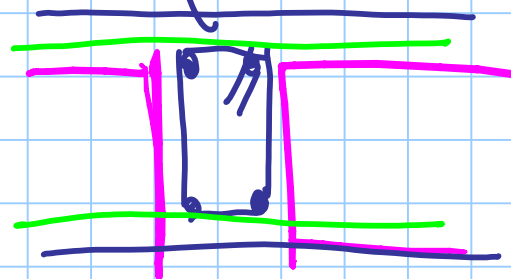




$l_{wre} \approx l/2$
 $l > 5m$

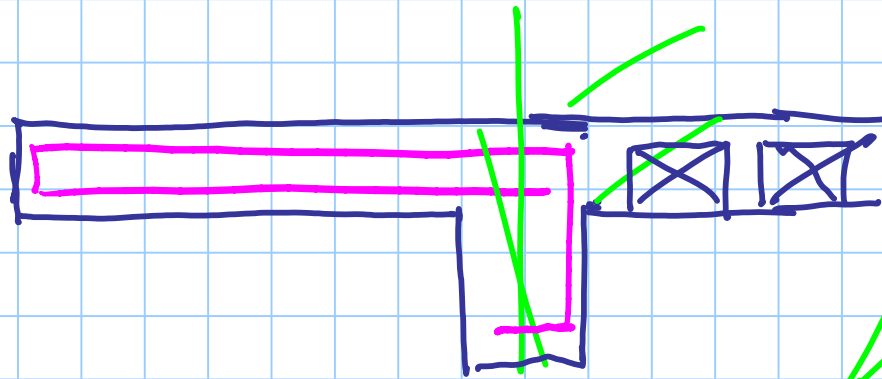
$\phi 8/20$

$4 \phi 14$



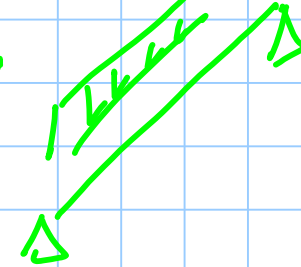
15

SBALZO LATERALE

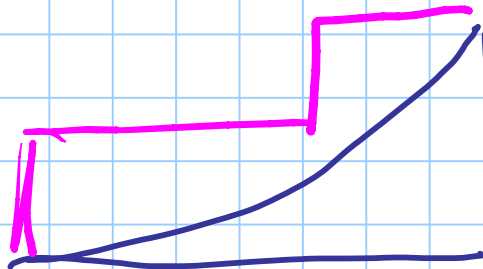
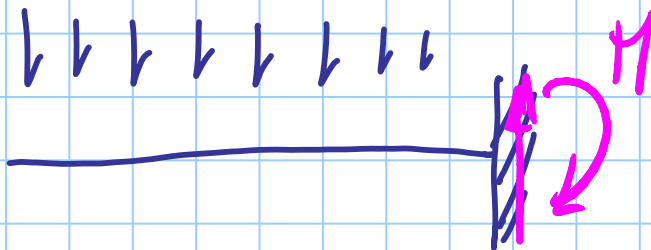


