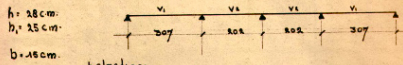


**LATIJ C-D STRAATGEVEL A-X**



belasting:  
 buitenmuur 0.80x11.4900 = 919 kg/m<sup>2</sup>  
 binnenmuur 0.50x1.70 = 85 "  
 later eg. 0.25x1.45x2.400 = 180 "  
 totaal = 380 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 380 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

belasting:  
 buitenmuur 1.40x11.4900 = 892 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 later eg. 0.25x1.45x2.400 = 93 "  
 totaal = 541 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

**LATIJ A STRAATGEVEL A-X**

b1=11cm  
 b2=9cm

belasting:  
 dak 0.90x1.80 = 162 kg/m<sup>2</sup>  
 later 0.25x1.45x2.400 = 93 kg/m<sup>2</sup>

$M_v \cdot 1/2 \times 3.07 \times 2 \times 255 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

**LATIJ B STRAATGEVEL A-X**

b1=28.5cm  
 b2=25cm

belasting:  
 buitenmuur 0.51x11.4900 = 65 kg/m<sup>2</sup>  
 later eg. 0.25x1.45x2.400 = 115 "  
 dak 0.90x1.80 = 162 "  
 totaal = 342 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 342 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

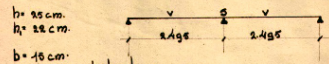
**LATIJ C NOORD-OOSTGEVEL A-X**

b1=25cm  
 b2=22cm

belasting:  
 buitenmuur 1.40x11.4900 = 892 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 later eg. 0.25x1.45x2.400 = 115 "  
 dak 0.90x1.80 = 162 "  
 totaal = 792 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 792 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

**LATIJ F NOORD-OOSTGEVEL A-X**

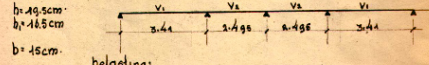


belasting:  
 buitenmuur 1.40x11.4900 = 892 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 later eg. 0.25x1.45x2.400 = 93 kg/m<sup>2</sup>

$M_v \cdot 1/2 \times 3.07 \times 2 \times 892 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 892 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 1.480$

**LATIJ G-G1 TYPE A-X**



belasting:  
 buitenmuur 0.80x11.4900 = 545 kg/m<sup>2</sup>  
 later eg. 0.25x1.45x2.400 = 93 "  
 dak 0.90x1.80 = 162 "  
 totaal = 340 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 340 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 340 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

**LATIJ D TYPE A-B**



belasting:  
 buitenmuur 1.40x11.4900 = 892 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 later eg. 0.25x1.45x2.400 = 93 "  
 totaal = 541 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

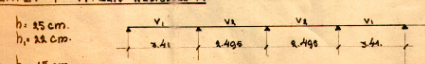
**LATIJ C STRAATGEVEL A**

b1=25cm  
 b2=22cm

belasting:  
 buitenmuur 0.80x11.4900 = 96 kg/m<sup>2</sup>  
 later eg. 0.25x1.45x2.400 = 90 "  
 totaal = 186 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 186 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

**LATIJ F-F1 ZUID-WESTGEVEL A**



belasting:  
 buitenmuur 1.40x11.4900 = 892 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 later eg. 0.25x1.45x2.400 = 93 "  
 totaal = 541 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

**LATIJ G2 NOORD-WESTGEVEL B**

b1=29.5cm  
 b2=25cm

belasting:  
 q = 310 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 310 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 310 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

**LATIJ C TYPE A-X**

b1=25cm  
 b2=22cm

belasting:  
 buitenmuur 1.35x11.4900 = 170 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 dak 1.45x1.80 = 190 "  
 totaal = 195 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 195 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 195 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

**LATIJ G2 NOORD-WESTGEVEL B**

b1=25cm  
 b2=22cm

belasting:  
 buitenmuur 1.00x11.4900 = 309 kg/m<sup>2</sup>  
 binnenmuur 0.70x1.70 = 81 "  
 later eg. 0.25x1.45x2.400 = 90 "  
 totaal = 390 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 390 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 390 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

