NIEUWBOUW WELKOOP WINKEL TE GEMERT

BEREKENINGSDOCUMENT CONSTRUCTIE



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PROJECT- EN DOCUMENTGEGEVENS

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Rapporthistorie

Versie	Datum	Omschrijving
1.0	25-07-2025	Eerste uitgave

Verantwoording

	Datum	Naam	Paraaf
Auteur	25-07-2025	[redacted]	[redacted]
Controle	25-07-2025	[redacted]	[redacted]
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1 Inleiding

1.1 Inleiding

Voor het project, nieuwbouw Welkoop winkel te Gemert, is door bouwbedrijf Braveco B.V. aan WSP Nederland B.V. opdracht verstrekt voor de advisering van de constructieve draagstructuur. In dit rapport worden de resultaten weergegeven van het engineeringproces van de fase omgevingsvergunning. Het rapport vormt samen met de separaat opgestelde constructieve documenten en tekeningen het fasedossier.

In dit rapport de berekening van de constructie. Het ontwerp van de constructieve draagstructuur is vastgelegd op de tekeningen van WSP Nederland B.V.

1.2 Definitie

De adviestaak van WSP heeft betrekking op de constructieve draagstructuur van het project. Hiervoor wordt de volgende definitie gegeven:

Constructieve draagstructuur
Tot de constructieve draagstructuur worden de elementen verstaan zoals omschreven in NEN-EN 1990.

Definitie volgens NEN-EN 1990:
- 1.5.1.6 constructie
Systematisch samenstel van met elkaar verbonden constructieve elementen ontworpen om belastingen te dragen en voldoende stijfheid te verschaffen.

- 1.5.1.7 constructief element
Fysisch goed te onderscheiden deel van een constructie b.v. een kolom, balk/ligger, een plaat, een funderingspaal.

Definitie volgens Besluit bouwwerken leefomgeving:
- Bouwconstructie: onderdeel van een bouwwerk voor het dragen van belastingen.

Bouwconstructie bedoeld voor het afdragen van horizontale belastingen, met uitzondering van stabiliserende elementen maken geen onderdeel uit van de constructieve draagstructuur.

1.3 Uitgangspunten

Het constructieve ontwerp is gebaseerd op de volgende stukken:

– Het bouwkundige ontwerp van bouwkundig Tekenburo [redacted] v.o.f. werkno. 2022-003

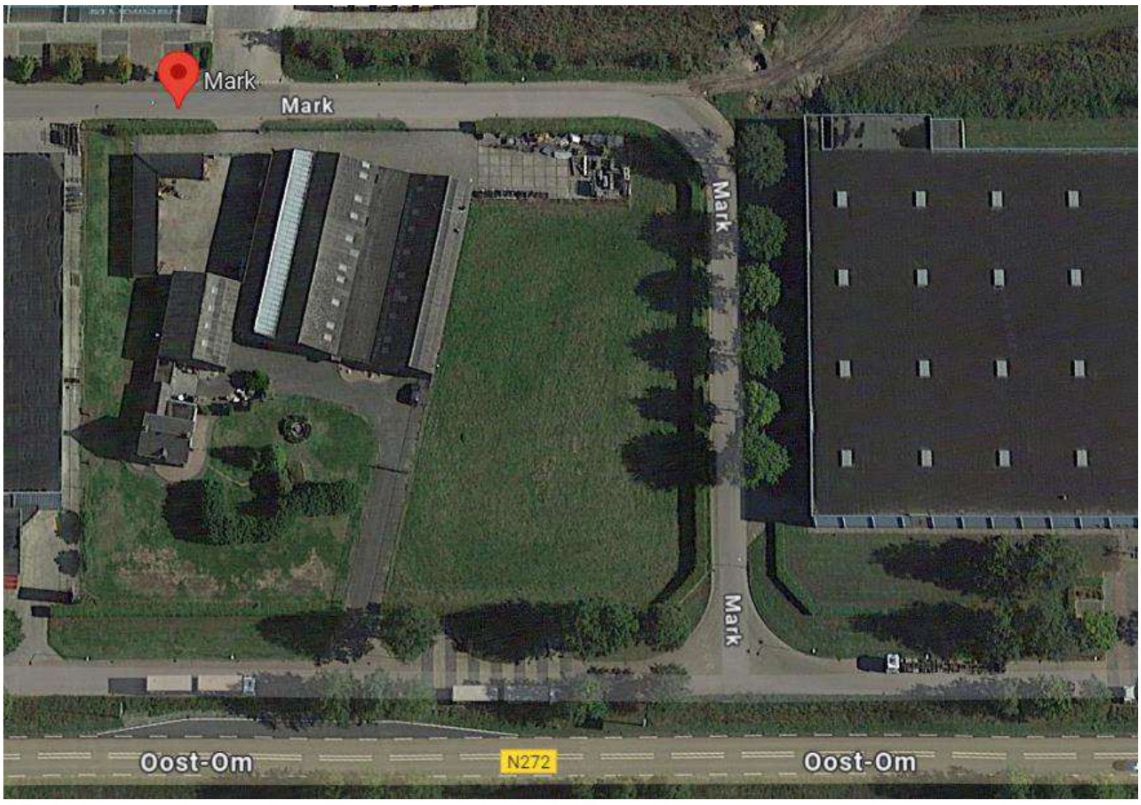
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1.4 Algemene projectgegevens

Het project betreft de nieuwbouw van een winkel met plaatselijk een klein stukje verdiepingsvloer. De afmeting van het project = 30 x 47m.

1.5 Locatie bouwproject

Het project bevindt zich aan de Mark te Gemert.



2 Staalconstructie

2.1 Invoer belastingen

De belastingen volgen uit het uitgangspuntendocument 'SGU022725 – R01'.

2.1.1 Permanente belasting

De permanente belasting bestaat uit het eigen gewicht van de constructie en de volgende opgelegde belastingen:

Dak:	$1{,}1 \cdot 0{,}60 = 0{,}66\ kN/m^2$ (rekening houdend met meervelds dakplaten)
Verdiepingsvloer:	$5{,}20\ kN/m^2$
Beganegrondvloer:	$0{,}5 \cdot 4{,}5 = 2{,}25\ kN/m$
Grond:	$0{,}42 \cdot 16 = 7{,}0\ kN/m^2$
Gevel:	$0{,}25\ kN/m^2$
	$7{,}6 \cdot 0{,}25 = 2{,}0\ kN/m$

2.1.2 Veranderlijke belasting

Verdiepingsvloer:	$4{,}0\ kN/m^2$
Beganegrondvloer:	$15\ kN/m^2$
	$0{,}5 \cdot 15 = 7{,}5\ kN/m$

2.1.3 Sneeuw

De sneeuwbelasting is: $q_s = 0{,}56\ kN/m^2$

2.1.4 Windbelasting

De stuwdruk is: $q_p(z) = 0{,}65\ kN/m^2$. Met behulp van de 3DWind generator in SCIA is de windbelasting gegenereerd.

3 Bedding

Gebaseerd op de rapportage ‘funderingsadvies d.d. 05-04-2024’ van Koops grondmechanica voor het project Nieuwbouw Welkoop winkel aan de Mark te Gemert is een bedding constante van 9MN/m^3 aangehouden ten behoeve van het ontwerpen van de fundering op staal. Onderstaande tabellen uit het funderingsadvies geven de draagkracht voor respectievelijk de stroken en poeren.

Tabel 4.2 Draagkracht stroken

Effectieve Strookbreedte [mm]	Permanente gronddekking [m]	Draagkracht	
		R_d [kN]	$\sigma'_{max;d}$ [kN/m^2]
600	0,20	42	71
800	0,20	64	80
1.000	0,20	90	90
1.200	0,20	116	97
1.400	0,20	145	103
1.600	0,20	178	111
1.800	0,20	215	119
2.000	0,20	255	128
* ***Indien een permanente gronddekking van tenminste 0,4 m kan worden gegarandeerd kan de draagkracht worden verhoogd met 30 kN/m².***			

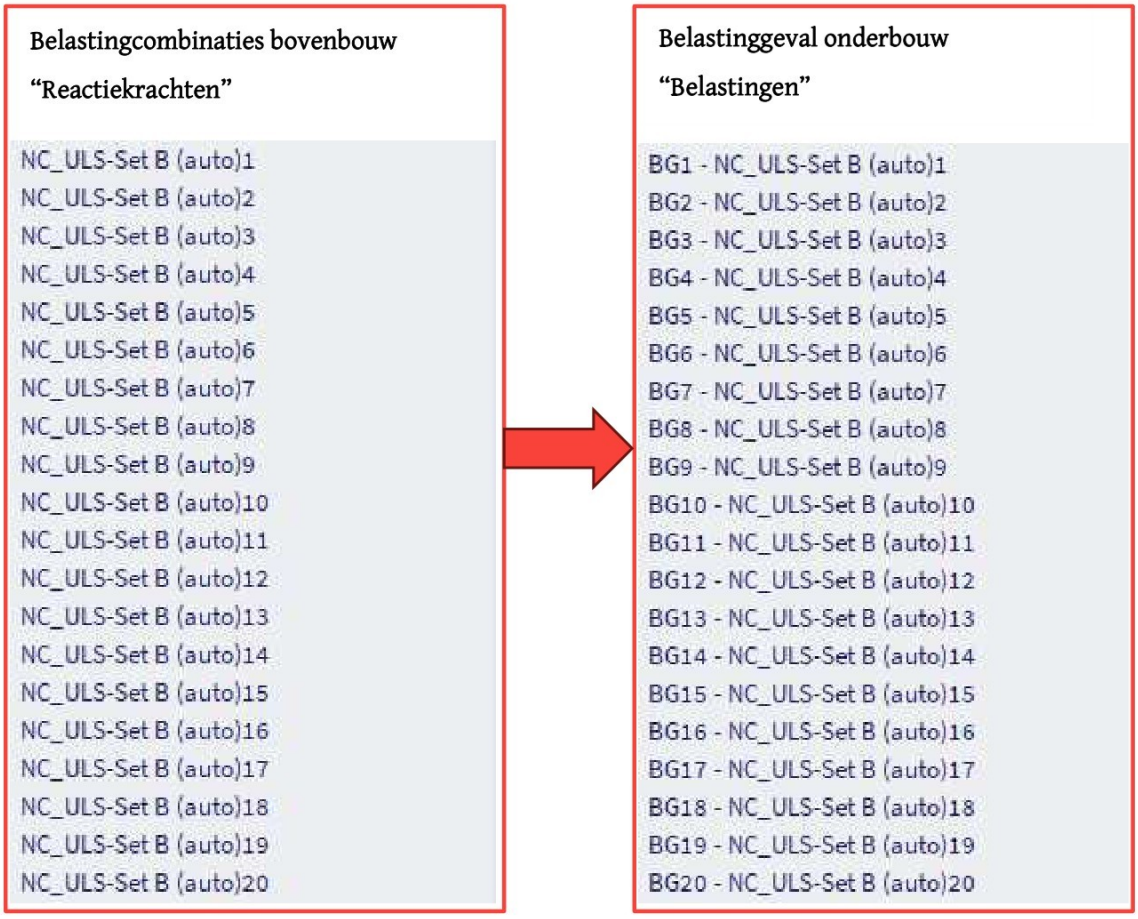
Tabel 4.3 Draagkracht poeren

Effectieve poerafmeting [mm]	Permanente gronddekking [m]	Draagkracht	
		R_d [kN]	$\sigma'_{max;d}$ [kN/m^2]
600×600	0,20	29	80
800×800	0,20	56	87
1.000×1.000	0,20	94	94
1.200×1.200	0,20	141	98
1.400×1.400	0,20	200	102
1.600×1.600	0,20	274	107
1.800×1.800	0,20	365	113
2.000×2.000	0,20	474	118
* ***Indien een permanente gronddekking van tenminste 0,4 m kan worden gegarandeerd kan de draagkracht worden verhoogd met 30 kN/m².***			

4 Koppeling tussen model bovenbouw en onderbouw

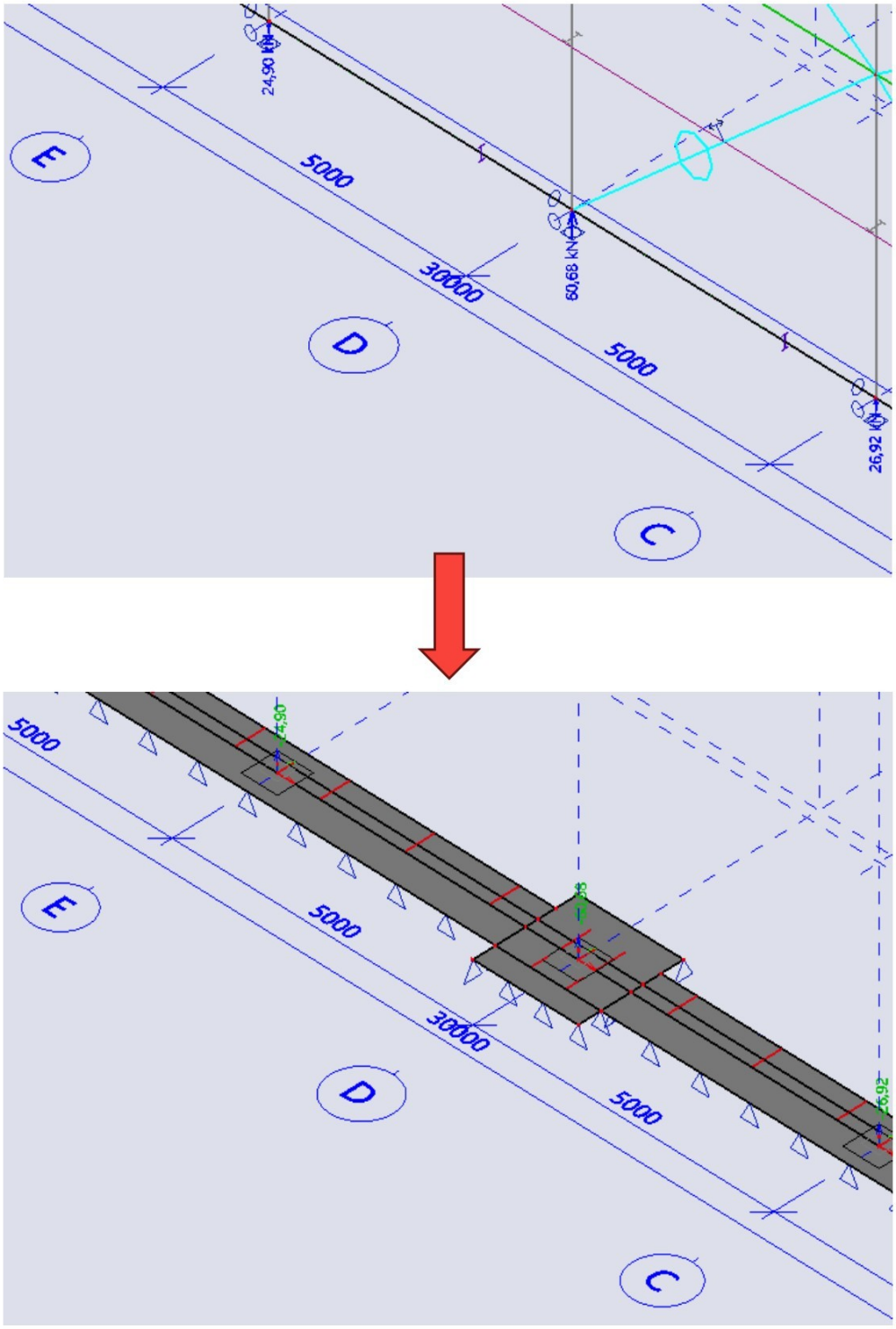
De 2 modellen zijn met elkaar gekoppeld door de reactiekrachten van de belastingcombinaties uit de bovenbouw als puntlasten op het model van de onderbouw aan te brengen. Dit is een geautomatiseerd proces. De ingevoerde belastingen zijn in de bijlage van de onderbouw te herleiden.

Vanwege de niet-lineaire aard van de bovenbouw (windverbanden nemen alleen trek op) zijn de resultaten uit de niet-lineaire combinaties overgezet. In totaal zijn er 79 ULS combinaties en 2 quasi combinatie overgezet. De overgezette niet-lineaire combinaties worden belastinggevallen in het model voor de onderbouw zoals hierna voor een aantal belastingcombinaties is weergegeven.



Belastingcombinaties overgezet

Voor het belastinggeval 'NC_ULS-Set B (auto)9' is een voorbeeld op de volgende pagina bijgevoegd. Reacties zijn overgezet op 23-07-2025 volgend uit model SGU022725 – Staalconstructie v5.



Voorbeeld voor 'NC_ULS-Set B (auto)9' bij as C-E

5 Controleberekening

5.1 Controle totaalgewicht bovenbouw

Voor het totale gewicht van de constructie is een grove handberekening gemaakt. Het resultaat is hier een rekenwaarde van 3273kN voor het totale gewicht van de constructie (inclusief belastingfactoren). In de bijbehorende belastingcombinatie (*NC_ULS-Set B (auto)10'*) in het rekenmodel wordt een waarde van 3275kN gevonden. De twee waarden komen met elkaar overeen met een marge binnen de 10%. Met deze controle zijn de resultaten uit het SCIA model bruikbaar voor de gewichtsberekening.

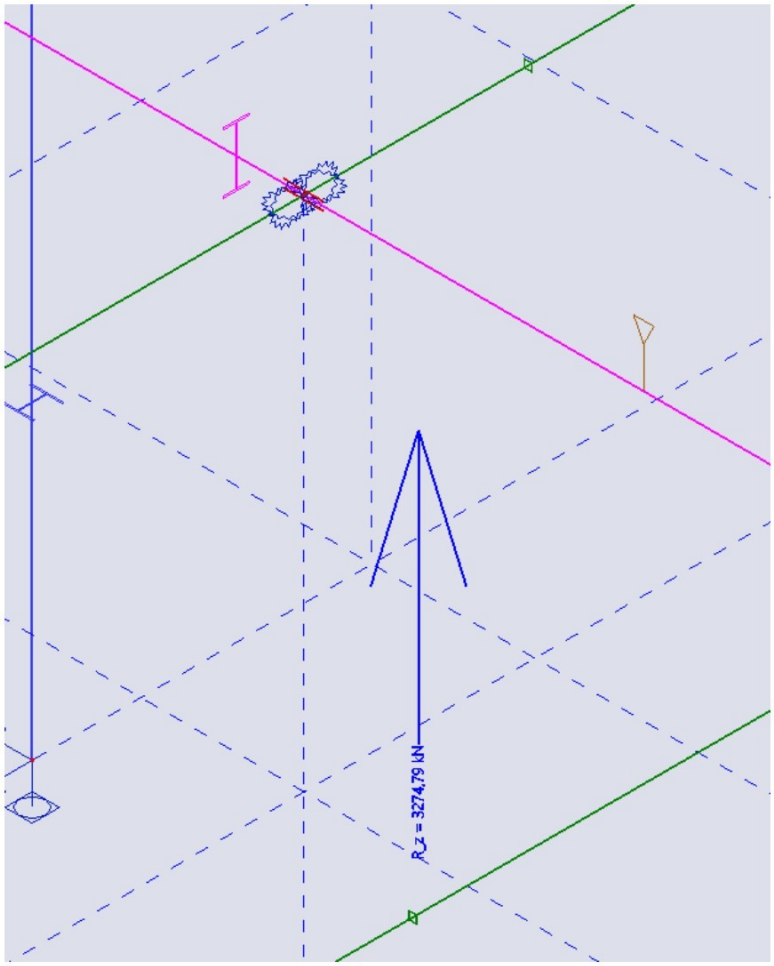
gewichtsberekening : optelling belastingen : veranderlijke & blijvende belasting — versie : wl02

Optelsom constructie				kN/m(2)	kN/m(2)		overheer -send	e.g. blijvend	6.10a mom.	6.10b extreem	6.10b mom,
omschrijving lijn bel.	a *	b *	c	G_k	q_k	Ψ_0	ja/nee	G_{ki}	Q_{ki}	Q_{ki}	Q_{ki}
Dak + PV	30,00	47,00		0,66	0,56	0,00	ja	930,60	0,00	789,60	0,00
kpv verdiepingen 260	6,00	8,00		5,20	4,00	0,60	nee	249,60	115,20	0,00	115,20
Staal	1,00			416,00				416,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
0,45*6=	2,70		0,5*8=	4				1596,2	115,2	789,6	115,2
										6.10b :	904,8

		blijvende bel.		v.b. : extreem			v.b. : momentaan				
formule	K_{fi} :	Y_g	G_{ki}	Y_Q	Ψ_t :	Q_{ki}	Y_Q	Ψ_t :	Q_{ki}	kN/m1	
B 6.10a STR :	1,00	1,35	1596	-	-	-	1,50	1,00	115	2328	
B 6.10b STR :	1,00	1,20	1596	1,50	1,00	790	1,50	1,00	115	3273	maatgevend
6.14b :	-	1,00	1596	1,00	1,00	790	1,00	1,00	115	2501	gebruiks

aantal palen :	1	stuks				Fd paal zonder windverband =	**3273**	kN
Fwind (gebruiks) :	0	kN	Fd wind :	2088	kN	Fd paal met windverband =	**0**	kN
Moment kolom	87,36	kNm				Fd paal maatgevend =	**3273**	kN

Grove handberekening model Staalconstructie v5 - 24-07-2025



Resultaat SCIA model bovenbouw V5

5.2 Controle totaalgewicht onderbouw

Voor het totale gewicht van de constructie is een grove handberekening gemaakt. Het resultaat is hier een rekenwaarde van 10434kN voor het totale gewicht van de constructie (inclusief belastingfactoren). In de bijbehorende belastingcombinatie (*NC_ULS-Set B (auto)10'*) in het rekenmodel wordt een waarde van 10165kN gevonden. De 2 waarden komen met elkaar overeen met een marge binnen de 10%. Met deze controle zijn de resultaten uit het SCIA-model bruikbaar voor de gewichtsberekening.

gewichtsberekening : optelling belastingen : veranderlijke & blijvende belasting — versie : wl02

Optelsom constructie				kN/m(2)	kN/m(2)		overheer -send	e.g. blijvend	6.10a mom.	6.10b extreem	6.10b mom,
omschrijving lijn bel.	a *	b *	c	G_k	q_k	Ψ_0	ja/nee	G_{ki}	Q_{ki}	Q_{ki}	Q_{ki}
Dak + PV	30,00	47,00		0,66	0,56	0,00	ja	930,60	0,00	789,60	0,00
kpv verdiepingen 260	6,00	8,00		5,20	4,00	0,60	nee	249,60	115,20	0,00	115,20
Staal	1,00			416,00				416,00	0,00	0,00	0,00
Poer 2000x2000x300mm	2,00	2,00	3,00	7,00	15,00	0,60	ja	84,00	108,00	180,00	0,00
Poer 1750x1750x300mm	1,75	1,75	12,00	7,00	15,00	0,60	ja	257,25	330,75	551,25	0,00
Stroken 800x200mm	0,80	113,50		7,00		0,60	ja	635,60	0,00	0,00	0,00
Stroken 1000x250mm	1,00	49,50		7,00		0,60	ja	346,50	0,00	0,00	0,00
Poer 2000x2000x300mm	4,00	0,30	3,00	25,00				90,00	0,00	0,00	0,00
Poer 1750x1750x300mm	3,06	0,30	12,00	25,00				275,40	0,00	0,00	0,00
Stroken 800x200mm	0,20	113,50		25,00				567,50	0,00	0,00	0,00
Stroken 1000x250mm	0,25	49,50		25,00				309,38	0,00	0,00	0,00
Betonvloer 180mm	214,00			2,25	7,50	0,60	ja	481,50	963,00	1605,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								0,00	0,00	0,00	0,00
								4643,3	1517,0	3125,9	115,2
										6.10b :	3241,1

		blijvende bel.		v.b. : extreem			v.b. : momentaan				
formule	K_{FI} :	Y_g	G_{ki}	Y_Q	Ψ_t :	Q_{ki}	Y_Q	Ψ_t :	Q_{ki}	kN/m1	
B 6.10a STR :	1,00	1,35	4643	-	-	-	1,50	1,00	1517	8544	
B 6.10b STR :	1,00	1,20	4643	1,50	1,00	3126	1,50	1,00	115	10434	maatgevend
6.14b :	-	1,00	4643	1,00	1,00	3126	1,00	1,00	115	7884	gebruiks

aantal palen : 1 stuks — Fd paal zonder windverband = **10434** kN

Fwind (gebruiks) : 0 kN — Fd wind : 7847 kN — Fd paal met windverband = **0** kN

Grove handberekening model onderbouw V4 - 24-07-2025

Opbouw totale reactiekracht rekenmodel

$$F_{tot} = 1.2 \cdot LC1 + 1.2 \cdot LC2 + 1.5 \cdot LC3 + 1.0 \cdot BG10 = 10165\ kN$$

Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
LC1	loads	0,00	0,00	-1100,33
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1100,33
LC2	loads	0,00	0,00	-2258,54
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	2258,54
LC3	loads	0,00	0,00	-1906,31
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1906,31
BG10	loads	1,11	0,00	-3274,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-1,11	0,00	3274,79

Resultaat SCIA model onderbouw V4

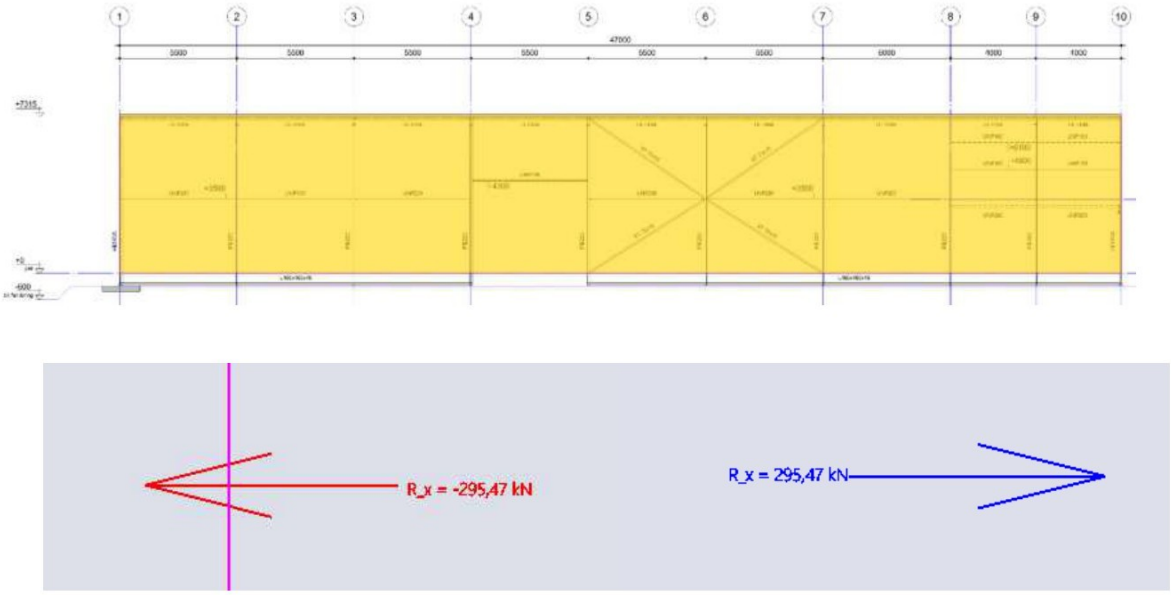
5.3 Controle windbelasting

Wind X-richting (0 en 180)

Totale windoppervlak: $A_w = 357m^2$

Windbelasting: $F_w = A_w \cdot (0{,}8 + 0{,}5) \cdot 1{,}0 \cdot 0{,}64 = 297kN$

Reactie SLS Wind X+ en SLS Wind X-, $F_w = \pm 295kN$ -> Akkoord



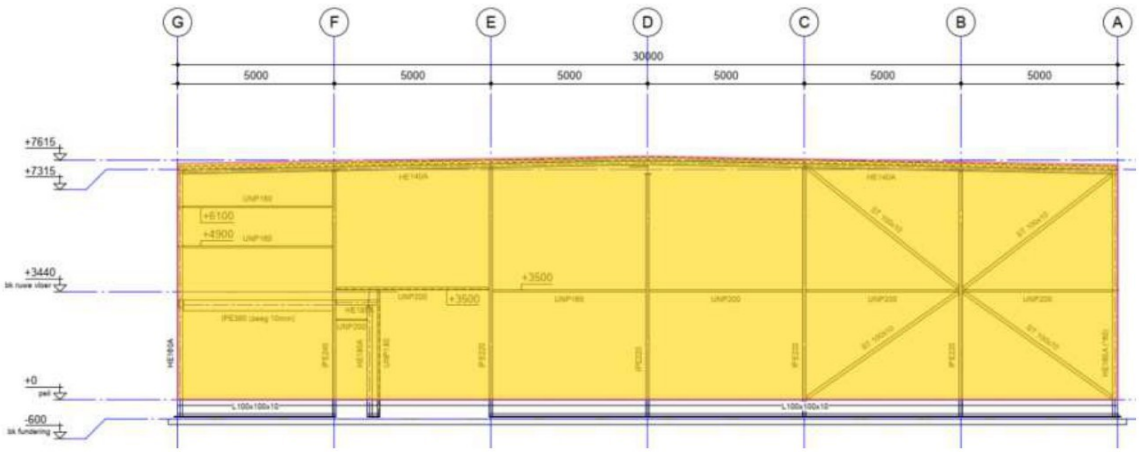
Windoppervlakte op constructie en reactiekrachten wind X-richting

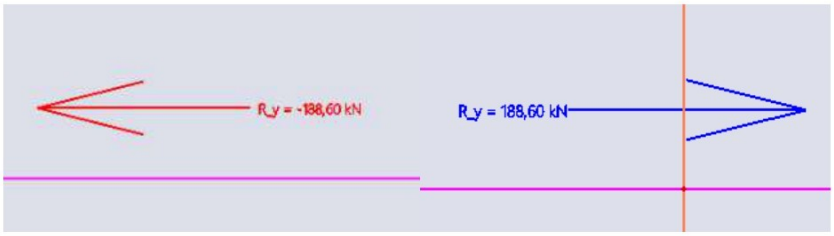
Wind Y-richting (90 en 270)

Totale windoppervlak: $A_w = 228m^2$

Windbelasting: $F_w = A_w \cdot (0{,}8 + 0{,}5) \cdot 1{,}0 \cdot 0{,}64 = 190kN$

Reactie SLS Wind Y+ en SLS Wind Y-, $F_w = \pm 189kN$ -> Akkoord





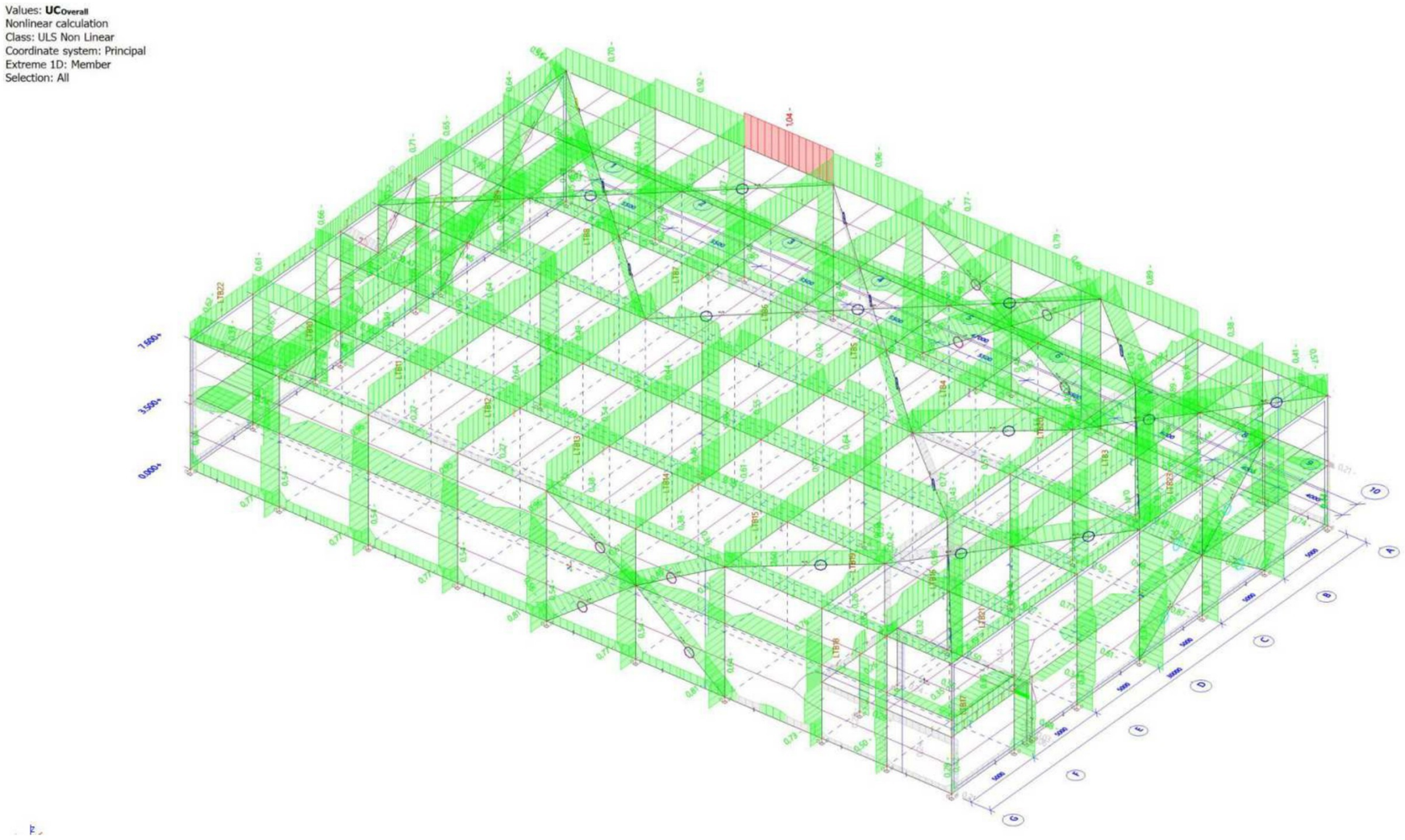
Windoppervlakte op constructie en reactiekrachten wind Y-richting

6 SCIA-berekening

In dit hoofdstuk worden een aantal zaken toegelicht met betrekking tot de SCIA-berekening. Voor de bovenbouw is een niet-lineaire berekening benodigd, omdat er windverbanden aanwezig zijn die alleen trek op kunnen nemen. De constructie van de bovenbouw is geometrisch niet-lineair berekend waarbij ook initiële imperfecties zijn beschouwd. Voor de volledige uitvoer van de bovenbouw, zie Bijlage A - SCIA uitvoer bovenbouw. Voor de volledige uitvoer van de onderbouw, zie Bijlage B - SCIA uitvoer onderbouw.

6.1 Staalcontrole

Een overzicht van de staalcontrole is voor de volledigheid in de volgende afbeelding weergegeven. De randligger met uc van 1,04 is akkoord.



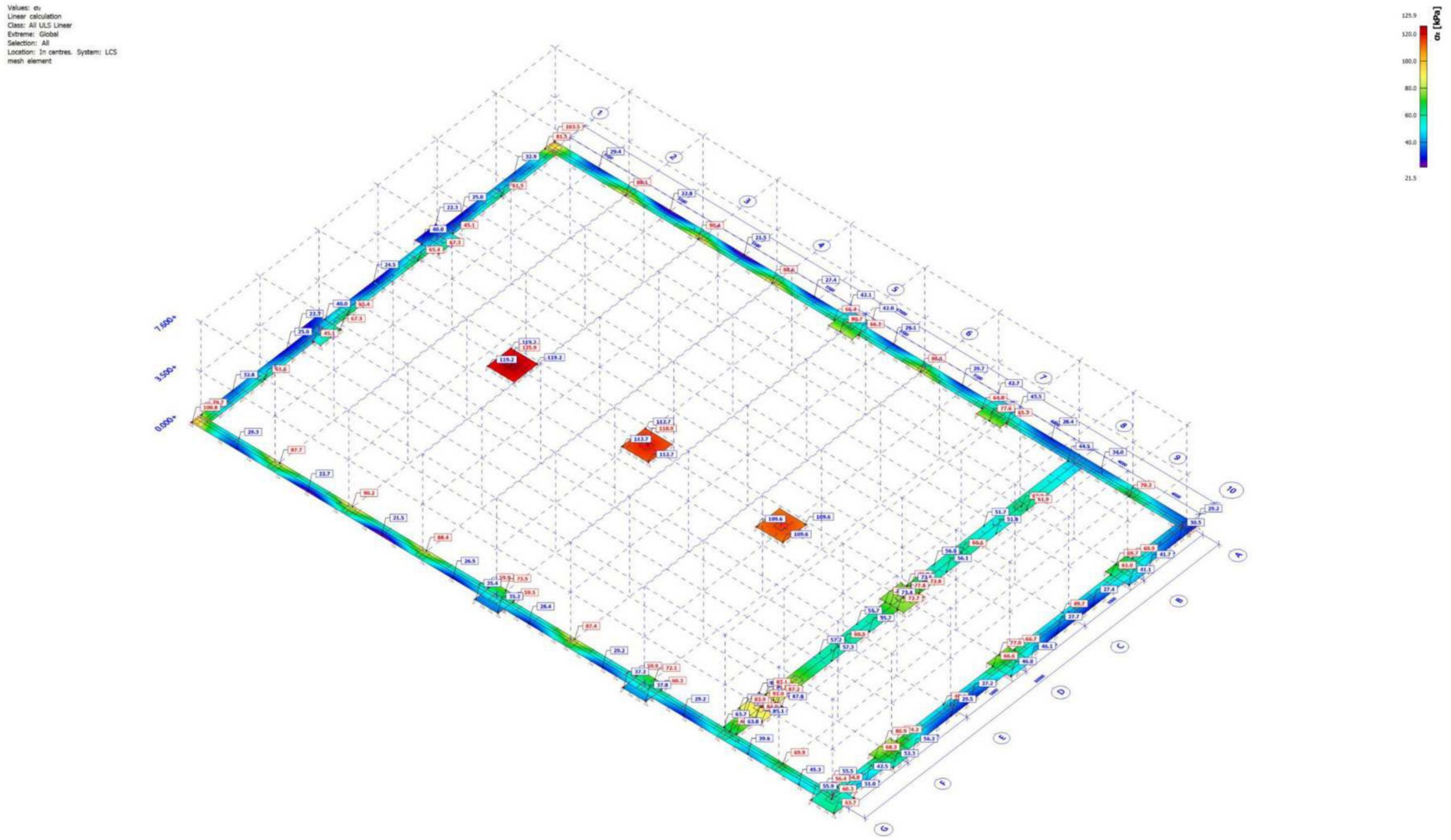
Staalcontrole

6.2 Grondspanning

De toelaatbare grondspanningen mag worden verhoogd met 30 kN/m^2 vanwege een permanente gronddekking van 0,4m en geeft de volgende toelaatbare grondspanningen:

- Strook 800mm $\sigma'_{max;d} = 110\ kN/m^2$
- Strook 1000mm $\sigma'_{max;d} = 120\ kN/m^2$
- Poer 1750x1750mm $\sigma'_{max;d} = 143\ kN/m^2$
- Poer 2000x2000mm $\sigma'_{max;d} = 148\ kN/m^2$

Een overzicht van de optredende grondspanningen is in de volgende afbeelding weergegeven. De optredende grondspanningen zijn kleiner dan de toelaatbare grondspanningen.



Grondspanningen.

Bijlage A - SCIA uitvoer bovenbouw

Bijlage B - SCIA uitvoer onderbouw

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2. Project

Licence user	tamara.wagemaker@wsp.com
Project	SGU022725 Welkoop aan de Mark te Gemert
Part	Staalconstructie
Description	-
Author	TWR
Date	25-07-2025
Structure	General XYZ
No. of nodes :	163
No. of beams :	229
No. of slabs :	0
No. of solids :	0
No. of used profiles :	22
No. of load cases :	20
No. of used materials :	1
Acceleration of gravity [m/s^2]	9,810
National code	EC - EN

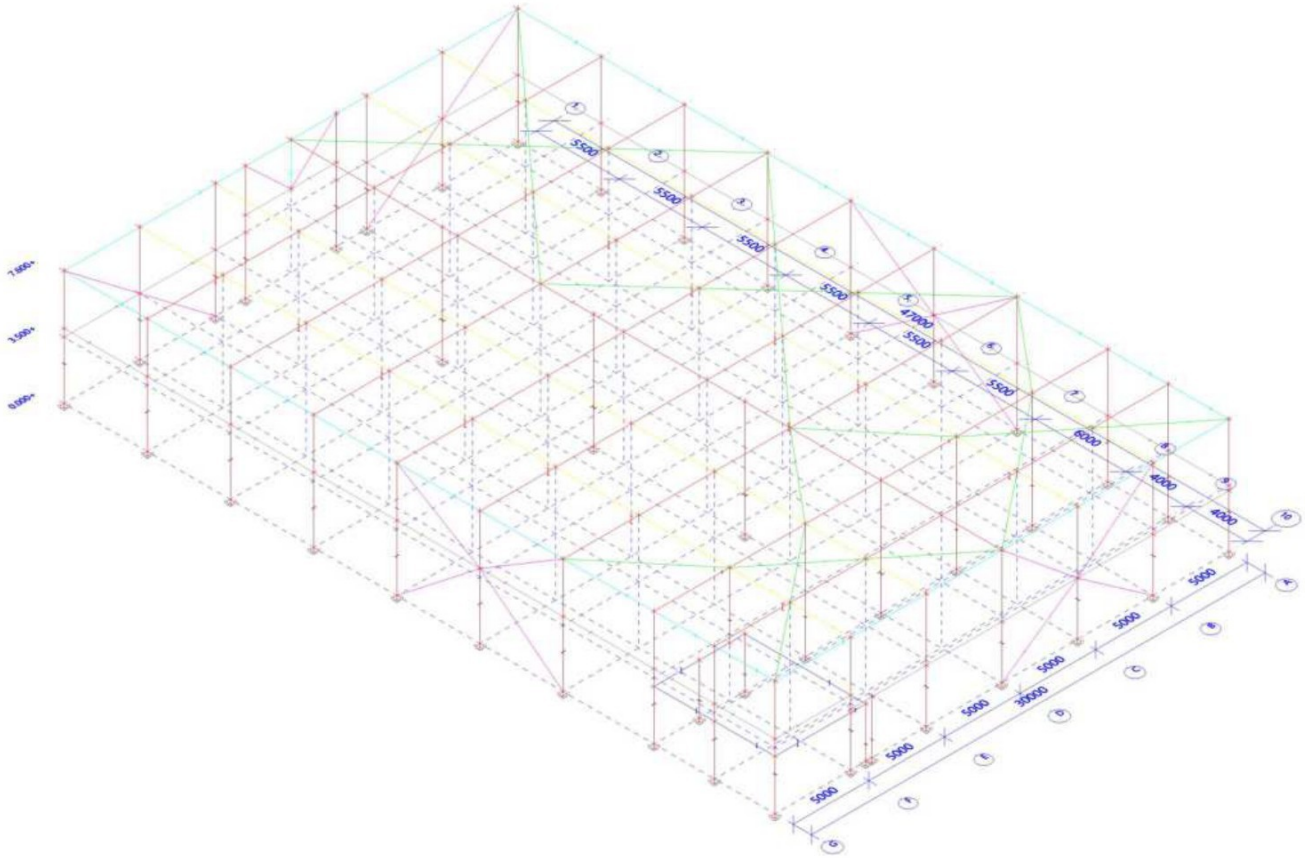
3. Instellingen solver (Geometrisch 2e orde)

Name	SolverSetup1
Neglect shear force deformation (Ay, Az >> A)	×
Initial stress	×
Number of thicknesses of rib plate	20
Maximum soil interaction iterations	10
Maximum iterations	30
Number of increments	1
Number of buckling modes	2
Minimal number of sections on member	10
Step for soil/water pressure [m]	0,500
C1x [kN/m^3]	1,0000e+02
C1y [kN/m^3]	1,0000e+02
C1z [kN/m^3]	1,0000e+04
C2x [kN/m]	5,0000e+03
C2y [kN/m]	5,0000e+03
Warning when maximal translation is greater than [mm]	1000,0
Warning when maximal rotation is greater than [mrad]	100,0
Parallelism tolerance [deg]	10,00
Ratio to half - distance to adjacent beam beff,i/bi [-]	0,200

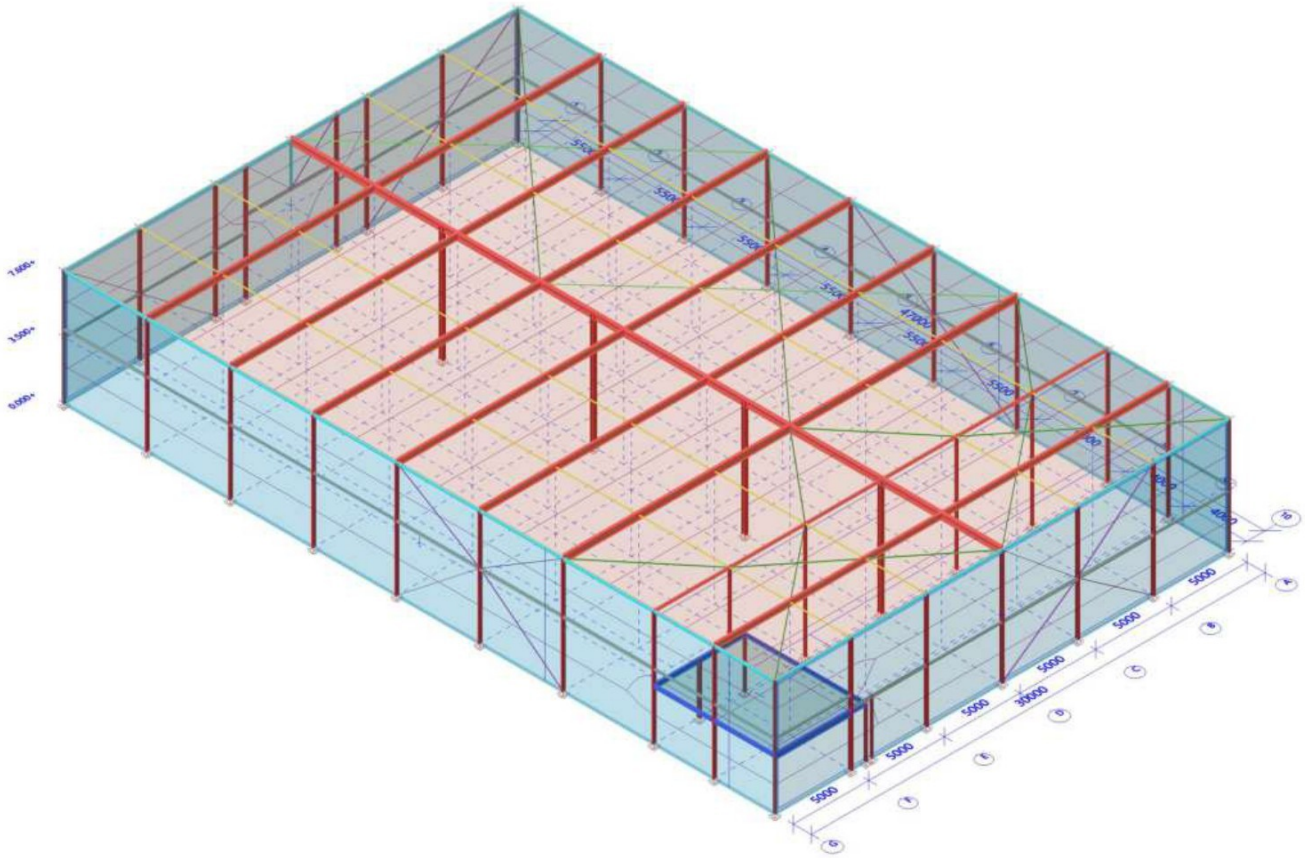
Ratio to effective span length beff,i/l0 [-]	0,100
Max ratio to effective span length beff,i/l0 [-]	0,200
Simply supported beam [-]	1,000
Inner span [-]	0,700
End span [-]	0,850
Cantilever, base ratio to current span [-]	1,000
Cantilever, base ratio to adjacent span [-]	0,150
Cantilever, max ratio to current span [-]	1,500
Max adjacent span length ratio [-]	1,500
Max cantilever length ratio to adjacent span [-]	0,500
Span length ratio Le/beff,i,max (1 side) [-]	8,00
Simply supported beam [-]	1,000
Inner span [-]	0,700
End span [-]	0,850
Cantilever [-]	2,000
Method used for non-concrete and non-steel / composite beams	EN 1994-1-1
Solver precision ratio	1
Soil combination	None
Bending theory of plate/shell analysis	Mindlin
Type of solver	Direct
Type of eigen value solver	Lanczos
Method of calculation	Picard

4. Constructie overzicht

4.1. Totale constructie



4.2. Totale constructie



4.3. Cross-sections

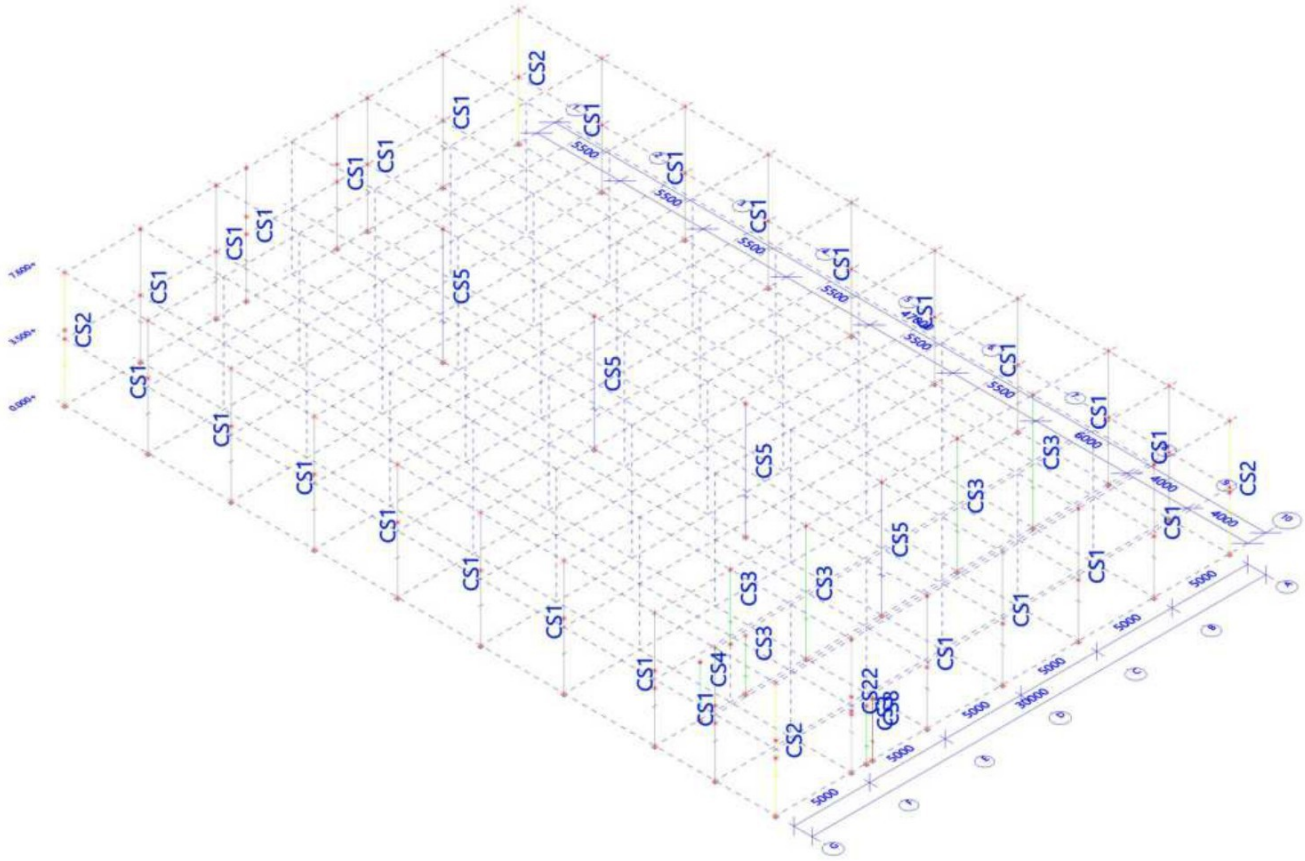
Name	Type	Item material	Fabrication	A [mm²]	A_y [mm²]	I_y [mm⁴]	$W_{el.y}$ [mm³]	$W_{pl.y}$ [mm³]	Colour
	Detailed				A_z [mm²]	I_z [mm⁴]	$W_{el.z}$ [mm³]	$W_{pl.z}$ [mm³]	
CS1	IPE220	S 235	rolled	3,3400e+03	2,0643e+03	2,7710e+07	2,5190e+05	2,8540e+05	
					1,3244e+03	2,0480e+06	3,7250e+04	5,8110e+04	
CS2	HEA160	S 235	rolled	3,8800e+03	2,8071e+03	1,6700e+07	2,2000e+05	2,4500e+05	
					9,8390e+02	6,1600e+06	7,7000e+04	1,1750e+05	
CS3	HEA140	S 235	rolled	3,1400e+03	2,2882e+03	1,0300e+07	1,5500e+05	1,7333e+05	
					7,8192e+02	3,8900e+06	5,5600e+04	8,5000e+04	
CS4	HEA180	S 235	rolled	4,5300e+03	3,2772e+03	2,5100e+07	2,9400e+05	3,2500e+05	
					1,0992e+03	9,2500e+06	1,0300e+05	1,5667e+05	
CS5	HEA240	S 235	rolled	7,6800e+03	5,5540e+03	7,7600e+07	6,7500e+05	7,4583e+05	
					1,8522e+03	2,7700e+07	2,3100e+05	3,5167e+05	
CS6	IPE450	S 235	rolled	9,8800e+03	5,5856e+03	3,3740e+08	1,4990e+06	1,7010e+06	
					4,3051e+03	1,6750e+07	1,7640e+05	2,7630e+05	
CS7	UNP160	S 235	rolled	2,4000e+03	1,3168e+03	9,2500e+06	1,1600e+05	1,3760e+05	
					1,1998e+03	8,5300e+05	1,8300e+04	3,5200e+04	
CS8	UNP180	S 235	rolled	2,8000e+03	1,4920e+03	1,3500e+07	1,5000e+05	1,7920e+05	
					1,4353e+03	1,1400e+06	2,2400e+04	4,2900e+04	
CS9	UNP260	S 235	rolled	4,8300e+03	2,4565e+03	4,8200e+07	3,7100e+05	4,4200e+05	
					2,5786e+03	3,1700e+06	4,7700e+04	9,1600e+04	
CS10	SHSCF60/60/4.0	S 235	cold formed	8,5500e+02	4,2702e+02	4,3600e+05	1,4500e+04	1,7600e+04	
					4,2702e+02	4,3600e+05	1,4500e+04	1,7600e+04	
CS11	HFLeq60x60x6	S 235	rolled	6,9090e+02	5,7999e+02	3,6140e+05	8,5150e+03	1,3551e+04	
					5,8516e+02	9,4400e+04	3,9562e+03	6,9893e+03	
CS12	FL70X10	S 235	rolled	7,0000e+02	5,8333e+02	5,8333e+03	1,1667e+03	1,7500e+03	
					5,8333e+02	2,8583e+05	8,1667e+03	1,2250e+04	
CS15	IPE200	S 235	rolled	2,8500e+03	1,7729e+03	1,9430e+07	1,9430e+05	2,2060e+05	
					1,1448e+03	1,4230e+06	2,8470e+04	4,4610e+04	
CS17	IPE400	S 235	rolled	8,4500e+03	4,9303e+03	2,3120e+08	1,1560e+06	1,3070e+06	
					3,5197e+03	1,3170e+07	1,4640e+05	2,2900e+05	
CS18	UNP200	S 235	rolled	3,2200e+03	1,6758e+03	1,9100e+07	1,9100e+05	2,2800e+05	
					1,6900e+03	1,4800e+06	2,7000e+04	5,1800e+04	
CS21	FL80X10	S 235	rolled	8,0000e+02	6,6667e+02	6,6667e+03	1,3333e+03	2,0000e+03	
					6,6667e+02	4,2667e+05	1,0667e+04	1,6000e+04	
CS22	IPE240	S 235	rolled	3,9100e+03	2,4315e+03	3,8910e+07	3,2430e+05	3,6660e+05	
					1,5295e+03	2,8360e+06	4,7270e+04	7,3920e+04	
CS23	IPE360	S 235	rolled	7,2700e+03	4,3051e+03	1,6260e+08	9,0360e+05	1,0190e+06	
					2,9457e+03	1,0430e+07	1,2270e+05	1,9100e+05	
CS24	IPE300	S 235	rolled	5,3800e+03	3,1835e+03	8,3560e+07	5,5700e+05	6,2830e+05	
					2,1775e+03	6,0370e+06	8,0500e+04	1,2520e+05	
CS25	HFLeq70x70x7	S 235	rolled	9,3970e+02	7,8961e+02	6,7090e+05	1,3548e+04	2,1545e+04	
					7,9525e+02	1,7500e+05	6,2796e+03	1,1097e+04	
CS26	HEA100	S 235	rolled	2,1200e+03	1,6076e+03	3,4900e+06	7,2800e+04	8,2917e+04	
					5,3156e+02	1,3400e+06	2,6800e+04	4,1125e+04	
CS27	FL100X10	S 235	rolled	1,0000e+03	8,3333e+02	8,3333e+03	1,6667e+03	2,5000e+03	
					8,3333e+02	8,3333e+05	1,6667e+04	2,5000e+04	

4.4. Layers

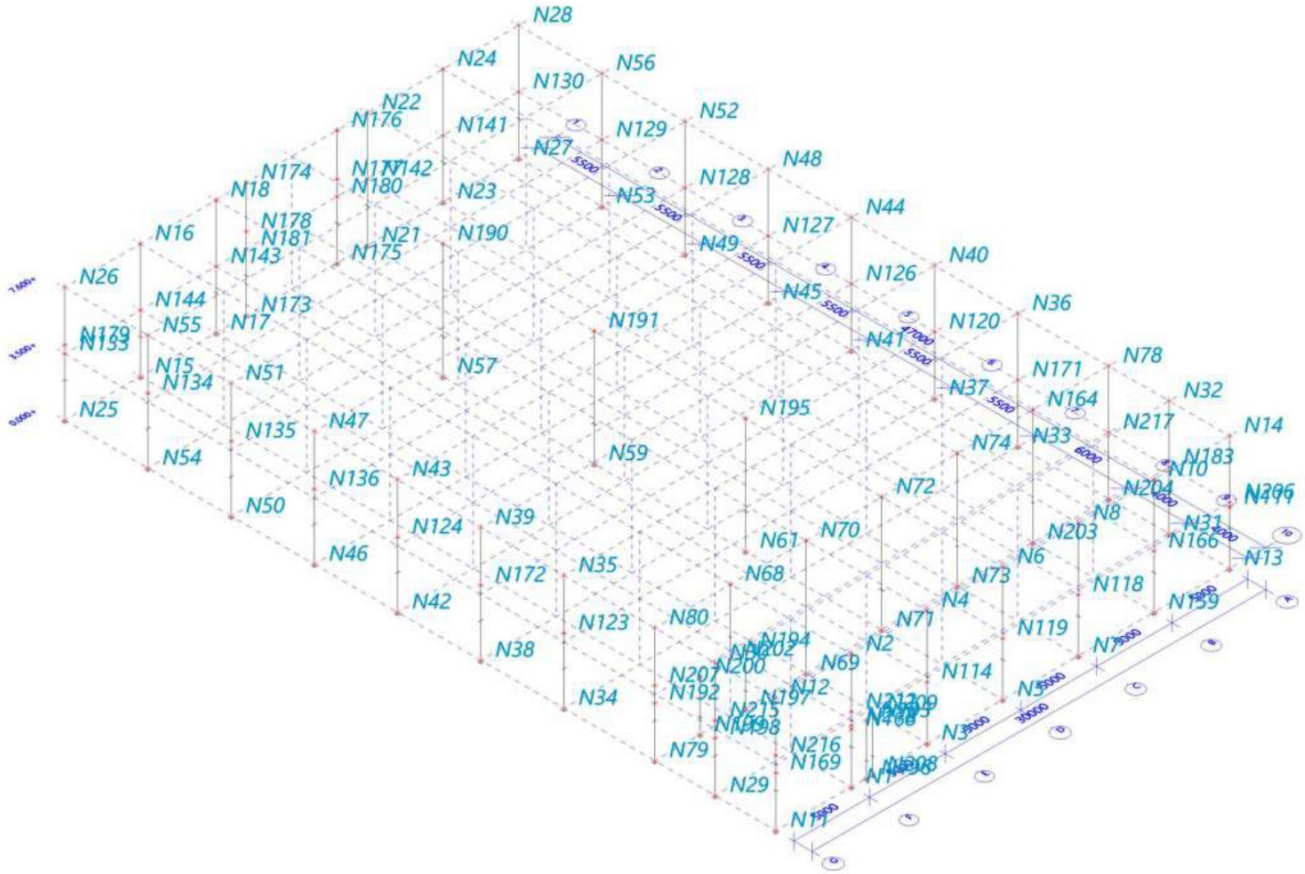
4.4.1. Layers - Kolommen

Name	Structural model only	Colour
Kolommen	×	

4.4.1.1. Profielen



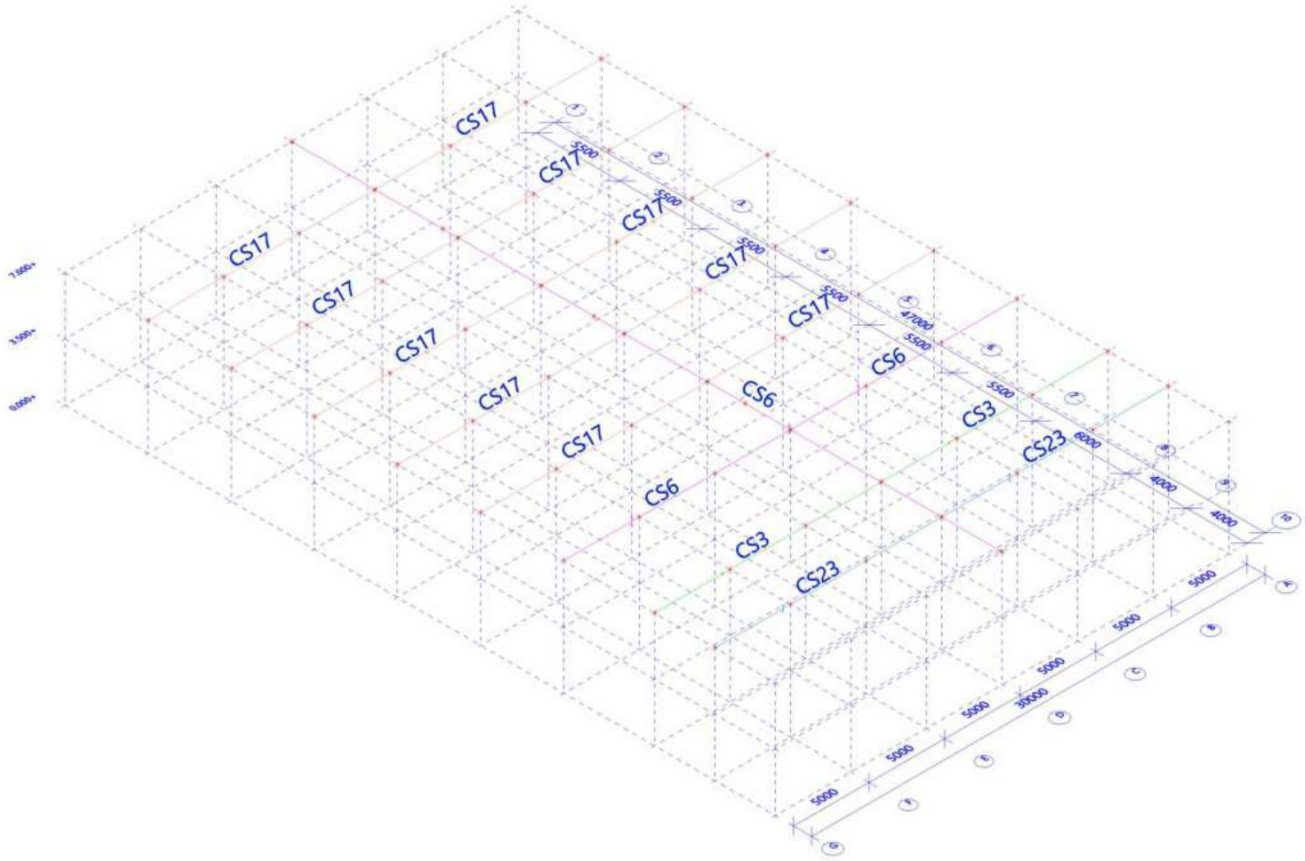
4.4.1.2. Knopen


N28
N24
N56
N130
N22
N176
N141
N52
N129
N27
N48
N174
N18
N142
N128
N23
N53
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N16
N178
N181
N190
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N177

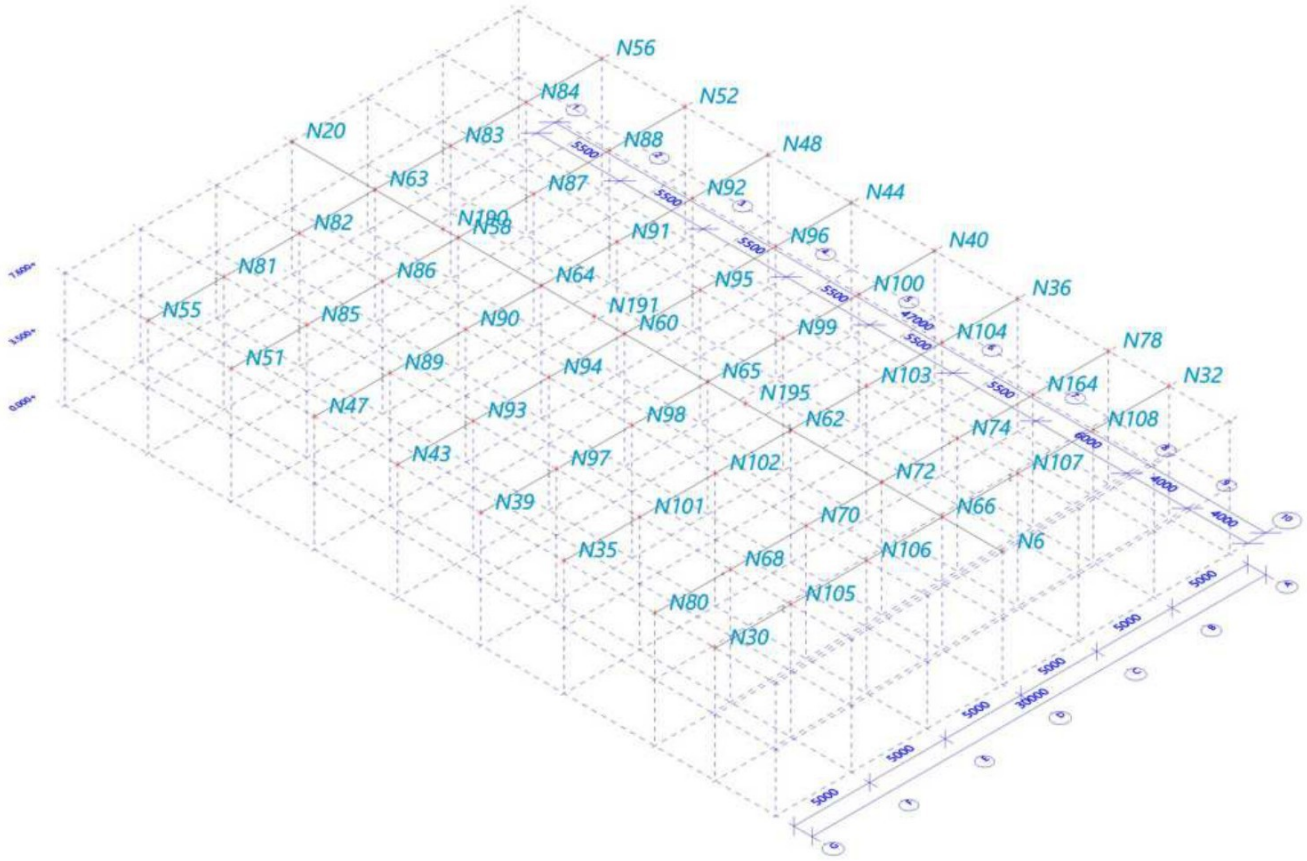
4.4.2. Layers - Dakliggers

Name	Structural model only	Colour
Dakliggers	×	

4.4.2.1. Profielen



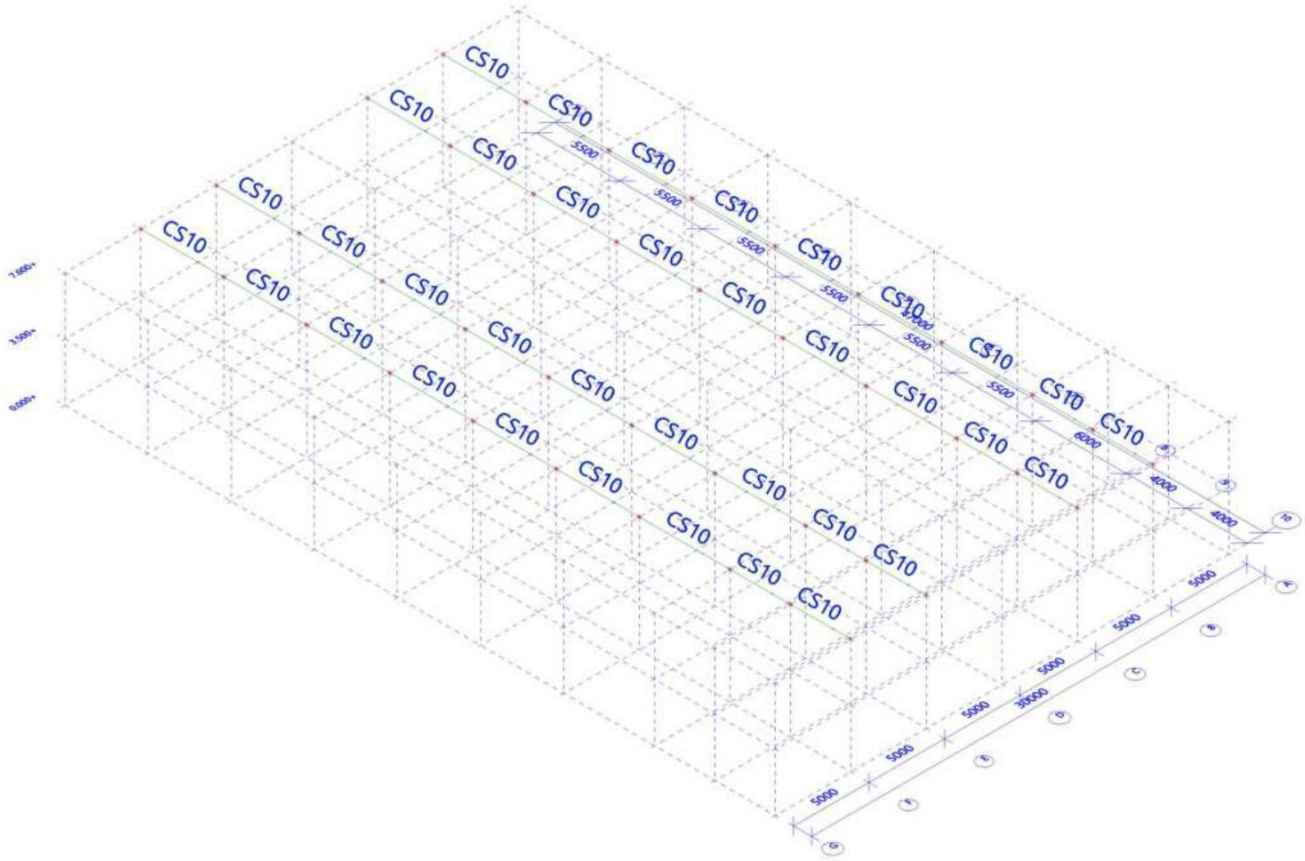
4.4.2.2. Knopen


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N96
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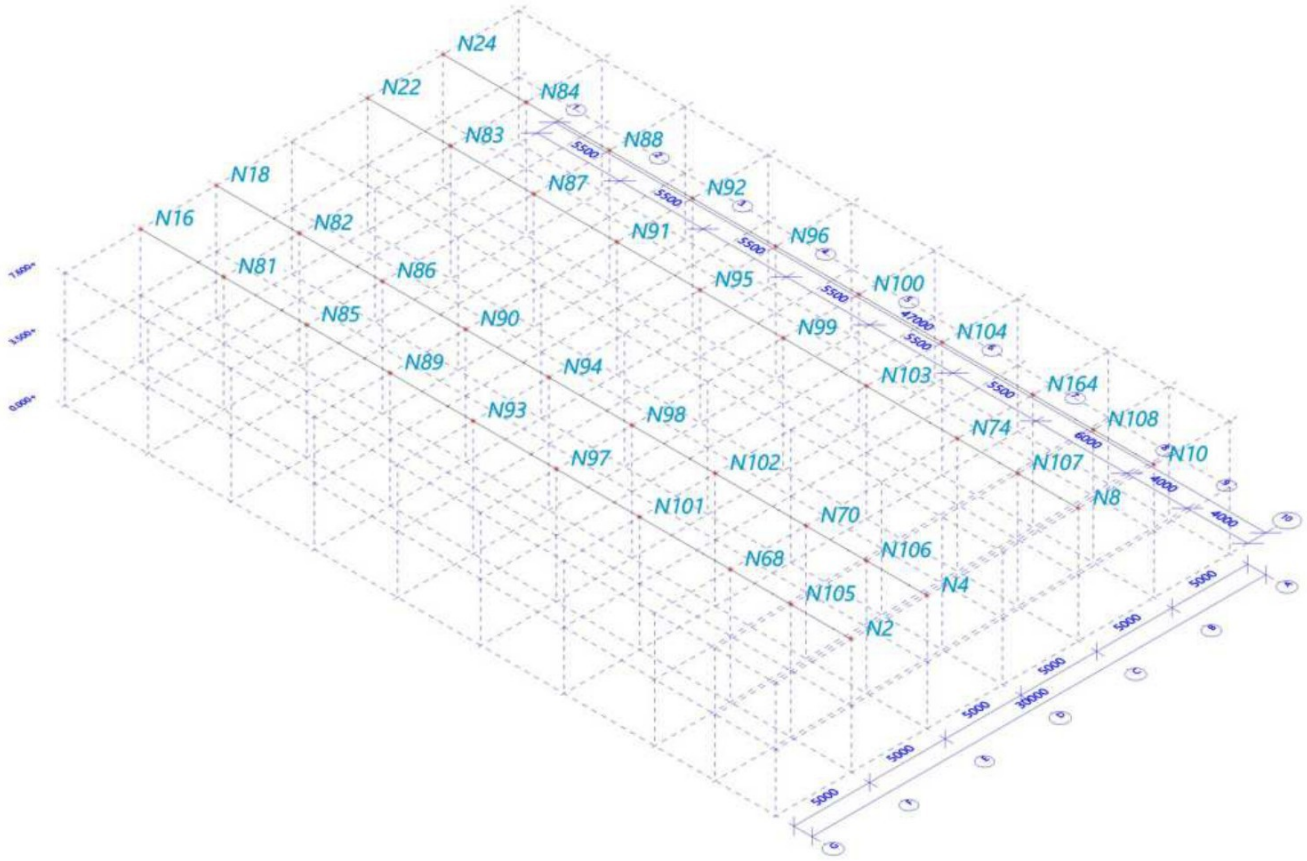
4.4.3. Layers - Dakgordingen

