

CORE CONSTRUCTIES

Statische Berekening

Project: Willemsparkweg 220 Amsterdam
Onderdeel: Tafel
Opdrachtgever: Structure Engineering
T.a.v. [REDACTED]
Van L. Stirumplein 18III
1051BE Amsterdam
Projectnummer: 17021
Datum: 26-03-2017
Gewijzigd:

Opgesteld:

[REDACTED]

Ir. [REDACTED]

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1 Inleiding

1.1 Algemeen

Het pand aan Willemsparkweg 220 Amsterdam wordt verbouwd.

Het pand wordt voorzien van een funderingsherstel. De gehele dragende tussenmuur wordt op alle verdiepingen vervangen door een staalconstructie. Op het bestaande dak wordt een dakterras met dakhuisje geplaatst. Er worden een aantal nieuwe badkamers geplaatst op verschillende verdiepingen, een deel van de begane grondvloer wordt vervangen.

In dit document worden de constructieve aspecten van de tafelconstructie van het funderingsherstel beschouwd.

1.2 Wijzigingen

N.v.t.

2 Aangehouden belastingen

<i>permanent</i>	
vloeren (gemiddeld)	= 1,00kN/m ²
badkamers	= 1,50kN/m ²
plat dak	= 0,60kN/m ²
schuin dak	= 0,80kN/m ²
dak+dakterras	= 0,90kN/m ²
HSB	= 1,00kN/m ²
balustrade	= 0,50kN/m ¹
mw	= 20,0kN/m ³
beton	= 25,0kN/m ³
<i>veranderlijk</i>	
vloeren	= 2,55kN/m ² (incl 0,80kN/m ² lichte scheidingswanden)
dakterras	= 2,50kN/m ²

3 Materialen

hout binnen	C18
hout buiten	C24 geïmpregneerd
staal	S235
bouten	8.8
beton	C20/25
wapening	B500A

4 Algemene rekenmethodes

Berekeningen conform Eurocodes.

Gevolgklasse CC2

5 Uitgangpunten

5.1 Willemsparkweg 218 Amsterdam

De Willemsparkweg 218 Amsterdam heeft een gedeelde bouwmuur met de Willemsparkweg 220 Amsterdam. De Willemsparkweg 218 Amsterdam heeft geen funderingsherstel gehad. De volgende belastingen worden hierdoor opgenomen in de berekening:

- Gedeelde bouwmuur
- Vloeren en dak op de bouwmuur
- Voorgevel tot helft eerste opening
- Achtergevel tot helft eerste opening

5.2 Koninginneweg 13 Amsterdam

De Koninginneweg 13 Amsterdam heeft een gedeelde bouwmuur met de Willemsparkweg 220 Amsterdam. De Koninginneweg 13 Amsterdam heeft geen funderingsherstel gehad. De volgende belastingen worden hierdoor opgenomen in de berekening:

- Gedeelde bouwmuur
- Vloeren en dak op de bouwmuur
- Voorgevel tot helft eerste opening
- Achtergevel tot helft eerste opening

5.3 Toe te passen palen

Er worden schroefinjectiepalen toegepast. De definitieve paalberekening dient door derden minimaal 3 weken voor aanvang van de werkzaamheden te worden geleverd.

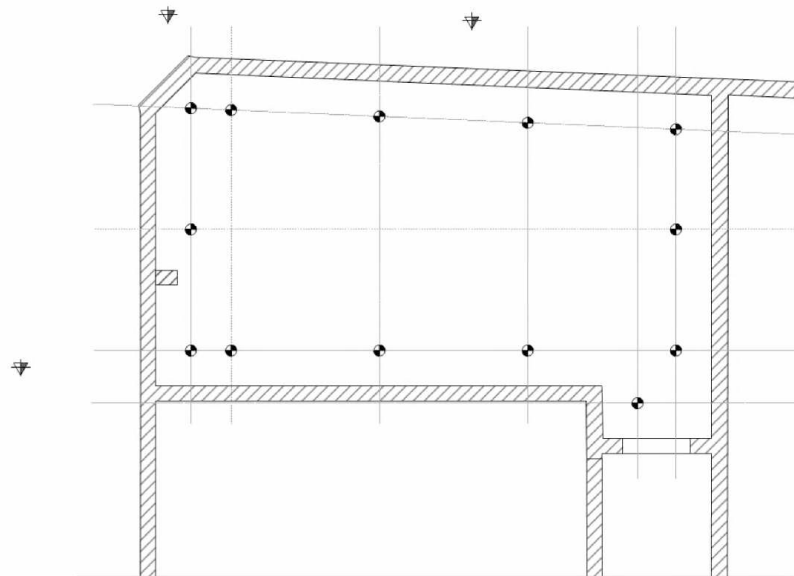
6 Beschikbare informatie

6.1 Algemeen

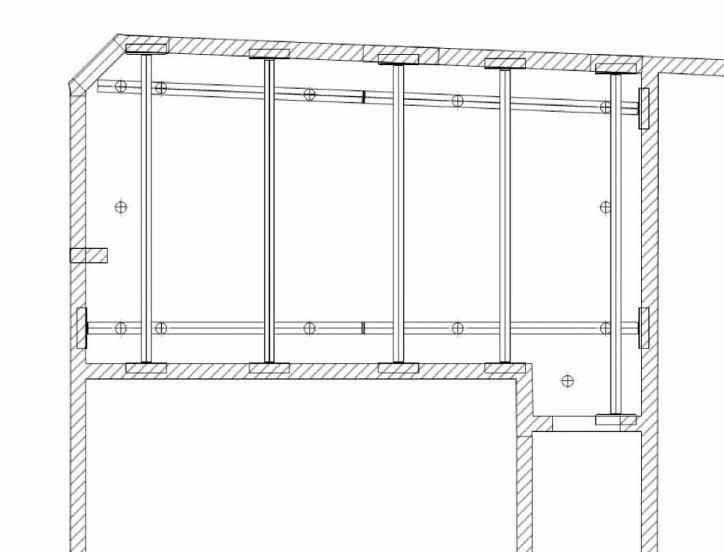
Voor het bepalen van de statische berekening is gebruik gemaakt van de volgende informatie:

- Tekeningen House Check bouwkundig adviesbureau 2016065 d.d. 20-04-2016
- Principe tekeningen Structure Engineering CO-17014-rev0
- Inmetingen/locatiebezoek/foto's Structure Engineering

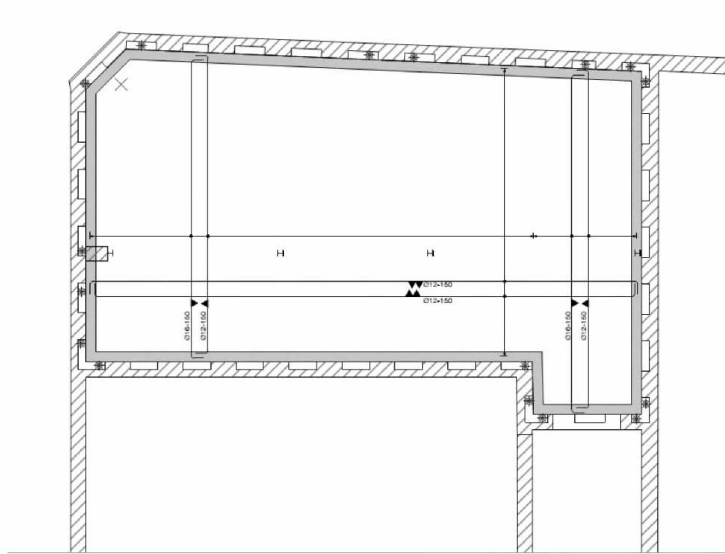
6.2.2 Structure Engineering



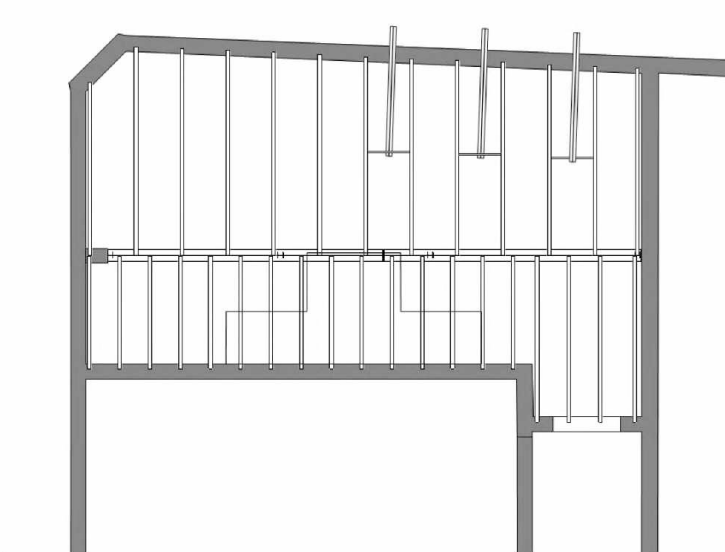
Palenplan



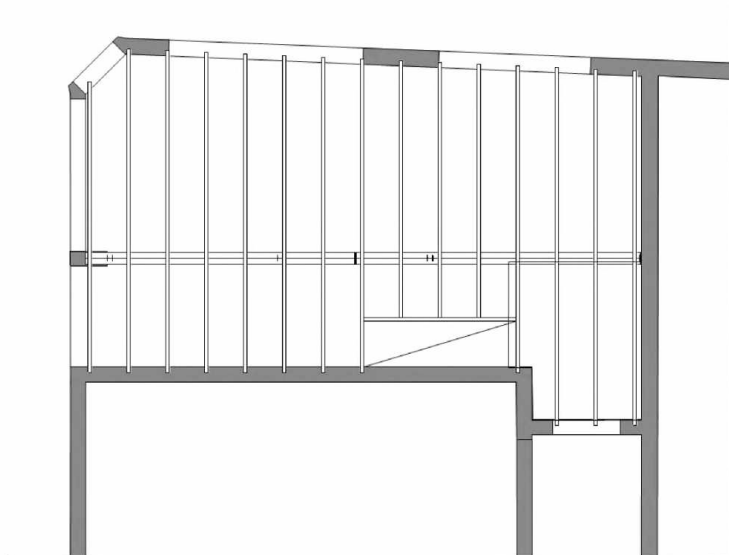
Tafelconstructie



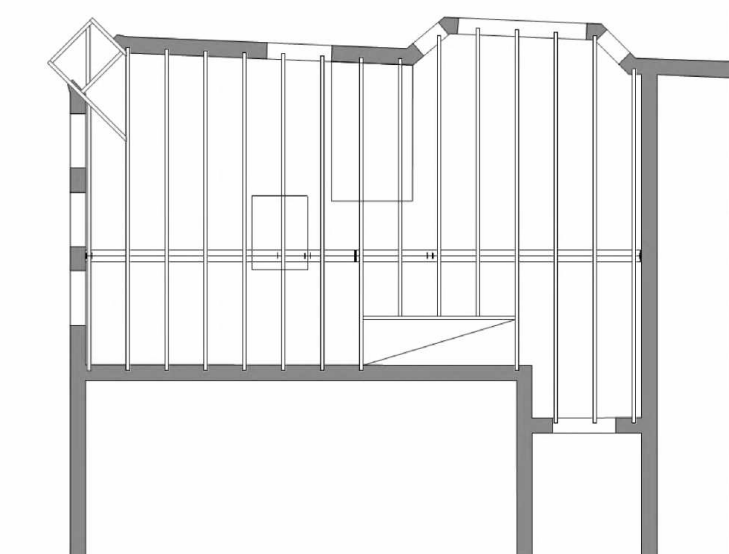
Betonvloer



Begane grondvloer

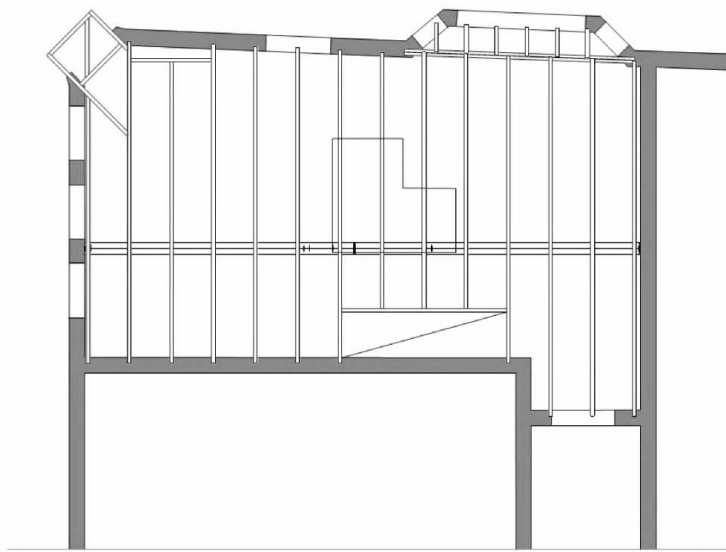


1^e verdieping

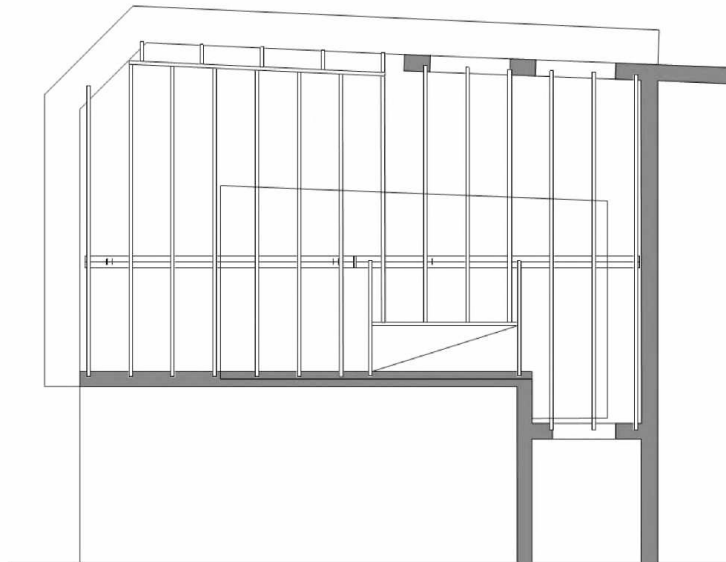


2^e verdieping

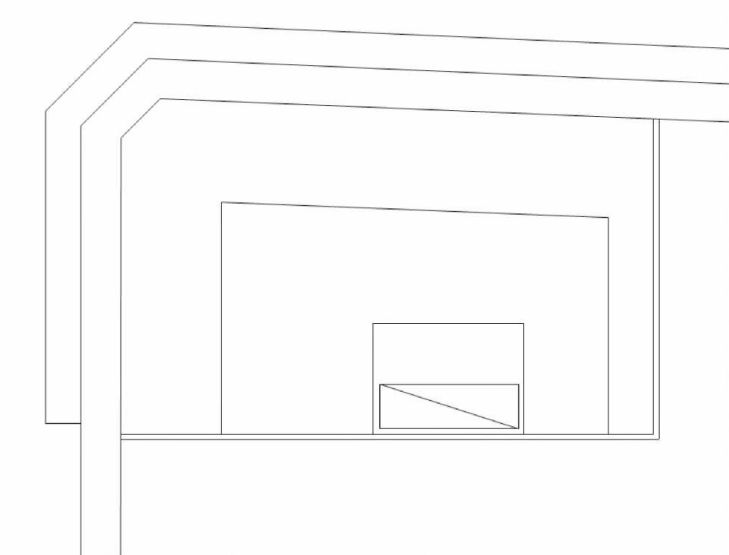




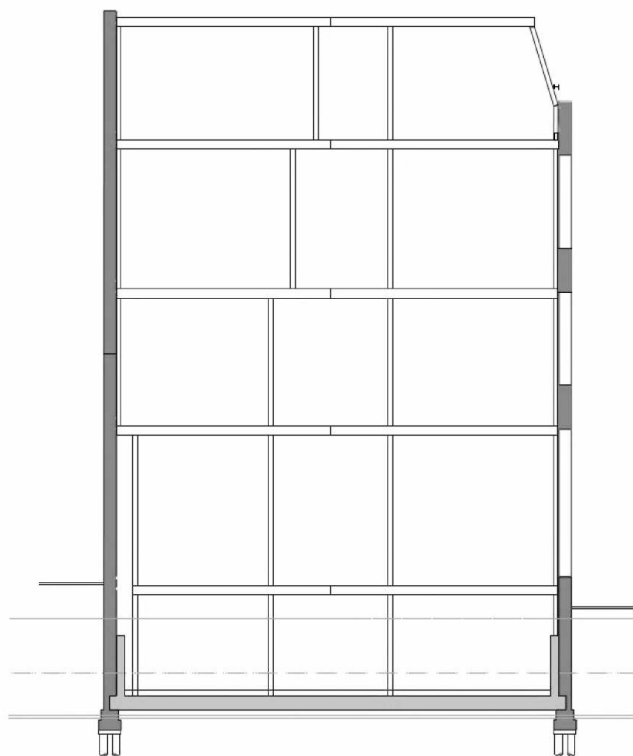
3^e verdieping



Daklaag



Dakterras met dakhuisje

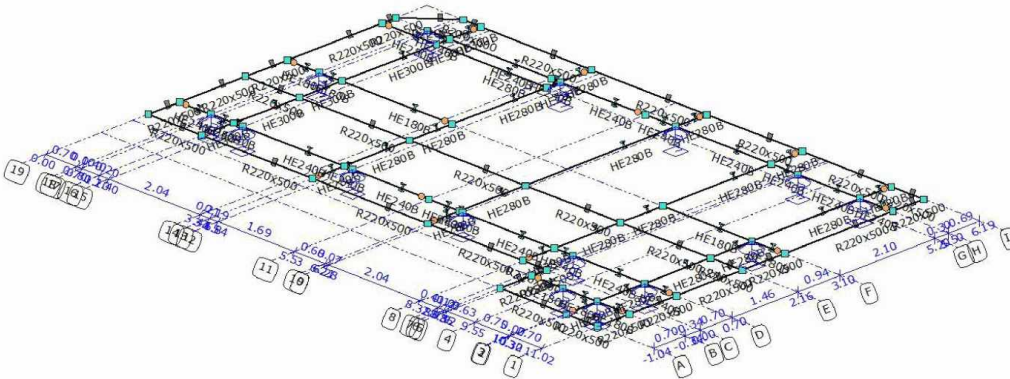


Doorsnede

7 Statische berekening

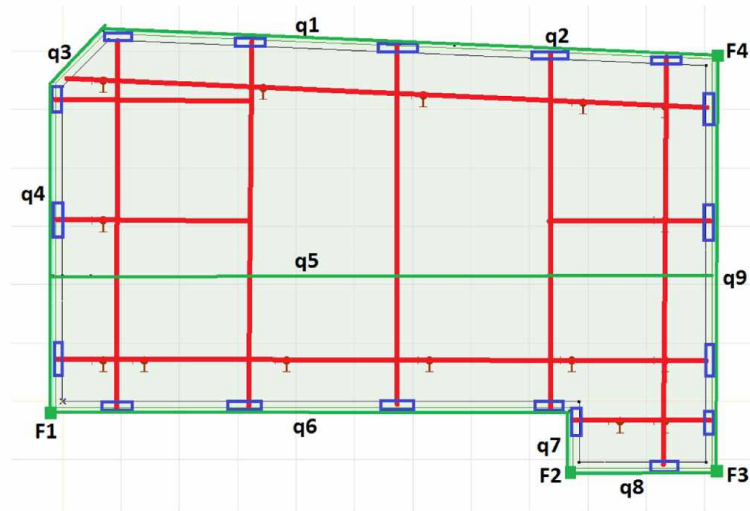
7.1 Pos 1

7.1.1 Geometrie



7.1.2 Belastingen

Voor de belastingen uit de gedeelde bouwmuren wordt voor de tijdelijke ondersteuning 50% van de belasting aangehouden (q6 t/m q9 en F1t/m F4)



q1	aantal	L	b	h	PB	VB					
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	11.6%	14.8	20		65.44			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
schuin dak	1	3	1				0.8	2.40			
vloeren BG tm 3e	4	1	2				1	8.00	2.8	2.55	14.28
dak+dakterras	1	1	2				1	2.00	0.4	2.5	2.00
TOTAAL								85.34			16.28

2 extreem, 2 momentaan
momentaan

q2	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	35.0%	17.1	20		55.60			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
vloeren BG tm 3e	4	1	2				1	8.00	2.8	2.55	14.28
dak+dakterras	1	1	2				1	2.00	0.4	2.5	2.00
TOTAAL								73.10			16.28

2 extreem, 2 momentaan
momentaan

q3	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	33.0%	14.8	20		49.58			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
schuin dak/overig	1	3	1				0.8	2.40			
vloeren BG tm 3e	4	1	2				1	8.00	2.8	2.55	14.28
dak+dakterras	1	1	2				1	2.00	0.4	2.5	2.00
TOTAAL								69.48			16.28

2 extreem, 2 momentaan
momentaan

q4	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25	28.8%	14.8	20		52.67			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
schuin dak/overig	1	3	1				0.8	2.40			
TOTAAL								62.57			0.00

q5	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
HSB	1	1			17.1		1	17.10			
vloer BG	4	1	2.9				1	11.60	2.8	2.55	20.71
dak+dakterras	1	1	2.9				1	2.90	0.4	2.5	2.90
TOTAAL								31.60			23.61

2 extreem, 2 momentaan
momentaan

q6 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		17.1	20		85.50			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
vloeren BG tm 3e nr 220	4	1	1.1				1	4.40	2.8	2.55	7.85
dak+dakterras nr 220	1	1	1.1				1	1.10	0.4	2.5	1.10
vloeren BG tm 3e nr 218	4	1	1.1				1	4.40	2.8	2.55	7.85
dak+(evt)dakterras nr 218	1	1	1.1				1	1.10	0.4	2.5	1.10
TOTAAL								104.00			17.91

2 extreem, 2 momentaan
momentaan
2 extreem, 2 momentaan
momentaan

q7 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		17.1	20		85.50			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
TOTAAL								93.00			0.00

q8 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		17.1	20		85.50			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
vloeren BG tm 3e	4	1	1.65				1	6.60	2.8	2.55	11.78
dak+dakterras	1	1	1.65				1	1.65	0.4	2.5	1.65
TOTAAL								101.25			13.43

2 extreem, 2 momentaan
momentaan

q9 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m2	kN/m1	stuks	kN/m2	kN/m1
mw 220mm	1	1	0.25		17.1	20		85.50			
betonnen kelderwand	1	1	0.2		1.5	25		7.50			
vloeren BG tm 3e nr 13	4	1	1.1				1	4.40	2.8	2.55	7.85
dak+(evt)dakterras nr 13	1	1	1.1				1	1.10	0.4	2.5	1.10
TOTAAL								98.50			8.95

2 extreem, 2 momentaan
momentaan

F1 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
mw voorgevel nr 218								100.00			
TOTAAL								100.00			0.00

Conservatief aangehouden op basis van foto's

F2 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
mw achtergevel nr 218	1	1	0.25		17.1	20		85.50			
TOTAAL								85.50			0.00

1 meter gevel meegenomen
PB = 100kN aangehouden in berekening

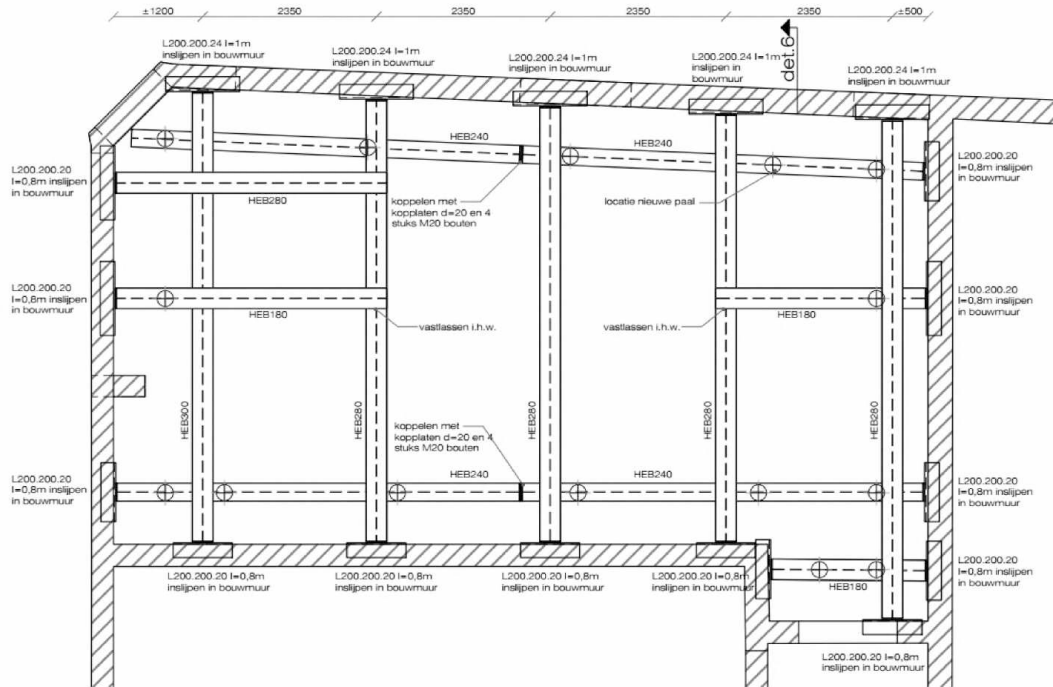
F3 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
mw bouwmuur nr 13	1	1	0.25		17.1	20		85.50			
vloeren BG tm 3e nr 13	4	1	1.1				1	4.40	2.8	2.55	7.85
dak+(evt)dakterras nr 13	1	1	1.1				1	1.10	0.4	2.5	1.10
TOTAAL								91.00			8.95

1 meter gevel meegenomen
2 extreem, 2 momentaan
momentaan
PB = 100kN aangehouden in berekening

F4 (50%)	aantal	L	b		h	PB			VB		
Onderdeel	stuks	m	m	% raam	m	kN/m3	kN/m1	kN	stuks	kN/m1	kN
mw voorgevel nr 13								100.00			
TOTAAL								100.00			0.00

Conservatief aangehouden op basis van foto's

7.1.3 Toegepaste maatregel

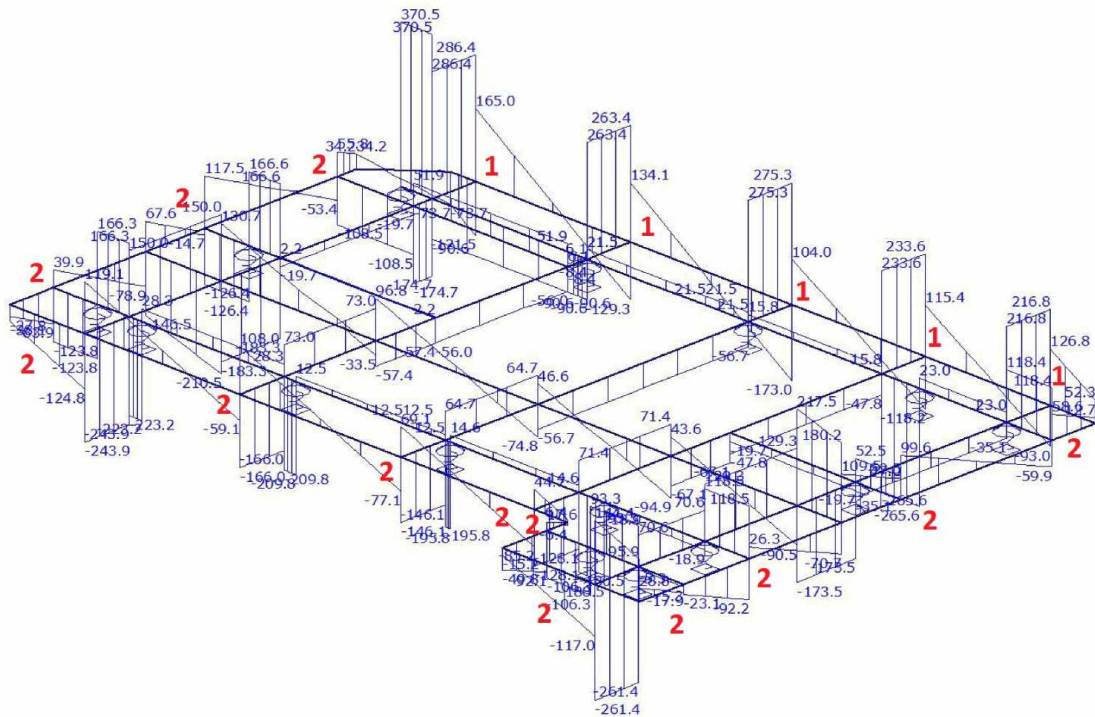


7.1.4 Uiterste grenstoestand

UC Drsn = 0,84, zie uitvoer MatrixFrame >> AKKOORD

UC Kip/stab = 0,00, zie uitvoer MatrixFrame >> AKKOORD

7.1.5 Opleggingen



7.1.5.1 Oplegging 1

L200.200.24, L=1,0m inslijpen in bouwmuur
 $\sigma_d = 286,4 \times 10^3 / (176 \times 1000) = 1,63 \text{ N/mm}^2$

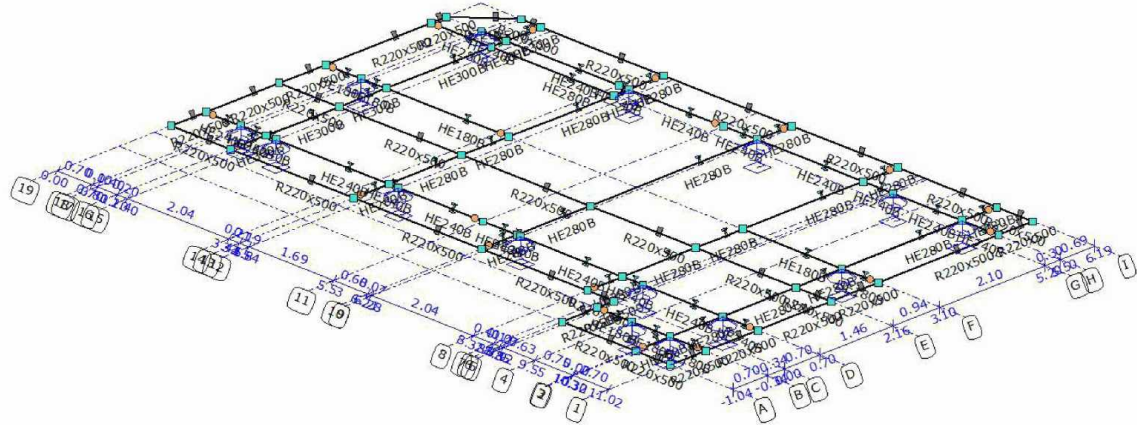
7.1.5.2 Oplegging 2

L200.200.20, L=0,8m inslijpen in bouwmuur
 $\sigma_d = 261,4 \times 10^3 / (180 \times 800) = 1,82 \text{ N/mm}^2$

8 Bijlagen

8.1 Bijlage uitdraai MatrixFrame berekening

AFB. GEOMETRIE LIGGER



STAVEN

Staaf	Knoop Lengte	Scharnier		Knoop	Profiel	X-B	Y-B	Z-B	X-E	Y-E	Z-
E	B	B	E	E							
S1	K1	XYZXrYrZr	XYZXrYrZr	K2	P1	0.000	0.000	0.000	0.700	0.000	
0.000	0.700										
S2	K2	XYZXrYrZr	XYZXrYrZr	K3	P1	0.700	0.000	0.000	2.160	0.000	
0.000	1.460										
S3	K3	XYZXrYrZr	XYZXrYrZr	K4	P1	2.160	0.000	0.000	3.100	0.000	
0.000	0.940										
S4	K4	XYZXrYrZr	XYZXrYrZr	K5	P1	3.100	0.000	0.000	5.200	0.000	
0.000	2.100										
S5	K5	XYZXrYrZr	XYZXrYrZr	K6	P1	5.200	0.000	0.000	5.500	0.000	
0.000	0.300										
S6	K6	XYZXrYrZr	XYZXrYrZr	K7	P1	5.500	0.000	0.000	6.190	0.800	
0.000	1.056										
S7	K7	XYZXrYrZr	XYZXrYrZr	K10	P1	6.190	0.800	0.000	6.190	1.200	
0.000	0.400										
S8	K10	XYZXrYrZr	XYZXrYrZr	K13	P1	6.190	1.200	0.000	6.190	3.650	
0.000	2.450										
S9	K13	XYZXrYrZr	XYZXrYrZr	K16	P1	6.190	3.650	0.000	6.190	6.210	
0.000	2.560										
S10	K16	XYZXrYrZr	XYZXrYrZr	K19	P1	6.190	6.210	0.000	6.190	8.320	
0.000	2.110										
S11	K19	XYZXrYrZr	XYZXrYrZr	K35	P1	6.190	8.320	0.000	6.190	10.300	
0.000	1.980										
S12	K35	XYZXrYrZr	XYZXrYrZr	K28	P1	6.190	10.300	0.000	6.190	11.020	
0.000	0.720										
S13	K1	XYZXrYrZr	XYZXrYrZr	K8	P1	0.000	0.000	0.000	0.000	1.200	
0.000	1.200										
S14	K8	XYZXrYrZr	XYZXrYrZr	K11	P1	0.000	1.200	0.000	0.000	3.650	
0.000	2.450										