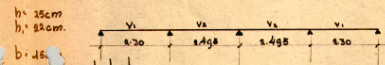
**LATIJ H ZUID-OOSTGEVEL B**

b1=25cm  
 b2=9cm

belasting:  
 q = 254 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 254 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380 \times 1.480$

**LATIJ J-F1 ZUID-OOSTGEVEL B**



belasting:  
 buitenmuur 1.40x11.4900 = 892 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 later eg. 0.25x1.45x2.400 = 93 "  
 totaal = 541 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 541 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

**LATIJ K TYPE B**

b1=25cm  
 b2=22cm

belasting:  
 buitenmuur 1.30x11.4900 = 795 kg/m<sup>2</sup>  
 binnenmuur 1.20x1.70 = 150 "  
 dak 1.45x1.80 = 190 "  
 totaal = 380 kg/m

$M_v \cdot 1/2 \times 3.07 \times 2 \times 380 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 1.20 \text{ cm}^2 \text{ wap} = 380$

$M_v \cdot 1/2 \times 3.07 \times 2 \times 380 \text{ kg/m} \cdot 0.4750 \beta \cdot 0.175 \text{ Ty} \cdot 0.80 \text{ cm}^2 \text{ wap} = 380$

LATIJ	PLAAT	VERDIEPING	DAGMAAT	TOTAALM.	AANTAL
C-D	straatgevel A-X	begane grond	2.87 - 3.07 m	11.06 m	10
A	straatgevel A-X	1 verd.	2.10 m	2.50 m	35
B	straatgevel A-X	1 verd.	1.75 m	4.75 m	35
C	noord-oostgevel A-X	begane grond	1.66 m	2.06 m	31
F	noord-oostgevel A-X	begane grond	1.95 - 2.05 m	4.65 m	10
G-G1	noord-oostgevel A-X	1 verd.	2.41 - 2.495 m zie schema		9
D	straatgevel A-B	begane grond	2.87 - 3.07 m	4.48 m	24
C	straatgevel A	begane grond	1.66 m	2.06 m	21
F-F1	zuid-westgevel A	begane grond	2.41 - 2.495 m zie schema		21
G2	noord-westgevel B	1 verd.	2.41 m	2.41 m	24
C	noord-westgevel A-B	begane grond	1.66 m	2.06 m	18
G2	noord-westgevel B	begane grond	1.66 m	2.06 m	34
H	zuid-oostgevel B	1 verd.	1.66 m	2.06 m	68
J-F1	zuid-oostgevel B	begane grond	2.10 - 2.195 m	2.98 m	24
K	noord-westgevel B	begane grond	2.12 m	2.17 m	16

DATUM: 11-10-1955  
 TEGEN:   
 667 "WILMA"  
 ANNEMINGOMARTSCHAPPIJ N.V. WEERT  
 B-223  
 ACCORD.

balk I en 2.

belasting:

dak : 2,91 x 180 = 525 kg/m<sup>2</sup>  
 zolder : 2,91 x 180 = 525 "  
 verd. vl. : 2,91 x 225 = 655 "  
 bq. gr. vl. : 2,91 x 225 = 655 "  
 muur : 8,20 x 120 = 984 kg/m

$Q = 2,26/8,20 \times 0,180 = 2,70$  kg/m<sup>2</sup>  
 eq. q. w. : 2,26 x 0,25 x 0,25 x 2400 = 270 kg/m<sup>2</sup>  
 2400 kg/m<sup>2</sup>

$M = \frac{1}{8} \times 2400 \times 2,91^2 = 3700$  kgm  
 $b = 30$   $l' = 0,15$   $T_b = 11$  kg/dm<sup>2</sup>  $T_y = 0,78$  dm<sup>2</sup>  $\boxed{4 \times 44}$

balk 3.