Name	Structural model only	Colour
Dakgordingen	×	

4.4.3.1. Profielen



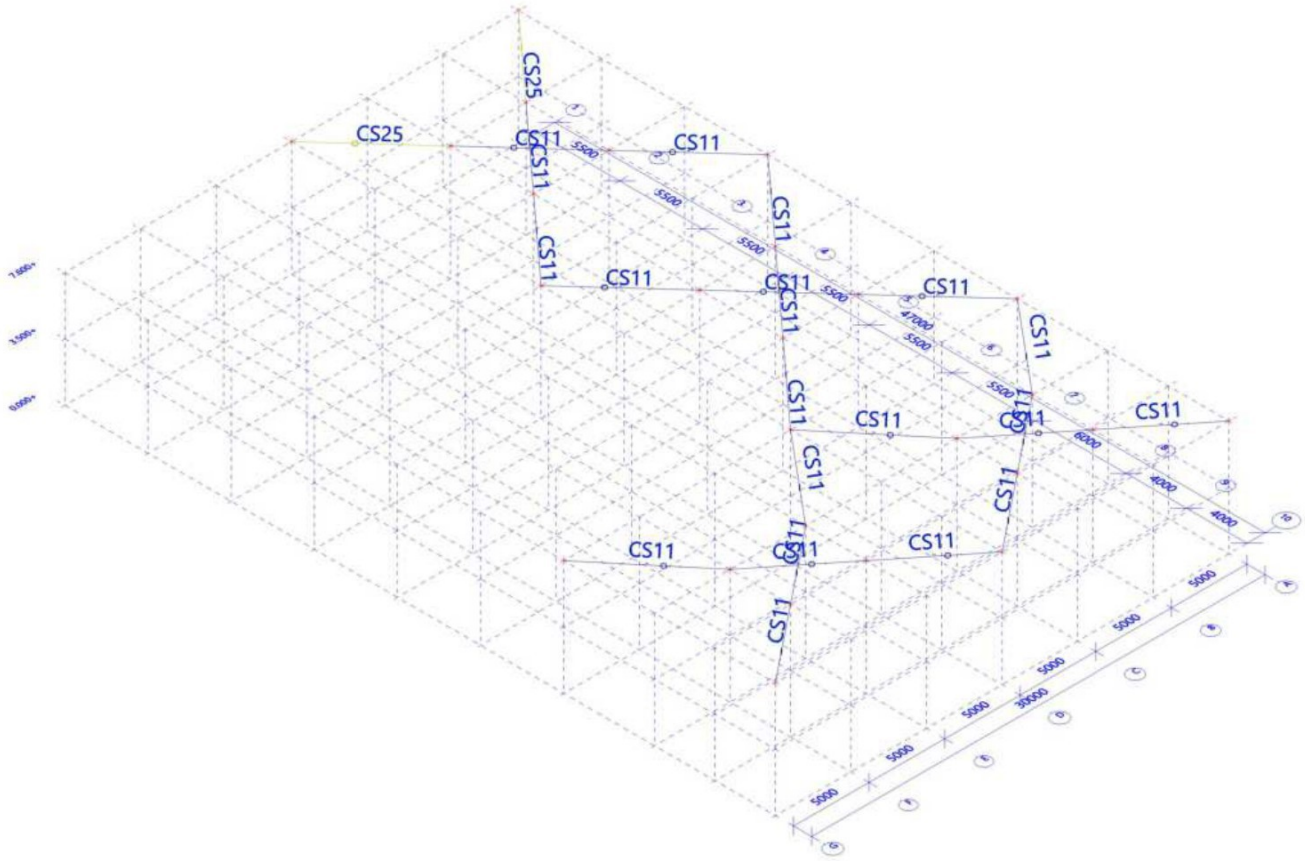
4.4.3.2. Knopen


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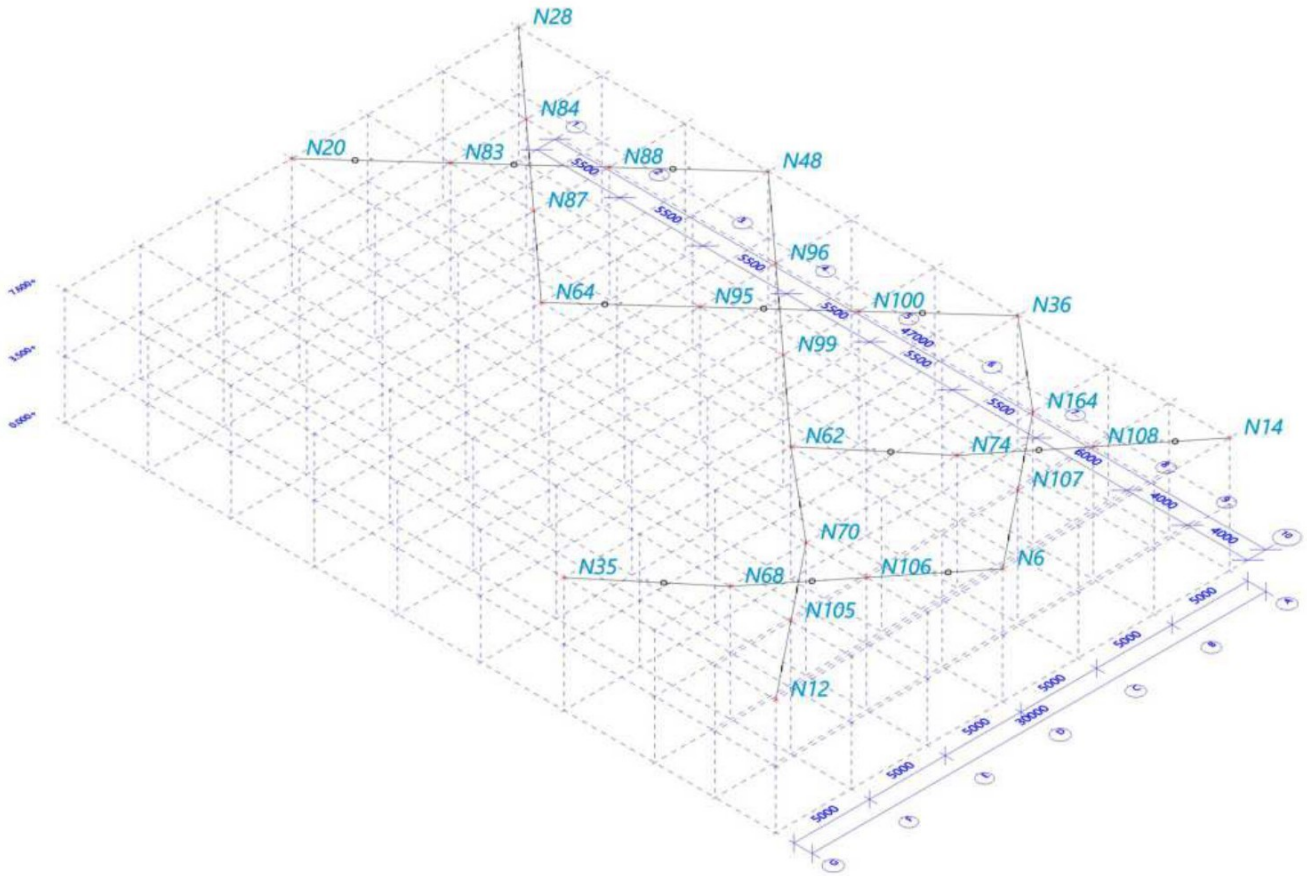
4.4.4. Layers - Windverbanden dak

Name	Structural model only	Colour
Windverbanden dak	×	

4.4.4.1. Profielen



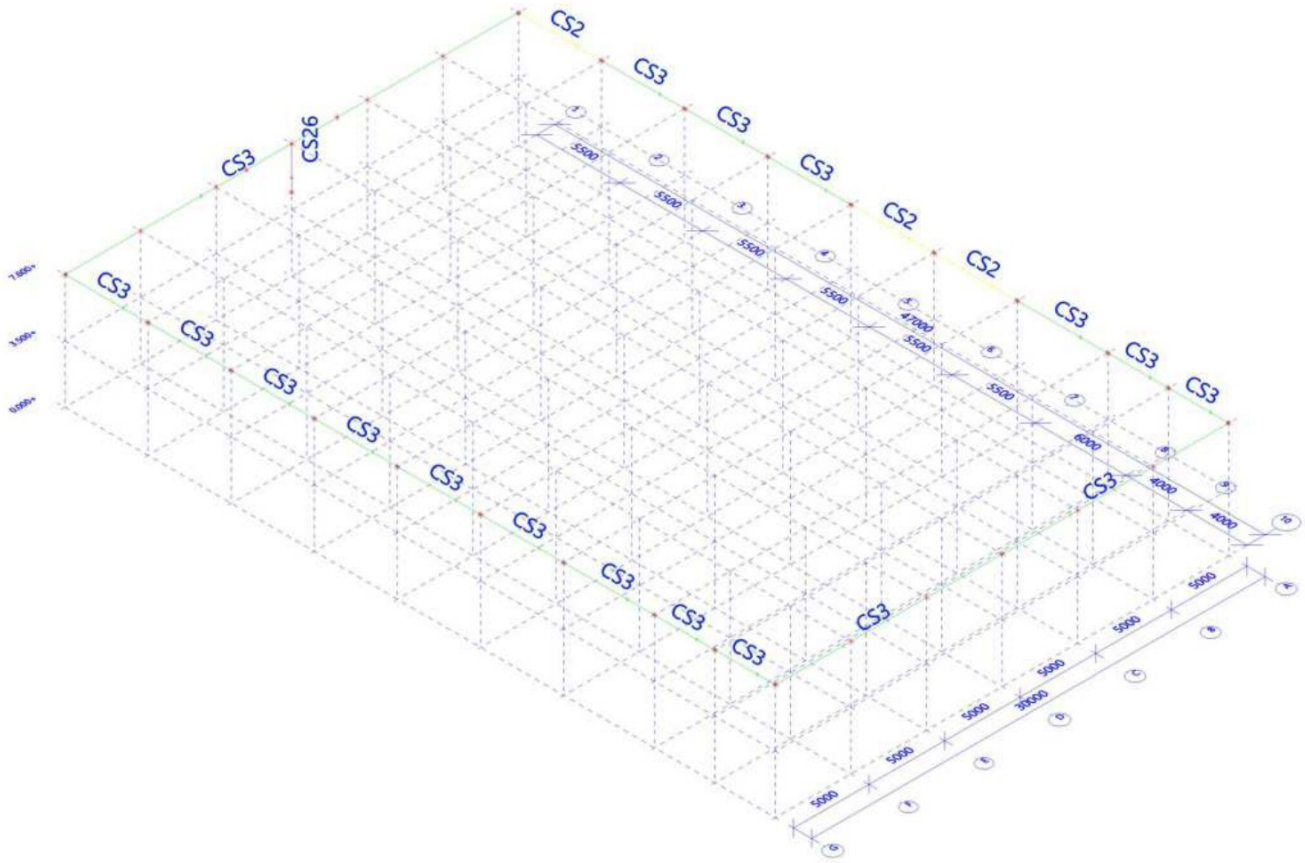
4.4.4.2. Knopen


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N164
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N74
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N107
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N6
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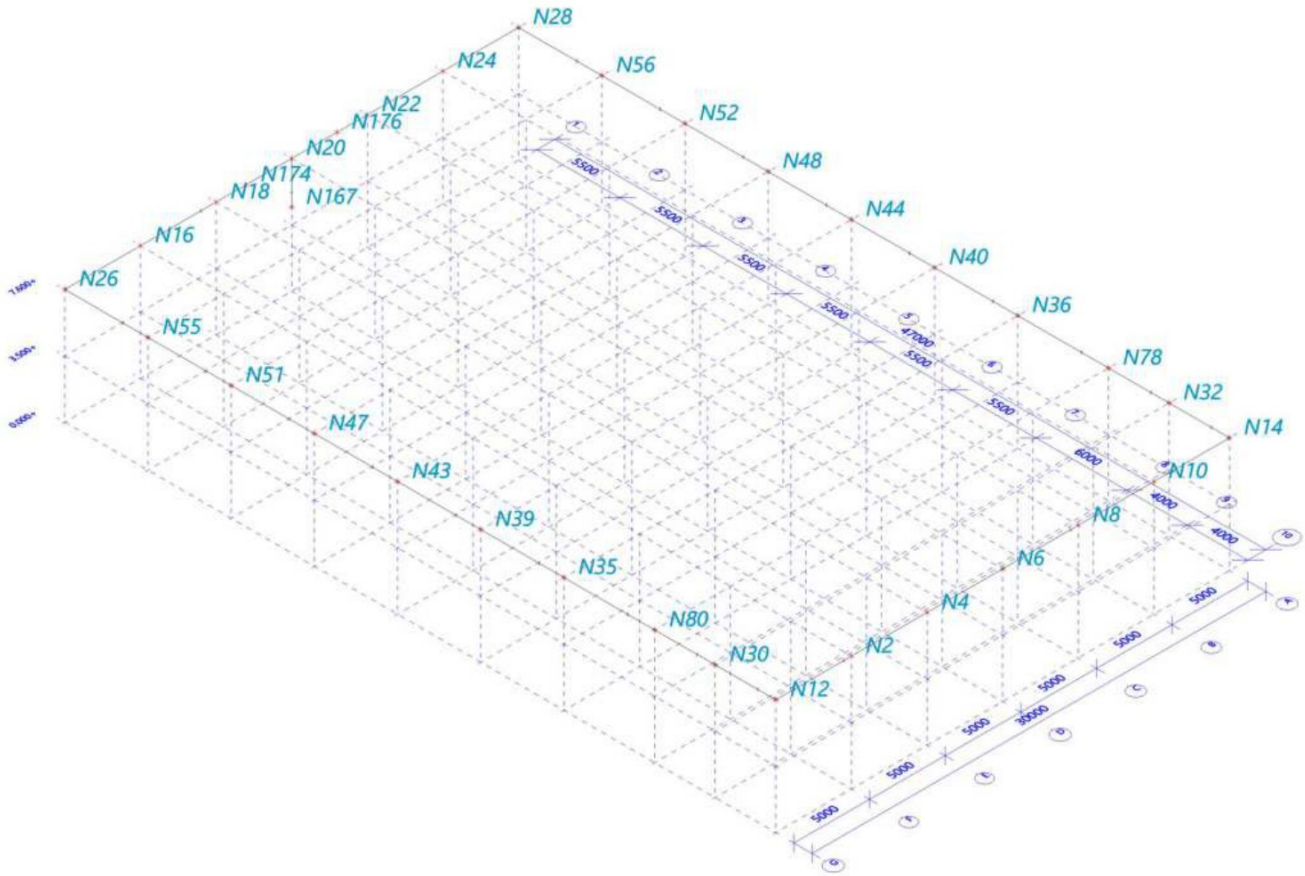
4.4.5. Layers - Randliggers dak

Name	Structural model only	Colour
Randliggers dak	×	

4.4.5.1. Profielen



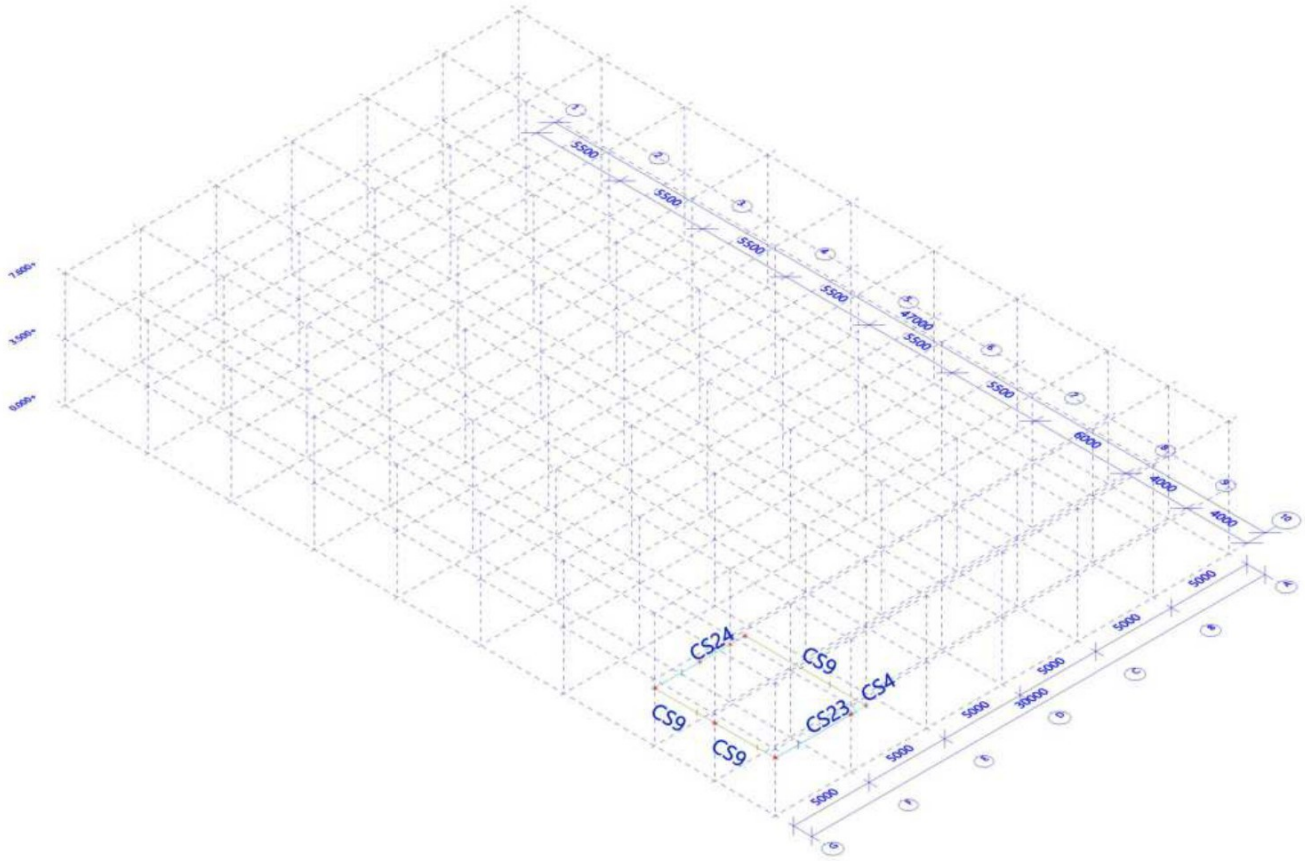
4.4.5.2. Knopen


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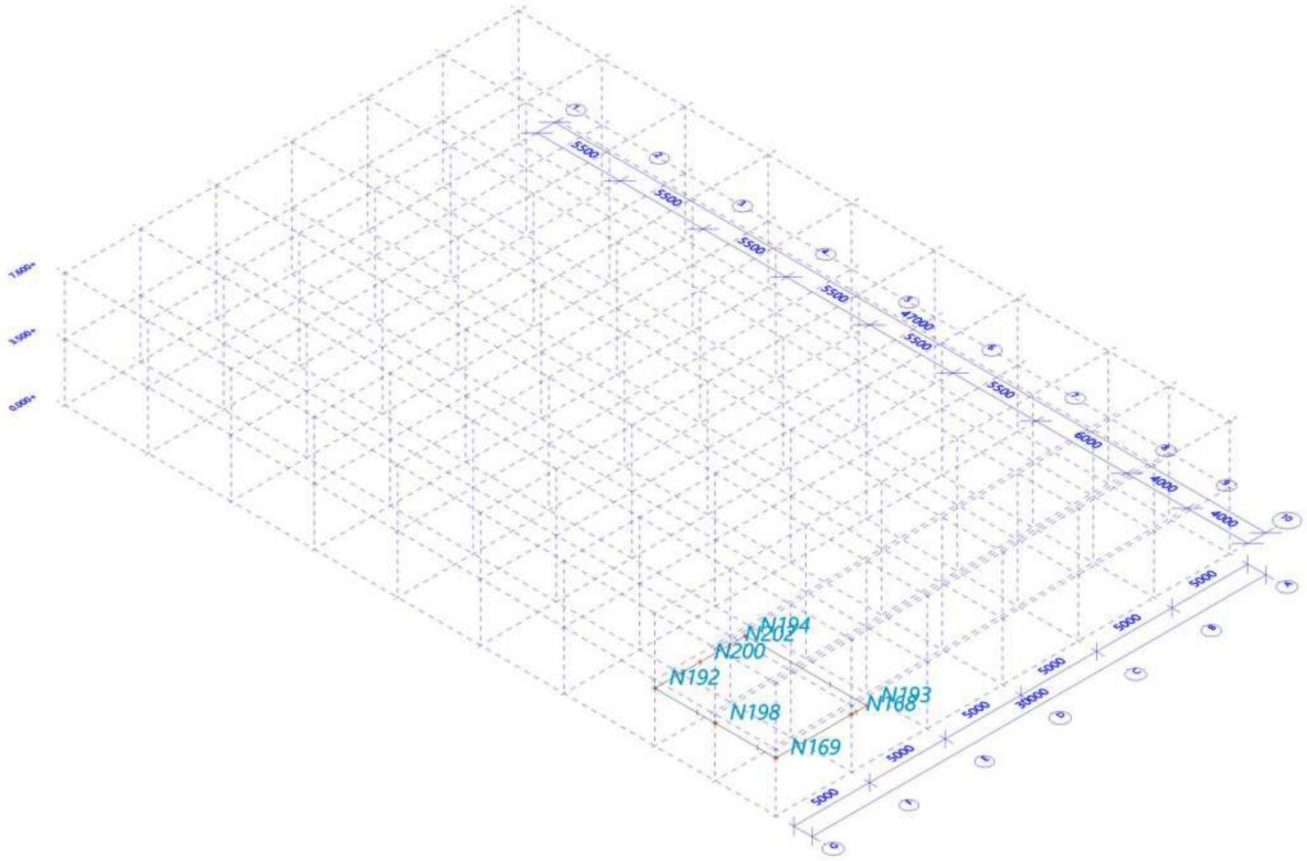
4.4.6. Layers - Vloerligger

Name	Structural model only	Colour
Vloerligger	×	

4.4.6.1. Profielen



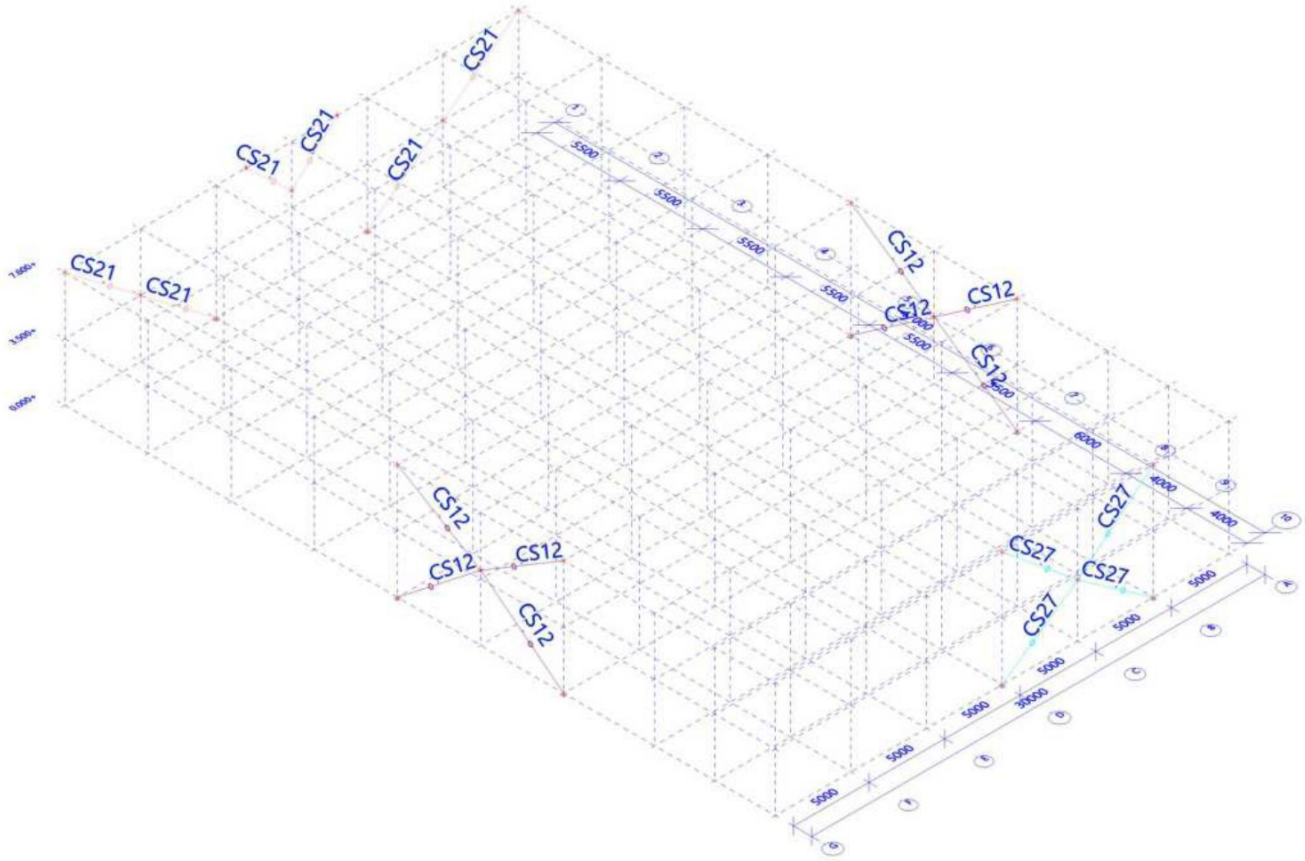
4.4.6.2. Knopen


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N169

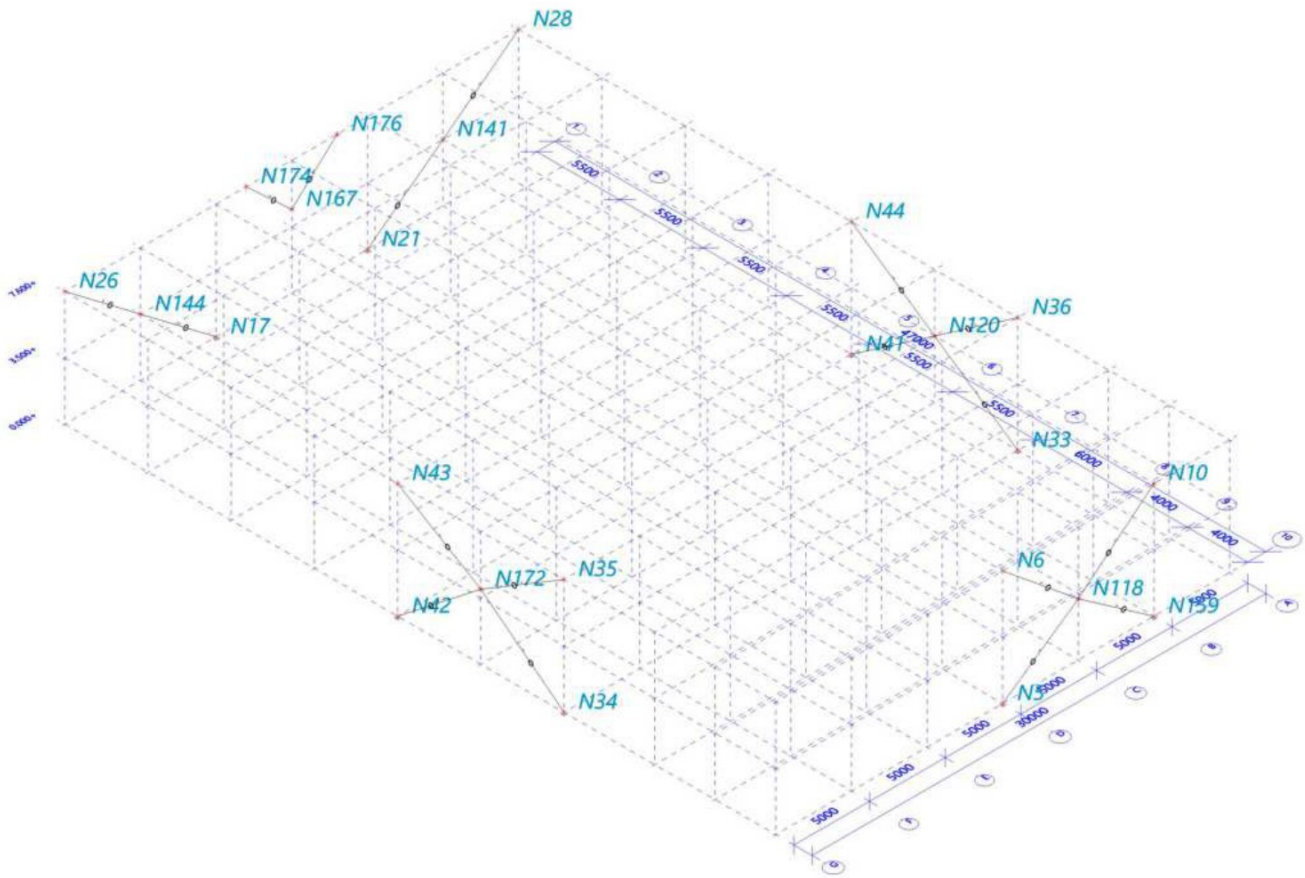
4.4.7. Layers - Windverbanden gevel

Name	Structural model only	Colour
Windverbanden gevel	×	

4.4.7.1. Profielen



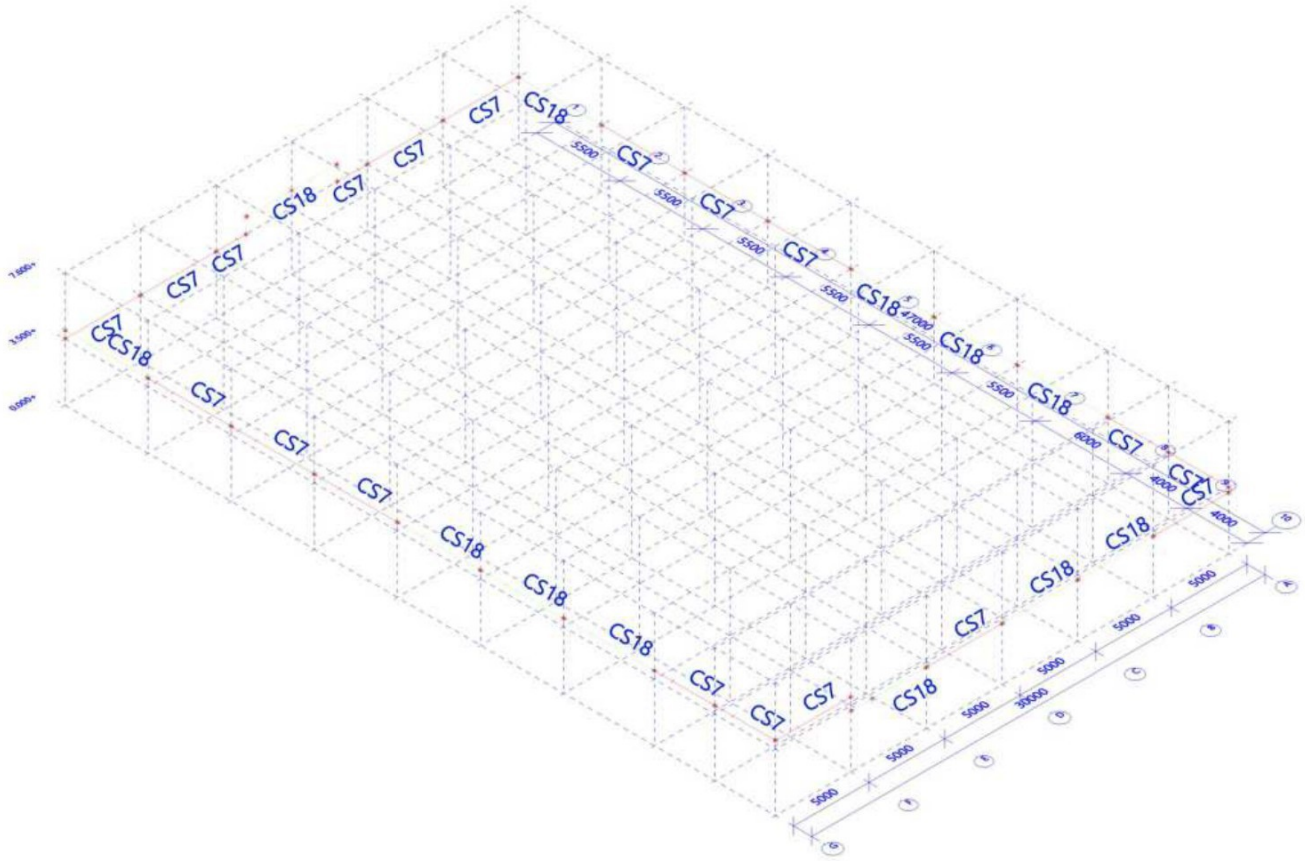
4.4.7.2. Knopen


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N174
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N41
N33
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N172
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N118
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N159
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6000
4000
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5000
5000
35000

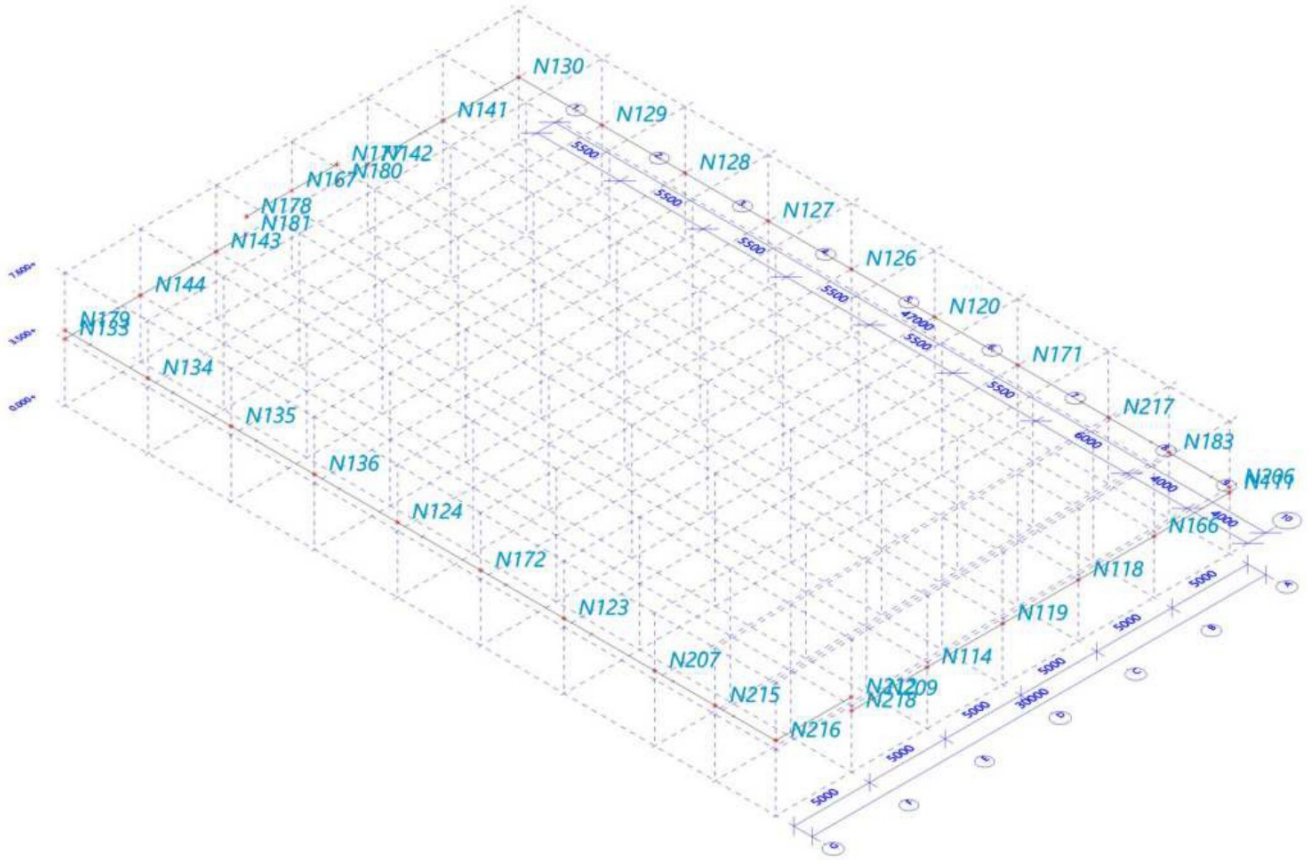
4.4.8. Layers - Geveldragers

Name	Structural model only	Colour
Geveldragers	×	

4.4.8.1. Profielen



4.4.8.2. Knopen


N130
N141
N129
N142
N180
N167
N128
N178
N181
N127
N143
N126
N144
N120
N171
N134
N217
N135
N183
N136
N124
N166
N172
N118
N123
N119
N207
N114
N215
N209
N218
N216
5500
47000
6000
4000
5000
35000

4.5. Knopen coordinaten

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1	5,000	0,000	0,000
N2	5,000	0,000	7,600
N3	10,000	0,000	0,000
N4	10,000	0,000	7,600
N5	15,000	0,000	0,000
N6	15,000	0,000	7,600
N7	20,000	0,000	0,000
N8	20,000	0,000	7,600
N10	25,000	0,000	7,600
N11	0,000	0,000	0,000
N12	0,000	0,000	7,600
N13	30,000	0,000	0,000
N14	30,000	0,000	7,600
N15	5,000	47,000	0,000
N16	5,000	47,000	7,600
N17	10,000	47,000	0,000
N18	10,000	47,000	7,600
N20	15,000	47,000	7,600
N21	20,000	47,000	0,000
N22	20,000	47,000	7,600
N23	25,000	47,000	0,000
N24	25,000	47,000	7,600
N25	0,000	47,000	0,000
N26	0,000	47,000	7,600
N27	30,000	47,000	0,000
N28	30,000	47,000	7,600
N29	0,000	4,000	0,000
N30	0,000	4,000	7,600
N31	30,000	4,000	0,000
N32	30,000	4,000	7,600
N33	30,000	14,000	0,000
N34	0,000	14,000	0,000
N35	0,000	14,000	7,600
N36	30,000	14,000	7,600
N37	30,000	19,500	0,000
N38	0,000	19,500	0,000
N39	0,000	19,500	7,600
N40	30,000	19,500	7,600
N41	30,000	25,000	0,000
N42	0,000	25,000	0,000
N43	0,000	25,000	7,600
N44	30,000	25,000	7,600
N45	30,000	30,500	0,000
N46	0,000	30,500	0,000
N47	0,000	30,500	7,600
N48	30,000	30,500	7,600
N49	30,000	36,000	0,000
N50	0,000	36,000	0,000
N51	0,000	36,000	7,600
N52	30,000	36,000	7,600
N53	30,000	41,500	0,000
N54	0,000	41,500	0,000
N55	0,000	41,500	7,600
N56	30,000	41,500	7,600
N57	15,000	37,000	0,000
N58	15,000	36,000	7,600
N59	15,000	27,000	0,000
N60	15,000	25,000	7,600
N61	15,000	17,000	0,000
N62	15,000	14,000	7,600
N63	15,000	41,500	7,600
N64	15,000	30,500	7,600
N65	15,000	19,500	7,600
N66	15,000	4,000	7,600
N68	5,000	8,000	7,600
N69	10,000	8,000	0,000
N70	10,000	8,000	7,600
N71	15,000	8,000	0,000
N72	15,000	8,000	7,600
N73	20,000	8,000	0,000
N74	20,000	8,000	7,600
N78	30,000	8,000	7,600
N79	0,000	8,000	0,000
N80	0,000	8,000	7,600
N81	5,000	41,500	7,600
N82	10,000	41,500	7,600
N83	20,000	41,500	7,600
N84	25,000	41,500	7,600
N85	5,000	36,000	7,600
N86	10,000	36,000	7,600
N87	20,000	36,000	7,600
N88	25,000	36,000	7,600
N89	5,000	30,500	7,600
N90	10,000	30,500	7,600
N91	20,000	30,500	7,600
N92	25,000	30,500	7,600
N93	5,000	25,000	7,600
N94	10,000	25,000	7,600
N95	20,000	25,000	7,600
N96	25,000	25,000	7,600
N97	5,000	19,500	7,600
N98	10,000	19,500	7,600
N99	20,000	19,500	7,600
N100	25,000	19,500	7,600
N101	5,000	14,000	7,600
N102	10,000	14,000	7,600
N103	20,000	14,000	7,600
N104	25,000	14,000	7,600
N105	5,000	4,000	7,600
N106	10,000	4,000	7,600
N107	20,000	4,000	7,600
N108	25,000	4,000	7,600
N111	30,000	0,000	3,500
N114	10,000	0,000	3,500
N118	20,000	0,000	3,500
N119	15,000	0,000	3,500
N120	30,000	19,500	3,800
N123	0,000	14,000	4,300
N124	0,000	25,000	4,300
N126	30,000	25,000	3,800
N127	30,000	30,500	3,800
N128	30,000	36,000	3,800
N129	30,000	41,500	3,800
N130	30,000	47,000	3,800
N133	0,000	47,000	3,800
N134	0,000	41,500	4,300
N135	0,000	36,000	4,300
N136	0,000	30,500	4,300
N141	25,000	47,000	3,800
N142	20,000	47,000	3,800
N143	10,000	47,000	3,800
N144	5,000	47,000	3,800
N159	25,000	0,000	0,000
N164	25,000	8,000	7,600
N166	25,000	0,000	3,500
N167	15,000	47,000	4,800
N168	5,000	0,000	3,300
N169	0,000	0,000	3,300
N171	30,000	14,000	3,800
N172	0,000	19,500	4,300
N173	12,000	47,000	0,000
N174	12,000	47,000	7,600
N175	18,000	47,000	0,000
N176	18,000	47,000	7,600
N177	18,000	47,000	4,800
N178	12,000	47,000	4,800
N179	0,000	47,000	4,300
N180	18,000	47,000	3,800
N181	12,000	47,000	3,800
N183	30,000	4,000	3,800
N190	15,000	37,000	7,600
N191	15,000	27,000	7,600
N192	0,000	8,000	3,300
N193	6,000	0,000	3,300
N194	6,000	8,000	3,300
N195	15,000	17,000	7,600
N196	6,000	0,000	0,000
N197	6,000	8,000	0,000
N198	0,000	4,000	3,300
N199	3,000	8,000	0,000
N200	3,000	8,000	3,300
N202	5,000	8,000	3,300
N203	25,000	8,000	0,000
N204	30,000	8,000	0,000
N206	30,000	0,000	3,800
N207	0,000	8,000	4,300
N208	6,400	0,000	0,000
N209	6,400	0,000	3,500
N212	5,000	0,000	4,300
N215	0,000	4,000	4,300
N216	0,000	0,000	4,300
N217	30,000	8,000	3,800
N218	5,000	0,000	3,500

5. Belastingen

5.1. Load cases

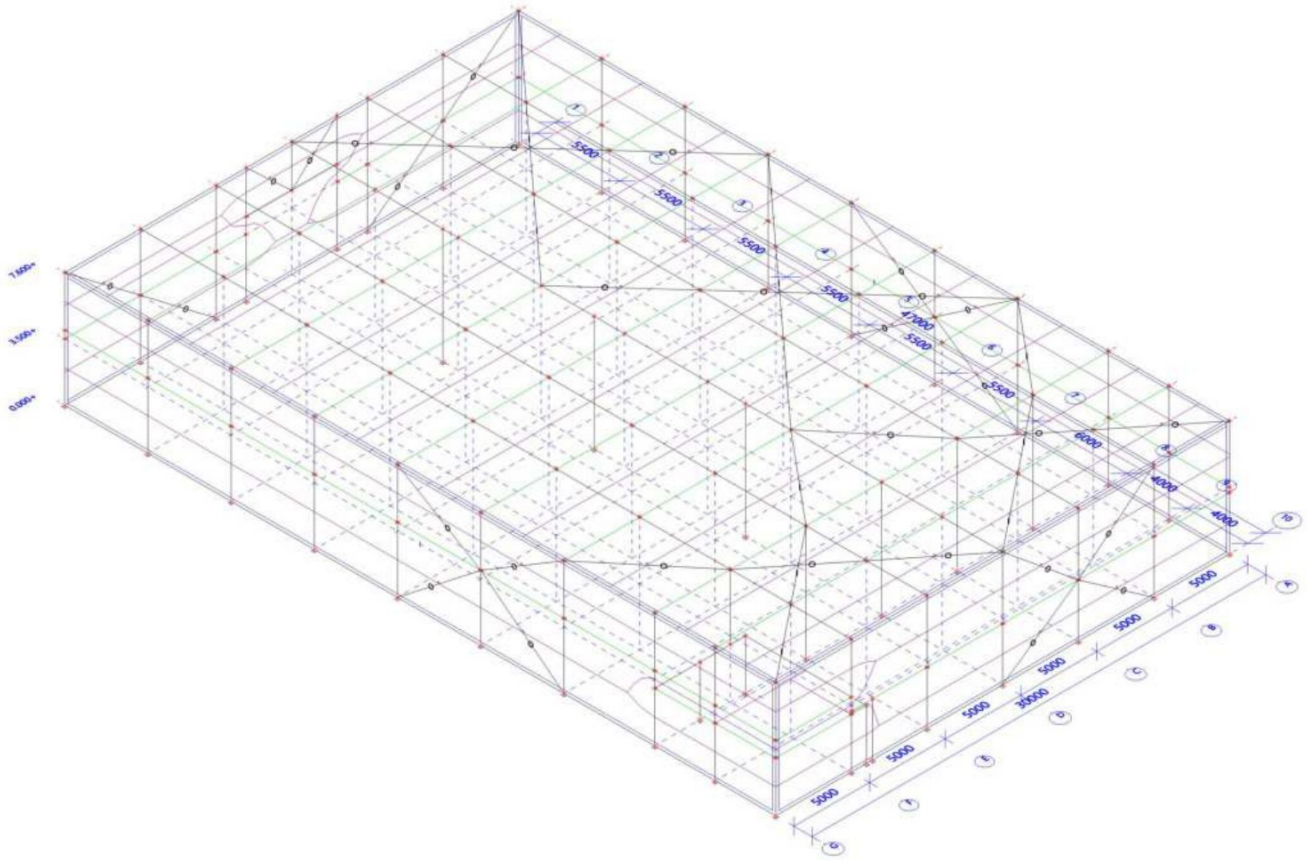
Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
LC1	Self weight	Permanent Self weight	LG1	-Z		
LC2	Permanent	Permanent Standard	LG1			
LC3	Veranderlijk Standard	Variable Static	LG2		Short	None
LC4	Sneeuw Standard	Variable Static	LG3		Short	None
3DWind1	0, + CPE, + CPI Static wind	Variable Static	LG4			None
3DWind2	0, + CPE, - CPI Static wind	Variable Static	LG4			None
3DWind3	0, - CPE, + CPI Static wind	Variable Static	LG4			None
3DWind4	0, - CPE, - CPI Static wind	Variable Static	LG4			None
3DWind5	90, + CPE, + CPI Static wind	Variable Static	LG4			None
3DWind6	90, + CPE, - CPI Static wind	Variable Static	LG4			None
3DWind7	90, - CPE, + CPI Static wind	Variable Static	LG4			None
3DWind8	90, - CPE, - CPI Static wind	Variable Static	LG4			None
3DWind9	180, + CPE, + CPI Static wind	Variable Static	LG4			None
3DWind10	180, + CPE, - CPI Static wind	Variable Static	LG4			None
3DWind11	180, - CPE, + CPI Static wind	Variable Static	LG4			None
3DWind12	180, - CPE, - CPI Static wind	Variable Static	LG4			None
3DWind13	270, + CPE, + CPI Static wind	Variable Static	LG4			None
3DWind14	270, + CPE, - CPI Static wind	Variable Static	LG4			None
3DWind15	270, - CPE, + CPI Static wind	Variable Static	LG4			None
3DWind16	270, - CPE, - CPI Static wind	Variable Static	LG4			None

5.2. Overzicht belastingen

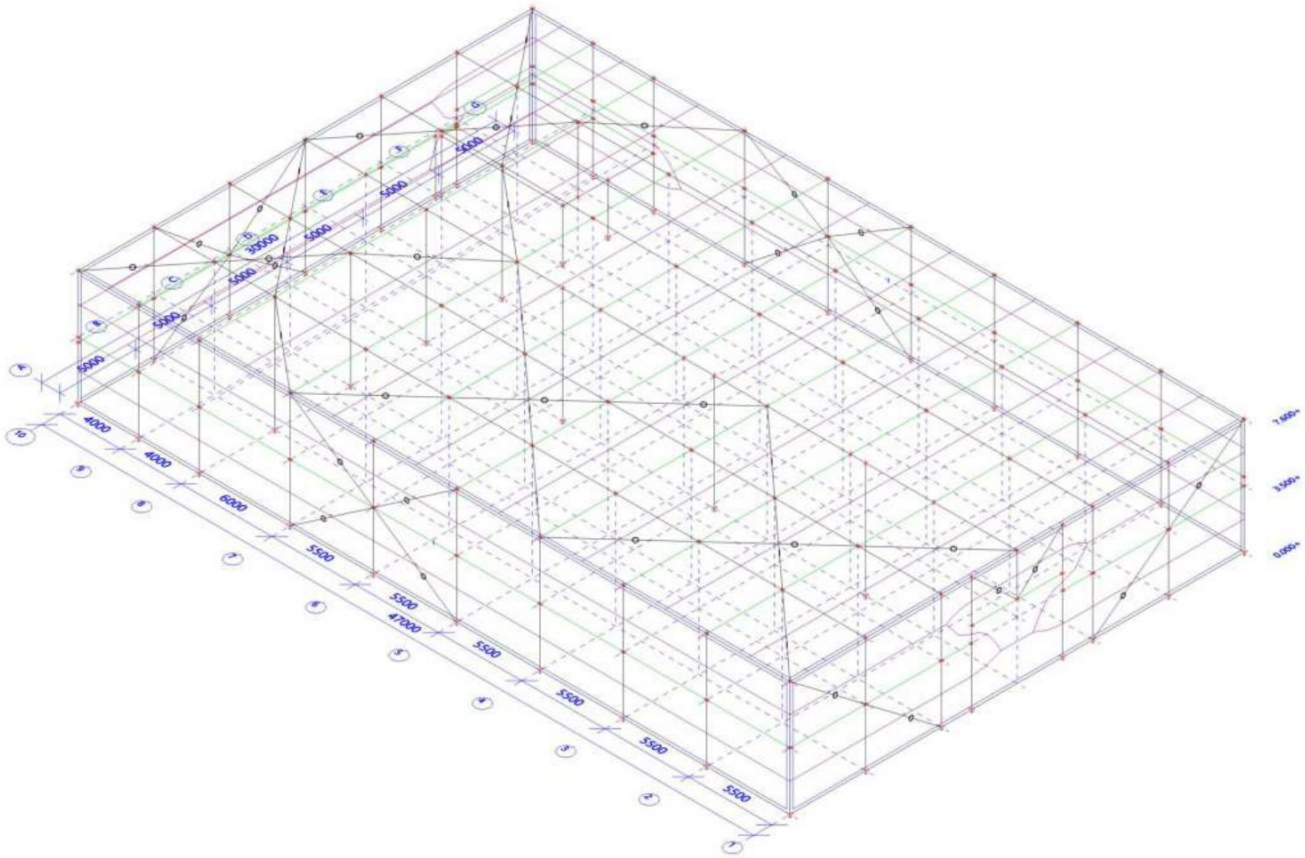
5.2.1. Overzicht belastingen - LC1

Name	Description	Action type	Load group	Direction
	Spec	Load type		
LC1	Self weight	Permanent Self weight	LG1	-Z

5.2.1.1. rep. waarde



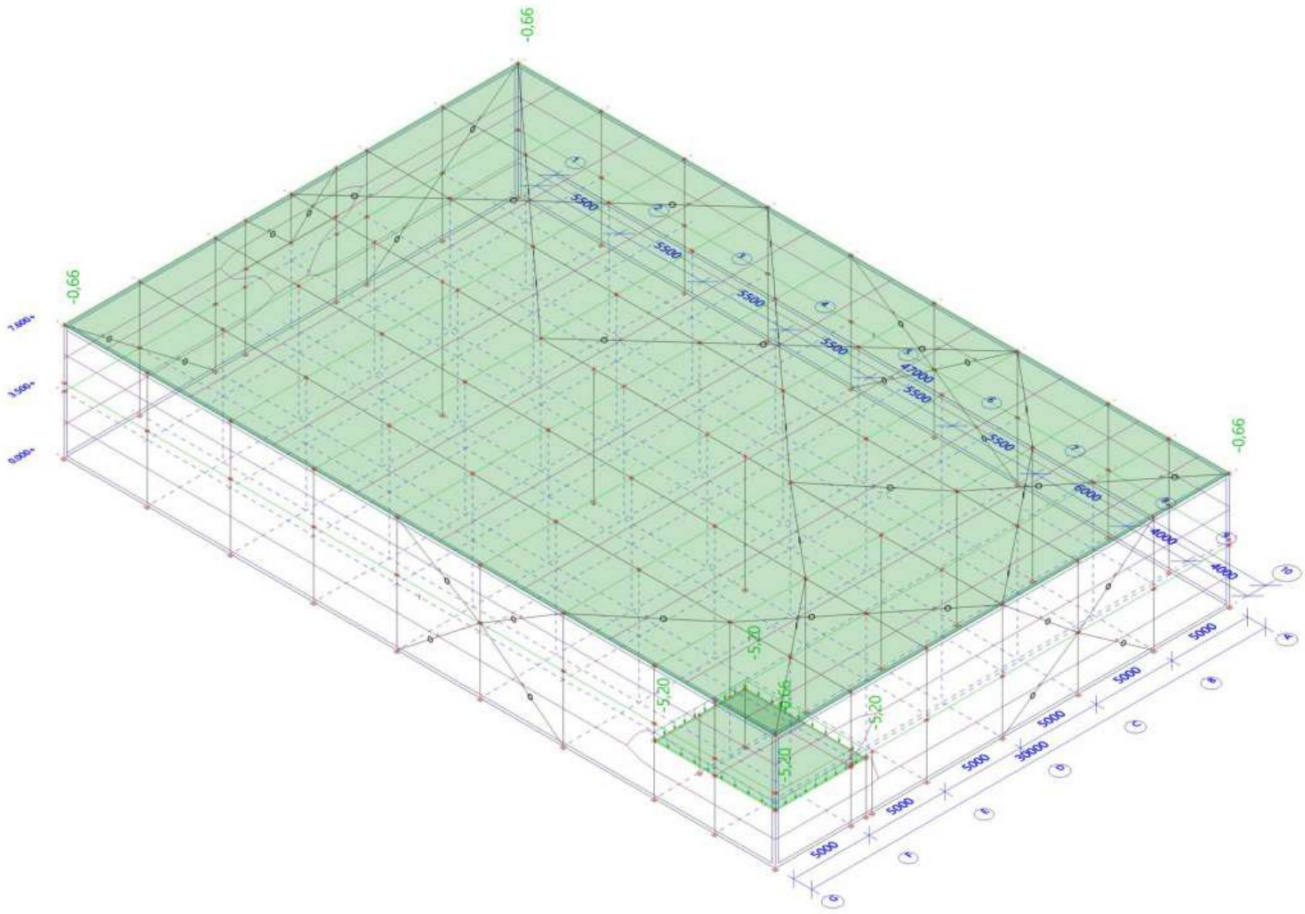
5.2.1.2. rep. waarde



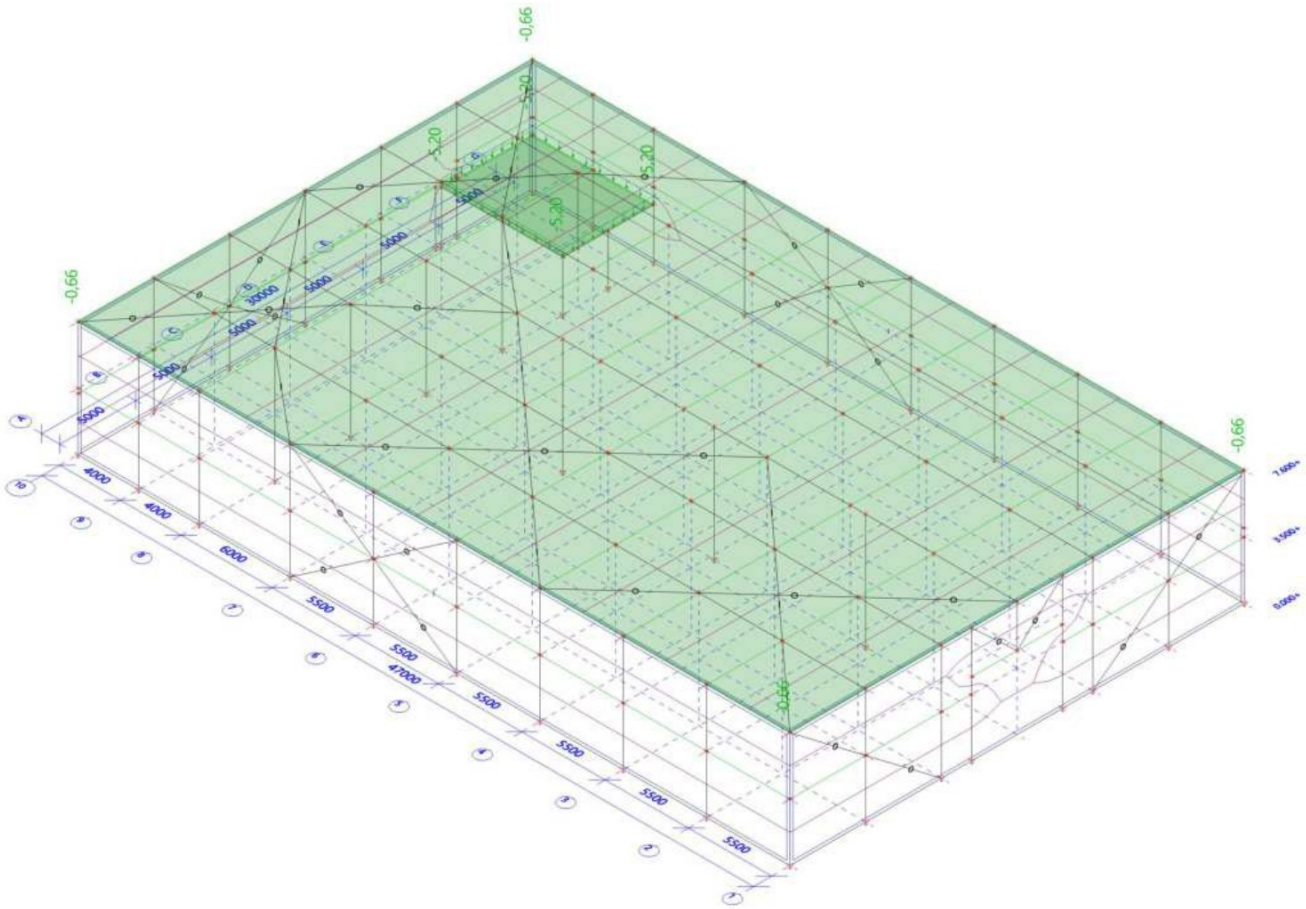
5.2.2. Overzicht belastingen - LC2

Name	Description	Action type	Load group
	Spec	Load type	
LC2	Permanent	Permanent	LG1
		Standard	

5.2.2.1. rep. waarde



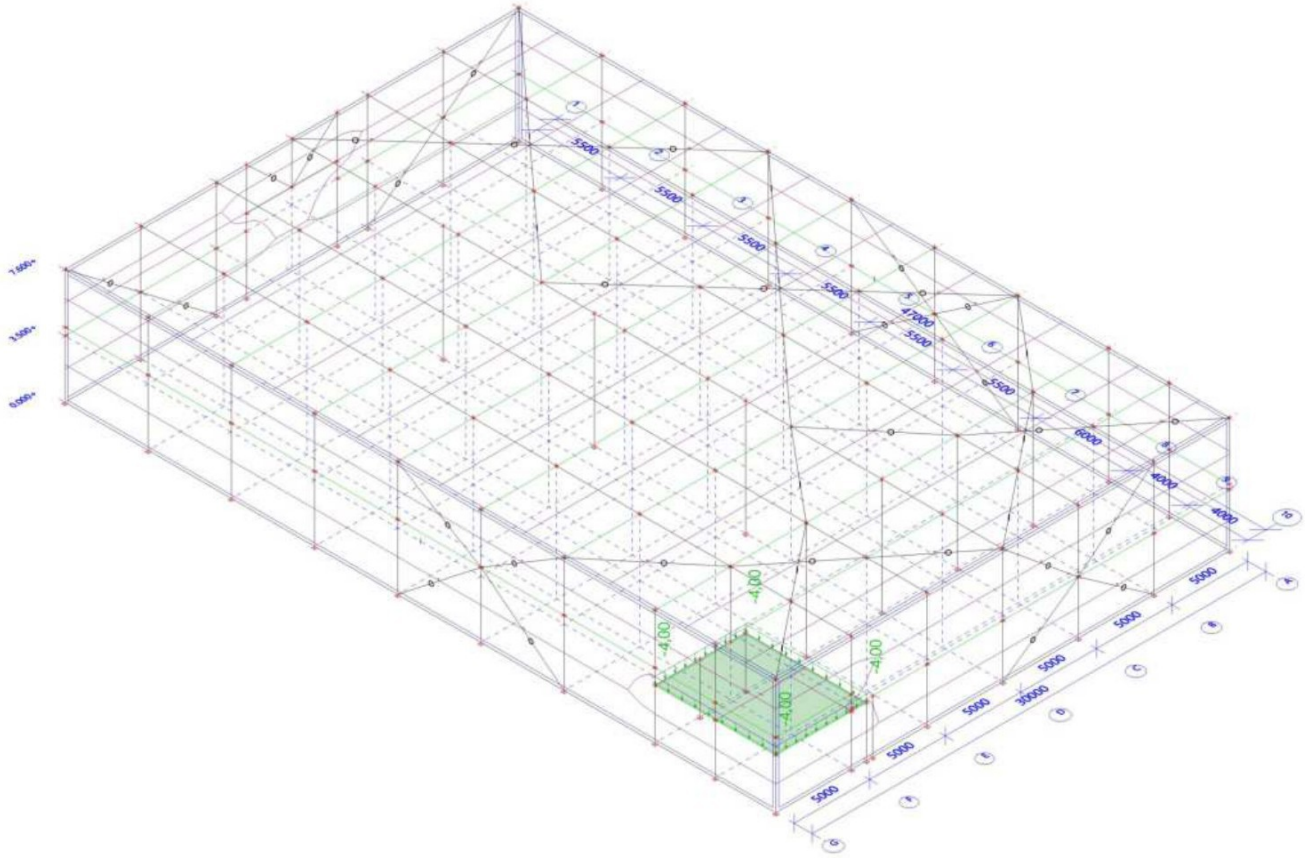
5.2.2.2. rep. waarde



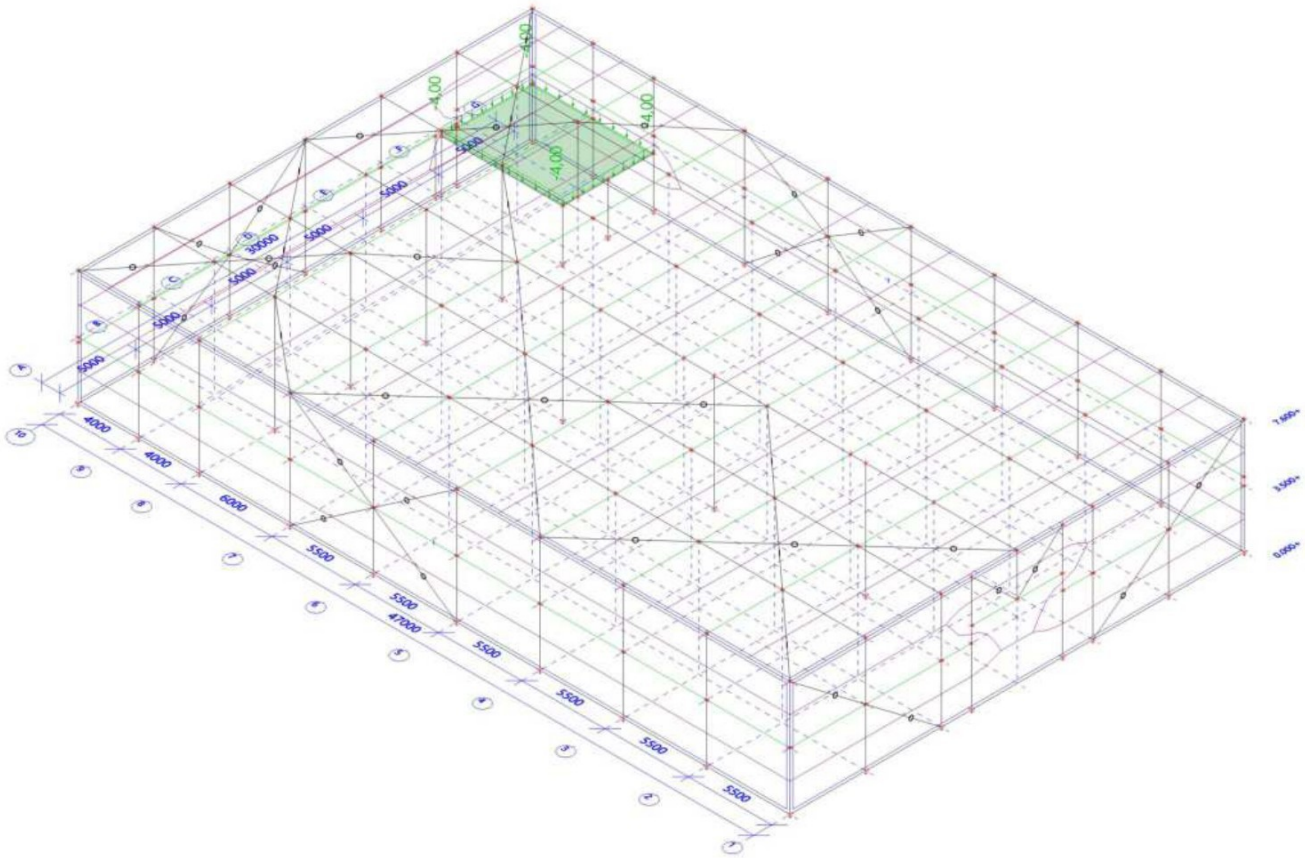
5.2.3. Overzicht belastingen - LC3

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
LC3	Veranderlijk	Variable	LG2	Short	None
	Standard	Static			

5.2.3.1. rep. waarde



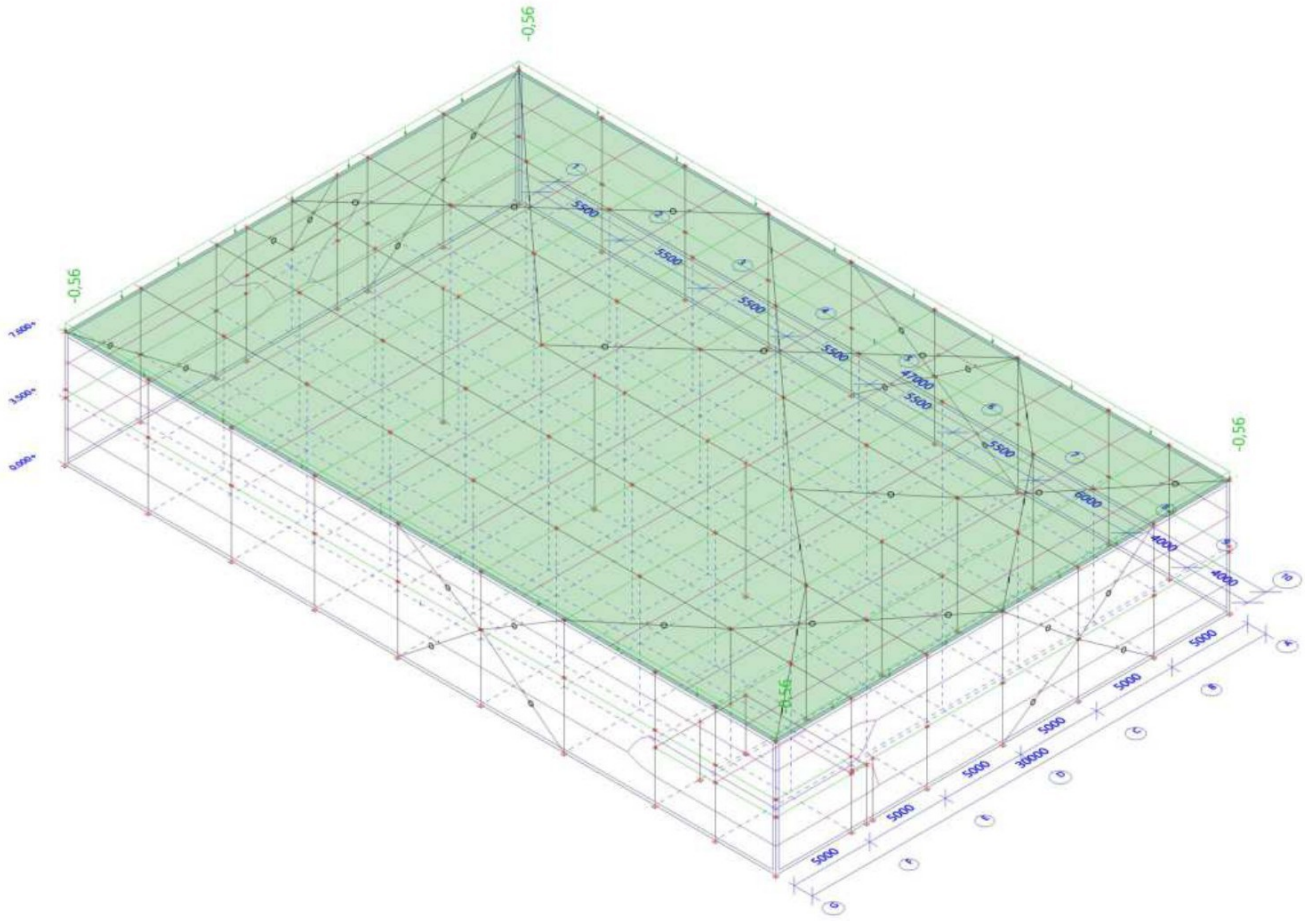
5.2.3.2. rep. waarde



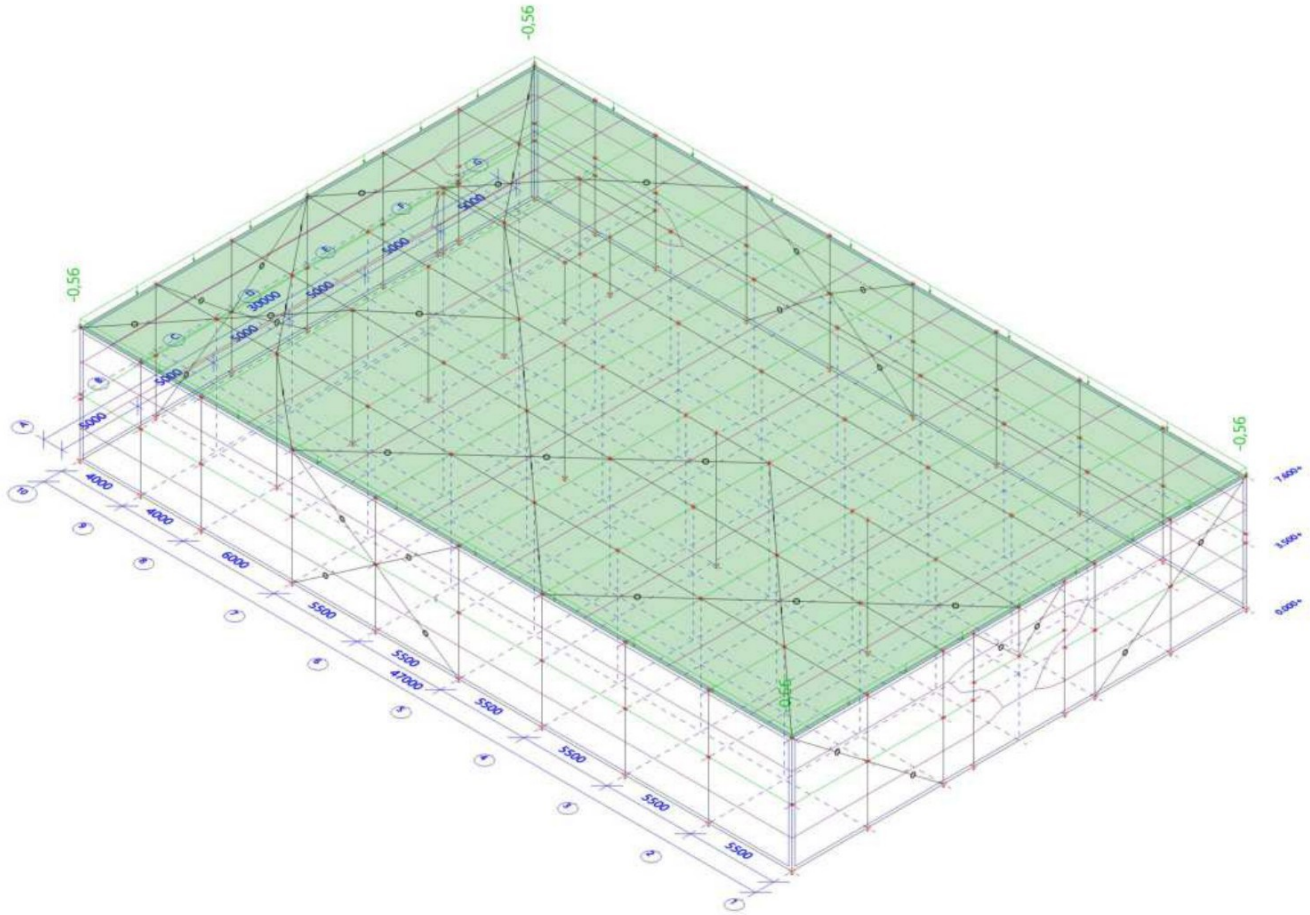
5.2.4. Overzicht belastingen - LC4

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
LC4	Sneeuw	Variable	LG3	Short	None
	Standard	Static			

5.2.4.1. rep. waarde



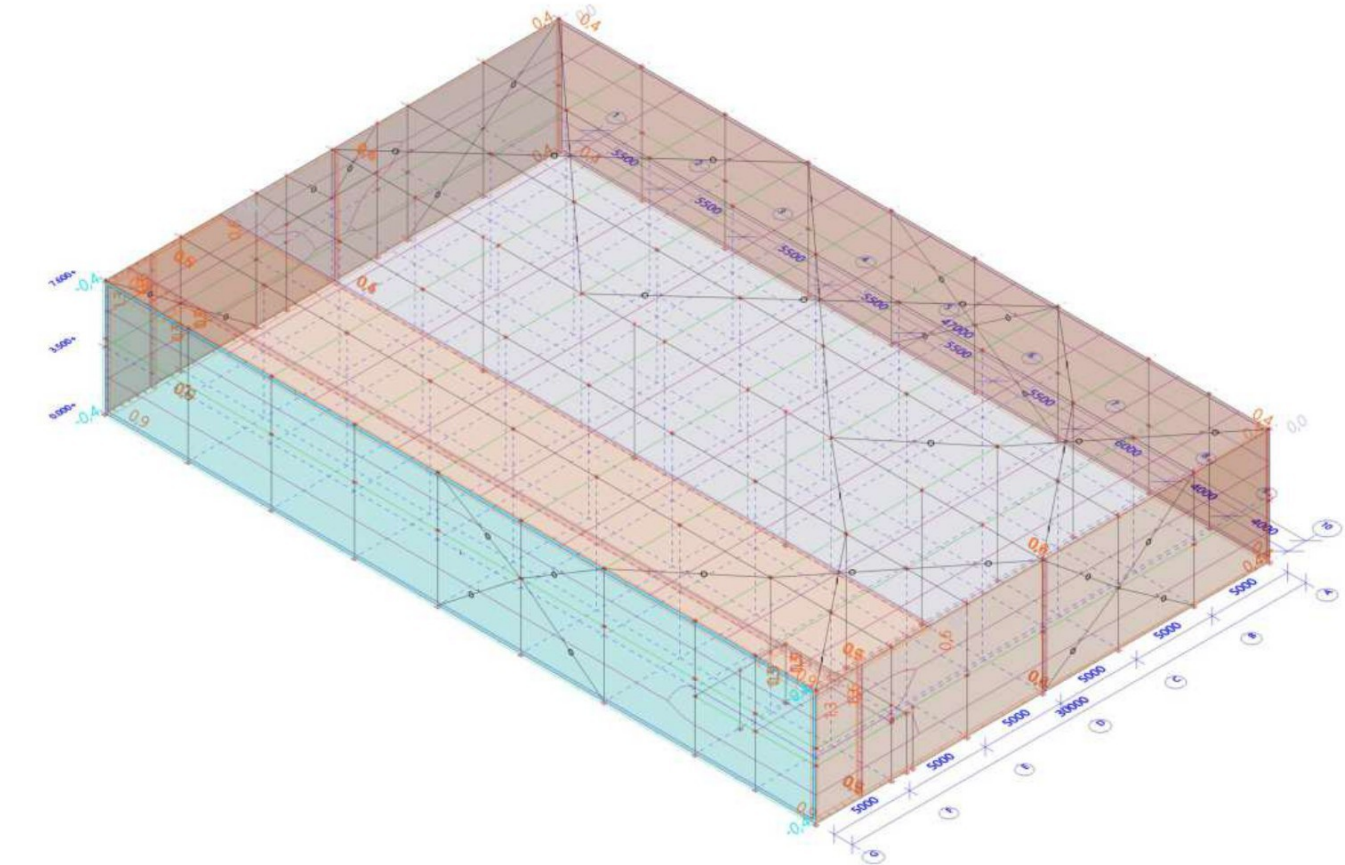
5.2.4.2. rep. waarde



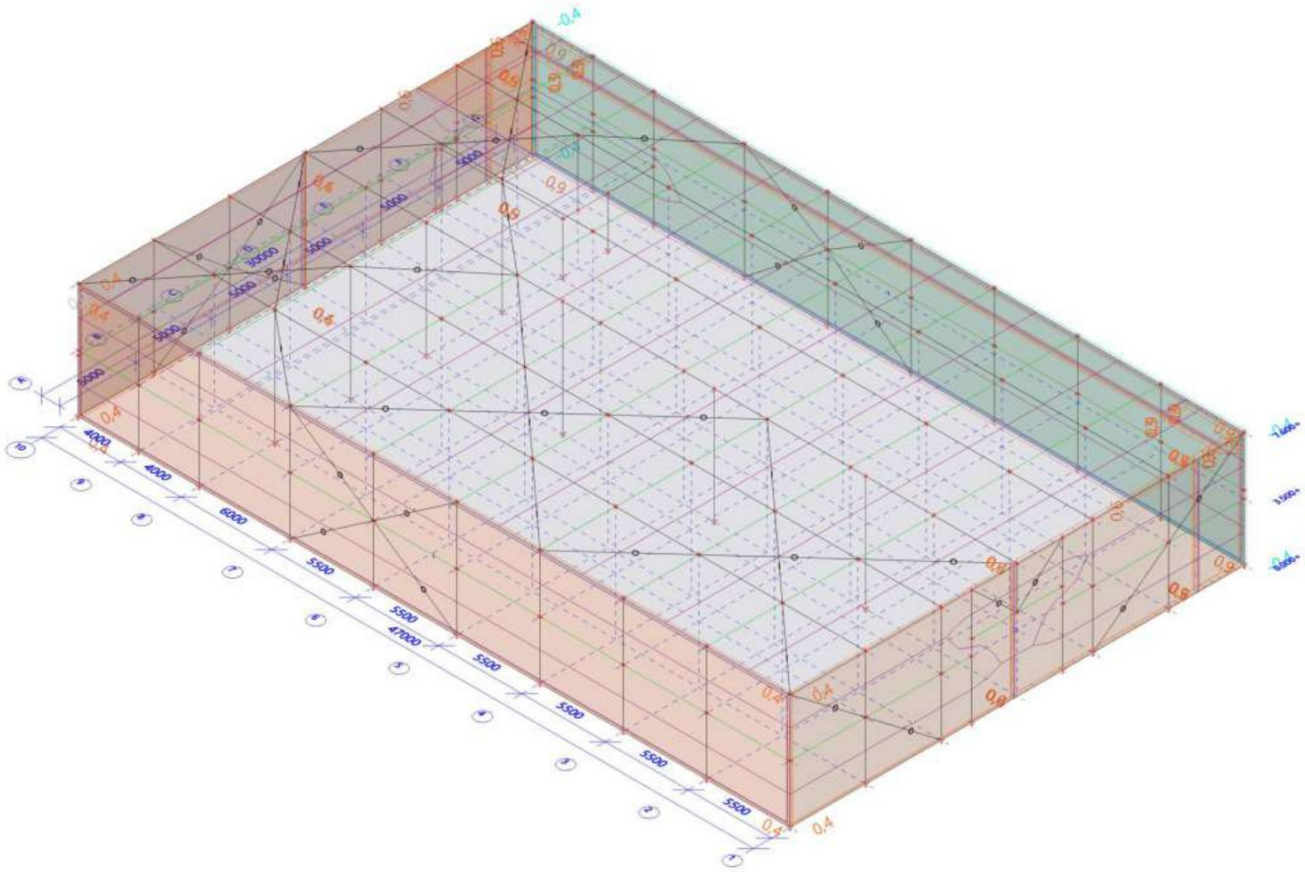
5.2.5. Overzicht belastingen - 3DWind1

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind1	0, + CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.5.1. rep. waarde