TRAVE

$$q = V$$

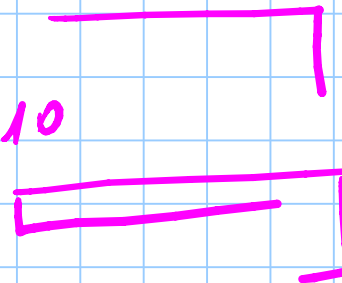


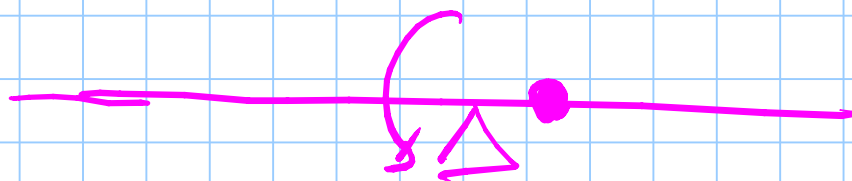
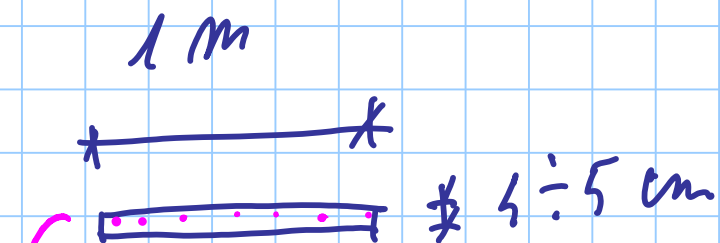
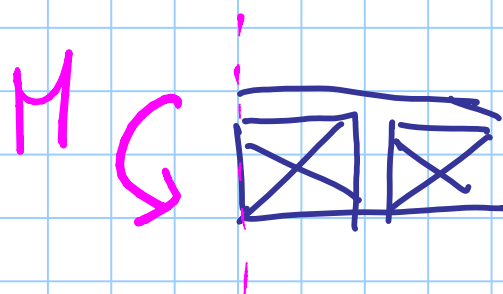
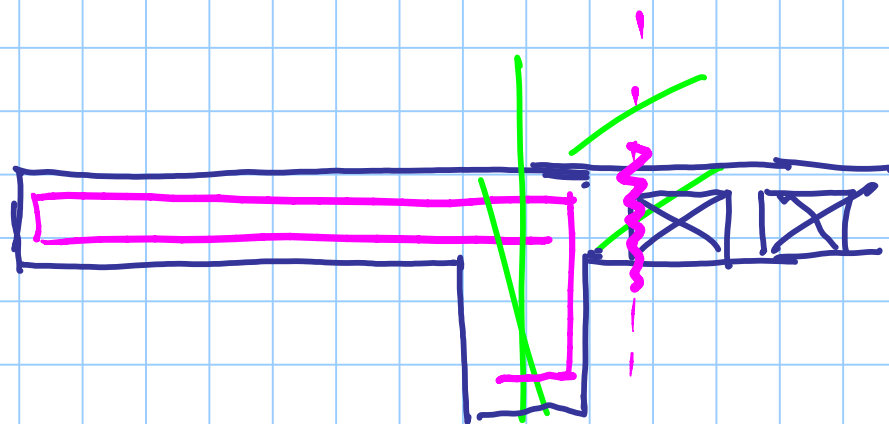
$$m_t = M$$