belasting:

dak : 2,50 x 180 = 450 kg/m<sup>2</sup>  
 zolder : 2,50 x 180 = 450 "  
 verd. vl. : 2,50 x 225 = 563 "  
 bq. gr. vl. : 2,50 x 225 = 563 "  
 muur : 8,20 x 260 = 2132 kg/m

$Q = 2,26/8,20 \times 0,260 = 2,90$  kg/m<sup>2</sup>  
 eq. q. w. : 2,26 x 0,25 x 0,25 x 2400 = 270 kg/m<sup>2</sup>  
 2520 kg/m<sup>2</sup>

$M = \frac{1}{8} \times 2520 \times 2,91^2 = 3800$  kgm  
 $b = 206$   $l' = 0,15$   $T_b = 475$  kg/dm<sup>2</sup>  $T_y = 6,06$  dm<sup>2</sup>  $\boxed{4 \times 44}$

balk 4.

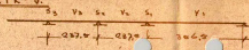
belasting:

dak : 2,33 x 180 = 420 kg/m<sup>2</sup>  
 zolder : 2,33 x 180 = 420 "  
 verd. vl. : 2,33 x 225 = 524 "  
 bq. gr. vl. : 2,33 x 225 = 524 "  
 muur : 8,20 x 239 = 1964 kg/m

$Q = 2,26/8,20 \times 0,236 = 2,90$  kg/m<sup>2</sup>  
 eq. q. w. : 2,26 x 0,25 x 0,25 x 2400 = 270 kg/m<sup>2</sup>  
 2520 kg/m<sup>2</sup>

$M = \frac{1}{8} \times 2520 \times 2,91^2 = 3800$  kgm  
 $b = 30$   $l' = 0,15$   $T_b = 275$  kg/dm<sup>2</sup>  $T_y = 0,93$  dm<sup>2</sup>  $\boxed{4 \times 42 + 2 \times 49}$

balk 5.



belasting:

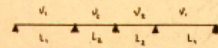
berdaai : 1,20 x 0,60 = 68 kg/m<sup>2</sup>  
 muur : 2,50 x 239 = 598 "  
 eq. q. w. : 270 kg/m<sup>2</sup>  
 1780 kg/m<sup>2</sup>

$M = M_{d1} = \frac{1}{4} \times 1780 \times 2,50^2 = 2200$  kgm  
 $b = 30$   $l' = 0,15$   $T_b = 49$  kg/dm<sup>2</sup>  $T_y = 0,60$  dm<sup>2</sup>  $\boxed{2 \times 46 + 2 \times 40}$

$M = M_{d2} = \frac{1}{4} \times 1780 \times 2,57^2 = 2900$  kgm  
 $b = 30$   $l' = 0,15$   $T_b = 28$  kg/dm<sup>2</sup>  $T_y = 0,28$  dm<sup>2</sup>  $\boxed{2 \times 46 + 1 \times 48}$

NO. 1: 9 SEP. 1957.	ONDERSTUNINGS CONSTRUCTIE BLOK 16.	ART. 30. 16.
NO. 2: 21. SEP. 15.		STOUWERIJ
NO. 3:	DIRIVINIA 6.	
69 WONINGEN SRASBOEKTRAVEL.		
NO. 4:	WILMA ANNEMINGS WANTSCHAPPI N.V.	TEK. NO.
667.	WIJRT.	B-290.

VLOER a



$l_1 = 2,90$	$l_1 \cdot l_2 = 5,22$	$l_2 \cdot l_3 = 1,16$
$l_1 = 2,32$	$2l_1 = 4,64$	
$l_1 l_2^2 = 3,05$	$xq = 430$	$xq = 700$
$l_1 l_2^2 = 1,56$	$xq = 220$	$xq = 360$

