

Statische berekening

Projectnummer	22-229
Omschrijving	Aanbouw bedrijfsruimte Zuidema a/d Smirnoffstraat 14 te Hoogeveen
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Constructeur	
Opdrachtgever	Gebr. Middelveld

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1. Algemeen

1.1 Projectomschrijving

In dit rapport wordt de aanbouw van een bedrijfsruimte aan de Smirnoffstraat 14 te Hoogeveen nader uitgewerkt. Deze uitwerking betreft uitsluitend de hoofddraagconstructie.

Gegunde opdracht

De opdracht van de statische berekening loopt tot aanvraag omgevingsvergunning.

1.2 Wijzigingen

n.v.t.

1.3 Bouwkundige tekeningen

Deze berekening is gebaseerd op de bouwkundige tekeningen van VM Architectuur d.d. 15-08-2022.

1.4 Gegevens derden

Voor deze berekening is gebruik gemaakt van de sonderingen van Koops Grondmechanica d.d. 20-05-1996.

1.5 Voorwaarden

DNR2011 – Algemene Voorwaarden Wopereis Bouwtechniek

Alle werkzaamheden worden verricht onder de Algemene Voorwaarden van Wopereis Bouwtechniek en de toepasselijkheid van de Rechtsverhouding opdrachtgever-architect, ingenieur en adviseur DNR 2011, gedeponeerd ter griffie bij de rechtbank te Amsterdam onder nummer 78/2011, de herziene versie uit 2013 onder nummer 56/2013. Zowel de Algemene Voorwaarden als de DNR 2011 zijn als bijlage meegestuurd met de offerte.

Prefab onderdelen

Deze berekening dient als basis voor de berekening van de prefab onderdelen, detailberekeningen staal- en houtconstructie. Bovengenoemde berekeningen en detailleringen worden niet in dit rapport behandeld en zijn voor rekening van de desbetreffende leverancier. Tekeningen en berekeningen van derden worden enkel gecontroleerd op constructieve uitgangspunten en belastingen conform de DNR 2011. De maatvoering wordt niet door ons gecontroleerd. De auteurs van de hiervoor genoemde tekeningen en berekeningen blijven ten allen tijden volledig verantwoordelijk. Werkzaamheden voor de prefab onderdelen dienen te worden uitgevoerd conform de onderstaande categorieën volgens het KOMO-atteest:

Categorie 1:	Niet van toepassing
Categorie 2:	Palen
Categorie 3:	Trappen, bordessen, galerijen, balkons
Categorie 4:	Systeemvloeren
Categorie 5:	Balken, kolommen, wanden
Categorie 6:	Niet van toepassing

Uitgangspunten in deze rapportage

Alle uitgangspunten in dit rapport dienen door de opdrachtgever en/of aannemer te worden gecontroleerd.

Goedkeuring gemeente / controlerende instantie

Zolang er geen goedkeuring is verleend door de controlerende instantie (gemeente), mogen er geen constructieve werkzaamheden worden verricht.

2. Uitgangspunten

2.1 Voorschriften

NEN8700	Grondslagen constructieve veiligheid van bestaande bouw	
Eurocode 0	Grondslagen van het constructief ontwerp	NEN-EN 1990 + NB
Eurocode 1	Belastingen op constructies	NEN-EN 1991 + NB
Eurocode 2	Betonconstructies	NEN-EN 1992 + NB
Eurocode 3	Staalconstructies	NEN-EN 1993 + NB
Eurocode 4	Staal-betonconstructies	NEN-EN 1994 + NB
Eurocode 5	Houtconstructies	NEN-EN 1995 + NB
Eurocode 6	Constructies van metselwerk	NEN-EN 1996 + NB
Eurocode 7	Geotechnisch ontwerp	NEN-EN 1997 + NB

2.2 Materiaaleigenschappen

Uitgangspunt in de berekening zijn de onderstaande (minimaal benodigde) materiaaleigenschappen, tenzij anders is aangegeven

Beton

In het werk gestort	C20/25
Prefab onderdelen	C35/45

Betonstaal

Staven	B500B
Gepuntlaste wapeningsnetten	B500B

Metselwerk

Baksteen	10,0N/mm ²	mortel/lijm	5,0N/mm ²
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Kalkzandsteen

Lijmblok	kwal. CS12	lijm	12,5N/mm ²
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Constructiestaal

Walsprofielen	S235
Koker- en buisprofielen	S275
Ankerbouten	kwal. 4.6 (gerolde draad)
Bouten	kwal. 8.8
Voegmortels onder stalen kolom	K50

- Staalconstructies en verankeringen in vochtig milieu corrosiewerend behandelen, met een referentieperiode van 50 jaar.
- Indien dak of vloerliggers worden voorzien van een zeeg, dan moet deze zeeg parabool-vormig worden uitgevoerd. De in de berekening genoemde zegen zijn exclusief eventueel afschot.
- Staalprofielen voorzien van de nodige ankers, strippen, haarspelden, schotjes e.d. voor verankering.
- Minimale oplegglengte latei/stalen balk is gelijk aan de profielhoogte.

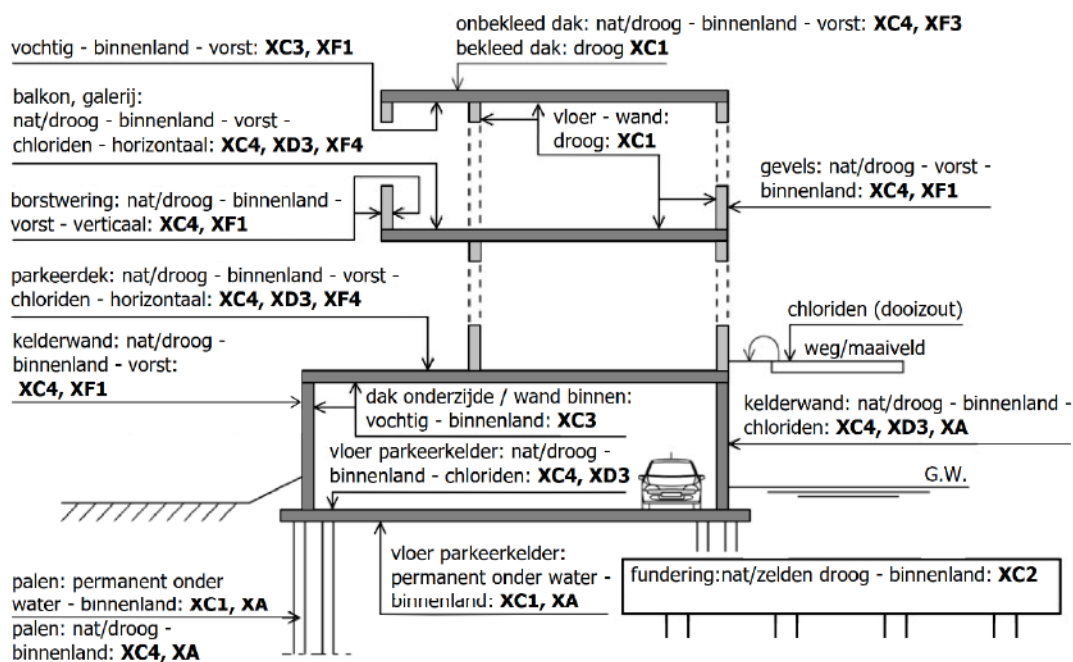
2.3 Gebouwcategorie, ontwerplevensduur, gevolgklasse

soort gebouwfunctie	: kantoor	belastingfactoren	
gebruikscategorie	: B	Permanent gunstig	: 0,9
gevolgklasse	: CC2	Permanent ongunstig (niet dominant)	: 1,20
toegepaste norm	: Nieuwbouw	Permanent ongunstig (dominant)	: 1,35
ontwerplevensduurklasse	: 3	Veranderlijke belasting	: 1,50
ontwerplevensduur	: 50 jaar		

2.4 Stabiliteitsprincipe

Geschoorde staalconstructie in langs en dwarsrichting. De stabiliteit wordt verzorgd door windverbanden in het dakvlak en in de gevels.

2.5 Milieuklassen



X0	XC1	XC2;XC3	XC4	XD1;XS1	XD2;XS2	XD3;XS3	XA1;XF1	XA2;XF2	XA3;XF3	XF3 (xd/xs)	XF4 (xc)
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	(xc/xd/xs)	(xc/xd/xs)	(xc/xd/xs)	[mm]	[mm]
15	20	30	35	40	45	45	20/40/40	30/45/45	30/50/50	50	35

Voorwaarden

- Bovenstaande dekking geldt bij een ontwerplevensduur van 50 jaar en een constructieklasse S4, zonder kwaliteitsbeheersing.
- Bovenstaande dekking mag niet kleiner zijn dan de staafdiameter + 5mm.
- Bij vloeren en wanden mag bovenstaande waarde met 5mm worden gereduceerd.
- Bij storten op een werkvloer moet bovenstaande dekking met 5mm worden verhoogd.
- Bij storten op de grond/op folie moet bovenstaande dekking met 45mm worden verhoogd.
- Toeslag indien de dekking oncontroleerbaar is +5mm

Relatieve vochtigheid [RH] meest gangbare milieuklassen

XC1 = droog (binnen)milieu	[RH <60%]
XC1 = permanent onder water	[RH 100%]
XC2 = nat/zelden droog milieu	[RH 85% - 100%]
XC3 = vochtig milieu	[RH 60% - 85%]
XC4 = nat/droog milieu	[RH 85% - 100%]

3. Belastingen

3.1 Windbelasting

Windgebied	:	III	$\psi_0 = 0$
Terreincategorie	:	II onbebouwd	$\psi_1 = 0,2$
Gebouwhoogte (H)	:	6,4 m	$\psi_2 = 0$
Gebouwlengte (D)	:	25,5 m	
Gebouwbreedte (B)	:	6,4 m	
Extreme stuwdruk $q_{p,z}$:	0,60 kN/m ²	

Coëfficiënten windwrijving

Positie	oppervlakte	c_{fr}
Dak	Zeer ruw	: 0,04
Gevels	Ruw	: 0,02



3.2 Sneeuwbelasting

Sneeuwbelasting (s_n)		$\mu_i = 0,70$		
hellend dak	$\alpha =$ n.v.t. °	$\mu_1 = 0,00$	$Q_{sn;k} = 0,00$ kN/m ²	$\psi_0 = 0$
hellend dak_	$\alpha =$ n.v.t. °	$\mu_1 = 0,00$	$Q_{sn;k} = 0,00$ kN/m ²	$\psi_1 = 0,2$
Platdak	$\alpha =$ 0 °	$\mu_1 = 0,80$	$Q_{sn;k} = 0,56$ kN/m ²	$\psi_2 = 0$

Sneeuwophoping

n.v.t.

3.3 Belastingen uit wanden

Gevelmetselwerk	dik100mm	2,00kN/m ²		
Kalkzandsteen [KZ]	dik100mm	2,00kN/m ²	Kalkzandsteen [KZ]	dik120mm 2,40kN/m ²
HSB-binnenwand		0,50kN/m ²	HSB-gevel	0,80kN/m ²

3.4 Belastingen uit vloeren en daken

platdak

permanent

stalen dakplaten, PIR isolatie, dakbedekking en hulpstaal	=	0,35	kN/m ²
plafond	=	0,15	kN/m ²
PV panelen_plat dak	=	0,25	kN/m ²
G_{k,1}	=	0,75	kN/m²

veranderlijk

Dakhelling $0 \leq \alpha < 20$ (niet toegankelijk - geldt voor 10m²)

Klasse: H

$\Psi_0 = 0$	$\psi_t = 1,00$	*	1,00 kN/m ²	=	1,00	kN/m ²
$\Psi_1 = 0$	-			=	-	kN/m ²
$\Psi_2 = 0$	Q _k =	2,0 kN	-	Q_{k,1}	=	1,00 kN/m²
				Q _{k,i}	=	0,00 ,,

1e verdiepingvloer

permanent

kanaalplaatvloer d=200				=	3,10	kN/m ²
cementdekvloer	80	mm	* 20,0 kN/m ³	=	1,60	kN/m ²
plafond				=	0,15	kN/m ²
Installaties				=	0,15	kN/m ²
				G_{k,1}	= 5,00	kN/m²

veranderlijk

Ontsluitingswegen (kantoorruimten)

Klasse: B

$\Psi_0 = 0,5$	$\psi_t = 1,00$	*	3,00 kN/m ²	=	3,00	kN/m ²
$\Psi_1 = 0,5$	scheidingswanden (1,0)			=	1,00	kN/m ²
$\Psi_2 = 0,3$	Q _k =	3,0 kN	-	Q_{k,1}	=	4,00 kN/m²
				Q _{k,i}	=	2,00 ,,

begane grondvloer

permanent

betonvloer op zand				=	-	kN/m ²
dikte vloer	200	mm	* 25,0 kN/m ³	=	5,00	kN/m ²
cementdekvloer	80	mm	* 20,0 kN/m ³	=	1,60	kN/m ²
				G_{k,1}	=	6,60 kN/m²

veranderlijk

Ontsluitingswegen (kantoorruimten)

Klasse: B

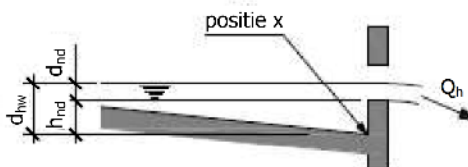
$\Psi_0 = 0,5$	$\psi_t = 1,00$	*	3,00 kN/m ²	=	3,00	kN/m ²
$\Psi_1 = 0,5$	scheidingswanden (1,0)			=	1,00	kN/m ²
$\Psi_2 = 0,3$	Q _k =	3,0 kN	-	Q_{k,1}	=	4,00 kN/m²
				Q _{k,i}	=	2,00 ,,

3.5 Noodoverstorten

Onderstaande berekening is excl. de noodafvoeren van het bestaande dak. De bestaande overstorten toevoegen aan onderstaand:

Wateraccumulatie rechte vrije overlaat

Totaal dakoppervlak	165 m ²
Breedte spuwer	350 mm
Hoogte spuwer	80 mm
Aantal	2 stuks
Referentie periode	50 jaar
	$i_r = 0,050 \cdot 10^{-3} \text{ m/s}$
	$Q_h = 0,00825 \text{ m}^3/\text{s}$
Inplakhoogte	$h_{nd} = 30 \text{ mm}$
Stuwhoogte	$d_{nd} = 36 \text{ mm}$
Waterhoogte	$d_{hw} = 66 \text{ mm}$



Rechte overlaten dienen boven de waterhoogte d_{nd} een vrije hoogte te hebben van minimaal 30mm:
vrije hoogte = hoogte overlaat - $d_{nd} = 44 \text{ mm}$ **voldoet**

De afstand tussen de noodafvoeren moet zijn beperkt, in verband met enig mogelijk verhang in de waterspiegel. Indien er geen afschot aanwezig is tussen de noodafvoeren, wordt aanbevolen de afstand tussen de noodafvoeren te beperken tot 30m.

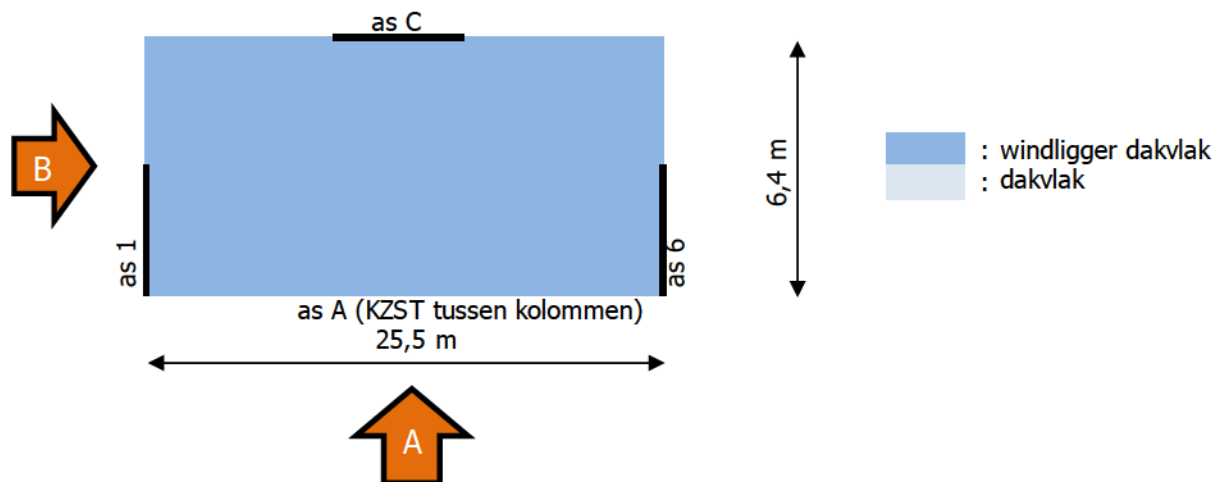
4. Berekening

4.1 Stabiliteit

Bepaling belastingen

Windgebied	: III	Correlatiefactor	: 0,85
Terreincategorie	: II onbebouwd	$C_s C_d$ (wind op langsgewel)	: 1,00
Gebouwhoogte (H)	: 6,4 m	$C_s C_d$ (wind op kopgewel)	: 1,00
Gebouwlengte (D)	: 26 m	Windwrijving dak	: 0,04
Gebouwbreedte (B)	: 6,4 m	Windwrijving gewel	: 0,02
ontwerplevensduur	: 50 jaar	Windfactoren gewel	C_{pe} (zone D) : 0,80
Extreme stuwdruk $q_{p,z}$: 0,60 kN/m ²		C_{pe} (zone E) : -0,50

Overzicht windbelastingen op dakvlak



Windbelasting

Hoogte dakrand	: 0,2 m
Dakniveau	: 6,2 m
Verd.niveau	: 3,1 m
Belastingbr. dakniveau	: $[3,1 * 0,5] + 0,2 = 1,8 \text{ m}$
$Q_{windrichting A; druk+zuiging}$: $0,60 * 1,30 * 1,00 * 0,85 * 1,8 \text{ m} = 1,15 \text{ kN/m}$
$Q_{windrichting A; dakwrijving}$: $0,60 * 0,04 * 0,85 * 6,4 \text{ m} = 0,13 \text{ kN/m}$
	$Q_{wind;rep A} = 1,28 \text{ kN/m}$
$Q_{windrichting B; druk+zuiging}$: $0,60 * 1,30 * 1,00 * 0,85 * 1,8 \text{ m} = 1,15 \text{ kN/m}$
$Q_{windrichting B; dakwrijving}$: $0,60 * 0,04 * 0,85 * 25,5 \text{ m} = 0,52 \text{ kN/m}$
	$Q_{wind;rep B} = 1,67 \text{ kN/m}$

Koppelkokers

$L_{c,max}$: 5,00 m
 $Q_{wind\ B}$: 1,67 kN/m
 Bel.br. : 3,20 m
 N_{Ed} : $1,67 * 3,20 * 1,50 = 8,0$ kN

Toetsing NEN-EN 1993 art. 6.3.3

Formule 6.47 u.c. = $\frac{N_{Ed}}{N_{b,Rd;y}} = 0,34$ **voldoet**

Formule 6.47 u.c. = $\frac{N_{Ed}}{N_{b,Rd;z}} = 0,34$ **voldoet**

Profiel	CF60x60x3	
Staalkwaliteit	S 235	
Breedte	60,0	mm
Hoogte	60,0	mm
W_y	$11,5 \times 10^3$	mm ³
I_y	$34,4 \times 10^4$	mm ⁴
i_y	23,0	mm
W_z	$11,5 \times 10^3$	mm ³
I_z	$34,4 \times 10^4$	mm ⁴
i_z	23,0	mm
I_t	$57,3 \times 10^4$	mm ⁴
A	653,0	mm ²

Profielkeuze CF60x60x3

ULS u.c.: 0,34 **voldoet**

Gedrukte rand (windligger) | zonder buiging om zwakke as

Windligger [2 steunpunten]
 Hoogte windligger : 6,4 m
 Lengte windligger : 25,5 m

Windrichting A
 $M_{rep} = 0,125 * 1,28 * 25,5^2 = 104$ kNm
 $N_{rep} = 104 / 6,4 \text{ m} = 16,3$ kN
 $N_{Ed} = 16,3 * 1,50 = 24,4$ kN

Gevelplaat steunt niet tegen de ligger (geen buiging om zwakke as)

$L_{c,max}$: 5,00 m

Toetsing NEN-EN 1993 art. 6.3.3

Formule 6.47 u.c. = $\frac{N_{Ed}}{N_{b,Rd;y}} = 0,12$ **voldoet**

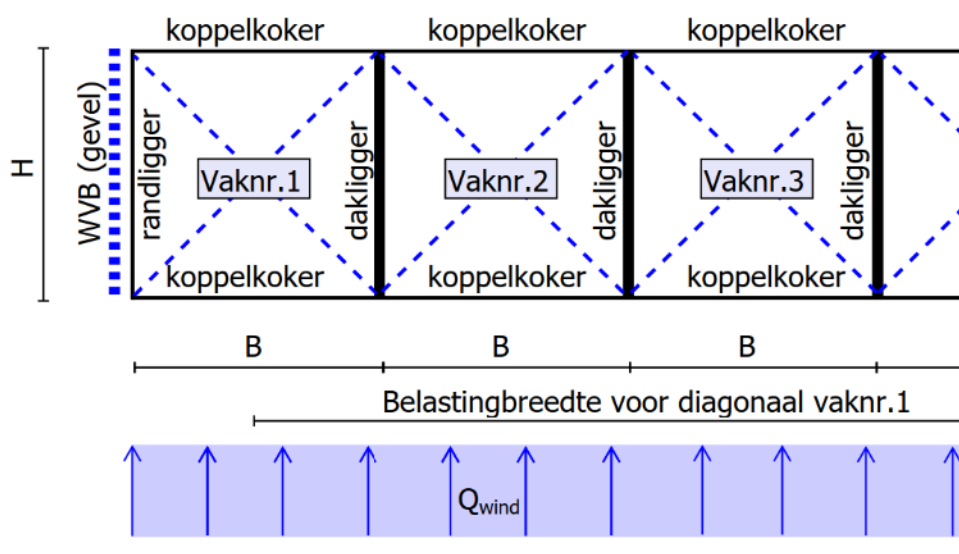
Formule 6.47 u.c. = $\frac{N_{Ed}}{N_{b,Rd;z}} = 0,28$ **voldoet**

Profielkeuze HE100A

ULS u.c.: 0,28 **voldoet**

Profiel	HE100A	
Staalkwaliteit	S 235	
Breedte	100,0	mm
Hoogte	96,0	mm
W_y	$83,0 \times 10^3$	mm ³
I_y	$349,2 \times 10^4$	mm ⁴
i_y	40,6	mm
W_z	$41,1 \times 10^3$	mm ³
I_z	$133,8 \times 10^4$	mm ⁴
i_z	25,1	mm
I_t	$5,2 \times 10^4$	mm ⁴
A	2124,0	mm ²

Dakverbanden



Windrichting A

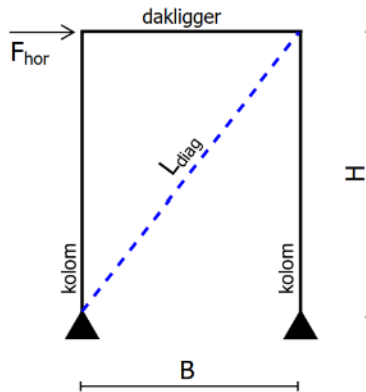
Diagonaal vak nr.	:	1
Aantal diagonalen	:	1
Belastingbreedte	:	10,3 m
$Q_{wind;rep}$:	1,28 kN/m
Vakbreedte [B]	:	5,0 m
Vakhoogte [H]	:	3,2 m
L_{diag}	:	5,9 m
$F_{hor:rep}$:	13,1 kN
$F_{hor:d}$:	19,7 kN
F_{diaoxd}	:	36,6 kN
L.60*60*6 + 2M12		
$N_{t,Rd}$:	67,8 kN
UC	:	0,54

Gevelwindverbanden

Windverband as C

Windrichting B

Aantal diagonalen	:	1
Belastingbreedte	:	3,2 m
$Q_{wind;rep}$:	1,67 kN/m
Breedte [B]	:	5,0 m
Hoogte [H]	:	3,1 m
L_{diag}	:	5,9 m
$F_{hor;rep}$:	5,3 kN
$F_{hor;d}$:	8,0 kN
$F_{diag;d}$:	9,4 kN
$N_{rep;kolom}$ +/-	:	3,31 kN
$N_{Ed;kolom}$ +/-	:	4,97 kN
Strip 60*6 + 2M12		
$N_{t;Rd}$:	67,8 kN
UC	:	0,14



4.2 Kopgevels as 1 en 6

Lijnlast

Belastingen	breedte factor		G _k	Q _k	ψ ₀	q _{g;k}	q _{Q;k}	q _k	q _{mom;ψ0}	q _{d;6.10a}	q _{d;6.10b}
	(m)		(kN/m ²)	(kN/m ²)		(kN/m ²)	(kN/m ²)	(kN/m ²)	(kN/m ²)	(kN/m ²)	(kN/m ²)
platdak	2,50	100%	0,75	1,00	1,00	1,88	2,50	4,38	0,00	2,53	6,00
1e verdiepingsvloer	0,60	100%	5,00	4,00	1,00	3,00	2,40	5,40	1,20	5,85	7,20
mw dik 100	2,90	100%	2,00			5,80		5,80		7,83	6,96

Horizontale belasting op stab. Element: as 1

- Windbelasting [richting] : Beide zijden gelijk Belastingafdracht v/d wind is aan beide zijden gelijk
- Windbelasting op niveau ca. : 6200+
- Windbelasting loodrecht op as : A
- De belastingbreedte van de belastinggenerator [Technosoft] is 2,5 m (in mindering gebracht in deze tabel)

Windbelasting	q _{p;z}	C _{pe}	B of L	H of L	c _s c _d	Cor.	Factor	Loefzijde	Lijzijde
	(kN/m ²)		(m)	(m)				(druk)	(zuiging)
F _{hor;druk}	: 0,60 *	0,80 *	10,3 *	1,8 *	1,00 *	0,85 *	100%	= 7,3 kN	
F _{hor;zuiging}	: 0,60 *	0,50 *	10,3 *	1,8 *	1,00 *	0,85 *	100%	=	4,5 kN
F _{hor;gevelwrijving}	: 0,60 *	0,02 *	6,4 *	1,8 *	1,00 *	0,85 *	100%	= 0,1 kN	0,1 kN
F _{hor;dakwrijving}	: 0,60 *	0,04 *	6,4 *	12,8 *	1,00 *	0,85 *	100%	= 0,8 kN	0,8 kN
								<u>8,2 kN</u>	<u>5,4 kN</u>
F _{hor;totaal;rep}	: 8,2 +	5,4	=	13,6 kN					
F _{hor;Ed;totaal}	: 13,6 *	1,50	=	20,4 kN					

Horizontale belasting op stab. Element: as 1

- Windbelasting [richting] : Beide zijden gelijk Belastingafdracht v/d wind is aan beide zijden gelijk
- Windbelasting op niveau ca. : 3100+
- Windbelasting loodrecht op as : A
- De belastingbreedte van de belastinggenerator [Technosoft] is 2,5 m (in mindering gebracht in deze tabel)

Windbelasting	q _{p;z}	C _{pe}	B of L	H of L	c _s c _d	Cor.	Factor	Loefzijde	Lijzijde
	(kN/m ²)		(m)	(m)				(druk)	(zuiging)
F _{hor;druk}	: 0,60 *	0,80 *	10,3 *	3,1 *	1,00 *	0,85 *	100%	= 12,9 kN	
F _{hor;zuiging}	: 0,60 *	0,50 *	10,3 *	3,1 *	1,00 *	0,85 *	100%	=	8,0 kN
F _{hor;gevelwrijving}	: 0,60 *	0,02 *	6,4 *	3,1 *	1,00 *	0,85 *	100%	= 0,1 kN	0,1 kN
								<u>13,0 kN</u>	<u>8,1 kN</u>
F _{hor;totaal;rep}	: 13,0 +	8,1	=	21,1 kN					
F _{hor;Ed;totaal}	: 21,1 *	1,50	=	31,7 kN					

Onderdeel....: DRSN kopgevels as 1 en as 6
 Dimensies....: kN;m;rad (tenzij anders aangegeven)
 Datum.....: 04/10/2022

Belastingbreedte.: 2.500
 Rekenmodel.....: 2e-orde-elastisch.
 Theorieën voor de bepaling van de krachtsverdeling:
 1) Losse belastinggevallen:
 Lineaire-elasticiteitstheorie
 2) Uiterste grenstoestand:
 Geometrisch niet lineair alle staven.
 Fysisch lineair alle staven.
 3) Gebruiksgrenstoestand:
 Geometrisch niet lineair alle staven.
 Fysisch lineair alle staven.

Maximum aantal iteraties.....: 50
 Max.deellengte kolommen/wanden: 0.500 Max.deellengte balken/vloeren: 0.500
 Max. X-verplaatsing in UGT....: 0.500 Max. Z-verplaatsing in UGT....: 0.250

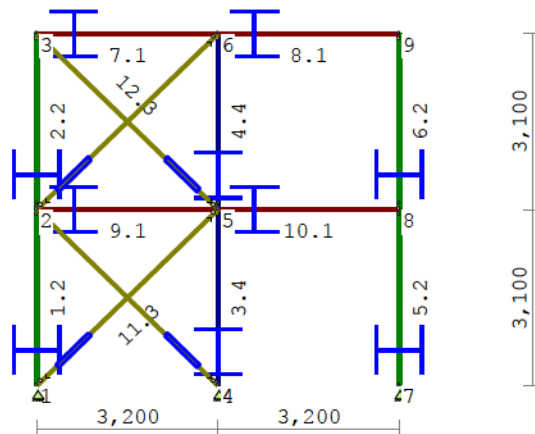
Gunstige werking van de permanente belasting wordt automatisch verwerkt.
 Eigen gewicht van trekstaven is niet meegenomen in de berekening.

De stabiliteit van de gehele constructie kan door de toegepaste trekstaven reken-
 technisch niet geheel gegarandeerd zijn en dient extra gecontroleerd te worden.

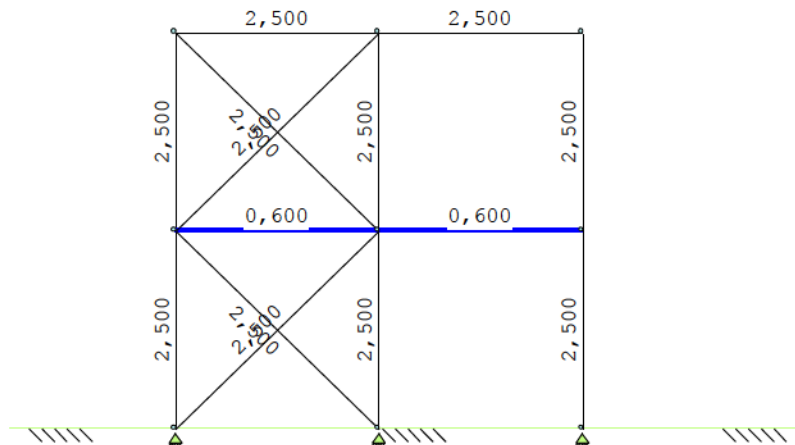
Toegepaste normen volgens Eurocode met Nederlandse NB

Belastingen	NEN-EN 1990:2002	C2:2010,A1:2019	NB:2019(nl)
	NEN-EN 1991-1-1:2002	C1/C11:2019	NB:2019(nl)
	NEN-EN 1991-1-3:2003	C1:2009	NB:2011(nl)
	NEN-EN 1991-1-4:2005	C2:2011	NB:2011(nl)
Staal	NEN-EN 1993-1-1:2006	C2:2011,A1:2016	NB:2016(nl)

GEOMETRIE



BELASTINGBREEDTEN



MATERIALEN

Mt	Kwaliteit	E-modulus[N/mm ²]	S.G.	Pois.	Uitz. coëff
1	S235	210000	78.5	0.30	1.2000e-05

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	HEA120	1:S235	2.5340e+03	6.0600e+06	0.00
2	HEA140	1:S235	3.1420e+03	1.0330e+07	0.00
3	STRIP80*8	1:S235	6.4000e+02	3.4133e+03	0.00
4	HEA140 (90)	1:S235	3.1420e+03	3.8900e+06	0.00

PROFIELEN vervolg [mm]

Prof.	Staaftype	Breedte	Hoogte	e	Type	b1	h1	b2	h2
1	0:Normaal	120	114	57.0					
2	0:Normaal	140	133	66.5					
3	1:Trek	80	8	4.0					
4	0:Normaal	140	133	70.0					

PROFIELVORMEN [mm]

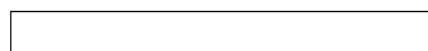
1 HEA120



2 HEA140



3 STRIP80*8



4 HEA140 (90)



KNOPEN

Knoop	X	Z	Knoop	X	Z
1	0.000	0.000	6	3.200	6.200
2	0.000	3.100	7	6.400	0.000
3	0.000	6.200	8	6.400	3.100
4	3.200	0.000	9	6.400	6.200
5	3.200	3.100			

STAVEN

St.	ki	kj	Profiel	Aansl.i	Aansl.j	Lengte	Opm.
1	1	2	2:HEA140	NDM	ND-	3.100	
2	2	3	2:HEA140	ND-	ND-	3.100	
3	4	5	4:HEA140 (90)	NDM	ND-	3.100	
4	5	6	4:HEA140 (90)	ND-	ND-	3.100	
5	7	8	2:HEA140	NDM	ND-	3.100	
6	8	9	2:HEA140	ND-	ND-	3.100	
7	3	6	1:HEA120	NDM	NDM	3.200	
8	6	9	1:HEA120	NDM	NDM	3.200	
9	2	5	1:HEA120	NDM	NDM	3.200	
10	5	8	1:HEA120	NDM	NDM	3.200	
11	1	5	3:STRIP80*8	ND-	ND-	4.455	
12	5	3	3:STRIP80*8	ND-	ND-	4.455	
13	4	2	3:STRIP80*8	ND-	ND-	4.455	
14	2	6	3:STRIP80*8	ND-	ND-	4.455	

VASTE STEUNPUNTEN

Nr.	knoop	Kode	XZR	l=vast	0=vrij	Hoek
1	1	110				0.00
2	4	110				0.00
3	7	110				0.00

BELASTINGBREEDTEN

Staal	Breedte-i	Breedte-j	Staal	Breedte-i	Breedte-j
1	2.500	2.500	6	2.500	2.500
2	2.500	2.500	7	2.500	2.500
3	2.500	2.500	8	2.500	2.500
4	2.500	2.500	9	0.600	0.600
5	2.500	2.500	10	0.600	0.600
11	2.500	2.500			
12	2.500	2.500			
13	2.500	2.500			
14	2.500	2.500			

BELASTINGGENERATIE ALGEMEEN.

Betrouwbaarheidsklasse.....	2	Referentieperiode.....	50
Gebouwdiepte.....	25.00	Gebouwhoogte.....	6.40
Niveau aansl.terrein.....	0.00	E.g. scheid.w. [kN/m2]:	1.00

WIND

Terrein categorie ...[4.3.2]...	Onbebouwd
Windgebied	3 Vb,0 ..[4.2]..... 24.500
Positie spant in het gebouw....	0.000 Kr ...[4.3.2]..... 0.209
z0	0.200 zmin ..[4.3.2]..... 4.000

WIND

Co wind van links ..[4.3.3]....	1.000	Co wind van rechts....	1.000
Co wind loodrecht ..[4.3.3]....	1.000		
Cpi wind van links ..[7.2.9]....	0.200	-0.300	
Cpi windloodrecht ...[7.2.9]....	0.200	-0.300	
Cpi wind van rechts ..[7.2.9]....	0.200	-0.300	
Cfr windwrijving[7.5].....	0.040		

SNEEUW

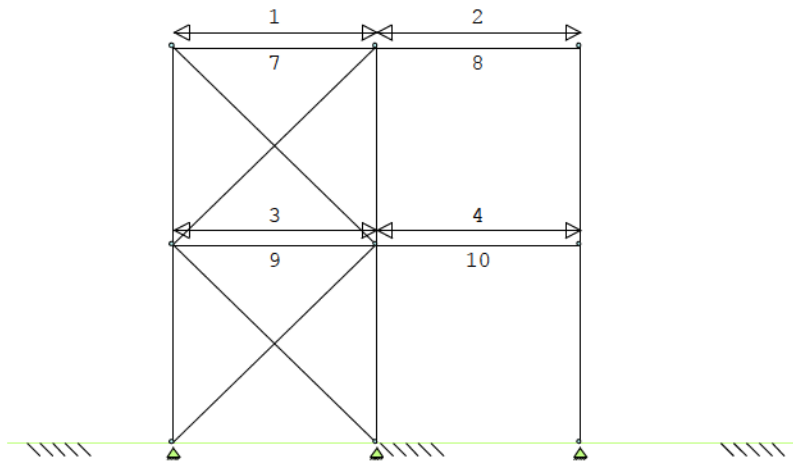
Sneeuwbelasting (sk) 50 jaar :	0.70
Sneeuwbelasting (sn) n jaar :	0.70

STAFTYPEN

Type	staven
1:Vloer.	: 9,10
4:Wand / kolom.	: 3,4
5:Linker gevel.	: 1,2
6:Rechter gevel.	: 5,6
7:Dak.	: 7,8
9:Open.	: 11-14

LASTVELDEN

Veranderlijke belastingen door personen

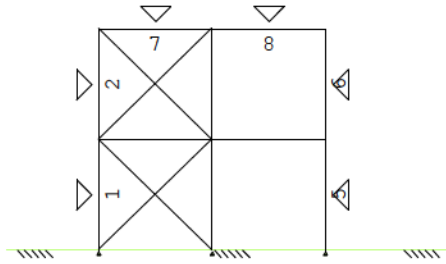


LASTVELDEN

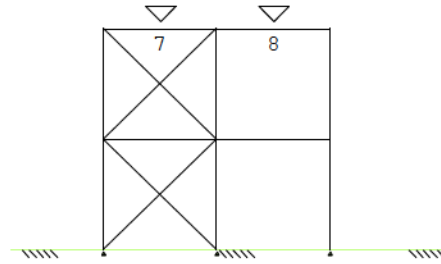
Nr	Staaf	Tabel	Klasse-Gebruiksfunctie	Verd.	q_k	Q_k	F_e / F_{e0}
1	7-7	6.10	H-Dak (onder dakbeschot)	2	-1.00	-2.00	1.00
2	8-8	6.10	H-Dak (onder dakbeschot)	2	-1.00	-2.00	1.00
3	9-9	6.2	B-Omsloten verkeersruimte	1	-3.00	-3.00	1.00
4	10-10	6.2	B-Omsloten verkeersruimte	1	-3.00	-3.00	1.00

LASTVELDEN

Wind staven



Sneeuw staven

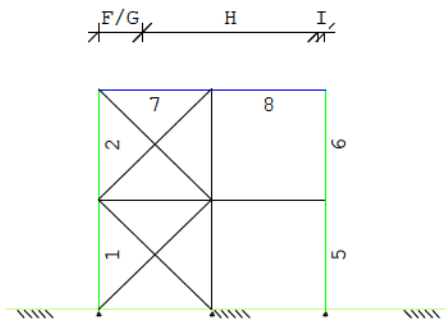


WIND DAKTYPES

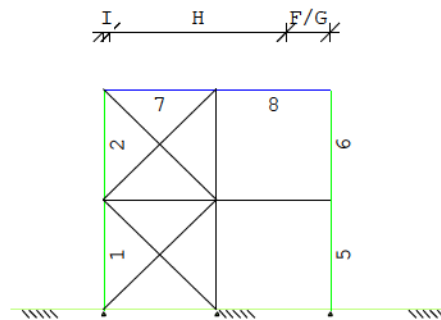
Nr.	Staaft Type	reductie bij wind van links	reductie bij wind van rechts	Cpe volgens art:
1	1-2 Gevel	1.000	1.000	7.2.2
2	7-8 Plat dak	1.000	1.000	7.2.3
3	6-5 Gevel	1.000	1.000	7.2.2

WIND ZONES

Wind van links



Wind van rechts



WIND VAN LINKS ZONES

Nr.	Staaft	Positie	Lengte	Zone
1	1-2	0.000	6.200	D
2	7-8	0.000	1.240	F/G
3	7-8	1.240	4.960	H
4	7-8	6.200	0.200	I
5	6-5	0.000	6.200	E

WIND VAN RECHTS ZONES

Nr.	Staaft	Positie	Lengte	Zone
1	6-5	0.000	6.200	D
2	7-8	0.000	1.240	F/G
3	7-8	1.240	4.960	H
4	7-8	6.200	0.200	I
5	1-2	0.000	6.200	E

Wind indexen

Index	CsCd	Cpe/Cpi	qp	breedte	reductie	Qw	Zone	Hoek(en)
Qw1		0.300	0.594	2.500		-0.446	-i	
Qw2		-0.300	0.594	2.500		0.446	-i	
Qw3	1.00	0.800	0.594	2.500		-1.189	D	
Qw4	1.00	-1.800	0.594	2.500		2.675	F	0.0
Qw5	1.00	-0.700	0.594	2.500		1.040	H	0.0
Qw6	1.00	-0.200	0.594	2.500		0.297	I	0.0
Qw7	1.00	0.500	0.594	2.500		-0.743	E	
Qw8		-0.200	0.594	2.500		0.297	+i	
Qw9		0.200	0.594	2.500		-0.297	+i	
Qw10	1.00	0.200	0.594	2.500		-0.297	I	0.0
Qw11	1.00	-0.800	0.594	2.500		1.189	D	
Qw12	1.00	-0.500	0.594	2.500		0.743	E	
Qw13	1.00	-1.200	0.594	1.280		0.913	A	
Qw14	1.00	-0.800	0.594	1.220		0.580	B	

Wind indexen

Index	CsCd	Cpe/Cpi	qp	breedte	reductie	Qw	Zone	Hoek(en)
Qw15	1.00	1.200	0.594	1.280		-0.913	A	
Qw16	1.00	0.800	0.594	1.220		-0.580	B	
Qw17	1.00	-1.200	0.594	0.640		0.456	G	0.0
Qw18	1.00	-1.800	0.594	0.640		0.685	F	0.0
Qw19	1.00	-0.700	0.594	1.860		0.774	H	0.0
Qw20	1.00	-0.500	0.594	2.500		0.743	C	
Qw21	1.00	0.500	0.594	2.500		-0.743	C	

SNEEUW DAKTYPEN

Staaft	artikel
7-8	5.3.2 Lessenaarsdak

Sneeuw indexen

Index	art	μ	s_k	red.	posfac	breedte	Q_s	hoek
Qs1	5.3.2	0.800	0.70	1.00		2.500	1.400	0.0

BELASTINGGEVALLEN

B.G.	Omschrijving	Type
	1 Permanente belasting EGZ=-1.00	1
g	2 Ver. bel. pers. ed. (q_k)	2
g	3 Ver. bel. pers. ed. (Q_k)	3
g*	4 Wind van links onderdruk A	7
g*	5 Wind van links overdruk A	8
g*	6 Wind van links onderdruk B	9
g*	7 Wind van links overdruk B	10
g*	8 Wind van rechts onderdruk A	11
g*	9 Wind van rechts overdruk A	12
g*	10 Wind van rechts onderdruk B	13
g*	11 Wind van rechts overdruk B	14
g	12 Wind loodrecht onderdruk A	15
g	13 Wind loodrecht overdruk A	16
g	14 Wind loodrecht onderdruk B	45
g	15 Wind loodrecht overdruk B	46
g	16 Sneeuw A	22

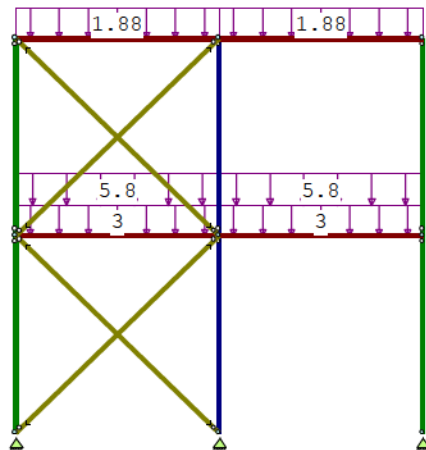
g = gegenereerd belastinggeval

* = belastinggeval bevat 1 of meer handmatig toegevoegde en/of gewijzigde lasten

BELASTINGEN

B.G:1 Permanente belasting

Eigen gewicht van alle staven is meegenomen in berekening. Richting:↓



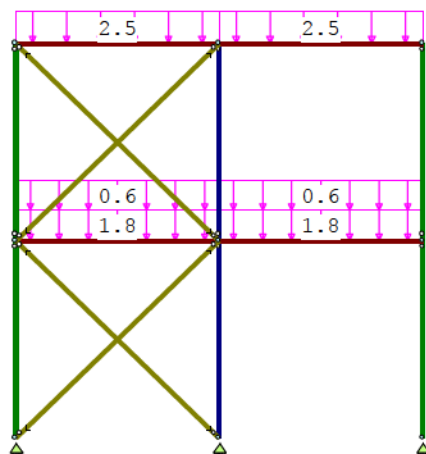
STAAFBELASTINGEN

B.G:1 Permanente belasting

Staaft	Type	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
7	1:QZLokaal	-1.88	-1.88	0.000	0.000			
8	1:QZLokaal	-1.88	-1.88	0.000	0.000			
9	1:QZLokaal	-3.00	-3.00	0.000	0.000			
10	1:QZLokaal	-3.00	-3.00	0.000	0.000			
9	1:QZLokaal	-5.80	-5.80	0.000	0.000			
10	1:QZLokaal	-5.80	-5.80	0.000	0.000			

BELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)



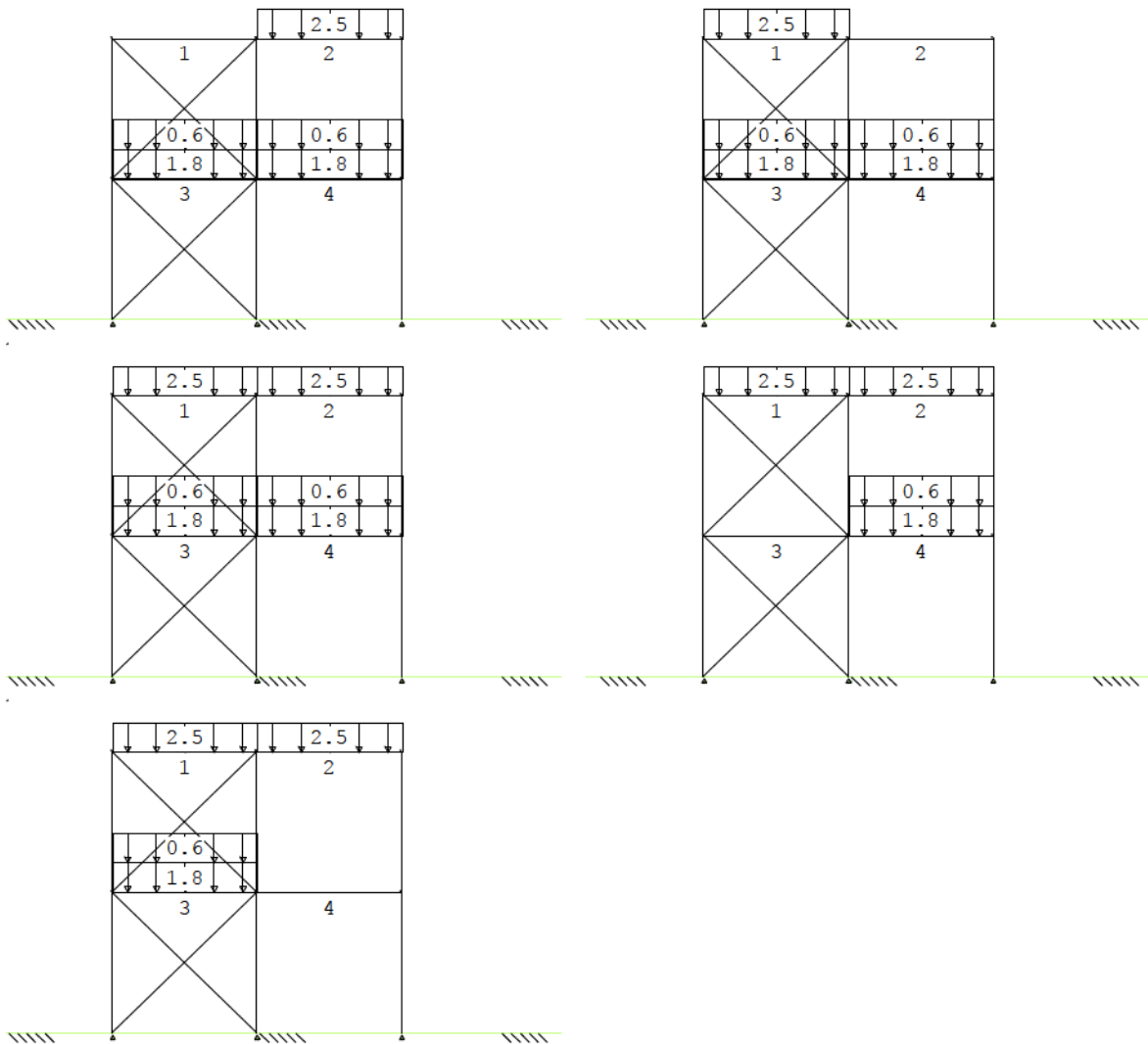
STAAFBELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)

Staaft	Type	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
7	3:QZgeProj.	-2.50	-2.50	0.000	0.000	0.00	0.00	0.00
8	3:QZgeProj.	-2.50	-2.50	0.000	0.000	0.00	0.00	0.00
9	3:QZgeProj.	-1.80	-1.80	0.000	0.000	0.50	0.50	0.30
9	3:QZgeProj.	-0.60	-0.60	0.000	0.000	0.50	0.50	0.30
10	3:QZgeProj.	-1.80	-1.80	0.000	0.000	0.50	0.50	0.30
10	3:QZgeProj.	-0.60	-0.60	0.000	0.000	0.50	0.50	0.30

SITUATIES BELAST/ONBELAST

B.G:2 Ver. bel. pers. ed. (q_k)



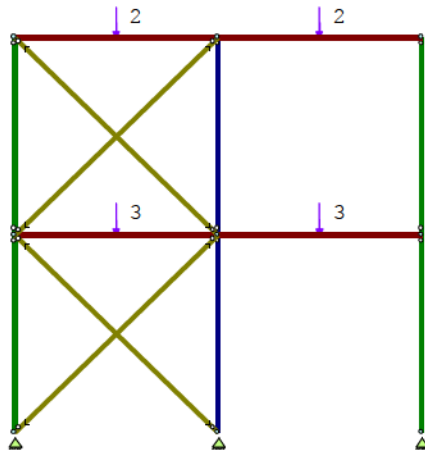
SITUATIES BELAST/ONBELAST

Belastingtype: q_k

Nr Lastvelden belast	Lastvelden onbelast
1 2-4	1
2 1,3,4	2
3 1-4	3
4 1,2,4	4
5 1-3	

BELASTINGEN

B.G:3 Ver. bel. pers. ed. (Q_k)



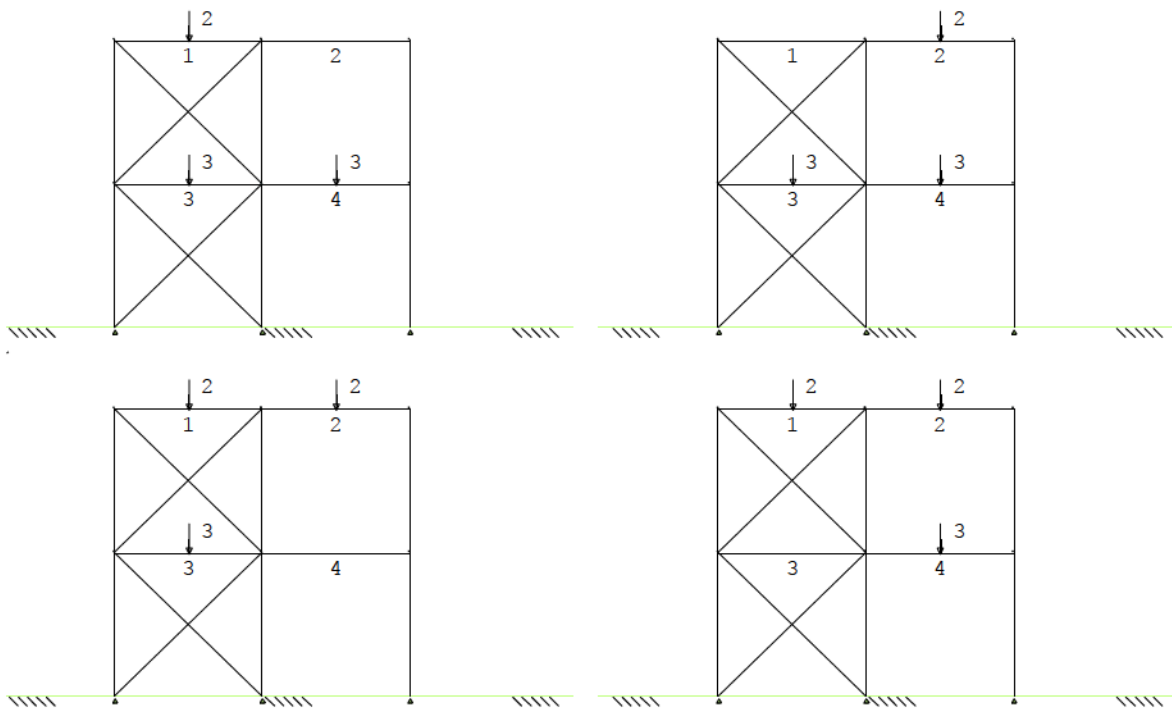
STAAFBELASTINGEN

B.G:3 Ver. bel. pers. ed. (Q_k)

Staaf	Type	q1/p/m	q2	A	B	ψ ₀	ψ ₁	ψ ₂
7	10:PZGepro.j.	-2.00		1.600		0.00	0.00	0.00
8	10:PZGepro.j.	-2.00		1.600		0.00	0.00	0.00
9	10:PZGepro.j.	-3.00		1.600		0.50	0.50	0.30
10	10:PZGepro.j.	-3.00		1.600		0.50	0.50	0.30

SITUATIES BELAST/ONBELAST

B.G:3 Ver. bel. pers. ed. (Q_k)



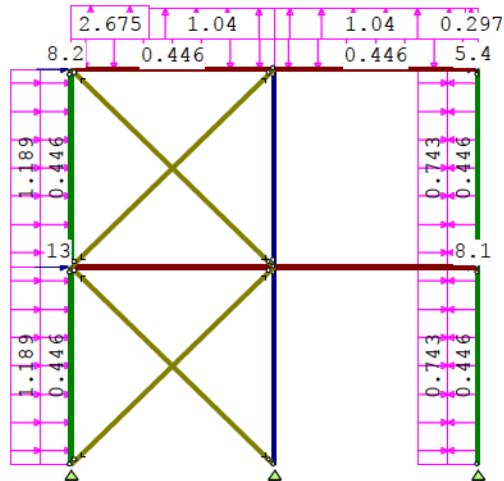
SITUATIES BELAST/ONBELAST

Belastingtype: Q_k

Nr Lastvelden belast	Lastvelden onbelast
1 1,3,4	2
2 2-4	1
3 1-3	4
4 1,2,4	3

BELASTINGEN

B.G:4 Wind van links onderdruk A



KNOOPBELASTINGEN

B.G:4 Wind van links onderdruk A

Last Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3 X	8.200	0.00	0.20	0.00	*
2	9 X	5.400	0.00	0.20	0.00	*
3	2 X	13.000	0.00	0.20	0.00	*
4	8 X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

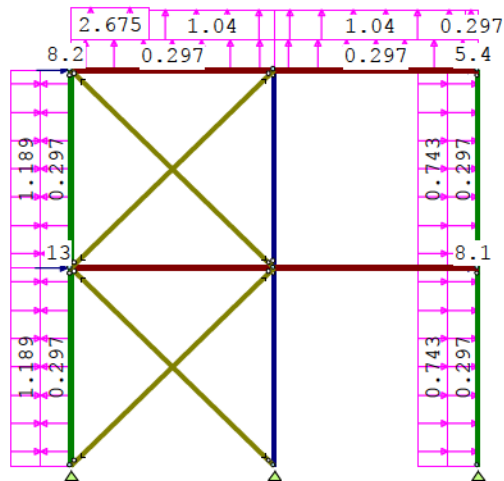
STAAFBELASTINGEN

B.G:4 Wind van links onderdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw6	0.30	0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:5 Wind van links overdruk A



KNOOPBELASTINGEN

B.G:5 Wind van links overdruk A

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

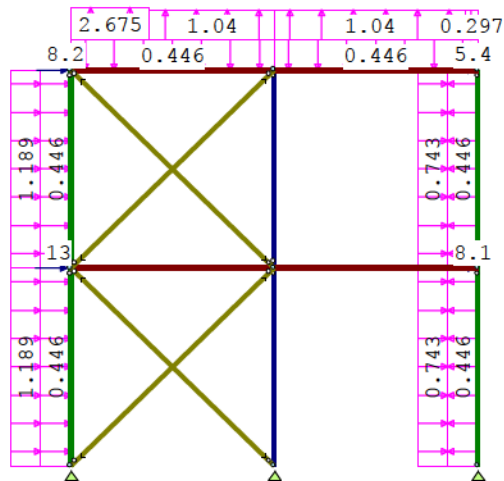
STAAFBELASTINGEN

B.G:5 Wind van links overdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw6	0.30	0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:6 Wind van links onderdruk B



KNOOPBELASTINGEN

B.G:6 Wind van links onderdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

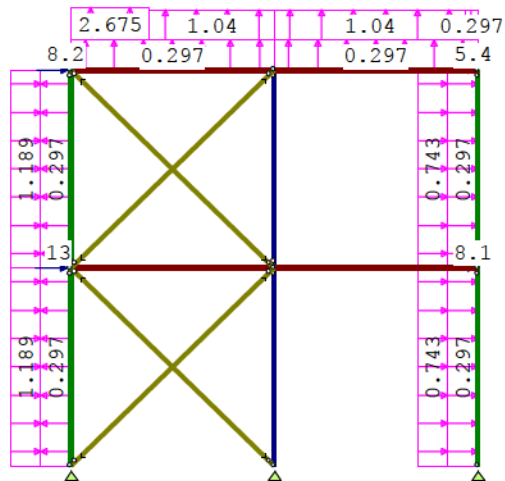
STAAFBELASTINGEN

B.G:6 Wind van links onderdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw10	-0.30	-0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:7 Wind van links overdruk B



KNOOPBELASTINGEN

B.G:7 Wind van links overdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

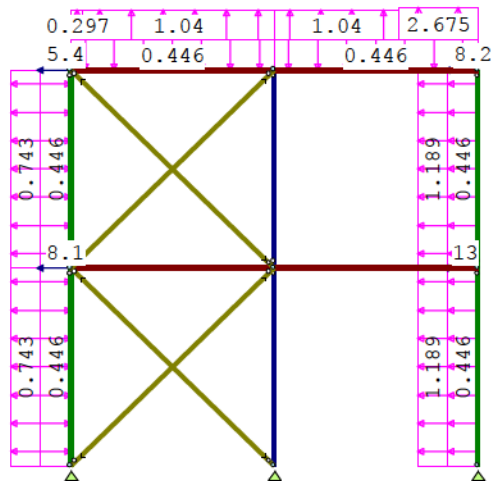
STAAFBELASTINGEN

B.G:7 Wind van links overdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw10	-0.30	-0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:8 Wind van rechts onderdruk A



KNOOPBELASTINGEN

B.G:8 Wind van rechts onderdruk A

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

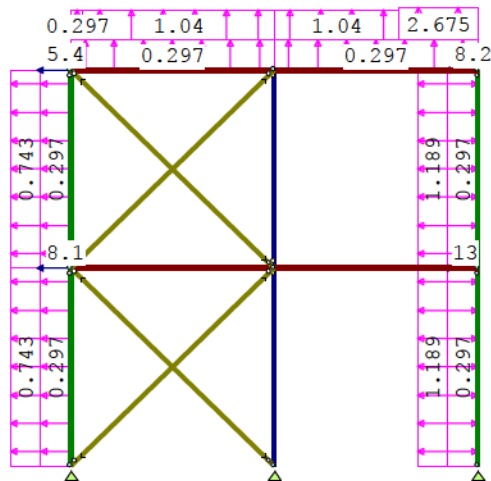
STAAFBELASTINGEN

B.G:8 Wind van rechts onderdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw6	0.30	0.30	0.000	3.000	0.00	0.20	0.00
2	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:9 Wind van rechts overdruk A



KNOOPBELASTINGEN

B.G:9 Wind van rechts overdruk A

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

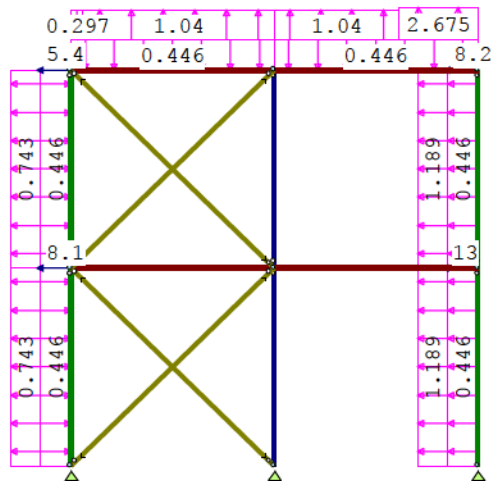
STAAFBELASTINGEN

B.G:9 Wind van rechts overdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw6	0.30	0.30	0.000	3.000	0.00	0.20	0.00
2	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:10 Wind van rechts onderdruk B



KNOOPBELASTINGEN

B.G:10 Wind van rechts onderdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

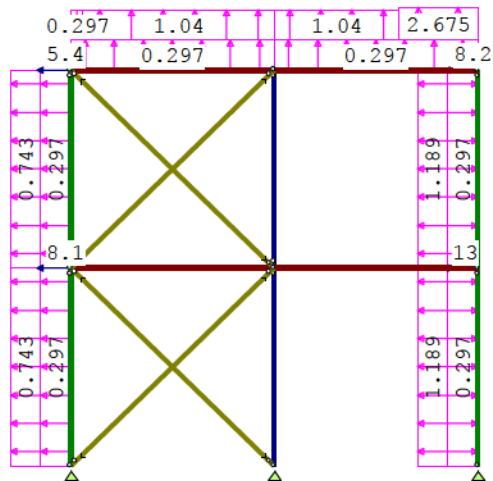
STAAFBELASTINGEN

B.G:10 Wind van rechts onderdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw10	-0.30	-0.30	0.000	3.000	0.00	0.20	0.00
2	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:11 Wind van rechts overdruk B



KNOOPBELASTINGEN

B.G:11 Wind van rechts overdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

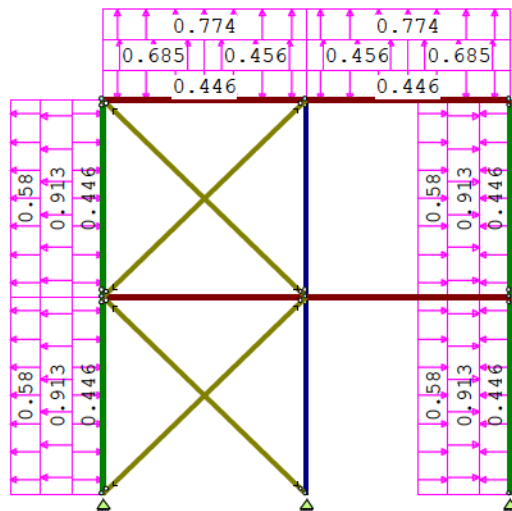
STAAFBELASTINGEN

B.G:11 Wind van rechts overdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw10	-0.30	-0.30	0.000	3.000	0.00	0.20	0.00
2	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:12 Wind loodrecht onderdruk A



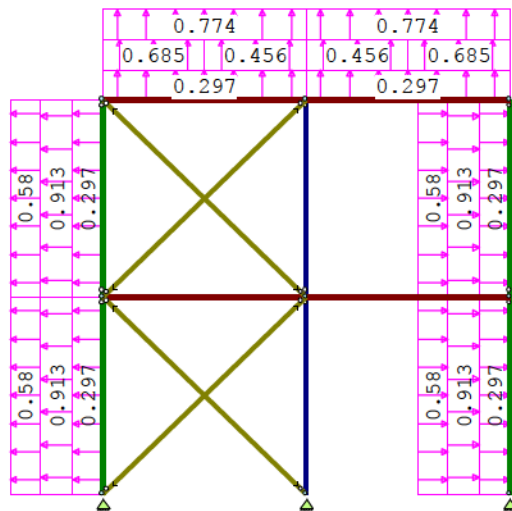
STAAFBELASTINGEN

B.G:12 Wind loodrecht onderdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw13	0.91	0.91	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw14	0.58	0.58	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw13	0.91	0.91	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw14	0.58	0.58	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw15	-0.91	-0.91	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw16	-0.58	-0.58	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw15	-0.91	-0.91	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw16	-0.58	-0.58	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw17	0.46	0.46	1.600	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw18	0.68	0.68	0.000	1.600	0.00	0.20	0.00
7	1:QZLokaal	Qw19	0.77	0.77	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw18	0.68	0.68	1.600	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw17	0.46	0.46	0.000	1.600	0.00	0.20	0.00
8	1:QZLokaal	Qw19	0.77	0.77	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:13 Wind loodrecht overdruk A



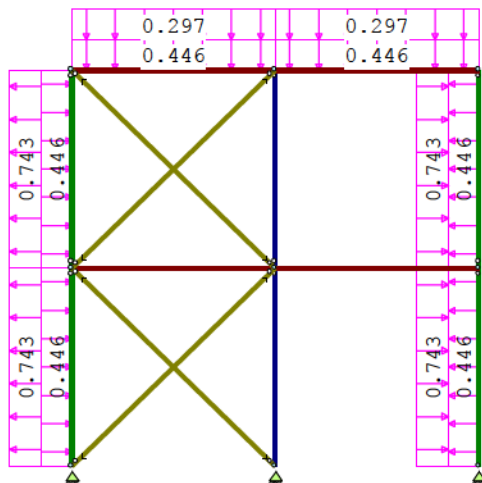
STAAFBELASTINGEN

B.G:13 Wind loodrecht overdruk A

Staal	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw13	0.91	0.91	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw14	0.58	0.58	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw13	0.91	0.91	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw14	0.58	0.58	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw15	-0.91	-0.91	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw16	-0.58	-0.58	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw15	-0.91	-0.91	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw16	-0.58	-0.58	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw17	0.46	0.46	1.600	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw18	0.68	0.68	0.000	1.600	0.00	0.20	0.00
7	1:QZLokaal	Qw19	0.77	0.77	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw18	0.68	0.68	1.600	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw17	0.46	0.46	0.000	1.600	0.00	0.20	0.00
8	1:QZLokaal	Qw19	0.77	0.77	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:14 Wind loodrecht onderdruk B



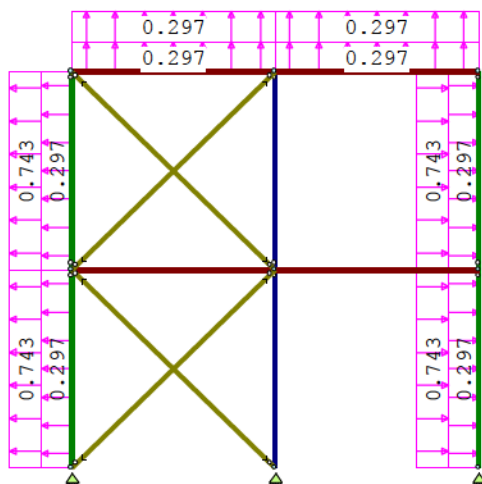
STAAFBELASTINGEN

B.G:14 Wind loodrecht onderdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw20	0.74	0.74	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw20	0.74	0.74	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw21	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw21	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw10	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw10	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:15 Wind loodrecht overdruk B



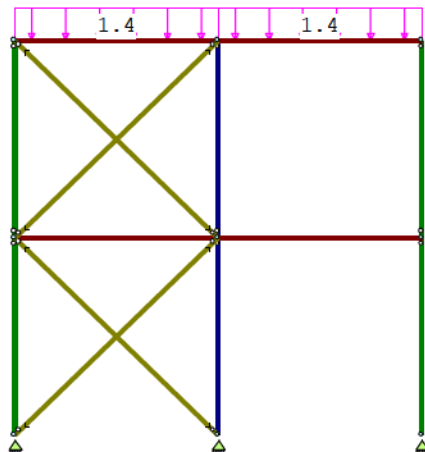
STAAFBELASTINGEN

B.G:15 Wind loodrecht overdruk B

Staaf	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw20	0.74	0.74	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw20	0.74	0.74	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw21	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw21	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw6	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw6	0.30	0.30	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:16 Sneeuw A



STAAFBELASTINGEN

B.G:16 Sneeuw A

Staaf	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
7	3:QZgeProj.	Qs1	-1.40	-1.40	0.000	0.000	0.00	0.20	0.00
8	3:QZgeProj.	Qs1	-1.40	-1.40	0.000	0.000	0.00	0.20	0.00

REACTIES

1e orde

Kn.	B.G.	X-min	X-max	Z-min	Z-max	M-min	M-max
1	1	0.00		14.86			
1	2	0.00		2.39	6.39		
1	3	0.00		0.35	1.85		
1	4	-46.22		-60.57			
1	5	-45.06		-61.47			
1	6	-46.22		-60.57			
1	7	-45.06		-61.47			
1	8	0.46		57.86			
1	9	1.61		56.96			
1	10	0.46		57.97			
1	11	1.61		57.08			
1	12	1.36		-1.18			
1	13	2.30		-2.07			
1	14	0.46		0.89			
1	15	1.39		-0.72			
1	16	0.00		1.69			

REACTIES

1e orde

Kn.	B.G.	X-min	X-max	Z-min	Z-max	M-min	M-max
4	1	-0.00		45.77			
4	2	-0.00		14.57	19.56		
4	3	-0.00		4.80	5.49		
4	4	-0.00		55.29			
4	5	-0.00		52.33			
4	6	-0.00		55.30			
4	7	-0.00		52.33			
4	8	43.68		-61.23			
4	9	43.68		-64.19			
4	10	43.68		-61.22			
4	11	43.68		-64.18			
4	12	0.27		-3.39			
4	13	0.48		-6.36			
4	14	-0.00		2.97			
4	15	0.22		-2.37			
4	16	-0.00		5.59			
7	1	0.00		14.86			
7	2	0.00		2.39	6.39		
7	3	0.00		0.35	1.85		
7	4	-0.46		-0.40			
7	5	-1.61		-1.30			
7	6	-0.46		-0.29			
7	7	-1.61		-1.18			
7	8	2.53		-2.31			
7	9	1.38		-3.21			
7	10	2.53		-2.32			
7	11	1.38		-3.21			
7	12	-1.62		-1.18			
7	13	-2.77		-2.07			
7	14	-0.46		0.89			
7	15	-1.61		-0.72			
7	16	0.00		1.69			

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
1	4	Nauwkeurigheid bereikt
2	4	Nauwkeurigheid bereikt
3	4	Nauwkeurigheid bereikt
4	4	Nauwkeurigheid bereikt
5	4	Nauwkeurigheid bereikt
6	4	Nauwkeurigheid bereikt
7	4	Nauwkeurigheid bereikt
8	4	Nauwkeurigheid bereikt
9	4	Nauwkeurigheid bereikt
10	4	Nauwkeurigheid bereikt
11	4	Nauwkeurigheid bereikt
12	4	Nauwkeurigheid bereikt
13	4	Nauwkeurigheid bereikt
14	4	Nauwkeurigheid bereikt
15	4	Nauwkeurigheid bereikt
16	4	Nauwkeurigheid bereikt
17	4	Nauwkeurigheid bereikt
18	4	Nauwkeurigheid bereikt
19	4	Nauwkeurigheid bereikt
20	4	Nauwkeurigheid bereikt
21	4	Nauwkeurigheid bereikt
22	4	Nauwkeurigheid bereikt
23	4	Nauwkeurigheid bereikt

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
24	4	Nauwkeurigheid bereikt
25	4	Nauwkeurigheid bereikt
26	4	Nauwkeurigheid bereikt
27	4	Nauwkeurigheid bereikt
28	4	Nauwkeurigheid bereikt
29	4	Nauwkeurigheid bereikt
30	4	Nauwkeurigheid bereikt
31	4	Nauwkeurigheid bereikt
32	4	Nauwkeurigheid bereikt
33	4	Nauwkeurigheid bereikt
34	4	Nauwkeurigheid bereikt
35	4	Nauwkeurigheid bereikt
36	4	Nauwkeurigheid bereikt
37	4	Nauwkeurigheid bereikt
38	4	Nauwkeurigheid bereikt
39	4	Nauwkeurigheid bereikt
40	4	Nauwkeurigheid bereikt
41	4	Nauwkeurigheid bereikt
42	4	Nauwkeurigheid bereikt
43	4	Nauwkeurigheid bereikt
44	4	Nauwkeurigheid bereikt
45	4	Nauwkeurigheid bereikt
46	4	Nauwkeurigheid bereikt
47	4	Nauwkeurigheid bereikt
48	4	Nauwkeurigheid bereikt
49	4	Nauwkeurigheid bereikt
50	4	Nauwkeurigheid bereikt
51	4	Nauwkeurigheid bereikt
52	4	Nauwkeurigheid bereikt
53	4	Nauwkeurigheid bereikt
54	4	Nauwkeurigheid bereikt
55	4	Nauwkeurigheid bereikt
56	4	Nauwkeurigheid bereikt
57	4	Nauwkeurigheid bereikt
58	4	Nauwkeurigheid bereikt
59	4	Nauwkeurigheid bereikt
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61	4	Nauwkeurigheid bereikt
62	4	Nauwkeurigheid bereikt
63	4	Nauwkeurigheid bereikt
64	4	Nauwkeurigheid bereikt
65	4	Nauwkeurigheid bereikt
66	4	Nauwkeurigheid bereikt
67	4	Nauwkeurigheid bereikt
68	4	Nauwkeurigheid bereikt
69	4	Nauwkeurigheid bereikt
70	4	Nauwkeurigheid bereikt
71	4	Nauwkeurigheid bereikt
72	4	Nauwkeurigheid bereikt
73	4	Nauwkeurigheid bereikt
74	4	Nauwkeurigheid bereikt
75	4	Nauwkeurigheid bereikt
76	4	Nauwkeurigheid bereikt

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
77	4	Nauwkeurigheid bereikt
78	4	Nauwkeurigheid bereikt
79	4	Nauwkeurigheid bereikt
80	4	Nauwkeurigheid bereikt
81	4	Nauwkeurigheid bereikt
82	4	Nauwkeurigheid bereikt
83	4	Nauwkeurigheid bereikt
84	4	Nauwkeurigheid bereikt
85	4	Nauwkeurigheid bereikt
86	4	Nauwkeurigheid bereikt
87	4	Nauwkeurigheid bereikt
88	4	Nauwkeurigheid bereikt
89	4	Nauwkeurigheid bereikt
90	4	Nauwkeurigheid bereikt
91	4	Nauwkeurigheid bereikt
92	4	Nauwkeurigheid bereikt
93	4	Nauwkeurigheid bereikt
94	4	Nauwkeurigheid bereikt
95	4	Nauwkeurigheid bereikt
96	4	Nauwkeurigheid bereikt
97	4	Nauwkeurigheid bereikt
98	4	Nauwkeurigheid bereikt
99	4	Nauwkeurigheid bereikt
100	4	Nauwkeurigheid bereikt
101	4	Nauwkeurigheid bereikt
102	4	Nauwkeurigheid bereikt
103	4	Nauwkeurigheid bereikt
104	4	Nauwkeurigheid bereikt
105	4	Nauwkeurigheid bereikt
106	4	Nauwkeurigheid bereikt
107	4	Nauwkeurigheid bereikt
108	4	Nauwkeurigheid bereikt
109	4	Nauwkeurigheid bereikt
110	4	Nauwkeurigheid bereikt
111	4	Nauwkeurigheid bereikt
112	4	Nauwkeurigheid bereikt
113	4	Nauwkeurigheid bereikt
114	4	Nauwkeurigheid bereikt
115	4	Nauwkeurigheid bereikt
116	4	Nauwkeurigheid bereikt
117	4	Nauwkeurigheid bereikt
118	4	Nauwkeurigheid bereikt
119	4	Nauwkeurigheid bereikt
120	4	Nauwkeurigheid bereikt
121	4	Nauwkeurigheid bereikt
122	4	Nauwkeurigheid bereikt
123	4	Nauwkeurigheid bereikt
124	4	Nauwkeurigheid bereikt
125	4	Nauwkeurigheid bereikt
126	4	Nauwkeurigheid bereikt
127	4	Nauwkeurigheid bereikt
128	4	Nauwkeurigheid bereikt
129	4	Nauwkeurigheid bereikt
130	4	Nauwkeurigheid bereikt

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
131	4	Nauwkeurigheid bereikt
132	4	Nauwkeurigheid bereikt
133	4	Nauwkeurigheid bereikt
134	4	Nauwkeurigheid bereikt
135	4	Nauwkeurigheid bereikt
136	4	Nauwkeurigheid bereikt
137	4	Nauwkeurigheid bereikt
138	4	Nauwkeurigheid bereikt
139	4	Nauwkeurigheid bereikt
140	4	Nauwkeurigheid bereikt
141	4	Nauwkeurigheid bereikt
142	4	Nauwkeurigheid bereikt
143	4	Nauwkeurigheid bereikt
144	4	Nauwkeurigheid bereikt
145	4	Nauwkeurigheid bereikt
146	4	Nauwkeurigheid bereikt
147	4	Nauwkeurigheid bereikt
148	4	Nauwkeurigheid bereikt
149	4	Nauwkeurigheid bereikt
150	4	Nauwkeurigheid bereikt
151	4	Nauwkeurigheid bereikt
152	4	Nauwkeurigheid bereikt
153	4	Nauwkeurigheid bereikt
154	4	Nauwkeurigheid bereikt
155	4	Nauwkeurigheid bereikt
156	4	Nauwkeurigheid bereikt
157	4	Nauwkeurigheid bereikt
158	4	Nauwkeurigheid bereikt
159	4	Nauwkeurigheid bereikt
160	4	Nauwkeurigheid bereikt
161	4	Nauwkeurigheid bereikt
162	4	Nauwkeurigheid bereikt
163	4	Nauwkeurigheid bereikt
164	4	Nauwkeurigheid bereikt
165	4	Nauwkeurigheid bereikt
166	4	Nauwkeurigheid bereikt
167	4	Nauwkeurigheid bereikt
168	4	Nauwkeurigheid bereikt
169	4	Nauwkeurigheid bereikt
170	4	Nauwkeurigheid bereikt
171	4	Nauwkeurigheid bereikt
172	4	Nauwkeurigheid bereikt
173	4	Nauwkeurigheid bereikt
174	4	Nauwkeurigheid bereikt
175	4	Nauwkeurigheid bereikt

BELASTINGCOMBINATIES

BC Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
1 Fund.	1	Perm	1.35									
2 Fund.	1	Perm	0.90									
3 Fund.	1	Perm	1.35	2	psi0	1.50						
4 Fund.	1	Perm	1.35	3	psi0	1.50						
5 Fund.	1	Perm	1.20	2	Extr	1.50						
6 Fund.	1	Perm	1.20	3	Extr	1.50						
7 Fund.	1	Perm	1.20	4	Extr	1.50						
8 Fund.	1	Perm	1.20	5	Extr	1.50						

BELASTINGCOMBINATIES

BC Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
9 Fund.	1	Perm	1.20	6 Extr	1.50							
10 Fund.	1	Perm	1.20	7 Extr	1.50							
11 Fund.	1	Perm	1.20	8 Extr	1.50							
12 Fund.	1	Perm	1.20	9 Extr	1.50							
13 Fund.	1	Perm	1.20	10 Extr	1.50							
14 Fund.	1	Perm	1.20	11 Extr	1.50							
15 Fund.	1	Perm	1.20	12 Extr	1.50							
16 Fund.	1	Perm	1.20	13 Extr	1.50							
17 Fund.	1	Perm	1.20	14 Extr	1.50							
18 Fund.	1	Perm	1.20	15 Extr	1.50							
19 Fund.	1	Perm	1.20	16 Extr	1.50							
20 Fund.	1	Perm	0.90	2 psi0	1.50							
21 Fund.	1	Perm	0.90	2 Extr	1.50							
22 Fund.	1	Perm	0.90	3 Extr	1.50							
23 Fund.	1	Perm	0.90	3 psi0	1.50							
24 Fund.	1	Perm	0.90	4 Extr	1.50							
25 Fund.	1	Perm	0.90	5 Extr	1.50							
26 Fund.	1	Perm	0.90	6 Extr	1.50							
27 Fund.	1	Perm	0.90	7 Extr	1.50							
28 Fund.	1	Perm	0.90	8 Extr	1.50							
29 Fund.	1	Perm	0.90	9 Extr	1.50							
30 Fund.	1	Perm	0.90	10 Extr	1.50							
31 Fund.	1	Perm	0.90	11 Extr	1.50							
32 Fund.	1	Perm	0.90	12 Extr	1.50							
33 Fund.	1	Perm	0.90	13 Extr	1.50							
34 Fund.	1	Perm	0.90	14 Extr	1.50							
35 Fund.	1	Perm	0.90	15 Extr	1.50							
36 Fund.	1	Perm	0.90	16 Extr	1.50							
37 Fund.	1	Perm	1.20	4 Extr	1.50	2 psi0	1.50					
38 Fund.	1	Perm	1.20	4 Extr	1.50	3 psi0	1.50					
39 Fund.	1	Perm	1.20	5 Extr	1.50	2 psi0	1.50					
40 Fund.	1	Perm	1.20	5 Extr	1.50	3 psi0	1.50					
41 Fund.	1	Perm	1.20	6 Extr	1.50	2 psi0	1.50					
42 Fund.	1	Perm	1.20	6 Extr	1.50	3 psi0	1.50					
43 Fund.	1	Perm	1.20	7 Extr	1.50	2 psi0	1.50					
44 Fund.	1	Perm	1.20	7 Extr	1.50	3 psi0	1.50					
45 Fund.	1	Perm	1.20	8 Extr	1.50	2 psi0	1.50					
46 Fund.	1	Perm	1.20	8 Extr	1.50	3 psi0	1.50					
47 Fund.	1	Perm	1.20	9 Extr	1.50	2 psi0	1.50					
48 Fund.	1	Perm	1.20	9 Extr	1.50	3 psi0	1.50					
49 Fund.	1	Perm	1.20	10 Extr	1.50	2 psi0	1.50					
50 Fund.	1	Perm	1.20	10 Extr	1.50	3 psi0	1.50					
51 Fund.	1	Perm	1.20	11 Extr	1.50	2 psi0	1.50					
52 Fund.	1	Perm	1.20	11 Extr	1.50	3 psi0	1.50					
53 Fund.	1	Perm	1.20	12 Extr	1.50	2 psi0	1.50					
54 Fund.	1	Perm	1.20	12 Extr	1.50	3 psi0	1.50					
55 Fund.	1	Perm	1.20	13 Extr	1.50	2 psi0	1.50					
56 Fund.	1	Perm	1.20	13 Extr	1.50	3 psi0	1.50					
57 Fund.	1	Perm	1.20	14 Extr	1.50	2 psi0	1.50					
58 Fund.	1	Perm	1.20	14 Extr	1.50	3 psi0	1.50					
59 Fund.	1	Perm	1.20	15 Extr	1.50	2 psi0	1.50					
60 Fund.	1	Perm	1.20	15 Extr	1.50	3 psi0	1.50					
61 Fund.	1	Perm	1.20	16 Extr	1.50	2 psi0	1.50					
62 Fund.	1	Perm	1.20	16 Extr	1.50	3 psi0	1.50					
63 Fund.	1	Perm	0.90	4 Extr	1.50	2 psi0	1.50					
64 Fund.	1	Perm	0.90	4 Extr	1.50	3 psi0	1.50					
65 Fund.	1	Perm	0.90	5 Extr	1.50	2 psi0	1.50					
66 Fund.	1	Perm	0.90	5 Extr	1.50	3 psi0	1.50					
67 Fund.	1	Perm	0.90	6 Extr	1.50	2 psi0	1.50					
68 Fund.	1	Perm	0.90	6 Extr	1.50	3 psi0	1.50					
69 Fund.	1	Perm	0.90	7 Extr	1.50	2 psi0	1.50					
70 Fund.	1	Perm	0.90	7 Extr	1.50	3 psi0	1.50					
71 Fund.	1	Perm	0.90	8 Extr	1.50	2 psi0	1.50					
72 Fund.	1	Perm	0.90	8 Extr	1.50	3 psi0	1.50					
73 Fund.	1	Perm	0.90	9 Extr	1.50	2 psi0	1.50					

BELASTINGCOMBINATIES

BC Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
74 Fund.	1	Perm	0.90	9 Extr	1.50		3	psi0	1.50			
75 Fund.	1	Perm	0.90	10 Extr	1.50		2	psi0	1.50			
76 Fund.	1	Perm	0.90	10 Extr	1.50		3	psi0	1.50			
77 Fund.	1	Perm	0.90	11 Extr	1.50		2	psi0	1.50			
78 Fund.	1	Perm	0.90	11 Extr	1.50		3	psi0	1.50			
79 Fund.	1	Perm	0.90	12 Extr	1.50		2	psi0	1.50			
80 Fund.	1	Perm	0.90	12 Extr	1.50		3	psi0	1.50			
81 Fund.	1	Perm	0.90	13 Extr	1.50		2	psi0	1.50			
82 Fund.	1	Perm	0.90	13 Extr	1.50		3	psi0	1.50			
83 Fund.	1	Perm	0.90	14 Extr	1.50		2	psi0	1.50			
84 Fund.	1	Perm	0.90	14 Extr	1.50		3	psi0	1.50			
85 Fund.	1	Perm	0.90	15 Extr	1.50		2	psi0	1.50			
86 Fund.	1	Perm	0.90	15 Extr	1.50		3	psi0	1.50			
87 Fund.	1	Perm	0.90	16 Extr	1.50		2	psi0	1.50			
88 Fund.	1	Perm	0.90	16 Extr	1.50		3	psi0	1.50			
89 Kar.	1	Perm	1.00	2 Extr	1.00							
90 Kar.	1	Perm	1.00	3 Extr	1.00							
91 Kar.	1	Perm	1.00	4 Extr	1.00							
92 Kar.	1	Perm	1.00	5 Extr	1.00							
93 Kar.	1	Perm	1.00	6 Extr	1.00							
94 Kar.	1	Perm	1.00	7 Extr	1.00							
95 Kar.	1	Perm	1.00	8 Extr	1.00							
96 Kar.	1	Perm	1.00	9 Extr	1.00							
97 Kar.	1	Perm	1.00	10 Extr	1.00							
98 Kar.	1	Perm	1.00	11 Extr	1.00							
99 Kar.	1	Perm	1.00	12 Extr	1.00							
100 Kar.	1	Perm	1.00	13 Extr	1.00							
101 Kar.	1	Perm	1.00	14 Extr	1.00							
102 Kar.	1	Perm	1.00	15 Extr	1.00							
103 Kar.	1	Perm	1.00	16 Extr	1.00							
104 Kar.	1	Perm	1.00	4 Extr	1.00		2	psi0	1.00			
105 Kar.	1	Perm	1.00	4 Extr	1.00		3	psi0	1.00			
106 Kar.	1	Perm	1.00	5 Extr	1.00		2	psi0	1.00			
107 Kar.	1	Perm	1.00	5 Extr	1.00		3	psi0	1.00			
108 Kar.	1	Perm	1.00	6 Extr	1.00		2	psi0	1.00			
109 Kar.	1	Perm	1.00	6 Extr	1.00		3	psi0	1.00			
110 Kar.	1	Perm	1.00	7 Extr	1.00		2	psi0	1.00			
111 Kar.	1	Perm	1.00	7 Extr	1.00		3	psi0	1.00			
112 Kar.	1	Perm	1.00	8 Extr	1.00		2	psi0	1.00			
113 Kar.	1	Perm	1.00	8 Extr	1.00		3	psi0	1.00			
114 Kar.	1	Perm	1.00	9 Extr	1.00		2	psi0	1.00			
115 Kar.	1	Perm	1.00	9 Extr	1.00		3	psi0	1.00			
116 Kar.	1	Perm	1.00	10 Extr	1.00		2	psi0	1.00			
117 Kar.	1	Perm	1.00	10 Extr	1.00		3	psi0	1.00			
118 Kar.	1	Perm	1.00	11 Extr	1.00		2	psi0	1.00			
119 Kar.	1	Perm	1.00	11 Extr	1.00		3	psi0	1.00			
120 Kar.	1	Perm	1.00	12 Extr	1.00		2	psi0	1.00			
121 Kar.	1	Perm	1.00	12 Extr	1.00		3	psi0	1.00			
122 Kar.	1	Perm	1.00	13 Extr	1.00		2	psi0	1.00			
123 Kar.	1	Perm	1.00	13 Extr	1.00		3	psi0	1.00			
124 Kar.	1	Perm	1.00	14 Extr	1.00		2	psi0	1.00			
125 Kar.	1	Perm	1.00	14 Extr	1.00		3	psi0	1.00			
126 Kar.	1	Perm	1.00	15 Extr	1.00		2	psi0	1.00			
127 Kar.	1	Perm	1.00	15 Extr	1.00		3	psi0	1.00			
128 Kar.	1	Perm	1.00	16 Extr	1.00		2	psi0	1.00			
129 Kar.	1	Perm	1.00	16 Extr	1.00		3	psi0	1.00			
130 Quas.	1	Perm	1.00									
131 Quas.	1	Perm	1.00	2	psi2	1.00						
132 Quas.	1	Perm	1.00	3	psi2	1.00						
133 Freq.	1	Perm	1.00									
134 Freq.	1	Perm	1.00	2	psi1	1.00						
135 Freq.	1	Perm	1.00	3	psi1	1.00						
136 Freq.	1	Perm	1.00	4	psi1	1.00						
137 Freq.	1	Perm	1.00	5	psi1	1.00						
138 Freq.	1	Perm	1.00	6	psi1	1.00						

