

Gemeente Heemskerk

A.W. Grootestraat 8

Vergroten dakkapel



2000-490

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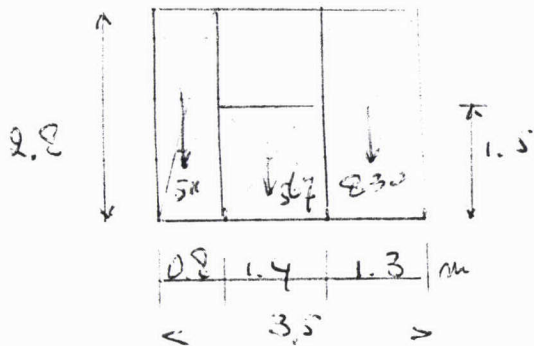
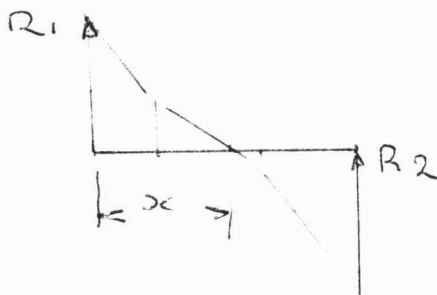
INGEKOMEN - 8 DEC. 2000

BEREKENING ONDERSLAGBALKEN, BEHORENDE BIJ AANVRAAG

UITBOUW "ERKER"

A.W. GROOTESTR. 2

H. 'KERK

UITGANGSPUNTEN: 1 DAKGOUT 100 kg/m 2 GEVEL 180 kg/m^2 3 BALK 30 kg/m BELASTING: $(0.8 \cdot 2.8 \cdot 180) + 0.8 \cdot 100 + 0.8 \cdot 30 = 511 \text{ kg}$ $(1.4 \cdot 1.5 \cdot 180) + 1.4 \cdot 100 + 1.4 \cdot 30 = 567 \text{ kg}$ $(1.3 \cdot 2.8 \cdot 180) + 1.3 \cdot 100 + 1.3 \cdot 30 = 830 \text{ kg}$ TOTAAL = 1908 kg  $830 \cdot 0.65 = 539 \text{ kg}$ $567 \cdot 0.20 = 1134 \text{ kg}$ $511 \cdot 0.51 = 261 \text{ kg}$ $R_1 = \frac{3257}{3.5} = 930 \text{ kg}$ $R_2 = 975 \text{ kg}$ 3257 kg

$$x = \frac{511 \cdot 0.4 + 1.5 \cdot 0.567 + 2.85 \cdot 830}{1908} = \frac{204 + 850 + 2365}{1908} = 1.8 \text{ m}$$

$$M_{x_{\text{max}}} = 930 \cdot 1.8 - 511(1.8 - 0.4) - \frac{1.0^2 \cdot 567}{2} = 1677 - 715 - 283 = 679 \text{ kg}$$

$$f_{\text{max}} = \frac{5 M_{x_{\text{max}}} l^2}{48 E I} \approx \frac{1}{600}$$

$$I = \frac{5 \cdot 679 \cdot 10^2 \cdot 3.5 \cdot 600}{48 \cdot 2.1 \cdot 10^6} = 704 \text{ cm}^4$$

$$W_x = \frac{679 \cdot 10^2}{1400} = 48.25 \text{ cm}^3$$

DIN 120 (HE 12 B)

I N 160

 $I_x = 864 \text{ cm}^4$ $I_x = 935 \text{ cm}^4$ $W_x = 144 \text{ cm}^3$ $W_x = 117 \text{ cm}^3$ $G = 26.7 \text{ kg/m}$ $G = 17.9 \text{ kg/m}$

27/02/01