Peree Bouwadvies B.V.

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adviseurs
voor de bouw

Project: Aviko Steenderen

Projectnr.: 8332 (Peree)

Omschrijving: Constructief ontwerp

Aanpassing constructie ST5

Opdrachtgever: Aviko B.V
Postbus 8
7221 CD Steenderen

Documentnr.: 8332-CO1

Constructeur: C. ter Braak

Projectleider: J. Terlage

Fase: Bestek

Status: Definitief

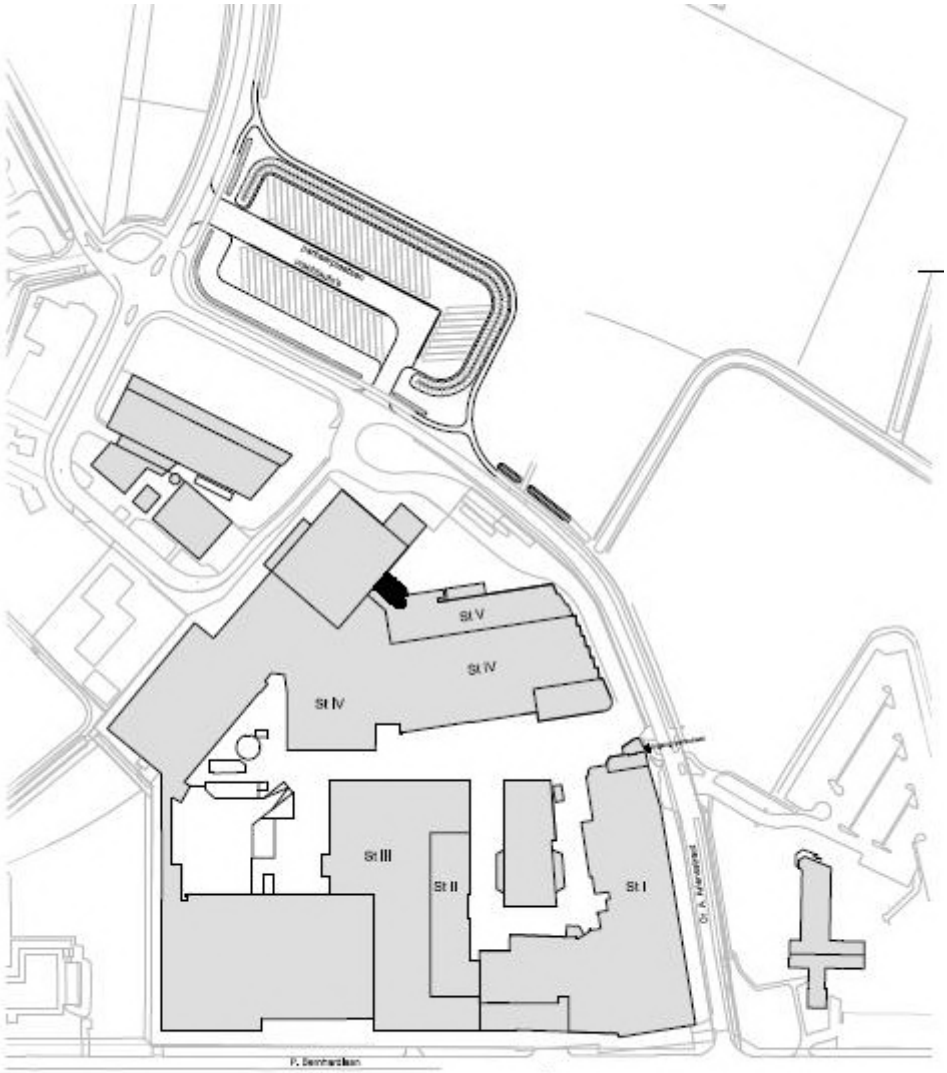
Datum: 29-04-2016

BTW: NL851154797.B01 KvK: 54088224
IBAN: NL38RABO0162547897 BIC: RABONL2U

Inhoudsopgave

Inleiding

Aviko B.V. te Steenderen is voornemens om een weeginstallatie te vervangen. De installatie bevindt zich in de hal Steenderen V. De nieuw te plaatsen installatie komt op de zelfde plaats als de huidige installatie. De afmetingen en belastingen tussen de bestaande en nieuwe installatie verschillen. In deze rapportage wordt de constructie berekend welke de nieuwe installatie dient af te dragen naar de fundatie. De bestaande constructie blijft deels intact en wordt waar nodig verstevigd.
Tevens wordt in het plan een vide dicht gemaakt d.m.v. een staalbetonvloer. Deze vloer wordt door een staal constructie afgedragen naar de fundering.



Uitgangspunten

Algemeen

Alle opdrachten worden aanvaard en uitgevoerd volgens de DNR 2011.

Normen

Bij de berekeningen is uitgegaan van de volgende normen
NEN-EN 1990 Eurocode 0 - Grondslagen voor het constructief ontwerp
NEN-EN 1991 Eurocode 1 - Ontwerp en berekening van belastingen op constructies
NEN-EN 1992 Eurocode 2 - Ontwerp en berekening van betonconstructies
NEN-EN 1993 Eurocode 3 - Ontwerp en berekening van staalconstructies
NEN-EN 1994 Eurocode 4 - Ontwerp en berekening van staal-betonconstructies
NEN-EN 1995 Eurocode 5 - Ontwerp en berekening van houtconstructies
NEN-EN 1996 Eurocode 6 - Ontwerp en berekening van metselwerkconstructies
NEN-EN 1997 Eurocode 7 - Geotechnisch ontwerp
Indien nodig is tevens gebruik gemaakt van richtlijnen en/of rapporten

Gebruikte software

- VCmaster Bautext 2012
- PCAE - Statikprogramme
- Diverse leverancier gebonden software

Documenten

De onderstaanden documenten dienen als basis voor het constructieve ontwerp en berekening

Tekeningen architect

- Steenderen 5 d.d. 17-03-2016

Omschrijving bouwwerk

Vervangen van een deels inpandige installatie

Constructieve opbouw

Opbouw

De installatie wordt gehuisvest in een unit. De unit wordt in zijn geheel op een stalen constructie geplaatst. De stalen constructie draagt tevens een gedeelte van het dak en een deel van de verdiepingsvloer. De stalen constructie wordt op de bestaande fundatie geplaatst.

Stabiliteit

De stabiliteit van de stalen constructie wordt gewaarborgd door het toepassen van enkele windverbanden.

Fundering

Fundering op palen.

Staalconstructie

Definitieve details, detailberekeningen, werkplaatstekeningen, hulpstaal, valbeveleiliging, (vloer) ravelingen, opleggingen, sparingen, (boor)anker- en boutverbindingen, tijdelijke voorzieningen voor montage en uitvoering, stalen trappen en bordessen, lateien en geveldragers zijn uit te voeren door de aannemer.

Staalconstructies en verankeringen in vochtig milieu dienen corrosiewerend te zijn behandeld met een ontwerplevensduur van 50 jaar.

Indeling toepassingsgebied van het bouwwerk

Gebouwcategorie	E) Industrie / opslagruimtes H) daken
Ontwerplevensduur	50 jaar
Gevolgklasse:	CC1
BB-klasse:	RC1
index β:	3,3
factor K_{FI}	0,9

Belastingcombinaties conform NEN-EN 1990

Vergelijking:

6.9: $$\sum_{j\geq 1} \gamma_{G,j} G_{k,j} "+" \gamma_P P "+" \gamma_{Q,1} Q_{k,1} "+" \sum_{i>1} \gamma_{Q,i} \psi_{0,i} Q_{k,i}$$

6.10a: $$\sum_{j\geq 1} \gamma_{G,j} G_{k,j} "+" \gamma_P P "+" \gamma_{Q,1} \psi_{0,1} Q_{k,1} "+" \sum_{i>1} \gamma_{Q,i} \psi_{0,i} Q_{k,i}$$

6.10b: $$\sum_{j\geq 1} \xi_j \gamma_{G,j} G_{k,j} "+" \gamma_P P "+" \gamma_{Q,1} Q_{k,1} "+" \sum_{i>1} \gamma_{Q,i} \psi_{0,i} Q_{k,i}$$

Fundamentele combinaties ULS

EQU (groep A)	Combinaties bij verlies van evenwicht
STR/GEO (groep B)	Combinaties bij constructieve berekeningen
STR/GEO (groep C)	Combinaties bij geotechnische berekeningen

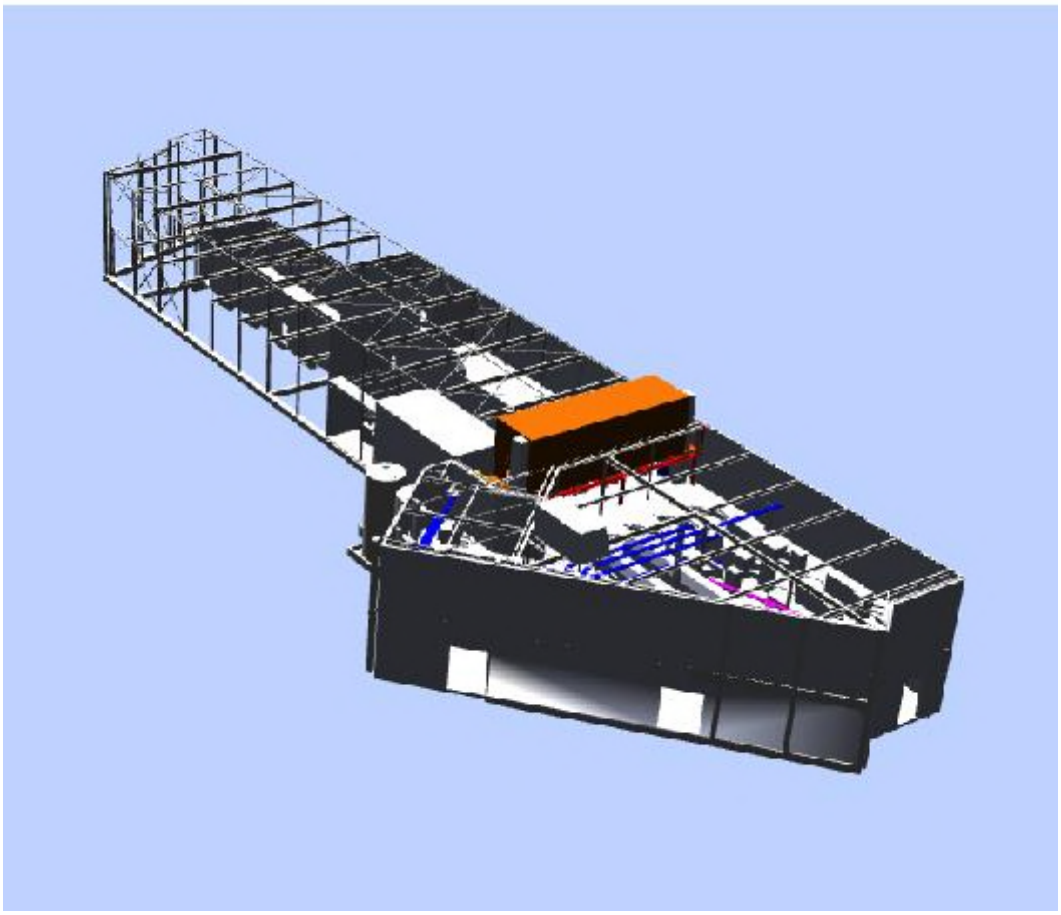
Belastingfactoren — EQU (groep A):

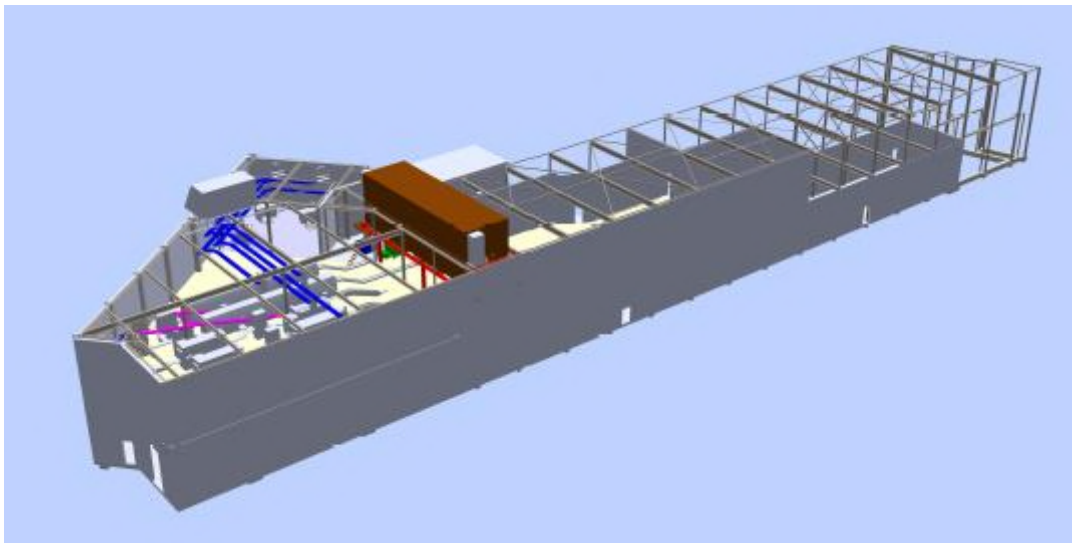
$\gamma_{Gj,sup,equ}$:	1,10
$\gamma_{Gj,inf,equ}$:	0,90
$\gamma_{Q,i,equ}$:	1,50
STR/GEO (groep B)	
$\gamma_{Gj,sup,strB}$:	1,35
$\gamma_{Gj,inf,strB}$:	0,90
$\gamma_{Q,i,strB}$:	1,50
ζ:	0,89
STR/GEO (groep C)	
$\gamma_{Gj,sup,strC}$:	1,00
$\gamma_{Gj,inf,strC}$:	1,00
$\gamma_{Q,i,strC}$:	1,30

Materialen

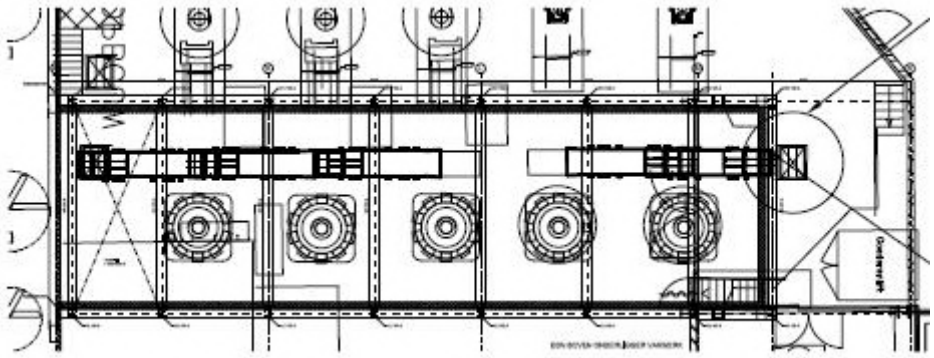
Staal	Walsprofielen	S235
	Kokerprofielen	S275
	Bouten	8.8
	Ankerbouten	4.6

Overzicht

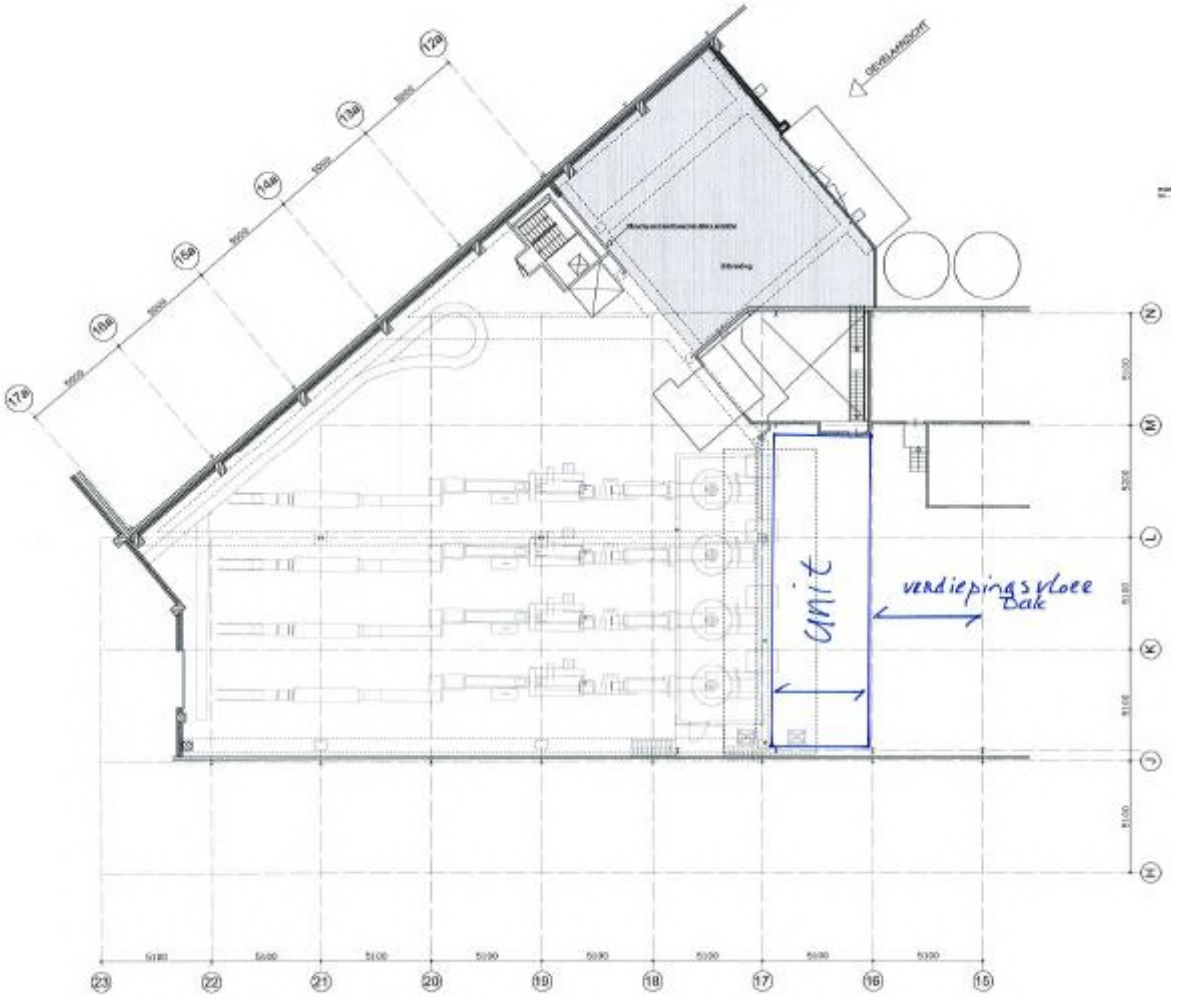


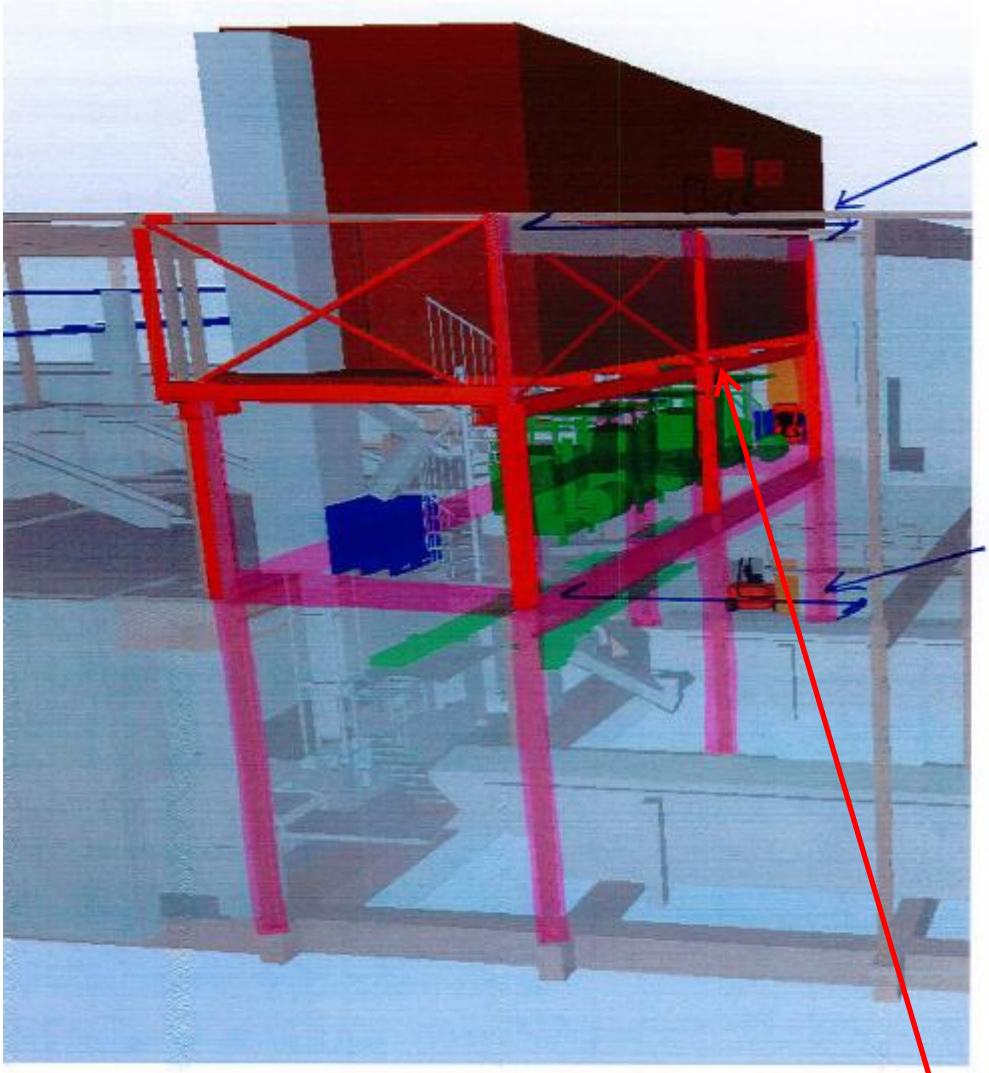


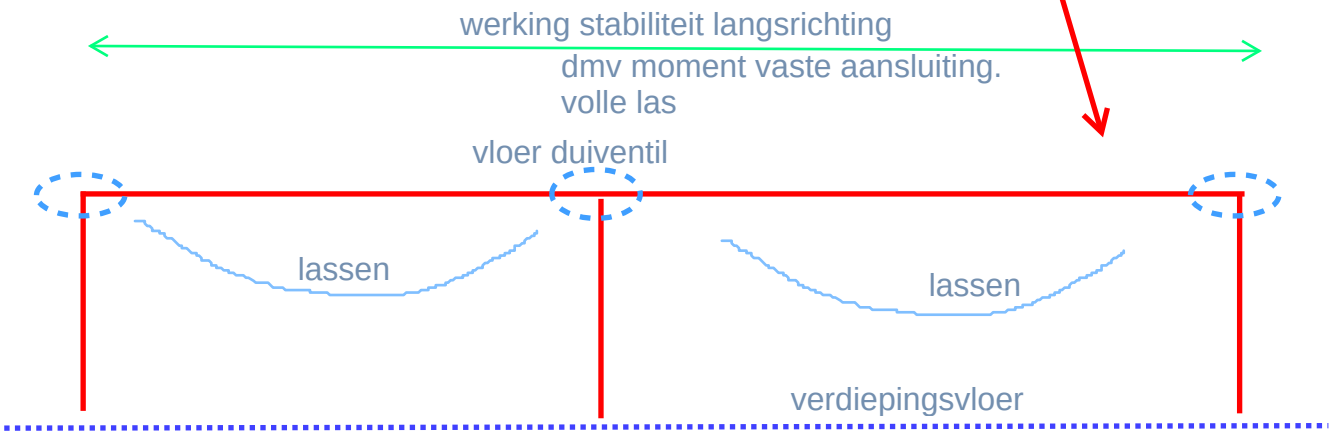
perspectief



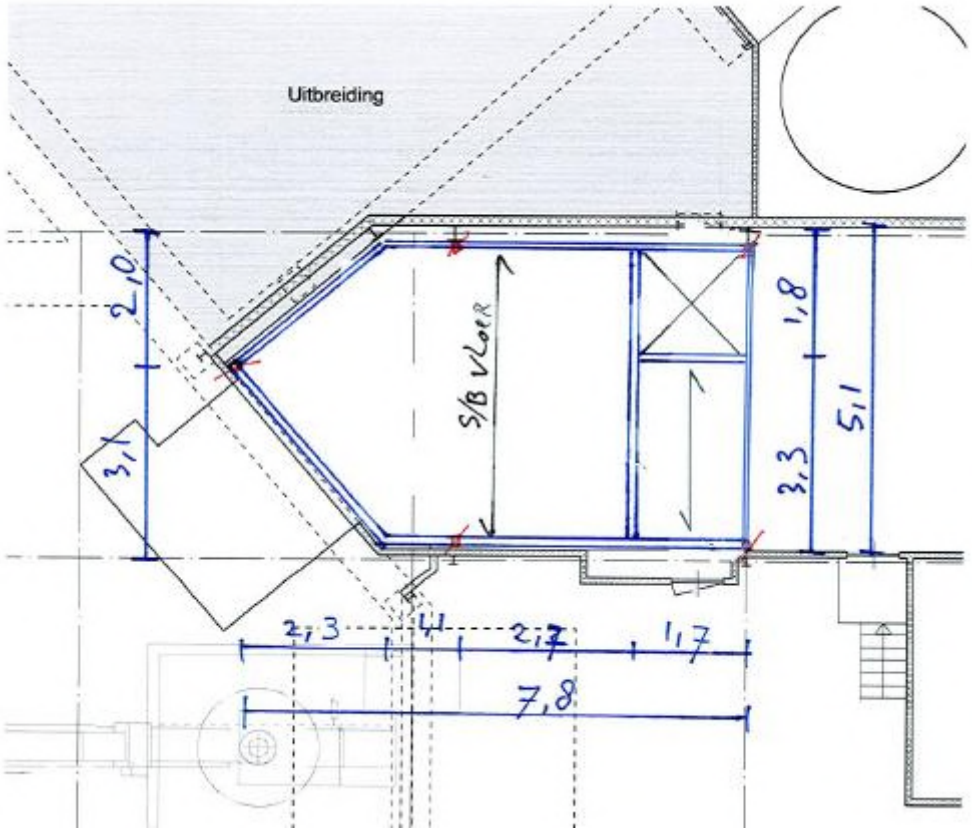
plattegrond




overspanning dak
Overspanning verdieping


werking stabiliteit langsrichting
dmv moment vaste aansluiting.
volle las
vloer duiventil
lassen
lassen
verdiepingsvloer


Nieuwe verdiepings vloer
GEVELAANZICHT


Uitbreiding
2,0
3,1
S/B vloer
1,8
3,3
5,1
2,3
1,1
2,7
1,7
7,8

Belastingen op staalconstructie t.b.v. unit

Algemeen
De staalconstructie wordt door verschillende onderdelen belast. Namelijk door de unit, een deel van het dak, en een deel van de begane grond vloer. De belastingen welke door de unit worden afgedragen aan de staalconstructie zijn opgegeven door de leverancier. De unit steekt door het dak en wordt tevens tevens door wind belast. De belastingen van het dak worden aangenomen, en de gegevens van de verdiepingsvloer zijn af te leiden uit de tekeningen van de verdiepingsvloer welke zijn gegeven.

Gegevens Unit
afmetingen

breedte unit b =	4,44 m
lengte unit l =	15,45 m
hoogte h =	4,90 m
hoogte boven dak h_w =	2,70 m

Belastingen unit
Opgegeven belastingen door leverancier unit

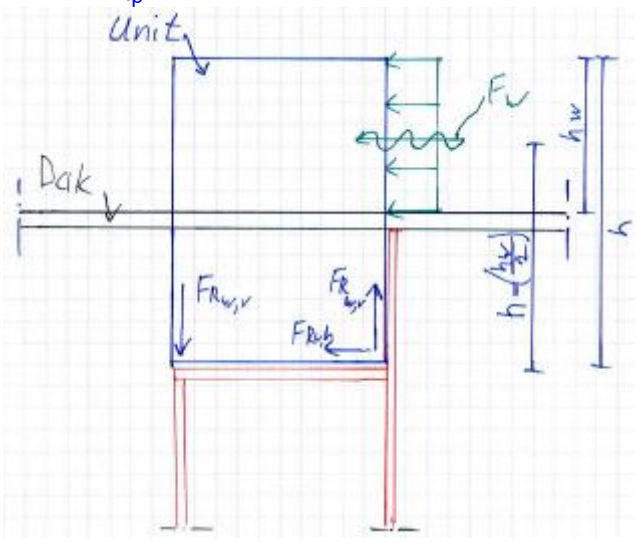
Totale massa inclusief product en marges F_{Ed} =			350 kN
De horizontale bewegingsfrequentie, toerental =			285 - 300 RPM
Frequentie =	$\frac{290}{60}$	=	4,83 hertz
Dynamisch verticale belasting =			1630 N
Dynamisch horizontale belasting =			650 N

De massa is volgens de leverancier gelijkmatig verdeelt over het oppervlakte van de unit

Massa per m^2 q_{Ed} =	$\frac{F_{Ed}}{b*l}$	=	5,10 kN/m²
Belasting per ligger $q_{Ed,ligger}$ =	$q_{Ed}*1,25$	=	6,38 kN/m

Windbelasting
Bepaling van de extreme waarde van de stuwdruk volgens NEN-EN 1991-1-4

Referentiehoogte z_e =		14,0 m
Gebied		=Gebied III
Omgeving		=onbebouwd
q_p	=	0,8 kN/m²

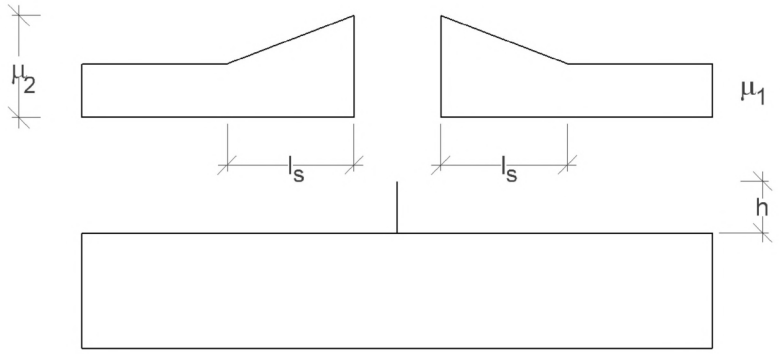


Belasting X en Y richting F_w =	$1,3 * q_p * h_w$	=	2,81 kN/m
Optredend koppel door wind $F_{Rw,vX}$ =	$\frac{F_w * \left(h - \left(\frac{h_w}{2}\right)\right)}{b}$	=	2,25 kN/m
Optredend koppel door wind $F_{Rw,vY}$ =	$\frac{F_w * \left(h - \left(\frac{h_w}{2}\right)\right)}{l}$	=	0,65 kN/m

Belasting dak

Sneeuw belasting

Sneeuwbelasting en ψ-factoren op dakNEN-EN 1991-1-3
Sneeuwbelasting ter plaatse van uitstekende delen en obstakels (artikel 6.2)



Hoogte h =			2,70 m
Stuiflengte l_s =	$2 * h$	=	5,40 m
Sneeuwbelastingsvormcoëfficiënt μ_1 =			0,80
Sneeuwbelastingsvormcoëfficiënt μ_2 =	MIN(2 * h / 0,7;2,0)	=	2,00
Sneeuwbelasting op de grond s_k =			0,70 kN/m²

De sneeuwbelasting is:

s_1 =	$\mu_1 * s_k$	=	0,56 kN/m²
s_2 =	$\mu_2 * s_k$	=	1,40 kN/m²

ψ-factoren

ψ_0 =			0,00
ψ_1 =			0,20
ψ_2 =			0,00

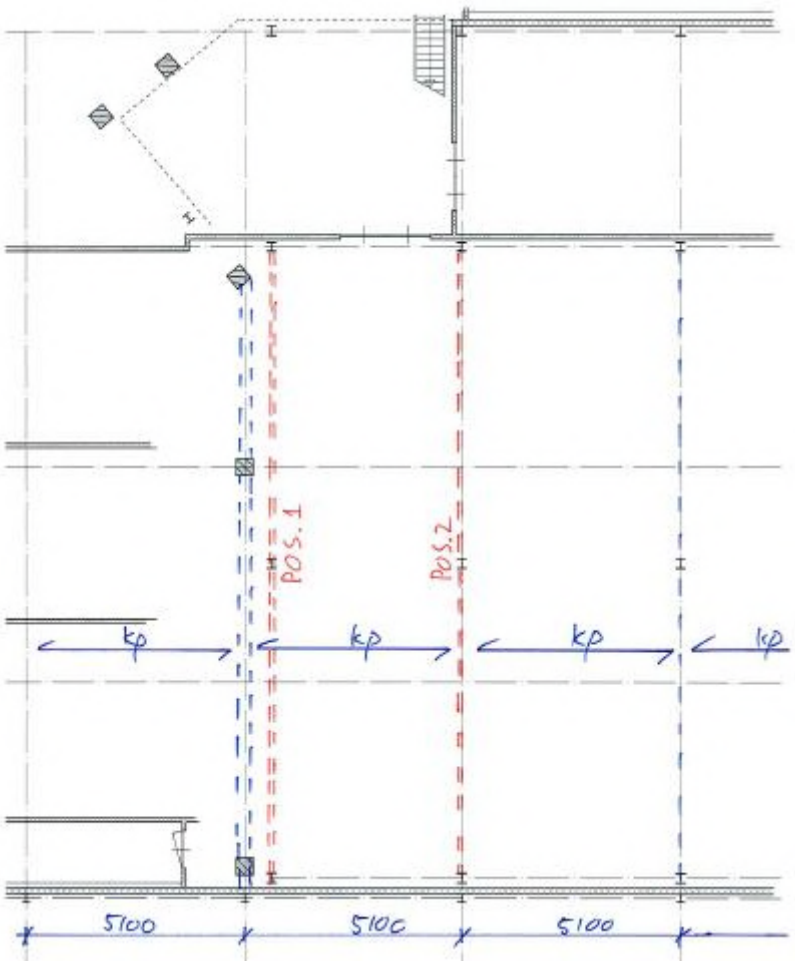
Sneeuwbelasting op stalen constructie

Gemiddelde sneeuw belasting s =	$(s_2 - s_1) * \frac{3}{4} + s_1$	=	1,19 kN/m²

Belasting dak

permanent $q_{Gk,dak}$ =	$0,30 * 5,1 / 2$	=	0,77 kN/m
veranderlijk $q_{qk,dak}$ =	$s * 5,1 / 2$	=	3,03 kN/m

Belasting verdiepingsvloer



Positie 1

permanent $q_{Gk,dak}$ =	(3,00 + 1,20) * (5,1 / 2) * 1,2	=	12,85 kN/m
veranderlijk $q_{qk,dak}$ =	10,00 * (5,1 / 2) * 1,2	=	30,60 kN/m

Positie 2

permanent $q_{Gk,dak}$ =	(3,00 + 1,20) * 5,1	=	21,42 kN/m
veranderlijk $q_{qk,dak}$ =	10,00 * 5,1	=	51,00 kN/m

Berekening staalconstructie t.b.v. unit

De berekening van de staalconstructie is bijgevoegd in bijlage A. De gegevens zijn verwerkt op de constructieve tekening 8332-3001.

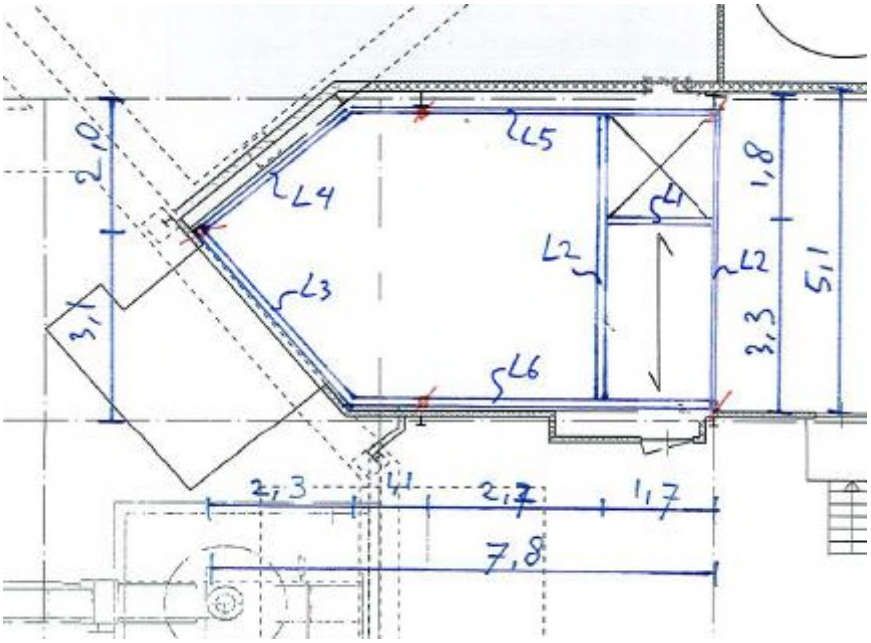
Belastingen op staalconstructie t.b.v. vloer

Algemeen
De verdiepingsvloer wordt uitgevoerd in een staalbetonvloer. In de vloer wordt wordt een sparing opgenomen voor een lift. De vloer wordt door stalenbalken en kolommen afgedragen naar de fundatie. Er wordt een Comflor 90 t 1,20mm dikte 200mm toegepast. In bijlage B zijn de gegevens van deze vloer bijgevoegd. De vloer dient te worden onderstempeld tijdens het storten.

Belastingen op stalenliggers

Belastingen vloer

Permanente belastingen vloer q_{Gk} = 3,90 + 1,20 = 5,10 kN/m²
Veranderlijke belasting vloer q_{qk} = 10,00 kN/m²



Ligger 1

Permanente belasting =	q_{Gk} *3,3/2	=	8,41 kN/m
Veranderlijke belasting =	q_{qk} *3,3/2	=	16,50 kN/m

Ligger 2

Permanente belasting =	q_{Gk} *0,5	=	2,55 kN/m
Veranderlijke belasting =	q_{qk} *0,5	=	5,00 kN/m

De ligger wordt tevens belast met de reacties uit ligger 1

Ligger 3 en 4

Maximaal

Permanente belasting =	q_{Gk} *5,1/2	=	13,01 kN/m
Veranderlijke belasting =	q_{qk} *5,1/2	=	25,50 kN/m

Minimaal

Permanente belasting =	q_{Gk} *0,5	=	2,55 kN/m
Veranderlijke belasting =	q_{qk} *0,5	=	5,00 kN/m

Ligger 5

Maximaal

Permanente belasting =	$q_{Gk} * 5,1/2$	=	13,01 kN/m
Veranderlijke belasting =	$q_{qk} * 5,1/2$	=	25,50 kN/m

Minimaal

Permanente belasting =	$q_{Gk} * 0,5$	=	2,55 kN/m
Veranderlijke belasting =	$q_{qk} * 0,5$	=	5,00 kN/m

De ligger wordt tevens belast met de reacties uit ligger 2 en 4

Ligger 6

Maximaal

Permanente belasting =	$q_{Gk} * 5,1/2$	=	13,01 kN/m
Veranderlijke belasting =	$q_{qk} * 5,1/2$	=	25,50 kN/m

Minimaal

Permanente belasting =	$q_{Gk} * 3,3/2$	=	8,41 kN/m
Veranderlijke belasting =	$q_{qk} * 3,3/2$	=	16,50 kN/m

De ligger wordt tevens belast met de reacties uit ligger 2 en 3

Berekening is toegevoegd in bijlage C. Toepassen alle ligger HEB 240
De maatgevende kolom is berekend met de reactie kracht uit de maatgevende ligger. De berekening is bijgevoegd in bijlage D. Toepassen kolom koker 150x150x8mm

Fundatie

Algemeen

De fundatie wordt na het uitvoeren van de plannen gedeeltelijk anders belast. De Belastingen op de fundatie t.p.v. de kolomen neemt lichtelijk toe omdat de nieuwe weegistallatie groter is dan de bestaande. Tevens worden er enkele kolommen bijgeplaats t.b.v. de verdiepingsvloer. Met de gebruiker vast gesteld dat de maximale nuttige belasting wordt verlaagd van 12 naar 10 kN/m^2. Dit betekend omdat het gebouw uit twee verdiepingen bestaat een reductie van 4kN/m^2. Hiermee is de toename van de belastingen op de palen te reduceren. De paal met de de grootste belasting staat ter plaatse van de stramien 17/K6. Deze paal wordt gecontroleerd.

Berekening

Paaldiamter d: 450 mm

4*d = 1800 mm
8*d = 3600 mm

Paalpuntniveau : -12 m

qc1: $\frac{14+16+18}{3}$ = 16,00 N/mm²

qc2: 14,00 N/mm²

qc3: $\frac{14+8+6}{3}$ = 9,33 N/mm²

αp: 0,50

Maximaal paalpuntdraagvermogen:

Rbcal: $0.5*\alpha p*((qc1+qc2)/2+qc3)*1/4*\pi*d^2$ = 967379,01 N

Schachtwrijving:

boorpalen paalklasse factor αs: 0,0060

qc: $\frac{10+8+6+4+15+8+6+4}{8}$ = 7,63 N/mm²

Rscal: $\alpha s*qc*\pi*d*8000$ = 517759,16 N

Rcal: Rscal+Rbcal = 1485138,17 N

ξ3: 1,39

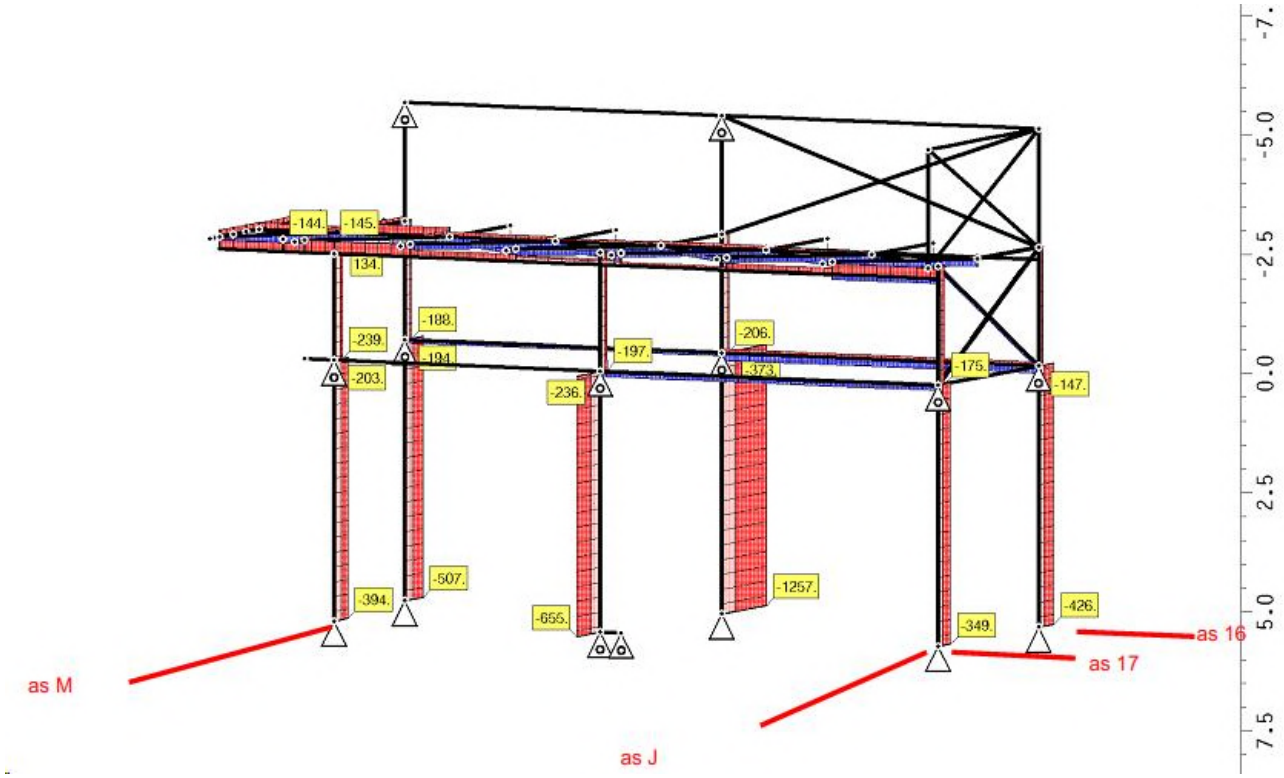
Rcd: $Rcal/(\xi 3*1,2*1000)$ = 890,37 kN

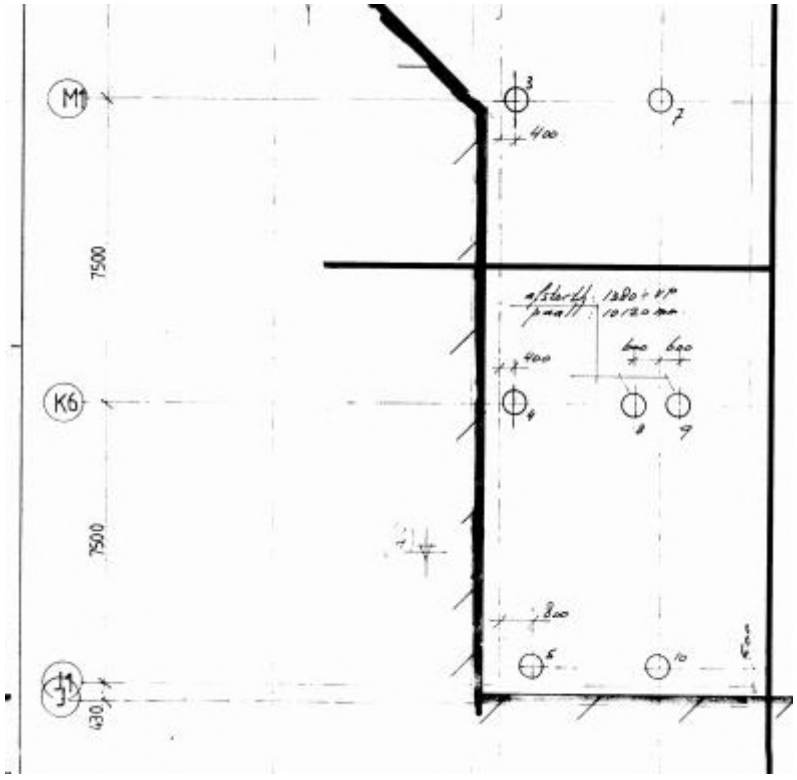
Maximaal paaldraagvermogen:

Rcd:850 kN.

Paalbelasting beschouwing:

last uit bovenbouw:





Maximale belastingen:

paal nr 8 en 9

Rekenlast uit bovenbouw: 1257,00 kN

Beganegrond:

A: (5.1+4.5)/2*7.5 = 36,00 m²

aaname beganegrondvloer:

Grepvloer:

$\left(0{,}25*24+\frac{50}{1000}*20\right)*1{,}2$ = 8,40 kN/m²

Opgelegd:

12*0.8*1.5 = 14,40 kN/m²

Pd = 22,80 kN/m²

Maximale paallast tbv paal 8 en 9 op basis van CC2

Pd*A+1257 = 2077,80 kN

Herziening klasse CC1:

Belastingsfactoren opgelegde belasting γ:1.3 ipv 1.5

Rekenlast uit bovenbouw 1155kN

Rekenlast uit bovenbouw: 1155,00 kN

Beganegrond:

A: (5.1+4.5)/2*7.5 = 36,00 m²

aaname beganegrondvloer:

Grepvloer:

$\left(0{,}25*24+\frac{50}{1000}*20\right)*1{,}2$ = 8,40 kN/m²

Opgelegd:

12*0.8*1.3 = 12,48 kN/m²

Pd = 20,88 kN/m²

Maximale paallast tbv paal 8 en 9 op basis van CC1

Pd*A+1155 = 1906,68 kN

Paaldraagvermogen is: 2*850 = 1700,00 kN

Te kort aan draagvermogen : 1900-1700 = 200,00 kN

over 2 verdiepingen.

A totaal over deze 2 verdiepingen: A*2 = 72,00 m²

Conclusie:

Een te kort van circa : $\frac{200}{72}$ = 2,78 kN/m²

Pd te kort :2.8kN/m2

Conclusie:
Reductie van de nuttige last met :2.0 kNm2

Conclusie:
Fundering kan ongewijzigd blijven indien de nuttige last per verdieping gereduceerd zou worden van
12 kN/m2 naar bv 10 kN/m2 vervolgens beschouwing CC1

Controle

Rekenlast uit bovenbouw: 1100,00 kN

Beganegrond:

A: (5.1+4.5)/2*7.5 = 36,00 m²

aaname beganegrondvloer:

Grepvloer:
$\left(0{,}25*24+\frac{50}{1000}*20\right)*1{,}2$ = 8,40 kN/m²
Opgelegd:
10*0.8*1.3 = 10,40 kN/m²

Pd = 18,80 kN/m²

Maximale paallast tbv paal 8 en 9 op basis van CC1

Pd*A+1100 = 1776,80 kN

verdeeld over 2 palen.

Last per paal: $\frac{1776}{2}$ = 888,00 kN

Paaldraagvermogen: 890 kN.

Conclusie:

De fundering hoeft op basis van het paaldraagvermogen niet te worden aangepast, indien de beganegrond en verdieping worden belast met maximaal 10kN/m2 nuttige last.

Bijlage A - Berekening staalconstructie t.b.v. unit

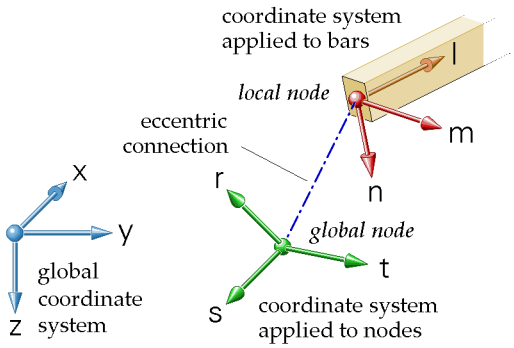
GLOBAL INFORMATION

Building component: uitkraging oplossing

Project: 8332-AviKo
2e orde-- NL 10 kN/m2

CALCULATION	☑ static ☐ dynamic
NON-LINEARITY	☑ Theory of the I order ☑ Theory of the II order
MATERIALS	☑ Steel ☐ Reinforced concrete ☐ Wood ☐ unknown

COORDINATE SYSTEMS



DATA OF SYSTEM

100	Steel bars	4	Traverses	5	Load cases
0	Reinforced concrete bars	0	Groups of incoherent bars	0	Imperfections
0	Wooden bars	15	Bedded nodes	3	Action effects
100	Total number of bars	56	Total number of nodes	3	Verifications

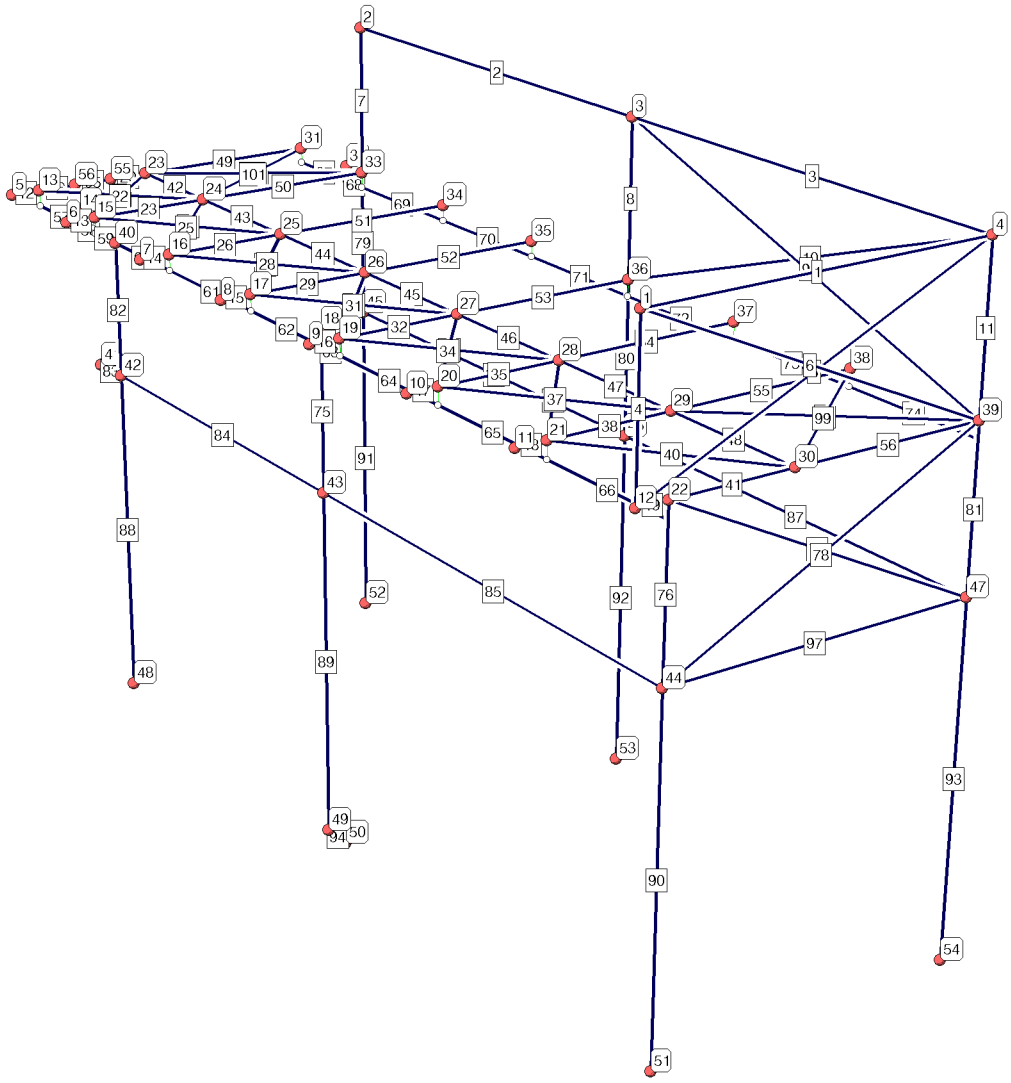
STATEMENTS DUE TO ITERATION CONTROL

Calculating maximum 50 iterations per load spectrum.
Limit of accuracy of joint displacements = 5.0 ‰
Limit of accuracy of of joint rotations = 20.0 ‰
Remarks with respect to strut faillure will be considered.

DESCRIPTION OF THE SYSTEM

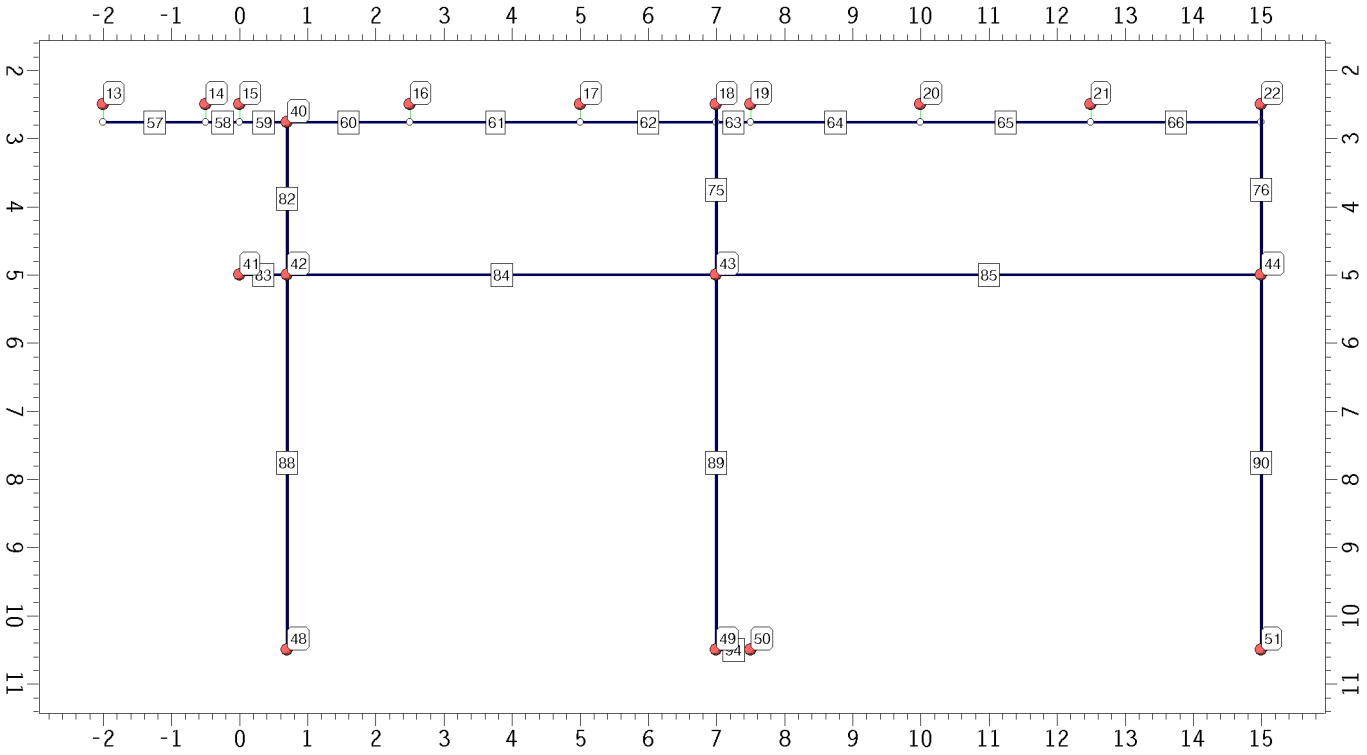
Overview: Complete system

with node numbers and bar numbers



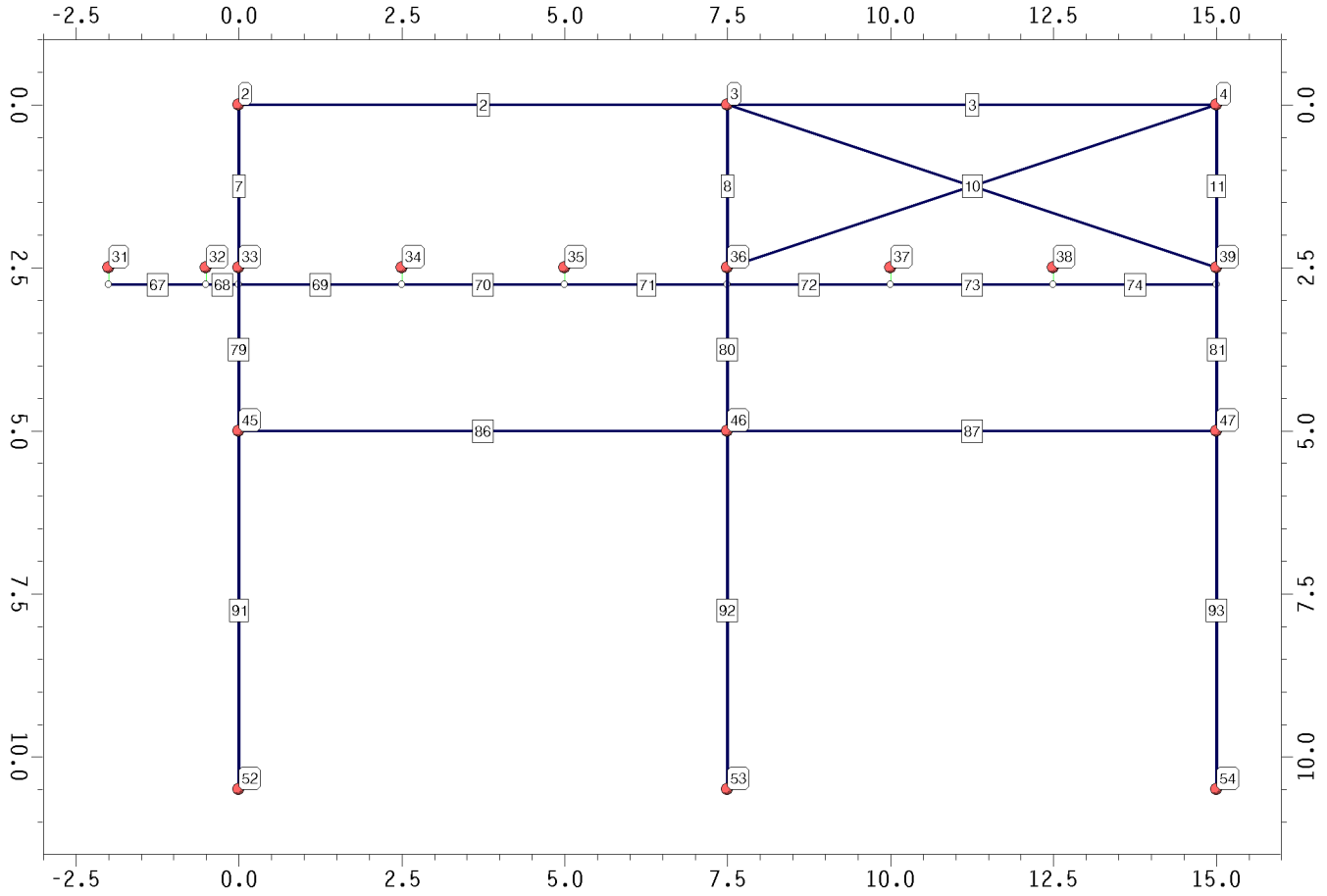
y-z-plane: plane 1

with node numbers and bar numbers



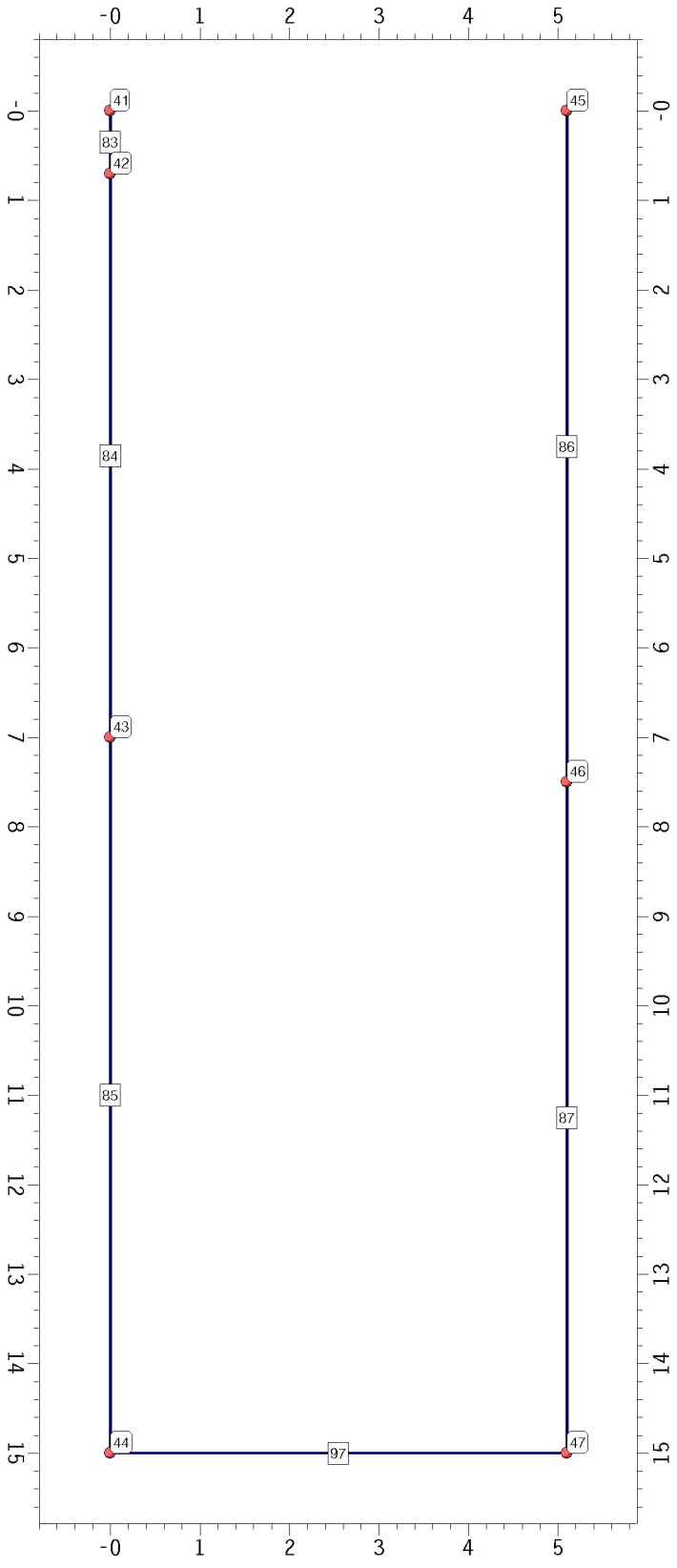
y-z-plane: plane 2

with node numbers and bar numbers



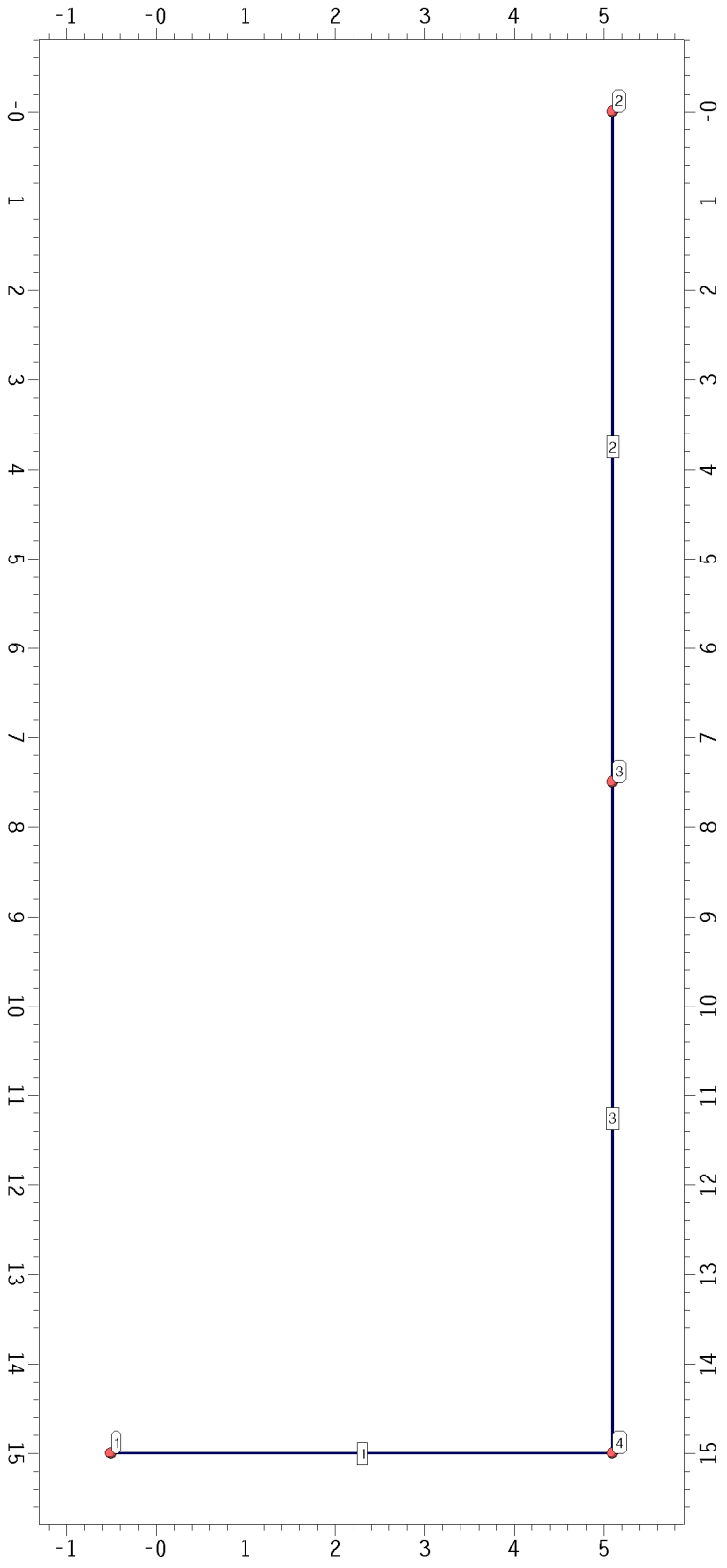
x-y-plane: plane 3

with node numbers and bar numbers



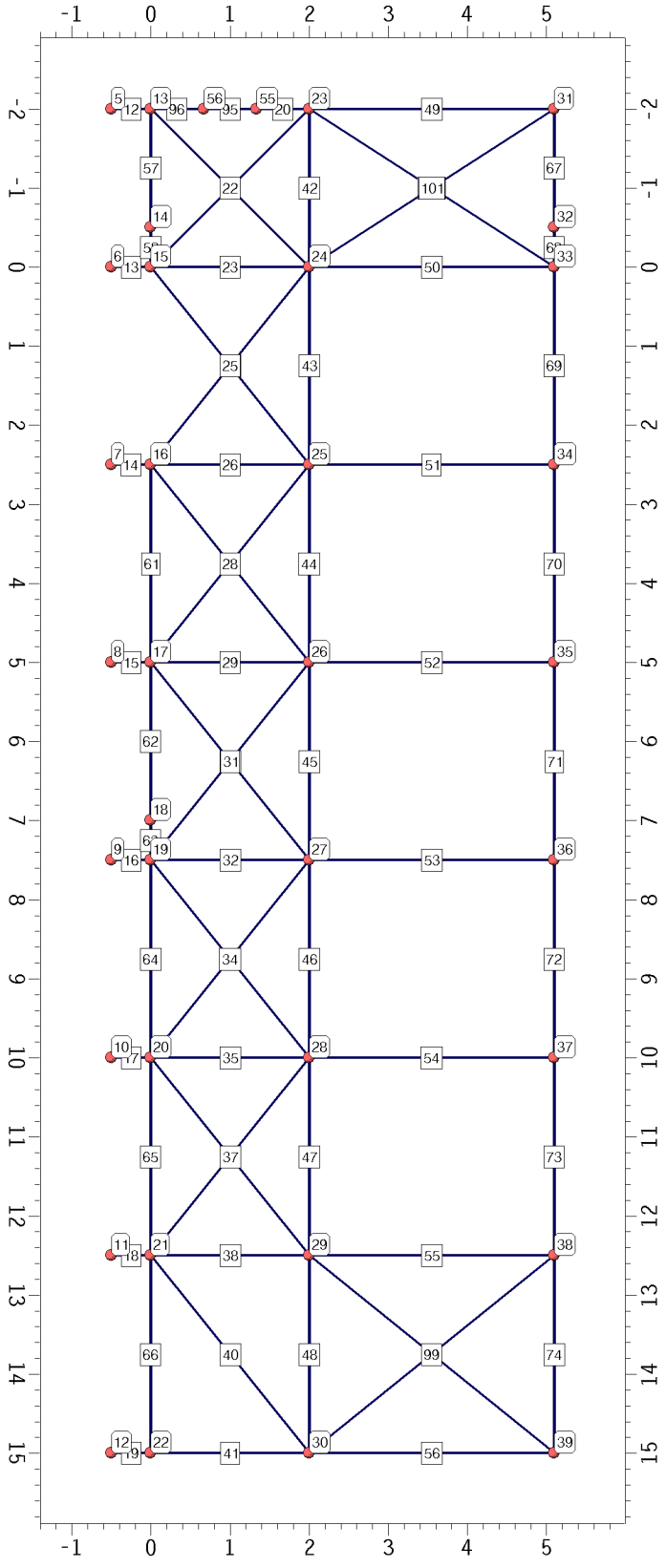
x-y-plane: plane 4

with node numbers and bar numbers



x-y-plane: plane 5

with node numbers and bar numbers



Nodes and global node coordinates

node	x	y	z	node	x	y	z
-	m	m	m	-	m	m	m
1	-0.500	15.000	0.000	29	2.000	12.500	2.500
2	5.100	0.000	0.000	30	2.000	15.000	2.500
3	5.100	7.500	0.000	31	5.100	-2.000	2.500
4	5.100	15.000	0.000	32	5.100	-0.500	2.500
5	-0.500	-2.000	2.500	33	5.100	0.000	2.500
6	-0.500	0.000	2.500	34	5.100	2.500	2.500
7	-0.500	2.500	2.500	35	5.100	5.000	2.500
8	-0.500	5.000	2.500	36	5.100	7.500	2.500
9	-0.500	7.500	2.500	37	5.100	10.000	2.500
10	-0.500	10.000	2.500	38	5.100	12.500	2.500
11	-0.500	12.500	2.500	39	5.100	15.000	2.500
12	-0.500	15.000	2.500	40	0.000	0.700	2.760
13	0.000	-2.000	2.500	41	0.000	0.000	5.000
14	0.000	-0.500	2.500	42	0.000	0.700	5.000
15	0.000	0.000	2.500	43	0.000	7.000	5.000
16	0.000	2.500	2.500	44	0.000	15.000	5.000
17	0.000	5.000	2.500	45	5.100	0.000	5.000
18	0.000	7.000	2.500	46	5.100	7.500	5.000
19	0.000	7.500	2.500	47	5.100	15.000	5.000
20	0.000	10.000	2.500	48	0.000	0.700	10.500
21	0.000	12.500	2.500	49	0.000	7.000	10.500
22	0.000	15.000	2.500	50	0.000	7.500	10.500
23	2.000	-2.000	2.500	51	0.000	15.000	10.500
24	2.000	0.000	2.500	52	5.100	0.000	10.500
25	2.000	2.500	2.500	53	5.100	7.500	10.500
26	2.000	5.000	2.500	54	5.100	15.000	10.500
27	2.000	7.500	2.500	55	1.333	-2.000	2.500
28	2.000	10.000	2.500	56	0.667	-2.000	2.500

r-s-t-Coordinate systems:

For all nodes: r-s-t = x-y-z

Table of nodal bearings, spring constants

	prevention of displacement			prevention of rotation		
node	Cur	Cus	Cut	Cvr	Cvs	Cvt
-	kN/m	kN/m	kN/m	kNm	kNm	kNm
2	rigid	--	--	--	--	--
3	rigid	--	--	--	--	--
42	rigid	--	--	--	--	--
43	rigid	--	--	--	--	--
44	rigid	rigid	--	--	--	--
45	rigid	--	--	--	--	--
46	rigid	--	--	--	--	--
47	rigid	rigid	--	--	--	--
48	rigid	rigid	rigid	--	--	--
49	rigid	rigid	--	--	--	--
50	--	--	rigid	--	--	--
51	rigid	rigid	rigid	--	--	--
52	rigid	rigid	rigid	--	--	--
53	rigid	rigid	rigid	--	--	--
54	rigid	rigid	rigid	--	--	--

BARS IN TRAVERSE 1: LIGGER 1

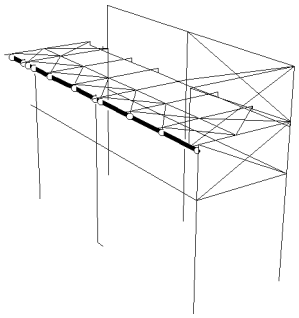


Table of bars

Length indicates the distance between the local nodes of the bar. α describes the l-m-n coordinate system of the bar (see global information). l always begins at the local start node and ends at the local end node. n is vertical to l and m. If α=0, m is always parallel to the x-y-plane. Vertical bars (Δx = Δy = 0.0) remain m=y for α=0. If α is positive, m rotates in the positive sense of rotation about l.

bar	nodA	nodE	length	α
-	-	-	m	°
57	13	14	1.500	0.0
58	14	15	0.500	0.0
59	15	40	0.700	0.0
60	40	16	1.800	0.0
61	16	17	2.500	0.0
62	17	18	2.000	0.0
63	18	19	0.500	0.0
64	19	20	2.500	0.0
65	20	21	2.500	0.0
66	21	22	2.500	0.0

Eccentric connected bars

The eccentric connections are described at the beginning of the bar with [ax,ay,az] and at the end with [ex,ey,ez]. They indicate the position of the local node measured from the global node.

bar	ax	ay	az	ex	ey	ez
-	m	m	m	m	m	m
57	0.000	0.000	0.260	0.000	0.000	0.260
58	0.000	0.000	0.260	0.000	0.000	0.260
59	0.000	0.000	0.260	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.260
61	0.000	0.000	0.260	0.000	0.000	0.260
62	0.000	0.000	0.260	0.000	0.000	0.260
63	0.000	0.000	0.260	0.000	0.000	0.260
64	0.000	0.000	0.260	0.000	0.000	0.260
65	0.000	0.000	0.260	0.000	0.000	0.260
66	0.000	0.000	0.260	0.000	0.000	0.260

There are neither elastic-bedded nor hinge-connected bars in this traverse.