BELASTINGCOMBINATIES

BC Type	BG Gen.	Factor	BG Gen.	Factor	BG Gen.	Factor	BG Gen.	Factor
139 Freq.	1 Perm	1.00	7 psi1	1.00				
140 Freq.	1 Perm	1.00	8 psi1	1.00				
141 Freq.	1 Perm	1.00	9 psi1	1.00				
142 Freq.	1 Perm	1.00	10 psi1	1.00				
143 Freq.	1 Perm	1.00	11 psi1	1.00				
144 Freq.	1 Perm	1.00	12 psi1	1.00				
145 Freq.	1 Perm	1.00	13 psi1	1.00				
146 Freq.	1 Perm	1.00	14 psi1	1.00				
147 Freq.	1 Perm	1.00	15 psi1	1.00				
148 Freq.	1 Perm	1.00	16 psi1	1.00				
149 Freq.	1 Perm	1.00	4 psi1	1.00	2 psi2	1.00		
150 Freq.	1 Perm	1.00	4 psi1	1.00	3 psi2	1.00		
151 Freq.	1 Perm	1.00	5 psi1	1.00	2 psi2	1.00		
152 Freq.	1 Perm	1.00	5 psi1	1.00	3 psi2	1.00		
153 Freq.	1 Perm	1.00	6 psi1	1.00	2 psi2	1.00		
154 Freq.	1 Perm	1.00	6 psi1	1.00	3 psi2	1.00		
155 Freq.	1 Perm	1.00	7 psi1	1.00	2 psi2	1.00		
156 Freq.	1 Perm	1.00	7 psi1	1.00	3 psi2	1.00		
157 Freq.	1 Perm	1.00	8 psi1	1.00	2 psi2	1.00		
158 Freq.	1 Perm	1.00	8 psi1	1.00	3 psi2	1.00		
159 Freq.	1 Perm	1.00	9 psi1	1.00	2 psi2	1.00		
160 Freq.	1 Perm	1.00	9 psi1	1.00	3 psi2	1.00		
161 Freq.	1 Perm	1.00	10 psi1	1.00	2 psi2	1.00		
162 Freq.	1 Perm	1.00	10 psi1	1.00	3 psi2	1.00		
163 Freq.	1 Perm	1.00	11 psi1	1.00	2 psi2	1.00		
164 Freq.	1 Perm	1.00	11 psi1	1.00	3 psi2	1.00		
165 Freq.	1 Perm	1.00	12 psi1	1.00	2 psi2	1.00		
166 Freq.	1 Perm	1.00	12 psi1	1.00	3 psi2	1.00		
167 Freq.	1 Perm	1.00	13 psi1	1.00	2 psi2	1.00		
168 Freq.	1 Perm	1.00	13 psi1	1.00	3 psi2	1.00		
169 Freq.	1 Perm	1.00	14 psi1	1.00	2 psi2	1.00		
170 Freq.	1 Perm	1.00	14 psi1	1.00	3 psi2	1.00		
171 Freq.	1 Perm	1.00	15 psi1	1.00	2 psi2	1.00		
172 Freq.	1 Perm	1.00	15 psi1	1.00	3 psi2	1.00		
173 Freq.	1 Perm	1.00	16 psi1	1.00	2 psi2	1.00		
174 Freq.	1 Perm	1.00	16 psi1	1.00	3 psi2	1.00		
175 Blij.	1 Perm	1.00						

GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC Staven met gunstige werking
1 Geen
2 Alle staven de factor:0.90
3 Geen
4 Geen
5 Geen
6 Geen
7 Geen
8 Geen
9 Geen
10 Geen
11 Geen
12 Geen
13 Geen
14 Geen
15 Geen
16 Geen
17 Geen
18 Geen
19 Geen
20 Alle staven de factor:0.90
21 Alle staven de factor:0.90
22 Alle staven de factor:0.90
23 Alle staven de factor:0.90

GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC Staven met gunstige werking

24 Alle staven de factor:0.90
25 Alle staven de factor:0.90
26 Alle staven de factor:0.90
27 Alle staven de factor:0.90
28 Alle staven de factor:0.90
29 Alle staven de factor:0.90
30 Alle staven de factor:0.90
31 Alle staven de factor:0.90
32 Alle staven de factor:0.90
33 Alle staven de factor:0.90
34 Alle staven de factor:0.90
35 Alle staven de factor:0.90
36 Alle staven de factor:0.90
37 Geen
38 Geen
39 Geen
40 Geen
41 Geen
42 Geen
43 Geen
44 Geen
45 Geen
46 Geen
47 Geen
48 Geen
49 Geen
50 Geen
51 Geen
52 Geen
53 Geen
54 Geen
55 Geen
56 Geen
57 Geen
58 Geen
59 Geen
60 Geen
61 Geen
62 Geen
63 Alle staven de factor:0.90
64 Alle staven de factor:0.90
65 Alle staven de factor:0.90
66 Alle staven de factor:0.90
67 Alle staven de factor:0.90
68 Alle staven de factor:0.90
69 Alle staven de factor:0.90
70 Alle staven de factor:0.90
71 Alle staven de factor:0.90
72 Alle staven de factor:0.90
73 Alle staven de factor:0.90
74 Alle staven de factor:0.90
75 Alle staven de factor:0.90
76 Alle staven de factor:0.90
77 Alle staven de factor:0.90
78 Alle staven de factor:0.90
79 Alle staven de factor:0.90
80 Alle staven de factor:0.90
81 Alle staven de factor:0.90
82 Alle staven de factor:0.90
83 Alle staven de factor:0.90
84 Alle staven de factor:0.90
85 Alle staven de factor:0.90
86 Alle staven de factor:0.90
87 Alle staven de factor:0.90

GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC Staven met gunstige werking

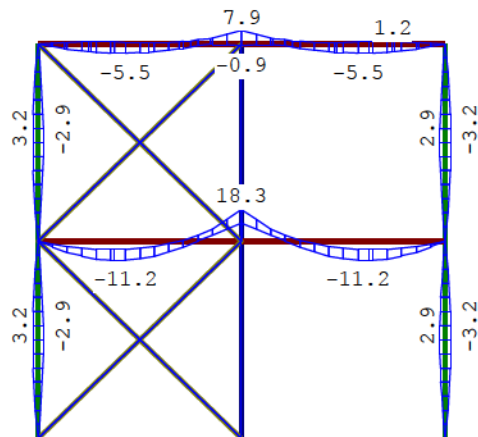
88 Alle staven de factor:0.90

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

MOMENTEN

2e orde

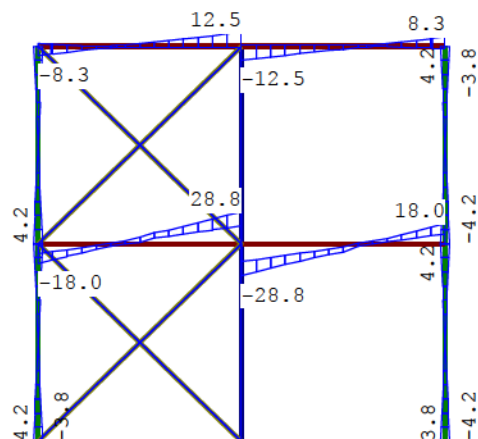
Fundamentele combinatie



DWARSKRACHTEN

2e orde

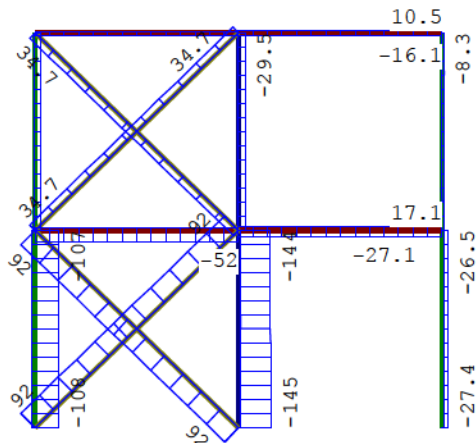
Fundamentele combinatie



NORMAALKRACHTEN

2e orde

Fundamentele combinatie



STAAFKRACHTEN

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	NXi/NXj		DZi/DZj		MYi/MYj		Min	BC	Max	BC
			Min	BC	Max	BC	Min	BC				
1	1		-107.5	49	15.74	69	-3.79	37	4.19	55	0.00	1
1	1.550		-107.0	49	16.09	69	-0.00	55	0.00	37	-2.88	37
1	1.771		-106.9	49	16.13	69	-0.59	16	0.54	41	-2.88	37
1	1.771		-106.9	49	16.13	69	-0.61	16	0.54	41	-2.88	37
1	2		-106.6	49	16.43	69	-4.19	55	3.79	37	0.00	38
2	2		-27.48	49	1.71	27	-3.80	37	4.16	55	0.00	1
2	1.550		-27.02	49	2.06	27	-0.00	55	0.00	37	-2.89	37
2	1.771		-26.96	49	2.11	27	-0.59	56	0.54	41	-2.89	37
2	3		-26.56	49	2.40	27	-4.16	55	3.80	37	0.00	8
3	4		-145.3	41	-8.42	29	-0.00	41	0.00	49	0.00	1
3	1.550		-144.9	41	-8.07	29	-0.00	49	0.00	41	-0.00	41
3	2.214		-144.7	41	-7.93	29	-0.00	49	0.00	41	-0.00	41
3	2.657		-144.6	41	-7.83	29	-0.00	49	0.00	41	-0.00	41
3	5		-144.4	41	-7.73	29	-0.00	49	0.00	41	0.00	28
4	5		-30.45	9	0.99	81	-0.00	41	0.00	13	0.00	1
4	6		-29.54	9	1.67	81	-0.00	13	0.00	41	0.00	48
5	7		-27.42	5	-8.17	77	-4.19	55	3.82	45	0.00	1
5	1.550		-26.96	5	-7.82	77	-0.00	45	0.00	55	-3.18	55
5	1.771		-26.90	5	-7.78	77	-0.54	49	0.59	55	-3.18	55
5	1.771		-26.90	5	-7.78	77	-0.54	49	0.61	55	-3.18	55
5	8		-26.50	5	-7.48	77	-3.82	45	4.19	55	0.00	67
6	8		-9.20	5	1.82	31	-4.16	55	3.80	45	0.00	1
6	1.550		-8.74	5	2.17	31	-0.00	45	0.00	55	-3.16	55
6	1.771		-8.67	5	2.22	31	-0.54	13	0.59	55	-3.16	55
6	9		-8.28	5	2.51	31	-3.80	45	4.16	55	0.00	45
7	3		-16.10	11	3.90	55	-8.28	5	2.41	27	0.00	1
7	0.827		-16.10	11	3.90	55	-3.12	5	0.36	21	-4.61	5
7	0.914		-16.10	11	3.90	55	-2.57	5	0.19	21	-4.96	5
7	1.371		-16.10	11	3.90	55	-0.92	22	1.14	5	-5.48	5
7	1.600		-16.10	11	3.90	55	-0.86	65	2.46	5	-5.09	5
7	1.829		-16.10	11	3.90	55	-0.90	65	3.89	5	-4.70	5
7	2.710		-16.10	11	3.90	55	-1.02	65	9.39	5	-0.36	65
7	6		-16.10	11	3.90	55	-1.08	65	12.45	5	-0.87	65

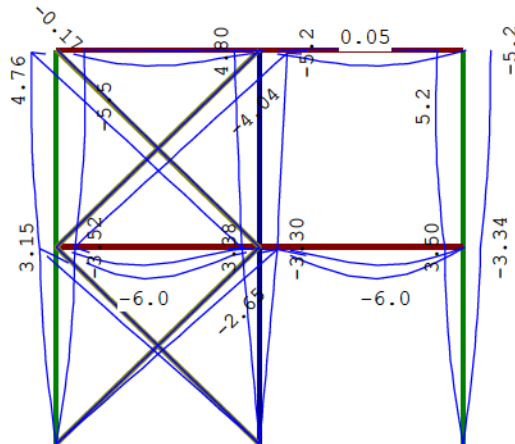
STAAFKRACHTEN			2e orde								Fundamentele combinatie			
St.	Kn.	Pos.	NXi/NXj				DZi/DZj				MYi/MYj			
			Min	BC	Max	BC	Min	BC	Max	BC	Min	BC	Max	BC
8	6		-16.10	49	10.52	43	-12.45	5	1.05	81	-0.87	65	7.87	5
8		0.490	-16.10	49	10.52	43	-9.39	5	0.91	73	-0.65	65	3.00	5
8		1.371	-16.10	45	10.52	43	-3.89	5	0.79	73	-4.70	5	0.70	31
8		1.600	-16.10	45	10.52	43	-3.03	6	0.75	73	-5.09	5	0.87	31
8		1.829	-16.10	45	10.52	43	-1.14	5	0.92	22	-5.48	5	1.04	31
8		2.286	-16.10	45	10.52	43	-0.19	21	2.57	5	-4.96	5	1.19	31
8		2.373	-16.10	45	10.52	43	-0.40	21	3.12	5	-4.61	5	1.20	31
8	9		-16.10	45	10.52	43	-2.52	31	8.28	5	0.00	55	0.00	49
9	2		-52.02	49	8.17	55	-18.03	5	-9.02	21	0.00	1	0.00	1
9		0.914	-52.03	49	8.14	55	-4.94	6	-1.62	21	-10.46	5	-4.86	21
9		0.914	-52.03	49	8.13	55	-4.94	6	-1.62	21	-10.46	5	-4.86	21
9		1.371	-52.04	49	8.12	55	-0.46	22	2.54	5	-11.18	5	-4.76	21
9		2.216	-52.02	49	8.15	55	8.19	33	14.60	5	-4.40	5	0.00	21
9		2.507	-52.02	75	8.17	55	10.55	33	18.79	5	0.00	21	3.48	5
9	5		-52.06	49	8.14	55	16.17	33	28.77	5	10.20	25	18.34	5
10	5		-27.11	75	17.09	43	-28.77	5	-16.12	25	10.20	25	18.34	5
10		0.693	-27.08	75	17.12	43	-18.79	5	-10.49	25	0.00	21	3.48	5
10		0.984	-27.08	75	17.11	43	-14.60	5	-8.13	25	-4.40	5	0.00	21
10		1.829	-27.09	75	17.08	43	-2.54	5	0.46	22	-11.18	5	-4.76	21
10		2.286	-27.09	75	17.08	43	1.62	21	4.94	6	-10.46	5	-4.86	21
10		2.286	-27.09	75	17.09	43	1.62	21	4.94	6	-10.46	5	-4.86	21
10	8		-27.08	75	17.12	43	9.02	21	18.03	5	0.00	20	0.00	56
11	1		0.00	11	91.62	41	0.00	1	0.00	41	0.00	1	0.00	1
11	5		0.00	11	91.62	41	0.00	1	0.00	41	0.00	1	0.00	1
12	5		0.00	1	34.70	13	-0.00	31	0.00	81	0.00	1	0.00	1
12	3		0.00	1	34.70	13	-0.00	31	0.00	81	0.00	1	0.00	1
13	4		0.00	1	91.61	49	-0.00	49	0.00	1	0.00	1	0.00	1
13	2		0.00	1	91.61	49	-0.00	49	0.00	1	0.00	1	0.00	1
14	2		0.00	3	34.72	41	0.00	1	0.00	41	0.00	1	0.00	1
14	6		0.00	3	34.72	41	0.00	1	0.00	41	0.00	1	0.00	1
REACTIES			2e orde								Fundamentele combinatie			
Kn.		X-min	X-max		Z-min	Z-max		M-min	M-max					
1		-69.58	4.16		-79.39	107.51								
4		-0.00	65.71		-55.22	145.39								
7		-4.16	3.78		8.17	27.42								

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN

2e orde [mm]

Karakteristieke combinatie



REACTIES

2e orde

Karakteristieke combinatie

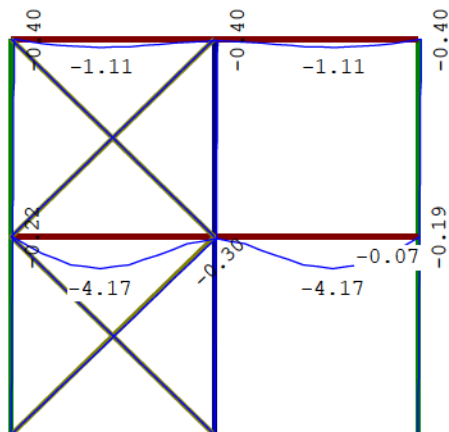
Kn.	X-min	X-max	Z-min	Z-max	M-min	M-max
1	-46.35	2.77	-46.98	74.61		
4	-0.00	43.77	-18.49	106.03		
7	-2.77	2.52	11.39	21.25		

OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN

2e orde [mm]

Blijvende combinatie



REACTIES

2e orde

Blijvende combinatie

Kn.	X	Z	M
1	0.00	14.85	
4	-0.00	45.77	
7	0.00	14.86	

STAALPROFIELEN - ALGEMENE GEGEVENS

Stabiliteit: Classificatie gehele constructie:	Geschoord
Doorbuiging en verplaatsing:	
Aantal bouwlagen:	1
Gebouwtype:	Overig
Toel. horiz. verplaatsing gehele gebouw:	h/300
Kleinste gevelhoogte [m]:	0.0

PROFIEL/MATERIAAL

P/M nr.	Profielnaam	Vloeisp. [N/mm ²]	Productie methode	Min. drsn. klasse
1	HEA120	235	Gewalst	1
2	HEA140	235	Gewalst	1
3	STRIP80*8	235	Gewalst	1
4	HEA140 (90)	235	Gewalst	1

Partiële veiligheidsfactoren:

Gamma M;0 : 1.00 Gamma M;1 : 1.00

KNIKSTABILITEIT

Staafl	l _y [m]	Classif. y	sterke as	l _{knik,y} [m]	Extra		l _{knik,z} [m]	Extra	
					aanp. y [kN]	Classif. z		aanp. z [kN]	Classif. z
1	3.100	Geschoord	2e orde			Geschoord	3.100	0.0	
2	3.100	Geschoord	2e orde			Geschoord	3.100	0.0	
3	3.100	Geschoord	3.100	0.0	Geschoord	2e orde			
4	3.100	Geschoord	3.100	0.0	Geschoord	2e orde			
5	3.100	Geschoord	2e orde			Geschoord	3.100	0.0	
6	3.100	Geschoord	2e orde			Geschoord	3.100	0.0	
7	3.200	Geschoord	2e orde			Geschoord	3.200	0.0	
8	3.200	Geschoord	2e orde			Geschoord	3.200	0.0	
9	3.200	Geschoord	2e orde			Geschoord	3.200	0.0	
10	3.200	Geschoord	2e orde			Geschoord	3.200	0.0	
11	4.455	Geschoord	4.455	0.0	Geschoord	2e orde			
12	4.455	Geschoord	4.455	0.0	Geschoord	2e orde			
13	4.455	Geschoord	4.455	0.0	Geschoord	2e orde			
14	4.455	Geschoord	4.455	0.0	Geschoord	2e orde			

KIPSTABILITEIT

Staafl	Plts. aangr.	l gaffel [m]	Kipsteunafstanden [m]	
			boven:	onder:
1	1.0*h		3.10	3.100
			3.10	3.100
2	1.0*h		3.10	3.100
			3.10	3.100
3	1.0*h		3.10	3.100
			3.10	3.100
4	1.0*h		3.10	3.100
			3.10	3.100
5	0.0*h		3.10	3.100
			3.10	3.100
6	0.0*h		3.10	3.100
			3.10	3.100
7	1.0*h		3.20	3.200
			3.20	3.200
8	1.0*h		3.20	3.200
			3.20	3.200
9	1.0*h		3.20	3.200
			3.20	3.200
10	1.0*h		3.20	3.200
			3.20	3.200
11	1.0*h		4.46	4.455
			4.46	4.455

KIPSTABILITEIT

Staaf	Plts. aangr.	l gaffel [m]	Kipsteunafstanden [m]
12	1.0*h	boven: 4.46	4.455
		onder: 4.46	4.455
13	1.0*h	boven: 4.46	4.455
		onder: 4.46	4.455
14	1.0*h	boven: 4.46	4.455
		onder: 4.46	4.455

TOETSING SPANNINGEN

Staaf nr.	P/M	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C. [N/mm ²]	Opm.
1	2	51	5	1	Staaf	EN3-1-1	6.3.3	(6.62)	0.295	69
2	2	51	1	1	Staaf	EN3-1-1	6.3.3	(6.62)	0.107	25
3	4	41	1	1	Staaf	EN3-1-1	6.3.1.1	(6.46z)	0.341	80
4	4	9	1	1	Staaf	EN3-1-1	6.3.1.1	(6.46z)	0.072	17
5	2	55	4	1	Staaf	EN3-1-1	6.3.3	(6.62)	0.118	28
6	2	55	1	1	Staaf	EN3-1-1	6.3.3	(6.62)	0.079	19
7	1	5	4	1	Einde	EN3-1-1	6.2.8	(6.30)	0.281	66
8	1	5	4	1	Begin	EN3-1-1	6.2.8	(6.30)	0.281	66
9	1	49	1	1	Staaf	EN3-1-1	6.3.3	(6.62)	0.748	176
10	1	5	1	1	Staaf	EN3-1-1	6.3.2	(6.54)	0.684	161
11	3	41	1	1	Begin	EN3-1-1	6.2.3	(6.5)	0.609	143
12	3	13	1	1	Begin	EN3-1-1	6.2.3	(6.5)	0.231	54
13	3	49	1	1	Begin	EN3-1-1	6.2.3	(6.5)	0.609	143
14	3	41	1	1	Begin	EN3-1-1	6.2.3	(6.5)	0.231	54

Opmerkingen:

[46] T.b.v. kip is een equivalente Q-last berekend.

[47] Bij verlopende normaalkracht wordt de grootste drukkracht genomen.

TOETSING DOORBUIGING

Staaf	Soort	Mtg	Lengte [m]	Overst I	Zeeg J	u _o [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]
7	Dak	db	3.20	N	N	0.0	-2.8	89	2 Eind	-2.8
		db						89	2 Bijk	-1.9
8	Dak	db	3.20	N	N	0.0	-2.8	89	1 Eind	-2.8
		db						89	1 Bijk	-1.9
9	Vloer	db	3.20	N	N	0.0	-5.8	89	5 Eind	-5.8
		db						89	5 Bijk	-1.8
10	Vloer	db	3.20	N	N	0.0	-5.8	89	4 Eind	-5.8
		db						89	4 Bijk	-1.8

TOETSING HORIZONTALE VERPLAATSING

Staaf	BC	Sit	Lengte [m]	u _{e i n d} [mm]	Toelaatbaar [mm]	Maatgevend [h/]
1	108	1	3.100	-3.5	10.3	300 scheefstand
2	108	1	3.100	-1.7	10.3	300 scheefstand
3	116	5	3.100	3.4	10.3	300 scheefstand
4	108	1	3.100	-1.9	10.3	300 scheefstand
5	116	1	3.100	3.5	10.3	300 scheefstand
6	108	1	3.100	-1.9	10.3	300 scheefstand

TOETSING HOR. VERPLAATSING GLOBAAL

Er is een maximale horizontale verplaatsing van 0.0052 [m] gevonden bij knoop 3 en combinatie 108; belastingsituatie 1, iter:4 (combinatietype 2). Bij een hoogte van 6.200 [m] levert dit h /1182 (toel.: h / 300).

4.3 Dakliggers as 2 t/m 5 | incl. momentverbinding

Lijnlast

Belastingen	breedte factor		G_k	Q_k	ψ_0	$q_{g;k}$	$q_{Q;k}$	q_k	$q_{mom;\psi_0}$	$q_{d;6.10a}$	$q_{d;6.10b}$
	(m)		(kN/m ²)	(kN/m ²)		(kN/m ²)	(kN/m ²)	(kN/m ²)	(kN/m ²)	(kN/m ²)	(kN/m ²)
plattendak	5,00	100%	0,75	0,56	1,00	3,75	2,80	6,55	0,00	5,06	8,70
						3,75	2,80	6,55	0,00	5,06	8,70

Technosoft Raamwerken release 6.75b

4 okt 2022

Onderdeel....: DRSN dakliggers as 2-5
 Dimensies....: kN;m;rad (tenzij anders aangegeven)
 Datum.....: 03/10/2022

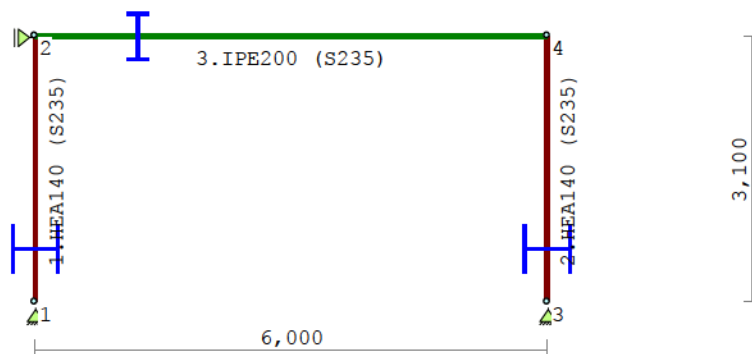
Belastingbreedte.: 5.000
 Rekenmodel.....: 1e-orde-elastisch.
 Theorie voor de bepaling van de krachtsverdeling:
 Geometrisch lineair.
 Fysisch lineair.

Gunstige werking van de permanente belasting wordt automatisch verwerkt.

Toegepaste normen volgens Eurocode met Nederlandse NB

Belastingen	NEN-EN 1990:2002	C2:2010,A1:2019	NB:2019(nl)
	NEN-EN 1991-1-1:2002	C1/C11:2019	NB:2019(nl)
	NEN-EN 1991-1-3:2003	C1:2009	NB:2011(nl)
	NEN-EN 1991-1-4:2005	C2:2011	NB:2011(nl)
Staal	NEN-EN 1993-1-1:2006	C2:2011,A1:2016	NB:2016(nl)
	NEN-EN 1993-1-8:2006	C2:2009	NB:2011(nl)

GEOMETRIE



MATERIALEN

Mt	Kwaliteit	E-modulus[N/mm2]	S.G.	Pois.	Uitz. coëff
1	S235	210000	78.5	0.30	1.2000e-05

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	HEA140	1:S235	3.1420e+03	1.0330e+07	0.00
2	IPE200	1:S235	2.8480e+03	1.9430e+07	0.00

PROFIELEN vervolg [mm]

Prof.	Staaftype	Breedte	Hoogte	e	Type	b1	h1	b2	h2
1	0:Normaal	140	133	66.5					
2	0:Normaal	100	200	100.0					

PROFIELVORMEN [mm]

1 HEA140



2 IPE200



KNOPEN

Knoop	X	Z
1	0.000	3.100
2	0.000	6.200
3	6.000	3.100
4	6.000	6.200

STAVEN

St.	ki	kj	Profiel	Aansl.i	Aansl.j	Lengte	Opm.
1	1	2	1:HEA140	NDV	445 NDM	3.100	1
2	3	4	1:HEA140	NDV	445 NDM	3.100	1
3	2	4	2:IPE200	NDV NDV	6.000	2

Opmerkingen

- [1] De gebruikte momentveerwaarde overschrijft de standaardwaarde zoals gebruikt in de invoertabel staven.
 [2] De momentveerwaarde is vastgelegd met een tri-lineair moment-veerstijfheidsdiagram volgens onderstaande tabel

STAVEN (vervolg - tri-lineair moment-veerstijfheidsdiagram)

St.	Kn.	Mvud	Cvud	Cvud(Mvud/1.2)	Cvud(Mvud/1.5)
3	2	-17.02	1896	3103	5667
		16.89	1506	2464	4501
4		-17.02	1896	3103	5667
		16.89	1506	2464	4501

VASTE STEUNPUNTEN

Nr.	knoop	Kode	XZR	1=vast	0=vrij	Hoek
1	1	110				0.00
2	2	100				0.00
3	3	110				0.00

BELASTINGGENERATIE ALGEMEEN.

Betrouwbaarheidsklasse.....	2	Referentieperiode.....	50
Gebouwdiepte.....	25.00	Gebouwhoogte.....	6.40
Niveau aansl.terrein.....	0.00	E.g. scheid.w. [kN/m2]:	0.00

WIND

Terrein categorie ...[4.3.2]...	Onbebouwd
Windgebied	3 Vb,0 ..[4.2]..... 24.500
Positie spant in het gebouw....	5.000 Kr[4.3.2]..... 0.209
z0	0.200 Zmin ..[4.3.2]..... 4.000

WIND

Co wind van links ..[4.3.3]...: 1.000 Co wind van rechts....: 1.000
 Co wind loodrecht ..[4.3.3]...: 1.000
 Cpi wind van links ..[7.2.9]...: 0.200 -0.300
 Cpi windloodrecht ...[7.2.9]...: 0.200 -0.300
 Cpi wind van rechts ..[7.2.9]...: 0.200 -0.300
 Cfr windwrijving[7.5].....: 0.040

SNEEUW

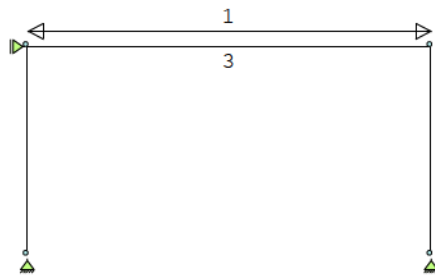
Sneeuwbelasting (sk) 50 jaar : 0.70
 Sneeuwbelasting (sn) n jaar : 0.70

STAFTYPEN

Type	staven
5:Linker gevel.	: 1
6:Rechter gevel.	: 2
7:Dak.	: 3

LASTVELDEN

Veranderlijke belastingen door personen

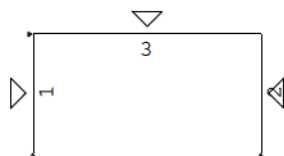


LASTVELDEN

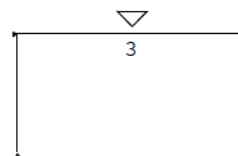
Nr	Staaf	Tabel	Klasse-Gebruiksfunctie	Verd.	q_k	Q_k	F_t/F_{t0}
1	3-3	6.10	H-Dak (onder dakbeschot)	1	-1.00	-2.00	1.00

LASTVELDEN

Wind staven



Sneeuw staven



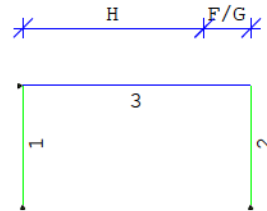
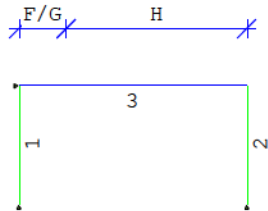
WIND DAKTYPES

Nr.	Staaft Type	reductie bij wind van links	reductie bij wind van rechts	Cpe volgens art:
1	1 Gevel	1.000	1.000	7.2.2
2	3 Plat dak	1.000	1.000	7.2.3
3	2 Gevel	1.000	1.000	7.2.2

WIND ZONES

Wind van links

Wind van rechts



WIND VAN LINKS ZONES

WIND VAN RECHTS ZONES

Nr.	Staaft	Positie	Lengte	Zone	Nr.	Staaft	Positie	Lengte	Zone
1	1	0.000	3.100	D	1	2	0.000	3.100	D
2	3	0.000	1.240	F/G	2	3	0.000	1.240	F/G
3	3	1.240	4.760	H	3	3	1.240	4.760	H
4	2	0.000	3.100	E	4	1	0.000	3.100	E

Wind indexen

Index	CsCd	Cpe/Cpi	qp	breedte	reductie	Qw	Zone	Hoek(en)
Qw1		0.300	0.594	5.000	-0.892	-i		
Qw2		-0.300	0.594	5.000	0.892	-i		
Qw3	1.00	0.800	0.594	5.000	-2.378	D		
Qw4	1.00	-1.800	0.594	0.600	0.642	F		0.0
Qw5	1.00	-1.200	0.594	4.400	3.138	G		0.0
Qw6	1.00	-0.700	0.594	5.000	2.080	H		0.0
Qw7	1.00	0.503	0.594	5.000	-1.496	E		
Qw8		-0.200	0.594	5.000	0.594	+i		
Qw9		0.200	0.594	5.000	-0.594	+i		
Qw10	1.00	-0.800	0.594	5.000	2.378	D		
Qw11	1.00	-0.503	0.594	5.000	1.496	E		
Qw12	1.00	-0.800	0.580	3.500	1.623	B		
Qw13	1.00	-0.500	0.580	1.500	0.435	C		
Qw14	1.00	-0.800	0.594	3.500	1.664	B		
Qw15	1.00	-0.500	0.594	1.500	0.446	C		
Qw16	1.00	0.800	0.580	3.500	-1.623	B		
Qw17	1.00	0.500	0.580	1.500	-0.435	C		
Qw18	1.00	0.800	0.594	3.500	-1.664	B		
Qw19	1.00	0.500	0.594	1.500	-0.446	C		
Qw20	1.00	-0.700	0.594	0.500	0.208	H		0.0
Qw21	1.00	0.200	0.594	4.500	-0.535	I		0.0
Qw22	1.00	-0.200	0.594	4.500	0.535	I		0.0
Qw23	1.00	-0.500	0.580	5.000	1.449	C		
Qw24	1.00	-0.500	0.594	5.000	1.486	C		
Qw25	1.00	0.500	0.580	5.000	-1.449	C		
Qw26	1.00	0.500	0.594	5.000	-1.486	C		

Wind indexen

Index	CsCd	Cpe/Cpi	qp	breedte	reductie	Qw	Zone	Hoek(en)
Qw27	1.00	0.200	0.594	5.000		-0.594	I	0.0
Qw28	1.00	-0.200	0.594	5.000		0.594	I	0.0

SNEEUW DAKTYPEN

Staaft	artikel
3-3	5.3.2 Lessenaarsdak

Sneeuw indexen

Index	art	μ	s_k	red. posfac	breedte	Q_s	hoek
Qs1	5.3.2	0.800	0.70	1.00	5.000	2.800	0.0

BELASTINGGEVALLEN

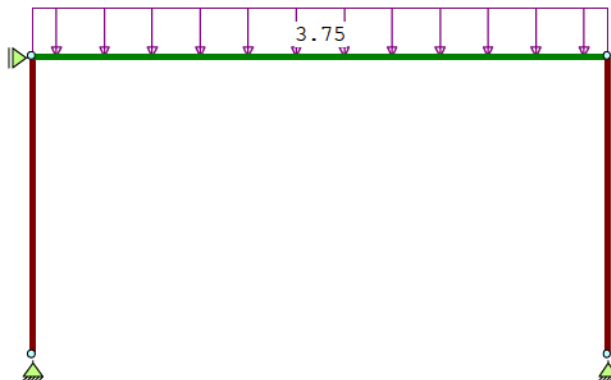
B.G.	Omschrijving	Type
	1 Permanente belasting EGZ=-1.00	1
g	2 Ver. bel. pers. ed. (q_k)	2
g	3 Ver. bel. pers. ed. (Q_k)	3
g	4 Wind van links onderdruk A	7
g	5 Wind van links overdruk A	8
g	6 Wind van rechts onderdruk A	11
g	7 Wind van rechts overdruk A	12
g	8 Wind loodrecht onderdruk A	15
g	9 Wind loodrecht overdruk A	16
g	10 Wind loodrecht onderdruk B	45
g	11 Wind loodrecht overdruk B	46
g	12 Sneeuw A	22
	13 Knik	0 Onbekend

g = gegenereerd belastinggeval

BELASTINGEN

B.G:1 Permanente belasting

Eigen gewicht van alle staven is meegenomen in berekening. Richting:↓



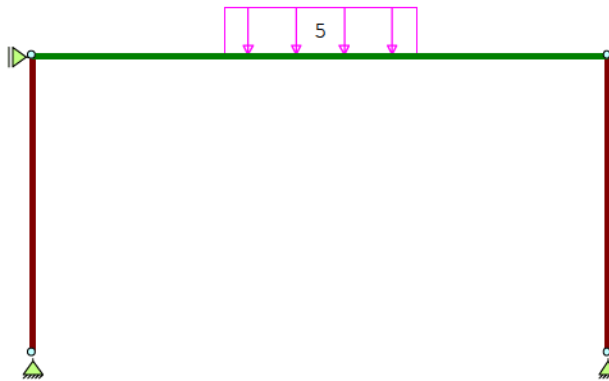
STAAFBELASTINGEN

B.G:1 Permanente belasting

Staaft	Type	$q_1/p/m$	q_2	A	B	ψ_0	ψ_1	ψ_2
3	1:QZLokaal	-3.75	-3.75	0.000	0.000			

BELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)



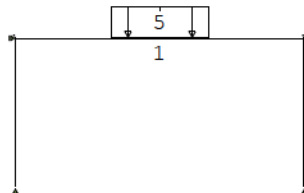
STAAFBELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)

Staat	Type	$q_1/p/m$	q_2	A	B	ψ_0	ψ_1	ψ_2
3	3:QZgeProj.	-5.00	-5.00	2.000	2.000	0.00	0.00	0.00

SITUATIES BELAST/ONBELAST

B.G:2 Ver. bel. pers. ed. (q_k)



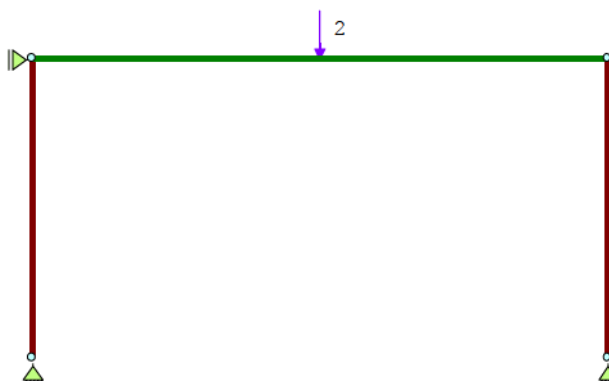
SITUATIES BELAST/ONBELAST

Belastingtype: q_k

Nr	Lastvelden belast	Lastvelden onbelast
1	1	

BELASTINGEN

B.G:3 Ver. bel. pers. ed. (Q_k)



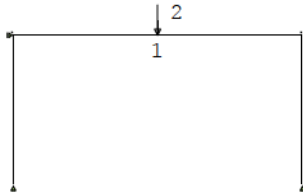
STAAFBELASTINGEN

B.G:3 Ver. bel. pers. ed. (Q_k)

Staat Type	q1/p/m	q2	A	B	ψ ₀	ψ ₁	ψ ₂
3 10:PZGeproj.	-2.00		3.000		0.00	0.00	0.00

SITUATIES BELAST/ONBELAST

B.G:3 Ver. bel. pers. ed. (Q_k)



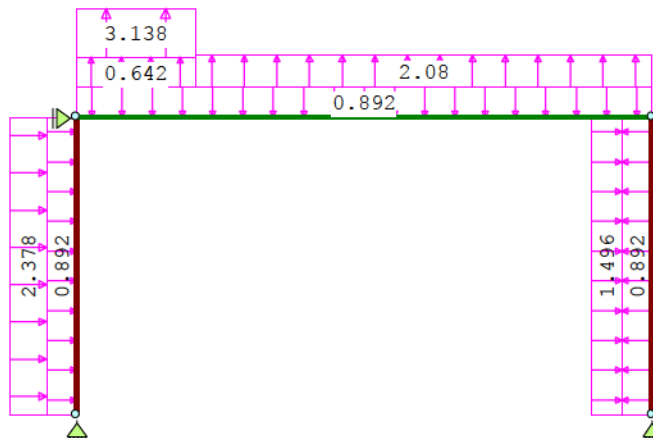
SITUATIES BELAST/ONBELAST

Belastingtype: Q_k

Nr Lastvelden belast	Lastvelden onbelast
1 1	

BELASTINGEN

B.G:4 Wind van links onderdruk A



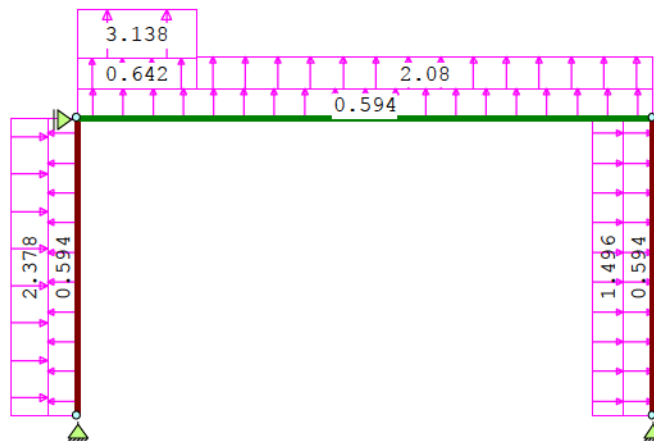
STAAFBELASTINGEN

B.G:4 Wind van links onderdruk A

Staat Type	Index	q1/p/m	q2	A	B	ψ ₀	ψ ₁	ψ ₂
1 1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
3 1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
2 1:QZLokaal	Qw2	0.89	0.89	0.000	0.000	0.00	0.20	0.00
1 1:QZLokaal	Qw3	-2.38	-2.38	0.000	0.000	0.00	0.20	0.00
3 1:QZLokaal	Qw4	0.64	0.64	0.000	4.760	0.00	0.20	0.00
3 1:QZLokaal	Qw5	3.14	3.14	0.000	4.760	0.00	0.20	0.00
3 1:QZLokaal	Qw6	2.08	2.08	1.240	0.000	0.00	0.20	0.00
2 1:QZLokaal	Qw7	-1.50	-1.50	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:5 Wind van links overdruk A



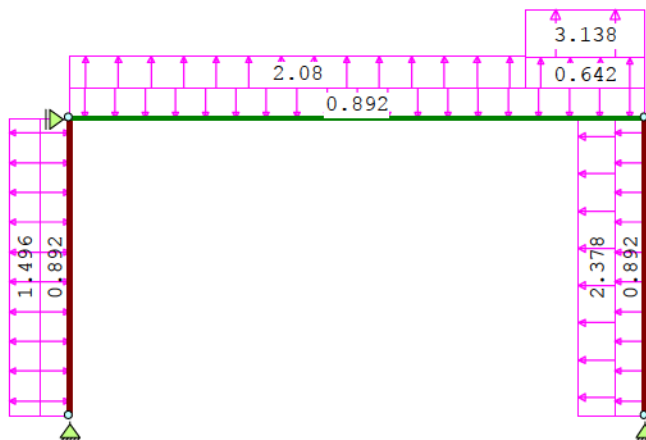
STAAFBELASTINGEN

B.G:5 Wind van links overdruk A

Staal	Type	Index	q1/p/m	q2	A	B	Ψ_0	Ψ_1	Ψ_2
1	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw9	-0.59	-0.59	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-2.38	-2.38	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw4	0.64	0.64	0.000	4.760	0.00	0.20	0.00
3	1:QZLokaal	Qw5	3.14	3.14	0.000	4.760	0.00	0.20	0.00
3	1:QZLokaal	Qw6	2.08	2.08	1.240	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw7	-1.50	-1.50	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:6 Wind van rechts onderdruk A



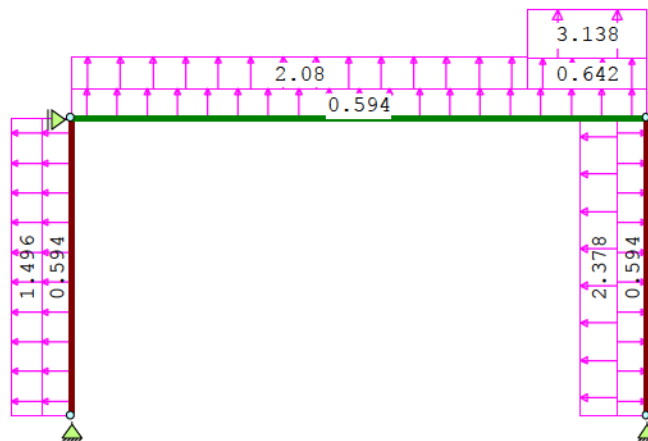
STAAFBELASTINGEN

B.G:6 Wind van rechts onderdruk A

Staal	Type	Index	q1/p/m	q2	A	B	Ψ_0	Ψ_1	Ψ_2
1	1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw2	0.89	0.89	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw10	2.38	2.38	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw4	0.64	0.64	4.760	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw5	3.14	3.14	4.760	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw6	2.08	2.08	0.000	1.240	0.00	0.20	0.00
1	1:QZLokaal	Qw11	1.50	1.50	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:7 Wind van rechts overdruk A



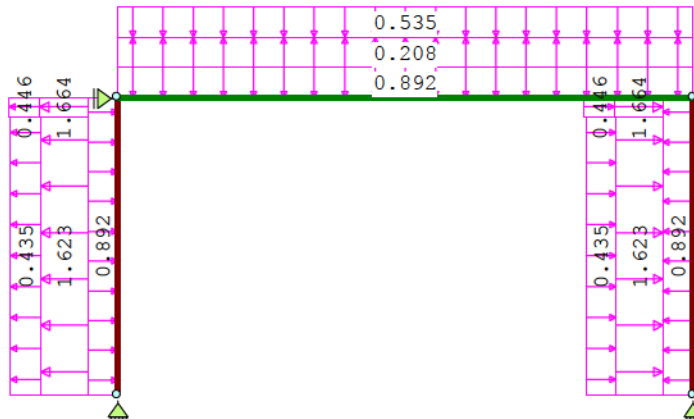
STAAFBELASTINGEN

B.G:7 Wind van rechts overdruk A

Staal	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw9	-0.59	-0.59	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw10	2.38	2.38	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw4	0.64	0.64	4.760	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw5	3.14	3.14	4.760	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw6	2.08	2.08	0.000	1.240	0.00	0.20	0.00
1	1:QZLokaal	Qw11	1.50	1.50	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:8 Wind loodrecht onderdruk A



STAAFBELASTINGEN

B.G:8 Wind loodrecht onderdruk A

Staal	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw2	0.89	0.89	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	1.62	1.62	0.000	0.200	0.00	0.20	0.00
1	1:QZLokaal	Qw13	0.43	0.43	0.000	0.200	0.00	0.20	0.00
1	1:QZLokaal	Qw14	1.66	1.66	2.900	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw15	0.45	0.45	2.900	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw16	-1.62	-1.62	0.000	0.200	0.00	0.20	0.00
2	1:QZLokaal	Qw17	-0.43	-0.43	0.000	0.200	0.00	0.20	0.00
2	1:QZLokaal	Qw18	-1.66	-1.66	2.900	0.000	0.00	0.20	0.00

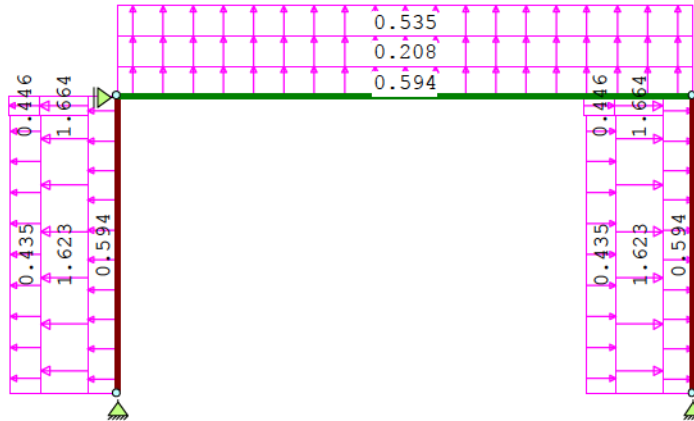
STAAFBELASTINGEN

B.G:8 Wind loodrecht onderdruk A

Staal	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
2	1:QZLokaal	Qw19	-0.45	-0.45	2.900	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw20	0.21	0.21	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw21	-0.53	-0.53	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:9 Wind loodrecht overdruk A



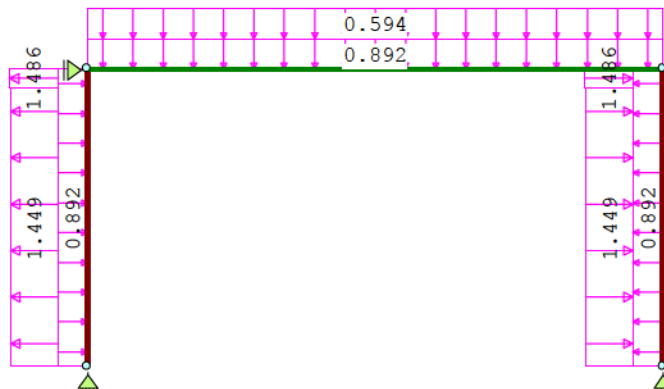
STAAFBELASTINGEN

B.G:9 Wind loodrecht overdruk A

Staal	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw9	-0.59	-0.59	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	1.62	1.62	0.000	0.200	0.00	0.20	0.00
1	1:QZLokaal	Qw13	0.43	0.43	0.000	0.200	0.00	0.20	0.00
1	1:QZLokaal	Qw14	1.66	1.66	2.900	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw15	0.45	0.45	2.900	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw16	-1.62	-1.62	0.000	0.200	0.00	0.20	0.00
2	1:QZLokaal	Qw17	-0.43	-0.43	0.000	0.200	0.00	0.20	0.00
2	1:QZLokaal	Qw18	-1.66	-1.66	2.900	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw19	-0.45	-0.45	2.900	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw20	0.21	0.21	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw22	0.53	0.53	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:10 Wind loodrecht onderdruk B



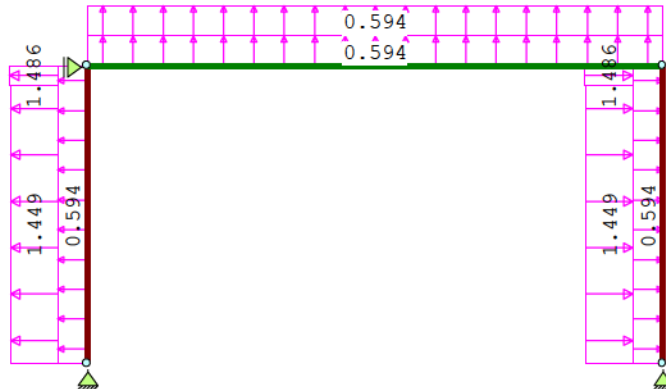
STAAFBELASTINGEN

B.G:10 Wind loodrecht onderdruk B

Staaf	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw1	-0.89	-0.89	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw2	0.89	0.89	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw23	1.45	1.45	0.000	0.200	0.00	0.20	0.00
1	1:QZLokaal	Qw24	1.49	1.49	2.900	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw25	-1.45	-1.45	0.000	0.200	0.00	0.20	0.00
2	1:QZLokaal	Qw26	-1.49	-1.49	2.900	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw27	-0.59	-0.59	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:11 Wind loodrecht overdruk B



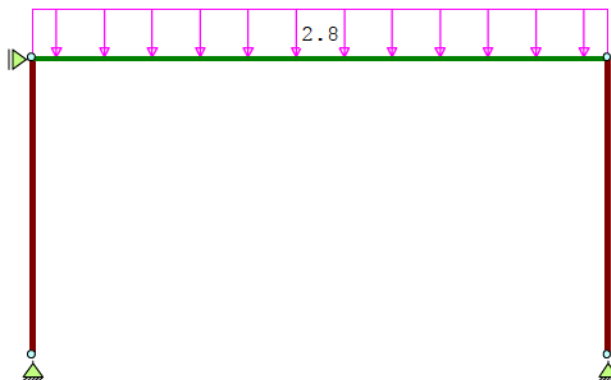
STAAFBELASTINGEN

B.G:11 Wind loodrecht overdruk B

Staaf	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw8	0.59	0.59	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw9	-0.59	-0.59	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw23	1.45	1.45	0.000	0.200	0.00	0.20	0.00
1	1:QZLokaal	Qw24	1.49	1.49	2.900	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw25	-1.45	-1.45	0.000	0.200	0.00	0.20	0.00
2	1:QZLokaal	Qw26	-1.49	-1.49	2.900	0.000	0.00	0.20	0.00
3	1:QZLokaal	Qw28	0.59	0.59	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:12 Sneeuw A



STAAFBELASTINGEN

B.G:12 Sneeuw A

Staat Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
3 3:QZgeProj.	Qs1	-2.80	-2.80	0.000	0.000	0.00	0.20	0.00

BELASTINGEN

B.G:13 Knik



KNOOPBELASTINGEN

B.G:13 Knik

Last Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2
1	4 X	1.000			

REACTIES

Kn.	B.G.	X	Z	M
1	1	1.97	12.69	
1	2	1.19	5.00	
1	3	0.25	1.00	
1	4	-5.23	-5.08	
1	5	-3.89	-9.54	
1	6	0.05	-4.16	
1	7	1.39	-8.62	
1	8	2.26	3.65	
1	9	3.07	-4.02	
1	10	1.53	4.46	
1	11	2.29	-3.57	
1	12	1.39	8.40	
1	13	-0.00	-0.00	
2	1	-0.00		
2	2	-0.00		
2	3	-0.00		
2	4	-6.73		
2	5	-6.72		
2	6	6.72		
2	7	6.73		
2	8	0.00		
2	9	0.01		
2	10	0.00		
2	11	0.00		
2	12	-0.00		
2	13	-1.00		

REACTIES

Kn.	B.G.	X	Z	M
3	1	-1.97	12.68	
3	2	-1.19	5.00	
3	3	-0.25	1.00	
3	4	-0.05	-4.16	
3	5	-1.39	-8.61	
3	6	5.24	-5.09	
3	7	3.89	-9.54	
3	8	-2.26	3.66	
3	9	-3.08	-4.01	
3	10	-1.53	4.46	
3	11	-2.29	-3.56	
3	12	-1.39	8.40	
3	13	-0.00	0.00	

BELASTINGCOMBINATIES

BC	Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
1	Fund.	1	Perm	1.35									
2	Fund.	1	Perm	0.90									
3	Fund.	1	Perm	1.20	2	Extr	1.50						
4	Fund.	1	Perm	1.20	3	Extr	1.50						
5	Fund.	1	Perm	1.20	4	Extr	1.50						
6	Fund.	1	Perm	1.20	5	Extr	1.50						
7	Fund.	1	Perm	1.20	6	Extr	1.50						
8	Fund.	1	Perm	1.20	7	Extr	1.50						
9	Fund.	1	Perm	1.20	8	Extr	1.50						
10	Fund.	1	Perm	1.20	9	Extr	1.50						
11	Fund.	1	Perm	1.20	10	Extr	1.50						
12	Fund.	1	Perm	1.20	11	Extr	1.50						
13	Fund.	1	Perm	1.20	12	Extr	1.50						
14	Fund.	1	Perm	0.90	2	Extr	1.50						
15	Fund.	1	Perm	0.90	3	Extr	1.50						
16	Fund.	1	Perm	0.90	4	Extr	1.50						
17	Fund.	1	Perm	0.90	5	Extr	1.50						
18	Fund.	1	Perm	0.90	6	Extr	1.50						
19	Fund.	1	Perm	0.90	7	Extr	1.50						
20	Fund.	1	Perm	0.90	8	Extr	1.50						
21	Fund.	1	Perm	0.90	9	Extr	1.50						
22	Fund.	1	Perm	0.90	10	Extr	1.50						
23	Fund.	1	Perm	0.90	11	Extr	1.50						
24	Fund.	1	Perm	0.90	12	Extr	1.50						
25	Kar.	1	Perm	1.00	2	Extr	1.00						
26	Kar.	1	Perm	1.00	3	Extr	1.00						
27	Kar.	1	Perm	1.00	4	Extr	1.00						
28	Kar.	1	Perm	1.00	5	Extr	1.00						
29	Kar.	1	Perm	1.00	6	Extr	1.00						
30	Kar.	1	Perm	1.00	7	Extr	1.00						
31	Kar.	1	Perm	1.00	8	Extr	1.00						
32	Kar.	1	Perm	1.00	9	Extr	1.00						
33	Kar.	1	Perm	1.00	10	Extr	1.00						
34	Kar.	1	Perm	1.00	11	Extr	1.00						
35	Kar.	1	Perm	1.00	12	Extr	1.00						
36	Quas.	1	Perm	1.00									
37	Freq.	1	Perm	1.00									
38	Freq.	1	Perm	1.00	4	psil	1.00						
39	Freq.	1	Perm	1.00	5	psil	1.00						
40	Freq.	1	Perm	1.00	6	psil	1.00						
41	Freq.	1	Perm	1.00	7	psil	1.00						
42	Freq.	1	Perm	1.00	8	psil	1.00						
43	Freq.	1	Perm	1.00	9	psil	1.00						
44	Freq.	1	Perm	1.00	10	psil	1.00						
45	Freq.	1	Perm	1.00	11	psil	1.00						
46	Freq.	1	Perm	1.00	12	psil	1.00						
47	Blij.	1	Perm	1.00									

GUNSTIGE WERKING PERMANENTE BELASTINGEN

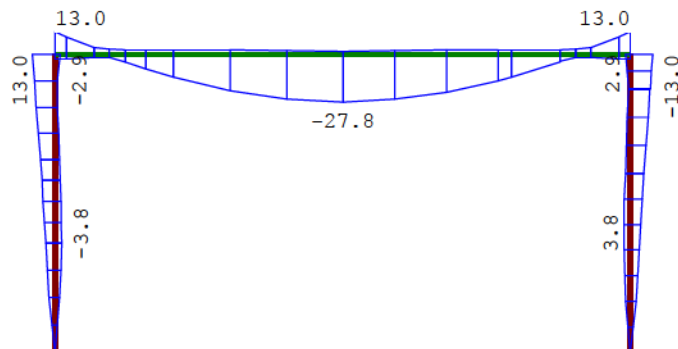
BC Staven met gunstige werking

- 1 Geen
- 2 Alle staven de factor:0.90
- 3 Geen
- 4 Geen
- 5 Geen
- 6 Geen
- 7 Geen
- 8 Geen
- 9 Geen
- 10 Geen
- 11 Geen
- 12 Geen
- 13 Geen
- 14 Alle staven de factor:0.90
- 15 Alle staven de factor:0.90
- 16 Alle staven de factor:0.90
- 17 Alle staven de factor:0.90
- 18 Alle staven de factor:0.90
- 19 Alle staven de factor:0.90
- 20 Alle staven de factor:0.90
- 21 Alle staven de factor:0.90
- 22 Alle staven de factor:0.90
- 23 Alle staven de factor:0.90
- 24 Alle staven de factor:0.90

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

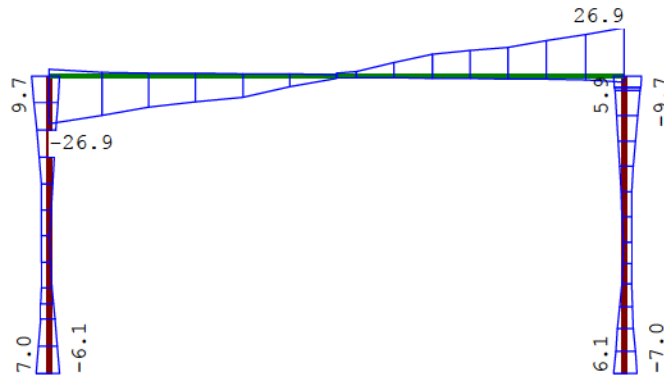
MOMENTEN

Fundamentele combinatie



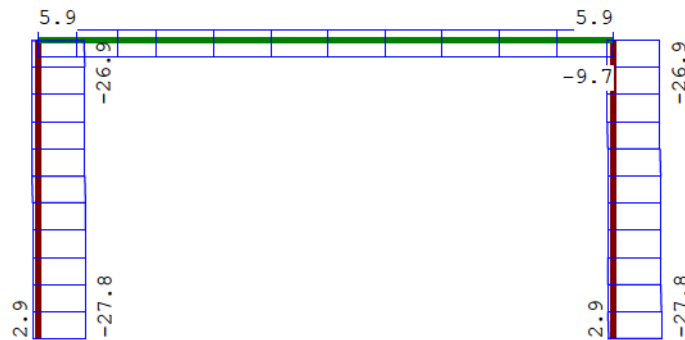
DWARSKRACHTEN

Fundamentele combinatie



NORMAALKRACHTEN

Fundamentele combinatie



STAAFKRACHTEN

Fundamentele combinatie

St.	Kn.	Pos.	NXi/NXj		DZi/DZj		MYi/MYj		Max BC
			Min BC	Max BC	Min BC	Max BC	Min BC	Max BC	
1	1		-27.82 13	2.90 17	-6.08 16	7.02 10	0.00 16	0.00 10	
1	0.895		-27.56 13	3.10 17	-1.69 16	4.19 9	-3.47 16	4.69 10	
1	1.239		-27.46 13	3.18 17	-0.69 17	4.19 13	-3.76 16	5.79 9	
1	1.365		-27.42 13	3.20 17	-0.36 17	4.19 13	-3.73 16	6.23 9	
1	1.974		-27.24 13	3.34 17	-2.27 19	4.19 13	-2.70 17	8.28 13	
1	2.729		-27.02 13	3.51 17	-4.64 19	7.90 5	-0.98 17	11.45 13	
1	2		-26.91 13	3.59 17	-5.92 21	9.72 5	-2.91 19	13.00 13	
2	3		-27.82 13	2.90 19	-7.03 10	6.08 18	0.00 10	0.00 18	
2	0.896		-27.56 13	3.10 19	-4.19 9	1.69 18	-4.70 10	3.48 18	
2	1.241		-27.45 13	3.17 19	-4.19 13	0.69 19	-5.80 9	3.78 18	
2	1.366		-27.42 13	3.20 19	-4.19 13	0.36 19	-6.24 9	3.74 18	
2	1.975		-27.24 13	3.34 19	-4.19 13	2.27 17	-8.28 13	2.70 19	
2	2.732		-27.01 13	3.51 19	-7.90 7	4.64 17	-11.45 13	0.98 19	
2	4		-26.90 13	3.59 19	-9.71 7	5.91 21	-13.00 13	2.90 17	

STAAFKRACHTEN

Fundamentele combinatie

St.	Kn.	Pos.	NXi/NXj		DZi/DZj		MYi/MYj		Min BC	Max BC
			Min	Max	Min	Max	Min	Max		
3	2		-9.71	5.91	-26.91	3.59	-2.91	13.00	7	13
3	0.584		-9.71	5.91	-21.67	1.94	-1.71	2.80	7	16
3	0.735		-9.71	5.91	-20.31	1.87	-4.35	2.26	7	16
3	1.202		-9.71	5.91	-16.13	1.67	-12.86	2.58	7	17
3	3.000		-9.71	5.91	-1.50	0.88	-27.78	1.71	7	17
3	3.000		-9.71	5.91	-0.88	1.50	-27.78	1.71	7	17
3	3.007		-9.71	5.91	-0.88	1.53	-27.78	1.70	7	17
3	4.798		-9.71	5.91	-1.66	16.13	-12.86	2.57	7	19
3	5.268		-9.71	5.91	-1.87	20.33	-4.31	2.25	7	19
3	5.416		-9.71	5.91	-1.93	21.66	-1.69	2.78	7	18
3	4		-9.71	5.91	-3.59	26.90	-2.90	13.00	7	13

REACTIES

Fundamentele combinatie

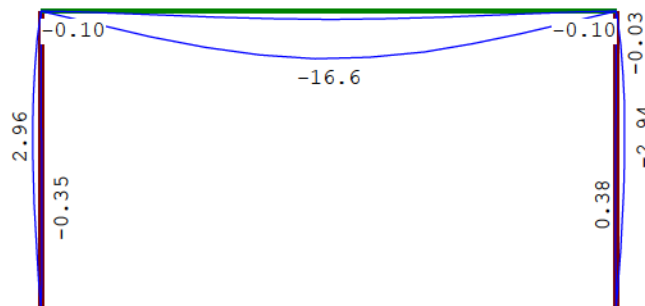
Kn.	X-min	X-max	Z-min	Z-max	M-min	M-max
1	-6.08	7.02	-2.90	27.82		
2	-10.08	10.08				
3	-7.03	6.08	-2.90	27.82		

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN

[mm]

Karakteristieke combinatie



REACTIES

Karakteristieke combinatie

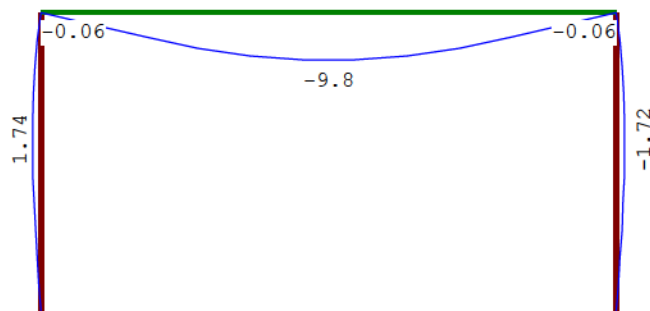
Kn.	X-min	X-max	Z-min	Z-max	M-min	M-max
1	-3.26	5.08	3.13	21.09		
2	-6.69	6.69				
3	-5.08	3.27	3.13	21.08		

OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN

[mm]

Blijvende combinatie



Dakligger 10mm zeeg

REACTIES

Blijvende combinatie

Kn.	X	Z	M
1	1.97	12.69	
2	-0.00		
3	-1.97	12.68	

STAALPROFIELEN - ALGEMENE GEGEVENS

Stabiliteit: Classificatie gehele constructie:	Geschoord
Doorbuiging en verplaatsing:	
Aantal bouwlagen:	1
Gebouwtype:	Overig
Toel. horiz. verplaatsing gehele gebouw:	h/300
Kleinste gevelhoogte [m]:	0.0

PROFIEL/MATERIAAL

P/M nr.	Profielnaam	Vloeisp. [N/mm²]	Productie methode	Min. drsn. klasse
1	HEA140	235	Gewalst	1
2	IPE200	235	Gewalst	1

Partiële veiligheidsfactoren:

Gamma M;0 : 1.00 Gamma M;1 : 1.00

KNIKSTABILITEIT

Staal	l _y [m]	Classif. y sterke as	l _{knik,y} [m]	Extra aanp. y [kN]	Classif. z zwakke as	l _{knik,z} [m]	Extra aanp. z [kN]
1	3.100	Geschoord	3.100	0.0	Geschoord	3.100	0.0
2	3.100	Geschoord	3.100	0.0	Geschoord	3.100	0.0
3	6.000	Geschoord	6.000	0.0	Geschoord	6.000	0.0

KIPSTABILITEIT

Staal	Plts. aangr.	l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	3.10 3.100
		onder:	3.10 3.100
2	0.0*h	boven:	3.10 3.100
		onder:	3.10 3.100
3	1.0*h	boven:	6.00 2*3
		onder:	6.00 2*3

TOETSING SPANNINGEN

Staal nr.	P/M	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C. [N/mm²]	Opm.
1	1	13	1	1	Staal	EN3-1-1	6.3.3	(6.62)	0.379 89	47
2	1	13	1	1	Staal	EN3-1-1	6.3.3	(6.62)	0.379 89	47
3	2	3	1	1	Staal	EN3-1-1	6.3.3	(6.62)	0.902 212	46

Opmerkingen:

[46] T.b.v. kip is een equivalente Q-last berekend.

[47] Bij verlopende normaalkracht wordt de grootste drukkracht genomen.

TOETSING DOORBUIGING

Staaf	Soort	Mtg	Lengte	Overst	Zeeg	$u_{e,0}$	BC	Sit	u	Toelaatbaar		
			[m]	I	J	[mm]			[mm]	*1		
3	Dak	db	6.00	N	N	0.0	-16.5	35	1 Eind	-16.5	-24.0	0.004
		db						35	1 Bijk	-6.8	-24.0	0.004

TOETSING HORIZONTALE VERPLAATSING

Staaf	BC	Sit	Lengte	$u_{e,i,n,d}$	Toelaatbaar	Maatgevend
			[m]	[mm]	[mm]	[h/]
1	35	1	3.100	3.0	10.3	300 doorbuiging
2	35	1	3.100	-3.0	10.3	300 doorbuiging

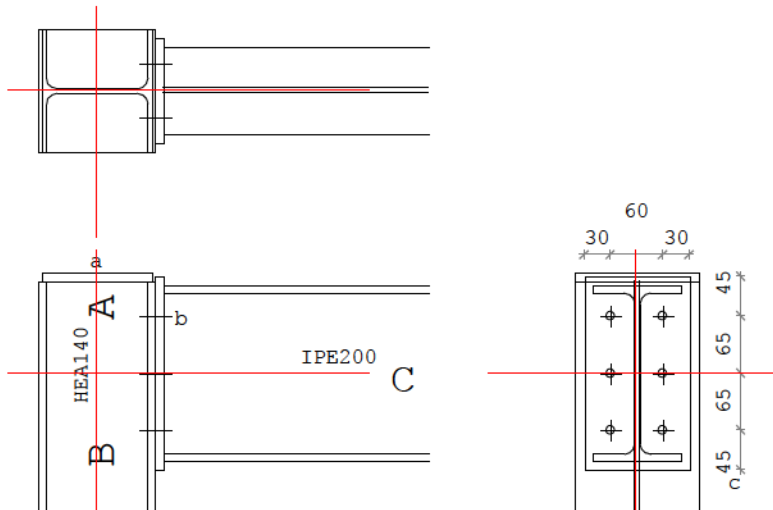
TOETSING HOR. VERPLAATSING GLOBAAL

Er is een maximale horizontale verplaatsing van -0.0001 [m] gevonden bij knoop 4 en combinatie 29; belastingsituatie 1 (combinatietype 2). Bij een hoogte van 3.100 [m] levert dit $h / 45006$ (toel.: $h / 300$).

VERBINDINGEN - BASISGEGEVENS

Knie:1

Verbindingstype	Knie Gebout
Knopen	2,4
Rekenwaarde vloeispanning $f_{y;d}$ platen	235
Hoek basis staaf AB t.o.v. globale as (linksom positief)	270
Classificatie constructie	Geschoord
Classificatie lijf staaf AB	Geschoord
Afschuiving lijf staaf AB actief?	Ja
Rekenmodel gebruikt bij de mechanicaresultaten	1e orde elastisch
Statisch systeem	Statisch onbepaald
Verbinding t.p.v. plastisch scharnier	Ja
Alternatieve methode T-stuk volgens EN 1993-1-8 tabel 6.2	Ja



LEGENDA

Onderdeel	Afmetingen	Aantal Lassen (d=dubb. hoeklas)
a Afdekplaat	140x125-10	1 $a_w=3d$ $a_f=8$
b Kopplaat	120x220-10	1 $a_w=3d$ $a_f=4d$
c Bout	M12 8.8	6

PROFIELEN

	Naam	Lengte	Prod.meth.	Exc	Hoek	$f_{y;d}$
Staaf B	HEA140	3100	Gewalst	0	270	235
Staaf C	IPE200	6000	Gewalst	0	0	235
Staaf A		105				

PLATEN

	Plaats	h	b	t	Exc	a_w	a_f	a_e	Hoek	Las	$f_{y;d}$
Kopplaat	Staaf C	220	120	10.0	0	$\Delta\Delta 3$	$\Delta\Delta 4$				235
Afdekplaat		125	140	10.0	0	$\Delta\Delta 3$	$\Delta 8$		0		235

Δ = Enkele stompe of hoeklas of dubbele hoeklas met slechts 1 las effectief

$\Delta\Delta$ = Dubbele hoeklas

BOUTEN

	d	qual	hoh	milieu	lengte	v (vanaf zijde B)
Staaf C	M12	8.8	60	Niet-corr.	28	45;110;175

KRACHTEN

	Normaalkr.	Dwarskr.	Moment	Kn:2 BC:13 Sit:1
Staaf B	26.91	-4.19	-13.00	
Staaf C	4.19	26.91	13.00	

BEZWIJKKRACHTEN

Onderdeel	$F_{R,d}$	Formule	$b_{e,f}$	Kn:2 BC:13 Sit:1
Afsch. lijf staaf AB	123.67 (6.7)	$A_{vc}=1013$ $\omega=0.76$ $\beta=1.00$		Staaf C
Druk lijf staaf AB	130.64 (6.9)	136.7 Drukpunt	14.25	
Plooi lijf staaf AB	130.64 (6.9)	136.7 $k_{wc}=1.00$ $l_{rel}=0.64$		
Drukzone kopplaat staaf C/D	266.52 (6.21)			
Trek bout	48.56			
Trek boutrij	97.11			
Let op: De normaalkracht is verwerkt in bovengenoemde bezwijkkrachten.				
Dwarskrachtcapaciteiten:				
Stuik flens staaf AB	165.09 (6.7)			
Stuik kopplaat	165.09 (6.7)			
Afsch.cap. bouten na red. trek	115.04 (6.7)			

BOUTRIJKRACHTEN Herverdeling: Nee

Kn:2 BC:13 Sit:1

EN3-1-8 art. 6.2.7.2 Reductie : Ja

Staaft C

Rij	$F_{t,Rd,heer}$	$F_{t,Rd}$	Arm	M	Criterium
3	77.66	77.66	160.8	12.48	Flens staaf AB: Plaat+Bout
2	67.85	46.01	95.8	4.41	Flens staaf AB: Plaat+Bout
1	27.87	0.00	30.8	0.00	Trek lijf staaf AB
Som F= 123.67 $M_{v,Rd} =$					16.89 Afsch. lijf staaf AB
Moment tbv. lassen =					51.84 gebaseerd op 1.0*MplRd
$V_{v,Rd} =$					115.04 Afsch.cap. bouten na red. trek

STIJFHEID

Kn:2 BC:13 Sit:1

Maatgevend criterium: Afschuifzone lijf staaf AB

Staaft C

Verh.	$M_{v,Rd}/Verh.$	Arm	S_j	ϕ
1.0	16.89	138	1506	0.01121
1.2	14.07	138	2464	0.00571
1.5	11.26	138	4501	0.00250

Bij een moment $M_{v,Ed}=13.00$ geldt een stijfheid $S_j=3239$.

De in mechanica gebruikte stijfheid is $S=3239$ kNm/rad.

TOETSING VERBINDING

Kn:2 BC:13 Sit:1

Artikel	$M_{v,Ed}$	$M_{v,Rd}$	Z	$V_{wp,Ed}$	$V_{wp,Rd}$	Toetsing
6.2.7.1	13.00	16.89				0.77
6.2.6.1			137	-4.19	123.67	0.03

Let op: Normaalcrachten in staven C & D zijn verwerkt in de bezwijk- en/of de boutrijkrachten. De conservatieve toetsingsformule van EN 1993-1-8 art. 6.2.7.1 (3) is niet gebruikt.

TOETSING PROFIELEN EN AFSCHUIVING

Kn:2 BC:13 Sit:1

Plaats	Profiel	Artikel	Formule	Toetsing
Staaaf B	HEA140	EN3-1-1	6.2.10 (6.45+6.31y)	0.32
		EN3-1-1	6.2.8 (6.30)	0.32
		EN3-1-1	6.2.5 (6.12y)	0.32
		EN3-1-1	6.2.6 (6.17)	0.03
		EN3-1-1	6.2.4 (6.9)	0.04
		EN3-1-1	6.2.1(6) N+D	0.07
Staaaf C	IPE200	EN3-1-1	6.2.10 (6.45+6.31y)	0.25
		EN3-1-1	6.2.8 (6.30)	0.25
		EN3-1-1	6.2.5 (6.12y)	0.25
		EN3-1-1	6.2.6 (6.17)	0.14
		EN3-1-1	6.2.1(6) N+D	0.15
		EN3-1-8	T.3.4	0.23

MOMENTCLASSIFICATIE EN3-1-8 art.5.2.3

Kn:2 BC:13 Sit:1

Plaats	$M_{y, Rd}$	$M_{y, Rd, staaf}$	Classificatie
Staaaf C	16.89	51.84	Niet volledig sterk

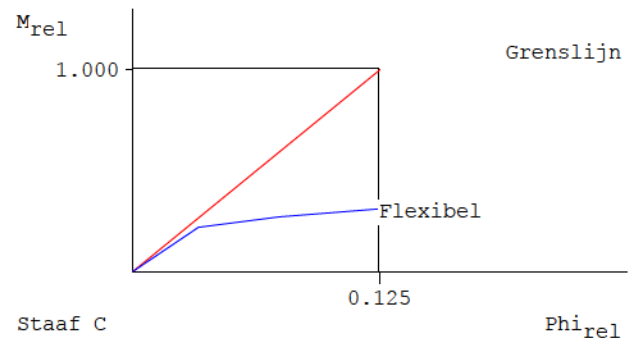
STIJFHEIDSCCLASSIFICATIE EN3-1-8 art.5.2.2

Kn:2 BC:13 Sit:1

Plaats	Punt	Grenswaarden		Actuele waarden		Classificatie
		Φ_{rel}	m_{rel}	Φ_{rel}	m_{rel}	
Staaaf C	1	0.000	0.000	0.000	0.000	Flexibel
	2	0.125	1.000	0.033	0.217	
	3	0.125	1.000	0.075	0.271	
	4	0.125	1.000	0.147	0.326	

M-PHI DIAGRAM EN3-1-8 fig. 5.4 Geschoord

Kn:2 BC:13 Sit:1



WAARSCHUWINGEN

Kn:2 BC:13 Sit:1

Onderdeel	Plaats	Rij Item	Ernst Art./(Frm.)	Min.	Waarde	Max.
Bout	Staaaf C	1	3.6.1(5)	73.4	27.5	
T.3.4b: FbRd is gereduceerd i.v.m. 2 mm gatspeling.						

CONTROLES

Kn:2 BC:13 Sit:1

Onderdeel	Plaats	Rij Item	Ernst Art./(Frm.)	Min.	Waarde	Max.
Afdekplaat	Staaaf C	Dikte	frmb 5.2.a	1.4	10.0	
	Staaaf C	Flenslas Δ	1.0*MplRd	7.85	8.00	
	Staaaf C	Lengte		121.0	125.0	133.0
Bout	Staaaf C	Lijflas ΔΔ	1.0*MplRd	3.00	3.00	
	Staaaf C	1 HOH-afstand p1	3.5(1)	30.8	65.0	119.0
	Staaaf C	1 HOH-afstand p2	3.5(1)	55.8	60.0	86.4
	Staaaf C	2 HOH-afstand p1	3.5(1)	30.8	65.0	119.0
	Staaaf C	2 HOH-afstand p2	3.5(1)	55.8	60.0	86.4
	Staaaf C	3 HOH-afstand p2	3.5(1)	55.8	60.0	86.4
Bout (Flens)	Staaaf C	3 Eindafstand e1	3.5(1)	16.8	40.0	
Bout (Plaat)	Staaaf C	1 Eindafstand e1	3.5(1)	16.8	45.0	
	Staaaf C	3 Eindafstand e1	3.5(1)	16.8	45.0	
Kopplaat	Staaaf C	Flenslas ΔΔ	1.0*MplRd	3.92	4.00	

Staafl C	Lijflaa ΔΔ	1.0*MplRd	3.00	3.00
Staafl C	Positie boven		105.7	110.0
Staafl C	Positie onder			-110.0-105.7

KRACHTEN Normaalkr. Dwarskr. Moment

Kn:4 BC:13 Sit:1

Staafl B	26.90	4.19	13.00
Staafl D	4.19	-26.90	-13.00

BEZWIJKKRACHTEN

Kn:4 BC:13 Sit:1

Onderdeel	F _{Rd}	Formule	b _{eff}	Staafl D
Afsch. lijf staafl AB	123.67 (6.7)	Avc= 1013 omega=0.76 beta=1.00		
Druk lijf staafl AB	130.64 (6.9)	136.7 Drukpunt 14.25		
Plooi lijf staafl AB	130.64 (6.9)	136.7 kwc=1.00 l _{rel} =0.64		
Drukzone kopplaat staafl C/D	266.52 (6.21)			
Trek bout	48.56			
Trek boutrij	97.11			
Let op: De normaalkracht is verwerkt in bovengenoemde bezwijkkrachten.				
Dwarskrachtcapaciteiten:				
Stuik flens staafl AB	165.09 (6.7)			
Stuik kopplaat	165.09 (6.7)			
Afsch.cap. bouten na red. trek	115.04 (6.7)			

BOUTRIJKRACHTEN

Herverdeling: Nee

Kn:4 BC:13 Sit:1

Rij	F _{t, Rd, hez v}	F _{t, Rd}	Arm	M	Criterion	Staafl D
3	77.66	77.66	160.8	12.48	Flens staafl AB: Plaat+Bout	
2	67.85	46.01	95.8	4.41	Flens staafl AB: Plaat+Bout	
1	27.87	0.00	30.8	0.00	Trek lijf staafl AB	
	Som F= 123.67		M _{v, Rd} =	16.89	Afsch. lijf staafl AB	
	Moment tbv. lassen =			51.84	gebaseerd op 1.0*MplRd	
	V _{v, Rd} =			115.04	Afsch.cap. bouten na red. trek	

STIJFHEID

Kn:4 BC:13 Sit:1

Maatgevend criterium: Afschuifzone lijf staafl AB

Staafl D

Verh.	M _{v, Rd} /Verh.	Arm	S _j	φ
1.0	16.89	138	1506	0.01121
1.2	14.07	138	2464	0.00571
1.5	11.26	138	4501	0.00250

Bij een moment M_{v, Ed}=13.00 geldt een stijfheid S_j=3245.

De in mechanica gebruikte stijfheid is S=3245 kNm/rad.

TOETSING VERBINDING

Kn:4 BC:13 Sit:1

Artikel	M _{v, Ed}	M _{v, Rd}	Z	V _{wp, Ed}	V _{wp, Rd}	Toetsing
6.2.7.1	-13.00	16.89				0.77
6.2.6.1			137	4.19	123.67	0.03

Let op: Normaalkrachten in staven C & D zijn verwerkt in de bezwijk- en/of de boutrijkrachten. De conservatieve toetsingsformule van EN 1993-1-8 art. 6.2.7.1 (3) is niet gebruikt.

TOETSING PROFIELEN EN AFSCHUIVING

Kn:4 BC:13 Sit:1

Plaats	Profiel	Artikel	Formule	Toetsing
Staafl B	HEA140	EN3-1-1	6.2.10 (6.45+6.31y)	0.32
		EN3-1-1	6.2.8 (6.30)	0.32
		EN3-1-1	6.2.5 (6.12y)	0.32
		EN3-1-1	6.2.6 (6.17)	0.03
		EN3-1-1	6.2.4 (6.9)	0.04
		EN3-1-1	6.2.1 (6)	0.07
Staafl D	IPE200	EN3-1-1	6.2.10 (6.45+6.31y)	0.25
		EN3-1-1	6.2.8 (6.30)	0.25
		EN3-1-1	6.2.5 (6.12y)	0.25
		EN3-1-1	6.2.6 (6.17)	0.14
		EN3-1-1	6.2.1 (6)	0.15
		EN3-1-8	T.3.4	0.23

MOMENTCLASSIFICATIE EN3-1-8 art.5.2.3

Kn:4 BC:13 Sit:1

Plaats	$M_{y,Rd}$	$M_{y,Rd,staaf}$	Classificatie
Staaf D	16.89	51.84	Niet volledig sterk

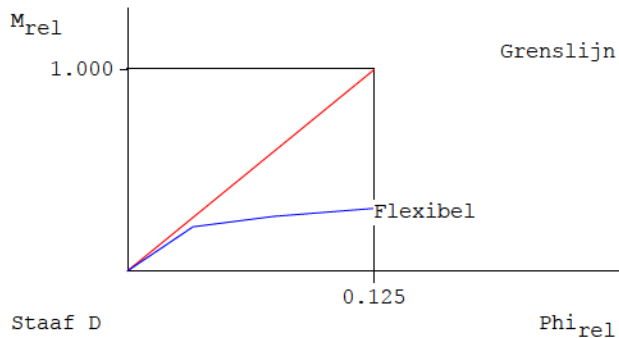
STIJFHEIDSClassificatie EN3-1-8 art.5.2.2

Kn:4 BC:13 Sit:1

Plaats	Punt	Grenswaarden		Actuele waarden		Classificatie
		Φ_{rel}	M_{rel}	Φ_{rel}	M_{rel}	
Staaf D	1	0.000	0.000	0.000	0.000	Flexibel
	2	0.125	1.000	0.033	0.217	
	3	0.125	1.000	0.075	0.271	
	4	0.125	1.000	0.147	0.326	

M-PHI DIAGRAM EN3-1-8 fig. 5.4 Geschoord

Kn:4 BC:13 Sit:1



WAARSCHUWINGEN

Kn:4 BC:13 Sit:1

Onderdeel	Plaats	Rij Item	Ernst Art./(Frm.)	Min.	Waarde	Max.
Bout	Staaf D	1	3.6.1(5)	73.4	27.5	
T.3.4b: FbRd is gereduceerd i.v.m. 2 mm gatspeling.						

CONTROLES

Kn:4 BC:13 Sit:1

Onderdeel	Plaats	Rij Item	Ernst Art./(Frm.)	Min.	Waarde	Max.
Afdekplaat	Staaf D	Dikte	frmb 5.2.a	1.4	10.0	
	Staaf D	Flenslas Δ	1.0*MplRd	7.85	8.00	
	Staaf D	Lengte		121.0	125.0	133.0
	Staaf D	Lijflas $\Delta\Delta$	1.0*MplRd	3.00	3.00	
Bout	Staaf D	1 HOH-afstand p1	3.5(1)	30.8	65.0	119.0
	Staaf D	1 HOH-afstand p2	3.5(1)	55.8	60.0	86.4
	Staaf D	2 HOH-afstand p1	3.5(1)	30.8	65.0	119.0
	Staaf D	2 HOH-afstand p2	3.5(1)	55.8	60.0	86.4
	Staaf D	3 HOH-afstand p2	3.5(1)	55.8	60.0	86.4
	Staaf D	3 Eindafstand e1	3.5(1)	16.8	40.0	
Bout (Flens)	Staaf D	1 Eindafstand e1	3.5(1)	16.8	45.0	
Bout (Plaat)	Staaf D	3 Eindafstand e1	3.5(1)	16.8	45.0	
Kopplaat	Staaf D	Flenslas $\Delta\Delta$	1.0*MplRd	3.92	4.00	
	Staaf D	Lijflas $\Delta\Delta$	1.0*MplRd	3.00	3.00	
	Staaf D	Positie boven		105.7	110.0	
	Staaf D	Positie onder			-110.0-105.7	

4.4 Verdiepingsvloer | ontwerp

ProjectNr.	Element	Elementtyp	Lengte	Breedte	Belastingsfase	Datum Berekend	Wapening
-	Kanaalplaat 1	A200	6200 mm	1200 mm	Gebruik	04-10-2022	S4D4-D2



Doorbuiging	Optr.	Toel.	Eenh.	Momenten Positief	Pos.	Optr.	Toel.	Eenh.
Veld bijkomend	7	19	mm	Gebruik	3100	69.42	74.80	kNm
Veld totaal	8	25	mm	Scheurmoment (doorbuiging)	3100	35.50	60.94	kNm
				Brand	3100	35.50	64.47	kNm
				Karakteristiek	3100	51.97	60.94	kNm
Scheurbeheersing				Pos.	Optr.	Toel.	Eenh.	
				Scheurwijdte onder	3100	0.000	0.339	mm
Dwarskrachten				Pos.	Optr.	Toel.	Eenh.	
				Gebruik	181 (60)	43.42	85.76	kN
				Gebruik	6019 (6140)	-43.42	-85.76	kN
				Gebruik	1118	29.48	65.43	kN
				Gebruik	5082	-29.48	-65.43	kN

Algemeen			
Gevolgklasse	CC2		
Ontwerplevensduur	50 jaar		
Milieuklasse onder	XC1		
XXConstructieklasse	S1		
Brandwerendheid	30 minuten		
Sterteklasse	C35/45		
Betondekking onderzijde	26 mm		
Belastingen			
Belastingcategorie	B		
ψ-factoren	ψ ₀ : 0.50	ψ ₁ : 0.50	ψ ₂ : 0.30
Eigen Gewicht	3.08	kN/m ²	
Afwerking	2.00	kN/m ²	
Opgelegd	3.00	kN/m ²	
Verpl. Scheidingswanden	1.20	kN/m ²	
Opleggingsen			
	A	B	
F _{reg} permanent	18.6	18.6	kN
F _{reg} variabel	15.4	15.4	kN
Niet bedoelde inkl.mom.	nee	nee	
Opleglengte (a)	90	90	mm

Ontwerpprogramma is beschikbaar gesteld door VBI Verkoop Maatschappij BV te Huissen.

- VBI neemt geen verantwoording voor afwijkende uitkomsten door foutieve ingaven of toepassing.
- Weergave van de optredende- en toelaatbare momenten, dwarskrachten en reactiekrachten zijn per elementbreedte.
- Eindopleggingsen zijn beschouwd als een vrije oplegging.
- Deze berekening is uitsluitend bedoeld als ontwerp informatie, definitieve berekeningen worden na opdracht gemaakt door VBI Verkoop Maatschappij BV.