S15	K11	XYZXrYrZr	XYZXrYrZr	K14	P1	0.000	3.650	0.000	0.000	6.210	
0.000	2.560										
S16	K14	XYZXrYrZr	XYZXrYrZr	K17	P1	0.000	6.210	0.000	0.000	8.320	
0.000	2.110										
S17	K17	XYZXrYrZr	XYZXrYrZr	K20	P1	0.000	8.320	0.000	0.000	8.850	
0.000	0.530										
S18	K22	XYZXrYrZr	XYZXrYrZr	K21	P1	-1.040	8.850	0.000	-0.340	8.850	
0.000	0.700										
S19	K21	XYZXrYrZr	XYZXrYrZr	K20	P1	-0.340	8.850	0.000	0.000	8.850	
0.000	0.340										
S20	K22	XYZXrYrZr	XYZXrYrZr	K29	P1	-1.040	8.850	0.000	-1.040	10.320	
0.000	1.470										
S21	K29	XYZXrYrZr	XYZXrYrZr	K23	P1	-1.040	10.320	0.000	-1.040	11.020	
0.000	0.700										
S22	K23	XYZXrYrZr	XYZXrYrZr	K36	P1	-1.040	11.020	0.000	-0.340	11.020	
0.000	0.700										
S23	K36	XYZXrYrZr	XYZXrYrZr	K24	P1	-0.340	11.020	0.000	0.700	11.020	
0.000	1.040										
S24	K24	XYZXrYrZr	XYZXrYrZr	K25	P1	0.700	11.020	0.000	2.160	11.020	
0.000	1.460										
S25	K25	XYZXrYrZr	XYZXrYrZr	K26	P1	2.160	11.020	0.000	3.100	11.020	
0.000	0.940										
S26	K26	XYZXrYrZr	XYZXrYrZr	K27	P1	3.100	11.020	0.000	5.500	11.020	
0.000	2.400										
S27	K27	XYZXrYrZr	XYZXrYrZr	K28	P1	5.500	11.020	0.000	6.190	11.020	
0.000	0.690										
S28	K8	XYZXr--	XYZXrYrZr	K51	P6	0.000	1.200	0.000	0.700	1.200	
0.000	0.700										
S29	K51	XYZXrYrZr	XYZXrYrZr	K9	P6	0.700	1.200	0.000	2.160	1.200	
0.000	1.460										
Staaf	Knoop	Scharnier		Knoop	Profiel	X-B	Y-B	Z-B	X-E	Y-E	Z-
E	Lengte	B	E	E							
S30	K9	XYZXrYrZr	XYZXrYrZr	K45	P6	2.160	1.200	0.000	3.100	1.200	
0.000	0.940										
S32	K47	XYZXrYrZr	XYZXr--	K10	P6	5.500	1.200	0.000	6.190	1.200	
0.000	0.690										
S37	K15	XYZXrYrZr	XYZXrYrZr	K49	P2	2.160	6.210	0.000	5.500	6.210	
0.000	3.340										
S38	K49	XYZXrYrZr	XYZXr--	K16	P2	5.500	6.210	0.000	6.190	6.210	
0.000	0.690										
S41	K21	XYZXr--	XYZXrYrZr	K43	P3	-0.340	8.850	0.000	-0.340	9.550	
0.000	0.700										
S42	K43	XYZXrYrZr	XYZXrYrZr	K31	P3	-0.340	9.550	0.000	-0.340	10.300	
0.000	0.750										
S43	K31	XYZXrYrZr	XYZXr--	K36	P3	-0.340	10.300	0.000	-0.340	11.020	
0.000	0.720										
S44	K29	XYZXr--	XYZXrYrZr	K31	P2	-1.040	10.320	0.000	-0.340	10.300	
0.000	0.700										
S45	K31	XYZXrYrZr	XYZXrYrZr	K30	P2	-0.340	10.300	0.000	0.700	10.320	
0.000	1.040										
S46	K30	XYZXrYrZr	XYZXrYrZr	K32	P2	0.700	10.320	0.000	2.160	10.320	
0.000	1.460										
S47	K32	XYZXrYrZr	XYZXrYrZr	K33	P2	2.160	10.320	0.000	3.100	10.300	
0.000	0.940										
S48	K33	XYZXrYrZr	XYZXrYrZr	K34	P2	3.100	10.300	0.000	5.500	10.300	
0.000	2.400										
S49	K34	XYZXrYrZr	XYZXr--	K35	P2	5.500	10.300	0.000	6.190	10.300	
0.000	0.690										
S50	K2	XYZXr--	XYZXrYrZr	K37	P4	0.700	0.000	0.000	0.700	0.700	
0.000	0.700										

S51	K37	XYZXrYrZr	XYZXrYrZr	K51	P4	0.700	0.700	0.000	0.700	1.200
0.000	0.500									
S52	K51	XYZXrYrZr	XYZXrYrZr	K38	P4	0.700	1.200	0.000	0.700	1.400
0.000	0.200									
S54	K11	XYZXr--	XYZXrYrZr	K53	P2	0.000	3.650	0.000	0.700	3.650
0.000	0.700									
S55	K53	XYZXrYrZr	XYZXrYrZr	K12	P2	0.700	3.650	0.000	2.160	3.650
0.000	1.460									
S56	K14	XYZXr--	XYZXrYrZr	K54	P2	0.000	6.210	0.000	0.700	6.210
0.000	0.700									
S57	K54	XYZXrYrZr	XYZXrYrZr	K15	P2	0.700	6.210	0.000	2.160	6.210
0.000	1.460									
S58	K17	XYZXr--	XYZXrYrZr	K55	P2	0.000	8.320	0.000	0.700	8.320
0.000	0.700									
S59	K55	XYZXrYrZr	XYZXrYrZr	K18	P2	0.700	8.320	0.000	2.160	8.320
0.000	1.460									
S64	K30	XYZXrYrZr	XYZXr--	K24	P4	0.700	10.320	0.000	0.700	11.020
0.000	0.700									
S65	K45	XYZXrYrZr	XYZXrYrZr	K56	P6	3.100	1.200	0.000	5.200	1.200
0.000	2.100									
S66	K56	XYZXrYrZr	XYZXrYrZr	K47	P6	5.200	1.200	0.000	5.500	1.200
0.000	0.300									
S68	K57	XYZXrYrZr	XYZXrYrZr	K52	P2	5.200	3.650	0.000	5.500	3.650
0.000	0.300									
S69	K5	XYZXr--	XYZXrYrZr	K56	P5	5.200	0.000	0.000	5.200	1.200
0.000	1.200									
S70	K56	XYZXrYrZr	XYZXrYrZr	K57	P5	5.200	1.200	0.000	5.200	3.650
0.000	2.450									
S71	K3	XYZXrYrZr	XYZXrYrZr	K9	P1	2.160	0.000	0.000	2.160	1.200
0.000	1.200									
S72	K9	XYZXrYrZr	XYZXrYrZr	K12	P1	2.160	1.200	0.000	2.160	3.650
0.000	2.450									
S73	K12	XYZXrYrZr	XYZXrYrZr	K15	P1	2.160	3.650	0.000	2.160	6.210
0.000	2.560									
S74	K15	XYZXrYrZr	XYZXrYrZr	K18	P1	2.160	6.210	0.000	2.160	8.320
0.000	2.110									
S75	K18	XYZXrYrZr	XYZXrYrZr	K32	P1	2.160	8.320	0.000	2.160	10.320
0.000	2.000									
S76	K32	XYZXrYrZr	XYZXrYrZr	K25	P1	2.160	10.320	0.000	2.160	11.020
0.000	0.700									
S78	K59	XYZXrYrZr	XYZXr--	K19	P2	5.500	8.320	0.000	6.190	8.320
0.000	0.690									
S79	K52	XYZXrYrZr	XYZXr--	K13	P2	5.500	3.650	0.000	6.190	3.650
0.000	0.690									
S80	K60	XYZXrYrZr	XYZXrYrZr	K47	P4	5.500	0.700	0.000	5.500	1.200
0.000	0.500									
S87	K34	XYZXrYrZr	XYZXr--	K27	P4	5.500	10.300	0.000	5.500	11.020
0.000	0.720									
S88	K38	XYZXrYrZr	XYZXrYrZr	K53	P4	0.700	1.400	0.000	0.700	3.650
0.000	2.250									
S89	K53	XYZXrYrZr	XYZXrYrZr	K61	P4	0.700	3.650	0.000	0.700	3.842
0.000	0.192									
S91	K54	XYZXrYrZr	XYZXrYrZr	K62	P4	0.700	6.210	0.000	0.700	6.284
0.000	0.074									
S92	K62	XYZXrYrZr	XYZXrYrZr	K55	P4	0.700	6.284	0.000	0.700	8.320
0.000	2.036									
S93	K55	XYZXrYrZr	XYZXrYrZr	K63	P4	0.700	8.320	0.000	0.700	8.726
0.000	0.406									
S94	K63	XYZXrYrZr	XYZXrYrZr	K30	P4	0.700	8.726	0.000	0.700	10.320
0.000	1.594									
S95	K61	XYZXrYrZr	XYZXr--	K64	P4	0.700	3.842	0.000	0.700	5.530

0.000	1.688										
S96	K64	XYZXrYrZr	XYZXrYrZr	K54	P4	0.700	5.530	0.000	0.700	6.210	
0.000	0.680										
S97	K18	XYZXrYrZr	XYZXrYrZr	K65	P2	2.160	8.320	0.000	3.100	8.320	
0.000	0.940										
S98	K65	XYZXrYrZr	XYZXrYrZr	K59	P2	3.100	8.320	0.000	5.500	8.320	
0.000	2.400										
S99	K65	XYZXrYrZr	XYZXrYrZr	K33	P3	3.100	8.320	0.000	3.100	10.300	
0.000	1.980										
S100	K33	XYZXrYrZr	XYZXr--	K26	P3	3.100	10.300	0.000	3.100	11.020	
0.000	0.720										
S101	K47	XYZXrYrZr	XYZXrYrZr	K66	P4	5.500	1.200	0.000	5.500	3.440	
0.000	2.240										
S102	K66	XYZXrYrZr	XYZXrYrZr	K52	P4	5.500	3.440	0.000	5.500	3.650	
0.000	0.210										
S103	K52	XYZXrYrZr	XYZXr--	K67	P4	5.500	3.650	0.000	5.500	5.530	
0.000	1.880										
S104	K67	XYZXrYrZr	XYZXrYrZr	K49	P4	5.500	5.530	0.000	5.500	6.210	
0.000	0.680										
S105	K49	XYZXrYrZr	XYZXrYrZr	K59	P4	5.500	6.210	0.000	5.500	8.320	
0.000	2.110										
S106	K59	XYZXrYrZr	XYZXrYrZr	K68	P4	5.500	8.320	0.000	5.500	8.920	
0.000	0.600										
S107	K68	XYZXrYrZr	XYZXrYrZr	K34	P4	5.500	8.920	0.000	5.500	10.300	
0.000	1.380										
S108	K4	XYZXr--	XYZXrYrZr	K69	P3	3.100	0.000	0.000	3.100	0.700	
0.000	0.700										
S109	K69	XYZXrYrZr	XYZXrYrZr	K45	P3	3.100	0.700	0.000	3.100	1.200	
0.000	0.500										
Staaft	Knoop	Scharnier	Knoop	Profiel	X-B	Y-B	Z-B	X-E	Y-E	Z-	
E	Lengte	B	E	E							
S110	K45	XYZXrYrZr	XYZXr--	K70	P3	3.100	1.200	0.000	3.100	3.650	
0.000	2.450										
S111	K12	XYZXrYrZr	XYZXrYrZr	K70	P2	2.160	3.650	0.000	3.100	3.650	
0.000	0.940										
S112	K70	XYZXrYrZr	XYZXrYrZr	K57	P2	3.100	3.650	0.000	5.200	3.650	
0.000	2.100										
-	-	-	-	-	-	m	m	m	m	m	
m	m										

PROFIELEN

Profiel	Profielnaam	Oppervlakte	It	Iy	Iz	Materiaal	Hoek
P1	R220x500	1.1000e-01	1.2814e-03	2.2917e-03	4.4367e-04	C20/25	0
P2	HE280B	1.3136e-02	1.4372e-06	1.9270e-04	6.5945e-05	S235	0
P3	HE180B	6.5251e-03	4.2165e-07	3.8311e-05	1.3628e-05	S235	0
P4	HE240B	1.0599e-02	1.0269e-06	1.1259e-04	3.9227e-05	S235	0
P5	HE280B	1.3136e-02	1.4372e-06	1.9270e-04	6.5945e-05	S235	0
P6	HE300B	1.4908e-02	1.8505e-06	2.5166e-04	8.5628e-05	S235	0
-	-	m2	m4	m4	m4	-	°

PROFIELVORMEN

Profiel	Verl.	hE	tf	tw	tf2	B	bL	bR	Raati.	Hoogte	
P1	Nee	0.500	0.500	0.000	0.000	0.000	0.220	0.000	0.000	Nee	0.000
-	-	m	m	m	m	m	m	m	m	-	m

MATERIALEN

Materiaalnaam	Poison	Dichtheid	E-Modulus	Uitzettingcoeff
C20/25	0.20	25.00	3.0000e+07	10.0000e-06
S235	0.30	78.50	2.1000e+08	12.0000e-06
-	-	kN/m3	kN/m2	C°m

OPLEGGINGEN

Oplegging ekYr	Knopen HoekZr				Xr	Yr	Zr	HoekXr	Ho
01	K37	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
02	K38	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
03	K60	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
04	K61	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
05	K62	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
06	K63	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
07	K43	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
08	K31	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
09	K30	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
010	K33	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
011	K34	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
012	K52	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
013	K49	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
014	K68	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
015	K69	vast	vast	20000	vrij	vrij	vrij	0	
0	0								
-	-	kN/m	kN/m	kN/m	kNmrad	kNmrad	kNmrad	°	
o	o								

BELASTINGSGEVALLEN TYPEN

Oplegg. Psi2	Staven Cprob	B.G.Type	Gunstig/Ong. Element	Niveau	Veld	Psi0	Psi1
B.G.1	Permanent	Permanent	-	N.v.t.	N.v.t.		
B.G.2 0.50	Verdeelde veranderlijke 0.30 belasting	Verdeelde 1.00 veranderlijke belasting	-	Cat. A) Vloeren	1	1	0.40

AFB. LASTEN B.G.1 PERMANENT

B.G.1	Permanent	1.00
B.G.2	Verdeelde veranderlijke belasting	0.30

KARAKTERISTIEK BELASTINGSCOMBINATIES (TABEL)

B.G.	Omschrijving	Ka.C.(w1)	Ka.C.1	Ka.C.2
B.G.1	Permanent	1.00	1.00	1.00
B.G.2	Verdeelde veranderlijke belasting	-	0.40	1.00

FREQUENT BELASTINGSCOMBINATIES (TABEL)

B.G.	Omschrijving	Fr.C.(w1)	Fr.C.1
B.G.1	Permanent	1.00	1.00
B.G.2	Verdeelde veranderlijke belasting	-	0.50

QUASI-PERMANENT BELASTINGSCOMBINATIES (TABEL)

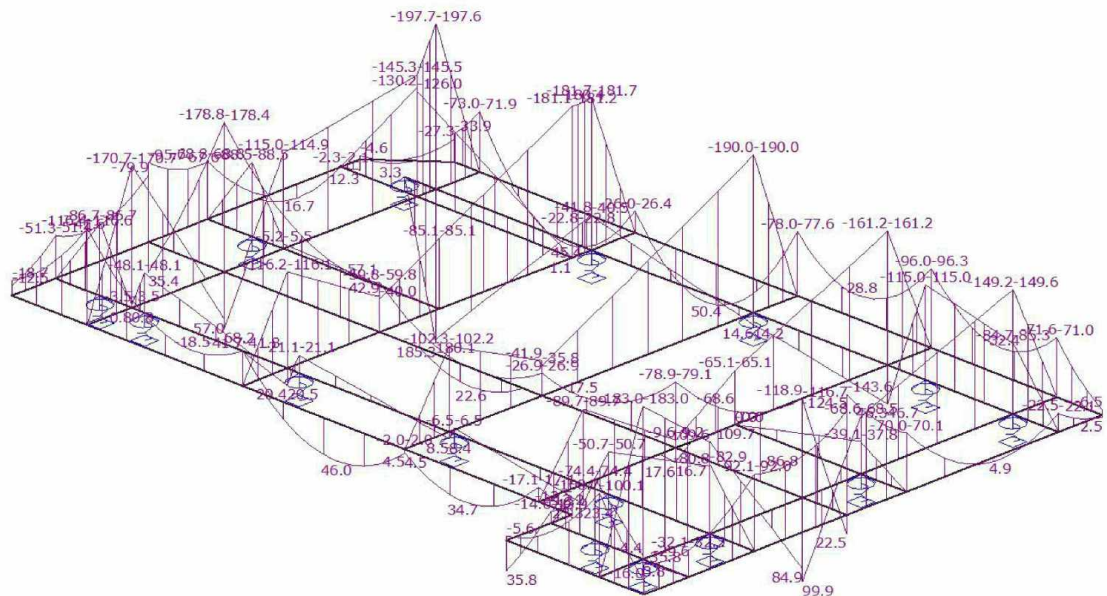
B.G.	Omschrijving	Qu.C.1
B.G.1	Permanent	1.00
B.G.2	Verdeelde veranderlijke belasting	0.30

UITGANGSPUNTEN VAN DE ANALYSE

Lineaire Elastische Analyse uitgevoerd

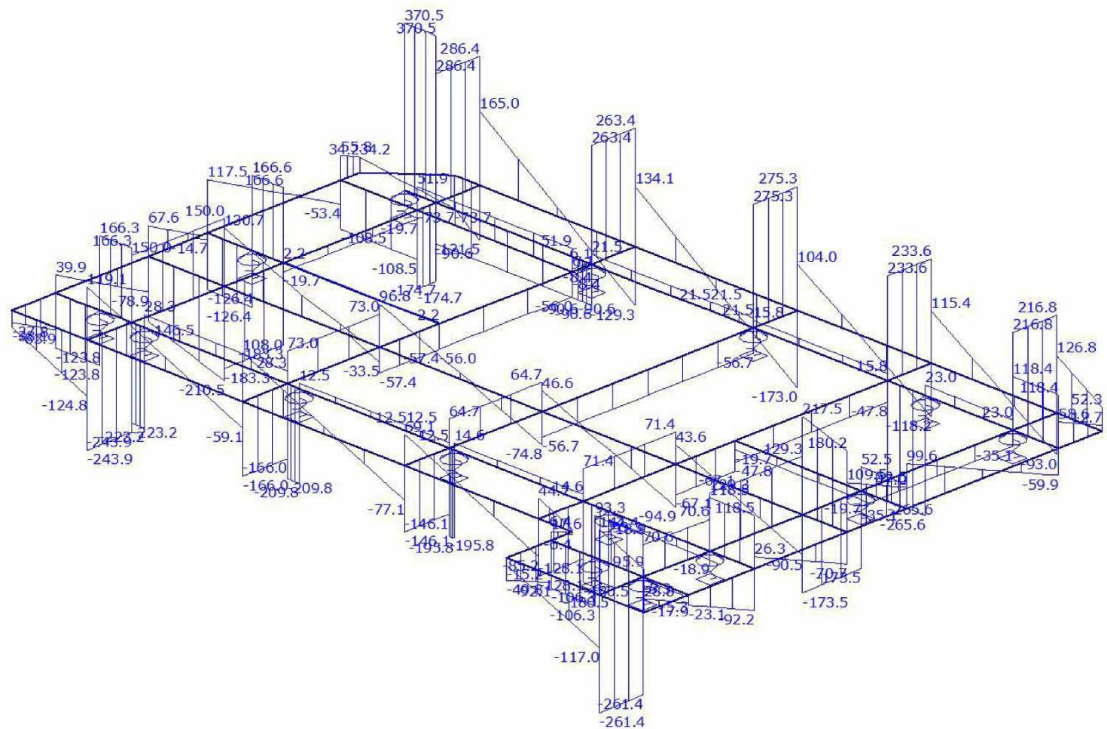
AFB. FU.C. MOMENT (MY) OMHULLENDE

Fundamenteel Belastingscombinaties



AFB. FU.C. DWARSKRACHT (VZ) OMHULLENDE

Fundamenteel Belastingscombinaties



FU.C. STAAFKRACHTEN (MY, MZ)

Staaft	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0
S1	Fu.C.1	My	-11.03			-48.17	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-12.52			-51.31	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S2	Fu.C.1	My	-48.28	-39.29	0.500	-72.50	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-51.44	-41.65	0.487	-79.88	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S3	Fu.C.1	My	-86.80	-67.28	0.736	-68.77	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-95.70	-67.63	0.831	-68.11	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S4	Fu.C.1	My	-68.82	11.08	1.490	-2.33	0.935	2.044
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-68.16	16.65	1.444	-0.87	0.804	2.084
		Mz	0.00			0.00	0.000	0.000
S5	Fu.C.1	My	-2.05			11.45	0.038	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-0.55			12.33	0.010	0.000
		Mz	0.00			0.00	0.000	0.000
S6	Fu.C.1	My	-2.44	3.34	0.338	-22.75	0.081	0.595
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-4.61	0.15	0.311	-27.33	0.255	0.366
		Mz	0.00			0.00	0.000	0.000
Staaft	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0
		Mz	0.00			0.00	0.000	0.000

S7	Fu.C.1	My	-28.48			-67.09	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-33.93			-72.96	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S8	Fu.C.1	My	-66.05	45.37	1.367	-24.67	0.495	2.239
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-71.93	42.05	1.382	-26.04	0.543	2.221
		Mz	0.00			0.00	0.000	0.000
S9	Fu.C.1	My	-24.99	50.38	1.124	-72.67	0.205	2.043
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-26.38	47.30	1.111	-78.00	0.221	2.001
		Mz	0.00			0.00	0.000	0.000
S10	Fu.C.1	My	-72.33	-21.00	0.987	-87.34	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-77.64	-28.84	0.971	-95.97	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S11	Fu.C.1	My	-87.66	-24.38	1.096	-65.49	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-96.27	-32.44	1.111	-71.56	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S12	Fu.C.1	My	-64.92			-5.01	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-70.97			-6.50	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S13	Fu.C.1	My	-15.18			-102.30	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-18.72			-116.43	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S14	Fu.C.1	My	-102.45	-8.14	1.624	-32.54	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-116.62	-18.45	1.648	-41.69	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S15	Fu.C.1	My	-32.64	45.99	1.483	4.48	0.349	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-41.79	38.96	1.495	-2.04	0.457	2.533
		Mz	0.00			0.00	0.000	0.000
S16	Fu.C.1	My	4.51	34.72	0.919	-16.00	1.904	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-1.98	31.03	0.956	-17.12	0.029	1.882
		Mz	0.00			0.00	0.000	0.000
S17	Fu.C.1	My	-15.98			-5.60	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-17.08			-3.55	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S18	Fu.C.1	My	31.80			-13.97	0.524	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	35.78			-13.91	0.541	0.000
		Mz	0.00			0.00	0.000	0.000
S19	Fu.C.1	My	-13.91	-11.03	0.328	-11.03	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-13.84	-12.18	0.234	-12.52	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S20	Fu.C.1	My	-5.60			-93.88	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-3.55			-100.68	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S21	Fu.C.1	My	-93.31			-12.38	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
Staaft	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0
S21	Fu.C.2	My	-100.07			-15.97	0.000	0.000

		Mz	0.00				0.00	0.000	0.000
S22	Fu.C.1	My	-31.78	-25.15	0.461	-26.94	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-35.76	-29.63	0.430	-32.05	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S23	Fu.C.1	My	-27.04			-81.99	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-32.16			-92.11	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S24	Fu.C.1	My	-81.90	-76.68	0.409	-111.27	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-92.04	-86.84	0.396	-124.48	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S25	Fu.C.1	My	-129.00			-62.98	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-143.56			-70.00	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S26	Fu.C.1	My	-63.10	4.90	1.474	-21.91	1.079	1.870	1.870
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-70.12	4.49	1.499	-22.49	1.131	1.866	1.866
		Mz	0.00			0.00	0.000	0.000	0.000
S27	Fu.C.1	My	-21.52			1.81	0.576	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-22.08			2.51	0.546	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S28	Fu.C.1	My	0.00			-162.16	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	0.00			-170.75	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S29	Fu.C.1	My	-162.10			56.97	1.080	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-170.68			41.84	1.173	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S30	Fu.C.1	My	68.22			-104.06	0.372	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	52.99			-114.97	0.297	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S32	Fu.C.1	My	-195.58			0.00	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-197.62			0.00	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S37	Fu.C.1	My	-0.43			-189.97	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-35.76			-188.67	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S38	Fu.C.1	My	-189.98			0.00	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-188.69			0.00	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S41	Fu.C.1	My	0.00			-71.16	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	0.00			-74.42	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S42	Fu.C.1	My	-71.16			-3.89	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
	Fu.C.2	My	-74.42			-4.42	0.000	0.000	0.000
		Mz	0.00			0.00	0.000	0.000	0.000
S43	Fu.C.1	My	3.83			0.00	0.000	0.000	0.000
Staaft	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0	x-M0
		Mz	0.00			0.00	0.000	0.000	0.000

	Fu.C.2	My	3.71		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S44	Fu.C.1	My	0.00		-173.87	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		-183.03	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S45	Fu.C.1	My	-173.81		-103.79	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-182.96		-109.57	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S46	Fu.C.1	My	-103.91		84.87	0.804	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-109.69		72.87	0.877	0.000	
		Mz	0.00		0.00	0.000	0.000	
S47	Fu.C.1	My	99.94		-63.21	0.576	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	87.18		-68.64	0.526	0.000	
		Mz	0.00		0.00	0.000	0.000	
S48	Fu.C.1	My	-63.07		-147.39	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-68.51		-149.21	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S49	Fu.C.1	My	-147.77		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-149.59		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S50	Fu.C.1	My	0.00		-79.97	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		-86.68	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S51	Fu.C.1	My	-79.97		0.81	0.495	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-86.68		-3.53	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S52	Fu.C.1	My	0.84		-43.19	0.004	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-3.50		-48.13	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S54	Fu.C.1	My	0.00		-115.60	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		-116.20	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S55	Fu.C.1	My	-115.55		-9.05	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-116.14		-42.93	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S56	Fu.C.1	My	0.00		-99.95	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		-102.25	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S57	Fu.C.1	My	-99.91		-5.49	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-102.20		-41.90	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S58	Fu.C.1	My	0.00		-86.61	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		-89.68	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
Staal	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0
S59	Fu.C.1	My	-86.60			17.58	1.214	0.000

		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-89.67			-9.55	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S64	Fu.C.1	My	-77.65			0.00	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-82.92			0.00	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S65	Fu.C.1	My	-104.02			-145.29	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-114.92			-145.05	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S66	Fu.C.1	My	-145.51			-195.63	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-145.28			-197.70	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S68	Fu.C.1	My	-179.15			-181.67	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-181.22			-179.38	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S69	Fu.C.1	My	0.00			-119.74	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	0.00			-130.22	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S70	Fu.C.1	My	-115.65			1.06	2.428	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-126.00			1.05	2.430	0.000
		Mz	0.00			0.00	0.000	0.000
S71	Fu.C.1	My	28.29			-166.61	0.218	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	35.44			-178.75	0.232	0.000
		Mz	0.00			0.00	0.000	0.000
S72	Fu.C.1	My	-166.28	-38.89	1.950	-47.28	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-178.38	-57.14	2.132	-59.84	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S73	Fu.C.1	My	-47.28	22.55	1.443	-19.23	0.623	2.264
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-59.82	1.89	1.521	-26.91	1.255	1.787
		Mz	0.00			0.00	0.000	0.000
S74	Fu.C.1	My	-19.21	-3.03	0.695	-70.17	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-26.89	-17.50	0.593	-78.88	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S75	Fu.C.1	My	-70.39	-56.21	0.651	-117.25	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-79.10	-68.60	0.627	-118.86	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S76	Fu.C.1	My	-114.83			17.39	0.597	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-116.73			22.47	0.578	0.000
		Mz	0.00			0.00	0.000	0.000
S78	Fu.C.1	My	-161.20			0.00	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-160.65			0.00	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
S79	Fu.C.1	My	-181.75			0.00	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
	Fu.C.2	My	-179.48			0.00	0.000	0.000
		Mz	0.00			0.00	0.000	0.000
Staal	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0
		Mz	0.00			0.00	0.000	0.000

S80	Fu.C.1	My	0.00	181.48	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	0.00	185.27	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S87	Fu.C.1	My	-81.59	0.00	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-85.27	0.00	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S88	Fu.C.1	My	-43.19	20.42	1.528	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-48.13	14.96	1.717	0.000		
		Mz	0.00	0.00	0.000	0.000		
S89	Fu.C.1	My	20.53	-19.75	0.098	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	15.06	-21.05	0.080	0.000		
		Mz	0.00	0.00	0.000	0.000		
S91	Fu.C.1	My	7.95	-6.54	0.041	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	8.44	-4.50	0.048	0.000		
		Mz	0.00	0.00	0.000	0.000		
S92	Fu.C.1	My	-6.54	23.25	0.447	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-4.50	18.83	0.393	0.000		
		Mz	0.00	0.00	0.000	0.000		
S93	Fu.C.1	My	23.37	-49.90	0.129	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	18.94	-50.71	0.110	0.000		
		Mz	0.00	0.00	0.000	0.000		
S94	Fu.C.1	My	-49.90	-75.61	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-50.71	-80.77	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S95	Fu.C.1	My	-19.75	0.00	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-21.05	0.00	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S96	Fu.C.1	My	0.00	7.96	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	0.00	8.48	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S97	Fu.C.1	My	16.68	-46.42	0.248	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-9.16	-65.12	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S98	Fu.C.1	My	-46.42	-161.22	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-65.13	-160.67	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S99	Fu.C.1	My	0.03	-38.16	0.001	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-0.01	-39.06	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S100	Fu.C.1	My	-37.02	0.00	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
	Fu.C.2	My	-37.82	0.00	0.000	0.000		
		Mz	0.00	0.00	0.000	0.000		
S101	Fu.C.1	My	176.48	-19.65	2.016	0.000		
		Mz	0.00	0.00	0.000	0.000		
Staaft	B.C.	Waarde	Mb	Mmax	xMmax	Me	x-M0	x-M0
S101	Fu.C.2	My	180.11			-22.80	1.988	0.000

		Mz	0.00		0.00	0.000	0.000	
S102	Fu.C.1	My	-19.65		-38.04	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-22.80		-41.82	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S103	Fu.C.1	My	-36.68		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-40.45		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S104	Fu.C.1	My	0.00		13.27	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		14.63	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S105	Fu.C.1	My	12.89		46.27	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	14.23		40.65	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S106	Fu.C.1	My	46.65		-112.73	0.176	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	41.04		-115.04	0.158	0.000	
		Mz	0.00		0.00	0.000	0.000	
S107	Fu.C.1	My	-112.73		-81.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-115.04		-84.67	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S108	Fu.C.1	My	0.00		-85.37	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	0.00		-88.47	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S109	Fu.C.1	My	-85.37		-2.90	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-88.47		-5.18	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S110	Fu.C.1	My	-3.23		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-5.50		0.00	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S111	Fu.C.1	My	-7.48		-61.39	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-39.98		-85.08	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
S112	Fu.C.1	My	-61.39		-179.08	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
	Fu.C.2	My	-85.08		-181.12	0.000	0.000	
		Mz	0.00		0.00	0.000	0.000	
-	-	-	kNm	kNm	m	kNm	m	m

FU.C. STAAFKRACHTEN (NX, VY, VZ, MX)

Staal	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
S1	Fu.C.1	-	0.00 Vz	-27.85	-78.26	-78.26	-15.18	-15.18
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-26.94	-83.90	-83.90	-18.72	-18.72
			Vy	0.00	0.00	0.00		
S2	Fu.C.1	-	0.00 Vz	35.98	-69.17	-69.17	-15.18	-15.18
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	39.93	-78.88	-78.88	-18.72	-18.72
			Vy	0.00	0.00	0.00		
S3	Fu.C.1	-	0.00 Vz	53.03	53.03	-14.67	13.11	13.11
			Vy	0.00	0.00	0.00		
Staal	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
S3	Fu.C.2	-	0.00 Vz	67.60	67.60	-8.90	16.72	16.72
			Vy	0.00	0.00	0.00		