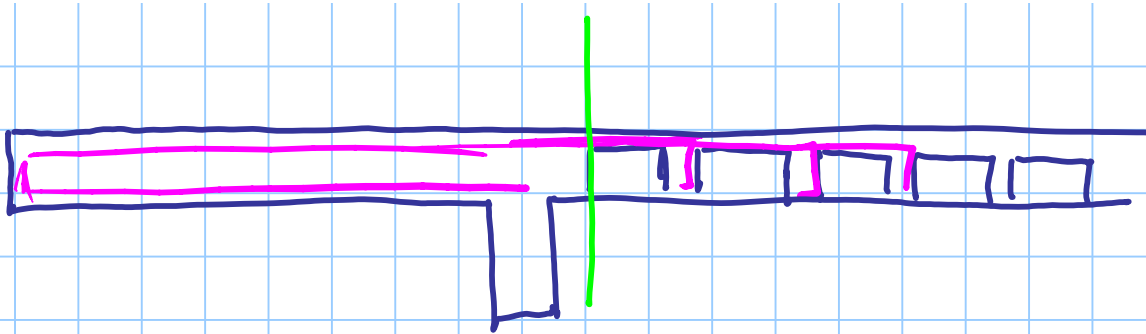


$1\phi 10$

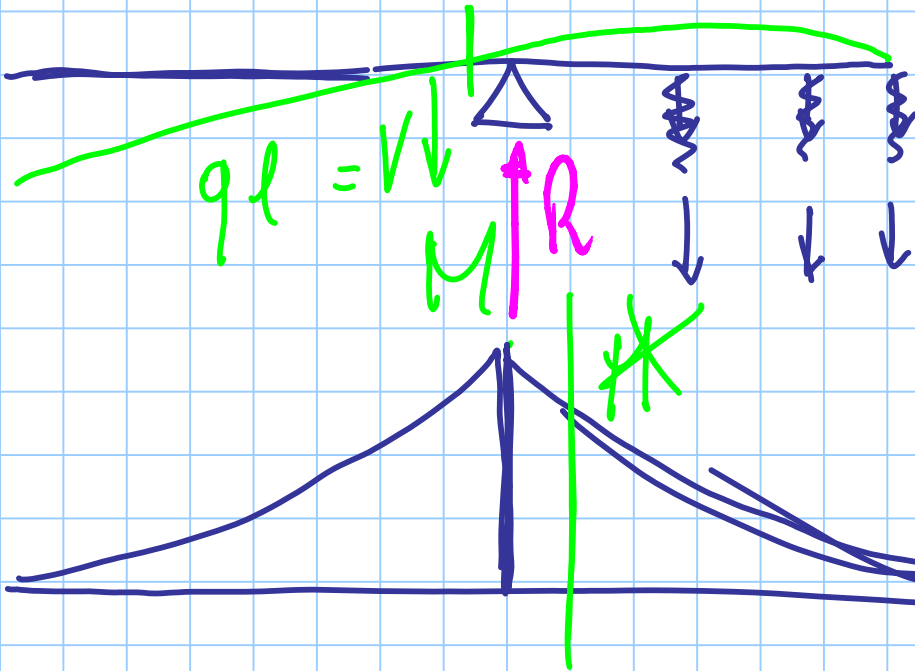
$1\phi 10$



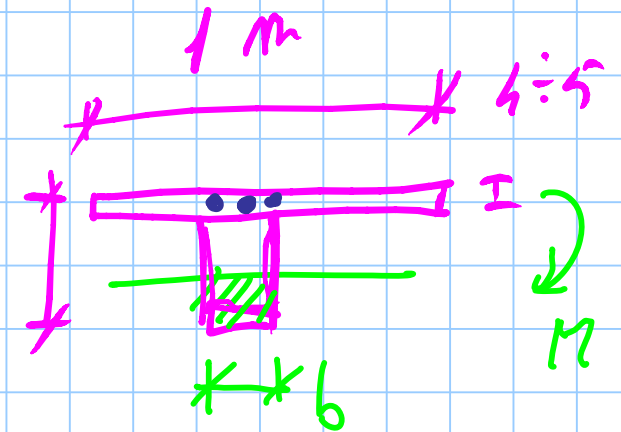
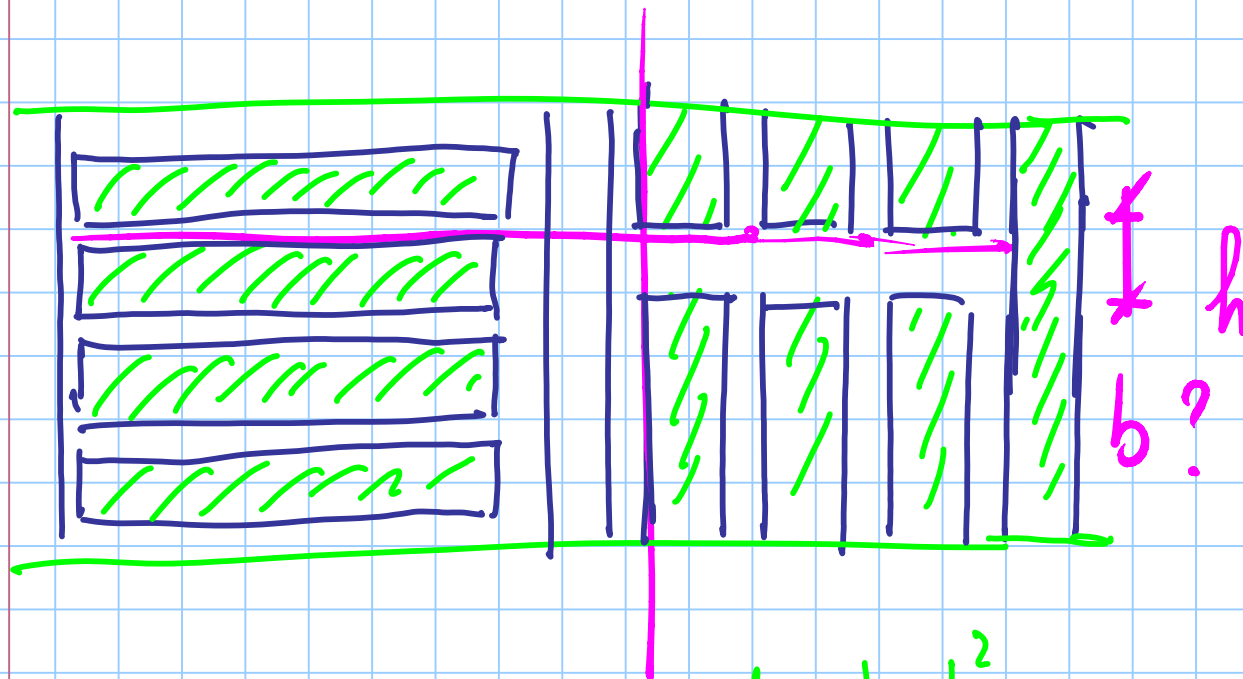
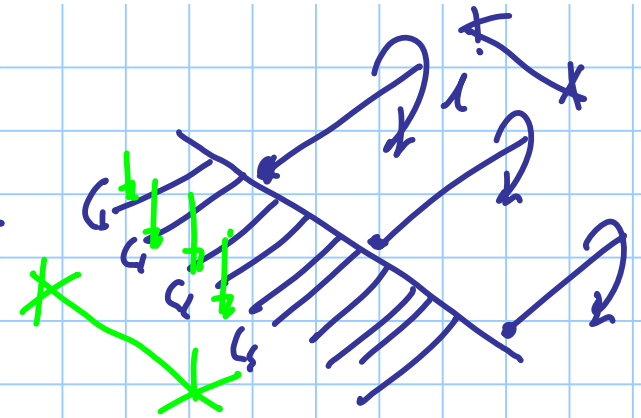
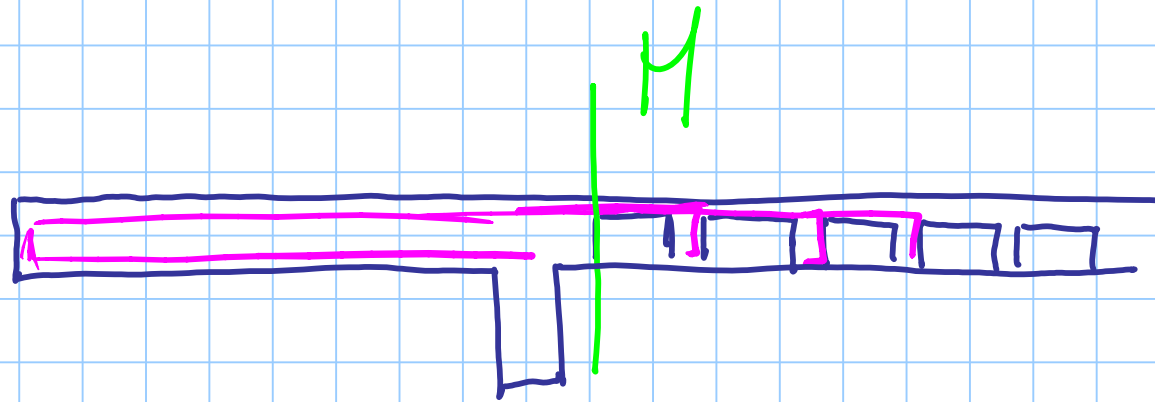