VBI_EuroCode v11.0.0.27

4.5 Stalen randligger as A en C

Lijnlast as A

Belastingen	breedte factor		G_k	Q_k	ψ_0	$q_{g;k}$	$q_{Q;k}$	q_k	$q_{mom;\psi_0}$	$q_{d;6.10a}$	$q_{d;6.10b}$
	(m)		(kN/m ²)	(kN/m ²)		(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)
1e verdiepingsvloer	3,10	100%	5,00	4,00	1,00	15,50	12,40	27,90	6,20	30,23	37,20
mw dik 100	2,80	100%	2,00			5,60		5,60		7,56	6,72
						21,10	12,40	33,50	6,20	37,79	43,92

Lijnlast as C

Belastingen	breedte factor		G_k	Q_k	ψ_0	$q_{g;k}$	$q_{Q;k}$	q_k	$q_{mom;\psi_0}$	$q_{d;6.10a}$	$q_{d;6.10b}$
	(m)		(kN/m ²)	(kN/m ²)		(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)
1e verdiepingsvloer	3,10	100%	5,00	4,00	1,00	15,50	12,40	27,90	6,20	30,23	37,20
						15,50	12,40	27,90	6,20	30,23	37,20

Puntlasten uit dakconstructie (hfdst 4.3)

$F_g=12,7\text{kN}$

$F_q=8,4\text{kN}$

Technosoft Liggers release 6.74

4 okt 2022

Onderdeel....: stalen liggers as A-C
Dimensies....: kN/m/rad

Betrouwbaarheidsklasse : 2 Referentieperiode : 50

Toegepaste normen volgens Eurocode met Nederlandse NB

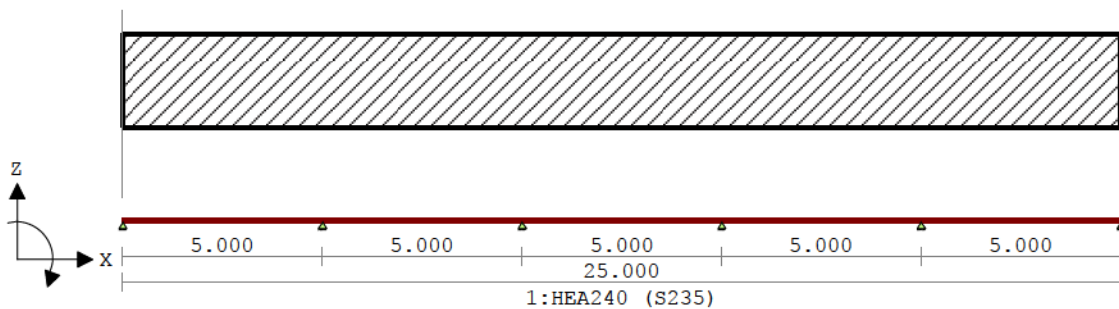
Belastingen	NEN-EN 1990:2002	C2:2010,A1:2019	NB:2019(nl)
	NEN-EN 1991-1-1:2002	C1/C11:2019	NB:2019(nl)
Staal	NEN-EN 1993-1-1:2006	C2:2011,A1:2016	NB:2016(nl)

LIGGER:as A

Profiel : HEA240

GEOMETRIE

Ligger:as A



VELDLENGHTEN

Ligger:as A

Veld	Vanaf	Tot	Lengte
1	0.000	5.000	5.000
2	5.000	10.000	5.000
3	10.000	15.000	5.000
4	15.000	20.000	5.000
5	20.000	25.000	5.000

MATERIALEN

Mt	Kwaliteit	E-modulus[N/mm ²]	S.G.	Pois.	Uitz. coëff
1	S235	210000	78.5	0.30	1.2000e-05

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	HEA240	1:S235	7.6800e+03	7.7630e+07	0.00

PROFIELEN vervolg [mm]

Prof.	Staaftype	Breedte	Hoogte	e	Type	b1	h1	b2	h2
1	0:Normaal	240	230	115.0					

PROFIELVORMEN [mm]

1 HEA240



BELASTINGGEVALLEN

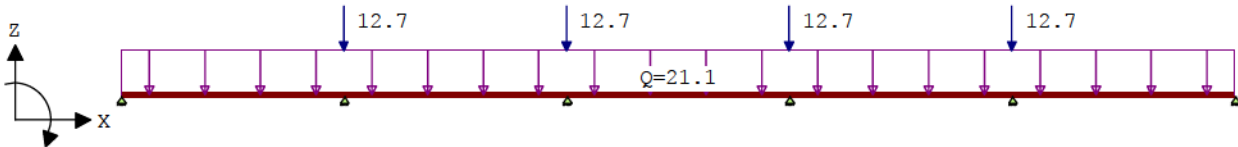
B.G. Omschrijving	Belast/onbelast	ψ_0	ψ_1	ψ_2	e.g.
1 Permanent	2:Permanent EN1991				-1.00
2 Veranderlijk	1:Schaakbord EN1991	0.50	0.50	0.30	0.00

BELASTINGGEVALLEN

B.G. Omschrijving	Type
1 Permanent	1 Permanente belasting
2 Veranderlijk	2 Ver. bel. pers. ed. (q_k)

VELDBELASTINGEN

Ligger:as A B.G:1 Permanent



VELDBELASTINGEN

Ligger:as A B.G:1 Permanent

Last Ref.	Type	Omschrijving	$q_1/p/m$	q_2	psi	Afstand	Lengte
1	1:q-last	Q	-21.100	-21.100		0.000	25.000
2	8:Puntlast		-12.700			5.000	
3	8:Puntlast		-12.700			10.000	
4	8:Puntlast		-12.700			15.000	
5	8:Puntlast		-12.700			20.000	

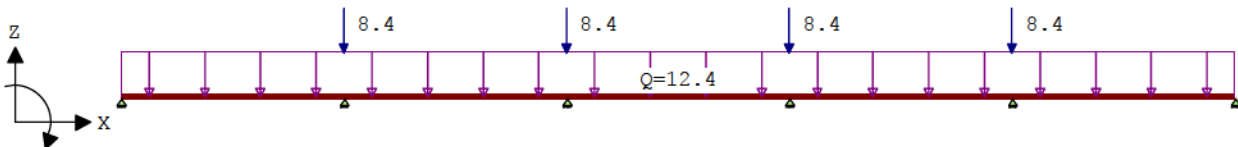
REACTIES

Ligger:as A B.G:1 Permanent

Stp	F	M
1	42.83	0.00
2	135.49	0.00
3	118.36	0.00
4	118.36	0.00
5	135.49	0.00
6	42.83	0.00
593.37 : (absoluut) grootste som reacties		
-593.37 : (absoluut) grootste som belastingen		

VELDBELASTINGEN

Ligger:as A B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:as A B.G:2 Veranderlijk

Last Ref.	Type	Omschrijving	$q_1/p/m$	q_2	psi	Afstand	Lengte
1	1:q-last	Q	-12.400	-12.400		0.000	25.000
2	8:Puntlast		-8.400			5.000	
3	8:Puntlast		-8.400			10.000	
4	8:Puntlast		-8.400			15.000	
5	8:Puntlast		-8.400			20.000	

REACTIES

Ligger:as A B.G:2 Veranderlijk

Stp	Fmin	Fmax	Mmin	Mmax
1	-3.26	27.74	0.00	0.00
2	0.00	83.90	0.00	0.00
3	0.00	80.78	0.00	0.00
4	0.00	80.78	0.00	0.00
5	0.00	83.90	0.00	0.00
6	-3.26	27.74	0.00	0.00

BELASTINGCOMBINATIES

BC Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
1 Fund.	1	Perm	1.35	2 psi0	1.50							
2 Fund.	1	Perm	1.20	2 Extr	1.50							
3 Kar.	1	Perm	1.00	2 Extr	1.00							
4 Blij.	1	Perm	1.00									

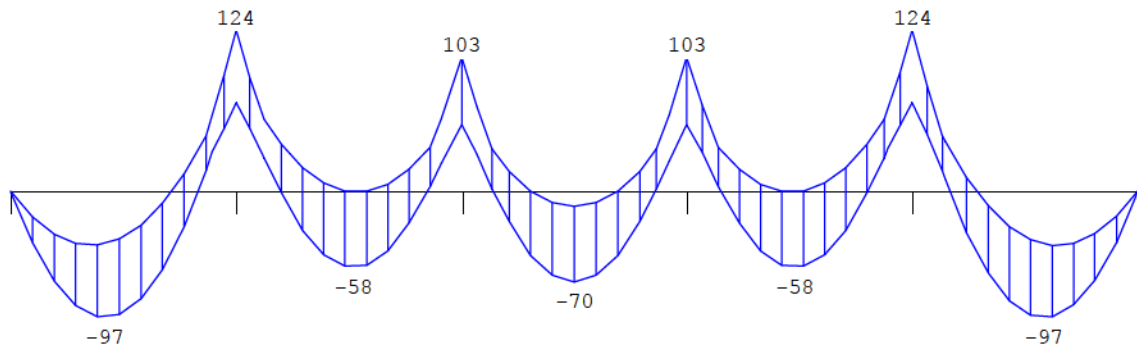
GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC Velden met gunstige werking
1 Geen
2 Geen

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

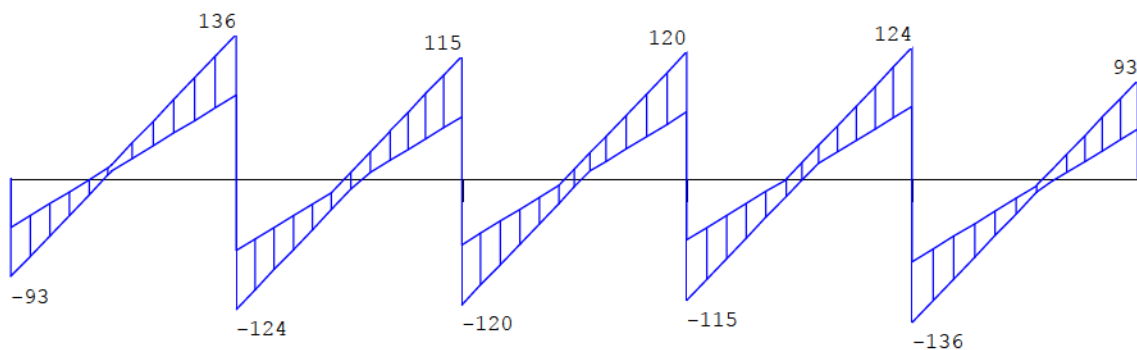
MOMENTEN

Ligger:as A Fundamentele combinatie



DWARSKRACHTEN

Ligger:as A Fundamentele combinatie



Fmin:46.5	163	142	142	163	46.5
Fmax:93	288	263	263	288	93

VELDWAARDEN

Ligger:as A Fundamentele combinatie

Veld	Pos.	Verpl. [mm]		Dwarskr		Moment	
		min.	max.	min.	max.	min.	max.
1	0.000	0.00	0.00	-93.01	-46.51	0.00	0.00
1	1.786				0.00		-41.52
1	1.996		-4.39				
1	2.083			0.00		-96.88	
1	2.295	-13.49					
1	3.571						-0.00
1	4.167					-0.00	
1	4.768		0.13				
1	5.000	0.00	0.00	78.82	136.44	68.54	124.16

VELDWAARDEN

Ligger:as A Fundamentele combinatie

Veld	Pos.	Verpl. [mm]		Dwarskr		Moment	
		min.	max.	min.	max.	min.	max.
2	0.000	0.00	0.00	-124.16	-68.54	68.54	124.16
2	0.985					-0.00	
2	1.614		2.79				
2	2.417				0.00		
2	2.499						-0.00
2	2.583	-6.70					
2	2.604					-58.37	
2	2.679						-0.42
2	2.781			0.00			
2	2.858						-0.00
2	4.255					-0.00	
2	5.000	0.00	0.00	58.23	115.30	51.40	103.13
3	0.000	0.00	0.00	-120.06	-63.00	51.40	103.13
3	0.694					-0.00	
3	0.863		0.85				
3	1.555						-0.00
3	2.311				0.00		
3	2.500	-8.91	0.37			-69.75	-11.63
3	2.689			0.00			
3	3.445						-0.00
3	4.137		0.85				
3	4.306					-0.00	
3	5.000	0.00	0.00	63.00	120.06	51.40	103.13
4	0.000	0.00	0.00	-115.30	-58.23	51.40	103.13
4	0.745					-0.00	
4	2.142						-0.00
4	2.219				0.00		
4	2.321						-0.42
4	2.396					-58.37	
4	2.417	-6.70					
4	2.501						-0.00
4	2.583			0.00			
4	3.386		2.79				
4	4.015					-0.00	
4	5.000	0.00	0.00	68.54	124.16	68.54	124.16
5	0.000	0.00	0.00	-136.44	-78.82	68.54	124.16
5	0.232		0.13				
5	0.833					-0.00	
5	1.429						-0.00
5	2.705	-13.49					
5	2.917				0.00	-96.88	
5	3.004		-4.39				
5	3.214			0.00			-41.52
5	5.000	0.00	0.00	46.51	93.01	0.00	0.00

REACTIES

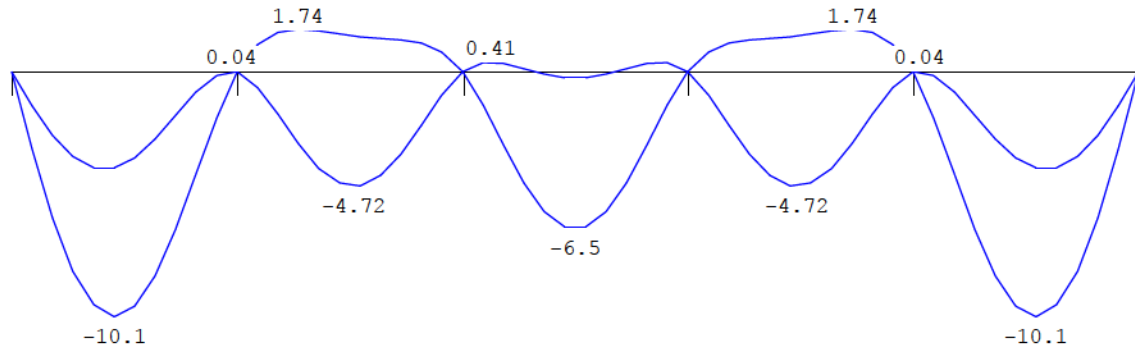
Ligger:as A Fundamentele combinatie

Stp	Fmin	Fmax	Mmin	Mmax
1	46.51	93.01	0.00	0.00
2	162.59	288.44	0.00	0.00
3	142.03	263.20	0.00	0.00
4	142.03	263.20	0.00	0.00
5	162.59	288.44	0.00	0.00
6	46.51	93.01	0.00	0.00

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:as A Karakteristieke combinatie



REACTIES

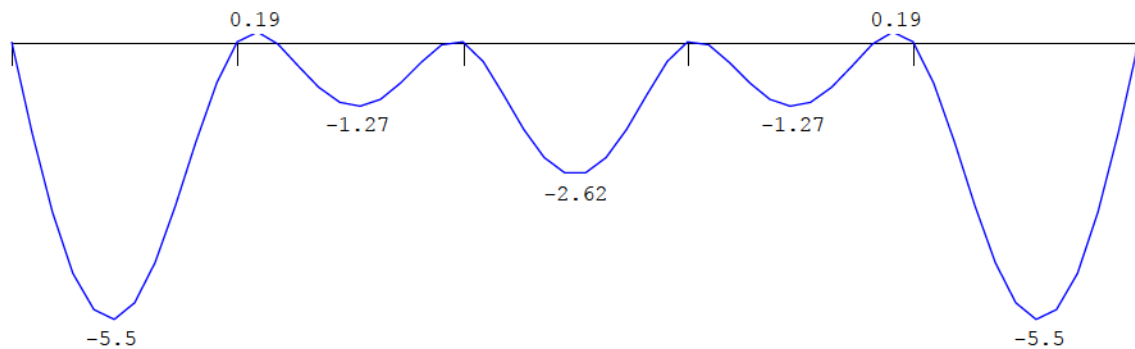
Ligger:as A Karakteristieke combinatie

Stp	Fmin	Fmax	Mmin	Mmax
1	39.57	70.57	0.00	0.00
2	135.49	219.39	0.00	0.00
3	118.36	199.14	0.00	0.00
4	118.36	199.14	0.00	0.00
5	135.49	219.39	0.00	0.00
6	39.57	70.57	0.00	0.00

OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:as A Blijvende combinatie



REACTIES

Ligger:as A Blijvende combinatie

stp	F	M
1	42.83	0.00
2	135.49	0.00
3	118.36	0.00
4	118.36	0.00
5	135.49	0.00
6	42.83	0.00

STAALPROFIELEN - ALGEMENE GEGEVENS

Ligger:as A

Stabiliteit: Classificatie gehele constructie:

Geschoord

PROFIEL/MATERIAAL

P/M nr.	Profielnaam	Vloeisp. [N/mm ²]	Productie methode	Min. drsn. klasse
1	HEA240	235	Gewalst	1

Partiële veiligheidsfactoren:
Gamma M;0 : 1.00 Gamma M;1 : 1.00

KIPSTABILITEIT

Ligger:as A

Staafl	Plts. aangr.	l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven: 5.00	4*1,25
		onder: 5.00	5.000
2	1.0*h	boven: 5.00	4*1,25
		onder: 5.00	5.000
3	1.0*h	boven: 5.00	4*1,25
		onder: 5.00	5.000
4	1.0*h	boven: 5.00	4*1,25
		onder: 5.00	5.000
5	1.0*h	boven: 5.00	4*1,25
		onder: 5.00	5.000

TOETSING SPANNINGEN

Ligger:as A

Staafl	P/M nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C. [N/mm ²]	Opm.
1	1	2	4	1	Einde	EN3-1-1	6.2.8	(6.30)	0.710	167
2	1	2	4	1	Begin	EN3-1-1	6.2.8	(6.30)	0.710	167
3	1	2	5	1	Begin	EN3-1-1	6.2.8	(6.30)	0.590	139
4	1	2	7	1	Einde	EN3-1-1	6.2.8	(6.30)	0.710	167
5	1	2	7	1	Begin	EN3-1-1	6.2.8	(6.30)	0.710	167

TOETSING DOORBUIGING

Ligger:as A

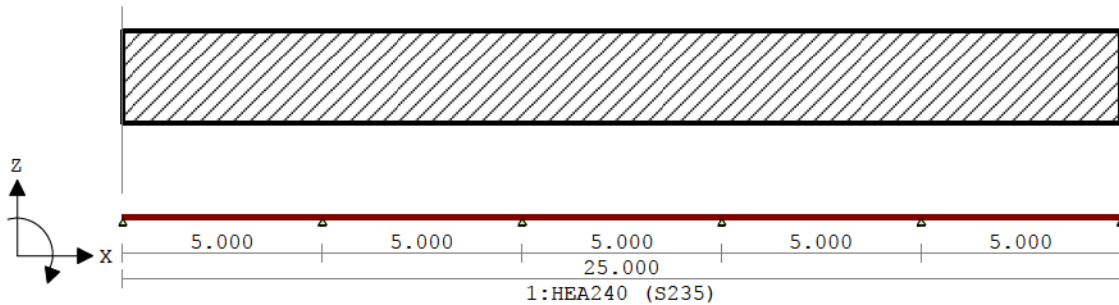
Staafl	Soort	Mtg	Lengte [m]	Overst I	Zeeg J	u _{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	*1
1	Vloer	db	5.00	N	N	0.0	-10.1	3 2 Eind	-10.1	±20.0	0.004
		db						3 2 Bijl	-4.6	±15.0	0.003
2	Vloer	db	5.00	N	N	0.0	-4.7	3 3 Eind	-4.7	±20.0	0.004
		db						3 3 Bijl	-3.5	±15.0	0.003
3	Vloer	db	5.00	N	N	0.0	-6.5	3 2 Eind	-6.5	±20.0	0.004
		db						3 2 Bijl	-3.8	±15.0	0.003
4	Vloer	db	5.00	N	N	0.0	-4.7	3 3 Eind	-4.7	±20.0	0.004
		db						3 3 Bijl	-3.5	±15.0	0.003
5	Vloer	db	5.00	N	N	0.0	-10.1	3 2 Eind	-10.1	±20.0	0.004
		db						3 2 Bijl	-4.6	±15.0	0.003

LIGGER:as C

Profiel : HEA240

GEOMETRIE

Ligger:as C



VELDLENGTEN

Ligger:as C

Veld	Vanaf	Tot	Lengte
1	0.000	5.000	5.000
2	5.000	10.000	5.000
3	10.000	15.000	5.000
4	15.000	20.000	5.000
5	20.000	25.000	5.000

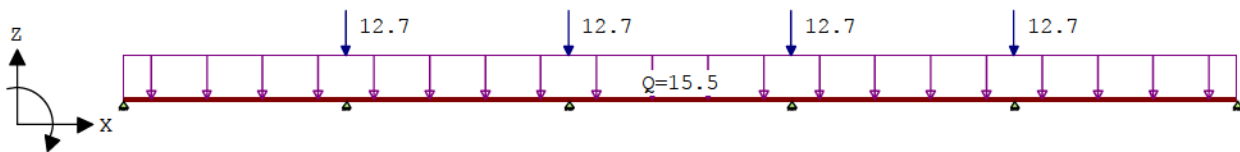
PROFIELVORMEN [mm]

1 HEA240



VELDBELASTINGEN

Ligger:as C B.G:1 Permanent



VELDBELASTINGEN

Ligger:as C B.G:1 Permanent

Last Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1	1:q-last	Q	-15.500	-15.500		0.000	25.000
2	8:Puntlast		-12.700			5.000	
3	8:Puntlast		-12.700			10.000	
4	8:Puntlast		-12.700			15.000	
5	8:Puntlast		-12.700			20.000	

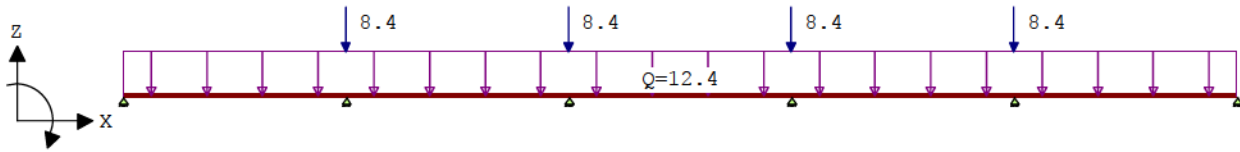
REACTIES

Ligger:as C B.G:1 Permanent

Stp	F	M
1	31.78	0.00
2	103.81	0.00
3	91.10	0.00
4	91.10	0.00
5	103.81	0.00
6	31.78	0.00
453.37 : (absoluut) grootste som reacties		
-453.37 : (absoluut) grootste som belastingen		

VELDBELASTINGEN

Ligger:as C B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:as C B.G:2 Veranderlijk

Last Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1	1:q-last	Q	-12.400	-12.400		0.000	25.000
2	8:Puntlast			-8.400		5.000	
3	8:Puntlast			-8.400		10.000	
4	8:Puntlast			-8.400		15.000	
5	8:Puntlast			-8.400		20.000	

REACTIES

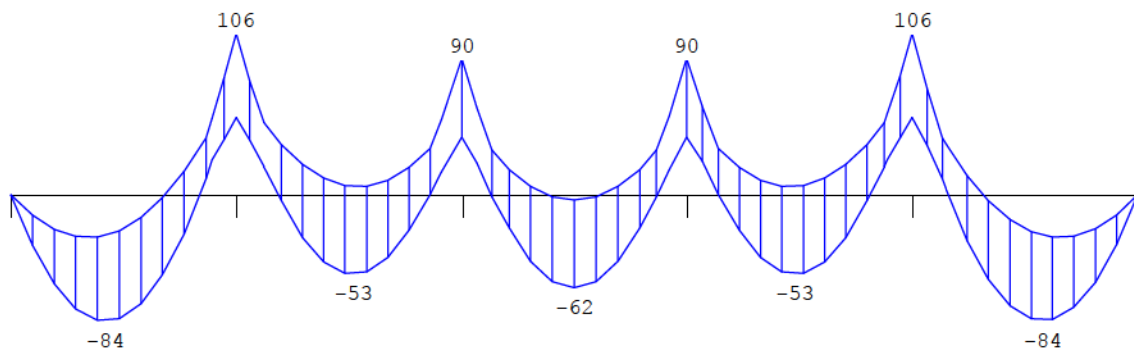
Ligger:as C B.G:2 Veranderlijk

Stp	Fmin	Fmax	Mmin	Mmax
1	-3.26	27.74	0.00	0.00
2	0.00	83.90	0.00	0.00
3	0.00	80.78	0.00	0.00
4	0.00	80.78	0.00	0.00
5	0.00	83.90	0.00	0.00
6	-3.26	27.74	0.00	0.00

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

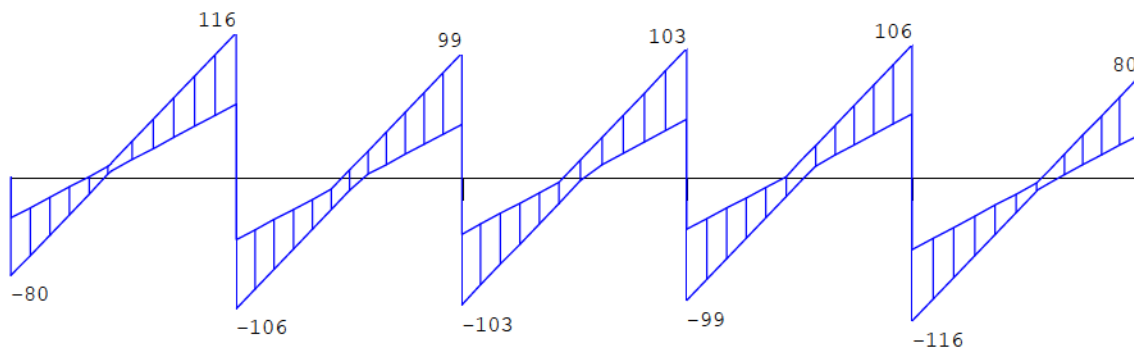
MOMENTEN

Ligger:as C Fundamentele combinatie



DWARSKRACHTEN

Ligger:as C Fundamentele combinatie



Fmin:33.2	125	109	109	125	33.2
Fmax:80	250	230	230	250	80

VELDWAARDEN

Ligger:as C Fundamentele combinatie

Veld	Pos.	Verpl. [mm]		Dwarskr		Moment	
		min.	max.	min.	max.	min.	max.
1	0.000	0.00	0.00	-79.74	-33.24	0.00	0.00
1	1.720				0.00		-28.60
1	1.898		-2.73				
1	2.103			0.00		-83.84	
1	2.309	-11.80					
1	3.441						-0.00
1	4.206					-0.00	
1	4.607		0.28				
1	5.000	0.00	0.00	58.48	116.10	50.85	106.47
2	0.000	0.00	0.00	-106.47	-50.85	50.85	106.47
2	0.920					-0.00	
2	1.971		3.06				
2	2.379				0.00		
2	2.574	-6.31					
2	2.599					-52.79	
2	2.695						5.16
2	2.810			0.00			
2	4.313					-0.00	
2	5.000	0.00	0.00	42.32	99.39	38.14	89.87
3	0.000	0.00	0.00	-103.26	-46.20	38.14	89.87
3	0.642					-0.00	
3	1.401		1.26				
3	1.865						-0.00
3	2.277				0.00		
3	2.500	-8.10	1.18			-62.02	-3.89
3	2.723			0.00			
3	3.135						-0.00
3	3.599		1.26				
3	4.358					-0.00	
3	5.000	0.00	0.00	46.20	103.26	38.14	89.87
4	0.000	0.00	0.00	-99.39	-42.32	38.14	89.87
4	0.687					-0.00	
4	2.190				0.00		
4	2.305						5.16
4	2.401					-52.79	
4	2.426	-6.31					
4	2.621			0.00			
4	3.029		3.06				
4	4.080					-0.00	
4	5.000	0.00	0.00	50.85	106.47	50.85	106.47
5	0.000	0.00	0.00	-116.10	-58.48	50.85	106.47
5	0.393		0.28				
5	0.794					-0.00	
5	1.559						-0.00
5	2.691	-11.80					
5	2.897				0.00	-83.84	
5	3.102		-2.73				
5	3.280			0.00			-28.60
5	5.000	0.00	0.00	33.24	79.74	0.00	0.00

REACTIES

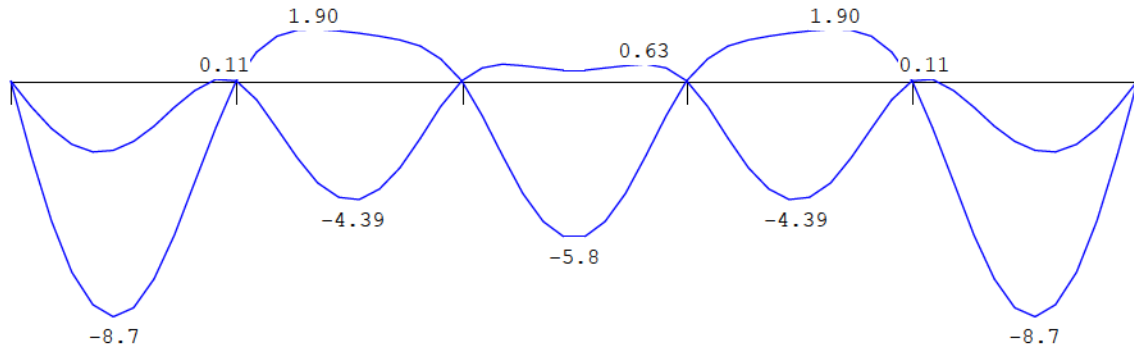
Ligger:as C Fundamentele combinatie

Stp	Fmin	Fmax	Mmin	Mmax
1	33.24	79.74	0.00	0.00
2	124.57	250.42	0.00	0.00
3	109.31	230.49	0.00	0.00
4	109.31	230.49	0.00	0.00
5	124.57	250.42	0.00	0.00
6	33.24	79.74	0.00	0.00

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:as C Karakteristieke combinatie



REACTIES

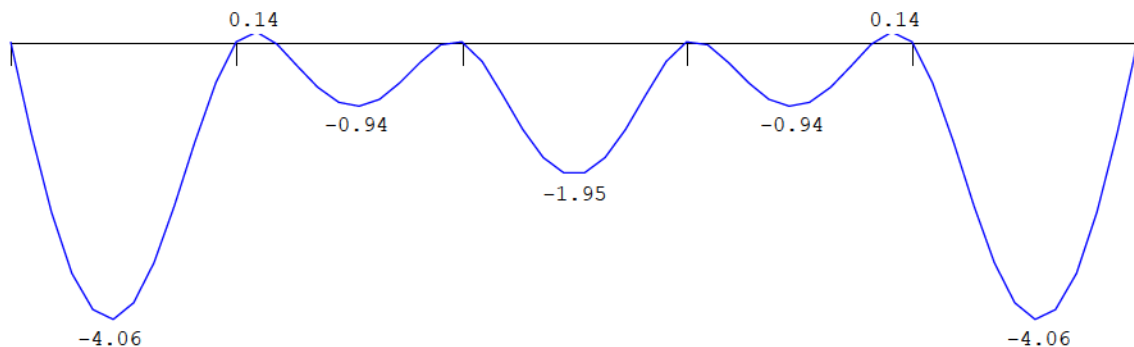
Ligger:as C Karakteristieke combinatie

Stp	Fmin	Fmax	Mmin	Mmax
1	28.52	59.52	0.00	0.00
2	103.81	187.71	0.00	0.00
3	91.10	171.88	0.00	0.00
4	91.10	171.88	0.00	0.00
5	103.81	187.71	0.00	0.00
6	28.52	59.52	0.00	0.00

OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:as C Blijvende combinatie



REACTIES

Ligger:as C Blijvende combinatie

Stp	F	M
1	31.78	0.00
2	103.81	0.00
3	91.10	0.00
4	91.10	0.00
5	103.81	0.00
6	31.78	0.00

KIPSTABILITEIT

Ligger:as C

Staafl	Plts. aangr.	l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven: 5.00 onder: 5.00	4*1,25 5.000
2	1.0*h	boven: 5.00 onder: 5.00	4*1,25 5.000

KIPSTABILITEIT

Ligger: as C

Staaf	Plts. aangr.	l gaffel	Kipsteunafstanden
		[m]	[m]
3	1.0*h	boven:	5.00 4*1,25
		onder:	5.00 5.000
4	1.0*h	boven:	5.00 4*1,25
		onder:	5.00 5.000
5	1.0*h	boven:	5.00 4*1,25
		onder:	5.00 5.000

TOETSING SPANNINGEN

Ligger: as C

Staaf	P/M	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing	Opm.
nr.									U.C. [N/mm²]	
1	1	2	4	1	Einde	EN3-1-1	6.2.8	(6.30)	0.609	143
2	1	2	4	1	Begin	EN3-1-1	6.2.8	(6.30)	0.609	143
3	1	2	5	1	Begin	EN3-1-1	6.2.8	(6.30)	0.514	121
4	1	2	7	1	Einde	EN3-1-1	6.2.8	(6.30)	0.609	143
5	1	2	7	1	Begin	EN3-1-1	6.2.8	(6.30)	0.609	143

TOETSING DOORBUIGING

Ligger: as C

Staaf	Soort	Mtg	Lengte	Overst	Zeeg	u _{o,z}	BC	Sit	u	Toelaatbaar
			[m]	I	J	[mm]			[mm]	[mm]
1	Vloer	db	5.00	N	N	0.0	-8.7	3 2 Eind	-8.7	±20.0
		db						3 2 Bijk	-4.6	±15.0
2	Vloer	db	5.00	N	N	0.0	-4.4	3 3 Eind	-4.4	±20.0
		db						3 3 Bijk	-3.5	±15.0
3	Vloer	db	5.00	N	N	0.0	-5.8	3 2 Eind	-5.8	±20.0
		db						3 2 Bijk	-3.8	±15.0
4	Vloer	db	5.00	N	N	0.0	-4.4	3 3 Eind	-4.4	±20.0
		db						3 3 Bijk	-3.5	±15.0
5	Vloer	db	5.00	N	N	0.0	-8.7	3 2 Eind	-8.7	±20.0
		db						3 2 Bijk	-4.6	±15.0

4.6 Deling stalen randligger | momentverbinding

$M_{Ed} = \frac{1}{4} * M_{pl} = 0,25 * 175\text{kNm} = 43,8\text{kNm} \rightarrow 50\text{kNm}$
 $V_{Ed} = 100\text{kN}$

Technosoft Verbindingen release 6.71a

5 okt 2022

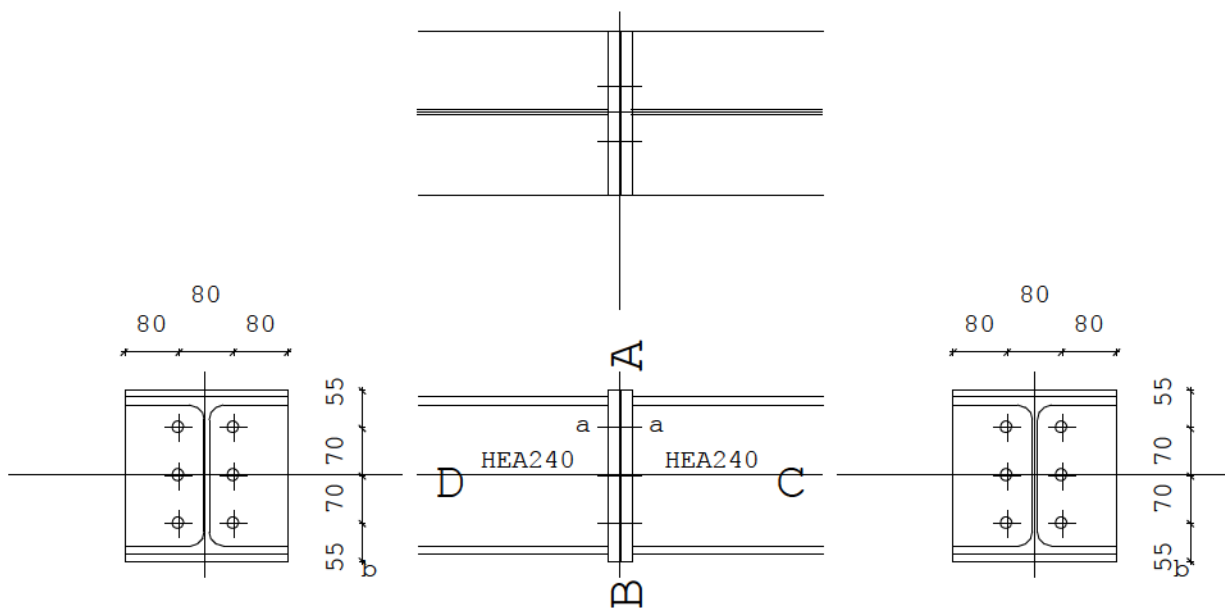
Dimensies.....: [kN] [kNm] [mm] [graden] [N/mm²] [kNm/rad]
Datum.....: 05-10-2022

Toegepaste normen volgens Eurocode met Nederlandse NB

Staal	NEN-EN 1993-1-1:2006	C2:2011, A1:2016	NB:2016 (nl)
	NEN-EN 1993-1-8:2006	C2:2009	NB:2011 (nl)

VERBINDINGEN - BASISGEGEVENS

Verbindingstype	Stuik Gebout
Rekenwaarde vloeispanning f_y ; d platen	235
Hoek basis staaf AB t.o.v. globale as (linksom positief)	270
Classificatie constructie	Geschoord
Verbinding symmetrisch?	Ja
Rekenmodel gebruikt bij de mechanicaresultaten	1e orde elastisch
Statisch systeem	Statisch onbepaald
Verbinding t.p.v. plastisch scharnier	Ja
Alternatieve methode T-stuk volgens EN 1993-1-8 tabel 6.2	Ja



LEGENDA

Onderdeel	Afmetingen	Aantal	Lassen (d=dubb. hoeklas)
a Kopplaat	240x250-18	2	aw=4d af=6d
b Bout	M20 8.8	6	

PROFIELEN

	Naam	Lengte	Prod.meth.	Exc	Hoek	$f_{y;d}$
Staaaf C	HEA240	6000	Gewalst	0	0	235
Staaaf D	HEA240	6000	Gewalst	0	0	235

PROFIELGEGEVENS [mm]

PROFIELGEGEVENS [mm]					Gewalst	Klasse 1	HEA240		
h :	230.0	i _y :	100.5	A :	7680.0	W _{e y} :	675.0E3	I _y :	7763.0E4
b :	240.0	i _z :	60.0			W _{e z} :	230.7E3	I _z :	2769.0E4
t _w :	7.5	r :	21.0			W _{p y} :	744.0E3	I _t :	42.1E4
t _f :	12.0					W _{p z} :	351.6E3	I _w :	328485.9E6

PLATEN

	Plaats	h	b	t	Exc	a_w	a_f	a_e	Hoek	Las	$f_{y;d}$
Kopplaat	Staaaf C	250	240	18.0	0	$\Delta\Delta 4$	$\Delta\Delta 6$				235
Kopplaat	Staaaf D	250	240	18.0	0	$\Delta\Delta 4$	$\Delta\Delta 6$				235

Δ = Enkele stompe of hoeklas of dubbele hoeklas met slechts 1 las effectief

$\Delta\Delta$ = Dubbele hoeklas

KRACHTEN

	Normaalkr.	Dwarskr.	Moment
Staaaf D	0.00	100.00	-50.00
Staaaf C	0.00	100.00	50.00

BEZWIJJKRACHTEN

Onderdeel	F_{Rd}	Formule	b_{eff}	Staaaf C
				Drukpunt 16.00
Drukzone kopplaat staaaf C/D	802.02	(6.21)		
Trek bout	141.00			
Trek boutrij	282.01			
Dwarskrachtcapaciteiten:				
Stuik kopplaat	1272.44			
Afsch.cap. bouten na red. trek	343.23			

BOU TRIJKRACHTEN

						Herverdeling: Nee
EN3-1-8	art. 6.2.7.2	Reductie	:	Nee		Staaaf C
Rij	$F_{t,Rd,her v}$	$F_{t,Rd}$	Arm	M	Criterium	
3	262.98	253.81	179.0	45.43	Kopplaat: Plaat+Bout	
2	128.78	154.55	109.0	16.85	Lassen	
1	61.72	55.30	39.0	2.16	Lassen	
	Som F=	463.66	$M_{v,Rd} =$	64.43	Bout/Plaat-combinatie	
	Moment tbv. lassen =			174.84	gebaseerd op $1.0 \cdot M_{plRd}$	
			$V_{v,Rd} =$	343.23	Afsch.cap. bouten na red. trek	

TUSSENRESULTATEN STIJFHEID

bij $M_{v,Rd}$ voor boutrij binnen trekflens (h_1)				Staaft C
i	Onderdeel	k_i	μ_i	Bijdrage
5	Trekzone kopplaat	39.453	2.988	48%
10	Trekzone bouten	35.824	2.988	52%

STIJFHEID

Maatgevend criterium: Trekzone bouten				Staaft C
Verh.	$M_{v,Rd}/\text{Verh.}$	Arm	S_j	ϕ
1.0	64.43	142	26061	0.00247
1.2	53.70	142	42637	0.00126
1.5	42.96	142	77883	0.00055

Bij een moment $M_{v,Ed}=50.00$ geldt een stijfheid $S_j=54766$.

BEZWIJKKRACHTEN

Onderdeel	F_{Rd}	Formule	b_{eff}	Staaft D
				Drukpunt 16.00
Drukzone kopplaat staaf C/D	802.02	(6.21)		
Trek bout	141.00			
Trek boutrij	282.01			
Dwarskrachtcapaciteiten:				
Stuik kopplaat	1272.44			
Afsch.cap. bouten na red. trek	343.23			

BOUTRIJKRACHTEN

Herverdeling: Nee				
EN3-1-8 art. 6.2.7.2	Reductie	:	Nee	Staaft D
Rij	$F_{t,Rd,herf}$	$F_{t,Rd}$	Arm	M Criterium
3	262.98	253.81	179.0	45.43 Kopplaat: Plaat+Bout
2	128.78	154.55	109.0	16.85 Lassen
1	61.72	55.30	39.0	2.16 Lassen
Som $F=$ 463.66 $M_{v,Rd} =$				64.43 Bout/Plaat-combinatie
Moment tbv. lassen =				174.84 gebaseerd op $1.0 \cdot M_{plRd}$
$V_{v,Rd} =$				343.23 Afsch.cap. bouten na red. trek

TUSSENRESULTATEN STIJFHEID

bij $M_{v,Rd}$ voor boutrij binnen trekflens (h_1)				Staaft D
i	Onderdeel	k_i	μ_i	Bijdrage
5	Trekzone kopplaat	39.453	2.988	48%
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STIJFHEID

Maatgevend criterium: Trekzone bouten				Staaft D
Verh.	$M_{v,Rd}/\text{Verh.}$	Arm	S_j	ϕ
1.0	64.43	142	26061	0.00247
1.2	53.70	142	42637	0.00126
1.5	42.96	142	77883	0.00055

Bij een moment $M_{v,Ed}=50.00$ geldt een stijfheid $S_j=54766$.

TOETSING VERBINDING

Artikel	$M_{v,Ed}$	$M_{v,Rd}$	Z	$V_{wp,Ed}$	$V_{wp,Rd}$	Toetsing
6.2.7.1	50.00	64.43				0.78
6.2.7.1	-50.00	64.43				0.78

TOETSING PROFIELEN EN AFSCHUIVING

Plaats	Profiel		Artikel	Formule	Toetsing
Staaf C	HEA240	EN3-1-1	6.2.8	(6.30)	0.29
		EN3-1-1	6.2.5	(6.12y)	0.29
		EN3-1-1	6.2.6	(6.17)	0.29
		EN3-1-8	T.3.4		0.29
Staaf D	HEA240	EN3-1-1	6.2.8	(6.30)	0.29
		EN3-1-1	6.2.5	(6.12y)	0.29
		EN3-1-1	6.2.6	(6.17)	0.29
		EN3-1-8	T.3.4		0.29

4.7 Staalkolom as A en as C | tussen beg.vloer en verd.vloer

Algemene gegevens

Lengte	3,10 m
Gevolgklasse	CC2
Ontwerp levensduur	50 jaar
Staalkwaliteit	S 235
Kniklengte Z-as	3,10 m
Kniklengte Y-as	3,10 m
Profiel	HE160A

Belastingen

PL 1

G: Permanent	$F_{k,j}$ 135,5 kN
Q: Veranderlijk	$F_{k,1}$ 83,9 kN

Excentriciteit Z-as	0 mm
Excentriciteit Y-as	50 mm

Belastinggevallen

belastinggeval	F_k (kN)	$M_{k,y}$ (kNm)	$M_{k,z}$ (kNm)
G: Permanent	135,5	6,8	0,0
Q: Veranderlijk	83,9	4,2	0,0

Profielafmetingen

Breedte	160,0	mm
Hoogte	152,0	mm
W_y	245,1	$\times 10^3$ mm ³
I_y	1673,0	$\times 10^4$ mm ⁴
i_y	65,7	mm
W_z	117,6	$\times 10^3$ mm ³
I_z	615,6	$\times 10^4$ mm ⁴
i_z	39,8	mm
I_t	12,2	$\times 10^4$ mm ⁴
A	3877,0	mm ²

Kromme y-y	b
Kromme z-z	c
Kipkromme	b

Belastingcombinaties

Belastingcombinatie	F_d (kN)	$M_{d,y}$ (kNm)	$M_{d,z}$ (kNm)
Formule 6.10a	245,9	12,3	0,0
Formule 6.10b	288,5	14,4	0,0

Toetsing NEN-EN 1993 art. 6.3.3

$$\text{Formule 6.47 u.c.} = \frac{N_{Ed}}{N_{b,Rd;y}} = 0,36 \text{ voldoet}$$

$$\text{Formule 6.47 u.c.} = \frac{N_{Ed}}{N_{b,Rd;z}} = 0,49 \text{ voldoet}$$

$$\text{Formule 6.61 u.c.} = \frac{N_{Ed}}{X_y * N_{Rk}} + k_{yy} * \frac{M_{y,Ed} + \Delta M_{y,Ed}}{X_{LT} * M_{y,Rk}} + k_{yz} * \frac{M_{z,Ed} + \Delta M_{z,Ed}}{M_{z,Rk}} = 0,53 \text{ voldoet}$$

$$\text{Formule 6.62 u.c.} = \frac{N_{Ed}}{X_z * N_{Rk}} + k_{zy} * \frac{M_{y,Ed} + \Delta M_{y,Ed}}{X_{LT} * M_{y,Rk}} + k_{zz} * \frac{M_{z,Ed} + \Delta M_{z,Ed}}{M_{z,Rk}} = 0,72 \text{ voldoet}$$

Uitbuiging kolom

$$u_{y,fin} = \frac{M * l^2}{9 * \sqrt{3} * E * I} = 1,9 \text{ mm} < 1/300 * l \quad 10,3 \text{ mm} \text{ voldoet}$$

$$u_{z,fin} = \frac{M * l^2}{9 * \sqrt{3} * E * I} = 0,0 \text{ mm} < 1/300 * l \quad 10,3 \text{ mm} \text{ voldoet}$$

Profielkeuze	HE160A
Staalkwal.	S 235

ULS u.c.: 0,72
SLS u.c.: 0,19

4.8 Beganegrondvloer – fundatieplaat

Randbalk

Lijnlast as C (gevel)

Belastingen	breedte factor		G_k	Q_k	ψ_0	$q_{g;k}$	$q_{Q;k}$	q_k	$q_{mom;\psi_0}$	$q_{d;6.10a}$	$q_{d;6.10b}$
	(m)		(kN/m ²)	(kN/m ²)		(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)	(kN/m ¹)
mw dik 100	2,80	100%	2,00			5,60		5,60		7,56	6,72
Gevelm.w.	6,60	100%	2,00			13,20		13,20		17,82	15,84
						18,80	0,00	18,80	0,00	25,38	22,56

Puntlasten uit kolommen as A

F_g=135,5kN

F_q=83,9kN

Puntlasten uit kolommen as C

F_g=103,8kN

F_q=83,9kN

Onderdeel....: Fundatierandbalken
 Dimensies....: kN;m;rad (tenzij anders aangegeven)
 Datum.....: 04/10/2022

Belastingbreedte.: 2.500
 Rekenmodel.....: 2e-orde niet lineair elastisch.
 Theorieën voor de bepaling van de krachtsverdeling:
 1) Losse belastinggevallen:
 Lineaire-elasticiteitstheorie
 2) Uiterste grenstoestand:
 Geometrisch lineair voor de staafnr('s): 15-22.
 Geometrisch niet lineair voor de staafnr('s): 1-14.
 Fysisch lineair alle staven.
 3) Gebruiksgrenstoestand:
 Geometrisch lineair alle staven.
 Fysisch lineair alle staven.
 Waarschuwing: Bij elastisch ondersteunde staven worden geometrisch niet lineaire effecten (2e orde) verwaarloosd!

Convergentie coefficient.....: 2.0 Maximum aantal iteraties.....: 50
 Max.deellengte kolommen/wanden: 0.500 Max.deellengte balken/vloeren: 0.500
 Max. X-verplaatsing in UGT....: 0.500 Max. Z-verplaatsing in UGT...: 0.250

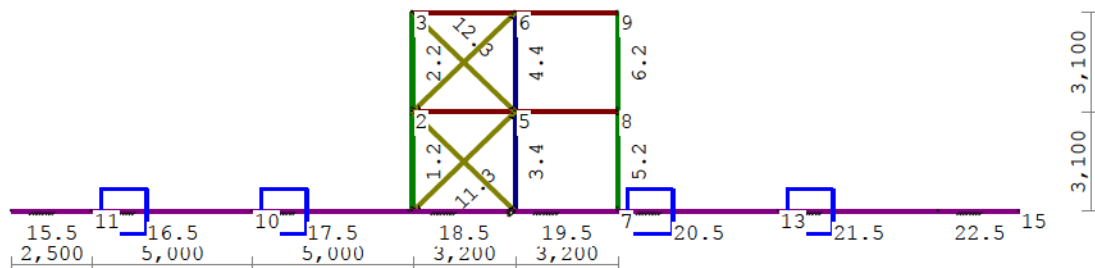
Gunstige werking van de permanente belasting wordt automatisch verwerkt.
 Eigen gewicht van trekstaven is niet meegenomen in de berekening.

De stabiliteit van de gehele constructie kan door de toegepaste trekstaven reken-technisch niet geheel gegarandeerd zijn en dient extra gecontroleerd te worden.

Toegepaste normen volgens Eurocode met Nederlandse NB

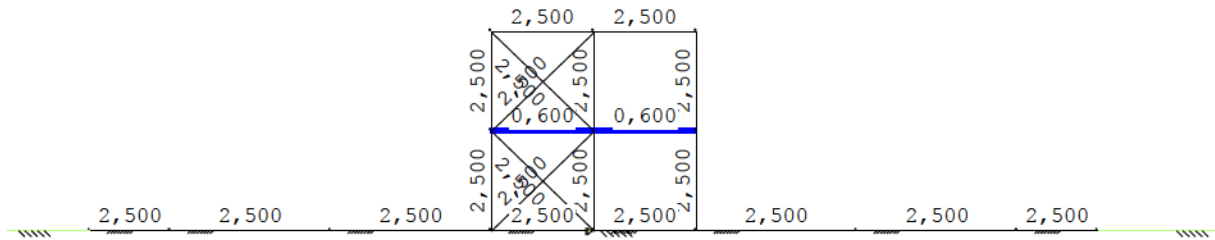
Belastingen	NEN-EN 1990:2002	C2:2010,A1:2019	NB:2019(nl)
	NEN-EN 1991-1-1:2002	C1/C11:2019	NB:2019(nl)
	NEN-EN 1991-1-3:2003	C1:2009	NB:2011(nl)
	NEN-EN 1991-1-4:2005	C2:2011	NB:2011(nl)
Beton	NEN-EN 1992-1-1:2011 (nl)	C2/A1:2015 (nl)	NB:2016 (nl)

GEOMETRIE



Linkerzijde (12,5m): as A
 Midden (6,4m): as 6
 Rechterzijde (12,5m): as C

BELASTINGBREEDTEN



MATERIALEN

Mt	Kwaliteit	E-modulus[N/mm ²]	S.G.	Pois.	Uitz. coëff
1	S235	210000	78.5	0.30	1.2000e-05
2	C20/25	7480	25.0	0.20	1.0000e-05

MATERIALEN vervolg

Mt	Kwaliteit	Cement	Kruipfac.	Toeslag	Rho[kg/m ³]
2	C20/25	N	3.01	Normaal	2400

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	HEA120	1:S235	2.5340e+03	6.0600e+06	0.00
2	HEA140	1:S235	3.1420e+03	1.0330e+07	0.00
3	STRIP80*8	1:S235	6.4000e+02	3.4133e+03	0.00
4	HEA140 (90)	1:S235	3.1420e+03	3.8900e+06	0.00
5	B*H 600*600	2:C20/25	3.6000e+05	1.0800e+10	0.00

PROFIELEN vervolg [mm]

Prof.	Staaftype	Breedte	Hoogte	e	Type	b1	h1	b2	h2
1	0:Normaal	120	114	57.0					
2	0:Normaal	140	133	66.5					
3	1:Trek	80	8	4.0					
4	0:Normaal	140	133	70.0					
5	0:Normaal	600	600	300.0	0:RH				

PROFIELVORMEN [mm]

1 HEA120



2 HEA140



3 STRIP80*8



4 HEA140 (90)



5 B*H 600*600



KNOPEN

Knoop	X	Z	Knoop	X	Z
1	0.000	0.000	6	3.200	6.200
2	0.000	3.100	7	6.400	0.000
3	0.000	6.200	8	6.400	3.100
4	3.200	0.000	9	6.400	6.200
5	3.200	3.100	10	-5.000	0.000
11	-10.000	0.000			
12	-12.500	0.000			
13	11.400	0.000			
14	16.400	0.000			
15	18.900	0.000			

STAVEN

St.	ki	kj	Profiel	Aansl.i	Aansl.j	Lengte	Opm.
1	1	2	2:HEA140	ND-	ND-	3.100	
2	2	3	2:HEA140	ND-	ND-	3.100	
3	4	5	4:HEA140 (90)	ND-	ND-	3.100	
4	5	6	4:HEA140 (90)	ND-	ND-	3.100	
5	7	8	2:HEA140	ND-	ND-	3.100	
6	8	9	2:HEA140	ND-	ND-	3.100	
7	3	6	1:HEA120	NDM	NDM	3.200	
8	6	9	1:HEA120	NDM	NDM	3.200	
9	2	5	1:HEA120	NDM	NDM	3.200	
10	5	8	1:HEA120	NDM	NDM	3.200	
11	1	5	3:STRIP80*8	ND-	ND-	4.455	
12	5	3	3:STRIP80*8	ND-	ND-	4.455	
13	4	2	3:STRIP80*8	ND-	ND-	4.455	
14	2	6	3:STRIP80*8	ND-	ND-	4.455	
15	12	11	5:B*H 600*600	NDM	NDM	2.500	
16	11	10	5:B*H 600*600	NDM	NDM	5.000	
17	10	1	5:B*H 600*600	NDM	ND-	5.000	
18	1	4	5:B*H 600*600	NDM	NDM	3.200	
19	4	7	5:B*H 600*600	NDM	NDM	3.200	
20	7	13	5:B*H 600*600	ND-	NDM	5.000	
21	13	14	5:B*H 600*600	NDM	NDM	5.000	
22	14	15	5:B*H 600*600	NDM	NDM	2.500	

VASTE STEUNPUNTEN

Nr.	knoop	Kode	XZR	l=vast	0=vrij	Hoek
1	4	100				0.00

BEDDINGEN

Nr.	Staven	Bedding	Breedte[mm]	Zijde
1	15-22	5000	600	negatief

BELASTINGBREEDTEN

Staaf	Breedte-i	Breedte-j	Staaf	Breedte-i	Breedte-j
1	2.500	2.500	6	2.500	2.500
2	2.500	2.500	7	2.500	2.500
3	2.500	2.500	8	2.500	2.500
4	2.500	2.500	9	0.600	0.600
5	2.500	2.500	10	0.600	0.600
11	2.500	2.500	16	2.500	2.500
12	2.500	2.500	17	2.500	2.500
13	2.500	2.500	18	2.500	2.500
14	2.500	2.500	19	2.500	2.500
15	2.500	2.500	20	2.500	2.500

BELASTINGBREEDTEN

Staaf	Breedte-i	Breedte-j	Staaf	Breedte-i	Breedte-j
21	2.500	2.500			
22	2.500	2.500			

BELASTINGGENERATIE ALGEMEEN.

Betrouwbaarheidsklasse.....	2	Referentieperiode.....	50
Gebouwdiepte.....	25.00	Gebouwhoogte.....	6.40
Niveau aansl.terrein.....	0.00	E.g. scheid.w. [kN/m2]:	1.00

WIND

Terrein categorie ...[4.3.2]...	Onbebouwd
Windgebied	3
Positie spant in het gebouw....	0.000
z0	0.200
Co wind van links ..[4.3.3]...	1.000
Co wind loodrecht ..[4.3.3]...	1.000
Cpi wind van links ..[7.2.9]...	0.200
Cpi windloodrecht ...[7.2.9]...	0.200
Cpi wind van rechts ..[7.2.9]...	0.200
Cfr windwrijving[7.5].....	0.040

SNEEUW

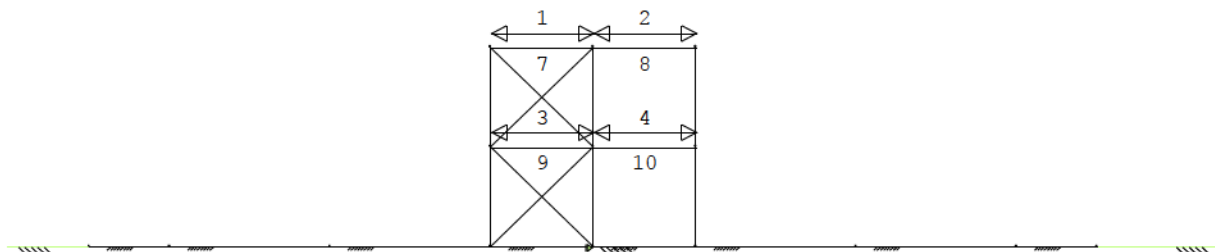
Sneeuwbelasting (sk) 50 jaar :	0.70
Sneeuwbelasting (sn) n jaar :	0.70

STAAPTYPEN

Type	staven
1:Vloer.	: 9,10
4:Wand / kolom.	: 3,4
5:Linker gevel.	: 1,2
6:Rechter gevel.	: 5,6
7:Dak.	: 7,8
9:Open.	: 11-14

LASTVELDEN

Veranderlijke belastingen door personen



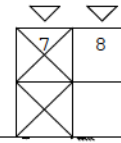
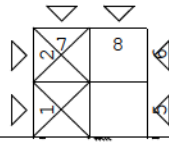
LASTVELDEN

Nr	Staaf	Tabel	Klasse-Gebruiksfunctie	Verd.	q _k	Q _k	F _t / F _{t0}
1	7-7	6.10	H-Dak (onder dakbeschot)	2	-1.00	-2.00	1.00
2	8-8	6.10	H-Dak (onder dakbeschot)	2	-1.00	-2.00	1.00
3	9-9	6.2	B-Omsloten verkeersruimte	1	-3.00	-3.00	1.00
4	10-10	6.2	B-Omsloten verkeersruimte	1	-3.00	-3.00	1.00

LASTVELDEN

Wind staven

Sneeuw staven



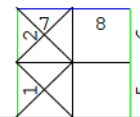
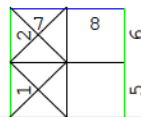
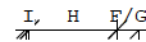
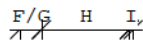
WIND DAKTYPES

Nr.	Staaft Type	reductie bij wind van links	reductie bij wind van rechts	Cpe volgens art:
1	1-2 Gevel	1.000	1.000	7.2.2
2	7-8 Plat dak	1.000	1.000	7.2.3
3	6-5 Gevel	1.000	1.000	7.2.2

WIND ZONES

Wind van links

Wind van rechts



WIND VAN LINKS ZONES

WIND VAN RECHTS ZONES

Nr.	Staaft	Positie	Lengte	Zone
1	1-2	0.000	6.200	D
2	7-8	0.000	1.240	F/G
3	7-8	1.240	4.960	H
4	7-8	6.200	0.200	I
5	6-5	0.000	6.200	E

Wind indexen

Index	CsCd	Cpe/Cpi	qp	breedte	reductie	Qw	Zone	Hoek(en)
Qw1		0.300	0.594	2.500		-0.446	-i	
Qw2		-0.300	0.594	2.500		0.446	-i	
Qw3	1.00	0.800	0.594	2.500		-1.189	D	
Qw4	1.00	-1.800	0.594	2.500		2.675	F	0.0
Qw5	1.00	-0.700	0.594	2.500		1.040	H	0.0
Qw6	1.00	-0.200	0.594	2.500		0.297	I	0.0
Qw7	1.00	0.500	0.594	2.500		-0.743	E	
Qw8		-0.200	0.594	2.500		0.297	+i	
Qw9		0.200	0.594	2.500		-0.297	+i	
Qw10	1.00	0.200	0.594	2.500		-0.297	I	0.0
Qw11	1.00	-0.800	0.594	2.500		1.189	D	
Qw12	1.00	-0.500	0.594	2.500		0.743	E	
Qw13	1.00	-1.200	0.594	2.500		1.783	A	
Qw14	1.00	1.200	0.594	2.500		-1.783	A	
Qw15	1.00	-1.200	0.594	0.640		0.456	G	0.0
Qw16	1.00	-1.800	0.594	0.640		0.685	F	0.0
Qw17	1.00	-0.700	0.594	1.860		0.774	H	0.0
Qw18	1.00	-0.500	0.594	2.500		0.743	C	
Qw19	1.00	0.500	0.594	2.500		-0.743	C	

SNEEUW DAKTYPEN

Staaf	artikel
7-8	5.3.2 Lessenaarsdak

Sneeuw indexen

Index	art	μ	s_k	red. posfac	breedte	Q_s	hoek
Qs1	5.3.2	0.800	0.70	1.00	2.500	1.400	0.0

BELASTINGGEVALLEN

B.G.	Omschrijving	Type
	1 Permanente belasting EGZ=-1.00	1
g*	2 Ver. bel. pers. ed. (q_k)	2
g	3 Ver. bel. pers. ed. (Q_k)	3
g*	4 Wind van links onderdruk A	7
g*	5 Wind van links overdruk A	8
g*	6 Wind van links onderdruk B	9
g*	7 Wind van links overdruk B	10
g*	8 Wind van rechts onderdruk A	11
g*	9 Wind van rechts overdruk A	12
g*	10 Wind van rechts onderdruk B	13
g*	11 Wind van rechts overdruk B	14
g	12 Wind loodrecht onderdruk A	15
g	13 Wind loodrecht overdruk A	16
g	14 Wind loodrecht onderdruk B	45
g	15 Wind loodrecht overdruk B	46
g	16 Sneeuw A	22

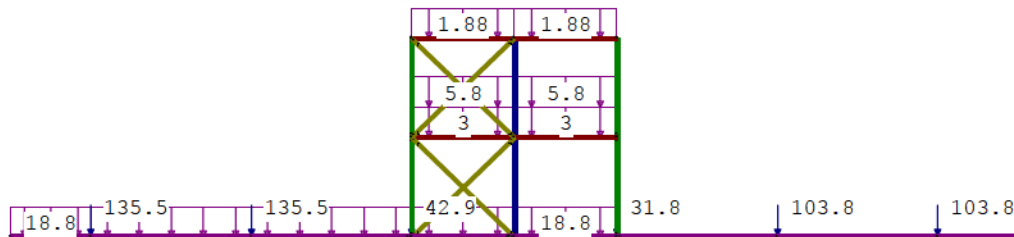
g = gegenereerd belastinggeval

* = belastinggeval bevat 1 of meer handmatig toegevoegde en/of gewijzigde lasten

BELASTINGEN

B.G:1 Permanente belasting

Eigen gewicht van alle staven is meegenomen in berekening. Richting:↓



KNOOPBELASTINGEN

B.G:1 Permanente belasting

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2
1	11	Z	-135.500			
2	10	Z	-135.500			
3	1	Z	-42.900			
4	7	Z	-31.800			
5	13	Z	-103.800			
6	14	Z	-103.800			

STAAFBELASTINGEN

B.G:1 Permanente belasting

Staaf	Type	$q_1/p/m$	q_2	A	B	ψ_0	ψ_1	ψ_2
7	1:QZLokaal	-1.88	-1.88	0.000	0.000			
8	1:QZLokaal	-1.88	-1.88	0.000	0.000			
9	1:QZLokaal	-3.00	-3.00	0.000	0.000			
10	1:QZLokaal	-3.00	-3.00	0.000	0.000			
9	1:QZLokaal	-5.80	-5.80	0.000	0.000			
10	1:QZLokaal	-5.80	-5.80	0.000	0.000			

STAAFBELASTINGEN

B.G:1 Permanente belasting

Staaf	Type	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
15	1:QZLokaal	-18.80	-18.80	0.000	0.000			
16	1:QZLokaal	-18.80	-18.80	0.000	0.000			
17	1:QZLokaal	-18.80	-18.80	0.000	0.000			
18	1:QZLokaal	-18.80	-18.80	0.000	0.000			
19	1:QZLokaal	-18.80	-18.80	0.000	0.000			

TUSSENPUTEN VERPLAATSINGEN

1e orde

B.G:1 Permanente belasting

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		[kN/m ²]
1	1		-0.00	-10.47	-10.47	0.00	-0.00050	
1	0.310		-0.16	-10.48	-10.48	0.16	-0.00050	
1	0.620		-0.31	-10.48	-10.48	0.31	-0.00050	
1	0.930		-0.47	-10.49	-10.49	0.47	-0.00050	
1	1.240		-0.62	-10.50	-10.50	0.62	-0.00050	
1	1.550		-0.78	-10.50	-10.50	0.78	-0.00050	
1	1.860		-0.93	-10.51	-10.51	0.93	-0.00050	
1	2.170		-1.09	-10.52	-10.52	1.09	-0.00050	
1	2.480		-1.24	-10.52	-10.52	1.24	-0.00050	
1	2.790		-1.40	-10.53	-10.53	1.40	-0.00050	
1	2		-1.56	-10.54	-10.54	1.56	-0.00050	
2	2		-1.56	-10.54	-10.54	1.56	-0.00048	
2	0.310		-1.70	-10.54	-10.54	1.70	-0.00048	
2	0.620		-1.85	-10.54	-10.54	1.85	-0.00048	
2	0.930		-2.00	-10.54	-10.54	2.00	-0.00048	
2	1.240		-2.15	-10.54	-10.54	2.15	-0.00048	
2	1.550		-2.29	-10.54	-10.54	2.29	-0.00048	
2	1.860		-2.44	-10.55	-10.55	2.44	-0.00048	
2	2.170		-2.59	-10.55	-10.55	2.59	-0.00048	
2	2.480		-2.73	-10.55	-10.55	2.73	-0.00048	
2	2.790		-2.88	-10.55	-10.55	2.88	-0.00048	
2	3		-3.03	-10.55	-10.55	3.03	-0.00048	
3	4		-0.00	-8.79	-8.79	0.00	-0.00050	
3	0.310		-0.16	-8.81	-8.81	0.16	-0.00050	
3	0.620		-0.31	-8.83	-8.83	0.31	-0.00050	
3	0.930		-0.47	-8.85	-8.85	0.47	-0.00050	
3	1.240		-0.62	-8.88	-8.88	0.62	-0.00050	
3	1.550		-0.78	-8.90	-8.90	0.78	-0.00050	
3	1.860		-0.93	-8.92	-8.92	0.93	-0.00050	
3	2.170		-1.09	-8.94	-8.94	1.09	-0.00050	
3	2.480		-1.24	-8.96	-8.96	1.24	-0.00050	
3	2.790		-1.40	-8.98	-8.98	1.40	-0.00050	
3	5		-1.56	-9.00	-9.00	1.56	-0.00050	
4	5		-1.56	-9.00	-9.00	1.56	-0.00048	
4	0.310		-1.70	-9.01	-9.01	1.70	-0.00048	
4	0.620		-1.85	-9.01	-9.01	1.85	-0.00048	
4	0.930		-2.00	-9.02	-9.02	2.00	-0.00048	
4	1.240		-2.15	-9.02	-9.02	2.15	-0.00048	
4	1.550		-2.29	-9.02	-9.02	2.29	-0.00048	
4	1.860		-2.44	-9.03	-9.03	2.44	-0.00048	
4	2.170		-2.59	-9.03	-9.03	2.59	-0.00048	
4	2.480		-2.73	-9.04	-9.04	2.73	-0.00048	
4	2.790		-2.88	-9.04	-9.04	2.88	-0.00048	
4	6		-3.03	-9.04	-9.04	3.03	-0.00048	

TUSSENpunten Verplaatsingen

1e orde

B.G:1 Permanente belasting

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²] Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
5	7		-0.00	-7.19	-7.19	0.00	-0.00050	
5	0.310		-0.16	-7.20	-7.20	0.16	-0.00050	
5	0.620		-0.31	-7.21	-7.21	0.31	-0.00050	
5	0.930		-0.47	-7.21	-7.21	0.47	-0.00050	
5	1.240		-0.62	-7.22	-7.22	0.62	-0.00050	
5	1.550		-0.78	-7.23	-7.23	0.78	-0.00050	
5	1.860		-0.93	-7.23	-7.23	0.93	-0.00050	
5	2.170		-1.09	-7.24	-7.24	1.09	-0.00050	
5	2.480		-1.24	-7.25	-7.25	1.24	-0.00050	
5	2.790		-1.40	-7.25	-7.25	1.40	-0.00050	
5	8		-1.56	-7.26	-7.26	1.56	-0.00050	
6	8		-1.56	-7.26	-7.26	1.56	-0.00048	
6	0.310		-1.70	-7.26	-7.26	1.70	-0.00048	
6	0.620		-1.85	-7.26	-7.26	1.85	-0.00048	
6	0.930		-2.00	-7.27	-7.27	2.00	-0.00048	
6	1.240		-2.15	-7.27	-7.27	2.15	-0.00048	
6	1.550		-2.29	-7.27	-7.27	2.29	-0.00048	
6	1.860		-2.44	-7.27	-7.27	2.44	-0.00048	
6	2.170		-2.59	-7.27	-7.27	2.59	-0.00048	
6	2.480		-2.73	-7.27	-7.27	2.73	-0.00048	
6	2.790		-2.88	-7.27	-7.27	2.88	-0.00048	
6	9		-3.03	-7.27	-7.27	3.03	-0.00048	
7	3		-3.03	-10.55	-3.03	-10.55	0.00066	
7	0.320		-3.03	-10.74	-3.03	-10.74	0.00054	
7	0.640		-3.03	-10.88	-3.03	-10.88	0.00031	
7	0.960		-3.03	-10.95	-3.03	-10.95	-0.00000	
7	1.280		-3.03	-10.88	-3.03	-10.88	-0.00038	
7	1.600		-3.03	-10.69	-3.03	-10.69	-0.00073	
7	1.920		-3.03	-10.42	-3.03	-10.42	-0.00102	
7	2.240		-3.03	-10.05	-3.03	-10.05	-0.00121	
7	2.560		-3.03	-9.67	-3.03	-9.67	-0.00118	
7	2.880		-3.03	-9.32	-3.03	-9.32	-0.00095	
7	6		-3.03	-9.04	-3.03	-9.04	-0.00051	
8	6		-3.03	-9.04	-3.03	-9.04	-0.00051	
8	0.320		-3.03	-9.00	-3.03	-9.00	-0.00008	
8	0.640		-3.03	-9.01	-3.03	-9.01	0.00015	
8	0.960		-3.03	-9.07	-3.03	-9.07	0.00019	
8	1.280		-3.03	-9.10	-3.03	-9.10	-0.00000	
8	1.600		-3.03	-9.05	-3.03	-9.05	-0.00030	
8	1.920		-3.03	-8.91	-3.03	-8.91	-0.00064	
8	2.240		-3.03	-8.65	-3.03	-8.65	-0.00102	
8	2.560		-3.03	-8.26	-3.03	-8.26	-0.00133	
8	2.880		-3.03	-7.80	-3.03	-7.80	-0.00156	
8	9		-3.03	-7.27	-3.03	-7.27	-0.00169	
9	2		-1.56	-10.54	-1.56	-10.54	0.00436	
9	0.320		-1.56	-11.85	-1.56	-11.85	0.00382	
9	0.640		-1.56	-12.91	-1.56	-12.91	0.00284	
9	0.960		-1.56	-13.68	-1.56	-13.68	0.00148	
9	1.280		-1.56	-13.86	-1.56	-13.86	-0.00012	
9	1.600		-1.56	-13.53	-1.56	-13.53	-0.00161	
9	1.920		-1.56	-12.85	-1.56	-12.85	-0.00286	
9	2.240		-1.56	-11.80	-1.56	-11.80	-0.00364	
9	2.560		-1.56	-10.64	-1.56	-10.64	-0.00346	
9	2.880		-1.56	-9.68	-1.56	-9.68	-0.00244	
9	5		-1.56	-9.00	-1.56	-9.00	-0.00051	

TUSSENpunten Verplaatsingen

1e orde

B.G:1 Permanente belasting

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²] Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
10	5		-1.56	-9.00	-1.56	-9.00	-0.00051	
10	0.320		-1.56	-9.35	-1.56	-9.35	0.00142	
10	0.640		-1.56	-9.98	-1.56	-9.98	0.00244	
10	0.960		-1.56	-10.82	-1.56	-10.82	0.00262	
10	1.280		-1.56	-11.54	-1.56	-11.54	0.00183	
10	1.600		-1.56	-11.90	-1.56	-11.90	0.00058	
10	1.920		-1.56	-11.90	-1.56	-11.90	-0.00090	
10	2.240		-1.56	-11.38	-1.56	-11.38	-0.00251	
10	2.560		-1.56	-10.29	-1.56	-10.29	-0.00386	
10	2.880		-1.56	-8.90	-1.56	-8.90	-0.00485	
10	8		-1.56	-7.26	-1.56	-7.26	-0.00539	
11	1		0.00	0.00	0.00	0.00	0.00000	
11	0.446		0.00	0.00	0.00	0.00	0.00000	
11	0.891		0.00	0.00	0.00	0.00	0.00000	
11	1.337		0.00	0.00	0.00	0.00	0.00000	
11	1.782		0.00	0.00	0.00	0.00	0.00000	
11	2.228		0.00	0.00	0.00	0.00	0.00000	
11	2.673		0.00	0.00	0.00	0.00	0.00000	
11	3.119		0.00	0.00	0.00	0.00	0.00000	
11	3.564		0.00	0.00	0.00	0.00	0.00000	
11	4.010		0.00	0.00	0.00	0.00	0.00000	
11	5		0.00	0.00	0.00	0.00	0.00000	
12	5		-0.00	0.00	0.00	0.00	0.00000	
12	0.446		-0.00	0.00	0.00	0.00	0.00000	
12	0.891		-0.00	0.00	0.00	0.00	0.00000	
12	1.337		-0.00	0.00	0.00	0.00	0.00000	
12	1.782		-0.00	0.00	0.00	0.00	0.00000	
12	2.228		-0.00	0.00	0.00	0.00	0.00000	
12	2.673		-0.00	0.00	0.00	0.00	0.00000	
12	3.119		-0.00	0.00	0.00	0.00	0.00000	
12	3.564		-0.00	0.00	0.00	0.00	0.00000	
12	4.010		-0.00	0.00	0.00	0.00	0.00000	
12	3		-0.00	0.00	0.00	0.00	0.00000	
13	4		-0.00	0.00	0.00	0.00	0.00000	
13	0.446		-0.00	0.00	0.00	0.00	0.00000	
13	0.891		-0.00	0.00	0.00	0.00	0.00000	
13	1.337		-0.00	0.00	0.00	0.00	0.00000	
13	1.782		-0.00	0.00	0.00	0.00	0.00000	
13	2.228		-0.00	0.00	0.00	0.00	0.00000	
13	2.673		-0.00	0.00	0.00	0.00	0.00000	
13	3.119		-0.00	0.00	0.00	0.00	0.00000	
13	3.564		-0.00	0.00	0.00	0.00	0.00000	
13	4.010		-0.00	0.00	0.00	0.00	0.00000	
13	2		-0.00	0.00	0.00	0.00	0.00000	
14	2		0.00	0.00	0.00	0.00	0.00000	
14	0.446		0.00	0.00	0.00	0.00	0.00000	
14	0.891		0.00	0.00	0.00	0.00	0.00000	
14	1.337		0.00	0.00	0.00	0.00	0.00000	
14	1.782		0.00	0.00	0.00	0.00	0.00000	
14	2.228		0.00	0.00	0.00	0.00	0.00000	
14	2.673		0.00	0.00	0.00	0.00	0.00000	
14	3.119		0.00	0.00	0.00	0.00	0.00000	
14	3.564		0.00	0.00	0.00	0.00	0.00000	
14	4.010		0.00	0.00	0.00	0.00	0.00000	
14	6		0.00	0.00	0.00	0.00	0.00000	

TUSSENpunten Verplaatsingen

1e orde

B.G:1 Permanente belasting

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
15	12		-0.00	-10.59	-0.00	-10.59	0.00100	79.393
15		0.250	-0.00	-10.84	-0.00	-10.84	0.00100	81.274
15		0.500	-0.00	-11.09	-0.00	-11.09	0.00100	83.149
15		0.750	-0.00	-11.33	-0.00	-11.33	0.00098	85.010
15		1.000	-0.00	-11.58	-0.00	-11.58	0.00096	86.835
15		1.250	-0.00	-11.81	-0.00	-11.81	0.00092	88.598
15		1.500	-0.00	-12.03	-0.00	-12.03	0.00085	90.261
15		1.750	-0.00	-12.24	-0.00	-12.24	0.00076	91.780
15		2.000	-0.00	-12.41	-0.00	-12.41	0.00064	93.098
15		2.250	-0.00	-12.55	-0.00	-12.55	0.00048	94.151
15	11		-0.00	-12.65	-0.00	-12.65	0.00027	94.864
Som gronddruk X: 0 Z: 132 kN								
16	11		-0.00	-12.65	-0.00	-12.65	0.00027	94.864
16		0.500	-0.00	-12.69	-0.00	-12.69	-0.00007	95.175
16		1.000	-0.00	-12.60	-0.00	-12.60	-0.00024	94.530
16		1.500	-0.00	-12.47	-0.00	-12.47	-0.00028	93.519
16		2.000	-0.00	-12.34	-0.00	-12.34	-0.00022	92.564
16		2.500	-0.00	-12.26	-0.00	-12.26	-0.00012	91.925
16		3.000	-0.00	-12.23	-0.00	-12.23	-0.00001	91.697
16		3.500	-0.00	-12.24	-0.00	-12.24	0.00006	91.821
16		4.000	-0.00	-12.28	-0.00	-12.28	0.00006	92.074
16		4.500	-0.00	-12.28	-0.00	-12.28	-0.00008	92.081
16	10		-0.00	-12.17	-0.00	-12.17	-0.00037	91.302
Som gronddruk X: 0 Z: 279 kN								
17	10		-0.00	-12.17	-0.00	-12.17	-0.00037	91.302
17		0.500	-0.00	-11.91	-0.00	-11.91	-0.00066	89.305
17		1.000	-0.00	-11.54	-0.00	-11.54	-0.00078	86.546
17		1.500	-0.00	-11.15	-0.00	-11.15	-0.00077	83.598
17		2.000	-0.00	-10.79	-0.00	-10.79	-0.00066	80.892
17		2.500	-0.00	-10.50	-0.00	-10.50	-0.00049	78.730
17		3.000	-0.00	-10.31	-0.00	-10.31	-0.00028	77.291
17		3.500	-0.00	-10.22	-0.00	-10.22	-0.00007	76.645
17		4.000	-0.00	-10.23	-0.00	-10.23	0.00012	76.750
17		4.500	-0.00	-10.33	-0.00	-10.33	0.00025	77.460
17	1		-0.00	-10.47	-0.00	-10.47	0.00030	78.522
Som gronddruk X: 0 Z: 244 kN								
18	1		-0.00	-10.47	-0.00	-10.47	-0.00069	78.522
18		0.320	-0.00	-10.25	-0.00	-10.25	-0.00068	76.876
18		0.640	-0.00	-10.04	-0.00	-10.04	-0.00065	75.285
18		0.960	-0.00	-9.84	-0.00	-9.84	-0.00060	73.782
18		1.280	-0.00	-9.65	-0.00	-9.65	-0.00055	72.404
18		1.600	-0.00	-9.49	-0.00	-9.49	-0.00050	71.150
18		1.920	-0.00	-9.33	-0.00	-9.33	-0.00045	70.006
18		2.240	-0.00	-9.19	-0.00	-9.19	-0.00042	68.954
18		2.560	-0.00	-9.06	-0.00	-9.06	-0.00041	67.961
18		2.880	-0.00	-8.93	-0.00	-8.93	-0.00042	66.970
18	4		-0.00	-8.79	-0.00	-8.79	-0.00046	65.929
Som gronddruk X: 0 Z: 137 kN								

TUSSENpunten Verplaatsingen

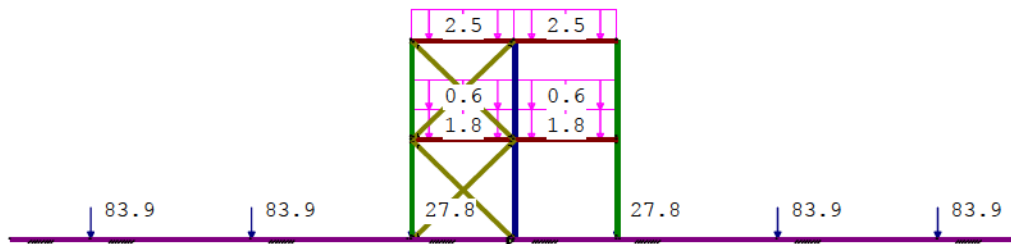
1e orde

B.G:1 Permanente belasting

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
19	4		0.00	-8.79	0.00	-8.79	-0.00046	65.929
19	0.320		-0.00	-8.64	-0.00	-8.64	-0.00050	64.770
19	0.640		-0.00	-8.47	-0.00	-8.47	-0.00052	63.539
19	0.960		-0.00	-8.30	-0.00	-8.30	-0.00053	62.271
19	1.280		-0.00	-8.13	-0.00	-8.13	-0.00053	60.996
19	1.600		-0.00	-7.97	-0.00	-7.97	-0.00052	59.739
19	1.920		-0.00	-7.80	-0.00	-7.80	-0.00050	58.512
19	2.240		-0.00	-7.64	-0.00	-7.64	-0.00049	57.323
19	2.560		-0.00	-7.49	-0.00	-7.49	-0.00047	56.174
19	2.880		-0.00	-7.34	-0.00	-7.34	-0.00046	55.053
19	7		-0.00	-7.19	-0.00	-7.19	-0.00046	53.949
Som gronddruk X: 0 Z: 115 kN								
20	7		-0.00	-7.19	-0.00	-7.19	-0.00089	53.949
20	0.500		-0.00	-6.76	-0.00	-6.76	-0.00083	50.702
20	1.000		-0.00	-6.38	-0.00	-6.38	-0.00068	47.842
20	1.500		-0.00	-6.09	-0.00	-6.09	-0.00048	45.644
20	2.000		-0.00	-5.90	-0.00	-5.90	-0.00025	44.267
20	2.500		-0.00	-5.84	-0.00	-5.84	-0.00002	43.764
20	3.000		-0.00	-5.88	-0.00	-5.88	0.00018	44.085
20	3.500		-0.00	-6.01	-0.00	-6.01	0.00033	45.079
20	4.000		-0.00	-6.20	-0.00	-6.20	0.00040	46.494
20	4.500		-0.00	-6.40	-0.00	-6.40	0.00036	47.972
20	13		-0.00	-6.54	-0.00	-6.54	0.00018	49.047
Som gronddruk X: 0 Z: 140 kN								
21	13		-0.00	-6.54	-0.00	-6.54	0.00018	49.047
21	0.500		-0.00	-6.58	-0.00	-6.58	-0.00001	49.338
21	1.000		-0.00	-6.55	-0.00	-6.55	-0.00008	49.149
21	1.500		-0.00	-6.52	-0.00	-6.52	-0.00006	48.867
21	2.000		-0.00	-6.50	-0.00	-6.50	0.00001	48.757
21	2.500		-0.00	-6.53	-0.00	-6.53	0.00010	48.968
21	3.000		-0.00	-6.60	-0.00	-6.60	0.00019	49.533
21	3.500		-0.00	-6.72	-0.00	-6.72	0.00024	50.364
21	4.000		-0.00	-6.83	-0.00	-6.83	0.00022	51.253
21	4.500		-0.00	-6.92	-0.00	-6.92	0.00009	51.869
21	14		-0.00	-6.90	-0.00	-6.90	-0.00018	51.756
Som gronddruk X: 0 Z: 150 kN								
22	14		-0.00	-6.90	-0.00	-6.90	-0.00018	51.756
22	0.250		-0.00	-6.84	-0.00	-6.84	-0.00033	51.273
22	0.500		-0.00	-6.74	-0.00	-6.74	-0.00046	50.529
22	0.750		-0.00	-6.61	-0.00	-6.61	-0.00055	49.581
22	1.000		-0.00	-6.46	-0.00	-6.46	-0.00062	48.480
22	1.250		-0.00	-6.30	-0.00	-6.30	-0.00067	47.268
22	1.500		-0.00	-6.13	-0.00	-6.13	-0.00070	45.979
22	1.750		-0.00	-5.95	-0.00	-5.95	-0.00072	44.642
22	2.000		-0.00	-5.77	-0.00	-5.77	-0.00073	43.279
22	2.250		-0.00	-5.59	-0.00	-5.59	-0.00074	41.903
22	15		-0.00	-5.40	-0.00	-5.40	-0.00074	40.524
Som gronddruk X: 0 Z: 70 kN								
Totale grondreactie X: 0 Z: 1267 kN								

BELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)



KNOOPBELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	11	Z	-83.900	0.50	0.50	0.30	*
2	10	Z	-83.900	0.50	0.50	0.30	*
3	13	Z	-83.900	0.50	0.50	0.30	*
4	14	Z	-83.900	0.50	0.50	0.30	*
5	1	Z	-27.800	0.50	0.50	0.30	*
6	7	Z	-27.800	0.50	0.50	0.30	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

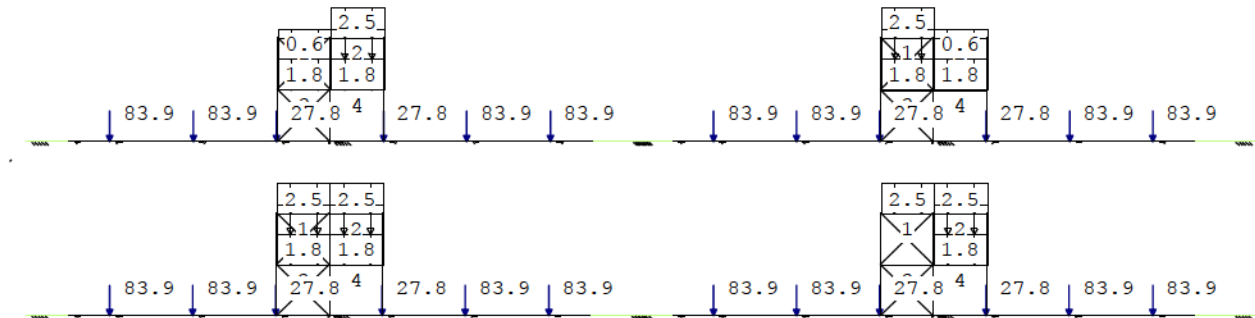
STAAFBELASTINGEN

B.G:2 Ver. bel. pers. ed. (q_k)

Staat	Type	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
7	3:QZgeProj.	-2.50	-2.50	0.000	0.000	0.00	0.00	0.00
8	3:QZgeProj.	-2.50	-2.50	0.000	0.000	0.00	0.00	0.00
9	3:QZgeProj.	-1.80	-1.80	0.000	0.000	0.50	0.50	0.30
9	3:QZgeProj.	-0.60	-0.60	0.000	0.000	0.50	0.50	0.30
10	3:QZgeProj.	-1.80	-1.80	0.000	0.000	0.50	0.50	0.30
10	3:QZgeProj.	-0.60	-0.60	0.000	0.000	0.50	0.50	0.30

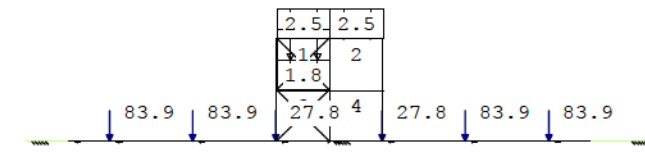
SITUATIES BELAST/ONBELAST

B.G:2 Ver. bel. pers. ed. (q_k)



SITUATIES BELAST/ONBELAST

B.G:2 Ver. bel. pers. ed. (q_k)