S4	Fu.C.1	-	0.00 Vz	107.28	107.28	-43.96	13.11	13.11
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	117.49	117.49	-53.41	16.72	16.72
			Vy	0.00	0.00	0.00		
S5	Fu.C.1	-	0.00 Vz	55.82	55.82	34.21	13.11	13.11
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	55.11	55.11	30.70	16.72	16.72
			Vy	0.00	0.00	0.00		
S6	Fu.C.1	-	0.00 Vz	34.21	-72.65	-72.65	17.23	17.23
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	30.70	-73.71	-73.71	20.26	20.26
			Vy	0.00	0.00	0.00		
S7	Fu.C.1	-	0.00 Vz	-72.65	-120.38	-120.38	-1.81	-1.81
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-73.71	-121.45	-121.45	-2.51	-2.51
			Vy	0.00	0.00	0.00		
S8	Fu.C.1	-	0.00 Vz	163.06	163.06	-129.29	-1.81	-1.81
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	164.95	164.95	-127.49	-2.51	-2.51
			Vy	0.00	0.00	0.00		
S9	Fu.C.1	-	0.00 Vz	134.12	-171.36	-171.36	-1.81	-1.81
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	132.62	-172.95	-172.95	-2.51	-2.51
			Vy	0.00	0.00	0.00		
S10	Fu.C.1	-	0.00 Vz	103.97	-118.20	-118.20	-1.81	-1.81
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	100.51	-117.88	-117.88	-2.51	-2.51
			Vy	0.00	0.00	0.00		
S11	Fu.C.1	-	0.00 Vz	115.43	115.43	-93.04	-1.81	-1.81
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	114.95	114.95	-89.99	-2.51	-2.51
			Vy	0.00	0.00	0.00		
S12	Fu.C.1	-	0.00 Vz	121.11	121.11	45.30	-1.81	-1.81
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	126.80	126.80	52.28	-2.51	-2.51
			Vy	0.00	0.00	0.00		
S13	Fu.C.1	-	0.00 Vz	-29.68	-115.51	-115.51	11.03	11.03
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-38.06	-124.80	-124.80	12.52	12.52
			Vy	0.00	0.00	0.00		
S14	Fu.C.1	-	0.00 Vz	116.15	116.15	-59.09	11.03	11.03
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	119.13	119.13	-57.96	12.52	12.52
			Vy	0.00	0.00	0.00		
S15	Fu.C.1	-	0.00 Vz	106.05	106.05	-77.05	11.03	11.03
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	108.05	108.05	-76.99	12.52	12.52
			Vy	0.00	0.00	0.00		
S16	Fu.C.1	-	0.00 Vz	65.74	-85.18	-85.18	11.03	11.03
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	69.08	-83.43	-83.43	12.52	12.52
			Vy	0.00	0.00	0.00		
S17	Fu.C.1	-	0.00 Vz	38.55	38.55	0.64	11.03	11.03
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	44.69	44.69	6.38	12.52	12.52
			Vy	0.00	0.00	0.00		
S18	Fu.C.1	-	0.00 Vz	-46.66	-84.11	-84.11	-5.60	-5.60
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-49.83	-92.15	-92.15	-3.55	-3.55
			Vy	0.00	0.00	0.00		
S19	Fu.C.1	-	0.00 Vz	17.55	17.55	-0.64	-5.60	-5.60
Staaft	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	14.17	14.17	-6.38	-3.55	-3.55
			Vy	0.00	0.00	0.00		
S20	Fu.C.1	-	0.00 Vz	-10.86	-109.24	-109.24	-31.80	-31.80

			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-15.17	-116.99	-116.99	-35.78	-35.78
S21	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	139.04	139.04	92.19	-31.78	-31.78
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	144.38	144.38	95.89	-35.76	-35.76
S22	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	28.82	28.82	-14.98	12.38	12.38
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	28.55	28.55	-17.95	15.97	15.97
S23	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-20.29	-85.37	-85.37	12.38	12.38
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-23.09	-92.18	-92.18	15.97	15.97
S24	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	25.56	-65.79	-65.79	12.38	12.38
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	26.28	-70.71	-70.71	15.97	15.97
S25	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	99.64	99.64	40.82	-5.01	-5.01
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	109.48	109.48	47.03	-6.50	-6.50
S26	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	92.24	92.24	-57.92	-5.01	-5.01
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	99.56	99.56	-59.87	-6.50	-6.50
S27	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	55.39	55.39	12.22	-5.01	-5.01
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	58.56	58.56	12.72	-6.50	-6.50
S28	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-231.66	-231.66	-231.66	-0.15	-0.15
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-243.93	-243.93	-243.93	-0.19	-0.19
S29	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	150.04	150.04	150.04	-0.12	-0.12
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	145.56	145.56	145.56	-0.16	-0.16
S30	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-183.28	-183.28	-183.28	0.21	0.21
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-178.68	-178.68	-178.68	0.22	0.22
S32	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	283.44	283.44	283.44	-1.04	-1.04
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	286.41	286.41	286.41	-1.03	-1.03
S37	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-56.75	-56.75	-56.75	0.04	0.04
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-45.78	-45.78	-45.78	0.04	0.04
S38	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	275.33	275.33	275.33	-0.34	-0.34
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	273.47	273.47	273.47	-0.36	-0.36
S41	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-101.66	-101.66	-101.66	-0.06	-0.06
	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-106.32	-106.32	-106.32	-0.07	-0.07
			Vy	0.00	0.00	0.00		
Staaft	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
S42	Fu.C.1	-	0.00 Vz	89.70	89.70	89.70	-0.06	-0.06
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	93.33	93.33	93.33	-0.07	-0.07
			Vy	0.00	0.00	0.00		
S43	Fu.C.1	-	0.00 Vz	-5.31	-5.31	-5.31	-0.10	-0.10

			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-5.15	-5.15	-5.15	-0.11	-0.11
S44	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-248.28	-248.28	-248.28	0.57	0.57
S45	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-261.37	-261.37	-261.37	0.62	0.62
S46	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	67.31	67.31	67.31	-0.02	-0.02
S47	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	70.56	70.56	70.56	0.00	0.00
S48	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	129.30	129.30	129.30	-0.06	-0.06
S49	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	125.04	125.04	125.04	-0.04	-0.04
S50	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-173.52	-173.52	-173.52	0.23	0.23
S51	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-165.72	-165.72	-165.72	0.23	0.23
S52	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-35.13	-35.13	-35.13	0.02	0.02
S53	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-33.63	-33.63	-33.63	0.01	0.01
S54	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	214.16	214.16	214.16	-0.57	-0.57
S55	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	216.80	216.80	216.80	-0.59	-0.59
S56	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-114.24	-114.24	-114.24	0.10	0.10
S57	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-123.83	-123.83	-123.83	0.13	0.13
S58	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	161.56	161.56	161.56	0.10	0.10
S59	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	166.31	166.31	166.31	0.13	0.13
S60	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-220.14	-220.14	-220.14	0.04	0.04
S61	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-223.18	-223.18	-223.18	0.06	0.06
S62	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-165.14	-165.14	-165.14	-0.09	-0.09
S63	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-166.01	-166.01	-166.01	-0.10	-0.10
S64	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	72.95	72.95	72.95	0.02	0.02
S65	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	50.14	50.14	50.14	0.00	0.00
S66	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-142.79	-142.79	-142.79	0.03	0.03
S67	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-146.07	-146.07	-146.07	0.05	0.05
S68	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	64.67	64.67	64.67	0.02	0.02
S69	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	41.30	41.30	41.30	0.02	0.02
S70	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-123.73	-123.73	-123.73	0.01	0.01
S71	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	-128.12	-128.12	-128.12	0.04	0.04
Staaft	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
S72	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	71.36	71.36	71.36	0.13	0.13
S73	Fu.C.2	-	Vy	0.00	0.00	0.00		
			0.00 Vz	54.87	54.87	54.87	0.15	0.15
S74	Fu.C.1	-	Vy	0.00	0.00	0.00		
			0.00 Vz	110.93	110.93	110.93	0.08	0.08
			Vy	0.00	0.00	0.00		

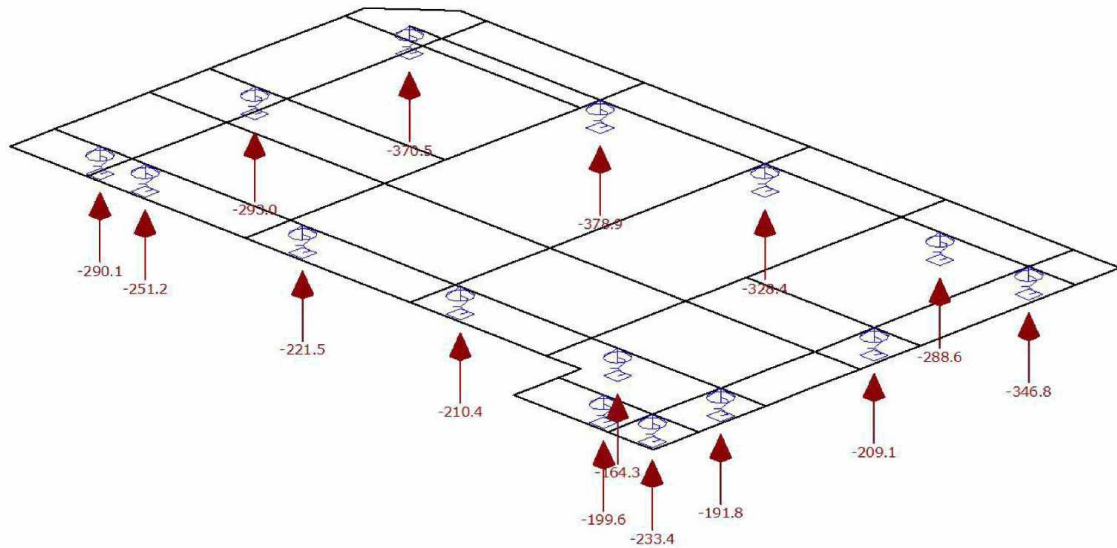
	Fu.C.2	-	0.00 Vz	118.46	118.46	118.46	0.07	0.07
			Vy	0.00	0.00	0.00		
S65	Fu.C.1	-	0.00 Vz	-19.65	-19.65	-19.65	-0.12	-0.12
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-14.35	-14.35	-14.35	-0.10	-0.10
			Vy	0.00	0.00	0.00		
S66	Fu.C.1	-	0.00 Vz	-167.07	-167.07	-167.07	3.96	3.96
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-174.72	-174.72	-174.72	4.13	4.13
			Vy	0.00	0.00	0.00		
S68	Fu.C.1	-	0.00 Vz	-8.41	-8.41	-8.41	-1.04	-1.04
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	6.12	6.12	6.12	-1.03	-1.03
			Vy	0.00	0.00	0.00		
S69	Fu.C.1	-	0.00 Vz	-99.78	-99.78	-99.78	-0.28	-0.28
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-108.52	-108.52	-108.52	-0.32	-0.32
			Vy	0.00	0.00	0.00		
S70	Fu.C.1	-	0.00 Vz	47.64	47.64	47.64	-0.06	-0.06
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	51.85	51.85	51.85	-0.09	-0.09
			Vy	0.00	0.00	0.00		
S71	Fu.C.1	-	0.00 Vz	-122.19	-202.64	-202.64	14.30	14.30
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-146.48	-210.51	-210.51	15.82	15.82
			Vy	0.00	0.00	0.00		
S72	Fu.C.1	-	0.00 Vz	130.69	130.69	-33.55	3.04	3.04
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	113.74	113.74	-16.97	4.67	4.67
			Vy	0.00	0.00	0.00		
S73	Fu.C.1	-	0.00 Vz	96.76	96.76	-74.85	1.47	1.47
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	81.15	81.15	-55.43	1.72	1.72
			Vy	0.00	0.00	0.00		
S74	Fu.C.1	-	0.00 Vz	46.57	-94.87	-94.87	-3.59	-3.59
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	31.64	-80.93	-80.93	-4.42	-4.42
			Vy	0.00	0.00	0.00		
S75	Fu.C.1	-	0.00 Vz	43.61	-90.46	-90.46	-2.69	-2.69
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	33.47	-73.23	-73.23	-4.81	-4.81
			Vy	0.00	0.00	0.00		
S76	Fu.C.1	-	0.00 Vz	212.35	212.35	165.43	-17.72	-17.72
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	217.54	217.54	180.19	-19.09	-19.09
			Vy	0.00	0.00	0.00		
S78	Fu.C.1	-	0.00 Vz	233.63	233.63	233.63	0.32	0.32
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	232.83	232.83	232.83	0.30	0.30
			Vy	0.00	0.00	0.00		
S79	Fu.C.1	-	0.00 Vz	263.40	263.40	263.40	0.32	0.32
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	260.12	260.12	260.12	0.34	0.34
			Vy	0.00	0.00	0.00		
S80	Fu.C.1	-	0.00 Vz	362.95	362.95	362.95	0.00	0.00
			Vy	0.00	0.00	0.00		
Staaft	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
S80	Fu.C.2	-	0.00 Vz	370.54	370.54	370.54	0.00	0.00
			Vy	0.00	0.00	0.00		
S87	Fu.C.1	-	0.00 Vz	113.32	113.32	113.32	0.39	0.39
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	118.43	118.43	118.43	0.41	0.41
			Vy	0.00	0.00	0.00		
S88	Fu.C.1	-	0.00 Vz	28.27	28.27	28.27	0.04	0.04
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	28.04	28.04	28.04	0.06	0.06

S89	Fu.C.1	-	Vy	0.00	0.00	0.00	0.00	0.00
			0.00 Vz	-209.82	-209.82	-209.82		
	Fu.C.2	-	Vy	0.00	0.00	0.00	0.00	0.00
			0.00 Vz	-188.11	-188.11	-188.11		
S91	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.04	-0.04
			0.00 Vz	-195.76	-195.76	-195.76		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.05	-0.05
			0.00 Vz	-174.90	-174.90	-174.90		
S92	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.04	-0.04
			0.00 Vz	14.63	14.63	14.63		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.05	-0.05
			0.00 Vz	11.46	11.46	11.46		
S93	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.05	-0.05
			0.00 Vz	-180.45	-180.45	-180.45		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.07	-0.07
			0.00 Vz	-171.54	-171.54	-171.54		
S94	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.05	-0.05
			0.00 Vz	-16.13	-16.13	-16.13		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.07	-0.07
			0.00 Vz	-18.86	-18.86	-18.86		
S95	Fu.C.1	-	Vy	0.00	0.00	0.00	0.00	0.00
			0.00 Vz	11.70	11.70	11.70		
	Fu.C.2	-	Vy	0.00	0.00	0.00	0.00	0.00
			0.00 Vz	12.47	12.47	12.47		
S96	Fu.C.1	-	Vy	0.00	0.00	0.00	0.00	0.00
			0.00 Vz	11.70	11.70	11.70		
	Fu.C.2	-	Vy	0.00	0.00	0.00	0.00	0.00
			0.00 Vz	12.47	12.47	12.47		
S97	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.09	-0.09
			0.00 Vz	-67.12	-67.12	-67.12		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.07	-0.07
			0.00 Vz	-59.53	-59.53	-59.53		
S98	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.07	-0.07
			0.00 Vz	-47.83	-47.83	-47.83		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.09	-0.09
			0.00 Vz	-39.81	-39.81	-39.81		
S99	Fu.C.1	-	Vy	0.00	0.00	0.00	0.01	0.01
			0.00 Vz	-19.29	-19.29	-19.29		
	Fu.C.2	-	Vy	0.00	0.00	0.00	0.01	0.01
			0.00 Vz	-19.72	-19.72	-19.72		
S100	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.11	-0.11
			0.00 Vz	51.42	51.42	51.42		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.11	-0.11
			0.00 Vz	52.53	52.53	52.53		
S101	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.06	-0.06
			0.00 Vz	-87.56	-87.56	-87.56		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.08	-0.08
			0.00 Vz	-90.58	-90.58	-90.58		
S102	Fu.C.1	-	Vy	0.00	0.00	0.00	-0.06	-0.06
			0.00 Vz	-87.56	-87.56	-87.56		
	Fu.C.2	-	Vy	0.00	0.00	0.00	-0.08	-0.08
			0.00 Vz	-90.58	-90.58	-90.58		
S103	Fu.C.1	-	Vy	0.00	0.00	0.00	0.02	0.02
			0.00 Vz	19.51	19.51	19.51		
Staaft	B.C.	T/D	Nmax Waarde	Vb	Vmax	Ve	Mxb	Mxe
			Vy	0.00	0.00	0.00		
			0.00 Vz	21.52	21.52	21.52	0.02	0.02
S104	Fu.C.1	-	Vy	0.00	0.00	0.00	0.02	0.02
			0.00 Vz	19.51	19.51	19.51		
	Fu.C.2	-	Vy	0.00	0.00	0.00	0.02	0.02
			0.00 Vz	21.52	21.52	21.52		
S105	Fu.C.1	-	Vy	0.00	0.00	0.00	0.03	0.03
			0.00 Vz	15.82	15.82	15.82		
	Fu.C.2	-	Vy	0.00	0.00	0.00	0.04	0.04
			0.00 Vz	12.52	12.52	12.52		
			Vy	0.00	0.00	0.00		

S106	Fu.C.1	-	0.00 Vz	-265.64	-265.64	-265.64	0.01	0.01
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-260.12	-260.12	-260.12	0.03	0.03
			Vy	0.00	0.00	0.00		
S107	Fu.C.1	-	0.00 Vz	22.99	22.99	22.99	0.01	0.01
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	22.01	22.01	22.01	0.03	0.03
			Vy	0.00	0.00	0.00		
S108	Fu.C.1	-	0.00 Vz	-121.96	-121.96	-121.96	0.05	0.05
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-126.39	-126.39	-126.39	0.05	0.05
			Vy	0.00	0.00	0.00		
S109	Fu.C.1	-	0.00 Vz	164.95	164.95	164.95	0.05	0.05
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	166.58	166.58	166.58	0.05	0.05
			Vy	0.00	0.00	0.00		
S110	Fu.C.1	-	0.00 Vz	1.32	1.32	1.32	0.00	0.00
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	2.25	2.25	2.25	0.00	0.00
			Vy	0.00	0.00	0.00		
S111	Fu.C.1	-	0.00 Vz	-57.36	-57.36	-57.36	0.02	0.02
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-47.98	-47.98	-47.98	0.02	0.02
			Vy	0.00	0.00	0.00		
S112	Fu.C.1	-	0.00 Vz	-56.04	-56.04	-56.04	0.02	0.02
			Vy	0.00	0.00	0.00		
	Fu.C.2	-	0.00 Vz	-45.73	-45.73	-45.73	0.02	0.02
			Vy	0.00	0.00	0.00		
-	-	-	kN -	kN	kN	kN	kNm	kNm

AFB. FU.C. OPLEGREACTIES OMHULLENDE

Fundamenteel Belastingcombinaties



FU.C. OPLEGREACTIES

B.C.	Oplegging	Knoop	X	Y	Z	Mx	My	Mz
Fu.C.1	O1	K37	0.00	0.00	-275.81	0.00	0.00	0.00

Fu.C.1	O2	K38	0.00	0.00	-248.41	0.00	0.00	0.00
Fu.C.1	O3	K60	0.00	0.00	-362.95	0.00	0.00	0.00
Fu.C.1	O4	K61	0.00	0.00	-221.53	0.00	0.00	0.00
Fu.C.1	O5	K62	0.00	0.00	-210.39	0.00	0.00	0.00
Fu.C.1	O6	K63	0.00	0.00	-164.32	0.00	0.00	0.00
Fu.C.1	O7	K43	0.00	0.00	-191.36	0.00	0.00	0.00
Fu.C.1	O8	K31	0.00	0.00	-220.59	0.00	0.00	0.00
Fu.C.1	O9	K30	0.00	0.00	-189.05	0.00	0.00	0.00
Fu.C.1	O10	K33	0.00	0.00	-209.09	0.00	0.00	0.00
Fu.C.1	O11	K34	0.00	0.00	-339.61	0.00	0.00	0.00
Fu.C.1	O12	K52	0.00	0.00	-378.88	0.00	0.00	0.00
Fu.C.1	O13	K49	0.00	0.00	-328.39	0.00	0.00	0.00
Fu.C.1	O14	K68	0.00	0.00	-288.64	0.00	0.00	0.00
Fu.C.1	O15	K69	0.00	0.00	-286.90	0.00	0.00	0.00
Som Reacties			0.00	0.00	-3915.93			
Som Lasten			0.00	0.00	3915.93			

Fu.C.2	O1	K37	0.00	0.00	-290.14	0.00	0.00	0.00
Fu.C.2	O2	K38	0.00	0.00	-251.22	0.00	0.00	0.00
Fu.C.2	O3	K60	0.00	0.00	-370.54	0.00	0.00	0.00
Fu.C.2	O4	K61	0.00	0.00	-200.58	0.00	0.00	0.00
Fu.C.2	O5	K62	0.00	0.00	-186.35	0.00	0.00	0.00
Fu.C.2	O6	K63	0.00	0.00	-152.67	0.00	0.00	0.00
Fu.C.2	O7	K43	0.00	0.00	-199.65	0.00	0.00	0.00
Fu.C.2	O8	K31	0.00	0.00	-233.45	0.00	0.00	0.00
Fu.C.2	O9	K30	0.00	0.00	-191.80	0.00	0.00	0.00
Fu.C.2	O10	K33	0.00	0.00	-204.34	0.00	0.00	0.00
Fu.C.2	O11	K34	0.00	0.00	-346.84	0.00	0.00	0.00
Fu.C.2	O12	K52	0.00	0.00	-366.09	0.00	0.00	0.00
Fu.C.2	O13	K49	0.00	0.00	-310.25	0.00	0.00	0.00

B.C.	Oplegging	Knoop	X	Y	Z	Mx	My	Mz
Fu.C.2	O14	K68	0.00	0.00	-282.13	0.00	0.00	0.00
Fu.C.2	O15	K69	0.00	0.00	-292.97	0.00	0.00	0.00
Som Reacties			0.00	0.00	-3879.05			
Som Lasten			0.00	0.00	3879.05			
-	-	-	kN	kN	kN	kNm	kNm	kNm

B.G. OPLEGREACTIES

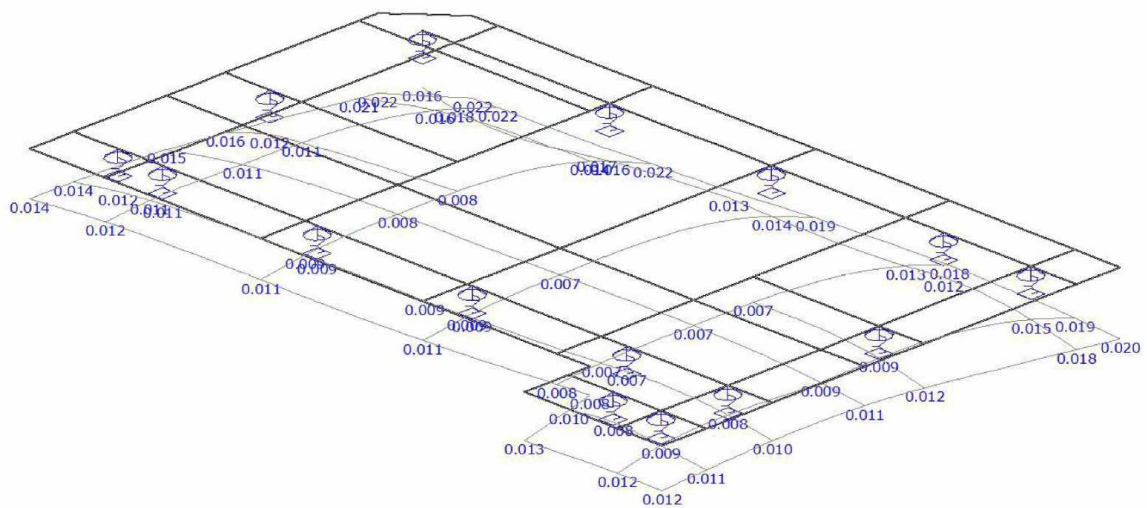
B.G.	Oplegging	Knoop	X	Y	Z	Mx	My	Mz
B.G.1	O1	K37	0.00	0.00	-214.12	0.00	0.00	0.00
B.G.1	O2	K38	0.00	0.00	-180.82	0.00	0.00	0.00
B.G.1	O3	K60	0.00	0.00	-268.35	0.00	0.00	0.00
B.G.1	O4	K61	0.00	0.00	-133.33	0.00	0.00	0.00
B.G.1	O5	K62	0.00	0.00	-121.69	0.00	0.00	0.00
B.G.1	O6	K63	0.00	0.00	-103.53	0.00	0.00	0.00
B.G.1	O7	K43	0.00	0.00	-146.59	0.00	0.00	0.00
B.G.1	O8	K31	0.00	0.00	-172.91	0.00	0.00	0.00
B.G.1	O9	K30	0.00	0.00	-138.35	0.00	0.00	0.00
B.G.1	O10	K33	0.00	0.00	-143.73	0.00	0.00	0.00
B.G.1	O11	K34	0.00	0.00	-251.25	0.00	0.00	0.00
B.G.1	O12	K52	0.00	0.00	-255.47	0.00	0.00	0.00
B.G.1	O13	K49	0.00	0.00	-213.02	0.00	0.00	0.00
B.G.1	O14	K68	0.00	0.00	-198.47	0.00	0.00	0.00
B.G.1	O15	K69	0.00	0.00	-212.20	0.00	0.00	0.00

Som Reacties			0.00	0.00	-2753.84			
Som Lasten			0.00	0.00	2753.84			
B.G.2	O1	K37	0.00	0.00	-22.66	0.00	0.00	0.00
B.G.2	O2	K38	0.00	0.00	-31.06	0.00	0.00	0.00
B.G.2	O3	K60	0.00	0.00	-41.70	0.00	0.00	0.00
B.G.2	O4	K61	0.00	0.00	-52.41	0.00	0.00	0.00
B.G.2	O5	K62	0.00	0.00	-54.15	0.00	0.00	0.00
B.G.2	O6	K63	0.00	0.00	-34.78	0.00	0.00	0.00
B.G.2	O7	K43	0.00	0.00	-17.47	0.00	0.00	0.00
B.G.2	O8	K31	0.00	0.00	-16.66	0.00	0.00	0.00
B.G.2	O9	K30	0.00	0.00	-22.98	0.00	0.00	0.00

B.G.2	O10	K33	0.00	0.00	-33.64	0.00	0.00	0.00
B.G.2	O11	K34	0.00	0.00	-38.89	0.00	0.00	0.00
B.G.2	O12	K52	0.00	0.00	-65.36	0.00	0.00	0.00
B.G.2	O13	K49	0.00	0.00	-64.08	0.00	0.00	0.00
B.G.2	O14	K68	0.00	0.00	-46.38	0.00	0.00	0.00
B.G.2	O15	K69	0.00	0.00	-32.89	0.00	0.00	0.00
Som Reacties			0.00	0.00	-575.10			
Som Lasten			0.00	0.00	575.10			
-	-	-	kN	kN	kN	kNm	kNm	kNm

AFB. KA.C. VERPLAATSINGEN OMHULLENDE

Karakteristiek Belastingscombinaties



KA.C. KNOOPVERPLAATSINGEN

Knoop	B.C.	X	Y	Z	Xr	Yr	Zr
K1	Ka.C.(w1)	0.0000	0.0000	0.0132	2.287e-03	0.124e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0135	2.077e-03	0.054e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0139	1.762e-03	-0.051e-03	0.000e-03
K2	Ka.C.(w1)	0.0000	0.0000	0.0132	2.945e-03	-0.094e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0135	2.706e-03	-0.170e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0140	2.348e-03	-0.285e-03	0.000e-03
K3	Ka.C.(w1)	0.0000	0.0000	0.0139	4.318e-03	-0.907e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0143	4.019e-03	-1.007e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0150	3.570e-03	-1.156e-03	0.000e-03
K4	Ka.C.(w1)	0.0000	0.0000	0.0151	3.515e-03	-1.671e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0157	3.264e-03	-1.805e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0165	2.886e-03	-2.006e-03	0.000e-03
K5	Ka.C.(w1)	0.0000	0.0000	0.0189	1.723e-03	-1.706e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0198	1.577e-03	-1.913e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0212	1.358e-03	-2.224e-03	0.000e-03
K6	Ka.C.(w1)	0.0000	0.0000	0.0194	1.467e-03	-1.683e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0204	1.336e-03	-1.892e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0219	1.140e-03	-2.204e-03	0.000e-03
K7	Ka.C.(w1)	0.0000	0.0000	0.0195	0.705e-03	-0.954e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0207	0.604e-03	-1.166e-03	0.000e-03

	Ka.C.2	0.0000	0.0000	0.0225	0.453e-03	-1.482e-03	0.000e-03
K8	Ka.C.(w1)	0.0000	0.0000	0.0109	1.480e-03	0.847e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0113	1.286e-03	0.775e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0121	0.996e-03	0.668e-03	0.000e-03
K9	Ka.C.(w1)	0.0000	0.0000	0.0089	3.470e-03	-0.006e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0097	3.143e-03	-0.095e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0109	2.652e-03	-0.228e-03	0.000e-03
K10	Ka.C.(w1)	0.0000	0.0000	0.0192	0.474e-03	-1.008e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0205	0.372e-03	-1.214e-03	0.000e-03
Knoop	B.C.	X	Y	Z	Xr	Yr	Zr
K10	Ka.C.2	0.0000	0.0000	0.0223	0.219e-03	-1.523e-03	0.000e-03
K11	Ka.C.(w1)	0.0000	0.0000	0.0092	0.194e-03	2.323e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0101	0.108e-03	2.248e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0113	-0.022e-03	2.136e-03	0.000e-03
K12	Ka.C.(w1)	0.0000	0.0000	0.0043	0.791e-03	0.624e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0058	0.609e-03	0.455e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0080	0.336e-03	0.202e-03	0.000e-03
K13	Ka.C.(w1)	0.0000	0.0000	0.0181	0.686e-03	-1.334e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0195	0.666e-03	-1.509e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0216	0.637e-03	-1.773e-03	0.000e-03
K14	Ka.C.(w1)	0.0000	0.0000	0.0085	0.529e-03	3.865e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0094	0.611e-03	3.787e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0107	0.732e-03	3.670e-03	0.000e-03
K15	Ka.C.(w1)	0.0000	0.0000	0.0034	0.101e-03	0.839e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0050	0.202e-03	0.667e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0073	0.353e-03	0.408e-03	0.000e-03
K16	Ka.C.(w1)	0.0000	0.0000	0.0156	0.972e-03	-1.674e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0170	1.038e-03	-1.818e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0190	1.137e-03	-2.034e-03	0.000e-03
K17	Ka.C.(w1)	0.0000	0.0000	0.0070	0.856e-03	5.137e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0076	1.018e-03	5.056e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0085	1.261e-03	4.934e-03	0.000e-03
K18	Ka.C.(w1)	0.0000	0.0000	0.0039	-0.819e-03	0.371e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0051	-0.580e-03	0.219e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0069	-0.221e-03	-0.009e-03	0.000e-03
K19	Ka.C.(w1)	0.0000	0.0000	0.0147	-0.201e-03	-1.955e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0159	-0.104e-03	-2.073e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0176	0.040e-03	-2.249e-03	0.000e-03
K20	Ka.C.(w1)	0.0000	0.0000	0.0066	0.811e-03	5.456e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0071	0.967e-03	5.374e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0078	1.202e-03	5.252e-03	0.000e-03
K21	Ka.C.(w1)	0.0000	0.0000	0.0084	0.778e-03	5.502e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0089	0.909e-03	5.422e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0096	1.106e-03	5.302e-03	0.000e-03
K22	Ka.C.(w1)	0.0000	0.0000	0.0123	0.710e-03	5.393e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0127	0.790e-03	5.317e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0133	0.910e-03	5.203e-03	0.000e-03
K23	Ka.C.(w1)	0.0000	0.0000	0.0116	-0.342e-03	1.674e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0119	-0.294e-03	1.589e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0123	-0.223e-03	1.462e-03	0.000e-03
K24	Ka.C.(w1)	0.0000	0.0000	0.0093	-1.767e-03	0.766e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0098	-1.629e-03	0.691e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0104	-1.421e-03	0.579e-03	0.000e-03
K25	Ka.C.(w1)	0.0000	0.0000	0.0093	-2.963e-03	-0.808e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0098	-2.749e-03	-0.884e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0106	-2.427e-03	-0.999e-03	0.000e-03
K26	Ka.C.(w1)	0.0000	0.0000	0.0106	-2.649e-03	-1.872e-03	0.000e-03

	Ka.C.1	0.0000	0.0000	0.0112	-2.455e-03	-1.956e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0121	-2.165e-03	-2.082e-03	0.000e-03
K27	Ka.C.(w1)	0.0000	0.0000	0.0159	-1.847e-03	-2.264e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0167	-1.706e-03	-2.343e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0178	-1.495e-03	-2.462e-03	0.000e-03
K28	Ka.C.(w1)	0.0000	0.0000	0.0174	-1.616e-03	-2.314e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0183	-1.490e-03	-2.398e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0196	-1.302e-03	-2.525e-03	0.000e-03
Knoop	B.C.	X	Y	Z	Xr	Yr	Zr
K29	Ka.C.(w1)	0.0000	0.0000	0.0115	0.084e-03	2.873e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0118	0.138e-03	2.791e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0123	0.219e-03	2.668e-03	0.000e-03
K30	Ka.C.(w1)	0.0000	0.0000	0.0069	-2.856e-03	0.443e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0074	-2.779e-03	0.268e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0081	-2.663e-03	0.005e-03	0.000e-03
K31	Ka.C.(w1)	0.0000	0.0000	0.0086	-2.711e-03	3.219e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0090	-2.728e-03	3.160e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0095	-2.754e-03	3.071e-03	0.000e-03
K32	Ka.C.(w1)	0.0000	0.0000	0.0073	-2.641e-03	-0.184e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0080	-2.396e-03	-0.243e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0090	-2.030e-03	-0.331e-03	0.000e-03
K33	Ka.C.(w1)	0.0000	0.0000	0.0072	-3.965e-03	-0.159e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0079	-3.821e-03	-0.107e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0089	-3.604e-03	-0.030e-03	0.000e-03
K34	Ka.C.(w1)	0.0000	0.0000	0.0126	-3.933e-03	-4.874e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0133	-3.932e-03	-5.074e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0145	-3.929e-03	-5.373e-03	0.000e-03
K35	Ka.C.(w1)	0.0000	0.0000	0.0163	-1.340e-03	-2.218e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0173	-1.214e-03	-2.312e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0187	-1.025e-03	-2.451e-03	0.000e-03
K36	Ka.C.(w1)	0.0000	0.0000	0.0105	-0.915e-03	1.425e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0109	-0.831e-03	1.345e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0114	-0.705e-03	1.223e-03	0.000e-03
K37	Ka.C.(w1)	0.0000	0.0000	0.0107	2.947e-03	0.790e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0112	2.708e-03	0.672e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0118	2.349e-03	0.496e-03	0.000e-03
K38	Ka.C.(w1)	0.0000	0.0000	0.0090	2.035e-03	1.548e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0097	1.806e-03	1.388e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0106	1.463e-03	1.147e-03	0.000e-03
K43	Ka.C.(w1)	0.0000	0.0000	0.0073	-0.001e-03	4.400e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0077	0.099e-03	4.330e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0082	0.248e-03	4.225e-03	0.000e-03
K45	Ka.C.(w1)	0.0000	0.0000	0.0090	2.422e-03	-0.510e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0098	2.065e-03	-0.519e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0111	1.530e-03	-0.531e-03	0.000e-03
K47	Ka.C.(w1)	0.0000	0.0000	0.0153	-2.908e-03	-5.000e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0164	-3.285e-03	-5.241e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0180	-3.850e-03	-5.603e-03	0.000e-03
K49	Ka.C.(w1)	0.0000	0.0000	0.0107	-0.626e-03	-6.447e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0119	-0.610e-03	-6.457e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0139	-0.585e-03	-6.474e-03	0.000e-03
K51	Ka.C.(w1)	0.0000	0.0000	0.0095	2.210e-03	1.422e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0100	1.974e-03	1.274e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0109	1.620e-03	1.053e-03	0.000e-03
K52	Ka.C.(w1)	0.0000	0.0000	0.0128	2.207e-03	-6.932e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0141	2.227e-03	-7.003e-03	0.000e-03