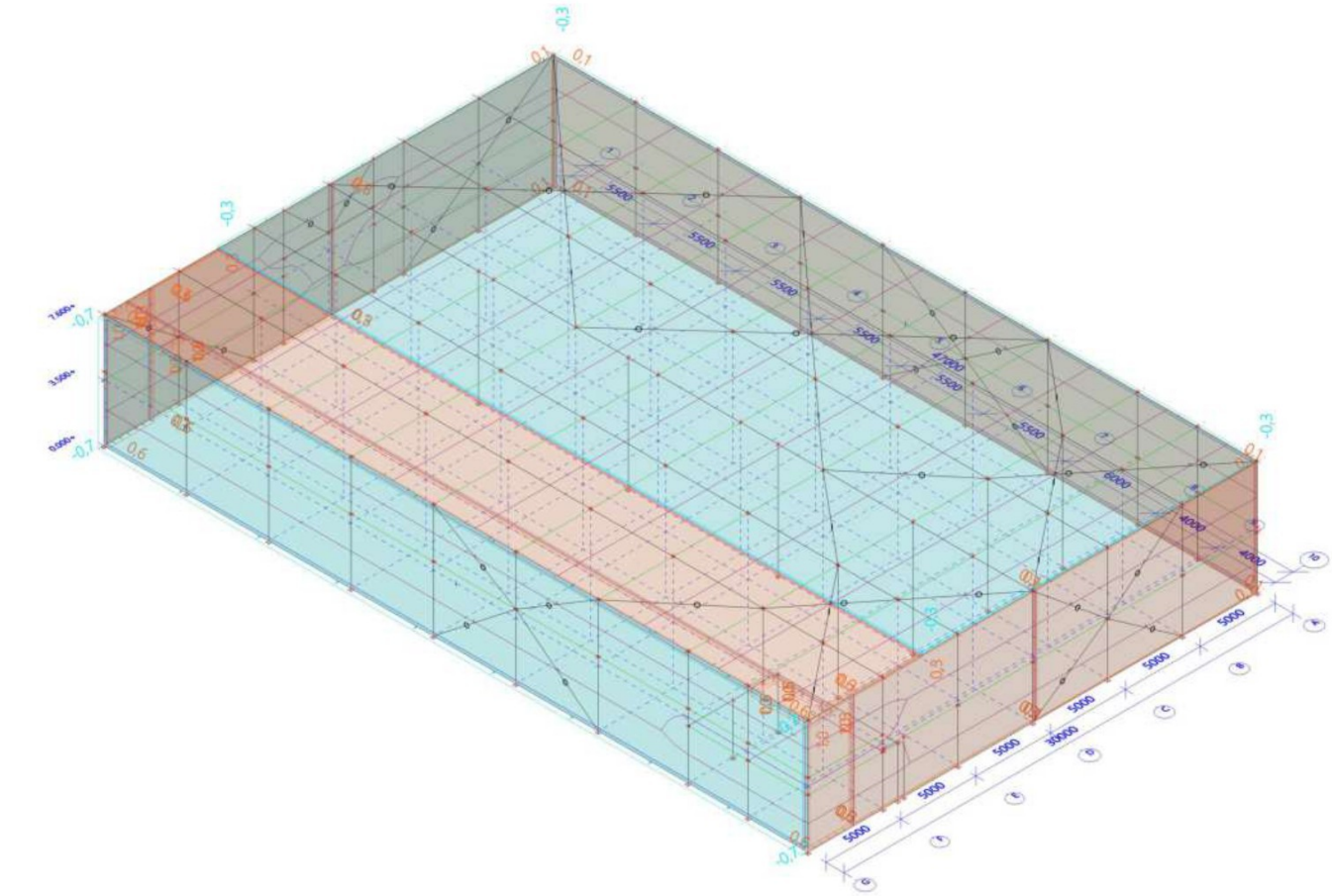
5.2.5.2. rep. waarde



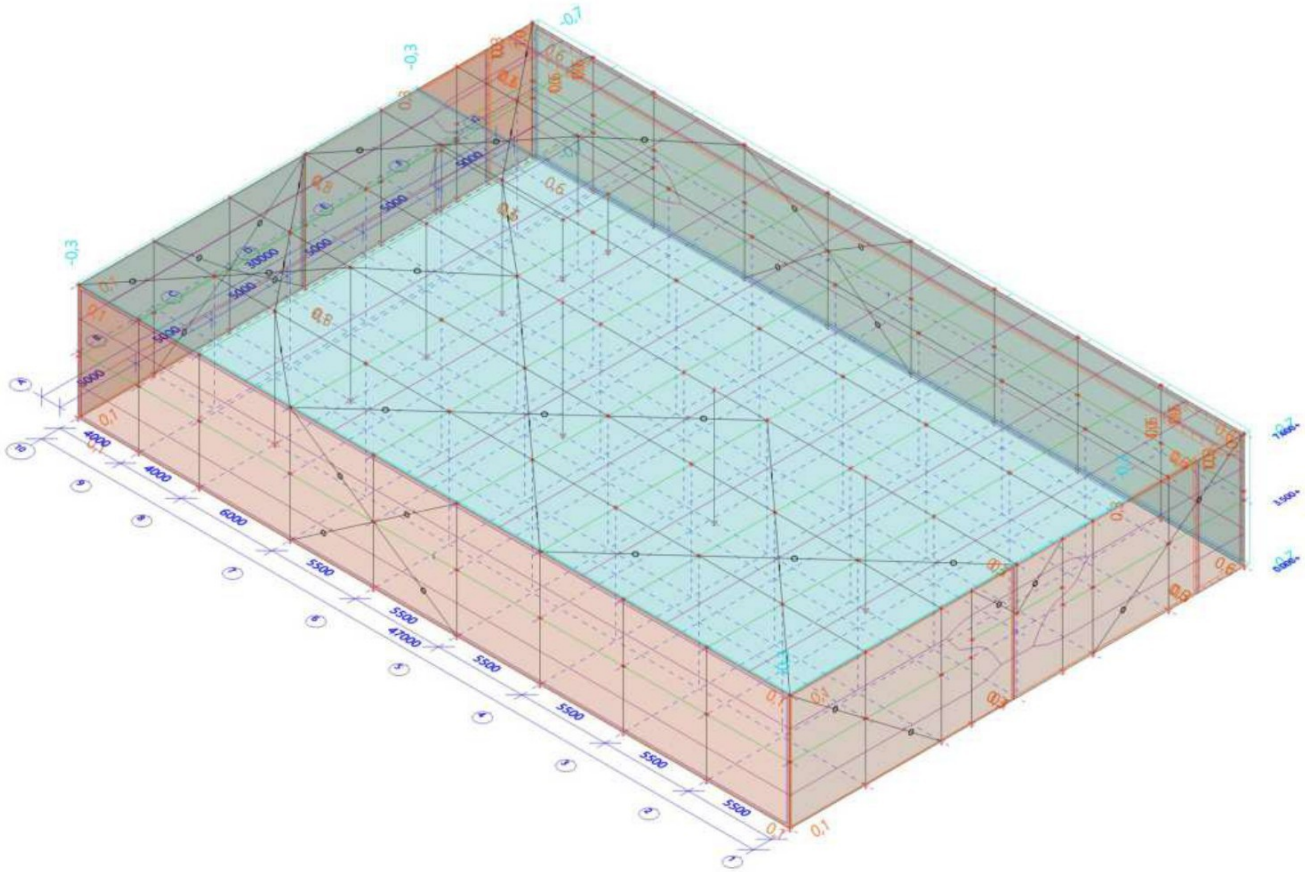
5.2.6. Overzicht belastingen - 3DWind2

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind2	0, + CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.6.1. rep. waarde



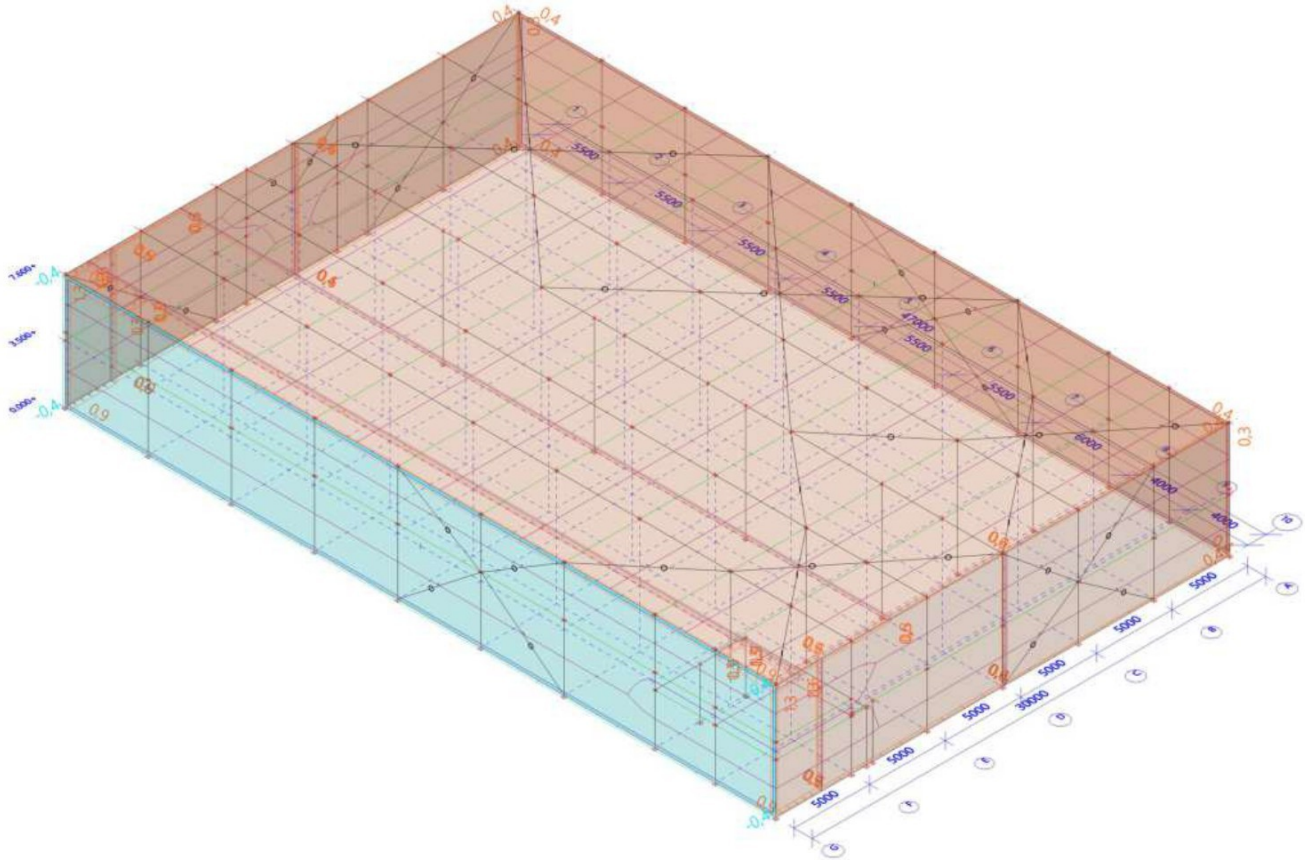
5.2.6.2. rep. waarde



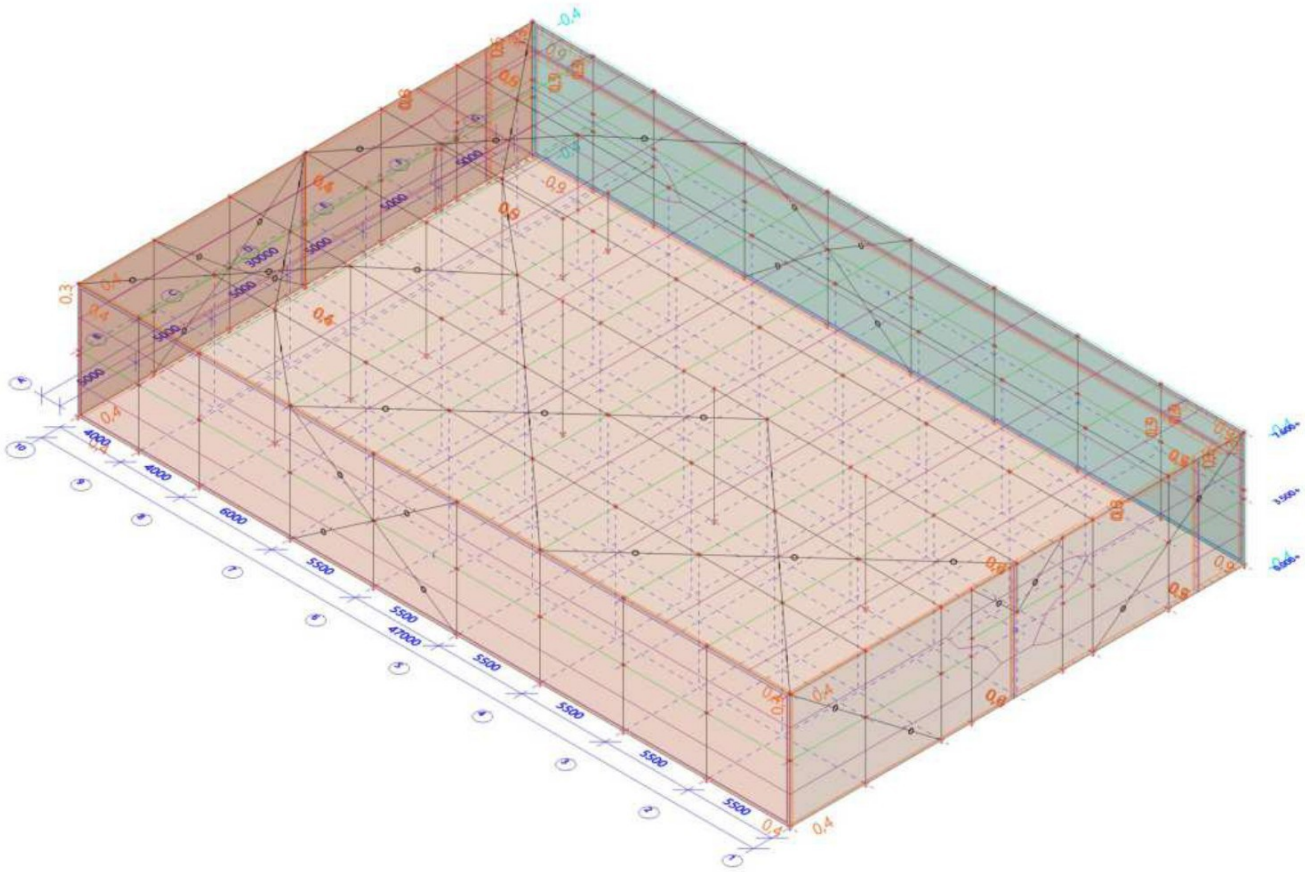
5.2.7. Overzicht belastingen - 3DWind3

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind3	0, - CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.7.1. rep. waarde



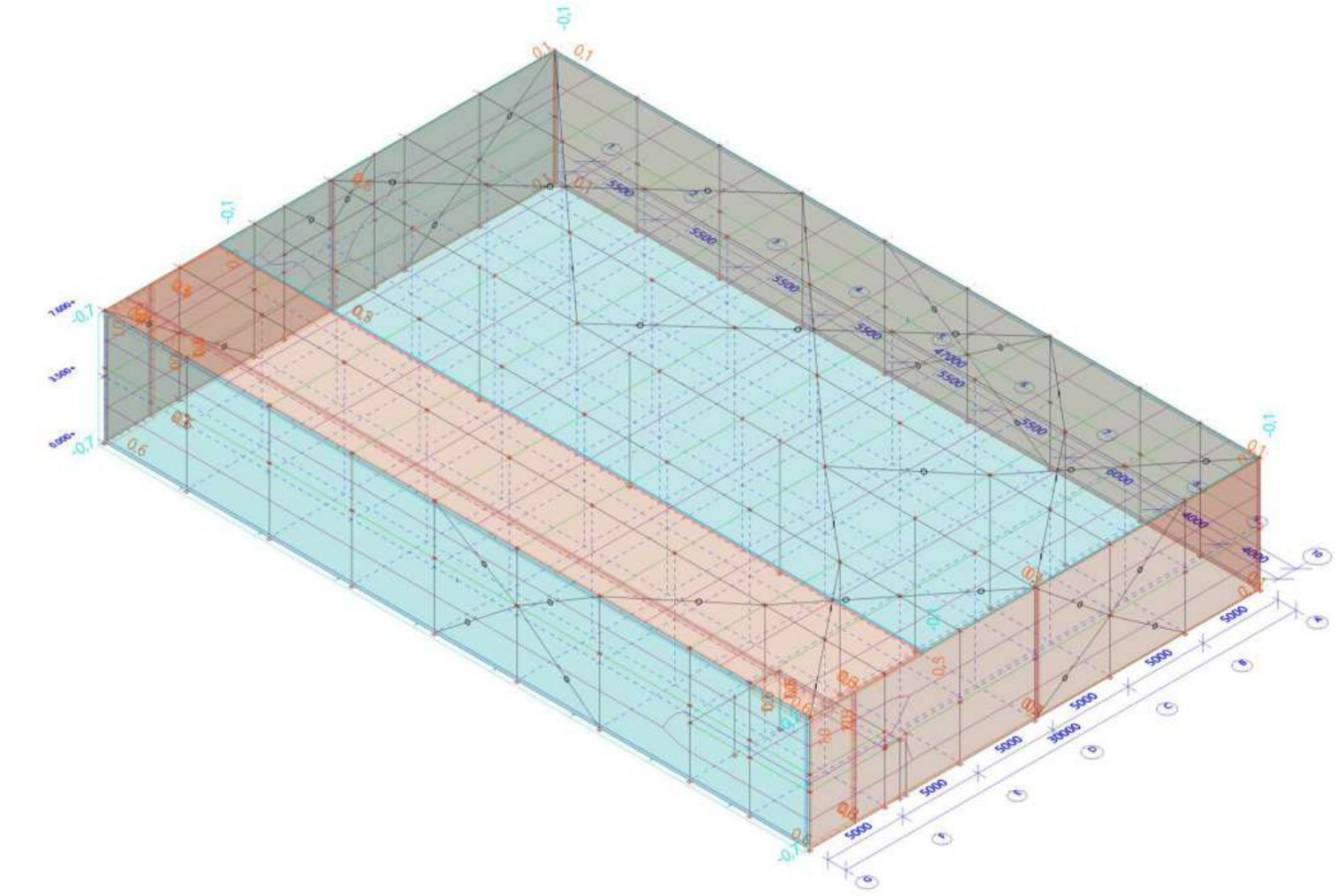
5.2.7.2. rep. waarde



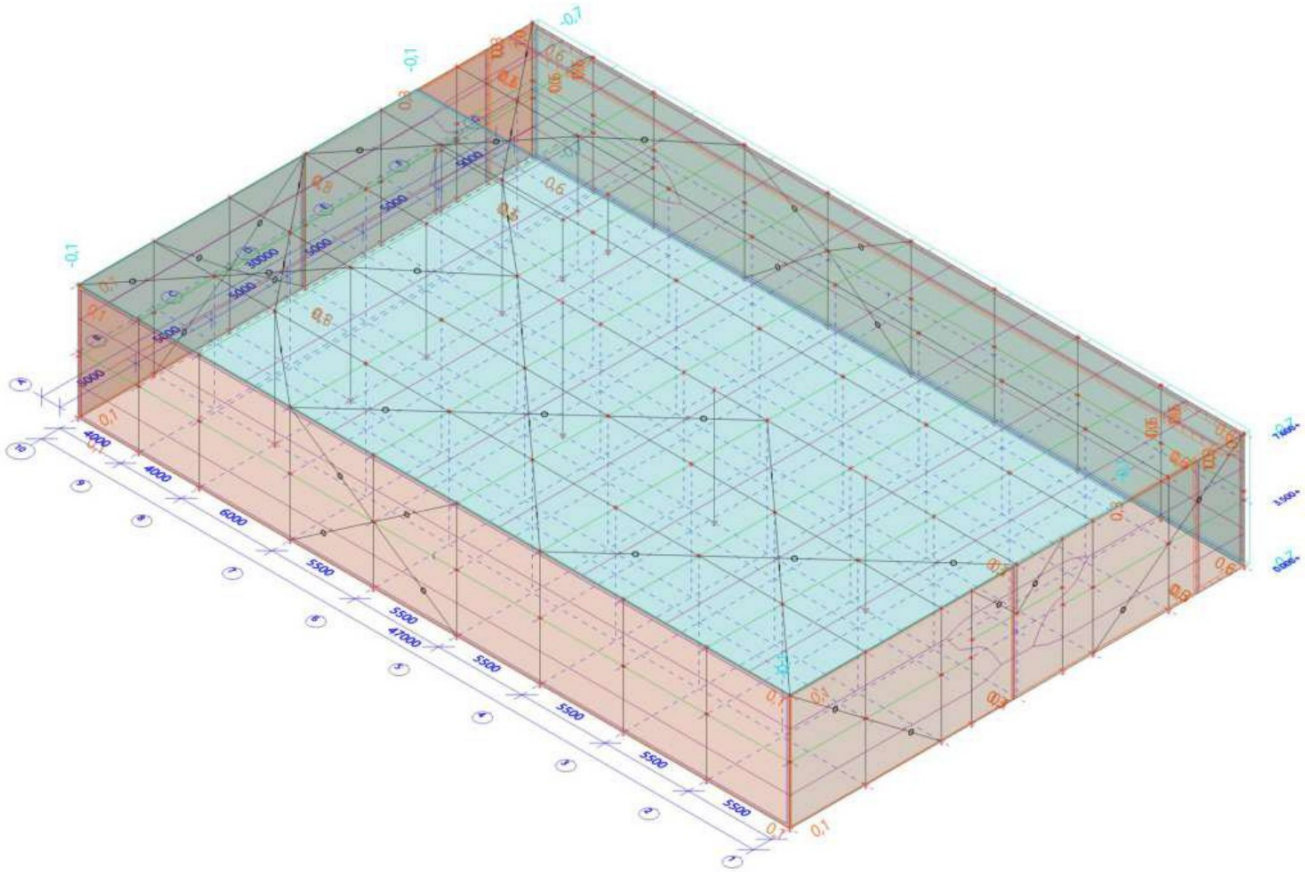
5.2.8. Overzicht belastingen - 3DWind4

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind4	0, - CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.8.1. rep. waarde



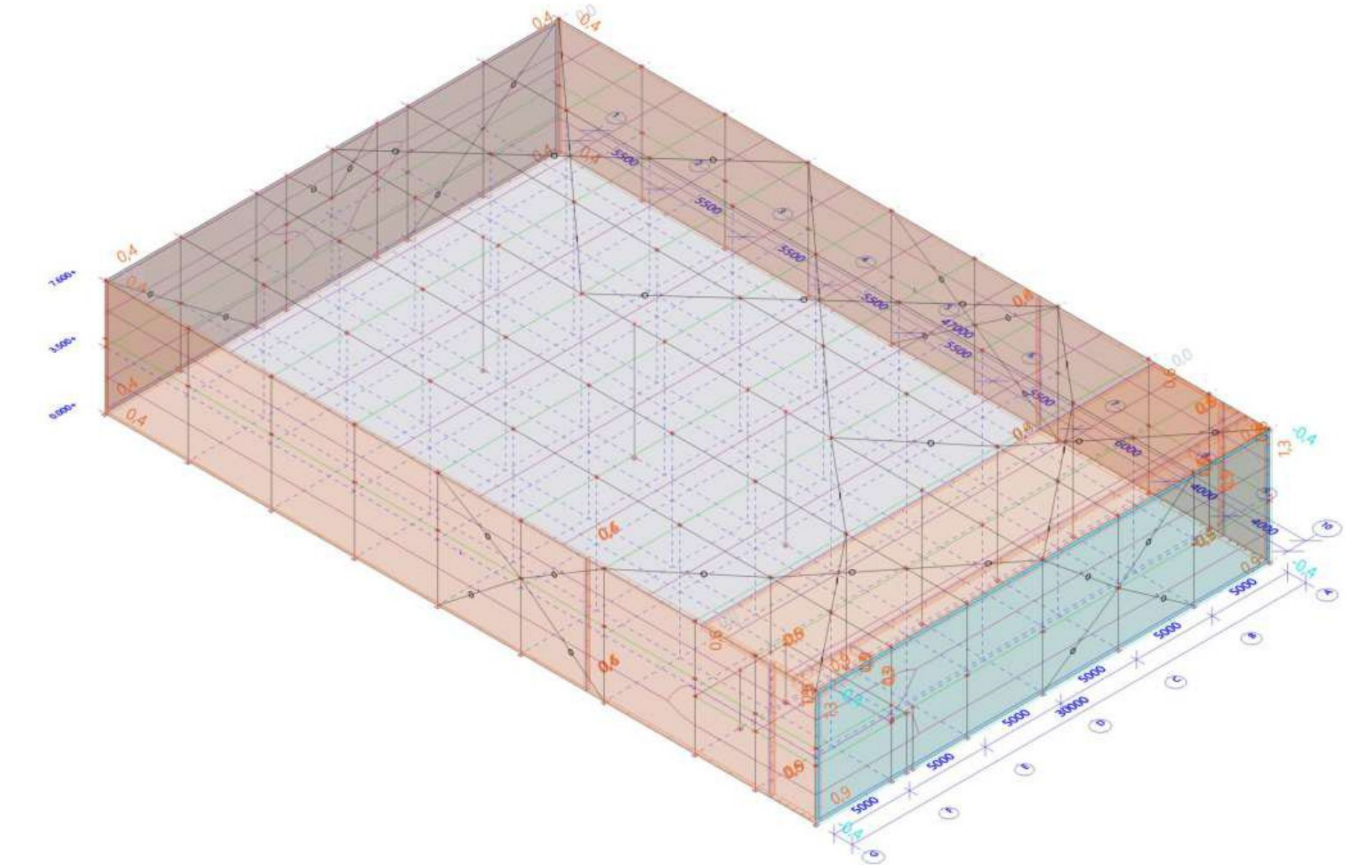
5.2.8.2. rep. waarde



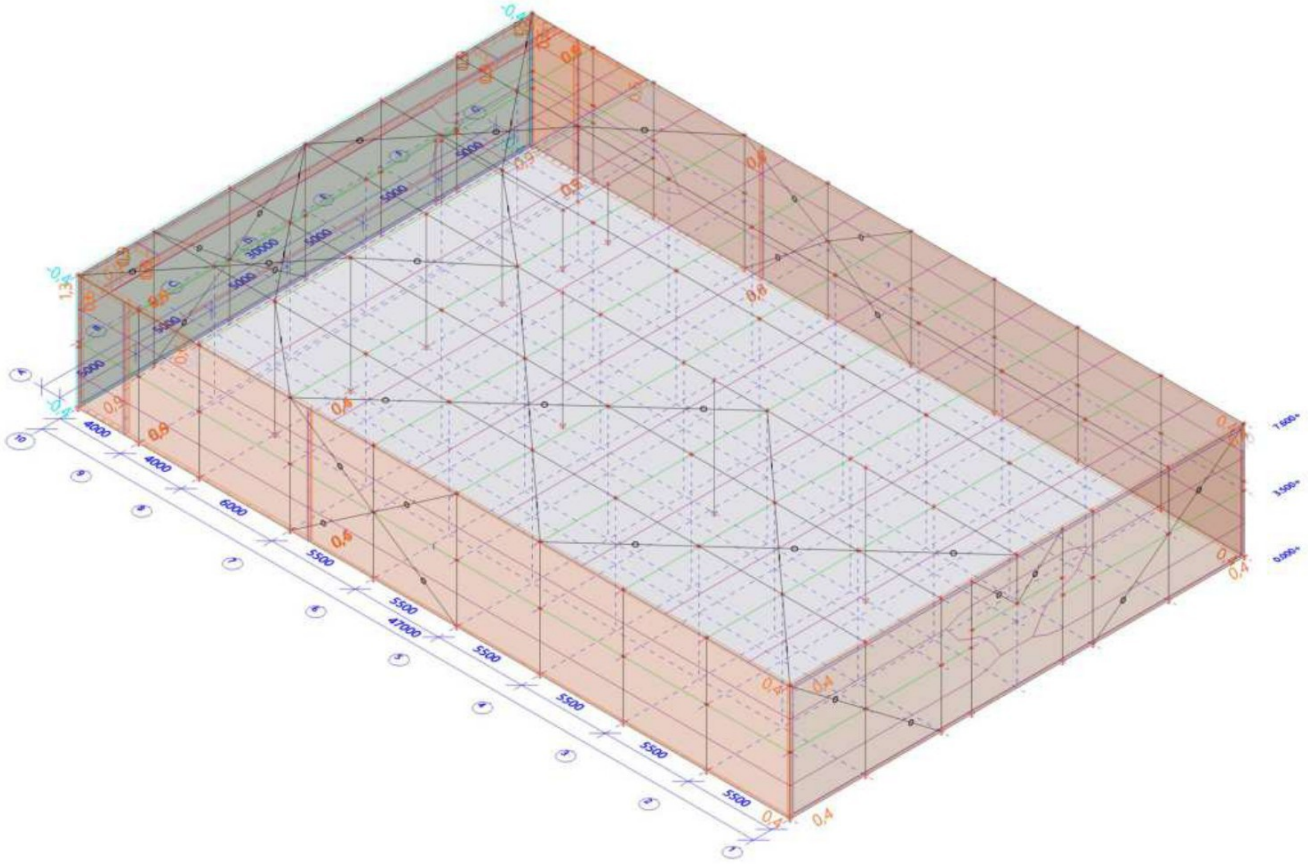
5.2.9. Overzicht belastingen - 3DWind5

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind5	90, + CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.9.1. rep. waarde



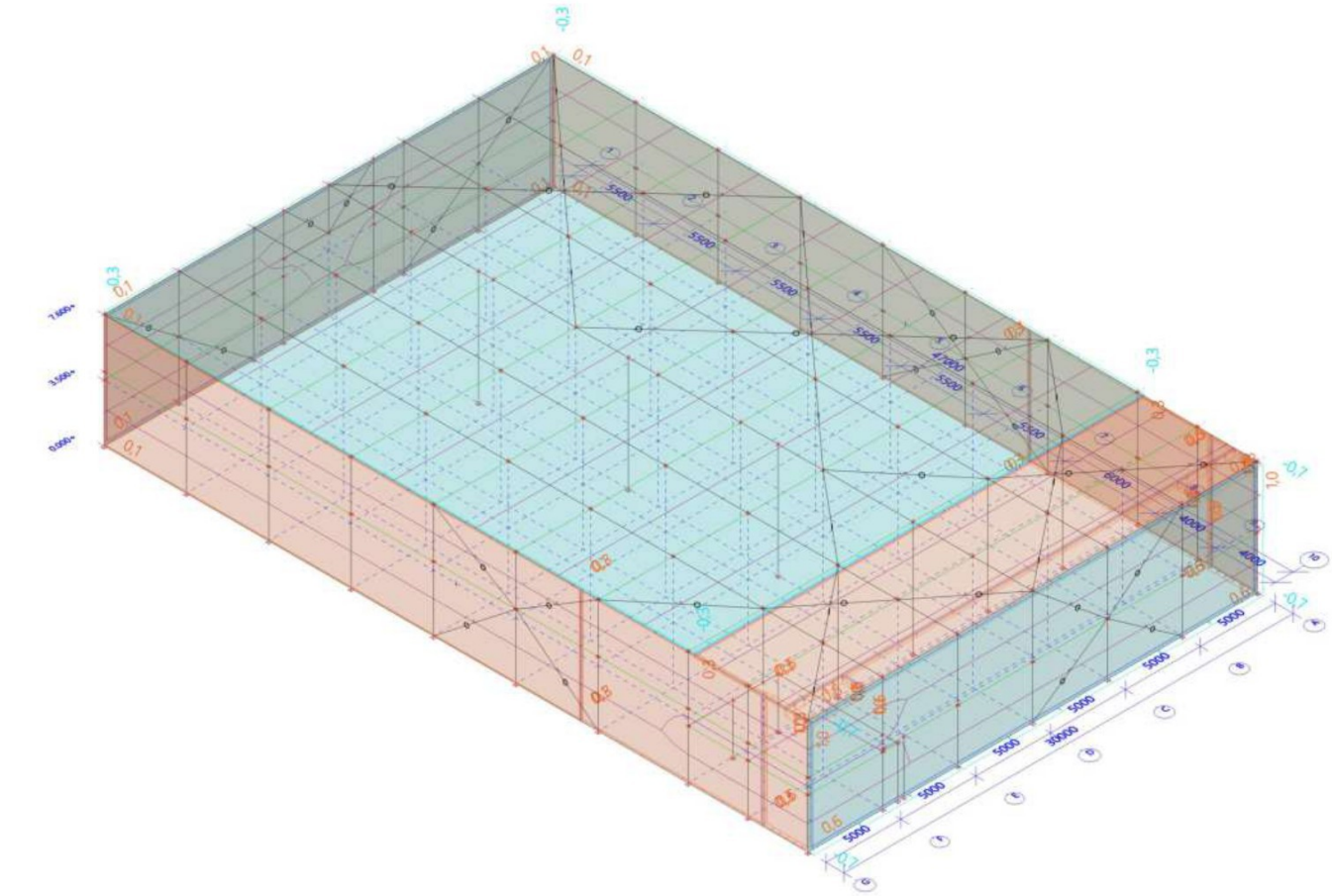
5.2.9.2. rep. waarde



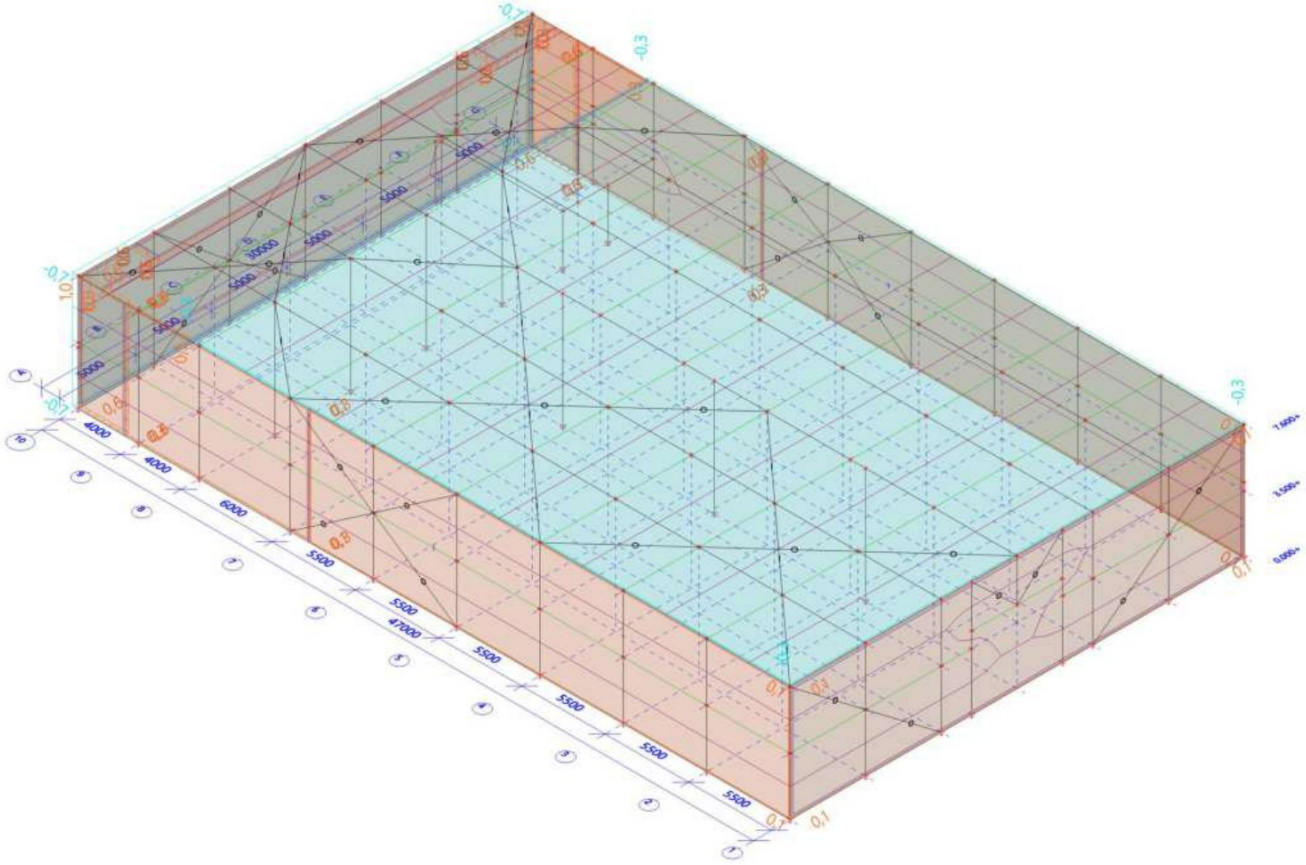
5.2.10. Overzicht belastingen - 3DWind6

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind6	90, + CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.10.1. rep. waarde



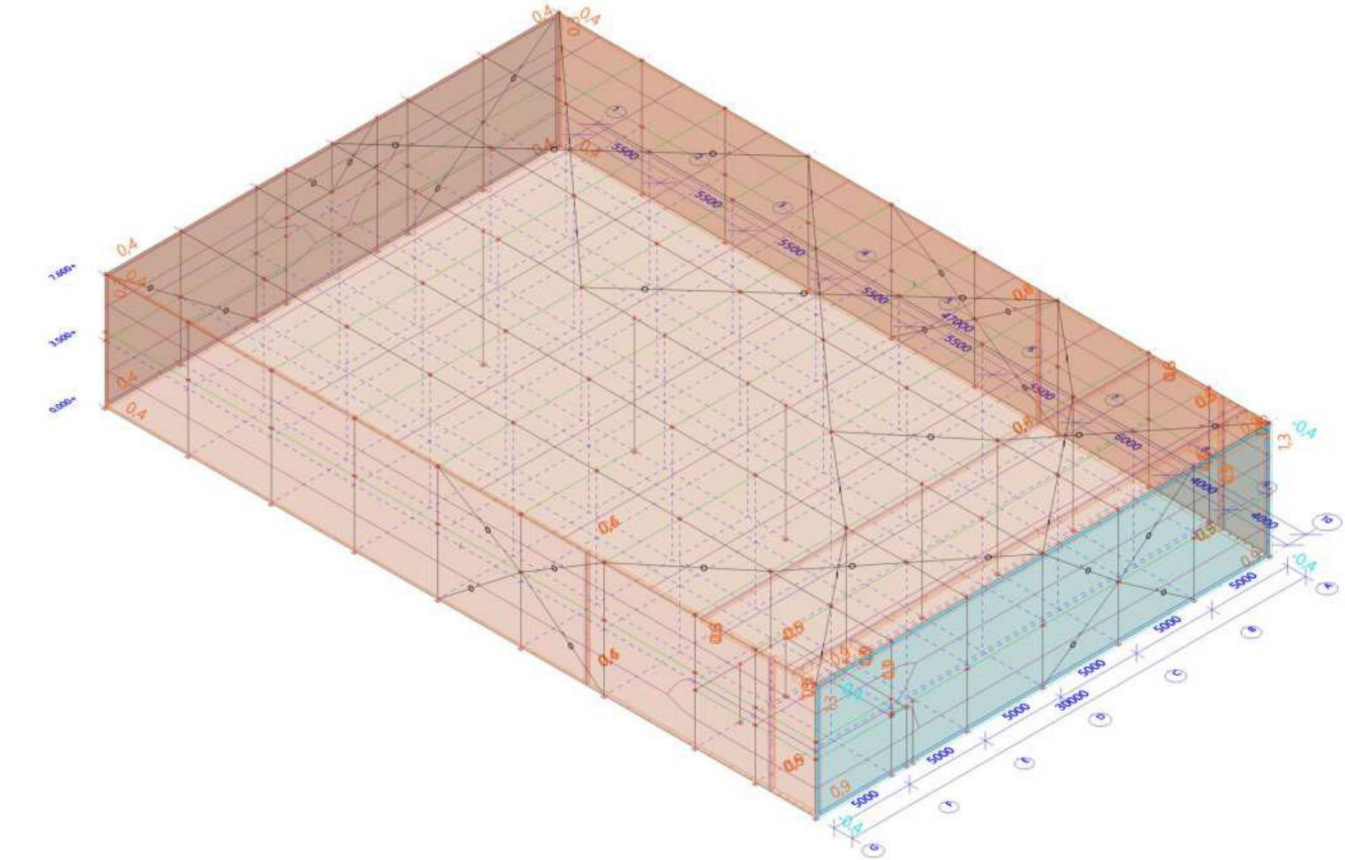
5.2.10.2. rep. waarde



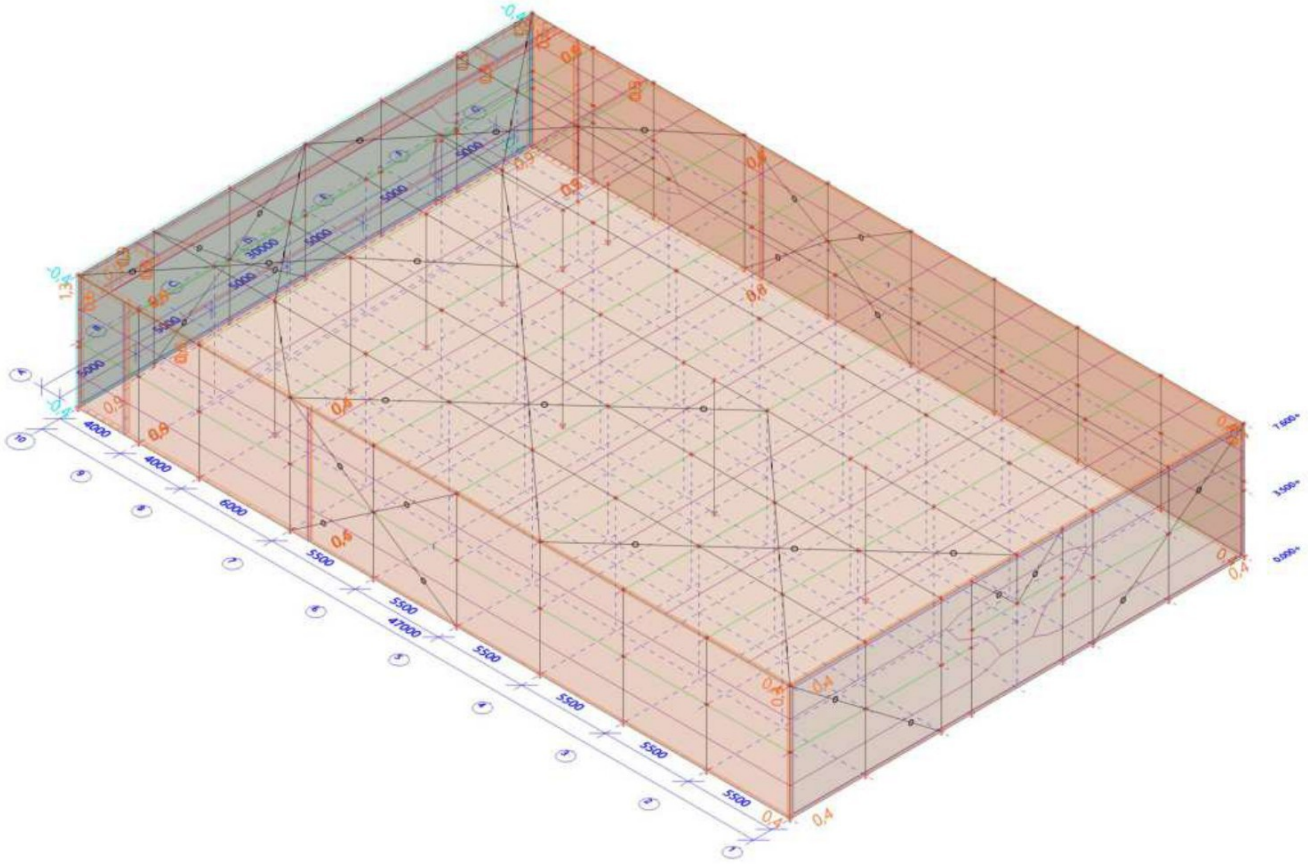
5.2.11. Overzicht belastingen - 3DWind7

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind7	90, - CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.11.1. rep. waarde



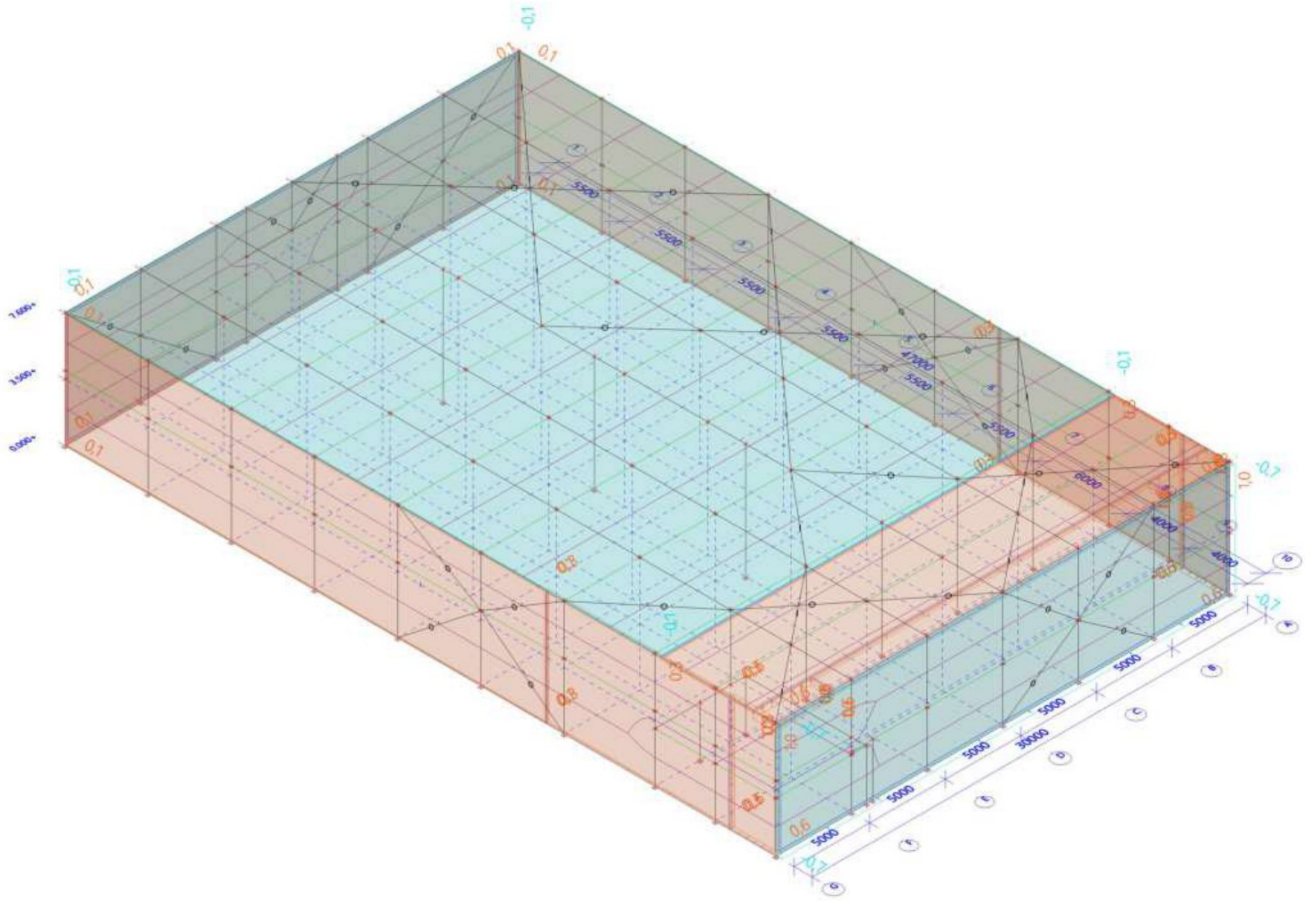
5.2.11.2. rep. waarde



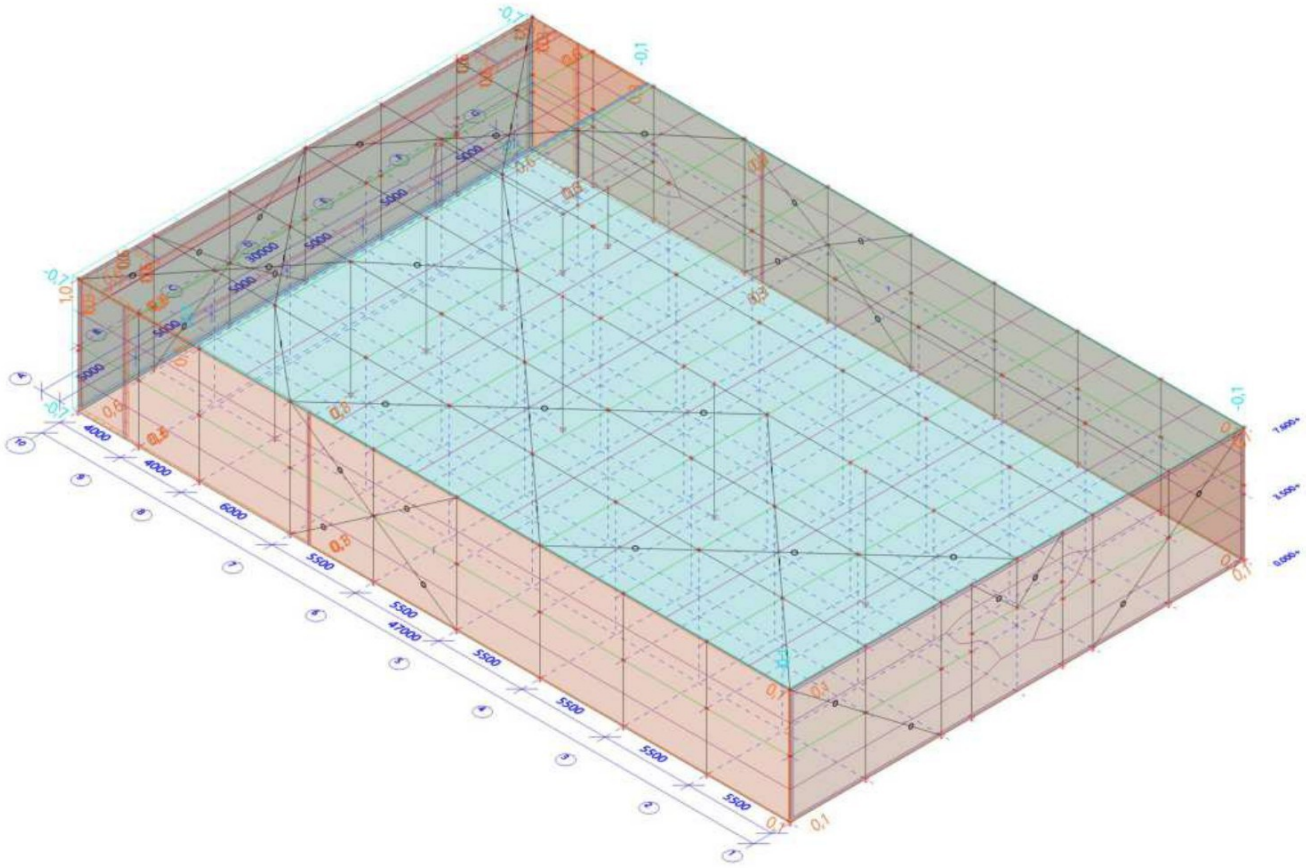
5.2.12. Overzicht belastingen - 3DWind8

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind8	90, - CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.12.1. rep. waarde



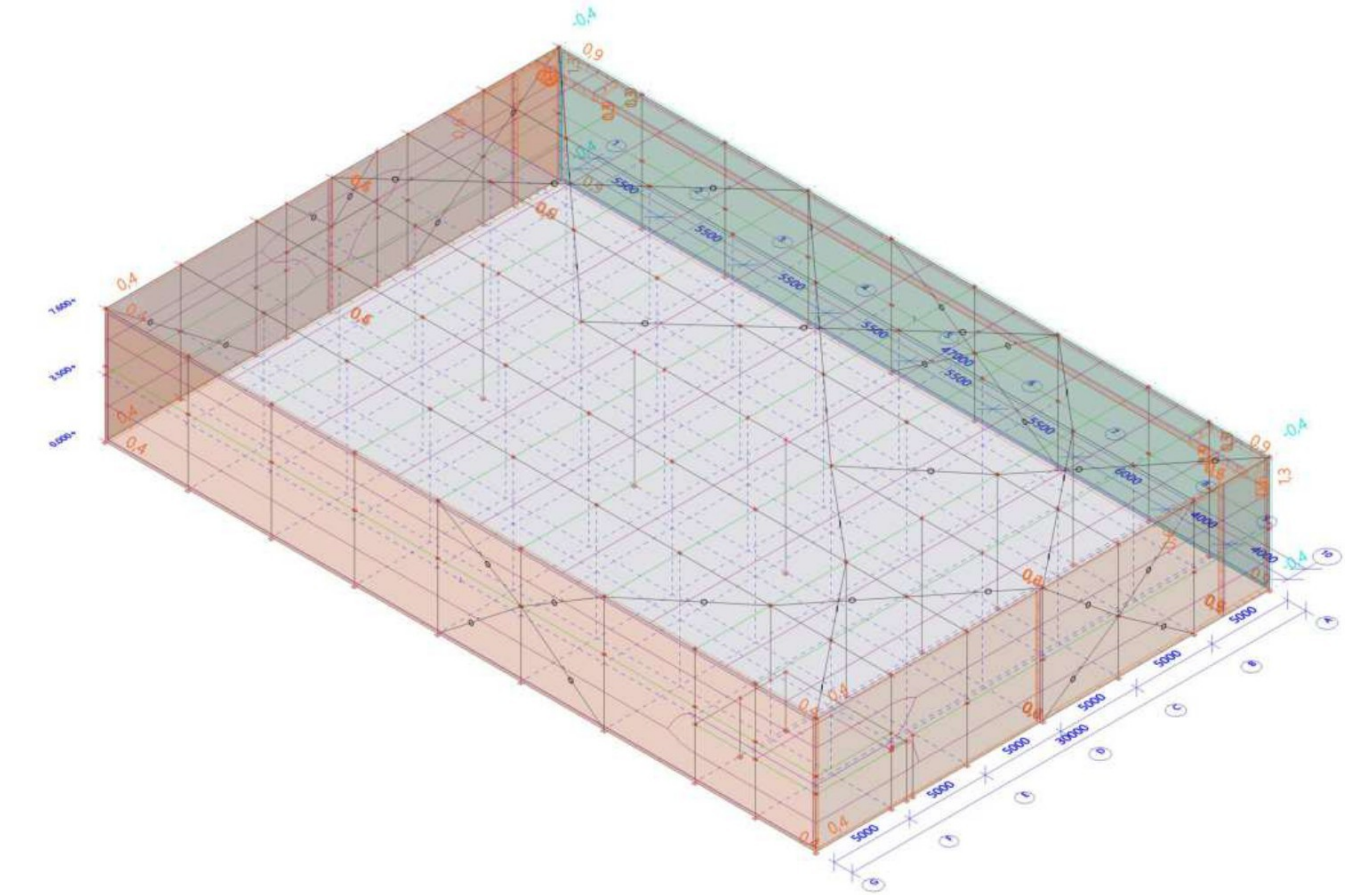
5.2.12.2. rep. waarde



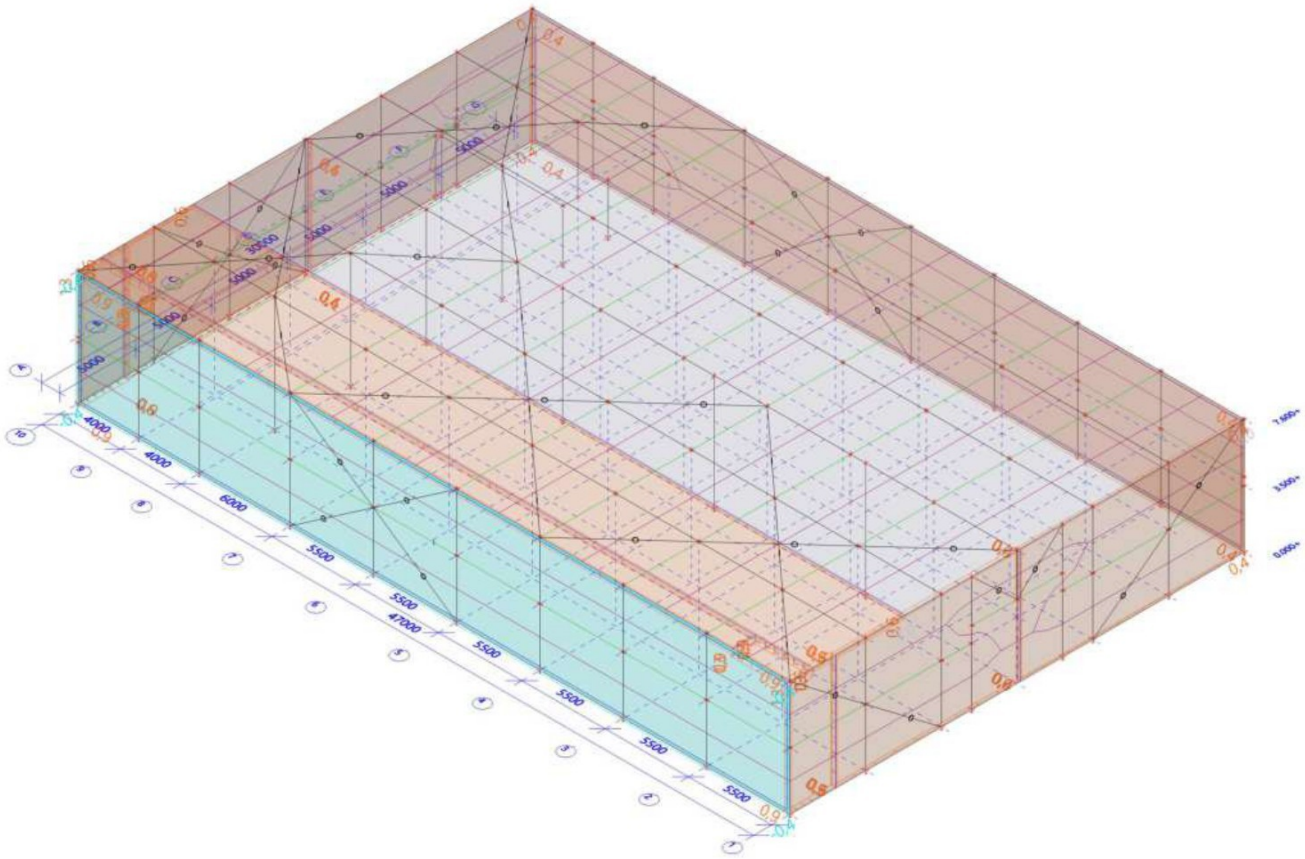
5.2.13. Overzicht belastingen - 3DWind9

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind9	180, + CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.13.1. rep. waarde



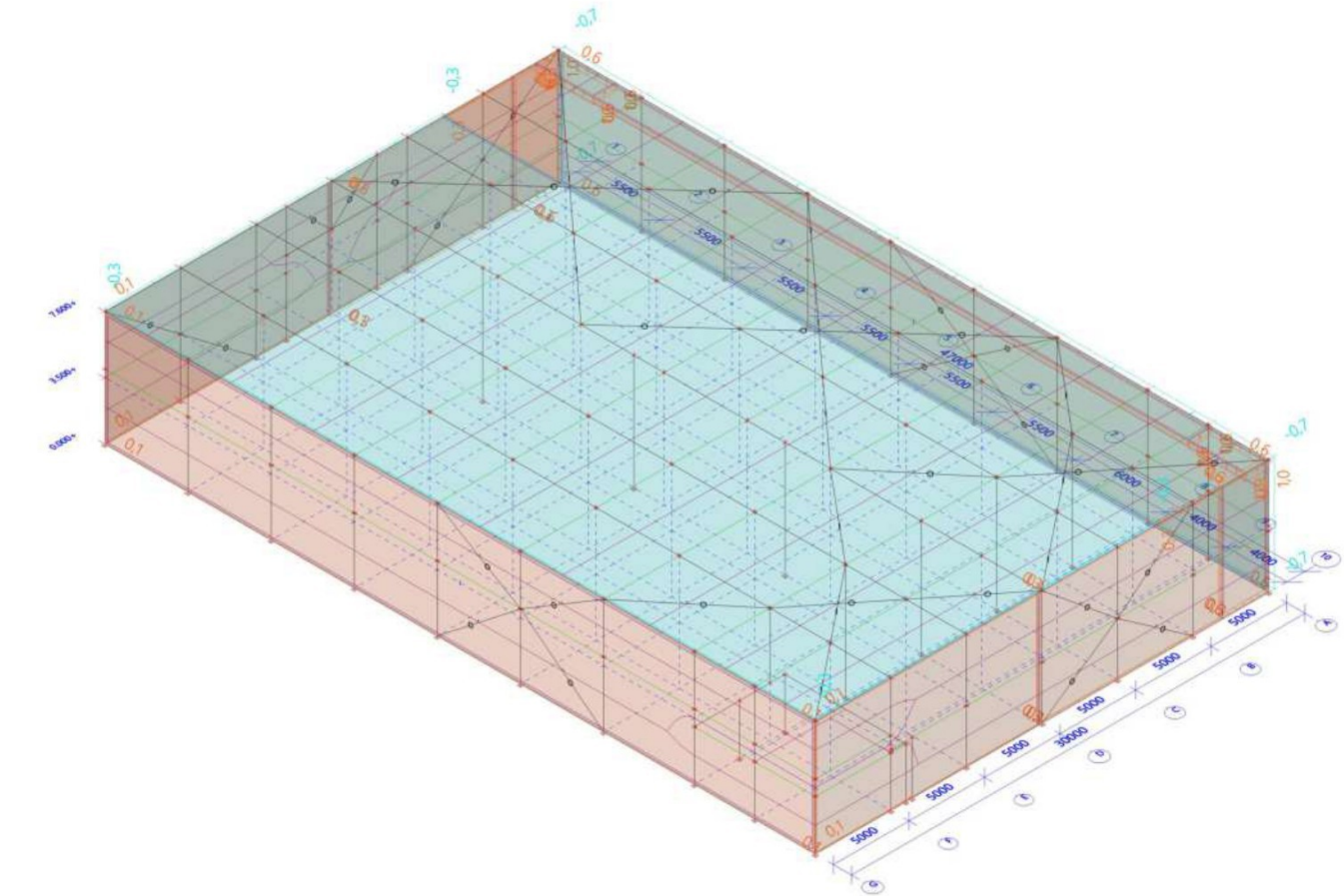
5.2.13.2. rep. waarde



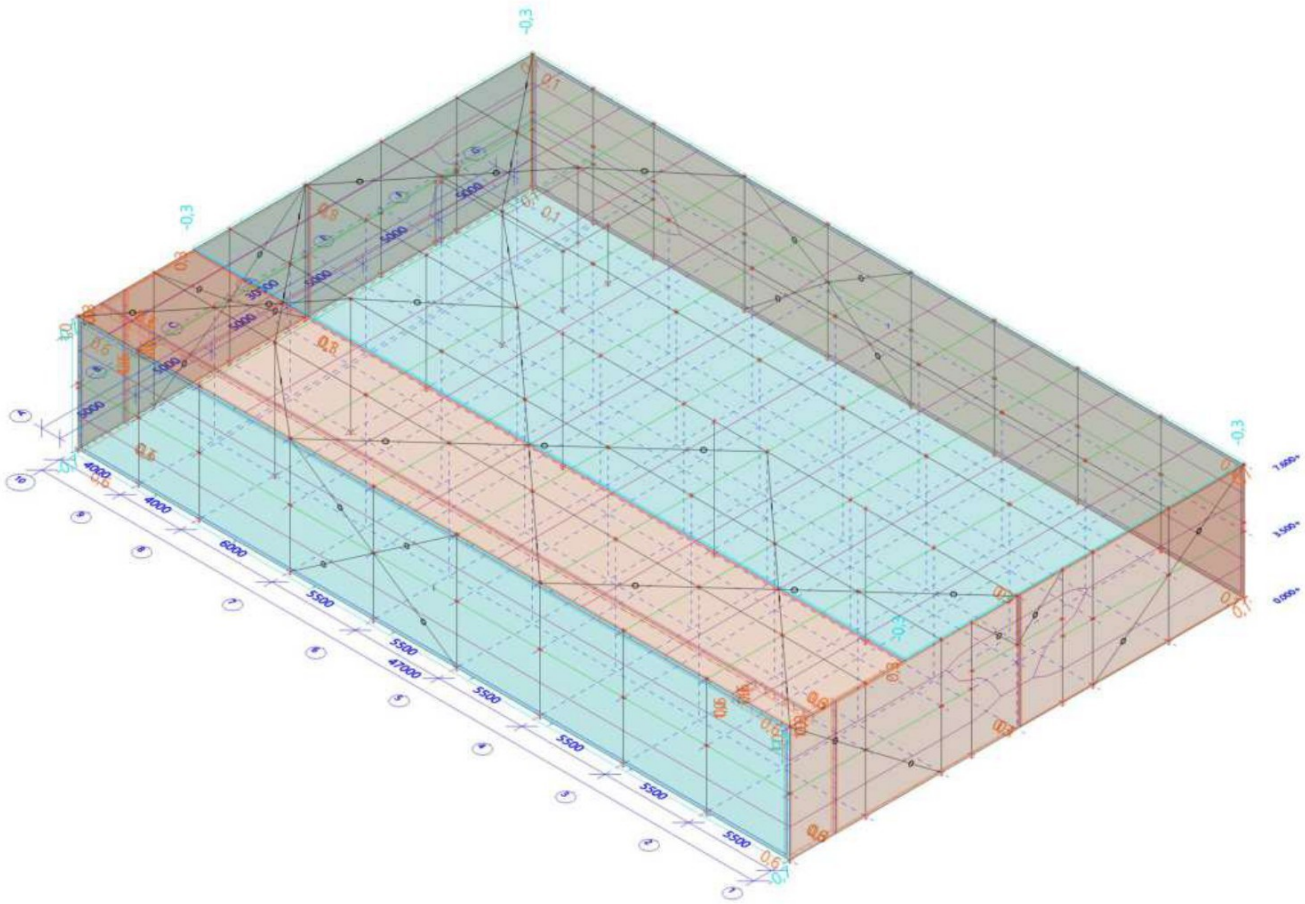
5.2.14. Overzicht belastingen - 3DWind10

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind10	180, + CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.14.1. rep. waarde



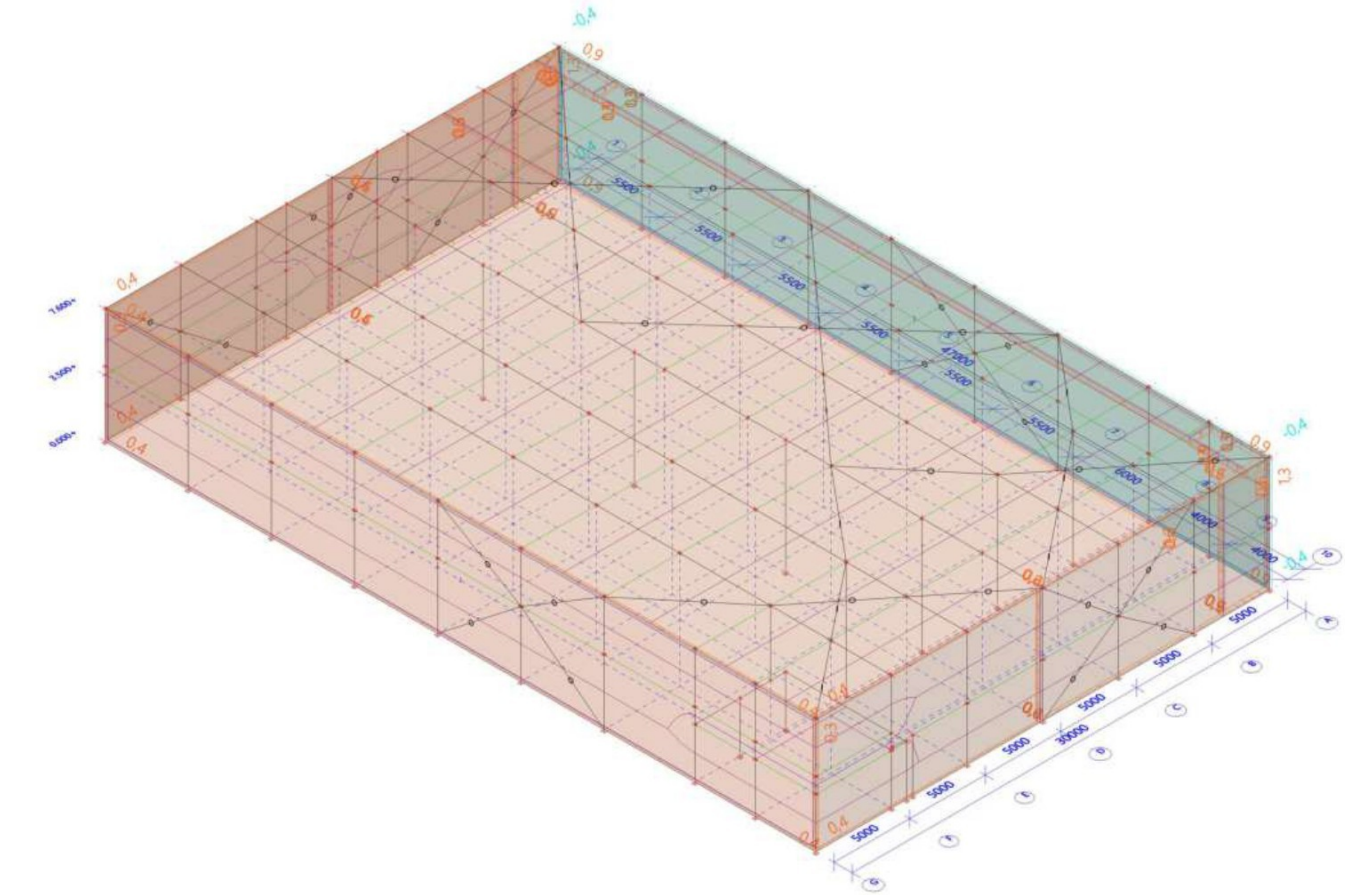
5.2.14.2. rep. waarde



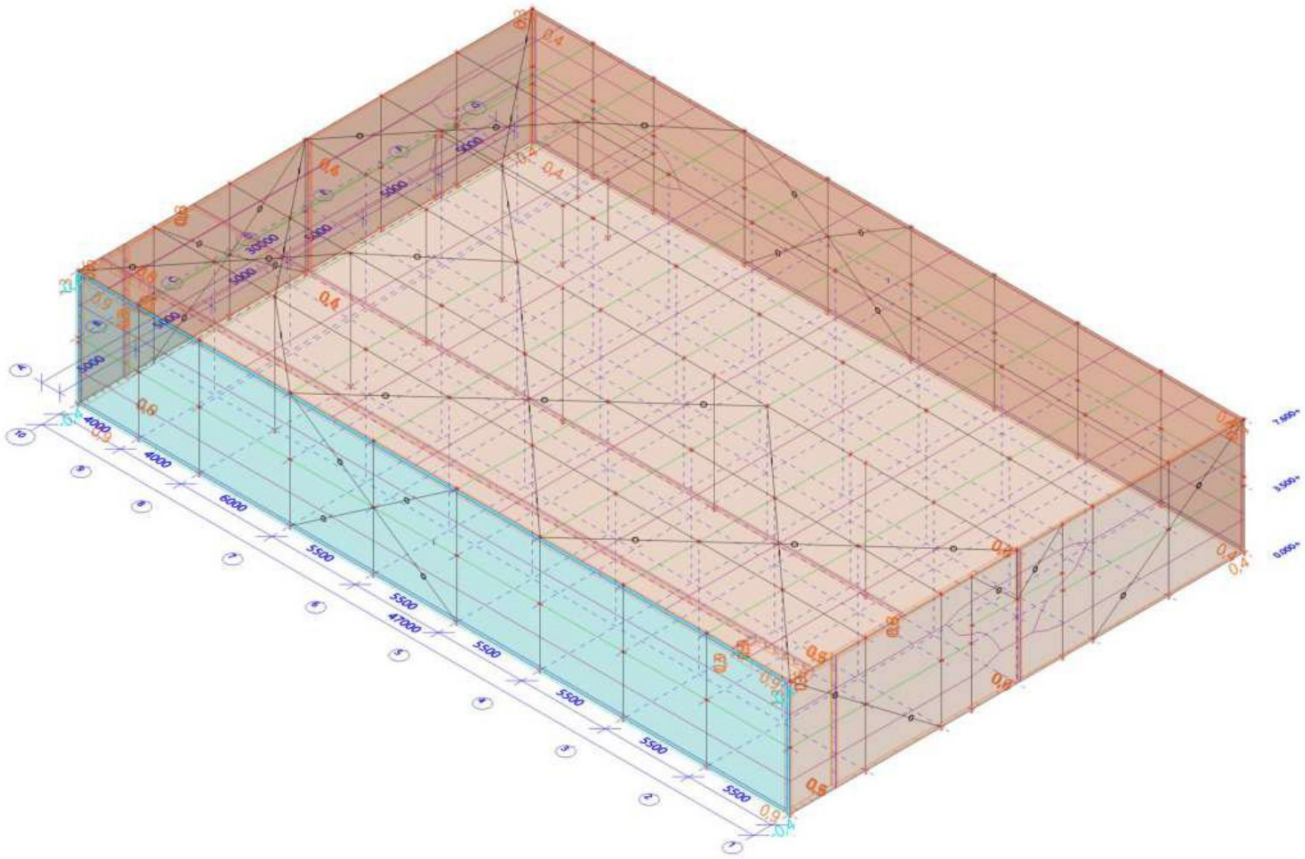
5.2.15. Overzicht belastingen - 3DWind11

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind11	180, - CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.15.1. rep. waarde



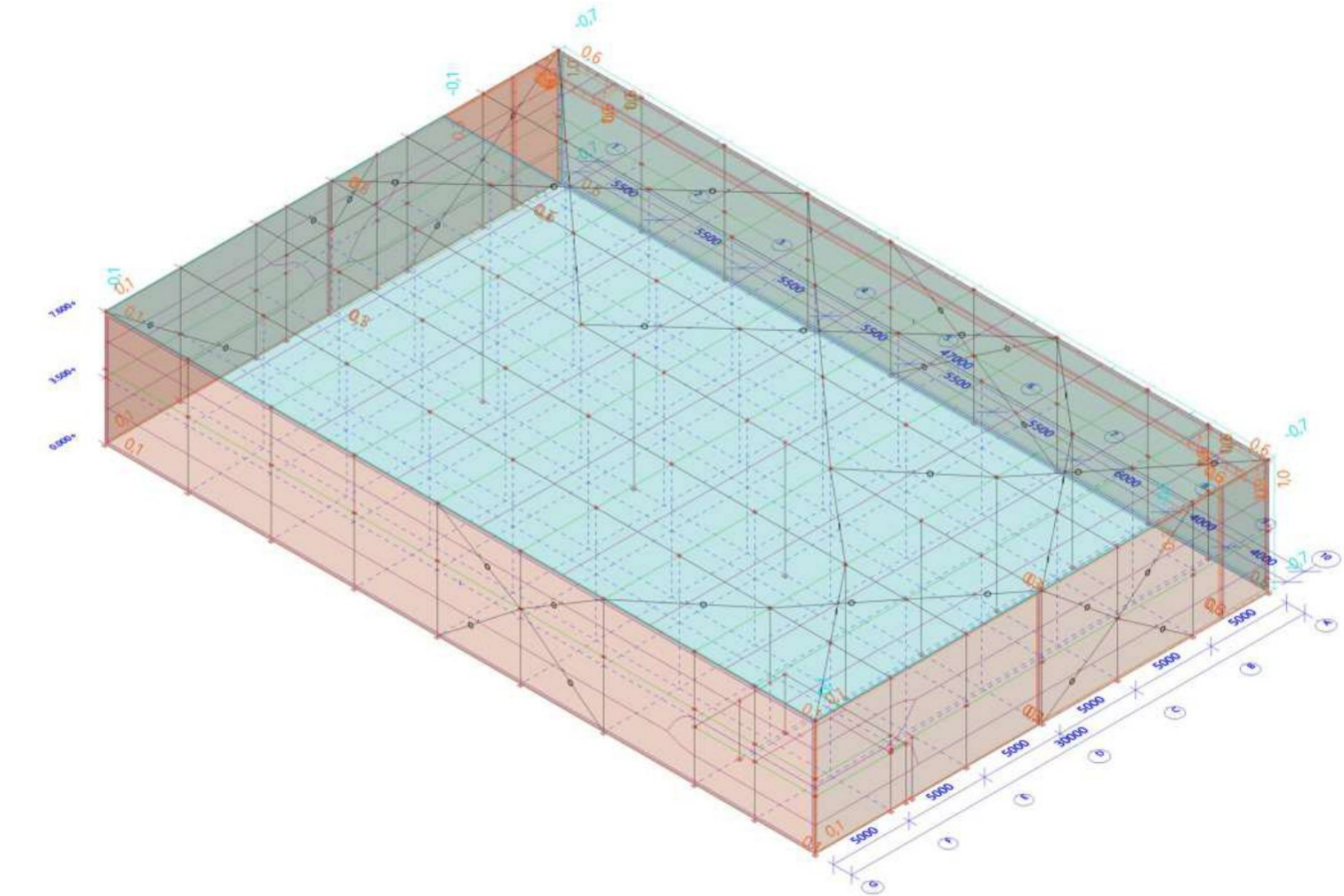
5.2.15.2. rep. waarde



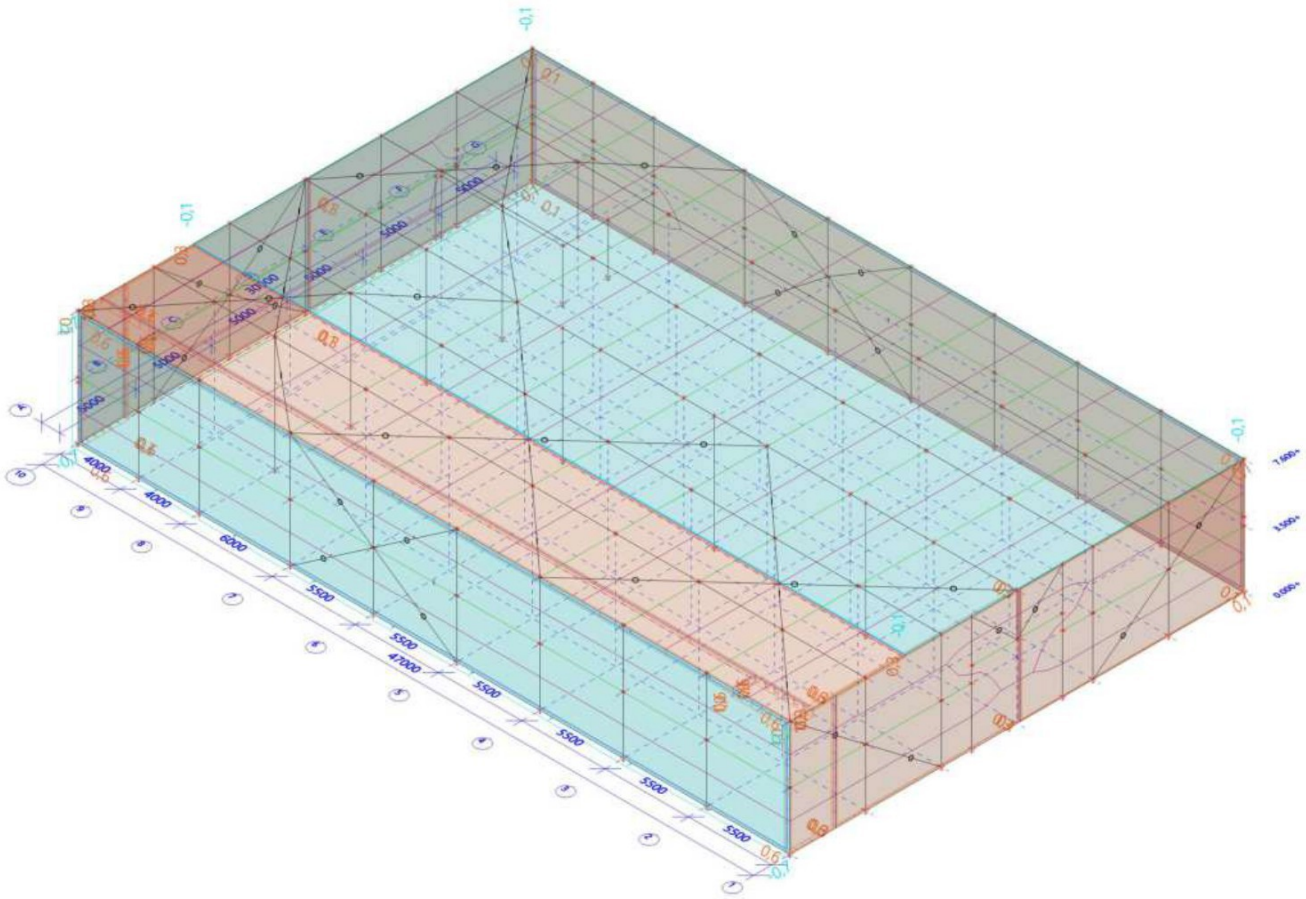
5.2.16. Overzicht belastingen - 3DWind12