Bars with normed steel sections

bar	material	profile designation	bar	material	profile designation
-	-	-	-	-	-
61	S235 (St37)	HE260B	64	S235 (St37)	HE260B
62	S235 (St37)	HE260B	65	S235 (St37)	HE260B
63	S235 (St37)	HE260B	66	S235 (St37)	HE260B

Bars with special cross-sections

The cross-sections are imported from program **4H-QUER**. Their description follows after the description of the system.
Material: S = steel, B = reinforced concrete, H = wood, A = general

bar	Material	E-Modul	G-Modul	αt	type	Cross-sectionsbezeichnung
-	-	MN/m²	MN/m²	10⁻⁵ K	-	
57	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat
58	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat
59	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat
60	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat

BARS IN TRAVERSE 2: L KOLOM

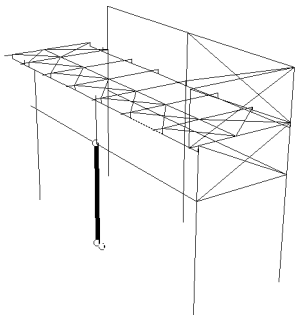


Table of bars

Length indicates the distance between the local nodes of the bar. α describes the l-m-n coordinate system of the bar (see global information).
l always begins at the local start node and ends at the local end node. n is vertical to l and m. If α=0, m is always parallel to the x-y-plane.
Vertical bars (Δx = Δy = 0.0) remain m=y for α=0. If α is positive, m rotates in the positive sense of rotation about l.

bar	nodA	nodE	length	α
-	-	-	m	°
94	50	49	0.500	0.0
89	49	43	5.500	90.0

There are no eccentric connections in this traverse.

Hinge connected bars

bar	hinges at local start node						hinges at local end node					
	Mm	Mn	Ml	Qm	Qn	Nl	Mm	Mn	Ml	Qm	Qn	Nl
89	-	-	-	-	-	-	yes	yes	-	-	-	-

There are no elastic-bedded bars in this traverse.

Bars with normed steel sections

bar	material	profile designation
-	-	-
89	S235 (St37)	HE320B

Bars with special cross-sections

The cross-sections are imported from program **4H-QUER**. Their description follows after the description of the system.
Material: S = steel, B = reinforced concrete, H = wood, A = general

bar	Material	E-Modul	G-Modul	αt	type	Cross-sectionsbezeichnung
-	-	MN/m²	MN/m²	10⁻⁵ K	-	
94	S: S235 (St37)	210000	81000	1.2	thin-walled	HEB320+2x10mm

BARS IN TRAVERSE 3: HOOFDLIGGER AS 17

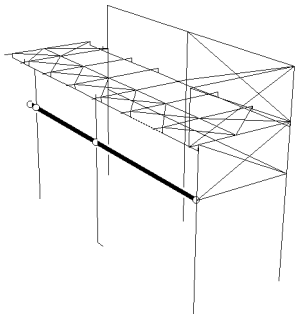


Table of bars

Length indicates the distance between the local nodes of the bar. α describes the l-m-n coordinate system of the bar (see global information).
l always begins at the local start node and ends at the local end node. n is vertical to l and m. If α=0, m is always parallel to the x-y-plane.
Vertical bars (Δx = Δy = 0.0) remain m=y for α=0. If α is positive, m rotates in the positive sense of rotation about l.

bar	nodA	nodE	length	α
-	-	-	m	°
83	41	42	0.700	0.0
84	42	43	6.300	0.0
85	43	44	8.000	0.0

There are no eccentric connections in this traverse.

Hinge connected bars

bar	hinges at local start node						hinges at local end node					
	Mm	Mn	Ml	Qm	Qn	Nl	Mm	Mn	Ml	Qm	Qn	Nl
85	-	-	-	-	-	-	yes	-	-	-	-	-

There are no elastic-bedded bars in this traverse.

Bars with normed steel sections

bar	material	profile designation
-	-	-
83	S235 (St37)	HE360A
84	S235 (St37)	HE360A
85	S235 (St37)	HE360A

BARS IN TRAVERSE 4: HOOFDLIGGER AS 16

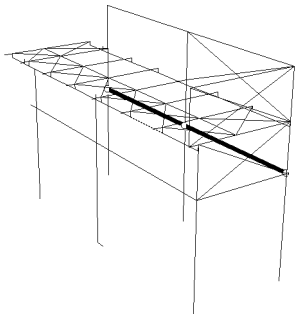


Table of bars

Length indicates the distance between the local nodes of the bar. α describes the l-m-n coordinate system of the bar (see global information). l always begins at the local start node and ends at the local end node. n is vertical to l and m. If α=0, m is always parallel to the x-y-plane. Vertical bars (Δx = Δy = 0.0) remain m=y for α=0. If α is positive, m rotates in the positive sense of rotation about l.

bar	nodA	nodE	length	α
-	-	-	m	°
87	47	46	7.500	0.0
86	46	45	7.500	0.0

There are no eccentric connections in this traverse.

Hinge connected bars

bar	hinges at local start node						hinges at local end node					
	Mm	Mn	Ml	Qm	Qn	Nl	Mm	Mn	Ml	Qm	Qn	Nl
87	yes	-	-	-	-	-	-	-	-	-	-	-
86	-	-	-	-	-	-	yes	-	-	-	-	-

There are no elastic-bedded bars in this traverse.

Bars with normed steel sections

bar	material	profile designation
-	-	-
87	S235 (St37)	HE450A
86	S235 (St37)	HE450A

BARS WITHOUT GROUP AFFILIATION

Table of bars

Length indicates the distance between the local nodes of the bar. α describes the l-m-n coordinate system of the bar (see global information). l always begins at the local start node and ends at the local end node. n is vertical to l and m. If α=0, m is always parallel to the x-y-plane. Vertical bars (Δx = Δy = 0.0) remain m=y for α=0. If α is positive, m rotates in the positive sense of rotation about l.

bar	nodA	nodE	length	α	bar	nodA	nodE	length	α
-	-	-	m	°	-	-	-	m	°
1	1	4	5.600	0.0	14	7	16	0.500	0.0
2	2	3	7.500	0.0	15	8	17	0.500	0.0
3	3	4	7.500	0.0	16	9	19	0.500	0.0
4	12	1	2.500	0.0	17	20	10	0.500	0.0
5	12	4	6.133	0.0	18	21	11	0.500	0.0
6	1	39	6.133	0.0	19	22	12	0.500	0.0
7	2	33	2.500	0.0	20	23	55	0.667	0.0
8	3	36	2.500	0.0	21	24	13	2.828	0.0
9	3	39	7.906	0.0	22	15	23	2.828	0.0
10	4	36	7.906	0.0	23	15	24	2.000	0.0
11	39	4	2.500	0.0	24	25	15	3.202	0.0
12	5	13	0.500	0.0	25	16	24	3.202	0.0
13	6	15	0.500	0.0	26	16	25	2.000	0.0

Table of bars

Length indicates the distance between the local nodes of the bar. α describes the l-m-n coordinate system of the bar (see global information). l always begins at the local start node and ends at the local end node. n is vertical to l and m. If α=0, m is always parallel to the x-y-plane. Vertical bars (Δx = Δy = 0.0) remain m=y for α=0. If α is positive, m rotates in the positive sense of rotation about l.

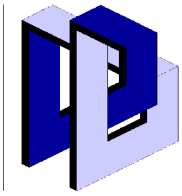
bar	nodA	nodE	length	α
-	-	-	m	°
27	17	25	3.202	0.0
28	26	16	3.202	0.0
29	17	26	2.000	0.0
30	27	17	3.202	0.0
31	19	26	3.202	0.0
32	19	27	2.000	0.0
33	28	19	3.202	0.0
34	20	27	3.202	0.0
35	20	28	2.000	0.0
36	21	28	3.202	0.0
37	29	20	3.202	0.0
38	21	29	2.000	0.0
40	30	21	3.202	0.0
41	22	30	2.000	0.0
42	24	23	2.000	0.0
43	25	24	2.500	0.0
44	26	25	2.500	0.0
45	27	26	2.500	0.0
46	28	27	2.500	0.0
47	29	28	2.500	0.0
48	30	29	2.500	0.0
49	31	23	3.100	0.0
50	24	33	3.100	0.0
51	25	34	3.100	0.0
52	26	35	3.100	0.0
53	27	36	3.100	0.0
54	28	37	3.100	0.0
55	29	38	3.100	0.0
56	30	39	3.100	0.0

bar	nodA	nodE	length	α
-	-	-	m	°
67	32	31	1.500	0.0
68	33	32	0.500	0.0
69	33	34	2.500	0.0
70	34	35	2.500	0.0
71	35	36	2.500	0.0
72	36	37	2.500	0.0
73	37	38	2.500	0.0
74	38	39	2.500	0.0
75	18	43	2.500	90.0
76	22	44	2.500	90.0
77	22	47	5.680	0.0
78	39	44	5.680	0.0
79	33	45	2.500	90.0
80	36	46	2.500	90.0
81	39	47	2.500	90.0
82	40	42	2.240	90.0
88	42	48	5.500	90.0
90	44	51	5.500	90.0
91	45	52	5.500	90.0
92	46	53	5.500	90.0
93	47	54	5.500	-90.0
95	55	56	0.667	0.0
96	56	13	0.667	0.0
97	44	47	5.100	0.0
98	29	39	3.982	0.0
99	38	30	3.982	0.0
100	23	33	3.689	0.0
101	24	31	3.689	0.0

Eccentric connected bars

The eccentric connections are described at the beginning of the bar with [ax,ay,az] and at the end with [ex,ey,ez]. They indicate the position of the local node measured from the global node.

bar	ax	ay	az	ex	ey	ez
-	m	m	m	m	m	m
67	0.000	0.000	0.260	0.000	0.000	0.260
68	0.000	0.000	0.260	0.000	0.000	0.260
69	0.000	0.000	0.260	0.000	0.000	0.260
70	0.000	0.000	0.260	0.000	0.000	0.260
71	0.000	0.000	0.260	0.000	0.000	0.260
72	0.000	0.000	0.260	0.000	0.000	0.260
73	0.000	0.000	0.260	0.000	0.000	0.260
74	0.000	0.000	0.260	0.000	0.000	0.260



Hinge connected bars

bar	hinges at local start node						hinges at local end node					
	Mm	Mn	Ml	Qm	Qn	Nl	Mm	Mn	Ml	Qm	Qn	Nl
3	-	-	-	-	-	-	yes	-	-	-	-	-
4	yes	-	-	-	-	-	yes	-	-	-	-	-
5	yes	-	-	-	-	-	yes	-	-	-	-	-
6	yes	-	-	-	-	-	yes	-	-	-	-	-
7	yes	yes	-	-	-	-	yes	yes	-	-	-	-
8	yes	yes	-	-	-	-	yes	yes	-	-	-	-
9	yes	-	-	-	-	-	yes	-	-	-	-	-
10	yes	-	-	-	-	-	yes	-	-	-	-	-
11	yes	yes	-	-	-	-	yes	yes	-	-	-	-
21	yes	yes	-	-	-	-	yes	yes	-	-	-	-
22	yes	yes	-	-	-	-	yes	yes	-	-	-	-
23	yes	-	-	-	-	-	-	-	-	-	-	-
24	yes	yes	-	-	-	-	yes	yes	-	-	-	-
25	yes	yes	-	-	-	-	yes	yes	-	-	-	-
26	yes	-	-	-	-	-	-	-	-	-	-	-
27	yes	yes	-	-	-	-	yes	yes	-	-	-	-
28	yes	yes	-	-	-	-	yes	yes	-	-	-	-
29	yes	-	-	-	-	-	-	-	-	-	-	-
30	yes	yes	-	-	-	-	yes	yes	-	-	-	-
31	yes	yes	-	-	-	-	yes	yes	-	-	-	-
33	yes	yes	-	-	-	-	yes	yes	-	-	-	-
34	yes	yes	-	-	-	-	yes	yes	-	-	-	-
35	yes	-	-	-	-	-	-	-	-	-	-	-
36	yes	yes	-	-	-	-	yes	yes	-	-	-	-
37	yes	yes	-	-	-	-	yes	yes	-	-	-	-
38	yes	-	-	-	-	-	-	-	-	-	-	-
40	yes	yes	-	-	-	-	yes	yes	-	-	-	-
42	yes	yes	-	-	-	-	yes	yes	-	-	-	-
43	yes	yes	-	-	-	-	yes	yes	-	-	-	-
44	yes	yes	-	-	-	-	yes	yes	-	-	-	-
45	yes	yes	-	-	-	-	yes	yes	-	-	-	-
46	yes	yes	-	-	-	-	yes	yes	-	-	-	-
47	yes	yes	-	-	-	-	yes	yes	-	-	-	-
48	yes	yes	-	-	-	-	yes	yes	-	-	-	-
50	-	-	-	-	-	-	yes	yes	-	-	-	-
51	-	-	-	-	-	-	yes	yes	-	-	-	-
52	-	-	-	-	-	-	yes	yes	-	-	-	-
53	-	-	-	-	-	-	yes	yes	-	-	-	-
54	-	-	-	-	-	-	yes	yes	-	-	-	-
55	-	-	-	-	-	-	yes	yes	-	-	-	-
56	-	-	-	-	-	-	yes	-	-	-	-	-
75	-	-	-	-	-	-	yes	-	-	-	-	-
76	-	yes	-	-	-	-	yes	yes	-	-	-	-
77	yes	-	-	-	-	-	yes	-	-	-	-	-
78	yes	-	-	-	-	-	yes	-	-	-	-	-
79	-	-	-	-	-	-	yes	yes	-	-	-	-
80	-	-	-	-	-	-	yes	yes	-	-	-	-
81	-	yes	-	-	-	-	-	-	-	-	-	-
82	-	-	-	-	-	-	yes	yes	-	-	-	-
88	yes	yes	-	-	-	-	-	-	-	-	-	-
92	yes	yes	-	-	-	-	-	-	-	-	-	-
93	yes	yes	-	-	-	-	-	-	-	-	-	-
98	yes	yes	-	-	-	-	yes	yes	-	-	-	-
99	yes	yes	-	-	-	-	yes	yes	-	-	-	-

Bars without group affiliation

Hinge connected bars

bar	hinges at local start node						hinges at local end node					
	Mm	Mn	Ml	Qm	Qn	Nl	Mm	Mn	Ml	Qm	Qn	Nl
100	yes	yes	-	-	-	-	yes	yes	-	-	-	-
101	yes	yes	-	-	-	-	yes	yes	-	-	-	-

There are no elastic-bedded bars in this group of bars.

Bars with normed steel sections

bar	material	profile designation
1	S235 (St37)	HE180A
2	S235 (St37)	IPE550
3	S235 (St37)	IPE550
4	S235 (St37)	MSH-QR 150.0 x 6.3
5	S235 (St37)	FL80X5
6	S235 (St37)	FL80X5
7	S235 (St37)	MSH-QR 150.0 x 6.3
8	S235 (St37)	MSH-QR 150.0 x 6.3
9	S235 (St37)	L 80 X 8
10	S235 (St37)	L 80 X 8
11	S235 (St37)	MSH-QR 150.0 x 6.3
13	S235 (St37)	HE200A
14	S235 (St37)	HE200A
15	S235 (St37)	HE200A
16	S235 (St37)	HE200A
17	S235 (St37)	HE200A
18	S235 (St37)	HE200A
19	S235 (St37)	HE200A
21	S235 (St37)	L 80 X 8
22	S235 (St37)	L 80 X 8
23	S235 (St37)	HE200A
24	S235 (St37)	L 80 X 8
25	S235 (St37)	L 80 X 8
26	S235 (St37)	HE200A
27	S235 (St37)	L 80 X 8
28	S235 (St37)	L 80 X 8
29	S235 (St37)	HE200A
30	S235 (St37)	L 80 X 8
31	S235 (St37)	L 80 X 8
32	S235 (St37)	HE200A
33	S235 (St37)	L 80 X 8
34	S235 (St37)	L 80 X 8
35	S235 (St37)	HE200A
36	S235 (St37)	L 80 X 8
37	S235 (St37)	L 80 X 8
38	S235 (St37)	HE200A
40	S235 (St37)	L 80 X 8
41	S235 (St37)	HE200A
42	S235 (St37)	MSH-QR 80.0 x 4.0
43	S235 (St37)	MSH-QR 80.0 x 4.0
44	S235 (St37)	MSH-QR 80.0 x 4.0
45	S235 (St37)	MSH-QR 80.0 x 4.0
46	S235 (St37)	MSH-QR 80.0 x 4.0
47	S235 (St37)	MSH-QR 80.0 x 4.0
48	S235 (St37)	MSH-QR 80.0 x 4.0
50	S235 (St37)	HE200A
51	S235 (St37)	HE200A
52	S235 (St37)	HE200A
53	S235 (St37)	HE200A
54	S235 (St37)	HE200A
55	S235 (St37)	HE200A
56	S235 (St37)	HE200A
70	S235 (St37)	HE260B
71	S235 (St37)	HE260B
72	S235 (St37)	HE260B
73	S235 (St37)	HE260B
74	S235 (St37)	HE260B
75	S235 (St37)	HE260B
76	S235 (St37)	HE260B
77	S235 (St37)	FL80X5
78	S235 (St37)	FL80X5
79	S235 (St37)	HE260B
80	S235 (St37)	HE260B
81	S235 (St37)	HE260B
82	S235 (St37)	HE260B
88	S235 (St37)	HE200A
90	S235 (St37)	HE200A
91	S235 (St37)	HE220A
93	S235 (St37)	HE200A
97	S235JR (St37-2)	IPE300
98	S235 (St37)	L 80 X 8
99	S235 (St37)	L 80 X 8
100	S235 (St37)	L 80 X 8
101	S235 (St37)	L 80 X 8

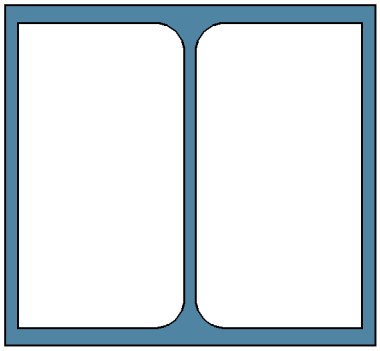
Bars with special cross-sections

The cross-sections are imported from program **4H-QUER**. Their description follows after the description of the system.
Material: S = steel, B = reinforced concrete, H = wood, A = general

bar	Material	E-Modul	G-Modul	αt	type	Cross-sectionsbezeichnung
-	-	MN/m²	MN/m²	10⁻⁵ K	-	
12	S: S235 (St37)	210000	81000	1.2	thin-walled	HE200A + 2x8mm plaat
20	S: S235 (St37)	210000	81000	1.2	thin-walled	HE200A + 2x8mm plaat
49	S: S235 (St37)	210000	81000	1.2	thin-walled	HE200A + 2x8mm plaat
67	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat
68	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat
69	S: S235 (St37)	210000	81000	1.2	thin-walled	HE260B + 2x8mm plaat
92	S: S235 (St37)	210000	81000	1.2	thin-walled	HEA220+2x8mm plaat
95	S: S235 (St37)	210000	81000	1.2	thin-walled	HE200A + 2x8mm plaat
96	S: S235 (St37)	210000	81000	1.2	thin-walled	HE200A + 2x8mm plaat

Special cross-section: HEA220+2x8mm plaat

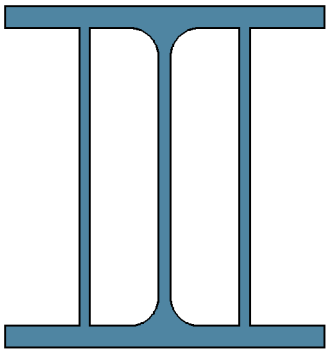
imported from program **4H-QUER**, type: thin-walled



Cross-sectionshöhe	h	=	21.00 cm
Cross-sectionsbreite	b	=	22.80 cm
Cross-sectional area	A	=	96.18 cm²
Hauptachsendrehwinkel	α	=	0.00 °
Biegeträgheitsmoment	I_η	=	6470.13 cm⁴
Biegeträgheitsmoment	I_ζ	=	5816.64 cm⁴
Torsionsträgheitsmoment	I_t	=	8570.93 cm⁴
Section modulus	$W_{\eta+}$	=	616.20 cm³
Section modulus	$W_{\eta-}$	=	616.20 cm³
Section modulus	$W_{\zeta+}$	=	510.23 cm³
Section modulus	$W_{\zeta-}$	=	510.23 cm³

Special cross-section: HEB320+2x10mm

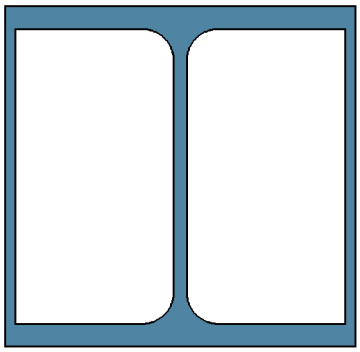
imported from program **4H-QUER**, type: thin-walled



Cross-sectionshöhe	h	=	32.00 cm
Cross-sectionsbreite	b	=	30.00 cm
Cross-sectional area	A	=	217.14 cm²
Hauptachsendrehwinkel	α	=	0.00 °
Biegeträgheitsmoment	I_η	=	34443.40 cm⁴
Biegeträgheitsmoment	I_ζ	=	12382.23 cm⁴
Torsionsträgheitsmoment	I_t	=	11038.76 cm⁴
Section modulus	$W_{\eta+}$	=	2152.71 cm³
Section modulus	$W_{\eta-}$	=	2152.71 cm³
Section modulus	$W_{\zeta+}$	=	825.48 cm³
Section modulus	$W_{\zeta-}$	=	825.48 cm³

Special cross-section: HE260B + 2x8mm plaat

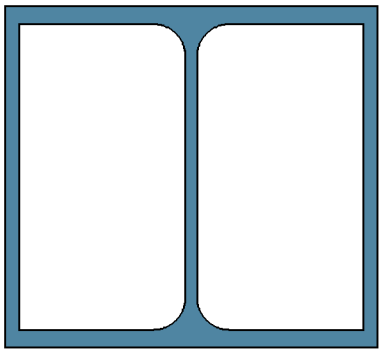
imported from program **4H-QUER**, type: thin-walled



Cross-sectionshöhe	h	=	26.00 cm
Cross-sectionsbreite	b	=	26.80 cm
Cross-sectional area	A	=	157.25 cm^2
Hauptachsendrehwinkel	α	=	0.00 °
Biegeträgheitsmoment	I_η	=	16850.66 cm^4
Biegeträgheitsmoment	I_ζ	=	11708.35 cm^4
Torsionsträgheitsmoment	I_t	=	17710.91 cm^4
Section modulus	$W\eta+$	=	1296.20 cm^3
Section modulus	$W\eta-$	=	1296.20 cm^3
Section modulus	$W\zeta+$	=	873.76 cm^3
Section modulus	$W\zeta-$	=	873.76 cm^3

Special cross-section: HE200A + 2x8mm plaat

imported from program **4H-QUER**, type: thin-walled



Cross-sectionshöhe	h	=	19.00 cm
Cross-sectionsbreite	b	=	20.80 cm
Cross-sectional area	A	=	82.63 cm^2
Hauptachsendrehwinkel	α	=	0.00 °
Biegeträgheitsmoment	I_η	=	4477.00 cm^4
Biegeträgheitsmoment	I_ζ	=	4223.45 cm^4
Torsionsträgheitsmoment	I_t	=	6119.95 cm^4
Section modulus	$W\eta+$	=	471.26 cm^3
Section modulus	$W\eta-$	=	471.26 cm^3
Section modulus	$W\zeta+$	=	406.10 cm^3
Section modulus	$W\zeta-$	=	406.10 cm^3

NON-LINEAR PROPERTIES

Bars with defined compression failure

At non-linear calculation the specification of ε leads to failure of bar design resistance, if $N_{calc} > \varepsilon/100 * N_{Euler}$.
(N_{calc} = calculated normal force, N_{Euler} = 2. Euler buckling force of bar)

bar				bar				bar			
5	ε	=	0.00 %	28	ε	=	0.00 %	40	ε	=	0.00 %
6	ε	=	0.00 %	30	ε	=	0.00 %	77	ε	=	0.00 %
21	ε	=	0.00 %	31	ε	=	0.00 %	78	ε	=	0.00 %
22	ε	=	0.00 %	33	ε	=	0.00 %	98	ε	=	0.00 %
24	ε	=	0.00 %	34	ε	=	0.00 %	99	ε	=	0.00 %
25	ε	=	0.00 %	36	ε	=	0.00 %	100	ε	=	0.00 %
27	ε	=	0.00 %	37	ε	=	0.00 %	101	ε	=	0.00 %

MATERIAL USAGE - MASS BALANCE

Cross-sections of steel:

(1) HE180A	standard profile: HE180A
(2) IPE550	standard profile: IPE550
(3) MSH-QR 150.0 x 6.3	standard profile: MSH-QR 150.0 x 6.3
(4) Flat steel	parameters: h=8.0cm, b=0.5cm
(5) L 80 X 8	standard profile: L 80 X 8
(6) Import	4H-QUER-designation: HE200A + 2x8mm plaat
(7) HE200A	standard profile: HE200A
(8) MSH-QR 80.0 x 4.0	standard profile: MSH-QR 80.0 x 4.0
(9) Import	4H-QUER-designation: HE260B + 2x8mm plaat
(10) HE260B	standard profile: HE260B
(11) HE360A	standard profile: HE360A
(12) HE450A	standard profile: HE450A
(13) HE320B	standard profile: HE320B
(14) HE220A	standard profile: HE220A
(15) Import	4H-QUER-designation: HEA220+2x8mm plaat
(16) Import	4H-QUER-designation: HEB320+2x10mm
(17) IPE300	standard profile: IPE300

Material usage: Steel

Cross-section -	Stäbe -	Fläche cm²	Σ l m	Volumen m³	Gewicht t
(1) HE180A	1	45.3	5.600	0.0254	0.1991
(2) IPE550	2	134.0	15.000	0.2010	1.5778
(3) MSH-QR 150.0 x 6.3	4	35.8	10.000	0.0358	0.2810
(4) Flat steel	4	4.0	23.625	0.0094	0.0742
(5) L 80 X 8	19	12.3	72.029	0.0886	0.6955
(6) Import	5	82.6	5.600	0.0463	0.3632
(7) HE200A	24	53.8	55.700	0.2997	2.3524
(8) MSH-QR 80.0 x 4.0	7	12.0	17.000	0.0204	0.1600
(9) Import	7	157.2	9.000	0.1415	1.1109
(10) HE260B	17	118.0	39.740	0.4689	3.6811
(11) HE360A	3	143.0	15.000	0.2145	1.6838
(12) HE450A	2	178.0	15.000	0.2670	2.0960
(13) HE320B	1	161.0	5.500	0.0886	0.6951
(14) HE220A	1	64.3	5.500	0.0354	0.2776
(15) Import	1	96.2	5.500	0.0529	0.4153
(16) Import	1	217.1	0.500	0.0109	0.0852
(17) IPE300	1	53.8	5.100	0.0274	0.2154
Sum of steel:	100		305.394	2.0336	15.9637

LOADING STRUCTURE

Description of loading structure

On the left-hand side, the relationship between the actions effects, load case file and load cases are shown in a tree structure. The right-hand side shows the characteristics of the superposition to the associated objects on the left-hand. In terms of the superposition, a load case file is equivalent to an extreme rule of the defined objects therein and can be additive or alternatively superpositioned.

Applied symbols: Action effect | Load case file | Load case | Imperfection cases

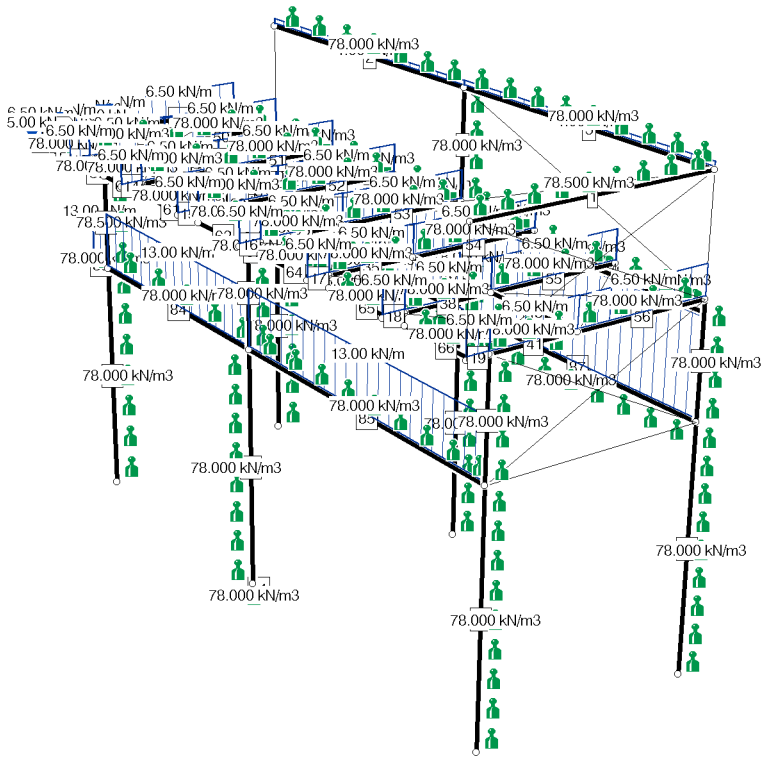
1: permanent loads	**permanent loads)**
1: Dead load (1)	additive
2: allg. trafficslasten	**transient loads**
2: traffic (1)	additive
3: new action effect	**transient loads**
3: wind Y	additive
4: wind X	additive
5: sneeuw	additive

DESCRIPTION OF LOAD CASES

Load case 1: Dead load (1)

Type of superposition: additive, part of action effect 1: permanent loads (permanent loads))
Load resultant: Σ Fx = 0.000 kN, Σ Fy = 0.000 kN, Σ Fz = 977.185 kN

Description of load cases



Dead load

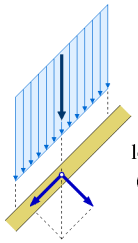
bar -	γ kN/m³	bar -	γ kN/m³	bar -	γ kN/m³	bar -	γ kN/m³	bar -	γ kN/m³
64	78.000	61	78.000	91	78.000	83	78.000	67	78.000
35	78.000	59	78.000	85	78.000	88	78.000	42	78.500
38	78.000	3	78.000	87	78.000	84	78.000	43	78.500
41	78.000	32	78.000	92	78.000	56	78.000	44	78.500
65	78.000	72	78.000	89	78.000	55	78.000	45	78.500
66	78.000	73	78.000	94	78.000	54	78.000	46	78.500
23	78.000	74	78.000	93	78.000	53	78.000	47	78.500
26	78.000	70	78.000	90	78.000	52	78.000	48	78.500
29	78.000	2	78.000	75	78.000	51	78.000	1	78.500
71	78.000	69	78.000	80	78.000	50	78.000	79	78.500
62	78.000	63	78.000	81	78.000	60	78.000	82	78.500
8	78.000	86	78.000	76	78.000	57	78.000		

Joint loads

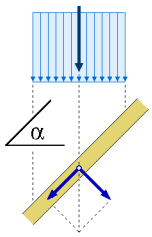
node -	123 =	P1 kN	P2 kN	P3 kN	M1 kNm	M2 kNm	M3 kNm
5	xyz	--	--	5.000	--	--	--
55	xyz	--	--	4.000	--	--	--
13	xyz	--	--	4.000	--	--	--

Description of load cases

Explanations of load types

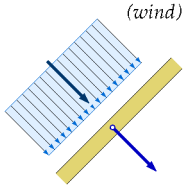


load type **G**
(dead load)



load type **S**
(snow)

Using load type S the load resultant will be reduced with the factor $\cos \alpha$.



load type **W**
(wind)

Line loads

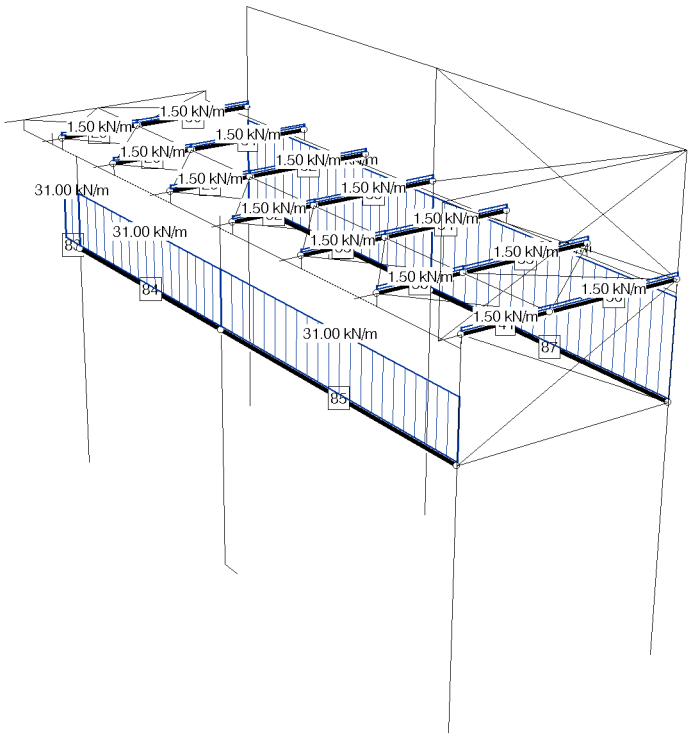
a designates the distance of line loads from the local start node. e describes the distance of line loads from the local end node. l is the effective length of line loads. The load coordinates at point A describe the line load at the beginning. The load coordinates at point E describe the line load at the end. If point=C, the line load is constant.
If type = G and S, the coordinate directions are 123=xyz. If type = W, the coordinate directions are 123=lmn.

bar	type	a	l	e	point	q_1	q_2	q_3	m_l
-	=	m	m	m	-	kN/m	kN/m	kN/m	kNm/m
41	G	0.000	2.000	0.000	C	--	--	6.500	--
38	G	0.000	2.000	0.000	C	--	--	6.500	--
35	G	0.000	2.000	0.000	C	--	--	6.500	--
32	G	0.000	2.000	0.000	C	--	--	6.500	--
29	G	0.000	2.000	0.000	C	--	--	6.500	--
26	G	0.000	2.000	0.000	C	--	--	6.500	--
23	G	0.000	2.000	0.000	C	--	--	6.500	--
2	G	0.000	7.500	0.000	C	--	--	1.000	--
3	G	0.000	7.500	0.000	C	--	--	1.000	--
49	G	0.000	3.100	0.000	C	--	--	6.500	--
12	G	0.000	0.500	0.000	C	--	--	6.500	--
13	G	0.000	0.500	0.000	C	--	--	6.500	--
14	G	0.000	0.500	0.000	C	--	--	6.500	--
15	G	0.000	0.500	0.000	C	--	--	6.500	--
16	G	0.000	0.500	0.000	C	--	--	6.500	--
17	G	0.000	0.500	0.000	C	--	--	6.500	--
18	G	0.000	0.500	0.000	C	--	--	6.500	--
19	G	0.000	0.500	0.000	C	--	--	6.500	--
87	G	0.000	7.500	0.000	C	--	--	21.500	--
86	G	0.000	7.500	0.000	C	--	--	21.500	--
85	G	0.000	8.000	0.000	C	--	--	13.000	--
83	G	0.000	0.700	0.000	C	--	--	13.000	--
84	G	0.000	6.300	0.000	C	--	--	13.000	--
20	G	0.000	0.667	0.000	C	--	--	6.500	--
56	G	0.000	3.100	0.000	C	--	--	6.500	--
55	G	0.000	3.100	0.000	C	--	--	6.500	--
54	G	0.000	3.100	0.000	C	--	--	6.500	--
53	G	0.000	3.100	0.000	C	--	--	6.500	--
52	G	0.000	3.100	0.000	C	--	--	6.500	--
51	G	0.000	3.100	0.000	C	--	--	6.500	--
50	G	0.000	3.100	0.000	C	--	--	6.500	--
95	G	0.000	0.667	0.000	C	--	--	6.500	--
96	G	0.000	0.667	0.000	C	--	--	6.500	--

Load case 2: traffic (1)

Type of superposition: additive, part of action effect 2: allg. trafficslasten (transient loads)
Load resultant: Σ Fx = 0.000 kN, Σ Fy = 0.000 kN, Σ Fz = 1283.550 kN

Description of load cases



Line loads

a designates the distance of line loads from the local start node. e describes the distance of line loads from the local end node.
l is the effective length of line loads. The load coordinates at point A describe the line load at the beginning. The load coordinates at point E describe the line load at the end. If point=C, the line load is constant.
If type = G and S, the coordinate directions are 123=xyz. If type = W, the coordinate directions are 123=lmn.

bar	type	a	l	e	point	q_1	q_2	q_3	m_1
-	=	m	m	m	-	kN/m	kN/m	kN/m	kNm/m
41	G	0.000	2.000	0.000	C	--	--	1.500	--
38	G	0.000	2.000	0.000	C	--	--	1.500	--
35	G	0.000	2.000	0.000	C	--	--	1.500	--
32	G	0.000	2.000	0.000	C	--	--	1.500	--
29	G	0.000	2.000	0.000	C	--	--	1.500	--
26	G	0.000	2.000	0.000	C	--	--	1.500	--
23	G	0.000	2.000	0.000	C	--	--	1.500	--
87	G	0.000	7.500	0.000	C	--	--	51.000	--
86	G	0.000	7.500	0.000	C	--	--	51.000	--
85	G	0.000	8.000	0.000	C	--	--	31.000	--
83	G	0.000	0.700	0.000	C	--	--	31.000	--
84	G	0.000	6.300	0.000	C	--	--	31.000	--
56	G	0.000	3.100	0.000	C	--	--	1.500	--
55	G	0.000	3.100	0.000	C	--	--	1.500	--
54	G	0.000	3.100	0.000	C	--	--	1.500	--
53	G	0.000	3.100	0.000	C	--	--	1.500	--
52	G	0.000	3.100	0.000	C	--	--	1.500	--
51	G	0.000	3.100	0.000	C	--	--	1.500	--

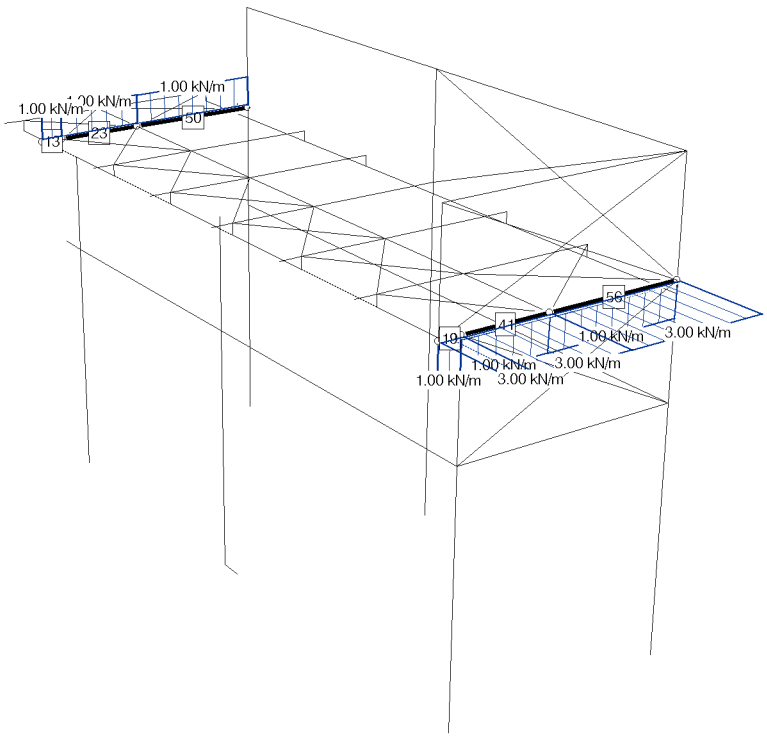
Line loads

a designates the distance of line loads from the local start node. e describes the distance of line loads from the local end node. l is the effective length of line loads. The load coordinates at point A describe the line load at the beginning. The load coordinates at point E describe the line load at the end. If point=C, the line load is constant.
If type = G and S, the coordinate directions are 123=xyz. If type = W, the coordinate directions are 123=lmn.

bar	type	a	l	e	point	q_1	q_2	q_3	m_l
-	=	m	m	m	-	kN/m	kN/m	kN/m	kNm/m
50	G	0.000	3.100	0.000	C	--	--	1.500	--

Load case 3: wind Y

Type of superposition: additive, part of action effect 3: new action effect (transient loads)
Load resultant: Σ Fx = 0.000 kN, Σ Fy = -16.800 kN, Σ Fz = 0.000 kN



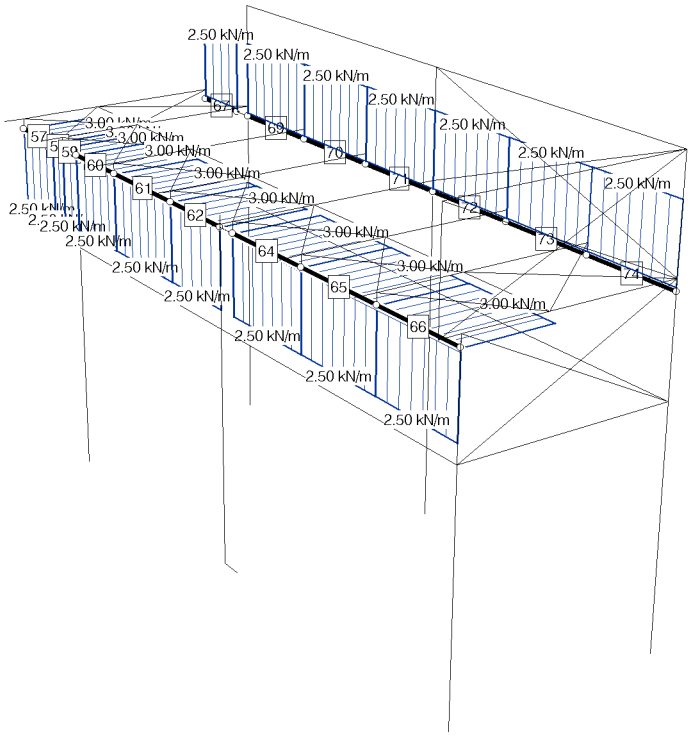
Line loads

a designates the distance of line loads from the local start node. e describes the distance of line loads from the local end node.
l is the effective length of line loads. The load coordinates at point A describe the line load at the beginning. The load coordinates at point E describe the line load at the end. If point=C, the line load is constant.
If type = G and S, the coordinate directions are 123=xyz. If type = W, the coordinate directions are 123=lmn.

bar	type	a	l	e	point	q_1	q_2	q_3	m_l
-	=	m	m	m	-	kN/m	kN/m	kN/m	kNm/m
50	G	0.000	3.100	0.000	C	--	--	1.000	--
23	G	0.000	2.000	0.000	C	--	--	1.000	--
13	G	0.000	0.500	0.000	C	--	--	1.000	--
56	G	0.000	3.100	0.000	C	--	--	-1.000	--
41	G	0.000	2.000	0.000	C	--	--	-1.000	--
19	G	0.000	0.500	0.000	C	--	--	-1.000	--
56	G	0.000	3.100	0.000	C	--	-3.000	--	--
41	G	0.000	2.000	0.000	C	--	-3.000	--	--
19	G	0.000	0.500	0.000	C	--	-3.000	--	--

Load case 4: wind X

Type of superposition: additive, part of action effect 3: new action effect (transient loads)
Load resultant: Σ Fx = -49.500 kN, Σ Fy = 0.000 kN, Σ Fz = 0.000 kN



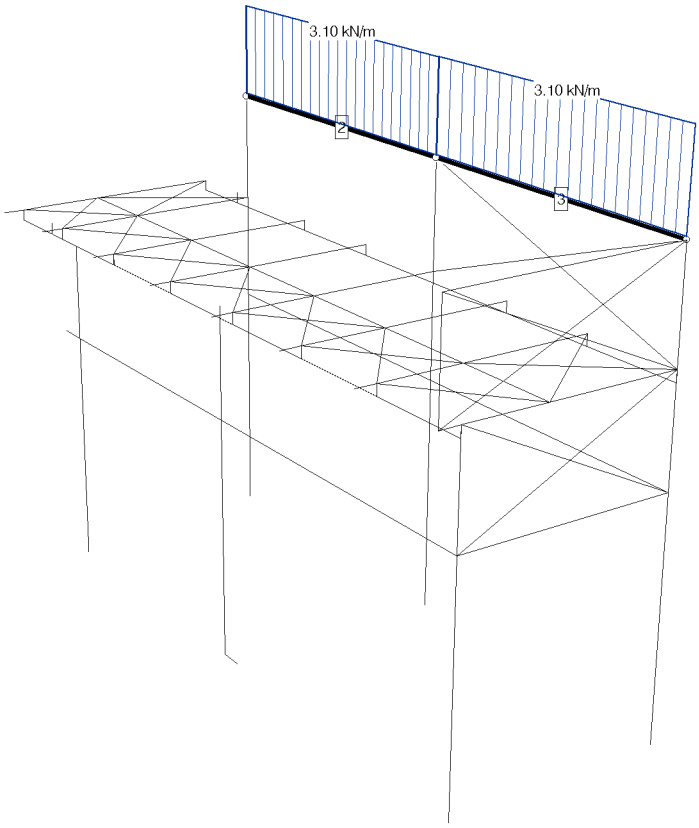
Line loads

a designates the distance of line loads from the local start node. e describes the distance of line loads from the local end node. l is the effective length of line loads. The load coordinates at point A describe the line load at the beginning. The load coordinates at point E describe the line load at the end. If point=C, the line load is constant.
If type = G and S, the coordinate directions are 123=xyz. If type = W, the coordinate directions are 123=lmn.

bar	type	a	l	e	point	q_1	q_2	q_3	m_1
-	=	m	m	m	-	kN/m	kN/m	kN/m	kNm/m
66	G	0.000	2.500	0.000	C	-3.000	--	--	--
65	G	0.000	2.500	0.000	C	-3.000	--	--	--
64	G	0.000	2.500	0.000	C	-3.000	--	--	--
62	G	0.000	2.000	0.000	C	-3.000	--	--	--
61	G	0.000	2.500	0.000	C	-3.000	--	--	--
60	G	0.000	1.800	0.000	C	-3.000	--	--	--
57	G	0.000	1.500	0.000	C	-3.000	--	--	--
59	G	0.000	0.700	0.000	C	-3.000	--	--	--
58	G	0.000	0.500	0.000	C	-3.000	--	--	--
57	G	0.000	1.500	0.000	C	--	--	-2.500	--
59	G	0.000	0.700	0.000	C	--	--	-2.500	--
58	G	0.000	0.500	0.000	C	--	--	-2.500	--
60	G	0.000	1.800	0.000	C	--	--	-2.500	--
61	G	0.000	2.500	0.000	C	--	--	-2.500	--
62	G	0.000	2.000	0.000	C	--	--	-2.500	--
64	G	0.000	2.500	0.000	C	--	--	-2.500	--
65	G	0.000	2.500	0.000	C	--	--	-2.500	--
66	G	0.000	2.500	0.000	C	--	--	-2.500	--
74	G	0.000	2.500	0.000	C	--	--	2.500	--
73	G	0.000	2.500	0.000	C	--	--	2.500	--
72	G	0.000	2.500	0.000	C	--	--	2.500	--
71	G	0.000	2.500	0.000	C	--	--	2.500	--
70	G	0.000	2.500	0.000	C	--	--	2.500	--
69	G	0.000	2.500	0.000	C	--	--	2.500	--
67	G	0.000	1.500	0.000	C	--	--	2.500	--

Load case 5: sneeuw

Type of superposition: additive, part of action effect 3: new action effect (transient loads)
Load resultant: Σ Fx = 0.000 kN, Σ Fy = 0.000 kN, Σ Fz = 46.500 kN



Line loads

a designates the distance of line loads from the local start node. e describes the distance of line loads from the local end node.
l is the effective length of line loads. The load coordinates at point A describe the line load at the beginning. The load coordinates at point E describe the line load at the end. If point=C, the line load is constant.
If type = G and S, the coordinate directions are 123=xyz. If type = W, the coordinate directions are 123=lmn.

bar	type	a	l	e	point	q_1	q_2	q_3	m_l
-	=	m	m	m	-	kN/m	kN/m	kN/m	kNm/m
3	G	0.000	7.500	0.000	C	--	--	3.100	--
2	G	0.000	7.500	0.000	C	--	--	3.100	--

DYNAMIC CALCULATION INFORMATION

Node masses are not defined.

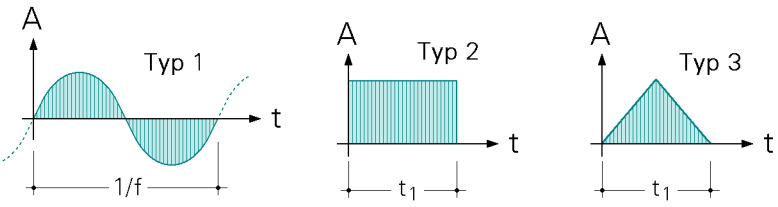
Mass occupation of bars

The weight density ρ is evaluated considering the haunched bar and the individual cross-section. g is a supplementary constant mass.

bar	ρ	g	bar	ρ	g	bar	ρ	g
-	t/m3	t/m	-	t/m3	t/m	-	t/m3	t/m
1	7.850	0.000	32	7.850	1.500	64	7.850	0.000
2	7.850	0.200	33	7.850	0.000	65	7.850	0.000
3	7.850	0.200	34	7.850	0.000	66	7.850	0.000
4	7.850	0.000	35	7.850	1.500	67	7.850	0.000
5	7.850	0.000	36	7.850	0.000	68	7.850	0.000
6	7.850	0.000	37	7.850	0.000	69	7.850	0.000
7	7.850	0.000	38	7.850	1.500	70	7.850	0.000
8	7.850	0.000	40	7.850	0.000	71	7.850	0.000
9	7.850	0.000	41	7.850	1.500	72	7.850	0.000
10	7.850	0.000	42	7.850	0.000	73	7.850	0.000
11	7.850	0.000	43	7.850	0.000	74	7.850	0.000
12	7.850	0.000	44	7.850	0.000	75	7.850	0.000
13	7.850	0.000	45	7.850	0.000	76	7.850	0.000
14	7.850	0.000	46	7.850	0.000	77	7.850	0.000
15	7.850	0.000	47	7.850	0.000	78	7.850	0.000
16	7.850	0.000	48	7.850	0.000	80	7.850	0.000
17	7.850	0.000	49	7.850	1.500	81	7.850	0.000
18	7.850	0.000	50	7.850	1.500	83	7.850	0.000
19	7.850	0.000	51	7.850	1.500	84	7.850	1.000
20	7.850	1.500	52	7.850	1.500	85	7.850	1.000
21	7.850	0.000	53	7.850	1.500	86	7.850	0.000
22	7.850	0.000	54	7.850	1.500	87	7.850	0.000
23	7.850	1.500	55	7.850	1.500	88	7.850	2.060
24	7.850	0.000	56	7.850	1.500	89	7.850	2.060
25	7.850	0.000	57	7.850	0.000	90	7.850	0.000
26	7.850	1.500	58	7.850	0.000	91	7.850	0.000
27	7.850	0.000	59	7.850	0.000	92	7.850	0.000
28	7.850	0.000	60	7.850	0.000	93	7.850	0.000
29	7.850	1.500	61	7.850	0.000	94	7.850	0.000
30	7.850	0.000	62	7.850	0.000	95	7.850	1.500
31	7.850	0.000	63	7.850	0.000	96	7.850	1.500

INFORMATION ABOUT HARMONIC ANALYSIS

EXPLANATION:
IN 4H-FRAP
INTEGRATED
TYPES OF EXCITATION:



selected: **excitation 2** (persuant to sketch) with t1 = 0.200000 sec

Modal degree of damping

vibrat. mode	value in %	vibrat. mode	value in %	vibrat. mode	value in %	vibrat. mode	value in %
0	3.000	4	3.000	8	3.000	12	0.000
1	3.000	5	3.000	9	3.000	13	0.000
2	3.000	6	3.000	10	3.000	14	0.000
3	3.000	7	3.000	11	3.000		

Excitation amplitudes

node -	Pr kN	Ps kN	Pt kN	Mr kNm	Ms kNm	Mt kNm
24	0.500	1.000	0.000	0.000	0.000	0.000
25	0.500	1.000	0.000	0.000	0.000	0.000
26	0.500	1.000	0.000	0.000	0.000	0.000
27	0.500	1.000	0.000	0.000	0.000	0.000
28	0.500	1.000	0.000	0.000	0.000	0.000
29	3.000	0.000	0.000	0.000	0.000	0.000

DESCRIPTION OF DEMANDED VERIFICATIONS

If using the rules of superposition according to Eurocode, it means:

Ψ_{dom}	Combination coefficient of a	leading	traffic load action	(dominant action)
Ψ_{sub}	Combination coefficient of a	non-leading	traffic load action	(accompanying action)
γ_{sup}	Partial safety factor for	unfavourable	load positions	
γ_{inf}	Partial safety factor for	favourable	load positions	

If using the rules of superposition according to DIN 18800, it means:

Ψ_{dom}	Combination coefficient of a main combination
Ψ_{sub}	Combination coefficient of a minor combination

rule of superpositionn Brückenbau and DIN 1055-100 verhalten sich wie Eurocode.
In non-linear analysis, rules of extremization will not be considered

If subsequently verifications acc. to Eurocode are listed, it means:
Die im Eurocode empfohlenen Parameter werden no nationalen Bezug berücksichtigt.

Verification 1: EC 3 Design resistance (th. I ord.)

EC 3 Design resistance (th. I ord.): Design resistance according to DIN EN 1993

Design options of verification 1:

☐ Safety factors like stability

Description of demanded verifications

1: Extreme rule 1

Rules of extremization of verification 1, type: user-defined, rule of superposition: Eurocode

action	Ψ_{dom}	Ψ_{sub}	γ_{sup}	γ_{inf}
1	1.00	1.00	1.22	1.00
2	1.00	1.00	1.35	0.00
3	1.00	0.80	1.35	0.00

Table of bars of verification 1:

bar	verif. type	c/t	bar	verif. type	c/t	bar	verif. type	c/t
1	plastic	yes	35	plastic	yes	70	plastic	yes
2	plastic	yes	36	plastic	yes	71	plastic	yes
3	plastic	yes	37	plastic	yes	72	plastic	yes
4	plastic	yes	38	plastic	yes	73	plastic	yes
5	plastic	yes	40	plastic	yes	74	plastic	yes
6	plastic	yes	41	plastic	yes	75	plastic	yes
7	plastic	yes	42	plastic	yes	76	plastic	yes
8	plastic	yes	43	plastic	yes	77	plastic	yes
9	plastic	yes	44	plastic	yes	78	plastic	yes
10	plastic	yes	45	plastic	yes	79	plastic	yes
11	plastic	yes	46	plastic	yes	80	plastic	yes
12	plastic	yes	47	plastic	yes	81	plastic	yes
13	plastic	yes	48	plastic	yes	82	plastic	yes
14	plastic	yes	49	plastic	yes	83	plastic	yes
15	plastic	yes	50	plastic	yes	84	plastic	yes
16	plastic	yes	51	plastic	yes	85	plastic	yes
17	plastic	yes	52	plastic	yes	86	plastic	yes
18	plastic	yes	53	plastic	yes	87	plastic	yes
19	plastic	yes	54	plastic	yes	88	plastic	yes
20	plastic	yes	55	plastic	yes	89	plastic	yes
21	plastic	yes	56	plastic	yes	90	plastic	yes
22	plastic	yes	57	plastic	yes	91	plastic	yes
23	plastic	yes	58	plastic	yes	92	plastic	yes
24	plastic	yes	59	plastic	yes	93	plastic	yes
25	plastic	yes	60	plastic	yes	94	plastic	yes
26	plastic	yes	61	plastic	yes	95	plastic	yes
27	plastic	yes	62	plastic	yes	96	plastic	yes
28	plastic	yes	63	plastic	yes	97	plastic	yes
29	plastic	yes	64	plastic	yes	98	plastic	yes
30	plastic	yes	65	plastic	yes	99	plastic	yes
31	plastic	yes	66	plastic	yes	100	plastic	yes
32	plastic	yes	67	plastic	yes	101	plastic	yes
33	plastic	yes	68	plastic	yes			
34	plastic	yes	69	plastic	yes			

Verification 2: EC 3 Design resistance (th. II ord.)

