

Belasting Keldervloer

eigen gewicht plaat	480 kg/m ²
qfw.	20 kg/m ²
nb.	500 kg/m ²
	$q'_1 = 1000 \text{ kg/m}^2$

$$q_1 = (2,94 + 6,50) \times 0,5 \times 1000 = 4720 \text{ kg/m}'$$

eigen gewicht balk in as 2

$$\frac{0,70 \times 0,45 \times 2400}{1} = 760 \text{ kg/m}'$$

$$q_1 = 5480 \text{ kg/m}'$$

Veld AB volbelast, zonder kracht P₃

$$R_A \cdot 8,54 - 5480 \times \frac{8,54^2}{2} + 3120 \times \frac{1,24^2}{2} = 0; R_A = 23190 \text{ kg}$$

$$x = 4,22 \text{ m}; \quad \underline{M_{\max AB} = 48900 \text{ kgm}}$$

Veld BC volbelast

$$M_B = 5480 \times \frac{1,24^2}{2} + 30983 \times 1,24; \quad \underline{M_B = 42582 \text{ kgm}}$$

Veld AB en BC volbelast

$$R_B = \left[\frac{(8,54 + 1,24)^2}{2} \times 5480 + 106672 \times 8,54 + 30983 \times 9,78 \right] \times \frac{1}{8,54} =$$

$$\underline{R_B = 168846 \text{ kg}}$$