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind12	180, - CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.16.1. rep. waarde



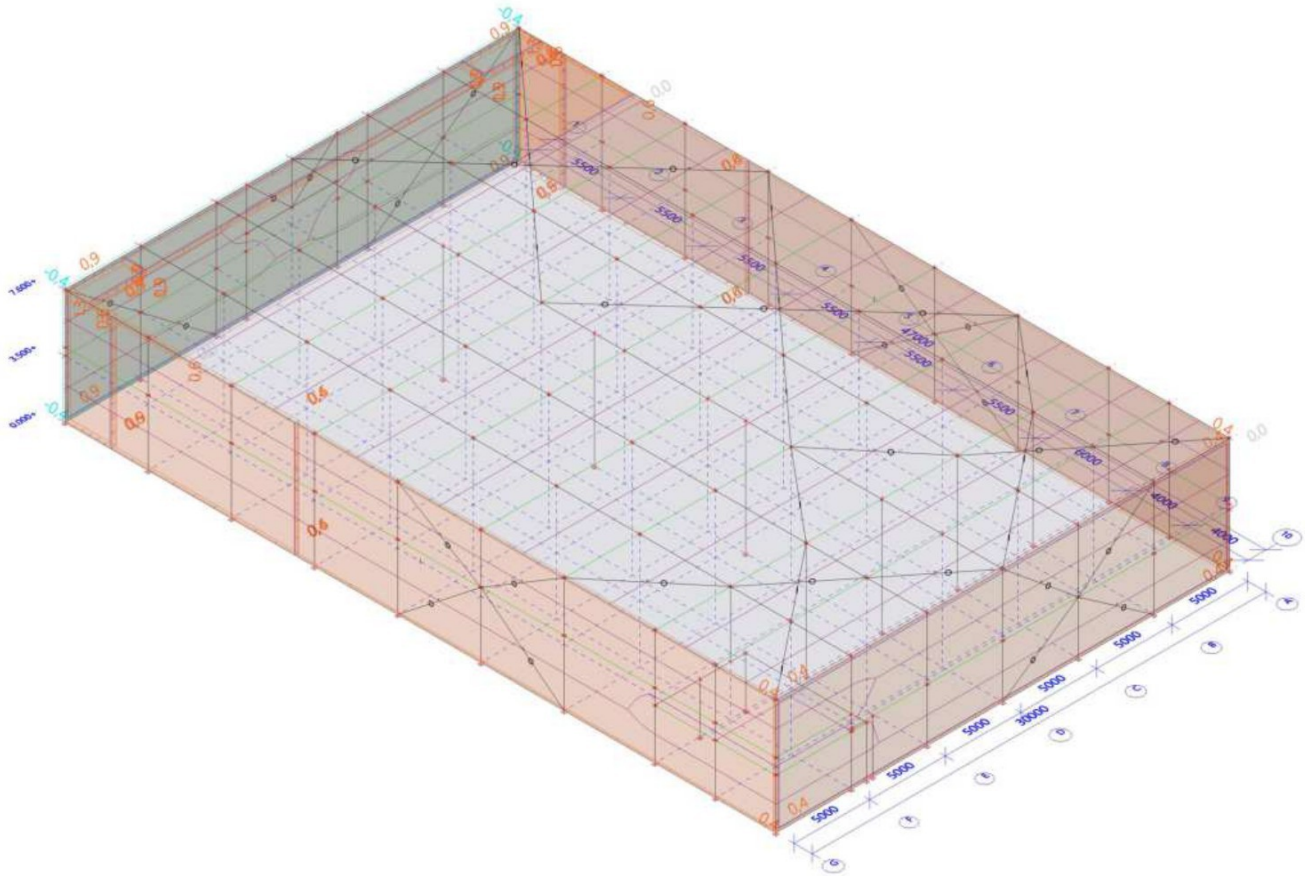
5.2.16.2. rep. waarde



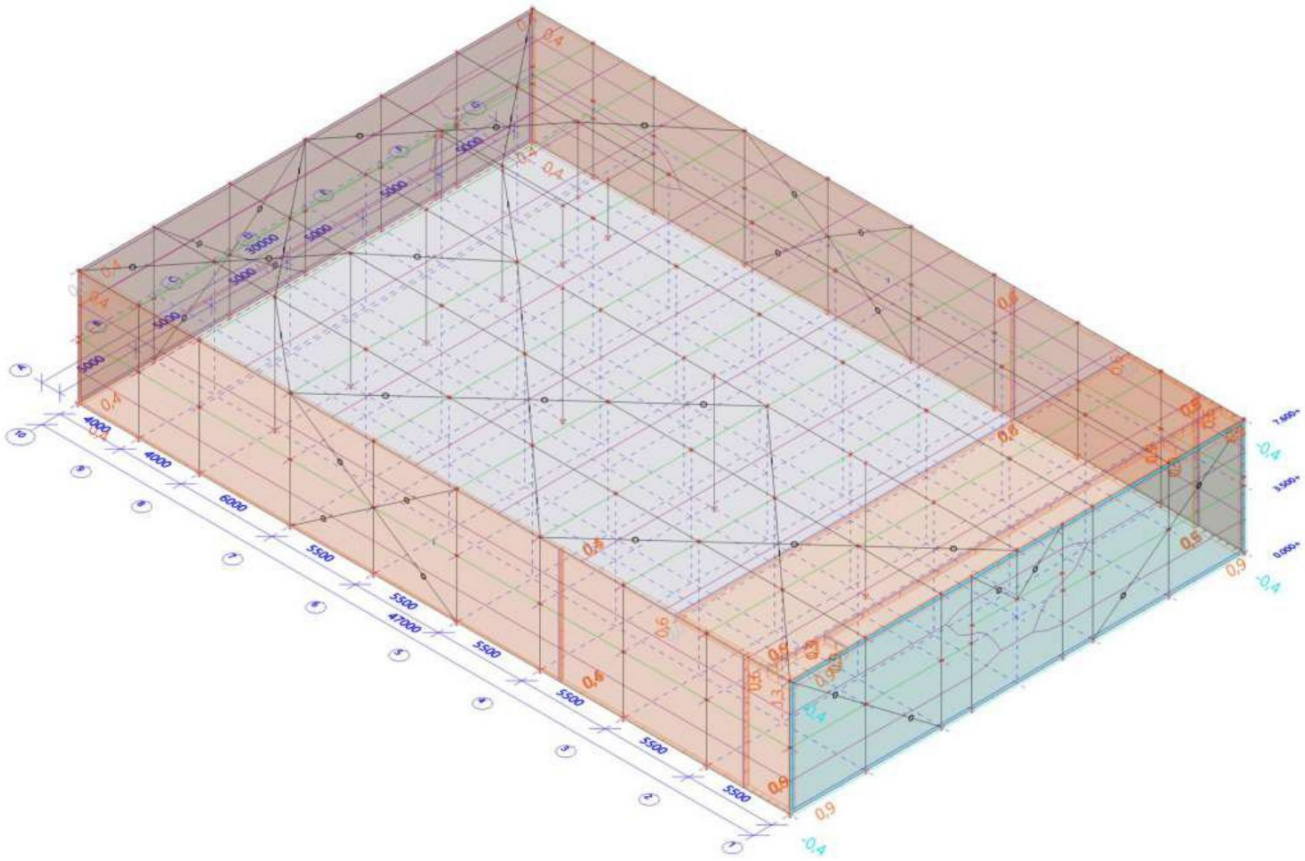
5.2.17. Overzicht belastingen - 3DWind13

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind13	270, + CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.17.1. rep. waarde



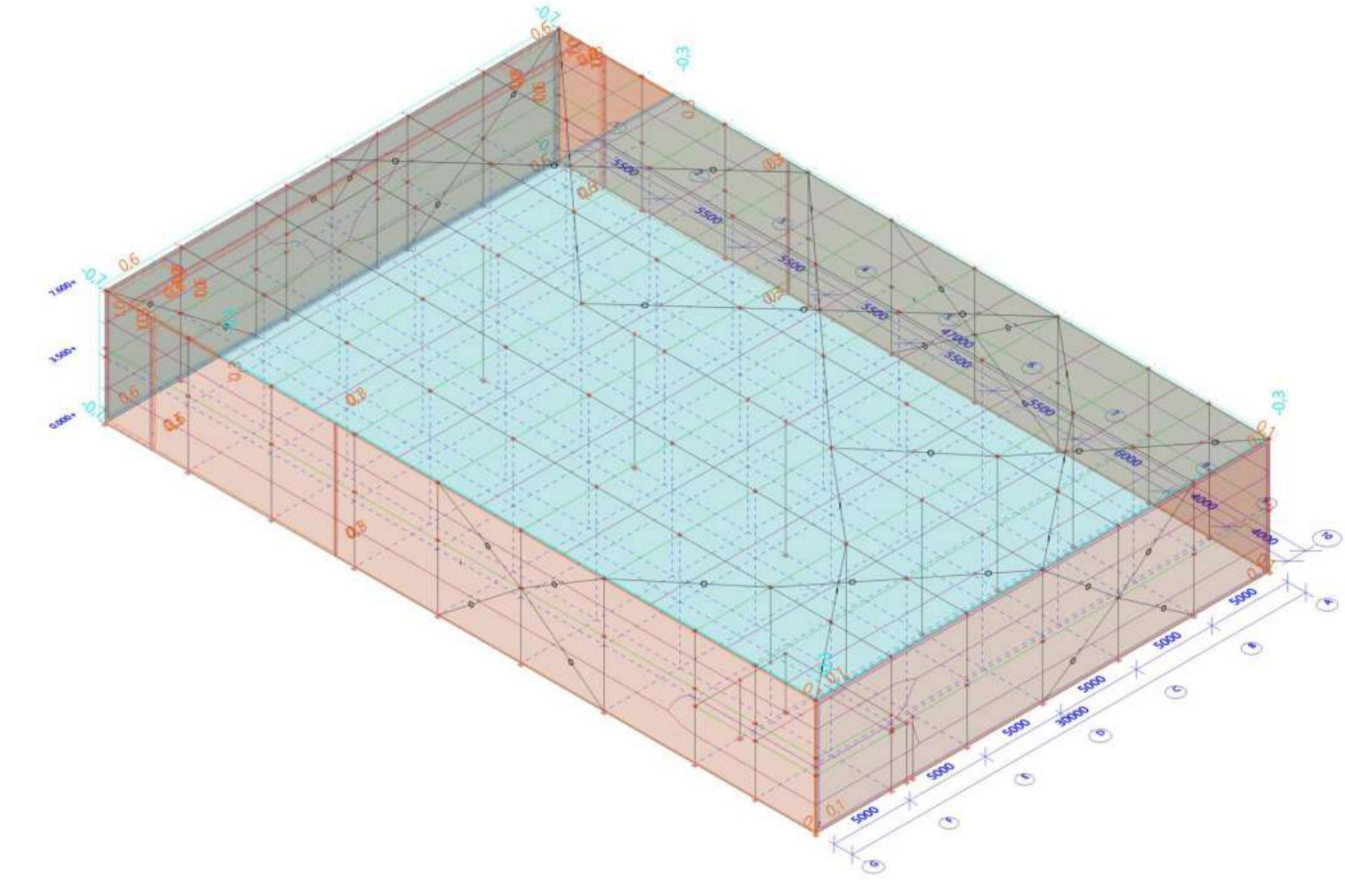
5.2.17.2. rep. waarde



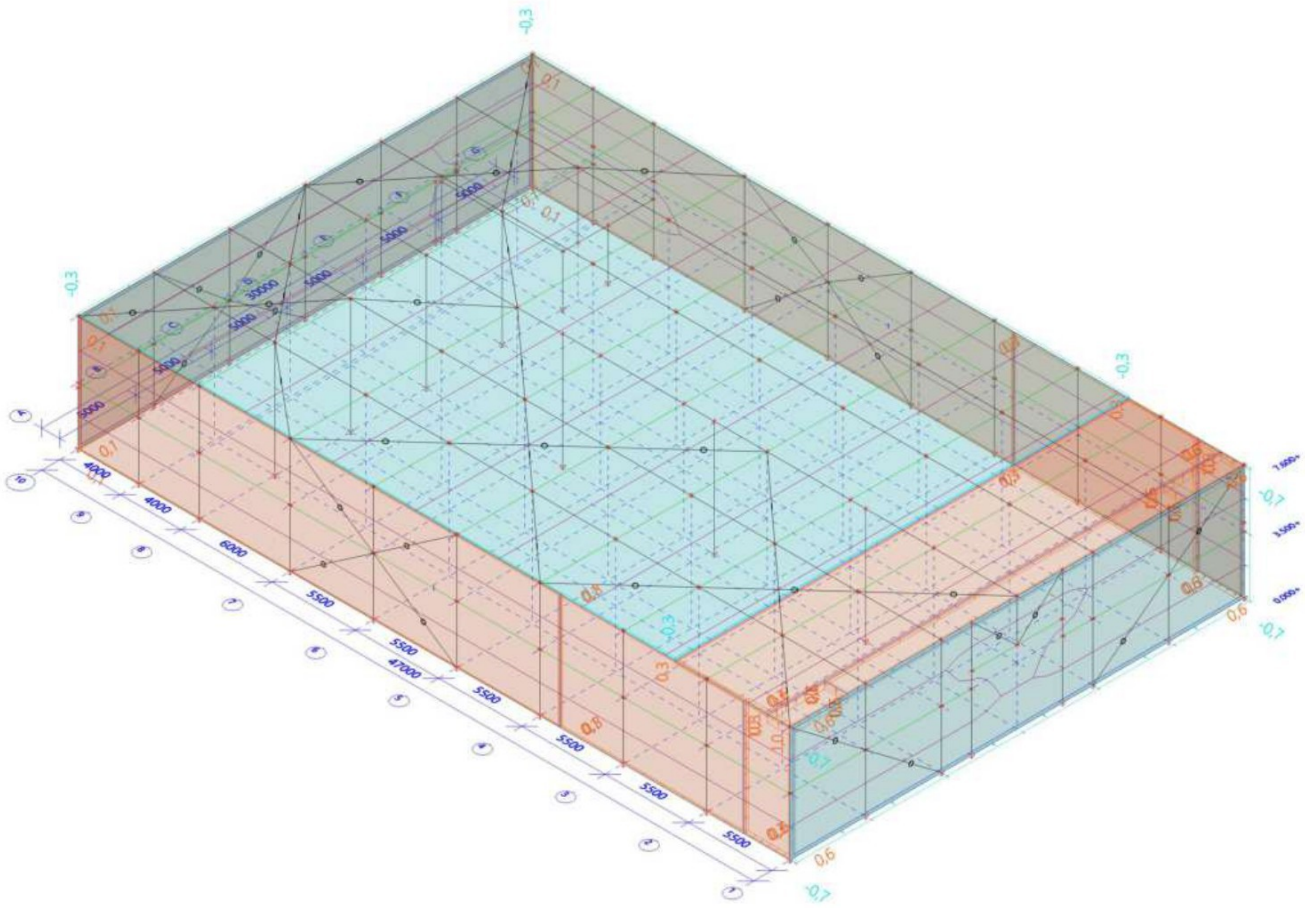
5.2.18. Overzicht belastingen - 3DWind14

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind14	270, + CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.18.1. rep. waarde



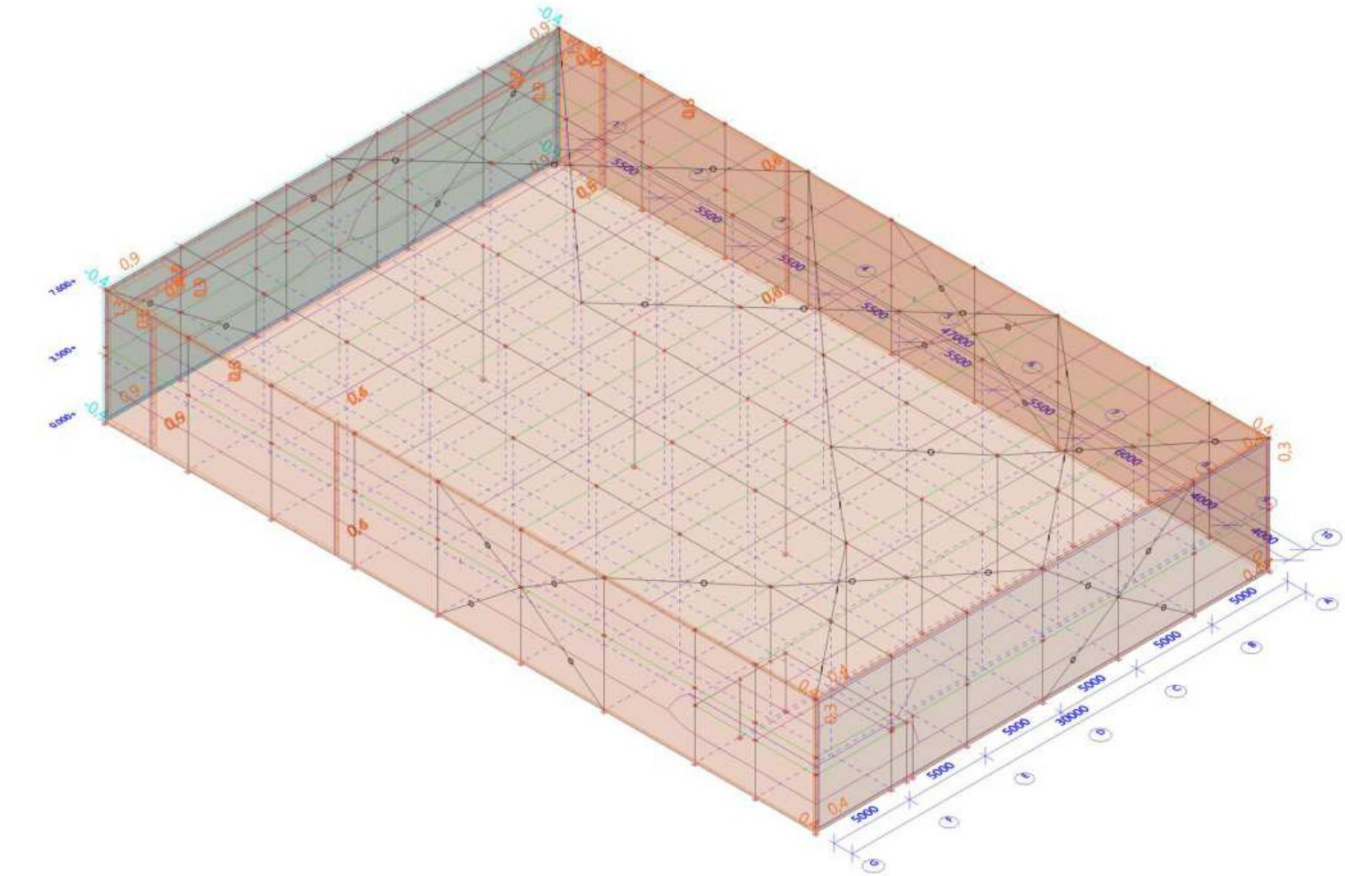
5.2.18.2. rep. waarde



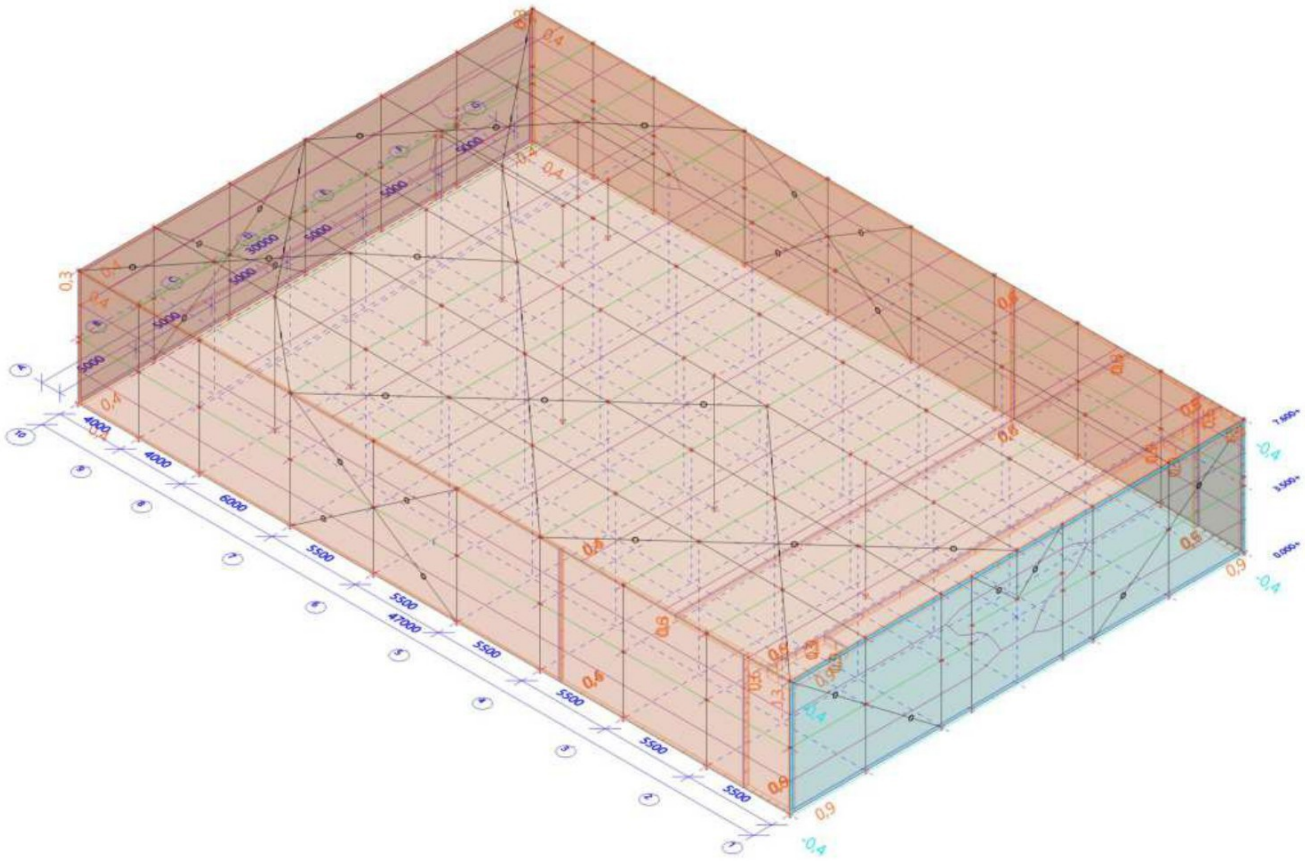
5.2.19. Overzicht belastingen - 3DWind15

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind15	270, - CPE, + CPI	Variable	LG4	None
	Static wind	Static		

5.2.19.1. rep. waarde



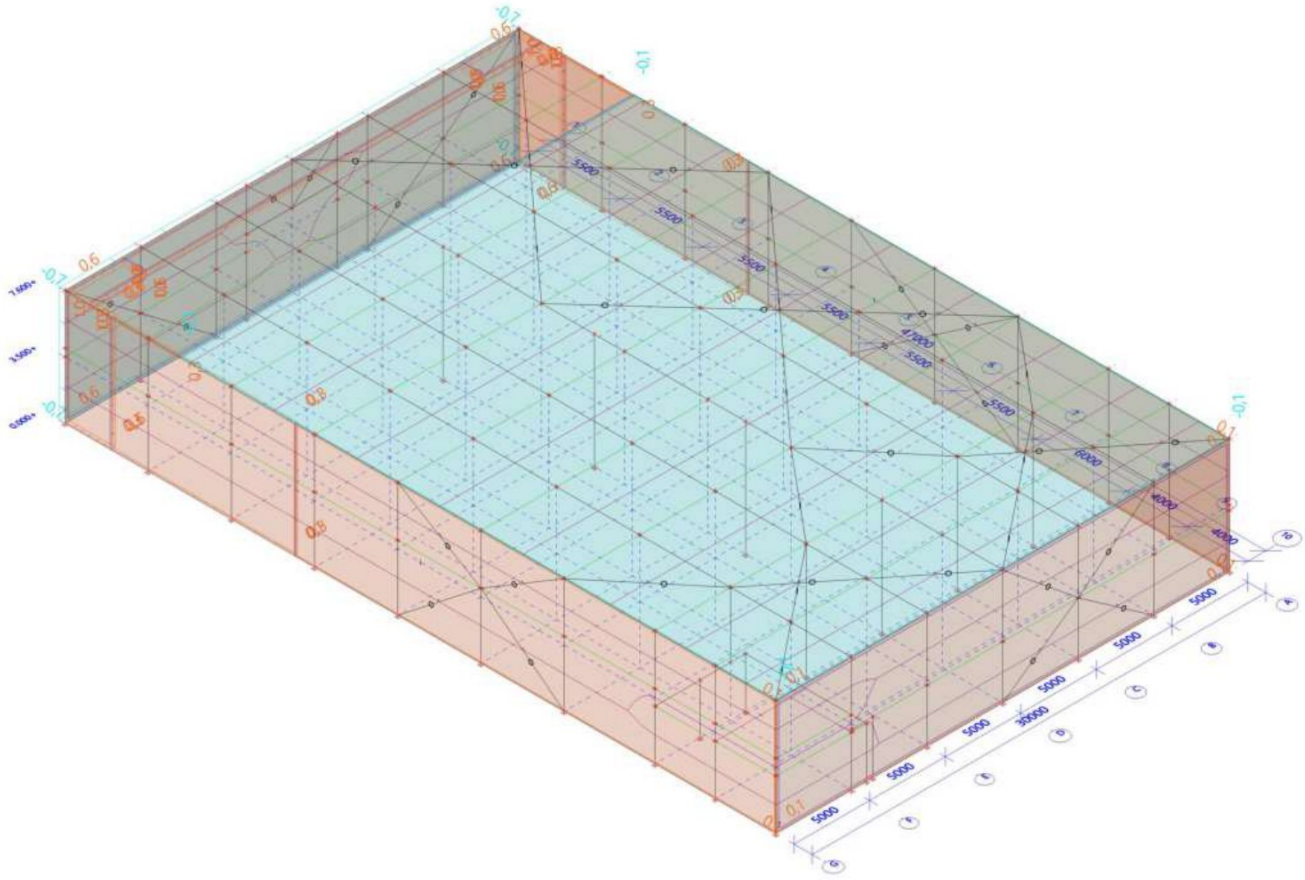
5.2.19.2. rep. waarde



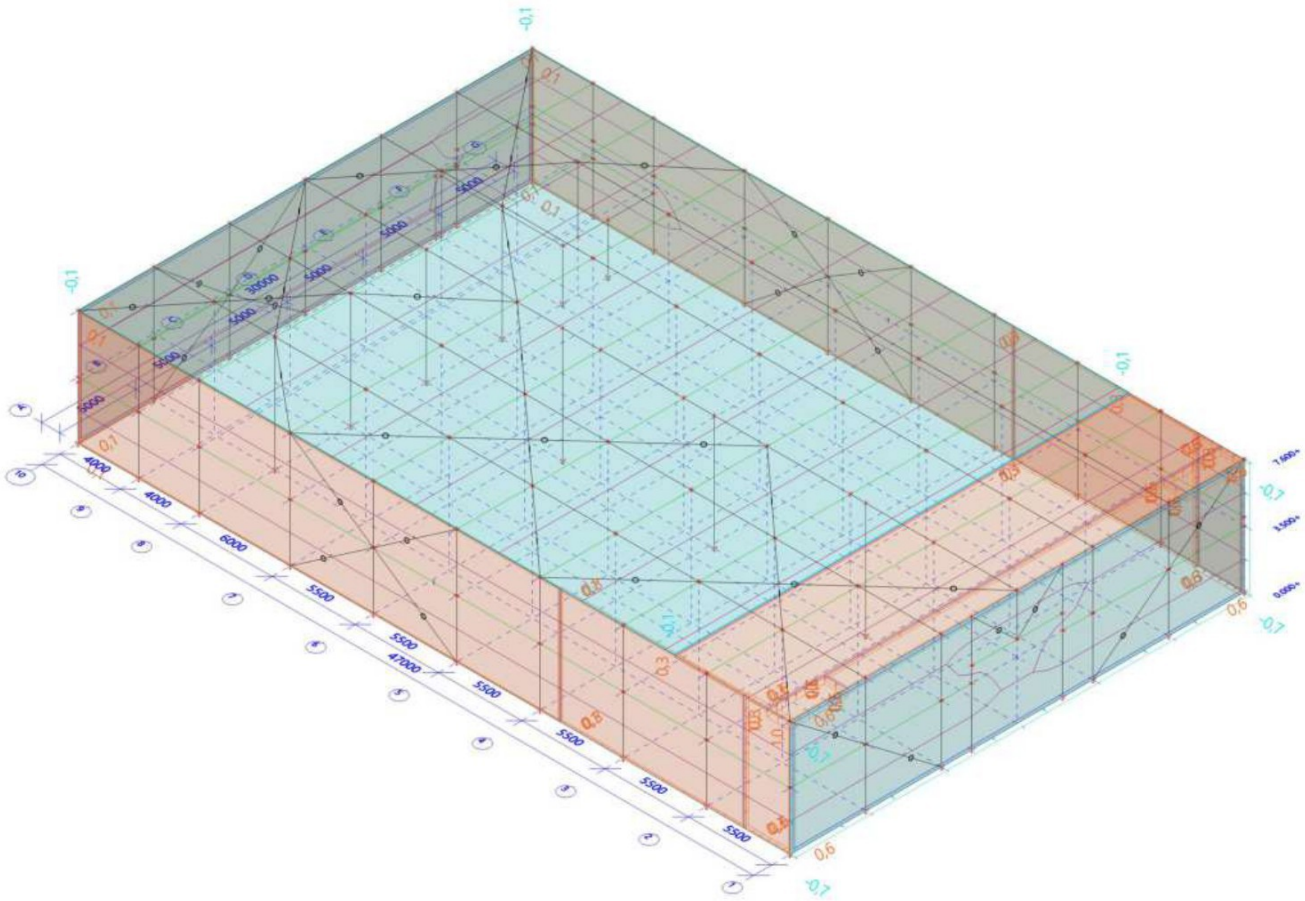
5.2.20. Overzicht belastingen - 3DWind16

Name	Description	Action type	Load group	Master load case
	Spec	Load type		
3DWind16	270, - CPE, - CPI	Variable	LG4	None
	Static wind	Static		

5.2.20.1. rep. waarde



5.2.20.2. rep. waarde



5.3. Nonlinear combinations

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
LC 1-2	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
LC 3	Serviceability	None			LC3 - Veranderlijk	1,000
LC 4	Serviceability	None			LC4 - Sneeuw	1,000
3DWind1	Serviceability	None			3DWind1 - 0, + CPE, + CPI	1,000
3DWind2	Serviceability	None			3DWind2 - 0, + CPE, - CPI	1,000
3DWind3	Serviceability	None			3DWind3 - 0, - CPE, + CPI	1,000
3DWind4	Serviceability	None			3DWind4 - 0, - CPE, - CPI	1,000
3DWind5	Serviceability	None			3DWind5 - 90, + CPE, + CPI	1,000
3DWind6	Serviceability	None			3DWind6 - 90, + CPE, - CPI	1,000
3DWind7	Serviceability	None			3DWind7 - 90, - CPE, + CPI	1,000
3DWind8	Serviceability	None			3DWind8 - 90, - CPE, - CPI	1,000
3DWind9	Serviceability	None			3DWind9 - 180, + CPE, + CPI	1,000
3DWind10	Serviceability	None			3DWind10 - 180, + CPE, - CPI	1,000
3DWind11	Serviceability	None			3DWind11 - 180, - CPE, + CPI	1,000
3DWind12	Serviceability	None			3DWind12 - 180, - CPE, - CPI	1,000
3DWind13	Serviceability	None			3DWind13 - 270, + CPE, + CPI	1,000
3DWind14	Serviceability	None			3DWind14 - 270, + CPE, - CPI	1,000
3DWind15	Serviceability	None			3DWind15 - 270, - CPE, + CPI	1,000
3DWind16	Serviceability	None			3DWind16 - 270, - CPE, - CPI	1,000
NC_ULS-Set B (auto)1	Ultimate	None			LC1 - Self weight	1,350
					LC2 - Permanent	1,350
NC_ULS-Set B (auto)2	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
NC_ULS-Set B (auto)3	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
NC_ULS-Set B (auto)4	Ultimate	None			LC1 - Self weight	1,350
					LC2 - Permanent	1,350
					LC3 - Veranderlijk	0,900
NC_ULS-Set B (auto)5	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
NC_ULS-Set B (auto)6	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	1,500
NC_ULS-Set B (auto)7	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	1,500
NC_ULS-Set B (auto)8	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
NC_ULS-Set B (auto)9	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC4 - Sneeuw	1,500
NC_ULS-Set B (auto)10	Ultimate	Simple curvature	0.002	500	LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					LC4 - Sneeuw	1,500
NC_ULS-Set B (auto)11	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC4 - Sneeuw	1,500
NC_ULS-Set B (auto)12	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					LC4 - Sneeuw	1,500
NC_ULS-Set B (auto)13	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind1 - 0, + CPE, + CPI	1,500
NC_ULS-Set B	Ultimate	None			LC1 - Self weight	1,202

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
(auto)14						
					LC2 - Permanent	1,202
					3DWind2 - 0, + CPE, - CPI	1,500
NC_ULS-Set B (auto)15	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind3 - 0, - CPE, + CPI	1,500
NC_ULS-Set B (auto)16	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind4 - 0, - CPE, - CPI	1,500
NC_ULS-Set B (auto)17	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind5 - 90, + CPE, + CPI	1,500
NC_ULS-Set B (auto)18	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind6 - 90, + CPE, - CPI	1,500
NC_ULS-Set B (auto)19	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind7 - 90, - CPE, + CPI	1,500
NC_ULS-Set B (auto)20	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind8 - 90, - CPE, - CPI	1,500
NC_ULS-Set B (auto)21	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind9 - 180, + CPE, + CPI	1,500
NC_ULS-Set B (auto)22	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind10 - 180, + CPE, - CPI	1,500
NC_ULS-Set B (auto)23	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind11 - 180, - CPE, + CPI	1,500
NC_ULS-Set B (auto)24	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind12 - 180, - CPE, - CPI	1,500
NC_ULS-Set B (auto)25	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind13 - 270, + CPE, + CPI	1,500
NC_ULS-Set B (auto)26	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind14 - 270, + CPE, - CPI	1,500
NC_ULS-Set B (auto)27	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind15 - 270, - CPE, + CPI	1,500
NC_ULS-Set B (auto)28	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					3DWind16 - 270, - CPE, - CPI	1,500
NC_ULS-Set B (auto)29	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind1 - 0, + CPE, + CPI	1,500
NC_ULS-Set B	Ultimate	None			LC1 - Self weight	1,202

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
(auto)30						
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind2 - 0, + CPE, - CPI	1,500
NC_ULS-Set B (auto)31	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind3 - 0, - CPE, + CPI	1,500
NC_ULS-Set B (auto)32	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind4 - 0, - CPE, - CPI	1,500
NC_ULS-Set B (auto)33	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind5 - 90, + CPE, + CPI	1,500
NC_ULS-Set B (auto)34	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind6 - 90, + CPE, - CPI	1,500
NC_ULS-Set B (auto)35	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind7 - 90, - CPE, + CPI	1,500
NC_ULS-Set B (auto)36	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind8 - 90, - CPE, - CPI	1,500
NC_ULS-Set B (auto)37	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind9 - 180, + CPE, + CPI	1,500
NC_ULS-Set B (auto)38	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind10 - 180, + CPE, - CPI	1,500
NC_ULS-Set B (auto)39	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind11 - 180, - CPE, + CPI	1,500
NC_ULS-Set B (auto)40	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind12 - 180, - CPE, - CPI	1,500
NC_ULS-Set B (auto)41	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind13 - 270, + CPE, + CPI	1,500
NC_ULS-Set B (auto)42	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind14 - 270, + CPE, - CPI	1,500
NC_ULS-Set B	Ultimate	None			LC1 - Self weight	1,202

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
(auto)43						
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind15 - 270, - CPE, + CPI	1,500
NC_ULS-Set B (auto)44	Ultimate	None			LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					3DWind16 - 270, - CPE, - CPI	1,500
NC_ULS-Set B (auto)45	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind1 - 0, + CPE, + CPI	1,500
NC_ULS-Set B (auto)46	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind2 - 0, + CPE, - CPI	1,500
NC_ULS-Set B (auto)47	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind3 - 0, - CPE, + CPI	1,500
NC_ULS-Set B (auto)48	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind4 - 0, - CPE, - CPI	1,500
NC_ULS-Set B (auto)49	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind5 - 90, + CPE, + CPI	1,500
NC_ULS-Set B (auto)50	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind6 - 90, + CPE, - CPI	1,500
NC_ULS-Set B (auto)51	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind7 - 90, - CPE, + CPI	1,500
NC_ULS-Set B (auto)52	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind8 - 90, - CPE, - CPI	1,500
NC_ULS-Set B (auto)53	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind9 - 180, + CPE, + CPI	1,500
NC_ULS-Set B (auto)54	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind10 - 180, + CPE, - CPI	1,500
NC_ULS-Set B (auto)55	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind11 - 180, - CPE, + CPI	1,500
NC_ULS-Set B (auto)56	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind12 - 180, - CPE, - CPI	1,500
NC_ULS-Set B (auto)57	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind13 - 270, + CPE, + CPI	1,500
NC_ULS-Set B (auto)58	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind14 - 270, + CPE, - CPI	1,500

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
NC_ULS-Set B (auto)59	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind15 - 270, - CPE, + CPI	1,500
NC_ULS-Set B (auto)60	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					3DWind16 - 270, - CPE, - CPI	1,500
NC_ULS-Set B (auto)61	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind1 - 0, + CPE, + CPI	1,500
NC_ULS-Set B (auto)62	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind2 - 0, + CPE, - CPI	1,500
NC_ULS-Set B (auto)63	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind3 - 0, - CPE, + CPI	1,500
NC_ULS-Set B (auto)64	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind4 - 0, - CPE, - CPI	1,500
NC_ULS-Set B (auto)65	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind5 - 90, + CPE, + CPI	1,500
NC_ULS-Set B (auto)66	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind6 - 90, + CPE, - CPI	1,500
NC_ULS-Set B (auto)67	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind7 - 90, - CPE, + CPI	1,500
NC_ULS-Set B (auto)68	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind8 - 90, - CPE, - CPI	1,500
NC_ULS-Set B (auto)69	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind9 - 180, + CPE, + CPI	1,500
NC_ULS-Set B (auto)70	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind10 - 180, + CPE, - CPI	1,500
NC_ULS-Set B (auto)71	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind11 - 180, - CPE, + CPI	1,500
NC_ULS-Set B (auto)72	Ultimate	None			LC1 - Self weight	0,900

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind12 - 180, - CPE, - CPI	1,500
NC_ULS-Set B (auto)73	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind13 - 270, + CPE, + CPI	1,500
NC_ULS-Set B (auto)74	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind14 - 270, + CPE, - CPI	1,500
NC_ULS-Set B (auto)75	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind15 - 270, - CPE, + CPI	1,500
NC_ULS-Set B (auto)76	Ultimate	None			LC1 - Self weight	0,900
					LC2 - Permanent	0,900
					LC3 - Veranderlijk	0,900
					3DWind16 - 270, - CPE, - CPI	1,500
NC_SLS-Char (auto)1	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
NC_SLS-Char (auto)2	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	1,000
NC_SLS-Char (auto)3	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
NC_SLS-Char (auto)4	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC4 - Sneeuw	1,000
NC_SLS-Char (auto)5	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					LC4 - Sneeuw	1,000
NC_SLS-Char (auto)6	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind1 - 0, + CPE, + CPI	1,000
NC_SLS-Char (auto)7	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind2 - 0, + CPE, - CPI	1,000
NC_SLS-Char (auto)8	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind3 - 0, - CPE, + CPI	1,000
NC_SLS-Char (auto)9	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind4 - 0, - CPE, - CPI	1,000
NC_SLS-Char (auto)10	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind5 - 90, + CPE, + CPI	1,000
NC_SLS-Char (auto)11	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind6 - 90, + CPE, - CPI	1,000
NC_SLS-Char (auto)12	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind7 - 90, - CPE, + CPI	1,000
NC_SLS-Char (auto)13	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind8 - 90, - CPE, - CPI	1,000
NC_SLS-Char (auto)14	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind9 - 180, + CPE, + CPI	1,000

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
NC_SLS-Char (auto)15	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind10 - 180, + CPE, - CPI	1,000
NC_SLS-Char (auto)16	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind11 - 180, - CPE, + CPI	1,000
NC_SLS-Char (auto)17	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind12 - 180, - CPE, - CPI	1,000
NC_SLS-Char (auto)18	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind13 - 270, + CPE, + CPI	1,000
NC_SLS-Char (auto)19	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind14 - 270, + CPE, - CPI	1,000
NC_SLS-Char (auto)20	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind15 - 270, - CPE, + CPI	1,000
NC_SLS-Char (auto)21	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					3DWind16 - 270, - CPE, - CPI	1,000
NC_SLS-Char (auto)22	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind1 - 0, + CPE, + CPI	1,000
NC_SLS-Char (auto)23	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind2 - 0, + CPE, - CPI	1,000
NC_SLS-Char (auto)24	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind3 - 0, - CPE, + CPI	1,000
NC_SLS-Char (auto)25	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind4 - 0, - CPE, - CPI	1,000
NC_SLS-Char (auto)26	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind5 - 90, + CPE, + CPI	1,000
NC_SLS-Char (auto)27	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind6 - 90, + CPE, - CPI	1,000
NC_SLS-Char (auto)28	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind7 - 90, - CPE, + CPI	1,000
NC_SLS-Char (auto)29	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind8 - 90, - CPE, - CPI	1,000
NC_SLS-Char (auto)30	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind9 - 180, + CPE, + CPI	1,000
NC_SLS-Char (auto)31	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind10 - 180, + CPE, - CPI	1,000
NC_SLS-Char (auto)32	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind11 - 180, - CPE, + CPI	1,000

Name	Type	Bow imperfection	f	1/f	Load cases	Coeff. [-]
NC_SLS-Char (auto)33	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind12 - 180, - CPE, - CPI	1,000
NC_SLS-Char (auto)34	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind13 - 270, + CPE, + CPI	1,000
NC_SLS-Char (auto)35	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind14 - 270, + CPE, - CPI	1,000
NC_SLS-Char (auto)36	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind15 - 270, - CPE, + CPI	1,000
NC_SLS-Char (auto)37	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600
					3DWind16 - 270, - CPE, - CPI	1,000
NC_ULS-Set B (auto)77	Ultimate	Simple curvature	0.002	500	LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					LC4 - Sneeuw	1,500
NC_ULS-Set B (auto)78	Ultimate	Simple curvature	0.002	500	LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					LC4 - Sneeuw	1,500
NC_ULS-Set B (auto)79	Ultimate	Simple curvature	0.002	500	LC1 - Self weight	1,202
					LC2 - Permanent	1,202
					LC3 - Veranderlijk	0,900
					LC4 - Sneeuw	1,500
NC_SLS-Quasi 1	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
NC_SLS-Quasi 2	Serviceability	None			LC1 - Self weight	1,000
					LC2 - Permanent	1,000
					LC3 - Veranderlijk	0,600

5.4. Result classes

Name	List
All ULS Linear	ULS-Set B (auto) - EN-ULS (STR/GEO) Set B
	ULS-Set B (auto)1 - Linear - ultimate
	ULS-Set B (auto)2 - Linear - ultimate
	ULS-Set B (auto)3 - Linear - ultimate
	ULS-Set B (auto)4 - Linear - ultimate
	ULS-Set B (auto)5 - Linear - ultimate
	ULS-Set B (auto)6 - Linear - ultimate
	ULS-Set B (auto)7 - Linear - ultimate
	ULS-Set B (auto)8 - Linear - ultimate
	ULS-Set B (auto)9 - Linear - ultimate
	ULS-Set B (auto)10 - Linear - ultimate
	ULS-Set B (auto)11 - Linear - ultimate
	ULS-Set B (auto)12 - Linear - ultimate
	ULS-Set B (auto)13 - Linear - ultimate
	ULS-Set B (auto)14 - Linear - ultimate
	ULS-Set B (auto)15 - Linear - ultimate
	ULS-Set B (auto)16 - Linear - ultimate
	ULS-Set B (auto)17 - Linear - ultimate
	ULS-Set B (auto)18 - Linear - ultimate
	ULS-Set B (auto)19 - Linear - ultimate
	ULS-Set B (auto)20 - Linear - ultimate

Name	List
	ULS-Set B (auto)21 - Linear - ultimate
	ULS-Set B (auto)22 - Linear - ultimate
	ULS-Set B (auto)23 - Linear - ultimate
	ULS-Set B (auto)24 - Linear - ultimate
	ULS-Set B (auto)25 - Linear - ultimate
	ULS-Set B (auto)26 - Linear - ultimate
	ULS-Set B (auto)27 - Linear - ultimate
	ULS-Set B (auto)28 - Linear - ultimate
	ULS-Set B (auto)29 - Linear - ultimate
	ULS-Set B (auto)30 - Linear - ultimate
	ULS-Set B (auto)31 - Linear - ultimate
	ULS-Set B (auto)32 - Linear - ultimate
	ULS-Set B (auto)33 - Linear - ultimate
	ULS-Set B (auto)34 - Linear - ultimate
	ULS-Set B (auto)35 - Linear - ultimate
	ULS-Set B (auto)36 - Linear - ultimate
	ULS-Set B (auto)37 - Linear - ultimate
	ULS-Set B (auto)38 - Linear - ultimate
	ULS-Set B (auto)39 - Linear - ultimate
	ULS-Set B (auto)40 - Linear - ultimate
	ULS-Set B (auto)41 - Linear - ultimate
	ULS-Set B (auto)42 - Linear - ultimate
	ULS-Set B (auto)43 - Linear - ultimate
	ULS-Set B (auto)44 - Linear - ultimate
	ULS-Set B (auto)45 - Linear - ultimate
	ULS-Set B (auto)46 - Linear - ultimate
	ULS-Set B (auto)47 - Linear - ultimate
	ULS-Set B (auto)48 - Linear - ultimate
	ULS-Set B (auto)49 - Linear - ultimate
	ULS-Set B (auto)50 - Linear - ultimate
	ULS-Set B (auto)51 - Linear - ultimate
	ULS-Set B (auto)52 - Linear - ultimate
	ULS-Set B (auto)53 - Linear - ultimate
	ULS-Set B (auto)54 - Linear - ultimate
	ULS-Set B (auto)55 - Linear - ultimate
	ULS-Set B (auto)56 - Linear - ultimate
	ULS-Set B (auto)57 - Linear - ultimate
	ULS-Set B (auto)58 - Linear - ultimate
	ULS-Set B (auto)59 - Linear - ultimate
	ULS-Set B (auto)60 - Linear - ultimate
	ULS-Set B (auto)61 - Linear - ultimate
	ULS-Set B (auto)62 - Linear - ultimate
	ULS-Set B (auto)63 - Linear - ultimate
	ULS-Set B (auto)64 - Linear - ultimate
	ULS-Set B (auto)65 - Linear - ultimate
	ULS-Set B (auto)66 - Linear - ultimate
	ULS-Set B (auto)67 - Linear - ultimate
	ULS-Set B (auto)68 - Linear - ultimate
	ULS-Set B (auto)69 - Linear - ultimate
	ULS-Set B (auto)70 - Linear - ultimate
	ULS-Set B (auto)71 - Linear - ultimate
	ULS-Set B (auto)72 - Linear - ultimate
	ULS-Set B (auto)73 - Linear - ultimate
	ULS-Set B (auto)74 - Linear - ultimate
	ULS-Set B (auto)75 - Linear - ultimate
	ULS-Set B (auto)76 - Linear - ultimate
All SLS Linear	SLS-Char (auto) - EN-SLS Characteristic
	SLS-Char (auto)1 - Linear - serviceability
	SLS-Char (auto)2 - Linear - serviceability
	SLS-Char (auto)3 - Linear - serviceability
	SLS-Char (auto)4 - Linear - serviceability
	SLS-Char (auto)5 - Linear - serviceability
	SLS-Char (auto)6 - Linear - serviceability
	SLS-Char (auto)7 - Linear - serviceability
	SLS-Char (auto)8 - Linear - serviceability
	SLS-Char (auto)9 - Linear - serviceability

Name	List
	SLS-Char (auto)10 - Linear - serviceability
	SLS-Char (auto)11 - Linear - serviceability
	SLS-Char (auto)12 - Linear - serviceability
	SLS-Char (auto)13 - Linear - serviceability
	SLS-Char (auto)14 - Linear - serviceability
	SLS-Char (auto)15 - Linear - serviceability
	SLS-Char (auto)16 - Linear - serviceability
	SLS-Char (auto)17 - Linear - serviceability
	SLS-Char (auto)18 - Linear - serviceability
	SLS-Char (auto)19 - Linear - serviceability
	SLS-Char (auto)20 - Linear - serviceability
	SLS-Char (auto)21 - Linear - serviceability
	SLS-Char (auto)22 - Linear - serviceability
	SLS-Char (auto)23 - Linear - serviceability
	SLS-Char (auto)24 - Linear - serviceability
	SLS-Char (auto)25 - Linear - serviceability
	SLS-Char (auto)26 - Linear - serviceability
	SLS-Char (auto)27 - Linear - serviceability
	SLS-Char (auto)28 - Linear - serviceability
	SLS-Char (auto)29 - Linear - serviceability
	SLS-Char (auto)30 - Linear - serviceability
	SLS-Char (auto)31 - Linear - serviceability
	SLS-Char (auto)32 - Linear - serviceability
	SLS-Char (auto)33 - Linear - serviceability
	SLS-Char (auto)34 - Linear - serviceability
	SLS-Char (auto)35 - Linear - serviceability
	SLS-Char (auto)36 - Linear - serviceability
	SLS-Char (auto)37 - Linear - serviceability
ULS Non Linear	NC_ULS-Set B (auto)1
	NC_ULS-Set B (auto)2
	NC_ULS-Set B (auto)3
	NC_ULS-Set B (auto)4
	NC_ULS-Set B (auto)5
	NC_ULS-Set B (auto)6
	NC_ULS-Set B (auto)7
	NC_ULS-Set B (auto)8
	NC_ULS-Set B (auto)9
	NC_ULS-Set B (auto)10
	NC_ULS-Set B (auto)11
	NC_ULS-Set B (auto)12
	NC_ULS-Set B (auto)13
	NC_ULS-Set B (auto)14
	NC_ULS-Set B (auto)15
	NC_ULS-Set B (auto)16
	NC_ULS-Set B (auto)17
	NC_ULS-Set B (auto)18
	NC_ULS-Set B (auto)19
	NC_ULS-Set B (auto)20
	NC_ULS-Set B (auto)21
	NC_ULS-Set B (auto)22
	NC_ULS-Set B (auto)23
	NC_ULS-Set B (auto)24
	NC_ULS-Set B (auto)25
	NC_ULS-Set B (auto)26
	NC_ULS-Set B (auto)27
	NC_ULS-Set B (auto)28
	NC_ULS-Set B (auto)29
	NC_ULS-Set B (auto)30
	NC_ULS-Set B (auto)31
	NC_ULS-Set B (auto)32
	NC_ULS-Set B (auto)33
	NC_ULS-Set B (auto)34
	NC_ULS-Set B (auto)35
	NC_ULS-Set B (auto)36
	NC_ULS-Set B (auto)37
	NC_ULS-Set B (auto)38

Name	List
	NC_ULS-Set B (auto)39
	NC_ULS-Set B (auto)40
	NC_ULS-Set B (auto)41
	NC_ULS-Set B (auto)42
	NC_ULS-Set B (auto)43
	NC_ULS-Set B (auto)44
	NC_ULS-Set B (auto)45
	NC_ULS-Set B (auto)46
	NC_ULS-Set B (auto)47
	NC_ULS-Set B (auto)48
	NC_ULS-Set B (auto)49
	NC_ULS-Set B (auto)50
	NC_ULS-Set B (auto)51
	NC_ULS-Set B (auto)52
	NC_ULS-Set B (auto)53
	NC_ULS-Set B (auto)54
	NC_ULS-Set B (auto)55
	NC_ULS-Set B (auto)56
	NC_ULS-Set B (auto)57
	NC_ULS-Set B (auto)58
	NC_ULS-Set B (auto)59
	NC_ULS-Set B (auto)60
	NC_ULS-Set B (auto)61
	NC_ULS-Set B (auto)62
	NC_ULS-Set B (auto)63
	NC_ULS-Set B (auto)64
	NC_ULS-Set B (auto)65
	NC_ULS-Set B (auto)66
	NC_ULS-Set B (auto)67
	NC_ULS-Set B (auto)68
	NC_ULS-Set B (auto)69
	NC_ULS-Set B (auto)70
	NC_ULS-Set B (auto)71
	NC_ULS-Set B (auto)72
	NC_ULS-Set B (auto)73
	NC_ULS-Set B (auto)74
	NC_ULS-Set B (auto)75
	NC_ULS-Set B (auto)76
	NC_ULS-Set B (auto)77
	NC_ULS-Set B (auto)78
	NC_ULS-Set B (auto)79
SLS Non Linear	LC 1-2
	LC 3
	LC 4
	3DWind1
	3DWind2
	3DWind3
	3DWind4
	3DWind5
	3DWind6
	3DWind7
	3DWind8
	3DWind9
	3DWind10
	3DWind11
	3DWind12
	3DWind13
	3DWind14
	3DWind15
	3DWind16
	NC_SLS-Char (auto)1
	NC_SLS-Char (auto)2
	NC_SLS-Char (auto)3
	NC_SLS-Char (auto)4
	NC_SLS-Char (auto)5
	NC_SLS-Char (auto)6

Name	List
	NC_SLS-Char (auto)7
	NC_SLS-Char (auto)8
	NC_SLS-Char (auto)9
	NC_SLS-Char (auto)10
	NC_SLS-Char (auto)11
	NC_SLS-Char (auto)12
	NC_SLS-Char (auto)13
	NC_SLS-Char (auto)14
	NC_SLS-Char (auto)15
	NC_SLS-Char (auto)16
	NC_SLS-Char (auto)17
	NC_SLS-Char (auto)18
	NC_SLS-Char (auto)19
	NC_SLS-Char (auto)20
	NC_SLS-Char (auto)21
	NC_SLS-Char (auto)22
	NC_SLS-Char (auto)23
	NC_SLS-Char (auto)24
	NC_SLS-Char (auto)25
	NC_SLS-Char (auto)26
	NC_SLS-Char (auto)27
	NC_SLS-Char (auto)28
	NC_SLS-Char (auto)29
	NC_SLS-Char (auto)30
	NC_SLS-Char (auto)31
	NC_SLS-Char (auto)32
	NC_SLS-Char (auto)33
	NC_SLS-Char (auto)34
	NC_SLS-Char (auto)35
	NC_SLS-Char (auto)36
	NC_SLS-Char (auto)37
	NC_SLS-Quasi 1
	NC_SLS-Quasi 2
3DWind - 0	3DWind1
	3DWind2
	3DWind3
	3DWind4
3DWind - 90	3DWind5
	3DWind6
	3DWind7
	3DWind8
3DWind - 180	3DWind9
	3DWind10
	3DWind11
	3DWind12
3DWind - 270	3DWind13
	3DWind14
	3DWind15
	3DWind16
All ULS+SLS	ULS-Set B (auto) - EN-ULS (STR/GEO) Set B
	ULS-Set B (auto)1 - Linear - ultimate
	ULS-Set B (auto)2 - Linear - ultimate
	ULS-Set B (auto)3 - Linear - ultimate
	ULS-Set B (auto)4 - Linear - ultimate
	ULS-Set B (auto)5 - Linear - ultimate
	ULS-Set B (auto)6 - Linear - ultimate
	ULS-Set B (auto)7 - Linear - ultimate
	ULS-Set B (auto)8 - Linear - ultimate
	ULS-Set B (auto)9 - Linear - ultimate
	ULS-Set B (auto)10 - Linear - ultimate
	ULS-Set B (auto)11 - Linear - ultimate
	ULS-Set B (auto)12 - Linear - ultimate
	ULS-Set B (auto)13 - Linear - ultimate
	ULS-Set B (auto)14 - Linear - ultimate
	ULS-Set B (auto)15 - Linear - ultimate
	ULS-Set B (auto)16 - Linear - ultimate

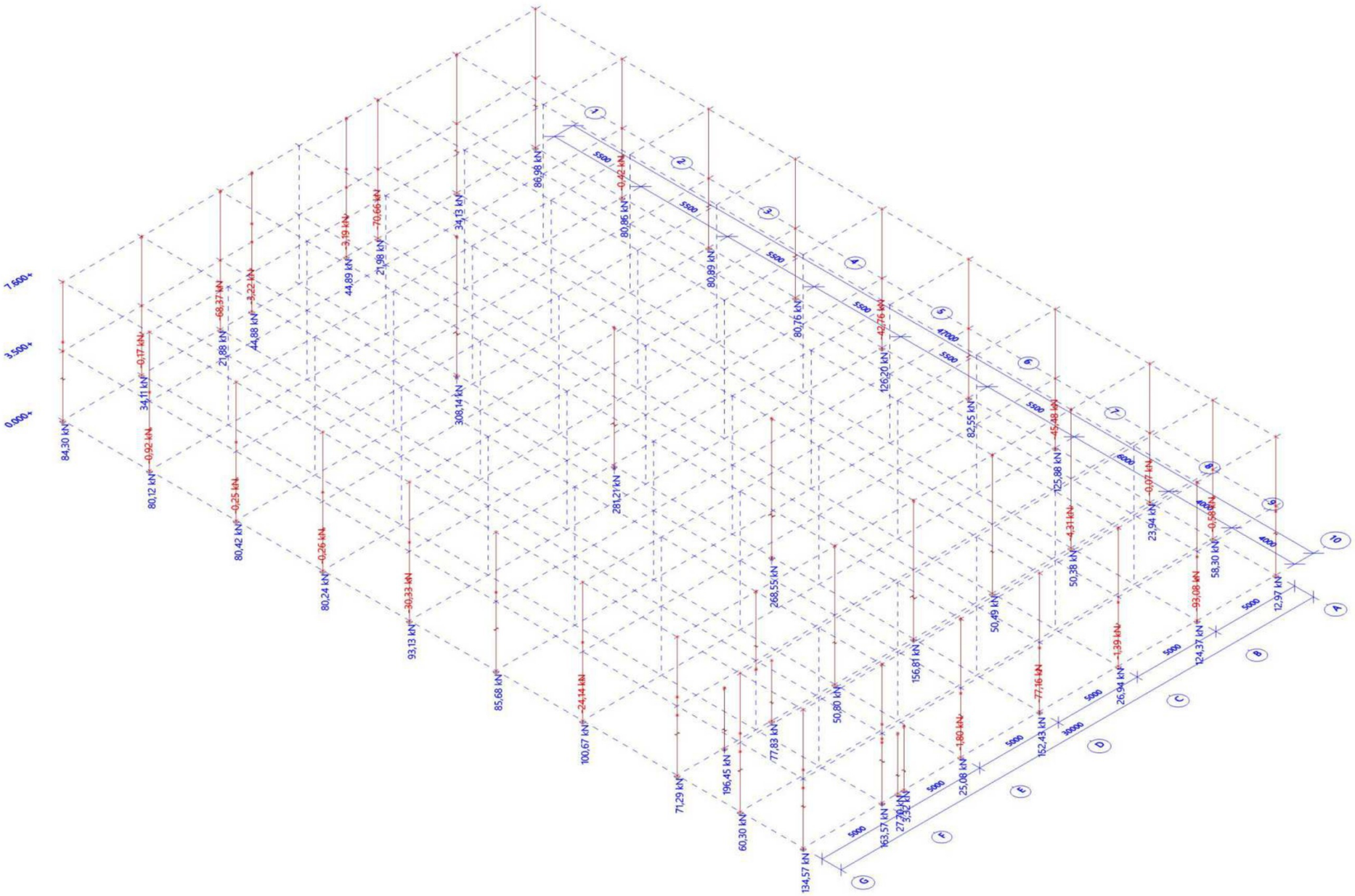
Name	List
	ULS-Set B (auto)17 - Linear - ultimate
	ULS-Set B (auto)18 - Linear - ultimate
	ULS-Set B (auto)19 - Linear - ultimate
	ULS-Set B (auto)20 - Linear - ultimate
	ULS-Set B (auto)21 - Linear - ultimate
	ULS-Set B (auto)22 - Linear - ultimate
	ULS-Set B (auto)23 - Linear - ultimate
	ULS-Set B (auto)24 - Linear - ultimate
	ULS-Set B (auto)25 - Linear - ultimate
	ULS-Set B (auto)26 - Linear - ultimate
	ULS-Set B (auto)27 - Linear - ultimate
	ULS-Set B (auto)28 - Linear - ultimate
	ULS-Set B (auto)29 - Linear - ultimate
	ULS-Set B (auto)30 - Linear - ultimate
	ULS-Set B (auto)31 - Linear - ultimate
	ULS-Set B (auto)32 - Linear - ultimate
	ULS-Set B (auto)33 - Linear - ultimate
	ULS-Set B (auto)34 - Linear - ultimate
	ULS-Set B (auto)35 - Linear - ultimate
	ULS-Set B (auto)36 - Linear - ultimate
	ULS-Set B (auto)37 - Linear - ultimate
	ULS-Set B (auto)38 - Linear - ultimate
	ULS-Set B (auto)39 - Linear - ultimate
	ULS-Set B (auto)40 - Linear - ultimate
	ULS-Set B (auto)41 - Linear - ultimate
	ULS-Set B (auto)42 - Linear - ultimate
	ULS-Set B (auto)43 - Linear - ultimate
	ULS-Set B (auto)44 - Linear - ultimate
	ULS-Set B (auto)45 - Linear - ultimate
	ULS-Set B (auto)46 - Linear - ultimate
	ULS-Set B (auto)47 - Linear - ultimate
	ULS-Set B (auto)48 - Linear - ultimate
	ULS-Set B (auto)49 - Linear - ultimate
	ULS-Set B (auto)50 - Linear - ultimate
	ULS-Set B (auto)51 - Linear - ultimate
	ULS-Set B (auto)52 - Linear - ultimate
	ULS-Set B (auto)53 - Linear - ultimate
	ULS-Set B (auto)54 - Linear - ultimate
	ULS-Set B (auto)55 - Linear - ultimate
	ULS-Set B (auto)56 - Linear - ultimate
	ULS-Set B (auto)57 - Linear - ultimate
	ULS-Set B (auto)58 - Linear - ultimate
	ULS-Set B (auto)59 - Linear - ultimate
	ULS-Set B (auto)60 - Linear - ultimate
	ULS-Set B (auto)61 - Linear - ultimate
	ULS-Set B (auto)62 - Linear - ultimate
	ULS-Set B (auto)63 - Linear - ultimate
	ULS-Set B (auto)64 - Linear - ultimate
	ULS-Set B (auto)65 - Linear - ultimate
	ULS-Set B (auto)66 - Linear - ultimate
	ULS-Set B (auto)67 - Linear - ultimate
	ULS-Set B (auto)68 - Linear - ultimate
	ULS-Set B (auto)69 - Linear - ultimate
	ULS-Set B (auto)70 - Linear - ultimate
	ULS-Set B (auto)71 - Linear - ultimate
	ULS-Set B (auto)72 - Linear - ultimate
	ULS-Set B (auto)73 - Linear - ultimate
	ULS-Set B (auto)74 - Linear - ultimate
	ULS-Set B (auto)75 - Linear - ultimate
	ULS-Set B (auto)76 - Linear - ultimate
	SLS-Char (auto) - EN-SLS Characteristic
	SLS-Char (auto)1 - Linear - serviceability
	SLS-Char (auto)2 - Linear - serviceability
	SLS-Char (auto)3 - Linear - serviceability
	SLS-Char (auto)4 - Linear - serviceability
	SLS-Char (auto)5 - Linear - serviceability

Name	List
	SLS-Char (auto)6 - Linear - serviceability
	SLS-Char (auto)7 - Linear - serviceability
	SLS-Char (auto)8 - Linear - serviceability
	SLS-Char (auto)9 - Linear - serviceability
	SLS-Char (auto)10 - Linear - serviceability
	SLS-Char (auto)11 - Linear - serviceability
	SLS-Char (auto)12 - Linear - serviceability
	SLS-Char (auto)13 - Linear - serviceability
	SLS-Char (auto)14 - Linear - serviceability
	SLS-Char (auto)15 - Linear - serviceability
	SLS-Char (auto)16 - Linear - serviceability
	SLS-Char (auto)17 - Linear - serviceability
	SLS-Char (auto)18 - Linear - serviceability
	SLS-Char (auto)19 - Linear - serviceability
	SLS-Char (auto)20 - Linear - serviceability
	SLS-Char (auto)21 - Linear - serviceability
	SLS-Char (auto)22 - Linear - serviceability
	SLS-Char (auto)23 - Linear - serviceability
	SLS-Char (auto)24 - Linear - serviceability
	SLS-Char (auto)25 - Linear - serviceability
	SLS-Char (auto)26 - Linear - serviceability
	SLS-Char (auto)27 - Linear - serviceability
	SLS-Char (auto)28 - Linear - serviceability
	SLS-Char (auto)29 - Linear - serviceability
	SLS-Char (auto)30 - Linear - serviceability
	SLS-Char (auto)31 - Linear - serviceability
	SLS-Char (auto)32 - Linear - serviceability
	SLS-Char (auto)33 - Linear - serviceability
	SLS-Char (auto)34 - Linear - serviceability
	SLS-Char (auto)35 - Linear - serviceability
	SLS-Char (auto)36 - Linear - serviceability
	SLS-Char (auto)37 - Linear - serviceability

6. Krachten voetplaten UGT

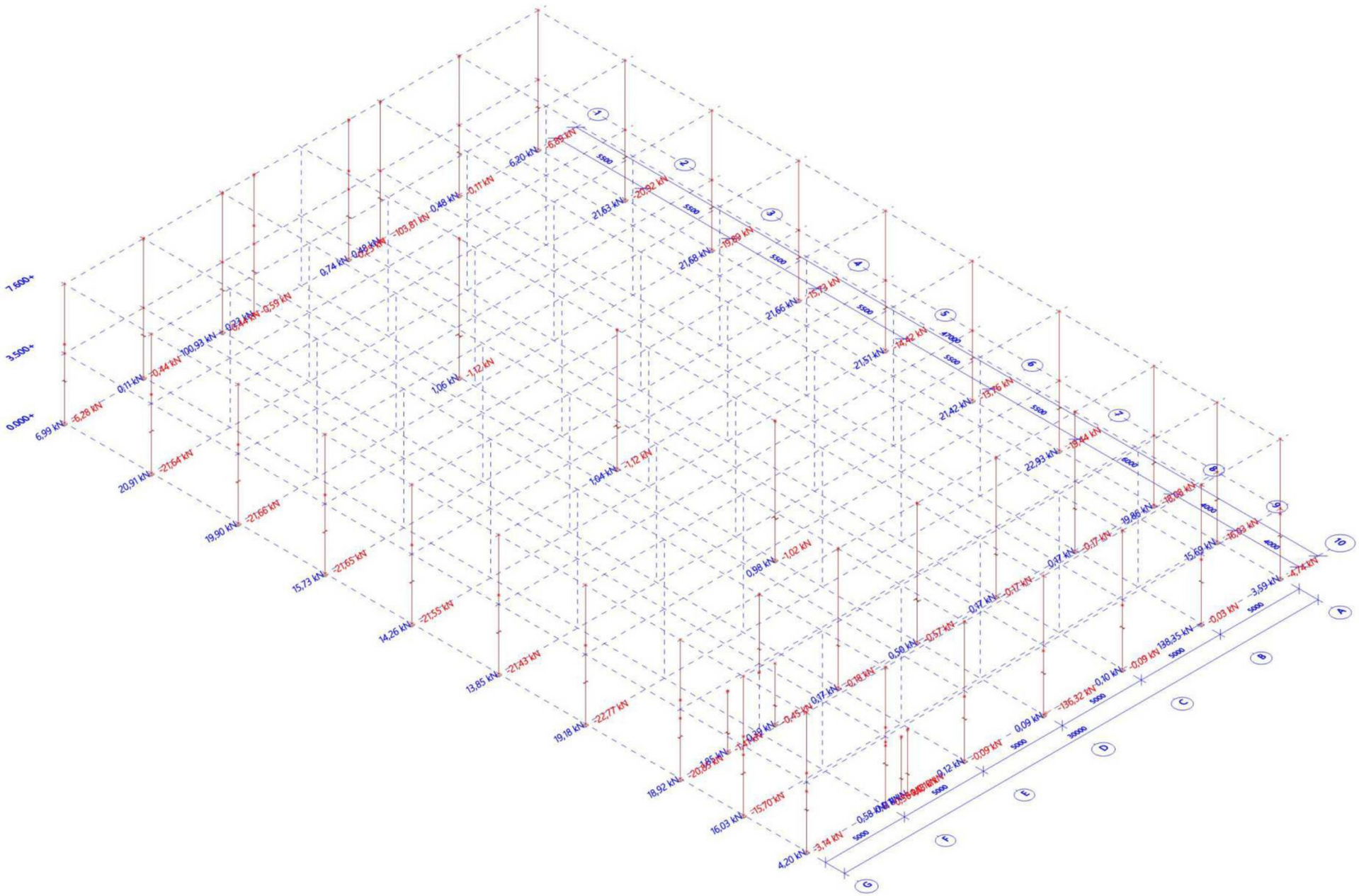
6.1. Reactions; R_z

Values: R_z
Nonlinear calculation
Class: ULS Non Linear
System: Global
Extreme: Member
Selection: All


7.500
3.500
0.000
5500
5500
5500
5500
47000
5500
6000
4000
5000
5000
5

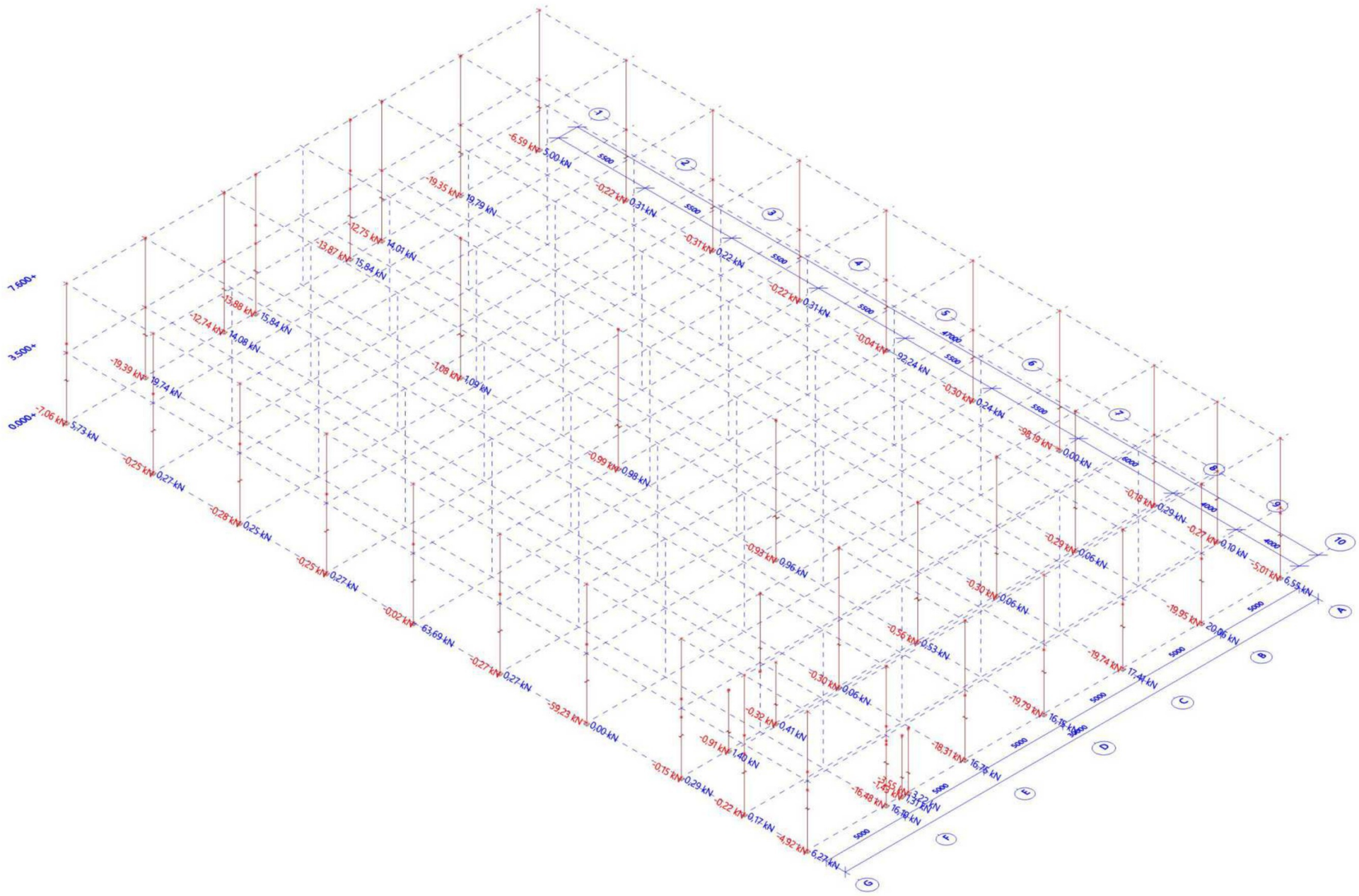
6.2. Reactions; R_x

Values: R_x
Nonlinear calculation
Class: ULS Non Linear
System: Global
Extreme: Member
Selection: All

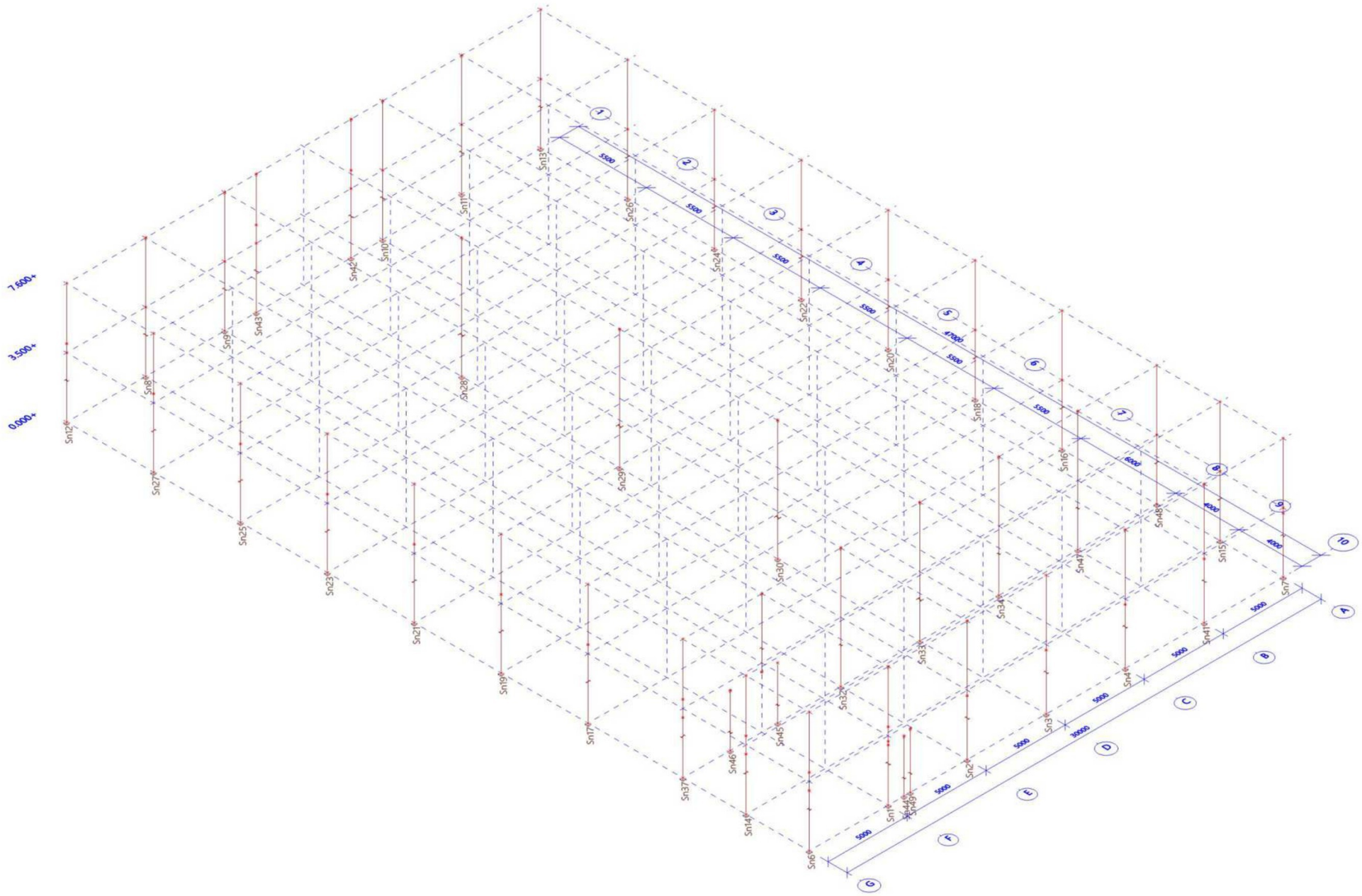


6.3. Reactions; R_y

Values: R_y
Nonlinear calculation
Class: ULS Non Linear
System: Global
Extreme: Member
Selection: All