$5,22 M_2 + 1,16 M_3$	1060	790	920
$4,64 M_2 + 1,16(M_2 + M_3)$	580	720	590
$5,22 M_2 + 1,16 M_3$	920	790	790
$1,16 M_2 + 0,22 M_3$	204	175	175
$1,16 M_2 + 1,16 M_3$	596	545	405
$1,16 M_2 + 0,22 M_3$	100	145	108
$4,91 M_2$	760	645	612
$M_1$	195	181	155
$M_2$	34	90	49
$M_3$	169	131	140

$M_1: x = \frac{0-185}{250 \times 2,90} + 1,45 = 1,20$

$M_1: \frac{1}{2} \times 230 \times 1,20 \times 1,70 = \frac{180}{230} \times 185 = 167 \text{ kgm}$   $\alpha = 0,945$   $\beta = 0,110$   $F_y = 0,94$  wap. 2φ8

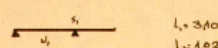
$M_2: x = \frac{49-440}{230 \times 2,32} + 1,16 = 0,99 \text{ m}$

$M_2: \frac{1}{2} \times 230 \times 0,99 \times 1,33 = 49 - \frac{899}{2,32} \times 91 = 73 \text{ kgm}$   $\alpha = 1,15$  wap. 1φ8

$M_3 = 195 \text{ kgm}$   $\alpha = 0,352$   $\beta = 0,229$   $F_y = 1,08 \text{ cm}^2$  wap. 1φ8+2φ6

$M_3 = 90 \text{ kgm}$   $\alpha = 0,549$   $\beta = 0,150$   $F_y = 0,48 \text{ cm}^2$  wap. 1φ8

VLOER b



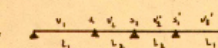
$M_{1,max} = \frac{1}{2} \times 230 \times 1,02^2 = 120 \text{ kgm}$   
 $M_{1,min} = \frac{1}{2} \times 144 \times 1,02^2 = 73 \text{ kgm}$

$x = \frac{0-73}{230 \times 3,10} + 1,55 = 1,43 \text{ m}$

$M_1: \frac{1}{2} \times 230 \times 1,43 \times 1,67 = \frac{153}{230} \times 230 = 240 \text{ kgm}$   $\alpha = 0,620$   $\beta = 0,124$   $F_y = 1,27 \text{ cm}^2$  wap. 1φ8+1φ10

$M_2 = 120 \text{ kgm}$   $\alpha = 0,449$   $\beta = 0,176$   $F_y = 0,66 \text{ cm}^2$  wap. 1φ8

STROOK 1



$l_1 = 3,10$	$l_1 \cdot l_2 = 5,22$	$l_2 \cdot l_3 = 1,55$
$l_1 = 2,12$	$2l_1 = 4,24$	$l_2 \cdot l_3 = 1,06$
$l_1 l_2^2 = 3,7$	$xq = 522$	$xq = 850$
$l_1 l_2^2 = 1,9$	$xq = 168$	$xq = 274$

$5,22 M_2 + 1,06 M_3$	1124	796	1018
$4,24 M_2 + 1,06(M_2 + M_3)$	442	548	442
$5,22 M_2 + 1,06 M_3$	1018	796	796
$1,06 M_2 + 0,22 M_3$	206	162	162
$1,06 M_2 + 1,06 M_3$	236	386	280
$1,06 M_2 + 0,22 M_3$	63	102	74
$4,94 M_2$	1064	684	644
$M_1$	215	140	181
$M_2$	3	60	19
$M_3$	195	140	148

$M_1: x = \frac{0-141}{230 \times 3,10} + 1,55 = 1,28 \text{ m}$

$M_1: \frac{1}{2} \times 230 \times 1,28 \times 1,82 = \frac{128}{230} \times 194 = 189 \text{ kgm}$   $\alpha = 0,700$   $\beta = 0,113$   $F_y = 1,03 \text{ cm}^2$  wap. 2φ8

$M_2: x = \frac{49-149}{230 \times 2,12} + 1,06 = 0,79 \text{ m}$

$M_2: \frac{1}{2} \times 230 \times 0,79 \times 1,33 = 49 - \frac{979}{2,12} \times 130 = 54 \text{ kgm}$   $\alpha = 1,31$  wap. 1φ8