9



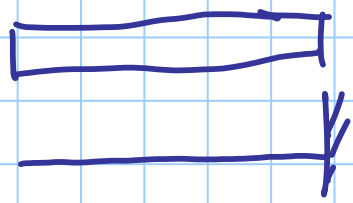
$$\textcircled{1} t_{2em} = 2 q l$$



$$M = \frac{b d^2}{\gamma'^2} \Rightarrow b_{\min} = \frac{\gamma'^2 M}{d^2}$$

$$\frac{b_{\min}}{1} = \frac{b_{\text{ass.}}}{i} \Rightarrow i = 1 \text{ m} \times \frac{b_{\text{ass.}}}{b_{\min}}$$

$$b_{\text{ass.}} = 25 \text{ to } 40 \text{ cm}$$



$$g_d + q_d = 5,72 + 6 = 11,72 \text{ kN/m}^2$$

$$M = \frac{(g_d + q_d) l^2}{2} = \frac{-11,72 \times 1,5^2}{2} = -13,2 \text{ kNm}$$

$$A_s = \frac{M_{Ed}}{0,9 d f_{yd}} = \frac{13,2 \times 10}{0,9 \times 0,18 \times 391,3} \approx 2,1 \text{ cm}^2 \text{ per meter}$$

$$\frac{2,1}{3} = 0,7 \text{ cm}^2$$

~~1 ϕ 10 e tre mHto~~

2 ϕ 10 1,56 cm²

$$b = \frac{M q'^2}{d^2} = \frac{13,2 \times 0,019^2}{0,18^2} = 0,15 \text{ m} = 15 \text{ cm}$$

$$b = 40 \text{ cm}$$

$$d' = 1 \text{ m} \times \frac{40}{15} = 2,7 \text{ m}$$

2,0 m