6.4. Support labels



6.5. Reactions

Nonlinear calculation
Class: ULS Non Linear
System: Global
Extreme: Member
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn1/N1	NC_ULS-Set B (auto)10	**0,58**	0,09	144,31	**0,00**	**0,00**	0,00	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)34	-0,05	**-16,48**	124,72	0,00	0,00	3,45	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)29	0,06	**16,10**	124,16	0,00	0,00	-3,78	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)51	-0,01	-8,88	**53,35**	0,00	0,00	1,88	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)6	-0,07	0,06	**163,57**	0,00	0,00	0,00	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)77	**-0,36**	0,09	144,37	0,00	**0,00**	0,00	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)45	-0,02	15,96	57,95	0,00	0,00	**-3,78**	0,0	0,0
Sn1/N1	NC_ULS-Set B (auto)52	-0,01	-16,25	58,66	0,00	0,00	**3,45**	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)39	**0,12**	11,75	11,21	**0,00**	**0,00**	1,18	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)66	0,05	**-18,31**	3,57	0,00	0,00	-1,85	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)29	-0,02	**16,75**	15,05	0,00	0,00	1,68	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)49	0,05	-10,03	**-1,80**	0,00	0,00	-1,01	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)79	-0,01	0,16	**25,08**	0,00	0,00	0,00	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)77	**-0,09**	0,23	25,08	0,00	**0,00**	0,00	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)52	0,04	-18,30	3,57	0,00	0,00	**-1,85**	0,0	0,0
Sn2/N3	NC_ULS-Set B (auto)45	-0,04	16,72	11,08	0,00	0,00	**1,68**	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)78	**0,09**	0,25	61,34	**0,00**	**0,00**	0,00	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)50	0,01	**-19,79**	21,41	0,00	0,00	0,00	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)29	-133,78	**16,15**	-59,21	0,00	0,00	-1,04	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)63	-132,07	16,13	**-77,16**	0,00	0,00	-1,04	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)38	-0,16	6,66	**152,43**	0,00	0,00	1,04	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)30	**-136,32**	6,80	-47,07	0,00	**0,00**	-1,04	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)31	-133,07	16,14	-68,71	0,00	0,00	**-1,04**	0,0	0,0
Sn3/N5	NC_ULS-Set B (auto)72	-0,13	6,63	131,86	0,00	0,00	**1,04**	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)52	0,00	**-19,74**	3,64	0,00	0,00	0,00	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)21	0,09	**17,41**	9,34	**0,00**	**0,00**	0,00	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)65	0,00	-10,82	**-1,39**	0,00	0,00	0,00	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)10	**0,10**	0,23	**26,94**	0,00	0,00	0,00	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)63	**-0,09**	12,15	1,33	0,00	**0,00**	0,00	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)48	-0,08	3,50	7,02	0,00	0,00	**0,00**	0,0	0,0
Sn4/N7	NC_ULS-Set B (auto)24	0,09	8,77	10,13	0,00	0,00	**0,00**	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)65	**4,20**	-2,62	84,84	**0,00**	**0,00**	-4,90	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)50	2,70	**-4,92**	51,05	0,00	0,00	-5,49	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)49	4,19	-2,64	**48,83**	0,00	0,00	-4,90	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)6	0,04	0,03	**134,57**	0,00	0,00	0,00	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)48	**-3,14**	3,96	51,54	0,00	**0,00**	5,07	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)34	2,71	-4,89	105,92	0,00	0,00	**-5,49**	0,0	0,0
Sn6/N11	NC_ULS-Set B (auto)29	-1,55	**6,27**	104,30	0,00	0,00	**5,66**	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)72	**3,59**	4,24	3,20	**0,00**	**0,00**	-5,59	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)52	-3,06	**-5,01**	2,23	0,00	0,00	6,00	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)37	1,91	**6,55**	3,58	0,00	0,00	-6,13	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)65	-4,73	-2,71	**0,01**	0,00	0,00	5,46	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)77	-0,05	0,03	**12,97**	0,00	0,00	0,00	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)35	**-4,74**	-2,70	2,54	0,00	**0,00**	5,46	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)21	1,91	6,55	3,58	0,00	0,00	**-6,13**	0,0	0,0
Sn7/N13	NC_ULS-Set B (auto)18	-3,07	-5,00	4,76	0,00	0,00	**6,00**	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)10	**0,11**	-0,15	33,49	**0,00**	**0,00**	0,00	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)13	-0,41	**-19,39**	5,51	0,00	0,00	0,74	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)58	0,02	**19,74**	8,86	0,00	0,00	0,01	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)47	-0,42	-19,36	**-0,17**	0,00	0,00	0,74	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)38	0,04	-3,57	**34,11**	0,00	0,00	0,00	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)62	**-0,44**	-10,38	5,05	0,00	**0,00**	0,74	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)33	0,05	-12,64	23,50	0,00	0,00	**0,00**	0,0	0,0
Sn8/N15	NC_ULS-Set B (auto)64	-0,44	-10,37	4,48	0,00	0,00	**0,74**	0,0	0,0
Sn9/N17	NC_ULS-Set B (auto)38	**100,93**	-2,78	-58,18	**0,00**	**0,00**	0,63	0,0	0,0
Sn9/N17	NC_ULS-Set B (auto)29	-0,41	**-12,74**	12,67	0,00	0,00	3,18	0,0	0,0
Sn9/N17	NC_ULS-Set B (auto)71	98,47	-9,31	**-68,37**	0,00	0,00	2,22	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn9/N17	NC_ULS-Set B (auto)78	-0,05	-0,08	**21,88**	0,00	0,00	0,00	0,0	0,0
Sn9/N17	NC_ULS-Set B (auto)32	**-0,44**	-6,42	14,02	0,00	**0,00**	1,59	0,0	0,0
Sn9/N17	NC_ULS-Set B (auto)74	15,26	**14,08**	-7,54	0,00	0,00	**-3,50**	0,0	0,0
Sn9/N17	NC_ULS-Set B (auto)47	-0,42	-12,70	5,74	0,00	0,00	**3,18**	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)40	**0,48**	-6,42	14,02	**0,00**	**0,00**	-1,59	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)37	0,44	**-12,75**	12,70	0,00	0,00	-3,18	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)63	-101,61	-9,30	**-70,66**	0,00	0,00	-2,23	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)9	0,03	-0,15	**21,98**	0,00	0,00	0,00	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)30	**-103,81**	-2,77	-60,29	0,00	**0,00**	-0,64	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)71	0,45	-12,71	5,75	0,00	0,00	**-3,18**	0,0	0,0
Sn10/N21	NC_ULS-Set B (auto)58	-5,92	**14,01**	-0,47	0,00	0,00	**3,50**	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)70	**0,48**	-10,38	6,18	**0,00**	**0,00**	-0,74	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)21	0,43	**-19,35**	6,35	0,00	0,00	-0,74	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)74	-0,04	**19,79**	7,21	0,00	0,00	0,00	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)55	0,44	-19,32	**0,67**	0,00	0,00	-0,74	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)30	-0,04	-3,57	**34,13**	0,00	0,00	0,00	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)77	**-0,11**	-0,14	33,50	0,00	**0,00**	0,00	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)72	0,47	-10,37	5,62	0,00	0,00	**-0,74**	0,0	0,0
Sn11/N23	NC_ULS-Set B (auto)33	-0,02	-12,52	25,84	0,00	0,00	**0,00**	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)13	-3,67	**-7,06**	3,70	0,00	0,00	-8,18	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)74	4,40	**5,73**	8,57	**0,00**	**0,00**	8,36	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)61	-3,68	-7,05	**0,84**	0,00	0,00	-8,18	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)38	0,96	-1,10	**84,30**	0,00	0,00	0,27	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)62	**-6,28**	-4,47	6,58	0,00	**0,00**	-8,86	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)14	-6,27	-4,48	9,44	0,00	0,00	**-8,86**	0,0	0,0
Sn12/N25	NC_ULS-Set B (auto)41	**6,99**	3,15	8,66	0,00	0,00	**9,04**	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)70	**6,20**	-4,28	6,61	**0,00**	**0,00**	8,20	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)37	3,61	**-6,59**	3,88	0,00	0,00	7,81	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)60	-4,36	**5,00**	3,51	0,00	0,00	-7,87	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)71	3,62	-6,57	**0,52**	0,00	0,00	7,81	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)30	-0,93	-0,93	**86,98**	0,00	0,00	-0,16	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)75	**-6,89**	2,72	0,83	0,00	**0,00**	-8,26	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)25	-6,89	2,70	3,85	0,00	0,00	**-8,26**	0,0	0,0
Sn13/N27	NC_ULS-Set B (auto)38	6,19	-4,29	9,86	0,00	0,00	**8,20**	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)33	**16,03**	-0,13	10,76	**0,00**	**0,00**	0,63	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)79	0,33	**-0,22**	60,24	0,00	0,00	0,00	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)75	10,05	**0,17**	15,58	0,00	0,00	-0,01	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)47	-8,68	0,14	**0,92**	0,00	0,00	0,01	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)77	0,13	-0,04	**60,30**	0,00	0,00	0,00	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)64	**-15,70**	0,08	14,40	0,00	**0,00**	0,01	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)37	10,07	0,11	35,19	0,00	0,00	**-0,01**	0,0	0,0
Sn14/N29	NC_ULS-Set B (auto)52	8,93	-0,18	15,58	0,00	0,00	**0,63**	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)72	**15,69**	0,02	12,58	**0,00**	**0,00**	-0,01	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)79	-0,34	**-0,27**	**58,30**	0,00	0,00	0,00	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)78	-0,34	**0,10**	58,24	0,00	0,00	0,00	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)71	8,66	0,01	**-0,58**	0,00	0,00	-0,01	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)19	**-16,03**	-0,08	8,65	0,00	**0,00**	-0,73	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)68	-8,91	-0,07	13,98	0,00	0,00	**-0,73**	0,0	0,0
Sn15/N31	NC_ULS-Set B (auto)29	-10,11	0,01	32,96	0,00	0,00	**0,01**	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)34	-8,92	**-98,19**	2,85	0,00	0,00	-1,52	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)63	-14,44	**0,00**	37,04	**0,00**	**0,00**	-0,61	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)67	-19,32	-96,11	**-45,48**	0,00	0,00	-1,96	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)42	-4,28	-0,12	**125,88**	0,00	0,00	-0,17	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)33	**-19,44**	-97,30	-17,29	0,00	**0,00**	-1,96	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)51	-19,32	-95,92	-45,35	0,00	0,00	**-1,96**	0,0	0,0
Sn16/N33	NC_ULS-Set B (auto)72	**22,93**	-28,59	2,43	0,00	0,00	**0,96**	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)33	**19,18**	-57,88	4,04	**0,00**	**0,00**	2,17	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)34	8,80	**-59,23**	23,58	0,00	0,00	1,70	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)75	14,47	**0,00**	50,60	0,00	0,00	0,66	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)67	19,10	-57,12	**-24,14**	0,00	0,00	2,17	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)42	4,37	-0,07	**100,67**	0,00	0,00	0,19	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)64	**-22,77**	-23,24	3,46	0,00	**0,00**	-1,03	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)32	-22,68	-23,16	15,90	0,00	0,00	**-1,03**	0,0	0,0
Sn17/N34	NC_ULS-Set B (auto)35	19,13	-57,58	-12,13	0,00	0,00	**2,17**	0,0	0,0
Sn18/N37	NC_ULS-Set B (auto)72	**21,42**	-0,01	20,87	**0,00**	**0,00**	0,00	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn18/N37	NC_ULS-Set B (auto)79	-0,39	**-0,30**	**82,55**	0,00	0,00	0,00	0,0	0,0
Sn18/N37	NC_ULS-Set B (auto)78	-0,40	**0,24**	82,42	0,00	0,00	0,00	0,0	0,0
Sn18/N37	NC_ULS-Set B (auto)55	11,82	-0,02	**1,43**	0,00	0,00	0,00	0,0	0,0
Sn18/N37	NC_ULS-Set B (auto)47	**-13,76**	0,02	19,73	0,00	**0,00**	0,00	0,0	0,0
Sn18/N37	NC_ULS-Set B (auto)51	-13,65	-0,05	28,03	0,00	0,00	**-0,05**	0,0	0,0
Sn18/N37	NC_ULS-Set B (auto)77	-0,68	-0,03	82,31	0,00	0,00	**0,00**	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)17	**13,85**	0,01	64,87	**0,00**	**0,00**	0,06	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)79	0,35	**-0,27**	82,95	0,00	0,00	0,00	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)78	0,35	**0,27**	83,07	0,00	0,00	0,00	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)63	-11,82	-0,01	**3,86**	0,00	0,00	0,00	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)34	4,20	0,03	**85,68**	0,00	0,00	0,06	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)64	**-21,43**	-0,01	24,29	0,00	**0,00**	0,00	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)10	0,63	0,00	81,59	0,00	0,00	**0,00**	0,0	0,0
Sn19/N38	NC_ULS-Set B (auto)33	13,85	0,01	65,07	0,00	0,00	**0,06**	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)77	-0,62	**-0,04**	81,77	0,00	0,00	0,00	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)42	-4,38	**92,24**	2,81	**0,00**	**0,00**	0,00	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)75	-14,28	90,01	**-42,76**	0,00	0,00	0,00	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)34	-4,26	0,12	**126,20**	0,00	0,00	0,00	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)41	**-14,42**	91,15	-16,11	0,00	**0,00**	0,00	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)56	**21,51**	-0,01	40,02	0,00	0,00	**-0,01**	0,0	0,0
Sn20/N41	NC_ULS-Set B (auto)25	-14,42	91,04	-16,03	0,00	0,00	**0,00**	0,0	0,0
Sn21/N42	NC_ULS-Set B (auto)47	-11,87	**-0,02**	14,33	0,00	0,00	0,00	0,0	0,0
Sn21/N42	NC_ULS-Set B (auto)75	14,12	63,00	**-30,33**	0,00	0,00	0,00	0,0	0,0
Sn21/N42	NC_ULS-Set B (auto)34	4,21	0,04	**93,13**	**0,00**	**0,00**	0,00	0,0	0,0
Sn21/N42	NC_ULS-Set B (auto)64	**-21,55**	-0,01	34,22	0,00	**0,00**	0,01	0,0	0,0
Sn21/N42	NC_ULS-Set B (auto)41	**14,26**	**63,69**	-3,52	0,00	0,00	**0,00**	0,0	0,0
Sn21/N42	NC_ULS-Set B (auto)48	-21,55	-0,01	34,28	0,00	0,00	**0,01**	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)56	**21,66**	-0,03	19,88	**0,00**	**0,00**	0,00	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)79	-0,35	**-0,22**	80,73	0,00	0,00	0,00	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)78	-0,35	**0,31**	80,73	0,00	0,00	0,00	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)55	11,95	-0,04	**0,12**	0,00	0,00	0,00	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)10	-0,08	0,04	**80,76**	0,00	0,00	0,00	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)41	**-15,73**	0,01	46,22	0,00	**0,00**	1,05	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)77	-0,63	0,05	80,75	0,00	0,00	**0,00**	0,0	0,0
Sn22/N45	NC_ULS-Set B (auto)42	-5,93	-0,02	65,99	0,00	0,00	**1,05**	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)25	**15,73**	0,01	45,61	**0,00**	**0,00**	-1,19	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)79	0,35	**-0,25**	80,23	0,00	0,00	0,00	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)78	0,35	**0,27**	80,23	0,00	0,00	0,00	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)63	-11,95	-0,02	**-0,26**	0,00	0,00	0,00	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)9	0,36	0,00	**80,24**	0,00	0,00	0,00	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)48	**-21,65**	-0,02	19,46	0,00	**0,00**	0,00	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)26	5,93	-0,01	65,32	0,00	0,00	**-1,19**	0,0	0,0
Sn23/N46	NC_ULS-Set B (auto)10	0,62	0,01	80,23	0,00	0,00	**0,00**	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)72	**21,68**	-0,05	19,71	**0,00**	**0,00**	0,00	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)79	-0,35	**-0,31**	80,89	0,00	0,00	0,00	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)78	-0,35	**0,22**	80,89	0,00	0,00	0,00	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)71	11,95	-0,06	**0,08**	0,00	0,00	0,00	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)9	-0,36	0,00	**80,89**	0,00	0,00	0,00	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)25	**-19,89**	0,02	45,92	0,00	**0,00**	0,06	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)30	-4,02	0,00	65,75	0,00	0,00	**0,00**	0,0	0,0
Sn24/N49	NC_ULS-Set B (auto)28	-10,00	0,01	50,01	0,00	0,00	**0,06**	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)41	**19,90**	0,02	45,56	**0,00**	**0,00**	-0,07	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)79	0,35	**-0,28**	80,41	0,00	0,00	0,00	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)78	0,35	**0,25**	80,41	0,00	0,00	0,00	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)63	-11,94	-0,03	**-0,25**	0,00	0,00	0,00	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)9	0,35	0,00	**80,42**	0,00	0,00	0,00	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)64	**-21,66**	-0,02	19,52	0,00	**0,00**	0,00	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)43	19,82	0,04	29,81	0,00	0,00	**-0,07**	0,0	0,0
Sn25/N50	NC_ULS-Set B (auto)77	0,08	-0,01	80,41	0,00	0,00	**0,00**	0,0	0,0
Sn26/N53	NC_ULS-Set B (auto)56	**21,63**	-0,06	18,69	**0,00**	**0,00**	0,01	0,0	0,0
Sn26/N53	NC_ULS-Set B (auto)79	-0,36	**-0,22**	**80,86**	0,00	0,00	0,00	0,0	0,0
Sn26/N53	NC_ULS-Set B (auto)78	-0,35	**0,31**	80,85	0,00	0,00	0,00	0,0	0,0
Sn26/N53	NC_ULS-Set B (auto)71	11,96	-0,07	**-0,42**	0,00	0,00	0,01	0,0	0,0
Sn26/N53	NC_ULS-Set B (auto)41	**-20,92**	0,07	15,33	0,00	**0,00**	0,71	0,0	0,0
Sn26/N53	NC_ULS-Set B (auto)29	-13,83	0,01	45,97	0,00	0,00	**-0,01**	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn26/N53	NC_ULS-Set B (auto)60	-11,13	0,07	21,37	0,00	0,00	**0,72**	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)25	**20,91**	0,06	14,49	**0,00**	**0,00**	-0,81	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)79	0,35	**-0,25**	**80,12**	0,00	0,00	0,00	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)78	0,36	**0,27**	80,10	0,00	0,00	0,00	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)47	-11,93	-0,03	**-0,92**	0,00	0,00	-0,01	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)48	**-21,64**	-0,02	18,59	0,00	**0,00**	-0,01	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)76	11,07	0,05	20,81	0,00	0,00	**-0,82**	0,0	0,0
Sn27/N54	NC_ULS-Set B (auto)37	13,88	0,00	45,52	0,00	0,00	**0,01**	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)10	**1,06**	-0,02	308,07	**0,00**	**0,00**	0,00	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)79	-0,03	**-1,08**	**308,14**	0,00	0,00	0,00	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)78	-0,02	**1,09**	308,12	0,00	0,00	0,00	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)75	0,00	-0,07	**38,26**	0,00	0,00	0,00	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)77	**-1,12**	0,03	308,11	0,00	**0,00**	0,00	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)48	0,56	-0,10	132,65	0,00	0,00	**-0,01**	0,0	0,0
Sn28/N57	NC_ULS-Set B (auto)56	-0,61	0,12	133,15	0,00	0,00	**0,00**	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)30	**1,04**	-0,18	209,80	**0,00**	**0,00**	0,00	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)79	-0,01	**-0,99**	281,16	0,00	0,00	0,00	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)78	-0,02	**0,98**	281,17	0,00	0,00	0,00	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)63	0,22	-0,03	**50,31**	0,00	0,00	0,00	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)77	-1,03	0,01	**281,21**	0,00	0,00	0,00	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)38	**-1,12**	0,17	210,55	0,00	**0,00**	0,00	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)57	0,03	-0,27	127,81	0,00	0,00	**0,00**	0,0	0,0
Sn29/N59	NC_ULS-Set B (auto)72	-0,62	0,09	121,64	0,00	0,00	**0,00**	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)30	**0,98**	-0,14	201,32	**0,00**	**0,00**	0,01	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)79	0,00	**-0,93**	**268,55**	0,00	0,00	0,00	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)78	-0,03	**0,96**	268,53	0,00	0,00	0,00	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)71	-0,22	0,03	**48,86**	0,00	0,00	-0,01	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)38	**-1,02**	0,18	200,89	0,00	**0,00**	-0,01	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)21	-0,65	0,11	133,47	0,00	0,00	**-0,01**	0,0	0,0
Sn30/N61	NC_ULS-Set B (auto)13	0,63	-0,08	133,83	0,00	0,00	**0,01**	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)10	**0,17**	-0,13	50,75	**0,00**	**0,00**	0,00	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)79	0,00	**-0,30**	50,74	0,00	0,00	0,00	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)33	0,00	**0,06**	19,46	0,00	0,00	0,00	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)51	0,00	0,02	**5,27**	0,00	0,00	0,00	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)78	-0,01	0,05	**50,80**	0,00	0,00	0,00	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)77	**-0,18**	-0,12	50,77	0,00	**0,00**	0,00	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)37	-0,04	-0,06	27,96	0,00	0,00	**0,00**	0,0	0,0
Sn32/N69	NC_ULS-Set B (auto)14	0,13	-0,08	39,77	0,00	0,00	**0,00**	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)10	**0,50**	-0,02	156,77	**0,00**	**0,00**	0,00	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)79	-0,02	**-0,56**	156,77	0,00	0,00	0,00	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)78	-0,04	**0,53**	156,81	0,00	0,00	0,00	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)67	0,01	0,01	**14,43**	0,00	0,00	0,00	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)77	**-0,57**	0,00	**156,81**	0,00	**0,00**	0,00	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)38	-0,32	0,08	120,25	0,00	0,00	**0,00**	0,0	0,0
Sn33/N71	NC_ULS-Set B (auto)30	0,32	-0,09	119,80	0,00	0,00	**0,00**	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)10	**0,17**	-0,13	50,41	**0,00**	**0,00**	0,00	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)79	0,00	**-0,30**	50,38	0,00	0,00	0,00	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)34	-0,03	**0,06**	32,21	0,00	0,00	0,00	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)67	0,00	0,02	**4,99**	0,00	0,00	0,00	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)77	**-0,17**	-0,12	**50,49**	0,00	**0,00**	0,00	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)42	-0,02	-0,17	39,90	0,00	0,00	**0,00**	0,0	0,0
Sn34/N73	NC_ULS-Set B (auto)55	0,00	0,00	9,05	0,00	0,00	**0,00**	0,0	0,0
Sn37/N79	NC_ULS-Set B (auto)52	9,36	**-0,15**	32,23	0,00	0,00	-1,90	0,0	0,0
Sn37/N79	NC_ULS-Set B (auto)78	0,27	**0,29**	67,04	**0,00**	**0,00**	0,00	0,0	0,0
Sn37/N79	NC_ULS-Set B (auto)45	-11,12	0,16	**22,48**	0,00	0,00	2,28	0,0	0,0
Sn37/N79	NC_ULS-Set B (auto)6	0,13	0,01	**71,29**	0,00	0,00	0,00	0,0	0,0
Sn37/N79	NC_ULS-Set B (auto)30	**-20,85**	0,10	53,99	0,00	**0,00**	**4,18**	0,0	0,0
Sn37/N79	NC_ULS-Set B (auto)33	**18,92**	-0,06	57,97	0,00	0,00	**-3,80**	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)38	**138,35**	10,73	-84,89	**0,00**	**0,00**	0,68	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)66	13,47	**-19,95**	-7,21	0,00	0,00	0,00	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)37	137,31	**20,06**	-89,66	0,00	0,00	0,68	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)69	136,18	20,02	**-93,08**	0,00	0,00	0,68	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)30	0,09	3,72	**124,37**	0,00	0,00	0,00	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)79	**-0,03**	0,15	26,28	0,00	**0,00**	0,00	0,0	0,0
Sn41/N159	NC_ULS-Set B (auto)41	-0,01	12,71	23,93	0,00	0,00	**0,00**	0,0	0,0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn41/N159	NC_ULS-Set B (auto)56	136,13	10,67	-87,70	0,00	0,00	**0,68**	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)72	**0,74**	-6,65	20,50	**0,00**	**0,00**	2,44	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)55	0,65	**-13,87**	10,09	0,00	0,00	5,40	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)74	-0,20	**15,84**	7,26	0,00	0,00	-6,52	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)57	-0,15	8,68	**-3,19**	0,00	0,00	-3,56	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)10	0,12	-0,04	**44,89**	0,00	0,00	0,00	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)41	**-0,25**	8,65	3,67	0,00	**0,00**	-3,56	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)28	-0,20	15,81	14,50	0,00	0,00	**-6,52**	0,0	0,0
Sn42/N175	NC_ULS-Set B (auto)21	0,61	-13,84	24,48	0,00	0,00	**5,40**	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)33	**0,23**	-10,05	25,62	**0,00**	**0,00**	-4,15	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)58	-0,01	**15,84**	9,16	0,00	0,00	6,52	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)73	0,12	8,68	**-3,22**	0,00	0,00	3,56	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)77	-0,13	-0,03	**44,88**	0,00	0,00	0,00	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)38	**-0,59**	-3,65	36,73	0,00	**0,00**	-1,92	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)29	-0,48	**-13,88**	24,39	0,00	0,00	**-5,40**	0,0	0,0
Sn43/N173	NC_ULS-Set B (auto)28	-0,01	15,80	16,43	0,00	0,00	**6,52**	0,0	0,0
Sn44/N196	NC_ULS-Set B (auto)53	**0,11**	0,88	11,85	**0,00**	**0,00**	-0,08	0,0	0,0
Sn44/N196	NC_ULS-Set B (auto)50	0,00	**-1,43**	**11,43**	0,00	0,00	0,11	0,0	0,0
Sn44/N196	NC_ULS-Set B (auto)6	-0,03	0,03	**27,70**	0,00	0,00	0,00	0,0	0,0
Sn44/N196	NC_ULS-Set B (auto)46	**-0,13**	0,70	11,92	0,00	**0,00**	-0,04	0,0	0,0
Sn44/N196	NC_ULS-Set B (auto)45	-0,12	**1,31**	11,99	0,00	0,00	**-0,10**	0,0	0,0
Sn44/N196	NC_ULS-Set B (auto)52	0,00	-1,43	11,43	0,00	0,00	**0,11**	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)30	**0,39**	-0,17	57,98	**0,00**	**0,00**	0,01	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)79	-0,07	**-0,32**	77,82	0,00	0,00	0,00	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)34	-0,30	**0,41**	67,37	0,00	0,00	0,00	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)47	-0,08	0,12	**21,18**	0,00	0,00	0,00	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)78	-0,08	0,29	**77,83**	0,00	0,00	0,00	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)37	**-0,45**	-0,18	63,84	0,00	0,00	**-0,01**	0,0	0,0
Sn45/N197	NC_ULS-Set B (auto)46	0,00	0,02	29,51	0,00	0,00	**0,01**	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)30	**1,85**	-0,52	155,86	**0,00**	**0,00**	0,01	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)41	-0,87	**-0,91**	161,31	0,00	0,00	0,01	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)47	0,36	-0,30	**69,07**	0,00	0,00	0,02	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)6	-0,02	0,00	**196,45**	0,00	0,00	0,00	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)37	**-1,41**	-0,62	161,48	0,00	**0,00**	0,01	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)34	-0,79	**1,40**	163,66	0,00	0,00	**-0,02**	0,0	0,0
Sn46/N199	NC_ULS-Set B (auto)29	1,16	-0,84	149,58	0,00	0,00	**0,02**	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)79	0,00	**-0,29**	50,34	0,00	0,00	0,00	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)65	0,01	**0,06**	12,56	**0,00**	**0,00**	0,00	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)55	0,04	0,00	**-4,31**	0,00	0,00	0,00	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)10	**0,17**	-0,12	**50,38**	0,00	0,00	0,00	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)77	**-0,17**	-0,12	50,29	0,00	**0,00**	0,00	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)29	0,08	-0,07	28,21	0,00	0,00	**0,00**	0,0	0,0
Sn47/N203	NC_ULS-Set B (auto)22	-0,02	-0,05	16,14	0,00	0,00	**0,00**	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)54	**19,86**	0,02	4,89	**0,00**	**0,00**	-3,33	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)67	-18,04	**-0,18**	5,99	0,00	0,00	3,03	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)43	-12,67	**0,29**	11,31	0,00	0,00	2,12	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)69	10,91	0,03	**-0,07**	0,00	0,00	-1,82	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)9	-0,15	0,07	**23,94**	0,00	0,00	0,00	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)17	**-18,08**	-0,16	12,50	0,00	**0,00**	3,03	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)38	19,83	0,04	8,76	0,00	0,00	**-3,33**	0,0	0,0
Sn48/N204	NC_ULS-Set B (auto)49	-18,06	-0,18	8,62	0,00	0,00	**3,03**	0,0	0,0
Sn49/N208	NC_ULS-Set B (auto)21	**0,11**	2,26	1,88	**0,00**	**0,00**	1,25	0,0	0,0
Sn49/N208	NC_ULS-Set B (auto)55	0,11	2,26	**1,24**	0,00	0,00	1,25	0,0	0,0
Sn49/N208	NC_ULS-Set B (auto)30	-0,10	1,61	**3,32**	0,00	0,00	0,89	0,0	0,0
Sn49/N208	NC_ULS-Set B (auto)62	**-0,10**	1,61	2,67	0,00	**0,00**	0,89	0,0	0,0
Sn49/N208	NC_ULS-Set B (auto)52	0,02	**-3,55**	1,82	0,00	0,00	**-1,96**	0,0	0,0
Sn49/N208	NC_ULS-Set B (auto)45	-0,09	**3,22**	2,58	0,00	0,00	**1,79**	0,0	0,0

7. Krachten per profiel (tabelvorm,UGT)

7.1. Layers

Name	Structural model only	Colour
Kolommen	×	
Dakliggers	×	
Dakgordingen	×	
Windverbanden dak	×	
Randliggers dak	×	
Vloerligger	×	
Windverbanden gevel	×	
Geveldragers	×	

7.2. Layers

7.2.1. Layers - Kolommen

Name	Structural model only	Colour
Kolommen	×	

7.2.1.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Kolommen

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B1	0,000	SLS-Char (auto)/1	CS22 - IPE240	**-123,58**	0,05	-0,06	0,00	0,00	-0,04
B1	7,600	SLS-Char (auto)/2	CS22 - IPE240	**1,29**	0,15	-3,90	0,00	-0,41	0,01
B1	3,300+	SLS-Char (auto)/3	CS22 - IPE240	-7,43	**-3,62**	-1,18	0,00	-12,85	-0,32
B1	3,300+	SLS-Char (auto)/2	CS22 - IPE240	-0,40	**5,88**	1,23	-0,01	13,12	-0,33
B1	0,000	SLS-Char (auto)/4	CS22 - IPE240	-68,74	0,07	**-7,17**	0,00	0,01	-0,12
B1	0,000	SLS-Char (auto)/5	CS22 - IPE240	-97,80	0,04	**7,26**	-0,01	-0,01	-0,02
B1	3,300+	SLS-Char (auto)/6	CS22 - IPE240	-4,08	3,70	2,21	**-0,06**	23,94	-0,23
B1	3,300+	SLS-Char (auto)/7	CS22 - IPE240	-10,66	3,37	-1,59	**0,07**	-15,44	-0,25
B1	3,500-	SLS-Char (auto)/4	CS22 - IPE240	-3,84	-1,57	-2,18	0,05	**-24,13**	-0,63
B1	3,500-	SLS-Char (auto)/5	CS22 - IPE240	-3,99	3,83	2,21	-0,06	**24,41**	0,43
B1	3,500+	SLS-Char (auto)/8	CS22 - IPE240	-7,49	2,29	0,71	-0,02	-13,03	**-1,22**
B1	3,500-	SLS-Char (auto)/9	CS22 - IPE240	-0,37	5,75	1,23	-0,01	13,39	**0,92**
B18	0,000	SLS-Char (auto)/10	CS1 - IPE220	**-70,85**	0,02	1,53	0,00	0,00	-0,08
B220	7,600	SLS-Char (auto)/11	CS1 - IPE220	**30,15**	-0,02	5,96	0,00	-0,20	-0,03
B227	3,800+	SLS-Char (auto)/12	CS1 - IPE220	-22,75	**-1,62**	0,39	-0,01	4,04	0,65
B17	4,300+	SLS-Char (auto)/13	CS1 - IPE220	-23,10	-0,02	**-8,80**	0,00	27,38	0,05
B27	4,300+	SLS-Char (auto)/14	CS1 - IPE220	-12,48	0,00	**8,06**	-0,01	-26,13	0,01
B57	3,300+	SLS-Char (auto)/15	CS1 - IPE220	-7,97	-0,17	-1,65	**-0,03**	-13,49	0,17
B57	3,300+	SLS-Char (auto)/16	CS1 - IPE220	-6,32	-0,25	2,37	**0,03**	21,28	0,23
B18	3,800+	SLS-Char (auto)/12	CS1 - IPE220	-18,39	-0,03	7,85	0,00	**-28,32**	0,06
B17	4,300-	SLS-Char (auto)/3	CS1 - IPE220	-21,94	-0,01	6,38	0,00	**27,45**	-0,03
B227	4,800-	SLS-Char (auto)/17	CS1 - IPE220	-27,53	-1,62	0,40	-0,01	4,45	**-0,97**
B227	4,800-	SLS-Char (auto)/18	CS1 - IPE220	-12,56	**1,49**	0,68	-0,01	16,12	**0,84**
B6	0,000	SLS-Char (auto)/1	CS2 - HEA160	**-101,07**	-0,03	-0,03	0,00	0,01	0,03
B14	7,600	SLS-Char (auto)/7	CS2 - HEA160	**23,47**	0,00	-0,11	-0,01	0,04	-0,09
B13	3,800+	SLS-Char (auto)/19	CS2 - HEA160	-1,50	**-7,99**	3,33	0,04	-0,93	1,78
B13	3,800+	SLS-Char (auto)/13	CS2 - HEA160	16,81	**6,61**	-4,63	-0,02	1,42	-1,33
B13	3,800+	SLS-Char (auto)/4	CS2 - HEA160	19,01	3,60	**-7,43**	0,10	2,20	-0,70
B7	3,500+	SLS-Char (auto)/11	CS2 - HEA160	-1,28	-2,74	**7,59**	0,15	-1,64	0,37
B7	3,500+	SLS-Char (auto)/20	CS2 - HEA160	-2,12	4,04	-6,30	**-0,11**	1,05	-0,66
B7	3,500+	SLS-Char (auto)/21	CS2 - HEA160	-5,46	3,40	4,09	**0,24**	-0,51	-0,69
B6	3,300+	SLS-Char (auto)/22	CS2 - HEA160	-1,81	-0,03	2,75	0,00	**-1,85**	0,08
B13	3,800-	SLS-Char (auto)/22	CS2 - HEA160	18,44	-0,23	0,61	-0,03	**2,21**	-0,85
B13	4,300-	SLS-Char (auto)/14	CS2 - HEA160	-1,35	-7,99	3,33	0,04	0,73	**-2,21**
B13	4,300-	SLS-Char (auto)/8	CS2 - HEA160	16,83	6,60	-4,63	-0,02	-0,89	**1,98**
B29	0,000	SLS-Char (auto)/23	CS5 - HEA240	**-233,73**	0,00	-0,01	0,00	0,00	0,00
B53	7,600	SLS-Char (auto)/24	CS5 - HEA240	**-34,95**	0,00	0,01	0,00	0,07	-0,03

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B31	0,000	SLS-Char (auto)/15	CS5 - HEA240	-82,50	0,00	0,00	**0,00**	0,00	0,00
B29	0,000	SLS-Char (auto)/25	CS5 - HEA240	-94,11	0,00	0,00	**0,00**	0,00	0,00
B31	7,600	SLS-Char (auto)/10	CS5 - HEA240	-163,34	0,00	**-0,02**	0,00	**-0,16**	0,00
B30	7,600	SLS-Char (auto)/26	CS5 - HEA240	-171,83	0,00	**0,02**	0,00	**0,14**	-0,01
B53	7,600	SLS-Char (auto)/12	CS5 - HEA240	-73,00	**-0,02**	0,01	0,00	0,09	**-0,17**
B53	7,600	SLS-Char (auto)/18	CS5 - HEA240	-47,48	**0,02**	0,00	0,00	0,01	**0,16**
B243	0,000	SLS-Char (auto)/23	CS3 - HEA140	**-59,72**	0,05	0,02	0,00	0,00	0,00
B259	4,300	SLS-Char (auto)/22	CS3 - HEA140	**-3,99**	-0,06	0,14	-0,01	0,40	-0,16
B259	0,000	SLS-Char (auto)/13	CS3 - HEA140	-14,08	**-0,14**	0,16	0,00	-0,11	0,31
B241	0,000	SLS-Char (auto)/5	CS3 - HEA140	-17,53	0,01	0,17	**-0,01**	0,00	0,01
B241	0,000	SLS-Char (auto)/18	CS3 - HEA140	-13,15	0,06	-0,20	**0,01**	0,00	-0,10
B241	3,300	SLS-Char (auto)/22	CS3 - HEA140	-17,16	0,06	**-0,20**	0,01	**-0,65**	0,10
B243	3,300	SLS-Char (auto)/20	CS3 - HEA140	-38,07	-0,05	**0,24**	0,00	**0,79**	-0,17
B259	0,000	SLS-Char (auto)/2	CS3 - HEA140	-16,23	0,22	-0,08	0,00	0,11	**-0,45**
B243	3,300	SLS-Char (auto)/16	CS3 - HEA140	-45,47	**0,24**	-0,10	0,01	-0,34	**0,78**
B248	0,000	SLS-Char (auto)/1	CS4 - HEA180	**-148,83**	-0,01	0,00	0,00	0,00	0,00
B248	3,300	SLS-Char (auto)/18	CS4 - HEA180	**-80,82**	0,12	**-0,02**	**0,01**	**-0,07**	0,41
B248	3,300	SLS-Char (auto)/5	CS4 - HEA180	-123,54	-0,10	**0,02**	**-0,01**	**0,07**	-0,32
B248	3,300	SLS-Char (auto)/2	CS4 - HEA180	-121,62	**-0,17**	0,01	-0,01	0,04	**-0,58**
B248	3,300	SLS-Char (auto)/3	CS4 - HEA180	-85,01	**0,20**	-0,01	0,01	-0,04	**0,66**
B270	0,000	SLS-Char (auto)/16	CS8 - UNP180	**-1,76**	0,03	0,03	0,00	-0,01	-0,06
B270	3,500	SLS-Char (auto)/15	CS8 - UNP180	**-0,88**	-0,04	0,03	0,00	0,12	-0,06
B270	0,000	SLS-Char (auto)/15	CS8 - UNP180	-1,64	**-0,04**	0,03	0,00	0,01	**0,08**
B270	0,000	SLS-Char (auto)/5	CS8 - UNP180	-1,69	-0,01	**-0,05**	-0,01	0,00	0,02
B270	0,000	SLS-Char (auto)/18	CS8 - UNP180	-1,73	0,03	**0,05**	0,00	0,00	-0,06
B270	0,000	SLS-Char (auto)/21	CS8 - UNP180	-1,75	0,03	0,05	**0,00**	0,00	-0,06
B270	3,500	SLS-Char (auto)/6	CS8 - UNP180	-0,91	-0,01	-0,05	**-0,01**	**-0,18**	-0,02
B270	3,500	SLS-Char (auto)/22	CS8 - UNP180	-1,00	0,03	0,05	0,00	**0,17**	0,04
B270	0,000	SLS-Char (auto)/8	CS8 - UNP180	-1,76	**0,03**	0,03	0,00	-0,01	**-0,06**

7.2.2. Layers - Dakliggers

Name	Structural model only	Colour
Dakliggers	×	

7.2.2.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Dakliggers

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B33	0,000	SLS-Char (auto)/1	CS17 - IPE400	**-15,41**	0,07	45,79	-0,08	-1,46	-0,21
B33	5,000+	SLS-Char (auto)/2	CS17 - IPE400	**18,15**	-0,06	3,81	0,00	41,50	0,21
B39	15,000	SLS-Char (auto)/3	CS17 - IPE400	-0,27	0,00	**-56,07**	-0,02	-2,06	0,00
B39	0,000	SLS-Char (auto)/4	CS17 - IPE400	-0,27	0,00	**56,09**	0,03	-2,13	0,00
B33	0,000	SLS-Char (auto)/4	CS17 - IPE400	-0,29	0,00	55,70	**-0,10**	-2,00	0,00
B32	10,000+	SLS-Char (auto)/3	CS17 - IPE400	-0,28	0,00	-18,43	**0,10**	182,16	0,00
B33	15,000	SLS-Char (auto)/3	CS17 - IPE400	-0,29	0,00	-55,73	0,08	**-2,14**	0,00
B39	7,500-	SLS-Char (auto)/4	CS17 - IPE400	-0,38	0,00	0,00	0,00	**209,28**	0,00
B32	15,000	SLS-Char (auto)/5	CS17 - IPE400	2,49	**-0,51**	-34,89	0,06	-1,16	**-1,58**
B32	15,000	SLS-Char (auto)/6	CS17 - IPE400	-8,22	**0,79**	-18,37	0,02	-0,68	**2,50**
B34	25,000+	SLS-Char (auto)/7	CS6 - IPE450	**-37,88**	-0,14	-73,41	-0,01	30,47	0,33
B34	27,000+	SLS-Char (auto)/8	CS6 - IPE450	**60,76**	0,06	33,92	-0,01	-74,06	0,00
B34	4,000+	SLS-Char (auto)/9	CS6 - IPE450	-4,47	**-0,82**	-32,23	0,00	72,87	**1,80**
B34	37,000-	SLS-Char (auto)/4	CS6 - IPE450	0,15	0,00	**-144,32**	0,00	-201,20	0,00
B34	17,000+	SLS-Char (auto)/3	CS6 - IPE450	-0,03	0,00	**108,46**	0,00	-179,50	0,00
B46	10,000+	SLS-Char (auto)/3	CS6 - IPE450	-0,15	0,00	-19,70	**-0,10**	194,20	0,00
B47	0,000	SLS-Char (auto)/3	CS6 - IPE450	-0,17	0,00	58,58	**0,10**	-1,51	0,00
B34	37,000+	SLS-Char (auto)/3	CS6 - IPE450	0,14	0,00	84,92	0,00	**-201,29**	0,00
B46	7,500-	SLS-Char (auto)/4	CS6 - IPE450	-0,15	0,00	0,00	0,00	**218,44**	0,00
B34	4,000+	SLS-Char (auto)/10	CS6 - IPE450	23,81	**0,83**	-20,59	0,00	46,48	**-1,82**

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B49	5,000+	SLS-Char (auto)/11	CS23 - IPE360	**-13,11**	0,31	6,63	0,00	86,43	-0,74
B48	5,000+	SLS-Char (auto)/12	CS23 - IPE360	**15,66**	0,03	2,21	0,00	24,44	-0,19
B49	15,000	SLS-Char (auto)/3	CS23 - IPE360	-0,28	0,00	**-40,10**	0,00	-2,10	0,00
B48	0,000	SLS-Char (auto)/6	CS23 - IPE360	-5,99	0,14	6,61	**-0,01**	-0,86	-0,08
B49	10,000+	SLS-Char (auto)/10	CS23 - IPE360	-5,98	-0,17	-5,08	**0,01**	33,68	0,77
B48	0,000	SLS-Char (auto)/4	CS23 - IPE360	-0,30	0,00	**40,11**	0,00	**-2,10**	0,00
B48	7,500-	SLS-Char (auto)/4	CS23 - IPE360	-0,23	0,00	-0,01	0,00	**147,05**	0,00
B49	10,000-	SLS-Char (auto)/9	CS23 - IPE360	0,53	**-0,31**	-8,64	0,00	83,78	**-0,75**
B49	10,000-	SLS-Char (auto)/10	CS23 - IPE360	-11,53	**0,32**	-4,74	0,00	33,59	**0,86**
B250	10,000+	SLS-Char (auto)/13	CS3 - HEA140	**-13,48**	0,08	6,18	0,00	-5,22	0,10
B250	0,000	SLS-Char (auto)/12	CS3 - HEA140	**15,09**	-0,02	3,57	0,00	-0,25	0,00
B250	10,000+	SLS-Char (auto)/14	CS3 - HEA140	12,18	**-0,13**	5,41	0,00	-4,60	0,16
B249	10,000+	SLS-Char (auto)/15	CS3 - HEA140	-2,80	**0,11**	6,75	0,00	-5,79	-0,28
B250	5,000-	SLS-Char (auto)/4	CS3 - HEA140	0,00	0,00	**-18,88**	0,00	-15,97	0,00
B249	5,000+	SLS-Char (auto)/16	CS3 - HEA140	-7,77	-0,09	1,82	**0,00**	-1,00	0,19
B249	5,000+	SLS-Char (auto)/17	CS3 - HEA140	0,84	-0,01	10,38	**0,00**	-9,82	0,00
B249	10,000+	SLS-Char (auto)/4	CS3 - HEA140	0,01	0,00	**18,96**	0,00	**-16,38**	0,00
B249	2,083	SLS-Char (auto)/4	CS3 - HEA140	-0,13	0,00	-0,25	0,00	**12,37**	0,00
B250	15,000	SLS-Char (auto)/18	CS3 - HEA140	12,17	-0,13	-5,14	0,00	0,34	**-0,49**
B250	15,000	SLS-Char (auto)/11	CS3 - HEA140	-13,48	0,08	-2,73	0,00	-0,87	**0,52**

7.2.3. Layers - Dakgordingen

Name	Structural model only	Colour
Dakgordingen	×	

7.2.3.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Dakgordingen

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B59	0,000	SLS-Char (auto)/1	CS10 - SHSCF60/60/4.0	**-14,62**	-0,03	0,07	-0,04	0,01	0,03
B76	0,000	SLS-Char (auto)/2	CS10 - SHSCF60/60/4.0	**16,32**	0,00	0,18	0,00	-0,09	0,00
B86	0,000	SLS-Char (auto)/3	CS10 - SHSCF60/60/4.0	13,67	**-0,06**	0,22	0,05	-0,10	**0,16**
B89	0,000	SLS-Char (auto)/2	CS10 - SHSCF60/60/4.0	13,34	**0,04**	0,24	-0,05	-0,18	-0,11
B254	4,000	SLS-Char (auto)/4	CS10 - SHSCF60/60/4.0	-0,18	0,00	**-0,79**	-0,18	-1,37	0,00
B87	0,000	SLS-Char (auto)5/4	CS10 - SHSCF60/60/4.0	-0,18	0,00	**0,80**	-0,16	-1,38	0,00
B258	0,000	SLS-Char (auto)/4	CS10 - SHSCF60/60/4.0	0,00	0,00	-0,51	**-0,20**	1,24	0,00
B252	0,000	SLS-Char (auto)/4	CS10 - SHSCF60/60/4.0	-0,19	0,00	-0,50	**0,20**	1,23	0,00
B88	0,000	SLS-Char (auto)/4	CS10 - SHSCF60/60/4.0	-0,18	0,00	0,80	0,16	**-1,38**	0,00
B87	4,000	SLS-Char (auto)/4	CS10 - SHSCF60/60/4.0	-0,18	0,00	0,53	-0,16	**1,28**	0,00
B58	5,500	SLS-Char (auto)/5	CS10 - SHSCF60/60/4.0	13,56	-0,03	-0,18	0,03	-0,04	**-0,12**

7.2.4. Layers - Windverbanden dak

Name	Structural model only	Colour
Windverbanden dak	×	

7.2.4.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Windverbanden dak

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B96	0,000	SLS-Char (auto)/1	CS25 - HFLeq70x70x7	**-49,30**	0,00	0,00	0,00	0,00	0,00
B96	0,000	SLS-Char (auto)/2	CS25 - HFLeq70x70x7	**41,34**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
B108	0,000	SLS-Char (auto)/3	CS11 - HFLeq60x60x6	**-40,93**	0,00	0,00	0,00	0,00	0,00
B108	0,000	SLS-Char (auto)/2	CS11 - HFLeq60x60x6	**34,18**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**

7.2.5. Layers - Randliggers dak

Name	Structural model only	Colour
Randliggers dak	×	

7.2.5.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Randliggers dak

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B287	12,000+	SLS-Char (auto)/1	CS3 - HEA140	**-46,58**	0,73	4,55	0,00	-1,84	-1,12
B173	0,000	SLS-Char (auto)/2	CS3 - HEA140	**45,45**	2,32	0,67	0,00	-0,07	-0,52
B287	20,000-	SLS-Char (auto)/3	CS3 - HEA140	0,29	**-6,26**	-1,29	0,00	-1,45	-4,43
B287	10,000+	SLS-Char (auto)/3	CS3 - HEA140	1,95	**6,25**	1,29	0,00	-1,45	-4,37
B287	5,000-	SLS-Char (auto)/4	CS3 - HEA140	1,06	0,00	**-10,90**	0,00	-9,96	0,00
B118	0,000	SLS-Char (auto)/5	CS3 - HEA140	-11,52	-2,81	0,46	**-0,01**	0,02	0,07
B117	2,400	SLS-Char (auto)/6	CS3 - HEA140	-10,66	-0,83	-0,12	**0,01**	0,44	2,81
B287	25,000+	SLS-Char (auto)/7	CS3 - HEA140	1,28	0,00	**10,90**	0,00	**-9,96**	0,00
B287	2,083	SLS-Char (auto)/4	CS3 - HEA140	1,06	0,00	-0,41	0,00	**6,53**	0,00
B287	15,000-	SLS-Char (auto)/8	CS3 - HEA140	-7,92	-5,60	-1,17	0,01	-0,22	**-6,68**
B287	12,000+	SLS-Char (auto)/3	CS3 - HEA140	-7,92	-2,66	1,45	0,01	-0,64	**5,71**
B171	0,000	SLS-Char (auto)/9	CS2 - HEA160	**-37,35**	-3,66	0,82	0,00	-0,03	0,61
B171	0,000	SLS-Char (auto)/10	CS2 - HEA160	**51,51**	2,33	0,82	0,00	-0,06	-0,40
B122	5,500	SLS-Char (auto)/11	CS2 - HEA160	-8,99	**-4,30**	-0,80	-0,02	-0,01	-0,20
B122	0,000	SLS-Char (auto)/12	CS2 - HEA160	-9,01	**3,82**	**0,84**	**-0,02**	-0,10	-0,68
B122	0,000	SLS-Char (auto)/13	CS2 - HEA160	-23,32	-3,74	0,83	**0,01**	-0,07	0,59
B122	5,500	SLS-Char (auto)/14	CS2 - HEA160	5,76	-0,66	**-0,84**	0,00	**-0,11**	-0,10
B171	2,750	SLS-Char (auto)/1	CS2 - HEA160	-37,18	-0,01	-0,01	0,00	**1,08**	-4,44
B122	2,750	SLS-Char (auto)/9	CS2 - HEA160	-23,32	-0,09	0,01	0,01	1,08	**-4,67**
B122	2,962	SLS-Char (auto)/11	CS2 - HEA160	-8,99	0,00	-0,05	-0,02	1,07	**5,27**
B225	0,000	SLS-Char (auto)/4	CS26 - HEA100	**-44,79**	0,00	0,16	0,00	-0,01	0,00
B225	2,800	SLS-Char (auto)/12	CS26 - HEA100	**-6,73**	0,00	0,15	0,00	0,55	0,00
B225	0,000	SLS-Char (auto)/15	CS26 - HEA100	-18,68	**-0,01**	-0,14	0,00	-0,20	**0,02**
B225	0,000	SLS-Char (auto)/13	CS26 - HEA100	-28,48	-0,01	0,03	**0,00**	-0,09	0,02
B225	0,000	SLS-Char (auto)/10	CS26 - HEA100	-25,90	0,01	-0,15	**0,00**	-0,20	-0,02
B225	2,800	SLS-Char (auto)/2	CS26 - HEA100	-18,33	0,01	**-0,17**	0,00	**-0,68**	0,00
B225	2,800	SLS-Char (auto)/16	CS26 - HEA100	-17,11	0,00	**0,31**	0,00	**1,12**	0,00
B225	0,000	SLS-Char (auto)/17	CS26 - HEA100	-28,59	**0,01**	-0,01	0,00	-0,08	**-0,02**

7.2.6. Layers - Vloerligger

Name	Structural model only	Colour
Vloerligger	×	

7.2.6.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Vloerligger

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B135	0,000	SLS-Char (auto)/1	CS23 - IPE360	**-3,74**	2,78	53,37	-0,01	-0,23	0,25
B135	0,000	SLS-Char (auto)/2	CS23 - IPE360	**5,85**	-1,95	77,41	0,01	-0,51	-0,33
B135	5,000	SLS-Char (auto)/3	CS23 - IPE360	-1,76	**-3,89**	-53,42	-0,01	-0,37	-0,20
B135	0,000	SLS-Char (auto)/4	CS23 - IPE360	-1,64	**4,55**	77,38	-0,01	-0,39	-0,08
B135	5,000	SLS-Char (auto)/5	CS23 - IPE360	0,62	0,00	**-93,40**	0,00	-0,54	0,01
B135	2,917	SLS-Char (auto)/6	CS23 - IPE360	3,87	0,67	-12,89	**0,01**	93,60	-4,46
B135	0,000	SLS-Char (auto)/5	CS23 - IPE360	0,62	0,00	**93,40**	0,00	**-0,56**	-0,01
B135	2,500	SLS-Char (auto)/5	CS23 - IPE360	0,62	0,00	0,00	0,00	**116,20**	0,00
B135	2,500	SLS-Char (auto)/7	CS23 - IPE360	3,87	0,04	0,01	0,01	96,28	**-4,61**
B135	2,500	SLS-Char (auto)/8	CS23 - IPE360	-1,75	-0,24	-0,03	**-0,01**	66,44	**5,32**
B246	0,000	SLS-Char (auto)/7	CS9 - UNP260	**-1,09**	2,36	-0,74	-0,03	-0,01	-0,04
B246	0,000	SLS-Char (auto)/8	CS9 - UNP260	**1,25**	-1,58	-0,72	-0,04	-0,04	-0,05
B245	4,000	SLS-Char (auto)/9	CS9 - UNP260	-0,38	**-4,29**	0,75	0,04	0,02	-0,32
B245	4,000	SLS-Char (auto)/10	CS9 - UNP260	0,30	**4,72**	0,76	0,04	0,05	0,32
B242	8,000	SLS-Char (auto)/11	CS9 - UNP260	-0,38	0,09	**-1,63**	-0,07	-0,65	0,20
B242	0,000	SLS-Char (auto)/12	CS9 - UNP260	0,38	-0,06	**1,62**	0,07	-0,60	0,36
B242	8,000	SLS-Char (auto)/10	CS9 - UNP260	0,27	0,01	-1,41	**-0,10**	0,26	0,03
B242	0,000	SLS-Char (auto)/13	CS9 - UNP260	-0,28	0,02	1,39	**0,09**	0,31	-0,11
B245	2,000	SLS-Char (auto)/14	CS9 - UNP260	-0,63	0,01	0,00	0,00	**-0,74**	1,20
B242	3,789	SLS-Char (auto)/11	CS9 - UNP260	-0,38	0,09	-0,07	0,01	**2,93**	-0,17
B245	2,000	SLS-Char (auto)/1	CS9 - UNP260	0,30	-0,06	0,02	0,00	-0,73	**-2,80**
B246	2,000	SLS-Char (auto)/9	CS9 - UNP260	-0,59	-0,05	0,01	0,01	-0,74	**3,36**
B244	0,000	SLS-Char (auto)/15	CS24 - IPE300	**-0,58**	0,01	34,28	-0,01	0,19	-0,28
B244	0,000	SLS-Char (auto)/13	CS24 - IPE300	**0,50**	-0,03	23,40	0,01	-0,28	0,30
B244	5,000+	SLS-Char (auto)/7	CS24 - IPE300	-0,05	**-0,15**	-19,47	0,14	34,99	-0,05
B244	3,000-	SLS-Char (auto)/5	CS24 - IPE300	0,00	-0,02	**-70,31**	0,00	-43,60	-0,04
B244	5,000+	SLS-Char (auto)/8	CS24 - IPE300	-0,08	**0,21**	-6,56	**-0,14**	16,70	-0,04
B244	5,000+	SLS-Char (auto)/6	CS24 - IPE300	-0,05	-0,14	-16,65	**0,14**	32,18	-0,07
B244	3,000+	SLS-Char (auto)/5	CS24 - IPE300	-0,01	-0,02	**77,37**	0,00	**-43,64**	-0,04
B244	5,000+	SLS-Char (auto)/16	CS24 - IPE300	-0,07	0,14	-26,62	0,00	**41,85**	-0,14
B244	0,000	SLS-Char (auto)/10	CS24 - IPE300	-0,58	0,02	34,30	-0,01	0,19	**-0,29**
B244	0,000	SLS-Char (auto)/9	CS24 - IPE300	0,49	-0,04	23,75	0,01	-0,28	**0,30**
B247	0,000	SLS-Char (auto)/12	CS4 - HEA180	**-0,13**	**1,12**	15,21	-0,04	0,05	-0,15
B247	0,000	SLS-Char (auto)/11	CS4 - HEA180	**0,08**	**-1,32**	10,57	0,05	-0,01	0,14
B247	1,000	SLS-Char (auto)/5	CS4 - HEA180	-0,01	-0,08	**-18,63**	0,00	-0,06	-0,06
B247	0,000	SLS-Char (auto)/5	CS4 - HEA180	-0,01	-0,08	**18,52**	0,00	-0,01	0,02
B247	0,000	SLS-Char (auto)/3	CS4 - HEA180	-0,12	1,12	10,42	**-0,04**	0,05	-0,15
B247	0,000	SLS-Char (auto)/6	CS4 - HEA180	0,08	-1,32	15,36	**0,05**	-0,02	0,14
B247	1,000	SLS-Char (auto)/10	CS4 - HEA180	-0,06	-0,40	-15,55	-0,03	**-0,13**	-0,02
B247	0,500	SLS-Char (auto)/5	CS4 - HEA180	-0,01	-0,08	-0,05	0,00	**4,61**	-0,02
B247	0,900	SLS-Char (auto)/11	CS4 - HEA180	0,08	0,01	-8,46	0,05	0,94	**-0,54**
B247	0,900	SLS-Char (auto)/17	CS4 - HEA180	-0,06	0,01	-12,22	-0,02	1,39	**0,48**

7.2.7. Layers - Windverbanden gevel

Name	Structural model only	Colour
Windverbanden gevel	×	

7.2.7.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Windverbanden gevel

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B140	6,685	SLS-Char (auto)/1	CS12 - FL70X10	**35,90**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
B138	0,000	SLS-Char (auto)/2	CS12 - FL70X10	**-41,20**	0,00	0,00	0,00	0,00	**0,00**
B181	6,280	SLS-Char (auto)/3	CS21 - FL80X10	**44,84**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
B181	0,000	SLS-Char (auto)/4	CS21 - FL80X10	**-48,27**	0,00	0,00	0,00	0,00	**0,00**
B269	0,000	SLS-Char (auto)/5	CS27 - FL100X10	**-57,84**	0,00	0,00	0,00	0,00	0,00
B269	6,466	SLS-Char (auto)/6	CS27 - FL100X10	**54,12**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**

7.2.8. Layers - Geveldragers

Name	Structural model only	Colour
Geveldragers	×	

7.2.8.1. 1D internal forces

Linear calculation
Class: All SLS Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Geveldragers

Name	dx [m]	Case	Cross-section	N [kN]	V_y [kN]	V_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]
B177	0,000	SLS-Char (auto)/1	CS7 - UNP160	**-7,20**	-0,45	5,01	0,21	0,06	0,18
B177	0,000	SLS-Char (auto)/2	CS7 - UNP160	**8,63**	-0,46	-3,56	-0,15	-0,13	0,22
B150	0,000	SLS-Char (auto)/3	CS7 - UNP160	-6,52	**-0,52**	1,31	0,05	-0,13	0,32
B224	5,000	SLS-Char (auto)/4	CS7 - UNP160	-2,89	0,44	**-8,07**	-0,33	-0,18	0,16
B177	0,000	SLS-Char (auto)/5	CS7 - UNP160	-3,90	-0,45	**8,08**	0,33	-0,36	0,18
B180	5,000	SLS-Char (auto)/6	CS7 - UNP160	-3,83	0,44	-8,04	**-0,33**	-0,13	0,15
B177	0,000	SLS-Char (auto)/7	CS7 - UNP160	-3,89	-0,45	8,08	**0,33**	-0,36	0,18
B152	2,750	SLS-Char (auto)/8	CS7 - UNP160	4,68	0,00	-0,07	0,00	**-9,41**	-0,42
B224	2,500	SLS-Char (auto)/7	CS7 - UNP160	-2,89	-0,02	0,40	0,01	**9,41**	-0,36
B151	2,750	SLS-Char (auto)/9	CS7 - UNP160	4,64	0,00	0,00	0,00	-9,23	**-0,42**
B152	5,500	SLS-Char (auto)/10	CS7 - UNP160	4,29	**0,52**	-4,61	-0,19	-0,28	**0,32**
B149	0,000	SLS-Char (auto)/11	CS18 - UNP200	**-7,38**	-0,75	3,55	0,16	-0,14	0,38
B149	0,000	SLS-Char (auto)/6	CS18 - UNP200	**8,92**	-0,76	-4,28	-0,19	0,25	0,38
B280	0,000	SLS-Char (auto)/3	CS18 - UNP200	1,15	**-0,76**	1,45	0,06	-0,09	**0,40**
B280	6,000	SLS-Char (auto)/12	CS18 - UNP200	-3,47	**0,76**	-7,25	-0,32	-0,35	0,40
B153	5,500	SLS-Char (auto)/2	CS18 - UNP200	-3,53	0,67	**-8,73**	-0,40	-0,15	0,25
B157	0,000	SLS-Char (auto)/13	CS18 - UNP200	-3,46	-0,68	**8,71**	0,40	-0,04	0,29
B153	5,500	SLS-Char (auto)/13	CS18 - UNP200	-3,53	0,67	-8,73	**-0,40**	-0,15	0,25
B157	0,000	SLS-Char (auto)/2	CS18 - UNP200	-3,46	-0,68	8,71	**0,40**	-0,04	0,29
B280	3,000	SLS-Char (auto)/1	CS18 - UNP200	4,74	0,01	0,01	0,00	**-11,52**	-0,76
B157	2,538	SLS-Char (auto)/13	CS18 - UNP200	-3,46	-0,05	0,11	0,02	**11,15**	-0,63
B149	3,000	SLS-Char (auto)/14	CS18 - UNP200	8,92	-0,01	0,08	0,00	-6,05	**-0,77**

8. Krachten grafisch UGT

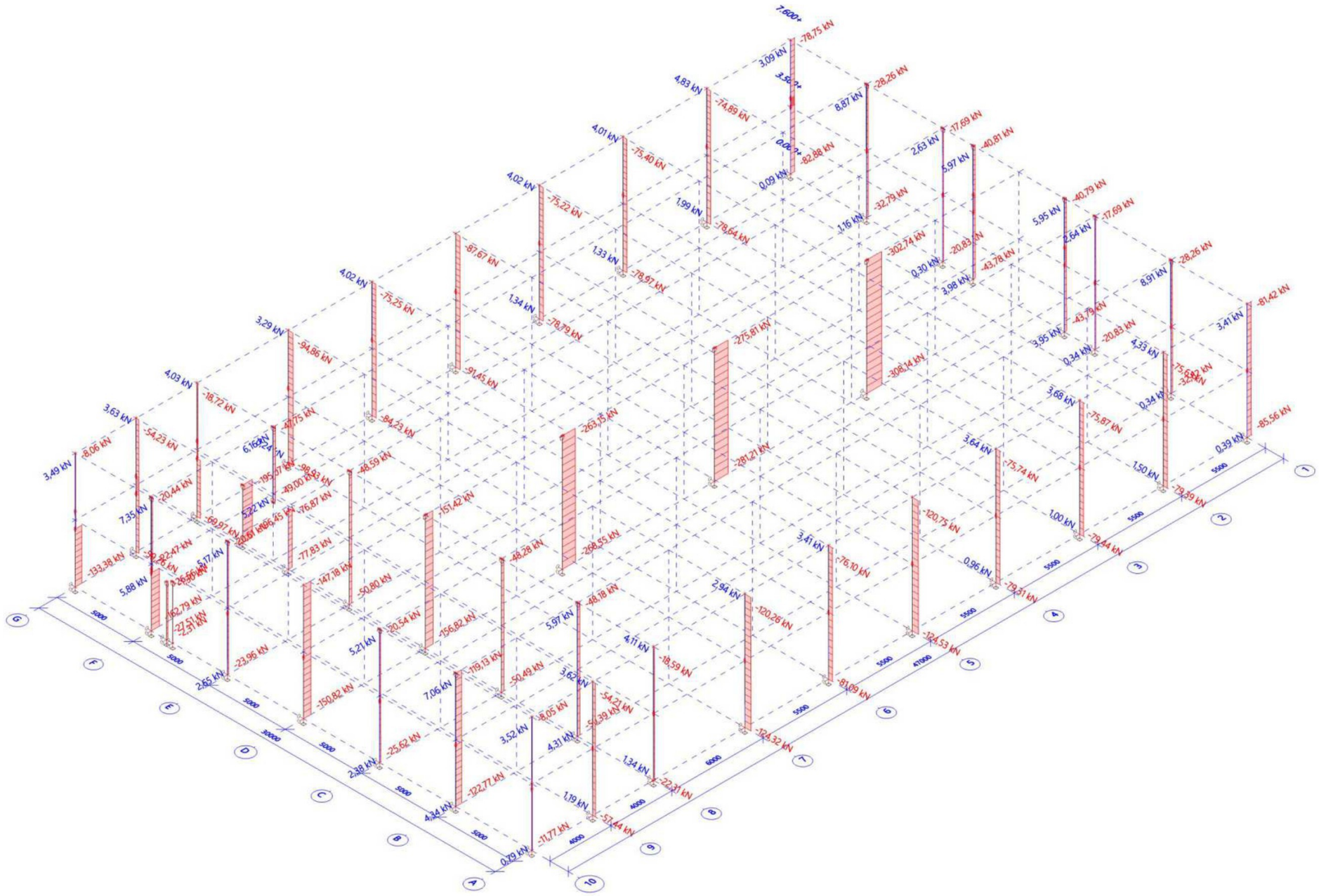
8.1. Layers

8.1.1. Layers - Kolommen

Name	Structural model only	Colour
Kolommen	×	

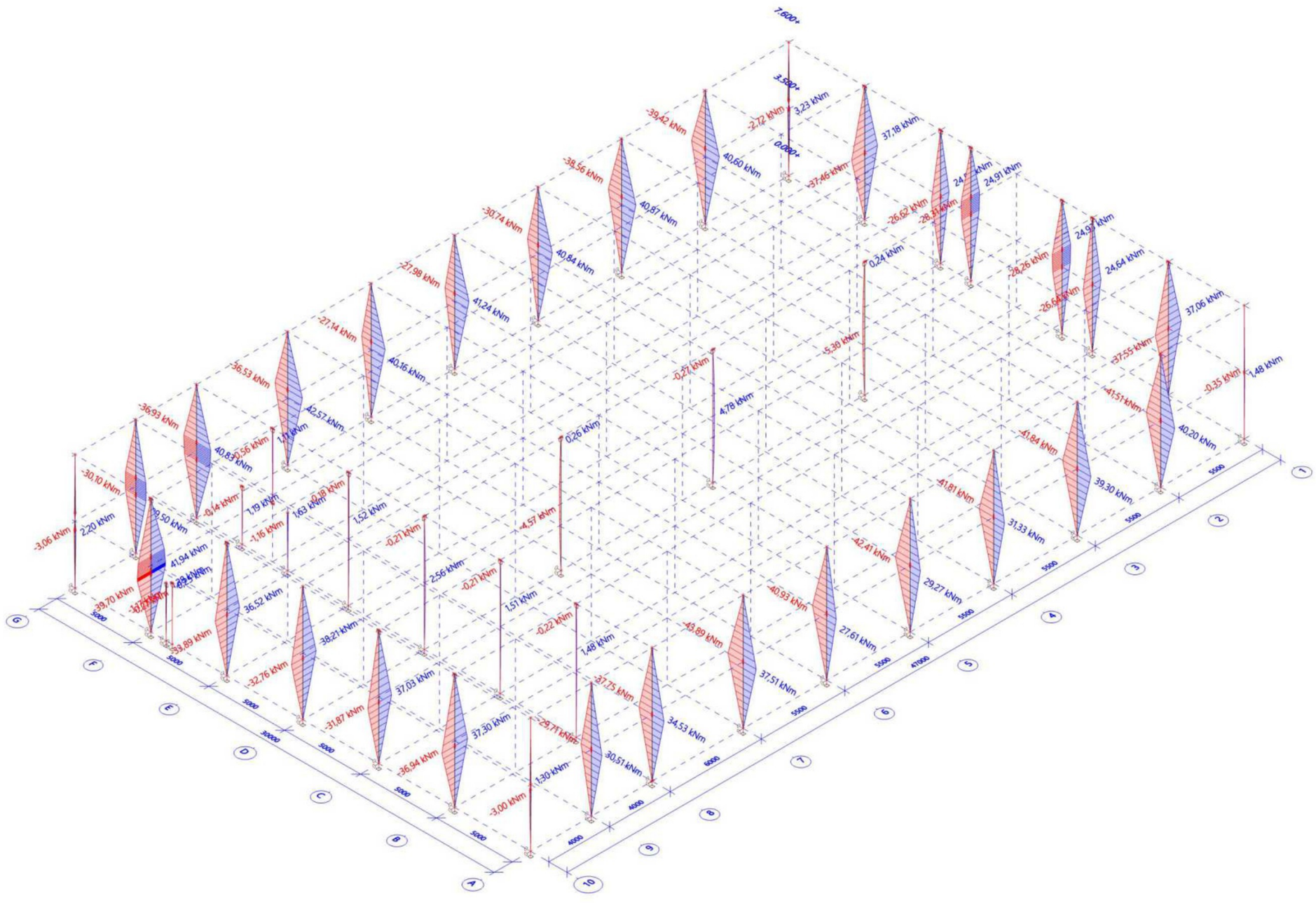
8.1.1.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Kolommen



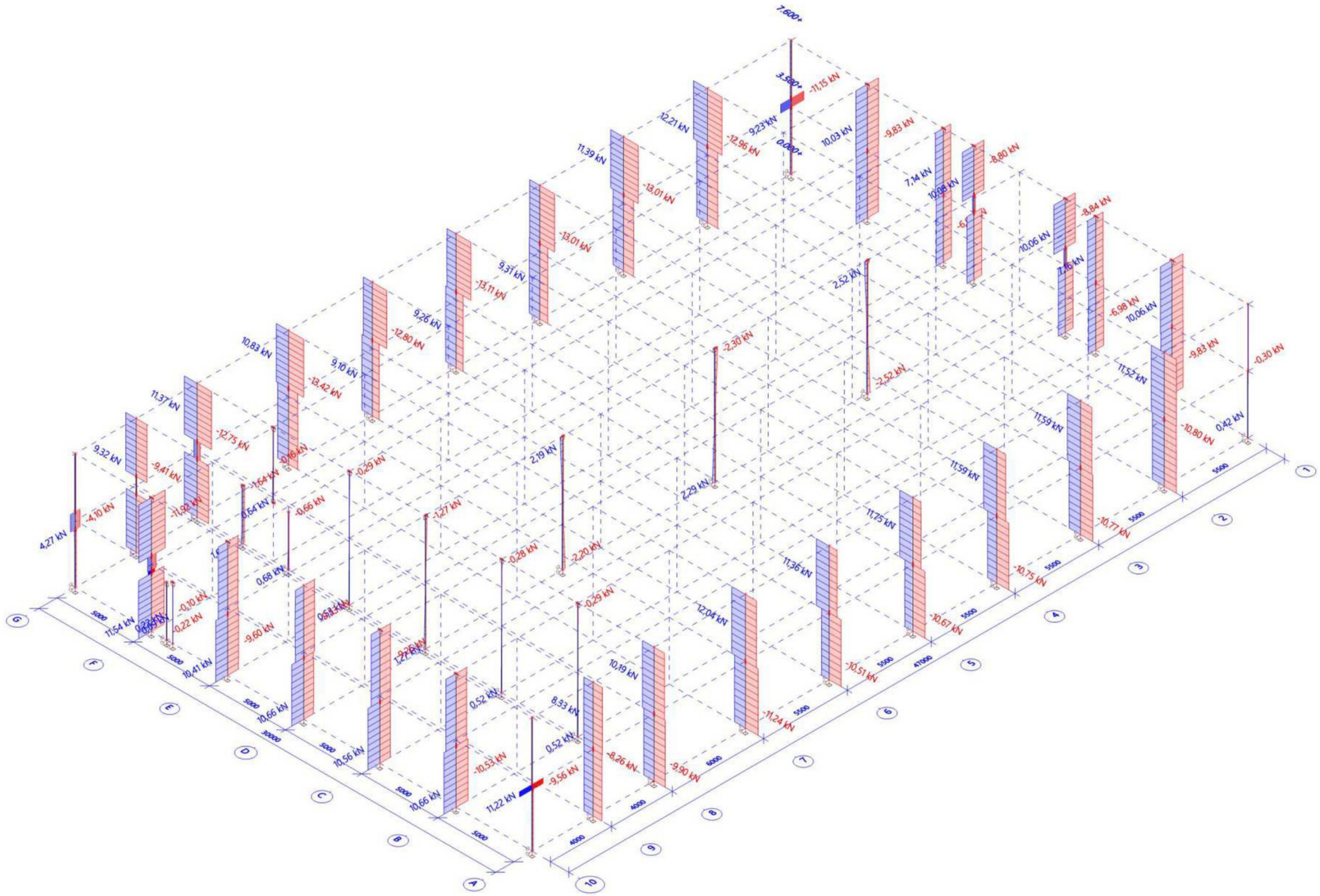
8.1.1.2. 1D internal forces; My

Values: **My**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Kolommen



8.1.1.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Kolommen

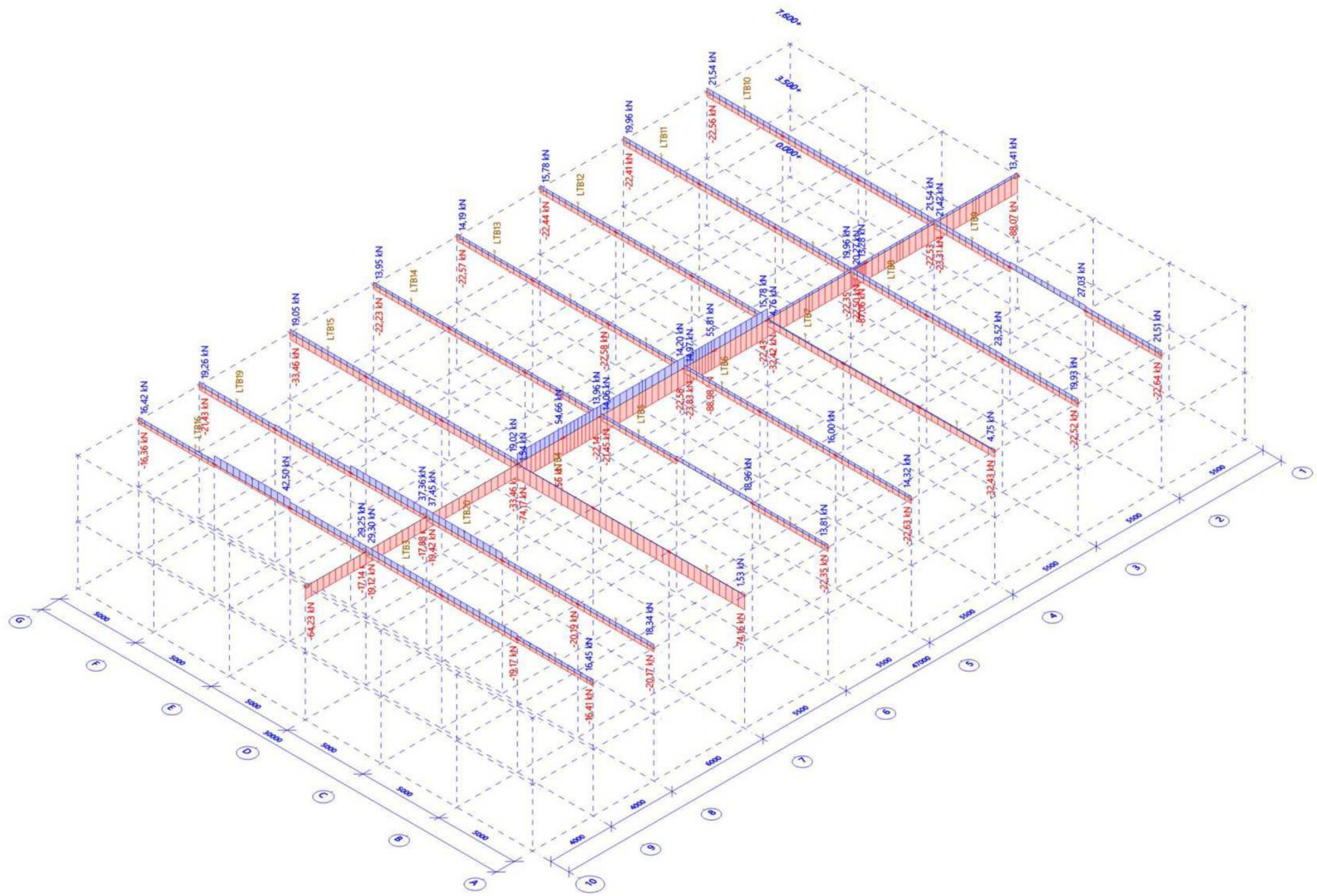


8.1.2. Layers - Dakliggers

Name	Structural model only	Colour
Dakliggers	×	

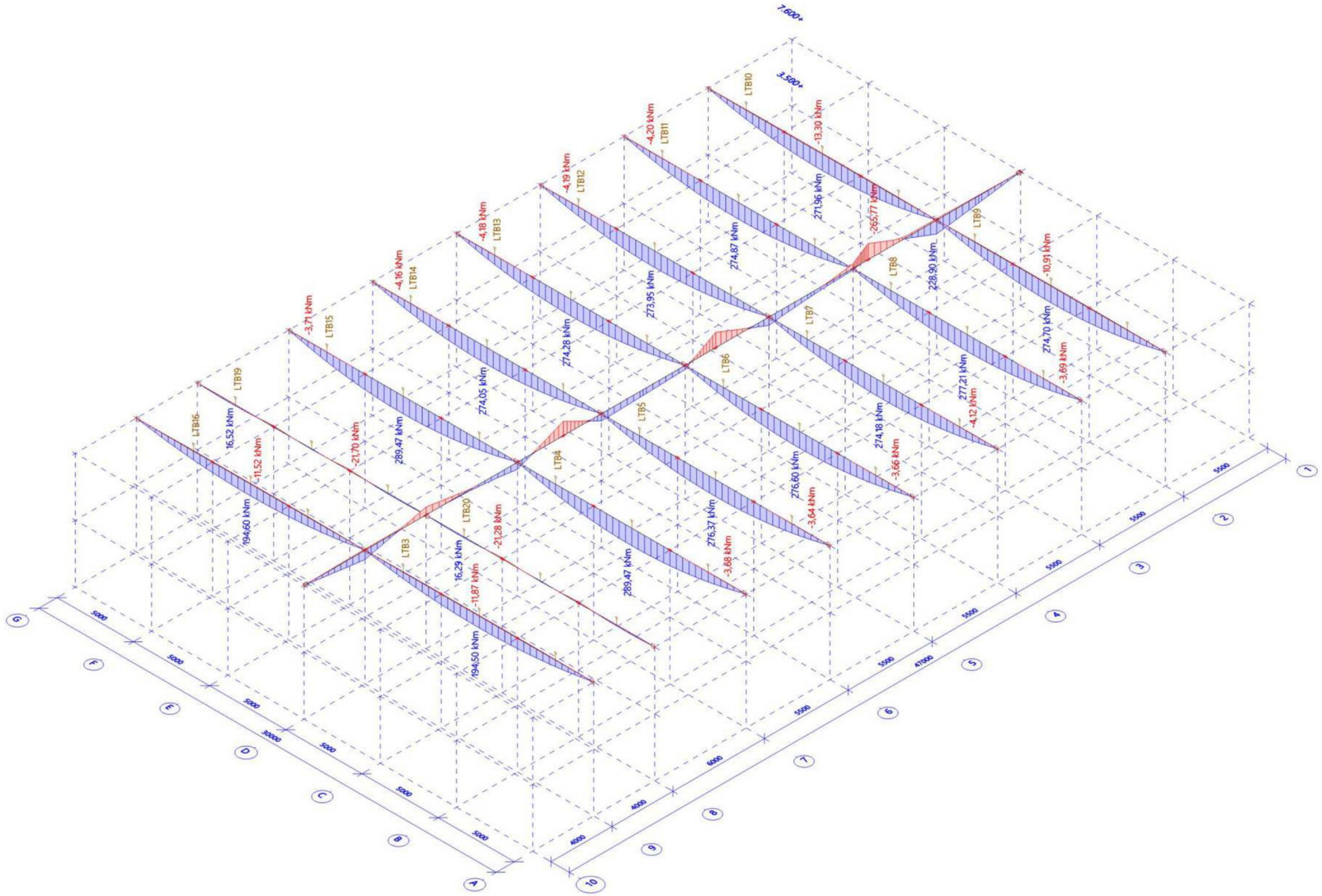
8.1.2.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Dakliggers