EC 3 Design resistance (th. II ord.): Design resistance according to DIN EN 1993

Design options of verification 2:

☐ No lateral torsional buckling

Description of demanded verifications

1: Generation code 1

Generation code of verification 2, type: user-defined, rule of superposition: Eurocode

Load spectra of generation code 1 of verification 2

Factorization of load cases. Negative numbers of load cases refer to imperfections

LK	1	2	3	4	5
1	1.00	1.35	-	-	-
2	1.22	1.35	-	-	-
3	1.00	1.35	1.08	-	-
4	1.22	1.35	1.08	-	-
5	1.00	1.35	-	1.08	-
6	1.22	1.35	-	1.08	-
7	1.00	1.35	1.08	1.08	-
8	1.22	1.35	1.08	1.08	-
9	1.00	1.35	-	-	1.08
10	1.22	1.35	-	-	1.08
11	1.00	1.35	1.08	-	1.08
12	1.22	1.35	1.08	-	1.08
13	1.00	1.35	-	1.08	1.08
14	1.22	1.35	-	1.08	1.08
15	1.00	1.35	1.08	1.08	1.08
16	1.22	1.35	1.08	1.08	1.08
17	1.00	-	1.35	-	-
18	1.22	-	1.35	-	-
19	1.00	1.35	1.35	-	-
20	1.22	1.35	1.35	-	-
21	1.00	-	-	1.35	-
22	1.22	-	-	1.35	-
23	1.00	1.35	-	1.35	-
24	1.22	1.35	-	1.35	-
25	1.00	-	1.35	1.35	-
26	1.22	-	1.35	1.35	-
27	1.00	1.35	1.35	1.35	-
28	1.22	1.35	1.35	1.35	-
29	1.00	-	-	-	1.35
30	1.22	-	-	-	1.35
31	1.00	1.35	-	-	1.35
32	1.22	1.35	-	-	1.35
33	1.00	-	1.35	-	1.35
34	1.22	-	1.35	-	1.35
35	1.00	1.35	1.35	-	1.35
36	1.22	1.35	1.35	-	1.35
37	1.00	-	-	1.35	1.35
38	1.22	-	-	1.35	1.35
39	1.00	1.35	-	1.35	1.35
40	1.22	1.35	-	1.35	1.35
41	1.00	-	1.35	1.35	1.35
42	1.22	-	1.35	1.35	1.35
43	1.00	1.35	1.35	1.35	1.35
44	1.22	1.35	1.35	1.35	1.35

Table of bars of verification 2:

bar	verif. type	c/t
1	plastic	yes
2	plastic	yes
3	plastic	yes
4	plastic	yes
5	plastic	yes
6	plastic	yes
7	plastic	yes
8	plastic	yes
9	plastic	yes
10	plastic	yes
11	plastic	yes
12	plastic	yes
13	plastic	yes
14	plastic	yes
15	plastic	yes
16	plastic	yes
17	plastic	yes
18	plastic	yes
19	plastic	yes
20	plastic	yes
21	plastic	yes
22	plastic	yes
23	plastic	yes
24	plastic	yes
25	plastic	yes
26	plastic	yes
27	plastic	yes
28	plastic	yes
29	plastic	yes
30	plastic	yes
31	plastic	yes
32	plastic	yes
33	plastic	yes
34	plastic	yes
35	plastic	yes
36	plastic	yes
37	plastic	yes
38	plastic	yes
40	plastic	yes
41	plastic	yes
42	plastic	yes
43	plastic	yes
44	plastic	yes
45	plastic	yes
46	plastic	yes
47	plastic	yes
48	plastic	yes
49	plastic	yes
50	plastic	yes
51	plastic	yes
52	plastic	yes
53	plastic	yes
54	plastic	yes
55	plastic	yes
56	plastic	yes
57	plastic	yes
58	plastic	yes
59	plastic	yes
60	plastic	yes
61	plastic	yes
62	plastic	yes
63	plastic	yes
64	plastic	yes
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66	plastic	yes
67	plastic	yes
68	plastic	yes
69	plastic	yes
70	plastic	yes
71	plastic	yes
72	plastic	yes
73	plastic	yes
74	plastic	yes
75	plastic	yes
76	plastic	yes
77	plastic	yes
78	plastic	yes
79	plastic	yes
80	plastic	yes
81	plastic	yes
82	plastic	yes
83	plastic	yes
84	plastic	yes
85	plastic	yes
86	plastic	yes
87	plastic	yes
88	plastic	yes
89	plastic	yes
90	plastic	yes
91	plastic	yes
92	plastic	yes
93	plastic	yes
94	plastic	yes

Table of bars of verification 2:

bar	verif. type	c/t	bar	verif. type	c/t
95	plastic	yes	99	plastic	yes
96	plastic	yes	100	plastic	yes
97	plastic	yes	101	plastic	yes
98	plastic	yes			

Verification 3: EC 3 Design resistance (th. II ord.)

EC 3 Design resistance (th. II ord.): Design resistance according to DIN EN 1993

Design options of verification 3:

☐ No lateral torsional buckling

1: verplaatsing

Generation code of verification 3, type: user-defined, rule of superposition: Eurocode

Load spectra of generation code 1 of verification 3

Factorization of load cases. Negative numbers of load cases refer to imperfections

LK	1	2	3	4	5	LK	1	2	3	4	5	LK	1	2	3	4	5
1	1.00	1.00	-	-	-	9	1.00	-	1.00	-	-	17	1.00	-	1.00	-	1.00
2	1.00	1.00	0.80	-	-	10	1.00	1.00	1.00	-	-	18	1.00	1.00	1.00	-	1.00
3	1.00	1.00	-	0.80	-	11	1.00	-	-	1.00	-	19	1.00	-	-	1.00	1.00
4	1.00	1.00	0.80	0.80	-	12	1.00	1.00	-	1.00	-	20	1.00	1.00	-	1.00	1.00
5	1.00	1.00	-	-	0.80	13	1.00	-	1.00	1.00	-	21	1.00	-	1.00	1.00	1.00
6	1.00	1.00	0.80	-	0.80	14	1.00	1.00	1.00	1.00	-	22	1.00	1.00	1.00	1.00	1.00
7	1.00	1.00	-	0.80	0.80	15	1.00	-	-	-	1.00						
8	1.00	1.00	0.80	0.80	0.80	16	1.00	1.00	-	-	1.00						

Table of bars of verification 3:

bar	verif. type	c/t	bar	verif. type	c/t	bar	verif. type	c/t
1	plastic	yes	20	plastic	yes	40	plastic	yes
2	plastic	yes	21	plastic	yes	41	plastic	yes
3	plastic	yes	22	plastic	yes	42	plastic	yes
4	plastic	yes	23	plastic	yes	43	plastic	yes
5	plastic	yes	24	plastic	yes	44	plastic	yes
6	plastic	yes	25	plastic	yes	45	plastic	yes
7	plastic	yes	26	plastic	yes	46	plastic	yes
8	plastic	yes	27	plastic	yes	47	plastic	yes
9	plastic	yes	28	plastic	yes	48	plastic	yes
10	plastic	yes	29	plastic	yes	49	plastic	yes
11	plastic	yes	30	plastic	yes	50	plastic	yes
12	plastic	yes	31	plastic	yes	51	plastic	yes
13	plastic	yes	32	plastic	yes	52	plastic	yes
14	plastic	yes	33	plastic	yes	53	plastic	yes
15	plastic	yes	34	plastic	yes	54	plastic	yes
16	plastic	yes	35	plastic	yes	55	plastic	yes
17	plastic	yes	36	plastic	yes	56	plastic	yes
18	plastic	yes	37	plastic	yes	57	plastic	yes
19	plastic	yes	38	plastic	yes	58	plastic	yes

Table of bars of verification 3:

bar	verif. type	c/t	bar	verif. type	c/t	bar	verif. type	c/t
59	plastic	yes	74	plastic	yes	89	plastic	yes
60	plastic	yes	75	plastic	yes	90	plastic	yes
61	plastic	yes	76	plastic	yes	91	plastic	yes
62	plastic	yes	77	plastic	yes	92	plastic	yes
63	plastic	yes	78	plastic	yes	93	plastic	yes
64	plastic	yes	79	plastic	yes	94	plastic	yes
65	plastic	yes	80	plastic	yes	95	plastic	yes
66	plastic	yes	81	plastic	yes	96	plastic	yes
67	plastic	yes	82	plastic	yes	97	plastic	yes
68	plastic	yes	83	plastic	yes	98	plastic	yes
69	plastic	yes	84	plastic	yes	99	plastic	yes
70	plastic	yes	85	plastic	yes	100	plastic	yes
71	plastic	yes	86	plastic	yes	101	plastic	yes
72	plastic	yes	87	plastic	yes			
73	plastic	yes	88	plastic	yes			

REGULATIONS

DIN EN 1990, Eurocode 0: Grundlagen der Tragwerksplanung;
Deutsche Fassung EN 1990:2002 + A1:2005 + A1:2005/AC:2010, Ausgabe Dezember 2010

DIN EN 1993-1-1, Eurocode 3: Bemessung und Konstruktion von Stahlbauten -
Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau;
Deutsche Fassung EN 1993-1-1:2005 + AC:2009, Ausgabe Dezember 2010

NATIONAL ANNEXES TO THE EUROCODES

Load factors (building construction) of the National Annex

Standard parameters of EC

Partial safety factor for actions
of permanent and transient design situation

Type of action effect	γFsup	γFinf
permanent loads	1.35	1.00
transient loads	1.50	0.00
fluid pressure/engine loads	1.35	0.00
restraint	1.00	0.00
prestressing	1.00	1.00

Partial safety factor for actions
of accidental design situation

Type of action effect	γFsup	γFinf
permanent loads	1.00	1.00
transient loads	1.00	0.00
fluid pressure/engine loads	1.00	0.00
restraint	1.00	0.00
prestressing	1.00	1.00
accidental action effects	1.00	1.00

Partial safety factor for actions
of earthquake design situation

Type of action effect	γFsup	γFinf
permanent loads	1.00	1.00
transient loads	1.00	0.00
fluid pressure/engine loads	1.00	0.00
restraint	1.00	0.00
prestressing	1.00	1.00
earthquake	1.00	1.00

Partial safety factor for actions
of design of serviceability and fatigue

Type of action effect	γFsup	γFinf
permanent loads	1.00	1.00
transient loads	1.00	0.00
fluid pressure/engine loads	1.00	0.00
restraint	1.00	0.00
prestressing	1.00	1.00

Combination coefficients

Action effect	Category	Ψ_0	Ψ_1	Ψ_2
housing, office rooms	A, B	0.70	0.50	0.30
Assembly, salesrooms	C, D	0.70	0.70	0.60
storage rooms	E	1.00	0.90	0.80
vehicles up to 30 kN	F	0.70	0.70	0.60
vehicles up to 160 kN	G	0.70	0.50	0.30
roofs	H	0.00	0.00	0.00
snow/ice up to 1000 m alt.		0.50	0.20	0.00
snow/ice above 1000 m alt.		0.70	0.50	0.20
Wind		0.60	0.20	0.00
temperature		0.60	0.50	0.00
soil settlements		1.00	1.00	1.00
other action effects		0.80	0.70	0.50

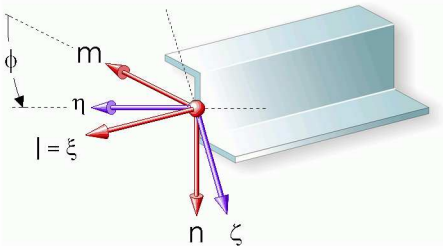
Note: Fluid pressure/engine loads, restraint or soil settlements, other action effects take no part to EN 1990 (Eurocode).

Selected calculation parameters of the National Annex
Standard parameters of EC

DIN EN 1993-1-1 (EC 3)

Chapter	Value	Meaning
6.1(1)	perman./transient situation	partial safety factors for structural steel
	γ_{M0} = 1.00	failure of cross-section
	γ_{M1} = 1.00	failure of stability
	accidental situation	partial safety factors for structural steel
	γ_{M0} = 1.00	failure of cross-section
	γ_{M1} = 1.00	failure of stability

BAR DIVISION AND VALUES OF CROSS-SECTIONS



Definition of the principle axis system ξ η ζ by using the angle ϕ

bar	s	E-mod.	G-mod.	α_t	A	I_T	I_η	I_ζ	ϕ	h_m	h_n	κ_η	κ_ζ
-	m	kN/m2	kN/m2	1/K	m2	m4	m4	m4	°	m	m	-	-
57	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
58	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
59	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
60	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
61	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
62	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
63	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
64	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
65	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
66	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
94	const.	0.21E+09	0.81E+08	0.12E-04	0.2171E-01	0.1104E-03	0.3444E-03	0.1238E-03	0.0	0.300	0.320		
89	const.	0.21E+09	0.81E+08	0.12E-04	0.1610E-01	0.2260E-05	0.3082E-03	0.9240E-04	0.0	0.300	0.320		
83	const.	0.21E+09	0.81E+08	0.12E-04	0.1430E-01	0.1490E-05	0.3309E-03	0.7890E-04	0.0	0.300	0.350		
84	const.	0.21E+09	0.81E+08	0.12E-04	0.1430E-01	0.1490E-05	0.3309E-03	0.7890E-04	0.0	0.300	0.350		
85	const.	0.21E+09	0.81E+08	0.12E-04	0.1430E-01	0.1490E-05	0.3309E-03	0.7890E-04	0.0	0.300	0.350		
87	const.	0.21E+09	0.81E+08	0.12E-04	0.1780E-01	0.2450E-05	0.6372E-03	0.9470E-04	0.0	0.300	0.440		
86	const.	0.21E+09	0.81E+08	0.12E-04	0.1780E-01	0.2450E-05	0.6372E-03	0.9470E-04	0.0	0.300	0.440		
1	const.	0.21E+09	0.81E+08	0.12E-04	0.4530E-02	0.1490E-06	0.2510E-04	0.9250E-05	0.0	0.180	0.171		
2	const.	0.21E+09	0.81E+08	0.12E-04	0.1340E-01	0.1240E-05	0.6712E-03	0.2670E-04	0.0	0.210	0.550		
3	const.	0.21E+09	0.81E+08	0.12E-04	0.1340E-01	0.1240E-05	0.6712E-03	0.2670E-04	0.0	0.210	0.550		
4	const.	0.21E+09	0.81E+08	0.12E-04	0.3579E-02	0.1909E-04	0.1223E-04	0.1223E-04	0.0	0.150	0.150		
5	const.	0.21E+09	0.81E+08	0.12E-04	0.4000E-03	0.3202E-08	0.2133E-06	0.8333E-09	0.0	0.005	0.080		
6	const.	0.21E+09	0.81E+08	0.12E-04	0.4000E-03	0.3202E-08	0.2133E-06	0.8333E-09	0.0	0.005	0.080		
7	const.	0.21E+09	0.81E+08	0.12E-04	0.3579E-02	0.1909E-04	0.1223E-04	0.1223E-04	0.0	0.150	0.150		
8	const.	0.21E+09	0.81E+08	0.12E-04	0.3579E-02	0.1909E-04	0.1223E-04	0.1223E-04	0.0	0.150	0.150		
9	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
10	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
11	const.	0.21E+09	0.81E+08	0.12E-04	0.3579E-02	0.1909E-04	0.1223E-04	0.1223E-04	0.0	0.150	0.150		
12	const.	0.21E+09	0.81E+08	0.12E-04	0.8263E-02	0.6120E-04	0.4477E-04	0.4223E-04	0.0	0.208	0.190		
13	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
14	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
15	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
16	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
17	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
18	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
19	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
20	const.	0.21E+09	0.81E+08	0.12E-04	0.8263E-02	0.6120E-04	0.4477E-04	0.4223E-04	0.0	0.208	0.190		
21	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
22	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
23	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
24	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
25	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
26	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
27	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
28	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
29	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
30	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
31	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
32	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
33	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
34	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
35	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
36	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
37	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
38	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
40	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		

bar	s	E-mod.	G-mod.	α_t	A	I_T	I_η	I_ζ	ϕ	h_m	h_n	κ_η	κ_ζ
-	m	kN/m2	kN/m2	1/K	m2	m4	m4	m4	°	m	m	-	-
41	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
42	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
43	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
44	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
45	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
46	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
47	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
48	const.	0.21E+09	0.81E+08	0.12E-04	0.1199E-02	0.1800E-05	0.1145E-05	0.1145E-05	0.0	0.080	0.080		
49	const.	0.21E+09	0.81E+08	0.12E-04	0.8263E-02	0.6120E-04	0.4477E-04	0.4223E-04	0.0	0.208	0.190		
50	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
51	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
52	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
53	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
54	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
55	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
56	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
67	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
68	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
69	const.	0.21E+09	0.81E+08	0.12E-04	0.1572E-01	0.1771E-03	0.1685E-03	0.1171E-03	0.0	0.268	0.260		
70	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
71	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
72	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
73	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
74	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
75	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
76	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
77	const.	0.21E+09	0.81E+08	0.12E-04	0.4000E-03	0.3202E-08	0.2133E-06	0.8333E-09	0.0	0.005	0.080		
78	const.	0.21E+09	0.81E+08	0.12E-04	0.4000E-03	0.3202E-08	0.2133E-06	0.8333E-09	0.0	0.005	0.080		
79	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
80	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
81	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
82	const.	0.21E+09	0.81E+08	0.12E-04	0.1180E-01	0.1240E-05	0.1492E-03	0.5130E-04	0.0	0.260	0.260		
88	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
90	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
91	const.	0.21E+09	0.81E+08	0.12E-04	0.6430E-02	0.2860E-06	0.5410E-04	0.1950E-04	0.0	0.220	0.210		
92	const.	0.21E+09	0.81E+08	0.12E-04	0.9618E-02	0.8571E-04	0.6470E-04	0.5817E-04	0.0	0.228	0.210		
93	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2110E-06	0.3690E-04	0.1340E-04	0.0	0.200	0.190		
95	const.	0.21E+09	0.81E+08	0.12E-04	0.8263E-02	0.6120E-04	0.4477E-04	0.4223E-04	0.0	0.208	0.190		
96	const.	0.21E+09	0.81E+08	0.12E-04	0.8263E-02	0.6120E-04	0.4477E-04	0.4223E-04	0.0	0.208	0.190		
97	const.	0.21E+09	0.81E+08	0.12E-04	0.5380E-02	0.2020E-06	0.8360E-04	0.6040E-05	0.0	0.150	0.300		
98	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
99	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
100	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		
101	const.	0.21E+09	0.81E+08	0.12E-04	0.1230E-02	0.2670E-07	0.1150E-05	0.2990E-06	45.0	0.080	0.080		

VERIFICATION 1: EXTREME RULE 1: EXTREME RULE 1

Extremal reactions of supported nodes (incl. γ_F)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
-		kN	kN	kN	kNm	kNm	kNm
2	Min	0.02	-0.00	0.00	0.00	0.00	0.00
	Max	0.16	0.00	0.00	0.00	0.00	0.00
3	Min	-0.18	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.12	0.00	0.00	0.00	0.00	-0.00
42	Min	1.97	-0.00	-0.00	-0.00	0.00	0.00
	Max	16.47	0.00	0.00	-0.00	0.00	0.00
43	Min	0.46	0.00	0.00	0.00	0.00	0.00
	Max	1.47	0.00	0.00	0.00	0.00	0.00
44	Min	0.94	-23.78	0.00	0.00	0.00	0.00
	Max	20.18	63.10	0.00	0.00	0.00	0.00
45	Min	-4.77	-0.00	0.00	-0.00	-0.00	0.00

Extremal reactions of supported nodes (incl. γ_F)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	type	AP_r kN	AP_s kN	AP_t kN	AM_r kNm	AM_s kNm	AM_t kNm
	Max	8.56	0.00	0.00	-0.00	-0.00	0.00
46	Min	0.01	-0.00	-0.00	-0.00	-0.00	0.00
	Max	0.04	0.00	0.00	0.00	0.00	0.00
47	Min	0.29	4.64	0.00	-0.00	0.00	0.00
	Max	21.02	50.86	0.00	0.00	0.00	0.00
48	Min	0.00	-0.00	-305.76	0.00	0.00	0.00
	Max	0.00	-0.00	-123.67	0.00	0.00	0.00
49	Min	0.00	-56.69	0.00	0.00	0.00	0.00
	Max	0.00	-15.45	0.00	0.00	0.00	0.00
50	Min	0.00	0.00	-624.09	-0.00	0.00	0.00
	Max	0.00	0.00	-170.33	-0.00	0.00	0.00
51	Min	0.00	-0.00	-275.51	0.00	0.00	0.00
	Max	0.06	-0.00	-90.65	0.00	0.00	0.00
52	Min	-0.00	-0.00	-399.62	0.00	0.00	0.00
	Max	0.00	-0.00	-137.63	0.00	0.00	0.00
53	Min	0.00	-0.00	-1093.03	0.00	0.00	0.00
	Max	0.00	-0.00	-300.64	0.00	0.00	0.00
54	Min	0.00	0.00	-351.80	0.00	0.00	0.00
	Max	0.00	0.00	-92.17	0.00	0.00	0.00
Minimum		**-4.77**	**-56.69**	**-1093.03**	**-0.00**	**-0.00**	**-0.00**
Maximum		**21.02**	**63.10**	**0.00**	**0.00**	**0.00**	**0.00**

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s m	type	N kN	V_η kN	V_ζ kN	T kNm	M_η kNm	M_ζ kNm
Traverse 1: Bar 57								
13	0.00	Min	-14.9	-0.91	-50.41	6.67	5.8	-8.3
		Max	-10.2	0.36	-31.86	35.76	8.1	-2.9
	0.75	Min	-14.9	-3.94	-49.00	6.67	-29.5	-6.7
		Max	-10.2	0.36	-32.78	35.76	-18.1	-2.9
	1.25	Min	-14.9	-5.97	-48.07	6.67	-53.8	-4.5
		Max	-10.2	0.36	-33.40	35.76	-34.7	-2.8
14	1.50	Min	-14.9	-6.98	-47.60	6.67	-65.7	-4.1
		Max	-10.2	0.36	-33.70	35.76	-43.0	-1.8
Traverse 1: Bar 58								
14	1.50	Min	-14.9	-6.98	-47.60	6.67	-65.7	-4.1
		Max	-10.2	0.36	-33.70	35.76	-43.0	-1.8
15	2.00	Min	-14.9	-9.01	-45.91	6.67	-89.1	-4.2
		Max	-10.2	0.36	-33.70	35.76	-59.9	2.2
Traverse 1: Bar 59								
15	2.00	Min	-32.2	-8.94	-80.86	5.18	-88.2	-5.1
		Max	-10.7	-2.28	-54.75	34.62	-56.1	-0.1
40	2.70	Min	-32.2	-11.78	-79.55	5.18	-143.8	-2.9
		Max	-10.7	-2.28	-55.61	34.62	-95.3	6.6
Traverse 1: Bar 60								
40	2.70	Min	-25.0	-0.61	20.57	-2.44	-107.1	-2.9
		Max	20.0	4.98	52.56	0.97	-46.9	6.5
	3.90	Min	-25.0	-0.61	23.14	-2.44	-45.1	-2.2
		Max	20.0	0.12	50.77	0.97	-20.7	3.4
16	4.50	Min	-25.0	-2.66	24.43	-2.44	-15.2	-1.9
		Max	20.0	-0.25	49.87	0.97	-6.0	4.1

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Traverse 1: Bar 61								
16	4.50	Min	1.5	-0.54	3.38	-0.29	-22.1	-0.1
		Max	42.2	8.79	19.03	-0.07	-11.9	7.1
	5.33	Min	1.5	-0.54	5.43	-0.29	-12.1	0.3
		Max	42.2	5.42	18.09	-0.07	-2.7	1.3
	6.58	Min	1.5	-0.54	8.50	-0.29	0.5	-2.6
		Max	42.2	0.36	16.69	-0.07	15.1	1.3
17	7.00	Min	1.5	-1.53	8.70	-0.29	4.3	-2.4
		Max	42.2	-0.35	17.04	-0.07	22.0	1.4
Traverse 1: Bar 62								
17	7.00	Min	-2.4	3.23	-17.49	0.08	5.4	1.3
		Max	36.8	4.68	-8.65	0.31	23.3	3.9
	8.00	Min	-2.4	-0.36	-18.61	0.08	-4.9	-0.5
		Max	36.8	4.21	-6.19	0.31	8.1	-0.2
18	9.00	Min	-2.4	-4.41	-19.74	0.08	-16.6	-4.5
		Max	36.8	4.21	-3.74	0.31	-4.4	2.0
Traverse 1: Bar 63								
18	9.00	Min	-31.6	-3.15	28.95	-2.86	-73.6	-4.5
		Max	32.1	4.89	68.41	-0.96	-23.4	1.9
19	9.50	Min	-31.6	-3.15	28.49	-2.86	-41.1	-7.0
		Max	32.1	4.89	67.85	-0.96	-7.4	3.5
Traverse 1: Bar 64								
19	9.50	Min	-28.8	-3.79	7.63	-0.47	-41.5	-5.8
		Max	21.5	10.91	36.10	0.12	-4.9	8.8
	10.75	Min	-28.8	-3.79	10.70	-0.47	-1.4	-2.0
		Max	21.5	5.85	34.69	0.12	10.6	-0.7
20	12.00	Min	-28.8	-3.79	13.77	-0.47	20.4	-5.9
		Max	21.5	0.79	33.29	0.12	46.6	3.8
Traverse 1: Bar 65								
20	12.00	Min	-11.9	-0.34	-9.33	-0.07	26.4	-1.6
		Max	-2.9	5.50	4.53	0.02	42.6	3.6
	13.25	Min	-11.9	-0.34	-6.26	-0.07	19.8	-5.2
		Max	-2.9	0.44	3.13	0.02	44.2	4.0
	14.08	Min	-11.9	-3.07	-4.21	-0.07	17.2	-4.2
		Max	-2.9	-0.21	2.19	0.02	44.7	4.2
21	14.50	Min	-11.9	-4.76	-3.23	-0.07	16.5	-2.6
		Max	-2.9	-0.21	1.76	0.02	44.6	4.3
Traverse 1: Bar 66								
21	14.50	Min	-21.9	0.76	-34.06	-0.17	18.2	-5.1
		Max	-10.1	2.86	-19.28	0.54	47.3	5.2
	15.33	Min	-21.9	-2.61	-34.02	-0.17	-0.2	-4.4
		Max	-10.1	2.86	-18.21	0.54	21.8	2.8
	16.17	Min	-21.9	-5.99	-34.96	-0.17	-23.1	-0.8
		Max	-10.1	2.86	-16.17	0.54	1.6	0.4
22	17.00	Min	-21.9	-9.36	-35.89	-0.17	-47.5	-2.2
		Max	-10.1	2.86	-14.12	0.54	-16.1	5.8
Traverse 2: Bar 94								
50	0.00	Min	0.0	0.00	170.33	0.00	0.0	0.0
		Max	0.0	0.00	624.09	0.00	0.0	0.0
49	0.50	Min	0.0	0.00	169.49	0.00	85.0	0.0
		Max	0.0	0.00	623.06	0.00	311.8	0.0
Traverse 2: Bar 89								
49	0.50	Min	-623.1	0.00	-56.69	0.00	85.0	0.0
		Max	-169.5	0.00	-15.45	0.00	311.8	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
43	6.00	Min	-614.6	0.00	-56.69	0.00	0.0	0.0
		Max	-162.6	0.00	-15.45	0.00	0.0	0.0
Traverse 3: Bar 83								
41	0.00	Min	-0.0	0.00	0.00	0.00	-0.0	0.0
		Max	0.0	0.00	0.00	0.00	-0.0	0.0
	0.35	Min	-0.0	0.00	-20.67	0.00	-3.6	0.0
		Max	0.0	0.00	-4.94	0.00	-0.9	0.0
42	0.70	Min	-0.0	0.00	-41.35	0.00	-14.5	0.0
		Max	0.0	0.00	-9.88	0.00	-3.5	0.0
Traverse 3: Bar 84								
42	0.70	Min	-33.8	0.00	30.87	0.00	-14.5	0.0
		Max	-4.2	0.01	129.32	0.00	-3.5	0.1
	2.80	Min	-33.8	0.00	1.22	0.00	30.2	-0.0
		Max	-4.2	0.01	5.27	0.00	126.9	0.0
	4.90	Min	-33.8	0.00	-118.94	0.00	1.7	-0.0
		Max	-4.2	0.01	-28.25	0.00	7.7	0.0
43	7.00	Min	-33.8	0.00	-242.99	0.00	-373.0	-0.0
		Max	-4.2	0.01	-57.89	0.00	-88.1	-0.0
Traverse 3: Bar 85								
43	7.00	Min	-10.9	-0.00	67.47	-0.12	-373.0	-0.0
		Max	79.0	0.02	282.91	-0.01	-88.1	0.0
	8.33	Min	-10.9	-0.00	48.65	-0.12	-48.3	-0.0
		Max	79.0	0.02	204.15	-0.01	-10.7	0.0
	11.00	Min	-10.9	-0.00	11.01	-0.12	68.4	-0.0
		Max	79.0	0.02	46.63	-0.01	286.6	0.0
	12.33	Min	-10.9	-0.00	-32.26	-0.12	70.7	-0.1
		Max	79.0	0.02	-7.68	-0.01	296.1	0.0
44	15.00	Min	-10.9	-0.00	-189.78	-0.12	-0.0	-0.1
		Max	79.0	0.02	-45.32	-0.01	-0.0	0.0
Traverse 4: Bar 87								
47	0.00	Min	11.1	-0.00	64.63	-0.00	0.0	-0.0
		Max	55.2	0.01	273.46	0.00	0.0	0.0
	2.50	Min	11.1	-0.00	7.41	-0.00	90.1	-0.0
		Max	55.2	0.01	31.53	0.00	381.2	0.0
	5.00	Min	11.1	-0.00	-210.55	-0.00	37.1	-0.0
		Max	55.2	0.01	-49.67	0.00	157.6	-0.0
	6.25	Min	11.1	-0.00	-331.52	-0.00	-181.9	-0.0
		Max	55.2	0.01	-78.28	0.00	-42.2	-0.0
46	7.50	Min	11.1	-0.00	-452.48	-0.00	-671.9	-0.0
		Max	55.2	0.01	-106.89	0.00	-157.9	-0.0
Traverse 4: Bar 86								
46	7.50	Min	3.1	-0.00	106.89	-0.00	-671.9	0.0
		Max	27.5	0.01	452.48	0.00	-157.9	0.0
	8.75	Min	3.1	-0.00	78.28	-0.00	-181.9	0.0
		Max	27.5	0.01	331.52	0.00	-42.2	0.0
	10.00	Min	3.1	-0.00	49.67	-0.00	37.1	0.0
		Max	27.5	0.01	210.55	0.00	157.6	0.0
	12.50	Min	3.1	-0.00	-31.53	-0.00	90.1	-0.0
		Max	27.5	0.01	-7.41	0.00	381.2	0.0
45	15.00	Min	3.1	-0.00	-273.46	-0.00	-0.0	-0.1
		Max	27.5	0.01	-64.63	0.00	-0.0	0.0
Bar 1								
1	0.00	Min	0.0	-0.01	0.99	0.00	0.0	-0.1
		Max	0.3	0.04	1.21	0.01	0.0	0.5

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	0.93	Min	0.0	-0.01	0.66	0.00	0.8	-0.1
		Max	0.3	0.04	0.81	0.01	0.9	0.5
	1.87	Min	0.0	-0.01	0.33	0.00	1.2	-0.2
		Max	0.3	0.04	0.40	0.01	1.5	0.5
	2.80	Min	0.0	-0.01	-0.00	0.00	1.4	-0.2
		Max	0.3	0.04	-0.00	0.01	1.7	0.5
	3.73	Min	0.0	-0.01	-0.41	0.00	1.2	-0.2
		Max	0.3	0.04	-0.33	0.01	1.5	0.5
	4.67	Min	0.0	-0.01	-0.81	0.00	0.8	-0.3
		Max	0.3	0.04	-0.66	0.01	0.9	0.5
4	5.60	Min	0.0	-0.01	-1.22	0.00	-0.0	-0.3
		Max	0.3	0.04	-1.00	0.01	-0.0	0.5
Bar 2								
2	0.00	Min	-0.0	0.02	6.09	0.00	0.0	-0.1
		Max	0.0	0.16	20.35	0.00	0.0	0.7
	2.50	Min	-0.0	0.02	0.97	0.00	8.8	-0.2
		Max	0.0	0.16	3.65	0.00	30.0	0.3
	5.00	Min	-0.0	0.02	-14.03	0.00	4.9	-0.3
		Max	0.0	0.16	-3.15	0.00	18.3	0.0
	6.25	Min	-0.0	0.02	-22.39	0.00	-9.4	-0.4
		Max	0.0	0.16	-5.71	0.00	4.3	-0.2
3	7.50	Min	-0.0	0.02	-30.74	0.00	-42.6	-0.5
		Max	0.0	0.16	-8.27	0.00	-4.5	-0.2
Bar 3								
3	0.00	Min	4.5	-0.13	8.26	0.00	-42.6	-0.3
		Max	11.6	0.25	30.73	0.01	-4.5	0.7
	1.25	Min	4.5	-0.13	5.71	0.00	-9.4	-0.2
		Max	11.6	0.25	22.38	0.01	4.3	0.4
	2.50	Min	4.5	-0.13	3.15	0.00	4.9	-0.1
		Max	11.6	0.25	14.03	0.01	18.3	0.2
	5.00	Min	4.5	-0.13	-3.65	0.00	8.8	-0.5
		Max	11.6	0.25	-0.98	0.01	30.0	0.3
4	7.50	Min	4.5	-0.13	-20.35	0.00	-0.0	-1.1
		Max	11.6	0.25	-6.09	0.01	-0.0	0.7
Bar 4								
12	0.00	Min	-1.2	-0.01	0.00	-0.52	0.0	-0.0
		Max	-0.9	0.04	0.00	0.10	0.0	0.1
1	2.50	Min	-1.2	-0.01	0.00	-0.52	0.0	-0.0
		Max	-0.9	0.04	0.00	0.10	0.0	0.0
Bar 5								
12	0.00	Min	-0.3	-0.00	0.00	0.00	0.0	-0.0
		Max	0.0	-0.00	0.00	0.00	0.0	0.0
4	6.13	Min	-0.3	-0.00	0.00	0.00	0.0	-0.0
		Max	0.0	-0.00	0.00	0.00	0.0	0.0
Bar 6								
1	0.00	Min	-0.4	-0.00	0.00	-0.00	0.0	-0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	-0.0
39	6.13	Min	-0.4	-0.00	0.00	-0.00	0.0	0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	0.0
Bar 7								
2	0.00	Min	-20.4	0.00	0.00	-0.71	0.0	0.0
		Max	-6.1	0.00	0.00	0.10	0.0	0.0
33	2.50	Min	-20.4	0.00	0.00	-0.71	0.0	0.0
		Max	-6.1	0.00	0.00	0.10	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 8								
3	0.00	Min	-59.4	0.00	0.00	-1.10	0.0	0.0
		Max	-13.2	0.00	0.00	-0.08	0.0	0.0
36	2.50	Min	-60.3	0.00	0.00	-1.10	0.0	0.0
		Max	-13.9	0.00	0.00	-0.08	0.0	0.0
Bar 9								
3	0.00	Min	-12.3	-0.00	0.00	-0.00	0.0	-0.0
		Max	-4.7	0.02	0.00	0.00	0.0	0.0
	2.64	Min	-12.3	-0.00	0.00	-0.00	0.0	-0.0
		Max	-4.7	0.02	0.00	0.00	0.0	0.0
39	7.91	Min	-12.3	-0.00	0.00	-0.00	0.0	-0.1
		Max	-4.7	0.02	0.00	0.00	0.0	0.0
Bar 10								
4	0.00	Min	-12.3	-0.01	0.00	-0.00	0.0	-0.0
		Max	-4.7	-0.00	0.00	-0.00	0.0	-0.0
	1.32	Min	-12.3	-0.01	0.00	-0.00	0.0	-0.0
		Max	-4.7	-0.00	0.00	-0.00	0.0	0.0
36	7.91	Min	-12.3	-0.01	0.00	-0.00	0.0	0.0
		Max	-4.7	-0.00	0.00	-0.00	0.0	0.1
Bar 11								
39	0.00	Min	-19.0	0.00	0.00	-0.60	0.0	0.0
		Max	-4.2	0.00	0.00	0.37	0.0	0.0
4	2.50	Min	-19.0	0.00	0.00	-0.60	0.0	0.0
		Max	-4.2	0.00	0.00	0.37	0.0	0.0
Bar 12								
5	0.00	Min	-0.0	-0.00	-6.10	0.00	-0.0	-0.0
		Max	0.0	0.00	-5.00	0.00	-0.0	0.0
13	0.50	Min	-0.0	-0.00	-10.06	0.00	-4.0	-0.0
		Max	0.0	0.00	-8.25	0.00	-3.3	0.0
Bar 13								
6	0.00	Min	-0.0	0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	0.00	-2.32	0.00	-0.3	-0.0
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
15	0.50	Min	-0.0	0.00	-4.64	0.00	-1.2	-0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	-0.0
Bar 14								
7	0.00	Min	-0.0	-0.00	0.00	0.00	0.0	0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	-0.0
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
16	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	-0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	0.0
Bar 15								
8	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	-0.00	-0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	-0.0
		Max	0.0	-0.00	-1.63	0.00	-0.2	0.0
17	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	-0.0
		Max	0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 16								
9	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
19	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	0.0
Bar 17								
20	0.00	Min	-0.0	-0.00	3.25	0.00	-1.0	-0.0
		Max	0.0	-0.00	3.96	0.00	-0.8	-0.0
	0.25	Min	-0.0	-0.00	1.63	0.00	-0.2	-0.0
		Max	0.0	-0.00	1.98	0.00	-0.2	0.0
10	0.50	Min	-0.0	-0.00	-0.00	0.00	-0.0	0.0
		Max	0.0	-0.00	-0.00	0.00	-0.0	0.0
Bar 18								
21	0.00	Min	-0.0	0.00	3.25	0.00	-1.0	0.0
		Max	0.0	0.00	3.96	0.00	-0.8	0.0
	0.25	Min	-0.0	0.00	1.63	0.00	-0.2	-0.0
		Max	0.0	0.00	1.98	0.00	-0.2	-0.0
11	0.50	Min	-0.0	0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	-0.0
Bar 19								
22	0.00	Min	-0.0	-0.03	3.48	-0.09	-1.6	-0.1
		Max	0.3	2.03	5.23	0.01	-1.1	1.0
	0.25	Min	-0.0	-0.03	2.19	-0.09	-0.6	-0.1
		Max	0.3	1.02	3.24	0.01	-0.4	0.6
12	0.50	Min	-0.0	-0.04	0.89	-0.09	-0.0	-0.1
		Max	0.3	0.01	1.27	0.01	0.0	0.5
Bar 20								
23	0.00	Min	-11.7	2.61	-14.73	2.88	8.9	1.6
		Max	-6.0	5.24	-2.61	4.52	16.5	3.0
55	0.67	Min	-11.7	2.61	-20.02	2.88	-1.9	-1.5
		Max	-6.0	5.24	-6.95	4.52	12.6	0.8
Bar 21								
24	0.00	Min	8.0	0.00	-0.00	-0.00	0.0	0.0
		Max	16.3	0.00	-0.00	0.00	0.0	0.0
13	2.83	Min	8.0	0.00	0.00	-0.00	-0.0	-0.0
		Max	16.3	0.00	0.00	0.00	-0.0	-0.0
Bar 22								
15	0.00	Min	6.6	0.00	0.00	-0.00	0.0	0.0
		Max	18.5	0.00	0.00	0.00	0.0	0.0
23	2.83	Min	6.6	-0.00	0.00	-0.00	0.0	0.0
		Max	18.5	0.00	0.00	0.00	0.0	0.0
Bar 23								
15	0.00	Min	-28.6	0.28	17.78	0.01	0.0	0.7
		Max	-19.0	1.29	30.33	0.01	0.0	2.6
	1.00	Min	-28.6	0.28	10.86	0.01	14.3	0.4
		Max	-19.0	1.29	18.51	0.01	24.4	1.3
24	2.00	Min	-28.6	0.28	3.94	0.01	21.7	-0.1
		Max	-19.0	1.29	6.70	0.01	37.0	0.1
Bar 24								
25	0.00	Min	13.3	0.00	0.00	-0.00	0.0	0.0
		Max	30.4	0.00	0.00	0.00	0.0	0.0
15	3.20	Min	13.3	-0.00	0.00	-0.00	0.0	0.0
		Max	30.4	-0.00	0.00	0.00	0.0	0.0
Bar 25								
16	0.00	Min	24.0	0.00	0.00	0.00	0.0	0.0
		Max	35.5	0.00	0.00	0.00	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
24	3.20	Min	24.0	-0.00	0.00	0.00	0.0	0.0
		Max	35.5	-0.00	0.00	0.00	0.0	0.0
Bar 26								
16	0.00	Min	-22.1	-3.18	17.80	0.00	0.0	-3.4
		Max	-5.8	-1.42	26.88	0.00	0.0	-1.3
	1.00	Min	-22.1	-3.18	10.88	0.00	14.3	-0.3
		Max	-5.8	-1.42	16.41	0.00	21.6	0.1
25	2.00	Min	-22.1	-3.18	3.96	0.00	21.8	1.5
		Max	-5.8	-1.42	5.95	0.00	32.8	2.9
Bar 27								
17	0.00	Min	-3.5	0.00	0.00	0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.00	0.0	0.0
25	3.20	Min	-3.5	0.00	0.00	0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.00	0.0	0.0
Bar 28								
26	0.00	Min	-0.4	0.00	0.00	-0.01	0.0	0.0
		Max	3.4	0.00	0.00	-0.00	0.0	0.0
16	3.20	Min	-0.4	0.00	0.00	-0.01	0.0	0.0
		Max	3.4	0.00	0.00	-0.00	0.0	0.0
Bar 29								
17	0.00	Min	-3.2	-3.73	17.79	-0.00	0.0	-4.4
		Max	4.5	-1.56	26.88	-0.00	0.0	-1.7
	1.00	Min	-3.2	-3.73	10.87	-0.00	14.3	-0.7
		Max	4.5	-1.56	16.41	-0.00	21.6	-0.2
26	2.00	Min	-3.2	-3.73	3.95	-0.00	21.7	1.4
		Max	4.5	-1.56	5.94	-0.00	32.8	3.1
Bar 30								
27	0.00	Min	4.2	0.00	0.00	-0.00	0.0	0.0
		Max	12.0	0.00	0.00	-0.00	0.0	0.0
17	3.20	Min	4.2	0.00	0.00	-0.00	0.0	0.0
		Max	12.0	0.00	0.00	-0.00	0.0	0.0
Bar 31								
19	0.00	Min	-7.4	0.00	0.00	-0.00	0.0	0.0
		Max	2.4	0.00	0.00	-0.00	0.0	0.0
26	3.20	Min	-7.4	0.00	0.00	-0.00	0.0	0.0
		Max	2.4	0.00	0.00	-0.00	0.0	0.0
Bar 32								
19	0.00	Min	-9.7	-4.62	17.61	-0.01	-4.7	-5.7
		Max	10.4	-1.08	27.79	-0.00	0.9	-0.8
	1.33	Min	-9.7	-4.62	8.38	-0.01	14.9	0.3
		Max	10.4	-1.08	13.83	-0.00	26.3	0.8
27	2.00	Min	-9.7	-4.62	3.77	-0.01	19.5	1.3
		Max	10.4	-1.08	6.85	-0.00	32.6	3.6
Bar 33								
28	0.00	Min	-3.8	0.00	0.00	0.00	0.0	0.0
		Max	16.2	0.00	0.00	0.00	0.0	0.0
19	3.20	Min	-3.8	0.00	0.00	0.00	0.0	0.0
		Max	16.2	0.00	0.00	0.00	0.0	0.0
Bar 34								
20	0.00	Min	-21.9	0.00	0.00	-0.01	0.0	0.0
		Max	4.4	0.00	0.00	-0.00	0.0	0.0
27	3.20	Min	-21.9	0.00	0.00	-0.01	-0.0	-0.0
		Max	4.4	0.00	0.00	-0.00	0.0	0.0
Bar 35								

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
20	0.00	Min	5.1	-3.97	17.78	-0.00	0.0	-4.5
		Max	15.6	-0.44	26.86	0.01	0.0	0.3
	1.33	Min	5.1	-3.97	8.56	-0.00	17.6	0.6
		Max	15.6	-0.44	12.90	0.01	26.5	1.2
28	2.00	Min	5.1	-3.97	3.94	-0.00	21.7	1.1
		Max	15.6	-0.44	5.92	0.01	32.8	3.5
Bar 36								
21	0.00	Min	-31.8	0.00	0.00	-0.01	0.0	0.0
		Max	-13.8	0.00	0.00	0.00	0.0	0.0
28	3.20	Min	-31.8	0.00	0.00	-0.01	0.0	0.0
		Max	-13.8	0.00	0.00	0.00	0.0	0.0
Bar 37								
29	0.00	Min	-20.4	0.00	0.00	-0.00	0.0	0.0
		Max	17.9	0.00	0.00	0.01	0.0	0.0
20	3.20	Min	-20.4	-0.00	0.00	-0.00	0.0	0.0
		Max	17.9	0.00	0.00	0.01	0.0	0.0
Bar 38								
21	0.00	Min	12.7	-0.75	17.79	-0.00	0.0	-0.9
		Max	39.4	1.12	26.88	0.00	0.0	2.7
	1.00	Min	12.7	-0.75	10.87	-0.00	14.3	-0.2
		Max	39.4	1.12	16.41	0.00	21.6	1.6
29	2.00	Min	12.7	-0.75	3.95	-0.00	21.7	0.2
		Max	39.4	1.12	5.94	0.00	32.8	0.8
Bar 40								
30	0.00	Min	-25.1	0.00	0.00	-0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.01	0.0	0.0
21	3.20	Min	-25.1	0.00	0.00	-0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.01	0.0	0.0
Bar 41								
22	0.00	Min	-10.6	-4.02	13.90	-0.01	-2.5	-2.4
		Max	-2.4	2.75	27.28	0.00	1.9	5.1
	0.67	Min	-10.6	-1.32	10.18	-0.01	6.6	-1.2
		Max	-2.4	2.75	20.30	0.00	16.6	3.8
	1.33	Min	-10.6	-1.24	6.47	-0.01	12.7	-0.7
		Max	-2.4	5.37	13.32	0.00	27.3	1.4
30	2.00	Min	-10.6	-1.24	2.76	-0.01	16.3	-3.4
		Max	-2.4	8.07	6.35	0.00	33.4	0.5
Bar 42								
24	0.00	Min	-11.1	0.00	0.09	-0.23	0.0	0.0
		Max	-3.0	0.00	0.11	-0.07	0.0	0.0
	0.67	Min	-11.1	0.00	0.03	-0.23	0.0	0.0
		Max	-3.0	0.00	0.04	-0.07	0.1	0.0
23	2.00	Min	-11.1	0.00	-0.11	-0.23	0.0	0.0
		Max	-3.0	0.00	-0.09	-0.07	0.0	0.0
Bar 43								
25	0.00	Min	-29.6	0.00	0.12	-0.06	0.0	0.0
		Max	-9.7	0.00	0.14	-0.02	0.0	0.0
	0.83	Min	-29.6	0.00	0.04	-0.06	0.1	0.0
		Max	-9.7	0.00	0.05	-0.02	0.1	0.0
	1.67	Min	-29.6	0.00	-0.05	-0.06	0.1	0.0
		Max	-9.7	0.00	-0.04	-0.02	0.1	0.0
24	2.50	Min	-29.6	0.00	-0.14	-0.06	0.0	0.0
		Max	-9.7	0.00	-0.12	-0.02	0.0	0.0
Bar 44								

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
26	0.00	Min	-15.8	0.00	0.12	-0.00	0.0	0.0
		Max	6.5	0.00	0.14	0.02	0.0	0.0
	0.83	Min	-15.8	0.00	0.04	-0.00	0.1	0.0
		Max	6.5	0.00	0.05	0.02	0.1	0.0
	1.67	Min	-15.8	0.00	-0.05	-0.00	0.1	0.0
		Max	6.5	0.00	-0.04	0.02	0.1	0.0
25	2.50	Min	-15.8	0.00	-0.14	-0.00	0.0	0.0
		Max	6.5	0.00	-0.12	0.02	0.0	0.0
Bar 45								
27	0.00	Min	-14.5	0.00	0.12	0.03	0.0	0.0
		Max	4.7	0.00	0.14	0.06	0.0	0.0
	0.83	Min	-14.5	0.00	0.04	0.03	0.1	0.0
		Max	4.7	0.00	0.05	0.06	0.1	0.0
	1.67	Min	-14.5	0.00	-0.05	0.03	0.1	0.0
		Max	4.7	0.00	-0.04	0.06	0.1	0.0
26	2.50	Min	-14.5	0.00	-0.14	0.03	0.0	0.0
		Max	4.7	0.00	-0.12	0.06	0.0	0.0
Bar 46								
28	0.00	Min	0.1	0.00	0.12	-0.01	0.0	0.0
		Max	9.2	0.00	0.14	0.02	0.0	0.0
	0.83	Min	0.1	0.00	0.04	-0.01	0.1	0.0
		Max	9.2	0.00	0.05	0.02	0.1	0.0
	1.67	Min	0.1	0.00	-0.05	-0.01	0.1	0.0
		Max	9.2	0.00	-0.04	0.02	0.1	0.0
27	2.50	Min	0.1	0.00	-0.14	-0.01	0.0	0.0
		Max	9.2	0.00	-0.12	0.02	0.0	0.0
Bar 47								
29	0.00	Min	15.9	0.00	0.12	-0.04	0.0	0.0
		Max	32.8	0.00	0.14	-0.01	0.0	0.0
	0.83	Min	15.9	0.00	0.04	-0.04	0.1	0.0
		Max	32.8	0.00	0.05	-0.01	0.1	0.0
	1.67	Min	15.9	0.00	-0.05	-0.04	0.1	0.0
		Max	32.8	0.00	-0.04	-0.01	0.1	0.0
28	2.50	Min	15.9	0.00	-0.14	-0.04	0.0	0.0
		Max	32.8	0.00	-0.12	-0.01	0.0	0.0
Bar 48								
30	0.00	Min	0.5	0.00	0.12	-0.03	0.0	0.0
		Max	29.0	0.00	0.14	0.04	0.0	0.0
	0.83	Min	0.5	0.00	0.04	-0.03	0.1	0.0
		Max	29.0	0.00	0.05	0.04	0.1	0.0
	1.67	Min	0.5	0.00	-0.05	-0.03	0.1	0.0
		Max	29.0	0.00	-0.04	0.04	0.1	0.0
29	2.50	Min	0.5	0.00	-0.14	-0.03	0.0	0.0
		Max	29.0	0.00	-0.12	0.04	0.0	0.0
Bar 49								
31	0.00	Min	-11.2	-2.18	6.09	2.88	-11.9	-3.8
		Max	1.5	0.12	21.51	4.52	21.4	1.9
	1.03	Min	-11.2	-2.18	-0.63	2.88	5.0	-1.5
		Max	1.5	0.12	13.31	4.52	25.4	1.8
	2.58	Min	-11.2	-2.18	-10.70	2.88	14.1	1.4
		Max	1.5	0.12	1.02	4.52	18.6	2.0
23	3.10	Min	-11.2	-2.18	-14.61	2.88	9.1	1.6
		Max	1.5	0.12	-2.52	4.52	16.7	3.0
Bar 50								

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
24	0.00	Min	-0.1	-0.02	3.73	0.01	21.6	-0.1
		Max	3.0	0.05	6.44	0.01	36.9	0.1
	0.52	Min	-0.1	-0.02	0.15	0.01	22.7	-0.1
		Max	3.0	0.05	0.33	0.01	38.6	0.1
	2.07	Min	-0.1	-0.02	-18.00	0.01	14.6	-0.0
		Max	3.0	0.05	-10.56	0.01	24.9	0.0
33	3.10	Min	-0.1	-0.02	-30.21	0.01	0.0	0.0
		Max	3.0	0.05	-17.71	0.01	0.0	0.0
Bar 51								
25	0.00	Min	-3.5	0.49	3.72	0.00	21.7	1.5
		Max	1.3	0.95	5.66	0.00	32.8	2.9
	0.52	Min	-3.5	0.49	0.15	0.00	22.7	1.3
		Max	1.3	0.95	0.25	0.00	34.3	2.4
	2.07	Min	-3.5	0.49	-15.98	0.00	14.6	0.5
		Max	1.3	0.95	-10.58	0.00	22.1	1.0
34	3.10	Min	-3.5	0.49	-26.79	0.00	0.0	0.0
		Max	1.3	0.95	-17.73	0.00	0.0	0.0
Bar 52								
26	0.00	Min	-0.0	0.44	3.72	-0.01	21.7	1.4
		Max	0.0	0.99	5.65	-0.00	32.8	3.1
	0.52	Min	-0.0	0.44	0.14	-0.01	22.7	1.1
		Max	0.0	0.99	0.25	-0.00	34.3	2.6
	1.55	Min	-0.0	0.44	-10.58	-0.01	19.2	0.7
		Max	0.0	0.99	-7.00	-0.00	29.0	1.5
35	3.10	Min	-0.0	0.44	-26.80	-0.01	0.0	0.0
		Max	0.0	0.99	-17.73	-0.00	0.0	0.0
Bar 53								
27	0.00	Min	-0.1	0.43	3.53	-0.01	19.5	1.3
		Max	-0.0	1.15	6.57	-0.00	32.7	3.6
	0.52	Min	-0.1	0.43	-0.04	-0.01	20.9	1.1
		Max	-0.0	1.15	1.16	-0.00	34.3	3.0
	1.55	Min	-0.1	0.43	-10.55	-0.01	18.1	0.7
		Max	-0.0	1.15	-6.29	-0.00	28.9	1.8
36	3.10	Min	-0.1	0.43	-26.78	-0.01	0.0	0.0
		Max	-0.0	1.15	-17.02	-0.00	0.0	0.0
Bar 54								
28	0.00	Min	-0.2	0.36	3.71	0.00	21.8	1.1
		Max	0.1	1.14	5.64	0.00	32.8	3.5
	0.52	Min	-0.2	0.36	0.13	0.00	22.7	0.9
		Max	0.1	1.14	0.23	0.00	34.3	2.9
	2.07	Min	-0.2	0.36	-16.00	0.00	14.6	0.4
		Max	0.1	1.14	-10.59	0.00	22.1	1.2
37	3.10	Min	-0.2	0.36	-26.81	0.00	0.0	0.0
		Max	0.1	1.14	-17.74	0.00	0.0	0.0
Bar 55								
29	0.00	Min	2.4	0.06	3.71	0.00	21.7	0.2
		Max	26.7	0.25	5.66	0.00	32.8	0.8
	0.52	Min	2.4	0.06	0.14	0.00	22.7	0.2
		Max	26.7	0.25	0.25	0.00	34.3	0.7
	2.07	Min	2.4	0.06	-15.99	0.00	14.6	0.1
		Max	26.7	0.25	-10.58	0.00	22.1	0.3
38	3.10	Min	2.4	0.06	-26.80	0.00	0.0	0.0
		Max	26.7	0.25	-17.73	0.00	0.0	0.0
Bar 56								

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
30	0.00	Min	-1.6	-6.65	2.64	-0.00	16.3	-3.4
		Max	3.4	0.29	6.20	0.00	33.4	0.5
	0.52	Min	-1.6	-4.55	-0.24	-0.00	17.3	-0.5
		Max	3.4	0.29	0.79	0.00	34.8	0.3
	1.55	Min	-1.6	-0.37	-10.77	-0.00	14.8	-0.2
		Max	3.4	0.29	-5.25	0.00	29.3	2.3
	2.58	Min	-1.6	-0.12	-21.58	-0.00	6.4	-0.3
		Max	3.4	4.23	-11.00	0.00	12.5	0.3
39	3.10	Min	-1.6	-0.12	-26.99	-0.00	0.0	-2.6
		Max	3.4	6.32	-13.88	0.00	0.0	-0.0
Bar 67								
32	0.00	Min	-5.0	-1.40	12.99	-10.14	-36.4	-0.2
		Max	0.4	7.18	23.75	21.18	-18.0	7.0
	0.75	Min	-5.0	-1.40	9.54	-10.14	-19.1	0.8
		Max	0.4	7.18	22.63	21.18	-9.6	1.7
31	1.50	Min	-5.0	-1.40	6.09	-10.14	-4.4	-3.8
		Max	0.4	7.18	21.51	21.18	-1.8	1.9
Bar 68								
33	0.00	Min	-5.0	-1.40	12.99	-10.14	-48.3	-0.9
		Max	0.4	7.18	23.75	21.18	-24.6	10.6
32	0.50	Min	-5.0	-1.40	12.99	-10.14	-36.4	-0.2
		Max	0.4	7.18	23.75	21.18	-18.0	7.0
Bar 69								
33	0.00	Min	-24.5	-3.81	24.66	-0.94	-96.0	-10.5
		Max	-4.4	0.80	52.13	0.26	-46.9	0.2
34	2.50	Min	-24.5	-3.81	21.60	-0.94	8.1	-2.3
		Max	-4.4	0.80	39.95	0.26	21.9	-0.6
Bar 70								
34	0.00	Min	-23.5	-0.64	3.80	-0.08	7.9	-2.3
		Max	-3.9	-0.18	13.23	-0.03	21.7	-0.6
35	2.50	Min	-23.5	-0.64	-0.13	-0.08	17.5	-0.7
		Max	-3.9	-0.18	3.61	-0.03	37.7	-0.1
Bar 71								
35	0.00	Min	-22.5	-0.65	-26.58	-0.08	17.4	-0.7
		Max	-3.5	-0.19	-14.47	-0.03	37.4	-0.1
	1.67	Min	-22.5	-0.65	-34.07	-0.08	-16.6	0.2
		Max	-3.5	-0.19	-16.00	-0.03	-4.4	0.4
36	2.50	Min	-22.5	-0.65	-37.82	-0.08	-44.4	0.3
		Max	-3.5	-0.19	-16.77	-0.03	-20.2	1.0
Bar 72								
36	0.00	Min	-38.2	-0.52	25.38	-0.15	-104.4	-0.5
		Max	-5.9	-0.14	57.30	-0.04	-44.9	0.6
37	2.50	Min	-38.2	-0.52	23.08	-0.15	14.4	0.5
		Max	-5.9	-0.14	46.06	-0.04	26.1	1.2
Bar 73								
37	0.00	Min	-37.0	-0.59	5.24	-0.17	14.3	0.5
		Max	-5.5	0.02	19.34	-0.00	25.8	1.2
38	2.50	Min	-37.0	-0.59	2.94	-0.17	26.1	0.7
		Max	-5.5	0.02	8.09	-0.00	58.6	2.4
Bar 74								
38	0.00	Min	-15.7	-0.26	-23.18	-0.06	25.3	0.7
		Max	-2.5	0.31	-10.31	0.06	53.1	2.4
39	2.50	Min	-15.7	-0.26	-31.95	-0.06	-25.3	0.2
		Max	-2.5	0.31	-15.09	0.06	3.0	2.7

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 75								
18	0.00	Min	-86.2	-1.47	-29.20	0.00	11.8	-3.6
		Max	-34.6	-0.47	-4.72	0.05	73.0	-1.2
43	2.50	Min	-89.0	-1.47	-29.20	0.00	-0.0	0.0
		Max	-36.9	-0.47	-4.72	0.05	-0.0	0.1
Bar 76								
22	0.00	Min	-69.5	0.00	7.82	-0.02	-52.3	0.0
		Max	-40.0	0.00	20.93	0.11	-19.5	0.0
44	2.50	Min	-72.3	0.00	7.82	-0.02	0.0	0.0
		Max	-42.3	0.00	20.93	0.11	0.0	0.0
Bar 77								
22	0.00	Min	0.3	-0.00	0.00	-0.00	0.0	-0.0
		Max	21.7	0.00	0.00	0.00	0.0	0.0
47	5.68	Min	0.3	-0.00	0.00	-0.00	0.0	0.0
		Max	21.7	0.00	0.00	0.00	0.0	0.0
Bar 78								
39	0.00	Min	-22.5	-0.00	0.00	-0.00	0.0	-0.0
		Max	-1.1	0.00	0.00	-0.00	0.0	0.0
44	5.68	Min	-22.5	-0.00	0.00	-0.00	-0.0	0.0
		Max	-1.1	0.00	0.00	-0.00	0.0	0.0
Bar 79								
33	0.00	Min	-120.0	-8.54	-27.50	-0.01	7.7	-21.4
		Max	-67.9	4.77	-3.06	0.05	68.7	11.9
45	2.50	Min	-122.8	-8.54	-27.50	-0.01	-0.0	0.0
		Max	-70.2	4.77	-3.06	0.05	0.0	0.0
Bar 80								
36	0.00	Min	-180.5	-0.05	-28.06	0.01	19.1	-0.1
		Max	-80.1	-0.01	-7.66	0.07	70.1	-0.0
46	2.50	Min	-183.3	-0.05	-28.06	0.01	0.0	0.0
		Max	-82.4	-0.01	-7.66	0.07	0.0	0.0
Bar 81								
39	0.00	Min	-73.0	-1.58	0.19	-0.02	-26.5	0.0
		Max	-33.2	-0.06	10.59	0.05	-0.5	0.0
47	2.50	Min	-75.8	-1.58	0.19	-0.02	-0.0	0.2
		Max	-35.5	-0.06	10.59	0.05	-0.0	3.9
Bar 82								
40	0.00	Min	-129.8	-16.45	4.17	0.00	-75.8	-36.9
		Max	-78.5	-1.97	33.82	0.07	-9.3	-4.4
42	2.24	Min	-132.3	-16.45	4.17	0.00	-0.0	-0.0
		Max	-80.6	-1.97	33.82	0.07	-0.0	-0.0
Bar 88								
42	0.00	Min	-302.9	0.00	0.00	0.00	0.0	0.0
		Max	-121.4	0.00	0.00	0.00	0.0	0.0
48	5.50	Min	-305.8	0.00	0.00	0.00	0.0	0.0
		Max	-123.7	0.00	0.00	0.00	0.0	0.0
Bar 90								
44	0.00	Min	-272.7	-0.06	0.00	0.00	-0.0	-0.3
		Max	-88.3	-0.00	0.00	0.00	-0.0	-0.0
51	5.50	Min	-275.5	-0.06	0.00	0.00	0.0	0.0
		Max	-90.7	-0.00	0.00	0.00	0.0	0.0
Bar 91								
45	0.00	Min	-396.3	-0.00	0.00	0.00	0.0	-0.0
		Max	-134.9	0.00	0.00	0.00	0.0	0.0
52	5.50	Min	-399.6	-0.00	0.00	0.00	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	-137.6	0.00	0.00	0.00	0.0	0.0
Bar 92								
46	0.00	Min	-1088.0	0.00	0.00	0.00	0.0	0.0
		Max	-296.5	0.00	0.00	0.00	0.0	0.0
53	5.50	Min	-1093.0	0.00	0.00	0.00	0.0	0.0
		Max	-300.6	0.00	0.00	0.00	0.0	0.0
Bar 93								
47	0.00	Min	-349.0	0.00	0.00	0.00	0.0	0.0
		Max	-89.9	0.00	0.00	0.00	0.0	0.0
54	5.50	Min	-351.8	0.00	0.00	0.00	0.0	0.0
		Max	-92.2	0.00	0.00	0.00	0.0	0.0
Bar 95								
55	0.00	Min	-11.7	2.61	-24.90	2.88	-1.9	-1.5
		Max	-6.0	5.24	-10.95	4.52	12.6	0.8
56	0.67	Min	-11.7	2.61	-30.18	2.88	-18.4	-4.8
		Max	-6.0	5.24	-15.28	4.52	2.0	-1.2
Bar 96								
56	0.00	Min	-11.7	2.61	-30.18	2.88	-18.4	-4.8
		Max	-6.0	5.24	-15.28	4.52	2.0	-1.2
13	0.67	Min	-11.7	2.61	-35.47	2.88	-39.9	-8.3
		Max	-6.0	5.24	-19.61	4.52	-10.0	-2.9
Bar 97								
44	0.00	Min	-0.0	-0.00	0.04	-0.01	-0.4	-0.0
		Max	0.0	0.00	0.86	-0.00	-0.0	0.0
	2.55	Min	-0.0	-0.00	0.04	-0.01	0.0	-0.0
		Max	0.0	0.00	0.86	-0.00	1.8	0.0
47	5.10	Min	-0.0	-0.00	0.04	-0.01	0.2	-0.0
		Max	0.0	0.00	0.86	-0.00	3.9	0.0
Bar 98								
29	0.00	Min	0.6	-0.00	0.00	-0.00	0.0	0.0
		Max	27.0	0.00	0.00	0.00	0.0	0.0
39	3.98	Min	0.6	-0.00	0.00	-0.00	0.0	0.0
		Max	27.0	0.00	0.00	0.00	0.0	0.0
Bar 99								
38	0.00	Min	-34.9	-0.00	0.00	-0.00	0.0	0.0
		Max	-3.3	0.00	0.00	0.00	0.0	0.0
30	3.98	Min	-34.9	-0.00	0.00	-0.00	0.0	0.0
		Max	-3.3	0.00	0.00	0.00	0.0	0.0
Bar 100								
23	0.00	Min	4.1	0.00	0.00	0.00	0.0	0.0
		Max	7.4	0.00	0.00	0.01	0.0	0.0
33	3.69	Min	4.1	0.00	0.00	0.00	0.0	0.0
		Max	7.4	0.00	0.00	0.01	0.0	0.0
Bar 101								
24	0.00	Min	-0.6	0.00	0.00	-0.00	0.0	0.0
		Max	5.2	0.00	0.00	-0.00	0.0	0.0
31	3.69	Min	-0.6	0.00	0.00	-0.00	-0.0	-0.0
		Max	5.2	0.00	0.00	-0.00	-0.0	-0.0
Minimum			**-1093.0**	**-16.45**	**-452.48**	**-10.14**	**-671.9**	**-36.9**
Maximum			**79.0**	**10.91**	**624.09**	**35.76**	**381.2**	**11.9**

Maximum utilization

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	U
-	m	-
Traverse 1: Bar 57		
13	0.00	0.339
	0.25	0.338
	0.75	0.348
14	1.50	0.399
Traverse 1: Bar 58		
14	1.50	0.399
15	2.00	0.436
Traverse 1: Bar 59		
15	2.00	0.460
	2.47	0.532
40	2.70	0.591
Traverse 1: Bar 60		
40	2.70	0.375
16	4.50	0.085
Traverse 1: Bar 61		
16	4.50	0.146
	5.33	0.080
	5.75	0.062
17	7.00	0.124
Traverse 1: Bar 62		
17	7.00	0.143
	8.00	0.075
	8.33	0.070
18	9.00	0.131
Traverse 1: Bar 63		
18	9.00	0.305
	9.17	0.281
19	9.50	0.261
Traverse 1: Bar 64		
19	9.50	0.191
	10.33	0.121
	10.75	0.108
	11.17	0.121
20	12.00	0.190
Traverse 1: Bar 65		
20	12.00	0.179
	13.25	0.184
21	14.50	0.187
Traverse 1: Bar 66		
21	14.50	0.196
	15.75	0.112
	16.17	0.128
22	17.00	0.196
Traverse 2: Bar 94		
50	0.00	0.543
	0.25	0.543
	0.33	0.550
49	0.50	0.698
Traverse 2: Bar 89		
49	0.50	0.735
43	6.00	0.188
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.092
Traverse 3: Bar 84		
42	0.70	0.287
	1.75	0.218
	4.90	0.265
	5.95	0.403
43	7.00	0.815
Traverse 3: Bar 85		
43	7.00	0.828
	8.33	0.455
	9.67	0.385
	11.00	0.609
	12.33	0.628
	13.67	0.437
44	15.00	0.423
Traverse 4: Bar 87		
47	0.00	0.419
	1.25	0.376
	2.50	0.518
	5.00	0.323
	6.25	0.508
46	7.50	0.960
Traverse 4: Bar 86		
46	7.50	0.960
	8.75	0.508
	10.00	0.323
	12.50	0.518
	13.75	0.375
45	15.00	0.419
Bar 1		
1	0.00	0.072
	0.93	0.095
	1.87	0.107
	2.80	0.110
	3.73	0.107
	4.67	0.094
4	5.60	0.074
Bar 2		
2	0.00	0.032
	1.25	0.065
	2.50	0.075
	3.75	0.073
	6.25	0.045
3	7.50	0.088
Bar 3		
3	0.00	0.086
	1.25	0.040
	3.75	0.070
	5.00	0.073
	6.25	0.063
4	7.50	0.036
Bar 4		
12	0.00	0.029
1	2.50	0.018
Bar 5		
12	0.00	0.003
4	6.13	0.003
Bar 6		
1	0.00	0.004
39	6.13	0.004
Bar 7		
2	0.00	0.073
33	2.50	0.073
Bar 8		
3	0.00	0.125
36	2.50	0.126
Bar 9		
3	0.00	0.138
39	7.91	0.175
Bar 10		
4	0.00	0.154
36	7.91	0.132
Bar 11		
39	0.00	0.071
4	2.50	0.071
Bar 12		
5	0.00	0.014
	0.17	0.017
13	0.50	0.039
Bar 13		
6	0.00	0.000
15	0.50	0.063
Bar 14		
7	0.00	0.000
16	0.50	0.058
Bar 15		
8	0.00	0.000
17	0.50	0.058
Bar 16		
9	0.00	0.000
19	0.50	0.058
Bar 17		
20	0.00	0.058
10	0.50	0.000
Bar 18		
21	0.00	0.058
11	0.50	0.000
Bar 19		
22	0.00	0.116
	0.33	0.075
12	0.50	0.066
Bar 20		
23	0.00	0.193
55	0.67	0.135
Bar 21		
24	0.00	0.079
13	2.83	0.079
Bar 22		
15	0.00	0.089
23	2.83	0.089
Bar 23		
15	0.00	0.193
	0.67	0.286
24	2.00	0.389
Bar 24		
25	0.00	0.143
15	3.20	0.143
Bar 25		
16	0.00	0.166
24	3.20	0.166
Bar 26		
16	0.00	0.179
25	2.00	0.375
Bar 27		
17	0.00	0.080
25	3.20	0.080
Bar 28		
26	0.00	0.027
16	3.20	0.027
Bar 29		
17	0.00	0.190
26	2.00	0.371
Bar 30		
27	0.00	0.058
17	3.20	0.058
Bar 31		
19	0.00	0.116
26	3.20	0.116
Bar 32		
19	0.00	0.216
	1.33	0.302
27	2.00	0.374
Bar 33		
28	0.00	0.083
19	3.20	0.083
Bar 34		
20	0.00	0.200
27	3.20	0.200
Bar 35		
20	0.00	0.188
28	2.00	0.375
Bar 36		
21	0.00	0.241
28	3.20	0.241
Bar 37		
29	0.00	0.193
20	3.20	0.193
Bar 38		
21	0.00	0.170
29	2.00	0.353
Bar 40		
30	0.00	0.214