$M_3 = 215 \text{ kgm}$   $\alpha = 0,335$   $\beta = 0,244$   $F_y = 1,21$  wap. 1φ8+1φ10

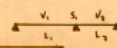
$M_3 = 60 \text{ kgm}$   $\alpha = 1,24$  wap. 1φ6

BALK 1

belasting: muur:  $2,60 \times 255 \times 1000 = 143 \text{ kg/m}$   
 beton:  $0,98 \times 0,19 \times 2400 = 505 \text{ ''}$   
 $p = 200 \times 200 = \frac{86 \text{ ''}}{504 \text{ kg/m}}$

$M_1: \frac{1}{2} \times 504 \times 1,02^2 = 205 \text{ kgm}$   $\alpha = 0,537$   $\beta = 0,145$   $F_y = 1,14 \text{ cm}^2$  wap. 2φ6+1φ10

VLOER a - 1-blok



$l_1 = 2,90$	$l_1 \cdot l_2 = 5,22$	$l_2 \cdot l_3 = 1,16$
$l_1 = 2,32$	$2l_1 = 4,64$	
$l_1 l_2^2 = 3,05$	$xq = 430$	$xq = 700$
$l_1 l_2^2 = 1,56$	$xq = 220$	$xq = 360$

$5,22 M_2$	1060	920	790
$M_1$	203	176	151

$M_1: x = \frac{0-176}{230 \times 2,90} + 1,45 = 1,19 \text{ m}$

$M_1: \frac{1}{2} \times 230 \times 1,19 \times 1,71 = \frac{119}{230} \times 176 = 163 \text{ kgm}$   $\alpha = 0,750$   $\beta = 0,109$   $F_y = 0,93 \text{ wap}$  2φ8

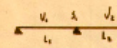
$M_2: x = \frac{151-0}{230 \times 2,32} + 1,16 = 1,44 \text{ m}$

$M_2: \frac{1}{2} \times 230 \times 1,44 \times 0,88 = 155 + \frac{159}{2,32} \times 151 = 89 \text{ kgm}$   $\alpha = 1,03$  wap. 1φ8+1φ6

$M_3 = 203 \text{ kgm}$   $\alpha = 0,344$   $\beta = 0,236$   $F_y = 1,14 \text{ cm}^2$  wap. 2φ8+1φ6

VLOER b als VLOER b VAN 2-blok

STROOK 1



$l_1 = 3,10$	$l_1 \cdot l_2 = 5,22$	$l_2 \cdot l_3 = 1,55$
$l_1 = 2,12$	$2l_1 = 4,24$	
$l_1 l_2^2 = 3,7$	$xq = 522$	$xq = 850$
$l_1 l_2^2 = 1,9$	$xq = 168$	$xq = 274$

$5,22 M_2$	1124	1018	796
$M_1$	216	195	183

$x = \frac{0-185}{230 \times 3,10} + 1,55 = 1,28 \text{ m}$

$M_1: \frac{1}{2} \times 230 \times 1,28 \times 1,82 = \frac{128}{230} \times 194 = 189 \text{ kgm}$   $\alpha = 0,700$   $\beta = 0,113$   $F_y = 1,03 \text{ wap}$  2φ8

$M_2: x = \frac{153-0}{230 \times 2,12} + 1,06 = 1,37 \text{ m}$

$M_2: \frac{1}{2} \times 230 \times 1,37 \times 0,75 = 153 - \frac{137}{2,12} \times 153 = 66 \text{ kgm}$   $\alpha = 1,180$  wap. 1φ8

$M_3 = 216 \text{ kgm}$   $\alpha = 0,334$   $\beta = 0,244$   $F_y = 1,22 \text{ cm}^2$  wap. 1φ8+1φ10