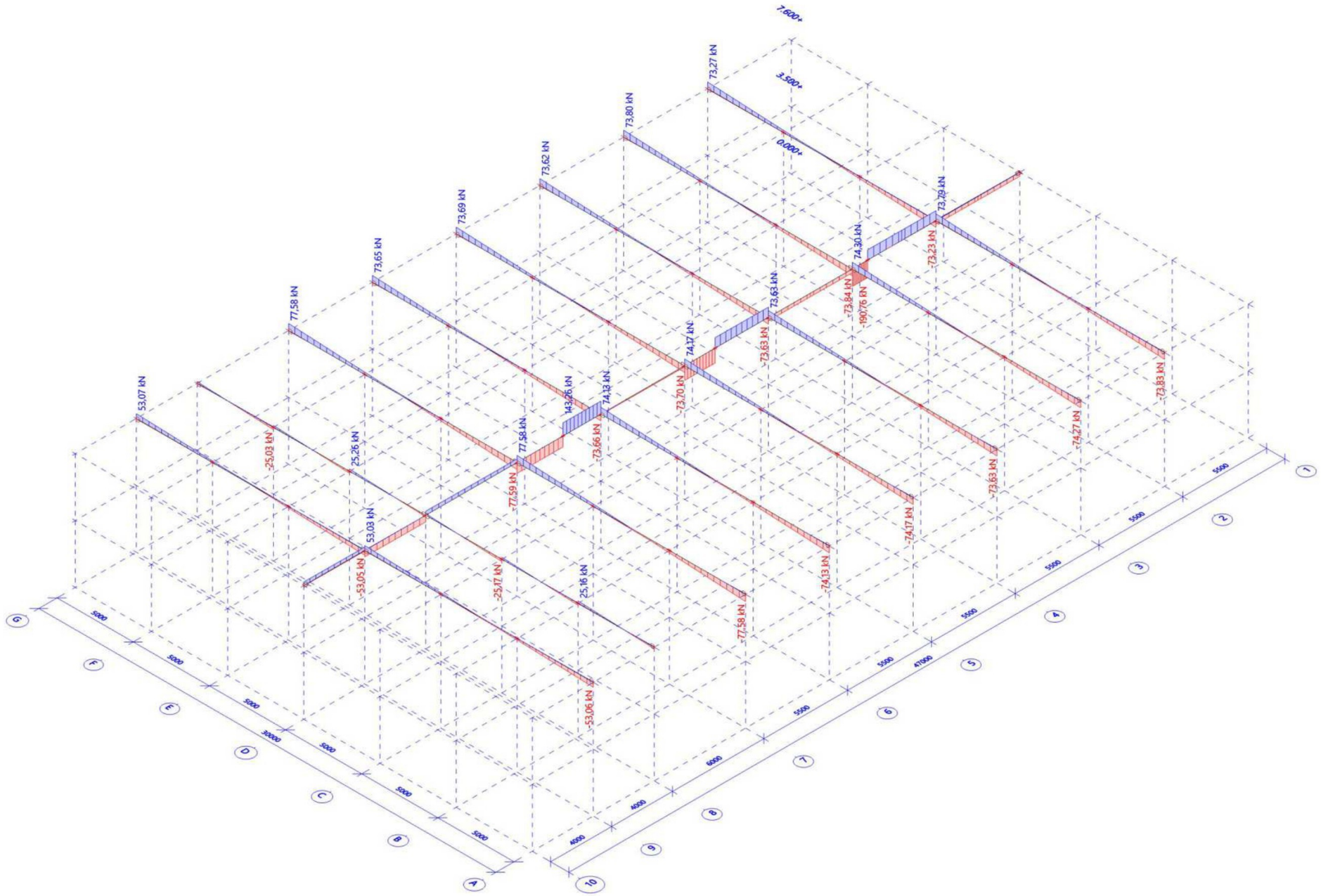
8.1.2.2. 1D internal forces; My

Values: **M_y**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Dakliggers



8.1.2.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Dakliggers

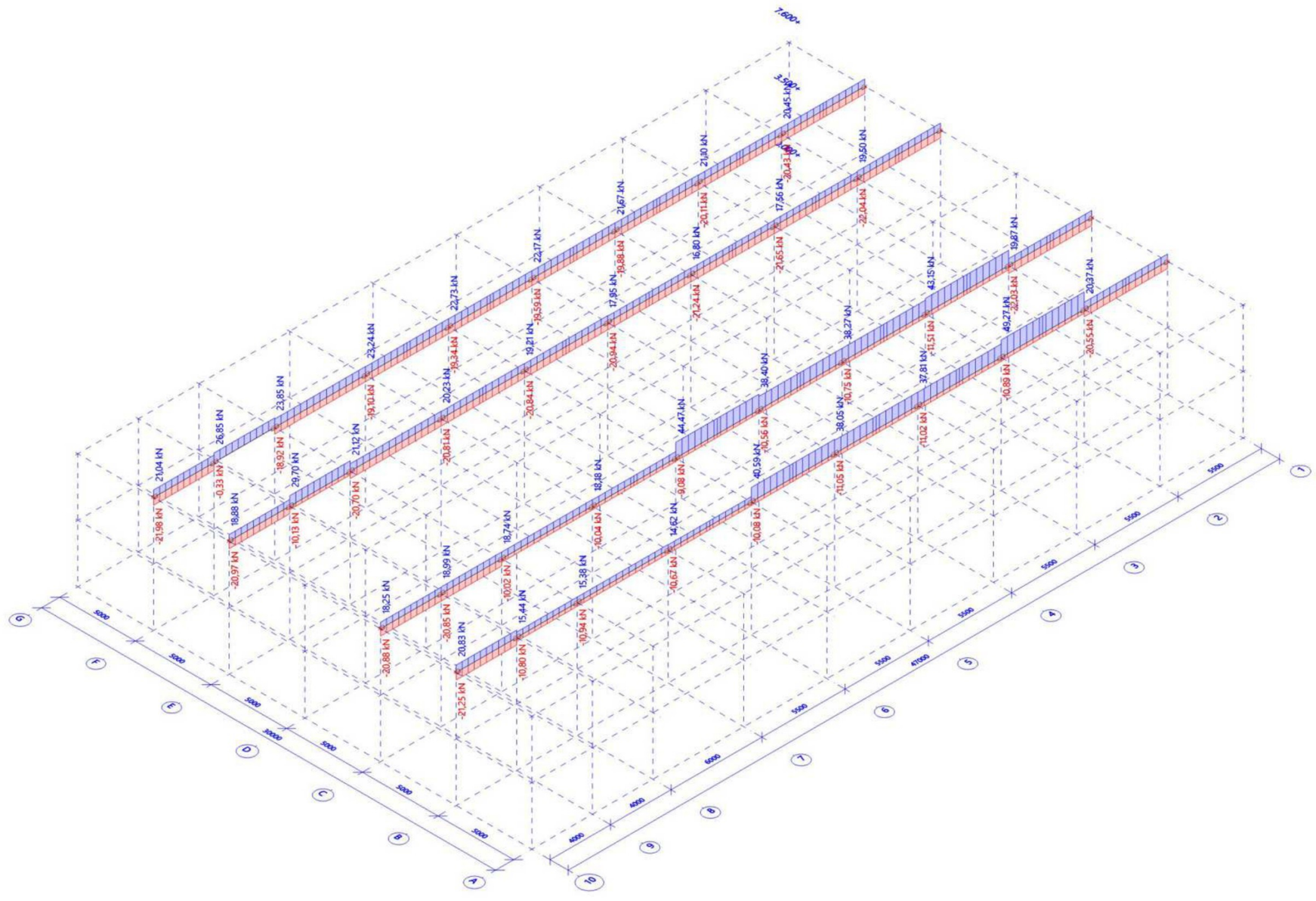


8.1.3. Layers - Dakgordingen

Name	Structural model only	Colour
Dakgordingen	×	

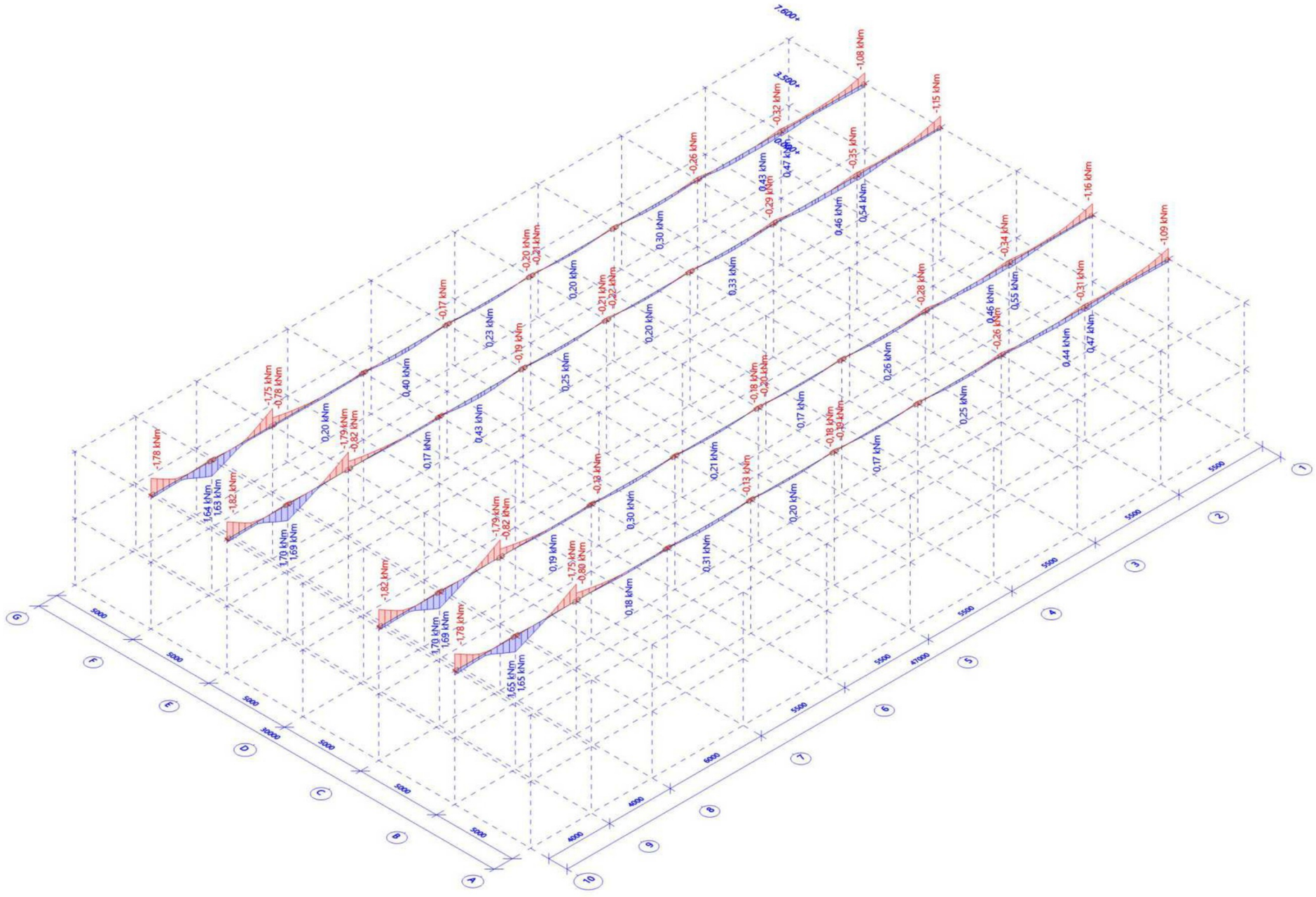
8.1.3.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Dakgordingen



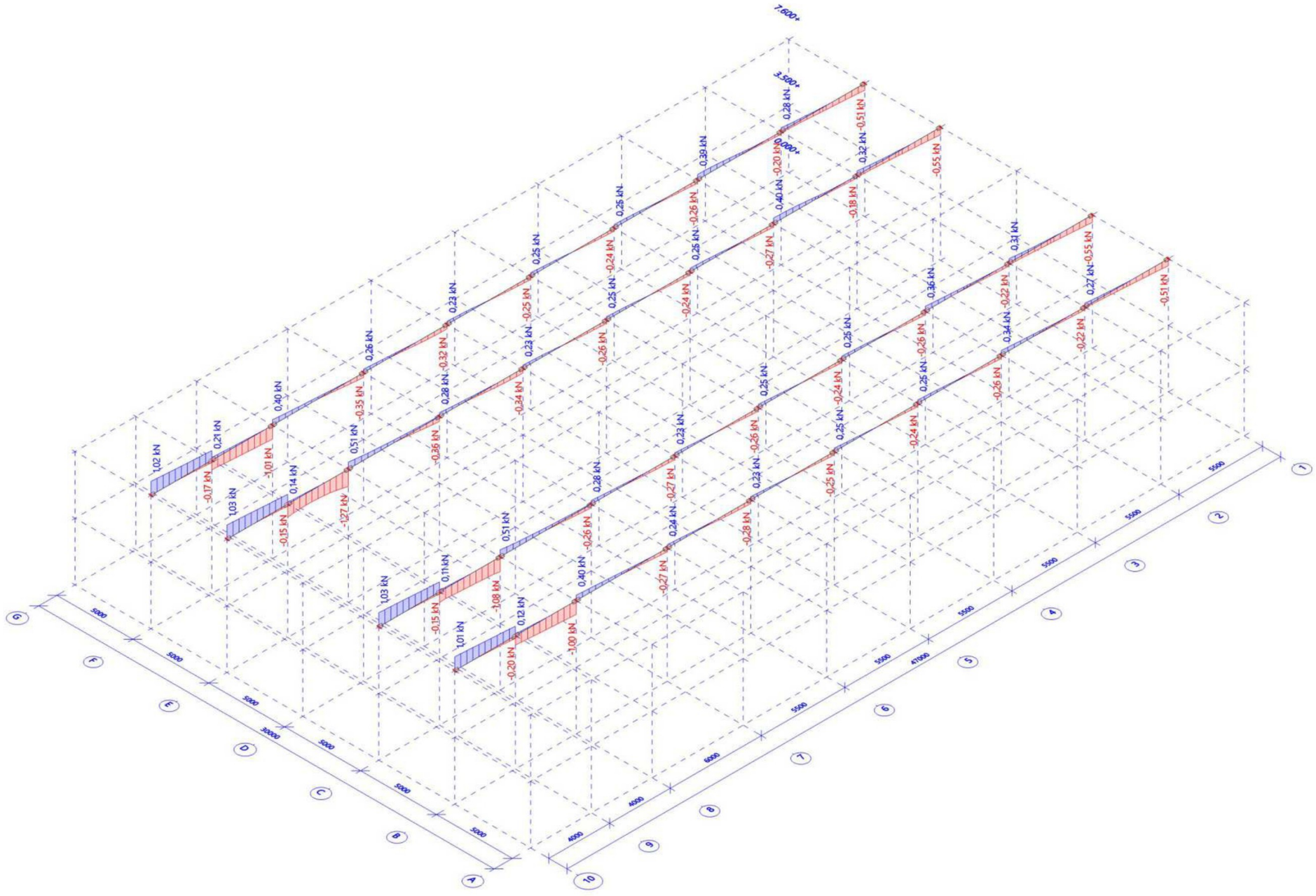
8.1.3.2. 1D internal forces; My

Values: **M_y**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Dakgordingen



8.1.3.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Dakgordingen

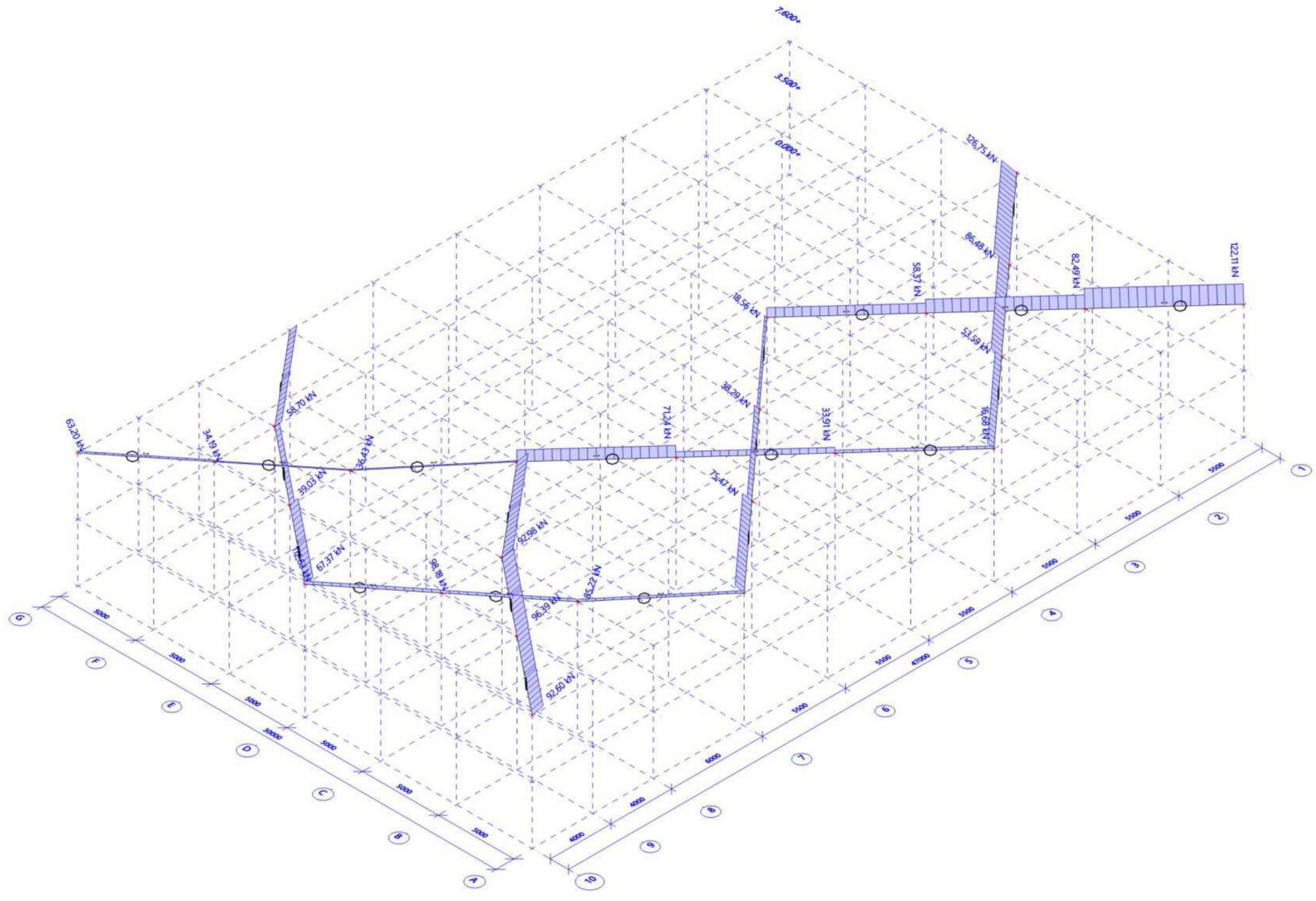


8.1.4. Layers - Windverbanden dak

Name	Structural model only	Colour
Windverbanden dak	×	

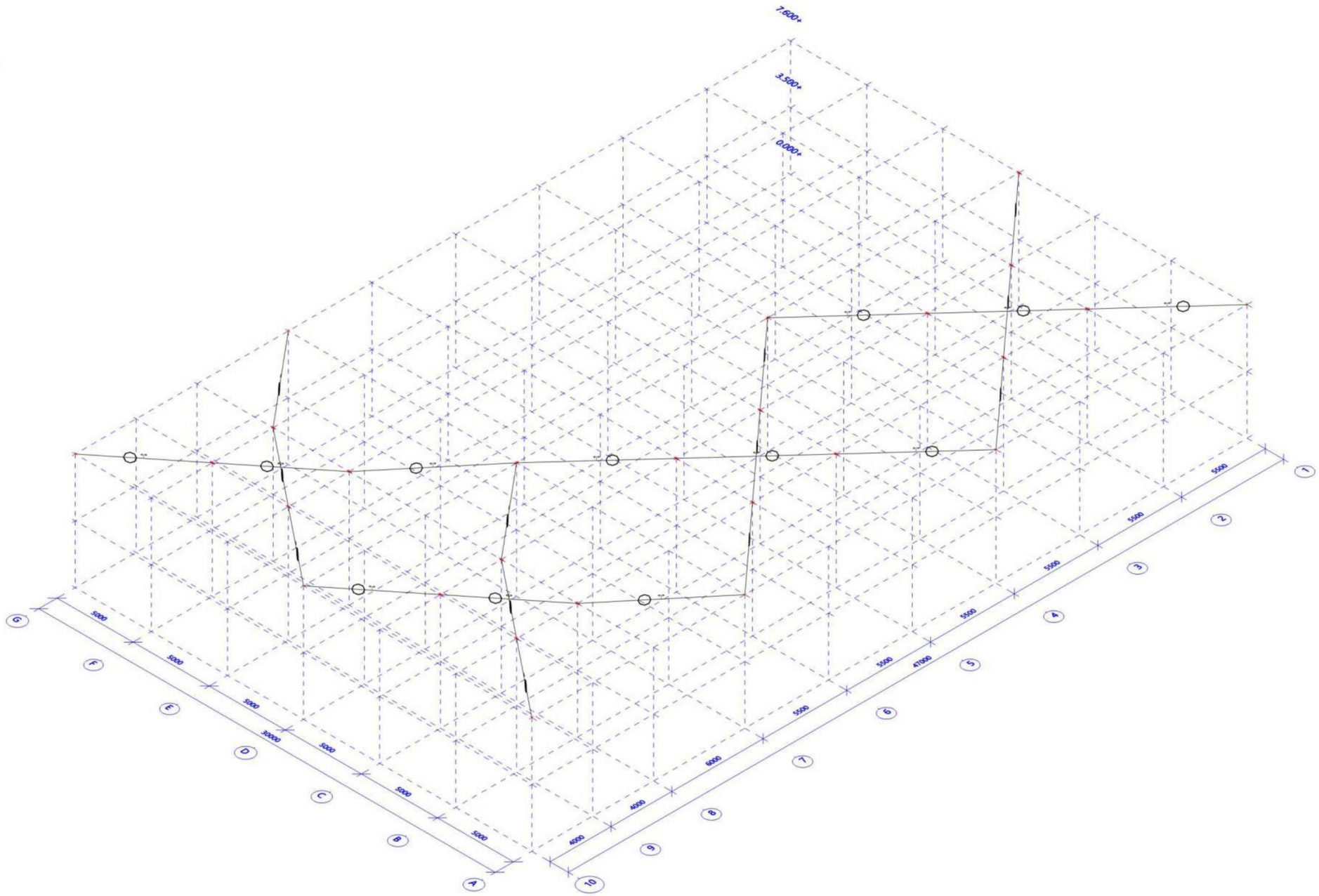
8.1.4.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Windverbanden dak



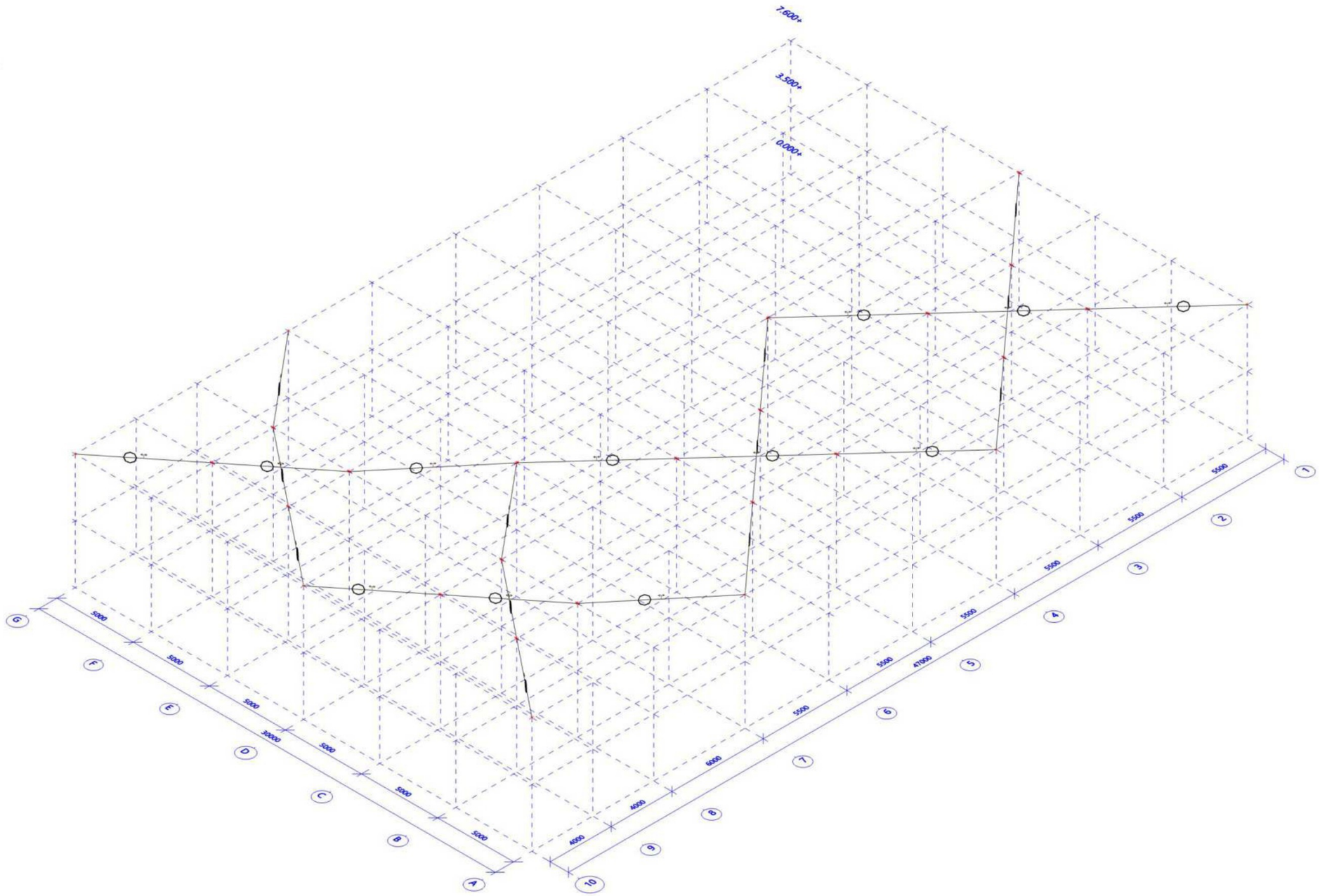
8.1.4.2. 1D internal forces; My

Values: **M_y**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Windverbanden dak



8.1.4.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Windverbanden dak

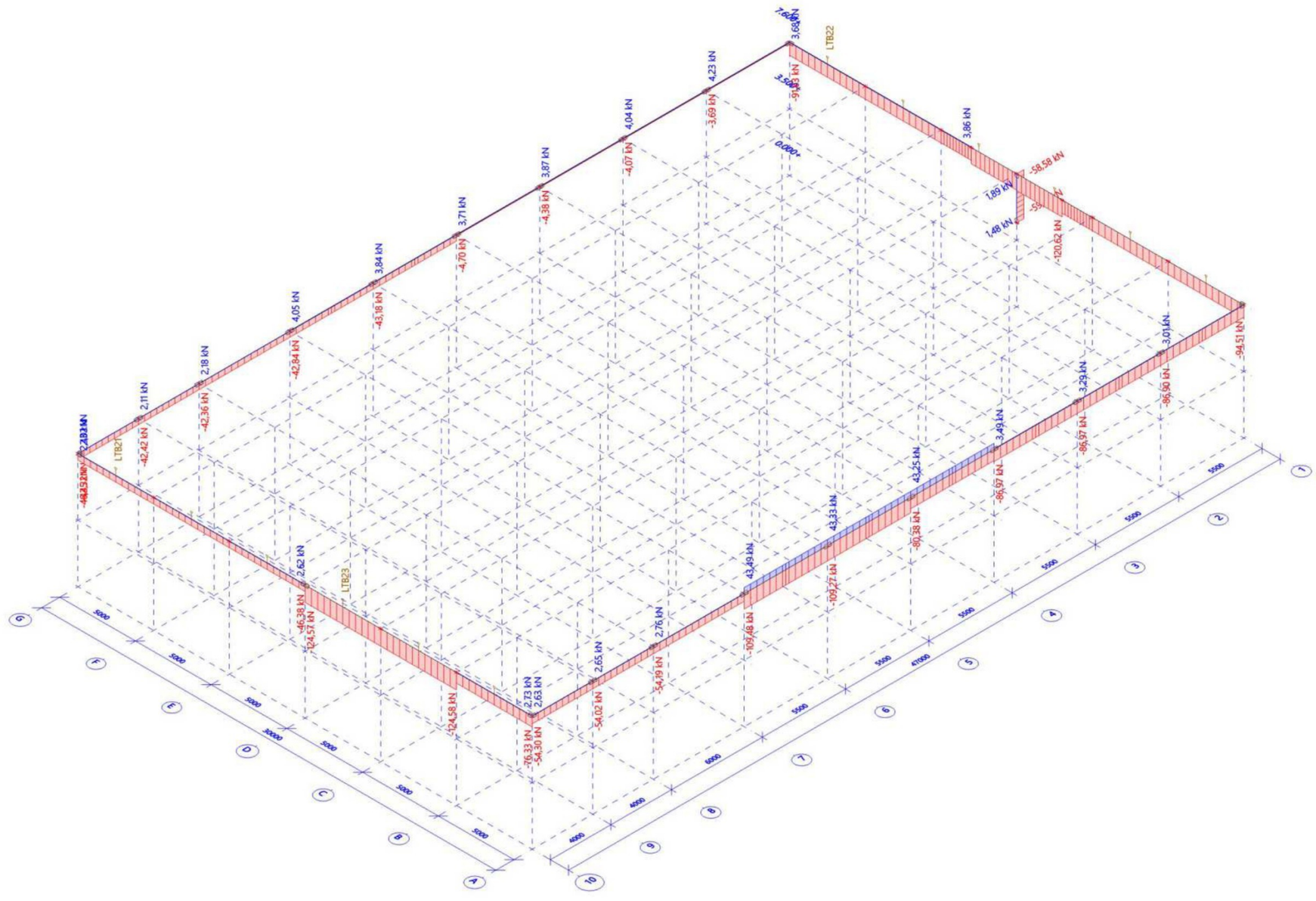

7.600
3.500
0.000
5000
5000
5000
30000
5000
5000
5

8.1.5. Layers - Randliggers dak

Name	Structural model only	Colour
Randliggers dak	×	

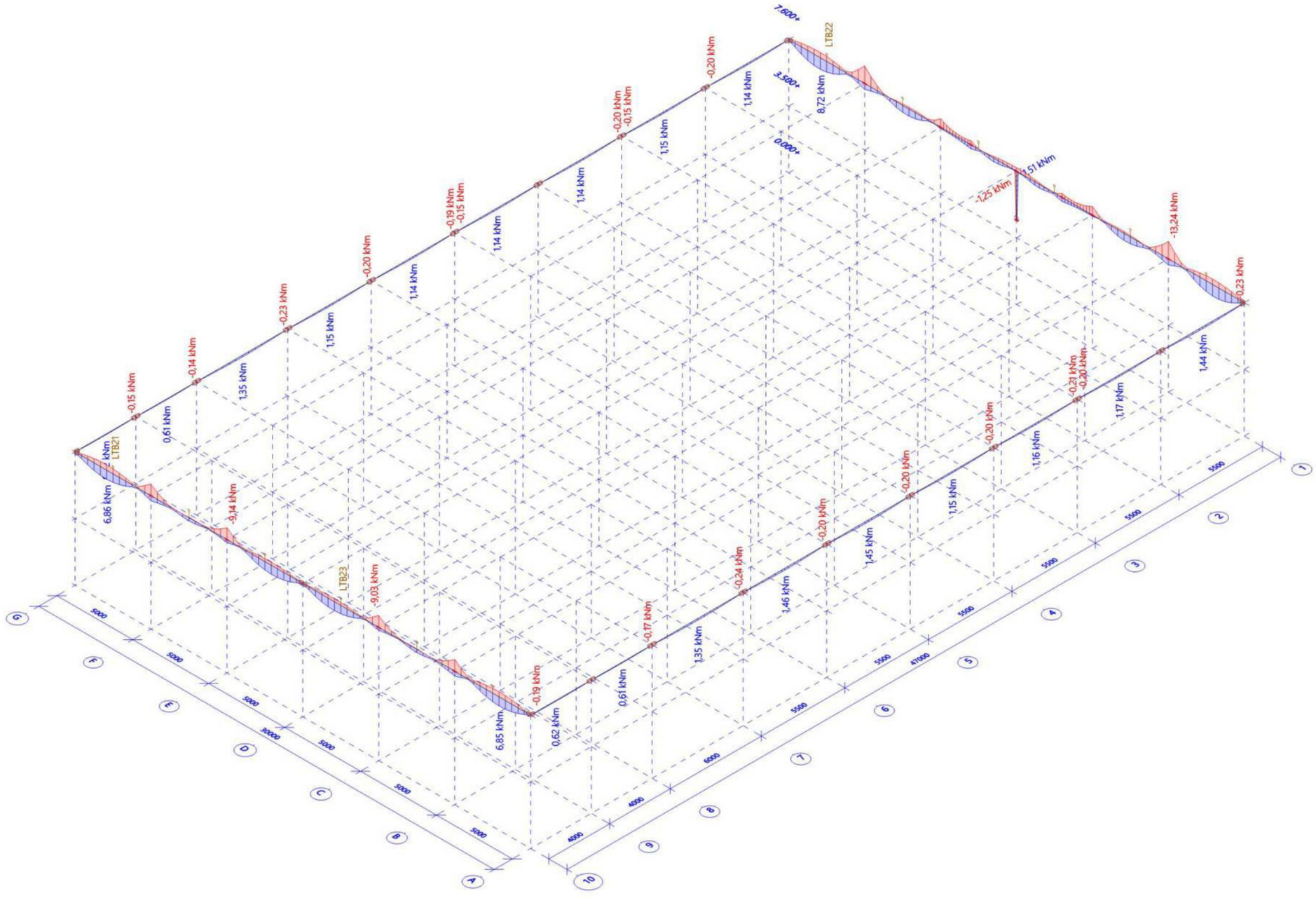
8.1.5.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Randliggers dak



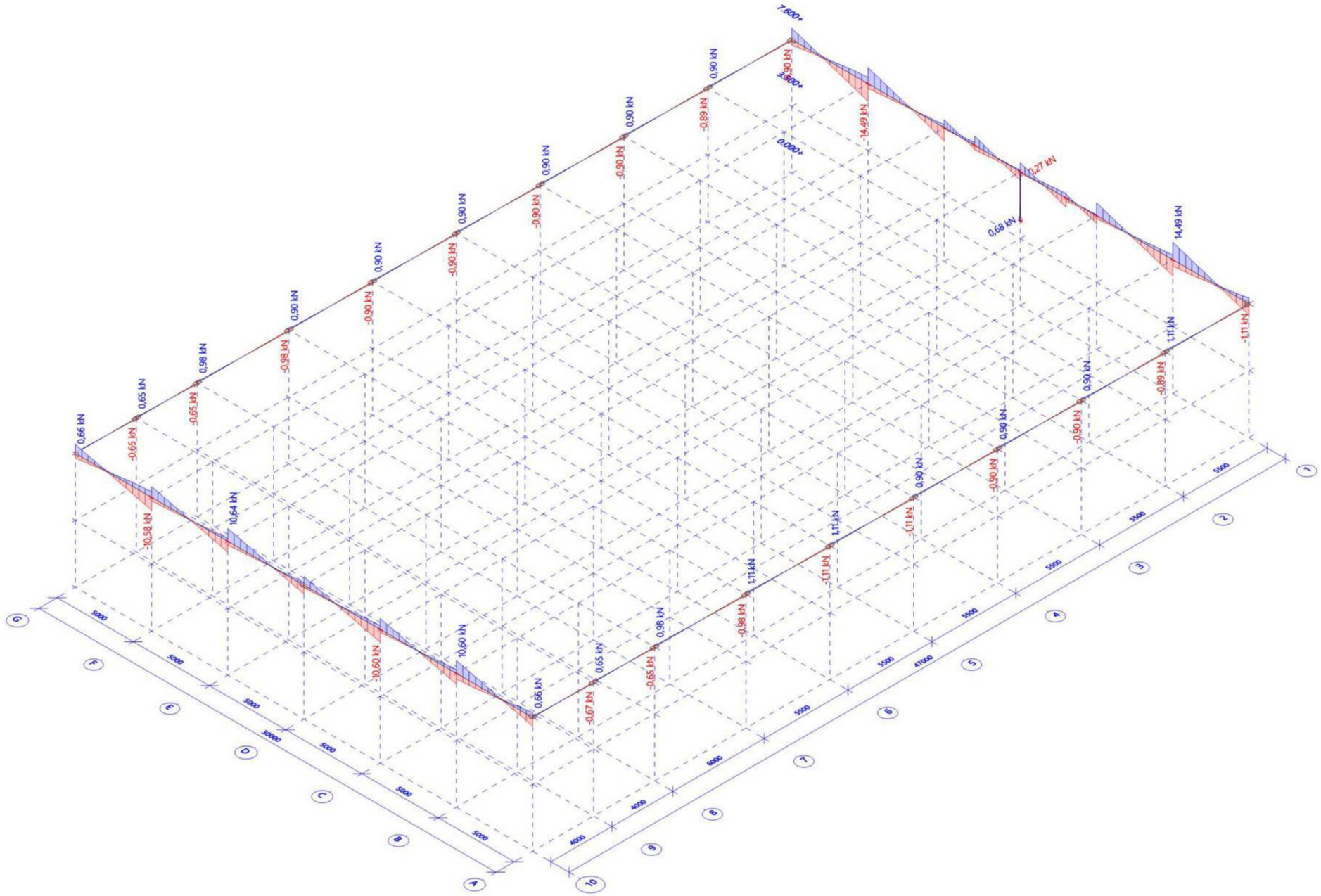
8.1.5.2. 1D internal forces; My

Values: **My**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Randliggers dak



8.1.5.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Randliggers dak

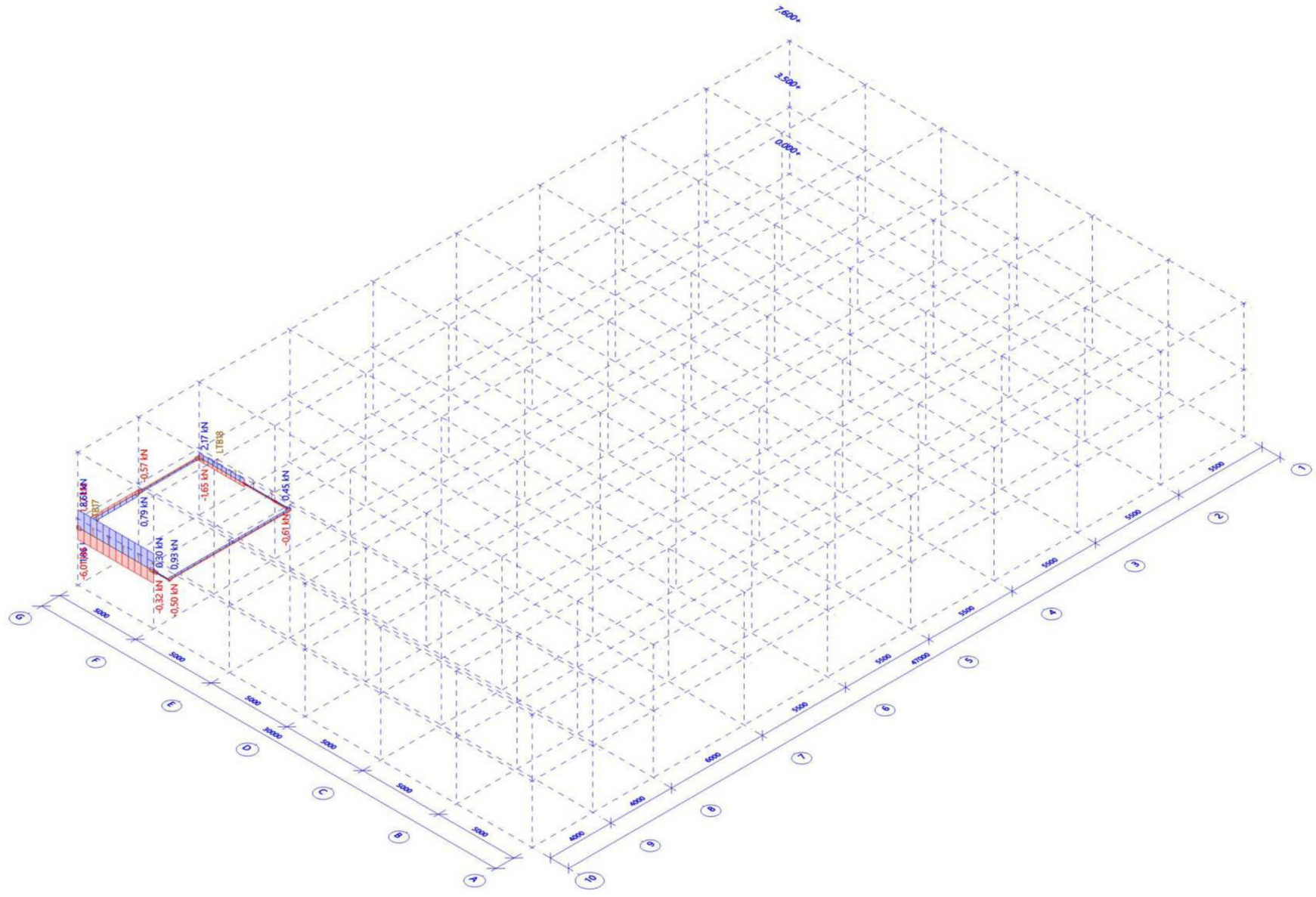


8.1.6. Layers - Vloerligger

Name	Structural model only	Colour
Vloerligger	×	

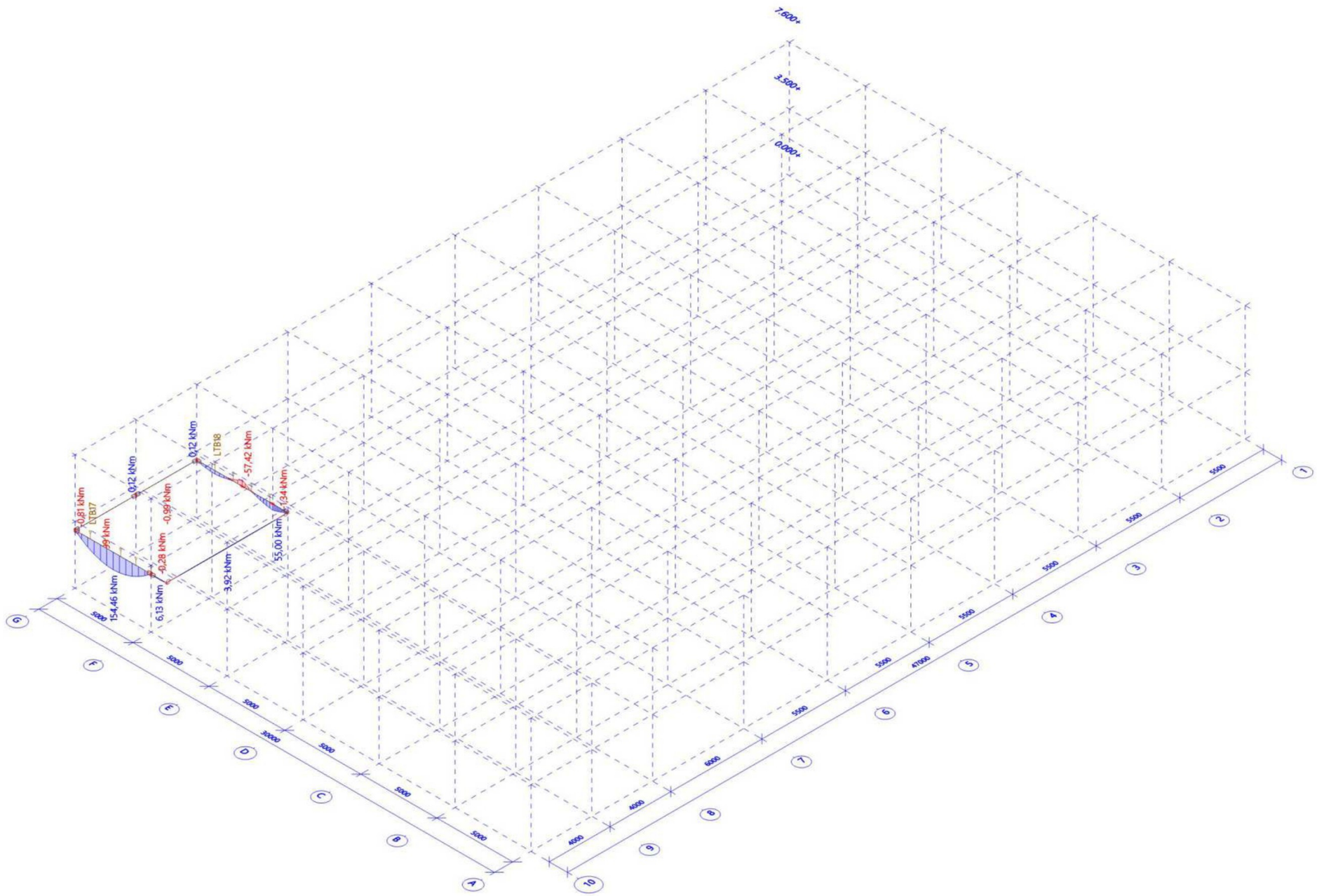
8.1.6.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Vloerligger



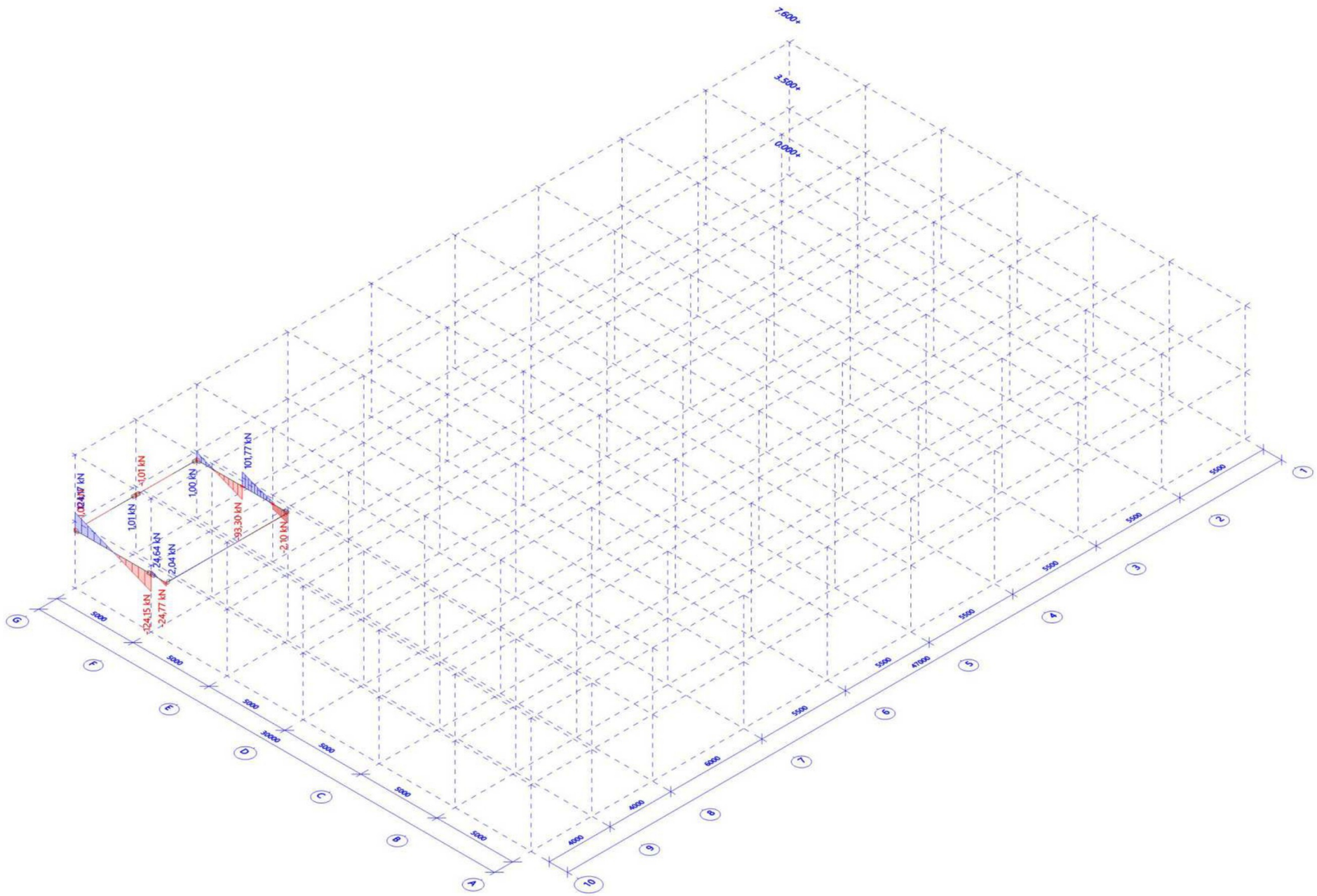
8.1.6.2. 1D internal forces; My

Values: M_y
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Vloerligger



8.1.6.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Vloerligger

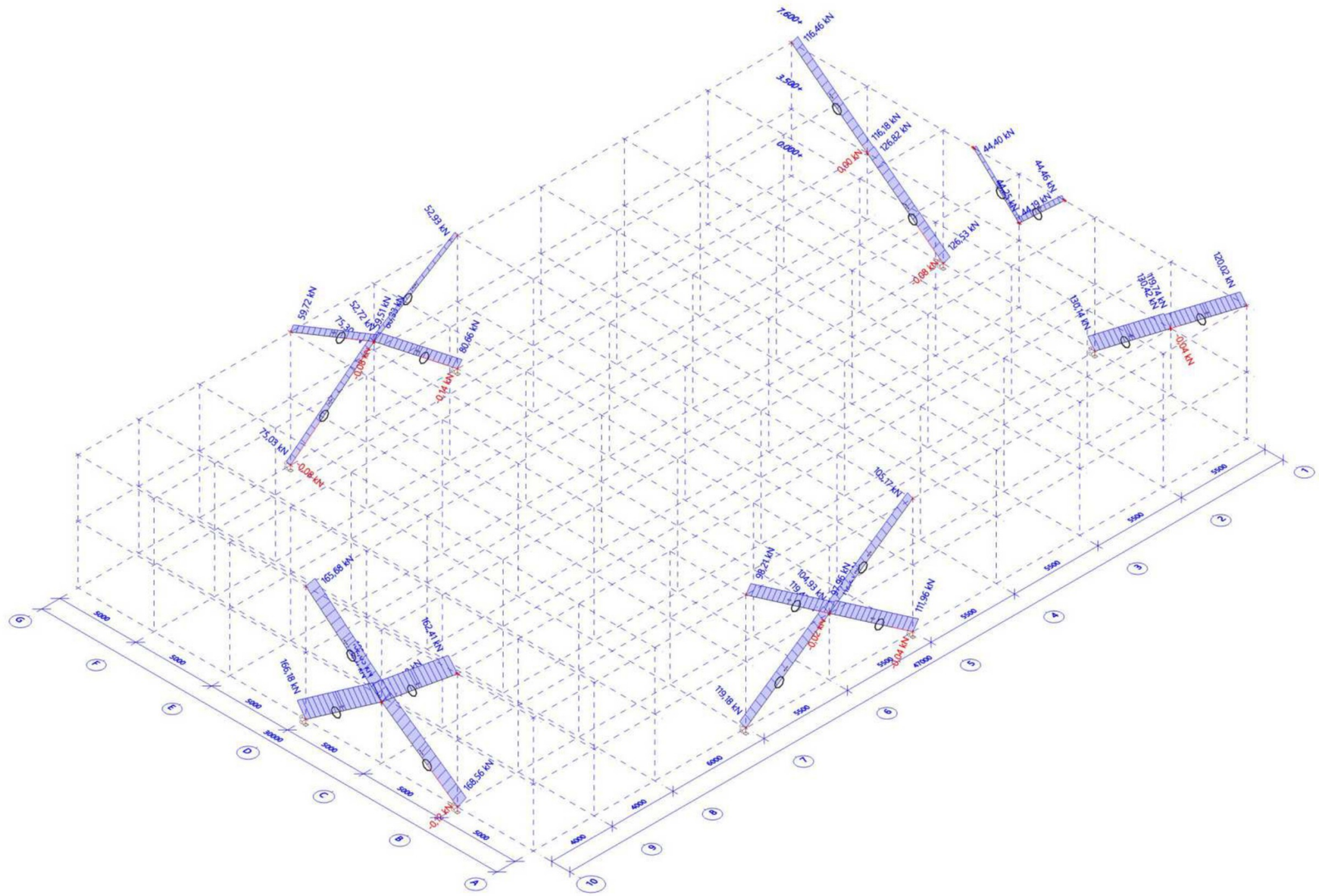


8.1.7. Layers - Windverbanden gevel

Name	Structural model only	Colour
Windverbanden gevel	×	

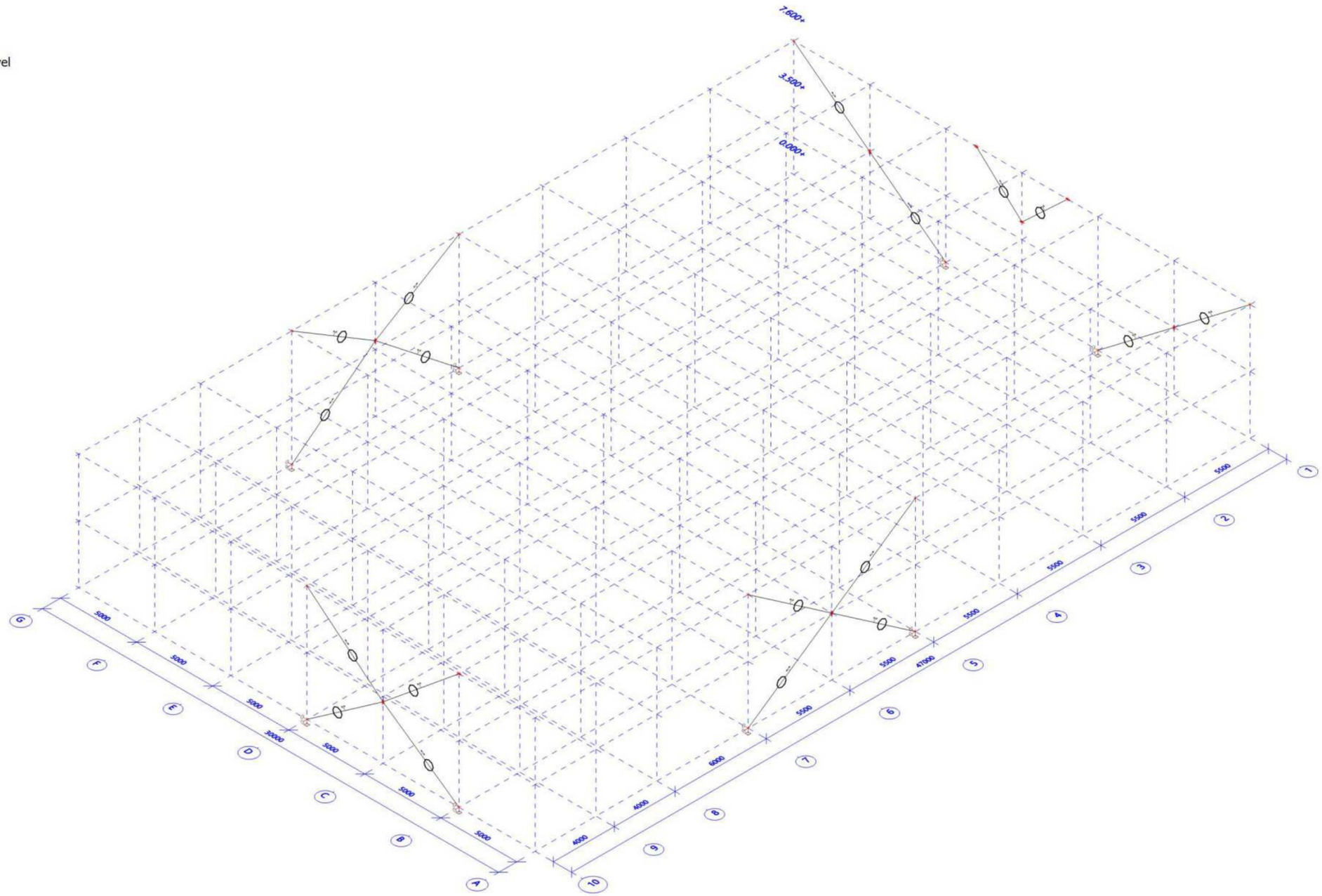
8.1.7.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Windverbanden gevel



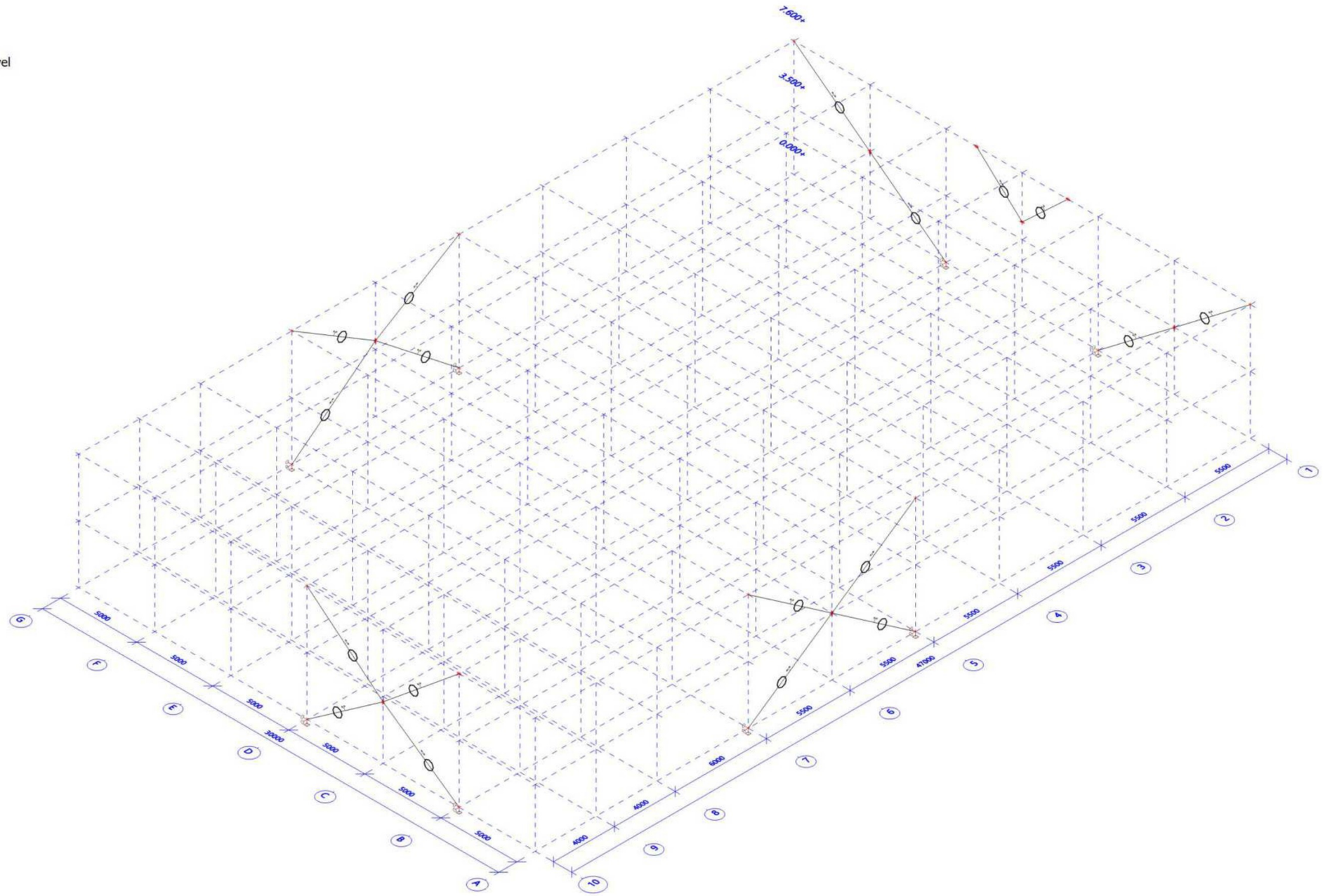
8.1.7.2. 1D internal forces; My

Values: **M_y**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Windverbanden gevel


7.600
3.500
0.000
5000
5000
5000
30000
5000
5000
5

8.1.7.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Windverbanden gevel

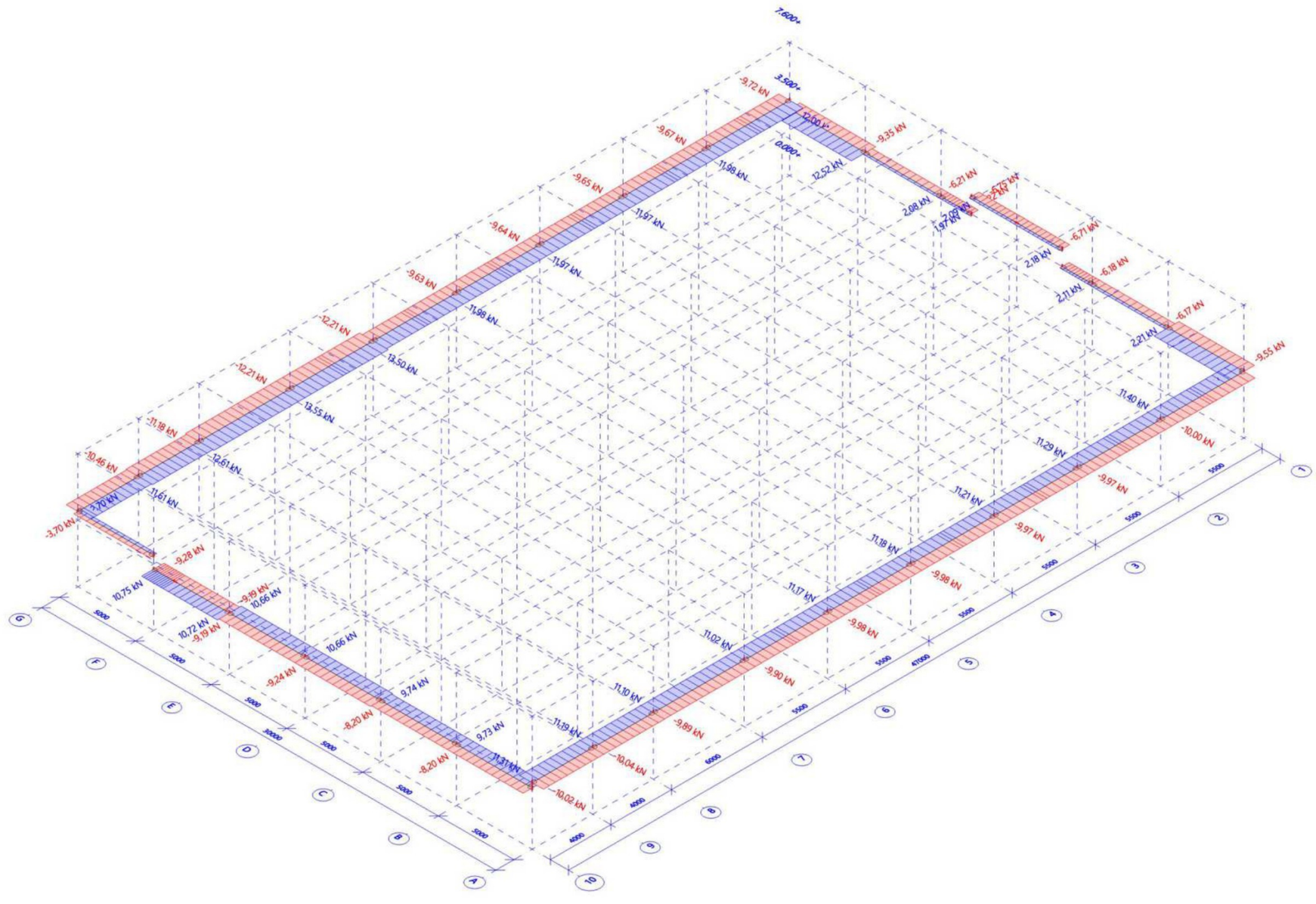


8.1.8. Layers - Geveldragers

Name	Structural model only	Colour
Geveldragers	×	

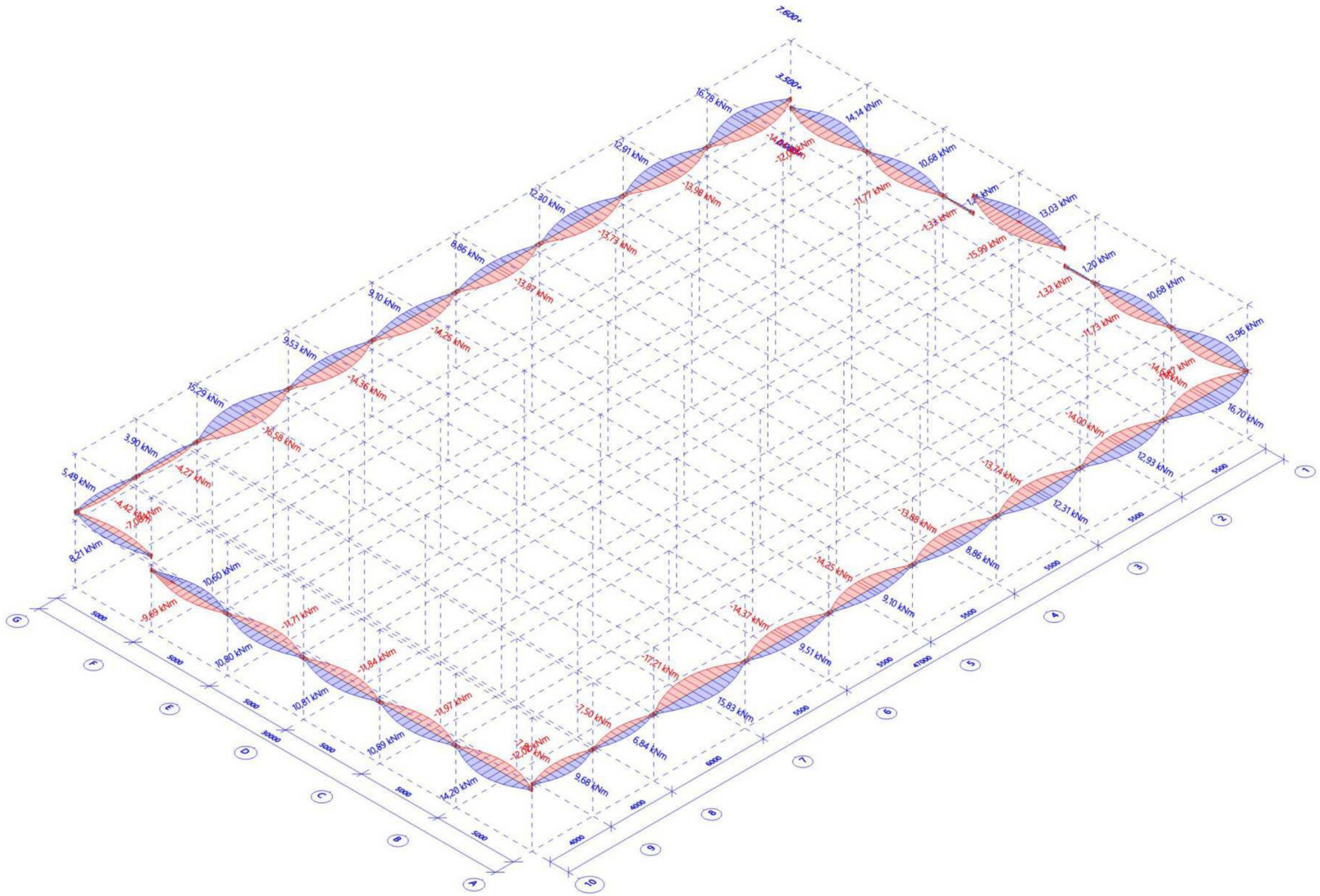
8.1.8.1. 1D internal forces; N

Values: **N**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Local
Selection: All
Filter: Layer = Geveldragers



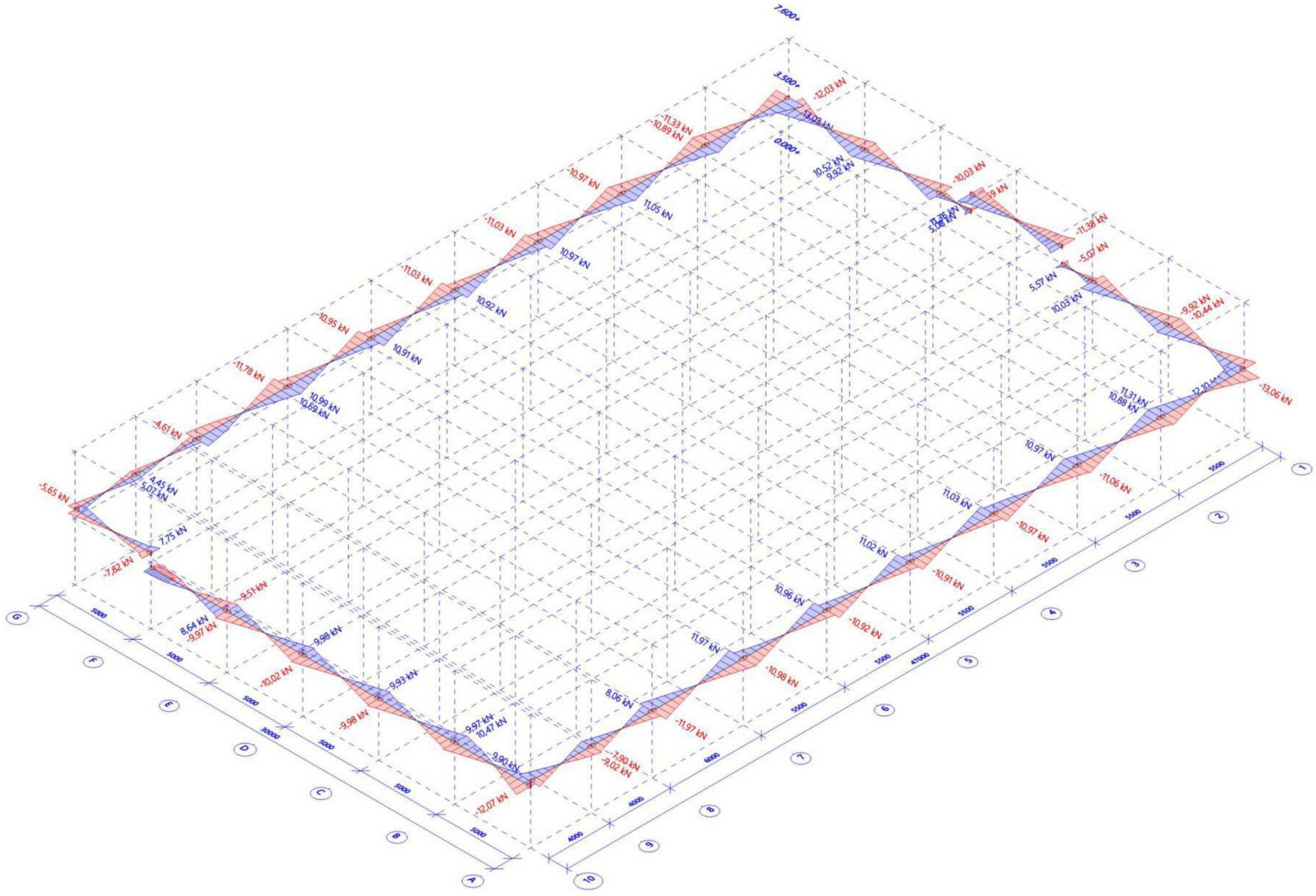
8.1.8.2. 1D internal forces; My

Values: **My**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Geveldragers


7.600+
3.500+
16,78 kNm
14,14 kNm
12,91 kNm
12,30 kNm
8,86 kNm
9,10 kNm
9,53 kNm
15,29 kNm
3,90 kNm
5,49 kNm
8,21 kNm
10,60 kNm
10,80 kNm
10,81 kNm
10,89 kNm
14,20 kNm
9,68 kNm
6,84 kNm
15,83 kNm
9,51 kNm
10,68 kNm
13,03 kNm
1,20 kNm
10,68 kNm
13,96 kNm
16,70 kNm
12,93 kNm
12,31 kNm
8,86 kNm
9,10 kNm
-13,98 kNm
-13,73 kNm
-13,87 kNm
-14,25 kNm
-14,36 kNm
-16,38 kNm
-4,27 kNm
-9,69 kNm
-11,71 kNm
-11,84 kNm
-11,97 kNm
-17,21 kNm
-14,37 kNm
-14,25 kNm
-13,88 kNm
-13,74 kNm
-14,00 kNm
-11,77 kNm
-15,99 kNm
-13,32 kNm
-11,73 kNm
5000
5000
5000
30000
5000
5000
5

8.1.8.3. 1D internal forces: Vz

Values: $\mathbf{V_z}$
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Geveldragers