	Ka.C.2	0.0000	0.0000	0.0160	2.256e-03	-7.110e-03	0.000e-03
K53	Ka.C.(w1)	0.0000	0.0000	0.0068	0.672e-03	2.970e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0078	0.592e-03	2.663e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0094	0.473e-03	2.201e-03	0.000e-03
K54	Ka.C.(w1)	0.0000	0.0000	0.0061	0.225e-03	3.029e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0072	0.361e-03	2.666e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0088	0.565e-03	2.123e-03	0.000e-03
K55	Ka.C.(w1)	0.0000	0.0000	0.0054	0.623e-03	1.909e-03	0.000e-03
Knoop	B.C.	X	Y	Z	Xr	Yr	Zr
K55	Ka.C.1	0.0000	0.0000	0.0062	0.840e-03	1.596e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0074	1.166e-03	1.125e-03	0.000e-03
K56	Ka.C.(w1)	0.0000	0.0000	0.0140	3.181e-03	-4.302e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0149	3.094e-03	-4.492e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0164	2.963e-03	-4.778e-03	0.000e-03
K57	Ka.C.(w1)	0.0000	0.0000	0.0108	0.330e-03	-5.978e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0121	0.185e-03	-5.975e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0141	-0.033e-03	-5.972e-03	0.000e-03
K59	Ka.C.(w1)	0.0000	0.0000	0.0105	1.032e-03	-5.532e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0116	1.274e-03	-5.595e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0132	1.636e-03	-5.690e-03	0.000e-03
K60	Ka.C.(w1)	0.0000	0.0000	0.0134	-4.327e-03	-5.000e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0143	-4.791e-03	-5.241e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0155	-5.489e-03	-5.603e-03	0.000e-03
K61	Ka.C.(w1)	0.0000	0.0000	0.0067	0.641e-03	2.975e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0077	0.573e-03	2.663e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0093	0.472e-03	2.195e-03	0.000e-03
K62	Ka.C.(w1)	0.0000	0.0000	0.0061	0.231e-03	2.990e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0072	0.366e-03	2.629e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0088	0.568e-03	2.088e-03	0.000e-03
K63	Ka.C.(w1)	0.0000	0.0000	0.0052	0.407e-03	1.612e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0059	0.630e-03	1.326e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0069	0.966e-03	0.898e-03	0.000e-03
K64	Ka.C.(w1)	0.0000	0.0000	0.0062	0.134e-03	3.013e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0074	0.267e-03	2.665e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0092	0.467e-03	2.144e-03	0.000e-03
K65	Ka.C.(w1)	0.0000	0.0000	0.0039	-0.475e-03	-0.492e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0052	-0.122e-03	-0.445e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0070	0.407e-03	-0.374e-03	0.000e-03
K66	Ka.C.(w1)	0.0000	0.0000	0.0133	2.427e-03	-6.767e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0146	2.447e-03	-6.852e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0165	2.478e-03	-6.981e-03	0.000e-03
K67	Ka.C.(w1)	0.0000	0.0000	0.0102	-0.786e-03	-6.576e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0114	-0.772e-03	-6.602e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0134	-0.750e-03	-6.643e-03	0.000e-03
K68	Ka.C.(w1)	0.0000	0.0000	0.0099	0.313e-03	-5.332e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0109	0.551e-03	-5.437e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0122	0.908e-03	-5.594e-03	0.000e-03
K69	Ka.C.(w1)	0.0000	0.0000	0.0106	4.580e-03	-0.994e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0113	4.303e-03	-1.055e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0123	3.888e-03	-1.146e-03	0.000e-03
K70	Ka.C.(w1)	0.0000	0.0000	0.0043	0.648e-03	-0.725e-03	0.000e-03
	Ka.C.1	0.0000	0.0000	0.0058	0.478e-03	-0.662e-03	0.000e-03
	Ka.C.2	0.0000	0.0000	0.0081	0.222e-03	-0.568e-03	0.000e-03
-	-	m	m	m	rad	rad	rad

KA.C. DOORBUIGINGEN

Staaf **B.C.** **Knoop Begin** **Staaf** **Knoop Eind**

					Z'afst	Z'	Z' glb dist	Z' glb	Y'afst	Y'	Y' glb dist	Y' glb	
S1 0,000	Ka.C.(w1) 0,000	0,000 0,013	0,000	0,013	0.390	0.0000	0.000	0.0132	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,014	0,000	0,013	0.390	0.0000	0.700	0.0135	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,014	0,000	0,014	0.391	0.0000	0.700	0.0140	0.000	0.0000	0.000	0.0000	
S10 0,000	Ka.C.(w1) 0,000	0,000 0,015	0,000	0,016	1.107	-0.0003	0.000	0.0156	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,016	0,000	0,017	1.110	-0.0002	0.000	0.0170	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,018	0,000	0,019	1.115	-0.0002	0.000	0.0190	0.000	0.0000	0.000	0.0000	
S100 0,000	Ka.C.(w1) 0,000	0,000 0,011	0,000	0,007	0.304	-0.0001	0.720	0.0106	0.000	0.0000	0.000	0.0000	
Staaft	B.C.	Knoop Begin				Z'afst	Z'	Z' glb dist	Z' glb	Y'afst	Y'	Y' glb dist	Y' glb
S100 0,000	Ka.C.1	0,000 0,011	0,000	0,008	0.304	-0.0001	0.720	0.0112	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,012	0,000	0,009	0.304	-0.0001	0.720	0.0121	0.000	0.0000	0.000	0.0000	
S101 0,000	Ka.C.(w1) 0,000	0,000 0,013	0,000	0,015	0.902	0.0016	0.627	0.0162	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,015	0,000	0,016	0.906	0.0017	0.675	0.0174	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,017	0,000	0,018	0.910	0.0018	0.740	0.0193	0.000	0.0000	0.000	0.0000	
S102 0,000	Ka.C.(w1) 0,000	0,000 0,013	0,000	0,013	0.110	0.0000	0.000	0.0133	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,014	0,000	0,015	0.110	0.0000	0.000	0.0146	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,016	0,000	0,017	0.110	0.0000	0.000	0.0165	0.000	0.0000	0.000	0.0000	
S103 0,000	Ka.C.(w1) 0,000	0,000 0,010	0,000	0,013	0.795	-0.0003	0.000	0.0128	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,011	0,000	0,014	0.795	-0.0003	0.000	0.0141	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,013	0,000	0,016	0.795	-0.0003	0.000	0.0160	0.000	0.0000	0.000	0.0000	
S104 0,000	Ka.C.(w1) 0,000	0,000 0,011	0,000	0,010	0.393	0.0000	0.680	0.0107	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,012	0,000	0,011	0.393	0.0000	0.680	0.0119	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,014	0,000	0,013	0.393	0.0000	0.680	0.0139	0.000	0.0000	0.000	0.0000	
S105 0,000	Ka.C.(w1) 0,000	0,000 0,010	0,000	0,011	1.128	0.0004	1.017	0.0110	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,012	0,000	0,012	1.138	0.0005	0.934	0.0122	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,013	0,000	0,014	1.150	0.0006	0.834	0.0141	0.000	0.0000	0.000	0.0000	
S106 0,000	Ka.C.(w1) 0,000	0,000 0,010	0,000	0,010	0.378	-0.0001	0.000	0.0105	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,011	0,000	0,012	0.382	-0.0001	0.000	0.0116	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,012	0,000	0,013	0.388	-0.0001	0.000	0.0132	0.000	0.0000	0.000	0.0000	
S107 0,000	Ka.C.(w1) 0,000	0,000 0,013	0,000	0,010	0.673	-0.0007	1.380	0.0126	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.1	0,000 0,013	0,000	0,011	0.673	-0.0008	1.380	0.0133	0.000	0.0000	0.000	0.0000	
0,000	Ka.C.2	0,000 0,012	0,000	0,012	0.671	-0.0008	1.380	0.0145	0.000	0.0000	0.000	0.0000	

0,000	0,000	0,015										
S108	Ka.C.(w1)	0,000	0,000	0,015	0.404	-0.0003	0.000	0.0151	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,016	0.404	-0.0003	0.000	0.0157	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.2	0,000	0,000	0,016	0.404	-0.0003	0.000	0.0165	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
S109	Ka.C.(w1)	0,000	0,000	0,011	0.216	-0.0001	0.000	0.0106	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,011	0.215	-0.0001	0.000	0.0113	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,012	0.214	-0.0002	0.000	0.0123	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S11	Ka.C.(w1)	0,000	0,000	0,015	0.934	-0.0002	1.980	0.0163	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
	Ka.C.1	0,000	0,000	0,016	0.929	-0.0002	1.980	0.0173	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
	Ka.C.2	0,000	0,000	0,018	0.920	-0.0002	1.980	0.0187	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
S110	Ka.C.(w1)	0,000	0,000	0,009	1.035	-0.0002	0.000	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,004										
	Ka.C.1	0,000	0,000	0,010	1.035	-0.0002	0.000	0.0098	0.000	0.0000	0.000	0.0000
0,000	0,000	0,006										
	Ka.C.2	0,000	0,000	0,011	1.035	-0.0001	0.000	0.0111	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S111	Ka.C.(w1)	0,000	0,000	0,004	0.489	-0.0002	0.000	0.0043	0.000	0.0000	0.000	0.0000
0,000	0,000	0,004										
	Ka.C.1	0,000	0,000	0,006	0.498	-0.0001	0.940	0.0058	0.000	0.0000	0.000	0.0000
0,000	0,000	0,006										
	Ka.C.2	0,000	0,000	0,008	0.521	-0.0001	0.940	0.0081	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S112	Ka.C.(w1)	0,000	0,000	0,004	1.100	-0.0014	2.100	0.0108	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,006	1.112	-0.0014	2.100	0.0121	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
	Ka.C.2	0,000	0,000	0,008	1.130	-0.0014	2.100	0.0141	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
S12	Ka.C.(w1)	0,000	0,000	0,016	0.000	0.0000	0.720	0.0174	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
	Ka.C.1	0,000	0,000	0,017	0.000	0.0000	0.720	0.0183	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
	Ka.C.2	0,000	0,000	0,019	0.000	0.0000	0.720	0.0196	0.000	0.0000	0.000	0.0000
0,000	0,000	0,020										
S13	Ka.C.(w1)	0,000	0,000	0,013	0.682	-0.0001	0.000	0.0132	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,013	0.684	-0.0001	0.000	0.0135	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.2	0,000	0,000	0,014	0.688	-0.0001	0.000	0.0139	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
S14	Ka.C.(w1)	0,000	0,000	0,011	1.006	-0.0003	0.000	0.0109	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,011	0.967	-0.0003	0.000	0.0113	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,012	0.893	-0.0002	0.000	0.0121	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S15	Ka.C.(w1)	0,000	0,000	0,009	1.413	0.0002	0.000	0.0092	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,010	1.392	0.0003	0.000	0.0101	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.2	0,000	0,000	0,011	1.371	0.0003	0.839	0.0114	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S16	Ka.C.(w1)	0,000	0,000	0,009	1.019	0.0001	0.000	0.0085	0.000	0.0000	0.000	0.0000

0,000	0,000	0,007										
	Ka.C.1	0,000	0,000	0,009	1.012	0.0001	0.000	0.0094	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
	Ka.C.2	0,000	0,000	0,011	1.004	0.0002	0.000	0.0107	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S17	Ka.C.(w1)	0,000	0,000	0,007	0.222	0.0000	0.000	0.0070	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
	Ka.C.1	0,000	0,000	0,008	0.229	0.0000	0.000	0.0076	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
	Ka.C.2	0,000	0,000	0,008	0.237	0.0000	0.000	0.0085	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										

Staaf	B.C.	Knoop Begin				Staaf					Knoop Eind	
		Z'afst	Z'	Z' glb dist	Z' glb	Y'afst	Y'	Y' glb dist	Y' glb			
S18	Ka.C.(w1)	0,000	0,000	0,012	0.270	0.0000	0.000	0.0123	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
	Ka.C.1	0,000	0,000	0,013	0.267	0.0000	0.000	0.0127	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.2	0,000	0,000	0,013	0.262	0.0000	0.000	0.0133	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
S19	Ka.C.(w1)	0,000	0,000	0,008	0.170	0.0000	0.000	0.0084	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
	Ka.C.1	0,000	0,000	0,009	0.168	0.0000	0.000	0.0089	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
	Ka.C.2	0,000	0,000	0,010	0.167	0.0000	0.000	0.0096	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S2	Ka.C.(w1)	0,000	0,000	0,013	0.771	-0.0001	1.460	0.0139	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
	Ka.C.1	0,000	0,000	0,014	0.769	-0.0001	1.460	0.0143	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
	Ka.C.2	0,000	0,000	0,014	0.766	-0.0001	1.460	0.0150	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
S20	Ka.C.(w1)	0,000	0,000	0,012	0.891	-0.0001	0.000	0.0123	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,013	0.889	-0.0001	0.000	0.0127	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
	Ka.C.2	0,000	0,000	0,013	0.884	-0.0001	0.000	0.0133	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
S21	Ka.C.(w1)	0,000	0,000	0,011	0.308	0.0000	0.700	0.0116	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
	Ka.C.1	0,000	0,000	0,012	0.307	0.0000	0.700	0.0119	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
	Ka.C.2	0,000	0,000	0,012	0.305	0.0000	0.700	0.0123	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
S22	Ka.C.(w1)	0,000	0,000	0,012	0.347	0.0000	0.000	0.0116	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,012	0.346	0.0000	0.000	0.0119	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.2	0,000	0,000	0,012	0.345	0.0000	0.000	0.0123	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S23	Ka.C.(w1)	0,000	0,000	0,011	0.566	-0.0001	0.000	0.0105	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,011	0.568	-0.0001	0.000	0.0109	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,011	0.570	-0.0001	0.000	0.0114	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
S24	Ka.C.(w1)	0,000	0,000	0,009	0.751	-0.0003	0.000	0.0093	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,010	0.752	-0.0003	1.460	0.0098	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,010	0.752	-0.0003	1.460	0.0106	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										

S25	Ka.C.(w1)	0,000	0,000	0,009	0.441	-0.0001	0.940	0.0106	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,010	0.441	-0.0001	0.940	0.0112	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.2	0,000	0,000	0,011	0.441	-0.0001	0.940	0.0121	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
S26	Ka.C.(w1)	0,000	0,000	0,011	0.000	0.0000	2.400	0.0159	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
	Ka.C.1	0,000	0,000	0,011	2.384	0.0000	2.400	0.0167	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
	Ka.C.2	0,000	0,000	0,012	2.367	0.0000	2.400	0.0178	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
S27	Ka.C.(w1)	0,000	0,000	0,016	0.248	0.0000	0.690	0.0174	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
	Ka.C.1	0,000	0,000	0,017	0.252	0.0000	0.690	0.0183	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
	Ka.C.2	0,000	0,000	0,018	0.257	0.0000	0.690	0.0196	0.000	0.0000	0.000	0.0000
0,000	0,000	0,020										
S28	Ka.C.(w1)	0,000	0,000	0,011	0.404	-0.0001	0.000	0.0109	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,011	0.404	-0.0001	0.000	0.0113	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,012	0.404	-0.0001	0.000	0.0121	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S29	Ka.C.(w1)	0,000	0,000	0,009	0.578	-0.0003	0.000	0.0095	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,010	0.561	-0.0003	0.000	0.0100	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,011	0.537	-0.0003	1.460	0.0109	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S3	Ka.C.(w1)	0,000	0,000	0,014	0.452	-0.0001	0.940	0.0151	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
	Ka.C.1	0,000	0,000	0,014	0.455	-0.0001	0.940	0.0157	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
	Ka.C.2	0,000	0,000	0,015	0.459	-0.0001	0.940	0.0165	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
S30	Ka.C.(w1)	0,000	0,000	0,009	0.597	-0.0001	0.940	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,010	0.619	-0.0001	0.940	0.0098	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,011	0.653	0.0000	0.940	0.0111	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S32	Ka.C.(w1)	0,000	0,000	0,015	0.292	-0.0001	0.690	0.0192	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
	Ka.C.1	0,000	0,000	0,016	0.292	-0.0001	0.690	0.0205	0.000	0.0000	0.000	0.0000
0,000	0,000	0,020										
	Ka.C.2	0,000	0,000	0,018	0.292	-0.0001	0.690	0.0223	0.000	0.0000	0.000	0.0000
0,000	0,000	0,022										
S37	Ka.C.(w1)	0,000	0,000	0,003	1.812	-0.0031	3.340	0.0107	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,005	1.853	-0.0030	3.340	0.0119	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
	Ka.C.2	0,000	0,000	0,007	1.914	-0.0029	3.340	0.0139	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
S38	Ka.C.(w1)	0,000	0,000	0,011	0.292	-0.0001	0.690	0.0156	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
	Ka.C.1	0,000	0,000	0,012	0.292	-0.0001	0.690	0.0170	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
	Ka.C.2	0,000	0,000	0,014	0.292	-0.0001	0.690	0.0190	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
S4	Ka.C.(w1)	0,000	0,000	0,015	1.376	0.0000	2.100	0.0189	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										

0,000	Ka.C.1	0,000	0,000	0,016	1.453	0.0000	2.100	0.0198	0.000	0.0000	0.000	0.0000
0,000	0,000	0,020										
0,000	Ka.C.2	0,000	0,000	0,016	0.430	0.0000	2.100	0.0212	0.000	0.0000	0.000	0.0000
0,000	0,000	0,021										
S41	Ka.C.(w1)	0,000	0,000	0,008	0.404	-0.0002	0.000	0.0084	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,009	0.404	-0.0002	0.000	0.0089	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
Staatf	B.C.	Knoop Begin				Staatf				Knoop Eind		
				Z'afst	Z'	Z' glb	Z' glb	Y'afst	Y'	Y' glb	Y' glb	
						dist				dist		
S41	Ka.C.2	0,000	0,000	0,010	0.404	-0.0002	0.000	0.0096	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S42	Ka.C.(w1)	0,000	0,000	0,007	0.323	-0.0003	0.750	0.0086	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
0,000	Ka.C.1	0,000	0,000	0,008	0.323	-0.0003	0.750	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
0,000	Ka.C.2	0,000	0,000	0,008	0.322	-0.0003	0.750	0.0095	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
S43	Ka.C.(w1)	0,000	0,000	0,009	0.304	0.0000	0.720	0.0105	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
0,000	Ka.C.1	0,000	0,000	0,009	0.304	0.0000	0.720	0.0109	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
0,000	Ka.C.2	0,000	0,000	0,009	0.304	0.0000	0.720	0.0114	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S44	Ka.C.(w1)	0,000	0,000	0,011	0.404	-0.0001	0.000	0.0115	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
0,000	Ka.C.1	0,000	0,000	0,012	0.404	-0.0001	0.000	0.0118	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
0,000	Ka.C.2	0,000	0,000	0,012	0.404	-0.0001	0.000	0.0123	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
S45	Ka.C.(w1)	0,000	0,000	0,009	0.499	-0.0004	0.000	0.0086	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,009	0.498	-0.0004	0.000	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.2	0,000	0,000	0,009	0.498	-0.0004	0.000	0.0095	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S46	Ka.C.(w1)	0,000	0,000	0,007	0.463	-0.0001	1.460	0.0073	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,007	0.431	-0.0001	1.460	0.0080	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
0,000	Ka.C.2	0,000	0,000	0,008	0.385	-0.0001	1.460	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
S47	Ka.C.(w1)	0,000	0,000	0,007	0.218	0.0000	0.103	0.0073	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,008	0.249	0.0000	0.132	0.0080	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
0,000	Ka.C.2	0,000	0,000	0,009	0.280	0.0001	0.163	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
S48	Ka.C.(w1)	0,000	0,000	0,007	1.270	-0.0014	2.400	0.0126	0.000	0.0000	0.000	0.0000
0,000	0,000	0,013										
0,000	Ka.C.1	0,000	0,000	0,008	1.273	-0.0015	2.400	0.0133	0.000	0.0000	0.000	0.0000
0,000	0,000	0,013										
0,000	Ka.C.2	0,000	0,000	0,009	1.278	-0.0016	2.400	0.0145	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
S49	Ka.C.(w1)	0,000	0,000	0,013	0.292	-0.0001	0.690	0.0163	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
0,000	Ka.C.1	0,000	0,000	0,013	0.292	-0.0001	0.690	0.0173	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
0,000	Ka.C.2	0,000	0,000	0,015	0.292	-0.0001	0.690	0.0187	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
S5	Ka.C.(w1)	0,000	0,000	0,019	0.000	0.0000	0.300	0.0194	0.000	0.0000	0.000	0.0000

0,000	0,000	0,019										
	Ka.C.1	0,000	0,000	0,020	0,000	0,0000	0,300	0,0204	0,000	0,0000	0,000	0,0000
0,000	0,000	0,020										
	Ka.C.2	0,000	0,000	0,021	0,000	0,0000	0,300	0,0219	0,000	0,0000	0,000	0,0000
0,000	0,000	0,022										
S50	Ka.C.(w1)	0,000	0,000	0,013	0,404	-0,0001	0,000	0,0132	0,000	0,0000	0,000	0,0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,014	0,404	-0,0001	0,000	0,0135	0,000	0,0000	0,000	0,0000
0,000	0,000	0,011										
	Ka.C.2	0,000	0,000	0,014	0,404	-0,0001	0,000	0,0140	0,000	0,0000	0,000	0,0000
0,000	0,000	0,012										
S51	Ka.C.(w1)	0,000	0,000	0,011	0,216	0,0000	0,000	0,0107	0,000	0,0000	0,000	0,0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,011	0,214	0,0000	0,000	0,0112	0,000	0,0000	0,000	0,0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,012	0,211	0,0000	0,000	0,0118	0,000	0,0000	0,000	0,0000
0,000	0,000	0,011										
S52	Ka.C.1	0,000	0,000	0,010	0,114	0,0000	0,000	0,0100	0,000	0,0000	0,000	0,0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,011	0,116	0,0000	0,000	0,0109	0,000	0,0000	0,000	0,0000
0,000	0,000	0,011										
	Ka.C.(w1)	0,000	0,000	0,009	0,112	0,0000	0,000	0,0095	0,000	0,0000	0,000	0,0000
0,000	0,000	0,009										
S54	Ka.C.(w1)	0,000	0,000	0,009	0,404	-0,0001	0,000	0,0092	0,000	0,0000	0,000	0,0000
0,000	0,000	0,007										
	Ka.C.1	0,000	0,000	0,010	0,404	-0,0001	0,000	0,0101	0,000	0,0000	0,000	0,0000
0,000	0,000	0,008										
	Ka.C.2	0,000	0,000	0,011	0,404	-0,0001	0,000	0,0113	0,000	0,0000	0,000	0,0000
0,000	0,000	0,009										
S55	Ka.C.(w1)	0,000	0,000	0,007	0,696	-0,0004	0,000	0,0068	0,000	0,0000	0,000	0,0000
0,000	0,000	0,004										
	Ka.C.1	0,000	0,000	0,008	0,675	-0,0004	0,000	0,0078	0,000	0,0000	0,000	0,0000
0,000	0,000	0,006										
	Ka.C.2	0,000	0,000	0,009	0,640	-0,0004	0,000	0,0094	0,000	0,0000	0,000	0,0000
0,000	0,000	0,008										
S56	Ka.C.(w1)	0,000	0,000	0,009	0,404	-0,0001	0,000	0,0085	0,000	0,0000	0,000	0,0000
0,000	0,000	0,006										
	Ka.C.1	0,000	0,000	0,009	0,404	-0,0001	0,000	0,0094	0,000	0,0000	0,000	0,0000
0,000	0,000	0,007										
	Ka.C.2	0,000	0,000	0,011	0,404	-0,0001	0,000	0,0107	0,000	0,0000	0,000	0,0000
0,000	0,000	0,009										
S57	Ka.C.(w1)	0,000	0,000	0,006	0,703	-0,0004	0,000	0,0061	0,000	0,0000	0,000	0,0000
0,000	0,000	0,003										
	Ka.C.1	0,000	0,000	0,007	0,680	-0,0004	0,000	0,0072	0,000	0,0000	0,000	0,0000
0,000	0,000	0,005										
	Ka.C.2	0,000	0,000	0,009	0,638	-0,0003	0,000	0,0088	0,000	0,0000	0,000	0,0000
0,000	0,000	0,007										
S58	Ka.C.(w1)	0,000	0,000	0,007	0,404	-0,0001	0,000	0,0070	0,000	0,0000	0,000	0,0000
0,000	0,000	0,005										
	Ka.C.1	0,000	0,000	0,008	0,404	-0,0001	0,000	0,0076	0,000	0,0000	0,000	0,0000
0,000	0,000	0,006										
	Ka.C.2	0,000	0,000	0,008	0,404	-0,0001	0,000	0,0085	0,000	0,0000	0,000	0,0000
0,000	0,000	0,007										
S59	Ka.C.(w1)	0,000	0,000	0,005	0,666	-0,0003	0,000	0,0054	0,000	0,0000	0,000	0,0000
0,000	0,000	0,004										
	Ka.C.1	0,000	0,000	0,006	0,637	-0,0003	0,000	0,0062	0,000	0,0000	0,000	0,0000
0,000	0,000	0,005										
	Ka.C.2	0,000	0,000	0,007	0,584	-0,0002	0,000	0,0074	0,000	0,0000	0,000	0,0000
0,000	0,000	0,007										
S6	Ka.C.(w1)	0,000	0,000	0,019	0,685	0,0000	1,056	0,0195	0,000	0,0000	0,000	0,0000
0,000	0,000	0,019										
	Ka.C.1	0,000	0,000	0,020	0,728	0,0000	1,056	0,0207	0,000	0,0000	0,000	0,0000

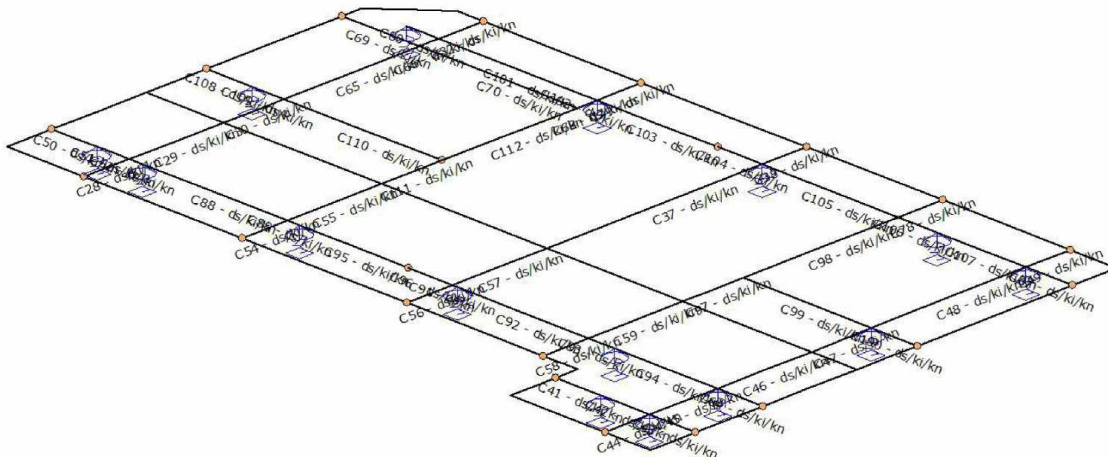
0,000	0,000	0,021										
	Ka.C.2	0,000	0,000	0,022	0.812	0.0000	1.056	0.0225	0.000	0.0000	0.000	0.0000
0,000	0,000	0,022										
S64	Ka.C.(w1)	0,000	0,000	0,007	0.296	-0.0001	0.700	0.0093	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
Staaft	B.C.	Knoop Begin			Z'afst	Z'	Z' glb dist	Staaft			Knoop Eind	
S64	Ka.C.1	0,000	0,000	0,007	0.296	-0.0001	0.700	0.0098	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,008	0.296	-0.0001	0.700	0.0104	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
S65	Ka.C.(w1)	0,000	0,000	0,009	1.065	-0.0010	2.100	0.0140	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
	Ka.C.1	0,000	0,000	0,010	1.070	-0.0010	2.100	0.0149	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
	Ka.C.2	0,000	0,000	0,011	1.077	-0.0011	2.100	0.0164	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
S66	Ka.C.(w1)	0,000	0,000	0,014	0.154	0.0000	0.300	0.0153	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
	Ka.C.1	0,000	0,000	0,015	0.154	0.0000	0.300	0.0164	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
	Ka.C.2	0,000	0,000	0,016	0.154	0.0000	0.300	0.0180	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
S68	Ka.C.(w1)	0,000	0,000	0,011	0.150	0.0000	0.300	0.0128	0.000	0.0000	0.000	0.0000
0,000	0,000	0,013										
	Ka.C.1	0,000	0,000	0,012	0.150	0.0000	0.300	0.0141	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
	Ka.C.2	0,000	0,000	0,014	0.150	0.0000	0.300	0.0160	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
S69	Ka.C.(w1)	0,000	0,000	0,019	0.693	-0.0002	0.000	0.0189	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
	Ka.C.1	0,000	0,000	0,020	0.693	-0.0002	0.000	0.0198	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
	Ka.C.2	0,000	0,000	0,021	0.693	-0.0002	0.000	0.0212	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
S7	Ka.C.(w1)	0,000	0,000	0,019	0.212	0.0000	0.000	0.0195	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
	Ka.C.1	0,000	0,000	0,021	0.213	0.0000	0.000	0.0207	0.000	0.0000	0.000	0.0000
0,000	0,000	0,020										
	Ka.C.2	0,000	0,000	0,022	0.214	0.0000	0.000	0.0225	0.000	0.0000	0.000	0.0000
0,000	0,000	0,022										
S70	Ka.C.(w1)	0,000	0,000	0,014	1.033	-0.0009	0.000	0.0140	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
	Ka.C.1	0,000	0,000	0,015	1.033	-0.0009	0.000	0.0149	0.000	0.0000	0.000	0.0000
0,000	0,000	0,012										
	Ka.C.2	0,000	0,000	0,016	1.033	-0.0009	0.000	0.0164	0.000	0.0000	0.000	0.0000
0,000	0,000	0,014										
S71	Ka.C.(w1)	0,000	0,000	0,014	0.744	-0.0001	0.000	0.0139	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
	Ka.C.1	0,000	0,000	0,014	0.743	-0.0001	0.000	0.0143	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
	Ka.C.2	0,000	0,000	0,015	0.742	-0.0001	0.000	0.0150	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S72	Ka.C.(w1)	0,000	0,000	0,009	1.101	-0.0008	0.000	0.0089	0.000	0.0000	0.000	0.0000
0,000	0,000	0,004										
	Ka.C.1	0,000	0,000	0,010	1.079	-0.0007	0.000	0.0097	0.000	0.0000	0.000	0.0000
0,000	0,000	0,006										
	Ka.C.2	0,000	0,000	0,011	1.038	-0.0006	0.000	0.0109	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
S73	Ka.C.(w1)	0,000	0,000	0,004	1.039	-0.0002	0.000	0.0043	0.000	0.0000	0.000	0.0000
0,000	0,000	0,003										