Maximum utilization

Verification 1 [EC 3 Design resistance (th. I ord.)]: Extreme rule 1: Extreme rule 1

node	s	U
-	m	-
21	3.20	0.214
Bar 41		
22	0.00	0.227
	0.67	0.292
30	2.00	0.362
Bar 42		
24	0.00	0.076
	0.33	0.080
	1.00	0.083
	1.67	0.080
23	2.00	0.076
Bar 43		
25	0.00	0.123
	0.42	0.128
	1.25	0.131
	2.08	0.128
24	2.50	0.123
Bar 44		
26	0.00	0.090
	0.42	0.095
	1.25	0.098
	2.08	0.095
25	2.50	0.090
Bar 45		
27	0.00	0.086
	0.42	0.091
	1.25	0.095
	2.08	0.091
26	2.50	0.086
Bar 46		
28	0.00	0.033
	0.42	0.040
	0.83	0.045
	1.25	0.046
	1.67	0.045
	2.08	0.040
27	2.50	0.033
Bar 47		
29	0.00	0.117
	0.42	0.124
	0.83	0.128
	1.25	0.130
	1.67	0.128
	2.08	0.124
28	2.50	0.117
Bar 48		
30	0.00	0.103
	0.42	0.111
	0.83	0.115
	1.25	0.116
	1.67	0.115
	2.08	0.111
29	2.50	0.103
Bar 49		
31	0.00	0.221
	1.03	0.253
	1.55	0.253
	2.07	0.237
	2.58	0.203
23	3.10	0.192
Bar 50		
24	0.00	0.382
	0.52	0.400
	1.03	0.385
	2.58	0.219
33	3.10	0.192
Bar 51		
25	0.00	0.370
	0.52	0.378
	1.55	0.334
34	3.10	0.169
Bar 52		
26	0.00	0.372
	0.52	0.379
	1.55	0.335
35	3.10	0.170
Bar 53		
27	0.00	0.377
	0.52	0.383
	1.55	0.338
36	3.10	0.170
Bar 54		
28	0.00	0.378
	0.52	0.384
	1.55	0.338
37	3.10	0.170
Bar 55		
29	0.00	0.348
	0.52	0.363
	1.55	0.314
38	3.10	0.170
Bar 56		
30	0.00	0.349
	0.52	0.363
	1.55	0.322
39	3.10	0.171
Bar 67		
32	0.00	0.186
	0.50	0.178
31	1.50	0.170
Bar 68		
33	0.00	0.228
	0.33	0.194
32	0.50	0.186
Bar 69		
33	0.00	0.338
	1.25	0.139
	2.08	0.086
34	2.50	0.094
Bar 70		
34	0.00	0.133
	1.25	0.153
35	2.50	0.160
Bar 71		
35	0.00	0.159
	0.83	0.104
	1.25	0.100
	1.67	0.106
36	2.50	0.172
Bar 72		
36	0.00	0.364
	1.25	0.161
37	2.50	0.144
Bar 73		
37	0.00	0.138
38	2.50	0.211
Bar 74		
38	0.00	0.193
	2.08	0.109
39	2.50	0.127
Bar 75		
18	0.00	0.267
43	2.50	0.089
Bar 76		
22	0.00	0.190
	1.67	0.123
44	2.50	0.068
Bar 77		
22	0.00	0.231
47	5.68	0.230
Bar 78		
39	0.00	0.240
44	5.68	0.240
Bar 79		
33	0.00	0.322
45	2.50	0.089
Bar 80		
36	0.00	0.281
46	2.50	0.108
Bar 81		
39	0.00	0.144
	2.08	0.096
47	2.50	0.097
Bar 82		
40	0.00	0.415
42	2.24	0.105
Bar 88		
42	0.00	0.280
48	5.50	0.281
Bar 90		
44	0.00	0.271
51	5.50	0.267
Bar 91		
45	0.00	0.299
52	5.50	0.300
Bar 92		
46	0.00	0.481
53	5.50	0.484
Bar 93		
47	0.00	0.300
54	5.50	0.302
Bar 95		
55	0.00	0.133
	0.22	0.121
56	0.67	0.236
Bar 96		
56	0.00	0.236
13	0.67	0.461
Bar 97		
44	0.00	0.024
	0.85	0.021
	2.55	0.044
47	5.10	0.066
Bar 98		
29	0.00	0.128
39	3.98	0.128
Bar 99		
38	0.00	0.252
30	3.98	0.252
Bar 100		
23	0.00	0.036
33	3.69	0.036
Bar 101		
24	0.00	0.033
31	3.69	0.033
Minimum		0.000
Maximum		0.960

VERIFICATION 1: SUMMARY

Extremal reactions of supported nodes (incl. γF)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	type	AP_r kN	AP_s kN	AP_t kN	AM_r kNm	AM_s kNm	AM_t kNm
2	Min	0.02	-0.00	0.00	0.00	0.00	0.00
	Max	0.16	0.00	0.00	0.00	0.00	0.00
3	Min	-0.18	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.12	0.00	0.00	0.00	0.00	-0.00
42	Min	1.97	-0.00	-0.00	-0.00	0.00	0.00
	Max	16.47	0.00	0.00	-0.00	0.00	0.00
43	Min	0.46	0.00	0.00	0.00	0.00	0.00
	Max	1.47	0.00	0.00	0.00	0.00	0.00
44	Min	0.94	-23.78	0.00	0.00	0.00	0.00
	Max	20.18	63.10	0.00	0.00	0.00	0.00
45	Min	-4.77	-0.00	0.00	-0.00	-0.00	0.00
	Max	8.56	0.00	0.00	-0.00	-0.00	0.00
46	Min	0.01	-0.00	-0.00	-0.00	-0.00	0.00
	Max	0.04	0.00	0.00	0.00	0.00	0.00
47	Min	0.29	4.64	0.00	-0.00	0.00	0.00
	Max	21.02	50.86	0.00	0.00	0.00	0.00
48	Min	0.00	-0.00	-305.76	0.00	0.00	0.00
	Max	0.00	-0.00	-123.67	0.00	0.00	0.00
49	Min	0.00	-56.69	0.00	0.00	0.00	0.00
	Max	0.00	-15.45	0.00	0.00	0.00	0.00
50	Min	0.00	0.00	-624.09	-0.00	0.00	0.00
	Max	0.00	0.00	-170.33	-0.00	0.00	0.00
51	Min	0.00	-0.00	-275.51	0.00	0.00	0.00
	Max	0.06	-0.00	-90.65	0.00	0.00	0.00
52	Min	-0.00	-0.00	-399.62	0.00	0.00	0.00
	Max	0.00	-0.00	-137.63	0.00	0.00	0.00
53	Min	0.00	-0.00	-1093.03	0.00	0.00	0.00
	Max	0.00	-0.00	-300.64	0.00	0.00	0.00
54	Min	0.00	0.00	-351.80	0.00	0.00	0.00
	Max	0.00	0.00	-92.17	0.00	0.00	0.00
Minimum		**-4.77**	**-56.69**	**-1093.03**	**-0.00**	**-0.00**	**-0.00**
Maximum		**21.02**	**63.10**	**0.00**	**0.00**	**0.00**	**0.00**

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s m	type	N kN	V_η kN	V_ζ kN	T kNm	M_η kNm	M_ζ kNm
Traverse 1: Bar 57								
13	0.00	Min	-14.9	-0.91	-50.41	6.67	5.8	-8.3
		Max	-10.2	0.36	-31.86	35.76	8.1	-2.9
	0.75	Min	-14.9	-3.94	-49.00	6.67	-29.5	-6.7
		Max	-10.2	0.36	-32.78	35.76	-18.1	-2.9
	1.25	Min	-14.9	-5.97	-48.07	6.67	-53.8	-4.5
		Max	-10.2	0.36	-33.40	35.76	-34.7	-2.8
14	1.50	Min	-14.9	-6.98	-47.60	6.67	-65.7	-4.1
		Max	-10.2	0.36	-33.70	35.76	-43.0	-1.8
Traverse 1: Bar 58								
14	1.50	Min	-14.9	-6.98	-47.60	6.67	-65.7	-4.1
		Max	-10.2	0.36	-33.70	35.76	-43.0	-1.8

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
15	2.00	Min	-14.9	-9.01	-45.91	6.67	-89.1	-4.2
		Max	-10.2	0.36	-33.70	35.76	-59.9	2.2
Traverse 1: Bar 59								
15	2.00	Min	-32.2	-8.94	-80.86	5.18	-88.2	-5.1
		Max	-10.7	-2.28	-54.75	34.62	-56.1	-0.1
40	2.70	Min	-32.2	-11.78	-79.55	5.18	-143.8	-2.9
		Max	-10.7	-2.28	-55.61	34.62	-95.3	6.6
Traverse 1: Bar 60								
40	2.70	Min	-25.0	-0.61	20.57	-2.44	-107.1	-2.9
		Max	20.0	4.98	52.56	0.97	-46.9	6.5
	3.90	Min	-25.0	-0.61	23.14	-2.44	-45.1	-2.2
		Max	20.0	0.12	50.77	0.97	-20.7	3.4
16	4.50	Min	-25.0	-2.66	24.43	-2.44	-15.2	-1.9
		Max	20.0	-0.25	49.87	0.97	-6.0	4.1
Traverse 1: Bar 61								
16	4.50	Min	1.5	-0.54	3.38	-0.29	-22.1	-0.1
		Max	42.2	8.79	19.03	-0.07	-11.9	7.1
	5.33	Min	1.5	-0.54	5.43	-0.29	-12.1	0.3
		Max	42.2	5.42	18.09	-0.07	-2.7	1.3
	6.58	Min	1.5	-0.54	8.50	-0.29	0.5	-2.6
		Max	42.2	0.36	16.69	-0.07	15.1	1.3
17	7.00	Min	1.5	-1.53	8.70	-0.29	4.3	-2.4
		Max	42.2	-0.35	17.04	-0.07	22.0	1.4
Traverse 1: Bar 62								
17	7.00	Min	-2.4	3.23	-17.49	0.08	5.4	1.3
		Max	36.8	4.68	-8.65	0.31	23.3	3.9
	8.00	Min	-2.4	-0.36	-18.61	0.08	-4.9	-0.5
		Max	36.8	4.21	-6.19	0.31	8.1	-0.2
18	9.00	Min	-2.4	-4.41	-19.74	0.08	-16.6	-4.5
		Max	36.8	4.21	-3.74	0.31	-4.4	2.0
Traverse 1: Bar 63								
18	9.00	Min	-31.6	-3.15	28.95	-2.86	-73.6	-4.5
		Max	32.1	4.89	68.41	-0.96	-23.4	1.9
19	9.50	Min	-31.6	-3.15	28.49	-2.86	-41.1	-7.0
		Max	32.1	4.89	67.85	-0.96	-7.4	3.5
Traverse 1: Bar 64								
19	9.50	Min	-28.8	-3.79	7.63	-0.47	-41.5	-5.8
		Max	21.5	10.91	36.10	0.12	-4.9	8.8
	10.75	Min	-28.8	-3.79	10.70	-0.47	-1.4	-2.0
		Max	21.5	5.85	34.69	0.12	10.6	-0.7
20	12.00	Min	-28.8	-3.79	13.77	-0.47	20.4	-5.9
		Max	21.5	0.79	33.29	0.12	46.6	3.8
Traverse 1: Bar 65								
20	12.00	Min	-11.9	-0.34	-9.33	-0.07	26.4	-1.6
		Max	-2.9	5.50	4.53	0.02	42.6	3.6
	13.25	Min	-11.9	-0.34	-6.26	-0.07	19.8	-5.2
		Max	-2.9	0.44	3.13	0.02	44.2	4.0
	14.08	Min	-11.9	-3.07	-4.21	-0.07	17.2	-4.2
		Max	-2.9	-0.21	2.19	0.02	44.7	4.2
21	14.50	Min	-11.9	-4.76	-3.23	-0.07	16.5	-2.6
		Max	-2.9	-0.21	1.76	0.02	44.6	4.3
Traverse 1: Bar 66								
21	14.50	Min	-21.9	0.76	-34.06	-0.17	18.2	-5.1
		Max	-10.1	2.86	-19.28	0.54	47.3	5.2

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	15.33	Min	-21.9	-2.61	-34.02	-0.17	-0.2	-4.4
		Max	-10.1	2.86	-18.21	0.54	21.8	2.8
	16.17	Min	-21.9	-5.99	-34.96	-0.17	-23.1	-0.8
		Max	-10.1	2.86	-16.17	0.54	1.6	0.4
22	17.00	Min	-21.9	-9.36	-35.89	-0.17	-47.5	-2.2
		Max	-10.1	2.86	-14.12	0.54	-16.1	5.8
Traverse 2: Bar 94								
50	0.00	Min	0.0	0.00	170.33	0.00	0.0	0.0
		Max	0.0	0.00	624.09	0.00	0.0	0.0
49	0.50	Min	0.0	0.00	169.49	0.00	85.0	0.0
		Max	0.0	0.00	623.06	0.00	311.8	0.0
Traverse 2: Bar 89								
49	0.50	Min	-623.1	0.00	-56.69	0.00	85.0	0.0
		Max	-169.5	0.00	-15.45	0.00	311.8	0.0
43	6.00	Min	-614.6	0.00	-56.69	0.00	0.0	0.0
		Max	-162.6	0.00	-15.45	0.00	0.0	0.0
Traverse 3: Bar 83								
41	0.00	Min	-0.0	0.00	0.00	0.00	-0.0	0.0
		Max	0.0	0.00	0.00	0.00	-0.0	0.0
	0.35	Min	-0.0	0.00	-20.67	0.00	-3.6	0.0
		Max	0.0	0.00	-4.94	0.00	-0.9	0.0
42	0.70	Min	-0.0	0.00	-41.35	0.00	-14.5	0.0
		Max	0.0	0.00	-9.88	0.00	-3.5	0.0
Traverse 3: Bar 84								
42	0.70	Min	-33.8	0.00	30.87	0.00	-14.5	0.0
		Max	-4.2	0.01	129.32	0.00	-3.5	0.1
	2.80	Min	-33.8	0.00	1.22	0.00	30.2	-0.0
		Max	-4.2	0.01	5.27	0.00	126.9	0.0
	4.90	Min	-33.8	0.00	-118.94	0.00	1.7	-0.0
		Max	-4.2	0.01	-28.25	0.00	7.7	0.0
43	7.00	Min	-33.8	0.00	-242.99	0.00	-373.0	-0.0
		Max	-4.2	0.01	-57.89	0.00	-88.1	-0.0
Traverse 3: Bar 85								
43	7.00	Min	-10.9	-0.00	67.47	-0.12	-373.0	-0.0
		Max	79.0	0.02	282.91	-0.01	-88.1	0.0
	8.33	Min	-10.9	-0.00	48.65	-0.12	-48.3	-0.0
		Max	79.0	0.02	204.15	-0.01	-10.7	0.0
	11.00	Min	-10.9	-0.00	11.01	-0.12	68.4	-0.0
		Max	79.0	0.02	46.63	-0.01	286.6	0.0
	12.33	Min	-10.9	-0.00	-32.26	-0.12	70.7	-0.1
		Max	79.0	0.02	-7.68	-0.01	296.1	0.0
44	15.00	Min	-10.9	-0.00	-189.78	-0.12	-0.0	-0.1
		Max	79.0	0.02	-45.32	-0.01	-0.0	0.0
Traverse 4: Bar 87								
47	0.00	Min	11.1	-0.00	64.63	-0.00	0.0	-0.0
		Max	55.2	0.01	273.46	0.00	0.0	0.0
	2.50	Min	11.1	-0.00	7.41	-0.00	90.1	-0.0
		Max	55.2	0.01	31.53	0.00	381.2	0.0
	5.00	Min	11.1	-0.00	-210.55	-0.00	37.1	-0.0
		Max	55.2	0.01	-49.67	0.00	157.6	-0.0
	6.25	Min	11.1	-0.00	-331.52	-0.00	-181.9	-0.0
		Max	55.2	0.01	-78.28	0.00	-42.2	-0.0
46	7.50	Min	11.1	-0.00	-452.48	-0.00	-671.9	-0.0
		Max	55.2	0.01	-106.89	0.00	-157.9	-0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Traverse 4: Bar 86								
46	7.50	Min	3.1	-0.00	106.89	-0.00	-671.9	0.0
		Max	27.5	0.01	452.48	0.00	-157.9	0.0
	8.75	Min	3.1	-0.00	78.28	-0.00	-181.9	0.0
		Max	27.5	0.01	331.52	0.00	-42.2	0.0
	10.00	Min	3.1	-0.00	49.67	-0.00	37.1	0.0
		Max	27.5	0.01	210.55	0.00	157.6	0.0
	12.50	Min	3.1	-0.00	-31.53	-0.00	90.1	-0.0
		Max	27.5	0.01	-7.41	0.00	381.2	0.0
45	15.00	Min	3.1	-0.00	-273.46	-0.00	-0.0	-0.1
		Max	27.5	0.01	-64.63	0.00	-0.0	0.0
Bar 1								
1	0.00	Min	0.0	-0.01	0.99	0.00	0.0	-0.1
		Max	0.3	0.04	1.21	0.01	0.0	0.5
	0.93	Min	0.0	-0.01	0.66	0.00	0.8	-0.1
		Max	0.3	0.04	0.81	0.01	0.9	0.5
	1.87	Min	0.0	-0.01	0.33	0.00	1.2	-0.2
		Max	0.3	0.04	0.40	0.01	1.5	0.5
	2.80	Min	0.0	-0.01	-0.00	0.00	1.4	-0.2
		Max	0.3	0.04	-0.00	0.01	1.7	0.5
	3.73	Min	0.0	-0.01	-0.41	0.00	1.2	-0.2
		Max	0.3	0.04	-0.33	0.01	1.5	0.5
	4.67	Min	0.0	-0.01	-0.81	0.00	0.8	-0.3
		Max	0.3	0.04	-0.66	0.01	0.9	0.5
4	5.60	Min	0.0	-0.01	-1.22	0.00	-0.0	-0.3
		Max	0.3	0.04	-1.00	0.01	-0.0	0.5
Bar 2								
2	0.00	Min	-0.0	0.02	6.09	0.00	0.0	-0.1
		Max	0.0	0.16	20.35	0.00	0.0	0.7
	2.50	Min	-0.0	0.02	0.97	0.00	8.8	-0.2
		Max	0.0	0.16	3.65	0.00	30.0	0.3
	5.00	Min	-0.0	0.02	-14.03	0.00	4.9	-0.3
		Max	0.0	0.16	-3.15	0.00	18.3	0.0
	6.25	Min	-0.0	0.02	-22.39	0.00	-9.4	-0.4
		Max	0.0	0.16	-5.71	0.00	4.3	-0.2
3	7.50	Min	-0.0	0.02	-30.74	0.00	-42.6	-0.5
		Max	0.0	0.16	-8.27	0.00	-4.5	-0.2
Bar 3								
3	0.00	Min	4.5	-0.13	8.26	0.00	-42.6	-0.3
		Max	11.6	0.25	30.73	0.01	-4.5	0.7
	1.25	Min	4.5	-0.13	5.71	0.00	-9.4	-0.2
		Max	11.6	0.25	22.38	0.01	4.3	0.4
	2.50	Min	4.5	-0.13	3.15	0.00	4.9	-0.1
		Max	11.6	0.25	14.03	0.01	18.3	0.2
	5.00	Min	4.5	-0.13	-3.65	0.00	8.8	-0.5
		Max	11.6	0.25	-0.98	0.01	30.0	0.3
4	7.50	Min	4.5	-0.13	-20.35	0.00	-0.0	-1.1
		Max	11.6	0.25	-6.09	0.01	-0.0	0.7
Bar 4								
12	0.00	Min	-1.2	-0.01	0.00	-0.52	0.0	-0.0
		Max	-0.9	0.04	0.00	0.10	0.0	0.1
1	2.50	Min	-1.2	-0.01	0.00	-0.52	0.0	-0.0
		Max	-0.9	0.04	0.00	0.10	0.0	0.0
Bar 5								

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
12	0.00	Min	-0.3	-0.00	0.00	0.00	0.0	-0.0
		Max	0.0	-0.00	0.00	0.00	0.0	0.0
4	6.13	Min	-0.3	-0.00	0.00	0.00	0.0	-0.0
		Max	0.0	-0.00	0.00	0.00	0.0	0.0
Bar 6								
1	0.00	Min	-0.4	-0.00	0.00	-0.00	0.0	-0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	-0.0
39	6.13	Min	-0.4	-0.00	0.00	-0.00	0.0	0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	0.0
Bar 7								
2	0.00	Min	-20.4	0.00	0.00	-0.71	0.0	0.0
		Max	-6.1	0.00	0.00	0.10	0.0	0.0
33	2.50	Min	-20.4	0.00	0.00	-0.71	0.0	0.0
		Max	-6.1	0.00	0.00	0.10	0.0	0.0
Bar 8								
3	0.00	Min	-59.4	0.00	0.00	-1.10	0.0	0.0
		Max	-13.2	0.00	0.00	-0.08	0.0	0.0
36	2.50	Min	-60.3	0.00	0.00	-1.10	0.0	0.0
		Max	-13.9	0.00	0.00	-0.08	0.0	0.0
Bar 9								
3	0.00	Min	-12.3	-0.00	0.00	-0.00	0.0	-0.0
		Max	-4.7	0.02	0.00	0.00	0.0	0.0
	2.64	Min	-12.3	-0.00	0.00	-0.00	0.0	-0.0
		Max	-4.7	0.02	0.00	0.00	0.0	0.0
39	7.91	Min	-12.3	-0.00	0.00	-0.00	0.0	-0.1
		Max	-4.7	0.02	0.00	0.00	0.0	0.0
Bar 10								
4	0.00	Min	-12.3	-0.01	0.00	-0.00	0.0	-0.0
		Max	-4.7	-0.00	0.00	-0.00	0.0	-0.0
	1.32	Min	-12.3	-0.01	0.00	-0.00	0.0	-0.0
		Max	-4.7	-0.00	0.00	-0.00	0.0	0.0
36	7.91	Min	-12.3	-0.01	0.00	-0.00	0.0	0.0
		Max	-4.7	-0.00	0.00	-0.00	0.0	0.1
Bar 11								
39	0.00	Min	-19.0	0.00	0.00	-0.60	0.0	0.0
		Max	-4.2	0.00	0.00	0.37	0.0	0.0
4	2.50	Min	-19.0	0.00	0.00	-0.60	0.0	0.0
		Max	-4.2	0.00	0.00	0.37	0.0	0.0
Bar 12								
5	0.00	Min	-0.0	-0.00	-6.10	0.00	-0.0	-0.0
		Max	0.0	0.00	-5.00	0.00	-0.0	0.0
13	0.50	Min	-0.0	-0.00	-10.06	0.00	-4.0	-0.0
		Max	0.0	0.00	-8.25	0.00	-3.3	0.0
Bar 13								
6	0.00	Min	-0.0	0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	0.00	-2.32	0.00	-0.3	-0.0
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
15	0.50	Min	-0.0	0.00	-4.64	0.00	-1.2	-0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	-0.0
Bar 14								
7	0.00	Min	-0.0	-0.00	0.00	0.00	0.0	0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	-0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
16	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	-0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	0.0
Bar 15								
8	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	-0.00	-0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	-0.0
		Max	0.0	-0.00	-1.63	0.00	-0.2	0.0
17	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	-0.0
		Max	0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 16								
9	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	0.0
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
19	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	0.0
Bar 17								
20	0.00	Min	-0.0	-0.00	3.25	0.00	-1.0	-0.0
		Max	0.0	-0.00	3.96	0.00	-0.8	-0.0
	0.25	Min	-0.0	-0.00	1.63	0.00	-0.2	-0.0
		Max	0.0	-0.00	1.98	0.00	-0.2	0.0
10	0.50	Min	-0.0	-0.00	-0.00	0.00	-0.0	0.0
		Max	0.0	-0.00	-0.00	0.00	-0.0	0.0
Bar 18								
21	0.00	Min	-0.0	0.00	3.25	0.00	-1.0	0.0
		Max	0.0	0.00	3.96	0.00	-0.8	0.0
	0.25	Min	-0.0	0.00	1.63	0.00	-0.2	-0.0
		Max	0.0	0.00	1.98	0.00	-0.2	-0.0
11	0.50	Min	-0.0	0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	-0.0
Bar 19								
22	0.00	Min	-0.0	-0.03	3.48	-0.09	-1.6	-0.1
		Max	0.3	2.03	5.23	0.01	-1.1	1.0
	0.25	Min	-0.0	-0.03	2.19	-0.09	-0.6	-0.1
		Max	0.3	1.02	3.24	0.01	-0.4	0.6
12	0.50	Min	-0.0	-0.04	0.89	-0.09	-0.0	-0.1
		Max	0.3	0.01	1.27	0.01	0.0	0.5
Bar 20								
23	0.00	Min	-11.7	2.61	-14.73	2.88	8.9	1.6
		Max	-6.0	5.24	-2.61	4.52	16.5	3.0
55	0.67	Min	-11.7	2.61	-20.02	2.88	-1.9	-1.5
		Max	-6.0	5.24	-6.95	4.52	12.6	0.8
Bar 21								
24	0.00	Min	8.0	0.00	-0.00	-0.00	0.0	0.0
		Max	16.3	0.00	-0.00	0.00	0.0	0.0
13	2.83	Min	8.0	0.00	0.00	-0.00	-0.0	-0.0
		Max	16.3	0.00	0.00	0.00	-0.0	-0.0
Bar 22								
15	0.00	Min	6.6	0.00	0.00	-0.00	0.0	0.0
		Max	18.5	0.00	0.00	0.00	0.0	0.0
23	2.83	Min	6.6	-0.00	0.00	-0.00	0.0	0.0
		Max	18.5	0.00	0.00	0.00	0.0	0.0
Bar 23								

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
15	0.00	Min	-28.6	0.28	17.78	0.01	0.0	0.7
		Max	-19.0	1.29	30.33	0.01	0.0	2.6
	1.00	Min	-28.6	0.28	10.86	0.01	14.3	0.4
		Max	-19.0	1.29	18.51	0.01	24.4	1.3
24	2.00	Min	-28.6	0.28	3.94	0.01	21.7	-0.1
		Max	-19.0	1.29	6.70	0.01	37.0	0.1
Bar 24								
25	0.00	Min	13.3	0.00	0.00	-0.00	0.0	0.0
		Max	30.4	0.00	0.00	0.00	0.0	0.0
15	3.20	Min	13.3	-0.00	0.00	-0.00	0.0	0.0
		Max	30.4	-0.00	0.00	0.00	0.0	0.0
Bar 25								
16	0.00	Min	24.0	0.00	0.00	0.00	0.0	0.0
		Max	35.5	0.00	0.00	0.00	0.0	0.0
24	3.20	Min	24.0	-0.00	0.00	0.00	0.0	0.0
		Max	35.5	-0.00	0.00	0.00	0.0	0.0
Bar 26								
16	0.00	Min	-22.1	-3.18	17.80	0.00	0.0	-3.4
		Max	-5.8	-1.42	26.88	0.00	0.0	-1.3
	1.00	Min	-22.1	-3.18	10.88	0.00	14.3	-0.3
		Max	-5.8	-1.42	16.41	0.00	21.6	0.1
25	2.00	Min	-22.1	-3.18	3.96	0.00	21.8	1.5
		Max	-5.8	-1.42	5.95	0.00	32.8	2.9
Bar 27								
17	0.00	Min	-3.5	0.00	0.00	0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.00	0.0	0.0
25	3.20	Min	-3.5	0.00	0.00	0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.00	0.0	0.0
Bar 28								
26	0.00	Min	-0.4	0.00	0.00	-0.01	0.0	0.0
		Max	3.4	0.00	0.00	-0.00	0.0	0.0
16	3.20	Min	-0.4	0.00	0.00	-0.01	0.0	0.0
		Max	3.4	0.00	0.00	-0.00	0.0	0.0
Bar 29								
17	0.00	Min	-3.2	-3.73	17.79	-0.00	0.0	-4.4
		Max	4.5	-1.56	26.88	-0.00	0.0	-1.7
	1.00	Min	-3.2	-3.73	10.87	-0.00	14.3	-0.7
		Max	4.5	-1.56	16.41	-0.00	21.6	-0.2
26	2.00	Min	-3.2	-3.73	3.95	-0.00	21.7	1.4
		Max	4.5	-1.56	5.94	-0.00	32.8	3.1
Bar 30								
27	0.00	Min	4.2	0.00	0.00	-0.00	0.0	0.0
		Max	12.0	0.00	0.00	-0.00	0.0	0.0
17	3.20	Min	4.2	0.00	0.00	-0.00	0.0	0.0
		Max	12.0	0.00	0.00	-0.00	0.0	0.0
Bar 31								
19	0.00	Min	-7.4	0.00	0.00	-0.00	0.0	0.0
		Max	2.4	0.00	0.00	-0.00	0.0	0.0
26	3.20	Min	-7.4	0.00	0.00	-0.00	0.0	0.0
		Max	2.4	0.00	0.00	-0.00	0.0	0.0
Bar 32								
19	0.00	Min	-9.7	-4.62	17.61	-0.01	-4.7	-5.7
		Max	10.4	-1.08	27.79	-0.00	0.9	-0.8
	1.33	Min	-9.7	-4.62	8.38	-0.01	14.9	0.3

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	10.4	-1.08	13.83	-0.00	26.3	0.8
27	2.00	Min	-9.7	-4.62	3.77	-0.01	19.5	1.3
		Max	10.4	-1.08	6.85	-0.00	32.6	3.6
Bar 33								
28	0.00	Min	-3.8	0.00	0.00	0.00	0.0	0.0
		Max	16.2	0.00	0.00	0.00	0.0	0.0
19	3.20	Min	-3.8	0.00	0.00	0.00	0.0	0.0
		Max	16.2	0.00	0.00	0.00	0.0	0.0
Bar 34								
20	0.00	Min	-21.9	0.00	0.00	-0.01	0.0	0.0
		Max	4.4	0.00	0.00	-0.00	0.0	0.0
27	3.20	Min	-21.9	0.00	0.00	-0.01	-0.0	-0.0
		Max	4.4	0.00	0.00	-0.00	0.0	0.0
Bar 35								
20	0.00	Min	5.1	-3.97	17.78	-0.00	0.0	-4.5
		Max	15.6	-0.44	26.86	0.01	0.0	0.3
	1.33	Min	5.1	-3.97	8.56	-0.00	17.6	0.6
		Max	15.6	-0.44	12.90	0.01	26.5	1.2
28	2.00	Min	5.1	-3.97	3.94	-0.00	21.7	1.1
		Max	15.6	-0.44	5.92	0.01	32.8	3.5
Bar 36								
21	0.00	Min	-31.8	0.00	0.00	-0.01	0.0	0.0
		Max	-13.8	0.00	0.00	0.00	0.0	0.0
28	3.20	Min	-31.8	0.00	0.00	-0.01	0.0	0.0
		Max	-13.8	0.00	0.00	0.00	0.0	0.0
Bar 37								
29	0.00	Min	-20.4	0.00	0.00	-0.00	0.0	0.0
		Max	17.9	0.00	0.00	0.01	0.0	0.0
20	3.20	Min	-20.4	-0.00	0.00	-0.00	0.0	0.0
		Max	17.9	0.00	0.00	0.01	0.0	0.0
Bar 38								
21	0.00	Min	12.7	-0.75	17.79	-0.00	0.0	-0.9
		Max	39.4	1.12	26.88	0.00	0.0	2.7
	1.00	Min	12.7	-0.75	10.87	-0.00	14.3	-0.2
		Max	39.4	1.12	16.41	0.00	21.6	1.6
29	2.00	Min	12.7	-0.75	3.95	-0.00	21.7	0.2
		Max	39.4	1.12	5.94	0.00	32.8	0.8
Bar 40								
30	0.00	Min	-25.1	0.00	0.00	-0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.01	0.0	0.0
21	3.20	Min	-25.1	0.00	0.00	-0.00	0.0	0.0
		Max	1.0	0.00	0.00	0.01	0.0	0.0
Bar 41								
22	0.00	Min	-10.6	-4.02	13.90	-0.01	-2.5	-2.4
		Max	-2.4	2.75	27.28	0.00	1.9	5.1
	0.67	Min	-10.6	-1.32	10.18	-0.01	6.6	-1.2
		Max	-2.4	2.75	20.30	0.00	16.6	3.8
	1.33	Min	-10.6	-1.24	6.47	-0.01	12.7	-0.7
		Max	-2.4	5.37	13.32	0.00	27.3	1.4
30	2.00	Min	-10.6	-1.24	2.76	-0.01	16.3	-3.4
		Max	-2.4	8.07	6.35	0.00	33.4	0.5
Bar 42								
24	0.00	Min	-11.1	0.00	0.09	-0.23	0.0	0.0
		Max	-3.0	0.00	0.11	-0.07	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	0.67	Min	-11.1	0.00	0.03	-0.23	0.0	0.0
		Max	-3.0	0.00	0.04	-0.07	0.1	0.0
23	2.00	Min	-11.1	0.00	-0.11	-0.23	0.0	0.0
		Max	-3.0	0.00	-0.09	-0.07	0.0	0.0
Bar 43								
25	0.00	Min	-29.6	0.00	0.12	-0.06	0.0	0.0
		Max	-9.7	0.00	0.14	-0.02	0.0	0.0
	0.83	Min	-29.6	0.00	0.04	-0.06	0.1	0.0
		Max	-9.7	0.00	0.05	-0.02	0.1	0.0
	1.67	Min	-29.6	0.00	-0.05	-0.06	0.1	0.0
		Max	-9.7	0.00	-0.04	-0.02	0.1	0.0
24	2.50	Min	-29.6	0.00	-0.14	-0.06	0.0	0.0
		Max	-9.7	0.00	-0.12	-0.02	0.0	0.0
Bar 44								
26	0.00	Min	-15.8	0.00	0.12	-0.00	0.0	0.0
		Max	6.5	0.00	0.14	0.02	0.0	0.0
	0.83	Min	-15.8	0.00	0.04	-0.00	0.1	0.0
		Max	6.5	0.00	0.05	0.02	0.1	0.0
	1.67	Min	-15.8	0.00	-0.05	-0.00	0.1	0.0
		Max	6.5	0.00	-0.04	0.02	0.1	0.0
25	2.50	Min	-15.8	0.00	-0.14	-0.00	0.0	0.0
		Max	6.5	0.00	-0.12	0.02	0.0	0.0
Bar 45								
27	0.00	Min	-14.5	0.00	0.12	0.03	0.0	0.0
		Max	4.7	0.00	0.14	0.06	0.0	0.0
	0.83	Min	-14.5	0.00	0.04	0.03	0.1	0.0
		Max	4.7	0.00	0.05	0.06	0.1	0.0
	1.67	Min	-14.5	0.00	-0.05	0.03	0.1	0.0
		Max	4.7	0.00	-0.04	0.06	0.1	0.0
26	2.50	Min	-14.5	0.00	-0.14	0.03	0.0	0.0
		Max	4.7	0.00	-0.12	0.06	0.0	0.0
Bar 46								
28	0.00	Min	0.1	0.00	0.12	-0.01	0.0	0.0
		Max	9.2	0.00	0.14	0.02	0.0	0.0
	0.83	Min	0.1	0.00	0.04	-0.01	0.1	0.0
		Max	9.2	0.00	0.05	0.02	0.1	0.0
	1.67	Min	0.1	0.00	-0.05	-0.01	0.1	0.0
		Max	9.2	0.00	-0.04	0.02	0.1	0.0
27	2.50	Min	0.1	0.00	-0.14	-0.01	0.0	0.0
		Max	9.2	0.00	-0.12	0.02	0.0	0.0
Bar 47								
29	0.00	Min	15.9	0.00	0.12	-0.04	0.0	0.0
		Max	32.8	0.00	0.14	-0.01	0.0	0.0
	0.83	Min	15.9	0.00	0.04	-0.04	0.1	0.0
		Max	32.8	0.00	0.05	-0.01	0.1	0.0
	1.67	Min	15.9	0.00	-0.05	-0.04	0.1	0.0
		Max	32.8	0.00	-0.04	-0.01	0.1	0.0
28	2.50	Min	15.9	0.00	-0.14	-0.04	0.0	0.0
		Max	32.8	0.00	-0.12	-0.01	0.0	0.0
Bar 48								
30	0.00	Min	0.5	0.00	0.12	-0.03	0.0	0.0
		Max	29.0	0.00	0.14	0.04	0.0	0.0
	0.83	Min	0.5	0.00	0.04	-0.03	0.1	0.0
		Max	29.0	0.00	0.05	0.04	0.1	0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	1.67	Min	0.5	0.00	-0.05	-0.03	0.1	0.0
		Max	29.0	0.00	-0.04	0.04	0.1	0.0
29	2.50	Min	0.5	0.00	-0.14	-0.03	0.0	0.0
		Max	29.0	0.00	-0.12	0.04	0.0	0.0
Bar 49								
31	0.00	Min	-11.2	-2.18	6.09	2.88	-11.9	-3.8
		Max	1.5	0.12	21.51	4.52	21.4	1.9
	1.03	Min	-11.2	-2.18	-0.63	2.88	5.0	-1.5
		Max	1.5	0.12	13.31	4.52	25.4	1.8
	2.58	Min	-11.2	-2.18	-10.70	2.88	14.1	1.4
		Max	1.5	0.12	1.02	4.52	18.6	2.0
23	3.10	Min	-11.2	-2.18	-14.61	2.88	9.1	1.6
		Max	1.5	0.12	-2.52	4.52	16.7	3.0
Bar 50								
24	0.00	Min	-0.1	-0.02	3.73	0.01	21.6	-0.1
		Max	3.0	0.05	6.44	0.01	36.9	0.1
	0.52	Min	-0.1	-0.02	0.15	0.01	22.7	-0.1
		Max	3.0	0.05	0.33	0.01	38.6	0.1
	2.07	Min	-0.1	-0.02	-18.00	0.01	14.6	-0.0
		Max	3.0	0.05	-10.56	0.01	24.9	0.0
33	3.10	Min	-0.1	-0.02	-30.21	0.01	0.0	0.0
		Max	3.0	0.05	-17.71	0.01	0.0	0.0
Bar 51								
25	0.00	Min	-3.5	0.49	3.72	0.00	21.7	1.5
		Max	1.3	0.95	5.66	0.00	32.8	2.9
	0.52	Min	-3.5	0.49	0.15	0.00	22.7	1.3
		Max	1.3	0.95	0.25	0.00	34.3	2.4
	2.07	Min	-3.5	0.49	-15.98	0.00	14.6	0.5
		Max	1.3	0.95	-10.58	0.00	22.1	1.0
34	3.10	Min	-3.5	0.49	-26.79	0.00	0.0	0.0
		Max	1.3	0.95	-17.73	0.00	0.0	0.0
Bar 52								
26	0.00	Min	-0.0	0.44	3.72	-0.01	21.7	1.4
		Max	0.0	0.99	5.65	-0.00	32.8	3.1
	0.52	Min	-0.0	0.44	0.14	-0.01	22.7	1.1
		Max	0.0	0.99	0.25	-0.00	34.3	2.6
	1.55	Min	-0.0	0.44	-10.58	-0.01	19.2	0.7
		Max	0.0	0.99	-7.00	-0.00	29.0	1.5
35	3.10	Min	-0.0	0.44	-26.80	-0.01	0.0	0.0
		Max	0.0	0.99	-17.73	-0.00	0.0	0.0
Bar 53								
27	0.00	Min	-0.1	0.43	3.53	-0.01	19.5	1.3
		Max	-0.0	1.15	6.57	-0.00	32.7	3.6
	0.52	Min	-0.1	0.43	-0.04	-0.01	20.9	1.1
		Max	-0.0	1.15	1.16	-0.00	34.3	3.0
	1.55	Min	-0.1	0.43	-10.55	-0.01	18.1	0.7
		Max	-0.0	1.15	-6.29	-0.00	28.9	1.8
36	3.10	Min	-0.1	0.43	-26.78	-0.01	0.0	0.0
		Max	-0.0	1.15	-17.02	-0.00	0.0	0.0
Bar 54								
28	0.00	Min	-0.2	0.36	3.71	0.00	21.8	1.1
		Max	0.1	1.14	5.64	0.00	32.8	3.5
	0.52	Min	-0.2	0.36	0.13	0.00	22.7	0.9
		Max	0.1	1.14	0.23	0.00	34.3	2.9

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	2.07	Min	-0.2	0.36	-16.00	0.00	14.6	0.4
		Max	0.1	1.14	-10.59	0.00	22.1	1.2
37	3.10	Min	-0.2	0.36	-26.81	0.00	0.0	0.0
		Max	0.1	1.14	-17.74	0.00	0.0	0.0
Bar 55								
29	0.00	Min	2.4	0.06	3.71	0.00	21.7	0.2
		Max	26.7	0.25	5.66	0.00	32.8	0.8
	0.52	Min	2.4	0.06	0.14	0.00	22.7	0.2
		Max	26.7	0.25	0.25	0.00	34.3	0.7
	2.07	Min	2.4	0.06	-15.99	0.00	14.6	0.1
		Max	26.7	0.25	-10.58	0.00	22.1	0.3
38	3.10	Min	2.4	0.06	-26.80	0.00	0.0	0.0
		Max	26.7	0.25	-17.73	0.00	0.0	0.0
Bar 56								
30	0.00	Min	-1.6	-6.65	2.64	-0.00	16.3	-3.4
		Max	3.4	0.29	6.20	0.00	33.4	0.5
	0.52	Min	-1.6	-4.55	-0.24	-0.00	17.3	-0.5
		Max	3.4	0.29	0.79	0.00	34.8	0.3
	1.55	Min	-1.6	-0.37	-10.77	-0.00	14.8	-0.2
		Max	3.4	0.29	-5.25	0.00	29.3	2.3
	2.58	Min	-1.6	-0.12	-21.58	-0.00	6.4	-0.3
		Max	3.4	4.23	-11.00	0.00	12.5	0.3
39	3.10	Min	-1.6	-0.12	-26.99	-0.00	0.0	-2.6
		Max	3.4	6.32	-13.88	0.00	0.0	-0.0
Bar 67								
32	0.00	Min	-5.0	-1.40	12.99	-10.14	-36.4	-0.2
		Max	0.4	7.18	23.75	21.18	-18.0	7.0
	0.75	Min	-5.0	-1.40	9.54	-10.14	-19.1	0.8
		Max	0.4	7.18	22.63	21.18	-9.6	1.7
31	1.50	Min	-5.0	-1.40	6.09	-10.14	-4.4	-3.8
		Max	0.4	7.18	21.51	21.18	-1.8	1.9
Bar 68								
33	0.00	Min	-5.0	-1.40	12.99	-10.14	-48.3	-0.9
		Max	0.4	7.18	23.75	21.18	-24.6	10.6
32	0.50	Min	-5.0	-1.40	12.99	-10.14	-36.4	-0.2
		Max	0.4	7.18	23.75	21.18	-18.0	7.0
Bar 69								
33	0.00	Min	-24.5	-3.81	24.66	-0.94	-96.0	-10.5
		Max	-4.4	0.80	52.13	0.26	-46.9	0.2
34	2.50	Min	-24.5	-3.81	21.60	-0.94	8.1	-2.3
		Max	-4.4	0.80	39.95	0.26	21.9	-0.6
Bar 70								
34	0.00	Min	-23.5	-0.64	3.80	-0.08	7.9	-2.3
		Max	-3.9	-0.18	13.23	-0.03	21.7	-0.6
35	2.50	Min	-23.5	-0.64	-0.13	-0.08	17.5	-0.7
		Max	-3.9	-0.18	3.61	-0.03	37.7	-0.1
Bar 71								
35	0.00	Min	-22.5	-0.65	-26.58	-0.08	17.4	-0.7
		Max	-3.5	-0.19	-14.47	-0.03	37.4	-0.1
	1.67	Min	-22.5	-0.65	-34.07	-0.08	-16.6	0.2
		Max	-3.5	-0.19	-16.00	-0.03	-4.4	0.4
36	2.50	Min	-22.5	-0.65	-37.82	-0.08	-44.4	0.3
		Max	-3.5	-0.19	-16.77	-0.03	-20.2	1.0
Bar 72								

Extremal member forces (in system of principal axis)

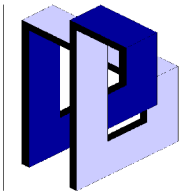
Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
36	0.00	Min	-38.2	-0.52	25.38	-0.15	-104.4	-0.5
		Max	-5.9	-0.14	57.30	-0.04	-44.9	0.6
37	2.50	Min	-38.2	-0.52	23.08	-0.15	14.4	0.5
		Max	-5.9	-0.14	46.06	-0.04	26.1	1.2
Bar 73								
37	0.00	Min	-37.0	-0.59	5.24	-0.17	14.3	0.5
		Max	-5.5	0.02	19.34	-0.00	25.8	1.2
38	2.50	Min	-37.0	-0.59	2.94	-0.17	26.1	0.7
		Max	-5.5	0.02	8.09	-0.00	58.6	2.4
Bar 74								
38	0.00	Min	-15.7	-0.26	-23.18	-0.06	25.3	0.7
		Max	-2.5	0.31	-10.31	0.06	53.1	2.4
39	2.50	Min	-15.7	-0.26	-31.95	-0.06	-25.3	0.2
		Max	-2.5	0.31	-15.09	0.06	3.0	2.7
Bar 75								
18	0.00	Min	-86.2	-1.47	-29.20	0.00	11.8	-3.6
		Max	-34.6	-0.47	-4.72	0.05	73.0	-1.2
43	2.50	Min	-89.0	-1.47	-29.20	0.00	-0.0	0.0
		Max	-36.9	-0.47	-4.72	0.05	-0.0	0.1
Bar 76								
22	0.00	Min	-69.5	0.00	7.82	-0.02	-52.3	0.0
		Max	-40.0	0.00	20.93	0.11	-19.5	0.0
44	2.50	Min	-72.3	0.00	7.82	-0.02	0.0	0.0
		Max	-42.3	0.00	20.93	0.11	0.0	0.0
Bar 77								
22	0.00	Min	0.3	-0.00	0.00	-0.00	0.0	-0.0
		Max	21.7	0.00	0.00	0.00	0.0	0.0
47	5.68	Min	0.3	-0.00	0.00	-0.00	0.0	0.0
		Max	21.7	0.00	0.00	0.00	0.0	0.0
Bar 78								
39	0.00	Min	-22.5	-0.00	0.00	-0.00	0.0	-0.0
		Max	-1.1	0.00	0.00	-0.00	0.0	0.0
44	5.68	Min	-22.5	-0.00	0.00	-0.00	-0.0	0.0
		Max	-1.1	0.00	0.00	-0.00	0.0	0.0
Bar 79								
33	0.00	Min	-120.0	-8.54	-27.50	-0.01	7.7	-21.4
		Max	-67.9	4.77	-3.06	0.05	68.7	11.9
45	2.50	Min	-122.8	-8.54	-27.50	-0.01	-0.0	0.0
		Max	-70.2	4.77	-3.06	0.05	0.0	0.0
Bar 80								
36	0.00	Min	-180.5	-0.05	-28.06	0.01	19.1	-0.1
		Max	-80.1	-0.01	-7.66	0.07	70.1	-0.0
46	2.50	Min	-183.3	-0.05	-28.06	0.01	0.0	0.0
		Max	-82.4	-0.01	-7.66	0.07	0.0	0.0
Bar 81								
39	0.00	Min	-73.0	-1.58	0.19	-0.02	-26.5	0.0
		Max	-33.2	-0.06	10.59	0.05	-0.5	0.0
47	2.50	Min	-75.8	-1.58	0.19	-0.02	-0.0	0.2
		Max	-35.5	-0.06	10.59	0.05	-0.0	3.9
Bar 82								
40	0.00	Min	-129.8	-16.45	4.17	0.00	-75.8	-36.9
		Max	-78.5	-1.97	33.82	0.07	-9.3	-4.4
42	2.24	Min	-132.3	-16.45	4.17	0.00	-0.0	-0.0
		Max	-80.6	-1.97	33.82	0.07	-0.0	-0.0

Extremal member forces (in system of principal axis)

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 88								
42	0.00	Min	-302.9	0.00	0.00	0.00	0.0	0.0
		Max	-121.4	0.00	0.00	0.00	0.0	0.0
48	5.50	Min	-305.8	0.00	0.00	0.00	0.0	0.0
		Max	-123.7	0.00	0.00	0.00	0.0	0.0
Bar 90								
44	0.00	Min	-272.7	-0.06	0.00	0.00	-0.0	-0.3
		Max	-88.3	-0.00	0.00	0.00	-0.0	-0.0
51	5.50	Min	-275.5	-0.06	0.00	0.00	0.0	0.0
		Max	-90.7	-0.00	0.00	0.00	0.0	0.0
Bar 91								
45	0.00	Min	-396.3	-0.00	0.00	0.00	0.0	-0.0
		Max	-134.9	0.00	0.00	0.00	0.0	0.0
52	5.50	Min	-399.6	-0.00	0.00	0.00	0.0	0.0
		Max	-137.6	0.00	0.00	0.00	0.0	0.0
Bar 92								
46	0.00	Min	-1088.0	0.00	0.00	0.00	0.0	0.0
		Max	-296.5	0.00	0.00	0.00	0.0	0.0
53	5.50	Min	-1093.0	0.00	0.00	0.00	0.0	0.0
		Max	-300.6	0.00	0.00	0.00	0.0	0.0
Bar 93								
47	0.00	Min	-349.0	0.00	0.00	0.00	0.0	0.0
		Max	-89.9	0.00	0.00	0.00	0.0	0.0
54	5.50	Min	-351.8	0.00	0.00	0.00	0.0	0.0
		Max	-92.2	0.00	0.00	0.00	0.0	0.0
Bar 95								
55	0.00	Min	-11.7	2.61	-24.90	2.88	-1.9	-1.5
		Max	-6.0	5.24	-10.95	4.52	12.6	0.8
56	0.67	Min	-11.7	2.61	-30.18	2.88	-18.4	-4.8
		Max	-6.0	5.24	-15.28	4.52	2.0	-1.2
Bar 96								
56	0.00	Min	-11.7	2.61	-30.18	2.88	-18.4	-4.8
		Max	-6.0	5.24	-15.28	4.52	2.0	-1.2
13	0.67	Min	-11.7	2.61	-35.47	2.88	-39.9	-8.3
		Max	-6.0	5.24	-19.61	4.52	-10.0	-2.9
Bar 97								
44	0.00	Min	-0.0	-0.00	0.04	-0.01	-0.4	-0.0
		Max	0.0	0.00	0.86	-0.00	-0.0	0.0
	2.55	Min	-0.0	-0.00	0.04	-0.01	0.0	-0.0
		Max	0.0	0.00	0.86	-0.00	1.8	0.0
47	5.10	Min	-0.0	-0.00	0.04	-0.01	0.2	-0.0
		Max	0.0	0.00	0.86	-0.00	3.9	0.0
Bar 98								
29	0.00	Min	0.6	-0.00	0.00	-0.00	0.0	0.0
		Max	27.0	0.00	0.00	0.00	0.0	0.0
39	3.98	Min	0.6	-0.00	0.00	-0.00	0.0	0.0
		Max	27.0	0.00	0.00	0.00	0.0	0.0
Bar 99								
38	0.00	Min	-34.9	-0.00	0.00	-0.00	0.0	0.0
		Max	-3.3	0.00	0.00	0.00	0.0	0.0
30	3.98	Min	-34.9	-0.00	0.00	-0.00	0.0	0.0
		Max	-3.3	0.00	0.00	0.00	0.0	0.0
Bar 100								
23	0.00	Min	4.1	0.00	0.00	0.00	0.0	0.0



Verification 1: Summary

Extremal member forces (in system of principal axis)

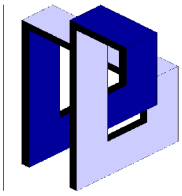
Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	7.4	0.00	0.00	0.01	0.0	0.0
33	3.69	Min	4.1	0.00	0.00	0.00	0.0	0.0
		Max	7.4	0.00	0.00	0.01	0.0	0.0
Bar 101								
24	0.00	Min	-0.6	0.00	0.00	-0.00	0.0	0.0
		Max	5.2	0.00	0.00	-0.00	0.0	0.0
31	3.69	Min	-0.6	0.00	0.00	-0.00	-0.0	-0.0
		Max	5.2	0.00	0.00	-0.00	-0.0	-0.0
Minimum			-1093.0	-16.45	-452.48	-10.14	-671.9	-36.9
Maximum			79.0	10.91	624.09	35.76	381.2	11.9

Maximum utilization

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	U
-	m	-
Traverse 1: Bar 57		
13	0.00	0.339
	0.25	0.338
	0.75	0.348
14	1.50	0.399
Traverse 1: Bar 58		
14	1.50	0.399
15	2.00	0.436
Traverse 1: Bar 59		
15	2.00	0.460
	2.47	0.532
40	2.70	0.591
Traverse 1: Bar 60		
40	2.70	0.375
16	4.50	0.085
Traverse 1: Bar 61		
16	4.50	0.146
	5.33	0.080
	5.75	0.062
17	7.00	0.124
Traverse 1: Bar 62		
17	7.00	0.143
	8.00	0.075
	8.33	0.070
18	9.00	0.131
Traverse 1: Bar 63		
18	9.00	0.305
	9.17	0.281
19	9.50	0.261
Traverse 1: Bar 64		
19	9.50	0.191
	10.33	0.121
	10.75	0.108
	11.17	0.121
20	12.00	0.190
Traverse 1: Bar 65		
20	12.00	0.179
	13.25	0.184
21	14.50	0.187
Traverse 1: Bar 66		
21	14.50	0.196
	15.75	0.112
	16.17	0.128
22	17.00	0.196
Traverse 2: Bar 94		
50	0.00	0.543
	0.25	0.543
	0.33	0.550
49	0.50	0.698
Traverse 2: Bar 89		
49	0.50	0.735
43	6.00	0.188
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.092
Traverse 3: Bar 84		
42	0.70	0.287
	1.75	0.218
	4.90	0.265
	5.95	0.403
43	7.00	0.815
Traverse 3: Bar 85		
43	7.00	0.828
	8.33	0.455
	9.67	0.385
	11.00	0.609
	12.33	0.628
	13.67	0.437
44	15.00	0.423
Traverse 4: Bar 87		
47	0.00	0.419
	1.25	0.376
	2.50	0.518
	5.00	0.323
	6.25	0.508
46	7.50	0.960
Traverse 4: Bar 86		
46	7.50	0.960
	8.75	0.508
	10.00	0.323
	12.50	0.518
	13.75	0.375
45	15.00	0.419
Bar 1		
1	0.00	0.072
	0.93	0.095
	1.87	0.107
	2.80	0.110
	3.73	0.107
	4.67	0.094
4	5.60	0.074
Bar 2		
2	0.00	0.032
	1.25	0.065
	2.50	0.075
	3.75	0.073
	6.25	0.045
3	7.50	0.088
Bar 3		
3	0.00	0.086
	1.25	0.040
	3.75	0.070
	5.00	0.073
	6.25	0.063
4	7.50	0.036
Bar 4		
12	0.00	0.029
1	2.50	0.018
Bar 5		
12	0.00	0.003
4	6.13	0.003
Bar 6		
1	0.00	0.004
39	6.13	0.004
Bar 7		
2	0.00	0.073
33	2.50	0.073
Bar 8		
3	0.00	0.125
36	2.50	0.126
Bar 9		
3	0.00	0.138
39	7.91	0.175
Bar 10		
4	0.00	0.154
36	7.91	0.132
Bar 11		
39	0.00	0.071
4	2.50	0.071
Bar 12		
5	0.00	0.014
	0.17	0.017
13	0.50	0.039
Bar 13		
6	0.00	0.000
15	0.50	0.063
Bar 14		
7	0.00	0.000
16	0.50	0.058
Bar 15		
8	0.00	0.000
17	0.50	0.058
Bar 16		
9	0.00	0.000
19	0.50	0.058
Bar 17		
20	0.00	0.058
10	0.50	0.000



Verification 1: Summary

Maximum utilization

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	U
-	m	-
Bar 18		
21	0.00	0.058
11	0.50	0.000
Bar 19		
22	0.00	0.116
	0.33	0.075
12	0.50	0.066
Bar 20		
23	0.00	0.193
55	0.67	0.135
Bar 21		
24	0.00	0.079
13	2.83	0.079
Bar 22		
15	0.00	0.089
23	2.83	0.089
Bar 23		
15	0.00	0.193
	0.67	0.286
24	2.00	0.389
Bar 24		
25	0.00	0.143
15	3.20	0.143
Bar 25		
16	0.00	0.166
24	3.20	0.166
Bar 26		
16	0.00	0.179
25	2.00	0.375
Bar 27		
17	0.00	0.080
25	3.20	0.080
Bar 28		
26	0.00	0.027
16	3.20	0.027
Bar 29		
17	0.00	0.190
26	2.00	0.371
Bar 30		
27	0.00	0.058
17	3.20	0.058
Bar 31		
19	0.00	0.116
26	3.20	0.116
Bar 32		
19	0.00	0.216
	1.33	0.302
27	2.00	0.374
Bar 33		
28	0.00	0.083
19	3.20	0.083
Bar 34		
20	0.00	0.200
27	3.20	0.200

node	s	U
-	m	-
Bar 35		
20	0.00	0.188
28	2.00	0.375
Bar 36		
21	0.00	0.241
28	3.20	0.241
Bar 37		
29	0.00	0.193
20	3.20	0.193
Bar 38		
21	0.00	0.170
29	2.00	0.353
Bar 40		
30	0.00	0.214
21	3.20	0.214
Bar 41		
22	0.00	0.227
	0.67	0.292
30	2.00	0.362
Bar 42		
24	0.00	0.076
	0.33	0.080
	1.00	0.083
	1.67	0.080
23	2.00	0.076
Bar 43		
25	0.00	0.123
	0.42	0.128
	1.25	0.131
	2.08	0.128
24	2.50	0.123
Bar 44		
26	0.00	0.090
	0.42	0.095
	1.25	0.098
	2.08	0.095
25	2.50	0.090
Bar 45		
27	0.00	0.086
	0.42	0.091
	1.25	0.095
	2.08	0.091
26	2.50	0.086
Bar 46		
28	0.00	0.033
	0.42	0.040
	0.83	0.045
	1.25	0.046
	1.67	0.045
	2.08	0.040
27	2.50	0.033
Bar 47		
29	0.00	0.117
	0.42	0.124

node	s	U
-	m	-
	0.83	0.128
	1.25	0.130
	1.67	0.128
	2.08	0.124
28	2.50	0.117
Bar 48		
30	0.00	0.103
	0.42	0.111
	0.83	0.115
	1.25	0.116
	1.67	0.115
	2.08	0.111
29	2.50	0.103
Bar 49		
31	0.00	0.221
	1.03	0.253
	1.55	0.253
	2.07	0.237
	2.58	0.203
23	3.10	0.192
Bar 50		
24	0.00	0.382
	0.52	0.400
	1.03	0.385
	2.58	0.219
33	3.10	0.192
Bar 51		
25	0.00	0.370
	0.52	0.378
	1.55	0.334
34	3.10	0.169
Bar 52		
26	0.00	0.372
	0.52	0.379
	1.55	0.335
35	3.10	0.170
Bar 53		
27	0.00	0.377
	0.52	0.383
	1.55	0.338
36	3.10	0.170
Bar 54		
28	0.00	0.378
	0.52	0.384
	1.55	0.338
37	3.10	0.170
Bar 55		
29	0.00	0.348
	0.52	0.363
	1.55	0.314
38	3.10	0.170
Bar 56		
30	0.00	0.349
	0.52	0.363

node	s	U
-	m	-
	1.55	0.322
39	3.10	0.171
Bar 67		
32	0.00	0.186
	0.50	0.178
31	1.50	0.170
Bar 68		
33	0.00	0.228
	0.33	0.194
32	0.50	0.186
Bar 69		
33	0.00	0.338
	1.25	0.139
	2.08	0.086
34	2.50	0.094
Bar 70		
34	0.00	0.133
	1.25	0.153
35	2.50	0.160
Bar 71		
35	0.00	0.159
	0.83	0.104
	1.25	0.100
	1.67	0.106
36	2.50	0.172
Bar 72		
36	0.00	0.364
	1.25	0.161
37	2.50	0.144
Bar 73		
37	0.00	0.138
38	2.50	0.211
Bar 74		
38	0.00	0.193
	2.08	0.109
39	2.50	0.127
Bar 75		
18	0.00	0.267
43	2.50	0.089
Bar 76		
22	0.00	0.190
	1.67	0.123
44	2.50	0.068
Bar 77		
22	0.00	0.231
47	5.68	0.230
Bar 78		
39	0.00	0.240
44	5.68	0.240
Bar 79		
33	0.00	0.322
45	2.50	0.089
Bar 80		
36	0.00	0.281

Maximum utilization

Verification 1 [EC 3 Design resistance (th. I ord.)]: Summary

node	s	U
-	m	-
46	2.50	0.108
Bar 81		
39	0.00	0.144
	2.08	0.096
47	2.50	0.097
Bar 82		
40	0.00	0.415
42	2.24	0.105
Bar 88		
42	0.00	0.280
48	5.50	0.281
Bar 90		
44	0.00	0.271
51	5.50	0.267
Bar 91		
45	0.00	0.299
52	5.50	0.300
Bar 92		
46	0.00	0.481
53	5.50	0.484
Bar 93		
47	0.00	0.300
54	5.50	0.302
Bar 95		
55	0.00	0.133
	0.22	0.121
56	0.67	0.236
Bar 96		
56	0.00	0.236
13	0.67	0.461
Bar 97		
44	0.00	0.024
	0.85	0.021
	2.55	0.044
47	5.10	0.066
Bar 98		
29	0.00	0.128
39	3.98	0.128
Bar 99		
38	0.00	0.252
30	3.98	0.252
Bar 100		
23	0.00	0.036
33	3.69	0.036
Bar 101		
24	0.00	0.033
31	3.69	0.033
Minimum		0.000
Maximum		0.960

VERIFICATION 2: GROUP OF LOAD SPECTRA 1: GENERATION CODE 1

Extremal reactions of supported nodes (incl. γ_F)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: Generation code 1

node	type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
-		kN	kN	kN	kNm	kNm	kNm
2	Min	-0.14	-0.00	-0.00	-0.00	0.00	0.00
	Max	0.04	0.00	0.00	0.00	0.00	0.00
3	Min	-0.35	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.08	0.00	0.00	0.00	0.00	0.00
42	Min	2.11	-0.00	-0.00	-0.00	-0.00	0.00
	Max	17.38	0.00	0.00	0.00	0.00	0.00
43	Min	0.41	-0.00	-0.00	-0.00	-0.00	0.00
	Max	1.09	0.00	0.00	0.00	0.00	0.00
44	Min	-0.20	-22.13	-0.00	-0.00	-0.00	0.00
	Max	-0.01	63.81	0.00	0.00	0.00	0.00
45	Min	-4.63	-0.00	-0.00	-0.00	-0.00	0.00
	Max	9.52	0.00	0.00	0.00	0.00	0.00
46	Min	-1.35	-0.00	-0.00	-0.00	-0.00	0.00
	Max	-0.03	0.00	0.00	0.00	0.00	0.00
47	Min	1.14	4.54	-0.00	-0.00	-0.00	-0.00
	Max	41.81	49.10	0.00	0.00	0.00	0.00
48	Min	-0.00	-0.01	-306.91	0.00	0.00	0.00
	Max	-0.00	0.00	-126.23	0.00	0.00	0.00
49	Min	-0.00	-56.69	0.00	-0.00	0.00	0.00
	Max	0.00	-15.37	0.00	0.00	0.00	0.00
50	Min	0.00	0.00	-623.75	-0.00	0.00	0.00
	Max	0.00	0.00	-169.50	0.00	0.00	0.00
51	Min	0.01	-0.00	-275.57	0.00	0.00	0.00
	Max	0.09	-0.00	-90.55	0.00	0.00	0.00
52	Min	-0.00	-0.01	-397.03	0.00	0.00	0.00
	Max	0.00	-0.00	-142.34	0.00	0.00	0.00
53	Min	0.00	-0.02	-1092.40	0.00	0.00	0.00
	Max	0.00	-0.00	-300.60	0.00	0.00	0.00
54	Min	-0.00	-0.00	-351.80	0.00	0.00	0.00

Extremal reactions of supported nodes (incl. γF)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: Generation code 1

node type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
-	kN	kN	kN	kNm	kNm	kNm
Max	-0.00	-0.00	-93.26	0.00	0.00	0.00
Minimum	**-4.63**	**-56.69**	**-1092.40**	**-0.00**	**-0.00**	**-0.00**
Maximum	**41.81**	**63.81**	**0.00**	**0.00**	**0.00**	**0.00**

Maximum utilization

Verification 2 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: Generation code 1

node	s	U
-	m	-
Traverse 1: Bar 57		
13	0.00	0.388
	0.25	0.388
	0.75	0.397
14	1.50	0.446
Traverse 1: Bar 58		
14	1.50	0.446
15	2.00	0.482
Traverse 1: Bar 59		
15	2.00	0.508
	2.35	0.559
40	2.70	0.647
Traverse 1: Bar 60		
40	2.70	0.381
16	4.50	0.093
Traverse 1: Bar 61		
16	4.50	0.151
	5.33	0.083
	5.75	0.068
17	7.00	0.123
Traverse 1: Bar 62		
17	7.00	0.143
	8.00	0.077
	8.33	0.077
18	9.00	0.130
Traverse 1: Bar 63		
18	9.00	0.323
19	9.50	0.293
Traverse 1: Bar 64		
19	9.50	0.192
	10.33	0.124
	10.75	0.109
20	12.00	0.188
Traverse 1: Bar 65		
20	12.00	0.185
	13.25	0.192
21	14.50	0.195
Traverse 1: Bar 66		
21	14.50	0.200
	15.75	0.115
	16.58	0.153
22	17.00	0.190
Traverse 2: Bar 94		
50	0.00	0.543
	0.25	0.542
	0.33	0.551
49	0.50	0.699
Traverse 2: Bar 89		
49	0.50	0.735
43	6.00	0.188
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.092
Traverse 3: Bar 84		
42	0.70	0.288
	1.75	0.221
	4.90	0.265
	5.95	0.402
43	7.00	0.822
Traverse 3: Bar 85		
43	7.00	0.835
	8.33	0.455
	9.67	0.384
	11.00	0.608
	12.33	0.626
	13.67	0.436
44	15.00	0.423
Traverse 4: Bar 87		
47	0.00	0.419
	1.25	0.375
	2.50	0.518
	5.00	0.323
	6.25	0.508
46	7.50	0.960
Traverse 4: Bar 86		
46	7.50	0.960
	8.75	0.508
	10.00	0.323
	12.50	0.518
	13.75	0.375
45	15.00	0.419
Bar 1		
1	0.00	0.083
	0.93	0.104
	1.87	0.115
	2.80	0.118
	3.73	0.114
	4.67	0.103
4	5.60	0.083
Bar 2		
2	0.00	0.031
	1.25	0.065
	2.50	0.076
	3.75	0.073
	6.25	0.046
3	7.50	0.089
Bar 3		
3	0.00	0.091
	1.25	0.046
	3.75	0.071
	5.00	0.073
	6.25	0.065
4	7.50	0.038
Bar 4		
12	0.00	0.030
	2.08	0.021
1	2.50	0.021
Bar 5		
12	0.00	0.006
	2.04	0.004
	5.11	0.005
4	6.13	0.008
Bar 6		
1	0.00	0.002
	2.04	0.002
39	6.13	0.003
Bar 7		
2	0.00	0.074
33	2.50	0.074
Bar 8		
3	0.00	0.125
36	2.50	0.126
Bar 9		
3	0.00	0.143
	2.64	0.152
	5.27	0.164
	6.59	0.165
39	7.91	0.160
Bar 10		
4	0.00	0.159
	2.64	0.135
	3.95	0.130
	5.27	0.132
36	7.91	0.153
Bar 11		
39	0.00	0.071
4	2.50	0.071
Bar 12		
5	0.00	0.014
	0.17	0.018
13	0.50	0.039
Bar 13		
6	0.00	0.000
15	0.50	0.063
Bar 14		
7	0.00	0.000
16	0.50	0.058
Bar 15		
8	0.00	0.000
17	0.50	0.058
Bar 16		
9	0.00	0.000
19	0.50	0.058
Bar 17		
20	0.00	0.058
10	0.50	0.000
Bar 18		
21	0.00	0.058
11	0.50	0.000
Bar 19		
22	0.00	0.122
	0.25	0.092
12	0.50	0.076
Bar 20		
23	0.00	0.190
55	0.67	0.131
Bar 21		
24	0.00	0.076
13	2.83	0.076
Bar 22		
15	0.00	0.106
23	2.83	0.106
Bar 23		
15	0.00	0.195
	0.67	0.291
24	2.00	0.391