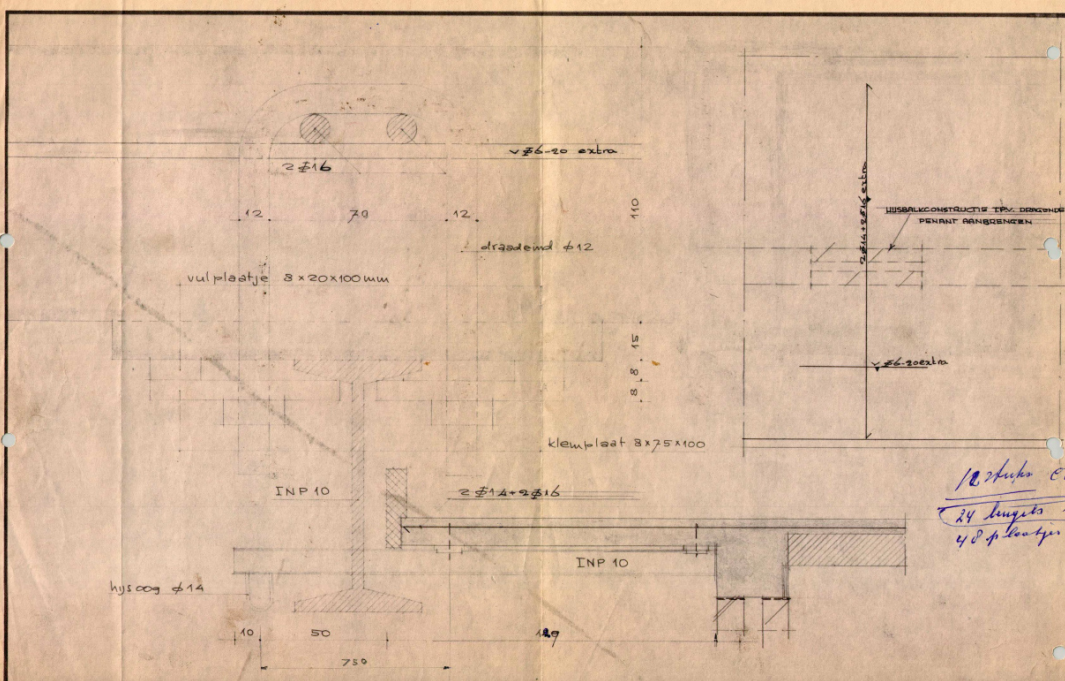
BALK 2

belasting

$l = 1,85 \text{ m}$   
 $h = 19 \text{ cm}$  vloer:  $2,60 \times 525 = 1365 \text{ kg/m}^2$   
 $h' = 165 \text{ cm}$  beton:  $0,19 \times 0,11 \times 2400 = \frac{50 \text{ ''}}{1415 \text{ kg/m}^2}$   
 $b = 11 \text{ cm}$

$1,46 \times 145 \times 1,25^2 = 280 \text{ kgm}$   $\alpha = 0,328$   $\beta = 0,248$   $F_y = 1,48 \text{ cm}^2$  wap. 2φ10

DAT: 12-5-55	<b>SOUTERRAINDEK TYPE B</b>	ACCORD
GET: JK	<b>BEREKENING</b>	
GEZ.	<b>69 WONINGEN HEERLEN</b>	
<b>667</b>	<b>"WILMA"</b> AANNEMINGSMAATSCHAPPIJ NV	<b>WEERT. B-224</b>



**HUSBALK**  
 $P = 800 \text{ kg}$   $l = 0,75 \text{ m}$   $M = 375 \text{ kgm}$   $W_{ben} = \frac{37500}{1400} = 27 \text{ cm}^3$  INP 10 ✓

**ANKER**  
 $R = \frac{500 \cdot 1,30}{1,15} = 830 \text{ kg}$   $F_{ben} = \frac{830}{1400} = 0,59 \text{ cm}^2$  Neem #12