0,000	Ka.C.1	0,000	0,000	0,006	2.330	0.0000	0.000	0.0058	0.000	0.0000	0.000	0.0000
0,000	0,000	0,005										
0,000	Ka.C.2	0,000	0,000	0,008	1.443	0.0001	0.000	0.0080	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
S74	Ka.C.(w1)	0,000	0,000	0,003	1.186	-0.0002	2.110	0.0039	0.000	0.0000	0.000	0.0000
0,000	0,000	0,004										
0,000	Ka.C.1	0,000	0,000	0,005	1.233	-0.0002	2.110	0.0051	0.000	0.0000	0.000	0.0000
0,000	0,000	0,005										
0,000	Ka.C.2	0,000	0,000	0,007	1.362	-0.0001	0.000	0.0073	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
S75	Ka.C.(w1)	0,000	0,000	0,004	1.036	-0.0004	2.000	0.0073	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,005	1.046	-0.0004	2.000	0.0080	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
0,000	Ka.C.2	0,000	0,000	0,007	1.061	-0.0004	2.000	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
S76	Ka.C.(w1)	0,000	0,000	0,007	0.269	0.0000	0.700	0.0093	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
0,000	Ka.C.1	0,000	0,000	0,008	0.272	0.0000	0.700	0.0098	0.000	0.0000	0.000	0.0000
0,000	0,000	0,010										
0,000	Ka.C.2	0,000	0,000	0,009	0.275	0.0000	0.700	0.0106	0.000	0.0000	0.000	0.0000
0,000	0,000	0,011										
S78	Ka.C.(w1)	0,000	0,000	0,010	0.292	-0.0001	0.690	0.0147	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
0,000	Ka.C.1	0,000	0,000	0,012	0.292	-0.0001	0.690	0.0159	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
0,000	Ka.C.2	0,000	0,000	0,013	0.292	-0.0001	0.690	0.0176	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
S79	Ka.C.(w1)	0,000	0,000	0,013	0.292	-0.0001	0.690	0.0181	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
0,000	Ka.C.1	0,000	0,000	0,014	0.292	-0.0001	0.690	0.0195	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
0,000	Ka.C.2	0,000	0,000	0,016	0.292	-0.0001	0.690	0.0216	0.000	0.0000	0.000	0.0000
0,000	0,000	0,022										
S8	Ka.C.(w1)	0,000	0,000	0,019	1.353	0.0002	0.000	0.0192	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
0,000	Ka.C.1	0,000	0,000	0,020	1.338	0.0002	0.000	0.0205	0.000	0.0000	0.000	0.0000
0,000	0,000	0,019										
0,000	Ka.C.2	0,000	0,000	0,022	1.322	0.0003	0.000	0.0223	0.000	0.0000	0.000	0.0000
0,000	0,000	0,022										
S80	Ka.C.(w1)	0,000	0,000	0,013	0.289	0.0001	0.500	0.0153	0.000	0.0000	0.000	0.0000
0,000	0,000	0,015										
0,000	Ka.C.1	0,000	0,000	0,014	0.289	0.0001	0.500	0.0164	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
0,000	Ka.C.2	0,000	0,000	0,016	0.289	0.0001	0.500	0.0180	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
S87	Ka.C.(w1)	0,000	0,000	0,013	0.304	-0.0001	0.720	0.0159	0.000	0.0000	0.000	0.0000
0,000	0,000	0,016										
0,000	Ka.C.1	0,000	0,000	0,013	0.304	-0.0001	0.720	0.0167	0.000	0.0000	0.000	0.0000
0,000	0,000	0,017										
0,000	Ka.C.2	0,000	0,000	0,015	0.304	-0.0001	0.720	0.0178	0.000	0.0000	0.000	0.0000
0,000	0,000	0,018										
S88	Ka.C.(w1)	0,000	0,000	0,009	0.875	-0.0004	0.000	0.0090	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,010	0.838	-0.0004	0.000	0.0097	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										
0,000	Ka.C.2	0,000	0,000	0,011	0.777	-0.0003	0.000	0.0106	0.000	0.0000	0.000	0.0000
0,000	0,000	0,009										
S89	Ka.C.(w1)	0,000	0,000	0,007	0.000	0.0000	0.000	0.0068	0.000	0.0000	0.000	0.0000
0,000	0,000	0,007										
0,000	Ka.C.1	0,000	0,000	0,008	0.000	0.0000	0.000	0.0078	0.000	0.0000	0.000	0.0000
0,000	0,000	0,008										

Staat	B.C.	Knoop Begin				Staat						Knoop Eind	
		Z'afst	Z'	Z' glb	Z' glb	Y'afst	Y'	Y' glb	Y' glb	dist	dist	Y' glb	
0,000	Ka.C.2 0,000	0,000	0,000	0,009	0,000	0,0000	0,000	0,0094	0,000	0,0000	0,000	0,0000	
		0,009											
S9 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,018	1.150	0.0002	0,000	0,0181	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,019	1.162	0.0003	0,000	0,0195	0,000	0,0000	0,000	0,0000	
0,000		0,017											
	Ka.C.2 0,000	0,000	0,000	0,022	1.175	0.0003	0,000	0,0216	0,000	0,0000	0,000	0,0000	
0,000		0,019											
S91 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,006	0,000	0.0000	0,000	0,0061	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,007	0,000	0.0000	0,000	0,0072	0,000	0,0000	0,000	0,0000	
0,000		0,007											
	Ka.C.2 0,000	0,000	0,000	0,009	0,000	0.0000	0,000	0,0088	0,000	0,0000	0,000	0,0000	
0,000		0,009											
S92 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,006	1.236	0.0001	0,000	0,0061	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,007	1.251	0.0001	0,000	0,0072	0,000	0,0000	0,000	0,0000	
0,000		0,006											
	Ka.C.2 0,000	0,000	0,000	0,009	1.264	0.0002	0,000	0,0088	0,000	0,0000	0,000	0,0000	
0,000		0,007											
S93 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,005	0.255	0.0000	0,000	0,0054	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,006	0.260	0.0000	0,000	0,0062	0,000	0,0000	0,000	0,0000	
0,000		0,006											
	Ka.C.2 0,000	0,000	0,000	0,007	0.266	0.0000	0,000	0,0074	0,000	0,0000	0,000	0,0000	
0,000		0,007											
S94 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,005	0.829	-0.0007	1.594	0,0069	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,006	0.827	-0.0007	1.594	0,0074	0,000	0,0000	0,000	0,0000	
0,000		0,007											
	Ka.C.2 0,000	0,000	0,000	0,007	0.825	-0.0007	1.594	0,0081	0,000	0,0000	0,000	0,0000	
0,000		0,008											
S95 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,007	0.713	-0.0001	0,000	0,0067	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,008	0.713	-0.0001	0,000	0,0077	0,000	0,0000	0,000	0,0000	
0,000		0,007											
	Ka.C.2 0,000	0,000	0,000	0,009	0.713	-0.0001	0,000	0,0093	0,000	0,0000	0,000	0,0000	
0,000		0,009											
S96 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,006	0.393	0.0000	0,000	0,0062	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,007	0.393	0.0000	0,000	0,0074	0,000	0,0000	0,000	0,0000	
0,000		0,007											
	Ka.C.2 0,000	0,000	0,000	0,009	0.393	0.0000	0,000	0,0092	0,000	0,0000	0,000	0,0000	
0,000		0,009											
S97 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,004	0.508	-0.0001	0,000	0,0039	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,005	0.526	-0.0001	0.940	0,0052	0,000	0,0000	0,000	0,0000	
0,000		0,005											
	Ka.C.2 0,000	0,000	0,000	0,007	0.580	0.0000	0.940	0,0070	0,000	0,0000	0,000	0,0000	
0,000		0,007											
S98 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,004	1.269	-0.0015	2.400	0,0105	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,005	1.283	-0.0016	2.400	0,0116	0,000	0,0000	0,000	0,0000	
0,000		0,012											
	Ka.C.2 0,000	0,000	0,000	0,007	1.304	-0.0016	2.400	0,0132	0,000	0,0000	0,000	0,0000	
0,000		0,013											
S99 0,000	Ka.C.(w1) 0,000	0,000	0,000	0,004	1.143	-0.0009	1.980	0,0072	0,000	0,0000	0,000	0,0000	
	Ka.C.1 0,000	0,000	0,000	0,005	1.143	-0.0009	1.980	0,0079	0,000	0,0000	0,000	0,0000	

0,000	0,000	0,008											
	Ka.C.2	0,000	0,000	0,007	1.143	-0.0010	1.980	0.0089	0.000	0.0000	0.000	0.0000	
0,000	0,000	0,009											
-	-	m	m	m	m	m	m	m	m	m	m	m	m
m	m	m											

AFB. STAALCONTROLE



SAMENSTELLING CONSTRUCTIEDELEN

Constructiedeel	StAAF/staven
C28	S28
C29	S29
C30	S30
C32	S32
C37	S37
C38	S38
C41	S41
C42	S42
C43	S43
C44	S44
C45	S45
C46	S46
C47	S47
C48	S48
C49	S49
C50	S50
C51	S51
C52	S52
C54	S54
C55	S55
C56	S56
C57	S57
C58	S58
C59	S59
C64	S64
C65	S65

C66	S66
C68	S68
C69	S69
C70	S70
C78	S78
C79	S79
C80	S80
C87	S87
C88	S88
C89	S89
C91	S91
C92	S92
C93	S93
C94	S94
C95	S95
C96	S96
C97	S97
C98	S98
C99	S99
C100	S100
C101	S101
C102	S102
C103	S103
C104	S104
C105	S105
C106	S106
C107	S107
C108	S108
C109	S109
C110	S110
C111	S111
C112	S112

KIPSTEUNENGEGEVENS

StAAF	Profiel	Begin:	Eind:	Kipsteunen boven	Kipsteunen onder
Aangrijphoogte					
C28 - V1 (0.000-0.700) P6		Gesteund	Gesteund		Centrum
C29 - V1 (0.000-1.460) P6		Gesteund	Gesteund		Centrum
C30 - V1 (0.000-0.940) P6		Gesteund	Gesteund		Centrum
C32 - V1 (0.000-0.690) P6		Gesteund	Gesteund		Centrum
C37 - V1 (0.000-3.340) P2		Gesteund	Gesteund		Centrum
C38 - V1 (0.000-0.690) P2		Gesteund	Gesteund		Centrum
C41 - V1 (0.000-0.700) P3		Gesteund	Gesteund		Centrum
C42 - V1 (0.000-0.750) P3		Gesteund	Gesteund		Centrum
C43 - V1 (0.000-0.720) P3		Gesteund	Gesteund		Centrum
C44 - V1 (0.000-0.700) P2		Gesteund	Gesteund		Centrum
C45 - V1 (0.000-1.040) P2		Gesteund	Gesteund		Centrum
C46 - V1 (0.000-1.460) P2		Gesteund	Gesteund		Centrum
C47 - V1 (0.000-0.940) P2		Gesteund	Gesteund		Centrum
C48 - V1 (0.000-2.400) P2		Gesteund	Gesteund		Centrum
C49 - V1 (0.000-0.690) P2		Gesteund	Gesteund		Centrum
C50 - V1 (0.000-0.700) P4		Gesteund	Gesteund		Centrum
C51 - V1 (0.000-0.500) P4		Gesteund	Gesteund		Centrum
C52 - V1 (0.000-0.200) P4		Gesteund	Gesteund		Centrum
C54 - V1 (0.000-0.700) P2		Gesteund	Gesteund		Centrum
C55 - V1 (0.000-1.460) P2		Gesteund	Gesteund		Centrum
C56 - V1 (0.000-0.700) P2		Gesteund	Gesteund		Centrum

C57 - V1 (0.000-1.460) P2	Gesteund	Gesteund	Centrum
C58 - V1 (0.000-0.700) P2	Gesteund	Gesteund	Centrum
C59 - V1 (0.000-1.460) P2	Gesteund	Gesteund	Centrum
C64 - V1 (0.000-0.700) P4	Gesteund	Gesteund	Centrum
C65 - V1 (0.000-2.100) P6	Gesteund	Gesteund	Centrum
C66 - V1 (0.000-0.300) P6	Gesteund	Gesteund	Centrum
C68 - V1 (0.000-0.300) P2	Gesteund	Gesteund	Centrum
C69 - V1 (0.000-1.200) P5	Gesteund	Gesteund	Centrum
C70 - V1 (0.000-2.450) P5	Gesteund	Gesteund	Centrum
C78 - V1 (0.000-0.690) P2	Gesteund	Gesteund	Centrum
C79 - V1 (0.000-0.690) P2	Gesteund	Gesteund	Centrum
C80 - V1 (0.000-0.500) P4	Gesteund	Gesteund	Centrum
C87 - V1 (0.000-0.720) P4	Gesteund	Gesteund	Centrum
C88 - V1 (0.000-2.250) P4	Gesteund	Gesteund	Centrum
C89 - V1 (0.000-0.192) P4	Gesteund	Gesteund	Centrum
C91 - V1 (0.000-0.074) P4	Gesteund	Gesteund	Centrum
C92 - V1 (0.000-2.036) P4	Gesteund	Gesteund	Centrum
C93 - V1 (0.000-0.406) P4	Gesteund	Gesteund	Centrum
C94 - V1 (0.000-1.594) P4	Gesteund	Gesteund	Centrum
C95 - V1 (0.000-1.688) P4	Gesteund	Gesteund	Centrum
C96 - V1 (0.000-0.680) P4	Gesteund	Gesteund	Centrum
C97 - V1 (0.000-0.940) P2	Gesteund	Gesteund	Centrum
C98 - V1 (0.000-2.400) P2	Gesteund	Gesteund	Centrum
C99 - V1 (0.000-1.980) P3	Gesteund	Gesteund	Centrum
C100 - V1 (0.000-0.720) Centrum	P3	Gesteund	Gesteund
C101 - V1 (0.000-2.240) Centrum	P4	Gesteund	Gesteund
C102 - V1 (0.000-0.210) Centrum	P4	Gesteund	Gesteund
C103 - V1 (0.000-1.880) Centrum	P4	Gesteund	Gesteund
C104 - V1 (0.000-0.680) Centrum	P4	Gesteund	Gesteund

Staal Aangrijphoogte	Profiel	Begin:	Eind:	Kipsteunen boven	Kipsteunen onder
C105 - V1 (0.000-2.110) Centrum	P4		Gesteund		Gesteund
C106 - V1 (0.000-0.600) Centrum	P4		Gesteund		Gesteund
C107 - V1 (0.000-1.380) Centrum	P4		Gesteund		Gesteund
C108 - V1 (0.000-0.700) Centrum	P3		Gesteund		Gesteund
C109 - V1 (0.000-0.500) Centrum	P3		Gesteund		Gesteund
C110 - V1 (0.000-2.450) Centrum	P3		Gesteund		Gesteund
C111 - V1 (0.000-0.940) Centrum	P2		Gesteund		Gesteund
C112 - V1 (0.000-2.100) Centrum	P2		Gesteund		Gesteund
-	-	-	-	m	m

STAALTOETS RESULTATEN MET PROFIELGEGEVENS NEN-EN1993-1-1:2009/NB:2011 Uitgangspunten berekening voor staalcontrole

■; cr = 1000.00 > 10;

Profielgegevens staaf C28-V1 (0.000-0.700)

HE300B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm2
h = 300.0 mm	A = 14.91e-03 m2	Wy;el = 167.8e-05 m3
186.9e-05 m3		Wy;pl =

b = 300.0 mm 870.1e-06 m ³ tf = 19.0 mm 1.20e-02 m ² tw = 11.0 mm 4.74e-03 m ² r = 27.0 mm m ⁶	Iy = 251.7e-06 m ⁴ Iz = 856.3e-07 m ⁴ Massa/m = 117.0 kg/m	Wz;el = 570.9e-06 m ³ Aw;y;el = 1.20e-02 m ² Aw;z;el = 4.74e-03 m ² It = 185.0e-08 m ⁴	Wz;pl = Aw;y;pl = Aw;z;pl = Iwa = 168.8e-08
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Doorsnedetoetsing C28-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m N;Ed = 0.0 kN kNm	Vy;Ed = 0.0 kN Vz;Ed = -243.9 kN Vy;Rd = 1,631.6 kN Vz;Rd = 643.5 kN	Profielklasse = 1 My;Ed = -170.7 kNm Mz;Ed = 0.0 kNm MyRd = 439.1 kNm MzRd = 204.5 kNm	Mx;Ed = -0.2 = 139.0 HH
NEN-EN1993-1-1(6.1): UC = 0.59 < 1			

Kiptoetsing C28-V1 (0.000-0.700)

Equi. profiel: HE300B Maatgevende combinatie: Bi.C.1 Aangrijphoogte van de last: 0.000 m vanaf hart profiel Kipsteun bovenflens: N.v.t. Kipsteun onderflens: N.v.t. Inklem. begin: Gesteund 0.000	Beperk. eind: Gesteund M = -130.0kN/m Xb;lst = 0.000 m Lg = 0.700 m C2 = 0.00 (tabel) kred = 1.0 M;Ed = 0.0 kNm lkip = 0.700 m My;eind = -130.0 kNm	Instab. curve Kip:a b-eff(Begin) = 0.000 MBeta = 0.0 Xe;lst = 0.700 m S = 1.540 m C2(toegepast) = 0.00 Lam-rel = 0.20	b-eff(Eind) = q = 1.0 lst = 0.700 m Iwa = 1.6878e-06 C = 39.52 Profielklasse 1 UC(y) = 0.00 UC(z) = 0.00
Tabel gebruikt Fig. NB.32 Bovenflens maatgevend Lsys = 0.700 m m ⁶ C1 = 1.80 Mcr = 92,561.4 kNm Chi;LT(Bi.C.1) = 1.00 Chi;LT,Z = 1.00 My;begin = 0.0 kNm NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging			

Profielgegevens staaf C29-V1 (0.000-1.460)

HE300B h = 300.0 mm 186.9e-05 m ³ b = 300.0 mm 870.1e-06 m ³ tf = 19.0 mm 1.20e-02 m ² tw = 11.0 mm 4.74e-03 m ² r = 27.0 mm m ⁶	Analyse A = 14.91e-03 m ² Iy = 251.7e-06 m ⁴ Iz = 856.3e-07 m ⁴ Massa/m = 117.0 kg/m	Staal S235 fyd(toegepast) = 235 N/mm ² Wy;el = 167.8e-05 m ³ Wz;el = 570.9e-06 m ³ Aw;y;el = 1.20e-02 m ² Aw;z;el = 4.74e-03 m ² It = 185.0e-08 m ⁴	Wy;pl = Wz;pl = Aw;y;pl = Aw;z;pl = Iwa = 168.8e-08
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Doorsnedetoetsing C29-V1 (0.000-1.460)

Maatgevende combinatie: Fu.C.2 op 0.000 m N;Ed = 0.0 kN kNm	Vy;Ed = 0.0 kN Vz;Ed = 145.6 kN Vy;Rd = 1,631.6 kN	Profielklasse = 1 My;Ed = -170.7 kNm Mz;Ed = 0.0 kNm MyRd = 439.1 kNm	Mx;Ed = -0.2 = 104.7 HH
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging			

Vz;Rd = 643.5 kN MzRd = 204.5 kNm

NEN-EN1993-1-1(6.1): UC = 0.45 < 1

Kiptoetsing C29-V1 (0.000-1.460)

Equi. profiel: HE300B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 6.1	M = -130.0kN/m	MBeta = 29.8	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 1.460 m	lst = 1.460 m
Lsys = 1.460 m	Lg = 1.460 m	S = 1.540 m	Iwa = 1.6878e-06
m6			
C1 = 2.01	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 21.82
Mcr = 24,500.3 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 29.8 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 1.460 m		UC(z) = 0.00
My;begin = -130.0 kNm	My;eind = 29.8 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C30-V1 (0.000-0.940)

HE300B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm2	
h = 300.0 mm	A = 14.91e-03 m2	Wy;el = 167.8e-05 m3	Wy;pl =
186.9e-05 m3			
b = 300.0 mm	Iy = 251.7e-06 m4	Wz;el = 570.9e-06 m3	Wz;pl =
870.1e-06 m3			
tf = 19.0 mm	Iz = 856.3e-07 m4	Aw;y;el = 1.20e-02 m2	Aw;y;pl =
1.20e-02 m2			
tw = 11.0 mm	Massa/m = 117.0 kg/m	Aw;z;el = 4.74e-03 m2	Aw;z;pl =
4.74e-03 m2			
r = 27.0 mm		It = 185.0e-08 m4	Iwa = 168.8e-08
m6			

Doorsnedetoetsing C30-V1 (0.000-0.940)

Maatgevende combinatie: Fu.C.1 op 0.000 m		Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = 68.2 kNm	Mx;Ed = 0.2
kNm			
	Vz;Ed = -183.3 kN	Mz;Ed = 0.0 kNm	
N;Rd = 3,503.3 kN	Vy;Rd = 1,631.6 kN	MyRd = 439.1 kNm	= 100.0
kN/m2			
	Vz;Rd = 643.5 kN	MzRd = 204.5 kNm	HH
NEN-EN1993-1-1(6.1): UC = 0.43 < 1			

Kiptoetsing C30-V1 (0.000-0.940)

Equi. profiel: HE300B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 8.1	= 0.0kN/m	= 0.0	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.940 m	lst = 0.940 m
Lsys = 0.940 m	Lg = 0.940 m	S = 1.540 m	Iwa = 1.6878e-06
m6			
C1 = 2.30	C2 = 1.55 (tabel)	C2(toegepast) = 0.00	C = 37.88
Mcr = 66,070.3 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1

Chi;LT(Bi.C.1) = 1.00 M;Ed = 38.2 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 Ikip = 0.940 m UC(z) = 0.00
 My;begin = 38.2 kNm My;eind = -88.2 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C32-V1 (0.000-0.690)

HE300B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 300.0 mm A = 14.91e-03 m2 Wy;el = 167.8e-05 m3 Wy;pl =
 186.9e-05 m3 b = 300.0 mm Iy = 251.7e-06 m4 Wz;el = 570.9e-06 m3 Wz;pl =
 870.1e-06 m3 tf = 19.0 mm Iz = 856.3e-07 m4 Aw;y;el = 1.20e-02 m2 Aw;y;pl =
 1.20e-02 m2 tw = 11.0 mm Massa/m = 117.0 kg/m Aw;z;el = 4.74e-03 m2 Aw;z;pl =
 4.74e-03 m2 r = 27.0 mm It = 185.0e-08 m4 Iwa = 168.8e-08
 m6

Doorsnedetoetsing C32-V1 (0.000-0.690)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kNm Vy;Ed = 0.0 kNm My;Ed = -197.6 kNm Mx;Ed = -1.0
 kNm Vz;Ed = 286.4 kNm Mz;Ed = 0.0 kNm
 N;Rd = 3,503.3 kN Vy;Rd = 1,631.6 kN MyRd = 439.1 kNm = 176.7
 kN/m2 Vz;Rd = 643.5 kNm MzRd = 204.5 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.75 < 1

Kiptoetsing C32-V1 (0.000-0.690)

Equi. profiel: HE300B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.084
 Tabel gebruikt NB 6.1 M = -149.6kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.690 m lst = 0.690 m
 Lsys = 0.690 m Lg = 0.690 m S = 1.540 m Iwa = 1.6878e-06
 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 38.94
 Mcr = 92,512.4 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 Ikip = 0.690 m UC(z) = 0.00
 My;begin = -149.6 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C37-V1 (0.000-3.340)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 717.6e-06 m3 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 1.06e-02 m2 tw = 10.5 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 4.11e-03 m2 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08
 m6

Doorsnedetoetsing C37-V1 (0.000-3.340)

Maatgevende combinatie: Fu.C.1 op 3.340 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -190.0 kNm
 Vz;Ed = -56.7 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm

NEN-EN1993-1-1(6.12): UC = 0.53 < 1

Kiptoetsing C37-V1 (0.000-3.340)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.014
 Tabel gebruikt NB 6.1 M = -142.4kN/m MBeta = -31.2
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 3.340 m lst = 3.340 m
 Lsys = 3.340 m Lg = 3.340 m S = 1.430 m Iwa = 1.1302e-06
 m6
 C1 = 1.53 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 8.08
 Mcr = 3,066.4 kNm kred = 1.0 Lam-rel = 0.34 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.97 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 Ikip = 3.340 m UC(z) = 0.00
 My;begin = -31.2 kNm My;eind = -142.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C38-V1 (0.000-0.690)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3
 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 717.6e-06 m3
 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 1.06e-02 m2 Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 4.11e-03 m2
 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08
 m6

Doorsnedetoetsing C38-V1 (0.000-0.690)

Maatgevende combinatie: Fu.C.1 op 0.000 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -190.0 kNm Mx;Ed = -0.3
 kNm
 Vz;Ed = 275.3 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm = 187.6
 kN/m2 Vz;Rd = 557.6 kN MzRd = 168.6 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.80 < 1

Kiptoetsing C38-V1 (0.000-0.690)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.084 b-eff(Eind) =

0.084

Tabel gebruikt NB 6.1 M = -142.4kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.690 m lst = 0.690 m
 Lsys = 0.690 m Lg = 0.690 m S = 1.430 m Iwa = 1.1302e-06

m6

C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 36.21
 Mcr = 66,540.1 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.690 m UC(z) = 0.00
 My;begin = -142.4 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C41-V1 (0.000-0.700)

HE180B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 180.0 mm A = 6.53e-03 m2 Wy;el = 425.7e-06 m3 Wy;pl =
 481.4e-06 m3
 b = 180.0 mm Iy = 383.1e-07 m4 Wz;el = 151.4e-06 m3 Wz;pl =
 231.0e-06 m3
 tf = 14.0 mm Iz = 136.3e-07 m4 Aw;y;el = 5.23e-03 m2 Aw;y;pl =
 5.23e-03 m2
 tw = 8.5 mm Massa/m = 51.2 kg/m Aw;z;el = 2.02e-03 m2 Aw;z;pl =
 2.02e-03 m2
 r = 15.0 mm It = 421.6e-09 m4 Iwa = 937.5e-10
 m6

Doorsnedetoetsing C41-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -74.4 kNm
 Vz;Ed = -106.3 kN Mz;Ed = 0.0 kNm
 N;Rd = 1,533.4 kN Vy;Rd = 710.0 kN MyRd = 113.1 kNm
 Vz;Rd = 274.6 kN MzRd = 54.3 kNm
 NEN-EN1993-1-1(6.12): UC = 0.66 < 1

Kiptoetsing C41-V1 (0.000-0.700)

Equi. profiel: HE180B

Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.040 b-eff(Eind) =
 0.040
 Tabel gebruikt Fig. NB.32 M = -56.6kN/m MBeta = 0.0 q = 0.4
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.700 m lst = 0.700 m
 Lsys = 0.700 m Lg = 0.700 m S = 0.760 m Iwa = 9.3746e-08

m6

C1 = 1.80 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 20.12
 Mcr = 8,975.4 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.700 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = -56.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C42-V1 (0.000-0.750)

HE180B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 180.0 mm A = 6.53e-03 m2 Wy;el = 425.7e-06 m3 Wy;pl =
 481.4e-06 m3
 b = 180.0 mm Iy = 383.1e-07 m4 Wz;el = 151.4e-06 m3 Wz;pl =
 231.0e-06 m3

tf = 14.0 mm Iz = 136.3e-07 m4 Aw;y;el = 5.23e-03 m2 Aw;y;pl =
 5.23e-03 m2
 tw = 8.5 mm Massa/m = 51.2 kg/m Aw;z;el = 2.02e-03 m2 Aw;z;pl =
 2.02e-03 m2
 r = 15.0 mm It = 421.6e-09 m4 Iwa = 937.5e-10
 m6

Doorsnedetoetsing C42-V1 (0.000-0.750)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -74.4 kNm
 Vz;Ed = 93.3 kN Mz;Ed = 0.0 kNm
 N;Rd = 1,533.4 kN Vy;Rd = 710.0 kN MyRd = 113.1 kNm
 Vz;Rd = 274.6 kN MzRd = 54.3 kNm
 NEN-EN1993-1-1(6.12): UC = 0.66 < 1

Kiptoetsing C42-V1 (0.000-0.750)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.036 b-eff(Eind) =
 0.036
 Tabel gebruikt NB 6.1 M = -56.6kN/m MBeta = -3.4
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.750 m lst = 0.750 m
 Lsys = 0.750 m Lg = 0.750 m S = 0.760 m Iwa = 9.3746e-08
 m6
 C1 = 1.69 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 17.70
 Mcr = 7,368.3 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.750 m UC(z) = 0.00
 My;begin = -56.6 kNm My;eind = -3.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C43-V1 (0.000-0.720)

HE180B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 180.0 mm A = 6.53e-03 m2 Wy;el = 425.7e-06 m3 Wy;pl =
 481.4e-06 m3
 b = 180.0 mm Iy = 383.1e-07 m4 Wz;el = 151.4e-06 m3 Wz;pl =
 231.0e-06 m3
 tf = 14.0 mm Iz = 136.3e-07 m4 Aw;y;el = 5.23e-03 m2 Aw;y;pl =
 5.23e-03 m2 Massa/m = 51.2 kg/m Aw;z;el = 2.02e-03 m2 Aw;z;pl =
 2.02e-03 m2
 r = 15.0 mm It = 421.6e-09 m4 Iwa = 937.5e-10
 m6

Doorsnedetoetsing C43-V1 (0.000-0.720)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = 3.7 kNm Mx;Ed = -0.1
 kNm Vz;Ed = -5.1 kN Mz;Ed = 0.0 kNm
 N;Rd = 1,533.4 kN Vy;Rd = 710.0 kN MyRd = 113.1 kNm = 12.7
 kN/m2 Vz;Rd = 274.6 kN MzRd = 54.3 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.05 < 1

Kiptoetsing C43-V1 (0.000-0.720)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.002 b-eff(Eind) = 0.002
 Tabel gebruikt NB 6.1 M = 2.8kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.720 m lst = 0.720 m
 Lsys = 0.720 m Lg = 0.720 m S = 0.760 m Iwa = 9.3746e-08 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 19.05
 Mcr = 8,259.9 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 2.8 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.720 m UC(z) = 0.00
 My;begin = 2.8 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C44-V1 (0.000-0.700)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl = 153.4e-05 m3
 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl = 717.6e-06 m3
 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl = 1.06e-02 m2
 tw = 10.5 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl = 4.11e-03 m2
 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08 m6

Doorsnedetoetsing C44-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -183.0 kNm Mx;Ed = 0.6 kNm
 Vz;Ed = -261.4 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm = 166.7 kN/m2
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.71 < 1

Kiptoetsing C44-V1 (0.000-0.700)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.081 b-eff(Eind) = 0.081
 Tabel gebruikt Fig. NB.32 M = -139.4kN/m MBeta = 0.0 q = 1.1
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.700 m lst = 0.700 m
 Lsys = 0.700 m Lg = 0.700 m S = 1.430 m Iwa = 1.1302e-06 m6
 C1 = 1.80 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 36.74
 Mcr = 66,524.7 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.700 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = -139.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C45-V1 (0.000-1.040)

HE280B	Analyse	Staal S235	$f_{yd}(\text{toegepast}) = 235 \text{ N/mm}^2$
$h = 280.0 \text{ mm}$	$A = 13.14e-03 \text{ m}^2$	$W_{y;el} = 137.6e-05 \text{ m}^3$	$W_{y;pl} =$
$153.4e-05 \text{ m}^3$	$I_y = 192.7e-06 \text{ m}^4$	$W_{z;el} = 471.0e-06 \text{ m}^3$	$W_{z;pl} =$
$b = 280.0 \text{ mm}$	$I_z = 659.5e-07 \text{ m}^4$	$A_{w;y;el} = 1.06e-02 \text{ m}^2$	$A_{w;y;pl} =$
$717.6e-06 \text{ m}^3$	Massa/m = 103.1 kg/m	$A_{w;z;el} = 4.11e-03 \text{ m}^2$	$A_{w;z;pl} =$
$t_f = 18.0 \text{ mm}$		$I_t = 143.7e-08 \text{ m}^4$	$I_{wa} = 113.0e-08$
$1.06e-02 \text{ m}^2$			
$tw = 10.5 \text{ mm}$			
$4.11e-03 \text{ m}^2$			
$r = 24.0 \text{ mm}$			
m6			

Doorsnedetoetsing C45-V1 (0.000-1.040)

Maatgevende combinatie: Fu.C.2 op 0.000 m	Profielklasse = 1
$N;Ed = 0.0 \text{ kN}$	$My;Ed = -183.0 \text{ kNm}$
$N;Rd = 3,087.1 \text{ kN}$	$Mz;Ed = 0.0 \text{ kNm}$
$V_y;Ed = 0.0 \text{ kN}$	$MyRd = 360.6 \text{ kNm}$
$V_z;Ed = 70.6 \text{ kN}$	$MzRd = 168.6 \text{ kNm}$
$V_y;Rd = 1,434.7 \text{ kN}$	
$V_z;Rd = 557.6 \text{ kN}$	
NEN-EN1993-1-1(6.12): UC = 0.51 < 1	

Kiptoetsing C45-V1 (0.000-1.040)

Equi. profiel: HE280B	Instab. curve Kip:a
Maatgevende combinatie: Bi.C.1	
Aangrijphoogte van de last: 0.000 m vanaf hart profiel	
Kipsteun bovenflens: N.v.t.	
Kipsteun onderflens: N.v.t.	
Inklem. begin: Gesteund	Beperk. eind: Gesteund
$b\text{-eff}(\text{Begin}) = 0.022$	$b\text{-eff}(\text{Eind}) =$
0.022	
Tabel gebruikt NB 6.1	$M\beta = -83.5$
Bovenflens maatgevend	$X_{e;lst} = 1.040 \text{ m}$
$L_{sys} = 1.040 \text{ m}$	$S = 1.430 \text{ m}$
m6	$lst = 1.040 \text{ m}$
$C1 = 1.23$	$C2(\text{toegepast}) = 0.00$
$M_{cr} = 20,854.9 \text{ kNm}$	$C = 17.11$
$Chi;LT(Bi.C.1) = 1.00$	Lam-rel = 0.20
$Chi;LT,Z = 1.00$	Profielklasse 1
$My;begin = -139.3 \text{ kNm}$	UC(y) = 0.00
$My;eind = -83.5 \text{ kNm}$	UC(z) = 0.00
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging	

Profielgegevens staaf C46-V1 (0.000-1.460)