SITUATIES BELAST/ONBELAST

Belastingtype: q_k

Nr Lastvelden belast	Lastvelden onbelast
1 2-4	1
2 1,3,4	2
3 1-4	
4 1,2,4	3
5 1-3	4

TUSSENpunten Verplaatsingen

1e orde

B.G:2 Ver. bel. pers. ed. (q_k)

St.	Kn.	Pos.	Z-verp		[kN/m²]	
			Min	BC	Max	BC Grondspan.
1	1		0.00	2	0.00	2
1		0.310	0.05	2	0.08	2
1		0.620	0.10	2	0.17	2
1		0.930	0.14	2	0.25	2
1		1.240	0.19	2	0.33	2
1		1.550	0.24	2	0.42	2
1		1.860	0.29	2	0.50	2
1		2.170	0.33	2	0.58	2
1		2.480	0.38	2	0.67	2
1		2.790	0.43	2	0.75	2
1	2		0.48	2	0.83	2
2	2		0.48	2	0.83	2
2		0.310	0.52	2	0.91	2
2		0.620	0.56	2	0.99	2
2		0.930	0.61	2	1.08	2
2		1.240	0.65	2	1.16	2
2		1.550	0.69	2	1.24	2
2		1.860	0.74	2	1.32	2
2		2.170	0.78	2	1.40	2
2		2.480	0.82	2	1.48	2
2		2.790	0.87	2	1.56	2
2	3		0.91	2	1.64	2
3	4		0.00	2	0.00	2
3		0.310	0.05	2	0.08	2
3		0.620	0.10	2	0.17	2
3		0.930	0.14	2	0.25	2
3		1.240	0.19	2	0.33	2
3		1.550	0.24	2	0.42	2
3		1.860	0.29	2	0.50	2
3		2.170	0.33	2	0.58	2
3		2.480	0.38	2	0.67	2
3		2.790	0.43	2	0.75	2
3	5		0.48	2	0.83	2

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:2 Ver. bel. pers. ed. (q_k)

St.	Kn.	Pos.	Z-verp		[kN/m²]	
			Min	BC	Max	BC Grondspan.
4	5		0.48	2	0.83	2
4		0.310	0.52	2	0.91	2
4		0.620	0.56	2	0.99	2
4		0.930	0.61	2	1.08	2
4		1.240	0.65	2	1.16	2
4		1.550	0.69	2	1.24	2
4		1.860	0.74	2	1.32	2
4		2.170	0.78	2	1.40	2
4		2.480	0.82	2	1.48	2
4		2.790	0.87	2	1.56	2
4	6		0.91	2	1.64	2
5	7		0.00	2	0.00	2
5		0.310	0.05	2	0.08	2
5		0.620	0.10	2	0.17	2
5		0.930	0.14	2	0.25	2
5		1.240	0.19	2	0.33	2
5		1.550	0.24	2	0.42	2
5		1.860	0.29	2	0.50	2
5		2.170	0.33	2	0.58	2
5		2.480	0.38	2	0.67	2
5		2.790	0.43	2	0.75	2
5	8		0.48	2	0.83	2
6	8		0.48	2	0.83	2
6		0.310	0.52	2	0.91	2
6		0.620	0.56	2	0.99	2
6		0.930	0.61	2	1.08	2
6		1.240	0.65	2	1.16	2
6		1.550	0.69	2	1.24	2
6		1.860	0.74	2	1.32	2
6		2.170	0.78	2	1.40	2
6		2.480	0.82	2	1.48	2
6		2.790	0.87	2	1.56	2
6	9		0.91	2	1.64	2
7	3		-2.20	2	-1.80	2
7		0.320	-2.70	2	-1.52	2
7		0.640	-3.12	2	-1.25	2
7		0.960	-3.44	2	-1.01	2
7		1.280	-3.56	2	-0.81	2
7		1.600	-3.50	2	-0.68	2
7		1.920	-3.29	2	-0.61	2
7		2.240	-2.91	2	-0.63	2
7		2.560	-2.41	2	-0.77	2
7		2.880	-1.97	2	-1.02	2
7	6		-1.65	2	-1.37	2
8	6		-1.65	2	-1.37	2
8		0.320	-1.90	2	-1.02	2
8		0.640	-2.41	2	-0.77	2
8		0.960	-2.91	2	-0.63	2
8		1.280	-3.29	2	-0.61	2
8		1.600	-3.50	2	-0.68	2
8		1.920	-3.56	2	-0.81	2
8		2.240	-3.44	2	-1.01	2
8		2.560	-3.12	2	-1.25	2
8		2.880	-2.70	2	-1.52	2
8	9		-2.20	2	-1.80	2

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:2 Ver. bel. pers. ed. (q_k)

St.	Kn.	Pos.	Z-verp		[kN/m²]	
			Min	BC	Max	BC Grondspan.
9	2		-2.18	2	-1.81	2
9	0.320		-2.66	2	-1.54	2
9	0.640		-3.06	2	-1.28	2
9	0.960		-3.36	2	-1.03	2
9	1.280		-3.47	2	-0.84	2
9	1.600		-3.40	2	-0.71	2
9	1.920		-3.20	2	-0.64	2
9	2.240		-2.83	2	-0.65	2
9	2.560		-2.35	2	-0.79	2
9	2.880		-1.85	2	-1.02	2
9	5		-1.60	2	-1.34	2
10	5		-1.60	2	-1.34	2
10	0.320		-1.85	2	-1.02	2
10	0.640		-2.35	2	-0.79	2
10	0.960		-2.83	2	-0.65	2
10	1.280		-3.20	2	-0.64	2
10	1.600		-3.40	2	-0.71	2
10	1.920		-3.47	2	-0.84	2
10	2.240		-3.36	2	-1.03	2
10	2.560		-3.06	2	-1.28	2
10	2.880		-2.66	2	-1.54	2
10	8		-2.18	2	-1.81	2
11	1		0.00	2	0.00	2
11	0.446		0.00	2	0.00	2
11	0.891		0.00	2	0.00	2
11	1.337		0.00	2	0.00	2
11	1.782		0.00	2	0.00	2
11	2.228		0.00	2	0.00	2
11	2.673		0.00	2	0.00	2
11	3.119		0.00	2	0.00	2
11	3.564		0.00	2	0.00	2
11	4.010		0.00	2	0.00	2
11	5		0.00	2	0.00	2
12	5		0.00	2	0.00	2
12	0.446		0.00	2	0.00	2
12	0.891		0.00	2	0.00	2
12	1.337		0.00	2	0.00	2
12	1.782		0.00	2	0.00	2
12	2.228		0.00	2	0.00	2
12	2.673		0.00	2	0.00	2
12	3.119		0.00	2	0.00	2
12	3.564		0.00	2	0.00	2
12	4.010		0.00	2	0.00	2
12	3		0.00	2	0.00	2
13	4		0.00	2	0.00	2
13	0.446		0.00	2	0.00	2
13	0.891		0.00	2	0.00	2
13	1.337		0.00	2	0.00	2
13	1.782		0.00	2	0.00	2
13	2.228		0.00	2	0.00	2
13	2.673		0.00	2	0.00	2
13	3.119		0.00	2	0.00	2
13	3.564		0.00	2	0.00	2
13	4.010		0.00	2	0.00	2
13	2		0.00	2	0.00	2

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:2 Ver. bel. pers. ed. (q_k)

St.	Kn.	Pos.	Z-verp		BC	[kN/m²]
			Min	Max		
14	2		0.00	0.00	2	
14		0.446	0.00	0.00	2	
14		0.891	0.00	0.00	2	
14		1.337	0.00	0.00	2	
14		1.782	0.00	0.00	2	
14		2.228	0.00	0.00	2	
14		2.673	0.00	0.00	2	
14		3.119	0.00	0.00	2	
14		3.564	0.00	0.00	2	
14		4.010	0.00	0.00	2	
14	6		0.00	0.00	2	
15	12		-2.72	-2.72	2	20.418
15		0.250	-2.88	-2.88	2	21.598
15		0.500	-3.04	-3.03	2	22.776
15		0.750	-3.19	-3.19	2	23.944
15		1.000	-3.35	-3.35	2	25.099
15		1.250	-3.50	-3.49	2	26.219
15		1.500	-3.64	-3.63	2	27.277
15		1.750	-3.77	-3.76	2	28.245
15		2.000	-3.88	-3.87	2	29.090
15		2.250	-3.97	-3.96	2	29.770
15	11		-4.03	-4.02	2	30.240
16	11		-4.03	-4.02	2	30.240
16		0.500	-4.07	-4.05	2	30.489
16		1.000	-4.02	-4.00	2	30.145
16		1.500	-3.94	-3.92	2	29.571
16		2.000	-3.87	-3.85	2	29.024
16		2.500	-3.82	-3.80	2	28.662
16		3.000	-3.81	-3.78	2	28.539
16		3.500	-3.81	-3.79	2	28.608
16		4.000	-3.83	-3.81	2	28.725
16		4.500	-3.82	-3.80	2	28.646
16	10		-3.74	-3.73	2	28.026
17	10		-3.74	-3.73	2	28.026
17		0.500	-3.55	-3.54	2	26.593
17		1.000	-3.30	-3.28	2	24.717
17		1.500	-3.02	-2.98	2	22.669
17		2.000	-2.76	-2.70	2	20.708
17		2.500	-2.54	-2.44	2	19.016
17		3.000	-2.36	-2.22	2	17.701
17		3.500	-2.24	-2.05	2	16.806
17		4.000	-2.17	-1.94	2	16.311
17		4.500	-2.15	-1.85	2	16.139
17	1		-2.15	-1.80	2	16.153
18	1		-2.15	-1.80	2	16.153
18		0.320	-2.02	-1.69	2	15.170
18		0.640	-1.91	-1.60	2	14.352
18		0.960	-1.81	-1.51	2	13.601
18		1.280	-1.73	-1.43	2	12.948
18		1.600	-1.65	-1.36	2	12.406
18		1.920	-1.60	-1.32	2	11.973
18		2.240	-1.55	-1.28	2	11.658
18		2.560	-1.53	-1.27	2	11.459
18		2.880	-1.51	-1.26	2	11.351
18	4		-1.51	-1.27	2	11.317

TUSSENpunTEN VERPLAATSINGEN

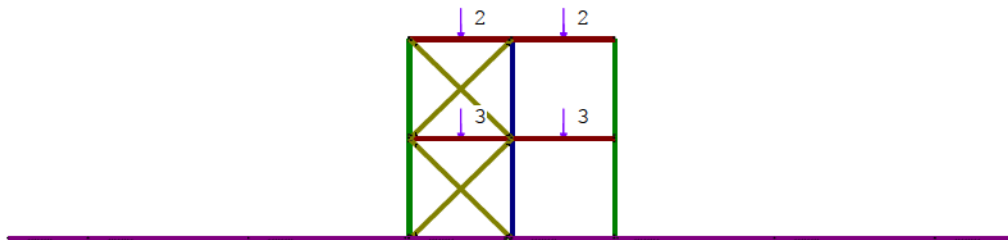
1e orde

B.G:2 Ver. bel. pers. ed. (q_k)

St.	Kn.	Pos.	Z-verp		[kN/m²]		
			Min	BC	Max	BC Grondspan.	
19	4		-1.51	2	-1.27	2	11.317
19		0.320	-1.51	2	-1.26	2	11.351
19		0.640	-1.53	2	-1.27	2	11.459
19		0.960	-1.55	2	-1.28	2	11.658
19		1.280	-1.60	2	-1.32	2	11.973
19		1.600	-1.65	2	-1.36	2	12.406
19		1.920	-1.73	2	-1.43	2	12.948
19		2.240	-1.81	2	-1.51	2	13.601
19		2.560	-1.91	2	-1.60	2	14.352
19		2.880	-2.02	2	-1.69	2	15.170
19	7		-2.15	2	-1.80	2	16.153
20	7		-2.15	2	-1.80	2	16.153
20		0.500	-2.15	2	-1.85	2	16.139
20		1.000	-2.17	2	-1.94	2	16.311
20		1.500	-2.24	2	-2.05	2	16.806
20		2.000	-2.36	2	-2.22	2	17.701
20		2.500	-2.54	2	-2.44	2	19.016
20		3.000	-2.76	2	-2.70	2	20.708
20		3.500	-3.02	2	-2.98	2	22.669
20		4.000	-3.30	2	-3.28	2	24.717
20		4.500	-3.55	2	-3.54	2	26.593
20	13		-3.74	2	-3.73	2	28.026
21	13		-3.74	2	-3.73	2	28.026
21		0.500	-3.82	2	-3.80	2	28.646
21		1.000	-3.83	2	-3.81	2	28.725
21		1.500	-3.81	2	-3.79	2	28.608
21		2.000	-3.81	2	-3.78	2	28.539
21		2.500	-3.82	2	-3.80	2	28.662
21		3.000	-3.87	2	-3.85	2	29.024
21		3.500	-3.94	2	-3.92	2	29.571
21		4.000	-4.02	2	-4.00	2	30.145
21		4.500	-4.07	2	-4.05	2	30.489
21	14		-4.03	2	-4.02	2	30.240
22	14		-4.03	2	-4.02	2	30.240
22		0.250	-3.97	2	-3.96	2	29.770
22		0.500	-3.88	2	-3.87	2	29.090
22		0.750	-3.77	2	-3.76	2	28.245
22		1.000	-3.64	2	-3.63	2	27.277
22		1.250	-3.50	2	-3.49	2	26.219
22		1.500	-3.35	2	-3.35	2	25.099
22		1.750	-3.19	2	-3.19	2	23.944
22		2.000	-3.04	2	-3.03	2	22.776
22		2.250	-2.88	2	-2.88	2	21.598
22	15		-2.72	2	-2.72	2	20.418

BELASTINGEN

B.G:3 Ver. bel. pers. ed. (Q_k)



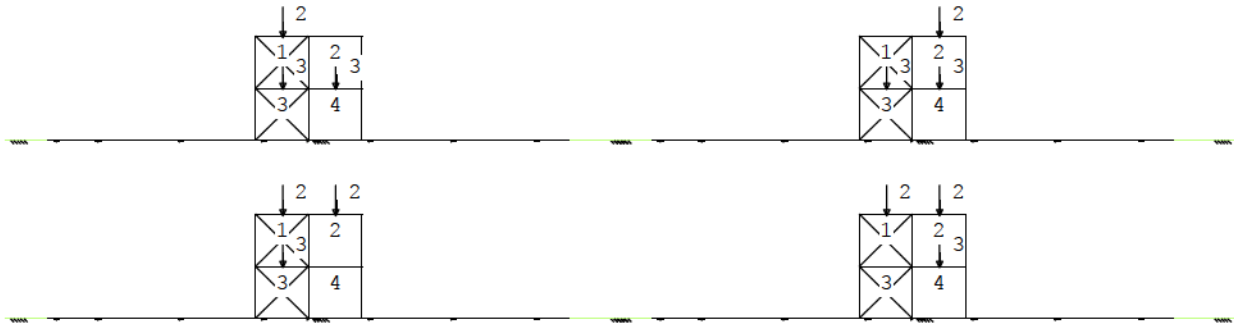
STAAFBELASTINGEN

B.G:3 Ver. bel. pers. ed. (Q_k)

Staal Type	$q_1/p/m$	q_2	A	B	ψ_0	ψ_1	ψ_2
7 10:PZGepro.j.	-2.00		1.600		0.00	0.00	0.00
8 10:PZGepro.j.	-2.00		1.600		0.00	0.00	0.00
9 10:PZGepro.j.	-3.00		1.600		0.50	0.50	0.30
10 10:PZGepro.j.	-3.00		1.600		0.50	0.50	0.30

SITUATIES BELAST/ONBELAST

B.G:3 Ver. bel. pers. ed. (Q_k)



SITUATIES BELAST/ONBELAST

Belastingtype: Q_k

Nr Lastvelden belast	Lastvelden onbelast
1 1,3,4	2
2 2-4	1
3 1-3	4
4 1,2,4	3

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:3 Ver. bel. pers. ed. (Q_k)

St.	Kn.	Pos.	Z-verp		[kN/m ²]	
			Min	BC	Max	BC Grondspan.
1	1		0.00	3	0.00	3
1		0.310	-0.02	3	0.01	3
1		0.620	-0.04	3	0.02	3
1		0.930	-0.05	3	0.03	3
1		1.240	-0.07	3	0.03	3
1		1.550	-0.09	3	0.04	3
1		1.860	-0.11	3	0.05	3
1		2.170	-0.12	3	0.06	3
1		2.480	-0.14	3	0.07	3
1		2.790	-0.16	3	0.08	3
1	2		-0.18	3	0.09	3
2	2		-0.18	3	0.09	3
2		0.310	-0.20	3	0.09	3
2		0.620	-0.21	3	0.10	3
2		0.930	-0.23	3	0.11	3
2		1.240	-0.25	3	0.12	3
2		1.550	-0.27	3	0.12	3
2		1.860	-0.29	3	0.13	3
2		2.170	-0.31	3	0.14	3
2		2.480	-0.33	3	0.15	3
2		2.790	-0.35	3	0.15	3
2	3		-0.37	3	0.16	3

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:3 Ver. bel. pers. ed. (Q_k)

St.	Kn.	Pos.	Z-verp		[kN/m²]	
			Min	BC	Max	BC Grondspan.
3	4		0.00	3	0.00	3
3		0.310	-0.02	3	0.01	3
3		0.620	-0.04	3	0.02	3
3		0.930	-0.05	3	0.03	3
3		1.240	-0.07	3	0.03	3
3		1.550	-0.09	3	0.04	3
3		1.860	-0.11	3	0.05	3
3		2.170	-0.12	3	0.06	3
3		2.480	-0.14	3	0.07	3
3		2.790	-0.16	3	0.08	3
3	5		-0.18	3	0.09	3
4	5		-0.18	3	0.09	3
4		0.310	-0.20	3	0.09	3
4		0.620	-0.21	3	0.10	3
4		0.930	-0.23	3	0.11	3
4		1.240	-0.25	3	0.12	3
4		1.550	-0.27	3	0.12	3
4		1.860	-0.29	3	0.13	3
4		2.170	-0.31	3	0.14	3
4		2.480	-0.33	3	0.15	3
4		2.790	-0.35	3	0.15	3
4	6		-0.37	3	0.16	3
5	7		0.00	3	0.00	3
5		0.310	-0.02	3	0.01	3
5		0.620	-0.04	3	0.02	3
5		0.930	-0.05	3	0.03	3
5		1.240	-0.07	3	0.03	3
5		1.550	-0.09	3	0.04	3
5		1.860	-0.11	3	0.05	3
5		2.170	-0.12	3	0.06	3
5		2.480	-0.14	3	0.07	3
5		2.790	-0.16	3	0.08	3
5	8		-0.18	3	0.09	3
6	8		-0.18	3	0.09	3
6		0.310	-0.20	3	0.09	3
6		0.620	-0.21	3	0.10	3
6		0.930	-0.23	3	0.11	3
6		1.240	-0.25	3	0.12	3
6		1.550	-0.27	3	0.12	3
6		1.860	-0.29	3	0.13	3
6		2.170	-0.31	3	0.14	3
6		2.480	-0.33	3	0.15	3
6		2.790	-0.35	3	0.15	3
6	9		-0.37	3	0.16	3
7	3		-0.36	3	-0.08	3
7		0.320	-0.58	3	-0.09	3
7		0.640	-0.79	3	-0.04	3
7		0.960	-0.96	3	0.01	3
7		1.280	-1.07	3	0.04	3
7		1.600	-1.11	3	0.05	3
7		1.920	-1.03	3	0.04	3
7		2.240	-0.89	3	0.00	3
7		2.560	-0.71	3	-0.07	3
7		2.880	-0.51	3	-0.18	3
7	6		-0.31	3	-0.28	3

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:3 Ver. bel. pers. ed. (Q_k)

St.	Kn.	Pos.	Z-verp		[kN/m²]	
			Min	BC	Max	BC Grondspan.
8	6		-0.31	3	-0.28	3
8		0.320	-0.51	3	-0.17	3
8		0.640	-0.70	3	-0.07	3
8		0.960	-0.88	3	0.01	3
8		1.280	-1.02	3	0.04	3
8		1.600	-1.07	3	0.05	3
8		1.920	-1.06	3	0.04	3
8		2.240	-0.95	3	0.01	3
8		2.560	-0.78	3	-0.04	3
8		2.880	-0.58	3	-0.07	3
8	9		-0.36	3	-0.08	3
9	2		-0.35	3	-0.08	3
9		0.320	-0.70	3	0.02	3
9		0.640	-1.01	3	0.11	3
9		0.960	-1.26	3	0.18	3
9		1.280	-1.43	3	0.24	3
9		1.600	-1.48	3	0.26	3
9		1.920	-1.35	3	0.25	3
9		2.240	-1.13	3	0.20	3
9		2.560	-0.86	3	0.09	3
9		2.880	-0.56	3	-0.06	3
9	5		-0.31	3	-0.27	3
10	5		-0.31	3	-0.27	3
10		0.320	-0.56	3	-0.06	3
10		0.640	-0.86	3	0.09	3
10		0.960	-1.13	3	0.20	3
10		1.280	-1.35	3	0.25	3
10		1.600	-1.48	3	0.26	3
10		1.920	-1.43	3	0.24	3
10		2.240	-1.26	3	0.18	3
10		2.560	-1.01	3	0.11	3
10		2.880	-0.70	3	0.02	3
10	8		-0.35	3	-0.08	3
11	1		0.00	3	0.00	3
11		0.446	0.00	3	0.00	3
11		0.891	0.00	3	0.00	3
11		1.337	0.00	3	0.00	3
11		1.782	0.00	3	0.00	3
11		2.228	0.00	3	0.00	3
11		2.673	0.00	3	0.00	3
11		3.119	0.00	3	0.00	3
11		3.564	0.00	3	0.00	3
11		4.010	0.00	3	0.00	3
11	5		0.00	3	0.00	3
12	5		0.00	3	0.00	3
12		0.446	0.00	3	0.00	3
12		0.891	0.00	3	0.00	3
12		1.337	0.00	3	0.00	3
12		1.782	0.00	3	0.00	3
12		2.228	0.00	3	0.00	3
12		2.673	0.00	3	0.00	3
12		3.119	0.00	3	0.00	3
12		3.564	0.00	3	0.00	3
12		4.010	0.00	3	0.00	3
12	3		0.00	3	0.00	3

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:3 Ver. bel. pers. ed. (Q_k)

St.	Kn.	Pos.	Z-verp		Max	BC	Grondspan.
			Min	BC			
13	4		0.00	3	0.00	3	
13		0.446	0.00	3	0.00	3	
13		0.891	0.00	3	0.00	3	
13		1.337	0.00	3	0.00	3	
13		1.782	0.00	3	0.00	3	
13		2.228	0.00	3	0.00	3	
13		2.673	0.00	3	0.00	3	
13		3.119	0.00	3	0.00	3	
13		3.564	0.00	3	0.00	3	
13		4.010	0.00	3	0.00	3	
13	2		0.00	3	0.00	3	
14	2		0.00	3	0.00	3	
14		0.446	0.00	3	0.00	3	
14		0.891	0.00	3	0.00	3	
14		1.337	0.00	3	0.00	3	
14		1.782	0.00	3	0.00	3	
14		2.228	0.00	3	0.00	3	
14		2.673	0.00	3	0.00	3	
14		3.119	0.00	3	0.00	3	
14		3.564	0.00	3	0.00	3	
14		4.010	0.00	3	0.00	3	
14	6		0.00	3	0.00	3	
15	12		2.09	3	9.52	3	
15		0.250	2.05	3	9.32	3	
15		0.500	2.01	3	9.12	3	
15		0.750	1.96	3	8.93	3	
15		1.000	1.92	3	8.73	3	
15		1.250	1.88	3	8.53	3	
15		1.500	1.83	3	8.34	3	
15		1.750	1.79	3	8.14	3	
15		2.000	1.75	3	7.94	3	
15		2.250	1.70	3	7.74	3	
15	11		1.66	3	7.55	3	
16	11		1.66	3	7.55	3	
16		0.500	1.57	3	7.15	3	
16		1.000	1.49	3	6.76	3	
16		1.500	1.40	3	6.36	3	
16		2.000	1.31	3	5.97	3	
16		2.500	1.23	3	5.58	3	
16		3.000	1.14	3	5.18	3	
16		3.500	1.05	3	4.79	3	
16		4.000	0.97	3	4.39	3	
16		4.500	0.88	3	4.00	3	
16	10		0.79	3	3.61	3	
17	10		0.79	3	3.61	3	
17		0.500	0.71	3	3.21	3	
17		1.000	0.62	3	2.82	3	
17		1.500	0.53	3	2.42	3	
17		2.000	0.45	3	2.03	3	
17		2.500	0.36	3	1.63	3	
17		3.000	0.27	3	1.24	3	
17		3.500	0.19	3	0.84	3	
17		4.000	0.10	3	0.45	3	
17		4.500	0.01	3	0.05	3	
17	1		-0.34	3	-0.08	3	2.579

TUSSENpunTEN VERPLAATSINGEN

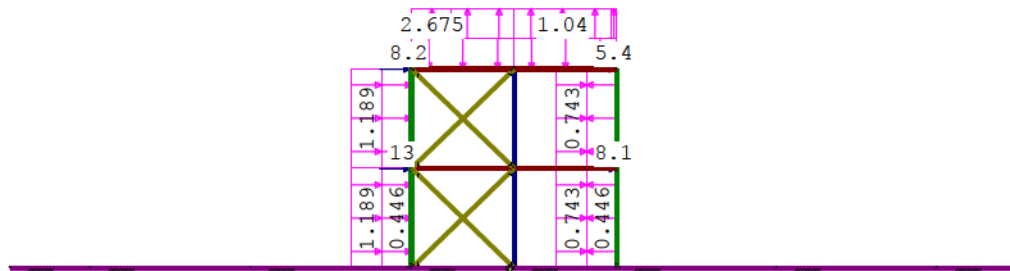
1e orde

B.G:3 Ver. bel. pers. ed. (Q_k)

St.	Kn.	Pos.	Z-verp		Max	BC	Grondspan.
			Min	BC			
18	1		-0.34	3	-0.08	3	2.579
18		0.320	-0.33	3	-0.09	3	2.488
18		0.640	-0.32	3	-0.11	3	2.402
18		0.960	-0.31	3	-0.13	3	2.334
18		1.280	-0.31	3	-0.15	3	2.299
18		1.600	-0.30	3	-0.17	3	2.271
18		1.920	-0.30	3	-0.18	3	2.248
18		2.240	-0.30	3	-0.20	3	2.227
18		2.560	-0.29	3	-0.22	3	2.202
18		2.880	-0.29	3	-0.23	3	2.168
18	4		-0.28	3	-0.25	3	2.120
19	4		-0.28	3	-0.25	3	2.120
19		0.320	-0.29	3	-0.23	3	2.168
19		0.640	-0.29	3	-0.22	3	2.202
19		0.960	-0.30	3	-0.20	3	2.227
19		1.280	-0.30	3	-0.18	3	2.248
19		1.600	-0.30	3	-0.17	3	2.271
19		1.920	-0.31	3	-0.15	3	2.299
19		2.240	-0.31	3	-0.13	3	2.334
19		2.560	-0.32	3	-0.11	3	2.402
19		2.880	-0.33	3	-0.09	3	2.488
19	7		-0.34	3	-0.08	3	2.579
20	7		-0.34	3	-0.08	3	2.579
20		0.500	0.01	3	0.05	3	
20		1.000	0.10	3	0.45	3	
20		1.500	0.19	3	0.84	3	
20		2.000	0.27	3	1.24	3	
20		2.500	0.36	3	1.63	3	
20		3.000	0.45	3	2.03	3	
20		3.500	0.53	3	2.42	3	
20		4.000	0.62	3	2.82	3	
20		4.500	0.71	3	3.21	3	
20	13		0.79	3	3.60	3	
21	13		0.79	3	3.60	3	
21		0.500	0.88	3	4.00	3	
21		1.000	0.97	3	4.39	3	
21		1.500	1.05	3	4.79	3	
21		2.000	1.14	3	5.18	3	
21		2.500	1.23	3	5.58	3	
21		3.000	1.31	3	5.97	3	
21		3.500	1.40	3	6.36	3	
21		4.000	1.49	3	6.76	3	
21		4.500	1.57	3	7.15	3	
21	14		1.66	3	7.55	3	
22	14		1.66	3	7.55	3	
22		0.250	1.70	3	7.74	3	
22		0.500	1.75	3	7.94	3	
22		0.750	1.79	3	8.14	3	
22		1.000	1.83	3	8.33	3	
22		1.250	1.88	3	8.53	3	
22		1.500	1.92	3	8.73	3	
22		1.750	1.96	3	8.93	3	
22		2.000	2.01	3	9.12	3	
22		2.250	2.05	3	9.32	3	
22	15		2.09	3	9.52	3	

BELASTINGEN

B.G:4 Wind van links onderdruk A



KNOOPBELASTINGEN

B.G:4 Wind van links onderdruk A

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:4 Wind van links onderdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw6	0.30	0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

TUSSENpunten Verplaatsingen

1e orde

B.G:4 Wind van links onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		[kN/m²]	
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z	Rotatie	Grondspan.
1	1		0.05	52213.49	52213.49	-0.05	8.16702	
1		0.310	2531.82	52213.50	52213.50	-2531.82	8.16695	
1		0.620	5063.55	52213.51	52213.51	-5063.55	8.16681	
1		0.930	7595.25	52213.52	52213.52	-7595.25	8.16662	
1		1.240	10126.85	52213.52	52213.52	-10126.8	8.16636	
1		1.550	12658.38	52213.53	52213.53	-12658.3	8.16609	
1		1.860	15189.83	52213.54	52213.54	-15189.8	8.16582	
1		2.170	17721.20	52213.55	52213.55	-17721.2	8.16556	
1		2.480	20252.48	52213.55	52213.55	-20252.4	8.16536	
1		2.790	22783.72	52213.56	52213.56	-22783.7	8.16523	
1	2		25314.93	52213.57	52213.57	-25314.9	8.16515	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:4 Wind van links onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
2	2		25314.93	52213.57	52213.57	-25314.9	8.16646	
2	0.310		27846.52	52213.57	52213.57	-27846.5	8.16639	
2	0.620		30378.08	52213.57	52213.57	-30378.0	8.16625	
2	0.930		32909.59	52213.57	52213.57	-32909.5	8.16605	
2	1.240		35441.02	52213.57	52213.57	-35441.0	8.16580	
2	1.550		37972.38	52213.58	52213.58	-37972.3	8.16552	
2	1.860		40503.65	52213.58	52213.58	-40503.6	8.16525	
2	2.170		43034.84	52213.58	52213.58	-43034.8	8.16500	
2	2.480		45565.95	52213.58	52213.58	-45565.9	8.16480	
2	2.790		48097.02	52213.58	52213.58	-48097.0	8.16466	
2	3		50628.05	52213.58	52213.58	-50628.0	8.16459	
3	4		0.00	26085.37	26085.37	0.00	8.16604	
3	0.310		2531.47	26085.35	26085.35	-2531.47	8.16604	
3	0.620		5062.94	26085.32	26085.32	-5062.94	8.16604	
3	0.930		7594.42	26085.30	26085.30	-7594.42	8.16604	
3	1.240		10125.89	26085.27	26085.27	-10125.8	8.16604	
3	1.550		12657.36	26085.25	26085.25	-12657.3	8.16604	
3	1.860		15188.83	26085.22	26085.22	-15188.8	8.16604	
3	2.170		17720.30	26085.20	26085.20	-17720.3	8.16604	
3	2.480		20251.78	26085.17	26085.17	-20251.7	8.16604	
3	2.790		22783.25	26085.15	26085.15	-22783.2	8.16604	
3	5		25314.72	26085.12	26085.12	-25314.7	8.16604	
4	5		25314.72	26085.12	26085.12	-25314.7	8.16557	
4	0.310		27846.05	26085.12	26085.12	-27846.0	8.16557	
4	0.620		30377.37	26085.11	26085.11	-30377.3	8.16557	
4	0.930		32908.70	26085.10	26085.10	-32908.7	8.16557	
4	1.240		35440.02	26085.10	26085.10	-35440.0	8.16557	
4	1.550		37971.35	26085.09	26085.09	-37971.3	8.16557	
4	1.860		40502.68	26085.09	26085.09	-40502.6	8.16557	
4	2.170		43034.00	26085.08	26085.08	-43034.0	8.16557	
4	2.480		45565.33	26085.08	26085.08	-45565.3	8.16557	
4	2.790		48096.66	26085.07	26085.07	-48096.6	8.16557	
4	6		50627.98	26085.07	26085.07	-50627.9	8.16557	
5	7		0.00	-34.13	-34.13	-0.00	8.16623	
5	0.310		2531.53	-34.13	-34.13	-2531.53	8.16621	
5	0.620		5063.05	-34.13	-34.13	-5063.05	8.16619	
5	0.930		7594.56	-34.13	-34.13	-7594.56	8.16615	
5	1.240		10126.06	-34.13	-34.13	-10126.0	8.16611	
5	1.550		12657.55	-34.13	-34.13	-12657.5	8.16606	
5	1.860		15189.02	-34.13	-34.13	-15189.0	8.16601	
5	2.170		17720.47	-34.13	-34.13	-17720.4	8.16596	
5	2.480		20251.91	-34.13	-34.13	-20251.9	8.16592	
5	2.790		22783.35	-34.13	-34.13	-22783.3	8.16590	
5	8		25314.77	-34.13	-34.13	-25314.7	8.16589	
6	8		25314.77	-34.13	-34.13	-25314.7	8.16573	
6	0.310		27846.15	-34.13	-34.13	-27846.1	8.16572	
6	0.620		30377.52	-34.13	-34.13	-30377.5	8.16570	
6	0.930		32908.88	-34.13	-34.13	-32908.8	8.16566	
6	1.240		35440.23	-34.13	-34.13	-35440.2	8.16561	
6	1.550		37971.56	-34.13	-34.13	-37971.5	8.16556	
6	1.860		40502.88	-34.13	-34.13	-40502.8	8.16551	
6	2.170		43034.18	-34.13	-34.13	-43034.1	8.16547	
6	2.480		45565.46	-34.13	-34.13	-45565.4	8.16543	
6	2.790		48096.75	-34.13	-34.13	-48096.7	8.16541	
6	9		50628.02	-34.13	-34.13	-50628.0	8.16539	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:4 Wind van links onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
7	3		50628.05	52213.58	50628.05	52213.58	8.16501	
7		0.320	50628.04	49600.77	50628.04	49600.77	8.16508	
7		0.640	50628.04	46987.92	50628.04	46987.92	8.16521	
7		0.960	50628.03	44375.03	50628.03	44375.03	8.16536	
7		1.280	50628.02	41762.10	50628.02	41762.10	8.16549	
7		1.600	50628.02	39149.13	50628.02	39149.13	8.16552	
7		1.920	50628.01	36536.17	50628.01	36536.17	8.16546	
7		2.240	50628.00	33923.23	50628.00	33923.23	8.16531	
7		2.560	50628.00	31310.40	50628.00	31310.40	8.16498	
7		2.880	50627.99	28697.68	50627.99	28697.68	8.16452	
7	6		50627.98	26085.07	50627.98	26085.07	8.16395	
8	6		50627.98	26085.07	50627.98	26085.07	8.16395	
8		0.320	50627.99	23472.76	50627.99	23472.76	8.16336	
8		0.640	50627.99	20860.56	50627.99	20860.56	8.16285	
8		0.960	50628.00	18248.50	50628.00	18248.50	8.16245	
8		1.280	50628.00	15636.58	50628.00	15636.58	8.16218	
8		1.600	50628.00	13024.71	50628.00	13024.71	8.16197	
8		1.920	50628.01	10412.90	50628.01	10412.90	8.16184	
8		2.240	50628.01	7801.12	50628.01	7801.12	8.16177	
8		2.560	50628.01	5189.36	50628.01	5189.36	8.16172	
8		2.880	50628.02	2577.61	50628.02	2577.61	8.16171	
8	9		50628.02	-34.13	50628.02	-34.13	8.16171	
9	2		25314.93	52213.57	25314.93	52213.57	8.16586	
9		0.320	25314.91	49600.50	25314.91	49600.50	8.16583	
9		0.640	25314.89	46987.45	25314.89	46987.45	8.16576	
9		0.960	25314.87	44374.41	25314.87	44374.41	8.16566	
9		1.280	25314.84	41761.43	25314.84	41761.43	8.16551	
9		1.600	25314.82	39148.50	25314.82	39148.50	8.16531	
9		1.920	25314.80	36535.63	25314.80	36535.63	8.16508	
9		2.240	25314.78	33922.84	25314.78	33922.84	8.16480	
9		2.560	25314.76	31310.18	25314.76	31310.18	8.16447	
9		2.880	25314.74	28697.60	25314.74	28697.60	8.16410	
9	5		25314.72	26085.12	25314.72	26085.12	8.16370	
10	5		25314.72	26085.12	25314.72	26085.12	8.16370	
10		0.320	25314.72	23472.83	25314.72	23472.83	8.16330	
10		0.640	25314.73	20860.64	25314.73	20860.64	8.16294	
10		0.960	25314.74	18248.53	25314.74	18248.53	8.16261	
10		1.280	25314.74	15636.55	25314.74	15636.55	8.16233	
10		1.600	25314.75	13024.65	25314.75	13024.65	8.16210	
10		1.920	25314.75	10412.80	25314.75	10412.80	8.16190	
10		2.240	25314.76	7801.02	25314.76	7801.02	8.16175	
10		2.560	25314.76	5189.28	25314.76	5189.28	8.16165	
10		2.880	25314.77	2577.57	25314.77	2577.57	8.16158	
10	8		25314.77	-34.13	25314.77	-34.13	8.16155	
11	1		0.06	52213.49	36329.94	37501.79	8.16555	
11		0.446	2531.52	49600.66	36330.14	33863.77	8.16555	
11		0.891	5062.99	46987.82	36330.34	30225.74	8.16555	
11		1.337	7594.45	44374.98	36330.54	26587.71	8.16555	
11		1.782	10125.92	41762.14	36330.74	22949.68	8.16555	
11		2.228	12657.39	39149.31	36330.95	19311.66	8.16555	
11		2.673	15188.85	36536.47	36331.14	15673.63	8.16555	
11		3.119	17720.32	33923.63	36331.35	12035.60	8.16555	
11		3.564	20251.79	31310.80	36331.55	8397.58	8.16555	
11		4.010	22783.25	28697.96	36331.75	4759.55	8.16555	
11	5		25314.72	26085.12	36331.95	1121.52	8.16555	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:4 Wind van links onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
12	5		-0.00	0.00	0.00	0.00	0.00000	
12	0.446		-0.00	0.00	0.00	0.00	0.00000	
12	0.891		-0.00	0.00	0.00	0.00	0.00000	
12	1.337		-0.00	0.00	0.00	0.00	0.00000	
12	1.782		-0.00	0.00	0.00	0.00	0.00000	
12	2.228		-0.00	0.00	0.00	0.00	0.00000	
12	2.673		-0.00	0.00	0.00	0.00	0.00000	
12	3.119		-0.00	0.00	0.00	0.00	0.00000	
12	3.564		-0.00	0.00	0.00	0.00	0.00000	
12	4.010		-0.00	0.00	0.00	0.00	0.00000	
12	3		-0.00	0.00	0.00	0.00	0.00000	
13	4		-0.00	0.00	0.00	0.00	0.00000	
13	0.446		-0.00	0.00	0.00	0.00	0.00000	
13	0.891		-0.00	0.00	0.00	0.00	0.00000	
13	1.337		-0.00	0.00	0.00	0.00	0.00000	
13	1.782		-0.00	0.00	0.00	0.00	0.00000	
13	2.228		-0.00	0.00	0.00	0.00	0.00000	
13	2.673		-0.00	0.00	0.00	0.00	0.00000	
13	3.119		-0.00	0.00	0.00	0.00	0.00000	
13	3.564		-0.00	0.00	0.00	0.00	0.00000	
13	4.010		-0.00	0.00	0.00	0.00	0.00000	
13	2		-0.00	0.00	0.00	0.00	0.00000	
14	2	25314.93	52213.58	54512.15	19887.88	8.16532		
14	0.446	27846.23	49600.72	54512.23	16249.96	8.16532		
14	0.891	30377.54	46987.87	54512.30	12612.03	8.16532		
14	1.337	32908.84	44375.02	54512.38	8974.11	8.16532		
14	1.782	35440.15	41762.17	54512.46	5336.18	8.16532		
14	2.228	37971.45	39149.32	54512.54	1698.26	8.16532		
14	2.673	40502.76	36536.47	54512.61	-1939.67	8.16532		
14	3.119	43034.07	33923.62	54512.69	-5577.59	8.16532		
14	3.564	45565.37	31310.77	54512.77	-9215.52	8.16532		
14	4.010	48096.68	28697.92	54512.84	-12853.4	8.16532		
14	6	50627.98	26085.07	54512.92	-16491.3	8.16532		
15	12		0.05	-233.43	0.05	-233.43	-4.19326	1750.696
15	0.250		0.05	814.89	0.05	814.89	-4.19327	
15	0.500		0.05	1863.21	0.05	1863.21	-4.19328	
15	0.750		0.05	2911.53	0.05	2911.53	-4.19331	
15	1.000		0.05	3959.86	0.05	3959.86	-4.19334	
15	1.250		0.05	5008.20	0.05	5008.20	-4.19338	
15	1.500		0.05	6056.55	0.05	6056.55	-4.19343	
15	1.750		0.05	7104.91	0.05	7104.91	-4.19348	
15	2.000		0.05	8153.29	0.05	8153.29	-4.19355	
15	2.250		0.05	9201.69	0.05	9201.69	-4.19362	
15	11		0.05	10250.10	0.05	10250.10	-4.19370	
Som gronddruk X: 0 Z: 29 kN								
16	11		0.05	10250.10	0.05	10250.10	-4.19370	
16	0.500		0.05	12346.99	0.05	12346.99	-4.19388	
16	1.000		0.05	14443.98	0.05	14443.98	-4.19408	
16	1.500		0.05	16541.08	0.05	16541.08	-4.19432	
16	2.000		0.05	18638.30	0.05	18638.30	-4.19457	
16	2.500		0.05	20735.66	0.05	20735.66	-4.19485	
16	3.000		0.05	22833.15	0.05	22833.15	-4.19514	
16	3.500		0.05	24930.80	0.05	24930.80	-4.19545	
16	4.000		0.05	27028.61	0.05	27028.61	-4.19577	
16	4.500		0.05	29126.57	0.05	29126.57	-4.19609	
16	10		0.05	31224.69	0.05	31224.69	-4.19641	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:4 Wind van links onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
17	10		0.05	31224.69	0.05	31224.69	-4.19641		
17		0.500	0.05	33322.98	0.05	33322.98	-4.19674		
17		1.000	0.05	35421.43	0.05	35421.43	-4.19705		
17		1.500	0.05	37520.03	0.05	37520.03	-4.19735		
17		2.000	0.05	39618.77	0.05	39618.77	-4.19763		
17		2.500	0.05	41717.66	0.05	41717.66	-4.19789		
17		3.000	0.05	43816.66	0.05	43816.66	-4.19812		
17		3.500	0.05	45915.77	0.05	45915.77	-4.19831		
17		4.000	0.05	48014.96	0.05	48014.96	-4.19845		
17		4.500	0.05	50114.21	0.05	50114.21	-4.19854		
17	1		0.05	52213.49	0.05	52213.49	-4.19857		
18	1		0.05	52213.49	0.05	52213.49	8.16576		
18		0.320	0.05	49600.45	0.05	49600.45	8.16573		
18		0.640	0.04	46987.43	0.04	46987.43	8.16566		
18		0.960	0.04	44374.43	0.04	44374.43	8.16555		
18		1.280	0.03	41761.48	0.03	41761.48	8.16539		
18		1.600	0.03	39148.59	0.03	39148.59	8.16520		
18		1.920	0.02	36535.76	0.02	36535.76	8.16496		
18		2.240	0.02	33923.01	0.02	33923.01	8.16469		
18		2.560	0.01	31310.36	0.01	31310.36	8.16438		
18		2.880	0.01	28697.81	0.01	28697.81	8.16404		
18	4		0.00	26085.37	0.00	26085.37	8.16367		
19	4		0.00	26085.37	0.00	26085.37	8.16367		
19		0.320	0.00	23473.06	0.00	23473.06	8.16330		
19		0.640	0.00	20860.87	0.00	20860.87	8.16296		
19		0.960	0.00	18248.76	0.00	18248.76	8.16266		
19		1.280	0.00	15636.75	0.00	15636.75	8.16240		
19		1.600	0.00	13024.82	0.00	13024.82	8.16218		
19		1.920	0.00	10412.95	0.00	10412.95	8.16200		
19		2.240	0.00	7801.14	0.00	7801.14	8.16186		
19		2.560	0.00	5189.36	0.00	5189.36	8.16176		
19		2.880	0.00	2577.61	0.00	2577.61	8.16170		
19	7		0.00	-34.13	0.00	-34.13	8.16167	255.973	
Som gronddruk X: 0 Z: 0 kN									
20	7		0.00	-34.13	0.00	-34.13	-0.07851	255.974	
20		0.500	0.00	5.12	0.00	5.12	-0.07848		
20		1.000	0.00	44.35	0.00	44.35	-0.07846		
20		1.500	0.00	83.57	0.00	83.57	-0.07843		
20		2.000	0.00	122.78	0.00	122.78	-0.07841		
20		2.500	0.00	161.98	0.00	161.98	-0.07839		
20		3.000	0.00	201.17	0.00	201.17	-0.07837		
20		3.500	0.00	240.35	0.00	240.35	-0.07835		
20		4.000	0.00	279.52	0.00	279.52	-0.07833		
20		4.500	0.00	318.68	0.00	318.68	-0.07831		
20	13		0.00	357.83	0.00	357.83	-0.07830		
Som gronddruk X: 0 Z: 33 kN									
21	13		0.00	357.83	0.00	357.83	-0.07830		
21		0.500	0.00	396.98	0.00	396.98	-0.07829		
21		1.000	0.00	436.12	0.00	436.12	-0.07828		
21		1.500	0.00	475.25	0.00	475.25	-0.07827		
21		2.000	0.00	514.38	0.00	514.38	-0.07826		
21		2.500	0.00	553.51	0.00	553.51	-0.07825		
21		3.000	0.00	592.64	0.00	592.64	-0.07825		
21		3.500	0.00	631.76	0.00	631.76	-0.07824		
21		4.000	0.00	670.88	0.00	670.88	-0.07824		
21		4.500	0.00	710.00	0.00	710.00	-0.07824		
21	14		0.00	749.11	0.00	749.11	-0.07823		

TUSSENpunTEN VERPLAATSINGEN

1e orde

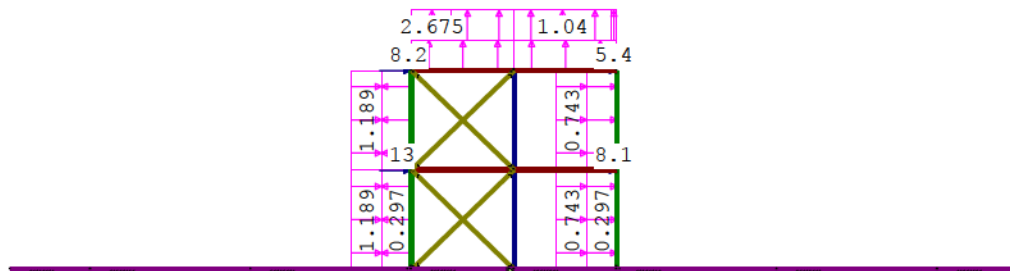
B.G:4 Wind van links onderdruk A

St.	Kn.	Pos.	Gloobaal [mm] Verpl-X	Gloobaal [mm] Verpl-Z	Lokaal [mm] Verpl-X	Lokaal [mm] Verpl-Z	Rotatie	[kN/m²] Grondspan.
22	14		0.00	749.11	0.00	749.11	-0.07823	
22		0.250	0.00	768.67	0.00	768.67	-0.07823	
22		0.500	0.00	788.23	0.00	788.23	-0.07823	
22		0.750	0.00	807.79	0.00	807.79	-0.07823	
22		1.000	0.00	827.35	0.00	827.35	-0.07823	
22		1.250	0.00	846.90	0.00	846.90	-0.07823	
22		1.500	0.00	866.46	0.00	866.46	-0.07823	
22		1.750	0.00	886.02	0.00	886.02	-0.07823	
22		2.000	0.00	905.58	0.00	905.58	-0.07823	
22		2.250	0.00	925.13	0.00	925.13	-0.07823	
22	15		0.00	944.69	0.00	944.69	-0.07823	

Totale grondreactie X: 0 Z: 63 kN

BELASTINGEN

B.G:5 Wind van links overdruk A



KNOOPBELASTINGEN

B.G:5 Wind van links overdruk A

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:5 Wind van links overdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw6	0.30	0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:5 Wind van links overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
1	1		0.05	55982.77	55982.77	-0.05	8.75517	
1	0.310	2714.15	55982.77	55982.77	-2714.15	8.75513		
1	0.620	5428.23	55982.78	55982.78	-5428.23	8.75506		
1	0.930	8142.29	55982.79	55982.79	-8142.29	8.75495		
1	1.240	10856.30	55982.80	55982.80	-10856.3	8.75481		
1	1.550	13570.26	55982.81	55982.81	-13570.2	8.75466		
1	1.860	16284.19	55982.82	55982.82	-16284.1	8.75451		
1	2.170	18998.07	55982.82	55982.82	-18998.0	8.75437		
1	2.480	21711.90	55982.83	55982.83	-21711.9	8.75427		
1	2.790	24425.71	55982.84	55982.84	-24425.7	8.75419		
1	2	27139.51	55982.85	55982.85	-27139.5	8.75415		
2	2	27139.51	55982.85	55982.85	-27139.5	8.75461		
2	0.310	29853.43	55982.85	55982.85	-29853.4	8.75457		
2	0.620	32567.33	55982.85	55982.85	-32567.3	8.75449		
2	0.930	35281.21	55982.85	55982.85	-35281.2	8.75438		
2	1.240	37995.05	55982.85	55982.85	-37995.0	8.75424		
2	1.550	40708.84	55982.86	55982.86	-40708.8	8.75410		
2	1.860	43422.59	55982.86	55982.86	-43422.5	8.75395		
2	2.170	46136.29	55982.86	55982.86	-46136.2	8.75381		
2	2.480	48849.95	55982.86	55982.86	-48849.9	8.75370		
2	2.790	51563.59	55982.86	55982.86	-51563.5	8.75363		
2	3	54277.20	55982.86	55982.86	-54277.2	8.75359		
3	4	0.00	27971.18	27971.18	0.00	8.75462		
3	0.310	2713.93	27971.16	27971.16	-2713.93	8.75462		
3	0.620	5427.86	27971.13	27971.13	-5427.86	8.75462		
3	0.930	8141.79	27971.11	27971.11	-8141.79	8.75462		
3	1.240	10855.72	27971.09	27971.09	-10855.7	8.75462		
3	1.550	13569.66	27971.06	27971.06	-13569.6	8.75462		
3	1.860	16283.59	27971.04	27971.04	-16283.5	8.75462		
3	2.170	18997.52	27971.02	27971.02	-18997.5	8.75462		
3	2.480	21711.45	27970.99	27970.99	-21711.4	8.75462		
3	2.790	24425.38	27970.97	27970.97	-24425.3	8.75462		
3	5	27139.31	27970.95	27970.95	-27139.3	8.75462		
4	5	27139.31	27970.95	27970.95	-27139.3	8.75414		
4	0.310	29853.09	27970.94	27970.94	-29853.0	8.75414		
4	0.620	32566.88	27970.94	27970.94	-32566.8	8.75414		
4	0.930	35280.66	27970.93	27970.93	-35280.6	8.75414		
4	1.240	37994.45	27970.93	27970.93	-37994.4	8.75414		
4	1.550	40708.23	27970.92	27970.92	-40708.2	8.75414		
4	1.860	43422.01	27970.92	27970.92	-43422.0	8.75414		
4	2.170	46135.80	27970.91	27970.91	-46135.8	8.75414		
4	2.480	48849.58	27970.91	27970.91	-48849.5	8.75414		
4	2.790	51563.36	27970.91	27970.91	-51563.3	8.75414		
4	6	54277.14	27970.90	27970.90	-54277.1	8.75414		
5	7	0.00	-32.08	-32.08	-0.00	8.75523		
5	0.310	2714.12	-32.07	-32.07	-2714.12	8.75519		
5	0.620	5428.21	-32.07	-32.07	-5428.21	8.75510		
5	0.930	8142.28	-32.07	-32.07	-8142.28	8.75497		
5	1.240	10856.29	-32.07	-32.07	-10856.2	8.75481		
5	1.550	13570.25	-32.07	-32.07	-13570.2	8.75464		
5	1.860	16284.17	-32.07	-32.07	-16284.1	8.75446		
5	2.170	18998.03	-32.07	-32.07	-18998.0	8.75430		
5	2.480	21711.84	-32.07	-32.07	-21711.8	8.75418		
5	2.790	24425.62	-32.07	-32.07	-24425.6	8.75409		
5	8	27139.38	-32.07	-32.07	-27139.3	8.75404		

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:5 Wind van links overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
6	8		27139.38	-32.07	-32.07	-27139.3	8.75473	
6		0.310	29853.34	-32.07	-32.07	-29853.3	8.75468	
6		0.620	32567.28	-32.07	-32.07	-32567.2	8.75459	
6		0.930	35281.18	-32.07	-32.07	-35281.1	8.75447	
6		1.240	37995.04	-32.07	-32.07	-37995.0	8.75431	
6		1.550	40708.85	-32.07	-32.07	-40708.8	8.75413	
6		1.860	43422.61	-32.07	-32.07	-43422.6	8.75396	
6		2.170	46136.31	-32.07	-32.07	-46136.3	8.75380	
6		2.480	48849.96	-32.07	-32.07	-48849.9	8.75367	
6		2.790	51563.58	-32.07	-32.07	-51563.5	8.75358	
6	9		54277.19	-32.07	-32.07	-54277.1	8.75354	
7	3		54277.20	55982.86	54277.20	55982.86	8.75316	
7		0.320	54277.20	53181.84	54277.20	53181.84	8.75327	
7		0.640	54277.19	50380.75	54277.19	50380.75	8.75349	
7		0.960	54277.19	47579.59	54277.19	47579.59	8.75376	
7		1.280	54277.18	44778.36	54277.18	44778.36	8.75402	
7		1.600	54277.18	41977.03	54277.18	41977.03	8.75419	
7		1.920	54277.17	39175.68	54277.17	39175.68	8.75423	
7		2.240	54277.16	36374.32	54277.16	36374.32	8.75416	
7		2.560	54277.16	33573.05	54277.16	33573.05	8.75383	
7		2.880	54277.15	30771.92	54277.15	30771.92	8.75329	
7	6		54277.14	27970.90	54277.14	27970.90	8.75258	
8	6		54277.14	27970.90	54277.14	27970.90	8.75258	
8		0.320	54277.15	25170.28	54277.15	25170.28	8.75185	
8		0.640	54277.15	22369.77	54277.15	22369.77	8.75126	
8		0.960	54277.16	19569.42	54277.16	19569.42	8.75086	
8		1.280	54277.16	16769.20	54277.16	16769.20	8.75067	
8		1.600	54277.17	13969.00	54277.17	13969.00	8.75056	
8		1.920	54277.17	11168.82	54277.17	11168.82	8.75056	
8		2.240	54277.18	8368.63	54277.18	8368.63	8.75062	
8		2.560	54277.18	5568.42	54277.18	5568.42	8.75070	
8		2.880	54277.18	2768.18	54277.18	2768.18	8.75077	
8	9		54277.19	-32.07	54277.19	-32.07	8.75081	
9	2		27139.51	55982.85	27139.51	55982.85	8.75441	
9		0.320	27139.49	53181.44	27139.49	53181.44	8.75438	
9		0.640	27139.47	50380.05	27139.47	50380.05	8.75432	
9		0.960	27139.45	47578.68	27139.45	47578.68	8.75422	
9		1.280	27139.43	44777.35	27139.43	44777.35	8.75407	
9		1.600	27139.41	41976.08	27139.41	41976.08	8.75388	
9		1.920	27139.39	39174.87	27139.39	39174.87	8.75366	
9		2.240	27139.37	36373.73	27139.37	36373.73	8.75339	
9		2.560	27139.35	33572.71	27139.35	33572.71	8.75307	
9		2.880	27139.33	30771.78	27139.33	30771.78	8.75272	
9	5		27139.31	27970.95	27139.31	27970.95	8.75233	
10	5		27139.31	27970.95	27139.31	27970.95	8.75233	
10		0.320	27139.32	25170.29	27139.32	25170.29	8.75194	
10		0.640	27139.32	22369.73	27139.32	22369.73	8.75159	
10		0.960	27139.33	19569.25	27139.33	19569.25	8.75127	
10		1.280	27139.34	16768.90	27139.34	16768.90	8.75101	
10		1.600	27139.35	13968.62	27139.35	13968.62	8.75078	
10		1.920	27139.35	11168.40	27139.35	11168.40	8.75059	
10		2.240	27139.36	8368.23	27139.36	8368.23	8.75044	
10		2.560	27139.37	5568.11	27139.37	5568.11	8.75034	
10		2.880	27139.37	2768.01	27139.37	2768.01	8.75028	
10	8		27139.38	-32.07	27139.38	-32.07	8.75025	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:5 Wind van links overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
11	1		0.05	55982.77	38952.58	40209.04	8.75413		
11		0.446	2713.98	53181.58	38952.78	36308.78	8.75413		
11		0.891	5427.90	50380.40	38952.98	32408.52	8.75413		
11		1.337	8141.83	47579.21	38953.18	28508.26	8.75413		
11		1.782	10855.75	44778.04	38953.38	24608.00	8.75413		
11		2.228	13569.68	41976.85	38953.59	20707.74	8.75413		
11		2.673	16283.61	39175.68	38953.79	16807.49	8.75413		
11		3.119	18997.53	36374.49	38953.99	12907.23	8.75413		
11		3.564	21711.46	33573.31	38954.19	9006.97	8.75413		
11		4.010	24425.38	30772.13	38954.39	5106.71	8.75413		
11	5		27139.31	27970.95	38954.59	1206.45	8.75413		
12	5		-0.00	0.00	0.00	0.00	0.00000		
12		0.446	-0.00	0.00	0.00	0.00	0.00000		
12		0.891	-0.00	0.00	0.00	0.00	0.00000		
12		1.337	-0.00	0.00	0.00	0.00	0.00000		
12		1.782	-0.00	0.00	0.00	0.00	0.00000		
12		2.228	-0.00	0.00	0.00	0.00	0.00000		
12		2.673	-0.00	0.00	0.00	0.00	0.00000		
12		3.119	-0.00	0.00	0.00	0.00	0.00000		
12		3.564	-0.00	0.00	0.00	0.00	0.00000		
12		4.010	-0.00	0.00	0.00	0.00	0.00000		
12	3		-0.00	0.00	0.00	0.00	0.00000		
13	4		-0.00	0.00	0.00	0.00	0.00000		
13		0.446	-0.00	0.00	0.00	0.00	0.00000		
13		0.891	-0.00	0.00	0.00	0.00	0.00000		
13		1.337	-0.00	0.00	0.00	0.00	0.00000		
13		1.782	-0.00	0.00	0.00	0.00	0.00000		
13		2.228	-0.00	0.00	0.00	0.00	0.00000		
13		2.673	-0.00	0.00	0.00	0.00	0.00000		
13		3.119	-0.00	0.00	0.00	0.00	0.00000		
13		3.564	-0.00	0.00	0.00	0.00	0.00000		
13		4.010	-0.00	0.00	0.00	0.00	0.00000		
13	2		-0.00	0.00	0.00	0.00	0.00000		
14	2		27139.50	55982.85	58445.28	21325.60	8.75390		
14		0.446	29853.27	53181.65	58445.36	17425.44	8.75390		
14		0.891	32567.03	50380.46	58445.44	13525.29	8.75390		
14		1.337	35280.80	47579.27	58445.52	9625.13	8.75390		
14		1.782	37994.56	44778.07	58445.59	5724.98	8.75390		
14		2.228	40708.32	41976.88	58445.67	1824.82	8.75390		
14		2.673	43422.09	39175.68	58445.74	-2075.33	8.75390		
14		3.119	46135.85	36374.49	58445.82	-5975.49	8.75390		
14		3.564	48849.62	33573.30	58445.89	-9875.64	8.75390		
14		4.010	51563.38	30772.10	58445.97	-13775.8	8.75390		
14	6		54277.14	27970.90	58446.05	-17675.9	8.75390		
15	12		0.05	-250.28	0.05	-250.28	-4.49597	1877.078	
15		0.250	0.05	873.72	0.05	873.72	-4.49598		
15		0.500	0.05	1997.71	0.05	1997.71	-4.49599		
15		0.750	0.05	3121.71	0.05	3121.71	-4.49602		
15		1.000	0.05	4245.72	0.05	4245.72	-4.49605		
15		1.250	0.05	5369.74	0.05	5369.74	-4.49610		
15		1.500	0.05	6493.77	0.05	6493.77	-4.49615		
15		1.750	0.05	7617.82	0.05	7617.82	-4.49621		
15		2.000	0.05	8741.88	0.05	8741.88	-4.49628		
15		2.250	0.05	9865.95	0.05	9865.95	-4.49635		
15	11		0.05	10990.05	0.05	10990.05	-4.49644		
Som gronddruk X: 0 Z: 31 kN									

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:5 Wind van links overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
16	11		0.05	10990.05	0.05	10990.05	-4.49644	
16		0.500	0.05	13238.32	0.05	13238.32	-4.49663	
16		1.000	0.05	15486.69	0.05	15486.69	-4.49685	
16		1.500	0.05	17735.18	0.05	17735.18	-4.49710	
16		2.000	0.05	19983.79	0.05	19983.79	-4.49738	
16		2.500	0.05	22232.56	0.05	22232.56	-4.49767	
16		3.000	0.05	24481.47	0.05	24481.47	-4.49799	
16		3.500	0.05	26730.55	0.05	26730.55	-4.49832	
16		4.000	0.05	28979.79	0.05	28979.79	-4.49866	
16		4.500	0.05	31229.21	0.05	31229.21	-4.49900	
16	10		0.05	33478.79	0.05	33478.79	-4.49935	
17	10		0.05	33478.79	0.05	33478.79	-4.49935	
17		0.500	0.05	35728.55	0.05	35728.55	-4.49970	
17		1.000	0.05	37978.49	0.05	37978.49	-4.50003	
17		1.500	0.05	40228.59	0.05	40228.59	-4.50036	
17		2.000	0.05	42478.84	0.05	42478.84	-4.50066	
17		2.500	0.05	44729.24	0.05	44729.24	-4.50093	
17		3.000	0.05	46979.77	0.05	46979.77	-4.50118	
17		3.500	0.05	49230.41	0.05	49230.41	-4.50138	
17		4.000	0.05	51481.14	0.05	51481.14	-4.50153	
17		4.500	0.05	53731.94	0.05	53731.94	-4.50163	
17	1		0.05	55982.77	0.05	55982.77	-4.50167	
18	1		0.05	55982.77	0.05	55982.77	8.75432	
18		0.320	0.05	53181.39	0.05	53181.39	8.75429	
18		0.640	0.04	50380.02	0.04	50380.02	8.75422	
18		0.960	0.04	47578.69	0.04	47578.69	8.75412	
18		1.280	0.03	44777.39	0.03	44777.39	8.75396	
18		1.600	0.03	41976.16	0.03	41976.16	8.75377	
18		1.920	0.02	39174.98	0.02	39174.98	8.75355	
18		2.240	0.02	36373.89	0.02	36373.89	8.75328	
18		2.560	0.01	33572.89	0.01	33572.89	8.75298	
18		2.880	0.01	30771.98	0.01	30771.98	8.75266	
18	4		0.00	27971.18	0.00	27971.18	8.75230	
19	4		0.00	27971.18	0.00	27971.18	8.75230	
19		0.320	0.00	25170.51	0.00	25170.51	8.75194	
19		0.640	0.00	22369.94	0.00	22369.94	8.75162	
19		0.960	0.00	19569.47	0.00	19569.47	8.75133	
19		1.280	0.00	16769.09	0.00	16769.09	8.75108	
19		1.600	0.00	13968.78	0.00	13968.78	8.75086	
19		1.920	0.00	11168.53	0.00	11168.53	8.75069	
19		2.240	0.00	8368.34	0.00	8368.34	8.75055	
19		2.560	0.00	5568.18	0.00	5568.18	8.75045	
19		2.880	0.00	2768.05	0.00	2768.05	8.75039	
19	7		0.00	-32.08	0.00	-32.08	8.75037	240.563
Som gronddruk X: 0 Z: 0 kN								
20	7		0.00	-32.08	0.00	-32.08	-0.07378	240.563
20		0.500	0.00	4.81	0.00	4.81	-0.07376	
20		1.000	0.00	41.68	0.00	41.68	-0.07373	
20		1.500	0.00	78.54	0.00	78.54	-0.07371	
20		2.000	0.00	115.39	0.00	115.39	-0.07369	
20		2.500	0.00	152.23	0.00	152.23	-0.07367	
20		3.000	0.00	189.06	0.00	189.06	-0.07365	
20		3.500	0.00	225.87	0.00	225.87	-0.07363	
20		4.000	0.00	262.68	0.00	262.68	-0.07361	
20		4.500	0.00	299.49	0.00	299.49	-0.07360	
20	13		0.00	336.28	0.00	336.28	-0.07359	
Som gronddruk X: 0 Z: 31 kN								

TUSSENpunTEN VERPLAATSINGEN

1e orde

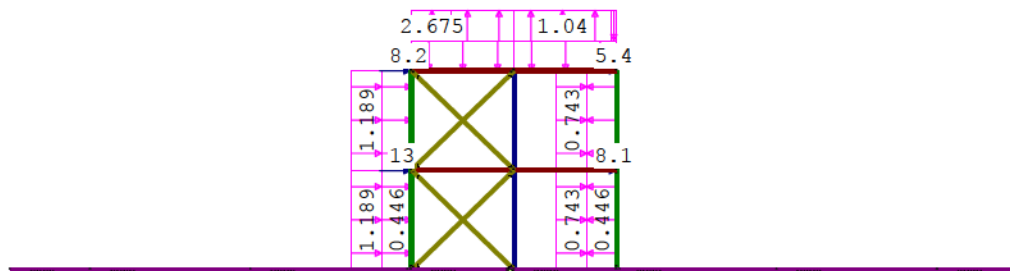
B.G:5 Wind van links overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		[kN/m²]
21	13		0.00	336.28	0.00	336.28	-0.07358	
21		0.500	0.00	373.07	0.00	373.07	-0.07357	
21		1.000	0.00	409.85	0.00	409.85	-0.07356	
21		1.500	0.00	446.63	0.00	446.63	-0.07355	
21		2.000	0.00	483.41	0.00	483.41	-0.07355	
21		2.500	0.00	520.18	0.00	520.18	-0.07354	
21		3.000	0.00	556.95	0.00	556.95	-0.07353	
21		3.500	0.00	593.71	0.00	593.71	-0.07353	
21		4.000	0.00	630.48	0.00	630.48	-0.07353	
21		4.500	0.00	667.24	0.00	667.24	-0.07352	
21	14		0.00	704.00	0.00	704.00	-0.07352	
22	14		0.00	704.00	0.00	704.00	-0.07352	
22		0.250	0.00	722.38	0.00	722.38	-0.07352	
22		0.500	0.00	740.76	0.00	740.76	-0.07352	
22		0.750	0.00	759.14	0.00	759.14	-0.07352	
22		1.000	0.00	777.52	0.00	777.52	-0.07352	
22		1.250	0.00	795.90	0.00	795.90	-0.07352	
22		1.500	0.00	814.28	0.00	814.28	-0.07352	
22		1.750	0.00	832.66	0.00	832.66	-0.07352	
22		2.000	0.00	851.04	0.00	851.04	-0.07352	
22		2.250	0.00	869.42	0.00	869.42	-0.07352	
22	15		0.00	887.80	0.00	887.80	-0.07352	

Totale grondreactie X: 0 Z: 63 kN

BELASTINGEN

B.G:6 Wind van links onderdruk B



KNOOPBELASTINGEN

B.G:6 Wind van links onderdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:6 Wind van links onderdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00

STAAFBELASTINGEN

B.G:6 Wind van links onderdruk B

Staaf	Type	Index	q1/p/m	q2	A	B	Ψ_0	Ψ_1	Ψ_2
8	1:QZLokaal	Qw10	-0.30	-0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:6 Wind van links onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
1	1		0.05	52210.57	52210.57	-0.05	8.16659	
1	0.310		2531.69	52210.57	52210.57	-2531.69	8.16651	
1	0.620		5063.28	52210.58	52210.58	-5063.28	8.16637	
1	0.930		7594.84	52210.59	52210.59	-7594.84	8.16618	
1	1.240		10126.31	52210.60	52210.60	-10126.3	8.16592	
1	1.550		12657.70	52210.61	52210.61	-12657.7	8.16565	
1	1.860		15189.01	52210.61	52210.61	-15189.0	8.16538	
1	2.170		17720.25	52210.62	52210.62	-17720.2	8.16512	
1	2.480		20251.39	52210.63	52210.63	-20251.3	8.16493	
1	2.790		22782.50	52210.64	52210.64	-22782.5	8.16479	
1	2		25313.57	52210.65	52210.65	-25313.5	8.16471	
2	2		25313.57	52210.65	52210.65	-25313.5	8.16602	
2	0.310		27845.03	52210.65	52210.65	-27845.0	8.16595	
2	0.620		30376.45	52210.65	52210.65	-30376.4	8.16581	
2	0.930		32907.83	52210.65	52210.65	-32907.8	8.16561	
2	1.240		35439.12	52210.65	52210.65	-35439.1	8.16536	
2	1.550		37970.34	52210.65	52210.65	-37970.3	8.16509	
2	1.860		40501.48	52210.65	52210.65	-40501.4	8.16481	
2	2.170		43032.54	52210.65	52210.65	-43032.5	8.16456	
2	2.480		45563.51	52210.66	52210.66	-45563.5	8.16436	
2	2.790		48094.44	52210.66	52210.66	-48094.4	8.16422	
2	3		50625.34	52210.66	52210.66	-50625.3	8.16415	
3	4		0.00	26083.85	26083.85	0.00	8.16560	
3	0.310		2531.34	26083.82	26083.82	-2531.34	8.16560	
3	0.620		5062.67	26083.80	26083.80	-5062.67	8.16560	
3	0.930		7594.01	26083.78	26083.78	-7594.01	8.16560	
3	1.240		10125.34	26083.75	26083.75	-10125.3	8.16560	
3	1.550		12656.68	26083.72	26083.72	-12656.6	8.16560	
3	1.860		15188.02	26083.70	26083.70	-15188.0	8.16560	
3	2.170		17719.35	26083.67	26083.67	-17719.3	8.16560	
3	2.480		20250.69	26083.65	26083.65	-20250.6	8.16560	
3	2.790		22782.03	26083.62	26083.62	-22782.0	8.16560	
3	5		25313.36	26083.60	26083.60	-25313.3	8.16560	
4	5		25313.36	26083.60	26083.60	-25313.3	8.16513	
4	0.310		27844.55	26083.59	26083.59	-27844.5	8.16513	
4	0.620		30375.74	26083.59	26083.59	-30375.7	8.16513	
4	0.930		32906.93	26083.58	26083.58	-32906.9	8.16513	
4	1.240		35438.12	26083.58	26083.58	-35438.1	8.16513	
4	1.550		37969.32	26083.57	26083.57	-37969.3	8.16513	
4	1.860		40500.51	26083.56	26083.56	-40500.5	8.16513	
4	2.170		43031.70	26083.56	26083.56	-43031.7	8.16513	
4	2.480		45562.89	26083.55	26083.55	-45562.8	8.16513	
4	2.790		48094.08	26083.55	26083.55	-48094.0	8.16513	
4	6		50625.27	26083.54	26083.54	-50625.2	8.16513	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:6 Wind van links onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
5	7		0.00	-34.25	-34.25	-0.00	8.16579	
5		0.310	2531.39	-34.25	-34.25	-2531.39	8.16577	
5		0.620	5062.78	-34.25	-34.25	-5062.78	8.16575	
5		0.930	7594.16	-34.25	-34.25	-7594.16	8.16571	
5		1.240	10125.52	-34.25	-34.25	-10125.5	8.16567	
5		1.550	12656.87	-34.25	-34.25	-12656.8	8.16562	
5		1.860	15188.21	-34.25	-34.25	-15188.2	8.16557	
5		2.170	17719.52	-34.25	-34.25	-17719.5	8.16552	
5		2.480	20250.83	-34.25	-34.25	-20250.8	8.16549	
5		2.790	22782.12	-34.25	-34.25	-22782.1	8.16546	
5	8		25313.42	-34.25	-34.25	-25313.4	8.16545	
6	8		25313.42	-34.25	-34.25	-25313.4	8.16530	
6		0.310	27844.66	-34.25	-34.25	-27844.6	8.16528	
6		0.620	30375.89	-34.25	-34.25	-30375.8	8.16526	
6		0.930	32907.12	-34.25	-34.25	-32907.1	8.16522	
6		1.240	35438.33	-34.25	-34.25	-35438.3	8.16517	
6		1.550	37969.52	-34.25	-34.25	-37969.5	8.16513	
6		1.860	40500.71	-34.25	-34.25	-40500.7	8.16508	
6		2.170	43031.87	-34.26	-34.26	-43031.8	8.16503	
6		2.480	45563.02	-34.26	-34.26	-45563.0	8.16499	
6		2.790	48094.16	-34.26	-34.26	-48094.1	8.16497	
6	9		50625.30	-34.26	-34.26	-50625.3	8.16496	
7	3		50625.34	52210.66	50625.34	52210.66	8.16457	
7		0.320	50625.33	49597.98	50625.33	49597.98	8.16464	
7		0.640	50625.32	46985.27	50625.32	46985.27	8.16477	
7		0.960	50625.32	44372.53	50625.32	44372.53	8.16492	
7		1.280	50625.31	41759.73	50625.31	41759.73	8.16505	
7		1.600	50625.30	39146.90	50625.30	39146.90	8.16508	
7		1.920	50625.29	36534.09	50625.29	36534.09	8.16502	
7		2.240	50625.29	33921.29	50625.29	33921.29	8.16488	
7		2.560	50625.28	31308.60	50625.28	31308.60	8.16454	
7		2.880	50625.27	28696.02	50625.27	28696.02	8.16409	
7	6		50625.27	26083.54	50625.27	26083.54	8.16352	
8	6		50625.27	26083.54	50625.27	26083.54	8.16352	
8		0.320	50625.27	23471.37	50625.27	23471.37	8.16292	
8		0.640	50625.28	20859.31	50625.28	20859.31	8.16242	
8		0.960	50625.28	18247.39	50625.28	18247.39	8.16202	
8		1.280	50625.28	15635.61	50625.28	15635.61	8.16175	
8		1.600	50625.29	13023.88	50625.29	13023.88	8.16154	
8		1.920	50625.29	10412.21	50625.29	10412.21	8.16140	
8		2.240	50625.29	7800.58	50625.29	7800.58	8.16133	
8		2.560	50625.30	5188.96	50625.30	5188.96	8.16128	
8		2.880	50625.30	2577.35	50625.30	2577.35	8.16127	
8	9		50625.30	-34.26	50625.30	-34.26	8.16126	
9	2		25313.57	52210.65	25313.57	52210.65	8.16542	
9		0.320	25313.55	49597.72	25313.55	49597.72	8.16539	
9		0.640	25313.53	46984.80	25313.53	46984.80	8.16532	
9		0.960	25313.51	44371.91	25313.51	44371.91	8.16522	
9		1.280	25313.49	41759.06	25313.49	41759.06	8.16507	
9		1.600	25313.46	39146.28	25313.46	39146.28	8.16487	
9		1.920	25313.45	36533.55	25313.45	36533.55	8.16464	
9		2.240	25313.43	33920.90	25313.43	33920.90	8.16436	
9		2.560	25313.40	31308.37	25313.40	31308.37	8.16403	
9		2.880	25313.38	28695.94	25313.38	28695.94	8.16367	
9	5		25313.36	26083.60	25313.36	26083.60	8.16327	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:6 Wind van links onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
10	5		25313.36	26083.60	25313.36	26083.60	8.16327	
10		0.320	25313.37	23471.45	25313.37	23471.45	8.16287	
10		0.640	25313.37	20859.39	25313.37	20859.39	8.16250	
10		0.960	25313.38	18247.43	25313.38	18247.43	8.16217	
10		1.280	25313.38	15635.59	25313.38	15635.59	8.16189	
10		1.600	25313.39	13023.83	25313.39	13023.83	8.16166	
10		1.920	25313.39	10412.12	25313.39	10412.12	8.16146	
10		2.240	25313.40	7800.48	25313.40	7800.48	8.16131	
10		2.560	25313.41	5188.88	25313.41	5188.88	8.16121	
10		2.880	25313.41	2577.31	25313.41	2577.31	8.16114	
10	8		25313.42	-34.25	25313.42	-34.25	8.16111	
11	1		0.05	52210.56	36327.90	37499.69	8.16512	
11		0.446	2531.38	49597.87	36328.10	33861.86	8.16512	
11		0.891	5062.72	46985.17	36328.30	30224.03	8.16512	
11		1.337	7594.05	44372.48	36328.51	26586.20	8.16512	
11		1.782	10125.38	41759.78	36328.71	22948.36	8.16512	
11		2.228	12656.71	39147.08	36328.91	19310.53	8.16512	
11		2.673	15188.04	36534.39	36329.11	15672.70	8.16512	
11		3.119	17719.37	33921.69	36329.31	12034.87	8.16512	
11		3.564	20250.70	31308.99	36329.51	8397.04	8.16512	
11		4.010	22782.03	28696.30	36329.71	4759.21	8.16512	
11	5		25313.36	26083.60	36329.92	1121.37	8.16512	
12	5		-0.00	0.00	0.00	0.00	0.00000	
12		0.446	-0.00	0.00	0.00	0.00	0.00000	
12		0.891	-0.00	0.00	0.00	0.00	0.00000	
12		1.337	-0.00	0.00	0.00	0.00	0.00000	
12		1.782	-0.00	0.00	0.00	0.00	0.00000	
12		2.228	-0.00	0.00	0.00	0.00	0.00000	
12		2.673	-0.00	0.00	0.00	0.00	0.00000	
12		3.119	-0.00	0.00	0.00	0.00	0.00000	
12		3.564	-0.00	0.00	0.00	0.00	0.00000	
12		4.010	-0.00	0.00	0.00	0.00	0.00000	
12	3		-0.00	0.00	0.00	0.00	0.00000	
13	4		-0.00	0.00	0.00	0.00	0.00000	
13		0.446	-0.00	0.00	0.00	0.00	0.00000	
13		0.891	-0.00	0.00	0.00	0.00	0.00000	
13		1.337	-0.00	0.00	0.00	0.00	0.00000	
13		1.782	-0.00	0.00	0.00	0.00	0.00000	
13		2.228	-0.00	0.00	0.00	0.00	0.00000	
13		2.673	-0.00	0.00	0.00	0.00	0.00000	
13		3.119	-0.00	0.00	0.00	0.00	0.00000	
13		3.564	-0.00	0.00	0.00	0.00	0.00000	
13		4.010	-0.00	0.00	0.00	0.00	0.00000	
13	2		-0.00	0.00	0.00	0.00	0.00000	
14	2		25313.57	52210.65	54509.14	19886.73	8.16489	
14		0.446	27844.74	49597.94	54509.22	16249.00	8.16489	
14		0.891	30375.91	46985.23	54509.30	12611.27	8.16489	
14		1.337	32907.08	44372.52	54509.37	8973.54	8.16489	
14		1.782	35438.25	41759.80	54509.45	5335.81	8.16489	
14		2.228	37969.42	39147.09	54509.52	1698.08	8.16489	
14		2.673	40500.59	36534.39	54509.60	-1939.65	8.16489	
14		3.119	43031.76	33921.67	54509.68	-5577.38	8.16489	
14		3.564	45562.93	31308.96	54509.75	-9215.11	8.16489	
14		4.010	48094.09	28696.25	54509.83	-12852.8	8.16489	
14	6		50625.27	26083.54	54509.91	-16490.5	8.16489	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:6 Wind van links onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z	Grondspan.	
15	12		0.05	-233.41	0.05	-233.41	-4.19302	1750.598
15		0.250	0.05	814.84	0.05	814.84	-4.19303	
15		0.500	0.05	1863.10	0.05	1863.10	-4.19305	
15		0.750	0.05	2911.37	0.05	2911.37	-4.19307	
15		1.000	0.05	3959.64	0.05	3959.64	-4.19310	
15		1.250	0.05	5007.92	0.05	5007.92	-4.19314	
15		1.500	0.05	6056.21	0.05	6056.21	-4.19319	
15		1.750	0.05	7104.52	0.05	7104.52	-4.19325	
15		2.000	0.05	8152.84	0.05	8152.84	-4.19331	
15		2.250	0.05	9201.17	0.05	9201.17	-4.19338	
15	11		0.05	10249.53	0.05	10249.53	-4.19346	
Som gronddruk X: 0 Z: 29 kN								
16	11		0.05	10249.53	0.05	10249.53	-4.19346	
16		0.500	0.05	12346.30	0.05	12346.30	-4.19364	
16		1.000	0.05	14443.17	0.05	14443.17	-4.19385	
16		1.500	0.05	16540.16	0.05	16540.16	-4.19408	
16		2.000	0.05	18637.26	0.05	18637.26	-4.19434	
16		2.500	0.05	20734.50	0.05	20734.50	-4.19461	
16		3.000	0.05	22831.88	0.05	22831.88	-4.19491	
16		3.500	0.05	24929.40	0.05	24929.40	-4.19521	
16		4.000	0.05	27027.09	0.05	27027.09	-4.19553	
16		4.500	0.05	29124.94	0.05	29124.94	-4.19585	
16	10		0.05	31222.94	0.05	31222.94	-4.19618	
17	10		0.05	31222.94	0.05	31222.94	-4.19618	
17		0.500	0.05	33321.11	0.05	33321.11	-4.19650	
17		1.000	0.05	35419.45	0.05	35419.45	-4.19682	
17		1.500	0.05	37517.93	0.05	37517.93	-4.19712	
17		2.000	0.05	39616.56	0.05	39616.56	-4.19740	
17		2.500	0.05	41715.32	0.05	41715.32	-4.19766	
17		3.000	0.05	43814.21	0.05	43814.21	-4.19788	
17		3.500	0.05	45913.20	0.05	45913.20	-4.19807	
17		4.000	0.05	48012.27	0.05	48012.27	-4.19821	
17		4.500	0.05	50111.40	0.05	50111.40	-4.19831	
17	1		0.05	52210.57	0.05	52210.57	-4.19834	
18	1		0.05	52210.57	0.05	52210.57	8.16532	
18		0.320	0.05	49597.67	0.05	49597.67	8.16529	
18		0.640	0.04	46984.78	0.04	46984.78	8.16522	
18		0.960	0.04	44371.93	0.04	44371.93	8.16511	
18		1.280	0.03	41759.12	0.03	41759.12	8.16495	
18		1.600	0.03	39146.37	0.03	39146.37	8.16476	
18		1.920	0.02	36533.68	0.02	36533.68	8.16452	
18		2.240	0.02	33921.07	0.02	33921.07	8.16425	
18		2.560	0.01	31308.56	0.01	31308.56	8.16395	
18		2.880	0.01	28696.15	0.01	28696.15	8.16360	
18	4		0.00	26083.85	0.00	26083.85	8.16323	
19	4		0.00	26083.85	0.00	26083.85	8.16323	
19		0.320	0.00	23471.68	0.00	23471.68	8.16286	
19		0.640	0.00	20859.62	0.00	20859.62	8.16253	
19		0.960	0.00	18247.66	0.00	18247.66	8.16223	
19		1.280	0.00	15635.79	0.00	15635.79	8.16197	
19		1.600	0.00	13024.00	0.00	13024.00	8.16175	
19		1.920	0.00	10412.27	0.00	10412.27	8.16156	
19		2.240	0.00	7800.59	0.00	7800.59	8.16142	
19		2.560	0.00	5188.96	0.00	5188.96	8.16132	
19		2.880	0.00	2577.35	0.00	2577.35	8.16126	
19	7		0.00	-34.25	0.00	-34.25	8.16123	256.883
Som gronddruk X: 0 Z: 0 kN								

TUSSENpunTEN VERPLAATSINGEN

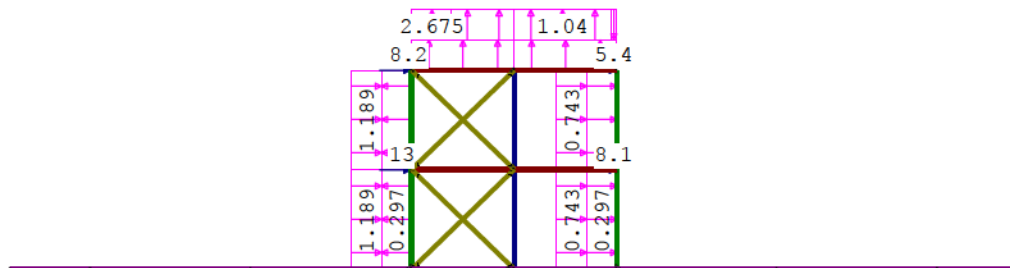
1e orde

B.G:6 Wind van links onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		Grondspan.
20	7		0.00	-34.25	0.00	-34.25	-0.07878	256.884
20		0.500	0.00	5.14	0.00	5.14	-0.07876	
20		1.000	0.00	44.51	0.00	44.51	-0.07873	
20		1.500	0.00	83.87	0.00	83.87	-0.07871	
20		2.000	0.00	123.22	0.00	123.22	-0.07868	
20		2.500	0.00	162.55	0.00	162.55	-0.07866	
20		3.000	0.00	201.88	0.00	201.88	-0.07864	
20		3.500	0.00	241.20	0.00	241.20	-0.07862	
20		4.000	0.00	280.50	0.00	280.50	-0.07861	
20		4.500	0.00	319.80	0.00	319.80	-0.07859	
20	13		0.00	359.09	0.00	359.09	-0.07858	
Som gronddruk X: 0 Z: 34 kN								
21	13		0.00	359.09	0.00	359.09	-0.07858	
21		0.500	0.00	398.38	0.00	398.38	-0.07856	
21		1.000	0.00	437.66	0.00	437.66	-0.07855	
21		1.500	0.00	476.93	0.00	476.93	-0.07854	
21		2.000	0.00	516.20	0.00	516.20	-0.07854	
21		2.500	0.00	555.47	0.00	555.47	-0.07853	
21		3.000	0.00	594.73	0.00	594.73	-0.07852	
21		3.500	0.00	633.99	0.00	633.99	-0.07852	
21		4.000	0.00	673.25	0.00	673.25	-0.07851	
21		4.500	0.00	712.50	0.00	712.50	-0.07851	
21	14		0.00	751.76	0.00	751.76	-0.07851	
22	14		0.00	751.76	0.00	751.76	-0.07851	
22		0.250	0.00	771.39	0.00	771.39	-0.07851	
22		0.500	0.00	791.01	0.00	791.01	-0.07851	
22		0.750	0.00	810.64	0.00	810.64	-0.07851	
22		1.000	0.00	830.27	0.00	830.27	-0.07851	
22		1.250	0.00	849.89	0.00	849.89	-0.07851	
22		1.500	0.00	869.52	0.00	869.52	-0.07851	
22		1.750	0.00	889.15	0.00	889.15	-0.07851	
22		2.000	0.00	908.77	0.00	908.77	-0.07851	
22		2.250	0.00	928.40	0.00	928.40	-0.07851	
22	15		0.00	948.03	0.00	948.03	-0.07851	
Totale grondreactie X: 0 Z: 63 kN								

BELASTINGEN

B.G:7 Wind van links overdruk B



KNOOPBELASTINGEN

B.G:7 Wind van links overdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	3	X	8.200	0.00	0.20	0.00	*
2	9	X	5.400	0.00	0.20	0.00	*
3	2	X	13.000	0.00	0.20	0.00	*
4	8	X	8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:7 Wind van links overdruk B

Staaftype	Type	Index	q1/p/m	q2	A	B	Ψ_0	Ψ_1	Ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw3	-1.19	-1.19	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw4	2.67	2.67	0.000	1.960	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	1.240	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	0.200	0.00	0.20	0.00
8	1:QZLokaal	Qw10	-0.30	-0.30	3.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw7	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00