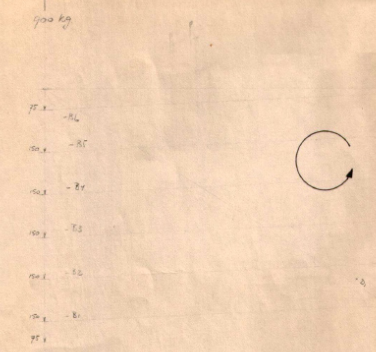
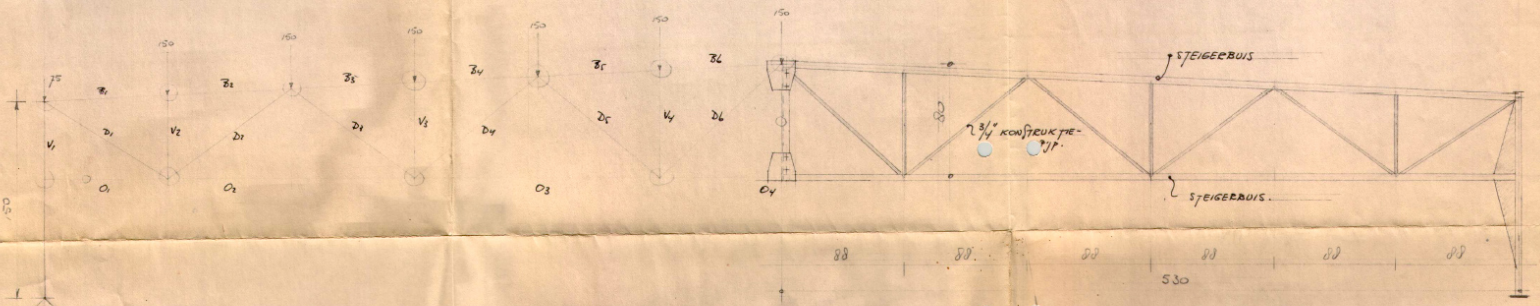
**KLEMP/LAAT**  
 $M = 416,35 = 1450 \text{ kgcm}$   $W_{ben} = \frac{1450}{1400} = 1,04 \text{ cm}^3$   
 $W_{aanm} = \frac{1}{8} \cdot 10 \cdot 0,8^2 = 1,07 \text{ cm}^3$  3x25x100mm

**EXTRA WAP.**  
 $P = 800 \text{ kg}$   $F = 800 \text{ kg}$   
 $M = \frac{1}{2} \cdot 800 \cdot 0,75 = 300 \text{ kgm}$   
 $h = 7,70 \text{ m}$   $b = 0,80 \text{ m}$   
 $K = 0,0022$   $K_0 = 0,0054$   $A = 6,79 \text{ cm}^2$  2#16 + 2#14  
vw #6-20

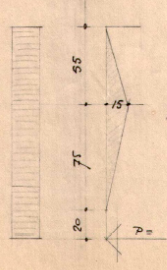
*10 stuks compleet gegabelt  
 24 lengtes + 48 mm - spand met geg  
 48 p. leuners geg*

*7/085  
 5/036  
 [Signature]*

DAT. 15-12-66	HUSBALKCONSTRUCTIE	AFD. 3x
GET. G. MELIS		WDZ
GEZ. M.		AFD.
SCHAAL 1:1, 1:10, 1:20		
240 WONINGEN MALBERG MAASTRICHT		
WERK NO. 885	WILMA	WEERT
		TEK. NO. CB-3572