Maximum utilization

Verification 2 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: Generation code 1

node	s	U
-	m	-
Bar 24		
25	0.00	0.141
15	3.20	0.141
Bar 25		
16	0.00	0.167
24	3.20	0.167
Bar 26		
16	0.00	0.186
25	2.00	0.380
Bar 27		
17	0.00	0.004
25	3.20	0.004
Bar 28		
26	0.00	0.013
16	3.20	0.013
Bar 29		
17	0.00	0.204
26	2.00	0.382
Bar 30		
27	0.00	0.057
17	3.20	0.057
Bar 31		
19	0.00	0.010
26	3.20	0.010
Bar 32		
19	0.00	0.236
	1.00	0.287
27	2.00	0.391
Bar 33		
28	0.00	0.159
19	3.20	0.159
Bar 34		
20	0.00	0.018
27	3.20	0.018
Bar 35		
20	0.00	0.225
	1.00	0.286
28	2.00	0.401
Bar 36		
21	0.00	0.021
28	3.20	0.021
Bar 37		
29	0.00	0.192
20	3.20	0.192
Bar 38		
21	0.00	0.171
	1.00	0.295
29	2.00	0.367
Bar 40		
30	0.00	0.019
21	3.20	0.019
Bar 41		
22	0.00	0.205
	1.00	0.329
30	2.00	0.378
Bar 42		
24	0.00	0.094
	0.33	0.098
	1.00	0.101
	1.67	0.098
23	2.00	0.094
Bar 43		
25	0.00	0.143
	0.83	0.154
	1.25	0.155
	1.67	0.154
24	2.50	0.143
Bar 44		
26	0.00	0.121
	0.83	0.127
	1.25	0.128
	1.67	0.127
25	2.50	0.121
Bar 45		
27	0.00	0.130
	0.83	0.137
	1.25	0.137
	1.67	0.137
26	2.50	0.130
Bar 46		
28	0.00	0.129
	0.42	0.132
	1.25	0.135
	2.08	0.132
27	2.50	0.129
Bar 47		
29	0.00	0.080
	0.42	0.085
	0.83	0.088
	1.25	0.089
	1.67	0.088
	2.08	0.085
28	2.50	0.080
Bar 48		
30	0.00	0.072
	0.83	0.081
	1.25	0.083
	1.67	0.081
29	2.50	0.072
Bar 49		
31	0.00	0.288
	1.03	0.297
	1.55	0.283
	2.58	0.205
23	3.10	0.190
Bar 50		
24	0.00	0.385
	0.52	0.402
	1.03	0.387
	2.58	0.221
33	3.10	0.193
Bar 51		
25	0.00	0.376
	0.52	0.382
	1.55	0.336
34	3.10	0.172
Bar 52		
26	0.00	0.381
	0.52	0.387
	1.55	0.340
35	3.10	0.171
Bar 53		
27	0.00	0.389
	0.52	0.391
	1.55	0.345
36	3.10	0.171
Bar 54		
28	0.00	0.395
	0.52	0.397
	1.55	0.347
37	3.10	0.173
Bar 55		
29	0.00	0.370
	0.52	0.376
	1.55	0.334
38	3.10	0.171
Bar 56		
30	0.00	0.378
	0.52	0.383
	1.55	0.348
39	3.10	0.218
Bar 67		
32	0.00	0.225
	0.25	0.221
31	1.50	0.213
Bar 68		
33	0.00	0.234
32	0.50	0.225
Bar 69		
33	0.00	0.326
	1.25	0.134
	2.08	0.091
34	2.50	0.100
Bar 70		
34	0.00	0.140
	1.25	0.158
35	2.50	0.165
Bar 71		
35	0.00	0.164
	0.83	0.108
	1.25	0.101
	1.67	0.105
36	2.50	0.172
Bar 72		
36	0.00	0.360
	1.25	0.160
37	2.50	0.146
Bar 73		
37	0.00	0.136
	0.83	0.170
38	2.50	0.215
Bar 74		
38	0.00	0.211
	2.08	0.129
39	2.50	0.128
Bar 75		
18	0.00	0.277
	0.83	0.195
43	2.50	0.093
Bar 76		
22	0.00	0.194
	1.67	0.126
44	2.50	0.072
Bar 77		
22	0.00	0.464
	0.95	0.459
	1.89	0.459
	4.73	0.459
47	5.68	0.461
Bar 78		
39	0.00	0.001
	0.95	0.001
44	5.68	0.002
Bar 79		
33	0.00	0.361
45	2.50	0.088
Bar 80		
36	0.00	0.280
46	2.50	0.108
Bar 81		
39	0.00	0.145
	0.42	0.136
	0.83	0.134
47	2.50	0.134
Bar 82		
40	0.00	0.453
42	2.24	0.109
Bar 88		
42	0.00	0.280
48	5.50	0.282
Bar 90		
44	0.00	0.273
	0.92	0.274
	2.75	0.272
51	5.50	0.267
Bar 91		

Maximum utilization

Verification 2 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: Generation code 1

node	s	U
-	m	-
45	0.00	0.298
52	5.50	0.299
Bar 92		
46	0.00	0.481
53	5.50	0.483
Bar 93		
47	0.00	0.300
54	5.50	0.302
Bar 95		

node	s	U
-	m	-
55	0.00	0.132
	0.11	0.131
56	0.67	0.283
Bar 96		
56	0.00	0.283
13	0.67	0.521
Bar 97		
44	0.00	0.028
	0.85	0.031

node	s	U
-	m	-
	2.55	0.064
47	5.10	0.094
Bar 98		
29	0.00	0.207
39	3.98	0.207
Bar 99		
38	0.00	0.006
30	3.98	0.006
Bar 100		

node	s	U
-	m	-
23	0.00	0.056
33	3.69	0.056
Bar 101		
24	0.00	0.023
31	3.69	0.023
Minimum		0.000
Maximum		0.960

VERIFICATION 2: SUMMARY

Extremal reactions of supported nodes (incl. γ_F)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
		kN	kN	kN	kNm	kNm	kNm
2	Min	-0.14	-0.00	-0.00	-0.00	0.00	0.00
	Max	0.04	0.00	0.00	0.00	0.00	0.00
3	Min	-0.35	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.08	0.00	0.00	0.00	0.00	0.00
42	Min	2.11	-0.00	-0.00	-0.00	-0.00	0.00
	Max	17.38	0.00	0.00	0.00	0.00	0.00
43	Min	0.41	-0.00	-0.00	-0.00	-0.00	0.00
	Max	1.09	0.00	0.00	0.00	0.00	0.00
44	Min	-0.20	-22.13	-0.00	-0.00	-0.00	0.00
	Max	-0.01	63.81	0.00	0.00	0.00	0.00
45	Min	-4.63	-0.00	-0.00	-0.00	-0.00	0.00
	Max	9.52	0.00	0.00	0.00	0.00	0.00
46	Min	-1.35	-0.00	-0.00	-0.00	-0.00	0.00
	Max	-0.03	0.00	0.00	0.00	0.00	0.00
47	Min	1.14	4.54	-0.00	-0.00	-0.00	-0.00
	Max	41.81	49.10	0.00	0.00	0.00	0.00
48	Min	-0.00	-0.01	-306.91	0.00	0.00	0.00
	Max	-0.00	0.00	-126.23	0.00	0.00	0.00
49	Min	-0.00	-56.69	0.00	-0.00	0.00	0.00
	Max	0.00	-15.37	0.00	0.00	0.00	0.00
50	Min	0.00	0.00	-623.75	-0.00	0.00	0.00
	Max	0.00	0.00	-169.50	0.00	0.00	0.00
51	Min	0.01	-0.00	-275.57	0.00	0.00	0.00
	Max	0.09	-0.00	-90.55	0.00	0.00	0.00
52	Min	-0.00	-0.01	-397.03	0.00	0.00	0.00
	Max	0.00	-0.00	-142.34	0.00	0.00	0.00
53	Min	0.00	-0.02	-1092.40	0.00	0.00	0.00
	Max	0.00	-0.00	-300.60	0.00	0.00	0.00
54	Min	-0.00	-0.00	-351.80	0.00	0.00	0.00
	Max	-0.00	-0.00	-93.26	0.00	0.00	0.00
Minimum		-4.63	-56.69	-1092.40	-0.00	-0.00	-0.00
Maximum		41.81	63.81	0.00	0.00	0.00	0.00

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Traverse 1: Bar 57								
13	0.00	Min	-14.3	-1.35	-52.89	7.20	5.8	-8.8
		Max	-6.9	0.46	-32.11	41.86	8.0	-2.9
	0.75	Min	-14.3	-4.50	-51.46	7.19	-31.4	-6.8
		Max	-6.9	0.45	-33.03	41.90	-18.4	-2.9
	1.25	Min	-14.3	-6.59	-50.50	7.19	-56.9	-4.2
		Max	-7.0	0.44	-33.64	41.93	-35.0	-2.8
14	1.50	Min	-14.3	-7.63	-50.02	7.19	-69.5	-4.2
		Max	-7.0	0.43	-33.94	41.94	-43.5	-1.4
Traverse 1: Bar 58								
14	1.50	Min	-14.3	-7.63	-50.02	7.19	-69.5	-4.2
		Max	-7.0	0.43	-33.94	41.94	-43.5	-1.4
15	2.00	Min	-14.4	-9.72	-48.29	7.19	-94.0	-4.3
		Max	-7.0	0.42	-33.93	41.97	-60.5	2.9
Traverse 1: Bar 59								
15	2.00	Min	-30.8	-10.36	-83.26	5.79	-93.6	-5.2
		Max	-4.8	-2.41	-55.01	40.61	-56.9	0.4
40	2.70	Min	-30.9	-13.34	-81.86	5.79	-151.4	-2.9
		Max	-5.0	-2.43	-55.83	40.68	-96.0	8.1
Traverse 1: Bar 60								
40	2.70	Min	-22.8	-0.47	21.51	-2.29	-109.2	-2.9
		Max	25.4	5.47	53.09	0.96	-50.7	7.3
	3.60	Min	-22.6	-0.47	23.45	-2.34	-62.0	-2.5
		Max	25.5	1.84	51.80	0.96	-30.4	4.0
16	4.50	Min	-22.6	-1.96	25.41	-2.38	-16.4	-2.1
		Max	25.5	-0.22	50.47	0.95	-8.1	4.1
Traverse 1: Bar 61								
16	4.50	Min	3.0	-0.46	4.21	-0.28	-23.7	-0.2
		Max	50.1	9.06	19.56	-0.07	-13.7	7.4
	5.33	Min	3.0	-0.47	6.28	-0.30	-14.4	0.1
		Max	50.1	5.67	18.62	-0.07	-2.7	1.3
	6.58	Min	3.0	-0.49	9.29	-0.33	-0.1	-3.1
		Max	50.1	0.58	17.25	-0.07	15.1	1.3
17	7.00	Min	3.0	-1.27	8.91	-0.34	4.1	-3.0
		Max	50.1	-0.39	18.20	-0.07	22.2	1.5
Traverse 1: Bar 62								
17	7.00	Min	-1.6	3.32	-17.39	0.08	5.1	1.2
		Max	45.8	5.09	-7.38	0.33	23.4	3.9
	8.00	Min	-1.6	-0.04	-18.51	0.08	-4.4	-0.9
		Max	45.8	4.23	-4.91	0.35	8.7	-0.3
18	9.00	Min	-1.6	-4.09	-19.64	0.08	-16.2	-4.6
		Max	45.8	4.21	-2.42	0.37	-1.9	1.3
Traverse 1: Bar 63								
18	9.00	Min	-30.0	-2.73	29.41	-3.19	-75.2	-4.5
		Max	36.8	4.88	68.49	-1.00	-26.7	1.5
19	9.50	Min	-29.9	-3.14	28.90	-3.23	-42.4	-7.2
		Max	36.8	4.40	67.99	-1.00	-10.7	2.6
Traverse 1: Bar 64								
19	9.50	Min	-28.1	-3.88	8.01	-0.55	-42.9	-5.9
		Max	14.9	11.14	36.24	0.13	-5.1	8.4
	10.33	Min	-28.1	-3.85	10.07	-0.57	-15.8	-2.7
		Max	14.9	7.69	35.33	0.13	5.1	0.5
	10.75	Min	-28.1	-3.83	11.10	-0.58	-2.5	-2.6
		Max	14.9	5.96	34.86	0.12	10.9	-0.9

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
20	12.00	Min	-28.1	-3.77	14.12	-0.63	20.7	-6.5
		Max	14.9	0.76	33.44	0.10	46.1	3.6
Traverse 1: Bar 65								
20	12.00	Min	-24.6	-0.58	-8.81	-0.31	27.2	-1.3
		Max	-12.3	5.60	4.56	-0.06	45.5	3.4
	13.25	Min	-24.6	-0.57	-5.86	-0.31	21.5	-4.9
		Max	-12.3	0.48	3.13	-0.05	47.0	4.0
21	14.50	Min	-24.6	-4.88	-3.08	-0.33	18.6	-2.1
		Max	-12.3	-0.28	1.73	-0.03	47.6	4.6
Traverse 1: Bar 66								
21	14.50	Min	-23.3	2.40	-33.56	-0.14	18.5	-3.6
		Max	-11.9	3.88	-19.30	0.77	47.2	6.3
	14.92	Min	-23.3	0.66	-33.47	-0.13	9.6	-4.3
		Max	-11.8	3.80	-18.74	0.79	34.1	4.7
	16.17	Min	-23.3	-4.69	-34.87	-0.14	-23.1	-1.9
		Max	-11.8	3.81	-15.74	0.85	2.1	0.2
	16.58	Min	-23.3	-6.46	-35.33	-0.14	-35.3	-1.7
		Max	-11.8	3.82	-14.72	0.88	-6.6	0.7
22	17.00	Min	-23.3	-8.22	-35.79	-0.15	-47.2	-3.3
		Max	-11.8	3.82	-13.68	0.90	-15.6	3.8
Traverse 2: Bar 94								
50	0.00	Min	0.5	-0.00	169.50	0.00	-0.0	0.0
		Max	6.3	-0.00	623.75	0.00	0.0	0.0
49	0.50	Min	0.4	-0.00	168.65	-0.00	84.5	0.0
		Max	5.6	-0.00	622.72	0.00	311.6	0.0
Traverse 2: Bar 89								
49	0.50	Min	-623.2	-0.00	-51.06	-0.00	84.5	-0.0
		Max	-168.7	0.00	-14.97	0.00	311.6	0.0
43	6.00	Min	-614.0	-0.00	-59.47	0.00	-0.0	0.0
		Max	-161.7	0.00	-15.57	0.00	0.0	0.0
Traverse 3: Bar 83								
41	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.35	Min	-0.1	-0.20	-20.67	-0.00	-3.6	0.0
		Max	-0.0	-0.01	-4.94	0.00	-0.9	0.0
42	0.70	Min	-0.1	-0.41	-41.35	-0.00	-14.5	0.0
		Max	-0.0	-0.01	-9.88	0.00	-3.5	0.1
Traverse 3: Bar 84								
42	0.70	Min	-34.9	0.04	30.88	0.00	-14.5	0.0
		Max	-3.7	1.29	129.53	0.00	-3.5	0.2
	2.80	Min	-35.0	0.00	1.22	0.00	30.3	-1.2
		Max	-4.1	0.07	5.46	0.00	127.3	-0.0
	4.90	Min	-34.9	-1.15	-118.90	0.00	1.7	-0.1
		Max	-3.9	-0.03	-28.24	0.00	8.5	0.0
43	7.00	Min	-35.0	-2.38	-242.80	-0.00	-372.3	0.1
		Max	-4.8	-0.07	-57.87	0.00	-88.0	3.6
Traverse 3: Bar 85								
43	7.00	Min	-9.5	0.08	67.43	-0.15	-372.3	0.1
		Max	80.9	2.81	282.69	-0.02	-88.0	3.7
	8.33	Min	-9.5	0.05	48.58	-0.15	-48.1	0.0
		Max	81.4	1.68	203.79	-0.02	-10.6	0.4
	11.00	Min	-9.6	0.00	10.99	-0.15	68.3	-1.4
		Max	80.0	0.24	46.48	-0.02	285.5	-0.0
	12.33	Min	-9.5	-0.08	-32.12	-0.16	70.7	-1.0

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	80.1	-0.00	-7.68	-0.02	295.1	-0.0
	13.67	Min	-9.5	-0.13	-110.66	-0.16	47.9	-0.4
		Max	81.0	-0.01	-26.50	-0.02	200.0	0.0
44	15.00	Min	-9.4	-0.00	-189.34	-0.16	-0.0	-0.1
		Max	82.2	0.09	-45.32	-0.02	0.0	0.0
Traverse 4: Bar 87								
47	0.00	Min	11.1	-0.18	64.61	-0.00	-0.0	-0.0
		Max	56.8	0.01	273.28	0.01	0.0	0.0
	1.25	Min	11.1	-0.09	36.01	-0.00	62.9	-0.0
		Max	55.8	0.01	152.33	0.01	266.0	0.2
	2.50	Min	11.0	-0.01	7.41	-0.00	90.0	-0.0
		Max	55.1	0.00	31.48	0.01	380.8	0.2
	5.00	Min	11.1	-0.01	-210.47	-0.00	37.0	-0.0
		Max	55.8	0.11	-49.61	0.01	157.5	0.1
	6.25	Min	11.1	-0.01	-331.43	-0.00	-181.8	-0.1
		Max	56.3	0.14	-78.22	0.01	-42.2	-0.0
46	7.50	Min	11.0	-0.02	-452.46	0.00	-671.7	-0.3
		Max	55.0	0.17	-106.88	0.01	-157.9	0.0
Traverse 4: Bar 86								
46	7.50	Min	3.2	-0.15	106.88	0.00	-671.7	-0.2
		Max	28.3	0.01	452.47	0.01	-157.9	0.0
	8.75	Min	3.3	-0.08	78.25	-0.00	-181.8	-0.0
		Max	29.5	0.01	331.47	0.01	-42.2	0.0
	11.25	Min	3.2	-0.01	21.04	-0.00	81.4	0.0
		Max	28.4	0.01	89.56	0.01	344.9	0.1
	12.50	Min	3.2	-0.00	-31.53	-0.00	90.1	0.0
		Max	28.3	0.01	-7.41	0.01	381.0	0.0
	13.75	Min	3.2	-0.00	-152.41	-0.00	62.9	-0.0
		Max	29.1	0.02	-36.02	0.01	266.1	0.0
45	15.00	Min	3.3	-0.00	-273.34	-0.00	-0.0	-0.0
		Max	30.1	0.01	-64.63	0.01	0.0	0.0
Bar 1								
1	0.00	Min	-0.1	-0.01	0.99	0.00	-0.0	-0.1
		Max	0.0	0.04	1.21	0.01	0.0	0.7
	0.93	Min	-0.1	-0.00	0.66	0.00	0.8	-0.1
		Max	0.0	0.04	0.81	0.01	0.9	0.7
	1.87	Min	-0.1	-0.00	0.33	0.00	1.2	-0.1
		Max	-0.0	0.04	0.40	0.01	1.5	0.7
	2.80	Min	-0.1	-0.00	-0.00	0.00	1.4	-0.2
		Max	-0.0	0.04	0.00	0.01	1.7	0.7
	3.73	Min	-0.1	-0.01	-0.41	0.00	1.2	-0.2
		Max	-0.0	0.04	-0.33	0.01	1.5	0.7
	4.67	Min	-0.1	-0.01	-0.81	0.00	0.8	-0.2
		Max	-0.0	0.04	-0.66	0.01	0.9	0.7
4	5.60	Min	-0.1	-0.01	-1.22	0.00	-0.0	-0.3
		Max	-0.0	0.04	-1.00	0.01	0.0	0.7
Bar 2								
2	0.00	Min	0.0	0.02	6.09	-0.00	-0.0	-0.1
		Max	0.0	0.14	20.35	0.00	0.0	0.7
	2.50	Min	0.0	0.02	0.98	0.00	8.8	-0.2
		Max	0.0	0.14	3.65	0.00	30.0	0.4
	5.00	Min	0.0	0.02	-14.03	-0.01	4.9	-0.3
		Max	0.0	0.16	-3.16	0.01	18.2	0.1
	6.25	Min	0.0	0.03	-22.39	-0.00	-9.4	-0.4

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	0.0	0.17	-5.71	0.01	4.2	-0.0
3	7.50	Min	0.0	0.02	-30.74	-0.00	-42.6	-0.5
		Max	0.0	0.18	-8.27	0.01	-4.5	-0.2
Bar 3								
3	0.00	Min	5.3	-0.13	8.27	-0.00	-42.6	-0.3
		Max	11.9	0.29	30.73	0.02	-4.5	1.0
	1.25	Min	5.3	-0.13	5.71	-0.00	-9.4	-0.2
		Max	11.9	0.29	22.38	0.01	4.2	0.7
	3.75	Min	5.3	-0.14	0.60	-0.01	8.5	-0.1
		Max	11.9	0.30	5.68	0.02	29.3	0.2
	5.00	Min	5.3	-0.14	-3.65	-0.01	8.8	-0.5
		Max	11.9	0.30	-0.98	0.02	30.0	0.4
4	7.50	Min	5.3	-0.14	-20.35	-0.00	-0.0	-1.2
		Max	11.9	0.30	-6.09	0.01	0.0	0.7
Bar 4								
12	0.00	Min	-1.3	-0.01	-0.00	-0.68	-0.0	-0.0
		Max	-1.0	0.04	0.00	0.08	-0.0	0.1
1	2.50	Min	-1.3	-0.01	-0.00	-0.68	-0.0	0.0
		Max	-1.0	0.04	0.00	0.08	0.0	0.0
Bar 5								
12	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.4	0.00	0.00	0.00	0.0	0.0
4	6.13	Min	-0.0	-0.00	0.00	0.00	-0.0	-0.0
		Max	0.4	-0.00	0.00	0.00	0.0	0.0
Bar 6								
1	0.00	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	0.1	-0.00	0.00	-0.00	0.0	-0.0
39	6.13	Min	-0.0	-0.00	-0.00	-0.00	-0.0	0.0
		Max	0.1	-0.00	0.00	-0.00	-0.0	0.0
Bar 7								
2	0.00	Min	-20.4	-0.00	-0.00	-0.70	-0.0	-0.0
		Max	-6.1	0.00	0.00	0.11	0.0	0.0
33	2.50	Min	-20.4	-0.00	-0.00	-0.70	-0.0	-0.0
		Max	-6.1	0.00	0.00	0.11	0.0	0.0
Bar 8								
3	0.00	Min	-59.4	-0.00	-0.00	-1.33	0.0	0.0
		Max	-13.2	-0.00	-0.00	-0.09	0.0	0.0
36	2.50	Min	-60.2	0.00	0.00	-1.33	0.0	0.0
		Max	-13.9	0.00	0.00	-0.09	0.0	0.0
Bar 9								
3	0.00	Min	-12.5	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	-5.5	0.01	0.00	0.00	0.0	0.0
	2.64	Min	-12.5	-0.01	-0.00	-0.00	-0.0	-0.0
		Max	-5.5	0.02	0.00	0.00	0.0	0.0
	5.27	Min	-12.5	-0.00	-0.00	-0.00	-0.0	-0.1
		Max	-5.5	0.01	0.00	0.00	0.0	0.0
	6.59	Min	-12.5	-0.01	-0.00	-0.00	-0.0	-0.1
		Max	-5.5	0.00	0.00	0.00	0.0	0.0
39	7.91	Min	-12.5	-0.02	-0.00	-0.00	-0.0	-0.0
		Max	-5.5	0.00	0.00	0.00	0.0	0.0
Bar 10								
4	0.00	Min	-12.5	-0.03	-0.00	-0.00	-0.0	-0.0
		Max	-5.6	-0.00	0.00	-0.00	0.0	-0.0
	1.32	Min	-12.5	-0.03	-0.00	-0.00	-0.0	0.0

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	-5.6	-0.00	0.00	-0.00	-0.0	0.0
	3.95	Min	-12.5	-0.01	-0.00	-0.00	-0.0	0.0
		Max	-5.6	-0.00	0.00	-0.00	-0.0	0.1
	6.59	Min	-12.5	0.00	-0.00	-0.00	-0.0	0.0
		Max	-5.6	0.02	0.00	-0.00	-0.0	0.0
36	7.91	Min	-12.5	0.00	-0.00	-0.00	-0.0	-0.0
		Max	-5.6	0.03	0.00	-0.00	0.0	0.0
Bar 11								
39	0.00	Min	-19.0	-0.00	-0.00	-0.54	-0.0	-0.0
		Max	-4.3	0.00	0.00	0.45	0.0	0.0
4	2.50	Min	-19.0	-0.00	-0.00	-0.54	-0.0	-0.0
		Max	-4.3	0.00	0.00	0.45	0.0	0.0
Bar 12								
5	0.00	Min	-0.0	0.02	-6.10	-0.00	-0.0	-0.0
		Max	0.0	0.04	-5.00	0.00	-0.0	0.0
13	0.50	Min	-0.0	0.04	-10.06	-0.00	-4.0	-0.0
		Max	0.0	0.07	-8.25	0.01	-3.3	-0.0
Bar 13								
6	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	0.0	0.00	-2.32	-0.00	-0.3	-0.0
		Max	0.0	0.01	-1.63	0.00	-0.2	-0.0
15	0.50	Min	0.0	0.01	-4.64	-0.00	-1.2	-0.0
		Max	0.0	0.02	-3.25	0.00	-0.8	-0.0
Bar 14								
7	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	0.0	-0.00	-1.98	0.00	-0.2	-0.0
		Max	0.0	0.00	-1.63	0.00	-0.2	0.0
16	0.50	Min	0.0	-0.00	-3.96	0.00	-1.0	-0.0
		Max	0.0	0.00	-3.25	0.00	-0.8	0.0
Bar 15								
8	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	0.0
		Max	0.0	-0.00	-1.63	0.00	-0.2	0.0
17	0.50	Min	-0.0	-0.00	-3.96	0.00	-1.0	0.0
		Max	0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 16								
9	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.98	0.00	-0.2	0.0
		Max	-0.0	-0.00	-1.63	0.00	-0.2	0.0
19	0.50	Min	-0.0	-0.01	-3.96	0.00	-1.0	0.0
		Max	-0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 17								
20	0.00	Min	-0.1	-0.01	3.25	0.00	-1.0	-0.0
		Max	-0.0	-0.00	3.96	0.00	-0.8	-0.0
	0.25	Min	-0.0	-0.00	1.63	0.00	-0.2	-0.0
		Max	-0.0	-0.00	1.98	0.00	-0.2	-0.0
10	0.50	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
Bar 18								
21	0.00	Min	-0.1	0.00	3.25	-0.00	-1.0	0.0

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	-0.0	0.01	3.96	0.00	-0.8	0.0
	0.25	Min	-0.1	0.00	1.63	-0.00	-0.2	0.0
		Max	-0.0	0.01	1.98	0.00	-0.2	0.0
11	0.50	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
Bar 19								
22	0.00	Min	-0.4	-0.02	3.44	-0.10	-1.6	-0.1
		Max	-0.0	2.03	5.22	0.00	-1.1	1.2
	0.25	Min	-0.3	-0.03	2.15	-0.10	-0.6	-0.1
		Max	-0.0	1.01	3.24	0.00	-0.4	0.8
12	0.50	Min	-0.3	-0.04	0.85	-0.10	0.0	-0.1
		Max	-0.0	0.01	1.27	0.00	0.0	0.7
Bar 20								
23	0.00	Min	-11.4	2.56	-17.17	2.94	7.8	0.8
		Max	-3.3	5.29	-2.82	5.19	16.4	2.9
55	0.67	Min	-11.4	2.54	-22.46	2.94	-4.5	-2.1
		Max	-3.3	5.26	-7.16	5.20	12.3	0.6
Bar 21								
24	0.00	Min	3.8	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	15.8	0.00	0.00	0.00	0.0	0.0
13	2.83	Min	3.8	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	15.8	0.00	0.00	0.00	0.0	0.0
Bar 22								
15	0.00	Min	7.1	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	22.2	-0.00	0.00	0.00	0.0	0.0
23	2.83	Min	7.1	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	22.2	-0.00	0.00	0.00	0.0	0.0
Bar 23								
15	0.00	Min	-29.3	0.17	17.80	0.01	-0.0	0.7
		Max	-20.7	1.24	30.42	0.02	-0.0	2.8
	0.33	Min	-29.3	0.19	15.49	0.00	5.5	0.6
		Max	-20.7	1.26	26.47	0.01	9.5	2.4
	1.00	Min	-29.4	0.21	10.86	-0.01	14.3	0.4
		Max	-20.7	1.31	18.55	0.02	24.5	1.6
24	2.00	Min	-29.5	0.24	3.89	-0.01	21.7	0.1
		Max	-20.7	1.35	6.61	0.03	37.1	0.3
Bar 24								
25	0.00	Min	12.5	-0.00	0.00	-0.00	-0.0	-0.0
		Max	30.0	-0.00	0.00	-0.00	-0.0	-0.0
15	3.20	Min	12.5	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	30.0	0.00	0.00	-0.00	-0.0	-0.0
Bar 25								
16	0.00	Min	24.2	-0.00	0.00	0.00	-0.0	-0.0
		Max	35.9	0.00	0.00	0.00	-0.0	-0.0
24	3.20	Min	24.2	-0.00	0.00	0.00	-0.0	-0.0
		Max	35.9	0.00	0.00	0.00	-0.0	-0.0
Bar 26								
16	0.00	Min	-21.9	-3.54	17.78	-0.05	-0.0	-3.7
		Max	-6.0	-1.46	26.95	-0.01	0.0	-1.4
	1.33	Min	-22.0	-3.58	8.54	-0.07	17.5	0.6
		Max	-6.1	-1.47	12.94	-0.01	26.6	1.0
25	2.00	Min	-22.0	-3.57	3.91	-0.05	21.7	1.6
		Max	-6.1	-1.46	5.91	-0.00	32.9	3.4
Bar 27								

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
17	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.3	0.00	0.00	0.00	-0.0	-0.0
25	3.20	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.3	0.00	0.00	0.00	-0.0	-0.0
Bar 28								
26	0.00	Min	0.5	-0.00	-0.00	-0.01	-0.0	-0.0
		Max	2.5	-0.00	0.00	-0.00	-0.0	-0.0
16	3.20	Min	0.5	-0.00	-0.00	-0.01	-0.0	-0.0
		Max	2.5	0.00	-0.00	-0.00	-0.0	-0.0
Bar 29								
17	0.00	Min	-2.7	-4.31	17.79	-0.06	-0.0	-4.9
		Max	-0.1	-1.63	26.90	-0.02	-0.0	-1.8
	1.33	Min	-2.8	-4.35	8.56	-0.09	17.6	0.3
		Max	-0.3	-1.64	12.93	-0.01	26.6	0.9
26	2.00	Min	-2.9	-4.35	3.95	-0.07	21.7	1.5
		Max	-0.3	-1.64	5.95	-0.01	32.8	3.8
Bar 30								
27	0.00	Min	7.3	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	11.8	-0.00	0.00	-0.00	-0.0	-0.0
17	3.20	Min	7.3	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	11.8	0.00	0.00	-0.00	-0.0	-0.0
Bar 31								
19	0.00	Min	-0.0	-0.00	-0.00	-0.00	0.0	0.0
		Max	2.1	0.00	0.00	-0.00	0.0	0.0
26	3.20	Min	-0.0	-0.00	-0.00	-0.00	0.0	0.0
		Max	2.1	0.00	0.00	-0.00	0.0	0.0
Bar 32								
19	0.00	Min	-9.4	-5.29	17.64	-0.07	-4.7	-6.1
		Max	-6.3	-1.13	27.81	-0.01	0.7	-0.9
	1.33	Min	-9.4	-5.35	8.40	-0.10	14.9	0.6
		Max	-6.4	-1.14	13.83	-0.01	26.1	1.0
27	2.00	Min	-9.5	-5.35	3.77	-0.08	19.5	1.4
		Max	-6.4	-1.14	6.84	-0.01	32.4	4.6
Bar 33								
28	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	0.0
		Max	34.0	0.00	0.00	0.00	0.0	0.0
19	3.20	Min	-0.0	-0.00	-0.00	0.00	0.0	0.0
		Max	34.0	0.00	0.00	0.00	0.0	0.0
Bar 34								
20	0.00	Min	-0.0	-0.00	-0.00	-0.01	-0.0	0.0
		Max	3.5	0.00	-0.00	-0.00	0.0	0.0
27	3.20	Min	-0.0	-0.00	-0.00	-0.01	-0.0	0.0
		Max	3.5	0.00	0.00	-0.00	0.0	0.0
Bar 35								
20	0.00	Min	-20.8	-5.18	17.78	-0.06	-0.0	-5.4
		Max	0.7	-0.34	26.90	-0.01	0.0	0.5
	1.00	Min	-20.9	-5.22	10.86	-0.08	14.3	-0.4
		Max	0.6	-0.35	16.40	-0.01	21.7	1.0
	1.33	Min	-20.9	-5.22	8.54	-0.09	17.6	0.9
		Max	0.5	-0.36	12.90	-0.01	26.5	1.7
28	2.00	Min	-20.9	-5.20	3.89	-0.06	21.7	1.1
		Max	0.5	-0.36	5.92	-0.00	32.8	5.1
Bar 36								
21	0.00	Min	-0.0	-0.00	-0.00	-0.01	-0.0	0.0

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	-0.0	0.00	0.00	-0.00	0.0	0.0
28	3.20	Min	-0.0	-0.00	0.00	-0.01	-0.0	0.0
		Max	-0.0	0.00	0.00	-0.00	0.0	0.0
Bar 37								
29	0.00	Min	0.1	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	41.6	0.00	0.00	0.01	0.0	0.0
20	3.20	Min	0.1	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	41.6	0.00	0.00	0.01	0.0	0.0
Bar 38								
21	0.00	Min	2.9	-1.76	17.64	-0.02	-0.0	-1.9
		Max	8.1	-0.02	26.85	0.00	0.0	1.8
	1.00	Min	2.8	-1.74	10.73	-0.06	14.2	-0.1
		Max	8.0	-0.02	16.38	0.01	21.6	1.9
29	2.00	Min	2.8	-1.73	3.82	-0.04	21.5	0.3
		Max	8.0	-0.00	5.93	0.01	32.8	3.3
Bar 40								
30	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	-0.0	0.00	0.00	0.01	0.0	0.0
21	3.20	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	-0.0	0.00	0.00	0.01	0.0	0.0
Bar 41								
22	0.00	Min	-31.8	-5.41	14.05	-0.03	-2.5	-3.6
		Max	-3.3	0.70	27.30	-0.01	1.7	3.4
	0.67	Min	-31.8	-2.70	10.33	-0.05	6.6	-1.1
		Max	-3.3	0.72	20.32	-0.00	16.7	3.1
	1.33	Min	-31.8	-1.65	6.59	-0.05	12.6	-0.1
		Max	-3.4	2.35	13.34	0.00	27.5	2.6
30	2.00	Min	-31.9	-1.63	2.84	-0.06	16.2	-1.4
		Max	-3.4	5.08	6.35	0.01	33.7	2.5
Bar 42								
24	0.00	Min	-17.3	0.00	0.09	-0.24	-0.0	-0.0
		Max	-3.5	0.00	0.12	-0.07	0.0	0.0
	0.67	Min	-17.3	0.00	0.03	-0.24	0.0	-0.0
		Max	-3.5	0.00	0.04	-0.07	0.1	0.0
23	2.00	Min	-17.3	-0.00	-0.12	-0.24	-0.0	-0.0
		Max	-3.5	0.00	-0.09	-0.07	0.0	0.0
Bar 43								
25	0.00	Min	-39.5	0.00	0.12	-0.07	-0.0	0.0
		Max	-10.8	0.00	0.16	-0.03	-0.0	0.0
	0.83	Min	-39.5	-0.00	0.04	-0.07	0.1	-0.0
		Max	-10.8	0.00	0.05	-0.03	0.1	-0.0
	1.67	Min	-39.5	-0.00	-0.05	-0.07	0.1	-0.0
		Max	-10.8	-0.00	-0.04	-0.03	0.1	-0.0
24	2.50	Min	-39.5	-0.00	-0.16	-0.07	-0.0	-0.0
		Max	-10.8	-0.00	-0.12	-0.03	-0.0	0.0
Bar 44								
26	0.00	Min	-28.3	0.00	0.12	-0.00	-0.0	-0.0
		Max	5.0	0.00	0.15	0.03	0.0	0.0
	0.83	Min	-28.3	0.00	0.04	-0.00	0.1	-0.0
		Max	5.0	0.00	0.05	0.03	0.1	-0.0
	1.67	Min	-28.3	-0.00	-0.05	-0.00	0.1	-0.0
		Max	5.0	-0.00	-0.04	0.03	0.1	-0.0
25	2.50	Min	-28.3	-0.00	-0.15	-0.00	-0.0	-0.0
		Max	5.0	-0.00	-0.12	0.03	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 45								
27	0.00	Min	-33.0	0.00	0.12	0.03	0.0	-0.0
		Max	3.0	0.00	0.15	0.06	0.0	-0.0
	0.83	Min	-33.0	0.00	0.04	0.03	0.1	-0.0
		Max	3.0	0.00	0.05	0.06	0.1	-0.0
	1.67	Min	-33.0	-0.00	-0.05	0.03	0.1	-0.0
		Max	3.0	-0.00	-0.04	0.06	0.1	-0.0
26	2.50	Min	-33.0	-0.00	-0.15	0.03	0.0	-0.0
		Max	3.0	-0.00	-0.12	0.06	0.0	0.0
Bar 46								
28	0.00	Min	-32.2	0.00	0.12	-0.01	-0.0	-0.0
		Max	7.3	0.00	0.15	0.02	0.0	0.0
	0.83	Min	-32.2	-0.00	0.04	-0.01	0.1	-0.0
		Max	7.3	0.00	0.05	0.02	0.1	-0.0
	1.67	Min	-32.2	-0.00	-0.05	-0.01	0.1	-0.0
		Max	7.3	-0.00	-0.04	0.02	0.1	-0.0
27	2.50	Min	-32.2	-0.00	-0.15	-0.01	-0.0	-0.0
		Max	7.3	-0.00	-0.12	0.02	0.0	0.0
Bar 47								
29	0.00	Min	-12.3	0.00	0.12	-0.04	-0.0	0.0
		Max	6.2	0.00	0.15	-0.01	-0.0	0.0
	0.83	Min	-12.3	-0.00	0.04	-0.04	0.1	-0.0
		Max	6.2	0.00	0.05	-0.01	0.1	-0.0
	1.67	Min	-12.3	-0.00	-0.05	-0.04	0.1	-0.0
		Max	6.2	-0.00	-0.04	-0.01	0.1	-0.0
28	2.50	Min	-12.3	-0.00	-0.15	-0.04	-0.0	-0.0
		Max	6.2	-0.00	-0.12	-0.01	-0.0	0.0
Bar 48								
30	0.00	Min	-10.0	0.00	0.12	-0.04	-0.0	-0.0
		Max	2.2	0.00	0.15	0.03	0.0	0.0
	0.83	Min	-10.0	0.00	0.04	-0.04	0.1	-0.0
		Max	2.2	0.00	0.05	0.03	0.1	-0.0
	1.67	Min	-10.0	-0.00	-0.05	-0.04	0.1	-0.0
		Max	2.2	-0.00	-0.04	0.03	0.1	-0.0
29	2.50	Min	-10.0	-0.00	-0.15	-0.04	-0.0	-0.0
		Max	2.2	-0.00	-0.12	0.03	0.0	0.0
Bar 49								
31	0.00	Min	-10.5	-2.08	3.82	2.92	-11.2	-3.6
		Max	2.2	0.80	21.23	5.18	27.3	3.3
	1.03	Min	-10.6	-2.08	-2.90	2.93	5.3	-1.5
		Max	2.1	0.78	13.04	5.18	29.3	2.4
	2.58	Min	-10.6	-2.11	-13.07	2.94	14.1	1.2
		Max	2.1	0.74	0.73	5.19	18.6	1.8
23	3.10	Min	-10.6	-2.13	-17.17	2.94	7.9	0.8
		Max	2.1	0.72	-2.74	5.19	16.6	2.8
Bar 50								
24	0.00	Min	-2.8	-0.01	3.73	-0.01	21.6	0.1
		Max	0.8	0.05	6.43	0.03	36.9	0.3
	0.52	Min	-2.8	0.01	0.15	-0.01	22.7	0.1
		Max	0.8	0.06	0.32	0.03	38.7	0.3
	2.07	Min	-2.7	0.02	-18.03	-0.00	14.6	0.0
		Max	0.9	0.09	-10.56	0.03	24.9	0.1
33	3.10	Min	-2.6	0.01	-30.25	0.01	-0.0	0.0
		Max	1.0	0.08	-17.71	0.02	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 51								
25	0.00	Min	-3.3	0.50	3.72	-0.05	21.6	1.6
		Max	1.7	1.09	5.67	-0.00	32.8	3.4
	0.52	Min	-3.3	0.50	0.14	-0.03	22.7	1.3
		Max	1.7	1.10	0.27	0.01	34.3	2.9
	1.03	Min	-3.3	0.50	-5.17	-0.01	21.8	1.0
		Max	1.7	1.10	-3.41	0.02	33.1	2.3
	1.55	Min	-3.3	0.50	-10.59	-0.00	19.1	0.8
		Max	1.8	1.10	-6.98	0.03	29.0	1.7
34	3.10	Min	-3.2	0.49	-26.82	0.01	-0.0	0.0
		Max	1.9	1.05	-17.71	0.03	0.0	0.0
Bar 52								
26	0.00	Min	-0.0	0.46	3.72	-0.07	21.7	1.5
		Max	0.1	1.21	5.65	-0.01	32.8	3.8
	0.52	Min	-0.0	0.47	0.14	-0.05	22.7	1.2
		Max	0.0	1.22	0.24	-0.00	34.3	3.2
	2.07	Min	0.0	0.47	-15.99	-0.00	14.6	0.5
		Max	0.1	1.25	-10.58	0.02	22.1	1.3
35	3.10	Min	0.1	0.47	-26.80	0.00	-0.0	0.0
		Max	0.2	1.24	-17.73	0.02	0.0	0.0
Bar 53								
27	0.00	Min	-1.8	0.45	3.59	-0.09	19.5	1.4
		Max	-0.1	1.45	6.56	-0.01	32.5	4.6
	0.52	Min	-1.8	0.45	0.02	-0.06	20.9	1.2
		Max	-0.1	1.46	1.15	-0.00	34.1	3.9
	2.07	Min	-1.7	0.46	-15.90	-0.00	13.9	0.5
		Max	-0.1	1.50	-9.88	0.02	22.0	1.6
36	3.10	Min	-1.6	0.46	-26.72	0.00	-0.0	0.0
		Max	-0.0	1.49	-17.03	0.02	-0.0	0.0
Bar 54								
28	0.00	Min	0.1	0.36	3.71	-0.07	21.7	1.1
		Max	0.7	1.65	5.64	0.00	32.8	5.1
	0.52	Min	0.1	0.36	0.13	-0.04	22.7	0.9
		Max	0.7	1.65	0.23	0.01	34.3	4.3
	1.03	Min	0.1	0.36	-5.18	-0.01	21.9	0.7
		Max	0.7	1.65	-3.44	0.02	33.1	3.4
	2.07	Min	0.2	0.35	-16.00	0.01	14.6	0.4
		Max	0.7	1.65	-10.59	0.04	22.1	1.7
37	3.10	Min	0.2	0.33	-26.82	0.01	-0.0	0.0
		Max	0.8	1.61	-17.74	0.04	-0.0	0.0
Bar 55								
29	0.00	Min	-1.5	0.07	3.72	-0.04	21.4	0.3
		Max	-0.4	1.01	5.80	0.01	32.8	3.3
	0.52	Min	-1.5	0.08	0.14	-0.02	22.5	0.3
		Max	-0.4	1.03	0.39	0.01	34.3	2.8
	2.07	Min	-1.4	0.10	-15.98	0.01	14.5	0.1
		Max	-0.3	1.06	-10.49	0.02	22.1	1.1
38	3.10	Min	-1.4	0.10	-26.80	0.00	-0.0	0.0
		Max	-0.2	1.05	-17.64	0.03	0.0	0.0
Bar 56								
30	0.00	Min	-31.9	-5.71	2.71	-0.05	16.2	-1.4
		Max	-3.4	1.35	6.20	0.01	33.7	2.5
	0.52	Min	-31.9	-3.61	-0.20	-0.04	17.2	0.4
		Max	-3.4	1.37	0.79	0.01	35.1	2.4

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	1.03	Min	-31.9	-1.50	-5.41	-0.02	16.8	0.2
		Max	-3.4	1.40	-2.35	0.01	33.8	3.2
	1.55	Min	-31.9	0.36	-10.88	-0.01	14.8	0.1
		Max	-3.4	1.67	-5.23	0.01	29.6	2.9
	2.58	Min	-31.8	0.37	-21.79	0.00	6.4	-1.2
		Max	-3.3	5.89	-10.98	0.03	12.7	-0.2
39	3.10	Min	-31.8	0.37	-27.21	0.01	0.0	-4.6
		Max	-3.3	7.97	-13.86	0.05	0.0	-0.5
Bar 67								
32	0.00	Min	-4.7	-2.24	10.71	-9.43	-36.2	-0.5
		Max	0.8	7.07	23.47	26.84	-15.6	7.1
	0.75	Min	-4.6	-2.20	7.27	-9.43	-19.1	1.1
		Max	0.8	7.07	22.35	26.84	-8.8	2.0
31	1.50	Min	-4.6	-2.17	3.82	-9.43	-5.3	-3.6
		Max	0.8	7.06	21.23	26.83	-1.9	3.3
Bar 68								
33	0.00	Min	-4.7	-2.25	10.71	-9.43	-47.9	-1.6
		Max	0.8	7.08	23.46	26.85	-21.0	10.7
32	0.50	Min	-4.7	-2.24	10.71	-9.43	-36.2	-0.5
		Max	0.8	7.07	23.47	26.84	-15.6	7.1
Bar 69								
33	0.00	Min	-21.5	-3.62	24.73	-0.92	-95.0	-10.5
		Max	-4.2	1.63	51.96	0.50	-47.1	1.4
	2.08	Min	-21.4	-3.64	22.18	-0.90	-1.7	-3.0
		Max	-4.1	1.53	41.86	0.39	6.3	-1.8
34	2.50	Min	-21.4	-3.64	21.67	-0.91	8.2	-3.4
		Max	-4.1	1.51	39.83	0.37	22.6	-0.7
Bar 70								
34	0.00	Min	-20.4	-0.61	3.79	-0.11	8.0	-3.4
		Max	-3.6	-0.17	13.12	-0.03	22.4	-0.7
35	2.50	Min	-20.4	-0.75	-0.40	-0.16	17.7	-1.6
		Max	-3.6	-0.18	3.61	-0.03	38.0	-0.1
Bar 71								
35	0.00	Min	-19.1	-1.02	-26.78	-0.16	17.6	-1.6
		Max	-3.2	-0.20	-14.49	-0.03	37.7	-0.1
	2.08	Min	-19.1	-1.06	-36.16	-0.05	-29.3	0.1
		Max	-3.2	-0.19	-16.41	-0.02	-13.4	0.6
36	2.50	Min	-19.1	-1.06	-38.02	-0.03	-44.8	0.3
		Max	-3.2	-0.19	-16.79	0.02	-20.3	1.0
Bar 72								
36	0.00	Min	-33.1	-0.47	25.30	-0.05	-103.6	-0.5
		Max	-5.3	-0.02	56.65	0.00	-44.8	0.6
	1.67	Min	-32.9	-0.67	23.77	-0.20	-16.3	0.1
		Max	-5.3	-0.03	49.25	-0.02	-2.9	0.8
37	2.50	Min	-32.9	-0.76	23.01	-0.28	14.3	0.4
		Max	-5.3	-0.03	45.50	-0.02	25.4	1.3
Bar 73								
37	0.00	Min	-31.4	-1.46	5.25	-0.45	14.1	0.4
		Max	-4.9	-0.19	18.68	-0.06	25.1	1.3
	1.67	Min	-31.4	-1.54	3.71	-0.48	23.0	0.8
		Max	-4.9	-0.19	11.11	-0.06	48.5	3.9
38	2.50	Min	-31.4	-1.54	2.93	-0.47	25.8	0.9
		Max	-4.9	-0.19	7.31	-0.06	56.2	5.4
Bar 74								

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
38	0.00	Min	-30.5	-0.08	-23.17	-0.09	25.7	0.9
		Max	-4.7	0.45	-11.08	0.06	55.9	5.4
	0.83	Min	-30.4	-0.07	-24.84	-0.05	13.1	0.8
		Max	-4.7	0.46	-13.84	0.06	38.2	5.2
39	2.50	Min	-30.4	-0.05	-32.35	-0.05	-24.8	0.4
		Max	-4.7	0.45	-15.38	0.10	3.5	4.9
Bar 75								
18	0.00	Min	-86.2	-1.55	-30.21	-0.38	17.2	-3.8
		Max	-33.8	-0.48	-6.88	-0.04	76.0	-1.2
43	2.50	Min	-89.0	-1.63	-30.47	0.00	0.0	0.0
		Max	-36.0	-0.49	-6.90	0.06	0.0	0.2
Bar 76								
22	0.00	Min	-78.5	-0.06	7.72	-0.02	-52.5	-0.2
		Max	-40.4	0.01	20.90	0.18	-19.4	0.0
	1.25	Min	-79.9	-0.03	7.75	-0.02	-26.3	-0.0
		Max	-41.6	0.01	21.03	0.15	-9.7	0.0
44	2.50	Min	-81.3	-0.00	7.75	-0.02	-0.0	-0.0
		Max	-42.7	0.00	21.07	0.12	0.0	0.0
Bar 77								
22	0.00	Min	1.1	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	43.1	0.10	0.00	0.00	0.0	0.0
	0.95	Min	1.1	-0.01	-0.00	-0.00	-0.0	-0.0
		Max	43.1	0.00	0.00	0.00	0.0	0.0
	4.73	Min	1.1	-0.02	-0.00	-0.00	-0.0	-0.0
		Max	43.1	0.00	0.00	0.00	-0.0	0.0
47	5.68	Min	1.1	-0.05	-0.00	-0.00	-0.0	-0.0
		Max	43.1	0.00	0.00	0.00	0.0	0.0
Bar 78								
39	0.00	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	-0.0	0.00	0.00	-0.00	-0.0	0.0
44	5.68	Min	-0.0	-0.00	-0.00	-0.00	-0.0	0.0
		Max	-0.0	0.00	0.00	-0.00	0.0	0.0
Bar 79								
33	0.00	Min	-117.2	-10.61	-28.33	-0.69	8.1	-27.1
		Max	-72.6	4.38	-3.22	-0.03	71.4	11.2
	0.83	Min	-118.1	-10.82	-28.51	-0.54	5.4	-18.2
		Max	-73.4	4.45	-3.24	-0.02	47.7	7.5
45	2.50	Min	-119.9	-11.00	-28.67	-0.01	-0.0	-0.0
		Max	-74.9	4.50	-3.25	0.04	0.0	0.0
Bar 80								
36	0.00	Min	-180.0	-0.02	-27.08	-0.45	19.2	-0.1
		Max	-80.1	0.02	-7.63	0.00	68.5	0.0
	0.42	Min	-180.4	-0.02	-27.22	-0.36	16.1	-0.1
		Max	-80.5	0.00	-7.66	0.01	57.2	-0.0
	0.83	Min	-180.9	-0.02	-27.33	-0.27	12.9	-0.0
		Max	-80.9	-0.01	-7.69	0.01	45.8	-0.0
	1.67	Min	-181.8	-0.05	-27.49	-0.09	6.4	-0.0
		Max	-81.6	-0.01	-7.72	0.01	22.9	-0.0
46	2.50	Min	-182.7	-0.07	-27.55	0.01	0.0	0.0
		Max	-82.4	-0.01	-7.73	0.09	0.0	0.0
Bar 81								
39	0.00	Min	-81.1	-3.25	1.35	-0.03	-26.8	-0.0
		Max	-36.3	-0.13	10.68	0.07	-3.4	0.0
47	2.50	Min	-83.9	-3.16	1.35	-0.03	-0.0	0.3

Extremal member forces (in system of principal axis)

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	-38.6	-0.13	10.74	0.02	-0.0	8.0
Bar 82								
40	0.00	Min	-130.7	-18.72	3.92	0.02	-78.2	-42.8
		Max	-81.0	-2.21	34.73	0.85	-8.8	-5.0
	1.12	Min	-132.0	-19.13	3.95	0.02	-39.2	-21.5
		Max	-81.9	-2.25	34.96	0.62	-4.4	-2.5
42	2.24	Min	-133.2	-19.25	3.96	0.00	0.0	-0.0
		Max	-82.9	-2.26	35.05	0.11	0.0	0.0
Bar 88								
42	0.00	Min	-304.1	-0.00	-0.00	0.00	0.0	0.0
		Max	-123.9	0.00	0.00	0.00	0.0	0.0
48	5.50	Min	-306.9	-0.00	-0.00	0.00	0.0	0.0
		Max	-126.2	0.00	0.00	0.00	0.0	0.0
Bar 90								
44	0.00	Min	-272.8	-0.05	0.00	-0.00	-0.0	-0.5
		Max	-88.2	0.02	0.00	-0.00	-0.0	-0.0
	0.92	Min	-273.2	-0.07	0.00	-0.00	-0.0	-0.5
		Max	-88.6	-0.01	0.00	-0.00	-0.0	-0.0
	2.75	Min	-274.2	-0.10	0.00	-0.00	-0.0	-0.4
		Max	-89.4	-0.01	0.00	-0.00	-0.0	-0.0
51	5.50	Min	-275.6	-0.15	0.00	0.00	0.0	0.0
		Max	-90.6	-0.01	0.00	0.00	0.0	0.0
Bar 91								
45	0.00	Min	-393.7	-0.00	0.00	-0.00	-0.0	-0.0
		Max	-139.6	0.00	0.00	0.00	0.0	0.0
	2.75	Min	-395.3	-0.00	-0.00	-0.00	0.0	-0.0
		Max	-141.0	0.00	0.00	0.00	0.0	0.0
52	5.50	Min	-397.0	-0.00	-0.00	0.00	0.0	0.0
		Max	-142.3	0.00	-0.00	0.00	0.0	0.0
Bar 92								
46	0.00	Min	-1087.4	-0.00	0.00	0.00	0.0	0.0
		Max	-296.5	-0.00	0.00	0.00	0.0	0.0
53	5.50	Min	-1092.4	-0.00	-0.00	0.00	0.0	0.0
		Max	-300.6	-0.00	-0.00	0.00	0.0	0.0
Bar 93								
47	0.00	Min	-349.0	-0.00	-0.00	0.00	0.0	0.0
		Max	-91.0	0.00	0.00	0.00	0.0	0.0
54	5.50	Min	-351.8	0.00	0.00	0.00	0.0	0.0
		Max	-93.3	0.00	0.00	0.00	0.0	0.0
Bar 95								
55	0.00	Min	-11.4	2.52	-27.34	2.94	-4.5	-2.1
		Max	-3.3	5.23	-11.16	5.20	12.3	0.6
56	0.67	Min	-11.4	2.50	-32.63	2.94	-22.6	-5.3
		Max	-3.3	5.18	-15.50	5.21	1.4	-1.2
Bar 96								
56	0.00	Min	-11.4	2.50	-32.63	2.94	-22.6	-5.3
		Max	-3.3	5.18	-15.50	5.21	1.4	-1.2
13	0.67	Min	-11.4	2.47	-37.90	2.93	-46.1	-8.7
		Max	-3.4	5.12	-19.83	5.23	-10.6	-2.9
Bar 97								
44	0.00	Min	0.0	-0.00	0.07	-0.01	-0.6	-0.0
		Max	0.0	0.00	1.70	-0.00	-0.1	0.0
	2.55	Min	0.0	-0.00	0.07	-0.01	0.1	-0.0
		Max	0.0	0.00	1.70	-0.00	3.7	0.0

Extremal member forces (in system of principal axis)

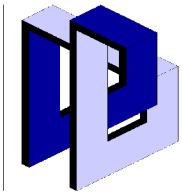
Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
47	5.10	Min	-0.0	-0.00	0.07	-0.01	0.3	0.0
		Max	0.0	0.00	1.70	-0.00	8.0	0.0
Bar 98								
29	0.00	Min	4.8	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	45.0	0.00	-0.00	0.00	0.0	0.0
39	3.98	Min	4.8	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	45.0	0.00	-0.00	0.00	0.0	0.0
Bar 99								
38	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	-0.0	0.00	0.00	0.00	0.0	-0.0
30	3.98	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	-0.0	0.00	0.00	0.00	0.0	-0.0
Bar 100								
23	0.00	Min	5.3	0.00	-0.00	0.00	0.0	0.0
		Max	11.6	0.00	0.00	0.01	0.0	0.0
33	3.69	Min	5.3	-0.00	0.00	0.00	0.0	0.0
		Max	11.6	0.00	0.00	0.01	0.0	0.0
Bar 101								
24	0.00	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	4.7	0.00	0.00	-0.00	-0.0	-0.0
31	3.69	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	4.7	0.00	0.00	-0.00	-0.0	-0.0
Minimum			-1092.4	-19.25	-452.46	-9.43	-671.7	-42.8
Maximum			82.2	11.14	623.75	41.97	381.0	11.2

Maximum utilization

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	U
-	m	-
Traverse 1: Bar 57		
13	0.00	0.388
	0.25	0.388
	0.75	0.397
14	1.50	0.446
Traverse 1: Bar 58		
14	1.50	0.446
15	2.00	0.482
Traverse 1: Bar 59		
15	2.00	0.508
	2.35	0.559
40	2.70	0.647
Traverse 1: Bar 60		
40	2.70	0.381
16	4.50	0.093
Traverse 1: Bar 61		
16	4.50	0.151
	5.33	0.083
	5.75	0.068
17	7.00	0.123
Traverse 1: Bar 62		
17	7.00	0.143
	8.00	0.077
	8.33	0.077
18	9.00	0.130
Traverse 1: Bar 63		
18	9.00	0.323
19	9.50	0.293
Traverse 1: Bar 64		
19	9.50	0.192
	10.33	0.124
	10.75	0.109
20	12.00	0.188
Traverse 1: Bar 65		
20	12.00	0.185
	13.25	0.192
21	14.50	0.195
Traverse 1: Bar 66		
21	14.50	0.200
	15.75	0.115
	16.58	0.153
22	17.00	0.190
Traverse 2: Bar 94		
50	0.00	0.543
	0.25	0.542
	0.33	0.551
49	0.50	0.699
Traverse 2: Bar 89		
49	0.50	0.735
43	6.00	0.188
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.092
Traverse 3: Bar 84		
42	0.70	0.288
	1.75	0.221
	4.90	0.265
	5.95	0.402
43	7.00	0.822
Traverse 3: Bar 85		
43	7.00	0.835
	8.33	0.455
	9.67	0.384
	11.00	0.608
	12.33	0.626
	13.67	0.436
44	15.00	0.423
Traverse 4: Bar 87		
47	0.00	0.419
	1.25	0.375
	2.50	0.518
	5.00	0.323
	6.25	0.508
46	7.50	0.960
Traverse 4: Bar 86		
46	7.50	0.960
	8.75	0.508
	10.00	0.323
	12.50	0.518
	13.75	0.375
45	15.00	0.419
Bar 1		
1	0.00	0.083
	0.93	0.104
	1.87	0.115
	2.80	0.118
	3.73	0.114
	4.67	0.103
4	5.60	0.083
Bar 2		
2	0.00	0.031
	1.25	0.065



Verification 2: Summary

Maximum utilization

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	U
-	m	-
	2.50	0.076
	3.75	0.073
	6.25	0.046
3	7.50	0.089
Bar 3		
3	0.00	0.091
	1.25	0.046
	3.75	0.071
	5.00	0.073
	6.25	0.065
4	7.50	0.038
Bar 4		
12	0.00	0.030
	2.08	0.021
1	2.50	0.021
Bar 5		
12	0.00	0.006
	2.04	0.004
	5.11	0.005
4	6.13	0.008
Bar 6		
1	0.00	0.002
	2.04	0.002
39	6.13	0.003
Bar 7		
2	0.00	0.074
33	2.50	0.074
Bar 8		
3	0.00	0.125
36	2.50	0.126
Bar 9		
3	0.00	0.143
	2.64	0.152
	5.27	0.164
	6.59	0.165
39	7.91	0.160
Bar 10		
4	0.00	0.159
	2.64	0.135
	3.95	0.130
	5.27	0.132
36	7.91	0.153
Bar 11		
39	0.00	0.071
4	2.50	0.071
Bar 12		
5	0.00	0.014
	0.17	0.018
13	0.50	0.039
Bar 13		
6	0.00	0.000
15	0.50	0.063
Bar 14		
7	0.00	0.000
16	0.50	0.058
Bar 15		
8	0.00	0.000
17	0.50	0.058
Bar 16		
9	0.00	0.000
19	0.50	0.058
Bar 17		
20	0.00	0.058
10	0.50	0.000
Bar 18		
21	0.00	0.058
11	0.50	0.000
Bar 19		
22	0.00	0.122
	0.25	0.092
12	0.50	0.076
Bar 20		
23	0.00	0.190
55	0.67	0.131
Bar 21		
24	0.00	0.076
13	2.83	0.076
Bar 22		
15	0.00	0.106
23	2.83	0.106
Bar 23		
15	0.00	0.195
	0.67	0.291
24	2.00	0.391
Bar 24		
25	0.00	0.141
15	3.20	0.141
Bar 25		
16	0.00	0.167
24	3.20	0.167
Bar 26		
16	0.00	0.186
25	2.00	0.380
Bar 27		
17	0.00	0.004
25	3.20	0.004
Bar 28		
26	0.00	0.013
16	3.20	0.013
Bar 29		
17	0.00	0.204
26	2.00	0.382
Bar 30		
27	0.00	0.057
17	3.20	0.057
Bar 31		
19	0.00	0.010
26	3.20	0.010
Bar 32		
19	0.00	0.236
	1.00	0.287
27	2.00	0.391
Bar 33		
28	0.00	0.159
19	3.20	0.159
Bar 34		
20	0.00	0.018
27	3.20	0.018
Bar 35		
20	0.00	0.225
	1.00	0.286
28	2.00	0.401
Bar 36		
21	0.00	0.021
28	3.20	0.021
Bar 37		
29	0.00	0.192
20	3.20	0.192
Bar 38		
21	0.00	0.171
	1.00	0.295
29	2.00	0.367
Bar 40		
30	0.00	0.019
21	3.20	0.019
Bar 41		
22	0.00	0.205
	1.00	0.329
30	2.00	0.378
Bar 42		
24	0.00	0.094
	0.33	0.098
	1.00	0.101
	1.67	0.098
23	2.00	0.094
Bar 43		
25	0.00	0.143
	0.83	0.154
	1.25	0.155
	1.67	0.154
24	2.50	0.143
Bar 44		
26	0.00	0.121
	0.83	0.127
	1.25	0.128
	1.67	0.127
25	2.50	0.121
Bar 45		
27	0.00	0.130
	0.83	0.137
	1.25	0.137
	1.67	0.137
26	2.50	0.130
Bar 46		
28	0.00	0.129
	0.42	0.132
	1.25	0.135
	2.08	0.132
27	2.50	0.129
Bar 47		
29	0.00	0.080
	0.42	0.085
	0.83	0.088
	1.25	0.089
	1.67	0.088
	2.08	0.085
28	2.50	0.080
Bar 48		
30	0.00	0.072
	0.83	0.081
	1.25	0.083
	1.67	0.081
29	2.50	0.072
Bar 49		
31	0.00	0.288
	1.03	0.297
	1.55	0.283
	2.58	0.205
23	3.10	0.190
Bar 50		
24	0.00	0.385
	0.52	0.402
	1.03	0.387
	2.58	0.221
33	3.10	0.193
Bar 51		
25	0.00	0.376
	0.52	0.382
	1.55	0.336
34	3.10	0.172
Bar 52		
26	0.00	0.381
	0.52	0.387
	1.55	0.340
35	3.10	0.171
Bar 53		
27	0.00	0.389
	0.52	0.391
	1.55	0.345
36	3.10	0.171
Bar 54		
28	0.00	0.395
	0.52	0.397
	1.55	0.347
37	3.10	0.173
Bar 55		

Maximum utilization

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	U
-	m	-
29	0.00	0.370
	0.52	0.376
	1.55	0.334
38	3.10	0.171
Bar 56		
30	0.00	0.378
	0.52	0.383
	1.55	0.348
39	3.10	0.218
Bar 67		
32	0.00	0.225
	0.25	0.221
31	1.50	0.213
Bar 68		
33	0.00	0.234
32	0.50	0.225
Bar 69		
33	0.00	0.326
	1.25	0.134
	2.08	0.091
34	2.50	0.100
Bar 70		
34	0.00	0.140
	1.25	0.158
35	2.50	0.165
Bar 71		
35	0.00	0.164
	0.83	0.108
	1.25	0.101
	1.67	0.105
36	2.50	0.172
Bar 72		
36	0.00	0.360
	1.25	0.160
37	2.50	0.146
Bar 73		
37	0.00	0.136
	0.83	0.170
38	2.50	0.215
Bar 74		
38	0.00	0.211
	2.08	0.129
39	2.50	0.128
Bar 75		
18	0.00	0.277
	0.83	0.195
43	2.50	0.093
Bar 76		
22	0.00	0.194
	1.67	0.126
44	2.50	0.072
Bar 77		
22	0.00	0.464
	0.95	0.459
	1.89	0.459
	4.73	0.459
47	5.68	0.461
Bar 78		
39	0.00	0.001
	0.95	0.001
44	5.68	0.002
Bar 79		
33	0.00	0.361
45	2.50	0.088
Bar 80		
36	0.00	0.280
46	2.50	0.108
Bar 81		
39	0.00	0.145
	0.42	0.136
	0.83	0.134
47	2.50	0.134
Bar 82		
40	0.00	0.453
42	2.24	0.109
Bar 88		
42	0.00	0.280
48	5.50	0.282
Bar 90		
44	0.00	0.273
	0.92	0.274
	2.75	0.272
51	5.50	0.267
Bar 91		
45	0.00	0.298
52	5.50	0.299
Bar 92		
46	0.00	0.481
53	5.50	0.483
Bar 93		
47	0.00	0.300
54	5.50	0.302
Bar 95		
55	0.00	0.132
	0.11	0.131
56	0.67	0.283
Bar 96		
56	0.00	0.283
13	0.67	0.521
Bar 97		
44	0.00	0.028
	0.85	0.031
	2.55	0.064
47	5.10	0.094
Bar 98		
29	0.00	0.207
39	3.98	0.207
Bar 99		
38	0.00	0.006
30	3.98	0.006
Bar 100		
23	0.00	0.056
33	3.69	0.056
Bar 101		
24	0.00	0.023
31	3.69	0.023
Minimum		0.000
Maximum		0.960