9. Staalcontrole UGT

9.1. Steel slenderness

Linear calculation

Member	CS Name	Part	Sway y / Sway z	L_y [m] / L_z [m]	k_y [-] / k_z [-]	l_y [m] / l_z [m]	λ_y [-] / λ_z [-]	$e_{0,y}$ [mm] / $e_{0,z}$ [mm]	l_{yz} [m]	l_{LTB} [m]
B1	CS22	1	No	7,600	0,995	7,564	75,829	10,6	3,300	3,300
			No	3,300	0,662	2,186	81,159	4,5		
B1	CS22	4	No	7,600	0,995	7,564	75,829	10,6	3,300	3,300
			No	3,300	0,877	2,893	107,429	4,5		
B1	CS22	2	No	7,600	0,995	7,564	75,829	10,6	0,200	0,200
			No	0,200	0,714	0,143	5,305	-0,5		
B2	CS1	1	No	7,600	0,995	7,561	83,010	10,9	3,500	3,500
			No	3,500	0,678	2,372	95,801	4,9		
B227	CS1	1	No	7,600	0,999	7,596	83,392	10,9	3,800	3,800
			No	3,800	0,657	2,498	100,891	5,4		
B17	CS1	1	No	7,600	0,985	7,486	82,192	10,9	4,300	4,300
			No	4,300	0,632	2,717	109,730	6,3		
B228	CS1	3	No	7,600	0,999	7,596	83,392	10,9	2,800	2,800
			No	2,800	0,914	2,560	103,373	3,8		
B2	CS1	2	No	7,600	0,995	7,561	83,010	10,9	4,100	4,100
			No	4,100	0,699	2,865	115,687	5,9		
B122	CS2	1	No	5,500	0,811	4,463	68,030	13,4	5,500	5,500
			No	5,500	0,950	5,227	131,183	12,3		
B7	CS2	1	No	3,800	0,876	3,331	50,768	8,0	3,500	3,500
			No	3,500	0,780	2,730	68,520	7,2		
B6	CS2	2	No	1,000	0,630	0,630	9,608	-0,7	1,000	1,000
			No	1,000	0,895	0,895	22,461	0,7		
B6	CS2	3	No	3,300	0,746	2,463	37,541	6,5	3,300	3,300
			No	3,300	0,962	3,176	79,696	6,6		
B171	CS2	1	No	5,500	0,570	3,133	47,759	13,4	5,500	5,500
			No	5,500	0,951	5,230	131,264	12,3		
B29	CS5	1	No	7,600	0,994	7,556	75,174	18,1	7,600	7,600
			No	7,600	0,991	7,535	125,460	16,9		
B31	CS5	1	No	7,600	0,994	7,557	75,184	18,1	7,600	7,600
			No	7,600	0,994	7,557	125,830	16,9		
B32	CS17	1	No	15,000	0,909	13,638	82,449	22,0	5,000	5,000
			No	5,000	0,877	4,385	111,084	6,8		
B33	CS17	1	No	15,000	0,925	13,879	83,906	22,0	5,000	5,000
			No	5,000	0,755	3,775	95,627	6,8		
B46	CS6	1	No	15,000	0,920	13,806	74,708	21,2	5,000	5,000
			No	5,000	0,779	3,894	94,577	6,6		
B34	CS6	3	No	9,000	0,632	5,692	30,804	10,2	6,000	6,000
			No	6,000	0,640	3,841	93,286	8,2		
B34	CS6	1	No	8,000	0,815	6,520	35,281	8,3	4,000	4,000
			No	4,000	0,968	3,873	94,061	5,1		
B34	CS6	12	No	10,000	0,671	6,710	36,311	12,0	5,500	5,500
			No	5,500	0,827	4,548	110,459	7,4		
B48	CS23	1	No	15,000	0,875	13,131	87,804	22,7	5,000	5,000
			No	5,000	0,727	3,635	95,969	6,9		
B49	CS23	1	No	15,000	0,920	13,802	92,290	22,7	5,000	5,000
			No	5,000	0,615	3,074	81,145	6,9		
B135	CS23	1	No	5,000	0,846	4,229	28,281	4,1	5,000	5,000
			No	5,000	0,935	4,677	123,471	6,9		
B52	CS3	1	No	7,600	0,970	7,376	128,778	20,4	7,600	7,600
			No	7,600	0,920	6,994	198,700	18,2		
B241	CS3	1	No	3,300	0,980	3,233	56,443	6,9	3,300	3,300
			No	3,300	0,887	2,926	83,119	6,9		
B54	CS3	1	No	7,600	0,971	7,376	128,789	20,4	7,600	7,600
			No	7,600	0,920	6,991	198,615	18,2		
B120	CS3	1	No	5,500	0,859	4,722	82,444	13,8	5,500	5,500
			No	5,500	0,963	5,297	150,495	12,7		
B251	CS10	1	No	6,000	0,728	4,366	193,337	21,9	6,000	6,000
			No	6,000	0,593	3,557	157,503	21,9		

Member	CS Name	Part	Sway y / Sway z	L_y [m] / L_z [m]	k_y [-] / k_z [-]	l_y [m] / l_z [m]	λ_y [-] / λ_z [-]	$e_{0,y}$ [mm] / $e_{0,z}$ [mm]	l_{yz} [m]	l_{LTB} [m]
B89	CS10	1	No	4,000	0,832	3,329	147,404	14,0	4,000	4,000
			No	4,000	0,554	2,216	98,154	14,0		
B253	CS10	1	No	6,000	0,732	4,394	194,574	21,9	6,000	6,000
			No	6,000	0,840	5,038	223,112	21,9		
B77	CS10	1	No	5,500	0,685	3,769	166,917	19,9	5,500	5,500
			No	5,500	0,934	5,139	227,589	19,9		
B255	CS10	1	No	6,000	0,731	4,389	194,347	21,9	6,000	6,000
			No	6,000	0,887	5,322	235,683	21,9		
B90	CS25	1	No	7,433	1,000	7,433	278,177	13,5	7,433	7,433
			No	7,433	1,000	7,433	544,667	12,7		
B262	CS11	1	No	7,810	1,000	7,810	341,482	14,4	7,810	7,810
			No	7,810	1,000	7,810	668,153	13,5		
B91	CS11	1	No	7,433	1,000	7,433	324,989	13,7	7,433	7,433
			No	7,433	1,000	7,433	635,883	12,8		
B150	CS7	1	No	5,500	0,938	5,159	83,097	17,6	5,500	5,500
			No	5,500	0,618	3,396	180,150	10,9		
B176	CS7	1	No	2,000	0,994	1,988	32,028	3,4	2,000	2,000
			No	2,000	0,627	1,253	66,475	3,5		
B159	CS7	1	No	5,500	0,984	5,411	87,154	17,6	5,500	5,500
			No	5,500	0,625	3,438	182,353	10,9		
B160	CS7	1	No	5,500	0,946	5,201	83,772	17,6	5,500	5,500
			No	5,500	0,640	3,518	186,609	10,9		
B149	CS18	1	No	6,000	0,970	5,819	75,561	18,3	6,000	6,000
			No	6,000	0,781	4,685	218,550	11,4		
B229	CS18	1	No	6,000	0,998	5,991	77,787	18,3	3,000	3,000
			No	3,000	0,610	1,830	85,342	5,3		
B271	CS18	1	No	5,000	0,820	4,100	53,241	14,3	1,400	1,400
			No	1,400	0,801	1,121	52,295	2,0		
B282	CS12	1	No	6,981	1,000	6,981	**2418,369**	20,9	6,981	6,981
			No	6,981	1,000	6,981	345,481	19,9		
B138	CS12	1	No	6,685	1,000	6,685	**2315,715**	20,0	13,370	13,370
			No	13,370	1,000	13,370	661,633	39,1		
B181	CS21	1	No	6,280	1,000	6,280	**2175,445**	18,8	12,560	12,560
			No	12,560	1,000	12,560	543,861	36,5		
B194	CS15	2	No	6,000	0,627	3,764	45,592	8,2	6,000	6,000
			No	6,000	0,501	3,006	134,526	9,0		
B279	CS15	1	No	0,400	0,798	0,319	3,865	-2,1	0,400	0,400
			No	0,400	1,000	0,400	17,901	0,0		
B191	CS15	1	No	1,000	0,669	0,669	8,100	-1,0	1,000	1,000
			No	1,000	1,000	1,000	44,752	0,9		
B225	CS26	1	No	2,800	0,953	2,668	65,747	6,2	2,800	2,800
			No	2,800	0,836	2,342	93,137	6,1		
B242	CS9	1	No	8,000	0,642	5,136	51,410	24,6	8,000	8,000
			No	8,000	0,754	6,032	235,440	15,1		
B246	CS9	1	No	4,000	0,782	3,129	31,323	8,5	4,000	4,000
			No	4,000	0,930	3,721	145,236	7,1		
B244	CS24	1	No	3,000	0,637	1,911	15,334	1,2	6,000	6,000
			No	6,000	0,846	5,075	151,488	8,7		
B244	CS24	3	No	1,000	0,773	0,773	6,203	-2,5	6,000	6,000
			No	6,000	0,846	5,075	151,488	8,7		
B248	CS4	1	No	3,300	0,999	3,295	44,270	6,0	3,300	3,300
			No	3,300	0,980	3,235	71,591	6,4		
B247	CS4	1	No	1,000	0,832	0,832	11,177	-1,3	1,000	1,000
			No	1,000	0,978	0,978	21,654	0,4		
B266	CS27	1	No	6,466	1,000	6,466	**2239,855**	19,3	6,466	6,466
			No	6,466	1,000	6,466	223,986	17,8		
B270	CS8	1	No	3,500	0,996	3,487	50,213	8,8	3,500	3,500
			No	3,500	0,753	2,637	130,679	6,5		

9.2. EC-EN 1993 Steel check ULS beknopt

Values: $\mathbf{UC_{Overall}}$
Nonlinear calculation

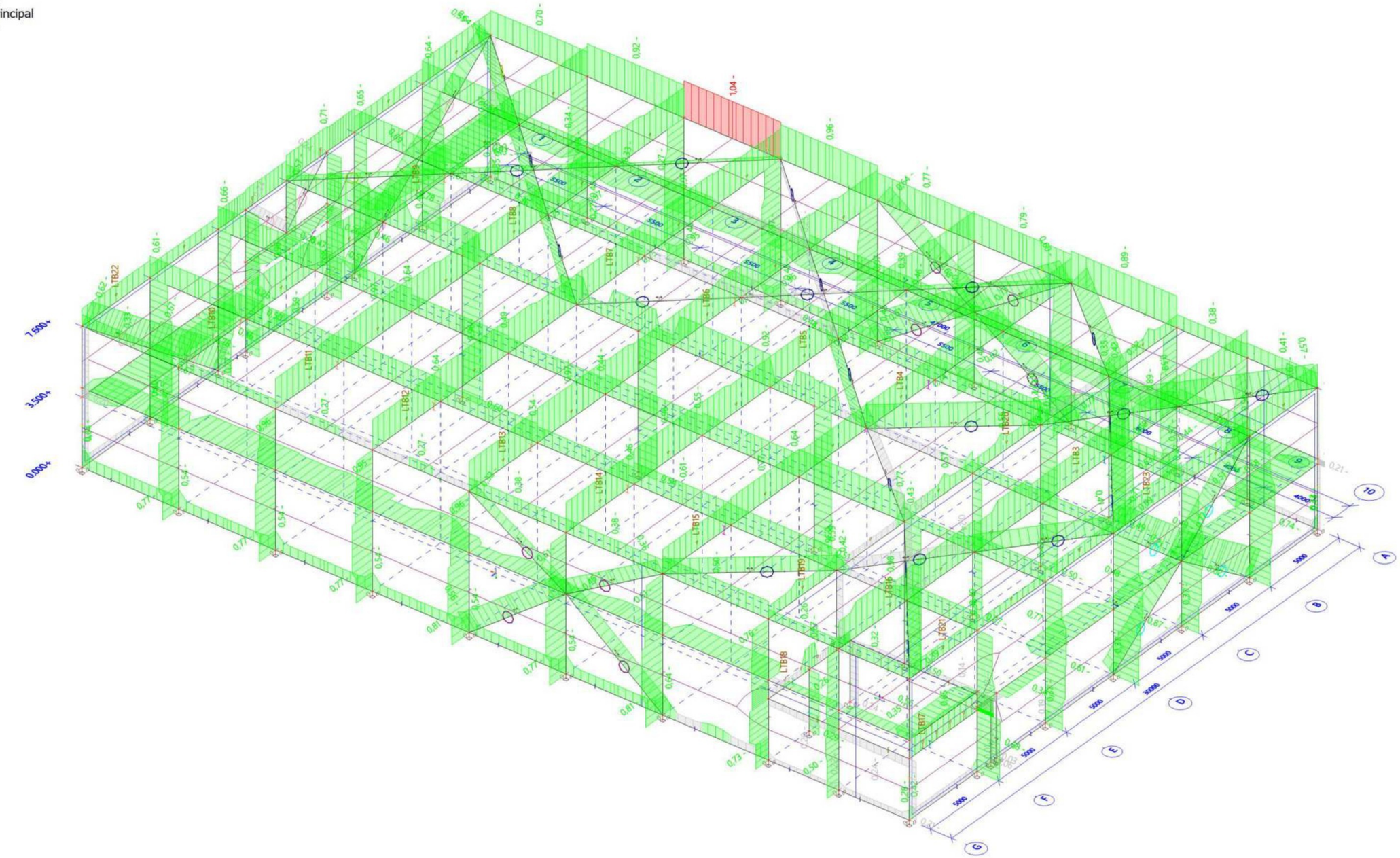
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
There are 1 warnings on selected members. 1 of them are shown.
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]	E/W/N
B1	2,310	NC_ULS-Set B (auto)34	CS22 - IPE240	S 235	**0,68**	0,34	0,68	W30
B3	3,500+	NC_ULS-Set B (auto)37	CS1 - IPE220	S 235	**0,87**	0,49	0,87	W30
B171	2,750	NC_ULS-Set B (auto)38	CS2 - HEA160	S 235	**0,79**	0,31	0,79	
B29	0,000	NC_ULS-Set B (auto)77	CS5 - HEA240	S 235	**0,60**	0,17	0,60	
B39	7,500-	NC_ULS-Set B (auto)10	CS17 - IPE400	S 235	**0,98**	0,90	0,98	
B34	19,500+	NC_ULS-Set B (auto)10	CS6 - IPE450	S 235	**0,92**	0,30	0,92	
B48	3,750	NC_ULS-Set B (auto)10	CS23 - IPE360	S 235	**0,98**	0,61	0,98	
B174	2,750	NC_ULS-Set B (auto)38	CS3 - HEA140	S 235	**1,04**	0,43	1,04	
B253	0,000	NC_ULS-Set B (auto)42	CS10 - SHSCF60/60/4.0	S 235	**0,77**	0,16	0,77	
B96	0,000	NC_ULS-Set B (auto)30	CS25 - HFLeq70x70x7	S 235	**0,57**	0,57	0,00	
B108	0,000	NC_ULS-Set B (auto)30	CS11 - HFLeq60x60x6	S 235	**0,69**	0,69	0,00	
B152	2,750	NC_ULS-Set B (auto)40	CS7 - UNP160	S 235	**0,97**	0,50	0,97	W30
B280	3,000	NC_ULS-Set B (auto)38	CS18 - UNP200	S 235	**0,77**	0,40	0,77	W30
B138	6,685	NC_ULS-Set B (auto)34	CS12 - FL70X10	S 235	**0,73**	0,73	0,00	
B181	6,280	NC_ULS-Set B (auto)30	CS21 - FL80X10	S 235	**0,69**	0,69	0,00	
B239	0,000	NC_ULS-Set B (auto)44	CS15 - IPE200	S 235	**0,68**	0,68	0,36	
B225	0,000	NC_ULS-Set B (auto)78	CS26 - HEA100	S 235	**0,28**	0,12	0,28	W30
B246	2,000	NC_ULS-Set B (auto)19	CS9 - UNP260	S 235	**0,24**	0,24	0,23	W30
B244	3,000+	NC_ULS-Set B (auto)78	CS24 - IPE300	S 235	**0,67**	0,35	0,67	
B248	0,000	NC_ULS-Set B (auto)77	CS4 - HEA180	S 235	**0,29**	0,16	0,29	
B267	6,103	NC_ULS-Set B (auto)38	CS27 - FL100X10	S 235	**0,72**	0,72	0,00	
B270	0,000	NC_ULS-Set B (auto)21	CS8 - UNP180	S 235	**0,03**	0,03	0,02	W30

E/W/N	Present on members
W30	B1, B134, B136, B142, B149, B150, B152, B2, B225, B242, B245, B246, B247, B270, B280, B3

9.3. EC-EN 1993 Steel check ULS; Overall check

Values: **UC$_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All



9.4. Lagen voor staalcontrole

Name	Structural model only	Colour
Kolommen	×	
Dakliggers	×	
Dakgordingen	×	
Windverbanden dak	×	
Randliggers dak	×	
Vloerligger	×	
Windverbanden gevel	×	
Geveldragers	×	

9.5. Per laag

9.5.1. Per laag - Kolommen

Name	Structural model only	Colour
Kolommen	×	

9.5.1.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Kolommen
There are 1 warnings on selected members. 1 of them are shown.
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]	E/W/N
B1	2,310	NC_ULS-Set B (auto)34	CS22 - IPE240	S 235	**0,68**	0,34	0,68	W30
B3	3,500+	NC_ULS-Set B (auto)37	CS1 - IPE220	S 235	**0,87**	0,49	0,87	W30
B7	3,500+	NC_ULS-Set B (auto)29	CS2 - HEA160	S 235	**0,21**	0,21	0,04	
B29	0,000	NC_ULS-Set B (auto)77	CS5 - HEA240	S 235	**0,60**	0,17	0,60	
B52	0,000	NC_ULS-Set B (auto)77	CS3 - HEA140	S 235	**0,50**	0,07	0,50	
B248	0,000	NC_ULS-Set B (auto)77	CS4 - HEA180	S 235	**0,29**	0,16	0,29	
B270	0,000	NC_ULS-Set B (auto)21	CS8 - UNP180	S 235	**0,03**	0,03	0,02	W30

E/W/N	Present on members
W30	B1, B2, B270, B3

9.5.1.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Kolommen

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B1	**2,310 / 7,600 m**	**IPE240**	**Rolled**	**S 235**	**ULS Non Linear**	**0,68 -**

Combination key
ULS Non Linear / NC_ULS-Set B (auto)34

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-123,07	kN	$N_{c,Rd}$	918,85	kN	0,13
Shear V_y	$V_{y,Ed}$	0,06	kN	$V_{pl,y,Rd}$	336,95	kN	0,00
Shear V_z	$V_{z,Ed}$	11,50	kN	$V_{pl,z,Rd}$	259,52	kN	0,04
Bending M_y	$M_{y,Ed}$	29,42	kNm	$M_{pl,y,Rd}$	86,15	kNm	0,34
Bending M_z	$M_{z,Ed}$	0,07	kNm	$M_{pl,z,Rd}$	17,37	kNm	0,00
Torsion	τ_{Ed}	1,3	MPa	τ_{Rd}	135,7	MPa	0,01

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,12

Stability checks
Decisive position for stability classification: 2,310 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	1,00	7,564	1409,37		0,81	0,79
z-z	0,66	2,186	1230,35		0,86	0,68
LTB	1,00	3,300		170,21	0,71	0,98

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-123,07	kN	$N_{b,Rd}$	628,60	kN	0,20
Lateral Torsional Buckling	$M_{y,Ed}$	29,42	kNm	$M_{b,Rd}$	84,56	kNm	0,35

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,99	0,58	0,96	0,97

Maximum moment $M_{y,Ed}$ is derived from beam B1 position 3,480 m.
Maximum moment $M_{z,Ed}$ is derived from beam B1 position 3,300 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	41,90	0,08	0,68

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B3	3,500 / 7,600 m	IPE220	Rolled	S 235	ULS Non Linear	0,87 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)37

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-133,28	kN	$N_{c,Rd}$	784,90	kN	0,17
Shear V_y	$V_{y,Ed}$	0,15	kN	$V_{pl,y,Rd}$	288,94	kN	0,00
Shear V_z	$V_{z,Ed}$	7,21	kN	$V_{pl,z,Rd}$	215,87	kN	0,03
Bending M_y	$M_{y,Ed}$	-32,76	kNm	$M_{pl,y,Rd}$	67,07	kNm	0,49
Bending M_z	$M_{z,Ed}$	0,16	kNm	$M_{pl,z,Rd}$	13,66	kNm	0,01
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,25

Stability checks
Decisive position for stability classification: 3,500 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,98	7,481	1026,17		0,87	0,75
z-z	0,66	2,688	587,52		1,16	0,50
LTB	1,00	4,100		88,21	0,87	0,88

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-133,28	kN	$N_{b,Rd}$	394,54	kN	0,34
Lateral Torsional Buckling	$M_{y,Ed}$	-32,76	kNm	$M_{b,Rd}$	59,21	kNm	0,55

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	1,03	0,69	0,92	1,15

Maximum moment $M_{y,Ed}$ is derived from beam B3 position 3,500 m.
Maximum moment $M_{z,Ed}$ is derived from beam B3 position 7,600 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-32,76	-0,24	0,87

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B7	3,500 / 7,600 m	HEA160	Rolled	S 235	ULS Non Linear	0,21 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)29

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-6,66	kN	$N_{c,Rd}$	911,80	kN	0,01
Shear V_y	$V_{y,Ed}$	5,15	kN	$V_{pl,y,Rd}$	407,85	kN	0,01
Shear V_z	$V_{z,Ed}$	6,07	kN	$V_{pl,z,Rd}$	179,64	kN	0,03
Bending M_y	$M_{y,Ed}$	-1,13	kNm	$M_{pl,y,Rd}$	57,58	kNm	0,02
Bending M_z	$M_{z,Ed}$	-1,06	kNm	$M_{pl,z,Rd}$	27,61	kNm	0,04
Torsion	τ_{Ed}	28,4	MPa	τ_{Rd}	135,7	MPa	0,21

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,04
Shear V_y and Torsion	0,01
Shear V_z and Torsion	0,04

Stability checks
Decisive position for stability classification: 3,500 m

Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,88	3,331	3120,15		0,54	1,00
z-z	0,77	3,154	1283,51		0,84	1,00
LTB	1,00	4,100		125,51	0,68	1,00

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,92	0,27	0,55	0,45

Maximum moment $M_{y,Ed}$ is derived from beam B7 position 3,500 m.
Maximum moment $M_{z,Ed}$ is derived from beam B7 position 3,500 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-1,13	-1,06	0,04

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B29	0,000 / 7,600 m	HEA240	Rolled	S 235	ULS Non Linear	0,60 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)77

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-308,11	kN	$N_{c,Rd}$	1804,80	kN	0,17
Shear V_y	$V_{y,Ed}$	-2,34	kN	$V_{pl,y,Rd}$	810,50	kN	0,00
Shear V_z	$V_{z,Ed}$	-2,47	kN	$V_{pl,z,Rd}$	341,09	kN	0,01
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]

Stability checks
Decisive position for stability classification: 0,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,99	7,556	2816,76		0,80	0,72
z-z	0,99	7,535	1011,27		1,34	0,37
LTB	1,00	7,600		239,78	0,85	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-308,11	kN	$N_{b,Rd}$	674,99	kN	0,46

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	1,08	0,93	0,65	1,56

Maximum moment $M_{y,Ed}$ is derived from beam B29 position 3,800 m.
Maximum moment $M_{z,Ed}$ is derived from beam B29 position 3,800 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-5,27	-6,66	0,60

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B52	0,000 / 7,600 m	HEA140	Rolled	S 235	ULS Non Linear	0,50 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)77

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-50,77	kN	$N_{c,Rd}$	737,90	kN	0,07
Shear V_y	$V_{y,Ed}$	-0,39	kN	$V_{pl,y,Rd}$	335,97	kN	0,00
Shear V_z	$V_{z,Ed}$	0,52	kN	$V_{pl,z,Rd}$	137,14	kN	0,00
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]

Stability checks
Decisive position for stability classification: 0,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,97	7,376	392,43		1,37	0,39
z-z	0,92	6,994	164,84		2,12	0,18
LTB	1,00	7,600		35,16	1,08	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-50,77	kN	$N_{b,Rd}$	131,33	kN	0,39

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	1,12	0,88	0,67	1,46

Maximum moment $M_{y,Ed}$ is derived from beam B52 position 4,644 m.
Maximum moment $M_{z,Ed}$ is derived from beam B52 position 3,800 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	1,50	-1,18	0,50

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B248	0,000 / 3,300 m	HEA180	Rolled	S 235	ULS Non Linear	0,29 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)77

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-172,16	kN	$N_{c,Rd}$	1064,55	kN	0,16
Shear V_y	$V_{y,Ed}$	-1,23	kN	$V_{pl,y,Rd}$	481,11	kN	0,00
Shear V_z	$V_{z,Ed}$	1,36	kN	$V_{pl,z,Rd}$	197,00	kN	0,01
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]

Stability checks
Decisive position for stability classification: 0,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	1,00	3,295	4790,66		0,47	0,90
z-z	0,98	3,235	1831,88		0,76	0,69
LTB	1,00	3,300		229,32	0,58	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-172,16	kN	$N_{b,Rd}$	730,09	kN	0,24

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	1,00	0,70	0,60	1,16

Maximum moment $M_{y,Ed}$ is derived from beam B248 position 1,650 m.
Maximum moment $M_{z,Ed}$ is derived from beam B248 position 1,650 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	1,18	-1,31	0,29

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B270	0,000 / 3,500 m	UNP180	Rolled	S 235	ULS Non Linear	0,03 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)21

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-1,91	kN	$N_{c,Rd}$	658,00	kN	0,00
Shear V_y	$V_{y,Ed}$	-0,11	kN	$V_{pl,y,Rd}$	208,94	kN	0,00
Shear V_z	$V_{z,Ed}$	0,06	kN	$V_{pl,z,Rd}$	199,31	kN	0,00
Bending M_y	$M_{y,Ed}$	0,01	kNm	$M_{pl,y,Rd}$	42,11	kNm	0,00
Bending M_z	$M_{z,Ed}$	0,22	kNm	$M_{pl,z,Rd}$	10,08	kNm	0,02
Torsion	T_{Ed}	0,7	MPa	T_{Rd}	135,7	MPa	0,01

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,03

Stability checks
Decisive position for stability classification: 0,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	1,00	3,487	2301,68		0,53	1,00
z-z	0,75	2,637	339,83		1,39	1,00
LTB	1,00	3,500		71,38	1,00	1,00

Combined stability checks

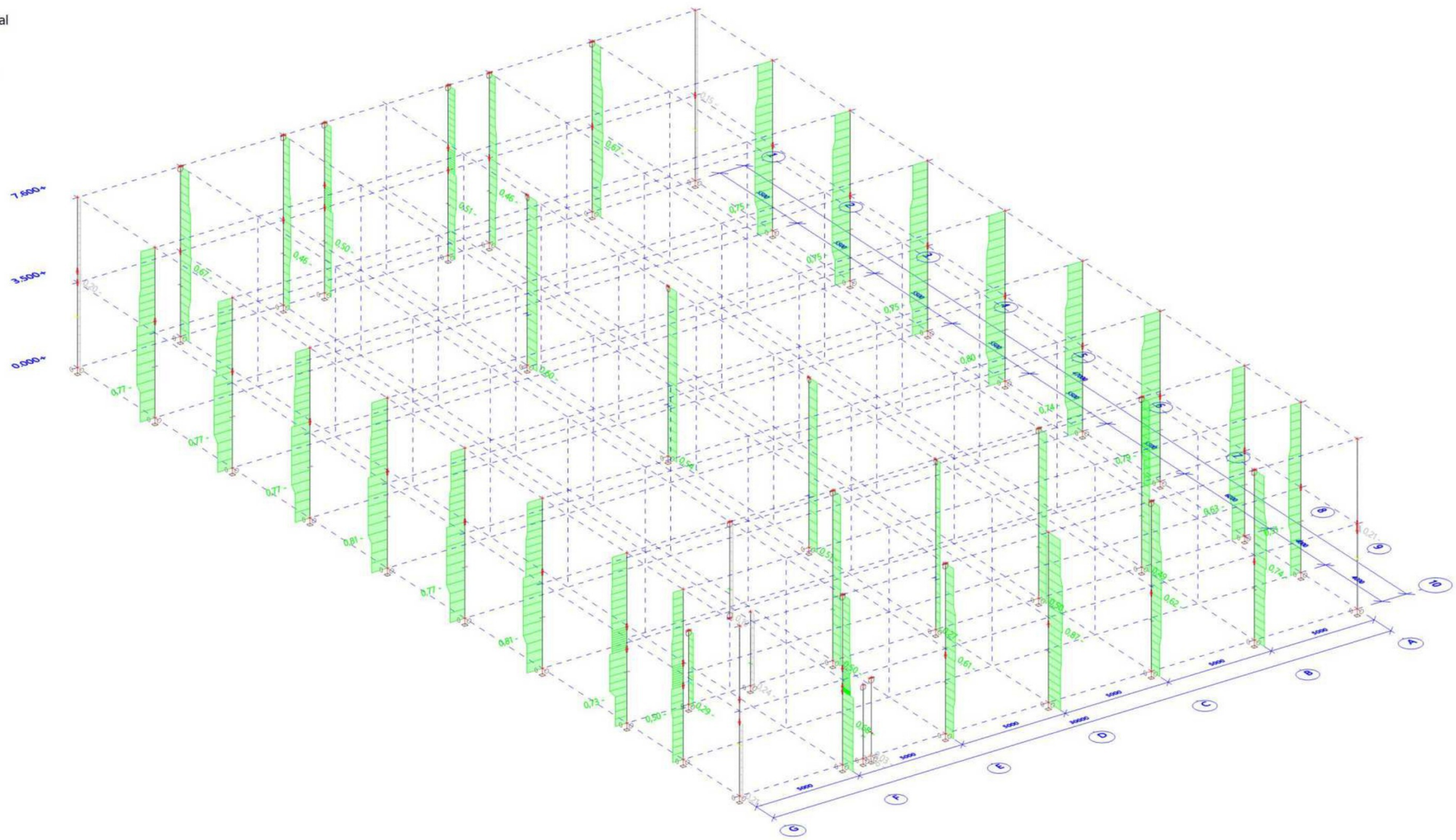
Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,61	0,24	1,00	0,40

Maximum moment $M_{y,Ed}$ is derived from beam B270 position 3,500 m.
Maximum moment $M_{z,Ed}$ is derived from beam B270 position 0,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	0,17	0,22	0,02

9.5.1.3. EC-EN 1993 Steel check ULS; Overall check

Values: **UC$_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Kolommen



9.5.2. Per laag - Dakliggers

Name	Structural model only	Colour
Dakliggers	×	

9.5.2.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Dakliggers

Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B39	7,500-	NC_ULS-Set B (auto)10	CS17 - IPE400	S 235	**0,98**	0,90	0,98
B34	19,500+	NC_ULS-Set B (auto)10	CS6 - IPE450	S 235	**0,92**	0,30	0,92
B48	3,750	NC_ULS-Set B (auto)10	CS23 - IPE360	S 235	**0,98**	0,61	0,98
B249	12,917	NC_ULS-Set B (auto)9	CS3 - HEA140	S 235	**0,57**	0,39	0,57

9.5.2.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Dakliggers

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B34	**19,500 / 47,000 m**	**IPE450**	**Rolled**	**S 235**	**ULS Non Linear**	**0,92 -**

Combination key
ULS Non Linear / NC_ULS-Set B (auto)10

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-4,66	kN	$N_{c,Rd}$	2321,80	kN	0,00
Shear V_y	$V_{y,Ed}$	-0,04	kN	$V_{pl,y,Rd}$	791,51	kN	0,00
Shear V_z	$V_{z,Ed}$	-6,80	kN	$V_{pl,z,Rd}$	689,57	kN	0,01
Bending M_y	$M_{y,Ed}$	118,21	kNm	$M_{pl,y,Rd}$	399,74	kNm	0,30
Bending M_z	$M_{z,Ed}$	-0,02	kNm	$M_{pl,z,Rd}$	64,93	kNm	0,00
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,09

Stability checks
Decisive position for stability classification: 19,500 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,54	5,423	23775,54		0,31	1,00
z-z	0,79	4,343	1840,37		1,12	1,00
LTB	1,00	5,500		435,18	0,96	0,70

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	118,21	kNm	$M_{b,Rd}$	278,95	kNm	0,42

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,47	0,39	1,00	0,64

Maximum moment $M_{y,Ed}$ is derived from beam B34 position 27,000 m.
Maximum moment $M_{z,Ed}$ is derived from beam B34 position 25,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-254,16	-0,23	0,92

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B39	7,500 / 15,000 m	IPE400	Rolled	S 235	ULS Non Linear	0,98 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)10

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-1,12	kN	$N_{c,Rd}$	1985,75	kN	0,00
Shear V_y	$V_{y,Ed}$	0,00	kN	$V_{pl,y,Rd}$	693,93	kN	0,00
Shear V_z	$V_{z,Ed}$	-0,02	kN	$V_{pl,z,Rd}$	579,76	kN	0,00
Bending M_y	$M_{y,Ed}$	277,18	kNm	$M_{pl,y,Rd}$	307,14	kNm	0,90
Bending M_z	$M_{z,Ed}$	-0,03	kNm	$M_{pl,z,Rd}$	53,81	kNm	0,00
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,82

Stability checks
Decisive position for stability classification: 7,500 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,90	13,451	2648,30		0,87	1,00
z-z	0,59	2,970	3094,76		0,80	1,00
LTB	1,00	2,500		1002,83	0,55	0,93

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	277,18	kNm	$M_{b,Rd}$	284,20	kNm	0,98

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,95	0,44	1,00	0,73

Maximum moment $M_{y,Ed}$ is derived from beam B39 position 7,500 m.
Maximum moment $M_{z,Ed}$ is derived from beam B39 position 10,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	277,18	-0,05	0,98

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B48	3,750 / 15,000 m	IPE360	Rolled	S 235	ULS Non Linear	0,98 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)10

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-0,61	kN	$N_{c,Rd}$	1708,45	kN	0,00
Shear V_y	$V_{y,Ed}$	0,00	kN	$V_{pl,y,Rd}$	614,08	kN	0,00
Shear V_z	$V_{z,Ed}$	26,05	kN	$V_{pl,z,Rd}$	476,34	kN	0,05
Bending M_y	$M_{y,Ed}$	145,66	kNm	$M_{pl,y,Rd}$	239,47	kNm	0,61
Bending M_z	$M_{z,Ed}$	0,01	kNm	$M_{pl,z,Rd}$	44,88	kNm	0,00
Torsion	τ_{Ed}	0,2	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,37

Stability checks
Decisive position for stability classification: 3,750 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,88	13,131	1954,44		0,93	1,00
z-z	0,73	3,635	1636,03		1,02	1,00
LTB	1,00	5,194		339,13	0,84	0,83

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	145,66	kNm	$M_{b,Rd}$	198,11	kNm	0,74

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,95	0,45	1,00	0,74

Maximum moment $M_{y,Ed}$ is derived from beam B48 position 7,500 m.
Maximum moment $M_{z,Ed}$ is derived from beam B48 position 5,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	194,60	0,02	0,98

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B249	12,917 / 15,000 m	HEA140	Rolled	S 235	ULS Non Linear	0,57 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)9

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-0,08	kN	$N_{c,Rd}$	737,90	kN	0,00
Shear V_y	$V_{y,Ed}$	0,00	kN	$V_{pl,y,Rd}$	335,97	kN	0,00
Shear V_z	$V_{z,Ed}$	0,59	kN	$V_{pl,z,Rd}$	137,14	kN	0,00
Bending M_y	$M_{y,Ed}$	16,00	kNm	$M_{pl,y,Rd}$	40,73	kNm	0,39
Bending M_z	$M_{z,Ed}$	0,00	kNm	$M_{pl,z,Rd}$	19,98	kNm	0,00
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,15

Stability checks

Decisive position for stability classification: 12,917 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,68	3,399	1847,94		0,63	1,00
z-z	0,62	3,080	850,13		0,93	1,00
LTB	1,00	3,352		99,10	0,64	0,94

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	16,00	kNm	$M_{b,Rd}$	38,24	kNm	0,42

Combined stability checks

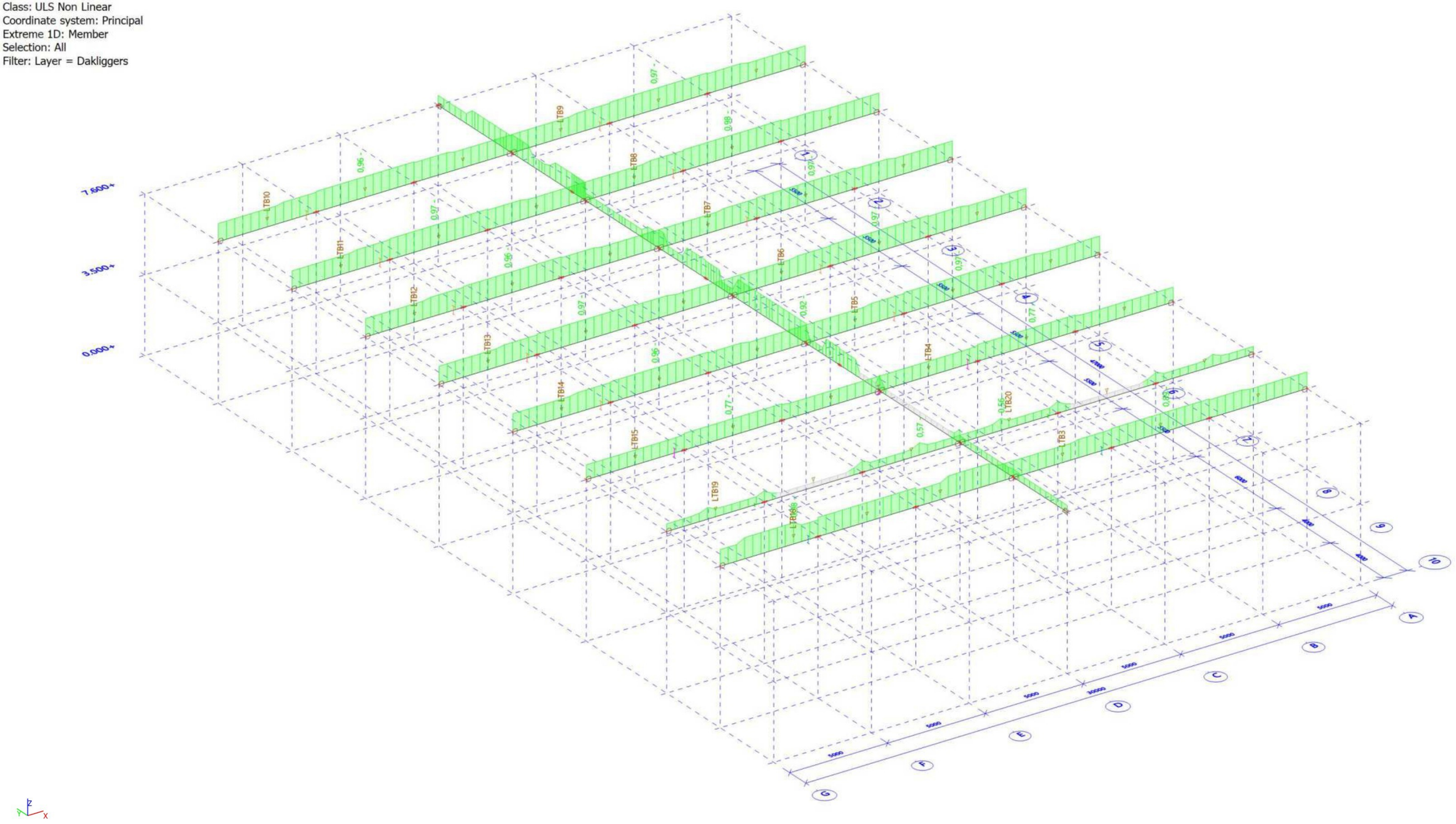
Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,65	0,24	1,00	0,40

Maximum moment $M_{y,Ed}$ is derived from beam B249 position 10,000 m.
Maximum moment $M_{z,Ed}$ is derived from beam B249 position 15,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-21,70	0,00	0,57

9.5.2.3. EC-EN 1993 Steel check ULS; Overall check

Values: **UC$_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Dakliggers



9.5.3. Per laag - Dakgordingen

Name	Structural model only	Colour
Dakgordingen	×	

9.5.3.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Dakgordingen

Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B253	0,000	NC_ULS-Set B (auto)42	CS10 - SHSCF60/60/4.0	S 235	**0,77**	0,16	0,77

9.5.3.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Dakgordingen

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B253	0,000 / 6,000 m	SHSCF60/60/4.0	Cold formed	S 235	ULS Non Linear	0,77 -

Note: EN 1993-1-3 article 1.1(3) specifies that this part does not apply to cold formed CHS and RHS sections.
The default EN 1993-1-1 code check is executed instead of the EN 1993-1-3 code check.

Combination key
ULS Non Linear / NC_ULS-Set B (auto)42

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-20,70	kN	$N_{c,Rd}$	200,93	kN	0,10
Shear V_y	$V_{y,Ed}$	-0,01	kN	$V_{pl,y,Rd}$	58,00	kN	0,00
Shear V_z	$V_{z,Ed}$	0,11	kN	$V_{pl,z,Rd}$	58,00	kN	0,00
Bending M_y	$M_{y,Ed}$	-0,67	kNm	$M_{pl,y,Rd}$	4,14	kNm	0,16
Bending M_z	$M_{z,Ed}$	-0,01	kNm	$M_{pl,z,Rd}$	4,14	kNm	0,00
Torsion	τ_{Ed}	3,9	MPa	τ_{Rd}	135,7	MPa	0,03

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,05

Stability checks
Decisive position for stability classification: 0,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,73	4,394	46,81		2,07	0,18
z-z	0,84	5,038	35,60		2,38	0,15
LTB	1,00	6,000		132,58	0,18	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-20,70	kN	$N_{b,Rd}$	29,16	kN	0,71

Combined stability checks

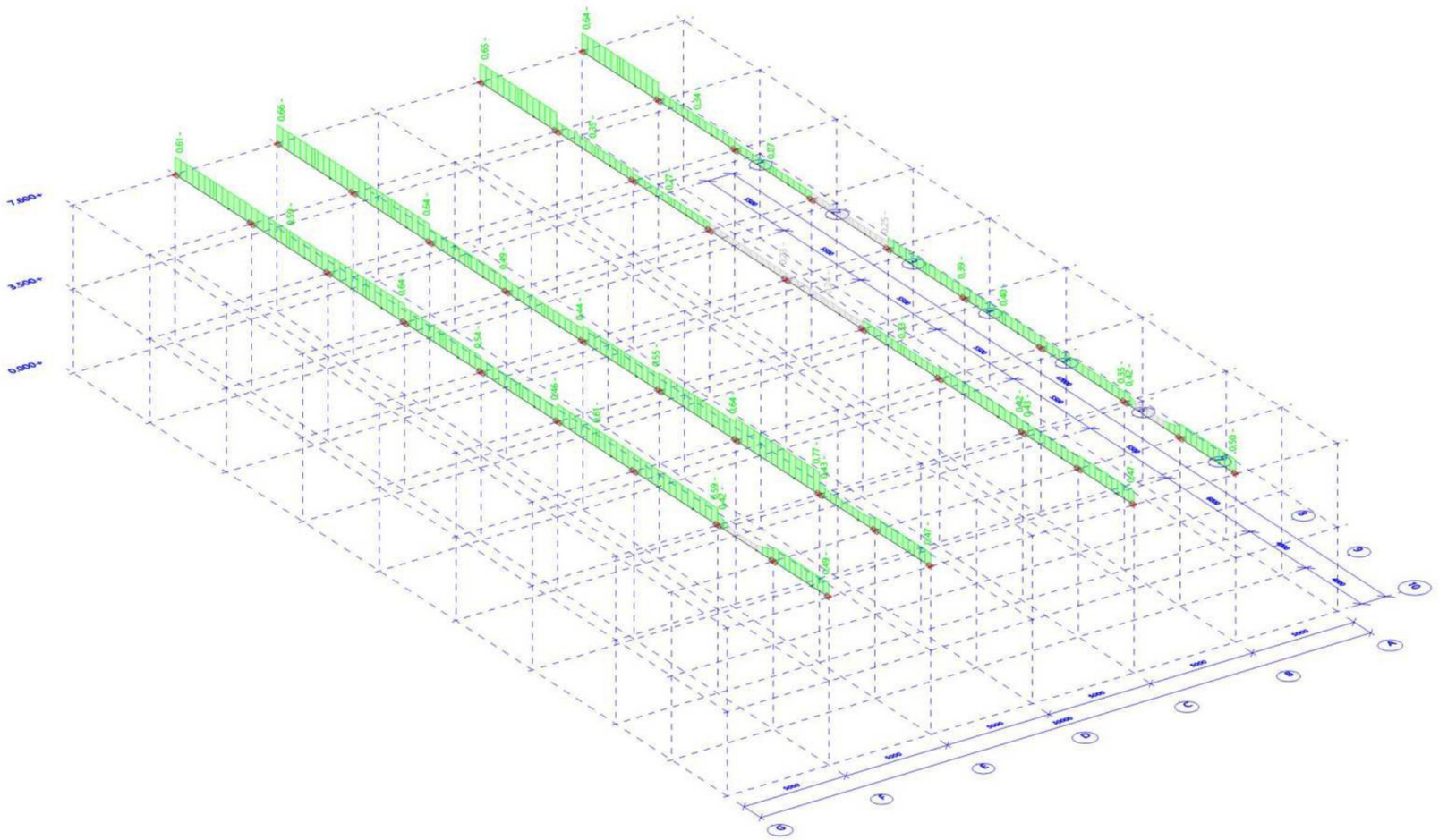
Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,58	0,69	0,35	1,15

Maximum moment $M_{y,Ed}$ is derived from beam B253 position 0,000 m.
Maximum moment $M_{z,Ed}$ is derived from beam B253 position 6,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-0,67	0,01	0,77

9.5.3.3. EC-EN 1993 Steel check ULS; Overall check

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Dakgordingen



9.5.4. Per laag - Windverbanden dak

Name	Structural model only	Colour
Windverbanden dak	×	

9.5.4.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Windverbanden dak

Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B96	0,000	NC_ULS-Set B (auto)30	CS25 - HFLeq70x70x7	S 235	**0,57**	0,57	0,00
B108	0,000	NC_ULS-Set B (auto)30	CS11 - HFLeq60x60x6	S 235	**0,69**	0,69	0,00

9.5.4.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Windverbanden dak

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B96	0,000 / 7,433 m	HFLeq70x70x7	Rolled	S 235	ULS Non Linear	0,57 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)30

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	126,75	kN	$N_{t,Rd}$	220,83	kN	0,57

Combined section checks

Combined section checks	Unity check [-]

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B108	0,000 / 6,403 m	HFLeq60x60x6	Rolled	S 235	ULS Non Linear	0,69 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)30

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

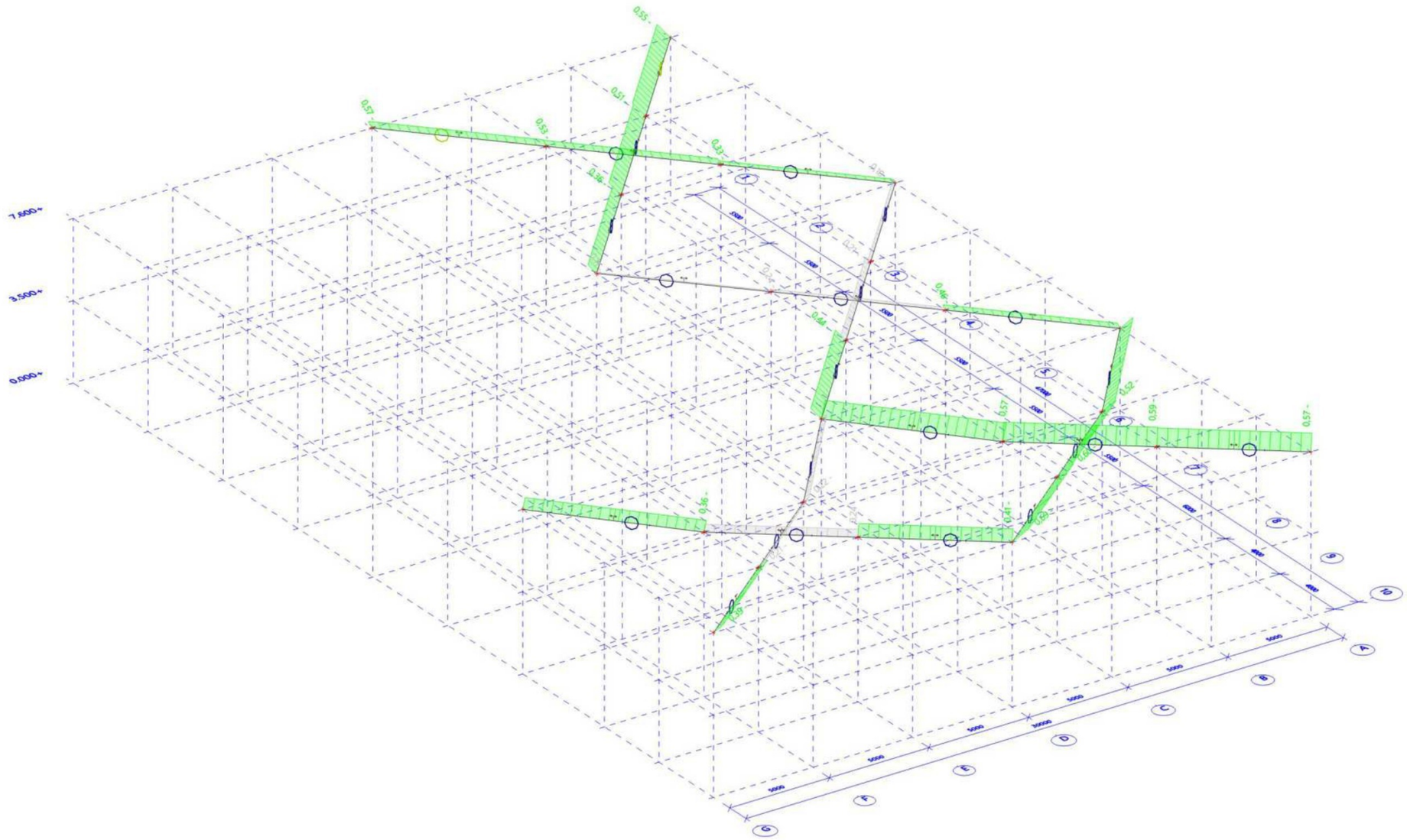
Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	112,63	kN	$N_{t,Rd}$	162,36	kN	0,69

Combined section checks

Combined section checks	Unity check [-]

9.5.4.3. EC-EN 1993 Steel check ULS; Overall check

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Windverbanden dak



9.5.5. Per laag - Randliggers dak

Name	Structural model only	Colour
Randliggers dak	×	

9.5.5.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Randliggers dak
There are 1 warnings on selected members. 1 of them are shown.
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]	E/W/N
B174	2,750	NC_ULS-Set B (auto)38	CS3 - HEA140	S 235	**1,04**	0,43	1,04	
B171	2,750	NC_ULS-Set B (auto)38	CS2 - HEA160	S 235	**0,79**	0,31	0,79	
B225	0,000	NC_ULS-Set B (auto)78	CS26 - HEA100	S 235	**0,28**	0,12	0,28	W30

E/W/N	Present on members
W30	B225

9.5.5.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Randliggers dak

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B171	2,750 / 5,500 m	HEA160	Rolled	S 235	ULS Non Linear	0,79 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)38

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-109,48	kN	$N_{c,Rd}$	911,80	kN	0,12
Shear V_y	$V_{y,Ed}$	0,12	kN	$V_{pl,y,Rd}$	407,85	kN	0,00
Shear V_z	$V_{z,Ed}$	-0,03	kN	$V_{pl,z,Rd}$	179,64	kN	0,00
Bending M_y	$M_{y,Ed}$	1,44	kNm	$M_{pl,y,Rd}$	57,58	kNm	0,02
Bending M_z	$M_{z,Ed}$	-8,64	kNm	$M_{pl,z,Rd}$	27,61	kNm	0,31
Torsion	τ_{Ed}	0,3	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,31

Stability checks
Decisive position for stability classification: 2,750 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,57	3,133	3525,67		0,51	0,88
z-z	0,95	5,230	466,73		1,40	0,35
LTB	1,00	5,500		80,80	0,84	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-109,48	kN	$N_{b,Rd}$	319,19	kN	0,34

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,99	0,84	0,59	1,40

Maximum moment $M_{y,Ed}$ is derived from beam B171 position 2,750 m.
Maximum moment $M_{z,Ed}$ is derived from beam B171 position 2,750 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	1,44	-8,64	0,79

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B174	2,750 / 5,500 m	HEA140	Rolled	S 235	ULS Non Linear	1,04 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)38

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-86,97	kN	$N_{c,Rd}$	737,90	kN	0,12
Shear V_y	$V_{y,Ed}$	-0,04	kN	$V_{pl,y,Rd}$	335,97	kN	0,00
Shear V_z	$V_{z,Ed}$	0,00	kN	$V_{pl,z,Rd}$	137,14	kN	0,00
Bending M_y	$M_{y,Ed}$	1,16	kNm	$M_{pl,y,Rd}$	40,73	kNm	0,03
Bending M_z	$M_{z,Ed}$	-8,60	kNm	$M_{pl,z,Rd}$	19,98	kNm	0,43
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,43

Stability checks
Decisive position for stability classification: 2,750 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,62	3,421	1824,36		0,64	0,82
z-z	0,93	5,115	308,17		1,55	0,30
LTB	1,00	5,500		51,23	0,89	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-86,97	kN	$N_{b,Rd}$	221,11	kN	0,39

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	1,01	0,87	0,60	1,46

Maximum moment $M_{y,Ed}$ is derived from beam B174 position 2,750 m.
Maximum moment $M_{z,Ed}$ is derived from beam B174 position 2,750 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	1,16	-8,60	**1,04**

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B225	0,000 / 2,800 m	HEA100	Rolled	S 235	ULS Non Linear	0,28 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)78

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-59,08	kN	$N_{c,Rd}$	498,20	kN	0,12
Shear V_y	$V_{y,Ed}$	0,47	kN	$V_{pl,y,Rd}$	228,62	kN	0,00
Shear V_z	$V_{z,Ed}$	0,67	kN	$V_{pl,z,Rd}$	102,03	kN	0,01
Bending M_y	$M_{y,Ed}$	-0,01	kNm	$M_{pl,y,Rd}$	19,49	kNm	0,00
Bending M_z	$M_{z,Ed}$	-0,07	kNm	$M_{pl,z,Rd}$	9,66	kNm	0,01
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,01

Stability checks
Decisive position for stability classification: 0,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,95	2,668	1016,50		0,70	0,78
z-z	0,84	2,342	506,53		0,99	0,54
LTB	1,00	2,800		47,18	0,64	1,00

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Flexural buckling	N_{Ed}	-59,08	kN	$N_{b,Rd}$	271,39	kN	0,22

Combined stability checks

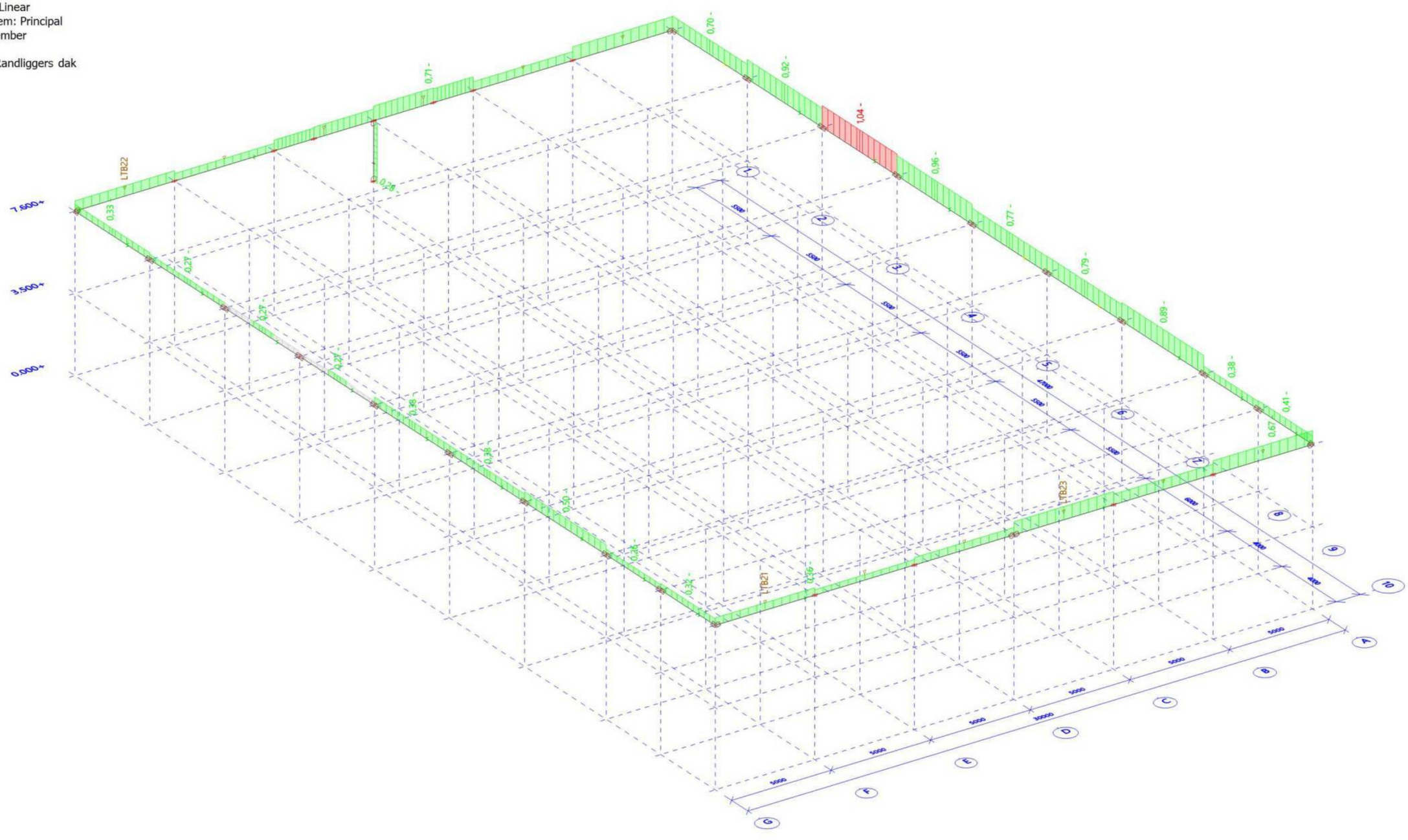
Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	1,07	0,73	0,64	1,22

Maximum moment $M_{y,Ed}$ is derived from beam B225 position 1,960 m.
Maximum moment $M_{z,Ed}$ is derived from beam B225 position 1,400 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	0,68	0,30	0,28

9.5.5.3. EC-EN 1993 Steel check ULS; Overall check

Values: **UC$_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Randliggers dak



9.5.6. Per laag - Vloerligger

Name	Structural model only	Colour
Vloerligger	×	

9.5.6.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Vloerligger
There are 1 warnings on selected members. 1 of them are shown.
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]	E/W/N
B135	2,500	NC_ULS-Set B (auto)6	CS23 - IPE360	S 235	**0,65**	0,65	0,00	
B246	2,000	NC_ULS-Set B (auto)19	CS9 - UNP260	S 235	**0,24**	0,24	0,23	W30
B244	3,000+	NC_ULS-Set B (auto)78	CS24 - IPE300	S 235	**0,67**	0,35	0,67	
B247	1,000	NC_ULS-Set B (auto)6	CS4 - HEA180	S 235	**0,13**	0,13	0,08	W30

E/W/N	Present on members
W30	B242, B245, B246, B247

9.5.6.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Vloerligger

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B135	2,500 / 5,000 m	IPE360	Rolled	S 235	ULS Non Linear	0,65 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)6

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	0,82	kN	$N_{t,Rd}$	1708,45	kN	0,00
Shear V_y	$V_{y,Ed}$	0,01	kN	$V_{pl,y,Rd}$	614,08	kN	0,00
Shear V_z	$V_{z,Ed}$	0,01	kN	$V_{pl,z,Rd}$	476,34	kN	0,00
Bending M_y	$M_{y,Ed}$	154,46	kNm	$M_{pl,y,Rd}$	239,47	kNm	0,65
Bending M_z	$M_{z,Ed}$	0,00	kNm	$M_{pl,z,Rd}$	44,88	kNm	0,00
Torsion	τ_{Ed}	0,0	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,42

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B244	3,000 / 6,000 m	IPE300	Rolled	S 235	ULS Non Linear	0,67 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)78

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-0,07	kN	$N_{c,Rd}$	1264,30	kN	0,00
Shear V_y	$V_{y,Ed}$	0,38	kN	$V_{pl,y,Rd}$	456,81	kN	0,00
Shear V_z	$V_{z,Ed}$	93,49	kN	$V_{pl,z,Rd}$	348,28	kN	0,27
Bending M_y	$M_{y,Ed}$	-52,41	kNm	$M_{pl,y,Rd}$	147,65	kNm	0,35
Bending M_z	$M_{z,Ed}$	-1,25	kNm	$M_{pl,z,Rd}$	29,42	kNm	0,04
Torsion	T_{Ed}	0,6	MPa	T_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,17

Stability checks
Decisive position for stability classification: 3,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,64	1,279	105847,68		0,11	1,00
z-z	0,85	5,075	485,90		1,61	1,00
LTB	1,00	6,000		101,71	1,20	0,59

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	-52,41	kNm	$M_{b,Rd}$	86,84	kNm	0,60

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,51	0,54	1,00	0,89

Maximum moment $M_{y,Ed}$ is derived from beam B244 position 5,000 m.
Maximum moment $M_{z,Ed}$ is derived from beam B244 position 3,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	54,78	-1,25	0,67

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B246	2,000 / 4,000 m	UNP260	Rolled	S 235	ULS Non Linear	0,24 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)19

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-0,59	kN	$N_{c,Rd}$	1135,05	kN	0,00
Shear V_y	$V_{y,Ed}$	-0,10	kN	$V_{pl,y,Rd}$	341,91	kN	0,00
Shear V_z	$V_{z,Ed}$	0,04	kN	$V_{pl,z,Rd}$	359,00	kN	0,00
Bending M_y	$M_{y,Ed}$	-0,89	kNm	$M_{pl,y,Rd}$	103,87	kNm	0,01
Bending M_z	$M_{z,Ed}$	5,04	kNm	$M_{pl,z,Rd}$	21,53	kNm	0,23
Torsion	τ_{Ed}	0,6	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,24

Stability checks
Decisive position for stability classification: 2,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,78	3,129	10203,02		0,33	1,00
z-z	0,93	3,721	474,59		1,55	1,00
LTB	1,00	4,000		116,24	1,10	1,00

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,95	0,57	1,00	0,95

Maximum moment $M_{y,Ed}$ is derived from beam B246 position 2,000 m.
Maximum moment $M_{z,Ed}$ is derived from beam B246 position 2,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	-0,89	5,04	0,23

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B247	1,000 / 1,000 m	HEA180	Rolled	S 235	ULS Non Linear	0,13 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)6

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Compression	N_{Ed}	-0,02	kN	$N_{c,Rd}$	1064,55	kN	0,00
Shear V_y	$V_{y,Ed}$	-0,10	kN	$V_{pl,y,Rd}$	481,11	kN	0,00
Shear V_z	$V_{z,Ed}$	-24,77	kN	$V_{pl,z,Rd}$	197,00	kN	0,13
Bending M_y	$M_{y,Ed}$	-0,08	kNm	$M_{pl,y,Rd}$	76,38	kNm	0,00
Bending M_z	$M_{z,Ed}$	-0,07	kNm	$M_{pl,z,Rd}$	36,82	kNm	0,00
Torsion	τ_{Ed}	0,1	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,00

Stability checks
Decisive position for stability classification: 1,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,83	0,832	75156,11		0,12	1,00
z-z	0,98	0,978	20024,45		0,23	1,00
LTB	1,00	1,000		1824,80	0,20	1,00

Combined stability checks

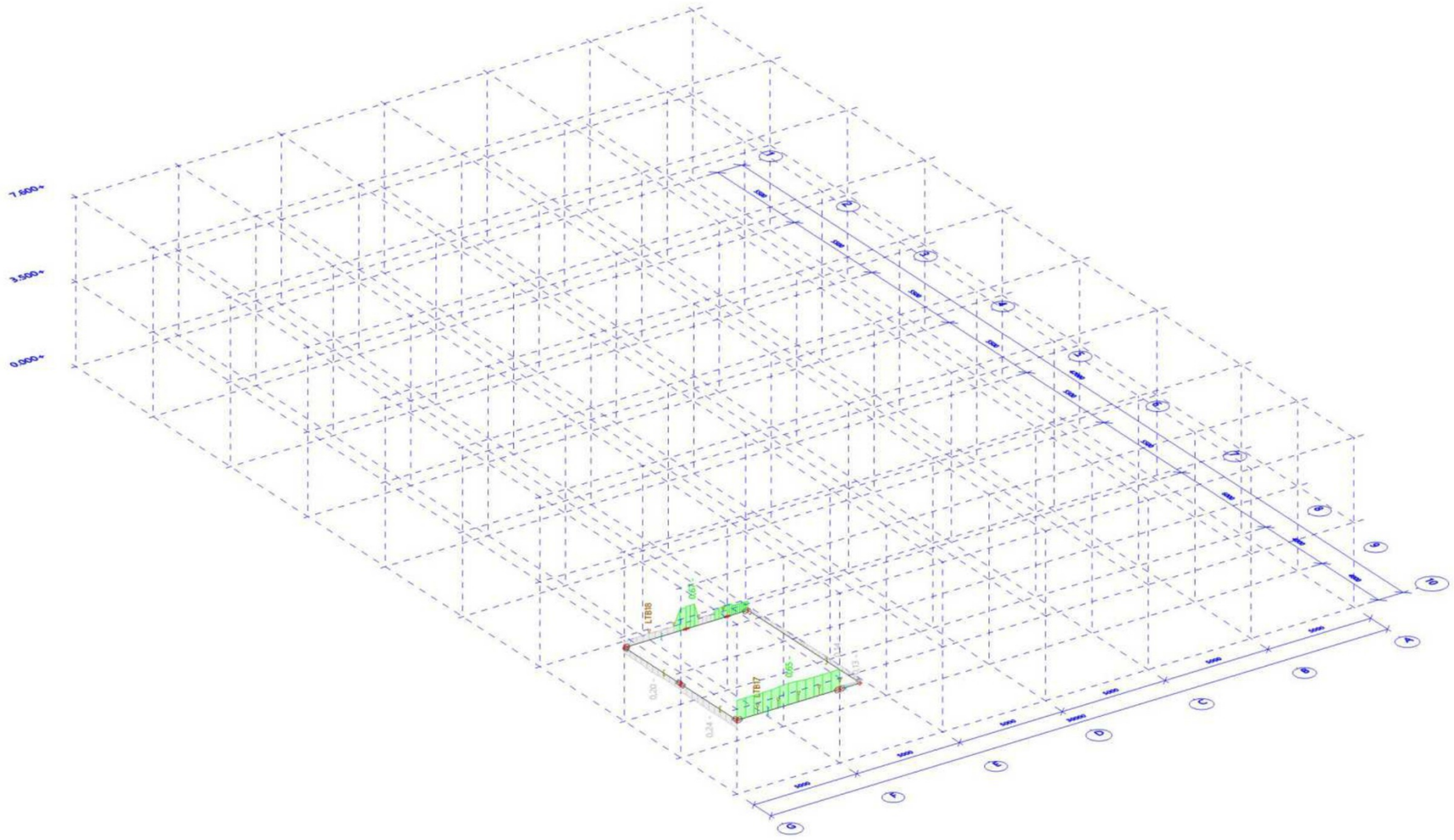
Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,95	0,28	0,57	0,47

Maximum moment $M_{y,Ed}$ is derived from beam B247 position 0,500 m.
Maximum moment $M_{z,Ed}$ is derived from beam B247 position 1,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Compression	6,13	-0,07	0,08

9.5.6.3. EC-EN 1993 Steel check ULS; Overall check

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Vloerligger



9.5.7. Per laag - Windverbanden gevel

Name	Structural model only	Colour
Windverbanden gevel	×	

9.5.7.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Windverbanden gevel

Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B138	6,685	NC_ULS-Set B (auto)34	CS12 - FL70X10	S 235	**0,73**	0,73	0,00
B181	6,280	NC_ULS-Set B (auto)30	CS21 - FL80X10	S 235	**0,69**	0,69	0,00
B267	6,103	NC_ULS-Set B (auto)38	CS27 - FL100X10	S 235	**0,72**	0,72	0,00

9.5.7.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Windverbanden gevel

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B138	6,685 / 6,685 m	FL70X10	Rolled	S 235	ULS Non Linear	0,73 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)34

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	119,43	kN	$N_{t,Rd}$	164,50	kN	0,73

Combined section checks

Combined section checks	Unity check [-]

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B181	6,280 / 6,280 m	FL80X10	Rolled	S 235	ULS Non Linear	0,69 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)30

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	130,42	kN	$N_{t,Rd}$	188,00	kN	0,69

Combined section checks

Combined section checks	Unity check [-]

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B267	6,103 / 6,103 m	FL100X10	Rolled	S 235	ULS Non Linear	0,72 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)38

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

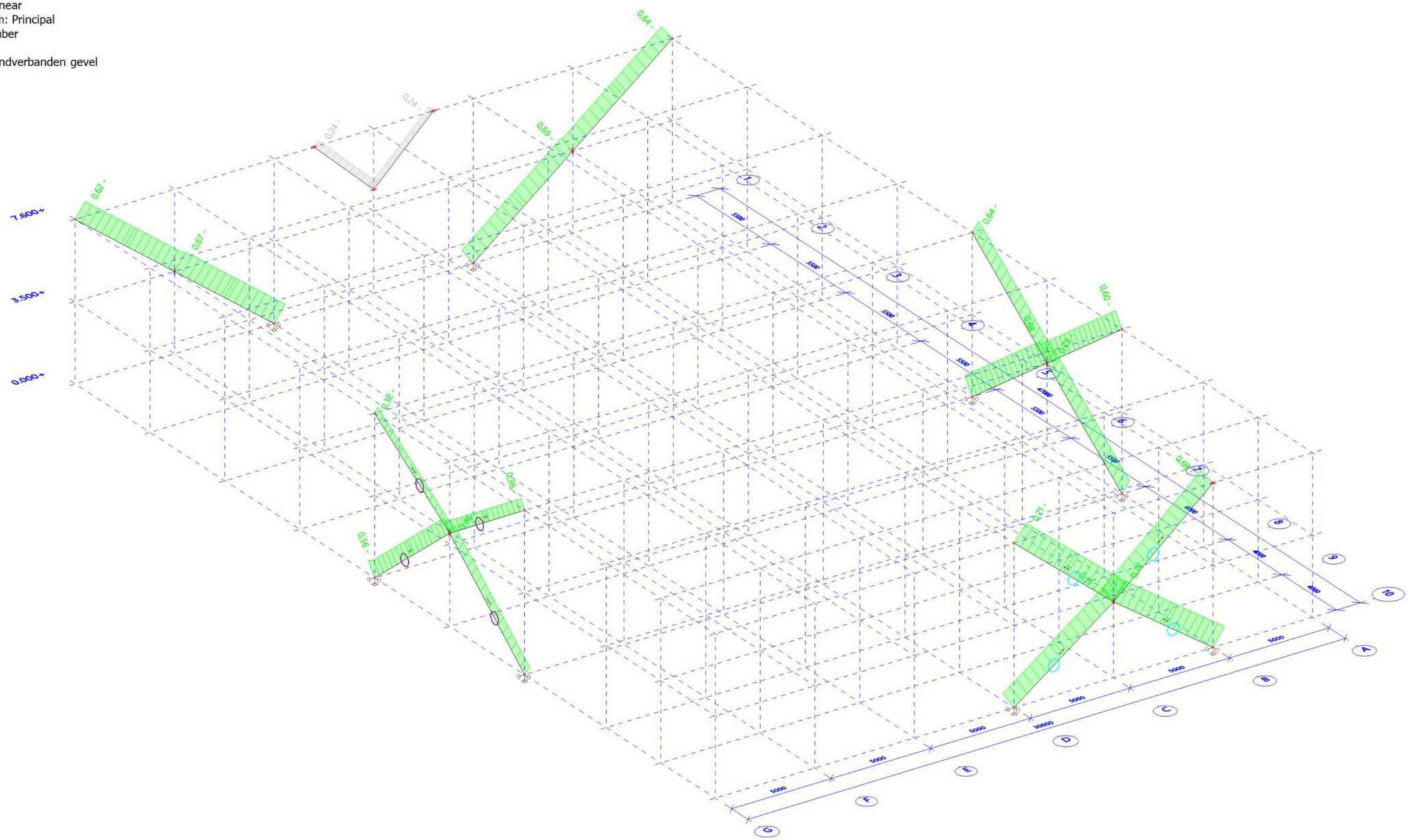
Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	168,89	kN	$N_{t,Rd}$	235,00	kN	0,72

Combined section checks

Combined section checks	Unity check [-]

9.5.7.3. EC-EN 1993 Steel check ULS; Overall check

Values: **UC$_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Windverbanden gevel



9.5.8. Per laag - Geveldragers

Name	Structural model only	Colour
Geveldragers	×	

9.5.8.1. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Geveldragers
There are 1 warnings on selected members. 1 of them are shown.
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]	E/W/N
B152	2,750	NC_ULS-Set B (auto)40	CS7 - UNP160	S 235	**0,97**	0,50	0,97	W30
B280	3,000	NC_ULS-Set B (auto)38	CS18 - UNP200	S 235	**0,77**	0,40	0,77	W30

E/W/N	Present on members
W30	B134, B136, B142, B149, B150, B152, B280

9.5.8.2. EC-EN 1993 Steel check ULS

Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Filter: Layer = Geveldragers

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B152	2,750 / 5,500 m	UNP160	Rolled	S 235	ULS Non Linear	0,97 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)40

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	6,78	kN	$N_{t,Rd}$	564,00	kN	0,01
Shear V_y	$V_{y,Ed}$	0,01	kN	$V_{pl,y,Rd}$	185,20	kN	0,00
Shear V_z	$V_{z,Ed}$	-0,09	kN	$V_{pl,z,Rd}$	166,07	kN	0,00
Bending M_y	$M_{y,Ed}$	-14,00	kNm	$M_{pl,y,Rd}$	32,34	kNm	0,43
Bending M_z	$M_{z,Ed}$	-0,49	kNm	$M_{pl,z,Rd}$	8,27	kNm	0,06
Torsion	τ_{Ed}	0,1	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,50

Stability checks
Decisive position for stability classification: 2,750 m
Section is classified as Class 1

Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,84	4,616	899,67		0,79	0,67
z-z	0,63	3,438	149,59		1,94	0,21
y-z	1,00	5,500	149,59		1,94	0,21
LTB	1,00	5,500		21,57	1,30	0,47

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	-14,00	kNm	$M_{b,Rd}$	15,22	kNm	0,92

Combined stability checks

Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,95	0,55	1,00	0,92

Maximum moment $M_{y,Ed}$ is derived from beam B152 position 2,750 m.
Maximum moment $M_{z,Ed}$ is derived from beam B152 position 2,750 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Tension	-14,00	-0,49	0,97

EN 1993-1-1 Code Check
National annex: Dutch NEN-EN NA

Member B280	3,000 / 6,000 m	UNP200	Rolled	S 235	ULS Non Linear	0,77 -

Combination key
ULS Non Linear / NC_ULS-Set B (auto)38

Partial safety factors		
Resistance of cross-sections	γ_{M0}	1,00
Resistance to instability	γ_{M1}	1,00
Resistance of net sections	γ_{M2}	1,25

Material			
Yield strength	f_y	235,0	MPa
Ultimate strength	f_u	360,0	MPa

Section checks
Section is classified as Class 1

Section checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Tension	N_{Ed}	6,64	kN	$N_{t,Rd}$	756,70	kN	0,01
Shear V_y	$V_{y,Ed}$	0,02	kN	$V_{pl,y,Rd}$	234,04	kN	0,00
Shear V_z	$V_{z,Ed}$	-0,01	kN	$V_{pl,z,Rd}$	234,04	kN	0,00
Bending M_y	$M_{y,Ed}$	-17,21	kNm	$M_{pl,y,Rd}$	53,58	kNm	0,32
Bending M_z	$M_{z,Ed}$	-0,89	kNm	$M_{pl,z,Rd}$	12,17	kNm	0,07
Torsion	τ_{Ed}	0,1	MPa	τ_{Rd}	135,7	MPa	0,00

Combined section checks

Combined section checks	Unity check [-]
Bending, Axial force and Shear	0,40

Stability checks
Decisive position for stability classification: 3,000 m
Section is classified as Class 1
Buckling group : Default

Buckling axis	k	L [m]	N_{cr} [kN]	M_{cr} [kNm]	λ_{rel}	χ
y-y	0,87	5,214	1455,97		0,72	1,00
z-z	0,60	3,622	233,83		1,80	1,00
y-z	1,00	6,000	233,83		1,80	1,00
LTB	1,00	6,000		33,38	1,33	0,45

Stability checks	Design force	Value	Unit	Resistance	Value	Unit	Unity check [-]
Lateral Torsional Buckling	$M_{y,Ed}$	-17,21	kNm	$M_{b,Rd}$	24,33	kNm	0,71

Combined stability checks

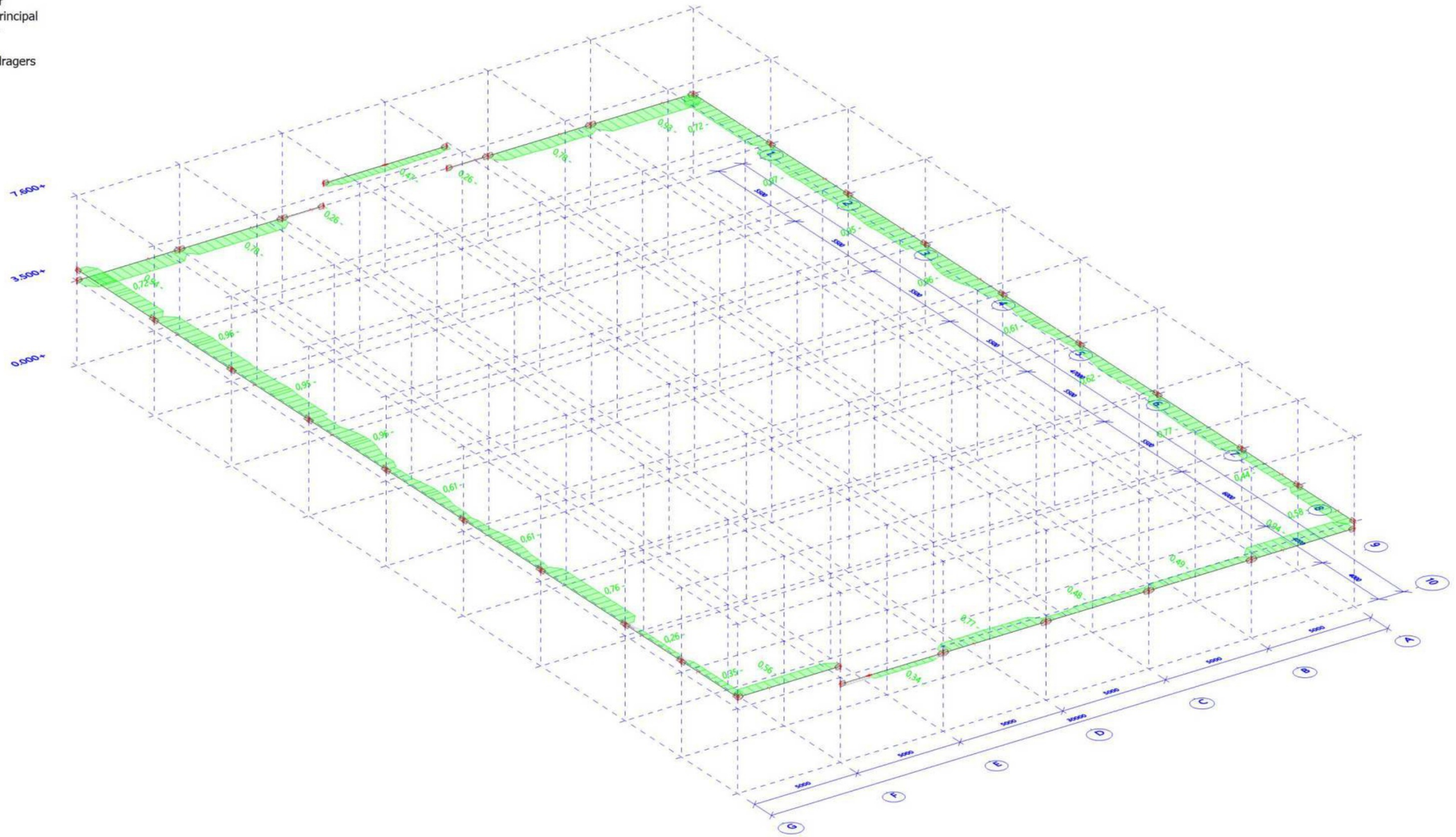
Interaction factors	k_{yy}	k_{yz}	k_{zy}	k_{zz}
Value	0,95	0,55	1,00	0,92

Maximum moment $M_{y,Ed}$ is derived from beam B280 position 3,000 m.
Maximum moment $M_{z,Ed}$ is derived from beam B280 position 3,000 m.