HE280B	Analyse	Staal S235	$f_{yd}(\text{toegepast}) = 235 \text{ N/mm}^2$
$h = 280.0 \text{ mm}$	$A = 13.14e-03 \text{ m}^2$	$W_{y;el} = 137.6e-05 \text{ m}^3$	$W_{y;pl} =$
$153.4e-05 \text{ m}^3$	$I_y = 192.7e-06 \text{ m}^4$	$W_{z;el} = 471.0e-06 \text{ m}^3$	$W_{z;pl} =$
$b = 280.0 \text{ mm}$	$I_z = 659.5e-07 \text{ m}^4$	$A_{w;y;el} = 1.06e-02 \text{ m}^2$	$A_{w;y;pl} =$
$717.6e-06 \text{ m}^3$	Massa/m = 103.1 kg/m	$A_{w;z;el} = 4.11e-03 \text{ m}^2$	$A_{w;z;pl} =$
$t_f = 18.0 \text{ mm}$		$I_t = 143.7e-08 \text{ m}^4$	$I_{wa} = 113.0e-08$
$1.06e-02 \text{ m}^2$			
$tw = 10.5 \text{ mm}$			
$4.11e-03 \text{ m}^2$			
$r = 24.0 \text{ mm}$			
m6			

Doorsnedetoetsing C46-V1 (0.000-1.460)

Maatgevende combinatie: Fu.C.2 op 0.000 m	Profielklasse = 1
$N;Ed = 0.0 \text{ kN}$	$My;Ed = -109.7 \text{ kNm}$
$N;Rd = 3,087.1 \text{ kN}$	$Mz;Ed = 0.0 \text{ kNm}$
$V_y;Ed = 0.0 \text{ kN}$	$MyRd = 360.6 \text{ kNm}$
$V_z;Ed = 125.0 \text{ kN}$	
$V_y;Rd = 1,434.7 \text{ kN}$	

$$V_z;R_d = 557.6 \text{ kN} \qquad M_zR_d = 168.6 \text{ kNm}$$

$$\text{NEN-EN1993-1-1(6.12): UC} = 0.30 < 1$$

Kiptoetsing C46-V1 (0.000-1.460)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 6.1	M = -83.6kN/m	MBeta = 53.6	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 1.460 m	lst = 1.460 m
Lsys = 1.460 m	Lg = 1.460 m	S = 1.430 m	Iwa = 1.1302e-06
m6			
C1 = 2.30	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 23.38
Mcr = 20,300.5 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 53.6 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 1.460 m		UC(z) = 0.00
My;begin = -83.6 kNm	My;eind = 53.6 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C47-V1 (0.000-0.940)

HE280B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm2	
h = 280.0 mm	A = 13.14e-03 m2	Wy;el = 137.6e-05 m3	Wy;pl =
153.4e-05 m3			
b = 280.0 mm	Iy = 192.7e-06 m4	Wz;el = 471.0e-06 m3	Wz;pl =
717.6e-06 m3			
tf = 18.0 mm	Iz = 659.5e-07 m4	Aw;y;el = 1.06e-02 m2	Aw;y;pl =
1.06e-02 m2			
tw = 10.5 mm	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m2	Aw;z;pl =
4.11e-03 m2			
r = 24.0 mm		It = 143.7e-08 m4	Iwa = 113.0e-08
m6			

Doorsnedetoetsing C47-V1 (0.000-0.940)

Maatgevende combinatie: Fu.C.1 op 0.000 m		Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = 99.9 kNm	Mx;Ed = 0.2
kNm			
	Vz;Ed = -173.5 kN	Mz;Ed = 0.0 kNm	
N;Rd = 3,087.1 kN	Vy;Rd = 1,434.7 kN	MyRd = 360.6 kNm	= 107.4
kN/m2			
	Vz;Rd = 557.6 kN	MzRd = 168.6 kNm	HH
NEN-EN1993-1-1(6.1): UC = 0.46 < 1			

Kiptoetsing C47-V1 (0.000-0.940)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.050			
Tabel gebruikt Fig. NB.32	M = 64.3kN/m	MBeta = -52.5	q = 0.3
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.940 m	lst = 0.940 m
Lsys = 0.940 m	Lg = 0.940 m	S = 1.430 m	Iwa = 1.1302e-06
m6			
C1 = 2.30	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 35.27

Mcr = 47,562.6 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 64.3 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.940 m UC(z) = 0.00
 My;begin = 64.3 kNm My;eind = -52.5 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C48-V1 (0.000-2.400)

HE280B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm2	
h = 280.0 mm	A = 13.14e-03 m2	Wy;el = 137.6e-05 m3	Wy;pl =
153.4e-05 m3			
b = 280.0 mm	Iy = 192.7e-06 m4	Wz;el = 471.0e-06 m3	Wz;pl =
717.6e-06 m3			
tf = 18.0 mm	Iz = 659.5e-07 m4	Aw;y;el = 1.06e-02 m2	Aw;y;pl =
1.06e-02 m2			
tw = 10.5 mm	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m2	Aw;z;pl =
4.11e-03 m2			
r = 24.0 mm		It = 143.7e-08 m4	Iwa = 113.0e-08
m6			

Doorsnedetoetsing C48-V1 (0.000-2.400)

Maatgevende combinatie: Fu.C.2 op 2.400 m	Profielklasse = 1
N;Ed = 0.0 kN	My;Ed = -149.2 kNm
	Vy;Ed = 0.0 kN
	Vz;Ed = -33.6 kN
N;Rd = 3,087.1 kN	MyRd = 360.6 kNm
	Vy;Rd = 1,434.7 kN
	Vz;Rd = 557.6 kN
NEN-EN1993-1-1(6.12): UC = 0.41 < 1	MzRd = 168.6 kNm

Kiptoetsing C48-V1 (0.000-2.400)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1	Instab. curve Kip:a
Aangrijphoogte van de last: 0.000 m vanaf hart profiel	
Kipsteun bovenflens: N.v.t.	
Kipsteun onderflens: N.v.t.	
Inklem. begin: Gesteund	Beperk. eind: Gesteund
0.010	b-eff(Begin) = 0.010
	b-eff(Eind) =
Tabel gebruikt NB 6.1	M = -112.9kN/m
Bovenflens maatgevend	Xb;lst = 0.000 m
Lsys = 2.400 m	Lg = 2.400 m
m6	MBeta = -52.4
	Xe;lst = 2.400 m
	S = 1.430 m
	Iwa = 1.1302e-06
C1 = 1.33	C2 = 0.00 (tabel)
Mcr = 4,675.1 kNm	kred = 1.0
Chi;LT(Bi.C.1) = 0.98	M;Ed = 0.0 kNm
Chi;LT,Z = 1.00	lkip = 2.400 m
My;begin = -52.4 kNm	My;eind = -112.9 kNm
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging	C2(toegepast) = 0.00
	Lam-rel = 0.28
	C = 8.85
	Profielklasse 1
	UC(y) = 0.00
	UC(z) = 0.00

Profielgegevens staaf C49-V1 (0.000-0.690)

HE280B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm2	
h = 280.0 mm	A = 13.14e-03 m2	Wy;el = 137.6e-05 m3	Wy;pl =
153.4e-05 m3			
b = 280.0 mm	Iy = 192.7e-06 m4	Wz;el = 471.0e-06 m3	Wz;pl =
717.6e-06 m3			
tf = 18.0 mm	Iz = 659.5e-07 m4	Aw;y;el = 1.06e-02 m2	Aw;y;pl =
1.06e-02 m2			
tw = 10.5 mm	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m2	Aw;z;pl =
4.11e-03 m2			
r = 24.0 mm		It = 143.7e-08 m4	Iwa = 113.0e-08
m6			

Doorsnedetoetsing C49-V1 (0.000-0.690)

Maatgevende combinatie: Fu.C.2 op 0.000 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -149.6 kNm Mx;Ed = -0.6
 kNm Vz;Ed = 216.8 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm = 152.1
 kN/m² Vz;Rd = 557.6 kN MzRd = 168.6 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.65 < 1

Kiptoetsing C49-V1 (0.000-0.690)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.067 b-eff(Eind) =
 0.067
 Tabel gebruikt NB 6.1 M = -113.2kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.690 m lst = 0.690 m
 Lsys = 0.690 m Lg = 0.690 m S = 1.430 m Iwa = 1.1302e-06
 m⁶
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 36.21
 Mcr = 66,540.1 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.690 m UC(z) = 0.00
 My;begin = -113.2 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C50-V1 (0.000-0.700)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm²
 h = 240.0 mm A = 10.60e-03 m² Wy;el = 938.3e-06 m³ Wy;pl =
 105.3e-05 m³ Iy = 112.6e-06 m⁴ Wz;el = 326.9e-06 m³ Wz;pl =
 b = 240.0 mm Iz = 392.3e-07 m⁴ Aw;y;el = 8.54e-03 m² Aw;y;pl =
 498.4e-06 m³ 8.54e-03 m² Aw;z;el = 3.32e-03 m² Aw;z;pl =
 tf = 17.0 mm Massa/m = 83.2 kg/m It = 102.7e-08 m⁴ Iwa = 486.9e-09
 8.54e-03 m² 3.32e-03 m²
 r = 21.0 mm
 m⁶

Doorsnedetoetsing C50-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -86.7 kNm Mx;Ed = 0.1
 kNm Vz;Ed = -123.8 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm = 105.1
 kN/m² Vz;Rd = 450.8 kN MzRd = 117.1 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.45 < 1

Kiptoetsing C50-V1 (0.000-0.700)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.040 b-eff(Eind) = 0.040
 Tabel gebruikt Fig. NB.32 M = -66.3kN/m MBeta = 0.0 q = 0.5
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.700 m lst = 0.700 m
 Lsys = 0.700 m Lg = 0.700 m S = 1.110 m Iwa = 4.8695e-07 m⁶
 C1 = 1.80 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 28.77
 Mcr = 33,967.7 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.700 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = -66.3 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C51-V1 (0.000-0.500)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm²
 h = 240.0 mm A = 10.60e-03 m² Wy;el = 938.3e-06 m³ Wy;pl = 105.3e-05 m³
 b = 240.0 mm Iy = 112.6e-06 m⁴ Wz;el = 326.9e-06 m³ Wz;pl = 498.4e-06 m³
 tf = 17.0 mm Iz = 392.3e-07 m⁴ Aw;y;el = 8.54e-03 m² Aw;y;pl = 8.54e-03 m²
 tw = 10.0 mm Massa/m = 83.2 kg/m Aw;z;el = 3.32e-03 m² Aw;z;pl = 3.32e-03 m²
 r = 21.0 mm It = 102.7e-08 m⁴ Iwa = 486.9e-09 m⁶

Doorsnedetoetsing C51-V1 (0.000-0.500)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -86.7 kNm Mx;Ed = 0.1 kNm
 Vz;Ed = 166.3 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm = 134.7 kN/m²
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.57 < 1

Kiptoetsing C51-V1 (0.000-0.500)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) = 0.000
 Tabel gebruikt NB 6.1 M = -66.3kN/m MBeta = -3.2
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.500 m lst = 0.500 m
 Lsys = 0.500 m Lg = 0.500 m S = 1.110 m Iwa = 4.8695e-07 m⁶
 C1 = 1.70 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 37.65
 Mcr = 62,235.9 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.500 m UC(z) = 0.00
 My;begin = -66.3 kNm My;eind = -3.2 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C52-V1 (0.000-0.200)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm²

h = 240.0 mm 105.3e-05 m ³	A = 10.60e-03 m ²	Wy;el = 938.3e-06 m ³	Wy;pl =
b = 240.0 mm 498.4e-06 m ³	Iy = 112.6e-06 m ⁴	Wz;el = 326.9e-06 m ³	Wz;pl =
tf = 17.0 mm 8.54e-03 m ²	Iz = 392.3e-07 m ⁴	Aw;y;el = 8.54e-03 m ²	Aw;y;pl =
tw = 10.0 mm 3.32e-03 m ²	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m ²	Aw;z;pl =
r = 21.0 mm m6		It = 102.7e-08 m ⁴	Iwa = 486.9e-09

Doorsnedetoetsing C52-V1 (0.000-0.200)

Maatgevende combinatie: Fu.C.2 op 0.200 m	Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -48.1 kNm
	Vz;Ed = -223.2 kN	Mz;Ed = 0.0 kNm
N;Rd = 2,490.7 kN	Vy;Rd = 1,158.5 kN	MyRd = 247.5 kNm
	Vz;Rd = 450.8 kN	MzRd = 117.1 kNm
NEN-EN1993-1-1(6.17): UC = 0.50 < 1		

Kiptoetsing C52-V1 (0.000-0.200)

Equi. profiel: HE240B		Instab. curve Kip:a	
Maatgevende combinatie: Bi.C.1			
Aangrijphoogte van de last: 0.000 m vanaf hart profiel			
Kipsteun bovenflens: N.v.t.			
Kipsteun onderflens: N.v.t.			
Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.072			
Tabel gebruikt Fig. NB.32	M = -37.0kN/m	MBeta = -3.2	q = 4.6
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.200 m	lst = 0.200 m
Lsys = 0.200 m	Lg = 0.200 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 1.72	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 94.29
Mcr = 389,694.3 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.200 m		UC(z) = 0.00
My;begin = -3.2 kNm	My;eind = -37.0 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging			

Profielgegevens staaf C54-V1 (0.000-0.700)

HE280B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm ²	
h = 280.0 mm 153.4e-05 m ³	A = 13.14e-03 m ²	Wy;el = 137.6e-05 m ³	Wy;pl =
b = 280.0 mm 717.6e-06 m ³	Iy = 192.7e-06 m ⁴	Wz;el = 471.0e-06 m ³	Wz;pl =
tf = 18.0 mm 1.06e-02 m ²	Iz = 659.5e-07 m ⁴	Aw;y;el = 1.06e-02 m ²	Aw;y;pl =
tw = 10.5 mm 4.11e-03 m ²	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m ²	Aw;z;pl =
r = 24.0 mm m6		It = 143.7e-08 m ⁴	Iwa = 113.0e-08

Doorsnedetoetsing C54-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m	Profielklasse = 1		
N;Ed = 0.0 kNm	Vy;Ed = 0.0 kN	My;Ed = -116.2 kNm	Mx;Ed = -0.1
	Vz;Ed = -166.0 kN	Mz;Ed = 0.0 kNm	
N;Rd = 3,087.1 kN	Vy;Rd = 1,434.7 kN	MyRd = 360.6 kNm	= 109.5
kN/m ²	Vz;Rd = 557.6 kN	MzRd = 168.6 kNm	HH

NEN-EN1993-1-1(6.1): $UC = 0.47 < 1$

Kiptoetsing C54-V1 (0.000-0.700)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt Fig. NB.32	M = -87.9kN/m	MBeta = 0.0	q = 0.7
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.700 m	lst = 0.700 m
Lsys = 0.700 m	Lg = 0.700 m	S = 1.430 m	Iwa = 1.1302e-06
m6			
C1 = 1.80	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 36.76
Mcr = 66,578.4 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.700 m		UC(z) = 0.00
My;begin = 0.0 kNm	My;eind = -87.9 kNm		

NEN-EN1993-1-1(6.54): $UC = 0.00 < 1$ Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C55-V1 (0.000-1.460)

HE280B

Analyse

Staal S235 fyd(toegepast) = 235 N/mm2

h = 280.0 mm

A = 13.14e-03 m2

Wy;el = 137.6e-05 m3

Wy;pl =

153.4e-05 m3

b = 280.0 mm

Iy = 192.7e-06 m4

Wz;el = 471.0e-06 m3

Wz;pl =

717.6e-06 m3

tf = 18.0 mm

Iz = 659.5e-07 m4

Aw;y;el = 1.06e-02 m2

Aw;y;pl =

1.06e-02 m2

tw = 10.5 mm

Massa/m = 103.1 kg/m

Aw;z;el = 4.11e-03 m2

Aw;z;pl =

4.11e-03 m2

r = 24.0 mm

It = 143.7e-08 m4

Iwa = 113.0e-08

m6

Doorsnedetoetsing C55-V1 (0.000-1.460)

Maatgevende combinatie: Fu.C.2 op 0.000 m

Profielklasse = 1

N;Ed = 0.0 kN

Vy;Ed = 0.0 kN

My;Ed = -116.1 kNm

Vz;Ed = 50.1 kN

Mz;Ed = 0.0 kNm

N;Rd = 3,087.1 kN

Vy;Rd = 1,434.7 kN

MyRd = 360.6 kNm

Vz;Rd = 557.6 kN

MzRd = 168.6 kNm

NEN-EN1993-1-1(6.12): $UC = 0.32 < 1$

Kiptoetsing C55-V1 (0.000-1.460)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 6.1	M = -87.8kN/m	MBeta = -36.5	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 1.460 m	lst = 1.460 m
Lsys = 1.460 m	Lg = 1.460 m	S = 1.430 m	Iwa = 1.1302e-06
m6			
C1 = 1.37	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 13.88
Mcr = 12,053.8 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 1.460 m		UC(z) = 0.00
My;begin = -87.8 kNm	My;eind = -36.5 kNm		

NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C56-V1 (0.000-0.700)

HE280B	Analyse	Staal S235	$f_{yd}(\text{toegepast}) = 235 \text{ N/mm}^2$
$h = 280.0 \text{ mm}$	$A = 13.14e-03 \text{ m}^2$	$W_{y;el} = 137.6e-05 \text{ m}^3$	$W_{y;pl} =$
$153.4e-05 \text{ m}^3$			
$b = 280.0 \text{ mm}$	$I_y = 192.7e-06 \text{ m}^4$	$W_{z;el} = 471.0e-06 \text{ m}^3$	$W_{z;pl} =$
$717.6e-06 \text{ m}^3$			
$t_f = 18.0 \text{ mm}$	$I_z = 659.5e-07 \text{ m}^4$	$A_{w;y;el} = 1.06e-02 \text{ m}^2$	$A_{w;y;pl} =$
$1.06e-02 \text{ m}^2$			
$t_w = 10.5 \text{ mm}$	Massa/m = 103.1 kg/m	$A_{w;z;el} = 4.11e-03 \text{ m}^2$	$A_{w;z;pl} =$
$4.11e-03 \text{ m}^2$			
$r = 24.0 \text{ mm}$		$I_t = 143.7e-08 \text{ m}^4$	$I_{wa} = 113.0e-08$
m6			

Doorsnedetoetsing C56-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m	Profielklasse = 1
$N;Ed = 0.0 \text{ kN}$	$My;Ed = -102.3 \text{ kNm}$
$V_y;Ed = 0.0 \text{ kN}$	$Mz;Ed = 0.0 \text{ kNm}$
$V_z;Ed = -146.1 \text{ kN}$	$MyRd = 360.6 \text{ kNm}$
$N;Rd = 3,087.1 \text{ kN}$	$V_y;Rd = 1,434.7 \text{ kN}$
$V_y;Rd = 1,434.7 \text{ kN}$	$MzRd = 168.6 \text{ kNm}$
$V_z;Rd = 557.6 \text{ kN}$	

NEN-EN1993-1-1(6.12): UC = 0.28 < 1

Kiptoetsing C56-V1 (0.000-0.700)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1	Instab. curve Kip:a
Aangrijphoogte van de last: 0.000 m vanaf hart profiel	
Kipsteun bovenflens: N.v.t.	
Kipsteun onderflens: N.v.t.	
Inklem. begin: Gesteund	Beperk. eind: Gesteund
0.000	$b\text{-eff}(\text{Begin}) = 0.000$
Tabel gebruikt Fig. NB.32	$b\text{-eff}(\text{Eind}) =$
Bovenflens maatgevend	$M\beta = 0.0$
$L_{sys} = 0.700 \text{ m}$	$q = 0.6$
m6	$X_e;lst = 0.700 \text{ m}$
$C_1 = 1.80$	$S = 1.430 \text{ m}$
$M_{cr} = 66,578.4 \text{ kNm}$	$I_{wa} = 1.1302e-06$
$Chi;LT(Bi.C.1) = 1.00$	$C_2(\text{toegepast}) = 0.00$
$Chi;LT,Z = 1.00$	$Lam\text{-rel} = 0.20$
$My;begin = 0.0 \text{ kNm}$	$C = 36.76$
$My;eind = -77.5 \text{ kNm}$	Profielklasse 1
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging	$UC(y) = 0.00$
	$UC(z) = 0.00$

Profielgegevens staaf C57-V1 (0.000-1.460)

HE280B	Analyse	Staal S235	$f_{yd}(\text{toegepast}) = 235 \text{ N/mm}^2$
$h = 280.0 \text{ mm}$	$A = 13.14e-03 \text{ m}^2$	$W_{y;el} = 137.6e-05 \text{ m}^3$	$W_{y;pl} =$
$153.4e-05 \text{ m}^3$			
$b = 280.0 \text{ mm}$	$I_y = 192.7e-06 \text{ m}^4$	$W_{z;el} = 471.0e-06 \text{ m}^3$	$W_{z;pl} =$
$717.6e-06 \text{ m}^3$			
$t_f = 18.0 \text{ mm}$	$I_z = 659.5e-07 \text{ m}^4$	$A_{w;y;el} = 1.06e-02 \text{ m}^2$	$A_{w;y;pl} =$
$1.06e-02 \text{ m}^2$			
$t_w = 10.5 \text{ mm}$	Massa/m = 103.1 kg/m	$A_{w;z;el} = 4.11e-03 \text{ m}^2$	$A_{w;z;pl} =$
$4.11e-03 \text{ m}^2$			
$r = 24.0 \text{ mm}$		$I_t = 143.7e-08 \text{ m}^4$	$I_{wa} = 113.0e-08$
m6			

Doorsnedetoetsing C57-V1 (0.000-1.460)

Maatgevende combinatie: Fu.C.2 op 0.000 m	Profielklasse = 1
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N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -102.2 kNm
 Vz;Ed = 41.3 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm
 NEN-EN1993-1-1(6.12): UC = 0.28 < 1

Kiptoetsing C57-V1 (0.000-1.460)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt NB 6.1 M = -77.5kN/m MBeta = -36.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 1.460 m lst = 1.460 m
 Lsys = 1.460 m Lg = 1.460 m S = 1.430 m Iwa = 1.1302e-06
 m6
 C1 = 1.33 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 13.49
 Mcr = 11,712.3 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 1.460 m UC(z) = 0.00
 My;begin = -77.5 kNm My;eind = -36.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C58-V1 (0.000-0.700)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3
 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 717.6e-06 m3
 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 1.06e-02 m2
 tw = 10.5 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 4.11e-03 m2
 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08
 m6

Doorsnedetoetsing C58-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -89.7 kNm
 Vz;Ed = -128.1 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm
 NEN-EN1993-1-1(6.12): UC = 0.25 < 1

Kiptoetsing C58-V1 (0.000-0.700)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt Fig. NB.32 M = -68.1kN/m MBeta = 0.0 q = 0.5
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.700 m lst = 0.700 m
 Lsys = 0.700 m Lg = 0.700 m S = 1.430 m Iwa = 1.1302e-06
 m6

C1 = 1.80 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 36.76
 M_{cr} = 66,578.4 kNm k_{red} = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 l_{kip} = 0.700 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = -68.1 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C59-V1 (0.000-1.460)

HE280B	Analyse	Staal S235	f _{yd} (toegepast) = 235 N/mm ²
h = 280.0 mm	A = 13.14e-03 m ²	W _y ;el = 137.6e-05 m ³	W _y ;pl =
153.4e-05 m ³	I _y = 192.7e-06 m ⁴	W _z ;el = 471.0e-06 m ³	W _z ;pl =
b = 280.0 mm	I _z = 659.5e-07 m ⁴	Aw;y;el = 1.06e-02 m ²	Aw;y;pl =
717.6e-06 m ³	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m ²	Aw;z;pl =
t _f = 18.0 mm		It = 143.7e-08 m ⁴	I _{wa} = 113.0e-08
1.06e-02 m ²			
tw = 10.5 mm			
4.11e-03 m ²			
r = 24.0 mm			
m6			

Doorsnedetoetsing C59-V1 (0.000-1.460)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN V_y;Ed = 0.0 kN M_y;Ed = -89.7 kNm M_x;Ed = 0.1
 kNm V_z;Ed = 54.9 kN M_z;Ed = 0.0 kNm
 N;R_d = 3,087.1 kN V_y;R_d = 1,434.7 kN M_yR_d = 360.6 kNm = 66.4
 kN/m² V_z;R_d = 557.6 kN M_zR_d = 168.6 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.28 < 1

Kiptoetsing C59-V1 (0.000-1.460)

Equi. profiel: HE280B Instab. curve Kip:a
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt NB 6.1 M = -68.1kN/m MBeta = -10.4
 Bovenflens maatgevend X_b;l_{st} = 0.000 m X_e;l_{st} = 1.460 m l_{st} = 1.460 m
 L_{sys} = 1.460 m L_g = 1.460 m S = 1.430 m I_{wa} = 1.1302e-06
 m6
 C1 = 1.60 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 16.22
 M_{cr} = 14,086.9 kNm k_{red} = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 l_{kip} = 1.460 m UC(z) = 0.00
 My;begin = -68.1 kNm My;eind = -10.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C64-V1 (0.000-0.700)

HE240B	Analyse	Staal S235	f _{yd} (toegepast) = 235 N/mm ²
h = 240.0 mm	A = 10.60e-03 m ²	W _y ;el = 938.3e-06 m ³	W _y ;pl =
105.3e-05 m ³	I _y = 112.6e-06 m ⁴	W _z ;el = 326.9e-06 m ³	W _z ;pl =
b = 240.0 mm	I _z = 392.3e-07 m ⁴	Aw;y;el = 8.54e-03 m ²	Aw;y;pl =
498.4e-06 m ³	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m ²	Aw;z;pl =
t _f = 17.0 mm			
8.54e-03 m ²			
tw = 10.0 mm			
3.32e-03 m ²			

r = 21.0 mm
m6
 It = 102.7e-08 m⁴
 Iwa = 486.9e-09

Doorsnedetoetsing C64-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.000 m
 N;Ed = 0.0 kN
 N;Rd = 2,490.7 kN
 NEN-EN1993-1-1(6.12): UC = 0.34 < 1

Vy;Ed = 0.0 kN
 Vz;Ed = 118.5 kN
 Vy;Rd = 1,158.5 kN
 Vz;Rd = 450.8 kN

Profielklasse = 1
 My;Ed = -82.9 kNm
 Mz;Ed = 0.0 kNm
 MyRd = 247.5 kNm
 MzRd = 117.1 kNm

Kiptoetsing C64-V1 (0.000-0.700)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund
 0.038
 Tabel gebruikt NB 6.1
 Bovenflens maatgevend
 Lsys = 0.700 m
 m6

Beperk. eind: Gesteund
 M = -63.3kN/m
 Xb;lst = 0.000 m
 Lg = 0.700 m
 C2 = 0.00 (tabel)
 kred = 1.0
 M;Ed = 0.0 kNm
 lkip = 0.700 m
 My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Instab. curve Kip:a
 b-eff(Begin) = 0.038
 MBeta = 0.0
 Xe;lst = 0.700 m
 S = 1.110 m
 C2(toegepast) = 0.00
 Lam-rel = 0.20
 C = 27.94
 Profielklasse 1
 UC(y) = 0.00
 UC(z) = 0.00

b-eff(Eind) =
 Ist = 0.700 m
 Iwa = 4.8695e-07

Profielgegevens staaf C65-V1 (0.000-2.100)

HE300B
 h = 300.0 mm
 186.9e-05 m³
 b = 300.0 mm
 870.1e-06 m³
 tf = 19.0 mm
 1.20e-02 m²
 tw = 11.0 mm
 4.74e-03 m²
 r = 27.0 mm
 m6

Analyse
 A = 14.91e-03 m²
 Iy = 251.7e-06 m⁴
 Iz = 856.3e-07 m⁴
 Massa/m = 117.0 kg/m

Staal S235 fyd(toegepast) = 235 N/mm²
 Wy;el = 167.8e-05 m³
 Wz;el = 570.9e-06 m³
 Aw;y;el = 1.20e-02 m²
 Aw;z;el = 4.74e-03 m²
 It = 185.0e-08 m⁴
 Iwa = 168.8e-08

Wy;pl =
 Wz;pl =
 Aw;y;pl =
 Aw;z;pl =

Doorsnedetoetsing C65-V1 (0.000-2.100)

Maatgevende combinatie: Fu.C.1 op 2.100 m
 N;Ed = 0.0 kN
 N;Rd = 3,503.3 kN
 kN/m²
 NEN-EN1993-1-1(6.1): UC = 0.37 < 1

Vy;Ed = 0.0 kN
 Vz;Ed = -19.7 kN
 Vy;Rd = 1,631.6 kN
 Vz;Rd = 643.5 kN

Profielklasse = 1
 My;Ed = -145.3 kNm
 Mz;Ed = 0.0 kNm
 MyRd = 439.1 kNm
 MzRd = 204.5 kNm

Mx;Ed = -0.1
 = 86.8
 HH

Kiptoetsing C65-V1 (0.000-2.100)

Equi. profiel: HE300B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.

Instab. curve Kip:a

Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) = 0.000
 Tabel gebruikt NB 6.1 M = -109.6kN/m MBeta = -88.1
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 2.100 m lst = 2.100 m
 Lsys = 2.100 m Lg = 2.100 m S = 1.540 m Iwa = 1.6878e-06 m6
 C1 = 1.10 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 8.68
 Mcr = 6,772.3 kNm kred = 1.0 Lam-rel = 0.25 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.99 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 2.100 m UC(z) = 0.00
 My;begin = -88.1 kNm My;eind = -109.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C66-V1 (0.000-0.300)

HE300B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 300.0 mm A = 14.91e-03 m2 Wy;el = 167.8e-05 m3 Wy;pl = 186.9e-05 m3
 b = 300.0 mm Iy = 251.7e-06 m4 Wz;el = 570.9e-06 m3 Wz;pl = 870.1e-06 m3
 tf = 19.0 mm Iz = 856.3e-07 m4 Aw;y;el = 1.20e-02 m2 Aw;y;pl = 1.20e-02 m2
 tw = 11.0 mm Massa/m = 117.0 kg/m Aw;z;el = 4.74e-03 m2 Aw;z;pl = 4.74e-03 m2
 r = 27.0 mm It = 185.0e-08 m4 Iwa = 168.8e-08 m6

Doorsnedetoetsing C66-V1 (0.000-0.300)

Maatgevende combinatie: Fu.C.2 op 0.300 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -197.7 kNm Mx;Ed = 4.1 kNm
 Vz;Ed = -174.7 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,503.3 kN Vy;Rd = 1,631.6 kN MyRd = 439.1 kNm = 149.1 kN/m2
 Vz;Rd = 643.5 kN MzRd = 204.5 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.63 < 1

Kiptoetsing C66-V1 (0.000-0.300)

Equi. profiel: HE300B Instab. curve Kip:a
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) = 0.000
 Tabel gebruikt NB 8.1 = 0.0kN/m = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.300 m lst = 0.300 m
 Lsys = 0.300 m Lg = 0.300 m S = 1.540 m Iwa = 1.6878e-06 m6
 C1 = 2.30 C2 = 1.55 (tabel) C2(toegepast) = 0.00 C = 116.75
 Mcr = 637,978.3 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.300 m UC(z) = 0.00
 My;begin = -109.7 kNm My;eind = -149.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C68-V1 (0.000-0.300)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2

h = 280.0 mm	A = 13.14e-03 m ²	Wy;el = 137.6e-05 m ³	Wy;pl =
153.4e-05 m ³			
b = 280.0 mm	Iy = 192.7e-06 m ⁴	Wz;el = 471.0e-06 m ³	Wz;pl =
717.6e-06 m ³			
tf = 18.0 mm	Iz = 659.5e-07 m ⁴	Aw;y;el = 1.06e-02 m ²	Aw;y;pl =
1.06e-02 m ²			
tw = 10.5 mm	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m ²	Aw;z;pl =
4.11e-03 m ²			
r = 24.0 mm		It = 143.7e-08 m ⁴	Iwa = 113.0e-08
m ⁶			

Doorsnedetoetsing C68-V1 (0.000-0.300)

Maatgevende combinatie: Fu.C.1 op 0.300 m		Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -181.7 kNm	Mx;Ed = -1.0
kNm			
	Vz;Ed = -8.4 kN	Mz;Ed = 0.0 kNm	
N;Rd = 3,087.1 kN	Vy;Rd = 1,434.7 kN	MyRd = 360.6 kNm	= 135.1
kN/m ²			
	Vz;Rd = 557.6 kN	MzRd = 168.6 kNm	HH
NEN-EN1993-1-1(6.1): UC = 0.57 < 1			

Kiptoetsing C68-V1 (0.000-0.300)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1		Instab. curve Kip:a	
Aangrijphoogte van de last: 0.000 m vanaf hart profiel			
Kipsteun bovenflens: N.v.t.			
Kipsteun onderflens: N.v.t.			
Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.003			
Tabel gebruikt Fig. NB.32	M = -137.2kN/m	MBeta = -135.3	q = 0.0
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.300 m	lst = 0.300 m
Lsys = 0.300 m	Lg = 0.300 m	S = 1.430 m	Iwa = 1.1302e-06
m ⁶			
C1 = 1.01	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 47.56
Mcr = 200,999.5 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.300 m		UC(z) = 0.00
My;begin = -137.2 kNm	My;eind = -135.3 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging			

Profielgegevens staaf C69-V1 (0.000-1.200)

HE280B	Analyse	Staal S235 fyd(toegepast) = 235 N/mm ²	
h = 280.0 mm	A = 13.14e-03 m ²	Wy;el = 137.6e-05 m ³	Wy;pl =
153.4e-05 m ³			
b = 280.0 mm	Iy = 192.7e-06 m ⁴	Wz;el = 471.0e-06 m ³	Wz;pl =
717.6e-06 m ³			
tf = 18.0 mm	Iz = 659.5e-07 m ⁴	Aw;y;el = 1.06e-02 m ²	Aw;y;pl =
1.06e-02 m ²			
tw = 10.5 mm	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m ²	Aw;z;pl =
4.11e-03 m ²			
r = 24.0 mm		It = 143.7e-08 m ⁴	Iwa = 113.0e-08
m ⁶			

