

OPPDRAG Nr. .... OPPDRAG .....

påført grunntrykk:

$$\begin{array}{rcl}
 & 0,570 & \text{t/m}^2 \\
 & + 0,620 & \text{"} \\
 & + 0,620 & \text{"} \\
 & + 1,310 & \text{"} \\
 + 38,2/51 & = 0,750 & \text{"} \\
 + 63,4/51 & = 1,243 & \text{"} \\
 \hline
 \text{Vgr.} & = 5,113 & \text{t/m}^2
 \end{array}$$

netto grunntrykk:

$$\begin{array}{rcl}
 \uparrow \text{netto} & & \\
 + \text{Vgr.} & = 5,113 \div 1,310 = 3,80 & \text{t/m}^2 \\
 + \text{vanntrykk:} & \underline{0,40 \text{ "}} & \\
 & \underline{4,20} & \text{t/m}^2
 \end{array}$$

$$M_0 = 4,2 \cdot 4,0^2 / 8 = 8,4 \text{ tm/m.}$$

$$M_b = 0,3 \cdot 60 \cdot 100 \cdot 22^2 = \underline{87 \text{ tm/m.}} > M_0 \text{ o.k.}$$

$$F_a = 8,4 \cdot 10^3 / 2200 \cdot 0,85 \cdot 0,22 = 20,4 \text{ cm}^2/\text{m.}$$

$$\underline{\text{§ 16 c 20 gir } 20,1 \text{ cm}^2/\text{m.}}$$

$$F_{a \min} = 4 \cdot 25 \cdot 250 / 4000 = 6,25 \text{ cm}^2/\text{m.}$$

$$\text{§ 12 c 18 gir } 6,28$$

$$\text{eller } \underline{2 \times \text{§ 10 c 25 gir } 6,3 \text{ cm}^2/\text{m.}}$$

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STATENS HUS, FREDRIKSTAD.Politifløy, utvidelse.Fundamentplate:

Belastninger:

dekket over 2. etg.:

oppforet treplate	-	$0,060 \text{ t/m}^2$
egv. plate	-	$0,360 \text{ "}$
$g$	=	$0,420 \text{ t/m}^2$
+ snø $p$	=	$0,150 \text{ "}$
$q_1$	=	$0,570 \text{ t/m}^2$

dekket over 1. etg.

puss + egv. plate $g$	=	$0,420 \text{ t/m}^2$
+ nyttelast $p$	=	$0,200 \text{ "}$
$q_2$	=	$0,620 \text{ t/m}^2$

dekket over kjeller:

puss + egv. plate $g$	=	$0,420 \text{ t/m}^2$
+ nyttelast $p$	=	$0,200 \text{ "}$
$q_3$	=	$0,620 \text{ t/m}^2$

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bunnplate:

$$\text{egv. gulv på grunn: } g = 0,240 \text{ t/m}^2$$

$$\text{oppfylt grus } g = 0,320 \text{ "}$$

$$\text{bunnplate } 0,25 \times 2,4 = g = 0,600 \text{ "}$$

$$g = 1,160 \text{ t/m}^2$$

$$+ \text{ nyttelast } p = 0,150 \text{ "}$$

$$\underline{\underline{g_y = 1,310 \text{ t/m}^2}}$$

egv. søyler/vegger i 1. og 2. etg.

$$\text{vegger } 2 \times 2,4 \times 0,15 \times 15,0 \times \sim 3,0 = 32,4 \text{ t.}$$

$$\text{dragere: } 2 \times 2,4 \times 0,30 \times 11 \times 0,25 = 4,0 \text{ "}$$

$$\text{søyler: } 2 \times 2,4 \times 2 \times 3 \times 0,25 \times 0,25 = 1,8 \text{ t}$$

$$\underline{\underline{g = 38,2 \text{ tonn.}}}$$

kjellervegger:

$$0,25 \times 2,4 \times 3,30 \times 32,0 = \underline{\underline{63,4 \text{ t.}}}$$

regner at lastene fordeler seg jevnt over bunnplaten.

$$A = \sim 4,6 \times 11 = 50,6 \text{ m}^2$$