STAAF	ZIJK kg	TEEK kg	STAAF- LENGTE	MIN- LENGTE	φ STAAF	L cm	γ = $\frac{L}{r}$	α =	F STAAF cm <sup>2</sup>	σ <sub>1</sub>	σ <sub>2</sub>	σ <sub>OPTE.</sub>
Z1	-1240		88	88	φ 48.25	1,59	55	0,797	4,91	2400	1270	252
Z2	-1240		88	88	"	"	"	"	"	"	"	252
Z3	-2670		88	88	"	"	"	"	"	"	"	543
Z4	-2670		88	88	"	"	"	"	"	"	"	543
Z5	-3100		88	88	"	"	"	"	"	"	"	630
Z6	-3100		88	88	"	"	"	"	"	"	"	630
O1	0	0	88	88	"	"	"	"	"	2400	1600	0
O2		+2100	176	176	"	"	"	"	"	"	"	427
O3		+2990	176	176	"	"	"	"	"	"	"	608
O4		+3030	176	176	"	"	"	"	"	"	"	615
V1	-900		6	36	φ 14	0,88	21	1	"	"	"	183
V2	-130		6	36	φ 14	0,88	41	0,909	1,73	2180	1450	87
V3	-130		6	36	"	"	45	0,876	"	2100	1400	87
V4	-130		6	36	"	"	51	0,827	"	1990	1320	87
D1		+1460	104	88	"	"	"	"	"	2400	1600	870
D2	-1030		110	88	"	"	75	0,629	"	1510	1000	620
D3		+690	110	88	"	"	"	"	"	2400	1600	400
D4	-410		114	88	"	"	77	0,612	"	1470	980	237
D5		+130	114	88	"	"	"	"	"	2400	1600	75
D6	-100		118	88	"	"	80	0,588	"	1410	940	58



$P = \frac{100 \times 1,5 \times 4,92}{2} = 370 \text{ kg}$   
 $M_{\text{mom}} = 370 \times 0,95 = 350 \text{ kpm} = 35000 \text{ kpcm}$   
 $W_{\text{steigerbuis}} = 5,14 \text{ cm}^3$   
 $\sigma = \frac{35000}{5,14} = 6800 \text{ kpf/cm}^2 \rightarrow \text{BEZWIJKEN}$   
 $\rightarrow$  plaat in het midden  $15 \text{ cm}$   
 $\rightarrow N = 5,14 + 7 \times 4,92 = 5,14 + 34,44 = 39,58$   
 $\sigma_{\text{pl}} = \frac{35000}{39,58} = 885 \text{ kpf/cm}^2$

**WIND.**  $Zuigning 0,4 \times 70 = 28 \text{ kp/m}$   
 $EG = 20 \text{ kp/m}^2 \rightarrow$  waait weg  $\rightarrow$  VASTZETTEN  
**GEWICHT SPANT.**  $\text{steigerbuis } 3,86 \text{ kp/m}$   
 $\frac{3}{4}'' \text{ buis } 1,41 \text{ ''}$   
 $4 \times 30,5 \text{ } 2,77 \text{ ''}$   
 $\text{steigerbuis } 24 \text{ m} \times 2 \text{ } 3,86 = 93 \text{ kp.}$   
 $\frac{3}{4}'' \text{ buis } 17 \text{ m} \times 2 \text{ } 1,41 = 24 \text{ ''}$   
 $4 \times 30,5 \text{ } 0,7 \text{ m} \times 2 \text{ } 2,77 = 2 \text{ ''}$   
 $\underline{\underline{119 \text{ kp.}}}$   
**G SPANT VOLGENS VOORSIETEL I**  $100 \text{ kp.}$

**CONCLUSIE.**  
 1. het spant ruim voldoende sterk en e.p. nuwe te draagen.  
 2. het versterken met plaat om wind- en verhuurkosten te kunnen ophangen  
 3. bij wind moet de kap verticaal worden  
 4. periodiek spant niet ouder dan bij versiel I.  
 5. niet met een goed vastmaken om veranderingen die meten en niet waken van de komrand te voorkomen.  
 6. Verwijzen te maken om velen roods aanpakken bij versiel II.  
 7.

D.V. NILHA NEEF PLAN BUDO.	WINTERVOORZIENINGEN			
	OVERKAPINGS VLOEVELDEN (PROEFMODEL "DE NEEF")			
DATUM 2.10.66	SCHAAL 1:20	GET. B	CEL.	TEK. NR. 615-01



No.	omschrijving	hoeveelheid	eenheid	toelichting
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**wilma**  
 bouwvereniging n.v. den haag

SCHAAL 1 : 5000