TUSSENPUTTEN VERPLAATSINGEN

1e orde

B.G:7 Wind van links overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
1	1		0.05	55979.84	55979.84	-0.05	8.75473	
1		0.310	2714.02	55979.85	55979.85	-2714.02	8.75469	
1		0.620	5427.96	55979.86	55979.86	-5427.96	8.75462	
1		0.930	8141.88	55979.87	55979.87	-8141.88	8.75451	
1		1.240	10855.75	55979.88	55979.88	-10855.7	8.75437	
1		1.550	13569.58	55979.88	55979.88	-13569.5	8.75422	
1		1.860	16283.37	55979.89	55979.89	-16283.3	8.75408	
1		2.170	18997.12	55979.90	55979.90	-18997.1	8.75394	
1		2.480	21710.82	55979.91	55979.91	-21710.8	8.75383	
1		2.790	24424.49	55979.91	55979.91	-24424.4	8.75375	
1	2		27138.15	55979.93	55979.93	-27138.1	8.75371	
2	2		27138.15	55979.93	55979.93	-27138.1	8.75417	
2		0.310	29851.93	55979.93	55979.93	-29851.9	8.75413	
2		0.620	32565.70	55979.93	55979.93	-32565.7	8.75405	
2		0.930	35279.45	55979.93	55979.93	-35279.4	8.75395	
2		1.240	37993.15	55979.93	55979.93	-37993.1	8.75381	
2		1.550	40706.80	55979.93	55979.93	-40706.8	8.75366	
2		1.860	43420.42	55979.93	55979.93	-43420.4	8.75351	
2		2.170	46133.98	55979.93	55979.93	-46133.9	8.75337	
2		2.480	48847.51	55979.93	55979.93	-48847.5	8.75326	
2		2.790	51561.01	55979.93	55979.93	-51561.0	8.75319	
2	3		54274.49	55979.94	55979.94	-54274.4	8.75315	
3	4		0.00	27969.66	27969.66	0.00	8.75418	
3		0.310	2713.80	27969.63	27969.63	-2713.80	8.75418	
3		0.620	5427.59	27969.61	27969.61	-5427.59	8.75418	
3		0.930	8141.39	27969.59	27969.59	-8141.39	8.75418	
3		1.240	10855.18	27969.56	27969.56	-10855.1	8.75418	
3		1.550	13568.98	27969.54	27969.54	-13568.9	8.75418	
3		1.860	16282.77	27969.52	27969.52	-16282.7	8.75418	
3		2.170	18996.57	27969.49	27969.49	-18996.5	8.75418	
3		2.480	21710.36	27969.47	27969.47	-21710.3	8.75418	
3		2.790	24424.16	27969.44	27969.44	-24424.1	8.75418	
3	5		27137.95	27969.42	27969.42	-27137.9	8.75418	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:7 Wind van links overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
4	5		27137.95	27969.42	27969.42	-27137.9	8.75370	
4	0.310		29851.60	27969.42	27969.42	-29851.6	8.75370	
4	0.620		32565.25	27969.41	27969.41	-32565.2	8.75370	
4	0.930		35278.89	27969.41	27969.41	-35278.8	8.75370	
4	1.240		37992.55	27969.40	27969.40	-37992.5	8.75370	
4	1.550		40706.19	27969.40	27969.40	-40706.1	8.75370	
4	1.860		43419.84	27969.39	27969.39	-43419.8	8.75370	
4	2.170		46133.49	27969.39	27969.39	-46133.4	8.75370	
4	2.480		48847.14	27969.39	27969.39	-48847.1	8.75370	
4	2.790		51560.79	27969.38	27969.38	-51560.7	8.75370	
4	6		54274.43	27969.38	27969.38	-54274.4	8.75370	
5	7		0.00	-32.20	-32.20	-0.00	8.75480	
5	0.310		2713.98	-32.20	-32.20	-2713.98	8.75475	
5	0.620		5427.94	-32.20	-32.20	-5427.94	8.75466	
5	0.930		8141.87	-32.20	-32.20	-8141.87	8.75454	
5	1.240		10855.75	-32.20	-32.20	-10855.7	8.75437	
5	1.550		13569.57	-32.20	-32.20	-13569.5	8.75420	
5	1.860		16283.35	-32.20	-32.20	-16283.3	8.75403	
5	2.170		18997.08	-32.20	-32.20	-18997.0	8.75386	
5	2.480		21710.75	-32.20	-32.20	-21710.7	8.75374	
5	2.790		24424.40	-32.20	-32.20	-24424.4	8.75365	
5	8		27138.02	-32.20	-32.20	-27138.0	8.75360	
6	8		27138.02	-32.20	-32.20	-27138.0	8.75429	
6	0.310		29851.85	-32.20	-32.20	-29851.8	8.75424	
6	0.620		32565.65	-32.19	-32.19	-32565.6	8.75416	
6	0.930		35279.42	-32.19	-32.19	-35279.4	8.75403	
6	1.240		37993.14	-32.19	-32.19	-37993.1	8.75387	
6	1.550		40706.81	-32.19	-32.19	-40706.8	8.75369	
6	1.860		43420.43	-32.19	-32.19	-43420.4	8.75352	
6	2.170		46134.00	-32.19	-32.19	-46134.0	8.75336	
6	2.480		48847.52	-32.19	-32.19	-48847.5	8.75323	
6	2.790		51561.00	-32.19	-32.19	-51561.0	8.75315	
6	9		54274.48	-32.19	-32.19	-54274.4	8.75310	
7	3		54274.49	55979.94	54274.49	55979.94	8.75272	
7	0.320		54274.48	53179.05	54274.48	53179.05	8.75283	
7	0.640		54274.48	50378.11	54274.48	50378.11	8.75305	
7	0.960		54274.47	47577.09	54274.47	47577.09	8.75332	
7	1.280		54274.47	44775.99	54274.47	44775.99	8.75358	
7	1.600		54274.46	41974.80	54274.46	41974.80	8.75375	
7	1.920		54274.46	39173.59	54274.46	39173.59	8.75379	
7	2.240		54274.45	36372.38	54274.45	36372.38	8.75373	
7	2.560		54274.45	33571.25	54274.45	33571.25	8.75339	
7	2.880		54274.44	30770.26	54274.44	30770.26	8.75285	
7	6		54274.43	27969.38	54274.43	27969.38	8.75214	
8	6		54274.43	27969.38	54274.43	27969.38	8.75214	
8	0.320		54274.44	25168.89	54274.44	25168.89	8.75141	
8	0.640		54274.44	22368.53	54274.44	22368.53	8.75083	
8	0.960		54274.45	19568.32	54274.45	19568.32	8.75042	
8	1.280		54274.45	16768.23	54274.45	16768.23	8.75023	
8	1.600		54274.45	13968.17	54274.45	13968.17	8.75012	
8	1.920		54274.46	11168.13	54274.46	11168.13	8.75013	
8	2.240		54274.46	8368.08	54274.46	8368.08	8.75018	
8	2.560		54274.46	5568.02	54274.46	5568.02	8.75026	
8	2.880		54274.47	2767.92	54274.47	2767.92	8.75033	
8	9		54274.48	-32.19	54274.48	-32.19	8.75037	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:7 Wind van links overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
9	2		27138.15	55979.93	27138.15	55979.93	8.75398	
9	0.320		27138.13	53178.66	27138.13	53178.66	8.75395	
9	0.640		27138.11	50377.40	27138.11	50377.40	8.75388	
9	0.960		27138.09	47576.17	27138.09	47576.17	8.75379	
9	1.280		27138.07	44774.98	27138.07	44774.98	8.75364	
9	1.600		27138.05	41973.86	27138.05	41973.86	8.75345	
9	1.920		27138.03	39172.78	27138.03	39172.78	8.75322	
9	2.240		27138.01	36371.79	27138.01	36371.79	8.75295	
9	2.560		27137.99	33570.91	27137.99	33570.91	8.75263	
9	2.880		27137.97	30770.12	27137.97	30770.12	8.75228	
9	5		27137.95	27969.42	27137.95	27969.42	8.75189	
10	5		27137.95	27969.42	27137.95	27969.42	8.75189	
10	0.320		27137.96	25168.90	27137.96	25168.90	8.75151	
10	0.640		27137.97	22368.48	27137.97	22368.48	8.75115	
10	0.960		27137.97	19568.15	27137.97	19568.15	8.75084	
10	1.280		27137.98	16767.94	27137.98	16767.94	8.75057	
10	1.600		27137.99	13967.80	27137.99	13967.80	8.75034	
10	1.920		27137.99	11167.71	27137.99	11167.71	8.75015	
10	2.240		27138.00	8367.69	27138.00	8367.69	8.75000	
10	2.560		27138.01	5567.71	27138.01	5567.71	8.74990	
10	2.880		27138.01	2767.75	27138.01	2767.75	8.74984	
10	8		27138.02	-32.20	27138.02	-32.20	8.74981	
11	1		0.05	55979.84	38950.54	40206.94	8.75369	
11	0.446		2713.84	53178.80	38950.75	36306.88	8.75369	
11	0.891		5427.63	50377.76	38950.95	32406.81	8.75369	
11	1.337		8141.42	47576.71	38951.15	28506.75	8.75369	
11	1.782		10855.21	44775.67	38951.35	24606.68	8.75369	
11	2.228		13569.00	41974.63	38951.55	20706.62	8.75369	
11	2.673		16282.79	39173.59	38951.75	16806.56	8.75369	
11	3.119		18996.58	36372.55	38951.95	12906.49	8.75369	
11	3.564		21710.37	33571.51	38952.16	9006.43	8.75369	
11	4.010		24424.16	30770.46	38952.36	5106.37	8.75369	
11	5		27137.95	27969.42	38952.56	1206.31	8.75369	
12	5		-0.00	0.00	0.00	0.00	0.00000	
12	0.446		-0.00	0.00	0.00	0.00	0.00000	
12	0.891		-0.00	0.00	0.00	0.00	0.00000	
12	1.337		-0.00	0.00	0.00	0.00	0.00000	
12	1.782		-0.00	0.00	0.00	0.00	0.00000	
12	2.228		-0.00	0.00	0.00	0.00	0.00000	
12	2.673		-0.00	0.00	0.00	0.00	0.00000	
12	3.119		-0.00	0.00	0.00	0.00	0.00000	
12	3.564		-0.00	0.00	0.00	0.00	0.00000	
12	4.010		-0.00	0.00	0.00	0.00	0.00000	
12	3		-0.00	0.00	0.00	0.00	0.00000	
13	4		-0.00	0.00	0.00	0.00	0.00000	
13	0.446		-0.00	0.00	0.00	0.00	0.00000	
13	0.891		-0.00	0.00	0.00	0.00	0.00000	
13	1.337		-0.00	0.00	0.00	0.00	0.00000	
13	1.782		-0.00	0.00	0.00	0.00	0.00000	
13	2.228		-0.00	0.00	0.00	0.00	0.00000	
13	2.673		-0.00	0.00	0.00	0.00	0.00000	
13	3.119		-0.00	0.00	0.00	0.00	0.00000	
13	3.564		-0.00	0.00	0.00	0.00	0.00000	
13	4.010		-0.00	0.00	0.00	0.00	0.00000	
13	2		-0.00	0.00	0.00	0.00	0.00000	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:7 Wind van links overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
14	2		27138.14	55979.93	58442.27	21324.44	8.75346	
14		0.446	29851.77	53178.87	58442.35	17424.48	8.75346	
14		0.891	32565.40	50377.82	58442.43	13524.52	8.75346	
14		1.337	35279.04	47576.76	58442.50	9624.56	8.75346	
14		1.782	37992.66	44775.71	58442.58	5724.60	8.75346	
14		2.228	40706.29	41974.66	58442.66	1824.64	8.75346	
14		2.673	43419.92	39173.60	58442.73	-2075.32	8.75346	
14		3.119	46133.55	36372.55	58442.81	-5975.28	8.75346	
14		3.564	48847.18	33571.49	58442.89	-9875.24	8.75346	
14		4.010	51560.80	30770.43	58442.96	-13775.2	8.75346	
14	6		54274.43	27969.38	58443.04	-17675.1	8.75346	
15	12		0.05	-250.26	0.05	-250.26	-4.49573	1876.980
15		0.250	0.05	873.67	0.05	873.67	-4.49574	
15		0.500	0.05	1997.61	0.05	1997.61	-4.49576	
15		0.750	0.05	3121.55	0.05	3121.55	-4.49578	
15		1.000	0.05	4245.50	0.05	4245.50	-4.49582	
15		1.250	0.05	5369.46	0.05	5369.46	-4.49586	
15		1.500	0.05	6493.43	0.05	6493.43	-4.49591	
15		1.750	0.05	7617.42	0.05	7617.42	-4.49597	
15		2.000	0.05	8741.42	0.05	8741.42	-4.49604	
15		2.250	0.05	9865.44	0.05	9865.44	-4.49612	
15	11		0.05	10989.48	0.05	10989.48	-4.49620	
Som gronddruk X: 0 Z: 31 kN								
16	11		0.05	10989.48	0.05	10989.48	-4.49620	
16		0.500	0.05	13237.63	0.05	13237.63	-4.49640	
16		1.000	0.05	15485.88	0.05	15485.88	-4.49662	
16		1.500	0.05	17734.25	0.05	17734.25	-4.49687	
16		2.000	0.05	19982.75	0.05	19982.75	-4.49714	
16		2.500	0.05	22231.40	0.05	22231.40	-4.49744	
16		3.000	0.05	24480.19	0.05	24480.19	-4.49775	
16		3.500	0.05	26729.15	0.05	26729.15	-4.49808	
16		4.000	0.05	28978.28	0.05	28978.28	-4.49842	
16		4.500	0.05	31227.57	0.05	31227.57	-4.49877	
16	10		0.05	33477.04	0.05	33477.04	-4.49912	
17	10		0.05	33477.04	0.05	33477.04	-4.49912	
17		0.500	0.05	35726.69	0.05	35726.69	-4.49946	
17		1.000	0.05	37976.50	0.05	37976.50	-4.49980	
17		1.500	0.05	40226.48	0.05	40226.48	-4.50012	
17		2.000	0.05	42476.62	0.05	42476.62	-4.50042	
17		2.500	0.05	44726.91	0.05	44726.91	-4.50070	
17		3.000	0.05	46977.32	0.05	46977.32	-4.50094	
17		3.500	0.05	49227.84	0.05	49227.84	-4.50114	
17		4.000	0.05	51478.45	0.05	51478.45	-4.50130	
17		4.500	0.05	53729.13	0.05	53729.13	-4.50140	
17	1		0.05	55979.84	0.05	55979.84	-4.50143	
18	1		0.05	55979.84	0.05	55979.84	8.75388	
18		0.320	0.05	53178.60	0.05	53178.60	8.75386	
18		0.640	0.04	50377.38	0.04	50377.38	8.75379	
18		0.960	0.04	47576.18	0.04	47576.18	8.75368	
18		1.280	0.03	44775.03	0.03	44775.03	8.75353	
18		1.600	0.03	41973.93	0.03	41973.93	8.75333	
18		1.920	0.02	39172.90	0.02	39172.90	8.75311	
18		2.240	0.02	36371.94	0.02	36371.94	8.75285	
18		2.560	0.01	33571.08	0.01	33571.08	8.75255	
18		2.880	0.01	30770.32	0.01	30770.32	8.75222	
18	4		0.00	27969.66	0.00	27969.66	8.75186	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:7 Wind van links overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
19	4		0.00	27969.66	0.00	27969.66	8.75186		
19		0.320	0.00	25169.13	0.00	25169.13	8.75150		
19		0.640	0.00	22368.70	0.00	22368.70	8.75118		
19		0.960	0.00	19568.37	0.00	19568.37	8.75089		
19		1.280	0.00	16768.13	0.00	16768.13	8.75064		
19		1.600	0.00	13967.96	0.00	13967.96	8.75042		
19		1.920	0.00	11167.85	0.00	11167.85	8.75025		
19		2.240	0.00	8367.79	0.00	8367.79	8.75011		
19		2.560	0.00	5567.78	0.00	5567.78	8.75001		
19		2.880	0.00	2767.78	0.00	2767.78	8.74995		
19	7		0.00	-32.20	0.00	-32.20	8.74993		241.472
Som gronddruk X: 0 Z: 0 kN									
20	7		0.00	-32.20	0.00	-32.20	-0.07406		241.473
20		0.500	0.00	4.83	0.00	4.83	-0.07403		
20		1.000	0.00	41.84	0.00	41.84	-0.07401		
20		1.500	0.00	78.84	0.00	78.84	-0.07398		
20		2.000	0.00	115.82	0.00	115.82	-0.07396		
20		2.500	0.00	152.80	0.00	152.80	-0.07394		
20		3.000	0.00	189.77	0.00	189.77	-0.07392		
20		3.500	0.00	226.72	0.00	226.72	-0.07391		
20		4.000	0.00	263.67	0.00	263.67	-0.07389		
20		4.500	0.00	300.61	0.00	300.61	-0.07388		
20	13		0.00	337.55	0.00	337.55	-0.07386		
Som gronddruk X: 0 Z: 31 kN									
21	13		0.00	337.54	0.00	337.54	-0.07386		
21		0.500	0.00	374.47	0.00	374.47	-0.07385		
21		1.000	0.00	411.39	0.00	411.39	-0.07384		
21		1.500	0.00	448.31	0.00	448.31	-0.07383		
21		2.000	0.00	485.23	0.00	485.23	-0.07382		
21		2.500	0.00	522.13	0.00	522.13	-0.07382		
21		3.000	0.00	559.04	0.00	559.04	-0.07381		
21		3.500	0.00	595.95	0.00	595.95	-0.07381		
21		4.000	0.00	632.85	0.00	632.85	-0.07380		
21		4.500	0.00	669.75	0.00	669.75	-0.07380		
21	14		0.00	706.65	0.00	706.65	-0.07380		
22	14		0.00	706.65	0.00	706.65	-0.07380		
22		0.250	0.00	725.10	0.00	725.10	-0.07380		
22		0.500	0.00	743.55	0.00	743.55	-0.07380		
22		0.750	0.00	762.00	0.00	762.00	-0.07380		
22		1.000	0.00	780.45	0.00	780.45	-0.07380		
22		1.250	0.00	798.90	0.00	798.90	-0.07380		
22		1.500	0.00	817.34	0.00	817.34	-0.07380		
22		1.750	0.00	835.79	0.00	835.79	-0.07380		
22		2.000	0.00	854.24	0.00	854.24	-0.07380		
22		2.250	0.00	872.69	0.00	872.69	-0.07380		
22	15		0.00	891.14	0.00	891.14	-0.07380		
Totale grondreactie X: 0 Z: 63 kN									

TUSSENpunten Verplaatsingen

1e orde

B.G:8 Wind van rechts onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
2	2		-25322.8	-34.40	-34.40	25322.83	-8.16838	
2		0.310	-27855.0	-34.41	-34.41	27855.03	-8.16837	
2		0.620	-30387.2	-34.42	-34.42	30387.22	-8.16834	
2		0.930	-32919.4	-34.43	-34.43	32919.40	-8.16831	
2		1.240	-35451.5	-34.43	-34.43	35451.57	-8.16826	
2		1.550	-37983.7	-34.44	-34.44	37983.72	-8.16821	
2		1.860	-40515.8	-34.45	-34.45	40515.86	-8.16816	
2		2.170	-43047.9	-34.45	-34.45	43047.98	-8.16811	
2		2.480	-45580.0	-34.46	-34.46	45580.09	-8.16808	
2		2.790	-48112.1	-34.47	-34.47	48112.19	-8.16805	
2	3		-50644.2	-34.48	-34.48	50644.29	-8.16804	
3	4		0.00	26102.40	26102.40	0.00	-8.16872	
3		0.310	-2532.30	26102.41	26102.41	2532.30	-8.16872	
3		0.620	-5064.61	26102.42	26102.42	5064.61	-8.16872	
3		0.930	-7596.91	26102.42	26102.42	7596.91	-8.16872	
3		1.240	-10129.2	26102.43	26102.43	10129.22	-8.16872	
3		1.550	-12661.5	26102.44	26102.44	12661.52	-8.16872	
3		1.860	-15193.8	26102.45	26102.45	15193.83	-8.16872	
3		2.170	-17726.1	26102.46	26102.46	17726.13	-8.16872	
3		2.480	-20258.4	26102.46	26102.46	20258.43	-8.16872	
3		2.790	-22790.7	26102.47	26102.47	22790.74	-8.16872	
3	5		-25323.0	26102.48	26102.48	25323.04	-8.16872	
4	5		-25323.0	26102.48	26102.48	25323.04	-8.16816	
4		0.310	-27855.1	26102.48	26102.48	27855.17	-8.16816	
4		0.620	-30387.3	26102.48	26102.48	30387.30	-8.16816	
4		0.930	-32919.4	26102.48	26102.48	32919.43	-8.16816	
4		1.240	-35451.5	26102.48	26102.48	35451.57	-8.16816	
4		1.550	-37983.7	26102.48	26102.48	37983.70	-8.16816	
4		1.860	-40515.8	26102.49	26102.49	40515.83	-8.16816	
4		2.170	-43047.9	26102.49	26102.49	43047.96	-8.16816	
4		2.480	-45580.0	26102.49	26102.49	45580.09	-8.16816	
4		2.790	-48112.2	26102.49	26102.49	48112.22	-8.16816	
4	6		-50644.3	26102.49	26102.49	50644.35	-8.16816	
5	7		-0.00	52232.28	52232.28	0.00	-8.16969	
5		0.310	-2532.60	52232.28	52232.28	2532.60	-8.16962	
5		0.620	-5065.16	52232.28	52232.28	5065.16	-8.16948	
5		0.930	-7597.68	52232.28	52232.28	7597.68	-8.16929	
5		1.240	-10130.1	52232.28	52232.28	10130.11	-8.16903	
5		1.550	-12662.4	52232.28	52232.28	12662.46	-8.16876	
5		1.860	-15194.7	52232.29	52232.29	15194.74	-8.16849	
5		2.170	-17726.9	52232.29	52232.29	17726.94	-8.16823	
5		2.480	-20259.0	52232.29	52232.29	20259.05	-8.16803	
5		2.790	-22791.1	52232.29	52232.29	22791.12	-8.16789	
5	8		-25323.1	52232.29	52232.29	25323.15	-8.16782	
6	8		-25323.1	52232.29	52232.29	25323.15	-8.16908	
6		0.310	-27855.5	52232.29	52232.29	27855.56	-8.16901	
6		0.620	-30387.9	52232.29	52232.29	30387.93	-8.16887	
6		0.930	-32920.2	52232.29	52232.29	32920.26	-8.16868	
6		1.240	-35452.5	52232.30	52232.30	35452.51	-8.16842	
6		1.550	-37984.6	52232.30	52232.30	37984.67	-8.16815	
6		1.860	-40516.7	52232.30	52232.30	40516.76	-8.16788	
6		2.170	-43048.7	52232.30	52232.30	43048.77	-8.16762	
6		2.480	-45580.6	52232.30	52232.30	45580.68	-8.16742	
6		2.790	-48112.5	52232.30	52232.30	48112.57	-8.16729	
6	9		-50644.4	52232.30	52232.30	50644.41	-8.16721	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:8 Wind van rechts onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
7	3		-50644.2	-34.48	-50644.2	-34.48	-8.16855	
7		0.320	-50644.2	2579.45	-50644.2	2579.45	-8.16850	
7		0.640	-50644.3	5193.36	-50644.3	5193.36	-8.16840	
7		0.960	-50644.3	7807.21	-50644.3	7807.21	-8.16824	
7		1.280	-50644.3	10421.03	-50644.3	10421.03	-8.16805	
7		1.600	-50644.3	13034.77	-50644.3	13034.77	-8.16783	
7		1.920	-50644.3	15648.43	-50644.3	15648.43	-8.16761	
7		2.240	-50644.3	18262.04	-50644.3	18262.04	-8.16739	
7		2.560	-50644.3	20875.57	-50644.3	20875.57	-8.16720	
7		2.880	-50644.3	23489.05	-50644.3	23489.05	-8.16705	
7	6		-50644.3	26102.49	-50644.3	26102.49	-8.16693	
8	6		-50644.3	26102.49	-50644.3	26102.49	-8.16693	
8		0.320	-50644.3	28715.88	-50644.3	28715.88	-8.16679	
8		0.640	-50644.3	31329.22	-50644.3	31329.22	-8.16659	
8		0.960	-50644.3	33942.51	-50644.3	33942.51	-8.16633	
8		1.280	-50644.3	36555.65	-50644.3	36555.65	-8.16599	
8		1.600	-50644.3	39168.71	-50644.3	39168.71	-8.16562	
8		1.920	-50644.3	41781.67	-50644.3	41781.67	-8.16523	
8		2.240	-50644.3	44394.47	-50644.3	44394.47	-8.16484	
8		2.560	-50644.4	47007.16	-50644.4	47007.16	-8.16450	
8		2.880	-50644.4	49619.77	-50644.4	49619.77	-8.16425	
8	9		-50644.4	52232.30	-50644.4	52232.30	-8.16412	
9	2		-25322.8	-34.40	-25322.8	-34.40	-8.16833	
9		0.320	-25322.8	2579.46	-25322.8	2579.46	-8.16831	
9		0.640	-25322.8	5193.31	-25322.8	5193.31	-8.16825	
9		0.960	-25322.9	7807.14	-25322.9	7807.14	-8.16818	
9		1.280	-25322.9	10420.94	-25322.9	10420.94	-8.16806	
9		1.600	-25322.9	13034.69	-25322.9	13034.69	-8.16791	
9		1.920	-25322.9	15648.39	-25322.9	15648.39	-8.16773	
9		2.240	-25322.9	18262.04	-25322.9	18262.04	-8.16751	
9		2.560	-25323.0	20875.59	-25323.0	20875.59	-8.16726	
9		2.880	-25323.0	23489.07	-25323.0	23489.07	-8.16698	
9	5		-25323.0	26102.48	-25323.0	26102.48	-8.16667	
10	5		-25323.0	26102.48	-25323.0	26102.48	-8.16667	
10		0.320	-25323.0	28715.74	-25323.0	28715.74	-8.16636	
10		0.640	-25323.0	31328.93	-25323.0	31328.93	-8.16608	
10		0.960	-25323.0	33942.05	-25323.0	33942.05	-8.16583	
10		1.280	-25323.0	36555.07	-25323.0	36555.07	-8.16562	
10		1.600	-25323.1	39168.04	-25323.1	39168.04	-8.16544	
10		1.920	-25323.1	41780.95	-25323.1	41780.95	-8.16528	
10		2.240	-25323.1	44393.82	-25323.1	44393.82	-8.16517	
10		2.560	-25323.1	47006.66	-25323.1	47006.66	-8.16509	
10		2.880	-25323.1	49619.48	-25323.1	49619.48	-8.16504	
10	8		-25323.1	52232.29	-25323.1	52232.29	-8.16501	
11	1		0.00	0.00	0.00	0.00	0.00000	
11		0.446	0.00	0.00	0.00	0.00	0.00000	
11		0.891	0.00	0.00	0.00	0.00	0.00000	
11		1.337	0.00	0.00	0.00	0.00	0.00000	
11		1.782	0.00	0.00	0.00	0.00	0.00000	
11		2.228	0.00	0.00	0.00	0.00	0.00000	
11		2.673	0.00	0.00	0.00	0.00	0.00000	
11		3.119	0.00	0.00	0.00	0.00	0.00000	
11		3.564	0.00	0.00	0.00	0.00	0.00000	
11		4.010	0.00	0.00	0.00	0.00	0.00000	
11	5		0.00	0.00	0.00	0.00	0.00000	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:8 Wind van rechts onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
12	5		-25323.0	26102.48	36350.01	-1128.20	-8.16797	
12	0.446		-27855.1	23488.79	36350.09	2510.90	-8.16797	
12	0.891		-30387.2	20875.09	36350.16	6150.00	-8.16797	
12	1.337		-32919.4	18261.39	36350.24	9789.11	-8.16797	
12	1.782		-35451.5	15647.70	36350.32	13428.21	-8.16797	
12	2.228		-37983.6	13034.00	36350.39	17067.31	-8.16797	
12	2.673		-40515.7	10420.31	36350.47	20706.41	-8.16797	
12	3.119		-43047.9	7806.61	36350.54	24345.51	-8.16797	
12	3.564		-45580.0	5192.92	36350.62	27984.61	-8.16797	
12	4.010		-48112.1	2579.22	36350.70	31623.71	-8.16797	
12	3		-50644.2	-34.48	36350.77	35262.81	-8.16797	
13	4		0.00	26102.40	18161.92	-18747.7	-8.16819	
13	0.446		-2532.28	23488.72	18162.12	-15108.5	-8.16819	
13	0.891		-5064.57	20875.04	18162.33	-11469.3	-8.16819	
13	1.337		-7596.85	18261.36	18162.53	-7830.19	-8.16819	
13	1.782		-10129.1	15647.68	18162.73	-4190.99	-8.16819	
13	2.228		-12661.4	13034.00	18162.93	-551.79	-8.16819	
13	2.673		-15193.7	10420.32	18163.13	3087.41	-8.16819	
13	3.119		-17725.9	7806.64	18163.34	6726.61	-8.16819	
13	3.564		-20258.2	5192.96	18163.54	10365.82	-8.16819	
13	4.010		-22790.5	2579.28	18163.74	14005.02	-8.16819	
13	2		-25322.8	-34.40	18163.94	17644.22	-8.16819	
14	2		0.00	0.00	0.00	0.00	0.00000	
14	0.446		0.00	0.00	0.00	0.00	0.00000	
14	0.891		0.00	0.00	0.00	0.00	0.00000	
14	1.337		0.00	0.00	0.00	0.00	0.00000	
14	1.782		0.00	0.00	0.00	0.00	0.00000	
14	2.228		0.00	0.00	0.00	0.00	0.00000	
14	2.673		0.00	0.00	0.00	0.00	0.00000	
14	3.119		0.00	0.00	0.00	0.00	0.00000	
14	3.564		0.00	0.00	0.00	0.00	0.00000	
14	4.010		0.00	0.00	0.00	0.00	0.00000	
14	6		0.00	0.00	0.00	0.00	0.00000	
15	12		-0.00	944.95	-0.00	944.95	0.07825	
15	0.250		-0.00	925.38	-0.00	925.38	0.07825	
15	0.500		-0.00	905.82	-0.00	905.82	0.07825	
15	0.750		-0.00	886.26	-0.00	886.26	0.07825	
15	1.000		-0.00	866.70	-0.00	866.70	0.07825	
15	1.250		-0.00	847.13	-0.00	847.13	0.07825	
15	1.500		-0.00	827.57	-0.00	827.57	0.07825	
15	1.750		-0.00	808.01	-0.00	808.01	0.07825	
15	2.000		-0.00	788.44	-0.00	788.44	0.07825	
15	2.250		-0.00	768.88	-0.00	768.88	0.07825	
15	11		-0.00	749.32	-0.00	749.32	0.07825	
16	11		-0.00	749.32	-0.00	749.32	0.07825	
16	0.500		-0.00	710.19	-0.00	710.19	0.07826	
16	1.000		-0.00	671.06	-0.00	671.06	0.07826	
16	1.500		-0.00	631.93	-0.00	631.93	0.07826	
16	2.000		-0.00	592.80	-0.00	592.80	0.07827	
16	2.500		-0.00	553.66	-0.00	553.66	0.07827	
16	3.000		-0.00	514.52	-0.00	514.52	0.07828	
16	3.500		-0.00	475.38	-0.00	475.38	0.07829	
16	4.000		-0.00	436.24	-0.00	436.24	0.07830	
16	4.500		-0.00	397.08	-0.00	397.08	0.07831	
16	10		-0.00	357.93	-0.00	357.93	0.07832	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:8 Wind van rechts onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
17	10		-0.00	357.93	-0.00	357.93	0.07832	
17	0.500		-0.00	318.76	-0.00	318.76	0.07833	
17	1.000		-0.00	279.59	-0.00	279.59	0.07835	
17	1.500		-0.00	240.41	-0.00	240.41	0.07837	
17	2.000		-0.00	201.23	-0.00	201.23	0.07839	
17	2.500		-0.00	162.03	-0.00	162.03	0.07841	
17	3.000		-0.00	122.82	-0.00	122.82	0.07843	
17	3.500		-0.00	83.60	-0.00	83.60	0.07845	
17	4.000		-0.00	44.37	-0.00	44.37	0.07848	
17	4.500		-0.00	5.12	-0.00	5.12	0.07850	
17	1		-0.00	-34.14	-0.00	-34.14	0.07853	256.024
Som gronddruk X: 0 Z: 33 kN								
18	1		-0.00	-34.14	-0.00	-34.14	-8.16819	256.024
18	0.320		-0.00	2579.68	-0.00	2579.68	-8.16817	
18	0.640		-0.00	5193.49	-0.00	5193.49	-8.16812	
18	0.960		-0.00	7807.28	-0.00	7807.28	-8.16805	
18	1.280		-0.00	10421.04	-0.00	10421.04	-8.16794	
18	1.600		-0.00	13034.76	-0.00	13034.76	-8.16780	
18	1.920		-0.00	15648.43	-0.00	15648.43	-8.16763	
18	2.240		-0.00	18262.04	-0.00	18262.04	-8.16742	
18	2.560		-0.00	20875.57	-0.00	20875.57	-8.16718	
18	2.880		-0.00	23489.03	-0.00	23489.03	-8.16691	
18	4		0.00	26102.40	0.00	26102.40	-8.16661	
Som gronddruk X: 0 Z: 0 kN								
19	4		0.00	26102.40	0.00	26102.40	-8.16661	
19	0.320		-0.00	28715.66	-0.00	28715.66	-8.16630	
19	0.640		-0.00	31328.83	-0.00	31328.83	-8.16604	
19	0.960		-0.00	33941.93	-0.00	33941.93	-8.16580	
19	1.280		-0.00	36554.95	-0.00	36554.95	-8.16561	
19	1.600		-0.00	39167.92	-0.00	39167.92	-8.16545	
19	1.920		-0.00	41780.84	-0.00	41780.84	-8.16532	
19	2.240		-0.00	44393.73	-0.00	44393.73	-8.16523	
19	2.560		-0.00	47006.59	-0.00	47006.59	-8.16516	
19	2.880		-0.00	49619.44	-0.00	49619.44	-8.16513	
19	7		-0.00	52232.28	-0.00	52232.28	-8.16511	
20	7		-0.00	52232.28	-0.00	52232.28	4.20008	
20	0.500		-0.00	50132.24	-0.00	50132.24	4.20005	
20	1.000		-0.00	48032.23	-0.00	48032.23	4.19996	
20	1.500		-0.00	45932.29	-0.00	45932.29	4.19982	
20	2.000		-0.00	43832.43	-0.00	43832.43	4.19963	
20	2.500		-0.00	41732.66	-0.00	41732.66	4.19940	
20	3.000		-0.00	39633.03	-0.00	39633.03	4.19914	
20	3.500		-0.00	37533.53	-0.00	37533.53	4.19886	
20	4.000		-0.00	35434.17	-0.00	35434.17	4.19856	
20	4.500		-0.00	33334.97	-0.00	33334.97	4.19825	
20	13		-0.00	31235.93	-0.00	31235.93	4.19792	
21	13		-0.00	31235.93	-0.00	31235.93	4.19792	
21	0.500		-0.00	29137.04	-0.00	29137.04	4.19760	
21	1.000		-0.00	27038.33	-0.00	27038.33	4.19728	
21	1.500		-0.00	24939.77	-0.00	24939.77	4.19696	
21	2.000		-0.00	22841.37	-0.00	22841.37	4.19665	
21	2.500		-0.00	20743.12	-0.00	20743.12	4.19636	
21	3.000		-0.00	18645.01	-0.00	18645.01	4.19608	
21	3.500		-0.00	16547.03	-0.00	16547.03	4.19583	
21	4.000		-0.00	14449.18	-0.00	14449.18	4.19559	
21	4.500		-0.00	12351.43	-0.00	12351.43	4.19539	
21	14		-0.00	10253.79	-0.00	10253.79	4.19521	

TUSSENpunTEN VERPLAATSINGEN

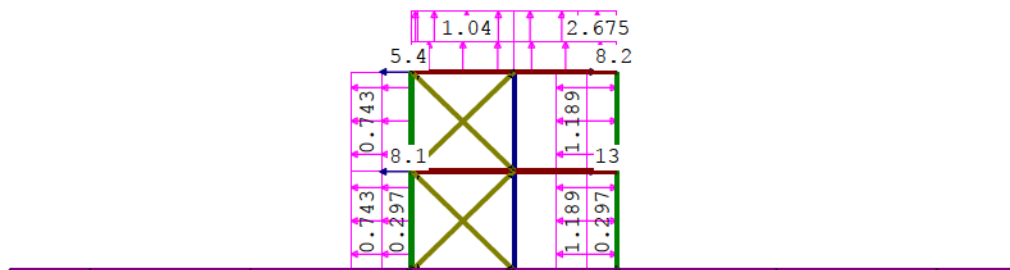
1e orde

B.G:8 Wind van rechts onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z	[kN/m²]	
22	14		-0.00	10253.79	-0.00	10253.79	4.19521	
22		0.250	-0.00	9205.00	-0.00	9205.00	4.19513	
22		0.500	-0.00	8156.22	-0.00	8156.22	4.19505	
22		0.750	-0.00	7107.47	-0.00	7107.47	4.19499	
22		1.000	-0.00	6058.73	-0.00	6058.73	4.19493	
22		1.250	-0.00	5010.00	-0.00	5010.00	4.19489	
22		1.500	-0.00	3961.28	-0.00	3961.28	4.19485	
22		1.750	-0.00	2912.58	-0.00	2912.58	4.19481	
22		2.000	-0.00	1863.88	-0.00	1863.88	4.19479	
22		2.250	-0.00	815.18	-0.00	815.18	4.19477	
22	15		-0.00	-233.51	-0.00	-233.51	4.19477	1751.332
Som gronddruk X: 0 Z: 29 kN								
Totale grondreactie X: 0 Z: 63 kN								

BELASTINGEN

B.G:9 Wind van rechts overdruk A



KNOOPBELASTINGEN

B.G:9 Wind van rechts overdruk A

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:9 Wind van rechts overdruk A

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00
7	1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw6	0.30	0.30	0.000	3.000	0.00	0.20	0.00
2	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:9 Wind van rechts overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
1	1		-0.00	-32.08	-32.08	0.00	-8.75816	
1	0.310		-2715.03	-32.11	-32.11	2715.03	-8.75812	
1	0.620		-5430.03	-32.13	-32.13	5430.03	-8.75803	
1	0.930		-8145.00	-32.16	-32.16	8145.00	-8.75790	
1	1.240		-10859.9	-32.19	-32.19	10859.92	-8.75774	
1	1.550		-13574.7	-32.21	-32.21	13574.79	-8.75757	
1	1.860		-16289.6	-32.24	-32.24	16289.62	-8.75739	
1	2.170		-19004.3	-32.27	-32.27	19004.39	-8.75723	
1	2.480		-21719.1	-32.29	-32.29	21719.10	-8.75711	
1	2.790		-24433.7	-32.32	-32.32	24433.79	-8.75702	
1	2		-27148.4	-32.35	-32.35	27148.46	-8.75697	
2	2		-27148.4	-32.35	-32.35	27148.46	-8.75771	
2	0.310		-29863.3	-32.35	-32.35	29863.34	-8.75767	
2	0.620		-32578.2	-32.36	-32.36	32578.21	-8.75758	
2	0.930		-35293.0	-32.37	-32.37	35293.05	-8.75746	
2	1.240		-38007.8	-32.37	-32.37	38007.83	-8.75729	
2	1.550		-40722.5	-32.38	-32.38	40722.56	-8.75712	
2	1.860		-43437.2	-32.39	-32.39	43437.24	-8.75695	
2	2.170		-46151.8	-32.39	-32.39	46151.87	-8.75678	
2	2.480		-48866.4	-32.40	-32.40	48866.45	-8.75666	
2	2.790		-51581.0	-32.41	-32.41	51581.00	-8.75657	
2	3		-54295.5	-32.41	-32.41	54295.53	-8.75652	
3	4		0.00	27988.97	27988.97	0.00	-8.75763	
3	0.310		-2714.87	27988.98	27988.98	2714.87	-8.75763	
3	0.620		-5429.73	27988.99	27988.99	5429.73	-8.75763	
3	0.930		-8144.60	27989.00	27989.00	8144.60	-8.75763	
3	1.240		-10859.4	27989.01	27989.01	10859.46	-8.75763	
3	1.550		-13574.3	27989.02	27989.02	13574.33	-8.75763	
3	1.860		-16289.1	27989.03	27989.03	16289.19	-8.75763	
3	2.170		-19004.0	27989.04	27989.04	19004.06	-8.75763	
3	2.480		-21718.9	27989.05	27989.05	21718.92	-8.75763	
3	2.790		-24433.7	27989.06	27989.06	24433.79	-8.75763	
3	5		-27148.6	27989.07	27989.07	27148.65	-8.75763	
4	5		-27148.6	27989.07	27989.07	27148.65	-8.75708	
4	0.310		-29863.3	27989.07	27989.07	29863.35	-8.75708	
4	0.620		-32578.0	27989.07	27989.07	32578.04	-8.75708	
4	0.930		-35292.7	27989.07	27989.07	35292.73	-8.75708	
4	1.240		-38007.4	27989.08	27989.08	38007.43	-8.75708	
4	1.550		-40722.1	27989.08	27989.08	40722.12	-8.75708	
4	1.860		-43436.8	27989.08	27989.08	43436.81	-8.75708	
4	2.170		-46151.5	27989.08	27989.08	46151.51	-8.75708	
4	2.480		-48866.2	27989.09	27989.09	48866.20	-8.75708	
4	2.790		-51580.8	27989.09	27989.09	51580.89	-8.75708	
4	6		-54295.5	27989.09	27989.09	54295.59	-8.75708	
5	7		-0.00	56003.08	56003.08	0.00	-8.75817	
5	0.310		-2715.03	56003.08	56003.08	2715.03	-8.75813	
5	0.620		-5430.04	56003.08	56003.08	5430.04	-8.75806	
5	0.930		-8145.02	56003.09	56003.09	8145.02	-8.75795	
5	1.240		-10859.9	56003.09	56003.09	10859.96	-8.75781	
5	1.550		-13574.8	56003.09	56003.09	13574.86	-8.75766	
5	1.860		-16289.7	56003.09	56003.09	16289.71	-8.75751	
5	2.170		-19004.5	56003.09	56003.09	19004.52	-8.75737	
5	2.480		-21719.2	56003.09	56003.09	21719.29	-8.75726	
5	2.790		-24434.0	56003.10	56003.10	24434.03	-8.75719	
5	8		-27148.7	56003.10	56003.10	27148.75	-8.75715	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:9 Wind van rechts overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
6	8		-27148.7	56003.10	56003.10	27148.75	-8.75757	
6	0.310		-29863.5	56003.10	56003.10	29863.59	-8.75753	
6	0.620		-32578.4	56003.10	56003.10	32578.41	-8.75746	
6	0.930		-35293.2	56003.11	56003.11	35293.21	-8.75735	
6	1.240		-38007.9	56003.11	56003.11	38007.97	-8.75721	
6	1.550		-40722.6	56003.11	56003.11	40722.68	-8.75706	
6	1.860		-43437.3	56003.11	56003.11	43437.35	-8.75691	
6	2.170		-46151.9	56003.11	56003.11	46151.97	-8.75678	
6	2.480		-48866.5	56003.11	56003.11	48866.55	-8.75667	
6	2.790		-51581.1	56003.11	56003.11	51581.11	-8.75659	
6	9		-54295.6	56003.12	56003.12	54295.64	-8.75655	
7	3		-54295.5	-32.41	-54295.5	-32.41	-8.75789	
7	0.320		-54295.5	2770.09	-54295.5	2770.09	-8.75779	
7	0.640		-54295.5	5572.57	-54295.5	5572.57	-8.75761	
7	0.960		-54295.5	8374.95	-54295.5	8374.95	-8.75733	
7	1.280		-54295.5	11177.26	-54295.5	11177.26	-8.75701	
7	1.600		-54295.5	13979.44	-54295.5	13979.44	-8.75666	
7	1.920		-54295.5	16781.51	-54295.5	16781.51	-8.75633	
7	2.240		-54295.5	19583.51	-54295.5	19583.51	-8.75604	
7	2.560		-54295.5	22385.39	-54295.5	22385.39	-8.75585	
7	2.880		-54295.5	25187.25	-54295.5	25187.25	-8.75578	
7	6		-54295.5	27989.09	-54295.5	27989.09	-8.75580	
8	6		-54295.5	27989.09	-54295.5	27989.09	-8.75580	
8	0.320		-54295.5	30790.96	-54295.5	30790.96	-8.75580	
8	0.640		-54295.6	33592.79	-54295.6	33592.79	-8.75567	
8	0.960		-54295.6	36394.59	-54295.6	36394.59	-8.75542	
8	1.280		-54295.6	39196.23	-54295.6	39196.23	-8.75500	
8	1.600		-54295.6	41997.77	-54295.6	41997.77	-8.75453	
8	1.920		-54295.6	44799.16	-54295.6	44799.16	-8.75401	
8	2.240		-54295.6	47600.34	-54295.6	47600.34	-8.75348	
8	2.560		-54295.6	50401.37	-54295.6	50401.37	-8.75302	
8	2.880		-54295.6	53202.29	-54295.6	53202.29	-8.75268	
8	9		-54295.6	56003.12	-54295.6	56003.12	-8.75252	
9	2		-27148.4	-32.35	-27148.4	-32.35	-8.75727	
9	0.320		-27148.4	2769.98	-27148.4	2769.98	-8.75724	
9	0.640		-27148.5	5572.29	-27148.5	5572.29	-8.75719	
9	0.960		-27148.5	8374.58	-27148.5	8374.58	-8.75711	
9	1.280		-27148.5	11176.83	-27148.5	11176.83	-8.75699	
9	1.600		-27148.5	13979.04	-27148.5	13979.04	-8.75683	
9	1.920		-27148.5	16781.20	-27148.5	16781.20	-8.75664	
9	2.240		-27148.6	19583.29	-27148.6	19583.29	-8.75642	
9	2.560		-27148.6	22385.29	-27148.6	22385.29	-8.75615	
9	2.880		-27148.6	25187.22	-27148.6	25187.22	-8.75586	
9	5		-27148.6	27989.07	-27148.6	27989.07	-8.75554	
10	5		-27148.6	27989.07	-27148.6	27989.07	-8.75554	
10	0.320		-27148.6	30790.76	-27148.6	30790.76	-8.75522	
10	0.640		-27148.6	33592.38	-27148.6	33592.38	-8.75492	
10	0.960		-27148.6	36393.93	-27148.6	36393.93	-8.75466	
10	1.280		-27148.6	39195.38	-27148.6	39195.38	-8.75444	
10	1.600		-27148.7	41996.76	-27148.7	41996.76	-8.75425	
10	1.920		-27148.7	44798.10	-27148.7	44798.10	-8.75409	
10	2.240		-27148.7	47599.39	-27148.7	47599.39	-8.75397	
10	2.560		-27148.7	50400.64	-27148.7	50400.64	-8.75389	
10	2.880		-27148.7	53201.88	-27148.7	53201.88	-8.75383	
10	8		-27148.7	56003.10	-27148.7	56003.10	-8.75381	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:9 Wind van rechts overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
11	1		0.00	0.00	0.00	0.00	0.00000	
11		0.446	0.00	0.00	0.00	0.00	0.00000	
11		0.891	0.00	0.00	0.00	0.00	0.00000	
11		1.337	0.00	0.00	0.00	0.00	0.00000	
11		1.782	0.00	0.00	0.00	0.00	0.00000	
11		2.228	0.00	0.00	0.00	0.00	0.00000	
11		2.673	0.00	0.00	0.00	0.00	0.00000	
11		3.119	0.00	0.00	0.00	0.00	0.00000	
11		3.564	0.00	0.00	0.00	0.00	0.00000	
11		4.010	0.00	0.00	0.00	0.00	0.00000	
11	5		0.00	0.00	0.00	0.00	0.00000	
12	5		-27148.6	27989.07	38973.91	-1212.97	-8.75688	
12		0.446	-29863.3	25186.92	38973.99	2688.51	-8.75688	
12		0.891	-32578.0	22384.77	38974.07	6589.99	-8.75688	
12		1.337	-35292.7	19582.62	38974.14	10491.48	-8.75688	
12		1.782	-38007.4	16780.48	38974.22	14392.96	-8.75688	
12		2.228	-40722.0	13978.33	38974.30	18294.44	-8.75688	
12		2.673	-43436.7	11176.18	38974.37	22195.92	-8.75688	
12		3.119	-46151.4	8374.03	38974.45	26097.40	-8.75688	
12		3.564	-48866.1	5571.88	38974.53	29998.89	-8.75688	
12		4.010	-51580.8	2769.74	38974.61	33900.37	-8.75688	
12	3		-54295.5	-32.41	38974.68	37801.85	-8.75688	
13	4		0.00	27988.97	19474.59	-20102.8	-8.75710	
13		0.446	-2714.84	25186.84	19474.79	-16201.2	-8.75710	
13		0.891	-5429.69	22384.71	19475.00	-12299.6	-8.75710	
13		1.337	-8144.54	19582.58	19475.20	-8398.06	-8.75710	
13		1.782	-10859.3	16780.45	19475.40	-4496.48	-8.75710	
13		2.228	-13574.2	13978.31	19475.60	-594.90	-8.75710	
13		2.673	-16289.0	11176.18	19475.80	3306.68	-8.75710	
13		3.119	-19003.9	8374.05	19476.00	7208.26	-8.75710	
13		3.564	-21718.7	5571.92	19476.21	11109.84	-8.75710	
13		4.010	-24433.6	2769.79	19476.41	15011.42	-8.75710	
13	2		-27148.4	-32.34	19476.61	18913.00	-8.75710	
14	2		0.00	0.00	0.00	0.00	0.00000	
14		0.446	0.00	0.00	0.00	0.00	0.00000	
14		0.891	0.00	0.00	0.00	0.00	0.00000	
14		1.337	0.00	0.00	0.00	0.00	0.00000	
14		1.782	0.00	0.00	0.00	0.00	0.00000	
14		2.228	0.00	0.00	0.00	0.00	0.00000	
14		2.673	0.00	0.00	0.00	0.00	0.00000	
14		3.119	0.00	0.00	0.00	0.00	0.00000	
14		3.564	0.00	0.00	0.00	0.00	0.00000	
14		4.010	0.00	0.00	0.00	0.00	0.00000	
14	6		0.00	0.00	0.00	0.00	0.00000	
15	12		-0.00	888.07	-0.00	888.07	0.07354	
15		0.250	-0.00	869.68	-0.00	869.68	0.07354	
15		0.500	-0.00	851.30	-0.00	851.30	0.07354	
15		0.750	-0.00	832.91	-0.00	832.91	0.07354	
15		1.000	-0.00	814.53	-0.00	814.53	0.07354	
15		1.250	-0.00	796.14	-0.00	796.14	0.07354	
15		1.500	-0.00	777.76	-0.00	777.76	0.07354	
15		1.750	-0.00	759.37	-0.00	759.37	0.07354	
15		2.000	-0.00	740.99	-0.00	740.99	0.07354	
15		2.250	-0.00	722.60	-0.00	722.60	0.07354	
15	11		-0.00	704.21	-0.00	704.21	0.07354	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:9 Wind van rechts overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
16	11		-0.00	704.21	-0.00	704.21	0.07354	
16		0.500	-0.00	667.44	-0.00	667.44	0.07355	
16		1.000	-0.00	630.67	-0.00	630.67	0.07355	
16		1.500	-0.00	593.89	-0.00	593.89	0.07355	
16		2.000	-0.00	557.12	-0.00	557.12	0.07356	
16		2.500	-0.00	520.34	-0.00	520.34	0.07356	
16		3.000	-0.00	483.55	-0.00	483.55	0.07357	
16		3.500	-0.00	446.77	-0.00	446.77	0.07358	
16		4.000	-0.00	409.98	-0.00	409.98	0.07358	
16		4.500	-0.00	373.18	-0.00	373.18	0.07359	
16	10		-0.00	336.38	-0.00	336.38	0.07361	
17	10		-0.00	336.38	-0.00	336.38	0.07361	
17		0.500	-0.00	299.58	-0.00	299.58	0.07362	
17		1.000	-0.00	262.76	-0.00	262.76	0.07363	
17		1.500	-0.00	225.94	-0.00	225.94	0.07365	
17		2.000	-0.00	189.11	-0.00	189.11	0.07367	
17		2.500	-0.00	152.27	-0.00	152.27	0.07369	
17		3.000	-0.00	115.43	-0.00	115.43	0.07371	
17		3.500	-0.00	78.57	-0.00	78.57	0.07373	
17		4.000	-0.00	41.70	-0.00	41.70	0.07375	
17		4.500	-0.00	4.81	-0.00	4.81	0.07378	
17	1		-0.00	-32.08	-0.00	-32.08	0.07380	240.614
Som gronddruk X: 0 Z: 31 kN								
18	1		-0.00	-32.08	-0.00	-32.08	-8.75712	240.614
18		0.320	-0.00	2770.20	-0.00	2770.20	-8.75711	
18		0.640	-0.00	5572.46	-0.00	5572.46	-8.75706	
18		0.960	-0.00	8374.71	-0.00	8374.71	-8.75698	
18		1.280	-0.00	11176.92	-0.00	11176.92	-8.75686	
18		1.600	-0.00	13979.10	-0.00	13979.10	-8.75672	
18		1.920	-0.00	16781.22	-0.00	16781.22	-8.75654	
18		2.240	-0.00	19583.28	-0.00	19583.28	-8.75633	
18		2.560	-0.00	22385.26	-0.00	22385.26	-8.75607	
18		2.880	-0.00	25187.16	-0.00	25187.16	-8.75579	
18	4		0.00	27988.97	0.00	27988.97	-8.75547	
Som gronddruk X: 0 Z: 0 kN								
19	4		0.00	27988.97	0.00	27988.97	-8.75547	
19		0.320	-0.00	30790.66	-0.00	30790.66	-8.75516	
19		0.640	-0.00	33592.27	-0.00	33592.27	-8.75488	
19		0.960	-0.00	36393.79	-0.00	36393.79	-8.75463	
19		1.280	-0.00	39195.24	-0.00	39195.24	-8.75443	
19		1.600	-0.00	41996.63	-0.00	41996.63	-8.75427	
19		1.920	-0.00	44797.98	-0.00	44797.98	-8.75414	
19		2.240	-0.00	47599.29	-0.00	47599.29	-8.75404	
19		2.560	-0.00	50400.56	-0.00	50400.56	-8.75397	
19		2.880	-0.00	53201.82	-0.00	53201.82	-8.75393	
19	7		-0.00	56003.08	-0.00	56003.08	-8.75391	
20	7		-0.00	56003.08	-0.00	56003.08	4.50330	
20		0.500	-0.00	53751.43	-0.00	53751.43	4.50327	
20		1.000	-0.00	51499.82	-0.00	51499.82	4.50317	
20		1.500	-0.00	49248.28	-0.00	49248.28	4.50301	
20		2.000	-0.00	46996.82	-0.00	46996.82	4.50281	
20		2.500	-0.00	44745.47	-0.00	44745.47	4.50257	
20		3.000	-0.00	42494.25	-0.00	42494.25	4.50229	
20		3.500	-0.00	40243.18	-0.00	40243.18	4.50199	
20		4.000	-0.00	37992.27	-0.00	37992.27	4.50167	
20		4.500	-0.00	35741.52	-0.00	35741.52	4.50133	
20	13		-0.00	33490.94	-0.00	33490.94	4.50098	

TUSSENpunTEN VERPLAATSINGEN

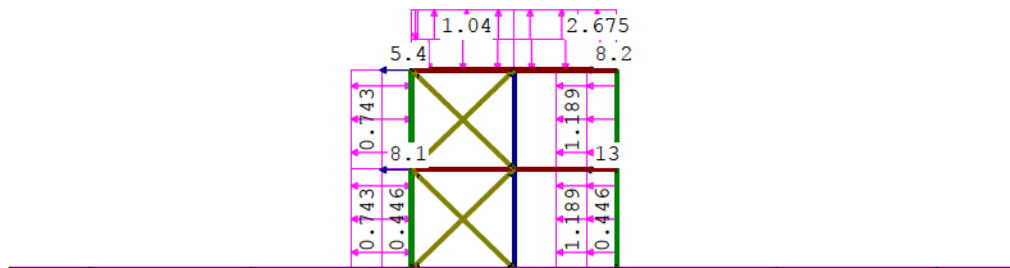
1e orde

B.G:9 Wind van rechts overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
21	13		-0.00	33490.94	-0.00	33490.94	4.50098	
21	0.500		-0.00	31240.54	-0.00	31240.54	4.50064	
21	1.000		-0.00	28990.30	-0.00	28990.30	4.50029	
21	1.500		-0.00	26740.25	-0.00	26740.25	4.49995	
21	2.000		-0.00	24490.36	-0.00	24490.36	4.49962	
21	2.500		-0.00	22240.62	-0.00	22240.62	4.49931	
21	3.000		-0.00	19991.05	-0.00	19991.05	4.49901	
21	3.500		-0.00	17741.61	-0.00	17741.61	4.49873	
21	4.000		-0.00	15492.31	-0.00	15492.31	4.49849	
21	4.500		-0.00	13243.12	-0.00	13243.12	4.49826	
21	14		-0.00	10994.04	-0.00	10994.04	4.49807	
22	14		-0.00	10994.04	-0.00	10994.04	4.49807	
22	0.250		-0.00	9869.53	-0.00	9869.53	4.49799	
22	0.500		-0.00	8745.05	-0.00	8745.05	4.49791	
22	0.750		-0.00	7620.58	-0.00	7620.58	4.49784	
22	1.000		-0.00	6496.13	-0.00	6496.13	4.49778	
22	1.250		-0.00	5371.69	-0.00	5371.69	4.49773	
22	1.500		-0.00	4247.26	-0.00	4247.26	4.49768	
22	1.750		-0.00	3122.85	-0.00	3122.85	4.49765	
22	2.000		-0.00	1998.44	-0.00	1998.44	4.49762	
22	2.250		-0.00	874.03	-0.00	874.03	4.49761	
22	15		-0.00	-250.37	-0.00	-250.37	4.49760	1877.766
							Som gronddruk X:	0 Z: 31 kN
							Totale grondreactie X:	0 Z: 63 kN

BELASTINGEN

B.G:10 Wind van rechts onderdruk B



KNOOPBELASTINGEN

B.G:10 Wind van rechts onderdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:10 Wind van rechts onderdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00

STAAFBELASTINGEN

B.G:10 Wind van rechts onderdruk B

Staaf	Type	Index	q1/p/m	q2	A	B	Ψ_0	Ψ_1	Ψ_2
7	1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw10	-0.30	-0.30	0.000	3.000	0.00	0.20	0.00
2	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

TUSSENPUTTEN VERPLAATSINGEN

1e orde

B.G:10 Wind van rechts onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		[kN/m ²]
1	1		-0.00	-34.26	-34.26	0.00	-8.16839	
1	0.310	-2532.20		-34.28	-34.28	2532.20	-8.16837	
1	0.620	-5064.39		-34.31	-34.31	5064.39	-8.16835	
1	0.930	-7596.58		-34.34	-34.34	7596.58	-8.16831	
1	1.240	-10128.7		-34.37	-34.37	10128.75	-8.16827	
1	1.550	-12660.9		-34.39	-34.39	12660.90	-8.16822	
1	1.860	-15193.0		-34.42	-34.42	15193.04	-8.16817	
1	2.170	-17725.1		-34.45	-34.45	17725.17	-8.16812	
1	2.480	-20257.2		-34.47	-34.47	20257.28	-8.16809	
1	2.790	-22789.3		-34.50	-34.50	22789.38	-8.16806	
1	2		-25321.4	-34.53	-34.53	25321.48	-8.16805	
2	2		-25321.4	-34.53	-34.53	25321.48	-8.16794	
2	0.310	-27853.5		-34.53	-34.53	27853.54	-8.16793	
2	0.620	-30385.5		-34.54	-34.54	30385.59	-8.16790	
2	0.930	-32917.6		-34.55	-34.55	32917.64	-8.16787	
2	1.240	-35449.6		-34.56	-34.56	35449.67	-8.16782	
2	1.550	-37981.6		-34.56	-34.56	37981.69	-8.16777	
2	1.860	-40513.6		-34.57	-34.57	40513.69	-8.16772	
2	2.170	-43045.6		-34.58	-34.58	43045.67	-8.16768	
2	2.480	-45577.6		-34.58	-34.58	45577.65	-8.16764	
2	2.790	-48109.6		-34.59	-34.59	48109.61	-8.16762	
2	3		-50641.5	-34.60	-34.60	50641.57	-8.16760	
3	4		0.00	26100.87	26100.87	0.00	-8.16829	
3	0.310	-2532.17	26100.88	26100.88	26100.88	2532.17	-8.16829	
3	0.620	-5064.34	26100.89	26100.89	26100.89	5064.34	-8.16829	
3	0.930	-7596.51	26100.90	26100.90	26100.90	7596.51	-8.16829	
3	1.240	-10128.6	26100.91	26100.91	26100.91	10128.67	-8.16829	
3	1.550	-12660.8	26100.92	26100.92	26100.92	12660.84	-8.16829	
3	1.860	-15193.0	26100.92	26100.92	26100.92	15193.01	-8.16829	
3	2.170	-17725.1	26100.93	26100.93	26100.93	17725.18	-8.16829	
3	2.480	-20257.3	26100.94	26100.94	26100.94	20257.35	-8.16829	
3	2.790	-22789.5	26100.95	26100.95	26100.95	22789.52	-8.16829	
3	5		-25321.6	26100.96	26100.96	25321.69	-8.16829	
4	5		-25321.6	26100.96	26100.96	25321.69	-8.16773	
4	0.310	-27853.6	26100.96	26100.96	26100.96	27853.68	-8.16773	
4	0.620	-30385.6	26100.96	26100.96	26100.96	30385.68	-8.16773	
4	0.930	-32917.6	26100.96	26100.96	26100.96	32917.67	-8.16773	
4	1.240	-35449.6	26100.96	26100.96	26100.96	35449.66	-8.16773	
4	1.550	-37981.6	26100.96	26100.96	26100.96	37981.66	-8.16773	
4	1.860	-40513.6	26100.96	26100.96	26100.96	40513.65	-8.16773	
4	2.170	-43045.6	26100.96	26100.96	26100.96	43045.65	-8.16773	
4	2.480	-45577.6	26100.96	26100.96	26100.96	45577.64	-8.16773	
4	2.790	-48109.6	26100.96	26100.96	26100.96	48109.64	-8.16773	
4	6		-50641.6	26100.96	26100.96	50641.64	-8.16773	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:10 Wind van rechts onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
5	7		-0.00	52229.35	52229.35	0.00	-8.16925	
5	0.310		-2532.46	52229.35	52229.35	2532.46	-8.16918	
5	0.620		-5064.89	52229.35	52229.35	5064.89	-8.16904	
5	0.930		-7597.27	52229.36	52229.36	7597.27	-8.16885	
5	1.240		-10129.5	52229.36	52229.36	10129.57	-8.16859	
5	1.550		-12661.7	52229.36	52229.36	12661.78	-8.16832	
5	1.860		-15193.9	52229.36	52229.36	15193.93	-8.16805	
5	2.170		-17725.9	52229.36	52229.36	17725.99	-8.16779	
5	2.480		-20257.9	52229.36	52229.36	20257.96	-8.16759	
5	2.790		-22789.8	52229.36	52229.36	22789.89	-8.16746	
5	8		-25321.7	52229.36	52229.36	25321.79	-8.16738	
6	8		-25321.7	52229.36	52229.36	25321.79	-8.16865	
6	0.310		-27854.0	52229.37	52229.37	27854.06	-8.16857	
6	0.620		-30386.3	52229.37	52229.37	30386.30	-8.16844	
6	0.930		-32918.5	52229.37	52229.37	32918.50	-8.16824	
6	1.240		-35450.6	52229.37	52229.37	35450.61	-8.16798	
6	1.550		-37982.6	52229.37	52229.37	37982.63	-8.16771	
6	1.860		-40514.5	52229.37	52229.37	40514.59	-8.16744	
6	2.170		-43046.4	52229.38	52229.38	43046.46	-8.16718	
6	2.480		-45578.2	52229.38	52229.38	45578.24	-8.16699	
6	2.790		-48109.9	52229.38	52229.38	48109.99	-8.16685	
6	9		-50641.7	52229.38	52229.38	50641.70	-8.16678	
7	3		-50641.5	-34.60	-50641.5	-34.60	-8.16810	
7	0.320		-50641.5	2579.18	-50641.5	2579.18	-8.16805	
7	0.640		-50641.5	5192.95	-50641.5	5192.95	-8.16796	
7	0.960		-50641.5	7806.67	-50641.5	7806.67	-8.16780	
7	1.280		-50641.5	10420.34	-50641.5	10420.34	-8.16761	
7	1.600		-50641.6	13033.94	-50641.6	13033.94	-8.16739	
7	1.920		-50641.6	15647.46	-50641.6	15647.46	-8.16717	
7	2.240		-50641.6	18260.94	-50641.6	18260.94	-8.16696	
7	2.560		-50641.6	20874.32	-50641.6	20874.32	-8.16677	
7	2.880		-50641.6	23487.66	-50641.6	23487.66	-8.16662	
7	6		-50641.6	26100.96	-50641.6	26100.96	-8.16650	
8	6		-50641.6	26100.96	-50641.6	26100.96	-8.16650	
8	0.320		-50641.6	28714.21	-50641.6	28714.21	-8.16635	
8	0.640		-50641.6	31327.42	-50641.6	31327.42	-8.16615	
8	0.960		-50641.6	33940.56	-50641.6	33940.56	-8.16589	
8	1.280		-50641.6	36553.57	-50641.6	36553.57	-8.16555	
8	1.600		-50641.6	39166.49	-50641.6	39166.49	-8.16519	
8	1.920		-50641.6	41779.31	-50641.6	41779.31	-8.16479	
8	2.240		-50641.6	44391.97	-50641.6	44391.97	-8.16440	
8	2.560		-50641.6	47004.52	-50641.6	47004.52	-8.16406	
8	2.880		-50641.6	49616.98	-50641.6	49616.98	-8.16381	
8	9		-50641.7	52229.38	-50641.7	52229.38	-8.16369	
9	2		-25321.4	-34.53	-25321.4	-34.53	-8.16789	
9	0.320		-25321.5	2579.19	-25321.5	2579.19	-8.16787	
9	0.640		-25321.5	5192.90	-25321.5	5192.90	-8.16782	
9	0.960		-25321.5	7806.60	-25321.5	7806.60	-8.16774	
9	1.280		-25321.5	10420.25	-25321.5	10420.25	-8.16762	
9	1.600		-25321.5	13033.86	-25321.5	13033.86	-8.16747	
9	1.920		-25321.6	15647.43	-25321.6	15647.43	-8.16729	
9	2.240		-25321.6	18260.94	-25321.6	18260.94	-8.16708	
9	2.560		-25321.6	20874.35	-25321.6	20874.35	-8.16682	
9	2.880		-25321.6	23487.69	-25321.6	23487.69	-8.16654	
9	5		-25321.6	26100.96	-25321.6	26100.96	-8.16623	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:10 Wind van rechts onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
10	5		-25321.6	26100.96	-25321.6	26100.96	-8.16623	
10		0.320	-25321.7	28714.08	-25321.7	28714.08	-8.16593	
10		0.640	-25321.7	31327.12	-25321.7	31327.12	-8.16564	
10		0.960	-25321.7	33940.10	-25321.7	33940.10	-8.16539	
10		1.280	-25321.7	36552.98	-25321.7	36552.98	-8.16518	
10		1.600	-25321.7	39165.81	-25321.7	39165.81	-8.16500	
10		1.920	-25321.7	41778.59	-25321.7	41778.59	-8.16485	
10		2.240	-25321.7	44391.32	-25321.7	44391.32	-8.16473	
10		2.560	-25321.7	47004.02	-25321.7	47004.02	-8.16465	
10		2.880	-25321.7	49616.70	-25321.7	49616.70	-8.16460	
10	8		-25321.7	52229.36	-25321.7	52229.36	-8.16457	
11	1		0.00	0.00	0.00	0.00	0.00000	
11		0.446	0.00	0.00	0.00	0.00	0.00000	
11		0.891	0.00	0.00	0.00	0.00	0.00000	
11		1.337	0.00	0.00	0.00	0.00	0.00000	
11		1.782	0.00	0.00	0.00	0.00	0.00000	
11		2.228	0.00	0.00	0.00	0.00	0.00000	
11		2.673	0.00	0.00	0.00	0.00	0.00000	
11		3.119	0.00	0.00	0.00	0.00	0.00000	
11		3.564	0.00	0.00	0.00	0.00	0.00000	
11		4.010	0.00	0.00	0.00	0.00	0.00000	
11	5		0.00	0.00	0.00	0.00	0.00000	
12	5		-25321.6	26100.96	36347.97	-1128.05	-8.16753	
12		0.446	-27853.6	23487.40	36348.05	2510.86	-8.16753	
12		0.891	-30385.6	20873.85	36348.12	6149.76	-8.16753	
12		1.337	-32917.6	18260.29	36348.20	9788.67	-8.16753	
12		1.782	-35449.6	15646.73	36348.28	13427.58	-8.16753	
12		2.228	-37981.6	13033.18	36348.36	17066.48	-8.16753	
12		2.673	-40513.6	10419.62	36348.43	20705.39	-8.16753	
12		3.119	-43045.6	7806.07	36348.51	24344.29	-8.16753	
12		3.564	-45577.5	5192.51	36348.59	27983.20	-8.16753	
12		4.010	-48109.5	2578.96	36348.66	31622.11	-8.16753	
12	3		-50641.5	-34.60	36348.74	35261.01	-8.16753	
13	4		0.00	26100.88	18160.86	-18746.7	-8.16775	
13		0.446	-2532.15	23487.33	18161.06	-15107.6	-8.16775	
13		0.891	-5064.29	20873.79	18161.27	-11468.6	-8.16775	
13		1.337	-7596.44	18260.25	18161.47	-7829.68	-8.16775	
13		1.782	-10128.5	15646.71	18161.67	-4190.67	-8.16775	
13		2.228	-12660.7	13033.17	18161.87	-551.67	-8.16775	
13		2.673	-15192.8	10419.63	18162.07	3087.34	-8.16775	
13		3.119	-17725.0	7806.10	18162.28	6726.34	-8.16775	
13		3.564	-20257.1	5192.55	18162.48	10365.35	-8.16775	
13		4.010	-22789.3	2579.01	18162.68	14004.36	-8.16775	
13	2		-25321.4	-34.52	18162.88	17643.36	-8.16775	
14	2		0.00	0.00	0.00	0.00	0.00000	
14		0.446	0.00	0.00	0.00	0.00	0.00000	
14		0.891	0.00	0.00	0.00	0.00	0.00000	
14		1.337	0.00	0.00	0.00	0.00	0.00000	
14		1.782	0.00	0.00	0.00	0.00	0.00000	
14		2.228	0.00	0.00	0.00	0.00	0.00000	
14		2.673	0.00	0.00	0.00	0.00	0.00000	
14		3.119	0.00	0.00	0.00	0.00	0.00000	
14		3.564	0.00	0.00	0.00	0.00	0.00000	
14		4.010	0.00	0.00	0.00	0.00	0.00000	
14	6		0.00	0.00	0.00	0.00	0.00000	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:10 Wind van rechts onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		Grondspan.
15	12		-0.00	948.31	-0.00	948.31	0.07853	
15		0.250	-0.00	928.67	-0.00	928.67	0.07853	
15		0.500	-0.00	909.04	-0.00	909.04	0.07853	
15		0.750	-0.00	889.41	-0.00	889.41	0.07853	
15		1.000	-0.00	869.78	-0.00	869.78	0.07853	
15		1.250	-0.00	850.15	-0.00	850.15	0.07853	
15		1.500	-0.00	830.51	-0.00	830.51	0.07853	
15		1.750	-0.00	810.88	-0.00	810.88	0.07853	
15		2.000	-0.00	791.25	-0.00	791.25	0.07853	
15		2.250	-0.00	771.61	-0.00	771.61	0.07853	
15	11		-0.00	751.98	-0.00	751.98	0.07853	
16	11		-0.00	751.98	-0.00	751.98	0.07853	
16		0.500	-0.00	712.71	-0.00	712.71	0.07853	
16		1.000	-0.00	673.45	-0.00	673.45	0.07854	
16		1.500	-0.00	634.18	-0.00	634.18	0.07854	
16		2.000	-0.00	594.91	-0.00	594.91	0.07855	
16		2.500	-0.00	555.63	-0.00	555.63	0.07855	
16		3.000	-0.00	516.35	-0.00	516.35	0.07856	
16		3.500	-0.00	477.07	-0.00	477.07	0.07857	
16		4.000	-0.00	437.79	-0.00	437.79	0.07858	
16		4.500	-0.00	398.50	-0.00	398.50	0.07859	
16	10		-0.00	359.20	-0.00	359.20	0.07860	
17	10		-0.00	359.20	-0.00	359.20	0.07860	
17		0.500	-0.00	319.90	-0.00	319.90	0.07861	
17		1.000	-0.00	280.59	-0.00	280.59	0.07863	
17		1.500	-0.00	241.27	-0.00	241.27	0.07865	
17		2.000	-0.00	201.94	-0.00	201.94	0.07866	
17		2.500	-0.00	162.60	-0.00	162.60	0.07868	
17		3.000	-0.00	123.26	-0.00	123.26	0.07871	
17		3.500	-0.00	83.90	-0.00	83.90	0.07873	
17		4.000	-0.00	44.52	-0.00	44.52	0.07876	
17		4.500	-0.00	5.14	-0.00	5.14	0.07878	
17	1		-0.00	-34.26	-0.00	-34.26	0.07881	256.935
Som gronddruk X: 0 Z: 34 kN								
18	1		-0.00	-34.26	-0.00	-34.26	-8.16775	256.935
18		0.320	-0.00	2579.42	-0.00	2579.42	-8.16773	
18		0.640	-0.00	5193.09	-0.00	5193.09	-8.16769	
18		0.960	-0.00	7806.74	-0.00	7806.74	-8.16761	
18		1.280	-0.00	10420.35	-0.00	10420.35	-8.16750	
18		1.600	-0.00	13033.93	-0.00	13033.93	-8.16736	
18		1.920	-0.00	15647.46	-0.00	15647.46	-8.16719	
18		2.240	-0.00	18260.93	-0.00	18260.93	-8.16699	
18		2.560	-0.00	20874.33	-0.00	20874.33	-8.16675	
18		2.880	-0.00	23487.64	-0.00	23487.64	-8.16647	
18	4		0.00	26100.87	0.00	26100.87	-8.16617	
Som gronddruk X: 0 Z: 0 kN								
19	4		0.00	26100.87	0.00	26100.87	-8.16617	
19		0.320	-0.00	28713.99	-0.00	28713.99	-8.16586	
19		0.640	-0.00	31327.03	-0.00	31327.03	-8.16560	
19		0.960	-0.00	33939.98	-0.00	33939.98	-8.16537	
19		1.280	-0.00	36552.86	-0.00	36552.86	-8.16517	
19		1.600	-0.00	39165.69	-0.00	39165.69	-8.16501	
19		1.920	-0.00	41778.48	-0.00	41778.48	-8.16489	
19		2.240	-0.00	44391.22	-0.00	44391.22	-8.16479	
19		2.560	-0.00	47003.95	-0.00	47003.95	-8.16473	
19		2.880	-0.00	49616.65	-0.00	49616.65	-8.16469	
19	7		-0.00	52229.35	-0.00	52229.35	-8.16467	

TUSSENpunTEN VERPLAATSINGEN

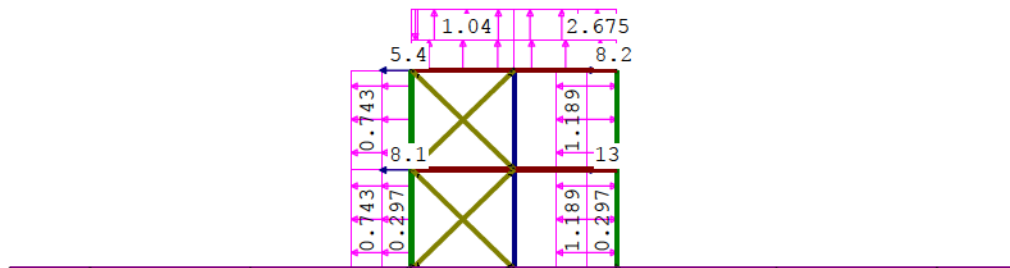
1e orde

B.G:10 Wind van rechts onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		[kN/m²]	
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z	Rotatie	Grondspan.
20	7		-0.00	52229.35	-0.00	52229.35	4.19985	
20	0.500		-0.00	50129.43	-0.00	50129.43	4.19982	
20	1.000		-0.00	48029.54	-0.00	48029.54	4.19972	
20	1.500		-0.00	45929.71	-0.00	45929.71	4.19958	
20	2.000		-0.00	43829.97	-0.00	43829.97	4.19939	
20	2.500		-0.00	41730.33	-0.00	41730.33	4.19917	
20	3.000		-0.00	39630.81	-0.00	39630.81	4.19891	
20	3.500		-0.00	37531.43	-0.00	37531.43	4.19863	
20	4.000		-0.00	35432.19	-0.00	35432.19	4.19833	
20	4.500		-0.00	33333.10	-0.00	33333.10	4.19801	
20	13		-0.00	31234.18	-0.00	31234.18	4.19769	
21	13		-0.00	31234.18	-0.00	31234.18	4.19769	
21	0.500		-0.00	29135.41	-0.00	29135.41	4.19736	
21	1.000		-0.00	27036.81	-0.00	27036.81	4.19704	
21	1.500		-0.00	24938.37	-0.00	24938.37	4.19672	
21	2.000		-0.00	22840.09	-0.00	22840.09	4.19642	
21	2.500		-0.00	20741.96	-0.00	20741.96	4.19612	
21	3.000		-0.00	18643.96	-0.00	18643.96	4.19585	
21	3.500		-0.00	16546.10	-0.00	16546.10	4.19559	
21	4.000		-0.00	14448.37	-0.00	14448.37	4.19536	
21	4.500		-0.00	12350.74	-0.00	12350.74	4.19515	
21	14		-0.00	10253.21	-0.00	10253.21	4.19497	
22	14		-0.00	10253.21	-0.00	10253.21	4.19497	
22	0.250		-0.00	9204.48	-0.00	9204.48	4.19489	
22	0.500		-0.00	8155.77	-0.00	8155.77	4.19482	
22	0.750		-0.00	7107.07	-0.00	7107.07	4.19476	
22	1.000		-0.00	6058.39	-0.00	6058.39	4.19470	
22	1.250		-0.00	5009.72	-0.00	5009.72	4.19465	
22	1.500		-0.00	3961.06	-0.00	3961.06	4.19461	
22	1.750		-0.00	2912.41	-0.00	2912.41	4.19458	
22	2.000		-0.00	1863.77	-0.00	1863.77	4.19456	
22	2.250		-0.00	815.14	-0.00	815.14	4.19454	
22	15		-0.00	-233.50	-0.00	-233.50	4.19453	1751.233
Som gronddruk X:							0	Z: 29 kN
Totale grondreactie X:							0	Z: 63 kN

BELASTINGEN

B.G:11 Wind van rechts overdruk B



KNOOPBELASTINGEN

B.G:11 Wind van rechts overdruk B

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2	Opm.
1	9	X	-8.200	0.00	0.20	0.00	*
2	3	X	-5.400	0.00	0.20	0.00	*
3	8	X	-13.000	0.00	0.20	0.00	*
4	2	X	-8.100	0.00	0.20	0.00	*

Opmerkingen

[*] Deze belasting is handmatig toegevoegd of gewijzigd.