Doorsnedetoetsing C69-V1 (0.000-1.200)

Maatgevende combinatie: Fu.C.2 op 1.200 m		Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -130.2 kNm	Mx;Ed = -0.3
kNm			

N;Rd = 3,087.1 kN
 Vz;Ed = -108.5 kN
 Vy;Rd = 1,434.7 kN
 Mz;Ed = 0.0 kNm
 MyRd = 360.6 kNm = 98.2
 KN/m2
 HH
 Vz;Rd = 557.6 kN
 MzRd = 168.6 kNm
 NEN-EN1993-1-1(6.1): UC = 0.42 < 1

Kiptoetsing C69-V1 (0.000-1.200)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt NB 6.1 M = -99.6kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 1.200 m lst = 1.200 m
 Lsys = 1.200 m Lg = 1.200 m S = 1.430 m Iwa = 1.1302e-06
 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 21.30
 Mcr = 22,507.3 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 1.200 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = -99.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C70-V1 (0.000-2.450)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3
 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 717.6e-06 m3
 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 1.06e-02 m2
 tw = 10.5 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 4.11e-03 m2
 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08
 m6

Doorsnedetoetsing C70-V1 (0.000-2.450)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -126.0 kNm
 Vz;Ed = 51.9 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm
 NEN-EN1993-1-1(6.12): UC = 0.35 < 1

Kiptoetsing C70-V1 (0.000-2.450)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt NB 6.1 M = -96.4kN/m MBeta = 0.8
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 2.450 m lst = 2.450 m
 Lsys = 2.450 m Lg = 2.450 m S = 1.430 m Iwa = 1.1302e-06
 m6

C1 = 1.76 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 11.54
 M_{cr} = 5,971.3 kNm k_{red} = 1.0 Lam-rel = 0.25 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.99 M;Ed = 0.8 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 I_{kip} = 2.450 m UC(z) = 0.00
 M_y;begin = -96.4 kNm M_y;eind = 0.8 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C78-V1 (0.000-0.690)

HE280B	Analyse	Staal S235	f _{yd} (toegepast) = 235 N/mm ²
h = 280.0 mm	A = 13.14e-03 m ²	W _y ;el = 137.6e-05 m ³	W _y ;pl =
153.4e-05 m ³	I _y = 192.7e-06 m ⁴	W _z ;el = 471.0e-06 m ³	W _z ;pl =
b = 280.0 mm	I _z = 659.5e-07 m ⁴	Aw;y;el = 1.06e-02 m ²	Aw;y;pl =
717.6e-06 m ³	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m ²	Aw;z;pl =
t _f = 18.0 mm		It = 143.7e-08 m ⁴	I _{wa} = 113.0e-08
1.06e-02 m ²			
t _w = 10.5 mm			
4.11e-03 m ²			
r = 24.0 mm			
m6			

Doorsnedetoetsing C78-V1 (0.000-0.690)

Maatgevende combinatie: Fu.C.1 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN V_y;Ed = 0.0 kN M_y;Ed = -161.2 kNm M_x;Ed = 0.3
 kNm V_z;Ed = 233.6 kN M_z;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN V_y;Rd = 1,434.7 kN M_yRd = 360.6 kNm = 159.6
 kN/m² V_z;Rd = 557.6 kN M_zRd = 168.6 kNm HH
 NEN-EN1993-1-1(6.1): UC = 0.68 < 1

Kiptoetsing C78-V1 (0.000-0.690)

Equi. profiel: HE280B Instab. curve Kip:a
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.071
 Tabel gebruikt NB 6.1 M = -121.3kN/m MBeta = 0.0
 Bovenflens maatgevend X_b;l_{st} = 0.000 m X_e;l_{st} = 0.690 m l_{st} = 0.690 m
 L_{sys} = 0.690 m L_g = 0.690 m S = 1.430 m I_{wa} = 1.1302e-06
 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 36.21
 M_{cr} = 66,540.1 kNm k_{red} = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 I_{kip} = 0.690 m UC(z) = 0.00
 M_y;begin = -121.3 kNm M_y;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C79-V1 (0.000-0.690)

HE280B	Analyse	Staal S235	f _{yd} (toegepast) = 235 N/mm ²
h = 280.0 mm	A = 13.14e-03 m ²	W _y ;el = 137.6e-05 m ³	W _y ;pl =
153.4e-05 m ³	I _y = 192.7e-06 m ⁴	W _z ;el = 471.0e-06 m ³	W _z ;pl =
b = 280.0 mm	I _z = 659.5e-07 m ⁴	Aw;y;el = 1.06e-02 m ²	Aw;y;pl =
717.6e-06 m ³	Massa/m = 103.1 kg/m	Aw;z;el = 4.11e-03 m ²	Aw;z;pl =
t _f = 18.0 mm			
1.06e-02 m ²			
t _w = 10.5 mm			
4.11e-03 m ²			

r = 24.0 mm
m6
 It = 143.7e-08 m4
 Iwa = 113.0e-08

Doorsnedetoetsing C79-V1 (0.000-0.690)

Maatgevende combinatie: Fu.C.1 op 0.000 m
 N;Ed = 0.0 kN
 kNm
 N;Rd = 3,087.1 kN
 kN/m2
 Vz;Ed = 263.4 kN
 Vz;Rd = 1,434.7 kN
 Vz;Rd = 557.6 kN
 NEN-EN1993-1-1(6.1): UC = 0.76 < 1

Profielklasse = 1
 My;Ed = -181.7 kNm
 Mz;Ed = 0.0 kNm
 MyRd = 360.6 kNm
 MzRd = 168.6 kNm
 Mx;Ed = 0.3
 = 179.4
 HH

Kiptoetsing C79-V1 (0.000-0.690)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund
 Beperk. eind: Gesteund
 0.079
 Tabel gebruikt NB 6.1
 Bovenflens maatgevend
 Lsys = 0.690 m
 m6
 C1 = 1.75
 Mcr = 66,540.1 kNm
 Chi;LT(Bi.C.1) = 1.00
 Chi;LT,Z = 1.00
 My;begin = -135.3 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Instab. curve Kip:a
 b-eff(Begin) = 0.079
 b-eff(Eind) =
 MBeta = 0.0
 Xb;lst = 0.000 m
 Lg = 0.690 m
 C2 = 0.00 (tabel)
 kred = 1.0
 M;Ed = 0.0 kNm
 lkip = 0.690 m
 My;eind = 0.0 kNm

S = 1.430 m
 Ist = 0.690 m
 Iwa = 1.1302e-06
 C2(toegepast) = 0.00
 Lam-rel = 0.20
 C = 36.21
 Profielklasse 1
 UC(y) = 0.00
 UC(z) = 0.00

Profielgegevens staaf C80-V1 (0.000-0.500)

HE240B
 h = 240.0 mm
 105.3e-05 m3
 b = 240.0 mm
 498.4e-06 m3
 tf = 17.0 mm
 8.54e-03 m2
 tw = 10.0 mm
 3.32e-03 m2
 r = 21.0 mm
 m6

Analyse
 A = 10.60e-03 m2
 Iy = 112.6e-06 m4
 Iz = 392.3e-07 m4
 Massa/m = 83.2 kg/m

Staal S235 fyd(toegepast) = 235 N/mm2
 Wy;el = 938.3e-06 m3
 Wz;el = 326.9e-06 m3
 Aw;y;el = 8.54e-03 m2
 Aw;z;el = 3.32e-03 m2
 It = 102.7e-08 m4
 Iwa = 486.9e-09

Wy;pl =
 Wz;pl =
 Aw;y;pl =
 Aw;z;pl =

Doorsnedetoetsing C80-V1 (0.000-0.500)

Maatgevende combinatie: Fu.C.2 op 0.500 m
 Nx;Ed = 0.0 kN
 Nc;Rd = 2,490.7 kN
 NVy;Rd = 2,166.9 kN
 kNm
 NEN-EN1993-1-1(6.30): UC = 0.84 < 1

Vy;Ed = 0.0 kN
 Vz;Ed = 370.5 kN
 Vy;Rd = 1,158.5 kN
 Vz;Rd = 450.8 kN
 NVz;Rd = 2,490.7 kN

Profielklasse = 1
 My;Ed = 185.3 kNm
 Mz;Ed = 0.0 kNm
 My;Rd = 247.5 kNm
 Mz;Rd = 117.1 kNm
 MVy;Rd = 220.6 kNm

a1 = 0.230
 a2 = 0.135
 p = 0.415
 q = 0.587
 MVz;Rd = 117.1

Kiptoetsing C80-V1 (0.000-0.500)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1
 Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund 0.000	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
Tabel gebruikt Fig. NB.35	M = 140.4kN/m	MBeta = 0.0	F = 1.7
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.500 m	lst = 0.500 m
Lsys = 0.500 m	Lg = 0.500 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 1.80	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 39.85
Mcr = 65,871.9 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 140.4 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.500 m		UC(z) = 0.00
My;begin = 0.0 kNm	My;eind = 140.4 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C87-V1 (0.000-0.720)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 240.0 mm	A = 10.60e-03 m2	Wy;el = 938.3e-06 m3	Wy;pl =
105.3e-05 m3			
b = 240.0 mm	Iy = 112.6e-06 m4	Wz;el = 326.9e-06 m3	Wz;pl =
498.4e-06 m3			
tf = 17.0 mm	Iz = 392.3e-07 m4	Aw;y;el = 8.54e-03 m2	Aw;y;pl =
8.54e-03 m2			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m2	Aw;z;pl =
3.32e-03 m2			
r = 21.0 mm		It = 102.7e-08 m4	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C87-V1 (0.000-0.720)

Maatgevende combinatie: Fu.C.2 op 0.000 m		Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -85.3 kNm	Mx;Ed = 0.4
kNm			
	Vz;Ed = 118.4 kN	Mz;Ed = 0.0 kNm	
N;Rd = 2,490.7 kN	Vy;Rd = 1,158.5 kN	MyRd = 247.5 kNm	= 110.3
kN/m2			
	Vz;Rd = 450.8 kN	MzRd = 117.1 kNm	HH
NEN-EN1993-1-1(6.1): UC = 0.47 < 1			

Kiptoetsing C87-V1 (0.000-0.720)

Equi. profiel: HE240B			
Maatgevende combinatie: Bi.C.1		Instab. curve Kip:a	
Aangrijphoogte van de last: 0.000 m vanaf hart profiel			
Kipsteun bovenflens: N.v.t.			
Kipsteun onderflens: N.v.t.			
Inklem. begin: Gesteund 0.038	Beperk. eind: Gesteund	b-eff(Begin) = 0.038	b-eff(Eind) =
Tabel gebruikt NB 6.1	M = -64.9kN/m	MBeta = 0.0	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.720 m	lst = 0.720 m
Lsys = 0.720 m	Lg = 0.720 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 1.75	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 27.20
Mcr = 31,223.5 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.720 m		UC(z) = 0.00
My;begin = -64.9 kNm	My;eind = 0.0 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging			

Profielgegevens staaf C88-V1 (0.000-2.250)

HE240B	Analyse	Staal S235	$f_{yd}(\text{toegepast}) = 235 \text{ N/mm}^2$
$h = 240.0 \text{ mm}$	$A = 10.60e-03 \text{ m}^2$	$W_{y;el} = 938.3e-06 \text{ m}^3$	$W_{y;pl} =$
$105.3e-05 \text{ m}^3$			
$b = 240.0 \text{ mm}$	$I_y = 112.6e-06 \text{ m}^4$	$W_{z;el} = 326.9e-06 \text{ m}^3$	$W_{z;pl} =$
$498.4e-06 \text{ m}^3$			
$t_f = 17.0 \text{ mm}$	$I_z = 392.3e-07 \text{ m}^4$	$A_{w;y;el} = 8.54e-03 \text{ m}^2$	$A_{w;y;pl} =$
$8.54e-03 \text{ m}^2$			
$tw = 10.0 \text{ mm}$	Massa/m = 83.2 kg/m	$A_{w;z;el} = 3.32e-03 \text{ m}^2$	$A_{w;z;pl} =$
$3.32e-03 \text{ m}^2$			
$r = 21.0 \text{ mm}$		$I_t = 102.7e-08 \text{ m}^4$	$I_{wa} = 486.9e-09$
m6			

Doorsnedetoetsing C88-V1 (0.000-2.250)

Maatgevende combinatie: Fu.C.2 op 0.000 m	Profielklasse = 1
$N;Ed = 0.0 \text{ kN}$	$V_y;Ed = 0.0 \text{ kN}$
	$V_z;Ed = 28.0 \text{ kN}$
$N;Rd = 2,490.7 \text{ kN}$	$V_y;Rd = 1,158.5 \text{ kN}$
	$V_z;Rd = 450.8 \text{ kN}$
NEN-EN1993-1-1(6.12): UC = 0.19 < 1	$M_y;Ed = -48.1 \text{ kNm}$
	$M_z;Ed = 0.0 \text{ kNm}$
	$M_yRd = 247.5 \text{ kNm}$
	$M_zRd = 117.1 \text{ kNm}$

Kiptoetsing C88-V1 (0.000-2.250)

Equi. profiel: HE240B			
Maatgevende combinatie: Bi.C.1		Instab. curve Kip:a	
Aangrijphoogte van de last: 0.000 m vanaf hart profiel			
Kipsteun bovenflens: N.v.t.			
Kipsteun onderflens: N.v.t.			
Inklem. begin: Gesteund	Beperk. eind: Gesteund	$b\text{-eff}(\text{Begin}) = 0.000$	$b\text{-eff}(\text{Eind}) =$
0.000			
Tabel gebruikt NB 6.1	$M = -37.0 \text{ kN/m}$	$MBeta = 10.7$	
Bovenflens maatgevend	$X_b;lst = 0.000 \text{ m}$	$X_e;lst = 2.250 \text{ m}$	$lst = 2.250 \text{ m}$
$L_{sys} = 2.250 \text{ m}$	$L_g = 2.250 \text{ m}$	$S = 1.110 \text{ m}$	$I_{wa} = 4.8695e-07$
m6			
$C1 = 2.08$	$C2 = 0.00$ (tabel)	$C2(\text{toegepast}) = 0.00$	$C = 12.04$
$M_{cr} = 4,423.6 \text{ kNm}$	$k_{red} = 1.0$	$Lam\text{-rel} = 0.24$	Profielklasse 1
$\chi_i;LT(Bi.C.1) = 0.99$	$M;Ed = 10.7 \text{ kNm}$		$UC(y) = 0.00$
$\chi_i;LT,Z = 1.00$	$l_{kip} = 2.250 \text{ m}$		$UC(z) = 0.00$
$M_y;begin = -37.0 \text{ kNm}$	$M_y;eind = 10.7 \text{ kNm}$		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C89-V1 (0.000-0.192)

HE240B	Analyse	Staal S235	$f_{yd}(\text{toegepast}) = 235 \text{ N/mm}^2$
$h = 240.0 \text{ mm}$	$A = 10.60e-03 \text{ m}^2$	$W_{y;el} = 938.3e-06 \text{ m}^3$	$W_{y;pl} =$
$105.3e-05 \text{ m}^3$			
$b = 240.0 \text{ mm}$	$I_y = 112.6e-06 \text{ m}^4$	$W_{z;el} = 326.9e-06 \text{ m}^3$	$W_{z;pl} =$
$498.4e-06 \text{ m}^3$			
$t_f = 17.0 \text{ mm}$	$I_z = 392.3e-07 \text{ m}^4$	$A_{w;y;el} = 8.54e-03 \text{ m}^2$	$A_{w;y;pl} =$
$8.54e-03 \text{ m}^2$			
$tw = 10.0 \text{ mm}$	Massa/m = 83.2 kg/m	$A_{w;z;el} = 3.32e-03 \text{ m}^2$	$A_{w;z;pl} =$
$3.32e-03 \text{ m}^2$			
$r = 21.0 \text{ mm}$		$I_t = 102.7e-08 \text{ m}^4$	$I_{wa} = 486.9e-09$
m6			

Doorsnedetoetsing C89-V1 (0.000-0.192)

Maatgevende combinatie: Fu.C.1 op 0.000 m	Profielklasse = 1
$N;Ed = 0.0 \text{ kN}$	$V_y;Ed = 0.0 \text{ kN}$
	$V_z;Ed = -209.8 \text{ kN}$
$N;Rd = 2,490.7 \text{ kN}$	$V_y;Rd = 1,158.5 \text{ kN}$
	$M_y;Ed = 20.5 \text{ kNm}$
	$M_z;Ed = 0.0 \text{ kNm}$
	$M_yRd = 247.5 \text{ kNm}$

$$V_z;R_d = 450.8 \text{ kN} \quad M_zR_d = 117.1 \text{ kNm}$$

$$\text{NEN-EN1993-1-1(6.17): UC} = 0.47 < 1$$

Kiptoetsing C89-V1 (0.000-0.192)

Equi. profiel: HE240B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.059			
Tabel gebruikt Fig. NB.35	M = -16.1kN/m	MBeta = 10.7	F = 5.2
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.192 m	lst = 0.192 m
Lsys = 0.192 m	Lg = 0.192 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 2.30	C2 = 0.01 (tabel)	C2(toegepast) = 0.00	C = 131.48
Mcr = 566,020.4 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 10.7 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.192 m		UC(z) = 0.00
My;begin = 10.7 kNm	My;eind = -16.1 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C91-V1 (0.000-0.074)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 240.0 mm	A = 10.60e-03 m2	Wy;el = 938.3e-06 m3	Wy;pl =
105.3e-05 m3			
b = 240.0 mm	Iy = 112.6e-06 m4	Wz;el = 326.9e-06 m3	Wz;pl =
498.4e-06 m3			
tf = 17.0 mm	Iz = 392.3e-07 m4	Aw;y;el = 8.54e-03 m2	Aw;y;pl =
8.54e-03 m2			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m2	Aw;z;pl =
3.32e-03 m2			
r = 21.0 mm		It = 102.7e-08 m4	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C91-V1 (0.000-0.074)

Maatgevende combinatie: Fu.C.1 op 0.000 m		Profielklasse = 1
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = 7.9 kNm
	Vz;Ed = -195.8 kN	Mz;Ed = 0.0 kNm
N;Rd = 2,490.7 kN	Vy;Rd = 1,158.5 kN	MyRd = 247.5 kNm
	Vz;Rd = 450.8 kN	MzRd = 117.1 kNm
NEN-EN1993-1-1(6.17): UC = 0.43 < 1		

Kiptoetsing C91-V1 (0.000-0.074)

Equi. profiel: HE240B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.055			
Tabel gebruikt Fig. NB.32	M = 6.4kN/m	MBeta = -3.2	q = 37.8
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.074 m	lst = 0.074 m
Lsys = 0.074 m	Lg = 0.074 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 2.29	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 339.20
Mcr = 3,788,807.4 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 6.4 kNm		UC(y) = 0.00

Chi;LT,Z = 1.00 Ikip = 0.074 m UC(z) = 0.00
 My;begin = 6.4 kNm My;eind = -3.2 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C92-V1 (0.000-2.036)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 240.0 mm	A = 10.60e-03 m2	Wy;el = 938.3e-06 m3	Wy;pl =
105.3e-05 m3			
b = 240.0 mm	Iy = 112.6e-06 m4	Wz;el = 326.9e-06 m3	Wz;pl =
498.4e-06 m3			
tf = 17.0 mm	Iz = 392.3e-07 m4	Aw;y;el = 8.54e-03 m2	Aw;y;pl =
8.54e-03 m2			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m2	Aw;z;pl =
3.32e-03 m2			
r = 21.0 mm		It = 102.7e-08 m4	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C92-V1 (0.000-2.036)

Maatgevende combinatie: Fu.C.1 op 2.036 m	Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = 23.3 kNm
	Vz;Ed = 14.6 kN	Mz;Ed = 0.0 kNm
N;Rd = 2,490.7 kN	Vy;Rd = 1,158.5 kN	MyRd = 247.5 kNm
	Vz;Rd = 450.8 kN	MzRd = 117.1 kNm

NEN-EN1993-1-1(6.12): UC = 0.09 < 1

Kiptoetsing C92-V1 (0.000-2.036)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 6.1	M = 13.7kN/m	MBeta = -3.2	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 2.036 m	lst = 2.036 m
Lsys = 2.036 m	Lg = 2.036 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 2.01	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 12.51
Mcr = 5,080.1 kNm	kred = 1.0	Lam-rel = 0.22	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 13.7 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	Ikip = 2.036 m		UC(z) = 0.00
My;begin = -3.2 kNm	My;eind = 13.7 kNm		

NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C93-V1 (0.000-0.406)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 240.0 mm	A = 10.60e-03 m2	Wy;el = 938.3e-06 m3	Wy;pl =
105.3e-05 m3			
b = 240.0 mm	Iy = 112.6e-06 m4	Wz;el = 326.9e-06 m3	Wz;pl =
498.4e-06 m3			
tf = 17.0 mm	Iz = 392.3e-07 m4	Aw;y;el = 8.54e-03 m2	Aw;y;pl =
8.54e-03 m2			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m2	Aw;z;pl =
3.32e-03 m2			
r = 21.0 mm		It = 102.7e-08 m4	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C93-V1 (0.000-0.406)

Maatgevende combinatie: Fu.C.1 op 0.406 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -49.9 kNm
 Vz;Ed = -180.5 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm
 NEN-EN1993-1-1(6.17): UC = 0.40 < 1

Kiptoetsing C93-V1 (0.000-0.406)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.055
 Tabel gebruikt Fig. NB.35 M = -38.4kN/m MBeta = 13.8 F = 0.6
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.406 m lst = 0.406 m
 Lsys = 0.406 m Lg = 0.406 m S = 1.110 m Iwa = 4.8695e-07
 m6
 C1 = 2.16 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 58.66
 Mcr = 119,424.3 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 13.8 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.406 m UC(z) = 0.00
 My;begin = 13.8 kNm My;eind = -38.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C94-V1 (0.000-1.594)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 240.0 mm A = 10.60e-03 m2 Wy;el = 938.3e-06 m3 Wy;pl =
 105.3e-05 m3
 b = 240.0 mm Iy = 112.6e-06 m4 Wz;el = 326.9e-06 m3 Wz;pl =
 498.4e-06 m3 Iz = 392.3e-07 m4 Aw;y;el = 8.54e-03 m2 Aw;y;pl =
 tf = 17.0 mm
 8.54e-03 m2 Massa/m = 83.2 kg/m Aw;z;el = 3.32e-03 m2 Aw;z;pl =
 tw = 10.0 mm
 3.32e-03 m2 It = 102.7e-08 m4 Iwa = 486.9e-09
 r = 21.0 mm
 m6

Doorsnedetoetsing C94-V1 (0.000-1.594)

Maatgevende combinatie: Fu.C.2 op 1.594 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -80.8 kNm
 Vz;Ed = -18.9 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm
 NEN-EN1993-1-1(6.12): UC = 0.33 < 1

Kiptoetsing C94-V1 (0.000-1.594)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.006 b-eff(Eind) =
 0.006
 Tabel gebruikt NB 6.1 M = -61.6kN/m MBeta = -38.4
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 1.594 m lst = 1.594 m
 Lsys = 1.594 m Lg = 1.594 m S = 1.110 m Iwa = 4.8695e-07

m6

C1 = 1.21 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 9.16
 Mcr = 4,751.6 kNm kred = 1.0 Lam-rel = 0.23 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.99 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 1.594 m UC(z) = 0.00
 My;begin = -38.4 kNm My;eind = -61.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C95-V1 (0.000-1.688)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 240.0 mm A = 10.60e-03 m2 Wy;el = 938.3e-06 m3 Wy;pl =
 105.3e-05 m3
 b = 240.0 mm Iy = 112.6e-06 m4 Wz;el = 326.9e-06 m3 Wz;pl =
 498.4e-06 m3 Iz = 392.3e-07 m4 Aw;y;el = 8.54e-03 m2 Aw;y;pl =
 tf = 17.0 mm
 8.54e-03 m2 Massa/m = 83.2 kg/m Aw;z;el = 3.32e-03 m2 Aw;z;pl =
 tw = 10.0 mm
 3.32e-03 m2 It = 102.7e-08 m4 Iwa = 486.9e-09
 r = 21.0 mm
 m6

Doorsnedetoetsing C95-V1 (0.000-1.688)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -21.1 kNm
 Vz;Ed = 12.5 kNm Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm
 NEN-EN1993-1-1(6.12): UC = 0.09 < 1

Kiptoetsing C95-V1 (0.000-1.688)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.004 b-eff(Eind) =
 0.004
 Tabel gebruikt NB 6.1 M = -16.1kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 1.688 m lst = 1.688 m
 Lsys = 1.688 m Lg = 1.688 m S = 1.110 m Iwa = 4.8695e-07
 m6

C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 12.62
 Mcr = 6,180.6 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 1.688 m UC(z) = 0.00
 My;begin = -16.1 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C96-V1 (0.000-0.680)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 240.0 mm A = 10.60e-03 m2 Wy;el = 938.3e-06 m3 Wy;pl =
 105.3e-05 m3
 b = 240.0 mm Iy = 112.6e-06 m4 Wz;el = 326.9e-06 m3 Wz;pl =
 498.4e-06 m3 Iz = 392.3e-07 m4 Aw;y;el = 8.54e-03 m2 Aw;y;pl =
 tf = 17.0 mm
 8.54e-03 m2 Massa/m = 83.2 kg/m Aw;z;el = 3.32e-03 m2 Aw;z;pl =
 tw = 10.0 mm
 3.32e-03 m2 It = 102.7e-08 m4 Iwa = 486.9e-09
 r = 21.0 mm

m6

Doorsnedetoetsing C96-V1 (0.000-0.680)

Maatgevende combinatie: Fu.C.2 op 0.680 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = 8.5 kNm
 Vz;Ed = 12.5 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm

NEN-EN1993-1-1(6.12): UC = 0.03 < 1

Kiptoetsing C96-V1 (0.000-0.680)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt Fig. NB.32 M = 6.5kN/m MBeta = 0.0 q = 0.1
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.680 m lst = 0.680 m
 Lsys = 0.680 m Lg = 0.680 m S = 1.110 m Iwa = 4.8695e-07

m6

C1 = 1.80 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 29.58
 Mcr = 35,955.9 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 6.5 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 Ikip = 0.680 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = 6.5 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C97-V1 (0.000-0.940)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3
 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 717.6e-06 m3
 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 1.06e-02 m2
 tw = 10.5 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 4.11e-03 m2
 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08

m6

Doorsnedetoetsing C97-V1 (0.000-0.940)

Maatgevende combinatie: Fu.C.2 op 0.940 m
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -65.1 kNm
 Vz;Ed = -59.5 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm

NEN-EN1993-1-1(6.12): UC = 0.18 < 1

Kiptoetsing C97-V1 (0.000-0.940)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt NB 8.1 = 0.0kN/m = 0.0

Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.940 m lst = 0.940 m
 Lsys = 0.940 m Lg = 0.940 m S = 1.430 m Iwa = 1.1302e-06
 m6
 C1 = 2.30 C2 = 1.55 (tabel) C2(toegepast) = 0.00 C = 35.28
 Mcr = 47,583.7 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.940 m UC(z) = 0.00
 My;begin = -10.0 kNm My;eind = -51.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C98-V1 (0.000-2.400)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3
 b = 280.0 mm Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 717.6e-06 m3
 tf = 18.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 1.06e-02 m2
 tw = 10.5 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 4.11e-03 m2
 r = 24.0 mm It = 143.7e-08 m4 Iwa = 113.0e-08
 m6

Doorsnedetoetsing C98-V1 (0.000-2.400)

Maatgevende combinatie: Fu.C.1 op 2.400 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -161.2 kNm
 Vz;Ed = -47.8 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm
 NEN-EN1993-1-1(6.12): UC = 0.45 < 1

Kiptoetsing C98-V1 (0.000-2.400)

Equi. profiel: HE280B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.000
 Tabel gebruikt NB 6.1 M = -121.3kN/m MBeta = -51.4
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 2.400 m lst = 2.400 m
 Lsys = 2.400 m Lg = 2.400 m S = 1.430 m Iwa = 1.1302e-06
 m6
 C1 = 1.36 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 9.06
 Mcr = 4,785.6 kNm kred = 1.0 Lam-rel = 0.27 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.98 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 2.400 m UC(z) = 0.00
 My;begin = -51.4 kNm My;eind = -121.3 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C99-V1 (0.000-1.980)

HE180B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 180.0 mm A = 6.53e-03 m2 Wy;el = 425.7e-06 m3 Wy;pl =
 481.4e-06 m3
 b = 180.0 mm Iy = 383.1e-07 m4 Wz;el = 151.4e-06 m3 Wz;pl =
 231.0e-06 m3
 tf = 14.0 mm Iz = 136.3e-07 m4 Aw;y;el = 5.23e-03 m2 Aw;y;pl =
 5.23e-03 m2
 tw = 8.5 mm Massa/m = 51.2 kg/m Aw;z;el = 2.02e-03 m2 Aw;z;pl =

2.02e-03 m2
 r = 15.0 mm
 m6
 It = 421.6e-09 m4
 Iwa = 937.5e-10

Doorsnedetoetsing C99-V1 (0.000-1.980)

Maatgevende combinatie: Fu.C.2 op 1.980 m
 N;Ed = 0.0 kN
 N;Rd = 1,533.4 kN
 NEN-EN1993-1-1(6.12): UC = 0.35 < 1

Profielklasse = 1
 My;Ed = -39.1 kNm
 Mz;Ed = 0.0 kNm
 MyRd = 113.1 kNm
 MzRd = 54.3 kNm

Vy;Ed = 0.0 kN
 Vz;Ed = -19.7 kN
 Vy;Rd = 710.0 kN
 Vz;Rd = 274.6 kN

Kiptoetsing C99-V1 (0.000-1.980)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund
 Beperk. eind: Gesteund
 b-eff(Begin) = 0.000
 b-eff(Eind) = 0.008

Tabel gebruikt NB 6.1
 Bovenflens maatgevend
 Lsys = 1.980 m
 m6

M = -29.6 kN/m
 Xb;lst = 0.000 m
 Lg = 1.980 m
 C2 = 0.00 (tabel)
 kred = 1.0
 M;Ed = 0.0 kNm
 lkip = 1.980 m
 My;eind = -29.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Instab. curve Kip:a
 MBeta = 0.0
 Xe;lst = 1.980 m
 S = 0.760 m
 C2(toegepast) = 0.00
 Lam-rel = 0.29
 C = 8.61
 Profielklasse 1
 UC(y) = 0.00
 UC(z) = 0.00

Ist = 1.980 m
 Iwa = 9.3746e-08

Profielgegevens staaf C100-V1 (0.000-0.720)

HE180B
 Analyse
 Staal S235 fyd(toegepast) = 235 N/mm2

h = 180.0 mm
 A = 6.53e-03 m2
 Wy;el = 425.7e-06 m3
 Wy;pl = 481.4e-06 m3

b = 180.0 mm
 Iy = 383.1e-07 m4
 Wz;el = 151.4e-06 m3
 Wz;pl = 231.0e-06 m3

tf = 14.0 mm
 Iz = 136.3e-07 m4
 Aw;y;el = 5.23e-03 m2
 Aw;y;pl = 5.23e-03 m2

tw = 8.5 mm
 Massa/m = 51.2 kg/m
 Aw;z;el = 2.02e-03 m2
 Aw;z;pl = 2.02e-03 m2

r = 15.0 mm
 It = 421.6e-09 m4
 Iwa = 937.5e-10
 m6

Doorsnedetoetsing C100-V1 (0.000-0.720)

Maatgevende combinatie: Fu.C.2 op 0.000 m
 N;Ed = 0.0 kN
 N;Rd = 1,533.4 kN
 kN/m2
 NEN-EN1993-1-1(6.1): UC = 0.39 < 1

Profielklasse = 1
 My;Ed = -37.8 kNm
 Mx;Ed = -0.1 kNm
 Mz;Ed = 0.0 kNm
 MyRd = 113.1 kNm
 MzRd = 54.3 kNm
 = 92.4
 HH

Vy;Ed = 0.0 kN
 Vz;Ed = 52.5 kN
 Vy;Rd = 710.0 kN
 Vz;Rd = 274.6 kN

Kiptoetsing C100-V1 (0.000-0.720)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.