VERIFICATION 3: GROUP OF LOAD SPECTRA 1: VERPLAATSING

Extremal reactions of supported nodes (incl. γ_F)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing

node	type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
-		kN	kN	kN	kNm	kNm	kNm
2	Min	-0.06	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.04	0.00	0.00	0.00	0.00	0.00
3	Min	-0.19	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.03	0.00	0.00	0.00	0.00	-0.00
42	Min	2.11	-0.00	-0.00	-0.00	-0.00	0.00
	Max	13.05	0.00	0.00	0.00	0.00	0.00
43	Min	0.41	-0.00	-0.00	-0.00	-0.00	0.00
	Max	0.87	0.00	0.00	0.00	0.00	0.00
44	Min	-0.14	-12.98	-0.00	-0.00	-0.00	0.00
	Max	-0.01	48.60	0.00	0.00	0.00	0.00
45	Min	-3.80	-0.00	-0.00	-0.00	-0.00	0.00
	Max	6.06	0.00	0.00	0.00	0.00	0.00

Extremal reactions of supported nodes (incl. γ_F)

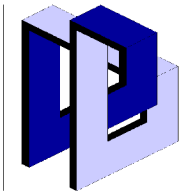
Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing

node	type	AP_r kN	AP_s kN	AP_t kN	AM_r kNm	AM_s kNm	AM_t kNm
46	Min	-0.77	-0.00	-0.00	-0.00	-0.00	0.00
	Max	-0.03	0.00	0.00	0.00	0.00	0.00
47	Min	1.21	4.61	-0.00	-0.00	-0.00	-0.00
	Max	30.74	36.31	0.00	0.00	0.00	0.00
48	Min	-0.00	-0.01	-240.31	0.00	0.00	0.00
	Max	-0.00	0.00	-128.65	0.00	0.00	0.00
49	Min	-0.00	-43.72	0.00	-0.00	0.00	0.00
	Max	0.00	-16.02	0.00	0.00	0.00	0.00
50	Min	0.00	0.00	-481.10	-0.00	0.00	0.00
	Max	0.00	0.00	-176.62	0.00	0.00	0.00
51	Min	0.01	-0.00	-213.18	0.00	0.00	0.00
	Max	0.07	-0.00	-92.13	0.00	0.00	0.00
52	Min	-0.00	-0.01	-307.51	0.00	0.00	0.00
	Max	0.00	-0.00	-141.08	0.00	0.00	0.00
53	Min	0.00	-0.01	-838.13	0.00	0.00	0.00
	Max	0.00	-0.00	-300.58	0.00	0.00	0.00
54	Min	-0.00	-0.00	-271.21	0.00	0.00	0.00
	Max	-0.00	-0.00	-97.56	0.00	0.00	0.00
Minimum		**-3.80**	**-43.72**	**-838.12**	**-0.00**	**-0.00**	**-0.00**
Maximum		**30.74**	**48.60**	**0.00**	**0.00**	**0.00**	**0.00**

Maximum utilization

Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing

node	s m	U -
Traverse 1: Bar 57		
13	0.00	0.292
	0.25	0.291
	0.75	0.299
14	1.50	0.341
Traverse 1: Bar 58		
14	1.50	0.341
15	2.00	0.372
Traverse 1: Bar 59		
15	2.00	0.391
	2.47	0.453
40	2.70	0.502
Traverse 1: Bar 60		
40	2.70	0.305
16	4.50	0.076
Traverse 1: Bar 61		
16	4.50	0.133
	5.33	0.073
	5.75	0.056
17	7.00	0.110
Traverse 1: Bar 62		
17	7.00	0.128
	8.00	0.066
	8.33	0.070
18	9.00	0.118
Traverse 1: Bar 63		
18	9.00	0.255
19	9.50	0.226
Traverse 1: Bar 64		
19	9.50	0.173
	10.75	0.088
20	12.00	0.169
Traverse 1: Bar 65		
20	12.00	0.166
	13.25	0.172
21	14.50	0.175
Traverse 1: Bar 66		
21	14.50	0.179
	15.75	0.093
22	17.00	0.165
Traverse 2: Bar 94		
50	0.00	0.419
	0.25	0.418
	0.33	0.425
49	0.50	0.539
Traverse 2: Bar 89		
49	0.50	0.566
43	6.00	0.165
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.076
Traverse 3: Bar 84		
42	0.70	0.220
	1.75	0.193
	4.90	0.202
	5.95	0.307
43	7.00	0.626
Traverse 3: Bar 85		
43	7.00	0.636
	8.33	0.348
	9.67	0.294
	11.00	0.464
	12.33	0.478
	13.67	0.333
44	15.00	0.324
Traverse 4: Bar 87		
47	0.00	0.320
	1.25	0.287
	2.50	0.396
	5.00	0.246
	6.25	0.387
46	7.50	0.732
Traverse 4: Bar 86		
46	7.50	0.732
	8.75	0.387
	10.00	0.246
	12.50	0.395
	13.75	0.286
45	15.00	0.321
Bar 1		
1	0.00	0.071
	0.93	0.091
	1.87	0.101
	2.80	0.103
	3.73	0.100
	4.67	0.089
4	5.60	0.068
Bar 2		
2	0.00	0.026
	1.25	0.057
	2.50	0.066
	3.75	0.064
	6.25	0.040
3	7.50	0.078
Bar 3		
3	0.00	0.079
	1.25	0.040
	3.75	0.062
	5.00	0.064
	6.25	0.056
4	7.50	0.030
Bar 4		
12	0.00	0.027
1	2.50	0.018
Bar 5		
12	0.00	0.004
	2.04	0.003
	5.11	0.003



Maximum utilization

Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing

node	s	U
-	m	-
4	6.13	0.005
Bar 6		
1	0.00	0.002
	2.04	0.001
39	6.13	0.002
Bar 7		
2	0.00	0.065
33	2.50	0.065
Bar 8		
3	0.00	0.110
36	2.50	0.111
Bar 9		
3	0.00	0.126
	5.27	0.143
	6.59	0.145
39	7.91	0.143
Bar 10		
4	0.00	0.138
	2.64	0.124
	5.27	0.119
36	7.91	0.128
Bar 11		
39	0.00	0.062
4	2.50	0.062
Bar 12		
5	0.00	0.011
	0.17	0.016
13	0.50	0.032
Bar 13		
6	0.00	0.000
15	0.50	0.057
Bar 14		
7	0.00	0.000
16	0.50	0.053
Bar 15		
8	0.00	0.000
17	0.50	0.053
Bar 16		
9	0.00	0.000
19	0.50	0.053
Bar 17		
20	0.00	0.053
10	0.50	0.000
Bar 18		
21	0.00	0.053
11	0.50	0.000
Bar 19		
22	0.00	0.106
	0.25	0.080
12	0.50	0.065
Bar 20		
23	0.00	0.156
55	0.67	0.108
Bar 21		
24	0.00	0.063
13	2.83	0.063
Bar 22		
15	0.00	0.081
23	2.83	0.081
Bar 23		
15	0.00	0.155
	0.67	0.259
24	2.00	0.329
Bar 24		
25	0.00	0.115
15	3.20	0.115
Bar 25		
16	0.00	0.136
24	3.20	0.136
Bar 26		
16	0.00	0.164
25	2.00	0.340
Bar 27		
17	0.00	0.003
25	3.20	0.003
Bar 28		
26	0.00	0.010
16	3.20	0.010
Bar 29		
17	0.00	0.178
26	2.00	0.340
Bar 30		
27	0.00	0.046
17	3.20	0.046
Bar 31		
19	0.00	0.009
26	3.20	0.009
Bar 32		
19	0.00	0.207
	1.00	0.255
27	2.00	0.347
Bar 33		
28	0.00	0.116
19	3.20	0.116
Bar 34		
20	0.00	0.015
27	3.20	0.015
Bar 35		
20	0.00	0.191
	1.00	0.257
28	2.00	0.356
Bar 36		
21	0.00	0.015
28	3.20	0.015
Bar 37		
29	0.00	0.143
20	3.20	0.143
Bar 38		
21	0.00	0.137
	1.00	0.263
29	2.00	0.327
Bar 40		
30	0.00	0.014
21	3.20	0.014
Bar 41		
22	0.00	0.180
	1.00	0.289
30	2.00	0.335
Bar 42		
24	0.00	0.081
	0.33	0.084
	1.00	0.087
	1.67	0.084
23	2.00	0.081
Bar 43		
25	0.00	0.124
	0.42	0.128
	1.25	0.131
	2.08	0.128
24	2.50	0.124
Bar 44		
26	0.00	0.101
	0.42	0.106
	1.25	0.109
	2.08	0.106
25	2.50	0.101
Bar 45		
27	0.00	0.110
	0.42	0.114
	1.25	0.117
	2.08	0.114
26	2.50	0.110
Bar 46		
28	0.00	0.106
	0.42	0.110
	1.25	0.113
	2.08	0.110
27	2.50	0.106
Bar 47		
29	0.00	0.064
	0.42	0.070
	0.83	0.074
	1.25	0.075
	1.67	0.074
	2.08	0.070
28	2.50	0.064
Bar 48		
30	0.00	0.060
	0.42	0.067
	0.83	0.070
	1.25	0.072
	1.67	0.070
	2.08	0.067
29	2.50	0.060
Bar 49		
31	0.00	0.187
	0.52	0.210
	1.03	0.220
	1.55	0.215
	2.07	0.197
	2.58	0.166
23	3.10	0.156
Bar 50		
24	0.00	0.319
	0.52	0.326
	1.55	0.299
33	3.10	0.154
Bar 51		
25	0.00	0.336
	0.52	0.336
	1.55	0.301
34	3.10	0.138
Bar 52		
26	0.00	0.340
	1.55	0.304
35	3.10	0.137
Bar 53		
27	0.00	0.345
	1.55	0.307
36	3.10	0.136
Bar 54		
28	0.00	0.351
	1.55	0.310
37	3.10	0.139
Bar 55		
29	0.00	0.330
	0.52	0.331
	1.55	0.298
38	3.10	0.137
Bar 56		
30	0.00	0.335
	1.55	0.309
39	3.10	0.189
Bar 67		
32	0.00	0.163
	0.75	0.150
31	1.50	0.144
Bar 68		
33	0.00	0.183
	0.17	0.170
32	0.50	0.163
Bar 69		
33	0.00	0.260
	1.25	0.107
	2.08	0.081
34	2.50	0.085

Maximum utilization

Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing

node	s	U
-	m	-
Bar 70		
34	0.00	0.123
	1.25	0.139
35	2.50	0.145
Bar 71		
35	0.00	0.144
	0.83	0.094
	1.25	0.080
	1.67	0.094
36	2.50	0.153
Bar 72		
36	0.00	0.281
	1.25	0.138
	2.08	0.118
37	2.50	0.122
Bar 73		
37	0.00	0.121
	1.25	0.162
38	2.50	0.186
Bar 74		
38	0.00	0.185
	2.08	0.108
39	2.50	0.114
Bar 75		
18	0.00	0.221
43	2.50	0.074
Bar 76		
22	0.00	0.171
	1.67	0.111
44	2.50	0.064
Bar 77		
22	0.00	0.341
	0.95	0.337
	1.89	0.337
	4.73	0.337
47	5.68	0.338
Bar 78		
39	0.00	0.001
	0.95	0.001
44	5.68	0.001
Bar 79		
33	0.00	0.261
	1.67	0.162
45	2.50	0.078
Bar 80		
36	0.00	0.213
46	2.50	0.096
Bar 81		
39	0.00	0.129
	0.42	0.121
47	2.50	0.116
Bar 82		
40	0.00	0.341
42	2.24	0.084
Bar 88		
42	0.00	0.248
48	5.50	0.249
Bar 90		
44	0.00	0.241
	2.75	0.239
51	5.50	0.235
Bar 91		
45	0.00	0.262
52	5.50	0.264
Bar 92		
46	0.00	0.369
53	5.50	0.371
Bar 93		
47	0.00	0.264
54	5.50	0.265
Bar 95		
55	0.00	0.108
	0.11	0.102
	0.22	0.109
56	0.67	0.207
Bar 96		
56	0.00	0.207
13	0.67	0.393
Bar 97		
44	0.00	0.024
	0.85	0.027
	2.55	0.055
47	5.10	0.080
Bar 98		
29	0.00	0.156
39	3.98	0.156
Bar 99		
38	0.00	0.004
30	3.98	0.004
Bar 100		
23	0.00	0.042
33	3.69	0.042
Bar 101		
24	0.00	0.019
31	3.69	0.019
Minimum		0.000
Maximum		0.732

VERIFICATION 3: SUMMARY

Extremal reactions of supported nodes (incl. γ_F)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
	-	kN	kN	kN	kNm	kNm	kNm
2	Min	-0.06	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.04	0.00	0.00	0.00	0.00	0.00
3	Min	-0.19	-0.00	-0.00	-0.00	0.00	-0.00
	Max	0.03	0.00	0.00	0.00	0.00	-0.00
42	Min	2.11	-0.00	-0.00	-0.00	-0.00	0.00
	Max	13.05	0.00	0.00	0.00	0.00	0.00
43	Min	0.41	-0.00	-0.00	-0.00	-0.00	0.00
	Max	0.87	0.00	0.00	0.00	0.00	0.00
44	Min	-0.14	-12.98	-0.00	-0.00	-0.00	0.00
	Max	-0.01	48.60	0.00	0.00	0.00	0.00
45	Min	-3.80	-0.00	-0.00	-0.00	-0.00	0.00
	Max	6.06	0.00	0.00	0.00	0.00	0.00
46	Min	-0.77	-0.00	-0.00	-0.00	-0.00	0.00
	Max	-0.03	0.00	0.00	0.00	0.00	0.00
47	Min	1.21	4.61	-0.00	-0.00	-0.00	-0.00
	Max	30.74	36.31	0.00	0.00	0.00	0.00
48	Min	-0.00	-0.01	-240.31	0.00	0.00	0.00

Extremal reactions of supported nodes (incl. γ_F)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	type	AP_r	AP_s	AP_t	AM_r	AM_s	AM_t
-		kN	kN	kN	kNm	kNm	kNm
	Max	-0.00	0.00	-128.65	0.00	0.00	0.00
49	Min	-0.00	-43.72	0.00	-0.00	0.00	0.00
	Max	0.00	-16.02	0.00	0.00	0.00	0.00
50	Min	0.00	0.00	-481.10	-0.00	0.00	0.00
	Max	0.00	0.00	-176.62	0.00	0.00	0.00
51	Min	0.01	-0.00	-213.18	0.00	0.00	0.00
	Max	0.07	-0.00	-92.13	0.00	0.00	0.00
52	Min	-0.00	-0.01	-307.51	0.00	0.00	0.00
	Max	0.00	-0.00	-141.08	0.00	0.00	0.00
53	Min	0.00	-0.01	-838.13	0.00	0.00	0.00
	Max	0.00	-0.00	-300.58	0.00	0.00	0.00
54	Min	-0.00	-0.00	-271.21	0.00	0.00	0.00
	Max	-0.00	-0.00	-97.56	0.00	0.00	0.00
Minimum		**-3.80**	**-43.72**	**-838.12**	**-0.00**	**-0.00**	**-0.00**
Maximum		**30.74**	**48.60**	**0.00**	**0.00**	**0.00**	**0.00**

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Traverse 1: Bar 57								
13	0.00	Min	-11.8	-0.93	-42.01	7.19	5.9	-6.7
		Max	-8.2	0.30	-32.11	31.07	6.5	-2.9
	0.75	Min	-11.8	-3.25	-41.05	7.18	-24.8	-5.3
		Max	-8.2	0.29	-33.03	31.09	-18.4	-2.9
	1.25	Min	-11.8	-4.79	-40.39	7.18	-45.2	-3.5
		Max	-8.3	0.28	-33.63	31.11	-35.0	-2.8
14	1.50	Min	-11.8	-5.56	-40.07	7.18	-55.3	-3.4
		Max	-8.3	0.27	-33.94	31.12	-43.5	-1.8
Traverse 1: Bar 58								
14	1.50	Min	-11.8	-5.56	-40.07	7.18	-55.3	-3.4
		Max	-8.3	0.27	-33.94	31.12	-43.5	-1.8
15	2.00	Min	-11.8	-7.09	-38.79	7.18	-75.0	-3.5
		Max	-8.3	0.26	-33.93	31.13	-60.5	1.4
Traverse 1: Bar 59								
15	2.00	Min	-25.2	-7.76	-66.72	5.78	-74.4	-4.2
		Max	-9.7	-2.40	-55.00	29.97	-57.0	-0.6
40	2.70	Min	-25.3	-9.95	-65.78	5.79	-120.7	-2.3
		Max	-9.8	-2.42	-55.82	30.01	-96.0	5.5
Traverse 1: Bar 60								
40	2.70	Min	-18.1	-0.38	24.89	-1.50	-87.5	-2.4
		Max	15.8	3.98	42.63	0.79	-55.4	5.0
	3.60	Min	-18.0	-0.38	26.04	-1.53	-49.6	-2.0
		Max	15.8	1.28	41.56	0.78	-32.5	2.6
16	4.50	Min	-18.0	-1.53	27.20	-1.57	-13.0	-1.7
		Max	15.8	-0.22	40.47	0.78	-8.3	2.7
Traverse 1: Bar 61								
16	4.50	Min	4.0	-0.39	6.05	-0.22	-18.9	-0.1
		Max	37.3	6.61	15.55	-0.07	-13.7	5.4
	5.33	Min	4.0	-0.40	7.38	-0.23	-11.1	0.2
		Max	37.3	4.09	14.78	-0.07	-3.3	0.9
	6.58	Min	4.0	-0.40	9.29	-0.25	2.0	-2.1

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	37.3	0.31	13.70	-0.07	11.9	1.0
17	7.00	Min	4.0	-1.01	8.91	-0.25	6.0	-1.9
		Max	37.3	-0.39	14.37	-0.07	17.5	1.2
Traverse 1: Bar 62								
17	7.00	Min	-0.9	3.31	-14.06	0.08	7.1	1.7
		Max	33.7	4.04	-8.60	0.25	18.5	3.2
	8.00	Min	-0.9	0.83	-14.99	0.08	-3.1	-0.7
		Max	33.7	3.45	-7.01	0.26	6.4	-0.3
18	9.00	Min	-0.9	-2.18	-15.91	0.08	-13.3	-3.7
		Max	33.7	3.43	-5.42	0.28	-4.9	0.0
Traverse 1: Bar 63								
18	9.00	Min	-23.8	-1.06	34.13	-2.44	-60.9	-3.7
		Max	23.1	3.98	55.34	-1.00	-33.8	0.1
19	9.50	Min	-23.7	-1.45	33.65	-2.46	-34.3	-5.9
		Max	23.2	3.67	54.92	-0.99	-15.8	0.5
Traverse 1: Bar 64								
19	9.50	Min	-22.3	-3.15	12.54	-0.37	-34.7	-4.9
		Max	7.8	7.44	29.30	0.10	-11.9	5.0
	10.33	Min	-22.3	-3.13	13.85	-0.39	-12.6	-2.2
		Max	7.8	4.88	28.55	0.10	1.1	-0.2
	10.75	Min	-22.3	-3.12	14.51	-0.40	-1.8	-2.0
		Max	7.8	3.60	28.17	0.10	8.0	-0.9
20	12.00	Min	-22.3	-3.08	16.45	-0.44	23.0	-4.0
		Max	7.8	-0.25	27.00	0.09	37.1	2.9
Traverse 1: Bar 65								
20	12.00	Min	-19.4	-0.47	-5.97	-0.22	27.9	-0.3
		Max	-12.4	4.01	3.59	-0.06	36.5	2.8
	13.25	Min	-19.4	-0.46	-4.08	-0.22	24.1	-2.8
		Max	-12.4	0.23	2.42	-0.05	37.8	3.3
21	14.50	Min	-19.4	-3.67	-2.19	-0.23	22.1	-0.6
		Max	-12.4	-0.32	1.24	-0.03	38.3	3.7
Traverse 1: Bar 66								
21	14.50	Min	-18.3	2.42	-26.85	-0.11	22.0	-1.5
		Max	-11.9	3.04	-19.79	0.54	38.0	5.0
	15.33	Min	-18.3	-0.20	-27.23	-0.11	3.5	-2.5
		Max	-11.9	3.05	-18.85	0.57	17.8	2.5
	16.17	Min	-18.3	-2.82	-28.00	-0.11	-17.3	-1.4
		Max	-11.9	3.06	-17.56	0.60	0.4	0.2
	16.58	Min	-18.3	-4.12	-28.38	-0.11	-27.3	-1.3
		Max	-11.9	3.06	-16.90	0.61	-8.6	0.3
22	17.00	Min	-18.3	-5.42	-28.75	-0.12	-37.0	-2.6
		Max	-11.9	3.06	-16.24	0.63	-17.7	2.4
Traverse 2: Bar 94								
50	0.00	Min	0.5	-0.00	176.62	0.00	-0.0	0.0
		Max	3.7	-0.00	481.10	0.00	0.0	0.0
49	0.50	Min	0.4	-0.00	175.77	-0.00	88.1	0.0
		Max	3.3	-0.00	480.26	0.00	240.3	0.0
Traverse 2: Bar 89								
49	0.50	Min	-480.6	-0.00	-40.38	-0.00	88.1	-0.0
		Max	-175.8	0.00	-15.58	0.00	240.3	0.0
43	6.00	Min	-473.2	-0.00	-45.36	0.00	-0.0	0.0
		Max	-168.8	0.00	-16.23	0.00	0.0	0.0
Traverse 3: Bar 83								
41	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	0.0

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.35	Min	-0.0	-0.11	-15.79	0.00	-2.8	0.0
		Max	-0.0	-0.01	-4.94	0.00	-0.9	0.0
42	0.70	Min	-0.1	-0.23	-31.58	0.00	-11.1	0.0
		Max	-0.0	-0.01	-9.88	0.00	-3.5	0.1
Traverse 3: Bar 84								
42	0.70	Min	-26.8	0.04	30.92	0.00	-11.1	0.0
		Max	-5.9	0.73	98.91	0.00	-3.5	0.2
	2.80	Min	-26.8	0.00	1.27	0.00	30.3	-0.7
		Max	-6.2	0.04	4.15	0.00	97.2	-0.0
	4.90	Min	-26.8	-0.65	-90.80	0.00	1.9	-0.0
		Max	-6.1	-0.03	-28.24	0.00	6.4	-0.0
43	7.00	Min	-26.8	-1.34	-185.45	-0.00	-284.4	0.1
		Max	-6.7	-0.07	-57.87	0.00	-88.0	2.1
Traverse 3: Bar 85								
43	7.00	Min	-0.8	0.08	67.43	-0.11	-284.4	0.1
		Max	62.1	1.58	215.92	-0.02	-88.0	2.1
	8.33	Min	-0.8	0.05	48.59	-0.11	-36.7	0.0
		Max	62.4	0.95	155.68	-0.02	-10.6	0.2
	11.00	Min	-0.9	0.00	10.99	-0.11	68.5	-0.8
		Max	61.6	0.14	35.51	-0.02	218.3	-0.0
	12.33	Min	-0.9	-0.04	-24.57	-0.11	70.7	-0.6
		Max	61.7	-0.00	-7.71	-0.02	225.5	-0.0
	13.67	Min	-0.8	-0.07	-84.56	-0.12	47.9	-0.2
		Max	62.2	-0.01	-26.52	-0.02	152.8	0.0
44	15.00	Min	-0.7	-0.00	-144.67	-0.11	-0.0	-0.1
		Max	62.9	0.05	-45.34	-0.02	0.0	0.0
Traverse 4: Bar 87								
47	0.00	Min	11.1	-0.10	64.61	-0.00	-0.0	-0.0
		Max	42.4	0.01	208.66	0.01	0.0	0.0
	1.25	Min	11.1	-0.05	36.01	-0.00	62.9	-0.0
		Max	41.8	0.00	116.32	0.01	203.1	0.1
	2.50	Min	11.0	-0.01	7.41	-0.00	90.0	-0.0
		Max	41.4	0.00	24.04	0.01	290.8	0.1
	5.00	Min	11.1	-0.01	-160.71	-0.00	37.0	-0.0
		Max	41.8	0.06	-49.66	0.01	120.2	0.0
	6.25	Min	11.1	-0.01	-253.07	-0.00	-138.8	-0.1
		Max	42.1	0.08	-78.27	0.01	-42.4	-0.0
46	7.50	Min	11.0	-0.01	-345.47	0.00	-512.9	-0.2
		Max	41.3	0.09	-106.92	0.01	-158.1	0.0
Traverse 4: Bar 86								
46	7.50	Min	3.2	-0.08	106.92	0.00	-512.9	-0.1
		Max	20.9	0.01	345.47	0.01	-158.1	0.0
	8.75	Min	3.2	-0.05	78.29	-0.00	-138.8	-0.0
		Max	21.7	0.00	253.09	0.01	-42.4	0.0
	11.25	Min	3.2	-0.00	21.08	-0.00	81.4	0.0
		Max	21.0	0.01	68.38	0.01	263.3	0.0
	12.50	Min	3.2	-0.00	-24.07	-0.00	90.1	0.0
		Max	21.0	0.01	-7.41	0.01	291.0	0.0
	13.75	Min	3.2	-0.00	-116.38	-0.00	62.9	-0.0
		Max	21.4	0.01	-36.02	0.01	203.2	0.0
45	15.00	Min	3.3	-0.00	-208.72	-0.00	-0.0	-0.0
		Max	22.0	0.01	-64.63	0.01	0.0	0.0
Bar 1								

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
1	0.00	Min	-0.1	0.00	0.99	0.00	-0.0	-0.1
		Max	0.0	0.03	1.00	0.01	0.0	0.5
	0.93	Min	-0.1	0.00	0.66	0.00	0.8	-0.1
		Max	0.0	0.03	0.66	0.01	0.8	0.5
	1.87	Min	-0.1	0.00	0.33	0.00	1.2	-0.1
		Max	-0.0	0.03	0.33	0.01	1.2	0.5
	2.80	Min	-0.1	0.00	-0.00	0.00	1.4	-0.1
		Max	-0.0	0.03	-0.00	0.01	1.4	0.5
	3.73	Min	-0.1	0.00	-0.33	0.00	1.2	-0.2
		Max	-0.0	0.03	-0.33	0.01	1.2	0.5
	4.67	Min	-0.1	0.00	-0.67	0.00	0.8	-0.2
		Max	-0.0	0.03	-0.66	0.01	0.8	0.5
4	5.60	Min	-0.1	-0.00	-1.00	0.00	-0.0	-0.2
		Max	-0.0	0.03	-1.00	0.01	-0.0	0.5
Bar 2								
2	0.00	Min	0.0	0.02	6.09	-0.00	-0.0	-0.1
		Max	0.0	0.10	15.66	0.00	0.0	0.5
	2.50	Min	0.0	0.02	0.98	0.00	8.8	-0.2
		Max	0.0	0.11	2.80	0.00	23.1	0.3
	5.00	Min	0.0	0.02	-10.80	-0.00	4.9	-0.3
		Max	0.0	0.11	-3.41	0.00	14.0	0.0
	6.25	Min	0.0	0.02	-17.23	-0.00	-7.2	-0.3
		Max	0.0	0.12	-5.97	0.00	2.6	-0.1
3	7.50	Min	0.0	0.02	-23.66	-0.00	-32.7	-0.4
		Max	0.0	0.12	-8.52	0.00	-6.4	-0.2
Bar 3								
3	0.00	Min	5.1	-0.11	8.52	-0.00	-32.7	-0.2
		Max	9.2	0.20	23.66	0.01	-6.4	0.7
	1.25	Min	5.1	-0.11	5.96	-0.00	-7.2	-0.1
		Max	9.2	0.20	17.22	0.01	2.7	0.5
	3.75	Min	5.1	-0.11	0.85	-0.01	8.5	-0.1
		Max	9.2	0.20	4.36	0.01	22.5	0.2
	5.00	Min	5.1	-0.11	-2.80	-0.00	8.8	-0.3
		Max	9.2	0.21	-0.98	0.01	23.1	0.3
4	7.50	Min	5.1	-0.11	-15.66	0.00	-0.0	-0.8
		Max	9.2	0.21	-6.09	0.01	0.0	0.6
Bar 4								
12	0.00	Min	-1.0	0.00	-0.00	-0.49	-0.0	0.0
		Max	-1.0	0.03	0.00	0.06	-0.0	0.1
1	2.50	Min	-1.0	0.00	-0.00	-0.49	-0.0	0.0
		Max	-1.0	0.03	0.00	0.06	0.0	0.0
Bar 5								
12	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.2	0.00	0.00	0.00	0.0	0.0
4	6.13	Min	-0.0	-0.00	0.00	0.00	-0.0	-0.0
		Max	0.2	-0.00	0.00	0.00	0.0	0.0
Bar 6								
1	0.00	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	0.1	-0.00	0.00	-0.00	0.0	-0.0
39	6.13	Min	-0.0	-0.00	-0.00	-0.00	-0.0	0.0
		Max	0.1	-0.00	-0.00	-0.00	-0.0	0.0
Bar 7								
2	0.00	Min	-15.7	-0.00	-0.00	-0.49	-0.0	-0.0
		Max	-6.1	0.00	0.00	0.09	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
33	2.50	Min	-15.7	-0.00	-0.00	-0.49	-0.0	-0.0
		Max	-6.1	0.00	0.00	0.09	0.0	0.0
Bar 8								
3	0.00	Min	-45.6	-0.00	-0.00	-0.98	0.0	0.0
		Max	-14.2	-0.00	-0.00	-0.09	0.0	0.0
36	2.50	Min	-46.3	0.00	0.00	-0.98	0.0	0.0
		Max	-14.9	0.00	0.00	-0.09	0.0	0.0
Bar 9								
3	0.00	Min	-9.7	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	-5.3	0.01	0.00	-0.00	0.0	0.0
	2.64	Min	-9.7	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	-5.3	0.02	0.00	-0.00	0.0	0.0
	6.59	Min	-9.7	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	-5.3	0.00	0.00	-0.00	0.0	0.0
39	7.91	Min	-9.7	-0.01	-0.00	-0.00	-0.0	-0.0
		Max	-5.3	0.00	0.00	-0.00	0.0	0.0
Bar 10								
4	0.00	Min	-9.7	-0.01	-0.00	-0.00	-0.0	-0.0
		Max	-5.4	-0.00	0.00	-0.00	0.0	-0.0
	1.32	Min	-9.7	-0.01	0.00	-0.00	-0.0	0.0
		Max	-5.4	-0.00	0.00	-0.00	-0.0	0.0
	3.95	Min	-9.7	-0.01	0.00	-0.00	-0.0	0.0
		Max	-5.4	-0.00	0.00	-0.00	-0.0	0.0
	5.27	Min	-9.7	-0.00	0.00	-0.00	-0.0	0.0
		Max	-5.4	0.00	0.00	-0.00	-0.0	0.0
36	7.91	Min	-9.7	0.00	0.00	-0.00	-0.0	0.0
		Max	-5.4	0.01	0.00	-0.00	-0.0	0.0
Bar 11								
39	0.00	Min	-14.6	-0.00	-0.00	-0.37	-0.0	-0.0
		Max	-4.6	0.00	0.00	0.35	0.0	0.0
4	2.50	Min	-14.6	-0.00	-0.00	-0.37	-0.0	-0.0
		Max	-4.6	0.00	0.00	0.35	0.0	0.0
Bar 12								
5	0.00	Min	-0.0	0.02	-5.00	-0.00	-0.0	-0.0
		Max	0.0	0.03	-5.00	0.00	-0.0	0.0
13	0.50	Min	-0.0	0.04	-8.25	-0.00	-3.3	-0.0
		Max	0.0	0.05	-8.25	0.00	-3.3	-0.0
Bar 13								
6	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	0.0	0.00	-1.88	-0.00	-0.2	-0.0
		Max	0.0	0.01	-1.63	0.00	-0.2	-0.0
15	0.50	Min	0.0	0.01	-3.75	-0.00	-0.9	-0.0
		Max	0.0	0.01	-3.25	0.00	-0.8	-0.0
Bar 14								
7	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	0.0	-0.00	-1.63	0.00	-0.2	0.0
		Max	0.0	-0.00	-1.63	0.00	-0.2	0.0
16	0.50	Min	0.0	-0.00	-3.25	0.00	-0.8	0.0
		Max	0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 15								
8	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	0.25	Min	-0.0	-0.00	-1.63	0.00	-0.2	0.0
		Max	0.0	-0.00	-1.63	0.00	-0.2	0.0
17	0.50	Min	-0.0	-0.00	-3.25	0.00	-0.8	0.0
		Max	0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 16								
9	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
	0.25	Min	-0.0	-0.00	-1.63	0.00	-0.2	0.0
		Max	-0.0	-0.00	-1.63	0.00	-0.2	0.0
19	0.50	Min	-0.0	-0.00	-3.25	0.00	-0.8	0.0
		Max	-0.0	-0.00	-3.25	0.00	-0.8	0.0
Bar 17								
20	0.00	Min	-0.0	-0.00	3.25	0.00	-0.8	-0.0
		Max	-0.0	-0.00	3.25	0.00	-0.8	-0.0
	0.25	Min	-0.0	-0.00	1.63	0.00	-0.2	-0.0
		Max	-0.0	-0.00	1.63	0.00	-0.2	-0.0
10	0.50	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
Bar 18								
21	0.00	Min	-0.1	0.00	3.25	-0.00	-0.8	0.0
		Max	-0.0	0.01	3.25	0.00	-0.8	0.0
	0.25	Min	-0.0	0.00	1.63	-0.00	-0.2	0.0
		Max	-0.0	0.00	1.63	0.00	-0.2	0.0
11	0.50	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.0	0.00	0.00	0.00	0.0	0.0
Bar 19								
22	0.00	Min	-0.2	-0.02	3.65	-0.08	-1.3	-0.1
		Max	-0.0	1.50	4.28	-0.01	-1.1	0.9
	0.25	Min	-0.2	-0.03	2.28	-0.08	-0.5	-0.1
		Max	-0.0	0.75	2.65	-0.01	-0.4	0.6
12	0.50	Min	-0.2	-0.03	0.89	-0.08	0.0	-0.1
		Max	-0.0	-0.00	1.04	-0.01	0.0	0.5
Bar 20								
23	0.00	Min	-9.3	2.60	-12.73	2.94	9.3	1.3
		Max	-4.8	4.18	-2.81	4.10	13.4	2.4
55	0.67	Min	-9.3	2.58	-17.07	2.94	-0.6	-1.4
		Max	-4.8	4.16	-7.15	4.10	10.1	0.5
Bar 21								
24	0.00	Min	6.2	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	13.0	0.00	0.00	0.00	0.0	0.0
13	2.83	Min	6.2	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	13.0	0.00	0.00	0.00	0.0	0.0
Bar 22								
15	0.00	Min	7.1	-0.00	0.00	-0.00	-0.0	-0.0
		Max	17.0	-0.00	0.00	0.00	0.0	0.0
23	2.83	Min	7.1	-0.00	0.00	-0.00	-0.0	-0.0
		Max	17.0	-0.00	0.00	0.00	0.0	0.0
Bar 23								
15	0.00	Min	-23.7	0.19	17.81	0.01	-0.0	0.7
		Max	-20.8	0.95	24.23	0.02	-0.0	2.1
	0.33	Min	-23.7	0.20	15.50	0.01	5.5	0.6
		Max	-20.8	0.97	21.09	0.01	7.6	1.8
	1.00	Min	-23.8	0.22	10.87	-0.00	14.3	0.4
		Max	-20.9	0.99	14.78	0.01	19.5	1.2

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
24	2.00	Min	-23.8	0.25	3.90	-0.00	21.7	0.1
		Max	-20.9	1.02	5.28	0.02	29.5	0.2
Bar 24								
25	0.00	Min	14.9	-0.00	0.00	-0.00	-0.0	-0.0
		Max	24.3	-0.00	0.00	-0.00	-0.0	-0.0
15	3.20	Min	14.9	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	24.3	0.00	0.00	-0.00	-0.0	-0.0
Bar 25								
16	0.00	Min	24.2	-0.00	0.00	0.00	-0.0	-0.0
		Max	29.0	-0.00	0.00	0.00	-0.0	-0.0
24	3.20	Min	24.2	-0.00	0.00	0.00	-0.0	-0.0
		Max	29.0	-0.00	0.00	0.00	-0.0	-0.0
Bar 26								
16	0.00	Min	-17.8	-2.74	17.80	-0.03	-0.0	-2.9
		Max	-8.7	-1.46	21.67	-0.01	-0.0	-1.4
	1.00	Min	-17.8	-2.76	10.87	-0.04	14.3	-0.2
		Max	-8.7	-1.47	13.23	-0.01	17.5	0.1
	1.33	Min	-17.9	-2.76	8.55	-0.04	17.6	0.6
		Max	-8.7	-1.47	10.41	-0.01	21.4	0.8
25	2.00	Min	-17.9	-2.76	3.92	-0.03	21.7	1.6
		Max	-8.7	-1.46	4.76	-0.00	26.5	2.7
Bar 27								
17	0.00	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.2	0.00	0.00	0.00	-0.0	-0.0
25	3.20	Min	-0.0	-0.00	-0.00	0.00	-0.0	-0.0
		Max	0.2	-0.00	0.00	0.00	-0.0	-0.0
Bar 28								
26	0.00	Min	0.9	-0.00	0.00	-0.01	-0.0	-0.0
		Max	2.0	-0.00	0.00	-0.00	-0.0	-0.0
16	3.20	Min	0.9	0.00	-0.00	-0.01	-0.0	-0.0
		Max	2.0	0.00	-0.00	-0.00	-0.0	-0.0
Bar 29								
17	0.00	Min	-2.3	-3.31	17.79	-0.04	-0.0	-3.7
		Max	-0.4	-1.63	21.63	-0.02	-0.0	-1.8
	1.33	Min	-2.3	-3.33	8.56	-0.05	17.6	0.3
		Max	-0.5	-1.64	10.40	-0.01	21.4	0.7
26	2.00	Min	-2.4	-3.33	3.95	-0.04	21.7	1.5
		Max	-0.5	-1.64	4.79	-0.01	26.4	2.9
Bar 30								
27	0.00	Min	7.4	-0.00	0.00	-0.00	-0.0	-0.0
		Max	9.5	0.00	0.00	-0.00	-0.0	-0.0
17	3.20	Min	7.4	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	9.5	0.00	0.00	-0.00	-0.0	-0.0
Bar 31								
19	0.00	Min	-0.0	-0.00	-0.00	-0.00	0.0	0.0
		Max	1.8	0.00	0.00	-0.00	0.0	0.0
26	3.20	Min	-0.0	-0.00	-0.00	-0.00	0.0	0.0
		Max	1.8	0.00	0.00	-0.00	0.0	0.0
Bar 32								
19	0.00	Min	-7.7	-3.99	17.86	-0.04	-3.9	-4.6
		Max	-5.9	-1.13	22.38	-0.01	-0.5	-0.9
	1.33	Min	-7.8	-4.03	8.62	-0.06	14.9	0.6
		Max	-6.0	-1.14	11.14	-0.01	20.8	0.8
27	2.00	Min	-7.8	-4.02	4.00	-0.05	19.5	1.4

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	-6.0	-1.14	5.51	-0.01	25.9	3.5
Bar 33								
28	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	0.0
		Max	24.3	0.00	0.00	0.00	0.0	0.0
19	3.20	Min	-0.0	-0.00	-0.00	0.00	0.0	0.0
		Max	24.3	0.00	0.00	0.00	0.0	0.0
Bar 34								
20	0.00	Min	-0.0	-0.00	-0.00	-0.01	-0.0	0.0
		Max	3.0	0.00	0.00	-0.00	0.0	0.0
27	3.20	Min	-0.0	-0.00	-0.00	-0.01	-0.0	0.0
		Max	3.0	0.00	0.00	-0.00	0.0	0.0
Bar 35								
20	0.00	Min	-14.9	-3.85	17.78	-0.03	-0.0	-3.9
		Max	0.5	-0.37	21.63	-0.01	0.0	0.4
	1.00	Min	-14.9	-3.87	10.86	-0.05	14.3	-0.1
		Max	0.4	-0.38	13.19	-0.01	17.4	0.8
	1.33	Min	-14.9	-3.87	8.55	-0.05	17.6	0.9
		Max	0.4	-0.38	10.38	-0.01	21.3	1.3
28	2.00	Min	-14.9	-3.86	3.91	-0.03	21.7	1.1
		Max	0.4	-0.39	4.77	-0.00	26.4	3.9
Bar 36								
21	0.00	Min	-0.0	-0.00	0.00	-0.01	0.0	0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	0.0
28	3.20	Min	-0.0	-0.00	0.00	-0.01	0.0	0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	0.0
Bar 37								
29	0.00	Min	0.4	-0.00	0.00	-0.00	-0.0	-0.0
		Max	30.4	0.00	0.00	0.01	0.0	0.0
20	3.20	Min	0.4	-0.00	0.00	-0.00	-0.0	-0.0
		Max	30.4	0.00	0.00	0.01	0.0	0.0
Bar 38								
21	0.00	Min	2.9	-1.36	17.67	-0.01	-0.0	-1.4
		Max	6.2	-0.19	21.60	0.00	0.0	1.2
	1.00	Min	2.9	-1.35	10.76	-0.03	14.2	-0.1
		Max	6.2	-0.18	13.18	0.00	17.4	1.4
29	2.00	Min	2.8	-1.34	3.85	-0.02	21.5	0.4
		Max	6.1	-0.17	4.77	0.01	26.4	2.4
Bar 40								
30	0.00	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	-0.0	0.00	-0.00	0.01	0.0	0.0
21	3.20	Min	-0.0	-0.00	-0.00	0.00	0.0	-0.0
		Max	-0.0	0.00	-0.00	0.01	0.0	0.0
Bar 41								
22	0.00	Min	-23.5	-4.13	15.11	-0.02	-2.0	-2.9
		Max	-3.4	0.20	21.97	-0.01	0.7	2.1
	1.00	Min	-23.6	-1.35	9.18	-0.03	10.6	-0.5
		Max	-3.5	0.41	13.54	-0.00	18.0	2.1
30	2.00	Min	-23.6	-1.33	3.22	-0.03	17.3	-0.8
		Max	-3.5	3.44	5.11	0.00	26.9	1.8
Bar 42								
24	0.00	Min	-12.7	0.00	0.09	-0.19	-0.0	-0.0
		Max	-3.5	0.00	0.10	-0.09	0.0	0.0
	0.67	Min	-12.7	0.00	0.03	-0.19	0.0	-0.0
		Max	-3.5	0.00	0.03	-0.09	0.0	0.0

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
23	2.00	Min	-12.7	-0.00	-0.10	-0.19	-0.0	-0.0
		Max	-3.5	0.00	-0.09	-0.09	0.0	0.0
Bar 43								
25	0.00	Min	-29.9	0.00	0.12	-0.05	-0.0	0.0
		Max	-10.8	0.00	0.13	-0.03	-0.0	0.0
	0.83	Min	-29.9	0.00	0.04	-0.05	0.1	-0.0
		Max	-10.8	0.00	0.04	-0.03	0.1	-0.0
	1.67	Min	-29.9	-0.00	-0.04	-0.05	0.1	-0.0
		Max	-10.8	-0.00	-0.04	-0.03	0.1	-0.0
24	2.50	Min	-29.9	-0.00	-0.13	-0.05	-0.0	-0.0
		Max	-10.8	-0.00	-0.12	-0.03	-0.0	0.0
Bar 44								
26	0.00	Min	-19.9	0.00	0.12	0.00	0.0	0.0
		Max	4.2	0.00	0.12	0.02	0.0	0.0
	0.83	Min	-19.9	0.00	0.04	0.00	0.1	-0.0
		Max	4.2	0.00	0.04	0.02	0.1	-0.0
	1.67	Min	-19.9	-0.00	-0.04	0.00	0.1	-0.0
		Max	4.2	-0.00	-0.04	0.02	0.1	-0.0
25	2.50	Min	-19.9	-0.00	-0.12	0.00	0.0	0.0
		Max	4.2	-0.00	-0.12	0.02	0.0	0.0
Bar 45								
27	0.00	Min	-23.5	0.00	0.12	0.03	0.0	-0.0
		Max	2.5	0.00	0.12	0.05	0.0	-0.0
	0.83	Min	-23.5	-0.00	0.04	0.03	0.1	-0.0
		Max	2.5	0.00	0.04	0.05	0.1	-0.0
	1.67	Min	-23.5	-0.00	-0.04	0.03	0.1	-0.0
		Max	2.5	-0.00	-0.04	0.05	0.1	-0.0
26	2.50	Min	-23.5	-0.00	-0.12	0.03	0.0	-0.0
		Max	2.5	-0.00	-0.12	0.05	0.0	0.0
Bar 46								
28	0.00	Min	-21.7	0.00	0.12	-0.00	-0.0	-0.0
		Max	6.0	0.00	0.12	0.02	0.0	0.0
	0.83	Min	-21.7	-0.00	0.04	-0.00	0.1	-0.0
		Max	6.0	0.00	0.04	0.02	0.1	-0.0
	1.67	Min	-21.7	-0.00	-0.04	-0.00	0.1	-0.0
		Max	6.0	-0.00	-0.04	0.02	0.1	-0.0
27	2.50	Min	-21.7	-0.00	-0.12	-0.00	-0.0	-0.0
		Max	6.0	-0.00	-0.12	0.02	0.0	0.0
Bar 47								
29	0.00	Min	-7.9	0.00	0.12	-0.03	-0.0	0.0
		Max	5.1	0.00	0.12	-0.01	-0.0	0.0
	0.83	Min	-7.9	0.00	0.04	-0.03	0.1	-0.0
		Max	5.1	0.00	0.04	-0.01	0.1	-0.0
	1.67	Min	-7.9	-0.00	-0.04	-0.03	0.1	-0.0
		Max	5.1	-0.00	-0.04	-0.01	0.1	-0.0
28	2.50	Min	-7.9	-0.00	-0.12	-0.03	-0.0	-0.0
		Max	5.1	-0.00	-0.12	-0.01	-0.0	0.0
Bar 48								
30	0.00	Min	-7.0	0.00	0.12	-0.03	-0.0	-0.0
		Max	1.8	0.00	0.12	0.02	0.0	0.0
	0.83	Min	-7.0	0.00	0.04	-0.03	0.1	-0.0
		Max	1.8	0.00	0.04	0.02	0.1	-0.0
	1.67	Min	-7.0	-0.00	-0.04	-0.03	0.1	-0.0
		Max	1.8	-0.00	-0.04	0.02	0.1	-0.0

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
29	2.50	Min	-7.0	-0.00	-0.12	-0.03	-0.0	-0.0
		Max	1.8	-0.00	-0.12	0.02	0.0	0.0
Bar 49								
31	0.00	Min	-8.7	-1.71	7.45	2.92	-9.2	-3.0
		Max	0.1	0.08	17.43	4.09	17.6	1.5
	1.03	Min	-8.7	-1.72	0.73	2.93	5.3	-1.2
		Max	0.1	0.07	10.72	4.09	21.8	1.4
	2.58	Min	-8.7	-1.74	-9.35	2.94	14.1	1.3
		Max	0.1	0.04	0.63	4.09	15.1	1.5
23	3.10	Min	-8.7	-1.75	-12.70	2.94	9.4	1.3
		Max	0.1	0.02	-2.74	4.09	13.6	2.3
Bar 50								
24	0.00	Min	-1.3	-0.00	3.73	-0.00	21.6	0.1
		Max	0.9	0.04	5.12	0.02	29.4	0.2
	0.52	Min	-1.3	0.01	0.16	-0.00	22.7	0.1
		Max	0.9	0.05	0.26	0.02	30.8	0.2
	2.07	Min	-1.2	0.02	-14.36	0.00	14.6	0.0
		Max	1.0	0.07	-10.56	0.02	19.9	0.1
33	3.10	Min	-1.1	0.02	-24.10	0.01	-0.0	0.0
		Max	1.0	0.06	-17.71	0.01	0.0	0.0
Bar 51								
25	0.00	Min	-2.7	0.50	3.72	-0.03	21.7	1.6
		Max	0.6	0.85	4.56	-0.00	26.4	2.7
	0.52	Min	-2.7	0.50	0.14	-0.02	22.7	1.3
		Max	0.6	0.85	0.21	0.01	27.6	2.2
	1.03	Min	-2.7	0.50	-4.16	-0.01	21.8	1.0
		Max	0.6	0.85	-3.42	0.02	26.6	1.8
	1.55	Min	-2.7	0.50	-8.51	0.00	19.1	0.8
		Max	0.6	0.85	-6.99	0.02	23.3	1.3
34	3.10	Min	-2.6	0.49	-21.57	0.01	-0.0	0.0
		Max	0.7	0.82	-17.72	0.02	-0.0	0.0
Bar 52								
26	0.00	Min	-0.0	0.46	3.72	-0.04	21.7	1.5
		Max	0.0	0.93	4.54	-0.01	26.4	2.9
	0.52	Min	-0.0	0.47	0.14	-0.03	22.7	1.2
		Max	0.0	0.94	0.19	-0.00	27.6	2.5
	2.07	Min	0.0	0.47	-12.86	0.00	14.6	0.5
		Max	0.1	0.95	-10.58	0.01	17.8	1.0
35	3.10	Min	0.1	0.47	-21.56	0.00	-0.0	0.0
		Max	0.1	0.95	-17.73	0.01	-0.0	0.0
Bar 53								
27	0.00	Min	-1.0	0.45	3.81	-0.05	19.5	1.4
		Max	-0.1	1.11	5.29	-0.01	26.0	3.5
	0.52	Min	-1.0	0.45	0.23	-0.04	20.9	1.2
		Max	-0.1	1.11	0.94	-0.00	27.3	2.9
	2.07	Min	-0.9	0.46	-12.73	0.00	13.9	0.5
		Max	-0.1	1.13	-9.88	0.01	17.6	1.2
36	3.10	Min	-0.9	0.46	-21.43	0.00	-0.0	0.0
		Max	-0.0	1.13	-17.03	0.01	-0.0	0.0
Bar 54								
28	0.00	Min	0.1	0.37	3.71	-0.04	21.7	1.1
		Max	0.5	1.24	4.54	-0.00	26.4	3.9
	0.52	Min	0.1	0.37	0.13	-0.02	22.7	1.0
		Max	0.5	1.25	0.19	0.01	27.6	3.2

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
	1.03	Min	0.1	0.37	-4.17	-0.00	21.9	0.8
		Max	0.5	1.25	-3.44	0.02	26.6	2.6
	2.07	Min	0.2	0.36	-12.87	0.01	14.6	0.4
		Max	0.5	1.24	-10.59	0.02	17.8	1.3
37	3.10	Min	0.2	0.35	-21.57	0.01	-0.0	0.0
		Max	0.6	1.22	-17.74	0.02	-0.0	0.0
Bar 55								
29	0.00	Min	-1.1	0.10	3.72	-0.02	21.5	0.4
		Max	-0.4	0.76	4.63	0.01	26.4	2.4
	0.52	Min	-1.1	0.11	0.15	-0.01	22.5	0.3
		Max	-0.4	0.77	0.28	0.01	27.6	2.0
	2.07	Min	-1.1	0.12	-12.86	0.01	14.6	0.1
		Max	-0.3	0.79	-10.51	0.02	17.8	0.8
38	3.10	Min	-1.1	0.13	-21.56	0.00	-0.0	0.0
		Max	-0.3	0.78	-17.66	0.02	0.0	0.0
Bar 56								
30	0.00	Min	-23.6	-4.11	3.09	-0.03	17.3	-0.8
		Max	-3.5	1.02	5.00	0.00	26.9	1.8
	0.52	Min	-23.6	-2.55	0.01	-0.03	18.4	0.5
		Max	-3.5	1.03	0.64	0.01	28.1	1.8
	1.03	Min	-23.6	-0.99	-4.29	-0.01	17.9	0.3
		Max	-3.5	1.05	-2.52	0.01	27.0	2.3
	2.07	Min	-23.6	0.39	-13.06	0.00	12.1	-0.3
		Max	-3.5	2.81	-8.64	0.02	18.0	1.2
	2.58	Min	-23.5	0.40	-17.43	0.00	6.8	-0.9
		Max	-3.4	4.37	-11.70	0.02	10.1	-0.3
39	3.10	Min	-23.5	0.40	-21.79	0.01	0.0	-3.5
		Max	-3.4	5.91	-14.75	0.03	0.0	-0.5
Bar 67								
32	0.00	Min	-3.8	-0.20	13.04	-7.80	-29.7	0.9
		Max	0.1	5.78	19.26	17.64	-19.5	5.8
	0.75	Min	-3.8	-0.17	10.24	-7.80	-15.7	1.1
		Max	0.1	5.77	18.35	17.63	-10.7	1.6
31	1.50	Min	-3.8	-0.14	7.45	-7.80	-4.1	-3.0
		Max	0.1	5.77	17.43	17.63	-1.9	1.5
Bar 68								
33	0.00	Min	-3.8	-0.21	13.04	-7.80	-39.3	0.8
		Max	0.1	5.78	19.26	17.65	-26.0	8.7
32	0.50	Min	-3.8	-0.20	13.04	-7.80	-29.7	0.9
		Max	0.1	5.78	19.26	17.64	-19.5	5.8
Bar 69								
33	0.00	Min	-16.2	-2.98	24.72	-0.75	-74.6	-8.5
		Max	-4.1	0.44	40.80	0.16	-47.1	-1.1
	2.08	Min	-16.1	-2.99	22.17	-0.74	-0.7	-2.4
		Max	-4.1	0.38	33.06	0.09	4.9	-1.8
34	2.50	Min	-16.1	-2.99	21.65	-0.74	8.9	-2.5
		Max	-4.1	0.36	31.51	0.08	17.9	-0.7
Bar 70								
34	0.00	Min	-15.3	-0.49	3.81	-0.08	8.7	-2.5
		Max	-3.6	-0.17	10.02	-0.03	17.7	-0.7
	1.25	Min	-15.3	-0.53	2.66	-0.09	14.4	-1.9
		Max	-3.6	-0.18	5.74	-0.03	25.9	-0.4
35	2.50	Min	-15.3	-0.57	0.12	-0.11	17.7	-1.2
		Max	-3.6	-0.18	2.81	-0.03	29.8	-0.1

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 71								
35	0.00	Min	-14.4	-0.73	-21.44	-0.11	17.5	-1.2
		Max	-3.1	-0.20	-14.93	-0.03	29.5	-0.1
	2.08	Min	-14.3	-0.74	-28.57	-0.04	-23.6	0.2
		Max	-3.1	-0.19	-16.84	-0.02	-14.6	0.4
36	2.50	Min	-14.3	-0.75	-29.99	-0.02	-35.8	0.3
		Max	-3.1	-0.19	-17.23	-0.00	-21.7	0.7
Bar 72								
36	0.00	Min	-24.9	-0.39	25.31	-0.06	-80.7	-0.4
		Max	-5.5	-0.04	44.30	-0.01	-44.8	0.4
	1.67	Min	-24.8	-0.53	23.79	-0.16	-12.3	0.2
		Max	-5.4	-0.05	38.65	-0.02	-3.2	0.6
37	2.50	Min	-24.8	-0.58	23.02	-0.20	14.6	0.4
		Max	-5.4	-0.06	35.80	-0.03	20.4	1.0
Bar 73								
37	0.00	Min	-23.6	-1.10	5.27	-0.33	14.5	0.4
		Max	-5.1	-0.20	14.22	-0.06	20.1	1.0
	1.25	Min	-23.6	-1.14	4.11	-0.34	21.4	0.7
		Max	-5.1	-0.21	9.92	-0.06	34.2	2.4
	1.67	Min	-23.6	-1.15	3.72	-0.34	23.0	0.8
		Max	-5.1	-0.21	8.49	-0.06	38.0	2.9
38	2.50	Min	-23.6	-1.14	2.95	-0.34	25.8	1.0
		Max	-5.1	-0.21	5.61	-0.06	43.9	4.0
Bar 74								
38	0.00	Min	-22.9	0.00	-18.60	-0.05	25.7	1.0
		Max	-4.9	0.35	-12.04	0.05	43.7	4.0
	0.42	Min	-22.9	0.01	-18.98	-0.03	19.5	0.9
		Max	-4.9	0.35	-13.48	0.05	36.8	3.9
	1.25	Min	-22.9	0.01	-21.41	-0.01	5.7	0.7
		Max	-4.9	0.35	-14.65	0.05	22.0	3.8
39	2.50	Min	-22.9	0.02	-25.69	-0.03	-19.7	0.4
		Max	-4.9	0.34	-15.80	0.08	-1.1	3.6
Bar 75								
18	0.00	Min	-69.9	-1.20	-24.13	-0.23	24.5	-2.9
		Max	-41.0	-0.48	-9.78	-0.04	60.6	-1.2
	2.08	Min	-71.7	-1.24	-24.30	-0.01	4.1	-0.4
		Max	-42.9	-0.49	-9.82	0.01	10.1	-0.2
43	2.50	Min	-72.1	-1.25	-24.30	0.00	0.0	0.0
		Max	-43.3	-0.49	-9.82	0.04	0.0	0.1
Bar 76								
22	0.00	Min	-62.4	-0.03	8.51	-0.02	-41.2	-0.1
		Max	-42.0	0.01	16.41	0.12	-21.3	0.0
	1.25	Min	-63.5	-0.02	8.53	-0.02	-20.6	-0.0
		Max	-43.1	0.00	16.49	0.10	-10.7	0.0
44	2.50	Min	-64.7	-0.00	8.54	-0.02	-0.0	-0.0
		Max	-44.3	0.00	16.52	0.09	0.0	0.0
Bar 77								
22	0.00	Min	1.2	-0.00	0.00	0.00	-0.0	-0.0
		Max	31.7	0.05	0.00	0.00	0.0	0.0
	0.95	Min	1.2	-0.01	0.00	0.00	-0.0	-0.0
		Max	31.7	-0.00	0.00	0.00	0.0	0.0
	4.73	Min	1.2	-0.01	0.00	0.00	-0.0	-0.0
		Max	31.7	0.00	0.00	0.00	-0.0	0.0
47	5.68	Min	1.2	-0.03	0.00	0.00	-0.0	-0.0

Extremal member forces (in system of principal axis)

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
		Max	31.7	0.00	0.00	0.00	0.0	0.0
Bar 78								
39	0.00	Min	-0.0	-0.00	0.00	-0.00	-0.0	-0.0
		Max	-0.0	-0.00	0.00	-0.00	-0.0	0.0
44	5.68	Min	-0.0	-0.00	-0.00	-0.00	-0.0	0.0
		Max	-0.0	-0.00	0.00	-0.00	0.0	0.0
Bar 79								
33	0.00	Min	-93.6	-6.84	-20.99	-0.38	8.0	-17.5
		Max	-71.4	3.64	-3.19	-0.03	52.8	9.2
45	2.50	Min	-95.8	-7.08	-21.19	-0.01	-0.0	-0.0
		Max	-73.7	3.72	-3.22	0.03	0.0	0.0
Bar 80								
36	0.00	Min	-141.0	-0.02	-20.63	-0.23	19.4	-0.0
		Max	-80.1	0.00	-7.70	0.00	52.0	-0.0
	1.25	Min	-142.1	-0.03	-20.84	-0.09	9.7	-0.0
		Max	-81.2	-0.01	-7.77	0.01	26.1	-0.0
	1.67	Min	-142.5	-0.04	-20.88	-0.04	6.5	-0.0
		Max	-81.6	-0.01	-7.78	0.01	17.4	-0.0
46	2.50	Min	-143.3	-0.05	-20.91	0.01	0.0	0.0
		Max	-82.4	-0.01	-7.80	0.06	0.0	0.0
Bar 81								
39	0.00	Min	-64.1	-2.38	2.59	-0.02	-21.4	-0.0
		Max	-37.6	-0.13	8.52	0.05	-6.5	0.0
47	2.50	Min	-66.4	-2.34	2.60	-0.02	-0.0	0.3
		Max	-39.9	-0.13	8.57	0.02	-0.0	5.9
Bar 82								
40	0.00	Min	-105.5	-13.84	6.03	0.03	-59.9	-31.5
		Max	-83.4	-2.21	26.63	0.49	-13.6	-5.0
	1.12	Min	-106.5	-14.08	6.07	0.02	-30.0	-15.8
		Max	-84.4	-2.24	26.77	0.36	-6.8	-2.5
42	2.24	Min	-107.5	-14.16	6.08	0.00	0.0	-0.0
		Max	-85.4	-2.26	26.83	0.08	0.0	0.0
Bar 88								
42	0.00	Min	-238.0	-0.00	-0.00	0.00	0.0	0.0
		Max	-126.3	0.00	0.00	0.00	0.0	0.0
48	5.50	Min	-240.3	-0.00	-0.00	0.00	0.0	0.0
		Max	-128.6	0.00	0.00	0.00	0.0	0.0
Bar 90								
44	0.00	Min	-210.9	-0.04	0.00	-0.00	-0.0	-0.4
		Max	-89.8	-0.00	0.00	-0.00	-0.0	-0.0
	2.75	Min	-212.0	-0.07	0.00	-0.00	-0.0	-0.3
		Max	-91.0	-0.01	0.00	-0.00	-0.0	-0.0
51	5.50	Min	-213.2	-0.10	0.00	0.00	0.0	0.0
		Max	-92.1	-0.01	0.00	0.00	0.0	0.0
Bar 91								
45	0.00	Min	-304.8	-0.00	0.00	-0.00	-0.0	-0.0
		Max	-138.3	0.00	0.00	0.00	0.0	0.0
52	5.50	Min	-307.5	-0.00	-0.00	0.00	0.0	0.0
		Max	-141.1	0.00	-0.00	0.00	0.0	0.0
Bar 92								
46	0.00	Min	-834.0	-0.00	0.00	0.00	0.0	0.0
		Max	-296.5	-0.00	0.00	0.00	0.0	0.0
53	5.50	Min	-838.1	-0.00	-0.00	0.00	0.0	0.0
		Max	-300.6	-0.00	-0.00	0.00	0.0	0.0

Extremal member forces (in system of principal axis)

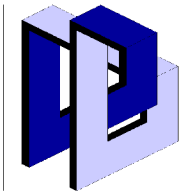
Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	type	N	V_η	V_ζ	T	M_η	M_ζ
-	m		kN	kN	kN	kNm	kNm	kNm
Bar 93								
47	0.00	Min	-268.9	0.00	0.00	0.00	0.0	0.0
		Max	-95.3	0.00	0.00	0.00	0.0	0.0
54	5.50	Min	-271.2	0.00	0.00	0.00	0.0	0.0
		Max	-97.6	0.00	0.00	0.00	0.0	0.0
Bar 95								
55	0.00	Min	-9.3	2.57	-21.07	2.94	-0.6	-1.4
		Max	-4.8	4.14	-11.15	4.10	10.1	0.5
56	0.67	Min	-9.3	2.54	-25.40	2.94	-16.1	-4.0
		Max	-4.8	4.11	-15.49	4.10	1.2	-1.2
Bar 96								
56	0.00	Min	-9.3	2.54	-25.40	2.94	-16.1	-4.0
		Max	-4.8	4.11	-15.49	4.10	1.2	-1.2
13	0.67	Min	-9.3	2.51	-29.73	2.94	-34.5	-6.7
		Max	-4.9	4.07	-19.82	4.12	-10.5	-2.9
Bar 97								
44	0.00	Min	0.0	-0.00	0.08	-0.01	-0.5	-0.0
		Max	0.0	0.00	1.25	-0.00	-0.1	0.0
	2.55	Min	0.0	-0.00	0.08	-0.01	0.1	-0.0
		Max	0.0	0.00	1.25	-0.00	2.7	0.0
47	5.10	Min	-0.0	-0.00	0.08	-0.01	0.3	0.0
		Max	0.0	0.00	1.25	-0.00	5.9	0.0
Bar 98								
29	0.00	Min	4.9	0.00	-0.00	-0.00	-0.0	-0.0
		Max	33.3	0.00	-0.00	0.00	0.0	0.0
39	3.98	Min	4.9	0.00	-0.00	-0.00	-0.0	-0.0
		Max	33.3	0.00	-0.00	0.00	0.0	0.0
Bar 99								
38	0.00	Min	-0.0	0.00	-0.00	0.00	-0.0	-0.0
		Max	-0.0	0.00	-0.00	0.00	-0.0	-0.0
30	3.98	Min	-0.0	-0.00	0.00	0.00	-0.0	-0.0
		Max	-0.0	0.00	0.00	0.00	-0.0	-0.0
Bar 100								
23	0.00	Min	5.3	0.00	-0.00	0.00	0.0	0.0
		Max	8.6	0.00	-0.00	0.00	0.0	0.0
33	3.69	Min	5.3	-0.00	-0.00	0.00	0.0	0.0
		Max	8.6	-0.00	0.00	0.00	0.0	0.0
Bar 101								
24	0.00	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	3.9	0.00	0.00	-0.00	-0.0	-0.0
31	3.69	Min	-0.0	-0.00	-0.00	-0.00	-0.0	-0.0
		Max	3.9	0.00	0.00	-0.00	-0.0	-0.0
Minimum			-838.1	-14.16	-345.47	-7.80	-512.9	-31.5
Maximum			62.9	7.44	481.10	31.13	291.0	9.2