STAAFBELASTINGEN

B.G:11 Wind van rechts overdruk B

Staaftype	Index	q1/p/m	q2	A	B	Ψ_0	Ψ_1	Ψ_2
1 1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2 1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7 1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8 1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6 1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5 1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5 1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
6 1:QZLokaal	Qw11	1.19	1.19	0.000	0.000	0.00	0.20	0.00
8 1:QZLokaal	Qw4	2.67	2.67	1.960	0.000	0.00	0.20	0.00
8 1:QZLokaal	Qw5	1.04	1.04	0.000	1.240	0.00	0.20	0.00
7 1:QZLokaal	Qw5	1.04	1.04	0.200	0.000	0.00	0.20	0.00
7 1:QZLokaal	Qw10	-0.30	-0.30	0.000	3.000	0.00	0.20	0.00
2 1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00
1 1:QZLokaal	Qw12	0.74	0.74	0.000	0.000	0.00	0.20	0.00

TUSSENPUTTEN VERPLAATSINGEN

1e orde

B.G:11 Wind van rechts overdruk B

St.	Kn.	Pos.	Globaal [mm] Verpl-X	Verpl-Z	Lokaal [mm] Verpl-X	Verpl-Z	Rotatie	[kN/m ²] Grondspan.
1	1		-0.00	-32.20	-32.20	0.00	-8.75772	
1	0.310		-2714.89	-32.23	-32.23	2714.89	-8.75768	
1	0.620		-5429.76	-32.26	-32.26	5429.76	-8.75759	
1	0.930		-8144.60	-32.28	-32.28	8144.60	-8.75746	
1	1.240		-10859.3	-32.31	-32.31	10859.38	-8.75730	
1	1.550		-13574.1	-32.34	-32.34	13574.11	-8.75713	
1	1.860		-16288.8	-32.36	-32.36	16288.80	-8.75696	
1	2.170		-19003.4	-32.39	-32.39	19003.44	-8.75679	
1	2.480		-21718.0	-32.41	-32.41	21718.02	-8.75667	
1	2.790		-24432.5	-32.44	-32.44	24432.57	-8.75658	
1	2		-27147.1	-32.47	-32.47	27147.10	-8.75653	
2	2		-27147.1	-32.47	-32.47	27147.10	-8.75728	
2	0.310		-29861.8	-32.47	-32.47	29861.85	-8.75723	
2	0.620		-32576.5	-32.48	-32.48	32576.58	-8.75714	
2	0.930		-35291.2	-32.49	-32.49	35291.28	-8.75702	
2	1.240		-38005.9	-32.49	-32.49	38005.93	-8.75685	
2	1.550		-40720.5	-32.50	-32.50	40720.52	-8.75668	
2	1.860		-43435.0	-32.51	-32.51	43435.07	-8.75651	
2	2.170		-46149.5	-32.51	-32.51	46149.56	-8.75635	
2	2.480		-48864.0	-32.52	-32.52	48864.01	-8.75622	
2	2.790		-51578.4	-32.53	-32.53	51578.42	-8.75613	
2	3		-54292.8	-32.54	-32.54	54292.81	-8.75609	
3	4		0.00	27987.45	27987.45	0.00	-8.75719	
3	0.310		-2714.73	27987.46	27987.46	2714.73	-8.75719	
3	0.620		-5429.46	27987.47	27987.47	5429.46	-8.75719	
3	0.930		-8144.19	27987.48	27987.48	8144.19	-8.75719	
3	1.240		-10858.9	27987.49	27987.49	10858.92	-8.75719	
3	1.550		-13573.6	27987.50	27987.50	13573.65	-8.75719	
3	1.860		-16288.3	27987.51	27987.51	16288.38	-8.75719	
3	2.170		-19003.1	27987.51	27987.51	19003.11	-8.75719	
3	2.480		-21717.8	27987.52	27987.52	21717.84	-8.75719	
3	2.790		-24432.5	27987.53	27987.53	24432.57	-8.75719	
3	5		-27147.2	27987.54	27987.54	27147.29	-8.75719	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:11 Wind van rechts overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
4	5		-27147.2	27987.54	27987.54	27147.29	-8.75664	
4	0.310		-29861.8	27987.55	27987.55	29861.85	-8.75664	
4	0.620		-32576.4	27987.55	27987.55	32576.41	-8.75664	
4	0.930		-35290.9	27987.55	27987.55	35290.97	-8.75664	
4	1.240		-38005.5	27987.55	27987.55	38005.53	-8.75664	
4	1.550		-40720.0	27987.56	27987.56	40720.09	-8.75664	
4	1.860		-43434.6	27987.56	27987.56	43434.64	-8.75664	
4	2.170		-46149.2	27987.56	27987.56	46149.20	-8.75664	
4	2.480		-48863.7	27987.56	27987.56	48863.75	-8.75664	
4	2.790		-51578.3	27987.57	27987.57	51578.31	-8.75664	
4	6		-54292.8	27987.57	27987.57	54292.87	-8.75664	
5	7		-0.00	56000.15	56000.15	0.00	-8.75773	
5	0.310		-2714.89	56000.16	56000.16	2714.89	-8.75769	
5	0.620		-5429.77	56000.16	56000.16	5429.77	-8.75762	
5	0.930		-8144.62	56000.16	56000.16	8144.62	-8.75751	
5	1.240		-10859.4	56000.16	56000.16	10859.42	-8.75737	
5	1.550		-13574.1	56000.16	56000.16	13574.18	-8.75722	
5	1.860		-16288.9	56000.16	56000.16	16288.90	-8.75707	
5	2.170		-19003.5	56000.17	56000.17	19003.57	-8.75693	
5	2.480		-21718.2	56000.17	56000.17	21718.20	-8.75683	
5	2.790		-24432.8	56000.17	56000.17	24432.80	-8.75675	
5	8		-27147.3	56000.17	56000.17	27147.39	-8.75671	
6	8		-27147.3	56000.17	56000.17	27147.39	-8.75714	
6	0.310		-29862.1	56000.18	56000.18	29862.10	-8.75710	
6	0.620		-32576.7	56000.18	56000.18	32576.78	-8.75702	
6	0.930		-35291.4	56000.18	56000.18	35291.45	-8.75691	
6	1.240		-38006.0	56000.18	56000.18	38006.07	-8.75677	
6	1.550		-40720.6	56000.18	56000.18	40720.64	-8.75663	
6	1.860		-43435.1	56000.18	56000.18	43435.18	-8.75648	
6	2.170		-46149.6	56000.18	56000.18	46149.66	-8.75634	
6	2.480		-48864.1	56000.19	56000.19	48864.11	-8.75623	
6	2.790		-51578.5	56000.19	56000.19	51578.53	-8.75615	
6	9		-54292.9	56000.19	56000.19	54292.93	-8.75612	
7	3		-54292.8	-32.54	-54292.8	-32.54	-8.75744	
7	0.320		-54292.8	2769.83	-54292.8	2769.83	-8.75735	
7	0.640		-54292.8	5572.16	-54292.8	5572.16	-8.75717	
7	0.960		-54292.8	8374.40	-54292.8	8374.40	-8.75689	
7	1.280		-54292.8	11176.57	-54292.8	11176.57	-8.75657	
7	1.600		-54292.8	13978.61	-54292.8	13978.61	-8.75622	
7	1.920		-54292.8	16780.54	-54292.8	16780.54	-8.75590	
7	2.240		-54292.8	19582.40	-54292.8	19582.40	-8.75560	
7	2.560		-54292.8	22384.15	-54292.8	22384.15	-8.75541	
7	2.880		-54292.8	25185.87	-54292.8	25185.87	-8.75534	
7	6		-54292.8	27987.57	-54292.8	27987.57	-8.75536	
8	6		-54292.8	27987.57	-54292.8	27987.57	-8.75536	
8	0.320		-54292.8	30789.29	-54292.8	30789.29	-8.75536	
8	0.640		-54292.8	33590.99	-54292.8	33590.99	-8.75524	
8	0.960		-54292.8	36392.65	-54292.8	36392.65	-8.75498	
8	1.280		-54292.8	39194.15	-54292.8	39194.15	-8.75456	
8	1.600		-54292.9	41995.54	-54292.9	41995.54	-8.75409	
8	1.920		-54292.9	44796.79	-54292.9	44796.79	-8.75357	
8	2.240		-54292.9	47597.83	-54292.9	47597.83	-8.75304	
8	2.560		-54292.9	50398.73	-54292.9	50398.73	-8.75258	
8	2.880		-54292.9	53199.50	-54292.9	53199.50	-8.75224	
8	9		-54292.9	56000.19	-54292.9	56000.19	-8.75208	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:11 Wind van rechts overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²] Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
9	2		-27147.1	-32.47	-27147.1	-32.47	-8.75683	
9	0.320		-27147.1	2769.71	-27147.1	2769.71	-8.75681	
9	0.640		-27147.1	5571.88	-27147.1	5571.88	-8.75675	
9	0.960		-27147.1	8374.04	-27147.1	8374.04	-8.75667	
9	1.280		-27147.1	11176.15	-27147.1	11176.15	-8.75655	
9	1.600		-27147.2	13978.22	-27147.2	13978.22	-8.75639	
9	1.920		-27147.2	16780.24	-27147.2	16780.24	-8.75620	
9	2.240		-27147.2	19582.19	-27147.2	19582.19	-8.75598	
9	2.560		-27147.2	22384.05	-27147.2	22384.05	-8.75571	
9	2.880		-27147.2	25185.84	-27147.2	25185.84	-8.75542	
9	5		-27147.2	27987.54	-27147.2	27987.54	-8.75510	
10	5		-27147.2	27987.54	-27147.2	27987.54	-8.75510	
10	0.320		-27147.3	30789.10	-27147.3	30789.10	-8.75478	
10	0.640		-27147.3	33590.58	-27147.3	33590.58	-8.75449	
10	0.960		-27147.3	36391.98	-27147.3	36391.98	-8.75422	
10	1.280		-27147.3	39193.29	-27147.3	39193.29	-8.75400	
10	1.600		-27147.3	41994.54	-27147.3	41994.54	-8.75381	
10	1.920		-27147.3	44795.73	-27147.3	44795.73	-8.75365	
10	2.240		-27147.3	47596.89	-27147.3	47596.89	-8.75353	
10	2.560		-27147.3	50398.00	-27147.3	50398.00	-8.75345	
10	2.880		-27147.3	53199.09	-27147.3	53199.09	-8.75339	
10	8		-27147.3	56000.17	-27147.3	56000.17	-8.75337	
11	1		0.00	0.00	0.00	0.00	0.00000	
11	0.446		0.00	0.00	0.00	0.00	0.00000	
11	0.891		0.00	0.00	0.00	0.00	0.00000	
11	1.337		0.00	0.00	0.00	0.00	0.00000	
11	1.782		0.00	0.00	0.00	0.00	0.00000	
11	2.228		0.00	0.00	0.00	0.00	0.00000	
11	2.673		0.00	0.00	0.00	0.00	0.00000	
11	3.119		0.00	0.00	0.00	0.00	0.00000	
11	3.564		0.00	0.00	0.00	0.00	0.00000	
11	4.010		0.00	0.00	0.00	0.00	0.00000	
11	5		0.00	0.00	0.00	0.00	0.00000	
12	5		-27147.2	27987.54	38971.88	-1212.82	-8.75644	
12	0.446		-29861.8	25185.54	38971.95	2688.47	-8.75644	
12	0.891		-32576.4	22383.53	38972.03	6589.75	-8.75644	
12	1.337		-35290.9	19581.52	38972.11	10491.04	-8.75644	
12	1.782		-38005.5	16779.51	38972.19	14392.33	-8.75644	
12	2.228		-40720.0	13977.51	38972.26	18293.61	-8.75644	
12	2.673		-43434.6	11175.50	38972.34	22194.90	-8.75644	
12	3.119		-46149.1	8373.49	38972.41	26096.19	-8.75644	
12	3.564		-48863.7	5571.48	38972.49	29997.47	-8.75644	
12	4.010		-51578.2	2769.47	38972.57	33898.76	-8.75644	
12	3		-54292.8	-32.53	38972.64	37800.05	-8.75644	
13	4		0.00	27987.45	19473.53	-20101.7	-8.75666	
13	0.446		-2714.71	25185.46	19473.73	-16200.3	-8.75666	
13	0.891		-5429.42	22383.46	19473.94	-12298.9	-8.75666	
13	1.337		-8144.13	19581.47	19474.14	-8397.56	-8.75666	
13	1.782		-10858.8	16779.48	19474.34	-4496.17	-8.75666	
13	2.228		-13573.5	13977.49	19474.54	-594.78	-8.75666	
13	2.673		-16288.2	11175.50	19474.74	3306.60	-8.75666	
13	3.119		-19002.9	8373.51	19474.95	7207.99	-8.75666	
13	3.564		-21717.6	5571.52	19475.14	11109.37	-8.75666	
13	4.010		-24432.3	2769.52	19475.35	15010.76	-8.75666	
13	2		-27147.1	-32.47	19475.55	18912.14	-8.75666	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:11 Wind van rechts overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
14	2		0.00	0.00	0.00	0.00	0.00000	
14		0.446	0.00	0.00	0.00	0.00	0.00000	
14		0.891	0.00	0.00	0.00	0.00	0.00000	
14		1.337	0.00	0.00	0.00	0.00	0.00000	
14		1.782	0.00	0.00	0.00	0.00	0.00000	
14		2.228	0.00	0.00	0.00	0.00	0.00000	
14		2.673	0.00	0.00	0.00	0.00	0.00000	
14		3.119	0.00	0.00	0.00	0.00	0.00000	
14		3.564	0.00	0.00	0.00	0.00	0.00000	
14		4.010	0.00	0.00	0.00	0.00	0.00000	
14	6		0.00	0.00	0.00	0.00	0.00000	
15	12		-0.00	891.43	-0.00	891.43	0.07382	
15		0.250	-0.00	872.98	-0.00	872.98	0.07382	
15		0.500	-0.00	854.52	-0.00	854.52	0.07382	
15		0.750	-0.00	836.07	-0.00	836.07	0.07382	
15		1.000	-0.00	817.61	-0.00	817.61	0.07382	
15		1.250	-0.00	799.16	-0.00	799.16	0.07382	
15		1.500	-0.00	780.70	-0.00	780.70	0.07382	
15		1.750	-0.00	762.25	-0.00	762.25	0.07382	
15		2.000	-0.00	743.79	-0.00	743.79	0.07382	
15		2.250	-0.00	725.33	-0.00	725.33	0.07382	
15	11		-0.00	706.88	-0.00	706.88	0.07382	
16	11		-0.00	706.88	-0.00	706.88	0.07382	
16		0.500	-0.00	669.97	-0.00	669.97	0.07382	
16		1.000	-0.00	633.06	-0.00	633.06	0.07383	
16		1.500	-0.00	596.14	-0.00	596.14	0.07383	
16		2.000	-0.00	559.22	-0.00	559.22	0.07383	
16		2.500	-0.00	522.31	-0.00	522.31	0.07384	
16		3.000	-0.00	485.38	-0.00	485.38	0.07385	
16		3.500	-0.00	448.46	-0.00	448.46	0.07385	
16		4.000	-0.00	411.53	-0.00	411.53	0.07386	
16		4.500	-0.00	374.60	-0.00	374.60	0.07387	
16	10		-0.00	337.66	-0.00	337.66	0.07389	
17	10		-0.00	337.66	-0.00	337.66	0.07389	
17		0.500	-0.00	300.71	-0.00	300.71	0.07390	
17		1.000	-0.00	263.76	-0.00	263.76	0.07391	
17		1.500	-0.00	226.80	-0.00	226.80	0.07393	
17		2.000	-0.00	189.83	-0.00	189.83	0.07395	
17		2.500	-0.00	152.85	-0.00	152.85	0.07397	
17		3.000	-0.00	115.86	-0.00	115.86	0.07399	
17		3.500	-0.00	78.86	-0.00	78.86	0.07401	
17		4.000	-0.00	41.85	-0.00	41.85	0.07403	
17		4.500	-0.00	4.83	-0.00	4.83	0.07406	
17	1		-0.00	-32.20	-0.00	-32.20	0.07408	241.524
Som gronddruk X:								0 Z: 32 kN
18	1		-0.00	-32.20	-0.00	-32.20	-8.75669	241.524
18		0.320	-0.00	2769.93	-0.00	2769.93	-8.75667	
18		0.640	-0.00	5572.06	-0.00	5572.06	-8.75662	
18		0.960	-0.00	8374.17	-0.00	8374.17	-8.75654	
18		1.280	-0.00	11176.24	-0.00	11176.24	-8.75643	
18		1.600	-0.00	13978.28	-0.00	13978.28	-8.75628	
18		1.920	-0.00	16780.26	-0.00	16780.26	-8.75610	
18		2.240	-0.00	19582.18	-0.00	19582.18	-8.75589	
18		2.560	-0.00	22384.02	-0.00	22384.02	-8.75564	
18		2.880	-0.00	25185.78	-0.00	25185.78	-8.75535	
18	4		0.00	27987.45	0.00	27987.45	-8.75503	
Som gronddruk X:								0 Z: 0 kN

TUSSENpunTEN VERPLAATSINGEN

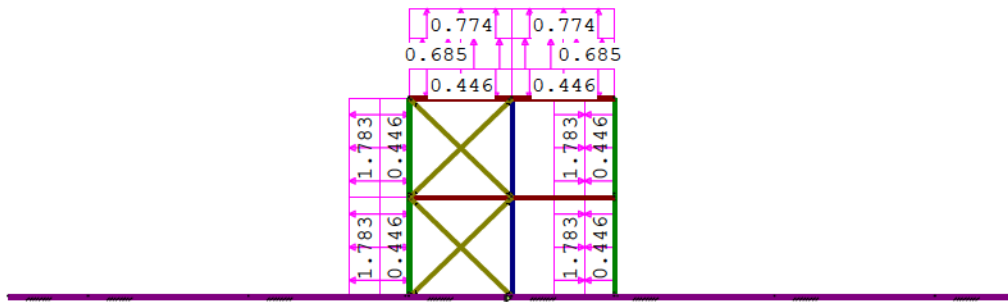
1e orde

B.G:11 Wind van rechts overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
19	4		0.00	27987.45	0.00	27987.45	-8.75503		
19		0.320	-0.00	30789.00	-0.00	30789.00	-8.75472		
19		0.640	-0.00	33590.46	-0.00	33590.46	-8.75444		
19		0.960	-0.00	36391.85	-0.00	36391.85	-8.75420		
19		1.280	-0.00	39193.16	-0.00	39193.16	-8.75400		
19		1.600	-0.00	41994.41	-0.00	41994.41	-8.75383		
19		1.920	-0.00	44795.61	-0.00	44795.61	-8.75370		
19		2.240	-0.00	47596.78	-0.00	47596.78	-8.75360		
19		2.560	-0.00	50397.92	-0.00	50397.92	-8.75353		
19		2.880	-0.00	53199.04	-0.00	53199.04	-8.75349		
19	7		-0.00	56000.15	-0.00	56000.15	-8.75348		
20	7		-0.00	56000.15	-0.00	56000.15	4.50307		
20		0.500	-0.00	53748.62	-0.00	53748.62	4.50303		
20		1.000	-0.00	51497.14	-0.00	51497.14	4.50293		
20		1.500	-0.00	49245.70	-0.00	49245.70	4.50278		
20		2.000	-0.00	46994.36	-0.00	46994.36	4.50258		
20		2.500	-0.00	44743.13	-0.00	44743.13	4.50233		
20		3.000	-0.00	42492.04	-0.00	42492.04	4.50206		
20		3.500	-0.00	40241.08	-0.00	40241.08	4.50175		
20		4.000	-0.00	37990.29	-0.00	37990.29	4.50143		
20		4.500	-0.00	35739.65	-0.00	35739.65	4.50110		
20	13		-0.00	33489.19	-0.00	33489.19	4.50075		
21	13		-0.00	33489.19	-0.00	33489.19	4.50075		
21		0.500	-0.00	31238.90	-0.00	31238.90	4.50040		
21		1.000	-0.00	28988.79	-0.00	28988.79	4.50005		
21		1.500	-0.00	26738.85	-0.00	26738.85	4.49971		
21		2.000	-0.00	24489.07	-0.00	24489.07	4.49938		
21		2.500	-0.00	22239.46	-0.00	22239.46	4.49907		
21		3.000	-0.00	19990.00	-0.00	19990.00	4.49877		
21		3.500	-0.00	17740.68	-0.00	17740.68	4.49850		
21		4.000	-0.00	15491.50	-0.00	15491.50	4.49825		
21		4.500	-0.00	13242.43	-0.00	13242.43	4.49803		
21	14		-0.00	10993.47	-0.00	10993.47	4.49784		
22	14		-0.00	10993.47	-0.00	10993.47	4.49783		
22		0.250	-0.00	9869.02	-0.00	9869.02	4.49775		
22		0.500	-0.00	8744.59	-0.00	8744.59	4.49767		
22		0.750	-0.00	7620.18	-0.00	7620.18	4.49760		
22		1.000	-0.00	6495.79	-0.00	6495.79	4.49754		
22		1.250	-0.00	5371.41	-0.00	5371.41	4.49749		
22		1.500	-0.00	4247.04	-0.00	4247.04	4.49745		
22		1.750	-0.00	3122.68	-0.00	3122.68	4.49742		
22		2.000	-0.00	1998.33	-0.00	1998.33	4.49739		
22		2.250	-0.00	873.99	-0.00	873.99	4.49737		
22	15		-0.00	-250.36	-0.00	-250.36	4.49737	1877.667	
								Som gronddruk X:	0 Z: 31 kN
								Totale grondreactie X:	0 Z: 63 kN

BELASTINGEN

B.G:12 Wind loodrecht onderdruk A



STAAFBELASTINGEN

B.G:12 Wind loodrecht onderdruk A

Staaf	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw13	1.78	1.78	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw13	1.78	1.78	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw14	-1.78	-1.78	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw14	-1.78	-1.78	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw15	0.46	0.46	1.600	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw16	0.68	0.68	0.000	1.600	0.00	0.20	0.00
7	1:QZLokaal	Qw17	0.77	0.77	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw16	0.68	0.68	1.600	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw15	0.46	0.46	0.000	1.600	0.00	0.20	0.00
8	1:QZLokaal	Qw17	0.77	0.77	0.000	0.000	0.00	0.20	0.00

TUSSENpunten Verplaatsingen

1e orde

B.G:12 Wind loodrecht onderdruk A

St.	Kn.	Pos.	Globaal [mm]	Lokaal [mm]	Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z		Grondspan.
1	1		-0.00	3899.84	3899.84	0.00 -0.00111
1	0.310		-0.34	3899.84	3899.84	0.34 -0.00105
1	0.620		-0.64	3899.84	3899.84	0.64 -0.00093
1	0.930		-0.92	3899.84	3899.84	0.92 -0.00077
1	1.240		-1.12	3899.84	3899.84	1.12 -0.00056
1	1.550		-1.25	3899.84	3899.84	1.25 -0.00034
1	1.860		-1.33	3899.84	3899.84	1.33 -0.00012
1	2.170		-1.34	3899.85	3899.85	1.34 0.00009
1	2.480		-1.27	3899.85	3899.85	1.27 0.00025
1	2.790		-1.18	3899.85	3899.85	1.18 0.00037
1	2		-1.06	3899.85	3899.85	1.06 0.00043
2	2		-1.06	3899.85	3899.85	1.06 -0.00110
2	0.310		-1.39	3899.85	3899.85	1.39 -0.00104
2	0.620		-1.69	3899.85	3899.85	1.69 -0.00093
2	0.930		-1.97	3899.85	3899.85	1.97 -0.00077
2	1.240		-2.17	3899.85	3899.85	2.17 -0.00056
2	1.550		-2.30	3899.85	3899.85	2.30 -0.00034
2	1.860		-2.38	3899.85	3899.85	2.38 -0.00012
2	2.170		-2.39	3899.85	3899.85	2.39 0.00009
2	2.480		-2.32	3899.85	3899.85	2.32 0.00025
2	2.790		-2.23	3899.85	3899.85	2.23 0.00037
2	3		-2.11	3899.85	3899.85	2.11 0.00043

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:12 Wind loodrecht onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
3	4		0.00	3900.92	3900.92	0.00	-0.00033	
3		0.310	-0.10	3900.92	3900.92	0.10	-0.00033	
3		0.620	-0.21	3900.92	3900.92	0.21	-0.00033	
3		0.930	-0.31	3900.92	3900.92	0.31	-0.00033	
3		1.240	-0.41	3900.92	3900.92	0.41	-0.00033	
3		1.550	-0.52	3900.92	3900.92	0.52	-0.00033	
3		1.860	-0.62	3900.92	3900.92	0.62	-0.00033	
3		2.170	-0.72	3900.93	3900.93	0.72	-0.00033	
3		2.480	-0.83	3900.93	3900.93	0.83	-0.00033	
3		2.790	-0.93	3900.93	3900.93	0.93	-0.00033	
3	5		-1.04	3900.93	3900.93	1.04	-0.00033	
4	5		-1.04	3900.93	3900.93	1.04	-0.00034	
4		0.310	-1.14	3900.93	3900.93	1.14	-0.00034	
4		0.620	-1.25	3900.93	3900.93	1.25	-0.00034	
4		0.930	-1.35	3900.93	3900.93	1.35	-0.00034	
4		1.240	-1.46	3900.94	3900.94	1.46	-0.00034	
4		1.550	-1.57	3900.94	3900.94	1.57	-0.00034	
4		1.860	-1.67	3900.94	3900.94	1.67	-0.00034	
4		2.170	-1.78	3900.94	3900.94	1.78	-0.00034	
4		2.480	-1.88	3900.94	3900.94	1.88	-0.00034	
4		2.790	-1.99	3900.94	3900.94	1.99	-0.00034	
4	6		-2.10	3900.94	3900.94	2.10	-0.00034	
5	7		0.00	3901.75	3901.75	-0.00	0.00044	
5		0.310	0.13	3901.75	3901.75	-0.13	0.00038	
5		0.620	0.23	3901.75	3901.75	-0.23	0.00027	
5		0.930	0.30	3901.75	3901.75	-0.30	0.00011	
5		1.240	0.29	3901.75	3901.75	-0.29	-0.00010	
5		1.550	0.22	3901.75	3901.75	-0.22	-0.00033	
5		1.860	0.09	3901.75	3901.75	-0.09	-0.00055	
5		2.170	-0.11	3901.75	3901.75	0.11	-0.00076	
5		2.480	-0.38	3901.75	3901.75	0.38	-0.00092	
5		2.790	-0.68	3901.75	3901.75	0.68	-0.00103	
5	8		-1.01	3901.75	3901.75	1.01	-0.00109	
6	8		-1.01	3901.75	3901.75	1.01	0.00042	
6		0.310	-0.89	3901.75	3901.75	0.89	0.00036	
6		0.620	-0.80	3901.76	3901.76	0.80	0.00025	
6		0.930	-0.74	3901.76	3901.76	0.74	0.00009	
6		1.240	-0.74	3901.76	3901.76	0.74	-0.00012	
6		1.550	-0.82	3901.76	3901.76	0.82	-0.00035	
6		1.860	-0.96	3901.76	3901.76	0.96	-0.00057	
6		2.170	-1.16	3901.76	3901.76	1.16	-0.00078	
6		2.480	-1.44	3901.76	3901.76	1.44	-0.00094	
6		2.790	-1.75	3901.76	3901.76	1.75	-0.00105	
6	9		-2.08	3901.76	3901.76	2.08	-0.00111	
7	3		-2.11	3899.85	-2.11	3899.85	-0.00087	
7		0.320	-2.10	3900.12	-2.10	3900.12	-0.00082	
7		0.640	-2.10	3900.36	-2.10	3900.36	-0.00070	
7		0.960	-2.10	3900.56	-2.10	3900.56	-0.00055	
7		1.280	-2.10	3900.72	-2.10	3900.72	-0.00038	
7		1.600	-2.10	3900.82	-2.10	3900.82	-0.00021	
7		1.920	-2.10	3900.86	-2.10	3900.86	-0.00009	
7		2.240	-2.10	3900.87	-2.10	3900.87	-0.00002	
7		2.560	-2.10	3900.88	-2.10	3900.88	-0.00002	
7		2.880	-2.10	3900.89	-2.10	3900.89	-0.00011	
7	6		-2.10	3900.94	-2.10	3900.94	-0.00030	

TUSSENpunten Verplaatsingen

1e orde

B.G:12 Wind loodrecht onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
8	6		-2.10	3900.94	-2.10	3900.94	-0.00030	
8	0.320		-2.09	3901.08	-2.09	3901.08	-0.00049	
8	0.640		-2.09	3901.26	-2.09	3901.26	-0.00058	
8	0.960		-2.09	3901.45	-2.09	3901.45	-0.00058	
8	1.280		-2.09	3901.62	-2.09	3901.62	-0.00051	
8	1.600		-2.09	3901.77	-2.09	3901.77	-0.00038	
8	1.920		-2.09	3901.86	-2.09	3901.86	-0.00022	
8	2.240		-2.09	3901.90	-2.09	3901.90	-0.00005	
8	2.560		-2.09	3901.89	-2.09	3901.89	0.00011	
8	2.880		-2.08	3901.84	-2.08	3901.84	0.00022	
8	9		-2.08	3901.76	-2.08	3901.76	0.00027	
9	2		-1.06	3899.85	-1.06	3899.85	-0.00036	
9	0.320		-1.05	3899.96	-1.05	3899.96	-0.00036	
9	0.640		-1.05	3900.08	-1.05	3900.08	-0.00036	
9	0.960		-1.05	3900.19	-1.05	3900.19	-0.00035	
9	1.280		-1.05	3900.30	-1.05	3900.30	-0.00035	
9	1.600		-1.05	3900.41	-1.05	3900.41	-0.00034	
9	1.920		-1.04	3900.52	-1.04	3900.52	-0.00034	
9	2.240		-1.04	3900.63	-1.04	3900.63	-0.00033	
9	2.560		-1.04	3900.73	-1.04	3900.73	-0.00032	
9	2.880		-1.04	3900.83	-1.04	3900.83	-0.00031	
9	5		-1.04	3900.93	-1.04	3900.93	-0.00030	
10	5		-1.04	3900.93	-1.04	3900.93	-0.00030	
10	0.320		-1.03	3901.02	-1.03	3901.02	-0.00029	
10	0.640		-1.03	3901.11	-1.03	3901.11	-0.00028	
10	0.960		-1.03	3901.20	-1.03	3901.20	-0.00027	
10	1.280		-1.03	3901.28	-1.03	3901.28	-0.00026	
10	1.600		-1.02	3901.37	-1.02	3901.37	-0.00025	
10	1.920		-1.02	3901.45	-1.02	3901.45	-0.00025	
10	2.240		-1.02	3901.52	-1.02	3901.52	-0.00024	
10	2.560		-1.02	3901.60	-1.02	3901.60	-0.00024	
10	2.880		-1.01	3901.68	-1.01	3901.68	-0.00024	
10	8		-1.01	3901.75	-1.01	3901.75	-0.00024	
11	1		-0.00	3899.84	2713.49	2801.02	-0.00034	
11	0.446		-0.11	3899.95	2713.49	2801.17	-0.00034	
11	0.891		-0.21	3900.06	2713.49	2801.32	-0.00034	
11	1.337		-0.31	3900.17	2713.49	2801.48	-0.00034	
11	1.782		-0.42	3900.28	2713.50	2801.62	-0.00034	
11	2.228		-0.52	3900.39	2713.50	2801.77	-0.00034	
11	2.673		-0.62	3900.49	2713.50	2801.93	-0.00034	
11	3.119		-0.73	3900.60	2713.50	2802.08	-0.00034	
11	3.564		-0.83	3900.71	2713.50	2802.23	-0.00034	
11	4.010		-0.93	3900.82	2713.50	2802.38	-0.00034	
11	5		-1.04	3900.93	2713.50	2802.53	-0.00034	
12	5		-1.04	3900.93	2714.99	-2801.08	-0.00034	
12	0.446		-1.14	3900.82	2714.99	-2800.93	-0.00034	
12	0.891		-1.25	3900.71	2715.00	-2800.78	-0.00034	
12	1.337		-1.36	3900.61	2715.00	-2800.63	-0.00034	
12	1.782		-1.46	3900.50	2715.00	-2800.48	-0.00034	
12	2.228		-1.57	3900.39	2715.00	-2800.32	-0.00034	
12	2.673		-1.68	3900.28	2715.00	-2800.17	-0.00034	
12	3.119		-1.78	3900.17	2715.00	-2800.02	-0.00034	
12	3.564		-1.89	3900.07	2715.01	-2799.87	-0.00034	
12	4.010		-2.00	3899.96	2715.01	-2799.72	-0.00034	
12	3		-2.11	3899.85	2715.01	-2799.56	-0.00034	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:12 Wind loodrecht onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z	Grondspan.	
13	4		0.00	3900.92	2714.24	-2801.79	-0.00034	
13		0.446	-0.11	3900.81	2714.24	-2801.64	-0.00034	
13		0.891	-0.21	3900.70	2714.24	-2801.49	-0.00034	
13		1.337	-0.32	3900.59	2714.24	-2801.34	-0.00034	
13		1.782	-0.42	3900.49	2714.24	-2801.19	-0.00034	
13		2.228	-0.53	3900.38	2714.25	-2801.04	-0.00034	
13		2.673	-0.63	3900.27	2714.25	-2800.89	-0.00034	
13		3.119	-0.74	3900.17	2714.25	-2800.74	-0.00034	
13		3.564	-0.84	3900.06	2714.25	-2800.59	-0.00034	
13		4.010	-0.95	3899.95	2714.25	-2800.44	-0.00034	
13	2		-1.06	3899.85	2714.25	-2800.29	-0.00034	
14	2		-1.06	3899.85	2712.74	2801.76	-0.00034	
14		0.446	-1.16	3899.96	2712.74	2801.91	-0.00034	
14		0.891	-1.26	3900.07	2712.74	2802.06	-0.00034	
14		1.337	-1.37	3900.18	2712.74	2802.21	-0.00034	
14		1.782	-1.47	3900.29	2712.74	2802.37	-0.00034	
14		2.228	-1.58	3900.40	2712.74	2802.52	-0.00034	
14		2.673	-1.68	3900.50	2712.75	2802.67	-0.00034	
14		3.119	-1.78	3900.61	2712.75	2802.82	-0.00034	
14		3.564	-1.89	3900.72	2712.75	2802.97	-0.00034	
14		4.010	-1.99	3900.83	2712.75	2803.12	-0.00034	
14	6		-2.10	3900.94	2712.75	2803.27	-0.00034	
15	12		-0.00	-17.43	-0.00	-17.43	-0.31320	130.760
15		0.250	-0.00	60.86	-0.00	60.86	-0.31320	
15		0.500	-0.00	139.16	-0.00	139.16	-0.31320	
15		0.750	-0.00	217.46	-0.00	217.46	-0.31320	
15		1.000	-0.00	295.76	-0.00	295.76	-0.31320	
15		1.250	-0.00	374.06	-0.00	374.06	-0.31320	
15		1.500	-0.00	452.37	-0.00	452.37	-0.31321	
15		1.750	-0.00	530.67	-0.00	530.67	-0.31321	
15		2.000	-0.00	608.97	-0.00	608.97	-0.31322	
15		2.250	-0.00	687.28	-0.00	687.28	-0.31322	
15	11		-0.00	765.58	-0.00	765.58	-0.31323	
Som gronddruk X: 0 Z: 2 kN								
16	11		-0.00	765.58	-0.00	765.58	-0.31323	
16		0.500	-0.00	922.20	-0.00	922.20	-0.31324	
16		1.000	-0.00	1078.83	-0.00	1078.83	-0.31326	
16		1.500	-0.00	1235.46	-0.00	1235.46	-0.31327	
16		2.000	-0.00	1392.10	-0.00	1392.10	-0.31329	
16		2.500	-0.00	1548.75	-0.00	1548.75	-0.31331	
16		3.000	-0.00	1705.42	-0.00	1705.42	-0.31334	
16		3.500	-0.00	1862.09	-0.00	1862.09	-0.31336	
16		4.000	-0.00	2018.78	-0.00	2018.78	-0.31338	
16		4.500	-0.00	2175.47	-0.00	2175.47	-0.31341	
16	10		-0.00	2332.18	-0.00	2332.18	-0.31343	
17	10		-0.00	2332.18	-0.00	2332.18	-0.31343	
17		0.500	-0.00	2488.90	-0.00	2488.90	-0.31346	
17		1.000	-0.00	2645.64	-0.00	2645.64	-0.31348	
17		1.500	-0.00	2802.38	-0.00	2802.38	-0.31350	
17		2.000	-0.00	2959.14	-0.00	2959.14	-0.31352	
17		2.500	-0.00	3115.91	-0.00	3115.91	-0.31354	
17		3.000	-0.00	3272.68	-0.00	3272.68	-0.31356	
17		3.500	-0.00	3429.46	-0.00	3429.46	-0.31357	
17		4.000	-0.00	3586.25	-0.00	3586.25	-0.31358	
17		4.500	-0.00	3743.05	-0.00	3743.05	-0.31359	
17	1		-0.00	3899.84	-0.00	3899.84	-0.31359	

TUSSENpunTEN VERPLAATSINGEN

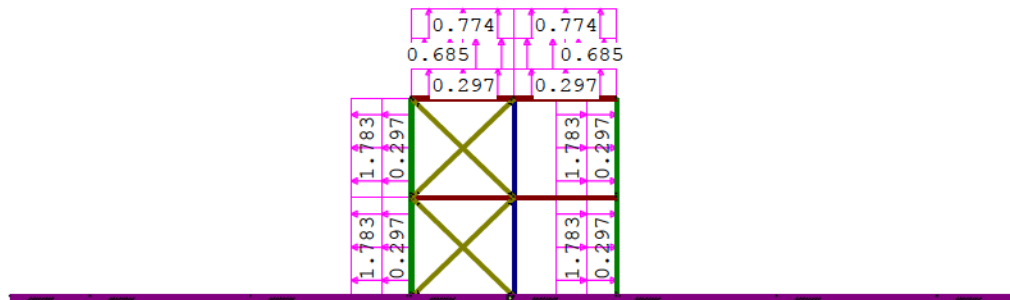
1e orde

B.G:12 Wind loodrecht onderdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
18	1		-0.00	3899.84	-0.00	3899.84	-0.00035	
18	0.320		-0.00	3899.95	-0.00	3899.95	-0.00035	
18	0.640		-0.00	3900.07	-0.00	3900.07	-0.00035	
18	0.960		-0.00	3900.18	-0.00	3900.18	-0.00035	
18	1.280		-0.00	3900.29	-0.00	3900.29	-0.00034	
18	1.600		-0.00	3900.40	-0.00	3900.40	-0.00034	
18	1.920		-0.00	3900.51	-0.00	3900.51	-0.00034	
18	2.240		-0.00	3900.61	-0.00	3900.61	-0.00033	
18	2.560		-0.00	3900.72	-0.00	3900.72	-0.00032	
18	2.880		-0.00	3900.82	-0.00	3900.82	-0.00031	
18	4		0.00	3900.92	0.00	3900.92	-0.00030	
19	4		0.00	3900.92	0.00	3900.92	-0.00030	
19	0.320		0.00	3901.01	0.00	3901.01	-0.00029	
19	0.640		0.00	3901.10	0.00	3901.10	-0.00028	
19	0.960		0.00	3901.19	0.00	3901.19	-0.00027	
19	1.280		0.00	3901.27	0.00	3901.27	-0.00026	
19	1.600		0.00	3901.35	0.00	3901.35	-0.00025	
19	1.920		0.00	3901.43	0.00	3901.43	-0.00025	
19	2.240		0.00	3901.51	0.00	3901.51	-0.00025	
19	2.560		0.00	3901.59	0.00	3901.59	-0.00025	
19	2.880		0.00	3901.67	0.00	3901.67	-0.00025	
19	7		0.00	3901.75	0.00	3901.75	-0.00024	
20	7		0.00	3901.75	0.00	3901.75	0.31375	
20	0.500		0.00	3744.88	0.00	3744.88	0.31374	
20	1.000		0.00	3588.01	0.00	3588.01	0.31374	
20	1.500		0.00	3431.14	0.00	3431.14	0.31373	
20	2.000		0.00	3274.28	0.00	3274.28	0.31371	
20	2.500		0.00	3117.43	0.00	3117.43	0.31370	
20	3.000		0.00	2960.59	0.00	2960.59	0.31368	
20	3.500		0.00	2803.75	0.00	2803.75	0.31365	
20	4.000		0.00	2646.93	0.00	2646.93	0.31363	
20	4.500		0.00	2490.12	0.00	2490.12	0.31361	
20	13		0.00	2333.32	0.00	2333.32	0.31358	
21	13		0.00	2333.32	0.00	2333.32	0.31358	
21	0.500		0.00	2176.54	0.00	2176.54	0.31356	
21	1.000		0.00	2019.76	0.00	2019.76	0.31354	
21	1.500		0.00	1863.00	0.00	1863.00	0.31351	
21	2.000		0.00	1706.25	0.00	1706.25	0.31349	
21	2.500		0.00	1549.51	0.00	1549.51	0.31347	
21	3.000		0.00	1392.78	0.00	1392.78	0.31345	
21	3.500		0.00	1236.06	0.00	1236.06	0.31343	
21	4.000		0.00	1079.35	0.00	1079.35	0.31341	
21	4.500		0.00	922.65	0.00	922.65	0.31340	
21	14		0.00	765.96	0.00	765.96	0.31338	
22	14		0.00	765.96	0.00	765.96	0.31338	
22	0.250		0.00	687.61	0.00	687.61	0.31338	
22	0.500		0.00	609.27	0.00	609.27	0.31337	
22	0.750		0.00	530.93	0.00	530.93	0.31337	
22	1.000		0.00	452.59	0.00	452.59	0.31336	
22	1.250		0.00	374.25	0.00	374.25	0.31336	
22	1.500		0.00	295.91	0.00	295.91	0.31335	
22	1.750		0.00	217.57	0.00	217.57	0.31335	
22	2.000		0.00	139.23	0.00	139.23	0.31335	
22	2.250		0.00	60.89	0.00	60.89	0.31335	
22	15		0.00	-17.44	0.00	-17.44	0.31335	130.824
Som gronddruk X: 0 Z: 2 kN								
Totale grondreactie X: 0 Z: 4 kN								

BELASTINGEN

B.G:13 Wind loodrecht overdruk A



STAAFBELASTINGEN

B.G:13 Wind loodrecht overdruk A

Staaf	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw13	1.78	1.78	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw13	1.78	1.78	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw14	-1.78	-1.78	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw14	-1.78	-1.78	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw15	0.46	0.46	1.600	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw16	0.68	0.68	0.000	1.600	0.00	0.20	0.00
7	1:QZLokaal	Qw17	0.77	0.77	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw16	0.68	0.68	1.600	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw15	0.46	0.46	0.000	1.600	0.00	0.20	0.00
8	1:QZLokaal	Qw17	0.77	0.77	0.000	0.000	0.00	0.20	0.00

TUSSENpunten Verplaatsingen

1e orde

B.G:13 Wind loodrecht overdruk A

St.	Kn.	Pos.	Globaal [mm]	Lokaal [mm]	Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z		Grondspan.
1	1		-0.00	7123.92	7123.92	0.00 -0.00181
1	0.310		-0.55	7123.92	7123.92	0.55 -0.00172
1	0.620		-1.06	7123.92	7123.92	1.06 -0.00155
1	0.930		-1.51	7123.92	7123.92	1.51 -0.00130
1	1.240		-1.86	7123.92	7123.92	1.86 -0.00097
1	1.550		-2.09	7123.92	7123.92	2.09 -0.00062
1	1.860		-2.24	7123.92	7123.92	2.24 -0.00028
1	2.170		-2.29	7123.92	7123.92	2.29 0.00005
1	2.480		-2.22	7123.92	7123.92	2.22 0.00030
1	2.790		-2.10	7123.92	7123.92	2.10 0.00047
1	2		-1.94	7123.92	7123.92	1.94 0.00057
2	2		-1.94	7123.92	7123.92	1.94 -0.00181
2	0.310		-2.48	7123.92	7123.92	2.48 -0.00172
2	0.620		-2.99	7123.92	7123.92	2.99 -0.00155
2	0.930		-3.44	7123.92	7123.92	3.44 -0.00129
2	1.240		-3.79	7123.93	7123.93	3.79 -0.00097
2	1.550		-4.03	7123.93	7123.93	4.03 -0.00062
2	1.860		-4.18	7123.93	7123.93	4.18 -0.00028
2	2.170		-4.22	7123.93	7123.93	4.22 0.00005
2	2.480		-4.15	7123.93	7123.93	4.15 0.00030
2	2.790		-4.03	7123.93	7123.93	4.03 0.00048
2	3		-3.87	7123.93	7123.93	3.87 0.00057

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:13 Wind loodrecht overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
3	4		0.00	7125.89	7125.89	0.00	-0.00061	
3		0.310	-0.19	7125.89	7125.89	0.19	-0.00061	
3		0.620	-0.38	7125.89	7125.89	0.38	-0.00061	
3		0.930	-0.57	7125.89	7125.89	0.57	-0.00061	
3		1.240	-0.76	7125.90	7125.90	0.76	-0.00061	
3		1.550	-0.95	7125.90	7125.90	0.95	-0.00061	
3		1.860	-1.14	7125.90	7125.90	1.14	-0.00061	
3		2.170	-1.33	7125.91	7125.91	1.33	-0.00061	
3		2.480	-1.52	7125.91	7125.91	1.52	-0.00061	
3		2.790	-1.71	7125.91	7125.91	1.71	-0.00061	
3	5		-1.90	7125.91	7125.91	1.90	-0.00061	
4	5		-1.90	7125.91	7125.91	1.90	-0.00063	
4		0.310	-2.10	7125.92	7125.92	2.10	-0.00063	
4		0.620	-2.29	7125.92	7125.92	2.29	-0.00063	
4		0.930	-2.49	7125.92	7125.92	2.49	-0.00063	
4		1.240	-2.68	7125.92	7125.92	2.68	-0.00063	
4		1.550	-2.88	7125.93	7125.93	2.88	-0.00063	
4		1.860	-3.07	7125.93	7125.93	3.07	-0.00063	
4		2.170	-3.27	7125.93	7125.93	3.27	-0.00063	
4		2.480	-3.46	7125.93	7125.93	3.46	-0.00063	
4		2.790	-3.66	7125.94	7125.94	3.66	-0.00063	
4	6		-3.85	7125.94	7125.94	3.85	-0.00063	
5	7		0.00	7127.40	7127.40	-0.00	0.00059	
5		0.310	0.17	7127.40	7127.40	-0.17	0.00049	
5		0.620	0.30	7127.40	7127.40	-0.30	0.00032	
5		0.930	0.37	7127.40	7127.40	-0.37	0.00007	
5		1.240	0.34	7127.40	7127.40	-0.34	-0.00026	
5		1.550	0.19	7127.40	7127.40	-0.19	-0.00060	
5		1.860	-0.04	7127.40	7127.40	0.04	-0.00095	
5		2.170	-0.38	7127.40	7127.40	0.38	-0.00128	
5		2.480	-0.83	7127.41	7127.41	0.83	-0.00153	
5		2.790	-1.32	7127.41	7127.41	1.32	-0.00170	
5	8		-1.87	7127.41	7127.41	1.87	-0.00179	
6	8		-1.87	7127.41	7127.41	1.87	0.00056	
6		0.310	-1.71	7127.41	7127.41	1.71	0.00046	
6		0.620	-1.59	7127.41	7127.41	1.59	0.00029	
6		0.930	-1.53	7127.41	7127.41	1.53	0.00004	
6		1.240	-1.57	7127.41	7127.41	1.57	-0.00029	
6		1.550	-1.72	7127.41	7127.41	1.72	-0.00063	
6		1.860	-1.96	7127.41	7127.41	1.96	-0.00098	
6		2.170	-2.31	7127.41	7127.41	2.31	-0.00131	
6		2.480	-2.77	7127.42	7127.42	2.77	-0.00156	
6		2.790	-3.28	7127.42	7127.42	3.28	-0.00173	
6	9		-3.83	7127.42	7127.42	3.83	-0.00182	
7	3		-3.87	7123.93	-3.87	7123.93	-0.00157	
7		0.320	-3.87	7124.42	-3.87	7124.42	-0.00148	
7		0.640	-3.86	7124.86	-3.86	7124.86	-0.00128	
7		0.960	-3.86	7125.23	-3.86	7125.23	-0.00101	
7		1.280	-3.86	7125.51	-3.86	7125.51	-0.00071	
7		1.600	-3.86	7125.70	-3.86	7125.70	-0.00041	
7		1.920	-3.86	7125.78	-3.86	7125.78	-0.00017	
7		2.240	-3.86	7125.81	-3.86	7125.81	-0.00004	
7		2.560	-3.85	7125.82	-3.85	7125.82	-0.00004	
7		2.880	-3.85	7125.85	-3.85	7125.85	-0.00019	
7	6		-3.85	7125.94	-3.85	7125.94	-0.00054	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:13 Wind loodrecht overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
8	6		-3.85	7125.94	-3.85	7125.94	-0.00054	
8		0.320	-3.85	7126.19	-3.85	7126.19	-0.00090	
8		0.640	-3.85	7126.51	-3.85	7126.51	-0.00105	
8		0.960	-3.85	7126.85	-3.85	7126.85	-0.00105	
8		1.280	-3.84	7127.17	-3.84	7127.17	-0.00092	
8		1.600	-3.84	7127.44	-3.84	7127.44	-0.00068	
8		1.920	-3.84	7127.60	-3.84	7127.60	-0.00038	
8		2.240	-3.84	7127.67	-3.84	7127.67	-0.00008	
8		2.560	-3.84	7127.65	-3.84	7127.65	0.00019	
8		2.880	-3.83	7127.56	-3.83	7127.56	0.00039	
8	9		-3.83	7127.42	-3.83	7127.42	0.00048	
9	2		-1.94	7123.92	-1.94	7123.92	-0.00066	
9		0.320	-1.93	7124.13	-1.93	7124.13	-0.00066	
9		0.640	-1.93	7124.34	-1.93	7124.34	-0.00066	
9		0.960	-1.93	7124.55	-1.93	7124.55	-0.00065	
9		1.280	-1.92	7124.76	-1.92	7124.76	-0.00064	
9		1.600	-1.92	7124.96	-1.92	7124.96	-0.00063	
9		1.920	-1.92	7125.16	-1.92	7125.16	-0.00062	
9		2.240	-1.91	7125.36	-1.91	7125.36	-0.00060	
9		2.560	-1.91	7125.55	-1.91	7125.55	-0.00059	
9		2.880	-1.91	7125.73	-1.91	7125.73	-0.00057	
9	5		-1.90	7125.91	-1.90	7125.91	-0.00054	
10	5		-1.90	7125.91	-1.90	7125.91	-0.00054	
10		0.320	-1.90	7126.08	-1.90	7126.08	-0.00052	
10		0.640	-1.90	7126.25	-1.90	7126.25	-0.00050	
10		0.960	-1.89	7126.41	-1.89	7126.41	-0.00049	
10		1.280	-1.89	7126.56	-1.89	7126.56	-0.00047	
10		1.600	-1.89	7126.71	-1.89	7126.71	-0.00046	
10		1.920	-1.88	7126.85	-1.88	7126.85	-0.00045	
10		2.240	-1.88	7126.99	-1.88	7126.99	-0.00044	
10		2.560	-1.87	7127.13	-1.87	7127.13	-0.00043	
10		2.880	-1.87	7127.27	-1.87	7127.27	-0.00043	
10	8		-1.87	7127.41	-1.87	7127.41	-0.00043	
11	1		-0.00	7123.92	4956.78	5116.68	-0.00062	
11		0.446	-0.19	7124.12	4956.79	5116.96	-0.00062	
11		0.891	-0.38	7124.31	4956.79	5117.24	-0.00062	
11		1.337	-0.57	7124.51	4956.79	5117.51	-0.00062	
11		1.782	-0.76	7124.71	4956.79	5117.79	-0.00062	
11		2.228	-0.95	7124.91	4956.80	5118.06	-0.00062	
11		2.673	-1.14	7125.11	4956.80	5118.34	-0.00062	
11		3.119	-1.33	7125.31	4956.80	5118.62	-0.00062	
11		3.564	-1.52	7125.51	4956.80	5118.89	-0.00062	
11		4.010	-1.72	7125.71	4956.81	5119.17	-0.00062	
11	5		-1.90	7125.91	4956.81	5119.44	-0.00062	
12	5		-1.90	7125.91	4959.54	-5116.79	-0.00063	
12		0.446	-2.10	7125.72	4959.55	-5116.51	-0.00063	
12		0.891	-2.30	7125.52	4959.55	-5116.23	-0.00063	
12		1.337	-2.49	7125.32	4959.55	-5115.96	-0.00063	
12		1.782	-2.69	7125.12	4959.56	-5115.68	-0.00063	
12		2.228	-2.89	7124.92	4959.56	-5115.40	-0.00063	
12		2.673	-3.08	7124.72	4959.56	-5115.12	-0.00063	
12		3.119	-3.28	7124.52	4959.56	-5114.84	-0.00063	
12		3.564	-3.47	7124.33	4959.57	-5114.56	-0.00063	
12		4.010	-3.67	7124.13	4959.57	-5114.28	-0.00063	
12	3		-3.87	7123.93	4959.57	-5114.00	-0.00063	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:13 Wind loodrecht overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		Grondspan.
13	4		0.00	7125.89	4958.16	-5118.10	-0.00062	
13		0.446	-0.19	7125.69	4958.16	-5117.82	-0.00062	
13		0.891	-0.39	7125.49	4958.16	-5117.55	-0.00062	
13		1.337	-0.58	7125.30	4958.17	-5117.27	-0.00062	
13		1.782	-0.77	7125.10	4958.17	-5116.99	-0.00062	
13		2.228	-0.97	7124.90	4958.17	-5116.72	-0.00062	
13		2.673	-1.16	7124.71	4958.17	-5116.44	-0.00062	
13		3.119	-1.36	7124.51	4958.17	-5116.17	-0.00062	
13		3.564	-1.55	7124.32	4958.18	-5115.89	-0.00062	
13		4.010	-1.74	7124.12	4958.18	-5115.62	-0.00062	
13	2		-1.94	7123.92	4958.18	-5115.34	-0.00062	
14	2		-1.94	7123.92	4955.40	5118.04	-0.00062	
14		0.446	-2.13	7124.12	4955.40	5118.31	-0.00062	
14		0.891	-2.32	7124.33	4955.41	5118.59	-0.00062	
14		1.337	-2.51	7124.53	4955.41	5118.87	-0.00062	
14		1.782	-2.70	7124.73	4955.41	5119.15	-0.00062	
14		2.228	-2.89	7124.93	4955.41	5119.43	-0.00062	
14		2.673	-3.09	7125.13	4955.42	5119.70	-0.00062	
14		3.119	-3.28	7125.33	4955.42	5119.98	-0.00062	
14		3.564	-3.47	7125.54	4955.42	5120.26	-0.00062	
14		4.010	-3.66	7125.74	4955.43	5120.54	-0.00062	
14	6		-3.85	7125.94	4955.43	5120.82	-0.00062	
15	12		-0.00	-31.85	-0.00	-31.85	-0.57212	238.862
15		0.250	-0.00	111.18	-0.00	111.18	-0.57212	
15		0.500	-0.00	254.21	-0.00	254.21	-0.57212	
15		0.750	-0.00	397.24	-0.00	397.24	-0.57213	
15		1.000	-0.00	540.28	-0.00	540.28	-0.57213	
15		1.250	-0.00	683.31	-0.00	683.31	-0.57214	
15		1.500	-0.00	826.34	-0.00	826.34	-0.57214	
15		1.750	-0.00	969.38	-0.00	969.38	-0.57215	
15		2.000	-0.00	1112.42	-0.00	1112.42	-0.57216	
15		2.250	-0.00	1255.46	-0.00	1255.46	-0.57217	
15	11		-0.00	1398.51	-0.00	1398.51	-0.57218	
Som gronddruk X: 0 Z: 4 kN								
16	11		-0.00	1398.51	-0.00	1398.51	-0.57218	
16		0.500	-0.00	1684.60	-0.00	1684.60	-0.57221	
16		1.000	-0.00	1970.71	-0.00	1970.71	-0.57223	
16		1.500	-0.00	2256.84	-0.00	2256.84	-0.57227	
16		2.000	-0.00	2542.98	-0.00	2542.98	-0.57230	
16		2.500	-0.00	2829.14	-0.00	2829.14	-0.57234	
16		3.000	-0.00	3115.31	-0.00	3115.31	-0.57238	
16		3.500	-0.00	3401.51	-0.00	3401.51	-0.57242	
16		4.000	-0.00	3687.73	-0.00	3687.73	-0.57246	
16		4.500	-0.00	3973.98	-0.00	3973.98	-0.57251	
16	10		-0.00	4260.24	-0.00	4260.24	-0.57255	
17	10		-0.00	4260.24	-0.00	4260.24	-0.57255	
17		0.500	-0.00	4546.53	-0.00	4546.53	-0.57260	
17		1.000	-0.00	4832.84	-0.00	4832.84	-0.57264	
17		1.500	-0.00	5119.17	-0.00	5119.17	-0.57268	
17		2.000	-0.00	5405.51	-0.00	5405.51	-0.57272	
17		2.500	-0.00	5691.88	-0.00	5691.88	-0.57275	
17		3.000	-0.00	5978.27	-0.00	5978.27	-0.57278	
17		3.500	-0.00	6264.67	-0.00	6264.67	-0.57281	
17		4.000	-0.00	6551.08	-0.00	6551.08	-0.57283	
17		4.500	-0.00	6837.49	-0.00	6837.49	-0.57284	
17	1		-0.00	7123.92	-0.00	7123.92	-0.57285	

TUSSENpunTEN VERPLAATSINGEN

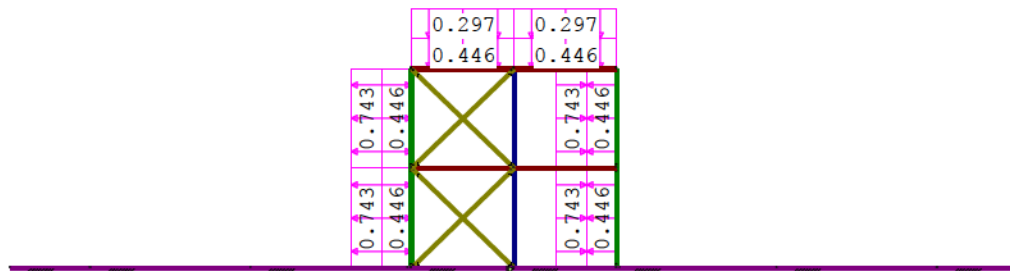
1e orde

B.G:13 Wind loodrecht overdruk A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
18	1		-0.00	7123.92	-0.00	7123.92	-0.00065	
18	0.320		-0.00	7124.12	-0.00	7124.12	-0.00065	
18	0.640		-0.00	7124.33	-0.00	7124.33	-0.00064	
18	0.960		-0.00	7124.53	-0.00	7124.53	-0.00064	
18	1.280		-0.00	7124.74	-0.00	7124.74	-0.00063	
18	1.600		-0.00	7124.94	-0.00	7124.94	-0.00063	
18	1.920		-0.00	7125.14	-0.00	7125.14	-0.00062	
18	2.240		-0.00	7125.33	-0.00	7125.33	-0.00060	
18	2.560		-0.00	7125.52	-0.00	7125.52	-0.00059	
18	2.880		-0.00	7125.71	-0.00	7125.71	-0.00057	
18	4		0.00	7125.89	0.00	7125.89	-0.00054	
19	4		0.00	7125.89	0.00	7125.89	-0.00054	
19	0.320		0.00	7126.06	0.00	7126.06	-0.00052	
19	0.640		0.00	7126.22	0.00	7126.22	-0.00050	
19	0.960		0.00	7126.38	0.00	7126.38	-0.00049	
19	1.280		0.00	7126.53	0.00	7126.53	-0.00047	
19	1.600		0.00	7126.68	0.00	7126.68	-0.00046	
19	1.920		0.00	7126.83	0.00	7126.83	-0.00045	
19	2.240		0.00	7126.97	0.00	7126.97	-0.00045	
19	2.560		0.00	7127.11	0.00	7127.11	-0.00045	
19	2.880		0.00	7127.26	0.00	7127.26	-0.00044	
19	7		0.00	7127.40	0.00	7127.40	-0.00044	
20	7		0.00	7127.40	0.00	7127.40	0.57313	
20	0.500		0.00	6840.84	0.00	6840.84	0.57312	
20	1.000		0.00	6554.28	0.00	6554.28	0.57311	
20	1.500		0.00	6267.73	0.00	6267.73	0.57309	
20	2.000		0.00	5981.19	0.00	5981.19	0.57306	
20	2.500		0.00	5694.67	0.00	5694.67	0.57303	
20	3.000		0.00	5408.16	0.00	5408.16	0.57300	
20	3.500		0.00	5121.67	0.00	5121.67	0.57296	
20	4.000		0.00	4835.20	0.00	4835.20	0.57292	
20	4.500		0.00	4548.75	0.00	4548.75	0.57288	
20	13		0.00	4262.32	0.00	4262.32	0.57283	
21	13		0.00	4262.32	0.00	4262.32	0.57283	
21	0.500		0.00	3975.92	0.00	3975.92	0.57279	
21	1.000		0.00	3689.54	0.00	3689.54	0.57274	
21	1.500		0.00	3403.18	0.00	3403.18	0.57270	
21	2.000		0.00	3116.84	0.00	3116.84	0.57266	
21	2.500		0.00	2830.52	0.00	2830.52	0.57262	
21	3.000		0.00	2544.22	0.00	2544.22	0.57258	
21	3.500		0.00	2257.94	0.00	2257.94	0.57254	
21	4.000		0.00	1971.67	0.00	1971.67	0.57251	
21	4.500		0.00	1685.43	0.00	1685.43	0.57248	
21	14		0.00	1399.19	0.00	1399.19	0.57246	
22	14		0.00	1399.19	0.00	1399.19	0.57246	
22	0.250		0.00	1256.08	0.00	1256.08	0.57245	
22	0.500		0.00	1112.96	0.00	1112.96	0.57244	
22	0.750		0.00	969.86	0.00	969.86	0.57243	
22	1.000		0.00	826.75	0.00	826.75	0.57242	
22	1.250		0.00	683.64	0.00	683.64	0.57242	
22	1.500		0.00	540.54	0.00	540.54	0.57241	
22	1.750		0.00	397.44	0.00	397.44	0.57241	
22	2.000		0.00	254.34	0.00	254.34	0.57240	
22	2.250		0.00	111.24	0.00	111.24	0.57240	
22	15		0.00	-31.86	0.00	-31.86	0.57240	238.979
			Som gronddruk X:		0		Z:	4 kN
			Totale grondreactie X:		0		Z:	8 kN

BELASTINGEN

B.G:14 Wind loodrecht onderdruk B



STAAFBELASTINGEN

B.G:14 Wind loodrecht onderdruk B

Staat	Type	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
1	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw1	-0.45	-0.45	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw2	0.45	0.45	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw18	0.74	0.74	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw18	0.74	0.74	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw19	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw19	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw10	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw10	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00

TUSSENPUTTEN VERPLAATSINGEN

1e orde

B.G:14 Wind loodrecht onderdruk B

St.	Kn.	Pos.	Globaal [mm] Verpl-X	Globaal [mm] Verpl-Z	Lokaal [mm] Verpl-X	Lokaal [mm] Verpl-Z	Rotatie	[kN/m ²] Grondspan.
1	1		-0.00	-0.15	-0.15	0.00	-0.00017	
1	0.310		-0.05	-0.15	-0.15	0.05	-0.00015	
1	0.620		-0.09	-0.15	-0.15	0.09	-0.00013	
1	0.930		-0.13	-0.15	-0.15	0.13	-0.00009	
1	1.240		-0.15	-0.15	-0.15	0.15	-0.00005	
1	1.550		-0.16	-0.15	-0.15	0.16	0.00000	
1	1.860		-0.15	-0.15	-0.15	0.15	0.00005	
1	2.170		-0.13	-0.15	-0.15	0.13	0.00010	
1	2.480		-0.09	-0.16	-0.16	0.09	0.00014	
1	2.790		-0.04	-0.16	-0.16	0.04	0.00016	
1	2		0.01	-0.16	-0.16	-0.01	0.00017	
2	2		0.01	-0.16	-0.16	-0.01	-0.00016	
2	0.310		-0.04	-0.16	-0.16	0.04	-0.00015	
2	0.620		-0.08	-0.16	-0.16	0.08	-0.00012	
2	0.930		-0.11	-0.16	-0.16	0.11	-0.00009	
2	1.240		-0.13	-0.16	-0.16	0.13	-0.00004	
2	1.550		-0.14	-0.16	-0.16	0.14	0.00001	
2	1.860		-0.13	-0.16	-0.16	0.13	0.00006	
2	2.170		-0.10	-0.16	-0.16	0.10	0.00010	
2	2.480		-0.06	-0.16	-0.16	0.06	0.00014	
2	2.790		-0.02	-0.16	-0.16	0.02	0.00016	
2	3		0.04	-0.16	-0.16	-0.04	0.00018	

TUSSENpunten Verplaatsingen

1e orde

B.G:14 Wind loodrecht onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
3	4		-0.00	-0.16	-0.16	0.00	0.00001	
3		0.310	0.00	-0.16	-0.16	-0.00	0.00001	
3		0.620	0.00	-0.16	-0.16	-0.00	0.00001	
3		0.930	0.00	-0.17	-0.17	-0.00	0.00001	
3		1.240	0.01	-0.17	-0.17	-0.01	0.00001	
3		1.550	0.01	-0.17	-0.17	-0.01	0.00001	
3		1.860	0.01	-0.17	-0.17	-0.01	0.00001	
3		2.170	0.01	-0.17	-0.17	-0.01	0.00001	
3		2.480	0.01	-0.17	-0.17	-0.01	0.00001	
3		2.790	0.01	-0.17	-0.17	-0.01	0.00001	
3	5		0.02	-0.18	-0.18	-0.02	0.00001	
4	5		0.02	-0.18	-0.18	-0.02	0.00001	
4		0.310	0.02	-0.18	-0.18	-0.02	0.00001	
4		0.620	0.02	-0.18	-0.18	-0.02	0.00001	
4		0.930	0.02	-0.18	-0.18	-0.02	0.00001	
4		1.240	0.03	-0.18	-0.18	-0.03	0.00001	
4		1.550	0.03	-0.18	-0.18	-0.03	0.00001	
4		1.860	0.03	-0.18	-0.18	-0.03	0.00001	
4		2.170	0.03	-0.19	-0.19	-0.03	0.00001	
4		2.480	0.03	-0.19	-0.19	-0.03	0.00001	
4		2.790	0.04	-0.19	-0.19	-0.04	0.00001	
4	6		0.04	-0.19	-0.19	-0.04	0.00001	
5	7		0.00	-0.15	-0.15	-0.00	0.00018	
5		0.310	0.05	-0.15	-0.15	-0.05	0.00016	
5		0.620	0.10	-0.15	-0.15	-0.10	0.00014	
5		0.930	0.14	-0.15	-0.15	-0.14	0.00010	
5		1.240	0.16	-0.15	-0.15	-0.16	0.00006	
5		1.550	0.17	-0.15	-0.15	-0.17	0.00001	
5		1.860	0.17	-0.15	-0.15	-0.17	-0.00004	
5		2.170	0.15	-0.15	-0.15	-0.15	-0.00009	
5		2.480	0.11	-0.16	-0.16	-0.11	-0.00012	
5		2.790	0.07	-0.16	-0.16	-0.07	-0.00015	
5	8		0.02	-0.16	-0.16	-0.02	-0.00016	
6	8		0.02	-0.16	-0.16	-0.02	0.00018	
6		0.310	0.07	-0.16	-0.16	-0.07	0.00016	
6		0.620	0.12	-0.16	-0.16	-0.12	0.00014	
6		0.930	0.16	-0.16	-0.16	-0.16	0.00010	
6		1.240	0.18	-0.16	-0.16	-0.18	0.00006	
6		1.550	0.19	-0.16	-0.16	-0.19	0.00001	
6		1.860	0.19	-0.16	-0.16	-0.19	-0.00004	
6		2.170	0.17	-0.16	-0.16	-0.17	-0.00009	
6		2.480	0.13	-0.16	-0.16	-0.13	-0.00013	
6		2.790	0.09	-0.16	-0.16	-0.09	-0.00015	
6	9		0.04	-0.16	-0.16	-0.04	-0.00016	
7	3		0.04	-0.16	0.04	-0.16	0.00041	
7		0.320	0.04	-0.28	0.04	-0.28	0.00037	
7		0.640	0.04	-0.39	0.04	-0.39	0.00029	
7		0.960	0.04	-0.47	0.04	-0.47	0.00017	
7		1.280	0.04	-0.50	0.04	-0.50	0.00004	
7		1.600	0.04	-0.49	0.04	-0.49	-0.00008	
7		1.920	0.04	-0.45	0.04	-0.45	-0.00019	
7		2.240	0.04	-0.38	0.04	-0.38	-0.00025	
7		2.560	0.04	-0.30	0.04	-0.30	-0.00024	
7		2.880	0.04	-0.23	0.04	-0.23	-0.00016	
7	6		0.04	-0.19	0.04	-0.19	-0.00000	

TUSSENpunten Verplaatsingen

1e orde

B.G:14 Wind loodrecht onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
8	6		0.04	-0.19	0.04	-0.19	-0.00000	
8		0.320	0.04	-0.23	0.04	-0.23	0.00016	
8		0.640	0.04	-0.30	0.04	-0.30	0.00024	
8		0.960	0.04	-0.38	0.04	-0.38	0.00025	
8		1.280	0.04	-0.45	0.04	-0.45	0.00019	
8		1.600	0.04	-0.49	0.04	-0.49	0.00008	
8		1.920	0.04	-0.50	0.04	-0.50	-0.00004	
8		2.240	0.04	-0.47	0.04	-0.47	-0.00017	
8		2.560	0.04	-0.39	0.04	-0.39	-0.00029	
8		2.880	0.04	-0.28	0.04	-0.28	-0.00037	
8	9		0.04	-0.16	0.04	-0.16	-0.00041	
9	2		0.01	-0.16	0.01	-0.16	0.00001	
9		0.320	0.01	-0.16	0.01	-0.16	0.00001	
9		0.640	0.01	-0.16	0.01	-0.16	0.00001	
9		0.960	0.01	-0.16	0.01	-0.16	0.00001	
9		1.280	0.01	-0.17	0.01	-0.17	0.00001	
9		1.600	0.01	-0.17	0.01	-0.17	0.00001	
9		1.920	0.01	-0.17	0.01	-0.17	0.00001	
9		2.240	0.01	-0.17	0.01	-0.17	0.00000	
9		2.560	0.02	-0.17	0.02	-0.17	0.00000	
9		2.880	0.02	-0.17	0.02	-0.17	0.00000	
9	5		0.02	-0.18	0.02	-0.18	-0.00000	
10	5		0.02	-0.18	0.02	-0.18	-0.00000	
10		0.320	0.02	-0.17	0.02	-0.17	-0.00000	
10		0.640	0.02	-0.17	0.02	-0.17	-0.00000	
10		0.960	0.02	-0.17	0.02	-0.17	-0.00000	
10		1.280	0.02	-0.17	0.02	-0.17	-0.00001	
10		1.600	0.02	-0.17	0.02	-0.17	-0.00001	
10		1.920	0.02	-0.17	0.02	-0.17	-0.00001	
10		2.240	0.02	-0.16	0.02	-0.16	-0.00001	
10		2.560	0.02	-0.16	0.02	-0.16	-0.00001	
10		2.880	0.02	-0.16	0.02	-0.16	-0.00001	
10	8		0.02	-0.16	0.02	-0.16	-0.00001	
11	1		0.00	0.00	0.00	0.00	0.00000	
11		0.446	0.00	0.00	0.00	0.00	0.00000	
11		0.891	0.00	0.00	0.00	0.00	0.00000	
11		1.337	0.00	0.00	0.00	0.00	0.00000	
11		1.782	0.00	0.00	0.00	0.00	0.00000	
11		2.228	0.00	0.00	0.00	0.00	0.00000	
11		2.673	0.00	0.00	0.00	0.00	0.00000	
11		3.119	0.00	0.00	0.00	0.00	0.00000	
11		3.564	0.00	0.00	0.00	0.00	0.00000	
11		4.010	0.00	0.00	0.00	0.00	0.00000	
11	5		0.00	0.00	0.00	0.00	0.00000	
12	5		-0.00	0.00	0.00	0.00	0.00000	
12		0.446	-0.00	0.00	0.00	0.00	0.00000	
12		0.891	-0.00	0.00	0.00	0.00	0.00000	
12		1.337	-0.00	0.00	0.00	0.00	0.00000	
12		1.782	-0.00	0.00	0.00	0.00	0.00000	
12		2.228	-0.00	0.00	0.00	0.00	0.00000	
12		2.673	-0.00	0.00	0.00	0.00	0.00000	
12		3.119	-0.00	0.00	0.00	0.00	0.00000	
12		3.564	-0.00	0.00	0.00	0.00	0.00000	
12		4.010	-0.00	0.00	0.00	0.00	0.00000	
12	3		-0.00	0.00	0.00	0.00	0.00000	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:14 Wind loodrecht onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
13	4		-0.00	0.00	0.00	0.00	0.00000	
13		0.446	-0.00	0.00	0.00	0.00	0.00000	
13		0.891	-0.00	0.00	0.00	0.00	0.00000	
13		1.337	-0.00	0.00	0.00	0.00	0.00000	
13		1.782	-0.00	0.00	0.00	0.00	0.00000	
13		2.228	-0.00	0.00	0.00	0.00	0.00000	
13		2.673	-0.00	0.00	0.00	0.00	0.00000	
13		3.119	-0.00	0.00	0.00	0.00	0.00000	
13		3.564	-0.00	0.00	0.00	0.00	0.00000	
13		4.010	-0.00	0.00	0.00	0.00	0.00000	
13	2		-0.00	0.00	0.00	0.00	0.00000	
14	2		0.00	0.00	0.00	0.00	0.00000	
14		0.446	0.00	0.00	0.00	0.00	0.00000	
14		0.891	0.00	0.00	0.00	0.00	0.00000	
14		1.337	0.00	0.00	0.00	0.00	0.00000	
14		1.782	0.00	0.00	0.00	0.00	0.00000	
14		2.228	0.00	0.00	0.00	0.00	0.00000	
14		2.673	0.00	0.00	0.00	0.00	0.00000	
14		3.119	0.00	0.00	0.00	0.00	0.00000	
14		3.564	0.00	0.00	0.00	0.00	0.00000	
14		4.010	0.00	0.00	0.00	0.00	0.00000	
14	6		0.00	0.00	0.00	0.00	0.00000	
15	12		-0.00	4.20	-0.00	4.20	0.00035	
15		0.250	-0.00	4.11	-0.00	4.11	0.00035	
15		0.500	-0.00	4.03	-0.00	4.03	0.00035	
15		0.750	-0.00	3.94	-0.00	3.94	0.00035	
15		1.000	-0.00	3.85	-0.00	3.85	0.00035	
15		1.250	-0.00	3.77	-0.00	3.77	0.00035	
15		1.500	-0.00	3.68	-0.00	3.68	0.00035	
15		1.750	-0.00	3.59	-0.00	3.59	0.00035	
15		2.000	-0.00	3.51	-0.00	3.51	0.00035	
15		2.250	-0.00	3.42	-0.00	3.42	0.00035	
15	11		-0.00	3.33	-0.00	3.33	0.00035	
16	11		-0.00	3.33	-0.00	3.33	0.00035	
16		0.500	-0.00	3.16	-0.00	3.16	0.00035	
16		1.000	-0.00	2.98	-0.00	2.98	0.00035	
16		1.500	-0.00	2.81	-0.00	2.81	0.00035	
16		2.000	-0.00	2.64	-0.00	2.64	0.00035	
16		2.500	-0.00	2.46	-0.00	2.46	0.00035	
16		3.000	-0.00	2.29	-0.00	2.29	0.00035	
16		3.500	-0.00	2.11	-0.00	2.11	0.00035	
16		4.000	-0.00	1.94	-0.00	1.94	0.00035	
16		4.500	-0.00	1.77	-0.00	1.77	0.00035	
16	10		-0.00	1.59	-0.00	1.59	0.00035	
17	10		-0.00	1.59	-0.00	1.59	0.00035	
17		0.500	-0.00	1.42	-0.00	1.42	0.00035	
17		1.000	-0.00	1.24	-0.00	1.24	0.00035	
17		1.500	-0.00	1.07	-0.00	1.07	0.00035	
17		2.000	-0.00	0.89	-0.00	0.89	0.00035	
17		2.500	-0.00	0.72	-0.00	0.72	0.00035	
17		3.000	-0.00	0.55	-0.00	0.55	0.00035	
17		3.500	-0.00	0.37	-0.00	0.37	0.00035	
17		4.000	-0.00	0.20	-0.00	0.20	0.00035	
17		4.500	-0.00	0.02	-0.00	0.02	0.00035	
17	1		-0.00	-0.15	-0.00	-0.15	0.00035	1.138
Som gronddruk X: 0 Z: 0 kN								

TUSSENpunten Verplaatsingen

1e orde

B.G:14 Wind loodrecht onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
18	1		-0.00	-0.15	-0.00	-0.15	-0.00000	1.138
18	0.320		-0.00	-0.15	-0.00	-0.15	-0.00000	1.136
18	0.640		-0.00	-0.15	-0.00	-0.15	0.00000	1.135
18	0.960		-0.00	-0.15	-0.00	-0.15	0.00000	1.137
18	1.280		-0.00	-0.15	-0.00	-0.15	0.00000	1.143
18	1.600		-0.00	-0.15	-0.00	-0.15	0.00000	1.153
18	1.920		-0.00	-0.16	-0.00	-0.16	0.00001	1.166
18	2.240		-0.00	-0.16	-0.00	-0.16	0.00001	1.180
18	2.560		-0.00	-0.16	-0.00	-0.16	0.00001	1.194
18	2.880		-0.00	-0.16	-0.00	-0.16	0.00000	1.205
18	4		0.00	-0.16	0.00	-0.16	-0.00000	1.210
Som gronddruk X: 0 Z: 2 kN								
19	4		0.00	-0.16	0.00	-0.16	-0.00000	1.210
19	0.320		0.00	-0.16	0.00	-0.16	-0.00000	1.205
19	0.640		0.00	-0.16	0.00	-0.16	-0.00001	1.194
19	0.960		0.00	-0.16	0.00	-0.16	-0.00001	1.180
19	1.280		0.00	-0.16	0.00	-0.16	-0.00001	1.166
19	1.600		0.00	-0.15	0.00	-0.15	-0.00000	1.153
19	1.920		0.00	-0.15	0.00	-0.15	-0.00000	1.143
19	2.240		0.00	-0.15	0.00	-0.15	-0.00000	1.137
19	2.560		0.00	-0.15	0.00	-0.15	-0.00000	1.135
19	2.880		0.00	-0.15	0.00	-0.15	0.00000	1.136
19	7		0.00	-0.15	0.00	-0.15	0.00000	1.138
Som gronddruk X: 0 Z: 2 kN								
20	7		0.00	-0.15	0.00	-0.15	-0.00035	1.138
20	0.500		0.00	0.02	0.00	0.02	-0.00035	
20	1.000		0.00	0.20	0.00	0.20	-0.00035	
20	1.500		0.00	0.37	0.00	0.37	-0.00035	
20	2.000		0.00	0.55	0.00	0.55	-0.00035	
20	2.500		0.00	0.72	0.00	0.72	-0.00035	
20	3.000		0.00	0.89	0.00	0.89	-0.00035	
20	3.500		0.00	1.07	0.00	1.07	-0.00035	
20	4.000		0.00	1.24	0.00	1.24	-0.00035	
20	4.500		0.00	1.42	0.00	1.42	-0.00035	
20	13		0.00	1.59	0.00	1.59	-0.00035	
Som gronddruk X: 0 Z: 0 kN								
21	13		0.00	1.59	0.00	1.59	-0.00035	
21	0.500		0.00	1.77	0.00	1.77	-0.00035	
21	1.000		0.00	1.94	0.00	1.94	-0.00035	
21	1.500		0.00	2.11	0.00	2.11	-0.00035	
21	2.000		0.00	2.29	0.00	2.29	-0.00035	
21	2.500		0.00	2.46	0.00	2.46	-0.00035	
21	3.000		0.00	2.64	0.00	2.64	-0.00035	
21	3.500		0.00	2.81	0.00	2.81	-0.00035	
21	4.000		0.00	2.98	0.00	2.98	-0.00035	
21	4.500		0.00	3.16	0.00	3.16	-0.00035	
21	14		0.00	3.33	0.00	3.33	-0.00035	

TUSSENpunTEN VERPLAATSINGEN

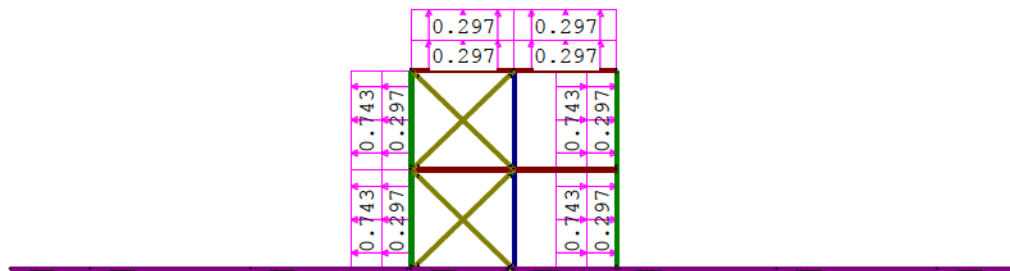
1e orde

B.G:14 Wind loodrecht onderdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
22	14		0.00	3.33	0.00	3.33	-0.00035	
22		0.250	0.00	3.42	0.00	3.42	-0.00035	
22		0.500	0.00	3.50	0.00	3.50	-0.00035	
22		0.750	0.00	3.59	0.00	3.59	-0.00035	
22		1.000	0.00	3.68	0.00	3.68	-0.00035	
22		1.250	0.00	3.77	0.00	3.77	-0.00035	
22		1.500	0.00	3.85	0.00	3.85	-0.00035	
22		1.750	0.00	3.94	0.00	3.94	-0.00035	
22		2.000	0.00	4.03	0.00	4.03	-0.00035	
22		2.250	0.00	4.11	0.00	4.11	-0.00035	
22	15		0.00	4.20	0.00	4.20	-0.00035	
Totale grondreactie X: 0 Z: 5 kN								

BELASTINGEN

B.G:15 Wind loodrecht overdruk B



STAAFBELASTINGEN

B.G:15 Wind loodrecht overdruk B

Staaft	Type	Index	q1/p/m	q2	A	B	ψ ₀	ψ ₁	ψ ₂
1	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw8	0.30	0.30	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw9	-0.30	-0.30	0.000	0.000	0.00	0.20	0.00
1	1:QZLokaal	Qw18	0.74	0.74	0.000	0.000	0.00	0.20	0.00
2	1:QZLokaal	Qw18	0.74	0.74	0.000	0.000	0.00	0.20	0.00
6	1:QZLokaal	Qw19	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
5	1:QZLokaal	Qw19	-0.74	-0.74	0.000	0.000	0.00	0.20	0.00
7	1:QZLokaal	Qw6	0.30	0.30	0.000	0.000	0.00	0.20	0.00
8	1:QZLokaal	Qw6	0.30	0.30	0.000	0.000	0.00	0.20	0.00

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:15 Wind loodrecht overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
1	1		-0.00	2579.26	2579.26	0.00	-0.00082	
1		0.310	-0.25	2579.26	2579.26	0.25	-0.00078	
1		0.620	-0.48	2579.26	2579.26	0.48	-0.00069	
1		0.930	-0.68	2579.26	2579.26	0.68	-0.00056	
1		1.240	-0.83	2579.26	2579.26	0.83	-0.00040	
1		1.550	-0.92	2579.26	2579.26	0.92	-0.00023	
1		1.860	-0.97	2579.26	2579.26	0.97	-0.00005	
1		2.170	-0.96	2579.26	2579.26	0.96	0.00011	
1		2.480	-0.90	2579.26	2579.26	0.90	0.00023	
1		2.790	-0.82	2579.26	2579.26	0.82	0.00032	
1	2		-0.71	2579.26	2579.26	0.71	0.00037	

TUSSENpunten Verplaatsingen

1e orde

B.G:15 Wind loodrecht overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
2	2		-0.71	2579.26	2579.26	0.71	-0.00082	
2		0.310	-0.96	2579.26	2579.26	0.96	-0.00078	
2		0.620	-1.18	2579.26	2579.26	1.18	-0.00069	
2		0.930	-1.38	2579.26	2579.26	1.38	-0.00056	
2		1.240	-1.53	2579.26	2579.26	1.53	-0.00040	
2		1.550	-1.62	2579.26	2579.26	1.62	-0.00023	
2		1.860	-1.67	2579.26	2579.26	1.67	-0.00005	
2		2.170	-1.66	2579.26	2579.26	1.66	0.00011	
2		2.480	-1.60	2579.26	2579.26	1.60	0.00023	
2		2.790	-1.52	2579.26	2579.26	1.52	0.00032	
2	3		-1.41	2579.26	2579.26	1.41	0.00037	
3	4		0.00	2579.98	2579.98	0.00	-0.00022	
3		0.310	-0.07	2579.98	2579.98	0.07	-0.00022	
3		0.620	-0.14	2579.98	2579.98	0.14	-0.00022	
3		0.930	-0.21	2579.98	2579.98	0.21	-0.00022	
3		1.240	-0.28	2579.98	2579.98	0.28	-0.00022	
3		1.550	-0.35	2579.98	2579.98	0.35	-0.00022	
3		1.860	-0.42	2579.98	2579.98	0.42	-0.00022	
3		2.170	-0.48	2579.98	2579.98	0.48	-0.00022	
3		2.480	-0.55	2579.98	2579.98	0.55	-0.00022	
3		2.790	-0.62	2579.99	2579.99	0.62	-0.00022	
3	5		-0.69	2579.99	2579.99	0.69	-0.00022	
4	5		-0.69	2579.99	2579.99	0.69	-0.00023	
4		0.310	-0.76	2579.99	2579.99	0.76	-0.00023	
4		0.620	-0.83	2579.99	2579.99	0.83	-0.00023	
4		0.930	-0.91	2579.99	2579.99	0.91	-0.00023	
4		1.240	-0.98	2579.99	2579.99	0.98	-0.00023	
4		1.550	-1.05	2579.99	2579.99	1.05	-0.00023	
4		1.860	-1.12	2579.99	2579.99	1.12	-0.00023	
4		2.170	-1.19	2579.99	2579.99	1.19	-0.00023	
4		2.480	-1.26	2579.99	2579.99	1.26	-0.00023	
4		2.790	-1.33	2580.00	2580.00	1.33	-0.00023	
4	6		-1.40	2580.00	2580.00	1.40	-0.00023	
5	7		0.00	2580.52	2580.52	-0.00	0.00038	
5		0.310	0.11	2580.52	2580.52	-0.11	0.00033	
5		0.620	0.20	2580.52	2580.52	-0.20	0.00024	
5		0.930	0.26	2580.52	2580.52	-0.26	0.00012	
5		1.240	0.27	2580.52	2580.52	-0.27	-0.00004	
5		1.550	0.23	2580.52	2580.52	-0.23	-0.00022	
5		1.860	0.14	2580.52	2580.52	-0.14	-0.00039	
5		2.170	-0.01	2580.52	2580.52	0.01	-0.00055	
5		2.480	-0.20	2580.52	2580.52	0.20	-0.00068	
5		2.790	-0.43	2580.52	2580.52	0.43	-0.00077	
5	8		-0.67	2580.52	2580.52	0.67	-0.00081	
6	8		-0.67	2580.52	2580.52	0.67	0.00036	
6		0.310	-0.57	2580.52	2580.52	0.57	0.00032	
6		0.620	-0.48	2580.52	2580.52	0.48	0.00023	
6		0.930	-0.42	2580.52	2580.52	0.42	0.00010	
6		1.240	-0.42	2580.52	2580.52	0.42	-0.00006	
6		1.550	-0.47	2580.52	2580.52	0.47	-0.00023	
6		1.860	-0.56	2580.52	2580.52	0.56	-0.00041	
6		2.170	-0.71	2580.53	2580.53	0.71	-0.00057	
6		2.480	-0.92	2580.53	2580.53	0.92	-0.00069	
6		2.790	-1.14	2580.53	2580.53	1.14	-0.00078	
6	9		-1.39	2580.53	2580.53	1.39	-0.00083	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:15 Wind loodrecht overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
7	3		-1.41	2579.26	-1.41	2579.26	-0.00056	
7		0.320	-1.41	2579.44	-1.41	2579.44	-0.00053	
7		0.640	-1.41	2579.60	-1.41	2579.60	-0.00046	
7		0.960	-1.41	2579.73	-1.41	2579.73	-0.00037	
7		1.280	-1.41	2579.83	-1.41	2579.83	-0.00026	
7		1.600	-1.41	2579.90	-1.41	2579.90	-0.00016	
7		1.920	-1.41	2579.93	-1.41	2579.93	-0.00007	
7		2.240	-1.41	2579.95	-1.41	2579.95	-0.00001	
7		2.560	-1.40	2579.95	-1.40	2579.95	-0.00002	
7		2.880	-1.40	2579.97	-1.40	2579.97	-0.00008	
7	6		-1.40	2580.00	-1.40	2580.00	-0.00020	
8	6		-1.40	2580.00	-1.40	2580.00	-0.00020	
8		0.320	-1.40	2580.09	-1.40	2580.09	-0.00032	
8		0.640	-1.40	2580.20	-1.40	2580.20	-0.00038	
8		0.960	-1.40	2580.33	-1.40	2580.33	-0.00038	
8		1.280	-1.40	2580.44	-1.40	2580.44	-0.00032	
8		1.600	-1.40	2580.53	-1.40	2580.53	-0.00024	
8		1.920	-1.40	2580.59	-1.40	2580.59	-0.00013	
8		2.240	-1.40	2580.62	-1.40	2580.62	-0.00003	
8		2.560	-1.40	2580.61	-1.40	2580.61	0.00007	
8		2.880	-1.39	2580.57	-1.39	2580.57	0.00013	
8	9		-1.39	2580.53	-1.39	2580.53	0.00017	
9	2		-0.71	2579.26	-0.71	2579.26	-0.00024	
9		0.320	-0.71	2579.34	-0.71	2579.34	-0.00024	
9		0.640	-0.71	2579.41	-0.71	2579.41	-0.00024	
9		0.960	-0.70	2579.49	-0.70	2579.49	-0.00024	
9		1.280	-0.70	2579.57	-0.70	2579.57	-0.00023	
9		1.600	-0.70	2579.64	-0.70	2579.64	-0.00023	
9		1.920	-0.70	2579.71	-0.70	2579.71	-0.00023	
9		2.240	-0.70	2579.79	-0.70	2579.79	-0.00022	
9		2.560	-0.70	2579.85	-0.70	2579.85	-0.00021	
9		2.880	-0.69	2579.92	-0.69	2579.92	-0.00021	
9	5		-0.69	2579.99	-0.69	2579.99	-0.00020	
10	5		-0.69	2579.99	-0.69	2579.99	-0.00020	
10		0.320	-0.69	2580.05	-0.69	2580.05	-0.00019	
10		0.640	-0.69	2580.11	-0.69	2580.11	-0.00018	
10		0.960	-0.69	2580.16	-0.69	2580.16	-0.00017	
10		1.280	-0.68	2580.22	-0.68	2580.22	-0.00017	
10		1.600	-0.68	2580.27	-0.68	2580.27	-0.00016	
10		1.920	-0.68	2580.32	-0.68	2580.32	-0.00016	
10		2.240	-0.68	2580.37	-0.68	2580.37	-0.00016	
10		2.560	-0.68	2580.42	-0.68	2580.42	-0.00015	
10		2.880	-0.67	2580.47	-0.67	2580.47	-0.00015	
10	8		-0.67	2580.52	-0.67	2580.52	-0.00015	
11	1		-0.00	2579.26	1794.63	1852.53	-0.00023	
11		0.446	-0.07	2579.33	1794.64	1852.63	-0.00023	
11		0.891	-0.14	2579.40	1794.64	1852.73	-0.00023	
11		1.337	-0.21	2579.48	1794.64	1852.83	-0.00023	
11		1.782	-0.28	2579.55	1794.64	1852.93	-0.00023	
11		2.228	-0.35	2579.62	1794.64	1853.03	-0.00023	
11		2.673	-0.42	2579.70	1794.64	1853.13	-0.00023	
11		3.119	-0.49	2579.77	1794.64	1853.23	-0.00023	
11		3.564	-0.55	2579.84	1794.64	1853.33	-0.00023	
11		4.010	-0.62	2579.91	1794.64	1853.43	-0.00023	
11	5		-0.69	2579.99	1794.65	1853.53	-0.00023	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:15 Wind loodrecht overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
12	5		-0.69	2579.99	1795.64	-1852.57	-0.00023	
12		0.446	-0.76	2579.91	1795.64	-1852.47	-0.00023	
12		0.891	-0.84	2579.84	1795.64	-1852.36	-0.00023	
12		1.337	-0.91	2579.77	1795.64	-1852.26	-0.00023	
12		1.782	-0.98	2579.70	1795.64	-1852.16	-0.00023	
12		2.228	-1.05	2579.62	1795.65	-1852.06	-0.00023	
12		2.673	-1.12	2579.55	1795.65	-1851.96	-0.00023	
12		3.119	-1.20	2579.48	1795.65	-1851.85	-0.00023	
12		3.564	-1.27	2579.41	1795.65	-1851.75	-0.00023	
12		4.010	-1.34	2579.34	1795.65	-1851.65	-0.00023	
12	3		-1.41	2579.26	1795.65	-1851.55	-0.00023	
13	4		0.00	2579.98	1795.14	-1853.04	-0.00023	
13		0.446	-0.07	2579.91	1795.14	-1852.94	-0.00023	
13		0.891	-0.14	2579.83	1795.14	-1852.84	-0.00023	
13		1.337	-0.21	2579.76	1795.14	-1852.74	-0.00023	
13		1.782	-0.28	2579.69	1795.14	-1852.64	-0.00023	
13		2.228	-0.35	2579.62	1795.14	-1852.54	-0.00023	
13		2.673	-0.42	2579.55	1795.14	-1852.44	-0.00023	
13		3.119	-0.50	2579.48	1795.14	-1852.34	-0.00023	
13		3.564	-0.57	2579.40	1795.14	-1852.24	-0.00023	
13		4.010	-0.64	2579.33	1795.15	-1852.14	-0.00023	
13	2		-0.71	2579.26	1795.15	-1852.04	-0.00023	
14	2		-0.71	2579.26	1794.13	1853.02	-0.00023	
14		0.446	-0.78	2579.33	1794.13	1853.12	-0.00023	
14		0.891	-0.85	2579.41	1794.13	1853.22	-0.00023	
14		1.337	-0.92	2579.48	1794.13	1853.33	-0.00023	
14		1.782	-0.99	2579.55	1794.13	1853.43	-0.00023	
14		2.228	-1.06	2579.63	1794.13	1853.53	-0.00023	
14		2.673	-1.13	2579.70	1794.14	1853.63	-0.00023	
14		3.119	-1.19	2579.78	1794.14	1853.73	-0.00023	
14		3.564	-1.26	2579.85	1794.14	1853.83	-0.00023	
14		4.010	-1.33	2579.92	1794.14	1853.93	-0.00023	
14	6		-1.40	2580.00	1794.14	1854.03	-0.00023	
15	12		-0.00	-11.53	-0.00	-11.53	-0.20714	86.481
15		0.250	-0.00	40.25	-0.00	40.25	-0.20714	
15		0.500	-0.00	92.04	-0.00	92.04	-0.20714	
15		0.750	-0.00	143.82	-0.00	143.82	-0.20714	
15		1.000	-0.00	195.61	-0.00	195.61	-0.20714	
15		1.250	-0.00	247.40	-0.00	247.40	-0.20715	
15		1.500	-0.00	299.18	-0.00	299.18	-0.20715	
15		1.750	-0.00	350.97	-0.00	350.97	-0.20715	
15		2.000	-0.00	402.76	-0.00	402.76	-0.20715	
15		2.250	-0.00	454.55	-0.00	454.55	-0.20716	
15	11		-0.00	506.34	-0.00	506.34	-0.20716	
Som gronddruk X: 0 Z: 1 kN								
16	11		-0.00	506.34	-0.00	506.34	-0.20716	
16		0.500	-0.00	609.92	-0.00	609.92	-0.20717	
16		1.000	-0.00	713.51	-0.00	713.51	-0.20718	
16		1.500	-0.00	817.10	-0.00	817.10	-0.20719	
16		2.000	-0.00	920.70	-0.00	920.70	-0.20720	
16		2.500	-0.00	1024.31	-0.00	1024.31	-0.20722	
16		3.000	-0.00	1127.92	-0.00	1127.92	-0.20723	
16		3.500	-0.00	1231.54	-0.00	1231.54	-0.20725	
16		4.000	-0.00	1335.17	-0.00	1335.17	-0.20726	
16		4.500	-0.00	1438.80	-0.00	1438.80	-0.20728	
16	10		-0.00	1542.45	-0.00	1542.45	-0.20730	

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:15 Wind loodrecht overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan. [kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
17	10		-0.00	1542.45	-0.00	1542.45	-0.20730	
17		0.500	-0.00	1646.10	-0.00	1646.10	-0.20731	
17		1.000	-0.00	1749.76	-0.00	1749.76	-0.20733	
17		1.500	-0.00	1853.43	-0.00	1853.43	-0.20734	
17		2.000	-0.00	1957.10	-0.00	1957.10	-0.20736	
17		2.500	-0.00	2060.78	-0.00	2060.78	-0.20737	
17		3.000	-0.00	2164.47	-0.00	2164.47	-0.20738	
17		3.500	-0.00	2268.16	-0.00	2268.16	-0.20739	
17		4.000	-0.00	2371.86	-0.00	2371.86	-0.20740	
17		4.500	-0.00	2475.56	-0.00	2475.56	-0.20740	
17	1		-0.00	2579.26	-0.00	2579.26	-0.20740	
18	1		-0.00	2579.26	-0.00	2579.26	-0.00024	
18		0.320	-0.00	2579.33	-0.00	2579.33	-0.00024	
18		0.640	-0.00	2579.41	-0.00	2579.41	-0.00023	
18		0.960	-0.00	2579.48	-0.00	2579.48	-0.00023	
18		1.280	-0.00	2579.56	-0.00	2579.56	-0.00023	
18		1.600	-0.00	2579.63	-0.00	2579.63	-0.00023	
18		1.920	-0.00	2579.70	-0.00	2579.70	-0.00022	
18		2.240	-0.00	2579.78	-0.00	2579.78	-0.00022	
18		2.560	-0.00	2579.84	-0.00	2579.84	-0.00021	
18		2.880	-0.00	2579.91	-0.00	2579.91	-0.00021	
18	4		0.00	2579.98	0.00	2579.98	-0.00020	
19	4		0.00	2579.98	0.00	2579.98	-0.00020	
19		0.320	0.00	2580.04	0.00	2580.04	-0.00019	
19		0.640	0.00	2580.10	0.00	2580.10	-0.00018	
19		0.960	0.00	2580.15	0.00	2580.15	-0.00017	
19		1.280	0.00	2580.21	0.00	2580.21	-0.00017	
19		1.600	0.00	2580.26	0.00	2580.26	-0.00017	
19		1.920	0.00	2580.32	0.00	2580.32	-0.00016	
19		2.240	0.00	2580.37	0.00	2580.37	-0.00016	
19		2.560	0.00	2580.42	0.00	2580.42	-0.00016	
19		2.880	0.00	2580.47	0.00	2580.47	-0.00016	
19	7		0.00	2580.52	0.00	2580.52	-0.00016	
20	7		0.00	2580.52	0.00	2580.52	0.20750	
20		0.500	0.00	2476.77	0.00	2476.77	0.20750	
20		1.000	0.00	2373.02	0.00	2373.02	0.20750	
20		1.500	0.00	2269.27	0.00	2269.27	0.20749	
20		2.000	0.00	2165.53	0.00	2165.53	0.20748	
20		2.500	0.00	2061.79	0.00	2061.79	0.20747	
20		3.000	0.00	1958.06	0.00	1958.06	0.20746	
20		3.500	0.00	1854.33	0.00	1854.33	0.20744	
20		4.000	0.00	1750.61	0.00	1750.61	0.20743	
20		4.500	0.00	1646.90	0.00	1646.90	0.20741	
20	13		0.00	1543.20	0.00	1543.20	0.20740	
21	13		0.00	1543.20	0.00	1543.20	0.20740	
21		0.500	0.00	1439.51	0.00	1439.51	0.20738	
21		1.000	0.00	1335.82	0.00	1335.82	0.20737	
21		1.500	0.00	1232.14	0.00	1232.14	0.20735	
21		2.000	0.00	1128.47	0.00	1128.47	0.20733	
21		2.500	0.00	1024.81	0.00	1024.81	0.20732	
21		3.000	0.00	921.15	0.00	921.15	0.20731	
21		3.500	0.00	817.50	0.00	817.50	0.20729	
21		4.000	0.00	713.86	0.00	713.86	0.20728	
21		4.500	0.00	610.22	0.00	610.22	0.20727	
21	14		0.00	506.59	0.00	506.59	0.20726	

