

versterkte spreek zijgevels.

$$L_g = 215 \text{ cm.}$$

belasting:

a] dak: bimsbetonkanalplaten:  $\frac{264^5}{2} \times 150 = 198 \text{ kgf/m}^1$

afwerklaag:  $\frac{264^5}{2} \times 0.08 \times 2400 = 254 \text{ " "}$

dakbedekking:  $\frac{296^5}{2} \times 20 = 29 \text{ " "}$

dakrand:  $0.16 \times 0.40 \times 2400 = 154 \text{ " "}$

ruiterige belasting  $\frac{296^5}{2} \times 100 = 149 \text{ " "}$

b] metselwerk:  $11.5 \cdot 11 \cdot 33 = 1100 \text{ " "}$   
 $0.62^5 \times 600 = 375 \text{ " "}$

c] begane grondvloer:  $\frac{186^5}{2} \times 500 = 463 \text{ " "}$

d] kelder vloer:  $\frac{196^5}{2} \times 580 = 570 \text{ " "}$

e] bransformator:  $\frac{875}{2.15} = 408 \text{ " "}$

f] eigen gewicht spreek:  $0.50 \times 0.20 \times 2400 = 240 \text{ " "}$   
 bobasal =  $3940 \text{ kgf/m}^1$

d =  $2+1.9+1 = 4.9 \text{ cm.}$   
 d' =  $1^5+1.9+1 = 4.4 \text{ cm.}$

$m_v = m_1 = 1/10 \times 3940 \times 2.15^2 = 1830 \text{ kgfm}$

$m_{u1} = \left(\frac{18.1}{0.258}\right)^2 \times 0.50 = 1710 \text{ " "}$

$m_{u2} = 120 \text{ kgfm.}$

$A_1 = 0.0934 \times \frac{1710}{15.1} = 10.6 \text{ cm}^2$

$A = \frac{12000}{24.00 (20.44 - 4.9)} = 0.46 \text{ cm}^2$

A bobasal =  $11.06 \text{ cm}^2$

neem  $4 \phi 19 (11.36 \text{ cm}^2)$