Maximum utilization

Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	U
-	m	-
Traverse 1: Bar 57		
13	0.00	0.292
	0.25	0.291
	0.75	0.299
14	1.50	0.341
Traverse 1: Bar 58		
14	1.50	0.341
15	2.00	0.372
Traverse 1: Bar 59		
15	2.00	0.391
	2.47	0.453
40	2.70	0.502
Traverse 1: Bar 60		
40	2.70	0.305
16	4.50	0.076
Traverse 1: Bar 61		
16	4.50	0.133
	5.33	0.073
	5.75	0.056
17	7.00	0.110
Traverse 1: Bar 62		
17	7.00	0.128
	8.00	0.066
	8.33	0.070
18	9.00	0.118
Traverse 1: Bar 63		
18	9.00	0.255
19	9.50	0.226
Traverse 1: Bar 64		
19	9.50	0.173
	10.75	0.088
20	12.00	0.169
Traverse 1: Bar 65		
20	12.00	0.166
	13.25	0.172
21	14.50	0.175
Traverse 1: Bar 66		
21	14.50	0.179
	15.75	0.093
22	17.00	0.165
Traverse 2: Bar 94		
50	0.00	0.419
	0.25	0.418
	0.33	0.425
49	0.50	0.539
Traverse 2: Bar 89		
49	0.50	0.566
43	6.00	0.165
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.076
Traverse 3: Bar 84		
42	0.70	0.220
	1.75	0.193
	4.90	0.202
	5.95	0.307
43	7.00	0.626
Traverse 3: Bar 85		
43	7.00	0.636
	8.33	0.348
	9.67	0.294
	11.00	0.464
	12.33	0.478
	13.67	0.333
44	15.00	0.324
Traverse 4: Bar 87		
47	0.00	0.320
	1.25	0.287
	2.50	0.396
	5.00	0.246
	6.25	0.387
46	7.50	0.732
Traverse 4: Bar 86		
46	7.50	0.732
	8.75	0.387
	10.00	0.246
	12.50	0.395
	13.75	0.286
45	15.00	0.321
Bar 1		
1	0.00	0.071
	0.93	0.091
	1.87	0.101
	2.80	0.103
	3.73	0.100
	4.67	0.089
4	5.60	0.068
Bar 2		
2	0.00	0.026
	1.25	0.057
	2.50	0.066
	3.75	0.064
	6.25	0.040
3	7.50	0.078
Bar 3		
3	0.00	0.079
	1.25	0.040
	3.75	0.062
	5.00	0.064
	6.25	0.056
4	7.50	0.030
Bar 4		
12	0.00	0.027
1	2.50	0.018
Bar 5		
12	0.00	0.004
	2.04	0.003
	5.11	0.003
4	6.13	0.005
Bar 6		
1	0.00	0.002
	2.04	0.001
39	6.13	0.002
Bar 7		
2	0.00	0.065
33	2.50	0.065
Bar 8		
3	0.00	0.110
36	2.50	0.111
Bar 9		
3	0.00	0.126
	5.27	0.143
	6.59	0.145
39	7.91	0.143
Bar 10		
4	0.00	0.138
	2.64	0.124
	5.27	0.119
36	7.91	0.128
Bar 11		
39	0.00	0.062
4	2.50	0.062
Bar 12		
5	0.00	0.011
	0.17	0.016
13	0.50	0.032
Bar 13		
6	0.00	0.000
15	0.50	0.057
Bar 14		
7	0.00	0.000
16	0.50	0.053
Bar 15		
8	0.00	0.000
17	0.50	0.053
Bar 16		
9	0.00	0.000
19	0.50	0.053
Bar 17		
20	0.00	0.053
10	0.50	0.000
Bar 18		
21	0.00	0.053
11	0.50	0.000
Bar 19		
22	0.00	0.106
	0.25	0.080
12	0.50	0.065
Bar 20		
23	0.00	0.156
55	0.67	0.108
Bar 21		
24	0.00	0.063
13	2.83	0.063
Bar 22		
15	0.00	0.081
23	2.83	0.081
Bar 23		
15	0.00	0.155
	0.67	0.259
24	2.00	0.329
Bar 24		
25	0.00	0.115
15	3.20	0.115
Bar 25		
16	0.00	0.136
24	3.20	0.136
Bar 26		
16	0.00	0.164
25	2.00	0.340
Bar 27		
17	0.00	0.003
25	3.20	0.003
Bar 28		
26	0.00	0.010
16	3.20	0.010
Bar 29		
17	0.00	0.178
26	2.00	0.340
Bar 30		
27	0.00	0.046
17	3.20	0.046
Bar 31		
19	0.00	0.009
26	3.20	0.009
Bar 32		
19	0.00	0.207
	1.00	0.255
27	2.00	0.347
Bar 33		
28	0.00	0.116
19	3.20	0.116
Bar 34		
20	0.00	0.015
27	3.20	0.015
Bar 35		
20	0.00	0.191
	1.00	0.257
28	2.00	0.356
Bar 36		
21	0.00	0.015
28	3.20	0.015
Bar 37		
29	0.00	0.143
20	3.20	0.143
Bar 38		



Maximum utilization

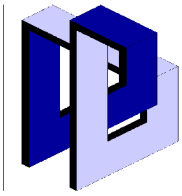
Verification 3 [EC 3 Design resistance (th. II ord.)]: Summary

node	s	U
-	m	-
21	0.00	0.137
	1.00	0.263
29	2.00	0.327
Bar 40		
30	0.00	0.014
21	3.20	0.014
Bar 41		
22	0.00	0.180
	1.00	0.289
30	2.00	0.335
Bar 42		
24	0.00	0.081
	0.33	0.084
	1.00	0.087
	1.67	0.084
23	2.00	0.081
Bar 43		
25	0.00	0.124
	0.42	0.128
	1.25	0.131
	2.08	0.128
24	2.50	0.124
Bar 44		
26	0.00	0.101
	0.42	0.106
	1.25	0.109
	2.08	0.106
25	2.50	0.101
Bar 45		
27	0.00	0.110
	0.42	0.114
	1.25	0.117
	2.08	0.114
26	2.50	0.110
Bar 46		
28	0.00	0.106
	0.42	0.110
	1.25	0.113
	2.08	0.110
27	2.50	0.106
Bar 47		
29	0.00	0.064
	0.42	0.070
	0.83	0.074
	1.25	0.075
	1.67	0.074
	2.08	0.070
28	2.50	0.064
Bar 48		
30	0.00	0.060
	0.42	0.067
	0.83	0.070
	1.25	0.072
	1.67	0.070
	2.08	0.067
29	2.50	0.060
Bar 49		
31	0.00	0.187
	0.52	0.210
	1.03	0.220
	1.55	0.215
	2.07	0.197
	2.58	0.166
23	3.10	0.156
Bar 50		
24	0.00	0.319
	0.52	0.326
	1.55	0.299
33	3.10	0.154
Bar 51		
25	0.00	0.336
	0.52	0.336
	1.55	0.301
34	3.10	0.138
Bar 52		
26	0.00	0.340
	1.55	0.304
35	3.10	0.137
Bar 53		
27	0.00	0.345
	1.55	0.307
36	3.10	0.136
Bar 54		
28	0.00	0.351
	1.55	0.310
37	3.10	0.139
Bar 55		
29	0.00	0.330
	0.52	0.331
	1.55	0.298
38	3.10	0.137
Bar 56		
30	0.00	0.335
	1.55	0.309
39	3.10	0.189
Bar 67		
32	0.00	0.163
	0.75	0.150
31	1.50	0.144
Bar 68		
33	0.00	0.183
	0.17	0.170
32	0.50	0.163
Bar 69		
33	0.00	0.260
	1.25	0.107
	2.08	0.081
34	2.50	0.085
Bar 70		
34	0.00	0.123
	1.25	0.139
35	2.50	0.145
Bar 71		
35	0.00	0.144
	0.83	0.094
	1.25	0.080
	1.67	0.094
36	2.50	0.153
Bar 72		
36	0.00	0.281
	1.25	0.138
	2.08	0.118
37	2.50	0.122
Bar 73		
37	0.00	0.121
	1.25	0.162
38	2.50	0.186
Bar 74		
38	0.00	0.185
	2.08	0.108
39	2.50	0.114
Bar 75		
18	0.00	0.221
43	2.50	0.074
Bar 76		
22	0.00	0.171
	1.67	0.111
44	2.50	0.064
Bar 77		
22	0.00	0.341
	0.95	0.337
	1.89	0.337
	4.73	0.337
47	5.68	0.338
Bar 78		
39	0.00	0.001
	0.95	0.001
44	5.68	0.001
Bar 79		
33	0.00	0.261
	1.67	0.162
45	2.50	0.078
Bar 80		
36	0.00	0.213
46	2.50	0.096
Bar 81		
39	0.00	0.129
	0.42	0.121
47	2.50	0.116
Bar 82		
40	0.00	0.341
42	2.24	0.084
Bar 88		
42	0.00	0.248
48	5.50	0.249
Bar 90		
44	0.00	0.241
	2.75	0.239
51	5.50	0.235
Bar 91		
45	0.00	0.262
52	5.50	0.264
Bar 92		
46	0.00	0.369
53	5.50	0.371
Bar 93		
47	0.00	0.264
54	5.50	0.265
Bar 95		
55	0.00	0.108
	0.11	0.102
	0.22	0.109
56	0.67	0.207
Bar 96		
56	0.00	0.207
13	0.67	0.393
Bar 97		
44	0.00	0.024
	0.85	0.027
	2.55	0.055
47	5.10	0.080
Bar 98		
29	0.00	0.156
39	3.98	0.156
Bar 99		
38	0.00	0.004
30	3.98	0.004
Bar 100		
23	0.00	0.042
33	3.69	0.042
Bar 101		
24	0.00	0.019
31	3.69	0.019
Minimum		0.000
Maximum		0.732

SUMMARY

Maximum utilization

node	s	U
-	m	-
Traverse 1: Bar 57		
13	0.00	0.388
	0.25	0.388
	0.75	0.397
14	1.50	0.446
Traverse 1: Bar 58		
14	1.50	0.446
15	2.00	0.482
Traverse 1: Bar 59		
15	2.00	0.508
	2.35	0.559
40	2.70	0.647
Traverse 1: Bar 60		
40	2.70	0.381
16	4.50	0.093
Traverse 1: Bar 61		
16	4.50	0.151
	5.33	0.083
	5.75	0.068
17	7.00	0.124
Traverse 1: Bar 62		
17	7.00	0.143
	8.00	0.077
	8.33	0.077
18	9.00	0.131
Traverse 1: Bar 63		
18	9.00	0.323
19	9.50	0.293
Traverse 1: Bar 64		
19	9.50	0.192
	10.33	0.124
	10.75	0.109
20	12.00	0.190
Traverse 1: Bar 65		
20	12.00	0.185
	13.25	0.192
21	14.50	0.195
Traverse 1: Bar 66		
21	14.50	0.200
	15.75	0.115
	16.58	0.161
22	17.00	0.196
Traverse 2: Bar 94		
50	0.00	0.543
	0.25	0.543
	0.33	0.551
49	0.50	0.699
Traverse 2: Bar 89		
49	0.50	0.735
43	6.00	0.188
Traverse 3: Bar 83		
41	0.00	0.000
42	0.70	0.092
Traverse 3: Bar 84		
42	0.70	0.288
	1.75	0.221
	4.90	0.265
	5.95	0.403
43	7.00	0.822
Traverse 3: Bar 85		
43	7.00	0.835
	8.33	0.455
	9.67	0.385
	11.00	0.609
	12.33	0.628
	13.67	0.437
44	15.00	0.423
Traverse 4: Bar 87		
47	0.00	0.419
	1.25	0.376
	2.50	0.518
	5.00	0.323
	6.25	0.508
46	7.50	0.960
Traverse 4: Bar 86		
46	7.50	0.960
	8.75	0.508
	10.00	0.323
	12.50	0.518
	13.75	0.375
45	15.00	0.419
Bar 1		
1	0.00	0.083
	0.93	0.104
	1.87	0.115
	2.80	0.118
	3.73	0.114
	4.67	0.103
4	5.60	0.083
Bar 2		
2	0.00	0.032
	1.25	0.065
	2.50	0.076
	3.75	0.073
	6.25	0.046
3	7.50	0.089
Bar 3		
3	0.00	0.091
	1.25	0.046
	3.75	0.071
	5.00	0.073
	6.25	0.065
4	7.50	0.038
Bar 4		
12	0.00	0.030
	2.08	0.021
1	2.50	0.021
Bar 5		
12	0.00	0.006
	2.04	0.004
	5.11	0.005
4	6.13	0.008
Bar 6		
1	0.00	0.004
39	6.13	0.004
Bar 7		
2	0.00	0.074
33	2.50	0.074
Bar 8		
3	0.00	0.125
36	2.50	0.126
Bar 9		
3	0.00	0.143
39	7.91	0.175
Bar 10		
4	0.00	0.159
	1.32	0.150
	5.27	0.139
	6.59	0.141
36	7.91	0.153
Bar 11		
39	0.00	0.071
4	2.50	0.071
Bar 12		
5	0.00	0.014
	0.17	0.018
13	0.50	0.039
Bar 13		
6	0.00	0.000
15	0.50	0.063
Bar 14		
7	0.00	0.000
16	0.50	0.058
Bar 15		
8	0.00	0.000
17	0.50	0.058
Bar 16		
9	0.00	0.000
19	0.50	0.058
Bar 17		
20	0.00	0.058
10	0.50	0.000
Bar 18		
21	0.00	0.058
11	0.50	0.000
Bar 19		
22	0.00	0.122
	0.25	0.092
12	0.50	0.076
Bar 20		
23	0.00	0.193
55	0.67	0.135
Bar 21		
24	0.00	0.079
13	2.83	0.079
Bar 22		
15	0.00	0.106
23	2.83	0.106
Bar 23		
15	0.00	0.195
	0.67	0.291
24	2.00	0.391
Bar 24		
25	0.00	0.143
15	3.20	0.143
Bar 25		
16	0.00	0.167
24	3.20	0.167
Bar 26		
16	0.00	0.186
25	2.00	0.380
Bar 27		
17	0.00	0.080
25	3.20	0.080
Bar 28		
26	0.00	0.027
16	3.20	0.027
Bar 29		
17	0.00	0.204
26	2.00	0.382
Bar 30		
27	0.00	0.058
17	3.20	0.058
Bar 31		
19	0.00	0.116
26	3.20	0.116
Bar 32		
19	0.00	0.236
	1.00	0.287
27	2.00	0.391
Bar 33		
28	0.00	0.159
19	3.20	0.159
Bar 34		



Project: 8332-AviKo
Member: uitkraging oplossing
2e orde-- NL 10 kN/m2

4H-FRAP
spatial frame structures
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kN, m, sec

Maximum utilization

node	s	U
-	m	-
20	0.00	0.200
27	3.20	0.200
Bar 35		
20	0.00	0.225
	1.00	0.286
28	2.00	0.401
Bar 36		
21	0.00	0.241
28	3.20	0.241
Bar 37		
29	0.00	0.193
20	3.20	0.193
Bar 38		
21	0.00	0.171
	1.00	0.295
29	2.00	0.367
Bar 40		
30	0.00	0.214
21	3.20	0.214
Bar 41		
22	0.00	0.227
	1.00	0.329
30	2.00	0.378
Bar 42		
24	0.00	0.094
	0.33	0.098
	1.00	0.101
	1.67	0.098
23	2.00	0.094
Bar 43		
25	0.00	0.143
	0.83	0.154
	1.25	0.155
	1.67	0.154
24	2.50	0.143
Bar 44		
26	0.00	0.121
	0.83	0.127
	1.25	0.128
	1.67	0.127
25	2.50	0.121
Bar 45		
27	0.00	0.130
	0.83	0.137
	1.25	0.137
	1.67	0.137
26	2.50	0.130
Bar 46		
28	0.00	0.129
	0.42	0.132
	1.25	0.135
	2.08	0.132
27	2.50	0.129
Bar 47		
29	0.00	0.117
	0.42	0.124
	0.83	0.128
	1.25	0.130
	1.67	0.128
	2.08	0.124
28	2.50	0.117
Bar 48		
30	0.00	0.103
	0.42	0.111
	0.83	0.115
	1.25	0.116
	1.67	0.115
	2.08	0.111
29	2.50	0.103
Bar 49		
31	0.00	0.288
	1.03	0.297
	1.55	0.283
	2.58	0.205
23	3.10	0.192
Bar 50		
24	0.00	0.385
	0.52	0.402
	1.03	0.387
	2.58	0.221
33	3.10	0.193
Bar 51		
25	0.00	0.376
	0.52	0.382
	1.55	0.336
34	3.10	0.172
Bar 52		
26	0.00	0.381
	0.52	0.387
	1.55	0.340
35	3.10	0.171
Bar 53		
27	0.00	0.389
	0.52	0.391
	1.55	0.345
36	3.10	0.171
Bar 54		
28	0.00	0.395
	0.52	0.397
	1.55	0.347
37	3.10	0.173
Bar 55		
29	0.00	0.370
	0.52	0.376
	1.55	0.334
38	3.10	0.171
Bar 56		
30	0.00	0.378
	0.52	0.383
	1.55	0.348
39	3.10	0.218
Bar 67		
32	0.00	0.225
	0.25	0.221
31	1.50	0.213
Bar 68		
33	0.00	0.234
32	0.50	0.225
Bar 69		
33	0.00	0.338
	1.25	0.139
	2.08	0.091
34	2.50	0.100
Bar 70		
34	0.00	0.140
	1.25	0.158
35	2.50	0.165
Bar 71		
35	0.00	0.164
	0.83	0.108
	1.25	0.101
	1.67	0.106
36	2.50	0.172
Bar 72		
36	0.00	0.364
	1.25	0.161
37	2.50	0.146
Bar 73		
37	0.00	0.138
38	2.50	0.215
Bar 74		
38	0.00	0.211
	2.08	0.129
39	2.50	0.128
Bar 75		
18	0.00	0.277
	0.83	0.195
43	2.50	0.093
Bar 76		
22	0.00	0.194
	1.67	0.126
44	2.50	0.072
Bar 77		
22	0.00	0.464
	0.95	0.459
	1.89	0.459
	4.73	0.459
47	5.68	0.461
Bar 78		
39	0.00	0.240
44	5.68	0.240
Bar 79		
33	0.00	0.361
45	2.50	0.089
Bar 80		
36	0.00	0.281
46	2.50	0.108
Bar 81		
39	0.00	0.145
	0.42	0.136
	0.83	0.134
47	2.50	0.134
Bar 82		
40	0.00	0.453
42	2.24	0.109
Bar 88		
42	0.00	0.280
48	5.50	0.282
Bar 90		
44	0.00	0.273
	0.92	0.274
	2.75	0.272
51	5.50	0.267
Bar 91		
45	0.00	0.299
52	5.50	0.300
Bar 92		
46	0.00	0.481
53	5.50	0.484
Bar 93		
47	0.00	0.300
54	5.50	0.302
Bar 95		
55	0.00	0.133
	0.11	0.131
56	0.67	0.283
Bar 96		
56	0.00	0.283
13	0.67	0.521
Bar 97		
44	0.00	0.028
	0.85	0.031
	2.55	0.064
47	5.10	0.094
Bar 98		
29	0.00	0.207
39	3.98	0.207
Bar 99		
38	0.00	0.252
30	3.98	0.252
Bar 100		
23	0.00	0.056
33	3.69	0.056
Bar 101		
24	0.00	0.033
31	3.69	0.033
Minimum		0.000
Maximum		0.960

Detailed information node 36 at x = 5.10 m, y = 7.50 m, z = 2.50 m

DETAILED INFORMATION NODE 36 AT X = 5.10 M, Y = 7.50 M, Z = 2.50 M

Results of load cases

no	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	designation
Action effect 1: permanent loads							
1	-0.98	-1.67	0.90	-0.13	0.39	-0.28	Dead load (1)
Action effect 2: allg. trafficslasten							
2	0.25	0.06	1.34	0.01	-0.10	-0.02	traffic (1)
Action effect 3: new action effect							
3	-0.08	-0.92	0.00	-0.12	0.03	-0.02	wind Y
4	-10.24	-2.64	0.08	-0.38	4.09	-1.07	wind X
5	0.02	0.00	0.11	-0.00	-0.01	-0.00	sneeuw

Verification 1: EC 3 Design resistance (th. I ord.)

Results of load spectra

type	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	factorization
Extreme rule 1: Extreme rule 1							
min u_r	-15.11	-6.85	1.20	-0.83	6.04	-1.82	1.22*Lf1+1.35*(Lf3+Lf4)
max u_r	-0.61	-1.59	2.84	-0.12	0.24	-0.31	Lf1+1.35*(Lf2+Lf5)
min u_s	-15.11	-6.85	1.20	-0.83	6.04	-1.82	1.22*Lf1+1.35*(Lf3+Lf4)
max u_s	-0.61	-1.59	2.84	-0.12	0.24	-0.31	Lf1+1.35*(Lf2+Lf5)
min u_t	-0.98	-1.67	0.90	-0.13	0.39	-0.28	Lf1
max u_t	-14.74	-6.77	3.15	-0.82	5.89	-1.84	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
min v_r	-15.08	-6.85	1.35	-0.83	6.02	-1.82	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
max v_r	-0.64	-1.59	2.70	-0.11	0.25	-0.31	Lf1+1.35*Lf2
min v_s	-0.61	-1.59	2.84	-0.12	0.24	-0.31	Lf1+1.35*(Lf2+Lf5)
max v_s	-15.11	-6.85	1.20	-0.83	6.04	-1.82	1.22*Lf1+1.35*(Lf3+Lf4)
min v_t	-14.74	-6.77	3.15	-0.82	5.89	-1.84	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
max v_t	-0.98	-1.67	0.90	-0.13	0.39	-0.28	Lf1

Verification 2: EC 3 Design resistance (th. II ord.)

Results of load spectra

type	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	factorization
Load spectrum 1: Load spectrum Auto #1							
----	-1.08	-1.61	2.70	-0.12	0.43	-0.31	Lf1+1.35*Lf2
Load spectrum 2: Load spectrum Auto #2							
----	-1.44	-1.99	2.90	-0.15	0.57	-0.38	1.22*Lf1+1.35*Lf2
Load spectrum 3: Load spectrum Auto #3							
----	-1.31	-2.56	2.70	-0.24	0.52	-0.38	Lf1+1.35*Lf2+0.8*1.35*Lf3
Load spectrum 4: Load spectrum Auto #4							
----	-1.67	-2.94	2.90	-0.28	0.66	-0.45	1.22*Lf1+1.35*Lf2+0.8*1.35*Lf3
Load spectrum 5: Load spectrum Auto #5							
----	-14.76	-4.37	2.79	-0.53	5.89	-1.63	Lf1+1.35*Lf2+0.8*1.35*Lf4
Load spectrum 6: Load spectrum Auto #6							
----	-15.29	-4.81	2.98	-0.57	6.11	-1.72	1.22*Lf1+1.35*Lf2+0.8*1.35*Lf4
Load spectrum 7: Load spectrum Auto #7							
----	-15.03	-5.32	2.79	-0.66	6.00	-1.71	Lf1+1.35*Lf2+0.8*1.35*(Lf3+Lf4)
Load spectrum 8: Load spectrum Auto #8							
----	-15.57	-5.76	2.98	-0.70	6.22	-1.80	1.22*Lf1+1.35*Lf2+0.8*1.35*(Lf3+Lf4)
Load spectrum 9: Load spectrum Auto #9							
----	-1.08	-1.61	2.81	-0.12	0.43	-0.31	Lf1+1.35*Lf2+0.8*1.35*Lf5
Load spectrum 10: Load spectrum Auto #10							
----	-1.44	-1.99	3.01	-0.15	0.57	-0.38	1.22*Lf1+1.35*Lf2+0.8*1.35*Lf5
Load spectrum 11: Load spectrum Auto #11							
----	-1.31	-2.56	2.81	-0.25	0.52	-0.38	Lf1+1.35*Lf2+0.8*1.35*(Lf3+Lf5)
Load spectrum 12: Load spectrum Auto #12							

Detailed information node 36 at x = 5.10 m, y = 7.50 m, z = 2.50 m

Verification 2: EC 3 Design resistance (th. II ord.)

Results of load spectra

type	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	factorization
----	-1.68	-2.95	3.01	-0.28	0.67	-0.45	1.22*Lf1+1.35*Lf2+0.8*1.35*(Lf3+Lf5)
Load spectrum 13: Load spectrum Auto #13							
----	-14.92	-4.42	2.90	-0.54	5.96	-1.65	Lf1+1.35*Lf2+0.8*1.35*(Lf4+Lf5)
Load spectrum 14: Load spectrum Auto #14							
----	-15.46	-4.85	3.10	-0.58	6.18	-1.74	1.22*Lf1+1.35*Lf2+0.8*1.35*(Lf4+Lf5)
Load spectrum 15: Load spectrum Auto #15							
----	-15.19	-5.37	2.90	-0.67	6.07	-1.73	Lf1+1.35*Lf2+0.8*1.35*(Lf3+Lf4+Lf5)
Load spectrum 16: Load spectrum Auto #16							
----	-15.75	-5.81	3.10	-0.71	6.29	-1.82	1.22*Lf1+1.35*Lf2+0.8*1.35*(Lf3+Lf4+Lf5)
Load spectrum 17: Load spectrum Auto #17							
----	-1.74	-2.86	0.89	-0.29	0.69	-0.39	Lf1+1.35*Lf3
Load spectrum 18: Load spectrum Auto #18							
----	-2.10	-3.24	1.09	-0.32	0.84	-0.45	1.22*Lf1+1.35*Lf3
Load spectrum 19: Load spectrum Auto #19							
----	-1.37	-2.79	2.70	-0.28	0.54	-0.40	Lf1+1.35*(Lf2+Lf3)
Load spectrum 20: Load spectrum Auto #20							
----	-1.73	-3.18	2.90	-0.31	0.69	-0.47	1.22*Lf1+1.35*(Lf2+Lf3)
Load spectrum 21: Load spectrum Auto #21							
----	-18.28	-5.11	1.00	-0.64	7.30	-1.92	Lf1+1.35*Lf4
Load spectrum 22: Load spectrum Auto #22							
----	-18.85	-5.55	1.20	-0.68	7.53	-2.02	1.22*Lf1+1.35*Lf4
Load spectrum 23: Load spectrum Auto #23							
----	-18.16	-5.06	2.81	-0.64	7.25	-1.96	Lf1+1.35*(Lf2+Lf4)
Load spectrum 24: Load spectrum Auto #24							
----	-18.74	-5.51	3.01	-0.68	7.49	-2.05	1.22*Lf1+1.35*(Lf2+Lf4)
Load spectrum 25: Load spectrum Auto #25							
----	-18.62	-6.29	1.01	-0.80	7.44	-2.02	Lf1+1.35*(Lf3+Lf4)
Load spectrum 26: Load spectrum Auto #26							
----	-19.21	-6.74	1.20	-0.84	7.67	-2.11	1.22*Lf1+1.35*(Lf3+Lf4)
Load spectrum 27: Load spectrum Auto #27							
----	-18.51	-6.25	2.81	-0.80	7.39	-2.06	Lf1+1.35*(Lf2+Lf3+Lf4)
Load spectrum 28: Load spectrum Auto #28							
----	-19.10	-6.70	3.01	-0.84	7.63	-2.15	1.22*Lf1+1.35*(Lf2+Lf3+Lf4)
Load spectrum 29: Load spectrum Auto #29							
----	-1.45	-1.68	1.04	-0.13	0.58	-0.30	Lf1+1.35*Lf5
Load spectrum 30: Load spectrum Auto #30							
----	-1.81	-2.06	1.24	-0.17	0.72	-0.38	1.22*Lf1+1.35*Lf5
Load spectrum 31: Load spectrum Auto #31							
----	-1.08	-1.61	2.84	-0.12	0.43	-0.31	Lf1+1.35*(Lf2+Lf5)
Load spectrum 32: Load spectrum Auto #32							
----	-1.44	-2.00	3.04	-0.15	0.57	-0.38	1.22*Lf1+1.35*(Lf2+Lf5)
Load spectrum 33: Load spectrum Auto #33							
----	-1.74	-2.87	1.04	-0.29	0.69	-0.39	Lf1+1.35*(Lf3+Lf5)
Load spectrum 34: Load spectrum Auto #34							
----	-2.11	-3.25	1.24	-0.33	0.84	-0.46	1.22*Lf1+1.35*(Lf3+Lf5)
Load spectrum 35: Load spectrum Auto #35							
----	-1.37	-2.81	2.84	-0.28	0.54	-0.40	Lf1+1.35*(Lf2+Lf3+Lf5)
Load spectrum 36: Load spectrum Auto #36							
----	-1.74	-3.19	3.04	-0.31	0.69	-0.47	1.22*Lf1+1.35*(Lf2+Lf3+Lf5)
Load spectrum 37: Load spectrum Auto #37							
----	-18.53	-5.18	1.15	-0.66	7.40	-1.95	Lf1+1.35*(Lf4+Lf5)
Load spectrum 38: Load spectrum Auto #38							
----	-19.12	-5.62	1.35	-0.70	7.64	-2.05	1.22*Lf1+1.35*(Lf4+Lf5)
Load spectrum 39: Load spectrum Auto #39							
----	-18.41	-5.13	2.95	-0.65	7.36	-1.99	Lf1+1.35*(Lf2+Lf4+Lf5)
Load spectrum 40: Load spectrum Auto #40							
----	-19.01	-5.58	3.15	-0.69	7.60	-2.08	1.22*Lf1+1.35*(Lf2+Lf4+Lf5)
Load spectrum 41: Load spectrum Auto #41							
----	-18.88	-6.37	1.15	-0.82	7.54	-2.05	Lf1+1.35*(Lf3+Lf4+Lf5)
Load spectrum 42: Load spectrum Auto #42							
----	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
Load spectrum 43: Load spectrum Auto #43							
----	-18.77	-6.33	2.95	-0.81	7.50	-2.09	Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
Load spectrum 44: Load spectrum Auto #44							
----	-19.38	-6.78	3.15	-0.85	7.74	-2.18	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
Extreme rule der Generierung 1: Generation code 1							
min u_r	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
max u_r	-1.08	-1.61	2.84	-0.12	0.43	-0.31	Lf1+1.35*(Lf2+Lf5)
min u_s	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)

Detailed information node 36 at x = 5.10 m, y = 7.50 m, z = 2.50 m

Verification 2: EC 3 Design resistance (th. II ord.)

Results of load spectra

type	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	factorization
max u_s	-1.08	-1.61	2.70	-0.12	0.43	-0.31	Lf1+1.35*Lf2
min u_t	-1.74	-2.86	0.89	-0.29	0.69	-0.39	Lf1+1.35*Lf3
max u_t	-19.38	-6.78	3.15	-0.85	7.74	-2.18	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
min v_r	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
max v_r	-1.08	-1.61	2.70	-0.12	0.43	-0.31	Lf1+1.35*Lf2
min v_s	-1.08	-1.61	2.84	-0.12	0.43	-0.31	Lf1+1.35*(Lf2+Lf5)
max v_s	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
min v_t	-19.38	-6.78	3.15	-0.85	7.74	-2.18	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
max v_t	-1.45	-1.68	1.04	-0.13	0.58	-0.30	Lf1+1.35*Lf5
Extreme rule of load case combinations							
min u_r	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
max u_r	-1.08	-1.61	2.84	-0.12	0.43	-0.31	Lf1+1.35*(Lf2+Lf5)
min u_s	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
max u_s	-1.08	-1.61	2.70	-0.12	0.43	-0.31	Lf1+1.35*Lf2
min u_t	-1.74	-2.86	0.89	-0.29	0.69	-0.39	Lf1+1.35*Lf3
max u_t	-19.38	-6.78	3.15	-0.85	7.74	-2.18	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
min v_r	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
max v_r	-1.08	-1.61	2.70	-0.12	0.43	-0.31	Lf1+1.35*Lf2
min v_s	-1.08	-1.61	2.84	-0.12	0.43	-0.31	Lf1+1.35*(Lf2+Lf5)
max v_s	-19.48	-6.82	1.35	-0.86	7.78	-2.14	1.22*Lf1+1.35*(Lf3+Lf4+Lf5)
min v_t	-19.38	-6.78	3.15	-0.85	7.74	-2.18	1.22*Lf1+1.35*(Lf2+Lf3+Lf4+Lf5)
max v_t	-1.45	-1.68	1.04	-0.13	0.58	-0.30	Lf1+1.35*Lf5

Verification 3: EC 3 Design resistance (th. II ord.)

Results of load spectra

type	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	factorization
Load spectrum 1: Load spectrum Auto #1							
----	-1.18	-1.62	2.23	-0.12	0.47	-0.30	Lf1+Lf2
Load spectrum 2: Load spectrum Auto #2							
----	-1.35	-2.33	2.23	-0.21	0.54	-0.36	Lf1+Lf2+0.8*Lf3
Load spectrum 3: Load spectrum Auto #3							
----	-11.27	-3.67	2.30	-0.43	4.50	-1.28	Lf1+Lf2+0.8*Lf4
Load spectrum 4: Load spectrum Auto #4							
----	-11.47	-4.38	2.30	-0.52	4.58	-1.34	Lf1+Lf2+0.8*(Lf3+Lf4)
Load spectrum 5: Load spectrum Auto #5							
----	-1.18	-1.63	2.32	-0.12	0.47	-0.31	Lf1+Lf2+0.8*Lf5
Load spectrum 6: Load spectrum Auto #6							
----	-1.35	-2.33	2.32	-0.22	0.54	-0.36	Lf1+Lf2+0.8*(Lf3+Lf5)
Load spectrum 7: Load spectrum Auto #7							
----	-11.36	-3.70	2.38	-0.43	4.54	-1.29	Lf1+Lf2+0.8*(Lf4+Lf5)
Load spectrum 8: Load spectrum Auto #8							
----	-11.56	-4.40	2.38	-0.53	4.61	-1.35	Lf1+Lf2+0.8*(Lf3+Lf4+Lf5)
Load spectrum 9: Load spectrum Auto #9							
----	-1.67	-2.55	0.89	-0.25	0.66	-0.36	Lf1+Lf3
Load spectrum 10: Load spectrum Auto #10							
----	-1.39	-2.50	2.23	-0.24	0.55	-0.37	Lf1+Lf2+Lf3
Load spectrum 11: Load spectrum Auto #11							
----	-13.91	-4.22	0.98	-0.51	5.56	-1.50	Lf1+Lf4
Load spectrum 12: Load spectrum Auto #12							
----	-13.79	-4.18	2.31	-0.50	5.51	-1.52	Lf1+Lf2+Lf4
Load spectrum 13: Load spectrum Auto #13							
----	-14.15	-5.10	0.98	-0.63	5.65	-1.57	Lf1+Lf3+Lf4
Load spectrum 14: Load spectrum Auto #14							
----	-14.04	-5.06	2.31	-0.62	5.61	-1.60	Lf1+Lf2+Lf3+Lf4
Load spectrum 15: Load spectrum Auto #15							
----	-1.45	-1.67	1.00	-0.13	0.58	-0.30	Lf1+Lf5
Load spectrum 16: Load spectrum Auto #16							
----	-1.18	-1.63	2.34	-0.12	0.47	-0.31	Lf1+Lf2+Lf5
Load spectrum 17: Load spectrum Auto #17							
----	-1.67	-2.56	1.00	-0.25	0.66	-0.36	Lf1+Lf3+Lf5
Load spectrum 18: Load spectrum Auto #18							
----	-1.39	-2.51	2.34	-0.24	0.55	-0.37	Lf1+Lf2+Lf3+Lf5
Load spectrum 19: Load spectrum Auto #19							

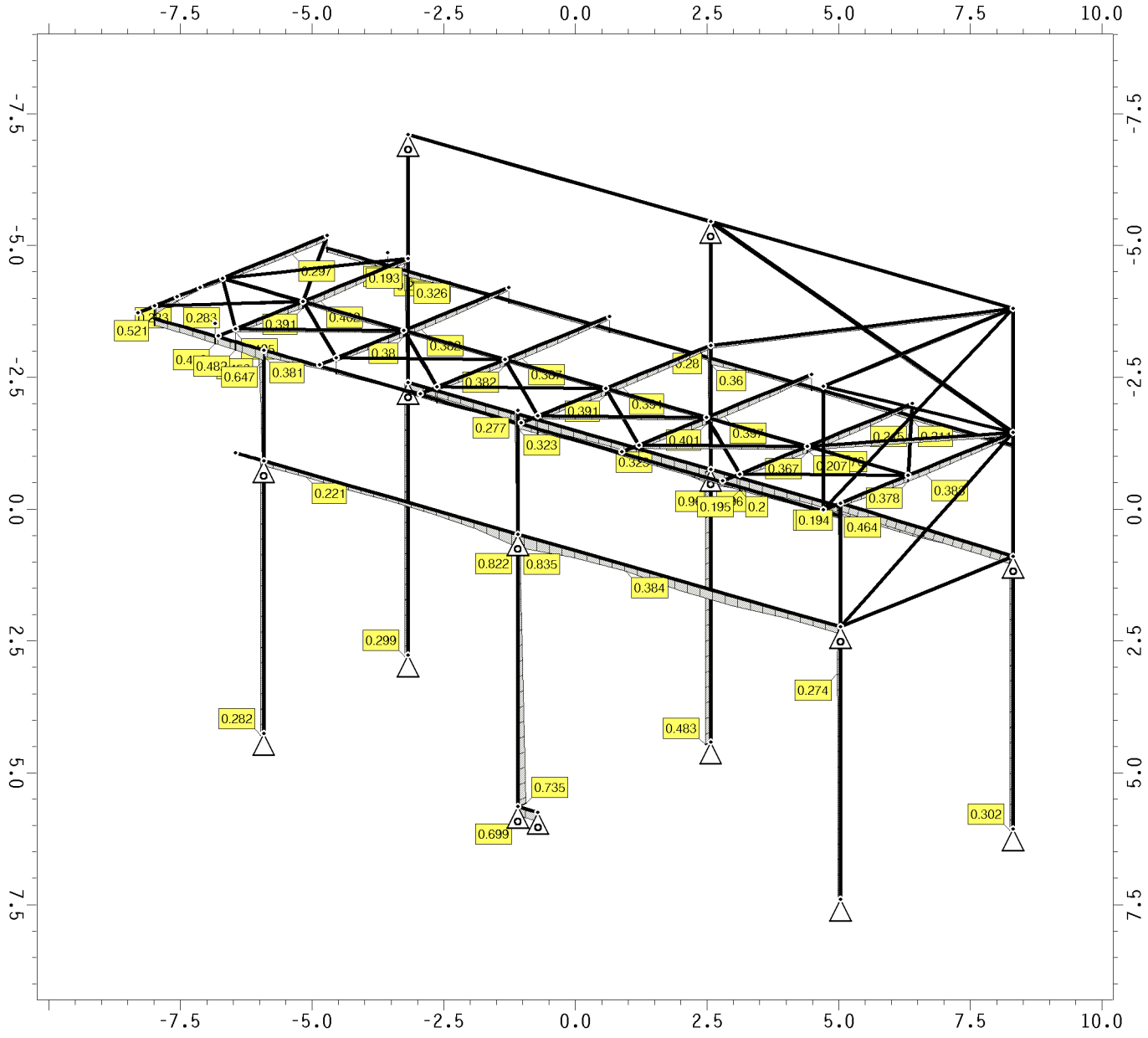
Verification 3: EC 3 Design resistance (th. II ord.)

Results of load spectra

type	u_r mm	u_s mm	u_t mm	v_r ‰	v_s ‰	v_t ‰	factorization
----	-14.05	-4.26	1.08	-0.52	5.61	-1.52	Lf1+Lf4+Lf5
Load spectrum 20: Load spectrum Auto #20							
----	-13.93	-4.22	2.42	-0.51	5.56	-1.54	Lf1+Lf2+Lf4+Lf5
Load spectrum 21: Load spectrum Auto #21							
----	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
Load spectrum 22: Load spectrum Auto #22							
----	-14.18	-5.10	2.42	-0.63	5.66	-1.61	Lf1+Lf2+Lf3+Lf4+Lf5
Extreme rule der Generierung 1: verplaatsing							
min u_r	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
max u_r	-1.18	-1.63	2.34	-0.12	0.47	-0.31	Lf1+Lf2+Lf5
min u_s	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
max u_s	-1.18	-1.62	2.23	-0.12	0.47	-0.30	Lf1+Lf2
min u_t	-1.67	-2.55	0.89	-0.25	0.66	-0.36	Lf1+Lf3
max u_t	-14.18	-5.10	2.42	-0.63	5.66	-1.61	Lf1+Lf2+Lf3+Lf4+Lf5
min v_r	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
max v_r	-1.18	-1.62	2.23	-0.12	0.47	-0.30	Lf1+Lf2
min v_s	-1.18	-1.63	2.34	-0.12	0.47	-0.31	Lf1+Lf2+Lf5
max v_s	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
min v_t	-14.18	-5.10	2.42	-0.63	5.66	-1.61	Lf1+Lf2+Lf3+Lf4+Lf5
max v_t	-1.45	-1.67	1.00	-0.13	0.58	-0.30	Lf1+Lf5
Extreme rule of load case combinations							
min u_r	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
max u_r	-1.18	-1.63	2.34	-0.12	0.47	-0.31	Lf1+Lf2+Lf5
min u_s	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
max u_s	-1.18	-1.62	2.23	-0.12	0.47	-0.30	Lf1+Lf2
min u_t	-1.67	-2.55	0.89	-0.25	0.66	-0.36	Lf1+Lf3
max u_t	-14.18	-5.10	2.42	-0.63	5.66	-1.61	Lf1+Lf2+Lf3+Lf4+Lf5
min v_r	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
max v_r	-1.18	-1.62	2.23	-0.12	0.47	-0.30	Lf1+Lf2
min v_s	-1.18	-1.63	2.34	-0.12	0.47	-0.31	Lf1+Lf2+Lf5
max v_s	-14.29	-5.14	1.08	-0.64	5.71	-1.59	Lf1+Lf3+Lf4+Lf5
min v_t	-14.18	-5.10	2.42	-0.63	5.66	-1.61	Lf1+Lf2+Lf3+Lf4+Lf5
max v_t	-1.45	-1.67	1.00	-0.13	0.58	-0.30	Lf1+Lf5

Boundary lines U

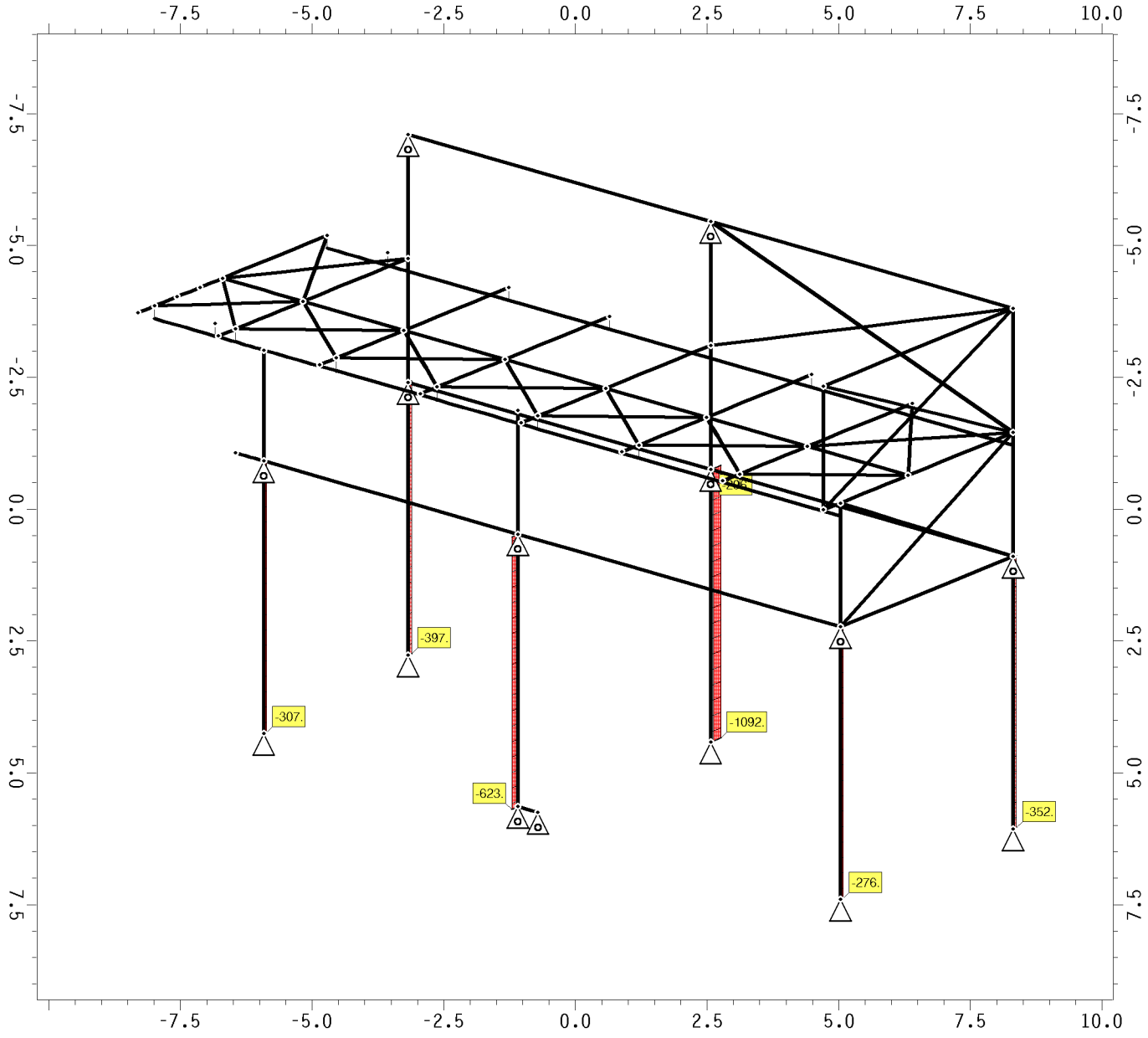
Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary



Boundary lines U, Utilization: factor: 0.319
Max: U: 0.96

Boundary lines ext N

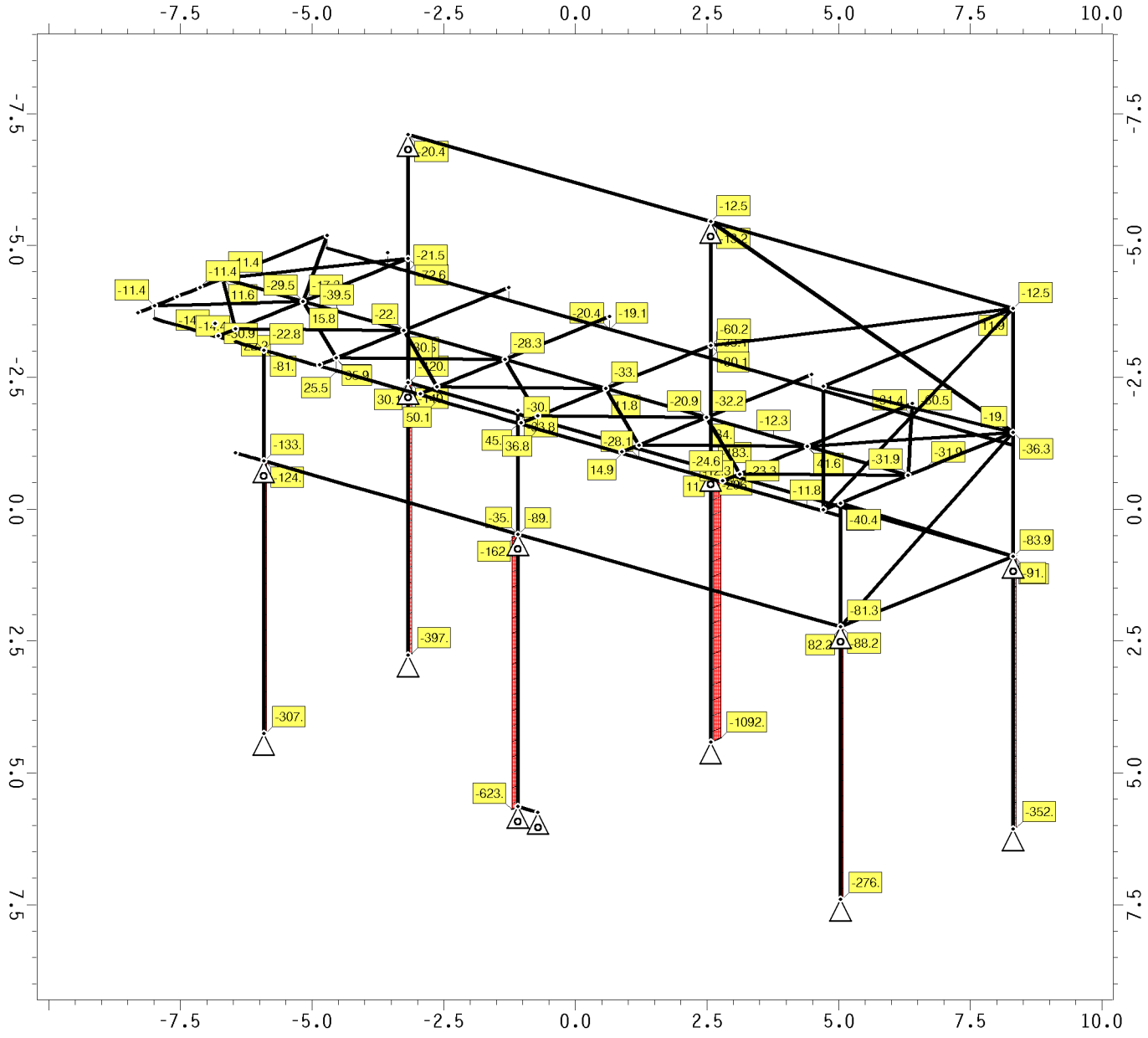
Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary



Boundary lines ext N, extr. normal force: factor: 3.E-4
Min/Max: ext N: -1092./82.16 kN

Boundary lines ext N

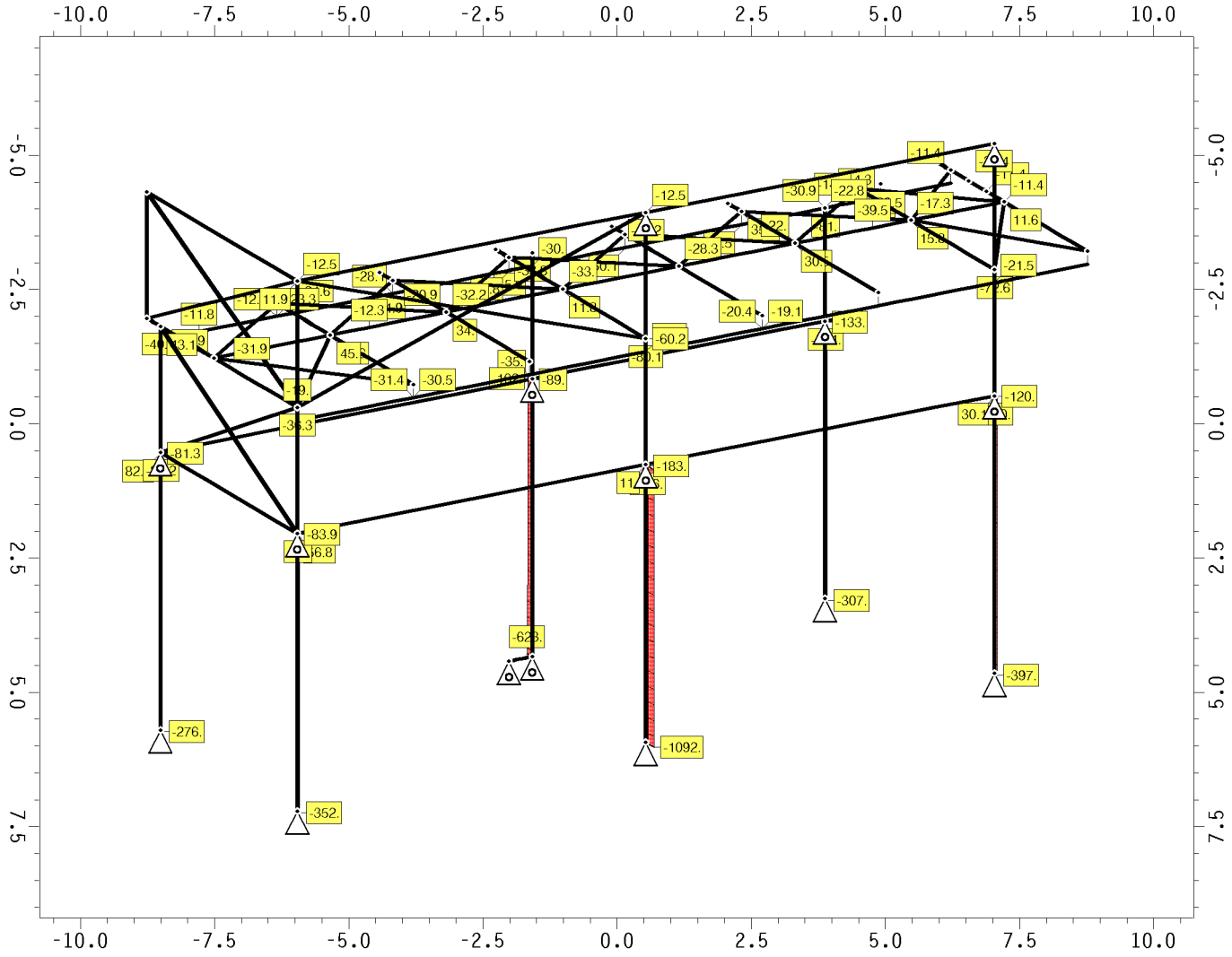
Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary



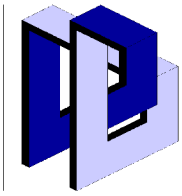
Boundary lines ext N, extr. normal force: factor: 3.E-4
Min/Max: ext N: -1092./82.16 kN

Boundary lines ext N

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary



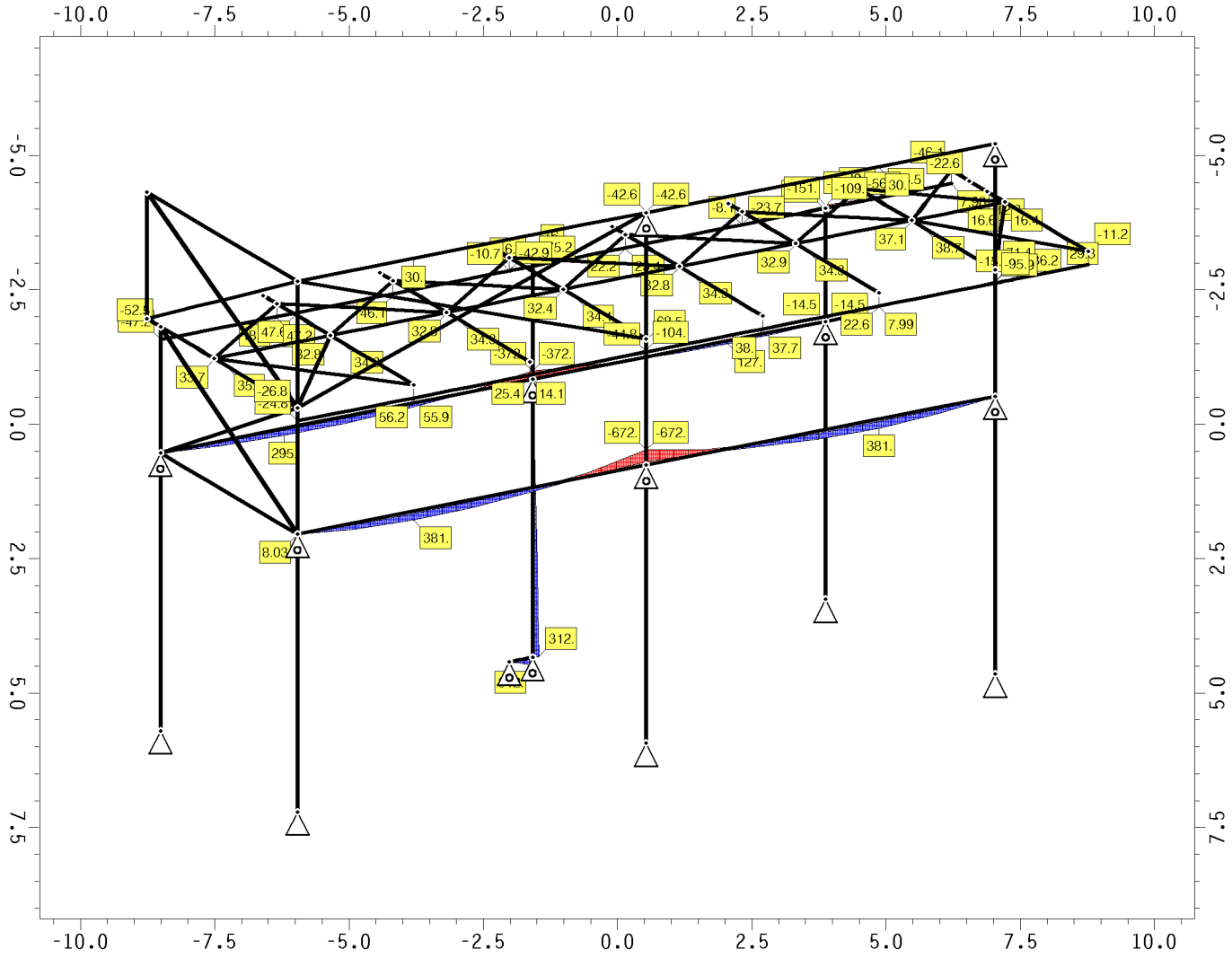
Boundary lines ext N, extr. normal force: factor: 3.E-4
Min/Max: ext N: -1092./82.16 kN



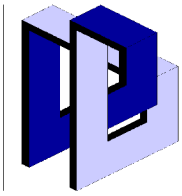
Project: 8332-AviKo Member: uitkraging oplossing 2e orde-- NL 10 kN/m2	4H-FRAP spatial frame structures Version 12/2014	29.04.2016 Page 116 kN, m, sec

Boundary lines ext Mη

Verification 2 [EC 3 Design resistance (th. II ord.)]: Summary



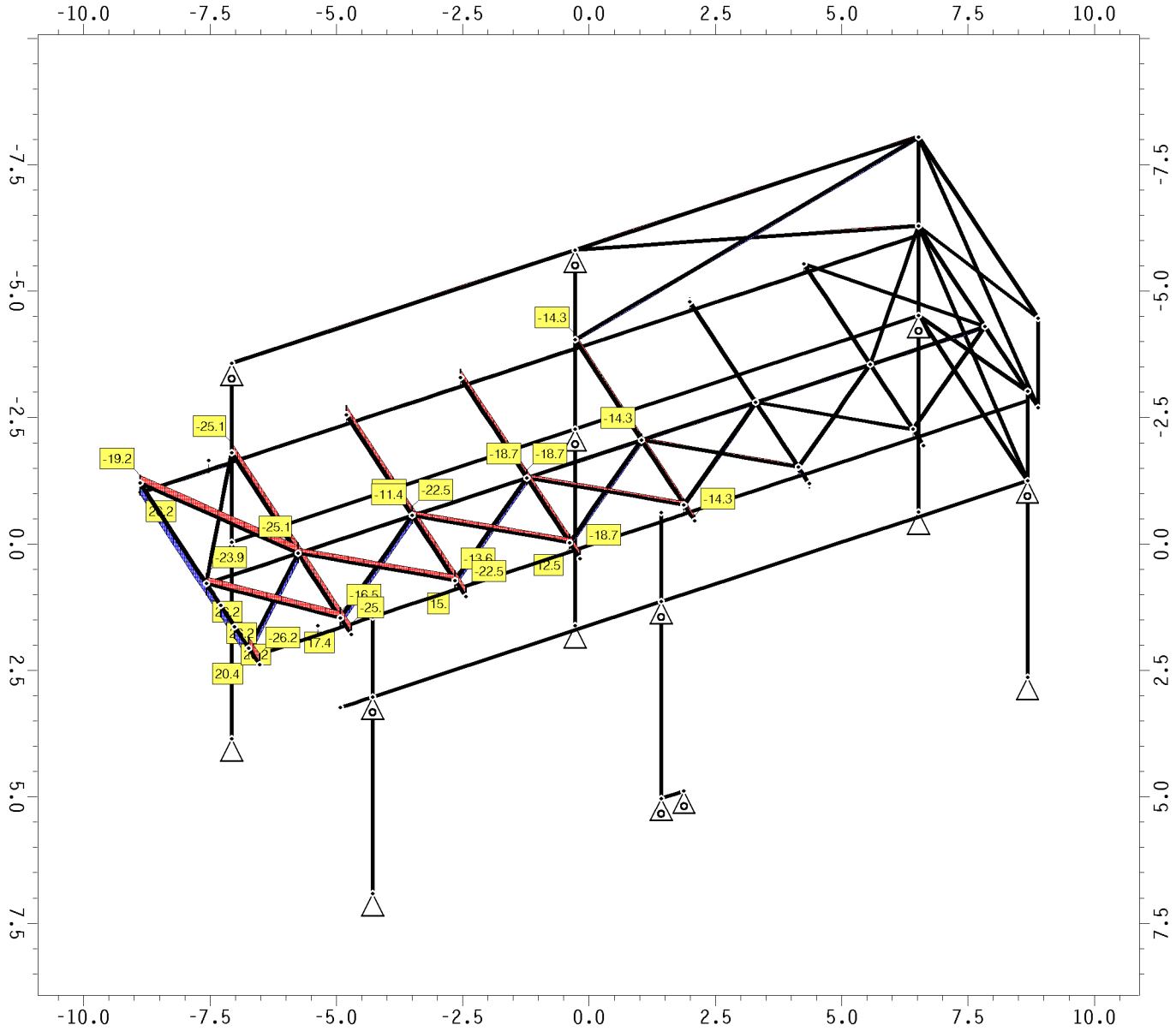
Boundary lines ext Mη, extr. moment about η-axis: factor: 5.E-4
Min/Max: ext Mη: -671.7/381. kNm



Project: 8332-AviKo Member: uitkraging oplossing 2e orde-- NL 10 kN/m2	4H-FRAP spatial frame structures Version 12/2014	29.04.2016 Page 117 kN, m, sec

Boundary lines ext ul

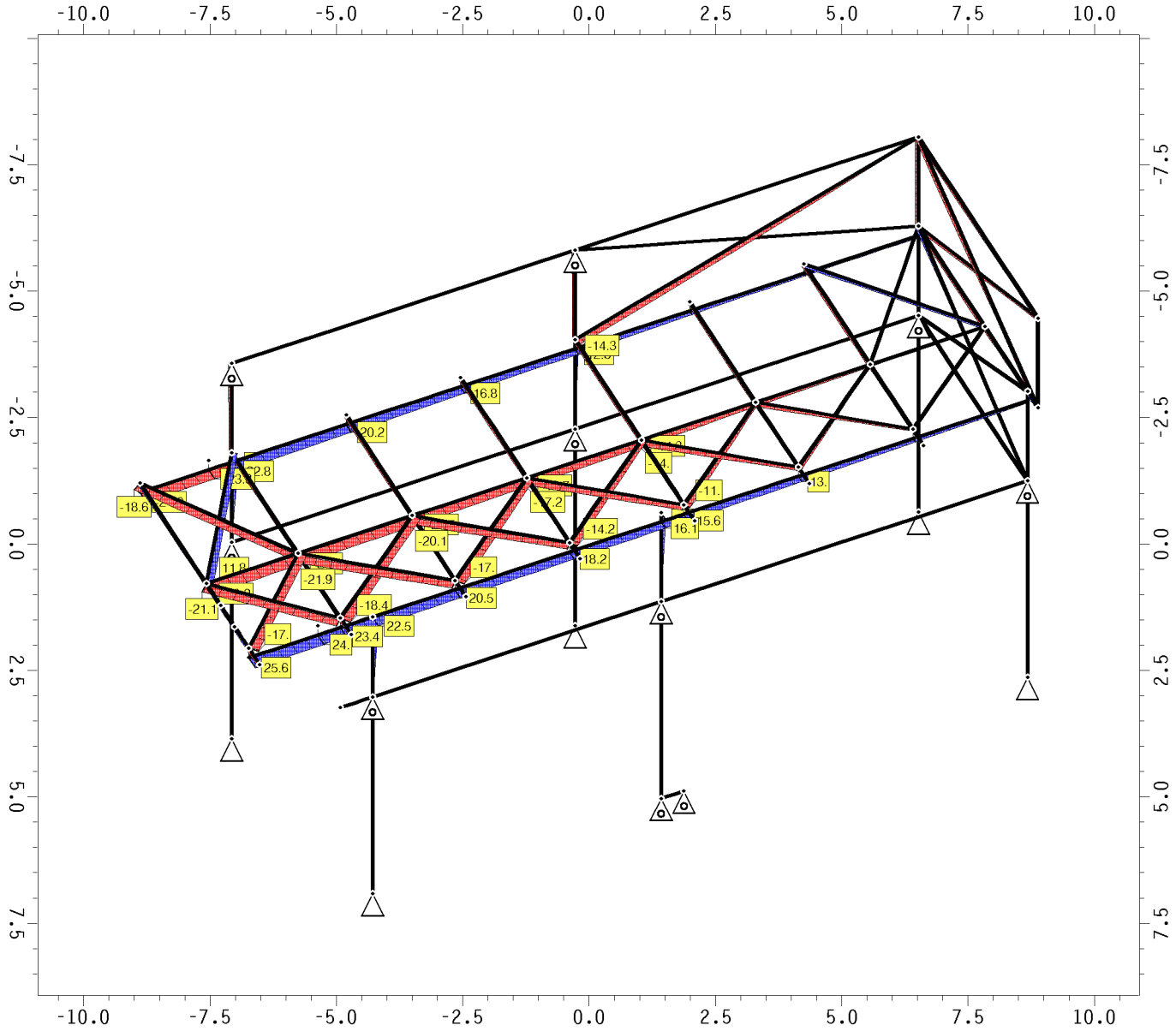
Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing



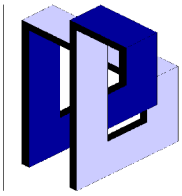
Boundary lines ext ul, extr. displacement in l-direction: factor: 1.E-2
Min/Max: ext ul: -26.16/26.17 mm

Boundary lines ext um

Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing



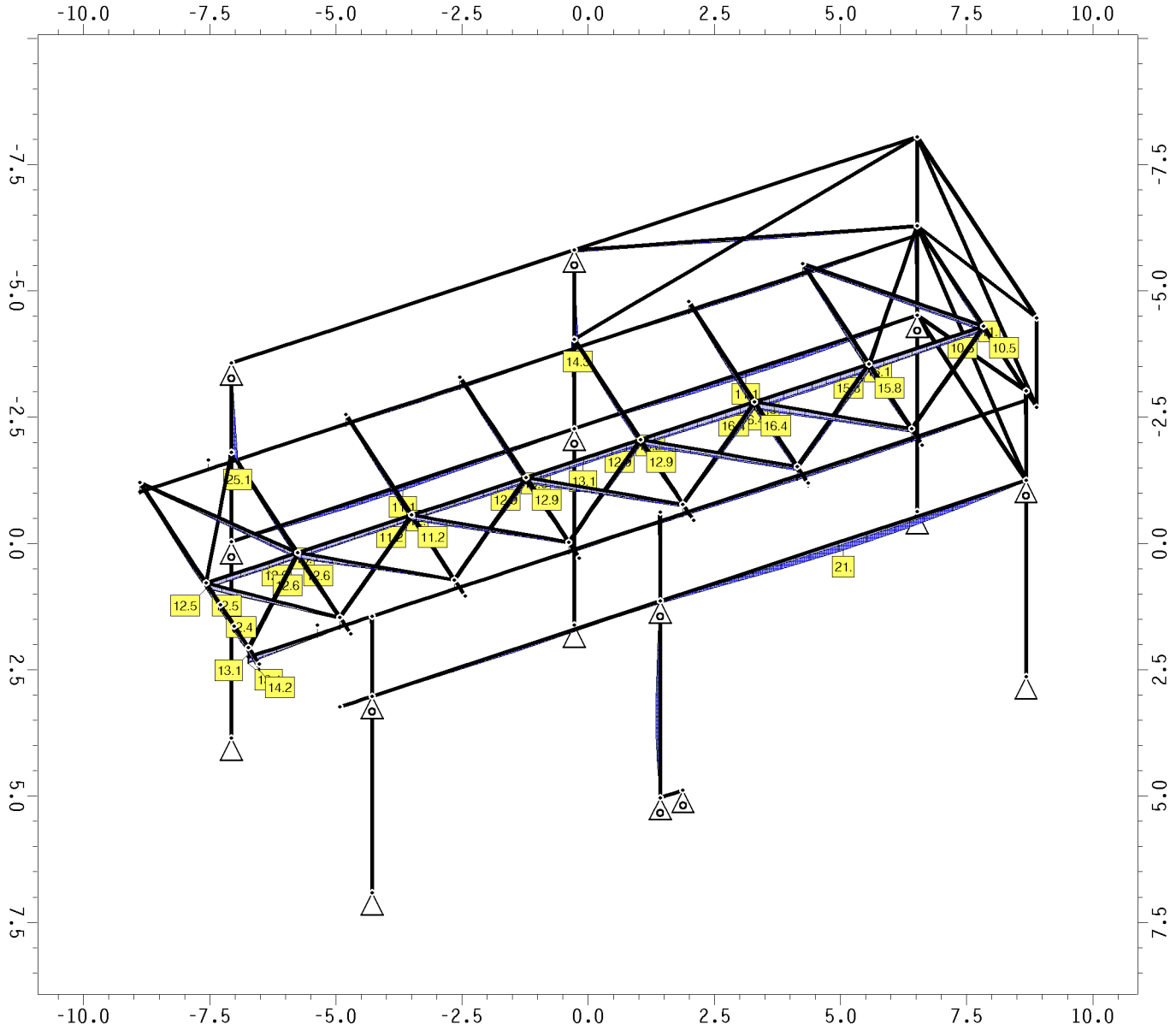
Boundary lines ext um, extr. deformation in m-direction: factor: 1.E-2
Min/Max: ext um: -26.17/25.62 mm



Project: 8332-AviKo Member: uitkraging oplossing 2e orde-- NL 10 kN/m2	4H-FRAP spatial frame structures Version 12/2014	29.04.2016 Page 119 kN, m, sec

Boundary lines ext un

Verification 3 [EC 3 Design resistance (th. II ord.)]: Group of load spectra 1: verplaatsing



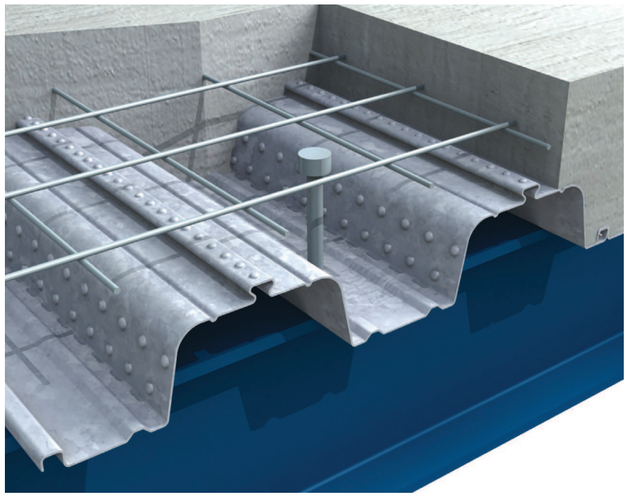
Boundary lines ext un, extr. deformation in n-direction: factor: 1.E-2
Min/Max: ext un: -5.01/25.1 mm

Bijlage B - Gegevens staalbetonvloer

ComFlor 95

- Uit de serie lage staalplaten

Constructief ontwerpers willen steeds grotere stempelvrije overspanningen realiseren. Daarnaast breekt het gebruik van deuvels om staal-betonliggers te maken, eindelijk door in Nederland. De ComFlor 95 combineert de grote stempelvrije overspanningen van de ComFlor 100 met de mogelijkheid deuvels toe te passen.