TUSSENpunTEN VERPLAATSINGEN

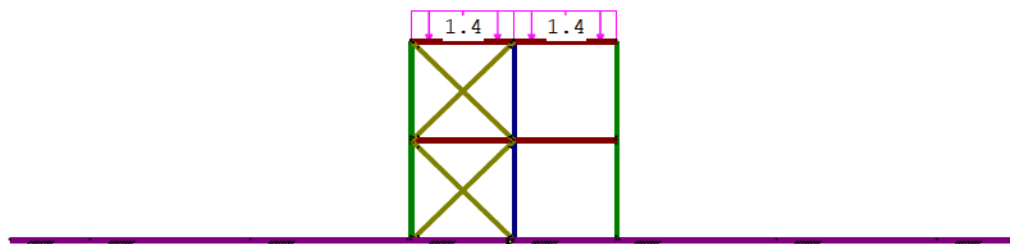
1e orde

B.G:15 Wind loodrecht overdruk B

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
22	14		0.00	506.59	0.00	506.59	0.20726	
22		0.250	0.00	454.77	0.00	454.77	0.20726	
22		0.500	0.00	402.96	0.00	402.96	0.20726	
22		0.750	0.00	351.14	0.00	351.14	0.20725	
22		1.000	0.00	299.33	0.00	299.33	0.20725	
22		1.250	0.00	247.52	0.00	247.52	0.20725	
22		1.500	0.00	195.71	0.00	195.71	0.20725	
22		1.750	0.00	143.89	0.00	143.89	0.20724	
22		2.000	0.00	92.08	0.00	92.08	0.20724	
22		2.250	0.00	40.27	0.00	40.27	0.20724	
22	15		0.00	-11.54	0.00	-11.54	0.20724	86.524
Som gronddruk X: 0 Z: 1 kN								
Totale grondreactie X: 0 Z: 3 kN								

BELASTINGEN

B.G:16 Sneeuw A



STAAFBELASTINGEN

B.G:16 Sneeuw A

Staaftype	Index	q1/p/m	q2	A	B	ψ_0	ψ_1	ψ_2
7 3:QZgeProj.	Qs1	-1.40	-1.40	0.000	0.000	0.00	0.20	0.00
8 3:QZgeProj.	Qs1	-1.40	-1.40	0.000	0.000	0.00	0.20	0.00

TUSSENpunTEN VERPLAATSINGEN

1e orde

B.G:16 Sneeuw A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		
1	1		-0.00	-0.29	-0.29	0.00	0.00001	
1		0.310	0.00	-0.29	-0.29	-0.00	0.00001	
1		0.620	0.01	-0.29	-0.29	-0.01	0.00001	
1		0.930	0.01	-0.29	-0.29	-0.01	0.00001	
1		1.240	0.01	-0.29	-0.29	-0.01	0.00001	
1		1.550	0.01	-0.29	-0.29	-0.01	0.00001	
1		1.860	0.02	-0.29	-0.29	-0.02	0.00001	
1		2.170	0.02	-0.29	-0.29	-0.02	0.00001	
1		2.480	0.02	-0.29	-0.29	-0.02	0.00001	
1		2.790	0.02	-0.29	-0.29	-0.02	0.00001	
1	2		0.03	-0.29	-0.29	-0.03	0.00001	
2	2		0.03	-0.29	-0.29	-0.03	0.00001	
2		0.310	0.03	-0.29	-0.29	-0.03	0.00001	
2		0.620	0.04	-0.30	-0.30	-0.04	0.00001	
2		0.930	0.04	-0.30	-0.30	-0.04	0.00001	
2		1.240	0.04	-0.30	-0.30	-0.04	0.00001	
2		1.550	0.05	-0.30	-0.30	-0.05	0.00001	
2		1.860	0.05	-0.30	-0.30	-0.05	0.00001	
2		2.170	0.06	-0.30	-0.30	-0.06	0.00001	
2		2.480	0.06	-0.30	-0.30	-0.06	0.00001	
2		2.790	0.07	-0.30	-0.30	-0.07	0.00001	
2	3		0.07	-0.30	-0.30	-0.07	0.00001	

TUSSENpunten Verplaatsingen

1e orde

B.G:16 Sneeuw A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
3	4		-0.00	-0.30	-0.30	0.00	0.00001		
3	0.310		0.00	-0.31	-0.31	-0.00	0.00001		
3	0.620		0.01	-0.31	-0.31	-0.01	0.00001		
3	0.930		0.01	-0.31	-0.31	-0.01	0.00001		
3	1.240		0.01	-0.31	-0.31	-0.01	0.00001		
3	1.550		0.01	-0.32	-0.32	-0.01	0.00001		
3	1.860		0.02	-0.32	-0.32	-0.02	0.00001		
3	2.170		0.02	-0.32	-0.32	-0.02	0.00001		
3	2.480		0.02	-0.33	-0.33	-0.02	0.00001		
3	2.790		0.02	-0.33	-0.33	-0.02	0.00001		
3	5		0.03	-0.33	-0.33	-0.03	0.00001		
4	5		0.03	-0.33	-0.33	-0.03	0.00001		
4	0.310		0.03	-0.33	-0.33	-0.03	0.00001		
4	0.620		0.04	-0.34	-0.34	-0.04	0.00001		
4	0.930		0.04	-0.34	-0.34	-0.04	0.00001		
4	1.240		0.04	-0.34	-0.34	-0.04	0.00001		
4	1.550		0.05	-0.34	-0.34	-0.05	0.00001		
4	1.860		0.05	-0.35	-0.35	-0.05	0.00001		
4	2.170		0.06	-0.35	-0.35	-0.06	0.00001		
4	2.480		0.06	-0.35	-0.35	-0.06	0.00001		
4	2.790		0.07	-0.35	-0.35	-0.07	0.00001		
4	6		0.07	-0.36	-0.36	-0.07	0.00001		
5	7		-0.00	-0.29	-0.29	0.00	0.00001		
5	0.310		0.00	-0.29	-0.29	-0.00	0.00001		
5	0.620		0.01	-0.29	-0.29	-0.01	0.00001		
5	0.930		0.01	-0.29	-0.29	-0.01	0.00001		
5	1.240		0.01	-0.29	-0.29	-0.01	0.00001		
5	1.550		0.01	-0.29	-0.29	-0.01	0.00001		
5	1.860		0.02	-0.29	-0.29	-0.02	0.00001		
5	2.170		0.02	-0.29	-0.29	-0.02	0.00001		
5	2.480		0.02	-0.29	-0.29	-0.02	0.00001		
5	2.790		0.02	-0.29	-0.29	-0.02	0.00001		
5	8		0.03	-0.29	-0.29	-0.03	0.00001		
6	8		0.03	-0.29	-0.29	-0.03	0.00001		
6	0.310		0.03	-0.29	-0.29	-0.03	0.00001		
6	0.620		0.04	-0.30	-0.30	-0.04	0.00001		
6	0.930		0.04	-0.30	-0.30	-0.04	0.00001		
6	1.240		0.04	-0.30	-0.30	-0.04	0.00001		
6	1.550		0.05	-0.30	-0.30	-0.05	0.00001		
6	1.860		0.05	-0.30	-0.30	-0.05	0.00001		
6	2.170		0.06	-0.30	-0.30	-0.06	0.00001		
6	2.480		0.06	-0.30	-0.30	-0.06	0.00001		
6	2.790		0.07	-0.30	-0.30	-0.07	0.00001		
6	9		0.07	-0.30	-0.30	-0.07	0.00001		
7	3		0.07	-0.30	0.07	-0.30	0.00078		
7	0.320		0.07	-0.54	0.07	-0.54	0.00069		
7	0.640		0.07	-0.73	0.07	-0.73	0.00054		
7	0.960		0.07	-0.88	0.07	-0.88	0.00033		
7	1.280		0.07	-0.94	0.07	-0.94	0.00008		
7	1.600		0.07	-0.92	0.07	-0.92	-0.00016		
7	1.920		0.07	-0.85	0.07	-0.85	-0.00035		
7	2.240		0.07	-0.71	0.07	-0.71	-0.00048		
7	2.560		0.07	-0.56	0.07	-0.56	-0.00045		
7	2.880		0.07	-0.44	0.07	-0.44	-0.00030		
7	6		0.07	-0.36	0.07	-0.36	-0.00000		

TUSSENpunten Verplaatsingen

1e orde

B.G:16 Sneeuw A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
8	6		0.07	-0.36	0.07	-0.36	-0.00000		
8	0.320		0.07	-0.44	0.07	-0.44	0.00030		
8	0.640		0.07	-0.56	0.07	-0.56	0.00045		
8	0.960		0.07	-0.71	0.07	-0.71	0.00048		
8	1.280		0.07	-0.85	0.07	-0.85	0.00035		
8	1.600		0.07	-0.92	0.07	-0.92	0.00016		
8	1.920		0.07	-0.94	0.07	-0.94	-0.00008		
8	2.240		0.07	-0.88	0.07	-0.88	-0.00033		
8	2.560		0.07	-0.73	0.07	-0.73	-0.00054		
8	2.880		0.07	-0.54	0.07	-0.54	-0.00069		
8	9		0.07	-0.30	0.07	-0.30	-0.00078		
9	2		0.03	-0.29	0.03	-0.29	0.00002		
9	0.320		0.03	-0.30	0.03	-0.30	0.00002		
9	0.640		0.03	-0.30	0.03	-0.30	0.00002		
9	0.960		0.03	-0.31	0.03	-0.31	0.00002		
9	1.280		0.03	-0.31	0.03	-0.31	0.00001		
9	1.600		0.03	-0.32	0.03	-0.32	0.00001		
9	1.920		0.03	-0.32	0.03	-0.32	0.00001		
9	2.240		0.03	-0.33	0.03	-0.33	0.00001		
9	2.560		0.03	-0.33	0.03	-0.33	0.00001		
9	2.880		0.03	-0.33	0.03	-0.33	0.00000		
9	5		0.03	-0.33	0.03	-0.33	-0.00000		
10	5		0.03	-0.33	0.03	-0.33	-0.00000		
10	0.320		0.03	-0.33	0.03	-0.33	-0.00000		
10	0.640		0.03	-0.33	0.03	-0.33	-0.00001		
10	0.960		0.03	-0.33	0.03	-0.33	-0.00001		
10	1.280		0.03	-0.32	0.03	-0.32	-0.00001		
10	1.600		0.03	-0.32	0.03	-0.32	-0.00001		
10	1.920		0.03	-0.31	0.03	-0.31	-0.00001		
10	2.240		0.03	-0.31	0.03	-0.31	-0.00002		
10	2.560		0.03	-0.30	0.03	-0.30	-0.00002		
10	2.880		0.03	-0.30	0.03	-0.30	-0.00002		
10	8		0.03	-0.29	0.03	-0.29	-0.00002		
11	1		0.00	0.00	0.00	0.00	0.00000		
11	0.446		0.00	0.00	0.00	0.00	0.00000		
11	0.891		0.00	0.00	0.00	0.00	0.00000		
11	1.337		0.00	0.00	0.00	0.00	0.00000		
11	1.782		0.00	0.00	0.00	0.00	0.00000		
11	2.228		0.00	0.00	0.00	0.00	0.00000		
11	2.673		0.00	0.00	0.00	0.00	0.00000		
11	3.119		0.00	0.00	0.00	0.00	0.00000		
11	3.564		0.00	0.00	0.00	0.00	0.00000		
11	4.010		0.00	0.00	0.00	0.00	0.00000		
11	5		0.00	0.00	0.00	0.00	0.00000		
12	5		-0.00	0.00	0.00	0.00	0.00000		
12	0.446		-0.00	0.00	0.00	0.00	0.00000		
12	0.891		-0.00	0.00	0.00	0.00	0.00000		
12	1.337		-0.00	0.00	0.00	0.00	0.00000		
12	1.782		-0.00	0.00	0.00	0.00	0.00000		
12	2.228		-0.00	0.00	0.00	0.00	0.00000		
12	2.673		-0.00	0.00	0.00	0.00	0.00000		
12	3.119		-0.00	0.00	0.00	0.00	0.00000		
12	3.564		-0.00	0.00	0.00	0.00	0.00000		
12	4.010		-0.00	0.00	0.00	0.00	0.00000		
12	3		-0.00	0.00	0.00	0.00	0.00000		

TUSSENpunten Verplaatsingen

1e orde

B.G:16 Sneeuw A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m ²]	Grondspan.
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z			
13	4		-0.00	0.00	0.00	0.00	0.00000		
13	0.446		-0.00	0.00	0.00	0.00	0.00000		
13	0.891		-0.00	0.00	0.00	0.00	0.00000		
13	1.337		-0.00	0.00	0.00	0.00	0.00000		
13	1.782		-0.00	0.00	0.00	0.00	0.00000		
13	2.228		-0.00	0.00	0.00	0.00	0.00000		
13	2.673		-0.00	0.00	0.00	0.00	0.00000		
13	3.119		-0.00	0.00	0.00	0.00	0.00000		
13	3.564		-0.00	0.00	0.00	0.00	0.00000		
13	4.010		-0.00	0.00	0.00	0.00	0.00000		
13	2		-0.00	0.00	0.00	0.00	0.00000		
14	2		0.00	0.00	0.00	0.00	0.00000		
14	0.446		0.00	0.00	0.00	0.00	0.00000		
14	0.891		0.00	0.00	0.00	0.00	0.00000		
14	1.337		0.00	0.00	0.00	0.00	0.00000		
14	1.782		0.00	0.00	0.00	0.00	0.00000		
14	2.228		0.00	0.00	0.00	0.00	0.00000		
14	2.673		0.00	0.00	0.00	0.00	0.00000		
14	3.119		0.00	0.00	0.00	0.00	0.00000		
14	3.564		0.00	0.00	0.00	0.00	0.00000		
14	4.010		0.00	0.00	0.00	0.00	0.00000		
14	6		0.00	0.00	0.00	0.00	0.00000		
15	12		-0.00	7.92	-0.00	7.92	0.00066		
15	0.250		-0.00	7.75	-0.00	7.75	0.00066		
15	0.500		-0.00	7.59	-0.00	7.59	0.00066		
15	0.750		-0.00	7.42	-0.00	7.42	0.00066		
15	1.000		-0.00	7.26	-0.00	7.26	0.00066		
15	1.250		-0.00	7.10	-0.00	7.10	0.00066		
15	1.500		-0.00	6.93	-0.00	6.93	0.00066		
15	1.750		-0.00	6.77	-0.00	6.77	0.00066		
15	2.000		-0.00	6.61	-0.00	6.61	0.00066		
15	2.250		-0.00	6.44	-0.00	6.44	0.00066		
15	11		-0.00	6.28	-0.00	6.28	0.00066		
16	11		-0.00	6.28	-0.00	6.28	0.00066		
16	0.500		-0.00	5.95	-0.00	5.95	0.00066		
16	1.000		-0.00	5.62	-0.00	5.62	0.00066		
16	1.500		-0.00	5.29	-0.00	5.29	0.00066		
16	2.000		-0.00	4.97	-0.00	4.97	0.00066		
16	2.500		-0.00	4.64	-0.00	4.64	0.00066		
16	3.000		-0.00	4.31	-0.00	4.31	0.00066		
16	3.500		-0.00	3.98	-0.00	3.98	0.00066		
16	4.000		-0.00	3.65	-0.00	3.65	0.00066		
16	4.500		-0.00	3.33	-0.00	3.33	0.00066		
16	10		-0.00	3.00	-0.00	3.00	0.00066		
17	10		-0.00	3.00	-0.00	3.00	0.00066		
17	0.500		-0.00	2.67	-0.00	2.67	0.00066		
17	1.000		-0.00	2.34	-0.00	2.34	0.00066		
17	1.500		-0.00	2.01	-0.00	2.01	0.00066		
17	2.000		-0.00	1.69	-0.00	1.69	0.00066		
17	2.500		-0.00	1.36	-0.00	1.36	0.00066		
17	3.000		-0.00	1.03	-0.00	1.03	0.00066		
17	3.500		-0.00	0.70	-0.00	0.70	0.00066		
17	4.000		-0.00	0.37	-0.00	0.37	0.00066		
17	4.500		-0.00	0.04	-0.00	0.04	0.00066		
17	1		-0.00	-0.29	-0.00	-0.29	0.00066	2.145	
Som gronddruk X: 0 Z: 0 kN									

TUSSENpunten Verplaatsingen

1e orde

B.G:16 Sneeuw A

St.	Kn.	Pos.	Globaal [mm]		Lokaal [mm]		Rotatie	[kN/m²]
			Verpl-X	Verpl-Z	Verpl-X	Verpl-Z		Grondspan.
18	1		-0.00	-0.29	-0.00	-0.29	-0.00000	2.145
18	0.320		-0.00	-0.29	-0.00	-0.29	-0.00000	2.140
18	0.640		-0.00	-0.29	-0.00	-0.29	0.00000	2.138
18	0.960		-0.00	-0.29	-0.00	-0.29	0.00000	2.142
18	1.280		-0.00	-0.29	-0.00	-0.29	0.00001	2.154
18	1.600		-0.00	-0.29	-0.00	-0.29	0.00001	2.173
18	1.920		-0.00	-0.29	-0.00	-0.29	0.00001	2.197
18	2.240		-0.00	-0.30	-0.00	-0.30	0.00001	2.224
18	2.560		-0.00	-0.30	-0.00	-0.30	0.00001	2.251
18	2.880		-0.00	-0.30	-0.00	-0.30	0.00001	2.271
18	4		-0.00	-0.30	-0.00	-0.30	-0.00000	2.281
Som gronddruk X: 0 Z: 4 kN								
19	4		0.00	-0.30	0.00	-0.30	-0.00000	2.281
19	0.320		0.00	-0.30	0.00	-0.30	-0.00001	2.271
19	0.640		0.00	-0.30	0.00	-0.30	-0.00001	2.251
19	0.960		0.00	-0.30	0.00	-0.30	-0.00001	2.224
19	1.280		0.00	-0.29	0.00	-0.29	-0.00001	2.197
19	1.600		0.00	-0.29	0.00	-0.29	-0.00001	2.173
19	1.920		0.00	-0.29	0.00	-0.29	-0.00001	2.154
19	2.240		0.00	-0.29	0.00	-0.29	-0.00000	2.142
19	2.560		0.00	-0.29	0.00	-0.29	-0.00000	2.138
19	2.880		0.00	-0.29	0.00	-0.29	0.00000	2.140
19	7		0.00	-0.29	0.00	-0.29	0.00000	2.145
Som gronddruk X: 0 Z: 4 kN								
20	7		0.00	-0.29	0.00	-0.29	-0.00066	2.145
20	0.500		0.00	0.04	0.00	0.04	-0.00066	
20	1.000		0.00	0.37	0.00	0.37	-0.00066	
20	1.500		0.00	0.70	0.00	0.70	-0.00066	
20	2.000		0.00	1.03	0.00	1.03	-0.00066	
20	2.500		0.00	1.36	0.00	1.36	-0.00066	
20	3.000		0.00	1.69	0.00	1.69	-0.00066	
20	3.500		0.00	2.01	0.00	2.01	-0.00066	
20	4.000		0.00	2.34	0.00	2.34	-0.00066	
20	4.500		0.00	2.67	0.00	2.67	-0.00066	
20	13		0.00	3.00	0.00	3.00	-0.00066	
Som gronddruk X: 0 Z: 0 kN								
21	13		0.00	3.00	0.00	3.00	-0.00066	
21	0.500		0.00	3.33	0.00	3.33	-0.00066	
21	1.000		0.00	3.65	0.00	3.65	-0.00066	
21	1.500		0.00	3.98	0.00	3.98	-0.00066	
21	2.000		0.00	4.31	0.00	4.31	-0.00066	
21	2.500		0.00	4.64	0.00	4.64	-0.00066	
21	3.000		0.00	4.97	0.00	4.97	-0.00066	
21	3.500		0.00	5.29	0.00	5.29	-0.00066	
21	4.000		0.00	5.62	0.00	5.62	-0.00066	
21	4.500		0.00	5.95	0.00	5.95	-0.00066	
21	14		0.00	6.28	0.00	6.28	-0.00066	
22	14		0.00	6.28	0.00	6.28	-0.00066	
22	0.250		0.00	6.44	0.00	6.44	-0.00066	
22	0.500		0.00	6.60	0.00	6.60	-0.00066	
22	0.750		0.00	6.77	0.00	6.77	-0.00066	
22	1.000		0.00	6.93	0.00	6.93	-0.00066	
22	1.250		0.00	7.10	0.00	7.10	-0.00066	
22	1.500		0.00	7.26	0.00	7.26	-0.00066	
22	1.750		0.00	7.42	0.00	7.42	-0.00066	
22	2.000		0.00	7.59	0.00	7.59	-0.00066	
22	2.250		0.00	7.75	0.00	7.75	-0.00066	
22	15		0.00	7.92	0.00	7.92	-0.00066	
Totale grondreactie X: 0 Z: 9 kN								

REACTIES		1e orde					
Kn.	B.G.	X-min	X-max	Z-min	Z-max	M-min	M-max
4	1	0.00					
4	2	0.00					
4	3	0.00					
4	4	-46.68					
4	5	-46.68					
4	6	-46.68					
4	7	-46.68					
4	8	46.68					
4	9	46.68					
4	10	46.68					
4	11	46.68					
4	12	0.00					
4	13	0.00					
4	14	0.00					
4	15	0.00					
4	16	0.00					

BEREKENINGSTATUS			Controlerende berekening
B.C.	Iteratie	Status	
1	4	Nauwkeurigheid bereikt	
2	4	Nauwkeurigheid bereikt	
3	4	Nauwkeurigheid bereikt	
4	4	Nauwkeurigheid bereikt	
5	4	Nauwkeurigheid bereikt	
6	4	Nauwkeurigheid bereikt	
7	4	Nauwkeurigheid bereikt	
8	4	Nauwkeurigheid bereikt	
9	4	Nauwkeurigheid bereikt	
10	4	Nauwkeurigheid bereikt	
11	4	Nauwkeurigheid bereikt	
12	4	Nauwkeurigheid bereikt	
13	4	Nauwkeurigheid bereikt	
14	4	Nauwkeurigheid bereikt	
15	4	Nauwkeurigheid bereikt	
16	4	Nauwkeurigheid bereikt	
17	4	Nauwkeurigheid bereikt	
18	4	Nauwkeurigheid bereikt	
19	4	Nauwkeurigheid bereikt	
20	4	Nauwkeurigheid bereikt	
21	4	Nauwkeurigheid bereikt	
22	4	Nauwkeurigheid bereikt	
23	4	Nauwkeurigheid bereikt	
24	4	Nauwkeurigheid bereikt	
25	4	Nauwkeurigheid bereikt	
26	4	Nauwkeurigheid bereikt	
27	4	Nauwkeurigheid bereikt	
28	4	Nauwkeurigheid bereikt	
29	4	Nauwkeurigheid bereikt	
30	4	Nauwkeurigheid bereikt	
31	4	Nauwkeurigheid bereikt	
32	4	Nauwkeurigheid bereikt	
33	4	Nauwkeurigheid bereikt	
34	4	Nauwkeurigheid bereikt	
35	4	Nauwkeurigheid bereikt	
36	4	Nauwkeurigheid bereikt	
37	4	Nauwkeurigheid bereikt	

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
38	4	Nauwkeurigheid bereikt
39	4	Nauwkeurigheid bereikt
40	4	Nauwkeurigheid bereikt
41	4	Nauwkeurigheid bereikt
42	4	Nauwkeurigheid bereikt
43	4	Nauwkeurigheid bereikt
44	4	Nauwkeurigheid bereikt
45	4	Nauwkeurigheid bereikt
46	4	Nauwkeurigheid bereikt
47	4	Nauwkeurigheid bereikt
48	4	Nauwkeurigheid bereikt
49	4	Nauwkeurigheid bereikt
50	4	Nauwkeurigheid bereikt
51	4	Nauwkeurigheid bereikt
52	4	Nauwkeurigheid bereikt
53	4	Nauwkeurigheid bereikt
54	4	Nauwkeurigheid bereikt
55	4	Nauwkeurigheid bereikt
56	4	Nauwkeurigheid bereikt
57	4	Nauwkeurigheid bereikt
58	4	Nauwkeurigheid bereikt
59	4	Nauwkeurigheid bereikt
60	4	Nauwkeurigheid bereikt
61	4	Nauwkeurigheid bereikt
62	4	Nauwkeurigheid bereikt
63	4	Nauwkeurigheid bereikt
64	4	Nauwkeurigheid bereikt
65	4	Nauwkeurigheid bereikt
66	4	Nauwkeurigheid bereikt
67	4	Nauwkeurigheid bereikt
68	4	Nauwkeurigheid bereikt
69	4	Nauwkeurigheid bereikt
70	4	Nauwkeurigheid bereikt
71	4	Nauwkeurigheid bereikt
72	4	Nauwkeurigheid bereikt
73	4	Nauwkeurigheid bereikt
74	4	Nauwkeurigheid bereikt
75	4	Nauwkeurigheid bereikt
76	4	Nauwkeurigheid bereikt
77	4	Nauwkeurigheid bereikt
78	4	Nauwkeurigheid bereikt
79	4	Nauwkeurigheid bereikt
80	4	Nauwkeurigheid bereikt
81	4	Nauwkeurigheid bereikt
82	4	Nauwkeurigheid bereikt
83	4	Nauwkeurigheid bereikt
84	4	Nauwkeurigheid bereikt
85	4	Nauwkeurigheid bereikt
86	4	Nauwkeurigheid bereikt
87	4	Nauwkeurigheid bereikt
88	4	Nauwkeurigheid bereikt
89	1	Lineaire berekening
90	1	Lineaire berekening

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
91	1	Lineaire berekening
92	1	Lineaire berekening
93	1	Lineaire berekening
94	1	Lineaire berekening
95	1	Lineaire berekening
96	1	Lineaire berekening
97	1	Lineaire berekening
98	1	Lineaire berekening
99	1	Lineaire berekening
100	1	Lineaire berekening
101	1	Lineaire berekening
102	1	Lineaire berekening
103	1	Lineaire berekening
104	1	Lineaire berekening
105	1	Lineaire berekening
106	1	Lineaire berekening
107	1	Lineaire berekening
108	1	Lineaire berekening
109	1	Lineaire berekening
110	1	Lineaire berekening
111	1	Lineaire berekening
112	1	Lineaire berekening
113	1	Lineaire berekening
114	1	Lineaire berekening
115	1	Lineaire berekening
116	1	Lineaire berekening
117	1	Lineaire berekening
118	1	Lineaire berekening
119	1	Lineaire berekening
120	1	Lineaire berekening
121	1	Lineaire berekening
122	1	Lineaire berekening
123	1	Lineaire berekening
124	1	Lineaire berekening
125	1	Lineaire berekening
126	1	Lineaire berekening
127	1	Lineaire berekening
128	1	Lineaire berekening
129	1	Lineaire berekening
130	1	Lineaire berekening
131	1	Lineaire berekening
132	1	Lineaire berekening
133	1	Lineaire berekening
134	1	Lineaire berekening
135	1	Lineaire berekening
136	1	Lineaire berekening
137	1	Lineaire berekening
138	1	Lineaire berekening
139	1	Lineaire berekening
140	1	Lineaire berekening
141	1	Lineaire berekening
142	1	Lineaire berekening
143	1	Lineaire berekening
144	1	Lineaire berekening

BEREKENINGSTATUS

Controlerende berekening

B.C. Iteratie Status

145	1 Lineaire berekening
146	1 Lineaire berekening
147	1 Lineaire berekening
148	1 Lineaire berekening
149	1 Lineaire berekening
150	1 Lineaire berekening
151	1 Lineaire berekening
152	1 Lineaire berekening
153	1 Lineaire berekening
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169	1 Lineaire berekening
170	1 Lineaire berekening
171	1 Lineaire berekening
172	1 Lineaire berekening
173	1 Lineaire berekening
174	1 Lineaire berekening
175	1 Lineaire berekening

BELASTINGCOMBINATIES

BC Type	BG Gen.	Factor	BG Gen.	Factor	BG Gen.	Factor	BG Gen.	Factor
1 Fund.	1 Perm	1.35						
2 Fund.	1 Perm	0.90						
3 Fund.	1 Perm	1.35	2 psi0	1.50				
4 Fund.	1 Perm	1.35	3 psi0	1.50				
5 Fund.	1 Perm	1.20	2 Extr	1.50				
6 Fund.	1 Perm	1.20	3 Extr	1.50				
7 Fund.	1 Perm	1.20	4 Extr	1.50				
8 Fund.	1 Perm	1.20	5 Extr	1.50				
9 Fund.	1 Perm	1.20	6 Extr	1.50				
10 Fund.	1 Perm	1.20	7 Extr	1.50				
11 Fund.	1 Perm	1.20	8 Extr	1.50				
12 Fund.	1 Perm	1.20	9 Extr	1.50				
13 Fund.	1 Perm	1.20	10 Extr	1.50				
14 Fund.	1 Perm	1.20	11 Extr	1.50				
15 Fund.	1 Perm	1.20	12 Extr	1.50				
16 Fund.	1 Perm	1.20	13 Extr	1.50				
17 Fund.	1 Perm	1.20	14 Extr	1.50				
18 Fund.	1 Perm	1.20	15 Extr	1.50				
19 Fund.	1 Perm	1.20	16 Extr	1.50				
20 Fund.	1 Perm	0.90	2 psi0	1.50				
21 Fund.	1 Perm	0.90	2 Extr	1.50				
22 Fund.	1 Perm	0.90	3 Extr	1.50				
23 Fund.	1 Perm	0.90	3 psi0	1.50				
24 Fund.	1 Perm	0.90	4 Extr	1.50				

BELASTINGCOMBINATIES

BC Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
25 Fund.	1	Perm	0.90	5 Extr	1.50							
26 Fund.	1	Perm	0.90	6 Extr	1.50							
27 Fund.	1	Perm	0.90	7 Extr	1.50							
28 Fund.	1	Perm	0.90	8 Extr	1.50							
29 Fund.	1	Perm	0.90	9 Extr	1.50							
30 Fund.	1	Perm	0.90	10 Extr	1.50							
31 Fund.	1	Perm	0.90	11 Extr	1.50							
32 Fund.	1	Perm	0.90	12 Extr	1.50							
33 Fund.	1	Perm	0.90	13 Extr	1.50							
34 Fund.	1	Perm	0.90	14 Extr	1.50							
35 Fund.	1	Perm	0.90	15 Extr	1.50							
36 Fund.	1	Perm	0.90	16 Extr	1.50							
37 Fund.	1	Perm	1.20	4 Extr	1.50	2	psi0	1.50				
38 Fund.	1	Perm	1.20	4 Extr	1.50	3	psi0	1.50				
39 Fund.	1	Perm	1.20	5 Extr	1.50	2	psi0	1.50				
40 Fund.	1	Perm	1.20	5 Extr	1.50	3	psi0	1.50				
41 Fund.	1	Perm	1.20	6 Extr	1.50	2	psi0	1.50				
42 Fund.	1	Perm	1.20	6 Extr	1.50	3	psi0	1.50				
43 Fund.	1	Perm	1.20	7 Extr	1.50	2	psi0	1.50				
44 Fund.	1	Perm	1.20	7 Extr	1.50	3	psi0	1.50				
45 Fund.	1	Perm	1.20	8 Extr	1.50	2	psi0	1.50				
46 Fund.	1	Perm	1.20	8 Extr	1.50	3	psi0	1.50				
47 Fund.	1	Perm	1.20	9 Extr	1.50	2	psi0	1.50				
48 Fund.	1	Perm	1.20	9 Extr	1.50	3	psi0	1.50				
49 Fund.	1	Perm	1.20	10 Extr	1.50	2	psi0	1.50				
50 Fund.	1	Perm	1.20	10 Extr	1.50	3	psi0	1.50				
51 Fund.	1	Perm	1.20	11 Extr	1.50	2	psi0	1.50				
52 Fund.	1	Perm	1.20	11 Extr	1.50	3	psi0	1.50				
53 Fund.	1	Perm	1.20	12 Extr	1.50	2	psi0	1.50				
54 Fund.	1	Perm	1.20	12 Extr	1.50	3	psi0	1.50				
55 Fund.	1	Perm	1.20	13 Extr	1.50	2	psi0	1.50				
56 Fund.	1	Perm	1.20	13 Extr	1.50	3	psi0	1.50				
57 Fund.	1	Perm	1.20	14 Extr	1.50	2	psi0	1.50				
58 Fund.	1	Perm	1.20	14 Extr	1.50	3	psi0	1.50				
59 Fund.	1	Perm	1.20	15 Extr	1.50	2	psi0	1.50				
60 Fund.	1	Perm	1.20	15 Extr	1.50	3	psi0	1.50				
61 Fund.	1	Perm	1.20	16 Extr	1.50	2	psi0	1.50				
62 Fund.	1	Perm	1.20	16 Extr	1.50	3	psi0	1.50				
63 Fund.	1	Perm	0.90	4 Extr	1.50	2	psi0	1.50				
64 Fund.	1	Perm	0.90	4 Extr	1.50	3	psi0	1.50				
65 Fund.	1	Perm	0.90	5 Extr	1.50	2	psi0	1.50				
66 Fund.	1	Perm	0.90	5 Extr	1.50	3	psi0	1.50				
67 Fund.	1	Perm	0.90	6 Extr	1.50	2	psi0	1.50				
68 Fund.	1	Perm	0.90	6 Extr	1.50	3	psi0	1.50				
69 Fund.	1	Perm	0.90	7 Extr	1.50	2	psi0	1.50				
70 Fund.	1	Perm	0.90	7 Extr	1.50	3	psi0	1.50				
71 Fund.	1	Perm	0.90	8 Extr	1.50	2	psi0	1.50				
72 Fund.	1	Perm	0.90	8 Extr	1.50	3	psi0	1.50				
73 Fund.	1	Perm	0.90	9 Extr	1.50	2	psi0	1.50				
74 Fund.	1	Perm	0.90	9 Extr	1.50	3	psi0	1.50				
75 Fund.	1	Perm	0.90	10 Extr	1.50	2	psi0	1.50				
76 Fund.	1	Perm	0.90	10 Extr	1.50	3	psi0	1.50				
77 Fund.	1	Perm	0.90	11 Extr	1.50	2	psi0	1.50				
78 Fund.	1	Perm	0.90	11 Extr	1.50	3	psi0	1.50				
79 Fund.	1	Perm	0.90	12 Extr	1.50	2	psi0	1.50				
80 Fund.	1	Perm	0.90	12 Extr	1.50	3	psi0	1.50				
81 Fund.	1	Perm	0.90	13 Extr	1.50	2	psi0	1.50				
82 Fund.	1	Perm	0.90	13 Extr	1.50	3	psi0	1.50				
83 Fund.	1	Perm	0.90	14 Extr	1.50	2	psi0	1.50				
84 Fund.	1	Perm	0.90	14 Extr	1.50	3	psi0	1.50				
85 Fund.	1	Perm	0.90	15 Extr	1.50	2	psi0	1.50				
86 Fund.	1	Perm	0.90	15 Extr	1.50	3	psi0	1.50				
87 Fund.	1	Perm	0.90	16 Extr	1.50	2	psi0	1.50				
88 Fund.	1	Perm	0.90	16 Extr	1.50	3	psi0	1.50				
89 Kar.	1	Perm	1.00	2 Extr	1.00							

BELASTINGCOMBINATIES

BC Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
90 Kar.	1	Perm	1.00	3	Extr	1.00						
91 Kar.	1	Perm	1.00	4	Extr	1.00						
92 Kar.	1	Perm	1.00	5	Extr	1.00						
93 Kar.	1	Perm	1.00	6	Extr	1.00						
94 Kar.	1	Perm	1.00	7	Extr	1.00						
95 Kar.	1	Perm	1.00	8	Extr	1.00						
96 Kar.	1	Perm	1.00	9	Extr	1.00						
97 Kar.	1	Perm	1.00	10	Extr	1.00						
98 Kar.	1	Perm	1.00	11	Extr	1.00						
99 Kar.	1	Perm	1.00	12	Extr	1.00						
100 Kar.	1	Perm	1.00	13	Extr	1.00						
101 Kar.	1	Perm	1.00	14	Extr	1.00						
102 Kar.	1	Perm	1.00	15	Extr	1.00						
103 Kar.	1	Perm	1.00	16	Extr	1.00						
104 Kar.	1	Perm	1.00	4	Extr	1.00	2	psi0	1.00			
105 Kar.	1	Perm	1.00	4	Extr	1.00	3	psi0	1.00			
106 Kar.	1	Perm	1.00	5	Extr	1.00	2	psi0	1.00			
107 Kar.	1	Perm	1.00	5	Extr	1.00	3	psi0	1.00			
108 Kar.	1	Perm	1.00	6	Extr	1.00	2	psi0	1.00			
109 Kar.	1	Perm	1.00	6	Extr	1.00	3	psi0	1.00			
110 Kar.	1	Perm	1.00	7	Extr	1.00	2	psi0	1.00			
111 Kar.	1	Perm	1.00	7	Extr	1.00	3	psi0	1.00			
112 Kar.	1	Perm	1.00	8	Extr	1.00	2	psi0	1.00			
113 Kar.	1	Perm	1.00	8	Extr	1.00	3	psi0	1.00			
114 Kar.	1	Perm	1.00	9	Extr	1.00	2	psi0	1.00			
115 Kar.	1	Perm	1.00	9	Extr	1.00	3	psi0	1.00			
116 Kar.	1	Perm	1.00	10	Extr	1.00	2	psi0	1.00			
117 Kar.	1	Perm	1.00	10	Extr	1.00	3	psi0	1.00			
118 Kar.	1	Perm	1.00	11	Extr	1.00	2	psi0	1.00			
119 Kar.	1	Perm	1.00	11	Extr	1.00	3	psi0	1.00			
120 Kar.	1	Perm	1.00	12	Extr	1.00	2	psi0	1.00			
121 Kar.	1	Perm	1.00	12	Extr	1.00	3	psi0	1.00			
122 Kar.	1	Perm	1.00	13	Extr	1.00	2	psi0	1.00			
123 Kar.	1	Perm	1.00	13	Extr	1.00	3	psi0	1.00			
124 Kar.	1	Perm	1.00	14	Extr	1.00	2	psi0	1.00			
125 Kar.	1	Perm	1.00	14	Extr	1.00	3	psi0	1.00			
126 Kar.	1	Perm	1.00	15	Extr	1.00	2	psi0	1.00			
127 Kar.	1	Perm	1.00	15	Extr	1.00	3	psi0	1.00			
128 Kar.	1	Perm	1.00	16	Extr	1.00	2	psi0	1.00			
129 Kar.	1	Perm	1.00	16	Extr	1.00	3	psi0	1.00			
130 Quas.	1	Perm	1.00									
131 Quas.	1	Perm	1.00	2	psi2	1.00						
132 Quas.	1	Perm	1.00	3	psi2	1.00						
133 Freq.	1	Perm	1.00									
134 Freq.	1	Perm	1.00	2	psi1	1.00						
135 Freq.	1	Perm	1.00	3	psi1	1.00						
136 Freq.	1	Perm	1.00	4	psi1	1.00						
137 Freq.	1	Perm	1.00	5	psi1	1.00						
138 Freq.	1	Perm	1.00	6	psi1	1.00						
139 Freq.	1	Perm	1.00	7	psi1	1.00						
140 Freq.	1	Perm	1.00	8	psi1	1.00						
141 Freq.	1	Perm	1.00	9	psi1	1.00						
142 Freq.	1	Perm	1.00	10	psi1	1.00						
143 Freq.	1	Perm	1.00	11	psi1	1.00						
144 Freq.	1	Perm	1.00	12	psi1	1.00						
145 Freq.	1	Perm	1.00	13	psi1	1.00						
146 Freq.	1	Perm	1.00	14	psi1	1.00						
147 Freq.	1	Perm	1.00	15	psi1	1.00						
148 Freq.	1	Perm	1.00	16	psi1	1.00						
149 Freq.	1	Perm	1.00	4	psi1	1.00	2	psi2	1.00			
150 Freq.	1	Perm	1.00	4	psi1	1.00	3	psi2	1.00			
151 Freq.	1	Perm	1.00	5	psi1	1.00	2	psi2	1.00			
152 Freq.	1	Perm	1.00	5	psi1	1.00	3	psi2	1.00			
153 Freq.	1	Perm	1.00	6	psi1	1.00	2	psi2	1.00			
154 Freq.	1	Perm	1.00	6	psi1	1.00	3	psi2	1.00			

BELASTINGCOMBINATIES

BC Type	BG Gen.	Factor	BG Gen.	Factor	BG Gen.	Factor	BG Gen.	Factor
155 Freq.	1 Perm	1.00	7 psi1	1.00	2 psi2	1.00		
156 Freq.	1 Perm	1.00	7 psi1	1.00	3 psi2	1.00		
157 Freq.	1 Perm	1.00	8 psi1	1.00	2 psi2	1.00		
158 Freq.	1 Perm	1.00	8 psi1	1.00	3 psi2	1.00		
159 Freq.	1 Perm	1.00	9 psi1	1.00	2 psi2	1.00		
160 Freq.	1 Perm	1.00	9 psi1	1.00	3 psi2	1.00		
161 Freq.	1 Perm	1.00	10 psi1	1.00	2 psi2	1.00		
162 Freq.	1 Perm	1.00	10 psi1	1.00	3 psi2	1.00		
163 Freq.	1 Perm	1.00	11 psi1	1.00	2 psi2	1.00		
164 Freq.	1 Perm	1.00	11 psi1	1.00	3 psi2	1.00		
165 Freq.	1 Perm	1.00	12 psi1	1.00	2 psi2	1.00		
166 Freq.	1 Perm	1.00	12 psi1	1.00	3 psi2	1.00		
167 Freq.	1 Perm	1.00	13 psi1	1.00	2 psi2	1.00		
168 Freq.	1 Perm	1.00	13 psi1	1.00	3 psi2	1.00		
169 Freq.	1 Perm	1.00	14 psi1	1.00	2 psi2	1.00		
170 Freq.	1 Perm	1.00	14 psi1	1.00	3 psi2	1.00		
171 Freq.	1 Perm	1.00	15 psi1	1.00	2 psi2	1.00		
172 Freq.	1 Perm	1.00	15 psi1	1.00	3 psi2	1.00		
173 Freq.	1 Perm	1.00	16 psi1	1.00	2 psi2	1.00		
174 Freq.	1 Perm	1.00	16 psi1	1.00	3 psi2	1.00		
175 Blij.	1 Perm	1.00						

GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC Staven met gunstige werking	
1	Geen
2	Alle staven de factor:0.90
3	Geen
4	Geen
5	Geen
6	Geen
7	Geen
8	Geen
9	Geen
10	Geen
11	Geen
12	Geen
13	Geen
14	Geen
15	Geen
16	Geen
17	Geen
18	Geen
19	Geen
20	Alle staven de factor:0.90
21	Alle staven de factor:0.90
22	Alle staven de factor:0.90
23	Alle staven de factor:0.90
24	Alle staven de factor:0.90
25	Alle staven de factor:0.90
26	Alle staven de factor:0.90
27	Alle staven de factor:0.90
28	Alle staven de factor:0.90
29	Alle staven de factor:0.90
30	Alle staven de factor:0.90
31	Alle staven de factor:0.90
32	Alle staven de factor:0.90
33	Alle staven de factor:0.90
34	Alle staven de factor:0.90
35	Alle staven de factor:0.90
36	Alle staven de factor:0.90
37	Geen
38	Geen
39	Geen

GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC Staven met gunstige werking

40 Geen
41 Geen
42 Geen
43 Geen
44 Geen
45 Geen
46 Geen
47 Geen
48 Geen
49 Geen
50 Geen
51 Geen
52 Geen
53 Geen
54 Geen
55 Geen
56 Geen
57 Geen
58 Geen
59 Geen
60 Geen
61 Geen
62 Geen
63 Alle staven de factor:0.90
64 Alle staven de factor:0.90
65 Alle staven de factor:0.90
66 Alle staven de factor:0.90
67 Alle staven de factor:0.90
68 Alle staven de factor:0.90
69 Alle staven de factor:0.90
70 Alle staven de factor:0.90
71 Alle staven de factor:0.90
72 Alle staven de factor:0.90
73 Alle staven de factor:0.90
74 Alle staven de factor:0.90
75 Alle staven de factor:0.90
76 Alle staven de factor:0.90
77 Alle staven de factor:0.90
78 Alle staven de factor:0.90
79 Alle staven de factor:0.90
80 Alle staven de factor:0.90
81 Alle staven de factor:0.90
82 Alle staven de factor:0.90
83 Alle staven de factor:0.90
84 Alle staven de factor:0.90
85 Alle staven de factor:0.90
86 Alle staven de factor:0.90
87 Alle staven de factor:0.90
88 Alle staven de factor:0.90

STAAFKRACHTEN

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	NXi/NXj				DZi/DZj				MYi/MYj			
			Min	BC	Max	BC	Min	BC	Max	BC	Min	BC	Max	BC
3	4		-144.2	41	-10.12	29	-0.00	42	0.00	49	0.00	1	0.00	1
3	1.329		-143.8	41	-9.82	29	-0.00	44	0.00	49	-0.00	42	0.00	49
3	1.771		-143.6	41	-9.72	29	-0.00	49	0.00	42	-0.00	42	0.00	49
3	5		-143.2	41	-9.43	29	-0.00	49	0.00	42	0.00	10	0.00	7
4	5		-29.75	41	0.87	82	-0.00	42	0.00	51	0.00	1	0.00	1
4	1.771		-29.23	41	1.26	82	-0.00	51	0.00	42	-0.00	42	0.00	49
4	6		-28.83	41	1.55	82	-0.00	51	0.00	42	0.00	45	0.00	11
5	7		-27.16	5	-7.06	77	-4.87	55	3.82	45	0.00	1	0.00	1
5	1.329		-26.77	5	-6.77	77	-0.70	55	0.55	45	-3.70	55	2.91	45
5	1.329		-26.77	5	-6.77	77	-0.69	55	0.55	45	-3.70	55	2.91	45
5	1.771		-26.64	5	-6.67	77	-0.54	49	0.69	56	-3.70	55	2.91	45
5	1.771		-26.64	5	-6.67	77	-0.54	49	0.70	56	-3.70	55	2.91	45
5	8		-26.25	5	-6.37	77	-3.82	45	4.86	55	0.00	6	0.00	8
6	8		-9.07	5	2.38	77	-4.84	56	3.80	45	0.00	1	0.00	1
6	1.329		-8.68	5	2.67	77	-0.69	56	0.54	46	-3.67	56	2.89	46
6	1.771		-8.54	5	2.77	77	-0.54	49	0.69	56	-3.67	56	2.89	46
6	9		-8.15	5	3.07	77	-3.80	45	4.84	56	0.00	15	0.00	46
7	3		-16.11	45	4.52	55	-8.15	5	2.02	69	0.00	1	0.00	1
7	0.827		-16.11	49	4.52	55	-2.99	5	0.53	77	-4.50	5	0.78	69
7	0.914		-16.11	49	4.52	55	-2.44	5	0.52	77	-4.84	5	0.72	69
7	1.143		-16.11	45	4.52	55	-1.40	6	0.74	21	-5.07	5	0.61	73
7	1.240		-16.11	45	4.52	55	-1.28	66	0.94	5	-5.17	5	0.66	73
7	1.371		-16.11	45	4.52	55	-1.30	66	1.27	5	-5.31	5	0.71	73
7	2.514		-16.11	49	4.52	55	-1.45	66	8.30	5	-1.34	66	2.54	5
7	6		-16.11	45	4.52	55	-1.53	66	12.58	5	-2.35	66	8.28	5
8	6		-16.10	50	10.53	44	-12.58	5	1.04	82	-2.35	66	8.28	5
8	0.500		-16.10	50	10.53	44	-9.46	5	0.89	66	-1.89	66	3.31	5
8	1.000		-16.10	46	10.53	44	-6.33	5	0.82	66	-2.72	5	1.65	31
8	1.600		-16.10	46	10.53	44	-2.78	22	0.72	66	-4.89	5	1.78	77
8	1.829		-16.10	46	10.53	44	-1.27	5	0.93	22	-5.31	5	1.82	77
8	1.960		-16.10	46	10.53	44	-0.94	5	1.29	5	-5.17	5	1.84	77
8	2.286		-16.10	46	10.53	44	-0.72	77	2.44	5	-4.84	5	1.71	77
8	9		-16.10	46	10.53	44	-3.09	77	8.15	5	0.00	40	0.00	6
9	2		-52.18	49	9.43	55	-17.90	5	-8.89	77	0.00	1	0.00	1
9	0.914		-52.19	49	9.41	55	-4.95	6	-1.43	77	-10.35	5	-4.72	77
9	0.914		-52.19	49	9.39	55	-4.95	6	-1.35	77	-10.35	5	-4.72	77
9	1.371		-52.20	49	9.39	55	-0.47	22	2.81	51	-11.01	5	-4.49	77
9	1.371		-52.20	49	9.39	55	-0.47	22	2.92	51	-11.01	5	-4.49	77
9	2.144		-52.18	49	9.42	55	7.28	25	13.70	5	-5.12	37	0.00	77
9	2.551		-52.18	49	9.44	55	10.61	25	19.55	5	0.00	63	4.82	51
9	5		-52.23	49	9.41	55	15.82	25	28.90	5	8.73	24	18.75	5
10	5		-27.16	49	17.14	43	-28.90	5	-15.65	25	8.73	24	18.75	5
10	0.659		-27.12	75	17.17	43	-19.40	5	-10.29	25	0.00	63	4.70	51
10	1.060		-27.12	75	17.15	44	-13.63	5	-7.06	25	-5.06	5	0.00	77
10	1.829		-27.12	75	17.12	43	-2.88	49	0.47	22	-11.01	5	-4.42	77
10	1.829		-27.12	75	17.12	43	-2.83	49	0.47	22	-11.01	5	-4.42	77
10	2.286		-27.13	75	17.12	44	1.34	77	4.95	6	-10.35	5	-4.66	77
10	2.286		-27.13	75	17.14	44	1.38	77	4.95	6	-10.35	5	-4.66	77
10	8		-27.12	75	17.17	43	8.81	77	17.90	5	0.00	3	0.00	39
11	1		0.00	1	92.43	42	0.00	1	0.00	68	0.00	1	0.00	1
11	5		0.00	1	92.43	42	0.00	1	0.00	68	0.00	1	0.00	1
12	5		0.00	1	35.82	49	-0.00	51	0.00	1	0.00	1	0.00	1
12	3		0.00	1	35.82	49	-0.00	51	0.00	1	0.00	1	0.00	1

STAAFKRACHTEN			2e orde								Fundamentele combinatie			
St.	Kn.	Pos.	NXi/NXj				DZi/DZj				MYi/MYj			
			Min	BC	Max	BC	Min	BC	Max	BC	Min	BC	Max	BC
13	4		0.00	7	93.29	49	-0.00	51	0.00	1	0.00	1	0.00	1
13	2		0.00	7	93.29	49	-0.00	51	0.00	1	0.00	1	0.00	1
14	2		0.00	1	35.23	68	-0.00	81	0.00	68	0.00	1	0.00	1
14	6		0.00	1	35.23	68	-0.00	81	0.00	68	0.00	1	0.00	1
15	12		0.00	5	0.00	76	0.00	88	0.00	87	0.00	1	0.00	88
15	11		-0.05	5	-0.01	76	-133.6	5	-55.94	76	-156.1	5	-65.96	76
16	11		-0.05	5	-0.01	76	64.98	70	154.89	5	-156.1	5	-65.96	76
16	1.332		-0.05	5	-0.01	76	28.60	70	72.25	5	-7.40	5	0.00	76
16	1.486		-0.04	5	-0.01	76	24.44	70	62.91	5	0.00	70	6.12	49
16	2.404		-0.04	5	-0.01	76	-0.09	70	10.23	49	11.49	70	37.43	5
16	2.543		-0.04	5	-0.01	76	-4.60	70	4.66	49	11.21	70	38.46	5
16	3.325		-0.04	5	-0.01	76	-45.83	5	-13.69	76	0.00	70	24.28	49
16	4.103		-0.04	5	-0.01	76	-91.44	5	-31.52	76	-40.14	43	0.00	76
16	10		-0.04	5	-0.01	76	-143.9	5	-52.53	76	-139.0	5	-37.49	76
17	10		-0.04	5	-0.01	76	53.67	70	145.23	5	-139.0	5	-37.49	76
17	0.604		-0.03	5	-0.01	88	39.25	70	111.44	5	-74.09	43	0.00	76
17	2.988		-0.02	50	0.03	43	-1.32	76	5.36	43	-6.40	70	88.05	49
17	3.750		-0.03	50	0.05	43	-31.58	49	1.55	70	-4.64	70	76.21	49
17	1		-0.06	50	0.08	43	-92.70	49	8.01	70	0.00	21	0.00	10
18	1		-69.78	42	4.84	81	-32.09	66	86.73	49	0.00	88	0.00	1
18	0.767		-69.80	42	4.85	55	-27.87	64	50.76	51	-22.49	66	51.83	49
18	2.954		-69.84	42	4.87	55	-60.81	37	14.24	29	-104.2	38	102.75	77
18	4		-69.84	42	4.87	55	-67.39	37	14.49	29	-119.5	38	105.82	77
19	4		-3.77	72	4.84	81	-39.31	31	76.82	41	-119.5	38	105.82	77
19	2.954		-3.75	72	4.84	81	-30.63	49	11.41	66	-2.39	66	7.54	49
19	7		-3.75	72	4.84	81	-30.70	5	8.09	66	-0.00	4	0.00	49
20	7		-0.05	42	0.02	77	18.55	78	76.32	5	0.00	1	0.00	1
20	1.890		-0.02	42	0.01	51	-0.48	77	4.28	42	18.11	78	72.79	5
20	1.964		-0.02	42	0.01	51	-1.57	77	2.10	42	18.08	78	73.08	5
20	3.569		-0.01	5	-0.00	76	-62.63	5	-21.62	78	0.00	78	32.49	41
20	4.350		-0.02	5	-0.01	76	-97.52	5	-34.34	78	-41.41	51	0.00	68
20	13		-0.03	5	-0.01	64	-128.9	5	-46.11	78	-113.5	5	-30.25	68
21	13		-0.03	5	-0.01	68	40.84	68	122.16	5	-113.5	5	-30.25	68
21	0.938		-0.03	5	-0.01	68	23.93	68	74.91	5	-21.46	51	0.00	68
21	1.408		-0.03	5	-0.01	68	15.59	68	51.25	5	0.00	78	12.14	41
21	2.425		-0.03	5	-0.01	68	-2.93	41	2.45	78	11.83	78	35.30	5
21	2.483		-0.03	5	-0.01	68	-4.18	41	0.24	78	11.85	78	35.19	5
21	3.540		-0.04	5	-0.01	68	-56.75	5	-20.62	78	0.00	78	4.71	5
21	3.675		-0.04	5	-0.01	68	-63.81	5	-23.30	78	-6.00	5	0.00	68
21	14		-0.04	5	-0.01	84	-134.6	5	-50.10	78	-135.5	5	-50.54	68
22	14		-0.04	5	-0.01	68	42.89	68	115.80	5	-135.5	5	-50.54	68
22	15		0.00	5	0.00	68	-0.00	5	-0.00	22	-0.00	5	-0.00	22

TUSSENpunTEN VERPLAATSINGEN					2e orde		Fundamentele combinatie	
St.	Kn.	Pos.	Z-verp		[kN/m²]		Grondspan.	
			Min	BC	Max	BC		
1	1		-0.08	42	0.01	55		
1	0.310		-1.66	68	1.83	51		
1	0.620		-3.19	68	3.63	51		
1	0.930		-4.66	68	5.38	51		
1	1.240		-6.01	68	7.05	51		
1	1.550		-7.22	68	8.63	51		
1	1.860		-8.34	68	10.15	51		
1	2.170		-9.32	68	11.58	51		

TUSSENpunten Verplaatsingen

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	Z-verp		Max	BC	Grondspan.
			Min	BC			
1		2.480	-10.18	68	12.92	51	
1		2.790	-10.98	68	14.22	51	
1	2		-11.73	68	15.49	51	
2	2		-11.73	68	15.49	51	
2		0.310	-13.04	68	17.08	51	
2		0.620	-14.30	68	18.63	51	
2		0.930	-15.51	68	20.15	51	
2		1.240	-16.58	68	21.58	51	
2		1.550	-17.53	68	22.93	51	
2		1.860	-18.37	68	24.21	51	
2		2.170	-19.09	68	25.41	51	
2		2.480	-19.68	68	26.53	51	
2		2.790	-20.21	68	27.61	51	
2	3		-20.68	68	28.66	51	
3	4		0.00	1	0.00	1	
3		0.310	-1.14	68	1.58	51	
3		0.620	-2.28	68	3.17	51	
3		0.930	-3.42	68	4.75	51	
3		1.240	-4.56	68	6.33	51	
3		1.550	-5.70	68	7.92	51	
3		1.860	-6.84	68	9.50	51	
3		2.170	-7.98	68	11.08	51	
3		2.480	-9.11	68	12.66	51	
3		2.790	-10.25	68	14.25	51	
3	5		-11.39	68	15.83	51	
4	5		-11.39	68	15.83	51	
4		0.310	-12.31	68	17.12	51	
4		0.620	-13.23	68	18.42	51	
4		0.930	-14.15	68	19.71	51	
4		1.240	-15.07	68	21.01	51	
4		1.550	-15.99	68	22.30	51	
4		1.860	-16.90	68	23.59	51	
4		2.170	-17.82	68	24.89	51	
4		2.480	-18.74	68	26.18	51	
4		2.790	-19.66	68	27.47	51	
4	6		-20.58	68	28.77	51	
5	7		-0.01	81	0.00	72	
5		0.310	-1.41	70	2.02	49	
5		0.620	-2.78	70	3.99	49	
5		0.930	-4.12	70	5.89	49	
5		1.240	-5.37	70	7.67	49	
5		1.550	-6.54	70	9.32	49	
5		1.860	-7.65	70	10.87	49	
5		2.170	-8.67	70	12.28	49	
5		2.480	-9.61	70	13.57	49	
5		2.790	-10.53	70	14.80	49	
5	8		-11.45	68	15.98	51	
6	8		-11.45	68	15.98	51	
6		0.310	-12.57	70	17.67	49	
6		0.620	-13.69	70	19.32	49	
6		0.930	-14.79	70	20.90	49	
6		1.240	-15.81	70	22.36	49	
6		1.550	-16.75	70	23.70	49	
6		1.860	-17.62	70	24.92	49	
6		2.170	-18.41	70	26.03	49	
6		2.480	-19.12	70	27.00	49	
6		2.790	-19.85	70	27.93	49	
6	9		-20.63	68	28.85	51	

TUSSENpunten Verplaatsingen

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	Z-verp		[kN/m²]	
			Min	BC	Max	BC Grondspan.
7	3		-20.29	49	-3.22	70
7		0.320	-19.23	49	-3.91	70
7		0.640	-18.16	49	-4.62	27
7		0.960	-18.30	5	-5.39	27
7		1.280	-18.40	5	-6.20	27
7		1.600	-18.07	5	-7.04	27
7		1.920	-17.43	5	-7.76	27
7		2.240	-16.43	5	-7.66	29
7		2.560	-15.21	5	-6.82	29
7		2.880	-14.22	41	-6.00	29
7	6		-14.29	41	-5.23	29
8	6		-14.29	41	-5.23	29
8		0.320	-14.60	41	-4.60	29
8		0.640	-14.91	41	-4.05	29
8		0.960	-15.25	5	-3.59	31
8		1.280	-15.85	5	-3.27	31
8		1.600	-16.10	5	-3.08	31
8		1.920	-16.04	5	-3.00	31
8		2.240	-15.54	5	-3.04	31
8		2.560	-14.59	5	-3.25	31
8		2.880	-13.48	5	-3.54	31
8	9		-12.28	41	-3.89	78
9	2		-20.13	49	-3.21	70
9		0.320	-21.00	49	-5.43	70
9		0.640	-21.51	49	-7.41	70
9		0.960	-21.71	49	-9.10	70
9		1.280	-21.85	5	-10.23	70
9		1.600	-21.35	5	-10.85	70
9		1.920	-20.23	5	-10.78	82
9		2.240	-18.41	5	-9.33	74
9		2.560	-16.29	5	-7.65	74
9		2.880	-14.71	41	-6.27	74
9	5		-14.14	41	-5.21	29
10	5		-14.14	41	-5.21	29
10		0.320	-15.04	41	-5.11	74
10		0.640	-16.37	41	-5.32	74
10		0.960	-17.86	41	-5.84	74
10		1.280	-19.02	41	-6.44	78
10		1.600	-19.55	41	-6.81	78
10		1.920	-19.51	41	-6.94	78
10		2.240	-18.70	5	-6.69	78
10		2.560	-16.94	41	-5.98	78
10		2.880	-14.78	41	-5.03	78
10	8		-12.26	41	-3.88	78
11	1		-5.75	37	0.00	1
11		0.446	-6.91	37	0.00	1
11		0.891	-8.07	37	0.00	1
11		1.337	-9.24	37	0.00	1
11		1.782	-10.40	37	0.00	1
11		2.228	-11.56	41	0.00	1
11		2.673	-12.72	41	0.00	1
11		3.119	-13.88	41	0.00	1
11		3.564	-15.04	41	0.00	1
11		4.010	-16.21	41	0.00	1
11	5		-17.37	41	0.00	1

TUSSENpunten Verplaatsingen

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	Z-verp		Max	BC	Grondspan.
			Min	BC			
12	5		0.00	1	17.30	49	
12		0.446	0.00	1	19.01	49	
12		0.891	0.00	1	20.73	49	
12		1.337	0.00	1	22.44	49	
12		1.782	0.00	1	24.16	49	
12		2.228	0.00	1	25.87	49	
12		2.673	0.00	1	27.58	49	
12		3.119	0.00	1	29.30	49	
12		3.564	0.00	1	31.01	49	
12		4.010	0.00	1	32.73	49	
12	3		0.00	1	34.44	49	
13	4		0.00	7	9.20	5	
13		0.446	0.00	7	10.80	5	
13		0.891	0.00	7	12.40	5	
13		1.337	0.00	7	14.00	5	
13		1.782	0.00	7	15.60	5	
13		2.228	0.00	7	17.20	49	
13		2.673	0.00	7	18.80	49	
13		3.119	0.00	7	20.40	49	
13		3.564	0.00	7	22.00	49	
13		4.010	0.00	7	23.60	49	
13	2		0.00	7	25.20	49	
14	2		-13.13	41	0.00	1	
14		0.446	-14.16	41	0.00	1	
14		0.891	-15.20	41	0.00	1	
14		1.337	-16.24	41	0.00	1	
14		1.782	-17.28	41	0.00	1	
14		2.228	-18.32	42	0.00	1	
14		2.673	-19.36	42	0.00	1	
14		3.119	-20.39	42	0.00	1	
14		3.564	-21.43	42	0.00	1	
14		4.010	-22.47	42	0.00	1	
14	6		-23.51	42	0.00	1	
15	12		-16.79	5	-9.44	70	125.900
15		0.250	-17.32	5	-9.69	70	129.926
15		0.500	-17.86	5	-9.95	70	133.944
15		0.750	-18.39	5	-10.19	70	137.928
15		1.000	-18.91	5	-10.40	76	141.851
15		1.250	-19.42	5	-10.59	76	145.645
15		1.500	-19.90	5	-10.76	76	149.228
15		1.750	-20.33	5	-10.92	76	152.503
15		2.000	-20.71	5	-11.05	76	155.352
15		2.250	-21.02	5	-11.15	76	157.636
15	11		-21.23	5	-11.21	76	159.195
16	11		-21.23	5	-11.21	76	159.195
16		0.500	-21.33	5	-11.20	76	159.942
16		1.000	-21.15	5	-11.08	76	158.652
16		1.500	-20.88	5	-10.91	76	156.576
16		2.000	-20.61	5	-10.75	76	154.611
16		2.500	-20.44	5	-10.65	76	153.300
16		3.000	-20.38	5	-10.60	76	152.842
16		3.500	-20.41	5	-10.63	76	153.094
16		4.000	-20.48	5	-10.69	76	153.574
16		4.500	-20.46	5	-10.77	76	153.464
16	10		-20.21	5	-10.80	76	151.600

TUSSENpunten Verplaatsingen

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	Z-verp		Max	BC	Grondspan.
			Min	BC			
17	10		-20.21	5	-10.80	76	151.600
17		0.500	-19.61	5	-10.69	70	147.055
17		1.000	-18.79	5	-10.09	70	140.933
17		1.500	-17.91	5	-9.37	70	134.326
17		2.000	-17.09	5	-8.58	70	128.141
17		2.500	-16.40	5	-7.75	70	123.012
17		3.000	-16.24	49	-6.88	70	121.806
17		3.500	-16.76	49	-6.00	70	125.680
17		4.000	-17.53	49	-5.10	70	131.454
17		4.500	-18.50	49	-4.19	70	138.759
17	1		-19.59	49	-3.26	70	146.962
18	1		-19.59	49	-3.26	70	146.962
18		0.320	-18.15	49	-4.12	70	136.149
18		0.640	-16.75	49	-4.96	27	125.651
18		0.960	-15.41	49	-5.78	27	115.549
18		1.280	-14.26	49	-6.56	27	106.917
18		1.600	-13.87	5	-7.30	27	103.996
18		1.920	-13.60	5	-7.81	29	101.966
18		2.240	-13.36	5	-7.14	29	100.225
18		2.560	-13.16	5	-6.36	29	98.729
18		2.880	-13.21	41	-5.69	29	99.073
18	4		-13.45	41	-5.13	29	100.876
19	4		-13.45	41	-5.13	29	100.876
19		0.320	-13.57	41	-4.70	29	101.759
19		0.640	-13.58	41	-4.37	29	101.876
19		0.960	-13.52	41	-4.12	29	101.394
19		1.280	-13.39	41	-3.95	29	100.420
19		1.600	-13.22	41	-3.85	31	99.125
19		1.920	-13.02	41	-3.79	31	97.635
19		2.240	-12.80	41	-3.77	31	96.021
19		2.560	-12.58	41	-3.77	31	94.349
19		2.880	-12.35	41	-3.79	78	92.662
19	7		-12.14	41	-3.81	78	91.067
20	7		-12.14	41	-3.81	78	91.067
20		0.500	-11.34	5	-3.88	78	85.037
20		1.000	-10.92	5	-3.96	78	81.867
20		1.500	-10.66	5	-4.10	78	79.974
20		2.000	-10.62	5	-4.28	78	79.666
20		2.500	-10.80	5	-4.52	78	81.037
20		3.000	-11.19	5	-4.80	78	83.962
20		3.500	-11.75	5	-5.12	78	88.097
20		4.000	-12.38	5	-5.45	78	92.868
20		4.500	-12.99	5	-5.75	78	97.456
20	13		-13.45	5	-5.82	68	100.896
21	13		-13.45	5	-5.82	68	100.896
21		0.500	-13.62	5	-5.81	68	102.176
21		1.000	-13.61	5	-5.76	68	102.068
21		1.500	-13.54	5	-5.71	68	101.553
21		2.000	-13.51	5	-5.70	68	101.317
21		2.500	-13.57	5	-5.73	68	101.757
21		3.000	-13.73	5	-5.81	68	102.978
21		3.500	-13.97	5	-5.92	68	104.794
21		4.000	-14.23	5	-6.05	68	106.722
21		4.500	-14.40	5	-6.14	68	107.977
21	14		-14.33	5	-6.14	68	107.467

TUSSENpunten Verplaatsingen

2e orde

Fundamentele combinatie

St.	Kn.	Pos.	Z-verp		Max	BC	Grondspan.
			Min	BC			
22	14		-14.33	5	-6.14	68	107.467
22		0.250	-14.16	5	-6.10	68	106.183
22		0.500	-13.90	5	-6.02	68	104.270
22		0.750	-13.58	5	-5.91	68	101.866
22		1.000	-13.21	5	-5.79	68	99.092
22		1.250	-12.81	5	-5.66	68	96.050
22		1.500	-12.38	5	-5.51	68	92.824
22		1.750	-11.93	5	-5.35	78	89.487
22		2.000	-11.48	5	-5.18	78	86.098
22		2.250	-11.02	5	-5.00	78	82.681
22	15		-10.57	5	-4.83	78	79.255

REACTIES

2e orde

Fundamentele combinatie

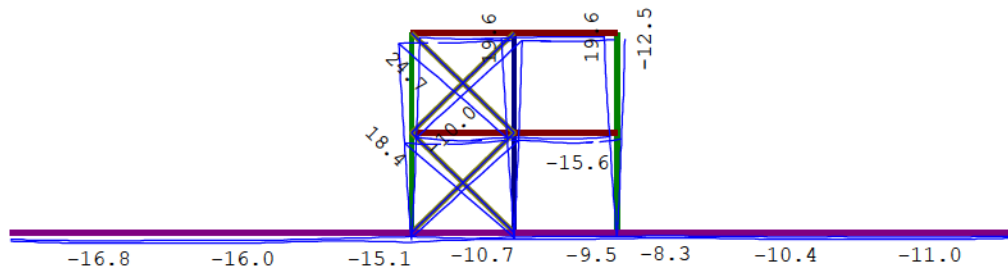
Kn.	X-min	X-max	Z-min	Z-max	M-min	M-max
4	-69.95	69.96				

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN

Geom.LE;Fys.NLE.kort [mm]

Karakteristieke combinatie



N.B. In deze verplaatsingen is de kruipvervorming (w2) niet verwerkt!

REACTIES

Geom.LE;Fys.NLE.kort

Karakteristieke combinatie

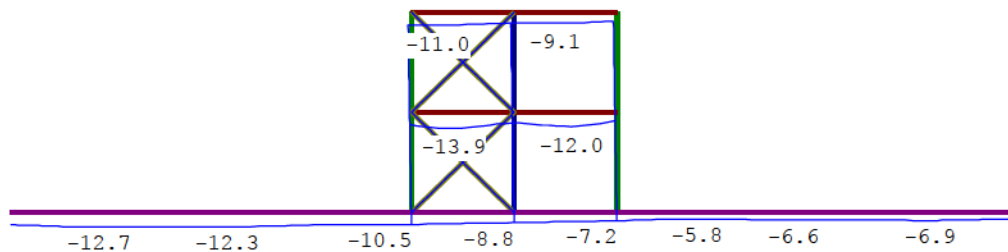
Kn.	X-min	X-max	Z-min	Z-max	M-min	M-max
4	-46.68	46.68				

OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN

Geom.LE;Fys.NLE.kort [mm]

Blijvende combinatie



N.B. In deze verplaatsingen is de kruipvervorming (w_2) niet verwerkt!

REACTIES

Geom.LE;Fys.NLE.kort

Blijvende combinatie

Kn.	X	Z	M
4	0.00		

MATERIAALGEGEVENS [N] [mm]

t.b.v. materiaal:5 C20/25

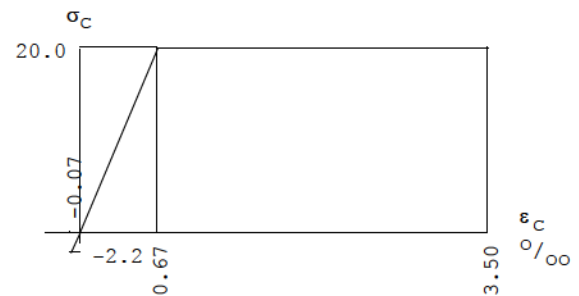
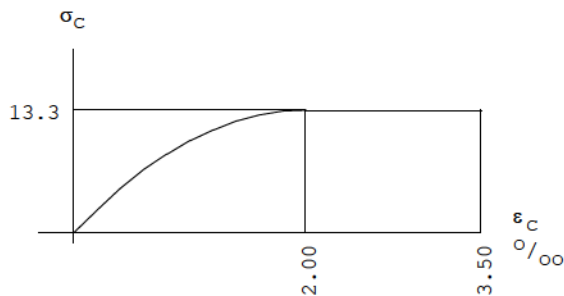
Spanning-rek diagrammen

T.b.v sterkte

E-modulus: 7619

korte-duur

E-modulus: 29962



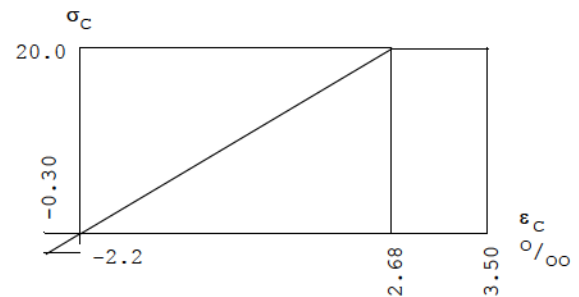
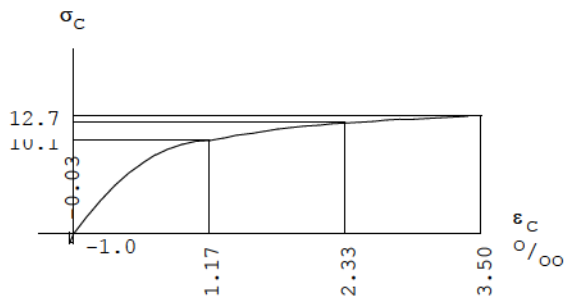
Spanning-rek diagrammen

T.b.v stijfheid in grenstoestand

E-modulus: 6227

lange-duur

E-modulus: 7472



PROFIELGEGEVENS Balk

[N] [mm]

5: B*H 600*600

Algemeen

Materiaal	: C20/25	Staaflengte:	2500
Oppervlak	: 3.600000e+05	Traagheid	: 1.08000e+10
Staaftype	: 0: normaal	Vormfactor	: 0.00

Doorsnede

breedte	: 600	hoogte	: 600	zwaartepunt tov negatieve zijde	: 300
---------	-------	--------	-------	---------------------------------	-------

Betonkwaliteit	: C20/25	Kruipcoëf.	: 3.01
Soort spanningsrekdiagram	: Parabolisch - rechthoekig diagram		
Treksterkte $f_{ct,eff}$ art. 7.1(2)	: f_{ctm} (2.21 N/mm ²)		
Doorbuiging volgens art.7.3.4(3)	: Ja		
Langeduur scheurmoments begrensd	: Ja		
Staalkwaliteit hoofdwapening	: 500	ϵ_{sk}	: 2.50
Soort spanningsrekdiagram	: Bi-lineair diagram met klimmende tak		
Staalkwaliteit beugels	: 500		
Bundels toepassen	: Nee	Breedte stortsluif:	50
Controle gebruikseisen	: Ja		

Betondekking	Positieve zijde	Negatieve zijde
Milieu	: XC2	: XC2
Gestort tegen bestaand beton	: Nee	: Nee
Element met plaatgeometrie	: Nee	: Nee
Specifieke kwaliteitsbeheersing	: Nee	: Nee
Oneffen beton oppervlak	: Nee	: Nee
Ondergrond	: Glad / N.v.t.	: Glad / N.v.t.
Constructieklasse	: S4	: S4
Grootste korrel	: 31.5	

Hoofdwapening	: 2de laag	2de laag
Nominale dekking	: 30	30
Toegepaste dekking	: 43	43
Gelijkwaardige diameter	: 12	12
$C_{min,b}$ $C_{min,dur}$ ΔC_{dur}	: 12 25 0	12 25 0
C_{min} ΔC_{dev} C_{nom}	: 25 5 30	25 5 30

Beugel / Verdeelwapening	: 1ste laag	1ste laag
Nominale dekking	: 30	30
Toegepaste dekking	: 35	35
Gelijkwaardige diameter	: 8	8
$C_{min,b}$ $C_{min,dur}$ ΔC_{dur}	: 8 25 0	8 25 0
C_{min} ΔC_{dev} C_{nom}	: 25 5 30	25 5 30

Wapening		
Basiswapening	: 6x12	6x12
Diameter nuttige hoogte	: 12.0	12.0
Min.tussenruimte	: 38	38
Art. 7.3.2 minimum wapening	: Nee	Nee
Aanhechting volgens art. 8.4.2	: Goed	Goed

Beugels		
Voorkeur h.o.h. afstand	: 300;150;100;75;60;50	
Beugeldiameter	: 8	
Breedte t.b.v. dwarskracht	: 600	Hoogte t.b.v. dwarskr: 600
Aantal beugelsneden per doorsn.	: 3 Ontwerpen	
Hoek betondrukdiagonaal θ	: 21.8	z berekenen via: -

WAPENING PER STAAF Nr:1:

Geldt voor staven:15,22

WAPENING PER STAAF Nr:2:

Geldt voor staven:16,17,20,21

WAPENING PER STAAF Nr:3:

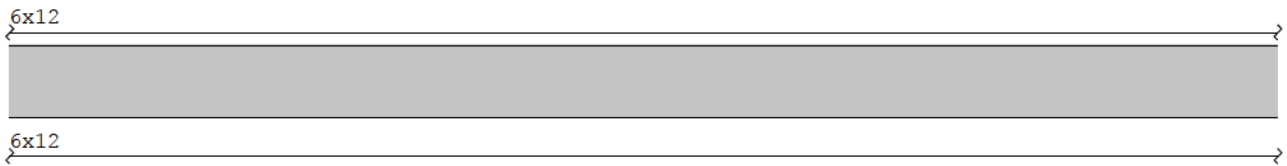
Geldt voor staven:18,19

Afwijkende wapeningsrichting(en)

In de navolgende staven loopt de wapening van de j-knoop naar de i-knoop:
22

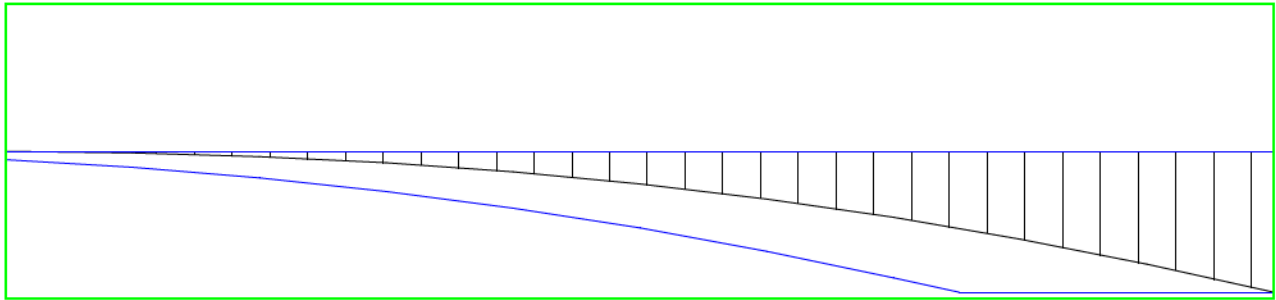
HOOFDWAPENING [mm²]

Staaf:15



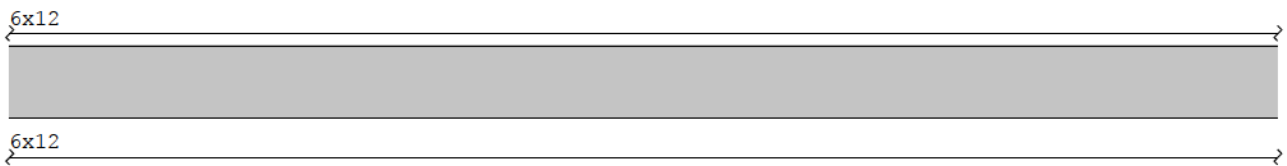
MEd DEKKINGSLIJN

Staaf:15



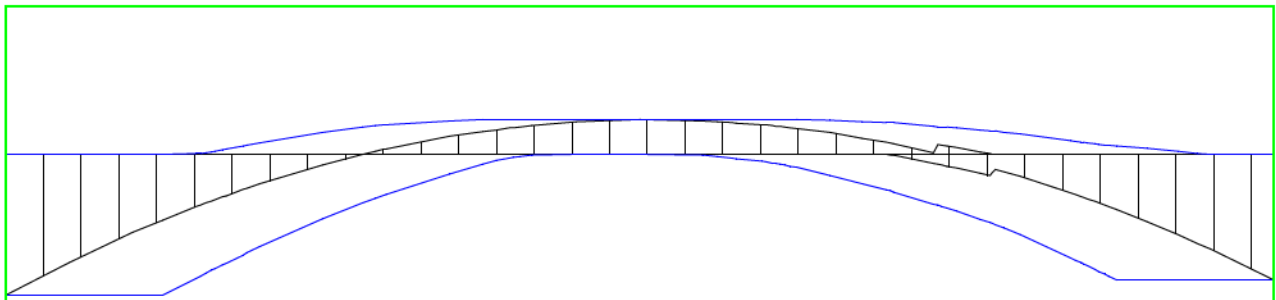
HOOFDWAPENING [mm²]

Staaf:16



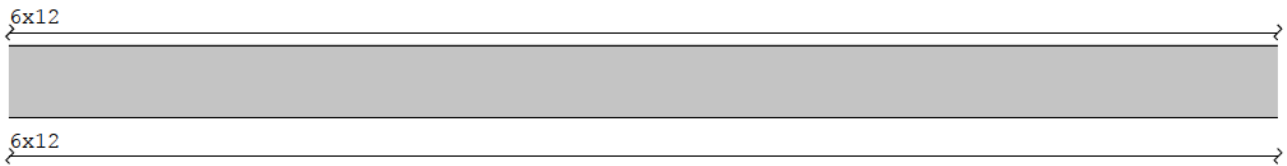
MEd DEKKINGSLIJN

Staaf:16



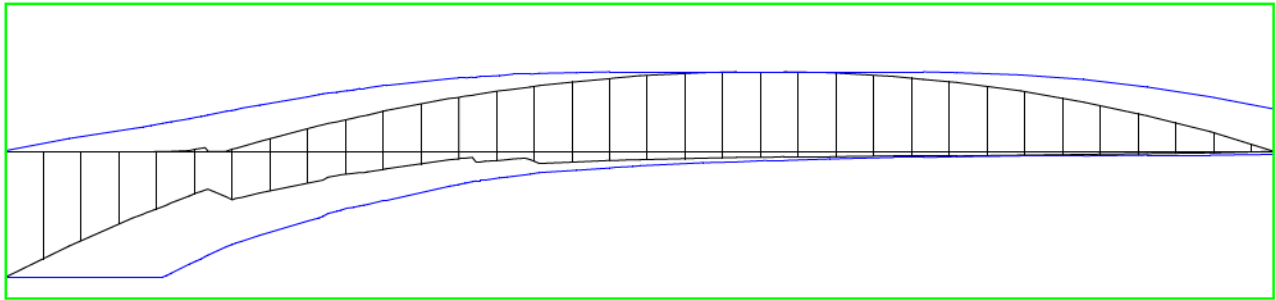
HOOFDWAPENING [mm²]

Staaf:17



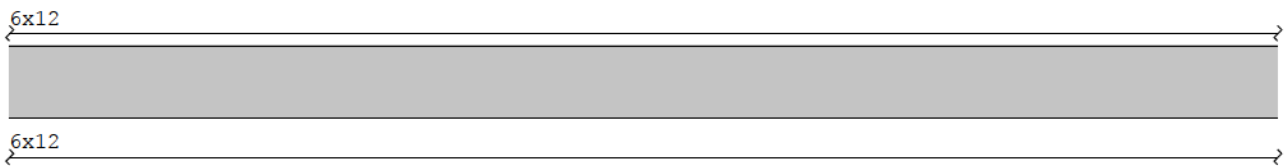
Med DEKKINGSLIJN

Staaf:17



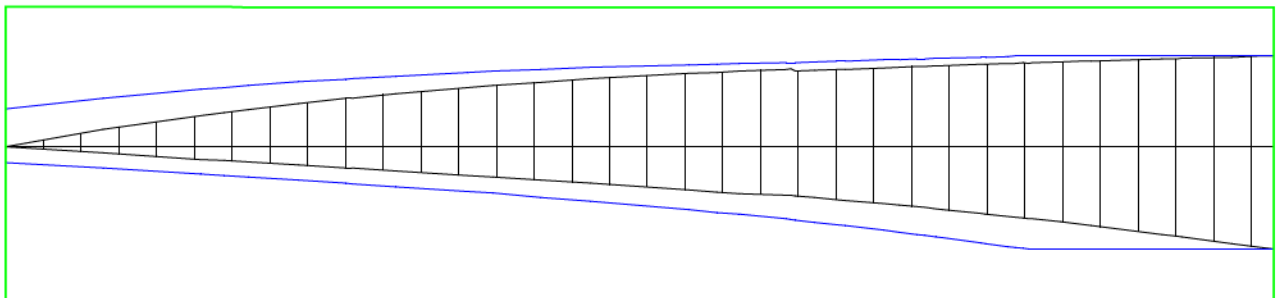
HOOFDWAPENING [mm²]

Staaf:18



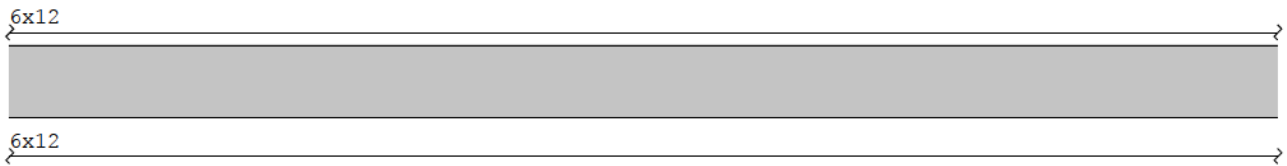
Med DEKKINGSLIJN

Staaf:18



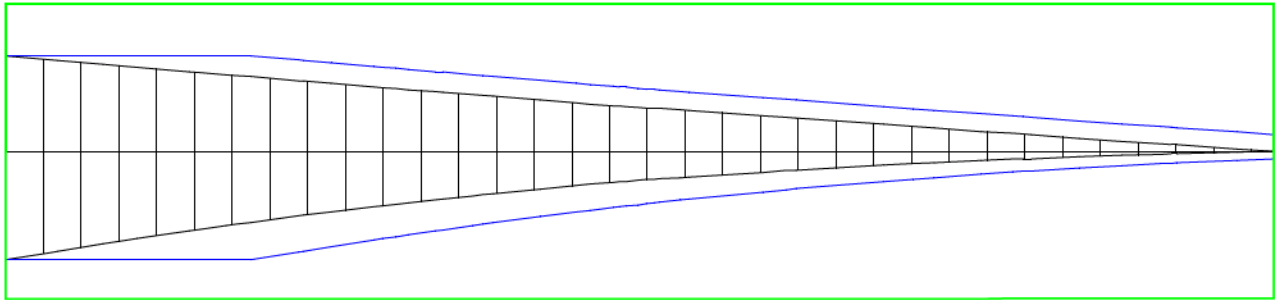
HOOFDWAPENING [mm²]

Staaf:19



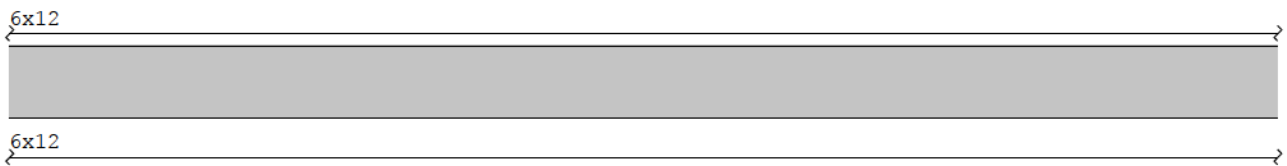
Med DEKKINGSLIJN

Staaf:19



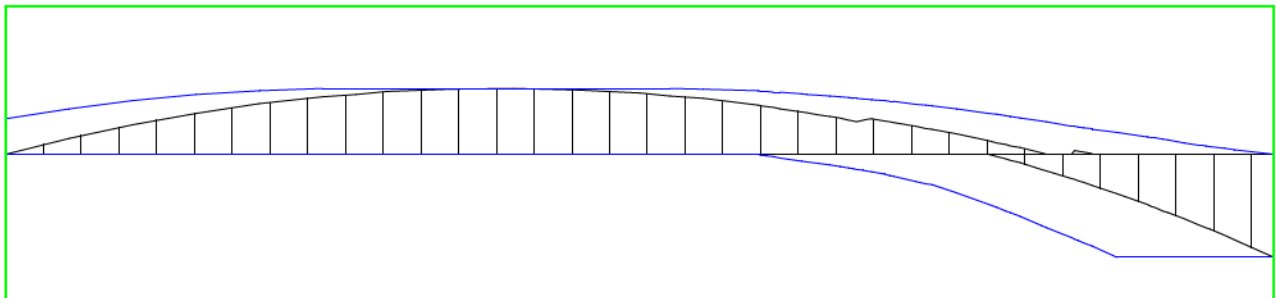
HOOFDWAPENING [mm²]

Staaf:20



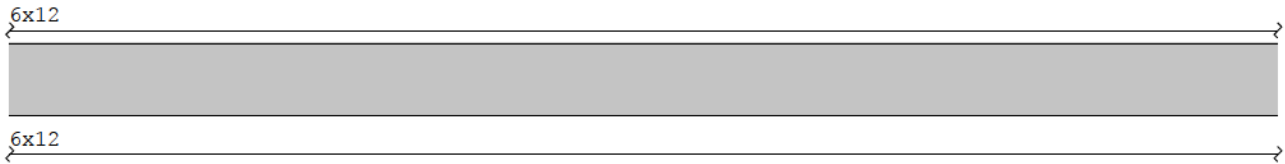
Med DEKKINGSLIJN

Staaf:20



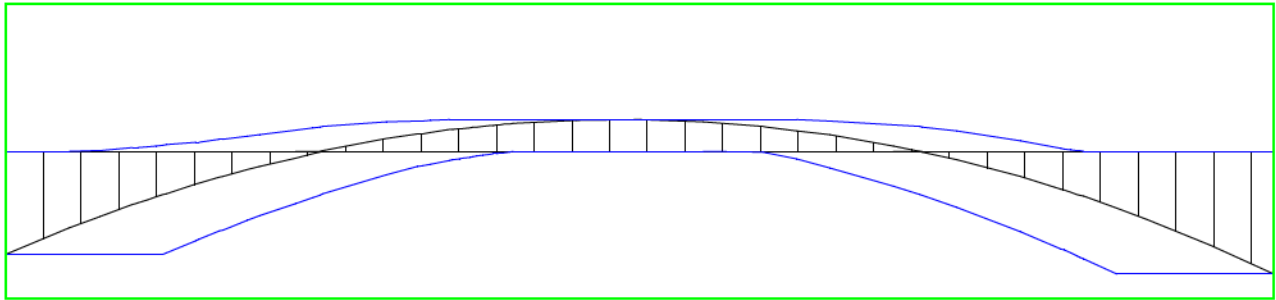
HOOFDWAPENING [mm²]

Staaf:21



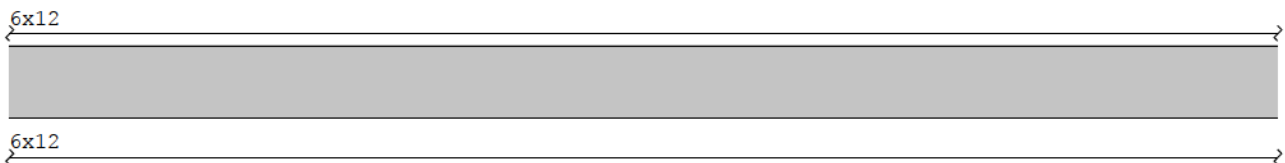
Med DEKKINGSLIJN

Staaf:21



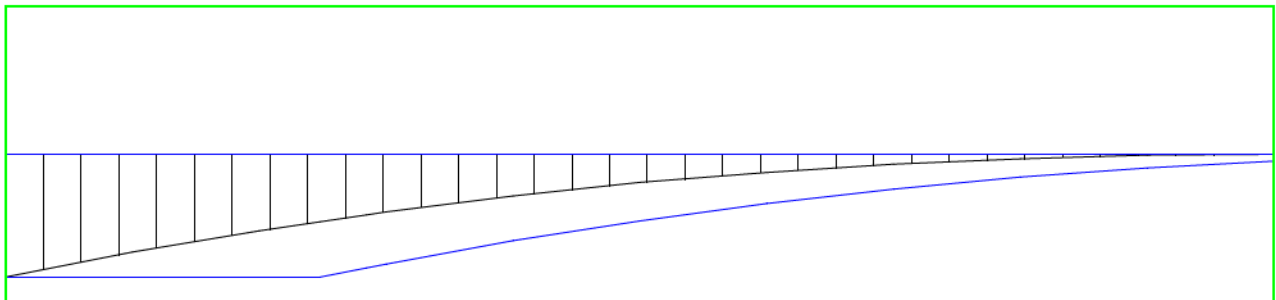
HOOFDWAPENING [mm²]

Staaf:22



Med DEKKINGSLIJN

Staaf:22



HOOFDWAPENING

Stf.	Pos [mm]	Benodigd		Aanwezig		N _{Ed} [kN]	M _{Ed} [kNm]	M _{Rd} [kNm]	Opm.
		Apos [mm ²]	Aneg [mm ²]	Apos [mm ²]	Aneg [mm ²]				
15	2500	0	648	679	679	-0	-156.12	-163.26	
16	0	0	648	679	679	-0	-156.12	-163.27	
16	2500	198	0	679	679	-0	38.40	163.27	1
17	0	0	575	679	679	-0	-139.01	-163.27	
17	3000	361	0	679	679	-0	88.04	163.27	
18	3200	441	0	679	679	2	105.82	162.76	

HOOFDWAPENING

Stf.	Pos [mm]	Benodigd		Aanwezig		N_{Ed} [kN]	M_{Ed} [kNm]	M_{Rd} [kNm]	Opm.
		Apos [mm ²]	Aneg [mm ²]	Apos [mm ²]	Aneg [mm ²]				
18	3200	0	413	679	679	-70	-119.52	-181.17	
19	0	433	0	679	679	-2	105.82	163.78	
19	0	0	494	679	679	1	-119.52	-163.11	
20	2000	326	0	679	679	-0	73.06	163.26	1
20	5000	0	467	679	679	-0	-113.54	-163.26	
21	2500	181	0	679	679	-0	35.16	163.27	1
21	5000	0	560	679	679	-0	-135.52	-163.27	
22	0	0	0	679	679	-0	0.00	163.26	91
22	0	0	560	679	679	-0	-135.52	-163.27	

Opmerkingen

[1] * = Eisen met betrekking tot minimum wapening zijn toegepast, zie nationale bijlage art. 9.2.1.1(1).