Instab. curve Kip:a

Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.020 b-eff(Eind) = 0.020
 Tabel gebruikt NB 6.1 M = -28.7kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.720 m lst = 0.720 m
 Lsys = 0.720 m Lg = 0.720 m S = 0.760 m Iwa = 9.3746e-08 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 19.05
 Mcr = 8,259.9 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.720 m UC(z) = 0.00
 My;begin = -28.7 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C101-V1 (0.000-2.240)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 240.0 mm A = 10.60e-03 m2 Wy;el = 938.3e-06 m3 Wy;pl = 105.3e-05 m3
 b = 240.0 mm Iy = 112.6e-06 m4 Wz;el = 326.9e-06 m3 Wz;pl = 498.4e-06 m3
 tf = 17.0 mm Iz = 392.3e-07 m4 Aw;y;el = 8.54e-03 m2 Aw;y;pl = 8.54e-03 m2
 tw = 10.0 mm Massa/m = 83.2 kg/m Aw;z;el = 3.32e-03 m2 Aw;z;pl = 3.32e-03 m2
 r = 21.0 mm It = 102.7e-08 m4 Iwa = 486.9e-09 m6

Doorsnedetoetsing C101-V1 (0.000-2.240)

Maatgevende combinatie: Fu.C.2 op 0.000 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = 180.1 kNm
 Vz;Ed = -90.6 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm
 NEN-EN1993-1-1(6.12): UC = 0.73 < 1

Kiptoetsing C101-V1 (0.000-2.240)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) = 0.000
 Tabel gebruikt NB 6.1 M = 136.5kN/m MBeta = -17.6
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 2.240 m lst = 2.240 m
 Lsys = 2.240 m Lg = 2.240 m S = 1.110 m Iwa = 4.8695e-07 m6
 C1 = 1.89 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 10.99
 Mcr = 4,055.7 kNm kred = 1.0 Lam-rel = 0.25 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.99 M;Ed = 136.5 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 2.240 m UC(z) = 0.00
 My;begin = 136.5 kNm My;eind = -17.6 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C102-V1 (0.000-0.210)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 240.0 mm A = 10.60e-03 m2 Wy;el = 938.3e-06 m3 Wy;pl = 105.3e-05 m3

b = 240.0 mm	Iy = 112.6e-06 m ⁴	Wz;el = 326.9e-06 m ³	Wz;pl =
498.4e-06 m ³			
tf = 17.0 mm	Iz = 392.3e-07 m ⁴	Aw;y;el = 8.54e-03 m ²	Aw;y;pl =
8.54e-03 m ²			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m ²	Aw;z;pl =
3.32e-03 m ²			
r = 21.0 mm		It = 102.7e-08 m ⁴	Iwa = 486.9e-09
m ⁶			

Doorsnedetoetsing C102-V1 (0.000-0.210)

Maatgevende combinatie: Fu.C.2 op 0.210 m	Profielklasse = 1
N;Ed = 0.0 kN	My;Ed = -41.8 kNm
	Mz;Ed = 0.0 kNm
N;Rd = 2,490.7 kN	MyRd = 247.5 kNm
	MzRd = 117.1 kNm
NEN-EN1993-1-1(6.17): UC = 0.20 < 1	

Kiptoetsing C102-V1 (0.000-0.210)

Equi. profiel: HE240B		Instab. curve Kip:a	
Maatgevende combinatie: Bi.C.1			
Aangrijphoogte van de last: 0.000 m vanaf hart profiel			
Kipsteun bovenflens: N.v.t.			
Kipsteun onderflens: N.v.t.			
Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.029			
Tabel gebruikt Fig. NB.32	M = -32.0kN/m	MBeta = -17.6	q = 1.8
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.210 m	lst = 0.210 m
Lsys = 0.210 m	Lg = 0.210 m	S = 1.110 m	Iwa = 4.8695e-07
m ⁶			
C1 = 1.28	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 67.13
Mcr = 264,228.6 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.210 m		UC(z) = 0.00
My;begin = -17.6 kNm	My;eind = -32.0 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging			

Profielgegevens staaf C103-V1 (0.000-1.880)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm ²
h = 240.0 mm	A = 10.60e-03 m ²	Wy;el = 938.3e-06 m ³	Wy;pl =
105.3e-05 m ³			
b = 240.0 mm	Iy = 112.6e-06 m ⁴	Wz;el = 326.9e-06 m ³	Wz;pl =
498.4e-06 m ³			
tf = 17.0 mm	Iz = 392.3e-07 m ⁴	Aw;y;el = 8.54e-03 m ²	Aw;y;pl =
8.54e-03 m ²			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m ²	Aw;z;pl =
3.32e-03 m ²			
r = 21.0 mm		It = 102.7e-08 m ⁴	Iwa = 486.9e-09
m ⁶			

Doorsnedetoetsing C103-V1 (0.000-1.880)

Maatgevende combinatie: Fu.C.2 op 0.000 m	Profielklasse = 1
N;Ed = 0.0 kN	My;Ed = -40.5 kNm
	Mz;Ed = 0.0 kNm
N;Rd = 2,490.7 kN	MyRd = 247.5 kNm
	MzRd = 117.1 kNm
NEN-EN1993-1-1(6.12): UC = 0.16 < 1	

Kiptoetsing C103-V1 (0.000-1.880)

Equi. profiel: HE240B

Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.007 b-eff(Eind) = 0.007
 Tabel gebruikt NB 6.1 M = -31.0kN/m MBeta = 0.0
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 1.880 m lst = 1.880 m
 Lsys = 1.880 m Lg = 1.880 m S = 1.110 m Iwa = 4.8695e-07 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 11.59
 Mcr = 5,095.0 kNm kred = 1.0 Lam-rel = 0.22 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 1.880 m UC(z) = 0.00
 My;begin = -31.0 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C104-V1 (0.000-0.680)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 240.0 mm A = 10.60e-03 m2 Wy;el = 938.3e-06 m3 Wy;pl = 105.3e-05 m3
 b = 240.0 mm Iy = 112.6e-06 m4 Wz;el = 326.9e-06 m3 Wz;pl = 498.4e-06 m3
 tf = 17.0 mm Iz = 392.3e-07 m4 Aw;y;el = 8.54e-03 m2 Aw;y;pl = 8.54e-03 m2
 tw = 10.0 mm Massa/m = 83.2 kg/m Aw;z;el = 3.32e-03 m2 Aw;z;pl = 3.32e-03 m2
 r = 21.0 mm It = 102.7e-08 m4 Iwa = 486.9e-09 m6

Doorsnedetoetsing C104-V1 (0.000-0.680)

Maatgevende combinatie: Fu.C.2 op 0.680 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = 14.6 kNm
 Vz;Ed = 21.5 kN Mz;Ed = 0.0 kNm
 N;Rd = 2,490.7 kN Vy;Rd = 1,158.5 kN MyRd = 247.5 kNm
 Vz;Rd = 450.8 kN MzRd = 117.1 kNm
 NEN-EN1993-1-1(6.12): UC = 0.06 < 1

Kiptoetsing C104-V1 (0.000-0.680)

Equi. profiel: HE240B
 Maatgevende combinatie: Bi.C.1 Instab. curve Kip:a
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.007 b-eff(Eind) = 0.007
 Tabel gebruikt Fig. NB.32 M = 11.2kN/m MBeta = 0.0 q = 0.1
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.680 m lst = 0.680 m
 Lsys = 0.680 m Lg = 0.680 m S = 1.110 m Iwa = 4.8695e-07 m6
 C1 = 1.80 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 29.58
 Mcr = 35,955.9 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 11.2 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.680 m UC(z) = 0.00
 My;begin = 0.0 kNm My;eind = 11.2 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4

Profielgegevens staaf C105-V1 (0.000-2.110)

HE240B Analyse Staal S235 fyd(toegepast) = 235 N/mm2

h = 240.0 mm	A = 10.60e-03 m ²	Wy;el = 938.3e-06 m ³	Wy;pl =
105.3e-05 m ³			
b = 240.0 mm	Iy = 112.6e-06 m ⁴	Wz;el = 326.9e-06 m ³	Wz;pl =
498.4e-06 m ³			
tf = 17.0 mm	Iz = 392.3e-07 m ⁴	Aw;y;el = 8.54e-03 m ²	Aw;y;pl =
8.54e-03 m ²			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m ²	Aw;z;pl =
3.32e-03 m ²			
r = 21.0 mm		It = 102.7e-08 m ⁴	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C105-V1 (0.000-2.110)

Maatgevende combinatie: Fu.C.1 op 2.110 m	Profielklasse = 1	
N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = 46.3 kNm
	Vz;Ed = 15.8 kN	Mz;Ed = 0.0 kNm
N;Rd = 2,490.7 kN	Vy;Rd = 1,158.5 kN	MyRd = 247.5 kNm
	Vz;Rd = 450.8 kN	MzRd = 117.1 kNm
NEN-EN1993-1-1(6.12): UC = 0.19 < 1		

Kiptoetsing C105-V1 (0.000-2.110)

Equi. profiel: HE240B			
Maatgevende combinatie: Bi.C.1		Instab. curve Kip:a	
Aangrijphoogte van de last: 0.000 m vanaf hart profiel			
Kipsteun bovenflens: N.v.t.			
Kipsteun onderflens: N.v.t.			
Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 6.1	M = 30.0kN/m	MBeta = 10.9	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 2.110 m	lst = 2.110 m
Lsys = 2.110 m	Lg = 2.110 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 1.41	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 8.55
Mcr = 3,348.3 kNm	kred = 1.0	Lam-rel = 0.27	Profielklasse 1
Chi;LT(Bi.C.1) = 0.98	M;Ed = 30.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 2.110 m		UC(z) = 0.00
My;begin = 10.9 kNm	My;eind = 30.0 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C106-V1 (0.000-0.600)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm ²
h = 240.0 mm	A = 10.60e-03 m ²	Wy;el = 938.3e-06 m ³	Wy;pl =
105.3e-05 m ³			
b = 240.0 mm	Iy = 112.6e-06 m ⁴	Wz;el = 326.9e-06 m ³	Wz;pl =
498.4e-06 m ³			
tf = 17.0 mm	Iz = 392.3e-07 m ⁴	Aw;y;el = 8.54e-03 m ²	Aw;y;pl =
8.54e-03 m ²			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m ²	Aw;z;pl =
3.32e-03 m ²			
r = 21.0 mm		It = 102.7e-08 m ⁴	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C106-V1 (0.000-0.600)

Maatgevende combinatie: Fu.C.1 op 0.600 m	Profielklasse = 1		
Nx;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -112.7 kNm	a1 = 0.230
	Vz;Ed = -265.6 kN	Mz;Ed = 0.0 kNm	a2 = 0.223
Nc;Rd = 2,490.7 kN	Vy;Rd = 1,158.5 kN	My;Rd = 247.5 kNm	p = 0.032
	Vz;Rd = 450.8 kN	Mz;Rd = 117.1 kNm	q = 0.832
NV;Rd = 2,465.8 kN	NVz;Rd = 2,490.7 kN	MV;y;Rd = 245.4 kNm	MV;z;Rd = 117.1
kNm			

NEN-EN1993-1-1(6.17): UC = 0.59 < 1

Kiptoetsing C106-V1 (0.000-0.600)

Equi. profiel: HE240B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund 0.083	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
Tabel gebruikt Fig. NB.32	M = -87.2kN/m	MBeta = 30.3	q = 0.7
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.600 m	lst = 0.600 m
Lsys = 0.600 m	Lg = 0.600 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 2.15	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 39.82
Mcr = 54,853.7 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 30.3 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.600 m		UC(z) = 0.00
My;begin = 30.3 kNm	My;eind = -87.2 kNm		
NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip N/B, ivm Lambda;LT <= 0.4			

Profielgegevens staaf C107-V1 (0.000-1.380)

HE240B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 240.0 mm	A = 10.60e-03 m2	Wy;el = 938.3e-06 m3	Wy;pl =
105.3e-05 m3			
b = 240.0 mm	Iy = 112.6e-06 m4	Wz;el = 326.9e-06 m3	Wz;pl =
498.4e-06 m3			
tf = 17.0 mm	Iz = 392.3e-07 m4	Aw;y;el = 8.54e-03 m2	Aw;y;pl =
8.54e-03 m2			
tw = 10.0 mm	Massa/m = 83.2 kg/m	Aw;z;el = 3.32e-03 m2	Aw;z;pl =
3.32e-03 m2			
r = 21.0 mm		It = 102.7e-08 m4	Iwa = 486.9e-09
m6			

Doorsnedetoetsing C107-V1 (0.000-1.380)

Maatgevende combinatie: Fu.C.2 op 0.000 m

Profielklasse = 1

N;Ed = 0.0 kN

Vy;Ed = 0.0 kN

My;Ed = -115.0 kNm

Vz;Ed = 22.0 kN

Mz;Ed = 0.0 kNm

N;Rd = 2,490.7 kN

Vy;Rd = 1,158.5 kN

MyRd = 247.5 kNm

Vz;Rd = 450.8 kN

MzRd = 117.1 kNm

NEN-EN1993-1-1(6.12): UC = 0.46 < 1

Kiptoetsing C107-V1 (0.000-1.380)

Equi. profiel: HE240B

Maatgevende combinatie: Bi.C.1

Instab. curve Kip:a

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund 0.007	Beperk. eind: Gesteund	b-eff(Begin) = 0.007	b-eff(Eind) =
Tabel gebruikt NB 6.1	M = -87.2kN/m	MBeta = -64.4	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 1.380 m	lst = 1.380 m
Lsys = 1.380 m	Lg = 1.380 m	S = 1.110 m	Iwa = 4.8695e-07
m6			
C1 = 1.14	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 9.72
Mcr = 5,821.5 kNm	kred = 1.0	Lam-rel = 0.21	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 1.380 m		UC(z) = 0.00

My;begin = -87.2 kNm My;eind = -64.4 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C108-V1 (0.000-0.700)

HE180B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 180.0 mm	A = 6.53e-03 m2	Wy;el = 425.7e-06 m3	Wy;pl =
481.4e-06 m3			
b = 180.0 mm	Iy = 383.1e-07 m4	Wz;el = 151.4e-06 m3	Wz;pl =
231.0e-06 m3			
tf = 14.0 mm	Iz = 136.3e-07 m4	Aw;y;el = 5.23e-03 m2	Aw;y;pl =
5.23e-03 m2			
tw = 8.5 mm	Massa/m = 51.2 kg/m	Aw;z;el = 2.02e-03 m2	Aw;z;pl =
2.02e-03 m2			
r = 15.0 mm		It = 421.6e-09 m4	Iwa = 937.5e-10
m6			

Doorsnedetoetsing C108-V1 (0.000-0.700)

Maatgevende combinatie: Fu.C.2 op 0.700 m	Profielklasse = 1
N;Ed = 0.0 kN	My;Ed = -88.5 kNm
	Mz;Ed = 0.0 kNm
N;Rd = 1,533.4 kN	MyRd = 113.1 kNm
	MzRd = 54.3 kNm
	Vy;Ed = 0.0 kN
	Vz;Ed = -126.4 kN
	Vy;Rd = 710.0 kN
	Vz;Rd = 274.6 kN

NEN-EN1993-1-1(6.12): UC = 0.78 < 1

Kiptoetsing C108-V1 (0.000-0.700)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.048 b-eff(Eind) = 0.048

Tabel gebruikt Fig. NB.32	M = -67.2kN/m	MBeta = 0.0	q = 0.5
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.700 m	lst = 0.700 m
Lsys = 0.700 m	Lg = 0.700 m	S = 0.760 m	Iwa = 9.3746e-08
m6			
C1 = 1.80	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 20.12
Mcr = 8,975.4 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.700 m		UC(z) = 0.00
My;begin = 0.0 kNm	My;eind = -67.2 kNm		

NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C109-V1 (0.000-0.500)

HE180B	Analyse	Staal S235	fyd(toegepast) = 235 N/mm2
h = 180.0 mm	A = 6.53e-03 m2	Wy;el = 425.7e-06 m3	Wy;pl =
481.4e-06 m3			
b = 180.0 mm	Iy = 383.1e-07 m4	Wz;el = 151.4e-06 m3	Wz;pl =
231.0e-06 m3			
tf = 14.0 mm	Iz = 136.3e-07 m4	Aw;y;el = 5.23e-03 m2	Aw;y;pl =
5.23e-03 m2			
tw = 8.5 mm	Massa/m = 51.2 kg/m	Aw;z;el = 2.02e-03 m2	Aw;z;pl =
2.02e-03 m2			
r = 15.0 mm		It = 421.6e-09 m4	Iwa = 937.5e-10
m6			

Doorsnedetoetsing C109-V1 (0.000-0.500)

Maatgevende combinatie: Fu.C.2 op 0.000 m
 Profielklasse = 1

Nx;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -88.5 kNm	a1 = 0.228
	Vz;Ed = 166.6 kN	Mz;Ed = 0.0 kNm	a2 = 0.217
Nc;Rd = 1,533.4 kN	Vy;Rd = 710.0 kN	My;Rd = 113.1 kNm	p = 0.045
	Vz;Rd = 274.6 kN	Mz;Rd = 54.3 kNm	q = 0.819
NVy;Rd = 1,511.8 kNm	NVz;Rd = 1,533.4 kNm	MV;y;Rd = 111.9 kNm	MV;z;Rd = 54.3 kNm

NEN-EN1993-1-1(6.30): UC = 0.79 < 1

Kiptoetsing C109-V1 (0.000-0.500)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Instab. curve Kip:a

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.000			
Tabel gebruikt NB 6.1	M = -67.2kN/m	MBeta = -4.2	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 0.500 m	lst = 0.500 m
Lsys = 0.500 m	Lg = 0.500 m	S = 0.760 m	Iwa = 9.3746e-08

m6

C1 = 1.69	C2 = 0.00 (tabel)	C2(toegepast) = 0.00	C = 25.85
Mcr = 16,139.2 kNm	kred = 1.0	Lam-rel = 0.20	Profielklasse 1
Chi;LT(Bi.C.1) = 1.00	M;Ed = 0.0 kNm		UC(y) = 0.00
Chi;LT,Z = 1.00	lkip = 0.500 m		UC(z) = 0.00
My;begin = -67.2 kNm	My;eind = -4.2 kNm		

NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C110-V1 (0.000-2.450)

HE180B
 Analyse
 Staal S235 fyd(toegepast) = 235 N/mm2

h = 180.0 mm	A = 6.53e-03 m2	Wy;el = 425.7e-06 m3	Wy;pl =
481.4e-06 m3			
b = 180.0 mm	Iy = 383.1e-07 m4	Wz;el = 151.4e-06 m3	Wz;pl =
231.0e-06 m3			
tf = 14.0 mm	Iz = 136.3e-07 m4	Aw;y;el = 5.23e-03 m2	Aw;y;pl =
5.23e-03 m2			
tw = 8.5 mm	Massa/m = 51.2 kg/m	Aw;z;el = 2.02e-03 m2	Aw;z;pl =
2.02e-03 m2			
r = 15.0 mm		It = 421.6e-09 m4	Iwa = 937.5e-10

m6

Doorsnedetoetsing C110-V1 (0.000-2.450)

Maatgevende combinatie: Fu.C.2 op 0.000 m
 Profielklasse = 1

N;Ed = 0.0 kN	Vy;Ed = 0.0 kN	My;Ed = -5.5 kNm
	Vz;Ed = 2.2 kN	Mz;Ed = 0.0 kNm
N;Rd = 1,533.4 kN	Vy;Rd = 710.0 kN	MyRd = 113.1 kNm
	Vz;Rd = 274.6 kN	MzRd = 54.3 kNm

NEN-EN1993-1-1(6.12): UC = 0.05 < 1

Kiptoetsing C110-V1 (0.000-2.450)

Equi. profiel: HE180B
 Maatgevende combinatie: Bi.C.1
 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t.
 Kipsteun onderflens: N.v.t.
 Instab. curve Kip:a

Inklem. begin: Gesteund	Beperk. eind: Gesteund	b-eff(Begin) = 0.000	b-eff(Eind) =
0.001			
Tabel gebruikt NB 6.1	M = -4.4kN/m	MBeta = 0.0	
Bovenflens maatgevend	Xb;lst = 0.000 m	Xe;lst = 2.450 m	lst = 2.450 m

Lsys = 2.450 m Lg = 2.450 m S = 0.760 m Iwa = 9.3746e-08 m6
 C1 = 1.75 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 7.68
 Mcr = 978.4 kNm kred = 1.0 Lam-rel = 0.34 Profielklasse 1
 Chi;LT(Bi.C.1) = 0.97 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 2.450 m UC(z) = 0.00
 My;begin = -4.4 kNm My;eind = 0.0 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C111-V1 (0.000-0.940)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3 Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 b = 280.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 717.6e-06 m3 tf = 18.0 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 1.06e-02 m2 tw = 10.5 mm It = 143.7e-08 m4 Iwa = 113.0e-08
 4.11e-03 m2 r = 24.0 mm
 m6

Doorsnedetoetsing C111-V1 (0.000-0.940)

Maatgevende combinatie: Fu.C.2 op 0.940 m Profielklasse = 1
 N;Ed = 0.0 kN Vy;Ed = 0.0 kN My;Ed = -85.1 kNm
 Vz;Ed = -48.0 kN Mz;Ed = 0.0 kNm
 N;Rd = 3,087.1 kN Vy;Rd = 1,434.7 kN MyRd = 360.6 kNm
 Vz;Rd = 557.6 kN MzRd = 168.6 kNm
 NEN-EN1993-1-1(6.12): UC = 0.24 < 1

Kiptoetsing C111-V1 (0.000-0.940)

Equi. profiel: HE280B Instab. curve Kip:a
 Maatgevende combinatie: Bi.C.1 Aangrijphoogte van de last: 0.000 m vanaf hart profiel
 Kipsteun bovenflens: N.v.t. Kipsteun onderflens: N.v.t.
 Inklem. begin: Gesteund Beperk. eind: Gesteund b-eff(Begin) = 0.000 b-eff(Eind) =
 0.014 Tabel gebruikt Fig. NB.32 M = -67.1kN/m MBeta = -34.1 q = 0.1
 Bovenflens maatgevend Xb;lst = 0.000 m Xe;lst = 0.940 m lst = 0.940 m
 Lsys = 0.940 m Lg = 0.940 m S = 1.430 m Iwa = 1.1302e-06 m6
 C1 = 1.31 C2 = 0.00 (tabel) C2(toegepast) = 0.00 C = 20.10
 Mcr = 27,105.7 kNm kred = 1.0 Lam-rel = 0.20 Profielklasse 1
 Chi;LT(Bi.C.1) = 1.00 M;Ed = 0.0 kNm UC(y) = 0.00
 Chi;LT,Z = 1.00 lkip = 0.940 m UC(z) = 0.00
 My;begin = -34.1 kNm My;eind = -67.1 kNm
 NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

Profielgegevens staaf C112-V1 (0.000-2.100)

HE280B Analyse Staal S235 fyd(toegepast) = 235 N/mm2
 h = 280.0 mm A = 13.14e-03 m2 Wy;el = 137.6e-05 m3 Wy;pl =
 153.4e-05 m3 Iy = 192.7e-06 m4 Wz;el = 471.0e-06 m3 Wz;pl =
 b = 280.0 mm Iz = 659.5e-07 m4 Aw;y;el = 1.06e-02 m2 Aw;y;pl =
 717.6e-06 m3 tf = 18.0 mm Massa/m = 103.1 kg/m Aw;z;el = 4.11e-03 m2 Aw;z;pl =
 1.06e-02 m2 tw = 10.5 mm
 4.11e-03 m2

r = 24.0 mm
m6

It = 143.7e-08 m4

Iwa = 113.0e-08

Doorsnedetoetsing C112-V1 (0.000-2.100)

Maatgevende combinatie: Fu.C.2 op 2.100 m

N;Ed = 0.0 kN

Vy;Ed = 0.0 kN

Vz;Ed = -45.7 kN

N;Rd = 3,087.1 kN

Vy;Rd = 1,434.7 kN

Vz;Rd = 557.6 kN

Profielklasse = 1

My;Ed = -181.1 kNm

Mz;Ed = 0.0 kNm

MyRd = 360.6 kNm

MzRd = 168.6 kNm

NEN-EN1993-1-1(6.12): UC = 0.50 < 1

Kiptoetsing C112-V1 (0.000-2.100)

Equi. profiel: HE280B

Maatgevende combinatie: Bi.C.1

Aangrijphoogte van de last: 0.000 m vanaf hart profiel

Kipsteun bovenflens: N.v.t.

Kipsteun onderflens: N.v.t.

Inklem. begin: Gesteund
0.000

Beperk. eind: Gesteund

b-eff(Begin) = 0.000

b-eff(Eind) =

Tabel gebruikt NB 6.1

M = -137.1kN/m

MBeta = -67.1

Bovenflens maatgevend

Xb;lst = 0.000 m

Xe;lst = 2.100 m

lst = 2.100 m

Lsys = 2.100 m

Lg = 2.100 m

S = 1.430 m

Iwa = 1.1302e-06

m6

C1 = 1.31

C2 = 0.00 (tabel)

C2(toegepast) = 0.00

C = 9.70

Mcr = 5,857.9 kNm

kred = 1.0

Lam-rel = 0.25

Profielklasse 1

Chi;LT(Bi.C.1) = 0.99

M;Ed = 0.0 kNm

UC(y) = 0.00

Chi;LT,Z = 1.00

lkip = 2.100 m

UC(z) = 0.00

My;begin = -67.1 kNm

My;eind = -137.1 kNm

NEN-EN1993-1-1(6.54): UC = 0.00 < 1 Kip NVT, i.v.m. geen buiging

UNITY CHECK NEN-EN1993-1-1:2009/NB:2011

Veld	Toetsing	Combinatie	Artikel	UC max
C28-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.59
C28-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C29-V1 (0.000-1.460)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.45
C29-V1 (0.000-1.460)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C30-V1 (0.000-0.940)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.43
C30-V1 (0.000-0.940)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C32-V1 (0.000-0.690)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.75
C32-V1 (0.000-0.690)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C37-V1 (0.000-3.340)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.12)	0.53
C37-V1 (0.000-3.340)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C38-V1 (0.000-0.690)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.80
C38-V1 (0.000-0.690)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C41-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.66
C41-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C42-V1 (0.000-0.750)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.66
C42-V1 (0.000-0.750)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C43-V1 (0.000-0.720)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.05
C43-V1 (0.000-0.720)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C44-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.71
C44-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C45-V1 (0.000-1.040)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.51
C45-V1 (0.000-1.040)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C46-V1 (0.000-1.460)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.30
C46-V1 (0.000-1.460)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00

C47-V1 (0.000-0.940)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.46
Veld	Toetsing	Combinatie	Artikel	UC max
C47-V1 (0.000-0.940)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C48-V1 (0.000-2.400)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.41
C48-V1 (0.000-2.400)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C49-V1 (0.000-0.690)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.65
C49-V1 (0.000-0.690)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C50-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.45
C50-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C51-V1 (0.000-0.500)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.57
C51-V1 (0.000-0.500)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C52-V1 (0.000-0.200)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.17)	0.50
C52-V1 (0.000-0.200)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C54-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.47
C54-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C55-V1 (0.000-1.460)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.32
C55-V1 (0.000-1.460)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C56-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.28
C56-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C57-V1 (0.000-1.460)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.28
C57-V1 (0.000-1.460)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C58-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.25
C58-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C59-V1 (0.000-1.460)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.28
C59-V1 (0.000-1.460)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C64-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.34
C64-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C65-V1 (0.000-2.100)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.37
C65-V1 (0.000-2.100)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C66-V1 (0.000-0.300)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.63
C66-V1 (0.000-0.300)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C68-V1 (0.000-0.300)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.57
C68-V1 (0.000-0.300)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C69-V1 (0.000-1.200)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.42
C69-V1 (0.000-1.200)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C70-V1 (0.000-2.450)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.35
C70-V1 (0.000-2.450)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C78-V1 (0.000-0.690)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.68
C78-V1 (0.000-0.690)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C79-V1 (0.000-0.690)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.1)	0.76
C79-V1 (0.000-0.690)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C80-V1 (0.000-0.500)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.30)	0.84
C80-V1 (0.000-0.500)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C87-V1 (0.000-0.720)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.47
C87-V1 (0.000-0.720)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C88-V1 (0.000-2.250)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.19
C88-V1 (0.000-2.250)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C89-V1 (0.000-0.192)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.17)	0.47
C89-V1 (0.000-0.192)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C91-V1 (0.000-0.074)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.17)	0.43
C91-V1 (0.000-0.074)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C92-V1 (0.000-2.036)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.12)	0.09
C92-V1 (0.000-2.036)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C93-V1 (0.000-0.406)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.17)	0.40

Veld	Toetsing	Combinatie	Artikel	UC max
C93-V1 (0.000-0.406)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C94-V1 (0.000-1.594)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.33
C94-V1 (0.000-1.594)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C95-V1 (0.000-1.688)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.09
C95-V1 (0.000-1.688)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C96-V1 (0.000-0.680)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.03
C96-V1 (0.000-0.680)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C97-V1 (0.000-0.940)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.18
C97-V1 (0.000-0.940)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C98-V1 (0.000-2.400)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.12)	0.45
C98-V1 (0.000-2.400)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C99-V1 (0.000-1.980)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.35
C99-V1 (0.000-1.980)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C100-V1 (0.000-0.720)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.1)	0.39
C100-V1 (0.000-0.720)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C101-V1 (0.000-2.240)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.73
C101-V1 (0.000-2.240)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C102-V1 (0.000-0.210)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.17)	0.20
C102-V1 (0.000-0.210)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C103-V1 (0.000-1.880)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.16
C103-V1 (0.000-1.880)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C104-V1 (0.000-0.680)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.06
C104-V1 (0.000-0.680)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C105-V1 (0.000-2.110)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.12)	0.19
C105-V1 (0.000-2.110)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C106-V1 (0.000-0.600)	Doorsnede	Fu.C.1	NEN-EN1993-1-1(6.17)	0.59
C106-V1 (0.000-0.600)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C107-V1 (0.000-1.380)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.46
C107-V1 (0.000-1.380)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C108-V1 (0.000-0.700)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.78
C108-V1 (0.000-0.700)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C109-V1 (0.000-0.500)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.30)	0.79
C109-V1 (0.000-0.500)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C110-V1 (0.000-2.450)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.05
C110-V1 (0.000-2.450)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C111-V1 (0.000-0.940)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.24
C111-V1 (0.000-0.940)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00
C112-V1 (0.000-2.100)	Doorsnede	Fu.C.2	NEN-EN1993-1-1(6.12)	0.50
C112-V1 (0.000-2.100)	Kiptoetsing	Bi.C.1	NEN-EN1993-1-1(6.54)	0.00

GEWICHT STAALCONSTRUCTIE

Staaft	Profiel	Lsys	Massa
C100-V1 (0.000-0.720)	HE180B	0.720	36.880
C108-V1 (0.000-0.700)	HE180B	0.700	35.856
C109-V1 (0.000-0.500)	HE180B	0.500	25.611
C110-V1 (0.000-2.450)	HE180B	2.450	125.495
C41-V1 (0.000-0.700)	HE180B	0.700	35.856
C42-V1 (0.000-0.750)	HE180B	0.750	38.417
C43-V1 (0.000-0.720)	HE180B	0.720	36.880
C99-V1 (0.000-1.980)	HE180B	1.980	101.420
Subtotaal:	HE180B	8.520	436.415
C101-V1 (0.000-2.240)	HE240B	2.240	186.365
C102-V1 (0.000-0.210)	HE240B	0.210	17.472
C103-V1 (0.000-1.880)	HE240B	1.880	156.414
C104-V1 (0.000-0.680)	HE240B	0.680	56.575

C105-V1 (0.000-2.110)	HE240B	2.110	175.549
C106-V1 (0.000-0.600)	HE240B	0.600	49.919
C107-V1 (0.000-1.380)	HE240B	1.380	114.814
C50-V1 (0.000-0.700)	HE240B	0.700	58.239
C51-V1 (0.000-0.500)	HE240B	0.500	41.599
C52-V1 (0.000-0.200)	HE240B	0.200	16.640
C64-V1 (0.000-0.700)	HE240B	0.700	58.239
C80-V1 (0.000-0.500)	HE240B	0.500	41.599
C87-V1 (0.000-0.720)	HE240B	0.720	59.903
C88-V1 (0.000-2.250)	HE240B	2.250	187.197
C89-V1 (0.000-0.192)	HE240B	0.192	15.974
C91-V1 (0.000-0.074)	HE240B	0.074	6.157
C92-V1 (0.000-2.036)	HE240B	2.036	169.393
C93-V1 (0.000-0.406)	HE240B	0.406	33.779
C94-V1 (0.000-1.594)	HE240B	1.594	132.619
C95-V1 (0.000-1.688)	HE240B	1.688	140.439
C96-V1 (0.000-0.680)	HE240B	0.680	56.575
Subtotaal:	HE240B	21.340	1,775.460
C111-V1 (0.000-0.940)	HE280B	0.940	96.934
C112-V1 (0.000-2.100)	HE280B	2.100	216.554
C37-V1 (0.000-3.340)	HE280B	3.340	344.424
C38-V1 (0.000-0.690)	HE280B	0.690	71.154
C44-V1 (0.000-0.700)	HE280B	0.700	72.214
C45-V1 (0.000-1.040)	HE280B	1.040	107.266
C46-V1 (0.000-1.460)	HE280B	1.460	150.557
C47-V1 (0.000-0.940)	HE280B	0.940	96.956
C48-V1 (0.000-2.400)	HE280B	2.400	247.491
C49-V1 (0.000-0.690)	HE280B	0.690	71.154
C54-V1 (0.000-0.700)	HE280B	0.700	72.185
C55-V1 (0.000-1.460)	HE280B	1.460	150.557
C56-V1 (0.000-0.700)	HE280B	0.700	72.185
C57-V1 (0.000-1.460)	HE280B	1.460	150.557
C58-V1 (0.000-0.700)	HE280B	0.700	72.185
C59-V1 (0.000-1.460)	HE280B	1.460	150.557
C68-V1 (0.000-0.300)	HE280B	0.300	30.936
C69-V1 (0.000-1.200)	HE280B	1.200	123.745
C70-V1 (0.000-2.450)	HE280B	2.450	252.647
C78-V1 (0.000-0.690)	HE280B	0.690	71.154
C79-V1 (0.000-0.690)	HE280B	0.690	71.154
C97-V1 (0.000-0.940)	HE280B	0.940	96.934
C98-V1 (0.000-2.400)	HE280B	2.400	247.491
Subtotaal:	HE280B	29.451	3,036.987
C28-V1 (0.000-0.700)	HE300B	0.700	81.918
C29-V1 (0.000-1.460)	HE300B	1.460	170.858
C30-V1 (0.000-0.940)	HE300B	0.940	110.005
C32-V1 (0.000-0.690)	HE300B	0.690	80.748
C65-V1 (0.000-2.100)	HE300B	2.100	245.755
C66-V1 (0.000-0.300)	HE300B	0.300	35.108
Subtotaal:	HE300B	6.190	724.391
Totaal:		65.501	5,973.252
		m	kg