Grotere overspanningen

De ComFlor 95 is het antwoord op de vraag naar grote overspanningen. Er zijn nu zowel gestempeld als ongestempeld grotere overspanningen tot 5,85 meter mogelijk. Met het toenemen van de overspanning neemt ook het gewicht van de staalplaten toe. Om het gewicht van een plaat te beperken, en zo verantwoorde montage mogelijk te maken is de werkende breedte van de ComFlor 95 600 mm.

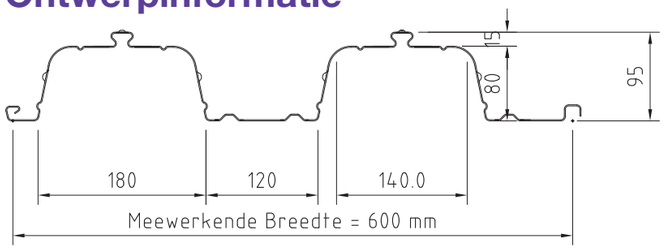
De noppen in het lijf van de plaat en de uitgekiende vorm van de zwaluwstaart geven een optimale verbinding tussen het beton en de staalplaat. Daardoor levert de ComFlor 95 ook bij de grotere overspanningen een belangrijke bijdrage als onderwapening.

Deuvels

Bij de ontwikkeling van de ComFlor 95 hebben deuvels een belangrijke rol gespeeld. De plaats van de langsverstijvingen in de onderflens en de asymmetische zijoverlap maken het mogelijk de deuvels in elke rib in het midden aan te brengen. Daarnaast vergroot de ronde overgang tussen het lijf en de bovenfles de effectiviteit van de deuvels.

Ondanks het feit dat de ComFlor 95 voor het realiseren van grote overspanningen hoger is dan andere platen maakt de vorm van de staalplaat het mogelijk om efficiënte staal-betonliggers te ontwerpen.

Ontwerpinformatie



Doorsnedegrootheden ComFlor 95

Nominale dikte	Kerndikte	Gewicht	Oppervlak	Traagheids-moment	Maximaal moment veld	Maximaal moment steunpunt
[mm]	[mm]	[kN/m²]	[mm²/m]	[mm⁴/m]	[kNm/m]	[kNm/m]
0,90	0,86	0,11	1387	1671200	10,76	8,68
1,20	1,16	0,15	1871	2194300	18,49	14,59

ComFlor 95 Staalplaat-betonvloer

Vloerdikte	Netto Beton-volume[1)]	Eigen gewicht Staalplaat-betonvloer[1+2)]	Max. stempelvrije overspanning[3)] 0.90 mm		1.20 mm	
		Grindbeton	Enkel-/meervelds		Enkel-/meervelds	
[mm]	[l/m²]	[kg/m²]	[m]	[m]	[m]	[m]
140	97	244	3,80	4,20	4,10	4,45
150	107	268	3,75	4,05	4,05	4,35
160	117	292	3,70	3,90	4,00	4,30
170	127	316	3,60	3,80	3,90	4,20
180	137	340	3,55	3,70	3,85	4,15
190	147	364	3,50	3,60	3,80	4,05
200	157	388	3,45	3,50	3,75	4,00
225	182	448	3,30	3,30	3,60	3,90
250	207	508	3,20	3,10	3,45	3,80

1) Exclusief doorbuiging staalplaat en liggers tijdens uitvoering - exclusief eventueel extra beton boven opleggingen.
Reductie betonvolume door profilering: 43 l/m²
Eigen gewicht staalplaat-betonvloer is gebaseerd op een plaat van 0,9 mm dikte.

2) Aangehouden soortelijk gewicht beton:
Grindbeton: 2.400 kg/m³

3) Doorbuiging staalplaat maximaal 20 mm: extra betonvolume maximaal 13 l/m² - extra eigen gewicht maximaal 32 kg/m².
Aangegeven overspanning is stramienmaat (aangehouden oplegbreedte 200 mm).

ComFlor 95 Overspanningstabel - Grindbeton (2.400 kg/m³)

	Brand-werendheid	Overspanning	Vloerdikte	Maximale overspanning [m] 0.90 mm Totale nuttige belasting [kN/m²] Kantoren	Winkels	Parkeergarages	Industrie	1.20 mm Kantoren	Winkels	Parkeergarages	Industrie
	[minuten]	Staalplaat-betonvloer	[mm]	[2,5kN/m² of 3,0kN]	[4,0kN/m² of 7,0kN]	[2,0kN/m² of 10,0kN]	[10 kN/m² of 7,0 kN]	[2,5kN/m² of 3,0kN]	[4,0kN/m² of 7,0kN]	[2,0kN/m² of 10,0kN]	[10 kN/m² of 7,0 kN]
Ongestempeld	30	Enkelvelds	140	3,80	3,80	3,80	3,75	4,10	4,10	4,10	3,85
			150	3,75	3,75	3,75	3,75	4,05	4,05	4,05	4,05
			170	3,60	3,60	3,60	3,60	3,90	3,90	3,90	3,90
		Meervelds	140	4,20	4,20	4,20	3,90	4,45	4,45	4,45	4,00
			150	4,05	4,05	4,05	4,05	4,35	4,35	4,35	4,30
			170	3,80	3,80	3,80	3,80	4,20	4,20	4,20	4,20
	60	Enkelvelds	140	3,80	3,80	3,80	3,75	4,10	4,10	4,10	3,85
			150	3,75	3,75	3,75	3,75	4,05	4,05	4,05	4,05
			170	3,60	3,60	3,60	3,60	3,90	3,90	3,90	3,90
		Meervelds	140	4,20	4,20	4,20	3,90	4,45	4,45	4,45	4,00
			150	4,05	4,05	4,05	4,05	4,35	4,35	4,35	4,30
			170	3,80	3,80	3,80	3,80	4,20	4,20	4,20	4,20
	90	Enkelvelds	160	3,70	3,70	3,70	3,70	4,00	4,00	4,00	4,00
			170	3,60	3,60	3,60	3,60	3,90	3,90	3,90	3,90
		Meervelds	160	3,90	3,90	3,90	3,90	4,30	4,30	4,30	4,30
			170	3,80	3,80	3,80	3,80	4,20	4,20	4,20	4,20
Gestempeld	30	Enkelvelds	150	5,25	5,00	5,25	3,90	5,25	5,20	5,25	4,00
			170	5,45	5,45	5,45	4,40	5,85	5,75	5,85	4,55
			200	5,45	5,45	5,45	5,15	5,85	5,75	5,85	5,30
		Meervelds	150	5,25	5,25	5,25	4,05	5,25	5,25	5,25	4,20
			170	5,45	5,45	5,45	4,55	5,85	5,85	5,85	4,70
			200	5,45	5,45	5,45	5,30	5,85	5,85	5,85	5,50
	60	Enkelvelds	150	5,25	5,00	5,25	3,90	5,25	5,20	5,25	4,00
			170	5,45	5,45	5,45	4,40	5,85	5,75	5,85	4,55
			200	5,45	5,45	5,45	5,15	5,85	5,85	5,85	5,30
		Meervelds	150	5,25	5,25	5,25	4,05	5,25	5,25	5,25	4,20
			170	5,45	5,45	5,45	4,55	5,85	5,85	5,85	4,70
			200	5,45	5,45	5,45	5,30	5,85	5,85	5,85	5,50
	90	Enkelvelds	160	5,45	5,30	5,45	4,15	5,85	5,45	5,85	4,25
			180	5,45	5,45	5,45	4,65	5,85	5,85	5,85	4,75
		Meervelds	160	5,45	5,45	5,45	4,30	5,60	5,60	5,60	4,45
			180	5,45	5,45	5,45	5,30	5,85	5,85	5,85	4,95

Parameters in ontwerptabellen

Staalplaat
Sendzimir verzinkt staal FeE350G, Z275. Gegarandeerde minimale vloeigrens van 350 N/mm². Minimaal gewicht zink voor beide zijden samen 275 g/m².

Beton
Aangehouden betonkwaliteit C20/25 tot C28/35, afhankelijk van de noodzaak per ontwerp.

Wapening
De benodigde extra wapening in een vloer behalve de bijdrage van de staalplaat is afhankelijk van vloertype, vloerdikte, overspanning en belasting. Onderscheid wordt gemaakt tussen een kruisnet, onderwapening en extra bovenwapening boven tussensteunpunten. Tevens kan bij grote dwarskrachtlasten lokaal een extra kruisnet boven de staalplaat worden toegepast. Onderwapening is nodig vanaf een brandwerendheid van 60 minuten of bij grotere overspanningen/belastingen. Vaak kan onderwapening in tussenvelden worden voorkomen. Extra steunpuntwapening kan nodig zijn in verband met scheurvorming, brandwerendheid of grotere overspanningen/belastingen. Eventueel aan te brengen onderwapening wordt met ronde afstandhouders in de ribben van de staalplaat gelegd. Extra bovenwapening wordt op de onderstaven van het kruisnet bevestigd.

Overspanning
Aangegeven overspanningen zijn stramienmaten. Voor meervelds vloeren is gerekend met 4 gelijke velden.

Oplegbreedte
Aangehouden oplegbreedte 200 mm: vrije overspanning is stramienmaat minus 200 mm.

Belasting
De aangehouden belastingen zijn veelvoorkomende veranderlijke belastingen volgens EC4, NEN-EN 1991-1-1(2002). Klasse B: kantoorruimten gaat uit van 2,5 kN/m² of een puntlast van 3,0 kN. Klasse D: winkelruimten gaat uit van 4,0 kN/m² of een puntlast van 7,0 kN. Klasse F: parkeergarages gaat uit van 2,0 kN/m² of een puntlast van 10,0 kN. De puntlast mag aangrijpen op elke willekeurige plaats op de vloer en is beschouwd als een vierkant met een zijde van 50 mm. Uitgegaan is van een ontwerp met gebruiksklasse 2(CC2). Rustende belasting is niet beschouwd. Het eigen gewicht van de vloer en het extra gewicht door het doorbuigen van de staalplaat tijdens het storten(betonaccumulatie) zijn verwerkt en hoeven niet in rekening te worden gebracht.

Rekenrichting
Staalplaat-betonvloeren zijn tweezijdig opgelegd. Ontwerp van de vloeren is derhalve gebaseerd op de eigenschappen van de vloer in zijn overspanningrichting. Haaks op deze overspanningrichting zijn de constructieve eigenschappen van vloer gereduceerd en afhankelijk van de beschikbare betonhoogte boven de staalplaat en de aanwezige verdeelwapening. In de praktijk zal de vloer in deze richting de eventuele vervorming van de draagconstructie volgen, hetgeen mogelijkerwijs tot scheurvorming kan leiden. Het valt aan te bevelen hier rekening mee te houden bij het ontwerp van de draagconstructie waarop de staalplaat-betonvloer rust..

Enkelvelds-Meervelds
Voor vloeren wordt onderscheid gemaakt tussen enkel- en meervelds toepassingen. Bij ongestempelde meervelds vloeren is gerekend met tweevelds staalplaten en 4 gelijke vloerdelen. Bij gestempelde meervelds vloeren is gerekend met enkelvelds staalplaten en 4 gelijke vloerdelen.

Stempels
In de tabellen is gerekend met maximaal 1 stempelrij per overspanning. De minimale breedte van een stempelrij is 100 mm. De stempellast per stempel kan van dien orde zijn dat het te adviseren is om extra stempelrij per vloerveld toe te passen. Voor ontwerpen met meer stempelrijen kunt u contact opnemen met Dutch Engineering

Lichtbeton
Voor ontwerpinformatie met betrekking tot de toepassing van ComFlor vloeren met lichtbeton gelieve contact op te nemen met Dutch Engineering. Bij ontwerpen met lichtbeton moet de verkrijgbaarheid, verwerkbaarheid en prijs per project worden onderzocht. Toepassen van lichtbeton is mogelijk, maar niet in alle gevallen praktisch of economisch.

Slankheid
De maximale slankheid (overspanning : vloerdikte) van doorgaande vloeren is 35.

Minimale vloerdikte
De minimale vloerdikte is afhankelijk van de brandwerendheid maar minimaal 140 mm.

Beloopbaarheid
De gegeven ontwerpen zijn beloopbaar tijdens de uitvoering. In uitzonderlijke situaties kan hiervan worden afgeweken. Hiervoor kunt u contact opnemen met Dutch Engineering.

Doorbuiging
De maximale doorbuiging tijdens de uitvoering is het maximum van L/180 of 20 mm. Voor de gerede toestand is de maximale bijkomende doorbuiging L/350 of 20 mm. Maximale totale doorbuiging is het maximum van L/250 of 25 mm. Let op: de totale doorbuiging is exclusief de doorbuiging die optreedt tijdens de uitvoering bij stempelvrije ontwerpen.

Montagebelasting
Montagebelasting conform Eurocode 4. Dit is niet toereikend voor gevallen waarbij grote ophoping van beton ontstaat of grote stootbelastingen optreden. Indien de uitvoeringswijze hiertoe aanleiding geeft kan van bovenstaande montagebelasting worden afgeweken. Hiervoor kunt u contact opnemen met Dutch Engineering.

Bijlage C - Berekening stalen ligger t.b.v. verdiepingsvloer

TS/Liggers Rel: 6.20 29 apr 2016
Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer
Constructeur.: Coen ter Braak
Opdrachtgever:
Dimensies....: kN/m/rad
Datum.....: 29/04/2016
Bestand.....: P:\8300\8332 - Steenderen 5 - Aviko\3 PROJECTDOCUMENTEN\BEREKENINGEN\1 INTERN\4 B\TECHNOSOFT\ligger in verdiepingsvloer.dlw

Betrouwbaarheidsklasse : 2 Referentieperiode : 50

Toegepaste normen volgens Eurocode met Nederlandse NB

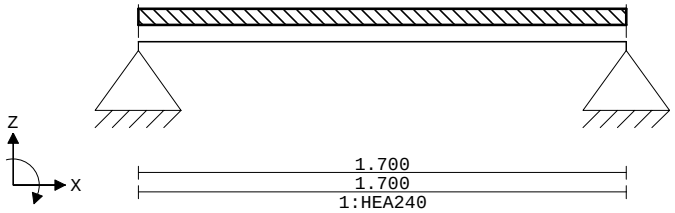
Belastingen	NEN-EN 1990:2002	C2:2010	NB:2011(nl)
	NEN-EN 1991-1-1:2002	C1:2009	NB:2011(nl)
Staal	NEN-EN 1993-1-1:2006	C2:2009	NB:2011(nl)

LIGGER:ligger 1

Profiel : HEA240

GEOMETRIE

Ligger:ligger 1



VELDLENGTEN

Ligger:ligger 1

Veld	Vanaf	Tot	Lengte
1	0.000	1.700	1.700

MATERIALEN

Mt	Omschrijving	E-modulus[N/mm2]	S.M.	Pois.	Uitz. coëff
1	S235	210000	78.5	0.30	1.2000e-005

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	HEA240	1:S235	7.6800e+003	7.7630e+007	0.00

PROFIELEN vervolg [mm]

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

TS/Liggers Rel: 6.20 29 apr 2016

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

PROFIELVORMEN [mm]

1 HEA240

BELASTINGGEVALLEN

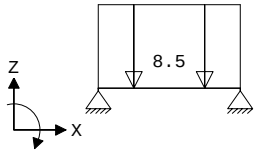
B.G.	Omschrijving	Belast/onbelast	ψ_0	ψ_1	ψ_2	e.g.
1	Permanent	2:Permanent EN1991				-1.00
2	Veranderlijk	1:Schaakbord EN1991	0.40	0.50	0.30	0.00

BELASTINGGEVALLEN

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

VELDBELASTINGEN

Ligger:ligger 1 B.G:1 Permanent



VELDBELASTINGEN

Ligger:ligger 1 B.G:1 Permanent

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-8.500	-8.500		0.000	1.700

REACTIES

Ligger:ligger 1 B.G:1 Permanent

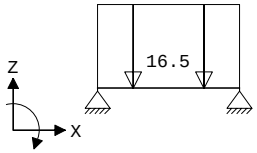
Stp	F	M
1	7.74	0.00
2	7.74	0.00

15.47 : (absoluut) grootste som reacties
-15.47 : (absoluut) grootste som belastingen

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 1 B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:ligger 1 B.G:2 Veranderlijk

Last Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1	1:q-last		-16.500	-16.500		0.000	1.700

REACTIES

Ligger:ligger 1 B.G:2 Veranderlijk

Stp	Fmin	Fmax	Mmin	Mmax
1	0.00	14.03	0.00	0.00
2	0.00	14.02	0.00	0.00

BELASTINGCOMBINATIES

BC	Type	BG	Gen. Factor	BG	Gen. Factor	BG	Gen. Factor	BG	Gen. Factor
1	Fund.	1	Perm 1.35						
2	Fund.	1	Perm 0.90						
3	Fund.	1	Perm 1.35	2	psi0 1.50				
4	Fund.	1	Perm 1.20	2	Extr 1.50				
5	Fund.	1	Perm 0.90	2	Extr 1.50				
6	Fund.	1	Perm 0.90	2	psi0 1.50				
7	Kar.	1	Perm 1.00	2	Extr 1.00				
8	Quas.	1	Perm 1.00						
9	Quas.	1	Perm 1.00	2	psi2 1.00				
10	Freq.	1	Perm 1.00						
11	Freq.	1	Perm 1.00	2	psi1 1.00				
12	Blij.	1	Perm 1.00						

GUNSTIGE WERKING PERMANENTE BELASTINGEN

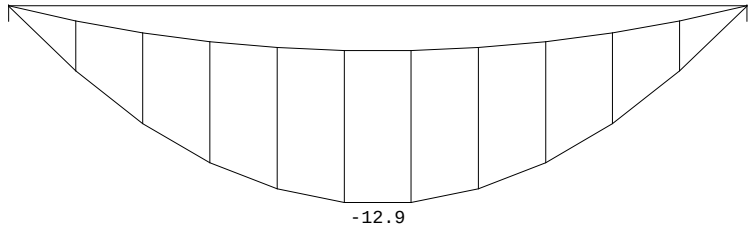
BC	Velden met gunstige werking
1	Geen
2	Alle velden de factor:0.90
3	Geen
4	Geen
5	Alle velden de factor:0.90
6	Alle velden de factor:0.90

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

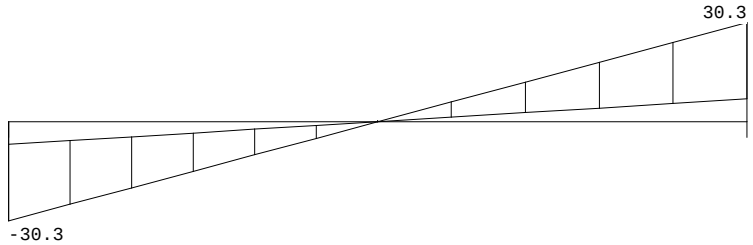
MOMENTEN

Ligger:ligger 1 Fundamentele combinatie



DWARSKRACHTEN

Ligger:ligger 1 Fundamentele combinatie



REACTIES

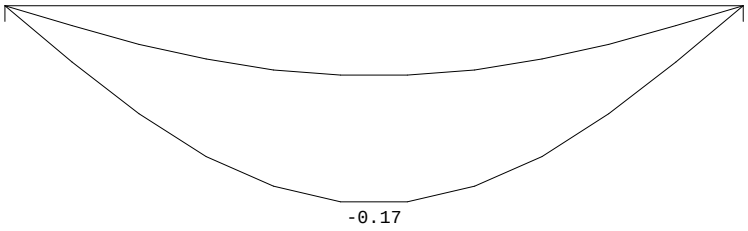
Ligger:ligger 1 Fundamentele combinatie

Stp	Fmin	Fmax	Mmin	Mmax
1	6.96	30.32	0.00	0.00
2	6.96	30.32	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

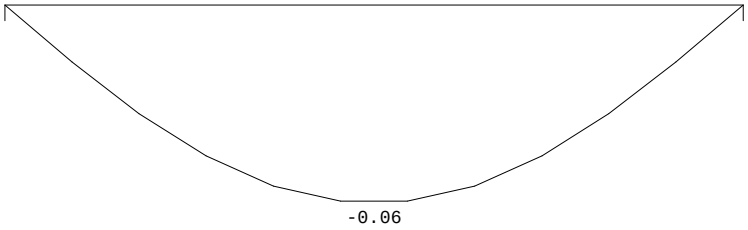
OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm] Ligger:ligger 1 Karakteristieke combinatie



OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm] Ligger:ligger 1 Blijvende combinatie



STAALPROFIELEN - ALGEMENE GEGEVENS Ligger:ligger 1

Stabiliteit: Classificatie gehele constructie: Geschoord

MATERIAAL

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

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

KIPSTABILITEIT Ligger:ligger 1

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	1.70	1.700
		onder:	1.70	1.700

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

TOETSING SPANNINGEN Ligger:ligger 1

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C.	[N/mm^2]	Opm.
1	1	4	1	1	Einde	EN3-1-1	6.2.6	(6.17)	0.089	12	

TOETSING DOORBUIGING Ligger:ligger 1

Staaf	Soort	Mtg	Lengte [m]	Overst I	Overst J	Zeeg [mm]	u_{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	Toelaatbaar *l
1	Vloer	db	1.70	N	N	0.0	-0.2	7	1 Eind	-0.2	±6.8	0.004
		db						7	1 Bijk	-0.1	±5.1	0.003

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

DOORBUIGINGEN

Karakteristieke combinatie

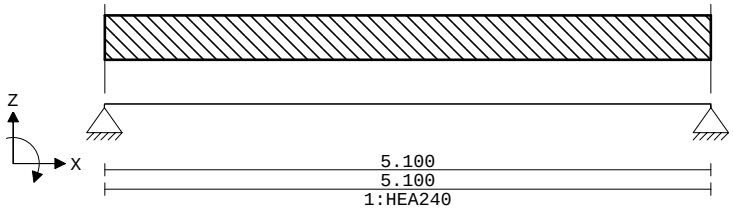
Alle vervormingen zijn kleiner dan lrep/9999 of h/9999

LIGGER:ligger 2

Profiel : HEA240

GEOMETRIE

Ligger:ligger 2



VELDLENGTEN

Ligger:ligger 2

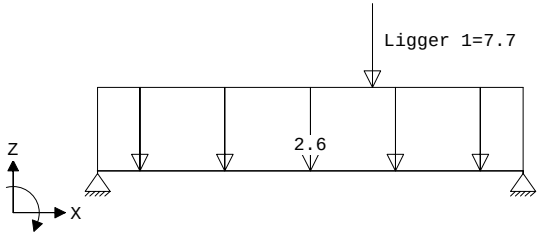
Veld	Vanaf	Tot	Lengte
1	0.000	5.100	5.100

PROFIELVORMEN [mm]

1 HEA240

VELDBELASTINGEN

Ligger:ligger 2 B.G:1 Permanent



Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 2 B.G:1 Permanent

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-2.600	-2.600		0.000	5.100
2		8:Puntlast	Ligger 1	-7.700			3.300	

REACTIES

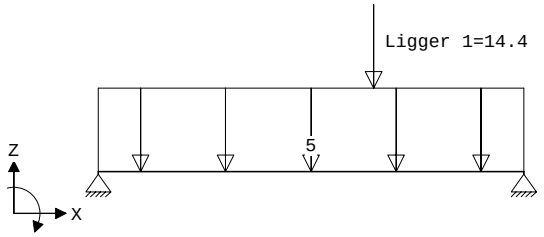
Ligger:ligger 2 B.G:1 Permanent

Stp	F	M
1	10.88	0.00
2	13.15	0.00

24.03 : (absoluut) grootste som reacties
-24.03 : (absoluut) grootste som belastingen

VELDBELASTINGEN

Ligger:ligger 2 B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:ligger 2 B.G:2 Veranderlijk

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-5.000	-5.000		0.000	5.100
2		8:Puntlast	Ligger 1	-14.400			3.300	

REACTIES

Ligger:ligger 2 B.G:2 Veranderlijk

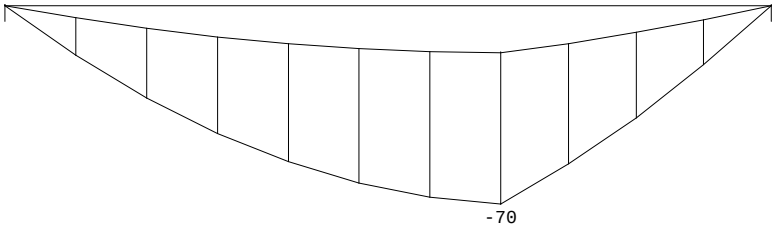
Stp	Fmin	Fmax	Mmin	Mmax
1	0.00	17.83	0.00	0.00
2	0.00	22.07	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

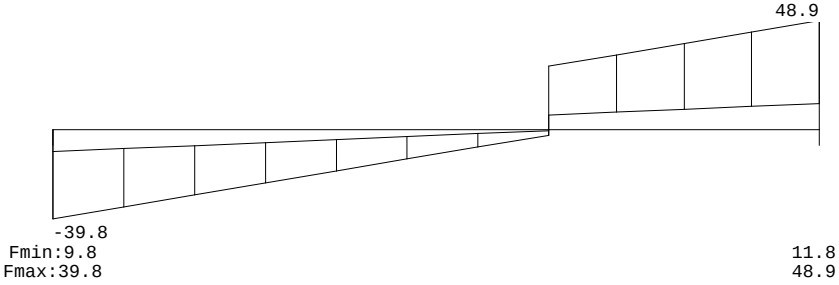
MOMENTEN

Ligger:ligger 2 Fundamentele combinatie



DWARSKRACHTEN

Ligger:ligger 2 Fundamentele combinatie



REACTIES

Ligger:ligger 2 Fundamentele combinatie

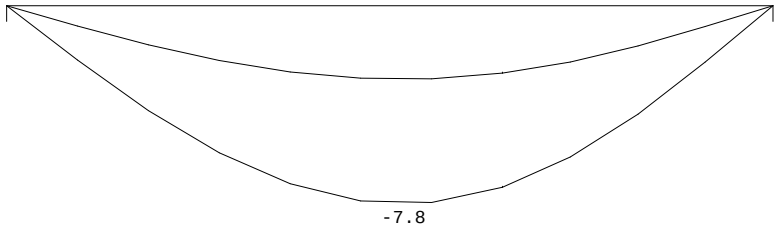
Stp	Fmin	Fmax	Mmin	Mmax
1	9.80	39.81	0.00	0.00
2	11.83	48.88	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

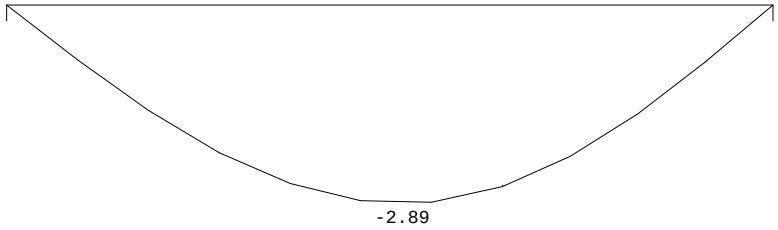
Ligger:ligger 2 Karakteristieke combinatie



OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:ligger 2 Blijvende combinatie



KIPSTABILITEIT

Ligger:ligger 2

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	5.10	5.100
		onder:	5.10	5.100

TOETSING SPANNINGEN

Ligger:ligger 2

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C.	[N/mm^2]	Opm.
1	1	4	1	1	Staaf	EN3-1-1	6.3.2	(6.54)	0.459	108	46

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

TOETSING DOORBUIGING

Ligger:ligger 2

Staaf	Soort	Mtg	Lengte [m]	Overst I	Overst J	Zeeg [mm]	u_{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	Toelaatbaar *l
1	Vloer	db	5.10	N	N	0.0	-7.8	7	1 Eind	-7.8	±20.4	0.004
		db						7	1 Bijk	-4.9	±15.3	0.003

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

DOORBUIGINGEN

Karakteristieke combinatie

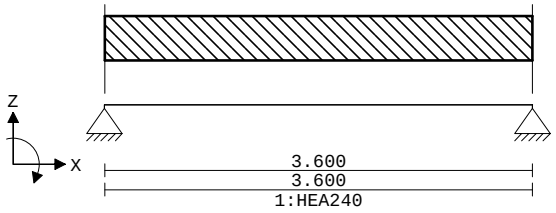
Veld	Zijde	positie [m]	l_{rep} [mm]	w_1 [mm]	w_2 [mm]	-- w_{bij} [mm]	[lrep/]	w_{tot} [mm]	w_c [mm]	-- w_{max} [mm]	[lrep/]
1	Neg.	2.593	5100	-2.9		-4.9	1049	-7.7		-7.7	658

LIGGER:ligger 3

Profiel : HEA240

GEOMETRIE

Ligger:ligger 3



VELDLENGTEN

Ligger:ligger 3

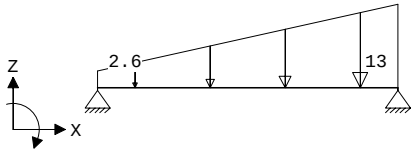
Veld	Vanaf	Tot	Lengte
1	0.000	3.600	3.600

PROFIELVORMEN [mm]

1 HEA240

VELDBELASTINGEN

Ligger:ligger 3 B.G:1 Permanent



Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 3 B.G:1 Permanent

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-2.600	-13.000		0.000	3.600

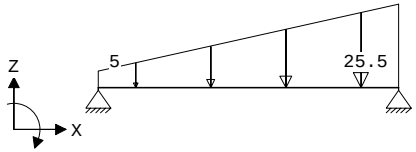
REACTIES

Ligger:ligger 3 B.G:1 Permanent

Stp	F	M
1	12.01	0.00
2	18.25	0.00
	30.25 :	(absoluut) grootste som reacties
	-30.25 :	(absoluut) grootste som belastingen

VELDBELASTINGEN

Ligger:ligger 3 B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:ligger 3 B.G:2 Veranderlijk

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-5.000	-25.500		0.000	3.600

REACTIES

Ligger:ligger 3 B.G:2 Veranderlijk

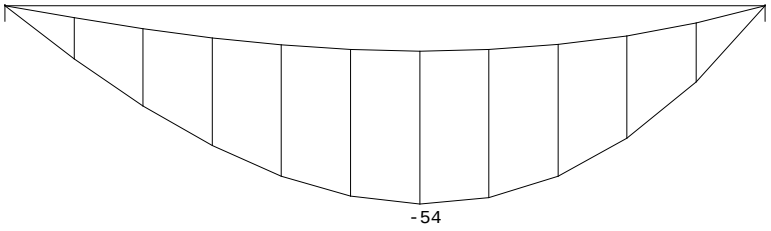
Stp	Fmin	Fmax	Mmin	Mmax
1	0.00	21.30	0.00	0.00
2	0.00	33.60	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

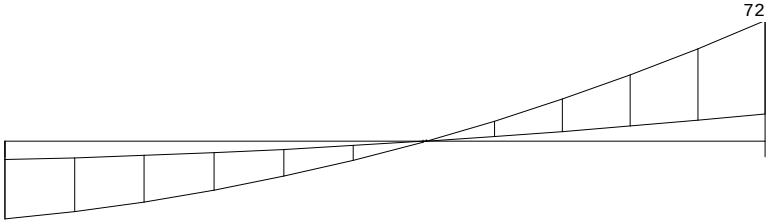
MOMENTEN

Ligger:ligger 3 Fundamentele combinatie



DWARSKRACHTEN

Ligger:ligger 3 Fundamentele combinatie



REACTIES

Ligger:ligger 3 Fundamentele combinatie

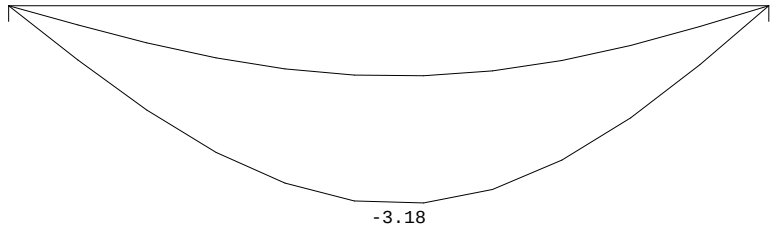
Stp	Fmin	Fmax	Mmin	Mmax
1	10.80	46.36	0.00	0.00
2	16.42	72.29	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

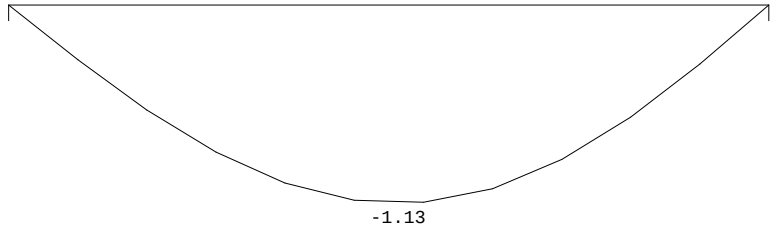
Ligger:ligger 3 Karakteristieke combinatie



OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:ligger 3 Blijvende combinatie



KIPSTABILITEIT

Ligger:ligger 3

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	3.60	3.600
		onder:	3.60	3.600

TOETSING SPANNINGEN

Ligger:ligger 3

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C.	[N/mm^2]	Opm.
1	1	4	1	1	My-max	EN3-1-1	6.2.5	(6.12y)	0.309	73	46

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

TOETSING DOORBUIGING

Ligger:ligger 3

Staaf	Soort	Mtg	Lengte [m]	Overst I	Overst J	Zeeg [mm]	u_{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	Toelaatbaar *l
1	Vloer	db	3.60	N	N	0.0	-3.2	7	1 Eind	-3.2	±14.4	0.004
		db						7	1 Bijk	-2.0	±10.8	0.003

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

DOORBUIGINGEN

Karakteristieke combinatie

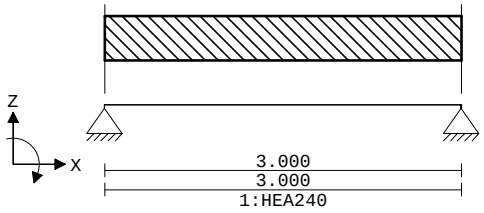
Veld	Zijde	positie [m]	l_{rep} [mm]	w_1 [mm]	w_2 [mm]	w_{bij} [mm]	[lrep/]	w_{tot} [mm]	w_c [mm]	w_{max} [mm]	[lrep/]
1	Neg.	1.920	3600	-1.1		-2.0	1762	-3.2		-3.2	1136

LIGGER:ligger 4

Profiel : HEA240

GEOMETRIE

Ligger:ligger 4



VELDLENGTEN

Ligger:ligger 4

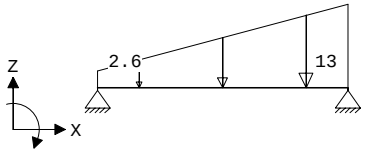
Veld	Vanaf	Tot	Lengte
1	0.000	3.000	3.000

PROFIELVORMEN [mm]

1 HEA240

VELDBELASTINGEN

Ligger:ligger 4 B.G:1 Permanent



Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 4 B.G:1 Permanent

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-2.600	-13.000		0.000	3.000

REACTIES

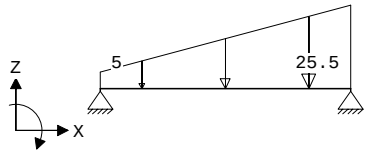
Ligger:ligger 4 B.G:1 Permanent

Stp	F	M
1	10.00	0.00
2	15.20	0.00

25.21 : (absoluut) grootste som reacties
-25.21 : (absoluut) grootste som belastingen

VELDBELASTINGEN

Ligger:ligger 4 B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:ligger 4 B.G:2 Veranderlijk

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-5.000	-25.500		0.000	3.000

REACTIES

Ligger:ligger 4 B.G:2 Veranderlijk

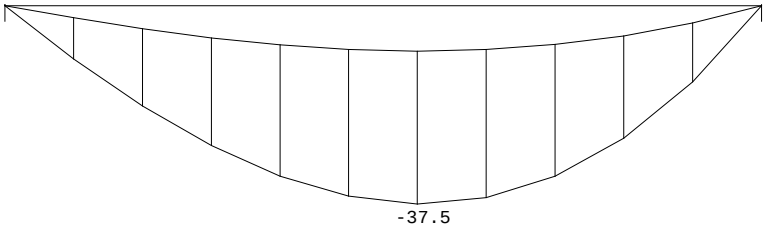
Stp	Fmin	Fmax	Mmin	Mmax
1	0.00	17.75	0.00	0.00
2	0.00	28.00	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

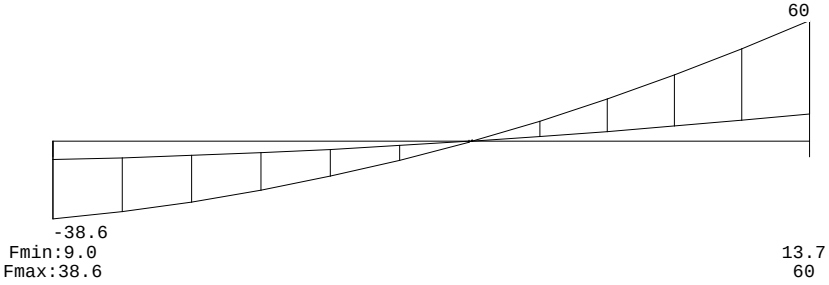
MOMENTEN

Ligger:ligger 4 Fundamentele combinatie



DWARSKRACHTEN

Ligger:ligger 4 Fundamentele combinatie



REACTIES

Ligger:ligger 4 Fundamentele combinatie

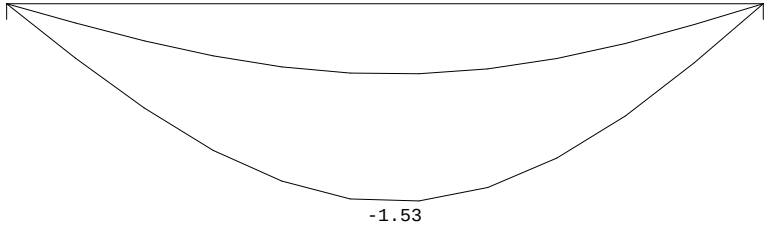
Stp	Fmin	Fmax	Mmin	Mmax
1	9.00	38.63	0.00	0.00
2	13.68	60.25	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

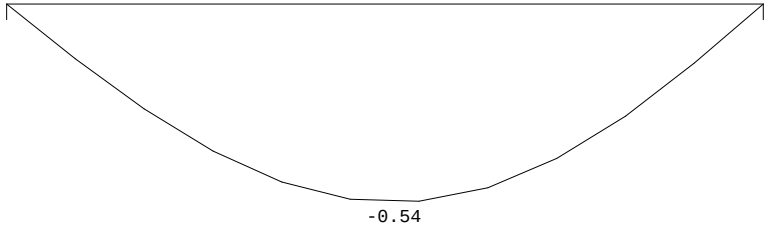
Ligger:ligger 4 Karakteristieke combinatie



OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:ligger 4 Blijvende combinatie



KIPSTABILITEIT

Ligger:ligger 4

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	3.00	3.000
		onder:	3.00	3.000

TOETSING SPANNINGEN

Ligger:ligger 4

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C.	[N/mm^2]	Opm.
1	1	4	1	1	My-max	EN3-1-1	6.2.5	(6.12y)	0.215	50	46

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

TOETSING DOORBUIGING

Ligger:ligger 4

Staaf	Soort	Mtg	Lengte [m]	Overst I	Overst J	Zeeg [mm]	u_{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	Toelaatbaar *l
1	Vloer	db	3.00	N	N	0.0	-1.5	7	1 Eind	-1.5	±12.0	0.004
		db						7	1 Bijk	-1.0	±9.0	0.003

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

DOORBUIGINGEN

Karakteristieke combinatie

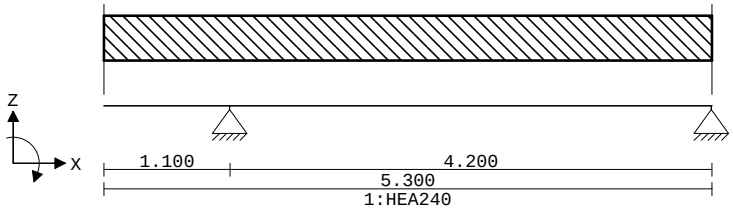
Veld	Zijde	positie [m]	l_{rep} [mm]	w_1 [mm]	w_2 [mm]	w_{bij} [mm]	[lrep/]	w_{tot} [mm]	w_c [mm]	w_{max} [mm]	[lrep/]
1	Neg.	1.500	3000	-0.5		-1.0	3041	-1.5		-1.5	1960

LIGGER:ligger 5

Profiel : HEA240

GEOMETRIE

Ligger:ligger 5



VELDLENGTEN

Ligger:ligger 5

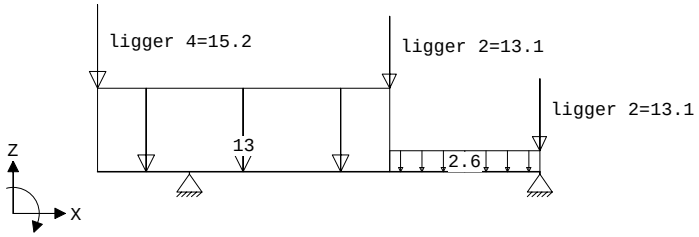
Veld	Vanaf	Tot	Lengte
1	0.000	1.100	1.100
2	1.100	5.300	4.200

PROFIELVORMEN [mm]

1 HEA240

VELDBELASTINGEN

Ligger:ligger 5 B.G:1 Permanent



Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 5 B.G:1 Permanent

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-2.600	-2.600		3.500	1.800
2		1:q-last		-13.000	-13.000		0.000	3.500
3		8:Puntlast	ligger 2	-13.100			3.500	
4		8:Puntlast	ligger 4	-15.200			0.000	
5		8:Puntlast	ligger 2	-13.100			5.300	

REACTIES

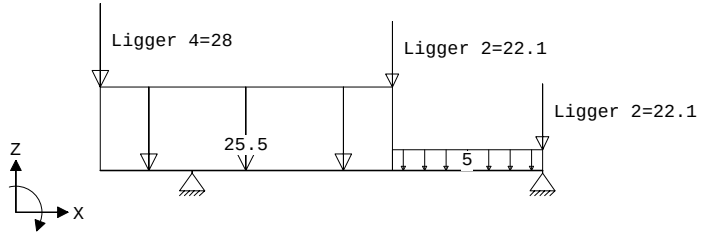
Ligger:ligger 5 B.G:1 Permanent

Stp	F	M
1	66.27	0.00
2	28.50	0.00

94.78	:	(absoluut) grootste som reacties
-94.78	:	(absoluut) grootste som belastingen

VELDBELASTINGEN

Ligger:ligger 5 B.G:2 Veranderlijk



VELDBELASTINGEN

Ligger:ligger 5 B.G:2 Veranderlijk

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-5.000	-5.000		3.500	1.800
2		1:q-last		-25.500	-25.500		0.000	3.500
3		8:Puntlast	Ligger 2	-22.100			3.500	
4		8:Puntlast	Ligger 4	-28.000			0.000	
5		8:Puntlast	Ligger 2	-22.100			5.300	

REACTIES

Ligger:ligger 5 B.G:2 Veranderlijk

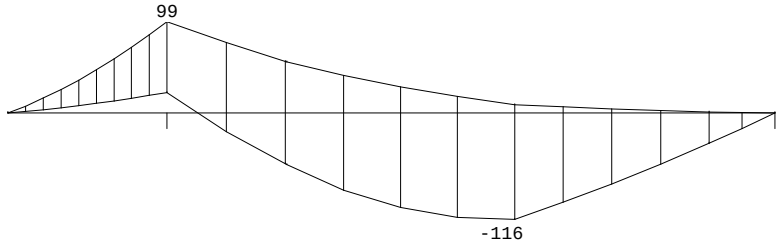
Stp	Fmin	Fmax	Mmin	Mmax
1	0.00	122.17	0.00	0.00
2	-11.01	59.29	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

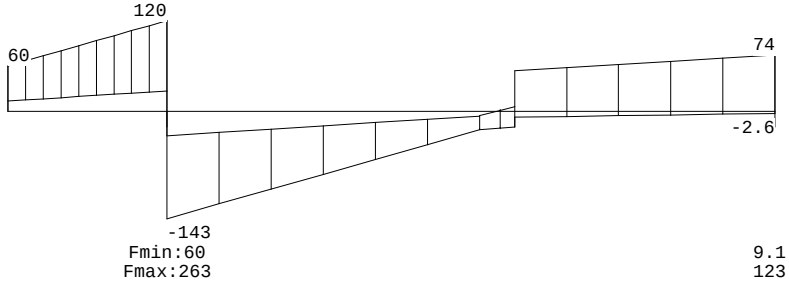
MOMENTEN

Ligger:ligger 5 Fundamentele combinatie



DWARSKRACHTEN

Ligger:ligger 5 Fundamentele combinatie



REACTIES

Ligger:ligger 5 Fundamentele combinatie

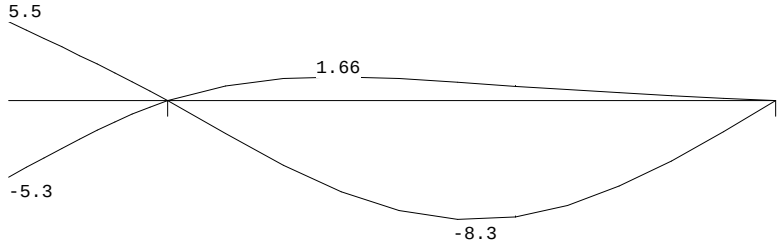
Stp	Fmin	Fmax	Mmin	Mmax
1	59.65	262.78	0.00	0.00
2	9.14	123.13	0.00	0.00

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

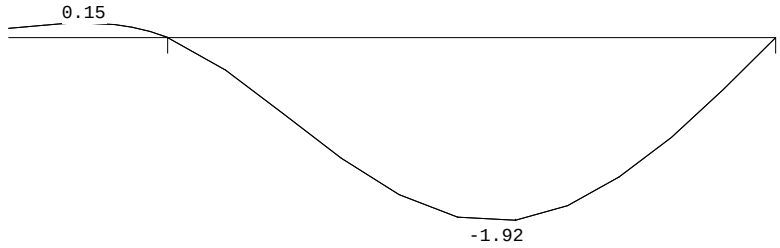
Ligger:ligger 5 Karakteristieke combinatie



OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:ligger 5 Blijvende combinatie



KIPSTABILITEIT

Ligger:ligger 5

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	2.20	1.100
		onder:	2.20	1.100
2	1.0*h	boven:	4.20	4.200
		onder:	4.20	4.200

TOETSING SPANNINGEN

Ligger:ligger 5

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm Artikel	Formule	Hoogste toetsing U.C.	[N/mm^2]	Opm.
1	1	4	1	1	Einde	EN3-1-1 6.2.8	(6.30)	0.568	133	
2	1	4	3	1	Staaf	EN3-1-1 6.3.2	(6.54)	0.717	168	46

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

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

TOETSING DOORBUIGING

Ligger:ligger 5

Staaf	Soort	Mtg	Lengte [m]	Overst I	Overst J	Zeeg [mm]	u_{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	*l
1	Vloer	ss	1.10	J	N	0.0	5.5	7	3 Eind	5.5	±8.8	2*0.004
							-5.3	7	2 Eind	-5.3		
		ss						7	3 Bijk	5.4	±6.6	2*0.003
2	Vloer	db	4.20	N	N	0.0	-8.3	7	3 Eind	-8.3	±16.8	0.004
		db						7	3 Bijk	-6.4	±12.6	0.003

DOORBUIGINGEN

Karakteristieke combinatie

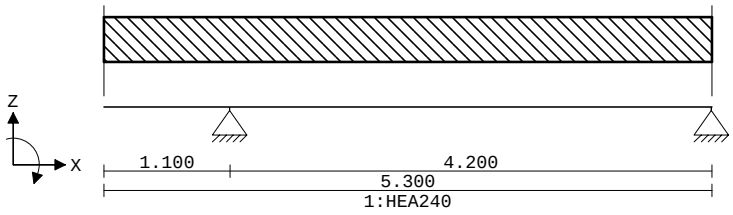
Veld	Zijde	positie [m]	l_{rep} [mm]	w_1 [mm]	w_2 [mm]	w_{bij} [mm]	w_{bij} [lrep/]	w_{tot} [mm]	w_c [mm]	w_{max} [mm]	w_{max} [lrep/]
1	Neg.	/	2200	-0.1		-5.4	406	-5.5		-5.5	399
1	Pos.	/	2200	-0.1		5.4	406	5.3		5.3	414
2	Neg.	2.160	4200	-1.9		-6.4	658	-8.3		-8.3	506
2	Pos.	1.680	4200	-1.7		3.2	1312	1.5		1.5	2795

LIGGER:ligger 6

Profiel : HEA240

GEOMETRIE

Ligger:ligger 6



VELDLENGTEN

Ligger:ligger 6

Veld	Vanaf	Tot	Lengte
1	0.000	1.100	1.100
2	1.100	5.300	4.200

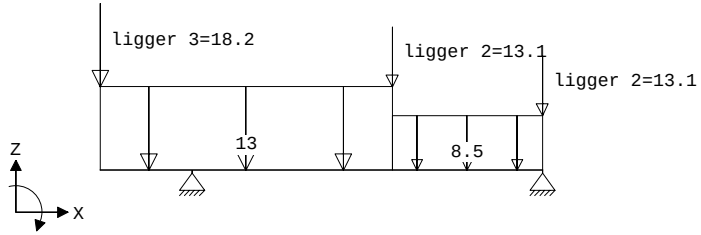
PROFIELVORMEN [mm]

1 HEA240

Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 6 B.G:1 Permanent



VELDBELASTINGEN

Ligger:ligger 6 B.G:1 Permanent

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-8.500	-8.500		3.500	1.800
2		1:q-last		-13.000	-13.000		0.000	3.500
3		8:Puntlast	ligger 2	-13.100			3.500	
4		8:Puntlast	ligger 3	-18.200			0.000	
5		8:Puntlast	ligger 2	-13.100			5.300	

REACTIES

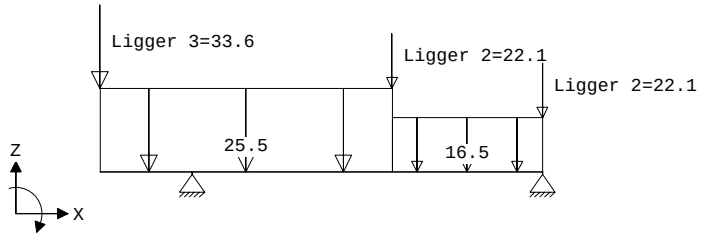
Ligger:ligger 6 B.G:1 Permanent

Stp	F	M
1	72.33	0.00
2	36.06	0.00

108.40 : (absoluut) grootste som reacties
-108.40 : (absoluut) grootste som belastingen

VELDBELASTINGEN

Ligger:ligger 6 B.G:2 Veranderlijk



Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

VELDBELASTINGEN

Ligger:ligger 6 B.G:2 Veranderlijk

Last	Ref.	Type	Omschrijving	q1/p/m	q2	psi	Afstand	Lengte
1		1:q-last		-16.500	-16.500		3.500	1.800
2		1:q-last		-25.500	-25.500		0.000	3.500
3		8:Puntlast	Ligger 2	-22.100			3.500	
4		8:Puntlast	Ligger 3	-33.600			0.000	
5		8:Puntlast	Ligger 2	-22.100			5.300	

REACTIES

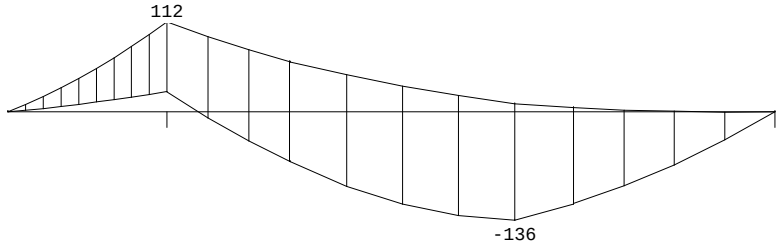
Ligger:ligger 6 B.G:2 Veranderlijk

Stp	Fmin	Fmax	Mmin	Mmax
1	0.00	133.67	0.00	0.00
2	-12.47	75.55	0.00	0.00

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

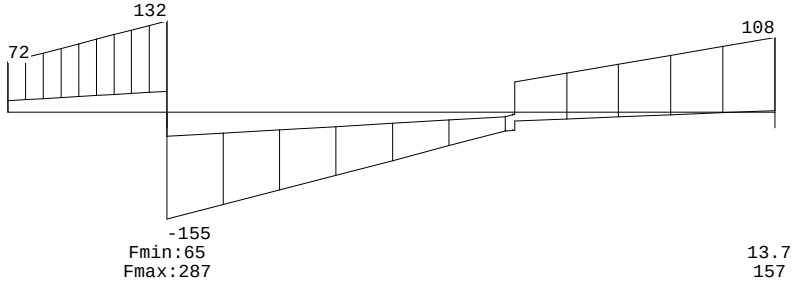
MOMENTEN

Ligger:ligger 6 Fundamentele combinatie



DWARSKRACHTEN

Ligger:ligger 6 Fundamentele combinatie



Project.....: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

REACTIES

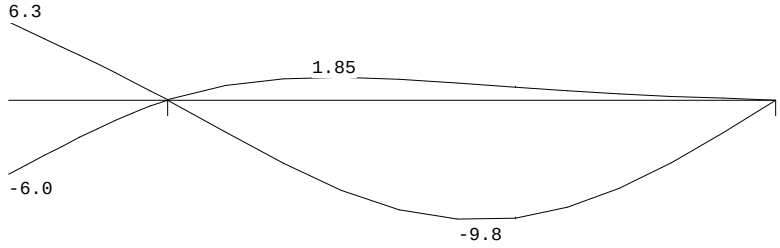
Ligger:ligger 6 Fundamentele combinatie

Stp	Fmin	Fmax	Mmin	Mmax
1	65.10	287.31	0.00	0.00
2	13.75	156.60	0.00	0.00

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN [mm]

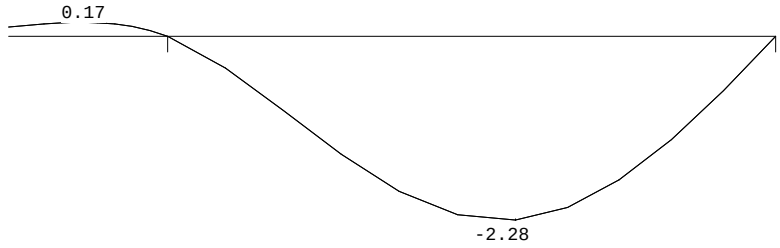
Ligger:ligger 6 Karakteristieke combinatie



OMHULLENDE VAN DE BLIJVENDE COMBINATIES

VERPLAATSINGEN [mm]

Ligger:ligger 6 Blijvende combinatie



KIPSTABILITEIT

Ligger:ligger 6

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	2.20	1.100
		onder:	2.20	1.100
2	1.0*h	boven:	4.20	4.200
		onder:	4.20	4.200

TOETSING SPANNINGEN

Ligger:ligger 6

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste U.C.	toetsing [N/mm^2]		Opm.
1	1	4	1	1	Einde	EN3-1-1	6.2.8	(6.30)	0.643	151		
2	1	4	3	1	Staaf	EN3-1-1	6.3.2	(6.54)	0.844	198		46

Project......: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer
Opmerkingen:
[46] T.b.v. kip is een equivalente Q-last berekend.

TOETSING DOORBUIGING

Ligger:ligger 6

Staaf	Soort	Mtg	Lengte [m]	Overst I	Overst J	Zeeg [mm]	u_{tot} [mm]	BC	Sit	u [mm]	Toelaatbaar [mm]	*l
1	Vloer	ss	1.10	J	N	0.0	6.3	7	3 Eind	6.3	±8.8	2*0.004
							-6.0	7	2 Eind	-6.0		
		ss						7	3 Bijk	6.2	±6.6	2*0.003
2	Vloer	db	4.20	N	N	0.0	-9.8	7	3 Eind	-9.8	±16.8	0.004
		db						7	3 Bijk	-7.5	±12.6	0.003

Project......: 8332 - Aviko Steenderen V
Onderdeel....: Stalenliggers onder verdiepingvloer

DOORBUIGINGEN

Karakteristieke combinatie

Veld	Zijde	positie [m]	l_{rep} [mm]	w_1 [mm]	w_2 [mm]	w_{bij} [mm]	w_{bij} [lrep/]	w_{tot} [mm]	w_c [mm]	w_{max} [mm]	w_{max} [lrep/]
1	Neg.	/	2200	-0.1		-6.2	354	-6.3		-6.3	347
1	Pos.	/	2200	-0.1		6.1	358	6.0		6.0	364
2	Neg.	2.160	4200	-2.3		-7.5	560	-9.8		-9.8	431
2	Pos.	1.680	4200	-2.0		3.6	1158	1.6		1.6	2558

Bijlage D - Berekening stalen kolommen t.b.v. verdiepingsvloer

Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer
Dimensies: kN;m;rad (tenzij anders aangegeven)
Datum....: 29/04/2016
Bestand..: P:\8300\8332 - Steenderen 5 - Aviko\3 PROJECTDOCUMENTEN\
BEREKENINGEN\1 INTERN\4 B\TECHNOSOFT\Kolom t.p.v.
verdiepingsvloer.rww

Belastingbreedte.: 1.000
Rekenmodel.....: 2e-orde-elastisch.
Theorieën voor de bepaling van de krachtsverdeling:
1) Losse belastinggevallen:
Lineaire-elasticiteitstheorie
2) Uiterste grenstoestand:
Geometrisch niet lineair alle staven.
Fysisch lineair alle staven.
3) Gebruiksgrenstoestand:
Geometrisch niet lineair alle staven.
Fysisch lineair alle staven.

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

Gunstige werking van de permanente belasting wordt automatisch verwerkt

Toegepaste normen volgens Eurocode met Nederlandse NB

Belastingen	NEN-EN 1990:2002	C2:2010	NB:2011(nl)
	NEN-EN 1991-1-1:2002	C1:2009	NB:2011(nl)
Staal	NEN-EN 1993-1-1:2006	C2:2009	NB:2011(nl)

GEOMETRIE

MATERIALEN

Mt	Omschrijving	E-modulus[N/mm2]	S.M.	Pois.	Uitz. coëff
1	S275	210000	78.5	0.30	1.2000e-005
2	S235	210000	78.5	0.30	1.2000e-005

Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer

PROFIELEN [mm]

Prof.	Omschrijving	Materiaal	Oppervlak	Traagheid	Vormf.
1	K150/150/8CF	1:S275	4.3243e+003	1.4118e+007	0.00

PROFIELEN vervolg [mm]

Prof.	Staaftype	Breedte	Hoogte	e	Type	b1	h1	b2	h2
1	0:Normaal	150	150	75.0					

PROFIELVORMEN [mm]

1 K150/150/8CF

KNOPEN

Knoop	X	Z
1	0.000	0.000
2	0.000	5.500

STAVEN

St.	ki	kj	Profiel	Aansl.i	Aansl.j	Lengte	Opm.
1	2	1	1:K150/150/8CF	NDM	NDM	5.500	

VASTE STEUNPUNTEN

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

BELASTINGGENERATIE ALGEMEEN.

Betrouwbaarheidsklasse.....: 1 Referentieperiode.....: 50
Gebouwdiepte.....: 0.00 Gebouwhoogte.....: 5.50
Niveau aansl.terrein.....: 0.00 E.g. scheid.w. [kN/m2]: 0.00

BELASTINGGEVALLEN

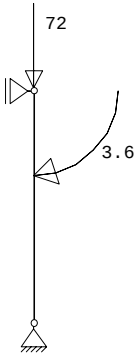
B.G.	Omschrijving		Type
1	Permanente belasting	EGZ=-1.00	1
2	Veranderlijk belasting		2 Ver. bel. pers. ed. (p_rep)

Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer

BELASTINGEN

B.G:1 Permanente belasting

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



KNOOPBELASTINGEN

B.G:1 Permanente belasting

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2
1	2	Z	-72.000			
2	2	Rotatie Y	3.600			

REACTIES

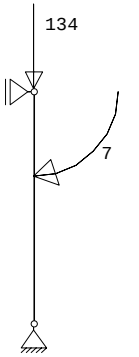
1e orde

B.G:1 Permanente belasting

Kn.	X	Z	M	
1	0.65	73.87		
2	-0.65			
	0.00	73.87		: Som van de reacties
	0.00	-73.87		: Som van de belastingen

BELASTINGEN

B.G:2 Veranderlijk belasting



Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer

KNOOPBELASTINGEN

B.G:2 Veranderlijk belasting

Last	Knoop	Richting	waarde	ψ_0	ψ_1	ψ_2
1	2	Z	-134.000	1.0	0.9	0.8
2	2	Rotatie Y	7.000	1.0	0.9	0.8

REACTIES

1e orde

B.G:2 Veranderlijk belasting

Kn.	X	Z	M	
1	1.27	134.00		
2	-1.27			
	0.00	134.00		: Som van de reacties
	0.00	-134.00		: Som van de belastingen

BEREKENINGSTATUS

Controlerende berekening

B.C.	Iteratie	Status
1	3	Nauwkeurigheid bereikt
2	3	Nauwkeurigheid bereikt
3	3	Nauwkeurigheid bereikt
4	4	Nauwkeurigheid bereikt
5	4	Nauwkeurigheid bereikt
6	3	Nauwkeurigheid bereikt
7	3	Nauwkeurigheid bereikt
8	3	Nauwkeurigheid bereikt
9	3	Nauwkeurigheid bereikt
10	3	Nauwkeurigheid bereikt
11	3	Nauwkeurigheid bereikt
12	3	Nauwkeurigheid bereikt
13	3	Nauwkeurigheid bereikt

BELASTINGCOMBINATIES

BC	Type						
1	Fund.	1.22	$G_{k,1}$				
2	Fund.	1.08	$G_{k,1}$				
3	Fund.	0.90	$G_{k,1}$				
4	Fund.	1.22	$G_{k,1}$	+	1.35	ψ_0	$Q_{k,2}$
5	Fund.	1.08	$G_{k,1}$	+	1.35		$Q_{k,2}$
6	Fund.	0.90	$G_{k,1}$	+	1.35	ψ_0	$Q_{k,2}$
7	Fund.	0.90	$G_{k,1}$	+	1.35		$Q_{k,2}$
8	Kar.	1.00	$G_{k,1}$	+	1.00		$Q_{k,2}$
9	Quas.	1.00	$G_{k,1}$				
10	Quas.	1.00	$G_{k,1}$	+	1.00	ψ_2	$Q_{k,2}$
11	Freq.	1.00	$G_{k,1}$				
12	Freq.	1.00	$G_{k,1}$	+	1.00	ψ_1	$Q_{k,2}$
13	Blij.	1.00	$G_{k,1}$				

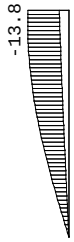
Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer

GUNSTIGE WERKING PERMANENTE BELASTINGEN

BC	Staven met gunstige werking
1	Geen
2	Geen
3	Alle staven de factor:0.90
4	Geen
5	Geen
6	Alle staven de factor:0.90
7	Alle staven de factor:0.90

OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES

MOMENTEN 2e orde Fundamentele combinatie



DWARSKRACHTEN 2e orde Fundamentele combinatie

Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer

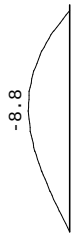
NORMAALKRACHTEN 2e orde Fundamentele combinatie

REACTIES 2e orde Fundamentele combinatie

Kn.	X-min	X-max	Z-min	Z-max	M-min	M-max
1	0.59	2.51	66.48	270.65		
2	-2.51	-0.59				

OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES

VERPLAATSINGEN 2e orde [mm] Karakteristieke combinatie



Project..: 8332 - Aviko Steenderen V
Onderdeel: Kolom t.b.v. verdiepingsvloer

STAALPROFIELEN - ALGEMENE GEGEVENS

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

MATERIAAL

Mat nr.	Profielnaam	Vloeisp. [N/mm^2]	Productie methode	Min. drsn. klasse
1	K150/150/8CF	275	Koudgewalst	1

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

KNIKSTABILITEIT

Staaf	l_{sys} [m]	Classif. y sterke as	$l_{knik;y}$ [m]	Extra aanp. y [kN]	Classif. z zwakke as	$l_{knik;z}$ [m]	Extra aanp. z [kN]
1	5.500	Ongeschoord	2e orde		Geschoord	5.500	0.0

KIPSTABILITEIT

Staaf	Plts. aangr.		l gaffel [m]	Kipsteunafstanden [m]
1	1.0*h	boven:	5.50	5.500
		onder:	5.50	5.500

TOETSING SPANNINGEN

Staaf	Mat nr.	BC	Sit	Kl	Plaats	Norm	Artikel	Formule	Hoogste toetsing U.C.	[N/mm^2]	Opm.
1	1	4	1	1	Staaf	EN3-1-1	6.3.3	(6.61)	0.751	207	47

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

TOETSING HORIZONTALE VERPLAATSING

Staaf	BC	Sit	Lengte [m]	u_{eind} [mm]	Toelaatbaar [mm]	[h/]
1	8	1	5.500	8.8	18.3	300