[91] Minimum excentriciteit art. 6.1 (4) is maatgevend.

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
15	2000	Neg	0	-96.04	367	0.846	0.311	1.17	0.350	0.89	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
16	0	Neg	0	-96.04	367	0.846	0.311	1.17	0.350	0.89	
16	2000	Pos	0	23.66	367	0.200	0.074	1.17	0.350	0.21	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
17	0	Neg	0	-84.82	367	0.718	0.264	1.17	0.350	0.75	
17	2500	Pos	0	43.94	367	0.372	0.137	1.17	0.350	0.39	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
18	2708	Neg	-9	-27.96	367	0.216	0.079	1.17	0.350	0.23	
18	985	Pos	0	23.91	367	0.203	0.075	1.17	0.350	0.21	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
19	0	Neg	0	-27.96	367	0.237	0.087	1.17	0.350	0.25	
19	738	Pos	0	12.45	367	0.105	0.038	1.17	0.350	0.11	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
20	4500	Neg	0	-63.57	367	0.538	0.198	1.17	0.350	0.56	
20	1500	Pos	0	46.18	367	0.391	0.143	1.17	0.350	0.41	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
21	4500	Neg	0	-78.87	367	0.667	0.245	1.17	0.350	0.70	
21	2000	Pos	0	20.96	367	0.177	0.065	1.17	0.350	0.19	

SCHEURVORMING VOLGENS ARTIKEL 7.3.4

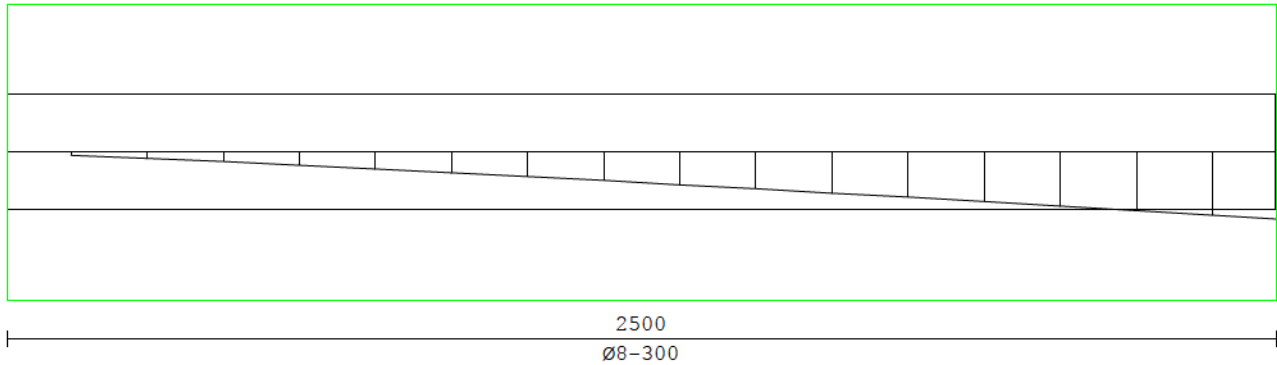
Stf.	Pos. [mm]	Zijde	$N_{E, \text{req}}$ [kN]	$M_{E, \text{req}}$ [kNm]	$S_{r, \text{max}}$ [mm]	$\epsilon_{sm} - \epsilon_{cm}$ [%]	W_k [mm]	k_{κ}	w_{max} [mm]	U.C.	Opm.
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SCHEURVORMING VOLGENS ARTIKEL 7.3.4

Stf.	Pos. Zijde	$N_{E;f_{req}}$	$M_{E;f_{req}}$	$S_{r,max}$	$\epsilon_{sm}-\epsilon_{cm}$	W_k	k_x	w_{max}	U.C.	Opm.
	[mm]	[kN]	[kNm]	[mm]	[%]	[mm]		[mm]		
22	250	Neg	0	-78.87	367	0.667	0.245	1.17	0.350	0.70

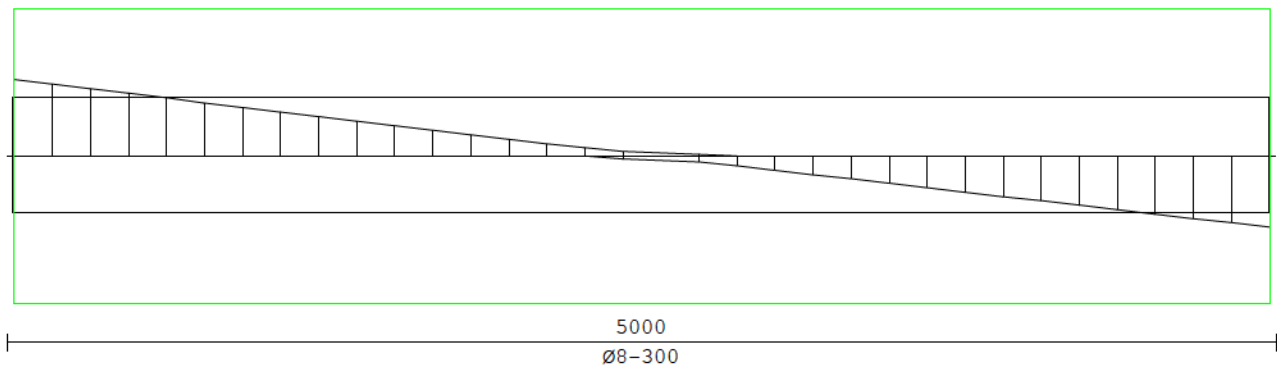
DWARSKRACHTEN DEKKINGSLIJN

Staaf:15



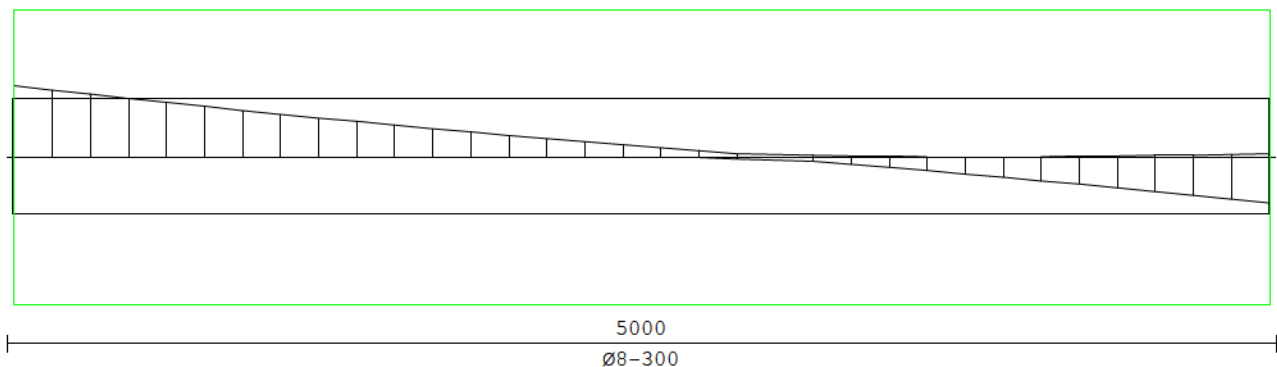
DWARSKRACHTEN DEKKINGSLIJN

Staaf:16



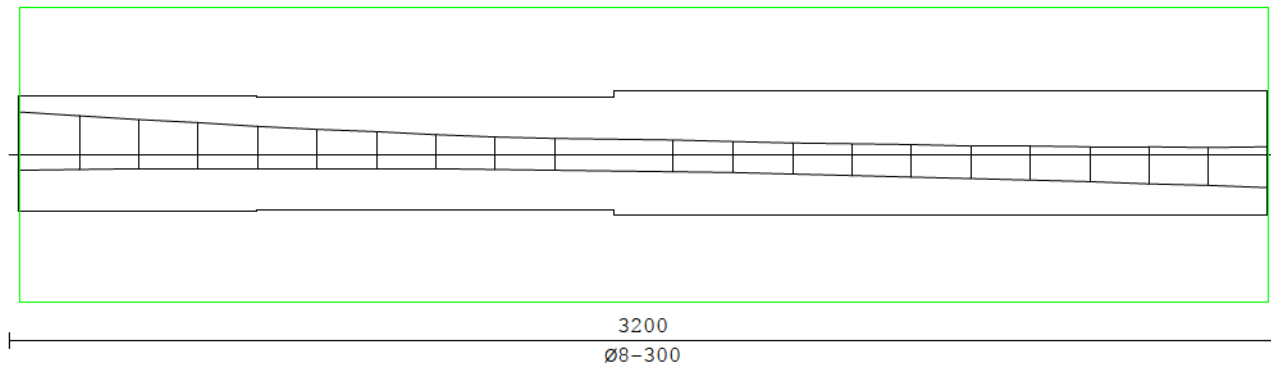
DWARSKRACHTEN DEKKINGSLIJN

Staaf:17



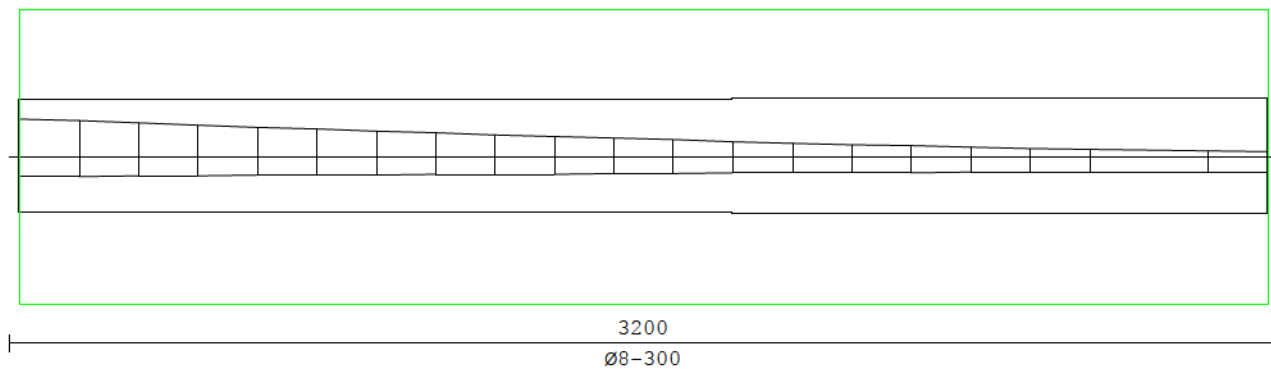
DWARSKRACHTEN DEKKINGSLIJN

Staaf:18



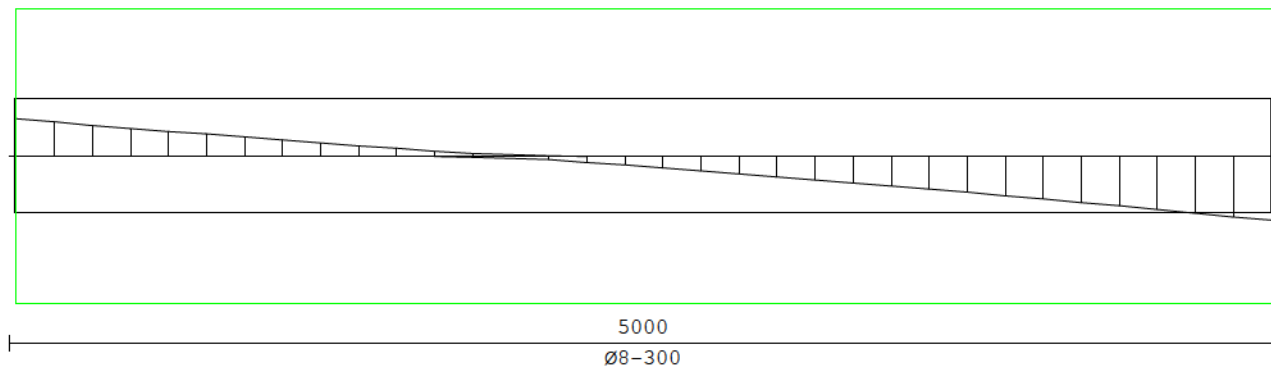
DWARSKRACHTEN DEKKINGSLIJN

Staaf:19



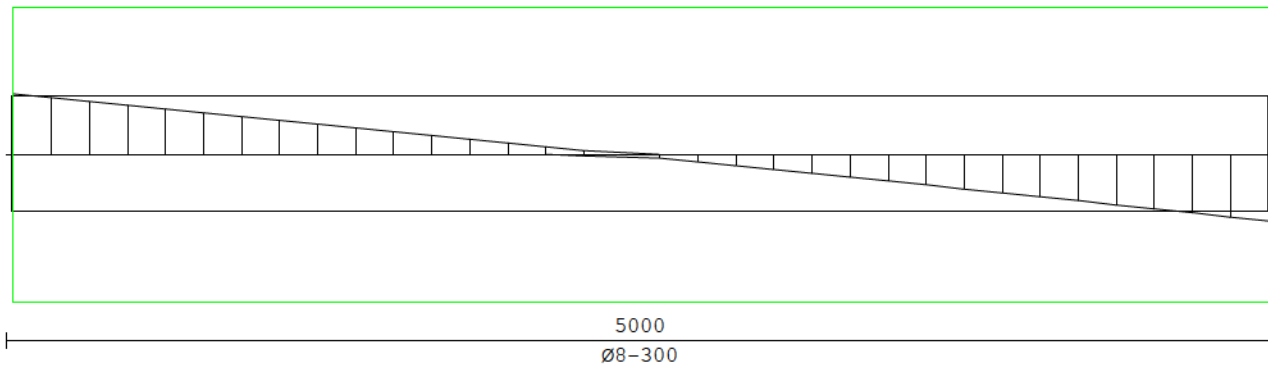
DWARSKRACHTEN DEKKINGSLIJN

Staaf:20



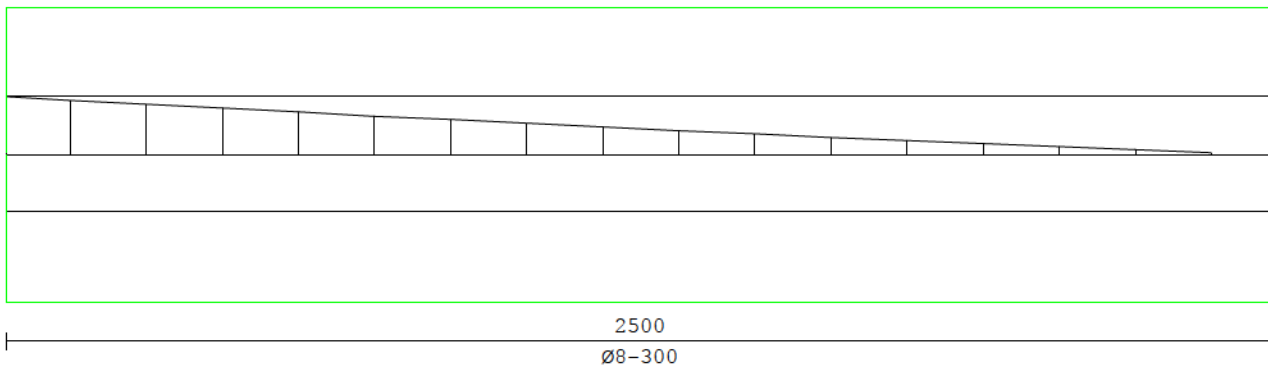
DWARSKRACHTEN DEKKINGSLIJN

Staaf:21



DWARSKRACHTEN DEKKINGSLIJN

Staaf:22



DWARSKRACHTWAPENING

Stf.	Vanaf [mm]	Tot Beugels [mm]	Lengte [mm]	N_{Ed} [kN]	V_{Ed} [kN]	A_{sw} [mm ² /m] Ben. Aanw.	A_{opg} [mm ²] Ben. Aanw.	Opm.
15	0	2500 Ø8-300 (3s)	2500	-0	134	429 503	0	0 8,58
16	0	5000 Ø8-300 (3s)	5000	-0	153	429 503	0	0 8,58
17	0	5000 Ø8-300 (3s)	5000	-0	144	429 503	0	0 8,58
18	0	3200 Ø8-300 (3s)	3200	0	85	429 503	0	0 8,58
19	0	3200 Ø8-300 (3s)	3200	1	76	429 503	0	0 8,58
20	0	5000 Ø8-300 (3s)	5000	-0	128	429 503	0	0 8,58
21	0	5000 Ø8-300 (3s)	5000	-0	133	429 503	0	0 8,58
22	0	2500 Ø8-300 (3s)	2500	-0	116	429 503	0	0 8,58

Opmerkingen

[8] Er zijn meer dan 2 beugelsneden per doorsnede toegepast.

[58] 6.2.3: λ is berekend m.b.v. 0.9d

Dwarsdoorsnede beg.vloer

Gemiddelde grondspanning nabij de kolommen op as A (maatgevende positie)

$$\sigma_{g;rep} = 94\text{kN/m}^2$$

$$Q_{g;fund.plaat} = 94\text{kN/m}^2 \cdot 0,6\text{m} = 56,4\text{kN/m}$$

$$\sigma_{q;rep} = 29\text{kN/m}^2$$

$$Q_{q;fund.plaat} = 29\text{kN/m}^2 \cdot 0,6\text{m} = 17,4\text{kN/m}$$

Gemiddelde grondspanning nabij de kolommen op as C (maatgevende positie)

$$\sigma_{g;rep} = 50\text{kN/m}^2$$

$$Q_{g;fund.plaat} = 50\text{kN/m}^2 \cdot 0,6\text{m} = 30,0\text{kN/m}$$

$$\sigma_{q;rep} = 29\text{kN/m}^2$$

$$Q_{q;fund.plaat} = 29\text{kN/m}^2 \cdot 0,6\text{m} = 17,4\text{kN/m}$$

Onderdeel....: fundatieplaat op staal
 Dimensies....: kN/m/rad

Betrouwbaarheidsklasse : 2 Referentieperiode : 50
 Herverdelen van momenten : nee Maximale deellengte : 0.000
 Ouderdom bij belasten : 28 Relatieve vochtigheid : 50%
 Doorbuigingen(beton) zijn dmv gecorrigeerde stijfheden berekend.

Fysisch lineair : Er is gerekend met de e-modulus uit de materiaaltabel.
 Fys.NLE.kort : Er is gerekend met een gecorrigeerde e-modulus (korte duur).
 Deze e-mod. is berekend mbv de krachten uit de fysisch lineair berekening.

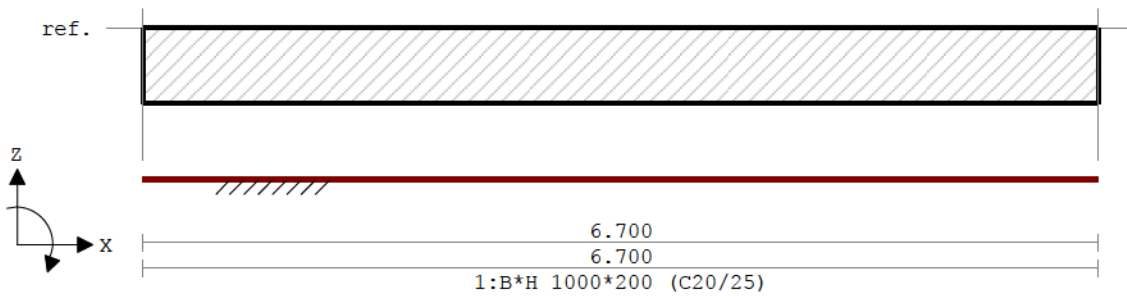
Toegepaste normen volgens Eurocode met Nederlandse NB

Belastingen	NEN-EN 1990:2002	C2:2010,A1:2019	NB:2019(nl)
	NEN-EN 1991-1-1:2002	C1/C11:2019	NB:2019(nl)
Beton	NEN-EN 1992-1-1:2011(nl)	C2/A1:2015(nl)	NB:2016(nl)



GEOMETRIE

Ligger:1



VELDLENGHTEN

Ligger:1

Veld	Vanaf	Tot	Lengte
1	0.000	6.700	6.700

MATERIALEN

Mt	Kwaliteit	E-modulus[N/mm ²]	S.G.	Pois.	Uitz. coëff
1	C20/25	7480	24.0	0.20	1.0000e-05

MATERIALEN vervolg

Mt	Kwaliteit	Cement	Kruipfac.
1	C20/25	N	3.01

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	B*H 1000*200	1:C20/25	2.0000e+05	6.6667e+08	0.00

PROFIELEN vervolg [mm]

Prof.	Staaftype	Breedte	Hoogte	e	Type	b1	h1	b2	h2
1	0:Normaal	1000	200	100.0	0:RH				

DOORSNEDEN

Ligger:1

sector	Vanaf	Tot	Lengte	Profiel begin	z-begin	Profiel eind	z-eind
1	0.000	6.700	6.700	1:B*H 1000*200	0.000	1:B*H 1000*200	0.000
sector	Vanaf	Tot	Lengte	Eindcode	Bedding	Br.[mm]	
1	0.000	6.700	6.700	1:Vast	5000	1000	

BELASTINGGEVALLEN

B.G.	Omschrijving	Belast/onbelast	ψ_0	ψ_1	ψ_2	e.g.
1	Permanent	2:Permanent EN1991				-1.00
2	Veranderlijk	1:Schaakbord EN1991	0.50	0.50	0.30	0.00

BELASTINGGEVALLEN

B.G.	Omschrijving	Type
1	Permanent	1 Permanente belasting
2	Veranderlijk	2 Ver. bel. pers. ed. (q_k)

VELDBELASTINGEN

Ligger:1 B.G:1 Permanent



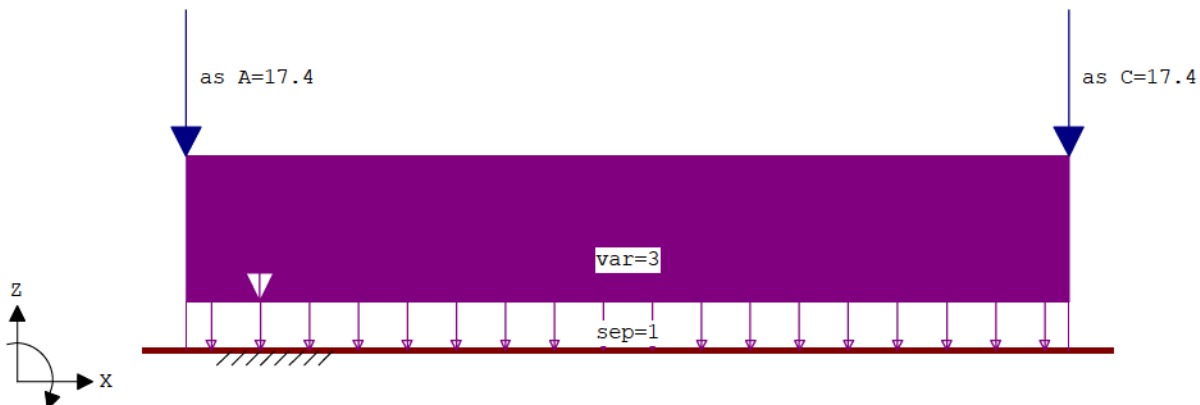
VELDBELASTINGEN

Ligger:1 B.G:1 Permanent

Last Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1	1:q-last	afw	-1.600	-1.600		0.300	6.100
2	8:Puntlast	as A	-56.400			0.300	
3	8:Puntlast	as C	-30.000			6.400	

VELDBELASTINGEN

Ligger:1 B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:1 B.G:2 Veranderlijk

Last Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1	1:q-last	sep	-1.000	-1.000		0.300	6.100
2	1:q-last	var	-3.000	-3.000		0.300	6.100
3	8:Puntlast	as A	-17.400			0.300	
4	8:Puntlast	as C	-17.400			6.400	

BELASTINGCOMBINATIES

BC	Type	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor	BG	Gen.	Factor
1	Fund.	1	Perm	1.35	2	psi0	1.50						
2	Fund.	1	Perm	1.20	2	Extr	1.50						
3	Kar.	1	Perm	1.00	2	Extr	1.00						
4	Freq.	1	Perm	1.00	2	psi1	1.00						
5	Quas.	1	Perm	1.00	2	psi2	1.00						
6	Blij.	1	Perm	1.00									

GUNSTIGE WERKING PERMANENTE BELASTINGEN

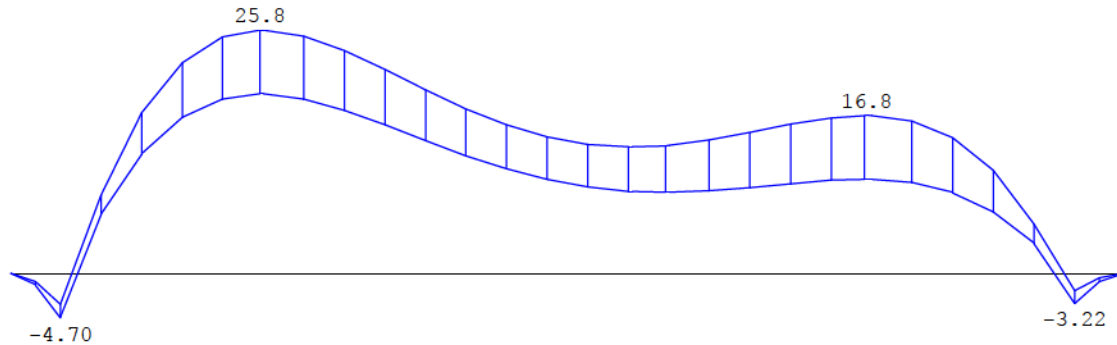
BC Velden met gunstige werking

- 1 Geen
- 2 Geen

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

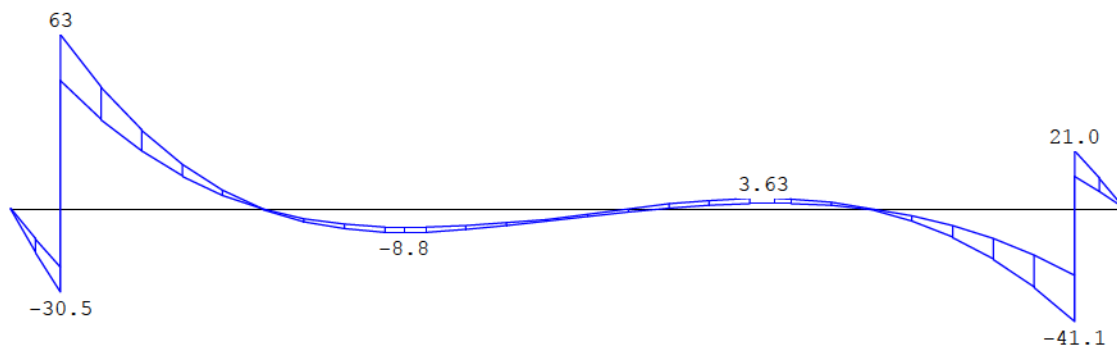
MOMENTEN Fysisch lineair

Ligger:1 Fundamentele combinatie



DWARSKRACHTEN Fysisch lineair

Ligger:1 Fundamentele combinatie



TUSSENpunTEN Fysisch lineair

Ligger:1 Fundamentele combinatie

Veld	Pos.	Grondspan. [kN/m ²]		Dwarskr		Moment		
		min.	max.	min.	max.	min.	max.	
1	0.000	83.229	110.516	0.00	0.00	0.00	0.00	
1	0.300	70.431	99.074	-30.61	-21.32	-4.72	-3.29	
1	0.300	70.431	99.074	46.36	63.17	-4.72	-3.29	
1	0.700	53.490	75.961	24.95	34.05	10.37	13.91	
1	1.101	38.138	54.978	9.72	13.37	17.15	23.18	
1	1.501	25.402	37.530	0.02	0.30	19.06	25.85	Gem.grondspanning 74kN/m ²
1	1.934	15.178	23.475	-6.67	-5.17	17.71	24.13	
1	2.366	8.191	13.833	-8.78	-6.87	15.01	20.66	
1	2.398	7.787	13.274	-8.77	-6.88	14.79	20.38	
1	2.846	3.692	7.616	-7.17	-5.82	11.91	16.78	
1	3.294	1.987	5.327	-4.14	-3.49	9.77	14.31	
1	3.742	2.255	5.925	-1.15	-0.01	8.71	13.44	
1	3.938	2.948	7.063	-0.02	1.41	8.61	13.58	
1	4.233	4.623	9.779	1.15	2.98	8.81	14.26	
1	4.527	7.092	13.781	1.74	3.63	9.25	15.26	
1	4.593	7.747	14.845	1.76	3.60	9.36	15.49	
1	4.864	10.867	19.928	1.28	2.52	9.79	16.35	
1	5.136	14.702	26.204	-0.15	0.12	10.01	16.80	
1	5.148	14.878	26.492	-0.22	0.00	10.01	16.80	

TUSSENpunTEN Fysisch lineair

Ligger:1 Fundamentele combinatie

Veld	Pos.	Grondspan. [kN/m ²]		Dwarskr		Moment	
		min.	max.	min.	max.	min.	max.
1	5.565	22.308	38.716	-8.00	-4.70	9.04	15.18
1	5.983	31.232	53.444	-21.41	-12.60	5.58	9.28
1	6.400	41.098	69.742	-41.14	-24.33	-3.23	-1.80
1	6.400	41.098	69.742	11.67	20.96	-3.23	-1.80
1	6.700	48.243	81.530	-0.00	-0.00	0.00	0.00

PROFIELGEGEVENS Vloer

[N] [mm]

t.b.v. profiel:1 B*B 1000*200

Algemeen

Materiaal : C20/25

Doorsnede

breedte : 1000 hoogte : 200 zwaartepunt tov onderkant : 100
 Fictieve dikte : 166.7

Betonkwaliteit element : C20/25 Kruipcoëf. : 3.010

Staalkwaliteit hoofdwapening : 500 ϵ_{yk} : 2.50

Staalkwaliteit beugels : 500

Betondekking

		Boven	Onder
Milieu	:	XC2	XC2
Hoofdwapening	:	1ste laag	1ste laag
Nominale dekking	:	25	25
Toegepaste dekking	:	25	40
Beugel / Verdeelwapening	:	2de laag	2de laag
Nominale dekking	:	25	25
Toegepaste dekking	:	33	48

Wapening

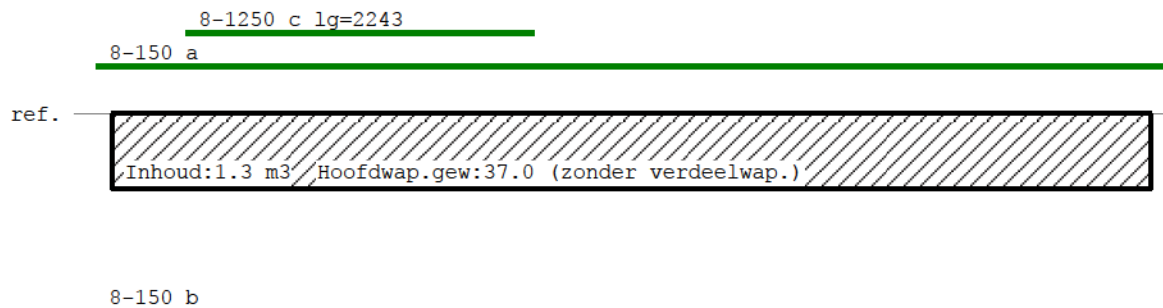
		Boven	Onder
Basiswapening	:	8-150	8-150
Hoofdwapening laag	:	1	1
Diameter verdeelwapening	:	8.0	8.0

Dwarskrachtwapening

Min. hoek betondrukdiagonaal θ : 21.8 z berekenen via: MRd

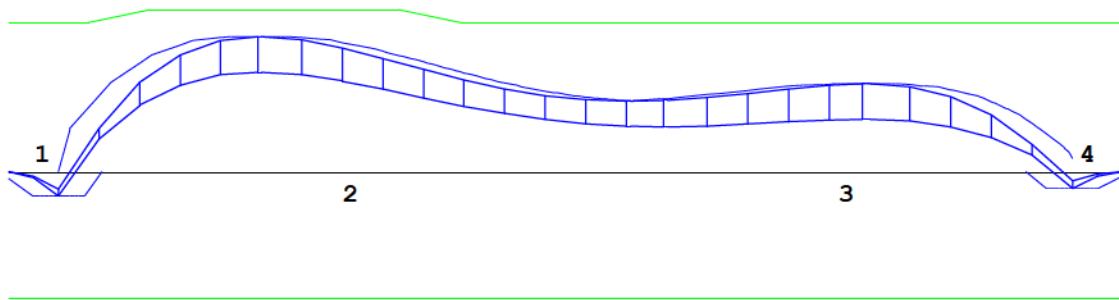
Hoofdwapening Fysisch lineair

Ligger:1 Fundamentele combinatie



MEd dekkingslijn Fysisch lineair

Ligger:1 Fundamentele combinatie



Hoofdwapening

Ligger:1

Geb.	Pos. [mm]	M_{Ed} [kNm]	M_{Rd} [kNm]	z B/O [mm]	A_b [mm ²]	A_s [mm ²]	Basiswapening +Bijlegwapening	Opm.
1	300	-4.72	-23.96	102 Ond	177*	336	8-150	54
2	1501	25.85	31.22	103 Bov	346	336	8-150	
				Bov		41	+8-1250	
3	5148	16.80	28.78	97 Bov	275*	336	8-150	1
4	6400	-3.23	-23.96	102 Ond	177*	336	8-150	54

Opmerkingen

[1] * = Eisen met betrekking tot minimum wapening zijn toegepast, zie nationale bijlage art. 9.2.1.1(1).

[54] * = Eisen met betrekking tot minimum wapening ten behoeve van gecontroleerde scheurvorming zijn toegepast volgens art. 7.3.2.

Verloop hoofdwapening

Ligger:1

Merk	B/O	Wapening	Vanaf [mm]	Tot [mm]	Lengte [mm]	$L_{bd; begin}$ [mm]	$L_{bd; eind}$ [mm]
a	Boven	8-150	-100	6800	6900	100	100
c	Boven	8-1250	474	2718	2243	375	375
b	Onder	8-150	-100	6800	6900	100	100

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

Schuifspanningen

Ligger:1

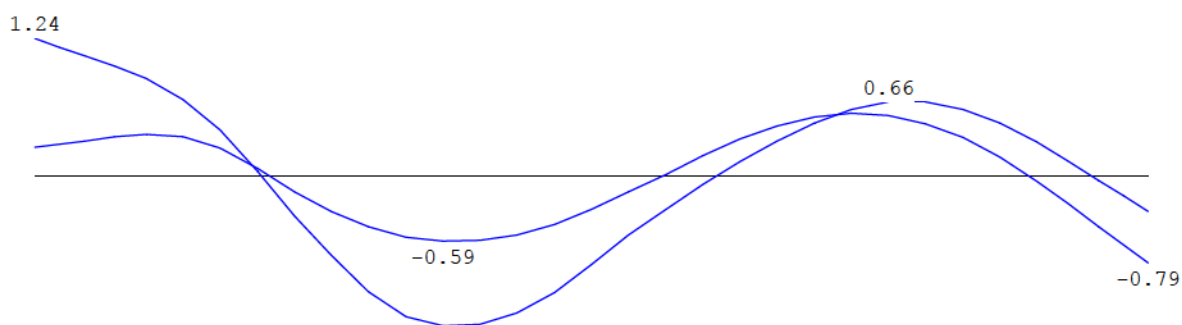
Geb.	Vanaf [mm]	Tot [mm]	θ [°]	V_{Ed} [kN]	$V_{Ed} < V_{Rd} < V_{Rd, max}$ [N/mm ²]	V_{opg} [N/mm ²]	Opm.	
1	0	6700	21.8	63	0.37	0.44	1.67	71

Opmerkingen

[71] Er wordt voor platen geen minimale dwarskrachtwapening volgens art. 9.3.2 toegepast. Uitgangspunt hiervoor is dat er herverdeling van belastingen in dwarsrichting mogelijk is (zie art. 6.2.1(4)).

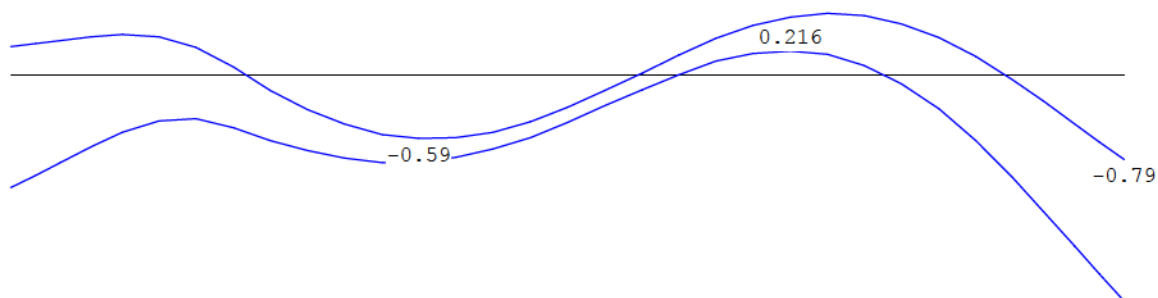
DOORBUIGINGEN w_2 [mm]

Ligger:1 Quasi-blijvende combinatie



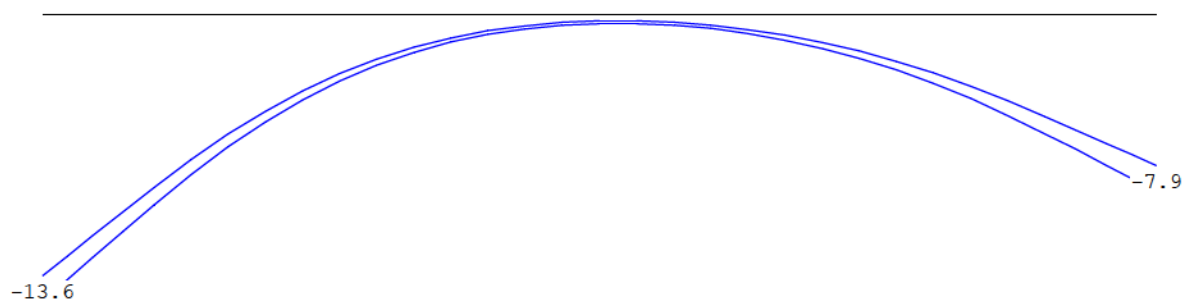
DOORBUIGINGEN w_{bij} [mm]

Ligger:1 Quasi-blijvende combinatie



DOORBUIGINGEN w_{max} [mm]

Ligger:1 Quasi-blijvende combinatie



DOORBUIGINGEN

Quasi-blijvende combinatie

Veld	Zijde	positie	l_{rep}	W_1	W_2	-- w_{bij} --		w_{tot}	W_c	-- w_{max} --	
		[m]	[mm]	[mm]	[mm]	[mm]	[lrep/]	[mm]	[mm]	[mm]	[lrep/]
1	Pos.	4.690	6700	7.1	1.0	2.0	3344	9.1		9.1	734
1	Pos.	3.350	6700	10.4	-0.0	1.1	5911	11.6		11.6	579

4.9 Sonderingen



Geotechnisch onderzoek tbv:

Nieuwbouw Bedrijfspannd aan de
Fokkerstraat te Hoogeveen.

Ordernr. 96.0076.

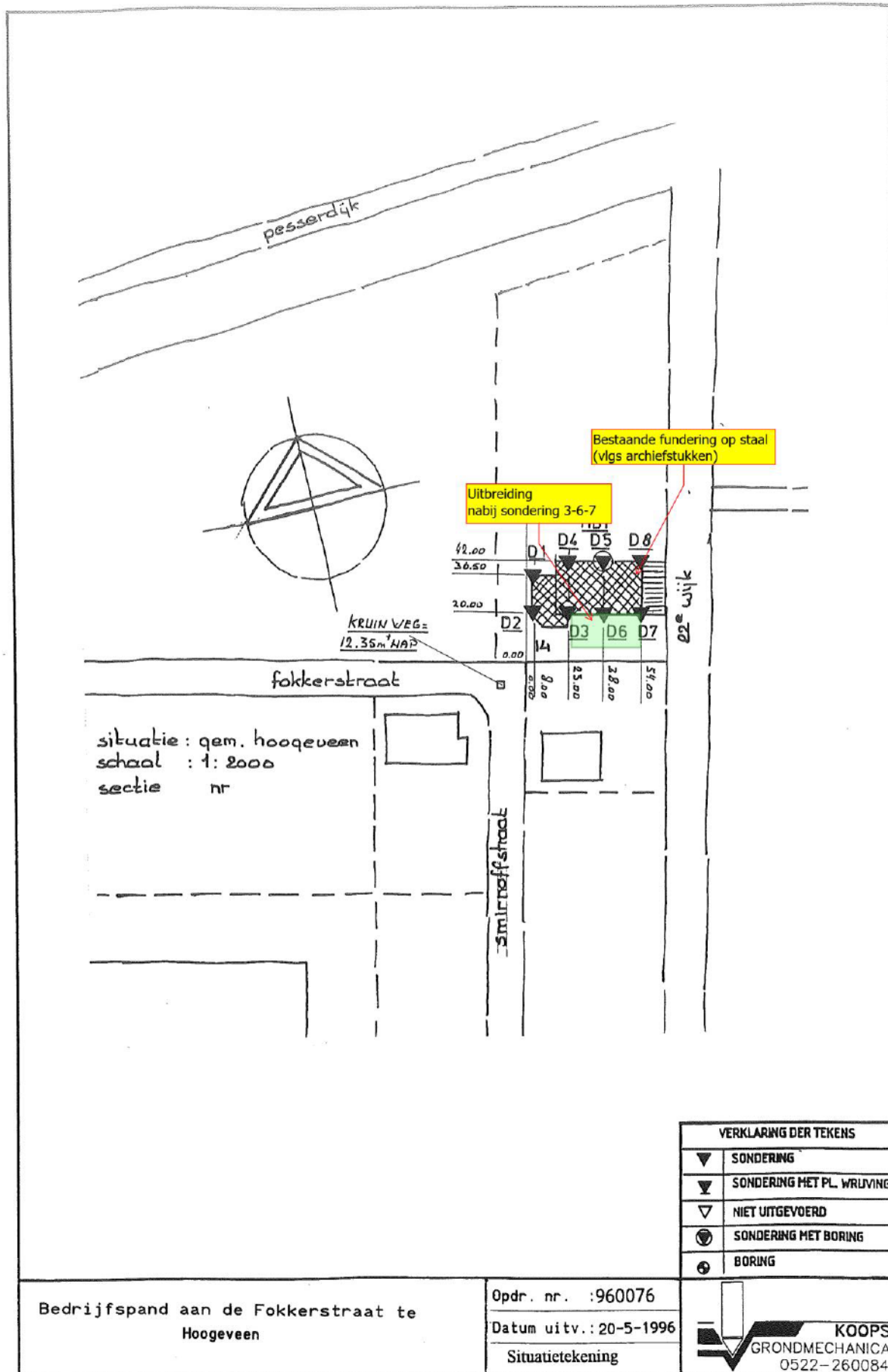
Opdrachtgever: Architectenburo Wim Boer BNA.
Postbus 517
7900 AM Hoogeveen.

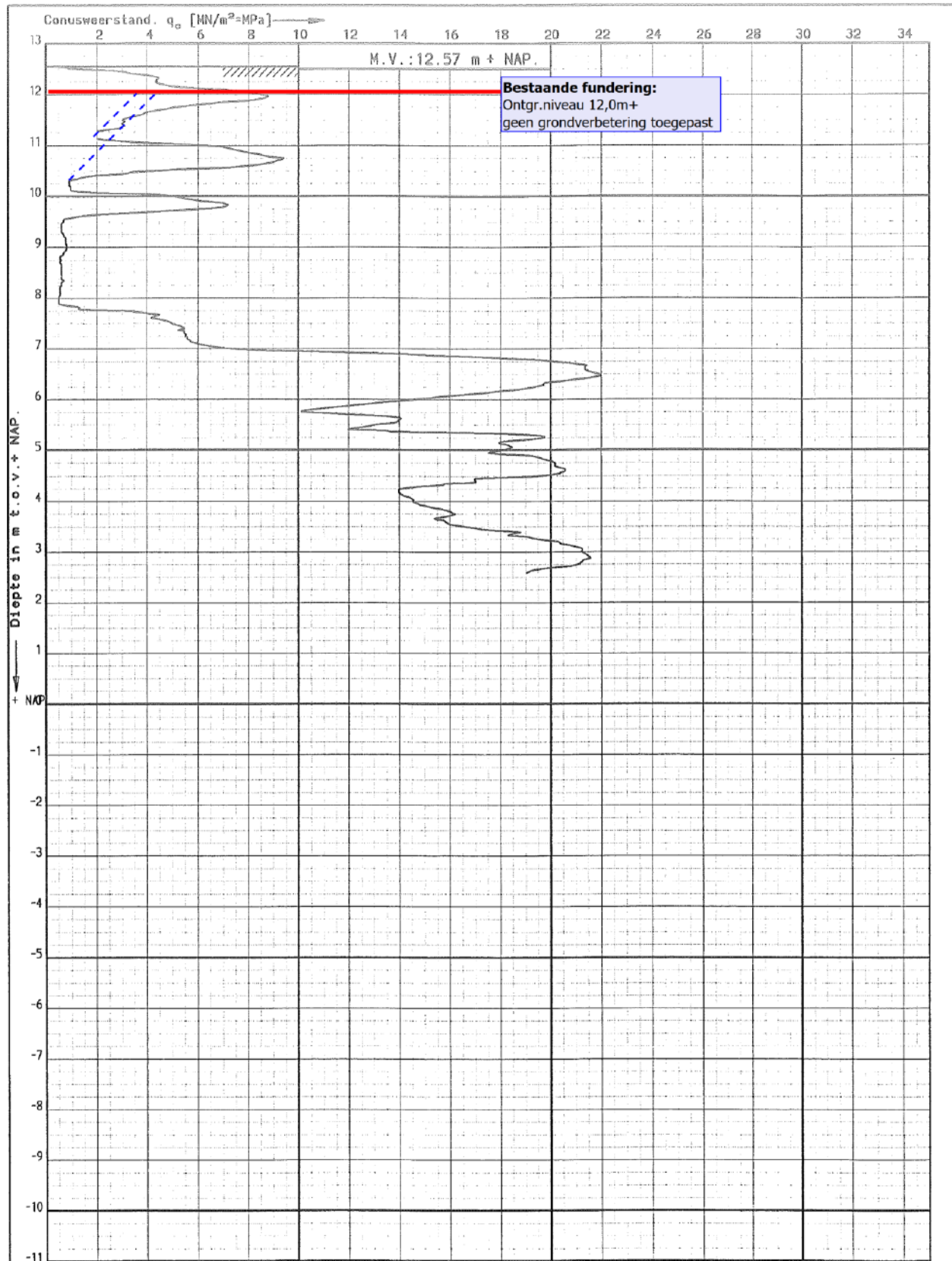
Datum grondonderzoek: 20 mei 1996.

Datum rapportage: 1 juni 1996.

Bijlagen: Situatietekening
Sondeergrafieken D-001 t/m D-008.
Handboorstaat HB-1.

Koops grondmechanica
tel: 0522 - 260084





Bedrijfspannd aan de Fokkerstraat te
Hoogeveen

Sondering volgens: NEN 5140

Oppervlakte conuspunt: 1000 mm²

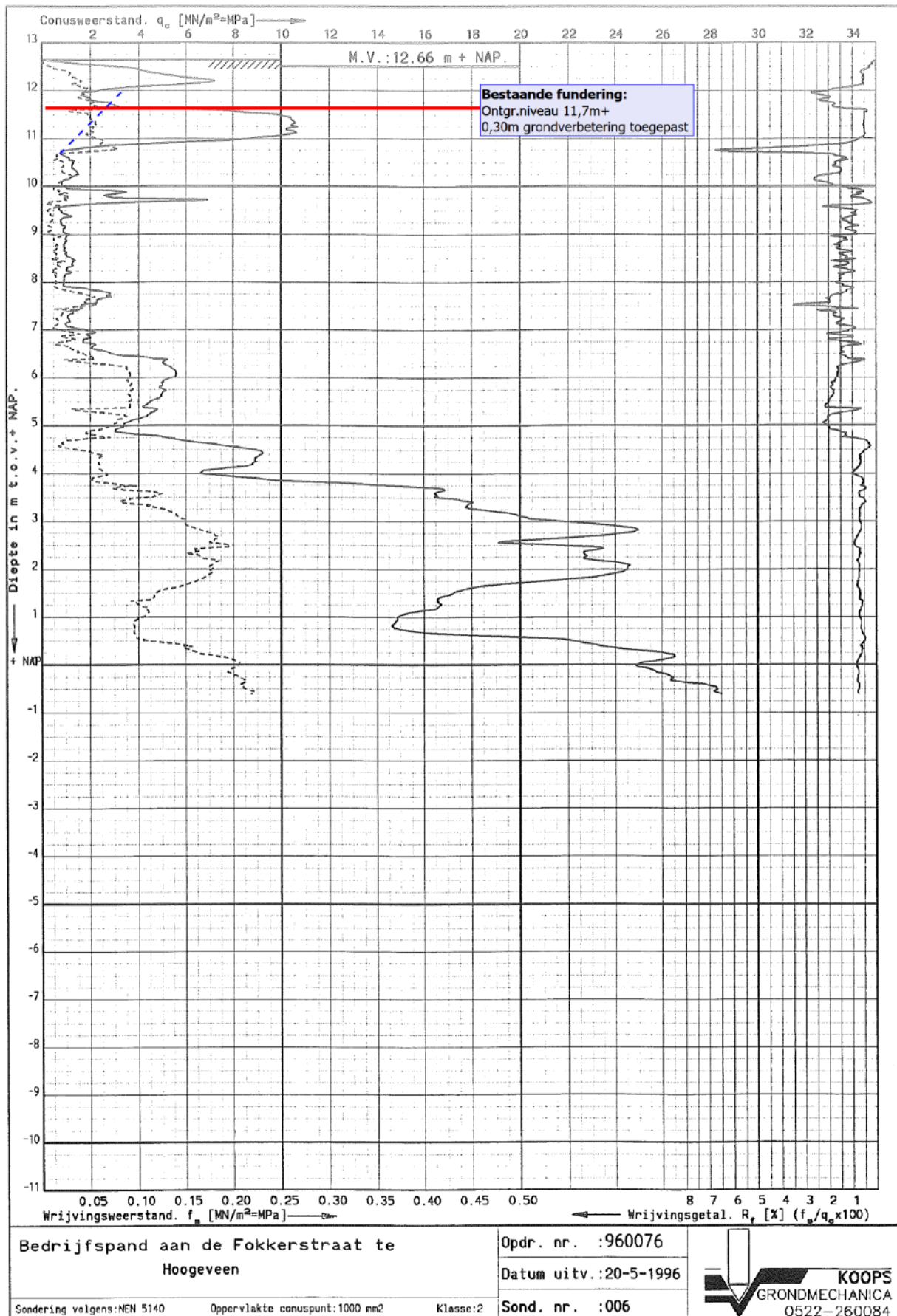
Klasse: 2

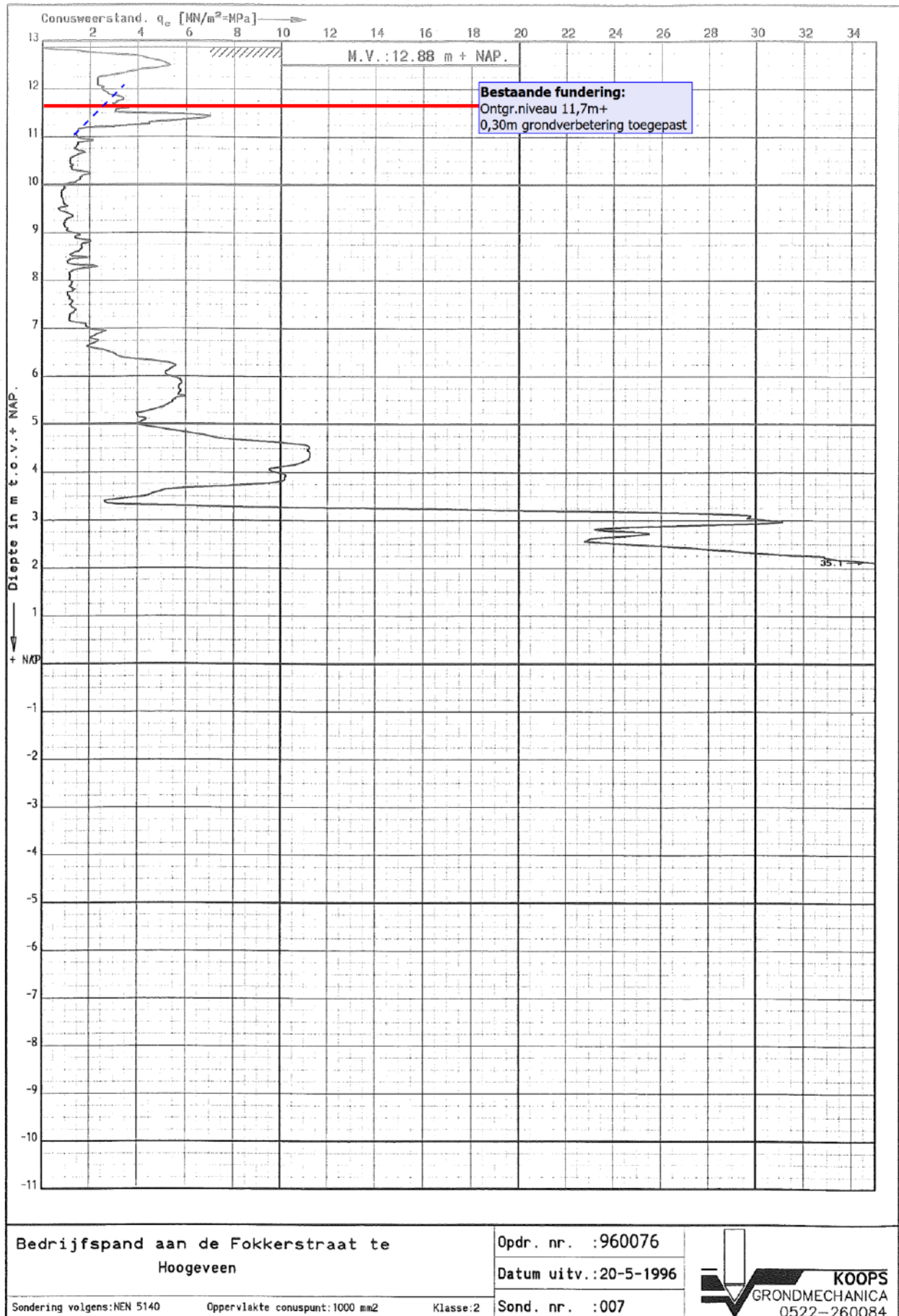
Opdr. nr. : 960076

Datum uitv. : 20-5-1996

Sond. nr. : 003

KOOPS
GRONDMECHANICA
0522-260084





4.10 Fundatiedraagvermogen

Uitgangspunten

leem; zwak zandig; slap

Fundering op zand of grondverbetering

Maximale grondwaterstand = 0,00 m + o.k. fundering

$$\begin{aligned}\varphi'_{\text{rep}} &= 27,5^\circ \\ \gamma_{\text{kar}} &= 19,0 \text{ kN/m}^3 \\ \gamma_{\text{sat}} &= 19,0 \text{ kN/m}^3\end{aligned}$$

$$\begin{aligned}\varphi'_{\text{e;d}} &= 24,4^\circ \\ \gamma'_{\text{e;d}} &= 17,3 \text{ kN/m}^3 \\ \gamma'_{\text{sat;d}} &= 7,3 \text{ kN/m}^3\end{aligned}$$

Bepaling draagkracht, gedraineerde toestand

$$R_d = \sigma'_{\text{max;d}} \cdot A'$$

$$\sigma'_{\text{max;d}} = (c'_{\text{e;d}} \cdot N_c \cdot s_c \cdot i_c \cdot \lambda_c \cdot b_c) + (\sigma'_{\text{v,z;d}} \cdot N_q \cdot s_q \cdot i_q \cdot \lambda_q \cdot b_q) + (0,5 \cdot \gamma'_{\text{e;d}} \cdot B_{\text{ef}} \cdot N_g \cdot s_g \cdot i_g \cdot \lambda_g \cdot b_g)$$

Reductie- en vormfactoren

invloed helling belasting	$i_c = 1,00$	$i_q = 1,00$	$i_g = 1,00$	loodrecht op fundering
invloed van taludhellingen	$\lambda_c = 1,00$	$\lambda_q = 1,00$	$\lambda_g = 1,00$	geen talud
reductie hellende onderzijde	$b_c = 1,00$	$b_q = 1,00$	$b_g = 1,00$	onderzijde fundering vlak
invloed cohesie	$s_c = 0,00$		$c'_{\text{e;d}} = 0,00$	geen invloed van de cohesie
strokenfundering	$s_q = 1,00$		$s_g = 1,00$	
vierkante poeren	$s_q = 1,41$		$s_g = 0,70$	
rechthoekige poeren	$s_q = 1 + (B_{\text{ef}}/L_{\text{ef}}) \cdot \sin \varphi'_{\text{e;d}}$		$s_g = 1 - 0,3 \cdot (B_{\text{ef}}/L_{\text{ef}})$	

Draagkrachtfactoren

$$\begin{aligned}N_c &= (N_q - 1) / \tan \varphi'_{\text{e;d}} &= 19,8 &\text{voor invloed van de cohesie} \\ N_q &= e^{N \cdot \tan \varphi'_{\text{e;d}}} \tan^2(45^\circ + \varphi'_{\text{e;d}} / 2) &= 10,0 &\text{voor invloed van de gronddekking} \\ N_g &= 2 \cdot (N_q - 1) \cdot \tan \varphi'_{\text{e;d}} &= 8,1 &\text{voor invloed eff. volumieke gewicht van de grond onder fundering}\end{aligned}$$

Bepaling $\sigma'_{\text{max;d}}$

Invloed gronddekking: $\sigma'_{\text{q;d}} = (\sigma'_{\text{v,z;d}} \cdot N_q \cdot s_q \cdot i_q \cdot b_q)$ waarin $\sigma'_{\text{v,z;d}} = \gamma'_{\text{e;d}} \cdot d_i$

stroken	$172,1 \cdot d_i \text{ kN/m}^2$	vierkante poeren	$243,1 \cdot d_i \text{ kN/m}^2$
stroken ($d_i = 0,20$)	$34,4 \text{ kN/m}^2$	vierkante poeren ($d_i = 0,20$)	$48,6 \text{ kN/m}^2$
stroken ($d_i = 0,60$)	$103,3 \text{ kN/m}^2$	vierkante poeren ($d_i = 0,60$)	$145,9 \text{ kN/m}^2$

Invloed afschuifvlak: $\sigma'_{\text{v,d}} = 0,5 \cdot \gamma'_{\text{sat;d}} \cdot B_{\text{ef}} \cdot N_g \cdot s_g \cdot i_g \cdot b_g$

stroken	$29,5 \cdot B_{\text{ef}} \text{ kN/m}^2$	vierkante poeren	$20,7 \cdot B_{\text{ef}} \text{ kN/m}^2$
		rechthoekige poeren	$29,5 \cdot s_g \cdot B_{\text{ef}} \text{ kN/m}^2$

Stroken $q_{r,v;d}$ (kN/m ²)					Beton dekking (m)
B _{ef} (m)	0,00	0,10	0,20	0,80	0,25
0,50	7,4	16,0	24,6	40,0	37,3
0,60	10,6	21,0	31,3	48,0	46,5
0,70	14,5	26,5	38,6	56,0	56,0
0,80	18,9	32,7	46,4	64,0	64,0
0,90	23,9	39,4	54,9	72,0	72,0
1,00	29,5	46,7	63,9	80,0	80,0

Poeren $F_{r,v;d}$ (kN)						Beton dekking (m)
B _{ef} (m)	L _{ef} (m)	0,00	0,20	0,70	0,80	0,25
0,50	0,50	2,6	14,7	20,0	20,0	20,0
0,60	0,60	4,5	22,0	28,8	28,8	28,8
0,70	0,70	7,1	30,9	39,2	39,2	39,2
0,80	0,80	10,6	41,7	51,2	51,2	51,2
0,90	0,90	15,1	54,4	64,8	64,8	64,8
1,00	1,00	20,7	69,3	80,0	80,0	80,0

Stroken $\sigma'_{\text{max;d}}$ (kN/m ²)					Beton dekking (m)
B _{ef} (m)	0,00	0,10	0,20	0,80	0,25
0,50	14,8	32,0	49,2	80,0	74,5
0,60	17,7	34,9	52,1	80,0	77,5
0,70	20,7	37,9	55,1	80,0	80,0
0,80	23,6	40,8	58,0	80,0	80,0
0,90	26,6	43,8	61,0	80,0	80,0
1,00	29,5	46,7	63,9	80,0	80,0
1,10	32,5	49,7	66,9	80,0	80,0
1,20	35,4	52,6	69,8	80,0	80,0

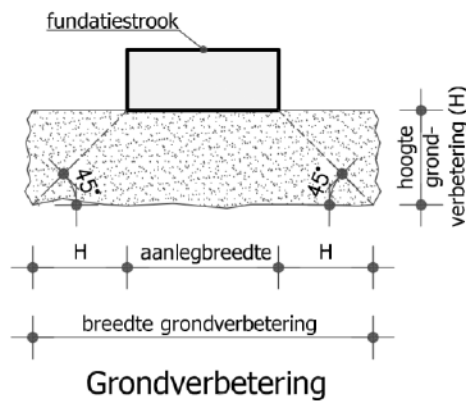
Poeren $\sigma'_{\text{max;d}}$ (kN/m ²)						Beton dekking (m)
B _{ef} (m)	L _{ef} (m)	0,00	0,20	0,70	0,80	0,25
0,50	0,50	10,3	58,9	80,0	80,0	80,0
0,60	0,60	12,4	61,0	80,0	80,0	80,0
0,70	0,70	14,5	63,1	80,0	80,0	80,0
0,80	0,80	16,5	65,1	80,0	80,0	80,0
0,90	0,90	18,6	67,2	80,0	80,0	80,0
1,00	1,00	20,7	69,3	80,0	80,0	80,0
1,10	1,10	22,7	71,3	80,0	80,0	80,0
1,20	1,20	24,8	73,4	80,0	80,0	80,0

De gronddekking aan alle zijden van de fundering onverninderd toepassen over $5 \cdot B_{\text{ef}}$

4.11 Grondverbetering

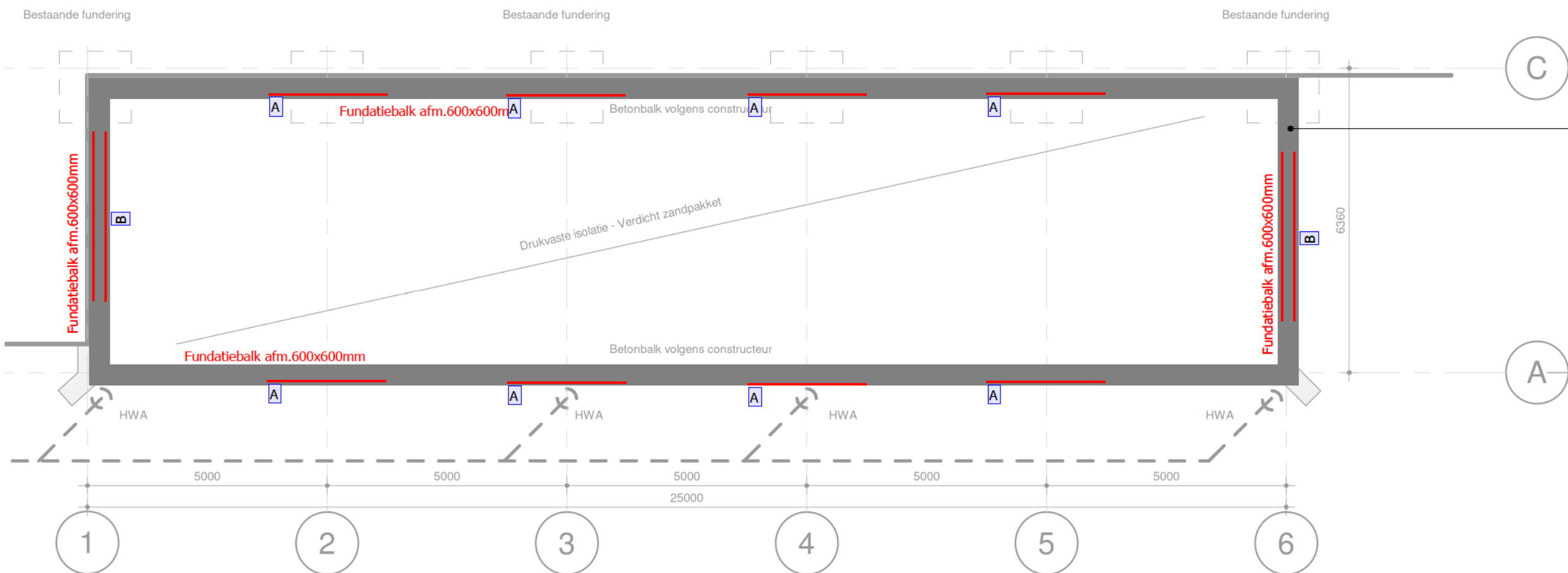
Grondverbetering; werkwijze

1. Het zandpakket onder de fundering dient een oplopende sondeerwaarde te hebben van 1 MPa per 10cm diepte (dus bijvoorbeeld 2,5 MPa op 25cm diepte) en op te lopen tot minimaal 5 MPa op 50cm diepte.
2. Indien de benodigde conuswaarde op het aanlegniveau wordt behaald is geen grondverbetering noodzakelijk. De bouwput wel op het aanlegniveau afrillen.
3. De ontgraving voor de grondverbetering weer aanvullen met schoon zand in lagen van 300mm dikte, waarbij iedere laag verdicht dient te worden met een mechanische trilplaat met een slaggewicht van 500 kg. Dit aantrillen dient te worden uitgevoerd in 4 gangen per laag, welke om en om haaks op elkaar moeten worden uitgevoerd.
4. De grondwaterstand mag maximaal 0,5m onder het ontgravingsniveau liggen, indien de grondwaterstand hoger ligt dient bemaling te worden toegepast tot dit niveau.
5. Door het lostrillen van de bovenkant van het zandbed dient ter plaatse van de funderingsstroken het losse zand verwijderd te worden. De grondverbetering dus 30mm hoger uitvoeren dan het aangegeven niveau.
6. Het zandniveau aanvullen tot bovenkant funderingsstrook of tot de minimale grondekking is bereikt.



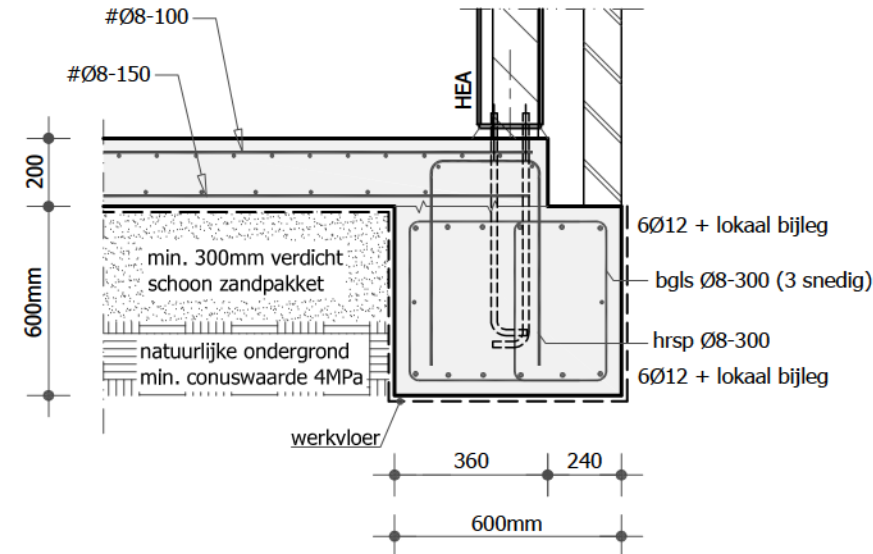
5. Constructieve overzichten

Voor de materiaaleigenschappen en vereiste kwaliteiten zie hoofdstuk 2.2.

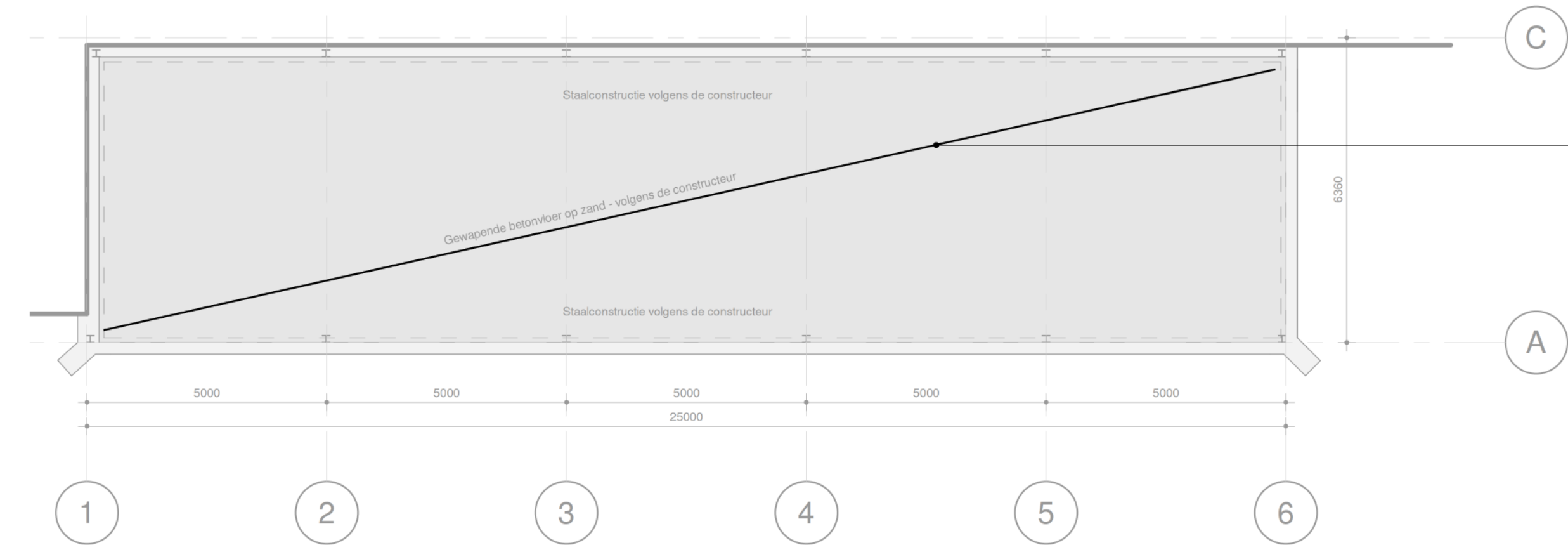


Fundatiebalken
(op staal)
A = Bijlegwapening 2012; onder (lg=2,5m)
B = Bijlegwapening 2012; onder en boven (lg=3,5m)

Fundatiebalken				
Betonkwaliteit	C20/25	Dekking bovenwap.	30mm	wapening B500
Milieuklasse	XC2	Dekking onderwap.	35mm	Bodemafsluiting 200mm
Balkafm. b.xh (mm)				
600x600	Beugelwapening	Bovenwapening	Onderwapening	Flankwapening
	Ø8-300 (3 snedig)	6Ø12 + bijleg	6Ø12 + bijleg	2Ø8
Algemeen:				
- Drukaste isolatie balk: EPS400 o.g. (langeduur druksterkte > 150kPa)				
- Het ontgravingniveau dient te worden aangebild				
- Natuurlijke ondergrond (conuswaarde > 4,0 MPa) l.h.w. controleren (dikte grondverbetering l.h.w. te bepalen middels handsonderingen)				

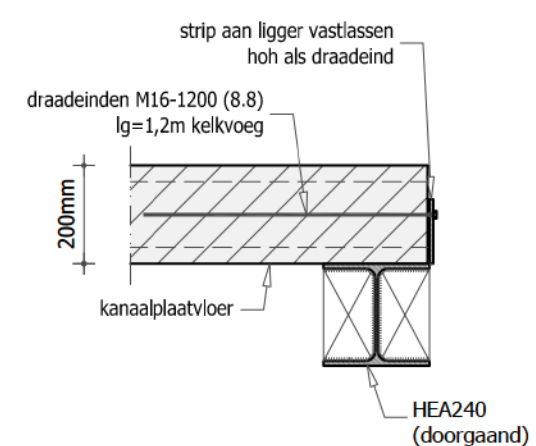


Randbalk - vloer
principe detail

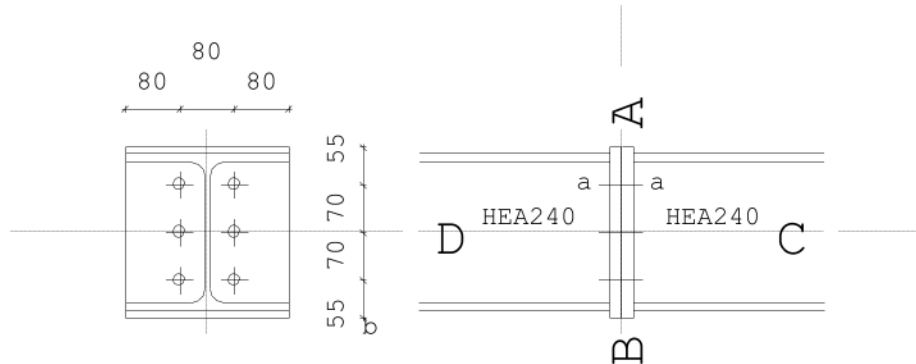


Beganegrondvloer
(op zand)

Betonvloer op zand		
- Constructieve betonvloer	d=200mm	
Betonkwaliteit (MK)	C20/25 (XC2)	
Dekking	25mm (boven)	35mm (onder)
Wapening (B500)	#Ø8-100 (boven)	#Ø8-150 (onder)
- Minimaal 300mm verdicht puingranulaat (aardvocht)		
- Drukaste isolatie vloer:	EPS300 o.g. (langeduur druksterkte > 100kPa)	
- Alternatief: isolatie op de vloer (EPS100)		
- Het ontgravingniveau dient te worden aangeleid		
- Natuurlijke ondergrond (conuswaarde > 4,0 MPa) l.h.w. controleren (dikte grondverbetering l.h.w. te bepalen middels handsonderingen)		

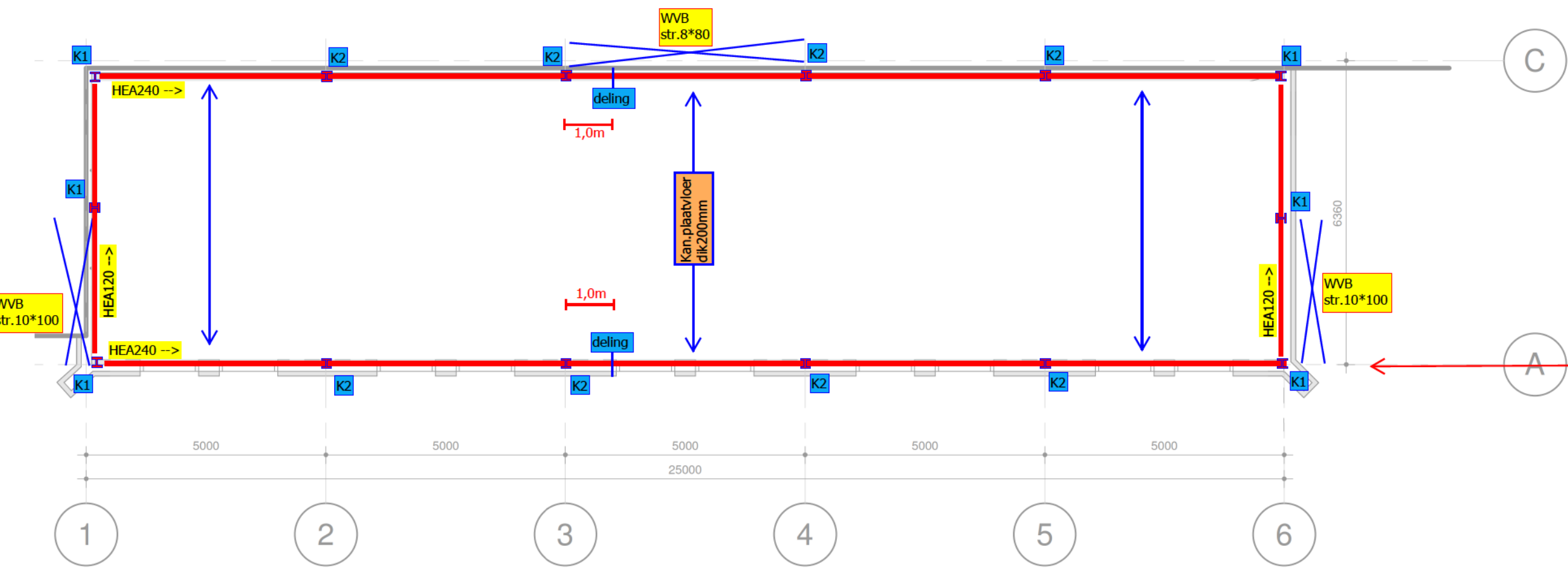


Stalen randligger
principe detail



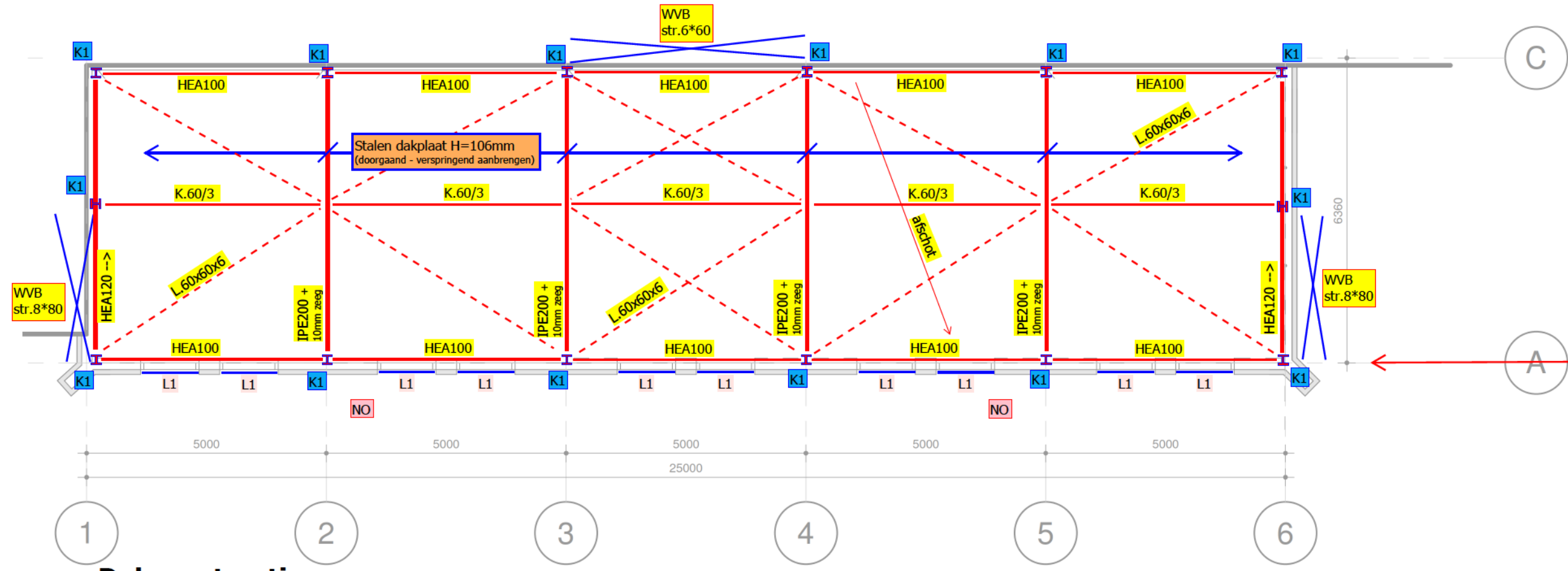
Onderdeel	Afmetingen	Aantal Lassen (d=dubb. hoeklas)
a Kopplaat	240x250-18	2 aw=4d af=6d
b Bout	M20 8.8	6

Deling randligger
(momentverbinding)



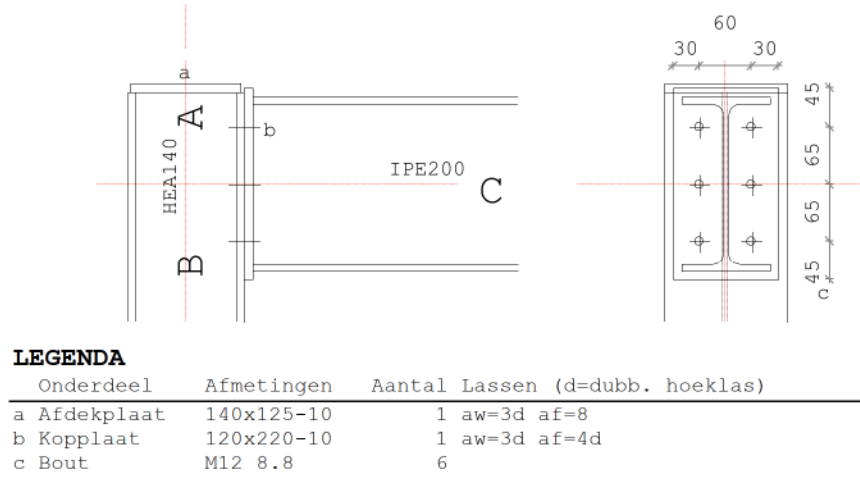
1e Verdiepingsvloer
K1 = Kolom HEA140
K2 = Kolom HEA160

Kolommen in KZST100mm (CS12) vermetselen (kolom v.v. aangelaste strippen)



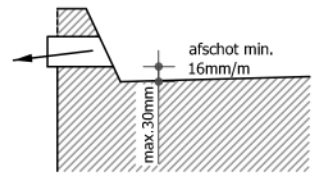
Dakconstructie (gerekend met PV panelen, max. 25kg/m²)
K1 = Kolom HEA140
L1 = L.100x100x8 (100mm opl.)

Kolommen in KZST100mm (CS12) vermetselen (kolom v.v. aangelaste strippen)



Onderdeel	Afmetingen	Aantal Lassen (d=dubb. hoeklas)
a Afdekkplaat	140x125-10	1 aw=3d af=8
b Kopplaat	120x220-10	1 aw=3d af=4d
c Bout	M12 8.8	6

Dakligger-kolom
(momentverbinding)



Noodoverstort
principe

(NO) Noodoverstort afm. 350x80mm
positie volgens plattegrond
NB dit is EXCL. de noodafvoeren van het bestaande dak!

Aansluiting tussen bestaand en nieuw dilateren!