Combined stability checks	$M_{y,Ed}$ [kNm]	$M_{z,Ed}$ [kNm]	Unity check [-]
Bending and Axial Tension	-17,21	-0,89	0,77

9.5.8.3. EC-EN 1993 Steel check ULS; Overall check

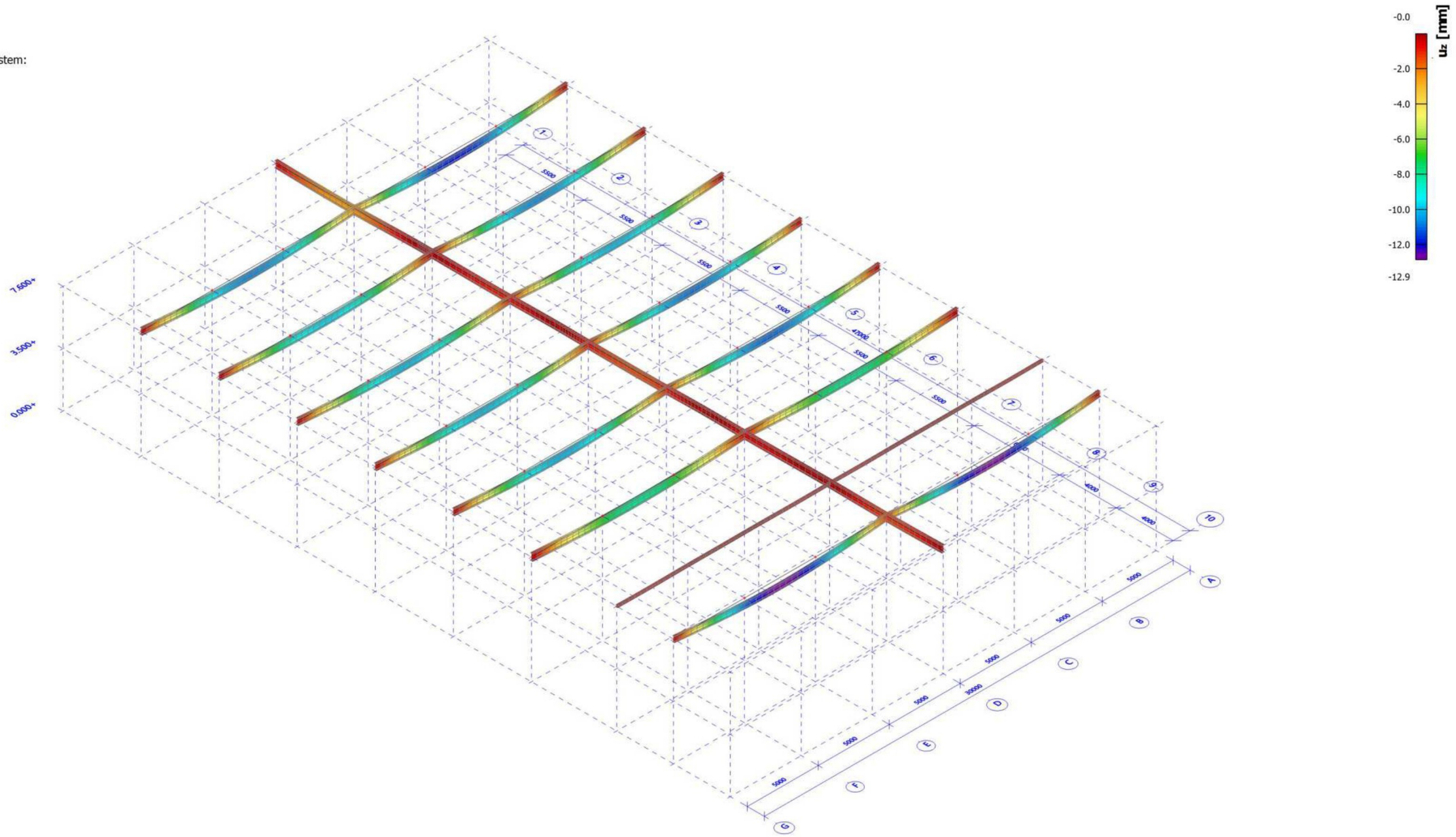
Values: **$UC_{Overall}$**
Nonlinear calculation
Class: ULS Non Linear
Coordinate system: Principal
Extreme 1D: Member
Selection: All
Filter: Layer = Geveldragers



10. Vervormingen dakliggers

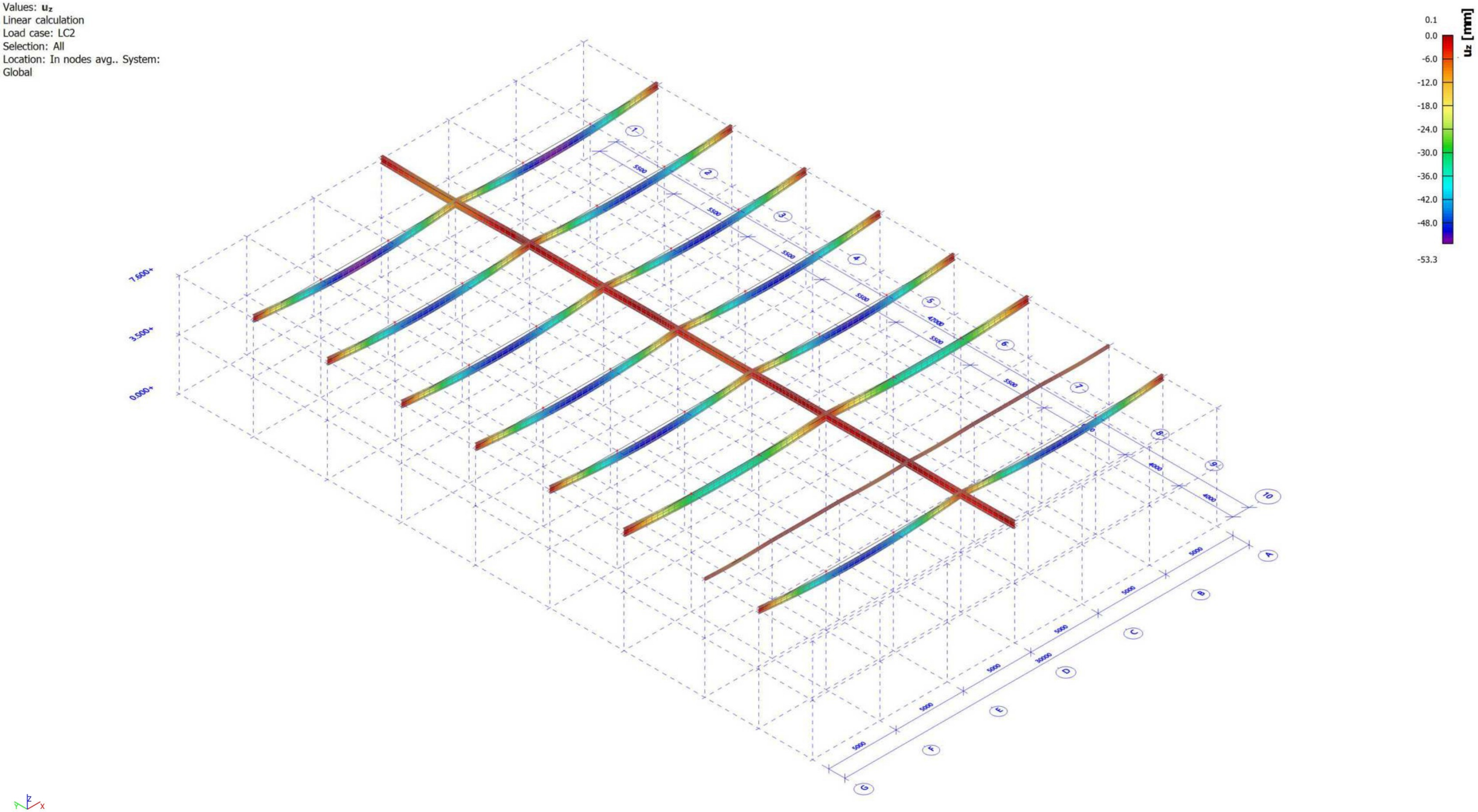
10.1. 3D displacement; u_z; e.g. staal

Values: u_z
Linear calculation
Load case: LC1
Selection: All
Location: In nodes avg.. System: Global



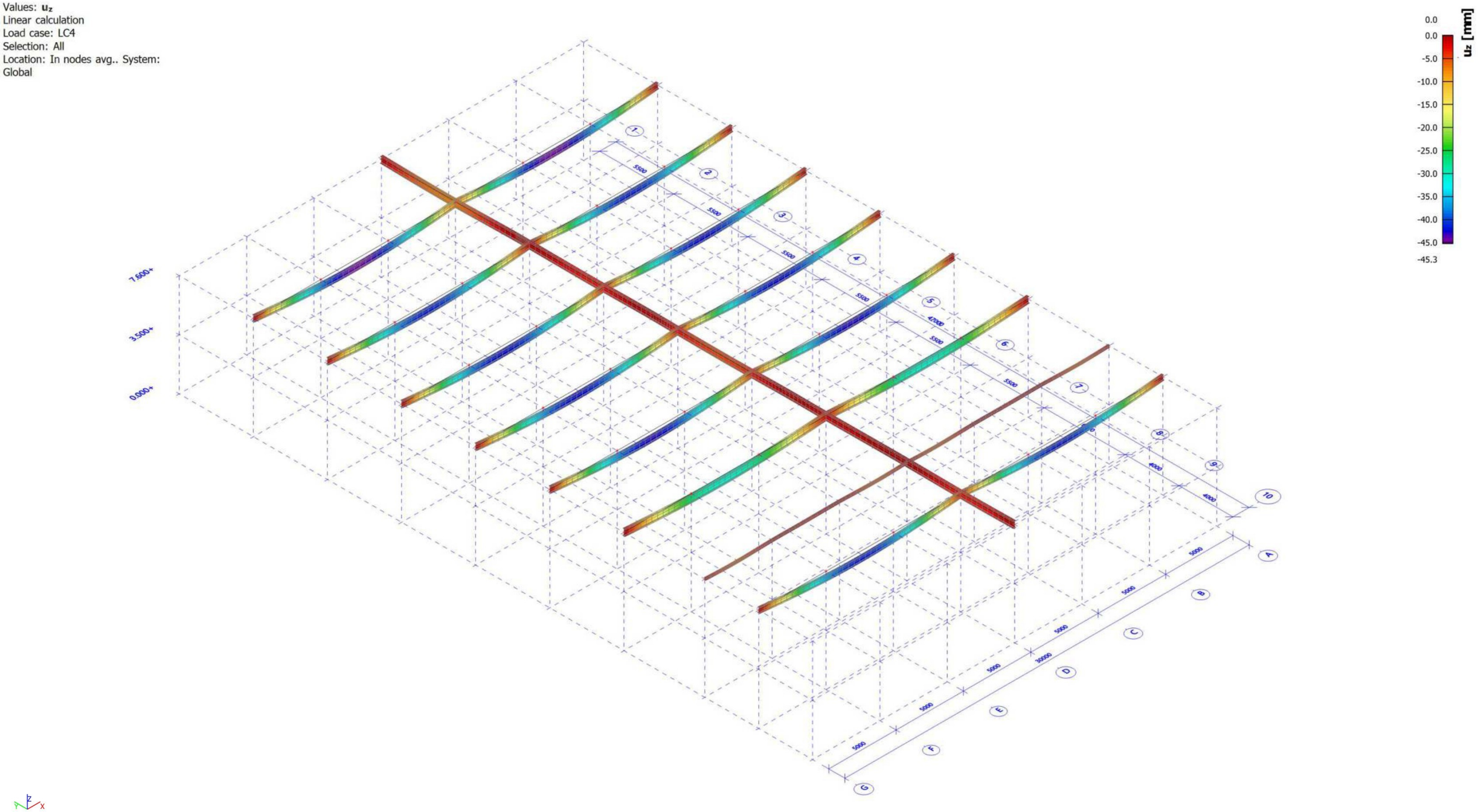
10.2. 3D displacement; u_z; e.g. dak

Values: u_z
Linear calculation
Load case: LC2
Selection: All
Location: In nodes avg.. System: Global



10.3. 3D displacement; u_z; sneeuwbelasting

Values: u_z
Linear calculation
Load case: LC4
Selection: All
Location: In nodes avg.. System: Global



10.4. BGT controle dakliggers

Liggers IPE400 en IPE450:
Totale vervorming permanent: 53,4mm
Totale vervorming variabel: 45,3mm

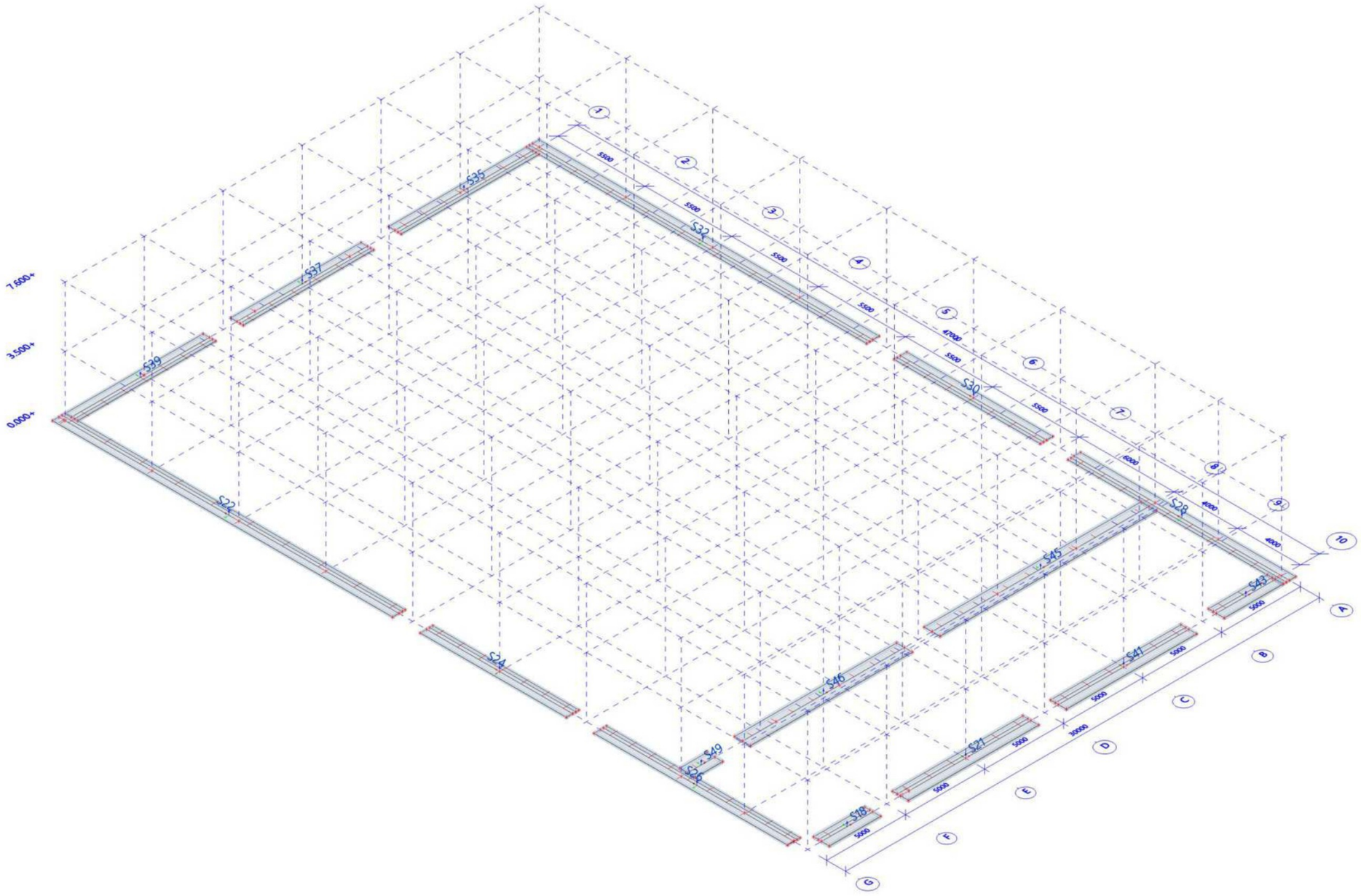
Toelaatbaar variabel L/250 = 15.000/250 = 60mm OK
Zeeg 80mm OK
Totale doorbuiging: 53,4 + 45,3/2 - 80 = 4mm
Toelaatbaar totaal L/250 = 60mm OK

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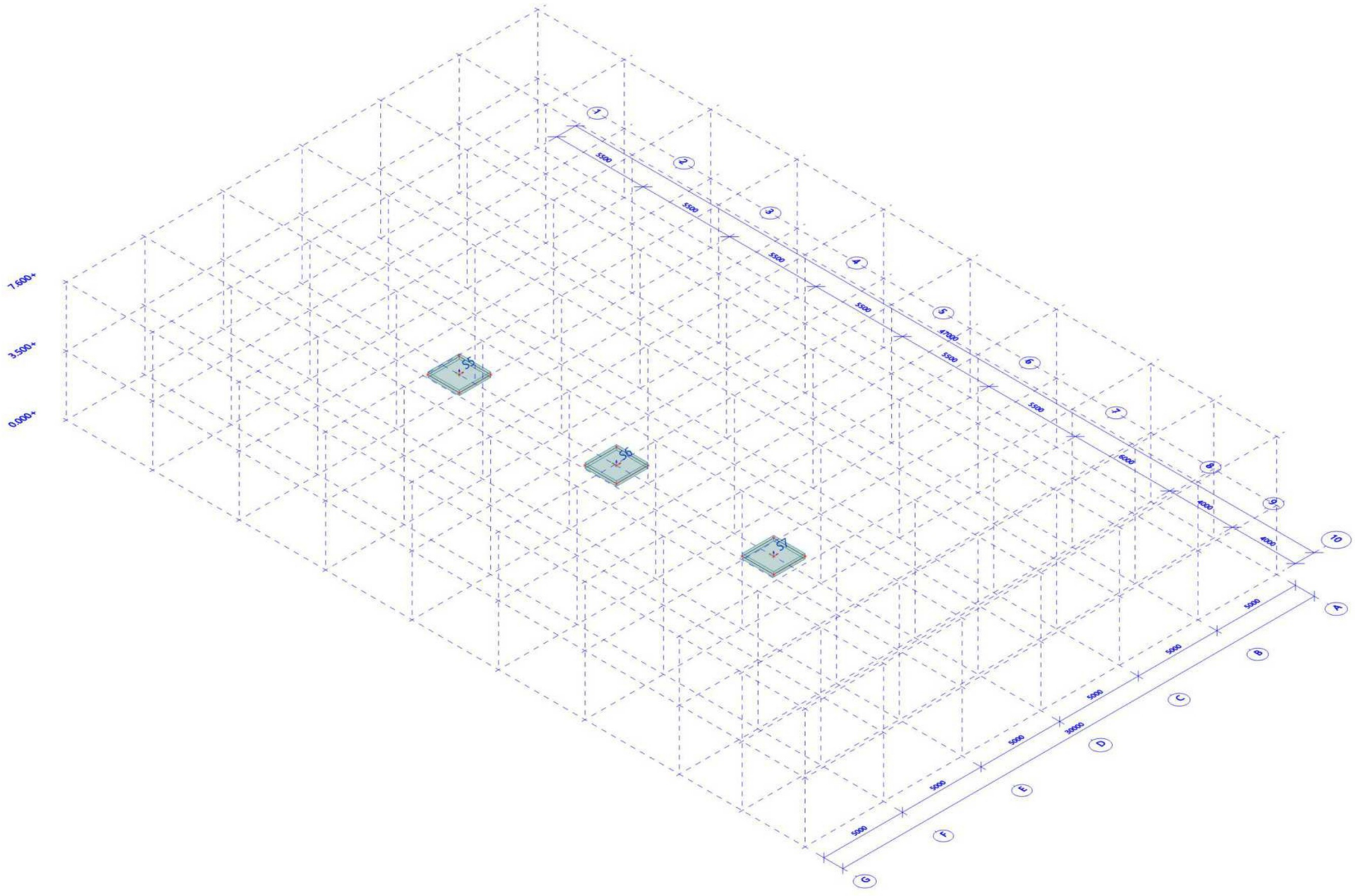
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2. Invoer geometrie

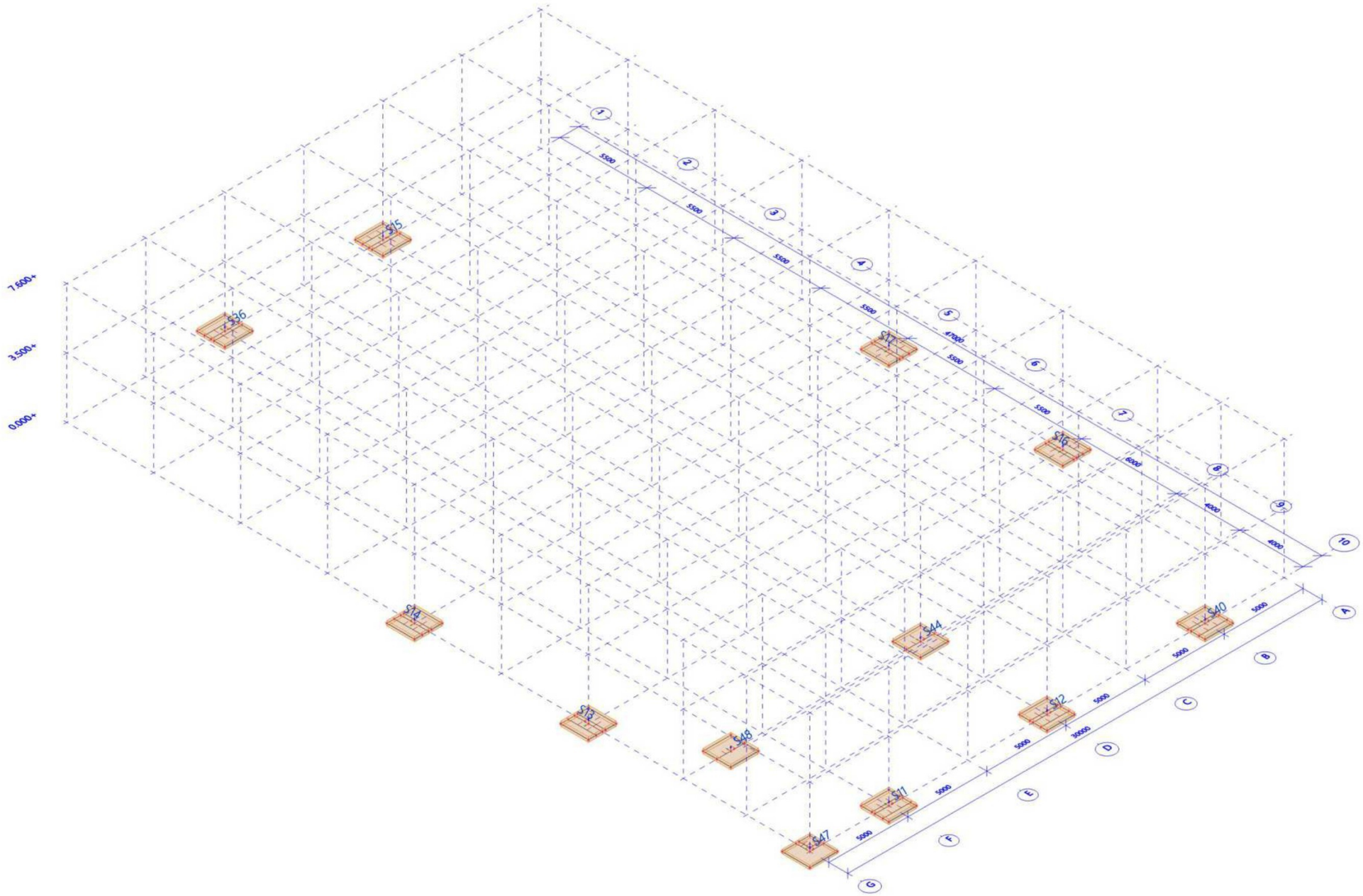
2.1. Funderingsstroken



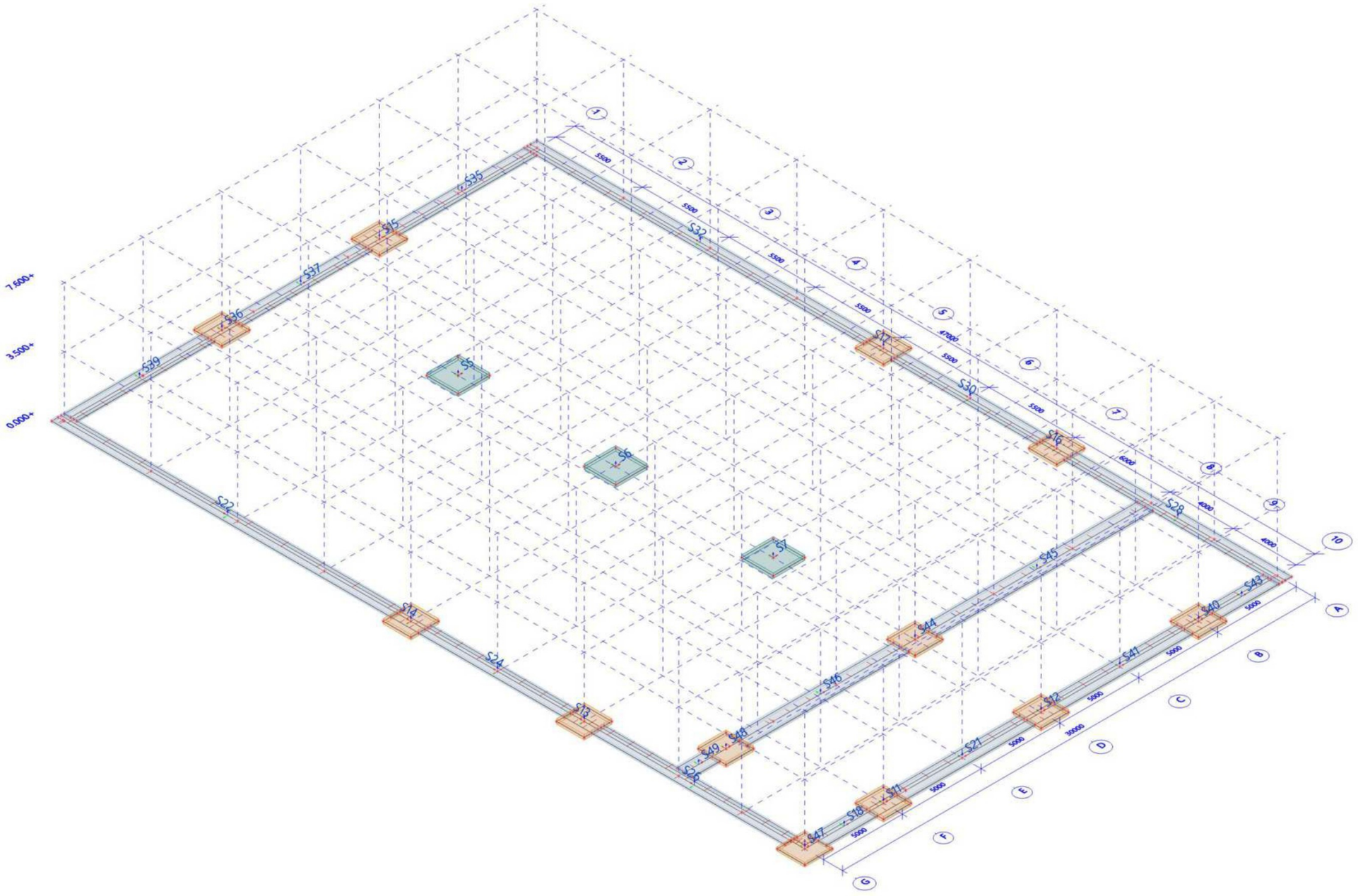
2.2. Poer 2000x2000x300



2.3. Poeren 1750x1750x250



2.4. Fundering



2.5. Staven en platen per laag

Name	Structural model only	Colour
opleggingen-kolommen	×	
Funderingsstrook	×	
Poer 2000x2000x300	×	
Poer 1750x1750x250	×	
Hulplijnen	×	

2.6. Nodal supports

Empty table

2.7. Materials

Steel EC3

Name	ρ [kg/m³]	E_{mod} [MPa]	μ	Lower limit [mm]	Upper limit [mm]	F_y [MPa]	F_u [MPa]	Colour
		G_{mod} [MPa]	α [m/mK]					
S 235	7850,00	2,1000e+05	0.3	0,00	40,00	235,0	360,0	
		8,0769e+04	0,01e-003	40,00	80,00	215,0	360,0	

Reinforcement EC2

Name	Type	ρ [kg/m³]	E_{mod} [MPa]	G_{mod} [MPa]	α [m/mK]	$f_{y.k}$ [MPa]
B 500A	Reinforcement steel	7850,00	2,0000e+05	8,3333e+04	0,01e-003	500,0
B 500B	Reinforcement steel	7850,00	2,0000e+05	8,3333e+04	0,01e-003	500,0

Concrete EN 1992-2

Name	Type	Unit mass [kg/m³]	E mod [MPa]	Poisson - nu	G mod [MPa]	Thermal exp [m/mK]	Colour
C20/25(E=10.000MPA)	Concrete	2500,00	1,0000e+04	0.2	4,1667e+03	0,01e-003	
C20/25(EN1992-2) GEEN EG	Concrete	0,00	3,0000e+04	0.2	1,2500e+04	0,01e-003	

3. Belastingen

3.1. Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
LC1	Self weight	Permanent Self weight	LG1	-Z		
LC2	Permanent	Permanent Standard	LG1			
LC3	Veranderlijk Standard	Variable Static	LG3		Short	None
BG1	NC_ULS-Set B (auto)1 Standard	Variable Static	LG2		Short	None
BG2	NC_ULS-Set B (auto)2 Standard	Variable Static	LG2		Short	None
BG3	NC_ULS-Set B (auto)3 Standard	Variable Static	LG2		Short	None
BG4	NC_ULS-Set B (auto)4 Standard	Variable Static	LG2		Short	None
BG5	NC_ULS-Set B (auto)5 Standard	Variable Static	LG2		Short	None
BG6	NC_ULS-Set B (auto)6 Standard	Variable Static	LG2		Short	None
BG7	NC_ULS-Set B (auto)7	Variable	LG2		Short	None

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
	Standard	Static				
BG8	NC_ULS-Set B (auto)8	Variable	LG2		Short	None
	Standard	Static				
BG9	NC_ULS-Set B (auto)9	Variable	LG2		Short	None
	Standard	Static				
BG10	NC_ULS-Set B (auto)10	Variable	LG2		Short	None
	Standard	Static				
BG11	NC_ULS-Set B (auto)11	Variable	LG2		Short	None
	Standard	Static				
BG12	NC_ULS-Set B (auto)12	Variable	LG2		Short	None
	Standard	Static				
BG13	NC_ULS-Set B (auto)13	Variable	LG2		Short	None
	Standard	Static				
BG14	NC_ULS-Set B (auto)14	Variable	LG2		Short	None
	Standard	Static				
BG15	NC_ULS-Set B (auto)15	Variable	LG2		Short	None
	Standard	Static				
BG16	NC_ULS-Set B (auto)16	Variable	LG2		Short	None
	Standard	Static				
BG17	NC_ULS-Set B (auto)17	Variable	LG2		Short	None
	Standard	Static				
BG18	NC_ULS-Set B (auto)18	Variable	LG2		Short	None
	Standard	Static				
BG19	NC_ULS-Set B (auto)19	Variable	LG2		Short	None
	Standard	Static				
BG20	NC_ULS-Set B (auto)20	Variable	LG2		Short	None
	Standard	Static				
BG21	NC_ULS-Set B (auto)21	Variable	LG2		Short	None
	Standard	Static				
BG22	NC_ULS-Set B (auto)22	Variable	LG2		Short	None
	Standard	Static				
BG23	NC_ULS-Set B (auto)23	Variable	LG2		Short	None
	Standard	Static				
BG24	NC_ULS-Set B (auto)24	Variable	LG2		Short	None
	Standard	Static				
BG25	NC_ULS-Set B (auto)25	Variable	LG2		Short	None
	Standard	Static				
BG26	NC_ULS-Set B (auto)26	Variable	LG2		Short	None
	Standard	Static				
BG27	NC_ULS-Set B (auto)27	Variable	LG2		Short	None
	Standard	Static				
BG28	NC_ULS-Set B (auto)28	Variable	LG2		Short	None
	Standard	Static				

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
BG29	NC_ULS-Set B (auto)29	Variable	LG2		Short	None
	Standard	Static				
BG30	NC_ULS-Set B (auto)30	Variable	LG2		Short	None
	Standard	Static				
BG31	NC_ULS-Set B (auto)31	Variable	LG2		Short	None
	Standard	Static				
BG32	NC_ULS-Set B (auto)32	Variable	LG2		Short	None
	Standard	Static				
BG33	NC_ULS-Set B (auto)33	Variable	LG2		Short	None
	Standard	Static				
BG34	NC_ULS-Set B (auto)34	Variable	LG2		Short	None
	Standard	Static				
BG35	NC_ULS-Set B (auto)35	Variable	LG2		Short	None
	Standard	Static				
BG36	NC_ULS-Set B (auto)36	Variable	LG2		Short	None
	Standard	Static				
BG37	NC_ULS-Set B (auto)37	Variable	LG2		Short	None
	Standard	Static				
BG38	NC_ULS-Set B (auto)38	Variable	LG2		Short	None
	Standard	Static				
BG39	NC_ULS-Set B (auto)39	Variable	LG2		Short	None
	Standard	Static				
BG40	NC_ULS-Set B (auto)40	Variable	LG2		Short	None
	Standard	Static				
BG41	NC_ULS-Set B (auto)41	Variable	LG2		Short	None
	Standard	Static				
BG42	NC_ULS-Set B (auto)42	Variable	LG2		Short	None
	Standard	Static				
BG43	NC_ULS-Set B (auto)43	Variable	LG2		Short	None
	Standard	Static				
BG44	NC_ULS-Set B (auto)44	Variable	LG2		Short	None
	Standard	Static				
BG45	NC_ULS-Set B (auto)45	Variable	LG2		Short	None
	Standard	Static				
BG46	NC_ULS-Set B (auto)46	Variable	LG2		Short	None
	Standard	Static				
BG47	NC_ULS-Set B (auto)47	Variable	LG2		Short	None
	Standard	Static				
BG48	NC_ULS-Set B (auto)48	Variable	LG2		Short	None
	Standard	Static				
BG49	NC_ULS-Set B (auto)49	Variable	LG2		Short	None
	Standard	Static				
BG50	NC_ULS-Set B	Variable	LG2		Short	None

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
	(auto)50					
	Standard	Static				
BG51	NC_ULS-Set B (auto)51	Variable	LG2		Short	None
	Standard	Static				
BG52	NC_ULS-Set B (auto)52	Variable	LG2		Short	None
	Standard	Static				
BG53	NC_ULS-Set B (auto)53	Variable	LG2		Short	None
	Standard	Static				
BG54	NC_ULS-Set B (auto)54	Variable	LG2		Short	None
	Standard	Static				
BG55	NC_ULS-Set B (auto)55	Variable	LG2		Short	None
	Standard	Static				
BG56	NC_ULS-Set B (auto)56	Variable	LG2		Short	None
	Standard	Static				
BG57	NC_ULS-Set B (auto)57	Variable	LG2		Short	None
	Standard	Static				
BG58	NC_ULS-Set B (auto)58	Variable	LG2		Short	None
	Standard	Static				
BG59	NC_ULS-Set B (auto)59	Variable	LG2		Short	None
	Standard	Static				
BG60	NC_ULS-Set B (auto)60	Variable	LG2		Short	None
	Standard	Static				
BG61	NC_ULS-Set B (auto)61	Variable	LG2		Short	None
	Standard	Static				
BG62	NC_ULS-Set B (auto)62	Variable	LG2		Short	None
	Standard	Static				
BG63	NC_ULS-Set B (auto)63	Variable	LG2		Short	None
	Standard	Static				
BG64	NC_ULS-Set B (auto)64	Variable	LG2		Short	None
	Standard	Static				
BG65	NC_ULS-Set B (auto)65	Variable	LG2		Short	None
	Standard	Static				
BG66	NC_ULS-Set B (auto)66	Variable	LG2		Short	None
	Standard	Static				
BG67	NC_ULS-Set B (auto)67	Variable	LG2		Short	None
	Standard	Static				
BG68	NC_ULS-Set B (auto)68	Variable	LG2		Short	None
	Standard	Static				
BG69	NC_ULS-Set B (auto)69	Variable	LG2		Short	None
	Standard	Static				
BG70	NC_ULS-Set B (auto)70	Variable	LG2		Short	None
	Standard	Static				
BG71	NC_ULS-Set B (auto)71	Variable	LG2		Short	None

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
	Standard	Static				
BG72	NC_ULS-Set B (auto)72	Variable	LG2		Short	None
	Standard	Static				
BG73	NC_ULS-Set B (auto)73	Variable	LG2		Short	None
	Standard	Static				
BG74	NC_ULS-Set B (auto)74	Variable	LG2		Short	None
	Standard	Static				
BG75	NC_ULS-Set B (auto)75	Variable	LG2		Short	None
	Standard	Static				
BG76	NC_ULS-Set B (auto)76	Variable	LG2		Short	None
	Standard	Static				
BG77	NC_ULS-Set B (auto)77	Variable	LG2		Short	None
	Standard	Static				
BG78	NC_ULS-Set B (auto)78	Variable	LG2		Short	None
	Standard	Static				
BG79	NC_ULS-Set B (auto)79	Variable	LG2		Short	None
	Standard	Static				
BG80	NC_SLS-Quasi 1	Variable	LG2		Short	None
	Standard	Static				
BG81	NC_SLS-Quasi 2	Variable	LG2		Short	None
	Standard	Static				

3.2. Combinations

Name	Description	Type	Load cases	Coeff. [-]
1.2G + 1.5Q + 1.0BG		Envelope - ultimate	LC1 - Self weight	1,200
			LC2 - Permanent	1,200
			LC3 - Veranderlijk	1,500
			BG1 - NC_ULS-Set B (auto)1	1,000
			BG2 - NC_ULS-Set B (auto)2	1,000
			BG3 - NC_ULS-Set B (auto)3	1,000
			BG4 - NC_ULS-Set B (auto)4	1,000
			BG5 - NC_ULS-Set B (auto)5	1,000
			BG6 - NC_ULS-Set B (auto)6	1,000
			BG7 - NC_ULS-Set B (auto)7	1,000
			BG8 - NC_ULS-Set B (auto)8	1,000
			BG9 - NC_ULS-Set B (auto)9	1,000
			BG10 - NC_ULS-Set B (auto)10	1,000
			BG11 - NC_ULS-Set B (auto)11	1,000
			BG12 - NC_ULS-Set B (auto)12	1,000
			BG13 - NC_ULS-Set B (auto)13	1,000
			BG14 - NC_ULS-Set B (auto)14	1,000
			BG15 - NC_ULS-Set B (auto)15	1,000
			BG16 - NC_ULS-Set B (auto)16	1,000
			BG17 - NC_ULS-Set B (auto)17	1,000
			BG18 - NC_ULS-Set B (auto)18	1,000

Name	Description	Type	Load cases	Coeff. [-]
			BG19 - NC_ULS-Set B (auto)19	1,000
			BG20 - NC_ULS-Set B (auto)20	1,000
			BG21 - NC_ULS-Set B (auto)21	1,000
			BG22 - NC_ULS-Set B (auto)22	1,000
			BG23 - NC_ULS-Set B (auto)23	1,000
			BG24 - NC_ULS-Set B (auto)24	1,000
			BG25 - NC_ULS-Set B (auto)25	1,000
			BG26 - NC_ULS-Set B (auto)26	1,000
			BG27 - NC_ULS-Set B (auto)27	1,000
			BG28 - NC_ULS-Set B (auto)28	1,000
			BG29 - NC_ULS-Set B (auto)29	1,000
			BG30 - NC_ULS-Set B (auto)30	1,000
			BG31 - NC_ULS-Set B (auto)31	1,000
			BG32 - NC_ULS-Set B (auto)32	1,000
			BG33 - NC_ULS-Set B (auto)33	1,000
			BG34 - NC_ULS-Set B (auto)34	1,000
			BG35 - NC_ULS-Set B (auto)35	1,000
			BG36 - NC_ULS-Set B (auto)36	1,000
			BG37 - NC_ULS-Set B (auto)37	1,000
			BG38 - NC_ULS-Set B (auto)38	1,000
			BG39 - NC_ULS-Set B (auto)39	1,000
			BG40 - NC_ULS-Set B (auto)40	1,000
			BG41 - NC_ULS-Set B (auto)41	1,000
			BG42 - NC_ULS-Set B (auto)42	1,000
			BG43 - NC_ULS-Set B (auto)43	1,000
			BG44 - NC_ULS-Set B (auto)44	1,000
			BG45 - NC_ULS-Set B (auto)45	1,000
			BG46 - NC_ULS-Set B (auto)46	1,000
			BG47 - NC_ULS-Set B (auto)47	1,000
			BG48 - NC_ULS-Set B (auto)48	1,000
			BG49 - NC_ULS-Set B (auto)49	1,000
			BG50 - NC_ULS-Set B (auto)50	1,000
			BG51 - NC_ULS-Set B	1,000

Name	Description	Type	Load cases	Coeff. [-]
			(auto)51	
			BG52 - NC_ULS-Set B (auto)52	1,000
			BG53 - NC_ULS-Set B (auto)53	1,000
			BG54 - NC_ULS-Set B (auto)54	1,000
			BG55 - NC_ULS-Set B (auto)55	1,000
			BG56 - NC_ULS-Set B (auto)56	1,000
			BG57 - NC_ULS-Set B (auto)57	1,000
			BG58 - NC_ULS-Set B (auto)58	1,000
			BG59 - NC_ULS-Set B (auto)59	1,000
			BG60 - NC_ULS-Set B (auto)60	1,000
			BG61 - NC_ULS-Set B (auto)61	1,000
			BG62 - NC_ULS-Set B (auto)62	1,000
			BG63 - NC_ULS-Set B (auto)63	1,000
			BG64 - NC_ULS-Set B (auto)64	1,000
			BG65 - NC_ULS-Set B (auto)65	1,000
			BG66 - NC_ULS-Set B (auto)66	1,000
			BG67 - NC_ULS-Set B (auto)67	1,000
			BG68 - NC_ULS-Set B (auto)68	1,000
			BG69 - NC_ULS-Set B (auto)69	1,000
			BG70 - NC_ULS-Set B (auto)70	1,000
			BG71 - NC_ULS-Set B (auto)71	1,000
			BG72 - NC_ULS-Set B (auto)72	1,000
			BG73 - NC_ULS-Set B (auto)73	1,000
			BG74 - NC_ULS-Set B (auto)74	1,000
			BG75 - NC_ULS-Set B (auto)75	1,000
			BG76 - NC_ULS-Set B (auto)76	1,000
			BG77 - NC_ULS-Set B (auto)77	1,000
			BG78 - NC_ULS-Set B (auto)78	1,000
			BG79 - NC_ULS-Set B (auto)79	1,000
0.9G + 1.0BG		Envelope - ultimate	LC1 - Self weight	0,900
			LC2 - Permanent	0,900
			BG1 - NC_ULS-Set B (auto)1	1,000
			BG2 - NC_ULS-Set B (auto)2	1,000
			BG3 - NC_ULS-Set B (auto)3	1,000
			BG4 - NC_ULS-Set B (auto)4	1,000
			BG5 - NC_ULS-Set B (auto)5	1,000
			BG6 - NC_ULS-Set B (auto)6	1,000

Name	Description	Type	Load cases	Coeff. [-]
			BG7 - NC_ULS-Set B (auto)7	1,000
			BG8 - NC_ULS-Set B (auto)8	1,000
			BG9 - NC_ULS-Set B (auto)9	1,000
			BG10 - NC_ULS-Set B (auto)10	1,000
			BG11 - NC_ULS-Set B (auto)11	1,000
			BG12 - NC_ULS-Set B (auto)12	1,000
			BG13 - NC_ULS-Set B (auto)13	1,000
			BG14 - NC_ULS-Set B (auto)14	1,000
			BG15 - NC_ULS-Set B (auto)15	1,000
			BG16 - NC_ULS-Set B (auto)16	1,000
			BG17 - NC_ULS-Set B (auto)17	1,000
			BG18 - NC_ULS-Set B (auto)18	1,000
			BG19 - NC_ULS-Set B (auto)19	1,000
			BG20 - NC_ULS-Set B (auto)20	1,000
			BG21 - NC_ULS-Set B (auto)21	1,000
			BG22 - NC_ULS-Set B (auto)22	1,000
			BG23 - NC_ULS-Set B (auto)23	1,000
			BG24 - NC_ULS-Set B (auto)24	1,000
			BG25 - NC_ULS-Set B (auto)25	1,000
			BG26 - NC_ULS-Set B (auto)26	1,000
			BG27 - NC_ULS-Set B (auto)27	1,000
			BG28 - NC_ULS-Set B (auto)28	1,000
			BG29 - NC_ULS-Set B (auto)29	1,000
			BG30 - NC_ULS-Set B (auto)30	1,000
			BG31 - NC_ULS-Set B (auto)31	1,000
			BG32 - NC_ULS-Set B (auto)32	1,000
			BG33 - NC_ULS-Set B (auto)33	1,000
			BG34 - NC_ULS-Set B (auto)34	1,000
			BG35 - NC_ULS-Set B (auto)35	1,000
			BG36 - NC_ULS-Set B (auto)36	1,000
			BG37 - NC_ULS-Set B (auto)37	1,000
			BG38 - NC_ULS-Set B (auto)38	1,000
			BG39 - NC_ULS-Set B (auto)39	1,000
			BG40 - NC_ULS-Set B (auto)40	1,000

Name	Description	Type	Load cases	Coeff. [-]
			BG41 - NC_ULS-Set B (auto)41	1,000
			BG42 - NC_ULS-Set B (auto)42	1,000
			BG43 - NC_ULS-Set B (auto)43	1,000
			BG44 - NC_ULS-Set B (auto)44	1,000
			BG45 - NC_ULS-Set B (auto)45	1,000
			BG46 - NC_ULS-Set B (auto)46	1,000
			BG47 - NC_ULS-Set B (auto)47	1,000
			BG48 - NC_ULS-Set B (auto)48	1,000
			BG49 - NC_ULS-Set B (auto)49	1,000
			BG50 - NC_ULS-Set B (auto)50	1,000
			BG51 - NC_ULS-Set B (auto)51	1,000
			BG52 - NC_ULS-Set B (auto)52	1,000
			BG53 - NC_ULS-Set B (auto)53	1,000
			BG54 - NC_ULS-Set B (auto)54	1,000
			BG55 - NC_ULS-Set B (auto)55	1,000
			BG56 - NC_ULS-Set B (auto)56	1,000
			BG57 - NC_ULS-Set B (auto)57	1,000
			BG58 - NC_ULS-Set B (auto)58	1,000
			BG59 - NC_ULS-Set B (auto)59	1,000
			BG60 - NC_ULS-Set B (auto)60	1,000
			BG61 - NC_ULS-Set B (auto)61	1,000
			BG62 - NC_ULS-Set B (auto)62	1,000
			BG63 - NC_ULS-Set B (auto)63	1,000
			BG64 - NC_ULS-Set B (auto)64	1,000
			BG65 - NC_ULS-Set B (auto)65	1,000
			BG66 - NC_ULS-Set B (auto)66	1,000
			BG67 - NC_ULS-Set B (auto)67	1,000
			BG68 - NC_ULS-Set B (auto)68	1,000
			BG69 - NC_ULS-Set B (auto)69	1,000
			BG70 - NC_ULS-Set B (auto)70	1,000
			BG71 - NC_ULS-Set B (auto)71	1,000
			BG72 - NC_ULS-Set B (auto)72	1,000
			BG73 - NC_ULS-Set B	1,000

Name	Description	Type	Load cases	Coeff. [-]
			(auto)73	
			BG74 - NC_ULS-Set B (auto)74	1,000
			BG75 - NC_ULS-Set B (auto)75	1,000
			BG76 - NC_ULS-Set B (auto)76	1,000
			BG77 - NC_ULS-Set B (auto)77	1,000
			BG78 - NC_ULS-Set B (auto)78	1,000
			BG79 - NC_ULS-Set B (auto)79	1,000
Quasi 1.0G + 0.6Q + 1.0BG		Envelope - serviceability	LC1 - Self weight	1,000
			LC2 - Permanent	1,000
			LC3 - Veranderlijk	0,600
			BG80 - NC_SLS-Quasi 1	1,000
			BG81 - NC_SLS-Quasi 2	1,000

3.3. Result classes

Name	List
All ULS Linear	1.2G + 1.5Q + 1.0BG - Envelope - ultimate
	0.9G + 1.0BG - Envelope - ultimate
	Quasi 1.0G + 0.6Q + 1.0BG - Envelope - serviceability
All SLS Linear	Quasi 1.0G + 0.6Q + 1.0BG - Envelope - serviceability
All SLS + ULS	1.2G + 1.5Q + 1.0BG - Envelope - ultimate
	0.9G + 1.0BG - Envelope - ultimate
	Quasi 1.0G + 0.6Q + 1.0BG - Envelope - serviceability
All SLS	Quasi 1.0G + 0.6Q + 1.0BG - Envelope - serviceability

3.4. Berekeningsrapport

Linear calculation

Number of 2D elements	19086
Number of 1D elements	42
Number of mesh nodes	21180
Number of equations	127080
Bending theory	Mindlin
Load cases	LC1, LC2, LC3, BG1, BG2, BG3, BG4, BG5, BG6, BG7, BG8, BG9, BG10, BG11, BG12, BG13, BG14, BG15, BG16, BG17, BG18, BG19, BG20, BG21, BG22, BG23, BG24, BG25, BG26, BG27, BG28, BG29, BG30, BG31, BG32, BG33, BG34, BG35, BG36, BG37, BG38, BG39, BG40, BG41, BG42, BG43, BG44, BG45, BG46, BG47, BG48, BG49, BG50, BG51, BG52, BG53, BG54, BG55, BG56, BG57, BG58, BG59, BG60, BG61, BG62, BG63, BG64, BG65, BG66, BG67, BG68, BG69, BG70, BG71, BG72, BG73, BG74, BG75, BG76, BG77, BG78, BG79, BG80, BG81

Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
LC1	loads	0,00	0,00	-1100,33
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1100,33
LC2	loads	0,00	0,00	-2258,54
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	0,00	0,00	2258,54
LC3	loads	0,00	0,00	-1906,31
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1906,31
BG1	loads	0,00	0,00	-2154,59
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	2154,59
BG2	loads	0,00	0,00	-1436,39
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1436,39
BG3	loads	0,00	0,00	-1917,59
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1917,59
BG4	loads	0,00	0,00	-2327,39
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	2327,39
BG5	loads	0,00	0,00	-1609,19
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1609,19
BG6	loads	0,00	0,00	-2205,59
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	2205,59
BG7	loads	0,00	0,00	-1724,39
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1724,39
BG8	loads	0,00	0,00	-2090,39
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	2090,39
BG9	loads	0,00	0,00	-3101,99
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	3101,99
BG10	loads	1,11	0,00	-3274,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-1,11	0,00	3274,79
BG11	loads	0,00	0,00	-2620,80
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	2620,80
BG12	loads	0,00	0,00	-2793,59
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	0,00	0,00	2793,59
BG13	loads	442,03	-0,61	-1569,96
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,03	0,61	1569,96
BG14	loads	442,92	-1,00	-2242,93
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,92	1,00	2242,93
BG15	loads	443,45	-0,34	-1168,10
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,45	0,34	1168,10
BG16	loads	442,67	-0,71	-1840,99
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,67	0,71	1840,99
BG17	loads	0,08	283,96	-1692,97
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,08	-283,96	1692,97
BG18	loads	-0,38	283,22	-2366,25
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,38	-283,22	2366,25
BG19	loads	0,16	283,54	-1242,09
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,16	-283,54	1242,09
BG20	loads	-0,27	284,13	-1914,98
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,27	-284,13	1914,98
BG21	loads	-442,59	-0,07	-1570,04
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,59	0,07	1570,04
BG22	loads	-443,31	0,52	-2242,93
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,31	-0,52	2242,93
BG23	loads	-443,56	-0,09	-1168,10
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,56	0,09	1168,10
BG24	loads	-443,00	0,45	-1840,99
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,00	-0,45	1840,99
BG25	loads	-0,79	-283,79	-1693,36
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	0,79	283,79	1693,36
BG26	loads	-0,25	-284,11	-2366,25
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,25	284,11	2366,25
BG27	loads	-0,77	-283,37	-1242,09
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,77	283,37	1242,09
BG28	loads	-0,29	-284,23	-1914,98
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,29	284,23	1914,98
BG29	loads	442,23	-0,32	-1742,45
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,23	0,32	1742,45
BG30	loads	443,22	-0,83	-2415,73
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,22	0,83	2415,73
BG31	loads	443,65	-0,05	-1340,90
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,65	0,05	1340,90
BG32	loads	442,96	-0,53	-2013,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,96	0,53	2013,79
BG33	loads	-0,16	284,13	-1865,78
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,16	-284,13	1865,78
BG34	loads	-0,09	283,47	-2539,05
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,09	-283,47	2539,05
BG35	loads	-0,07	283,22	-1414,89
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,07	-283,22	1414,89
BG36	loads	-0,01	284,37	-2087,78
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,01	-284,37	2087,78
BG37	loads	-442,91	0,19	-1742,84
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,91	-0,19	1742,84
BG38	loads	-443,07	0,39	-2415,73
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	443,07	-0,39	2415,73
BG39	loads	-443,87	0,15	-1340,90
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,87	-0,15	1340,90
BG40	loads	-442,79	0,33	-2013,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,79	-0,33	2013,79
BG41	loads	-0,45	-283,95	-1866,16
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,45	283,95	1866,16
BG42	loads	-0,42	-283,91	-2539,05
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,42	283,91	2539,05
BG43	loads	-0,46	-283,02	-1414,89
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,46	283,02	1414,89
BG44	loads	-0,46	-284,54	-2087,78
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,46	284,54	2087,78
BG45	loads	443,91	-0,17	-1088,41
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,91	0,17	1088,41
BG46	loads	442,54	-0,65	-1761,74
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,54	0,65	1761,74
BG47	loads	443,44	0,09	-687,58
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,44	-0,09	687,58
BG48	loads	442,29	-0,37	-1359,80
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,29	0,37	1359,80
BG49	loads	-0,21	283,59	-1211,90
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,21	-283,59	1211,90
BG50	loads	-0,05	283,75	-1885,05
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,05	-283,75	1885,05
BG51	loads	-0,10	282,69	-760,63
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	0,10	-282,69	760,63
BG52	loads	0,05	283,36	-1433,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,05	-283,36	1433,79
BG53	loads	-443,18	0,01	-1088,92
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,18	-0,01	1088,92
BG54	loads	-442,83	0,47	-1761,74
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,83	-0,47	1761,74
BG55	loads	-443,07	-0,02	-687,17
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,07	0,02	687,17
BG56	loads	-442,53	0,40	-1359,80
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,53	-0,40	1359,80
BG57	loads	-0,37	-283,44	-1212,16
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,37	283,44	1212,16
BG58	loads	-0,21	-284,37	-1885,53
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,21	284,37	1885,53
BG59	loads	-0,36	-282,51	-760,90
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,36	282,51	760,90
BG60	loads	-0,26	-283,44	-1434,25
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,26	283,44	1434,25
BG61	loads	443,75	-0,03	-1261,21
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,75	0,03	1261,21
BG62	loads	442,82	-0,95	-1934,54
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-442,82	0,95	1934,54
BG63	loads	443,27	0,24	-860,38
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-443,27	-0,24	860,38
BG64	loads	442,57	-0,67	-1532,60
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	-442,57	0,67	1532,60
BG65	loads	0,03	283,41	-1384,70
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,03	-283,41	1384,70
BG66	loads	0,08	283,98	-2057,85
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,08	-283,98	2057,85
BG67	loads	0,11	282,52	-933,43
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,11	-282,52	933,43
BG68	loads	0,16	283,58	-1606,59
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	-0,16	-283,58	1606,59
BG69	loads	-443,48	-0,31	-1261,72
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	443,48	0,31	1261,72
BG70	loads	-442,74	0,35	-1934,54
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,74	-0,35	1934,54
BG71	loads	-442,90	-0,32	-859,97
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,90	0,32	859,97
BG72	loads	-442,46	0,29	-1532,60
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	442,46	-0,29	1532,60
BG73	loads	-0,20	-283,21	-1384,96
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,20	283,21	1384,96
BG74	loads	-0,38	-284,66	-2058,32
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,38	284,66	2058,32
BG75	loads	-0,22	-282,31	-933,70
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,22	282,31	933,70
BG76	loads	-0,42	-283,72	-1607,05
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,42	283,72	1607,05
BG77	loads	-1,43	0,00	-3274,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	1,43	0,00	3274,79
BG78	loads	-0,73	5,38	-3274,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,73	-5,38	3274,79
BG79	loads	0,00	-5,83	-3274,79
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	5,83	3274,79
BG80	loads	0,00	0,00	-1595,99
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1595,99
BG81	loads	0,00	0,00	-1711,19
	reaction in nodes	0,00	0,00	0,00
	reaction on lines	0,00	0,00	0,00
	contact 1D	0,00	0,00	0,00
	contact 2D	0,00	0,00	1711,19

3.5. Belastingen uit bovenbouw

3.5.1. Combinaties uit bovenbouw

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG1	NC_ULS-Set B (auto)1	Variable	LG2	Short	None
	Standard	Static			
BG2	NC_ULS-Set B (auto)2	Variable	LG2	Short	None
	Standard	Static			
BG3	NC_ULS-Set B (auto)3	Variable	LG2	Short	None
	Standard	Static			
BG4	NC_ULS-Set B (auto)4	Variable	LG2	Short	None
	Standard	Static			
BG5	NC_ULS-Set B (auto)5	Variable	LG2	Short	None
	Standard	Static			
BG6	NC_ULS-Set B (auto)6	Variable	LG2	Short	None
	Standard	Static			
BG7	NC_ULS-Set B (auto)7	Variable	LG2	Short	None
	Standard	Static			
BG8	NC_ULS-Set B (auto)8	Variable	LG2	Short	None
	Standard	Static			
BG9	NC_ULS-Set B (auto)9	Variable	LG2	Short	None
	Standard	Static			
BG10	NC_ULS-Set B (auto)10	Variable	LG2	Short	None
	Standard	Static			
BG11	NC_ULS-Set B (auto)11	Variable	LG2	Short	None
	Standard	Static			
BG12	NC_ULS-Set B (auto)12	Variable	LG2	Short	None
	Standard	Static			
BG13	NC_ULS-Set B	Variable	LG2	Short	None

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
	(auto)13				
	Standard	Static			
BG14	NC_ULS-Set B (auto)14	Variable	LG2	Short	None
	Standard	Static			
BG15	NC_ULS-Set B (auto)15	Variable	LG2	Short	None
	Standard	Static			
BG16	NC_ULS-Set B (auto)16	Variable	LG2	Short	None
	Standard	Static			
BG17	NC_ULS-Set B (auto)17	Variable	LG2	Short	None
	Standard	Static			
BG18	NC_ULS-Set B (auto)18	Variable	LG2	Short	None
	Standard	Static			
BG19	NC_ULS-Set B (auto)19	Variable	LG2	Short	None
	Standard	Static			
BG20	NC_ULS-Set B (auto)20	Variable	LG2	Short	None
	Standard	Static			
BG21	NC_ULS-Set B (auto)21	Variable	LG2	Short	None
	Standard	Static			
BG22	NC_ULS-Set B (auto)22	Variable	LG2	Short	None
	Standard	Static			
BG23	NC_ULS-Set B (auto)23	Variable	LG2	Short	None
	Standard	Static			
BG24	NC_ULS-Set B (auto)24	Variable	LG2	Short	None
	Standard	Static			
BG25	NC_ULS-Set B (auto)25	Variable	LG2	Short	None
	Standard	Static			
BG26	NC_ULS-Set B (auto)26	Variable	LG2	Short	None
	Standard	Static			
BG27	NC_ULS-Set B (auto)27	Variable	LG2	Short	None
	Standard	Static			
BG28	NC_ULS-Set B (auto)28	Variable	LG2	Short	None
	Standard	Static			
BG29	NC_ULS-Set B (auto)29	Variable	LG2	Short	None
	Standard	Static			
BG30	NC_ULS-Set B (auto)30	Variable	LG2	Short	None
	Standard	Static			
BG31	NC_ULS-Set B (auto)31	Variable	LG2	Short	None
	Standard	Static			
BG32	NC_ULS-Set B (auto)32	Variable	LG2	Short	None
	Standard	Static			
BG33	NC_ULS-Set B (auto)33	Variable	LG2	Short	None
	Standard	Static			
BG34	NC_ULS-Set B (auto)34	Variable	LG2	Short	None

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
	Standard	Static			
BG35	NC_ULS-Set B (auto)35	Variable	LG2	Short	None
	Standard	Static			
BG36	NC_ULS-Set B (auto)36	Variable	LG2	Short	None
	Standard	Static			
BG37	NC_ULS-Set B (auto)37	Variable	LG2	Short	None
	Standard	Static			
BG38	NC_ULS-Set B (auto)38	Variable	LG2	Short	None
	Standard	Static			
BG39	NC_ULS-Set B (auto)39	Variable	LG2	Short	None
	Standard	Static			
BG40	NC_ULS-Set B (auto)40	Variable	LG2	Short	None
	Standard	Static			
BG41	NC_ULS-Set B (auto)41	Variable	LG2	Short	None
	Standard	Static			
BG42	NC_ULS-Set B (auto)42	Variable	LG2	Short	None
	Standard	Static			
BG43	NC_ULS-Set B (auto)43	Variable	LG2	Short	None
	Standard	Static			
BG44	NC_ULS-Set B (auto)44	Variable	LG2	Short	None
	Standard	Static			
BG45	NC_ULS-Set B (auto)45	Variable	LG2	Short	None
	Standard	Static			
BG46	NC_ULS-Set B (auto)46	Variable	LG2	Short	None
	Standard	Static			
BG47	NC_ULS-Set B (auto)47	Variable	LG2	Short	None
	Standard	Static			
BG48	NC_ULS-Set B (auto)48	Variable	LG2	Short	None
	Standard	Static			
BG49	NC_ULS-Set B (auto)49	Variable	LG2	Short	None
	Standard	Static			
BG50	NC_ULS-Set B (auto)50	Variable	LG2	Short	None
	Standard	Static			
BG51	NC_ULS-Set B (auto)51	Variable	LG2	Short	None
	Standard	Static			
BG52	NC_ULS-Set B (auto)52	Variable	LG2	Short	None
	Standard	Static			
BG53	NC_ULS-Set B (auto)53	Variable	LG2	Short	None
	Standard	Static			
BG54	NC_ULS-Set B (auto)54	Variable	LG2	Short	None
	Standard	Static			
BG55	NC_ULS-Set B (auto)55	Variable	LG2	Short	None
	Standard	Static			

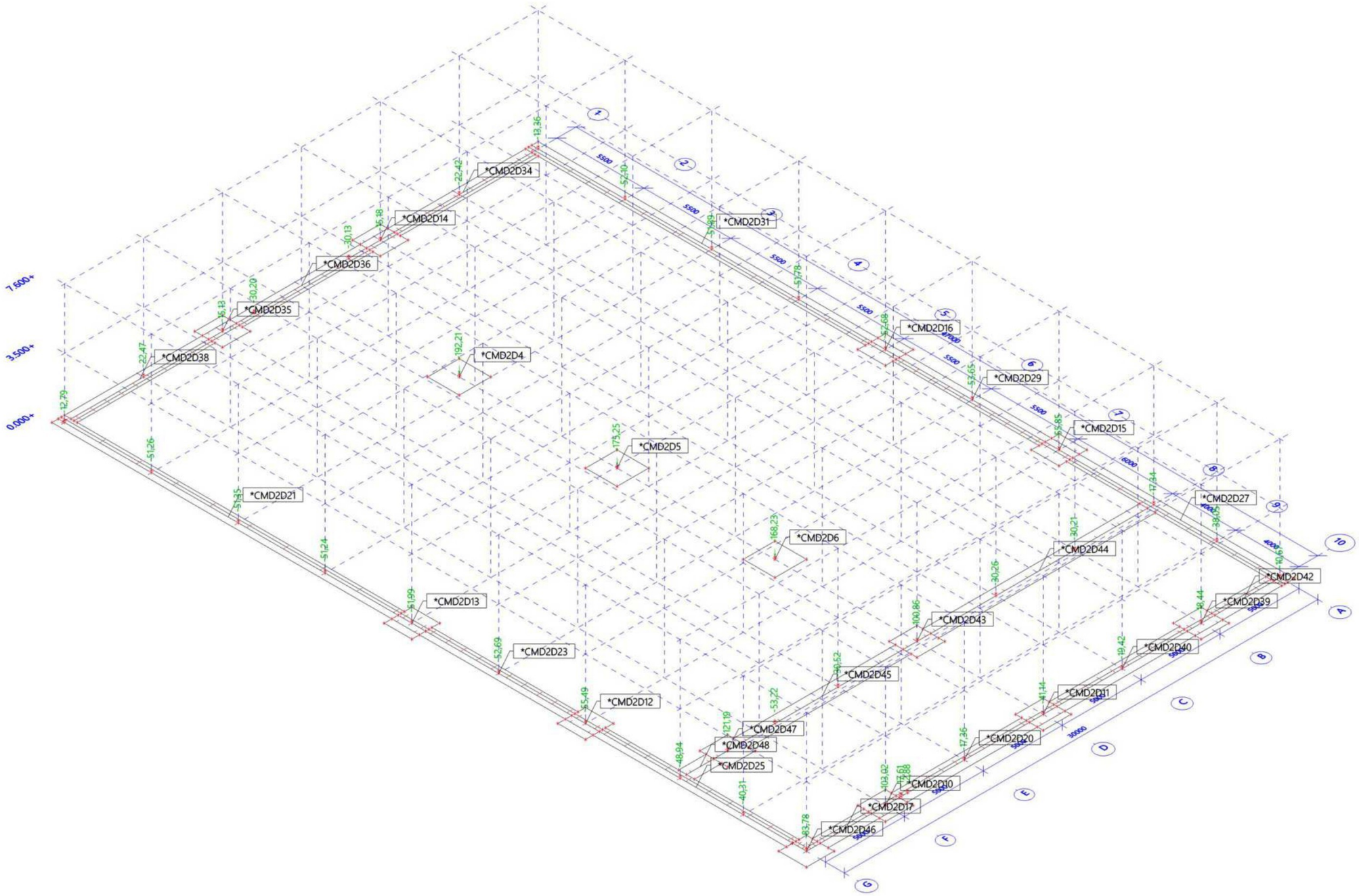
Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG56	NC_ULS-Set B (auto)56	Variable	LG2	Short	None
	Standard	Static			
BG57	NC_ULS-Set B (auto)57	Variable	LG2	Short	None
	Standard	Static			
BG58	NC_ULS-Set B (auto)58	Variable	LG2	Short	None
	Standard	Static			
BG59	NC_ULS-Set B (auto)59	Variable	LG2	Short	None
	Standard	Static			
BG60	NC_ULS-Set B (auto)60	Variable	LG2	Short	None
	Standard	Static			
BG61	NC_ULS-Set B (auto)61	Variable	LG2	Short	None
	Standard	Static			
BG62	NC_ULS-Set B (auto)62	Variable	LG2	Short	None
	Standard	Static			
BG63	NC_ULS-Set B (auto)63	Variable	LG2	Short	None
	Standard	Static			
BG64	NC_ULS-Set B (auto)64	Variable	LG2	Short	None
	Standard	Static			
BG65	NC_ULS-Set B (auto)65	Variable	LG2	Short	None
	Standard	Static			
BG66	NC_ULS-Set B (auto)66	Variable	LG2	Short	None
	Standard	Static			
BG67	NC_ULS-Set B (auto)67	Variable	LG2	Short	None
	Standard	Static			
BG68	NC_ULS-Set B (auto)68	Variable	LG2	Short	None
	Standard	Static			
BG69	NC_ULS-Set B (auto)69	Variable	LG2	Short	None
	Standard	Static			
BG70	NC_ULS-Set B (auto)70	Variable	LG2	Short	None
	Standard	Static			
BG71	NC_ULS-Set B (auto)71	Variable	LG2	Short	None
	Standard	Static			
BG72	NC_ULS-Set B (auto)72	Variable	LG2	Short	None
	Standard	Static			
BG73	NC_ULS-Set B (auto)73	Variable	LG2	Short	None
	Standard	Static			
BG74	NC_ULS-Set B (auto)74	Variable	LG2	Short	None
	Standard	Static			
BG75	NC_ULS-Set B (auto)75	Variable	LG2	Short	None
	Standard	Static			
BG76	NC_ULS-Set B (auto)76	Variable	LG2	Short	None
	Standard	Static			
BG77	NC_ULS-Set B	Variable	LG2	Short	None

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
	(auto)77 Standard	 Static			
BG78	NC_ULS-Set B (auto)78 Standard	Variable Static	LG2	Short	None
BG79	NC_ULS-Set B (auto)79 Standard	Variable Static	LG2	Short	None
BG80	NC_SLS-Quasi 1 Standard	Variable Static	LG2	Short	None
BG81	NC_SLS-Quasi 2 Standard	Variable Static	LG2	Short	None

3.5.2. Combinaties uit bovenbouw

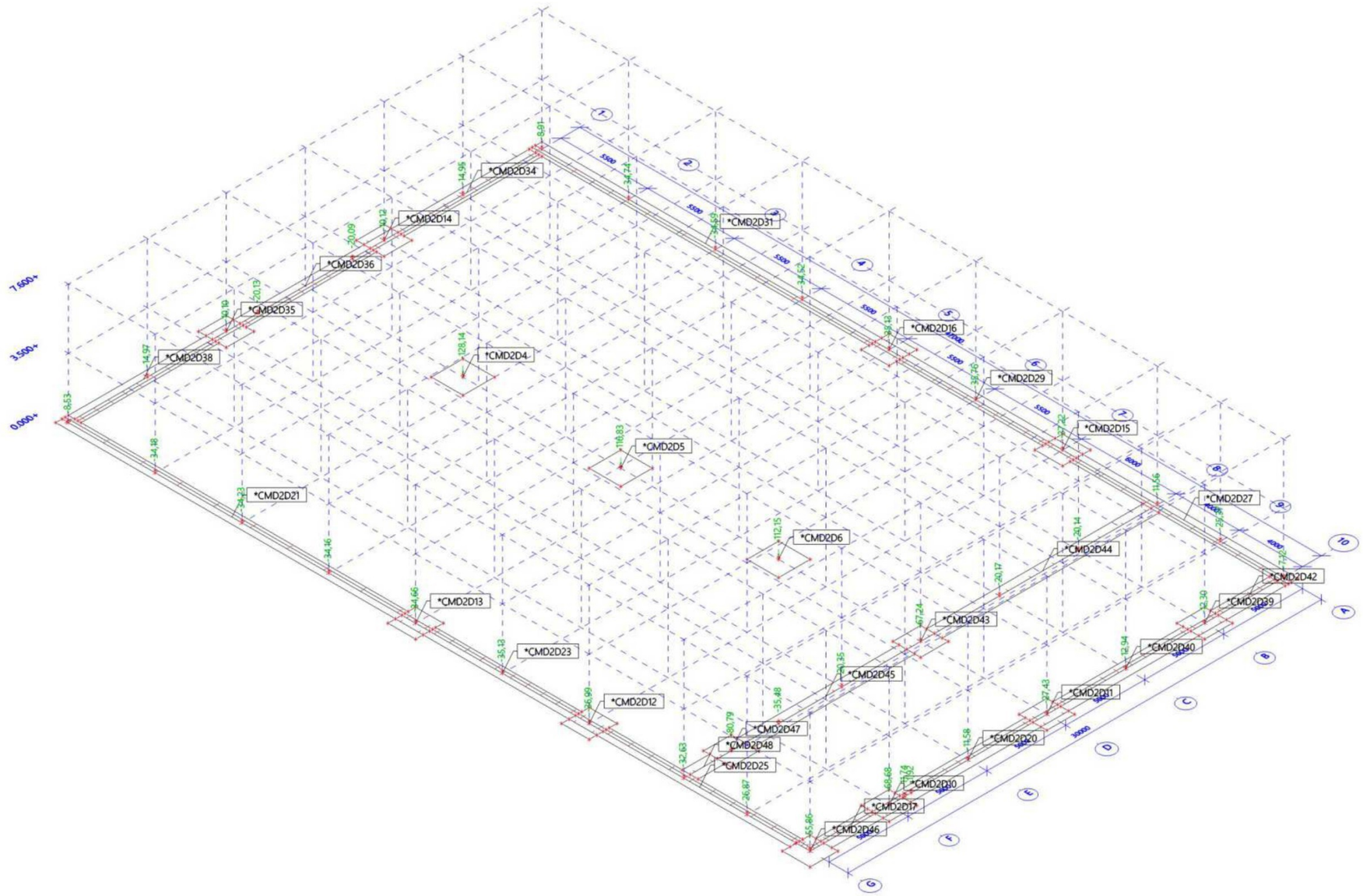
3.5.2.1. Combinaties uit bovenbouw - BG1

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG1	NC_ULS-Set B (auto)1 Standard	Variable Static	LG2	Short	None


*CMD2D34
*CMD2D14
*CMD2D36
*CMD2D35
*CMD2D38
*CMD2D4
*CMD2D5
*CMD2D21
*CMD2D6
*CMD2D13
*CMD2D23
*CMD2D12
*CMD2D47
*CMD2D48
*CMD2D25
*CMD2D46
*CMD2D45
*CMD2D43
*CMD2D31
*CMD2D16
*CMD2D29
*CMD2D15
*CMD2D27
*CMD2D44
*CMD2D42
*CMD2D39
*CMD2D40
*CMD2D11
*CMD2D20
*CMD2D10
*CMD2D17
7.600+
3.500+
0.000+

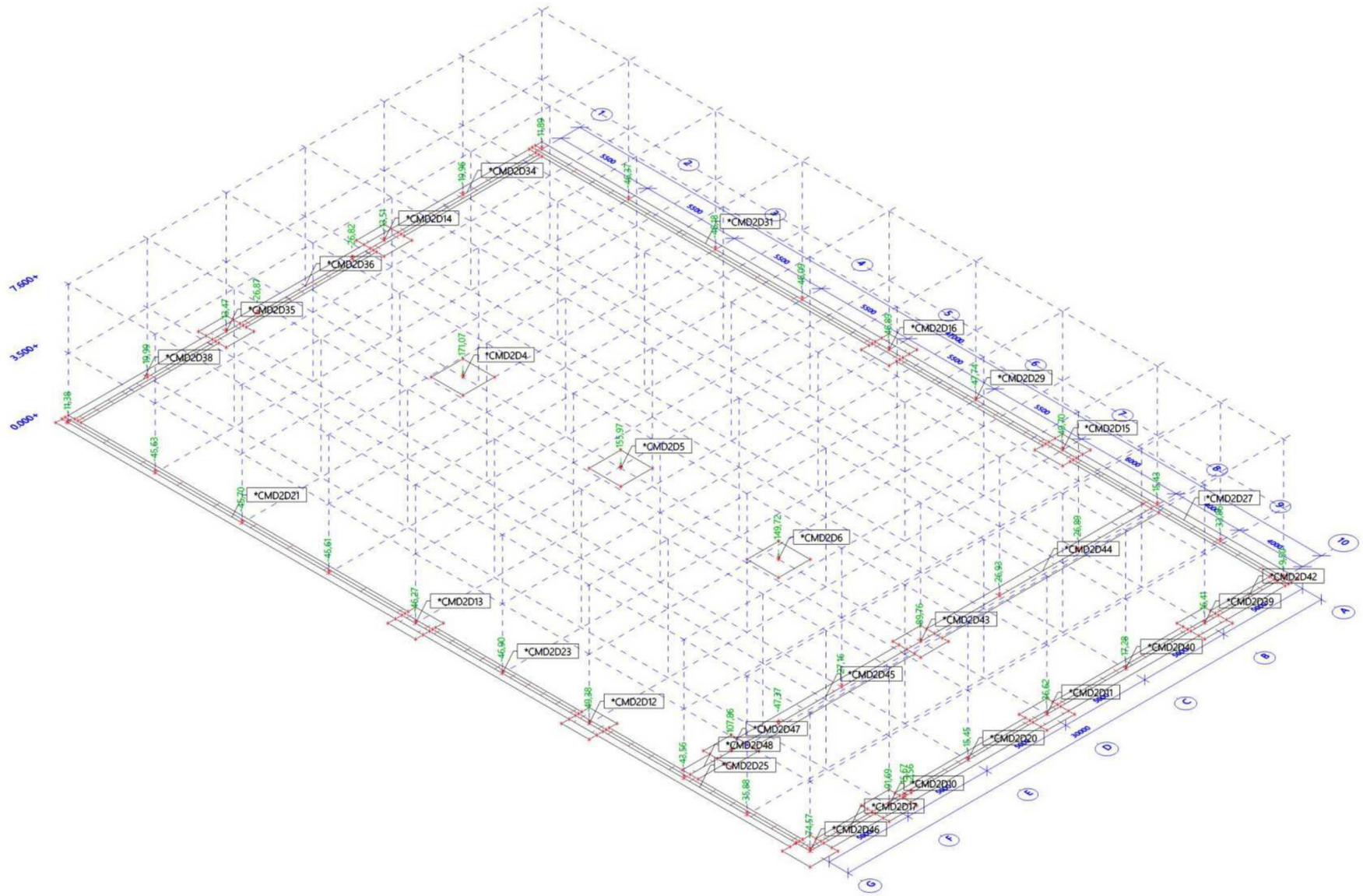
3.5.2.2. Combinaties uit bovenbouw - BG2

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG2	NC_ULS-Set B (auto)2	Variable	LG2	Short	None
	Standard	Static			



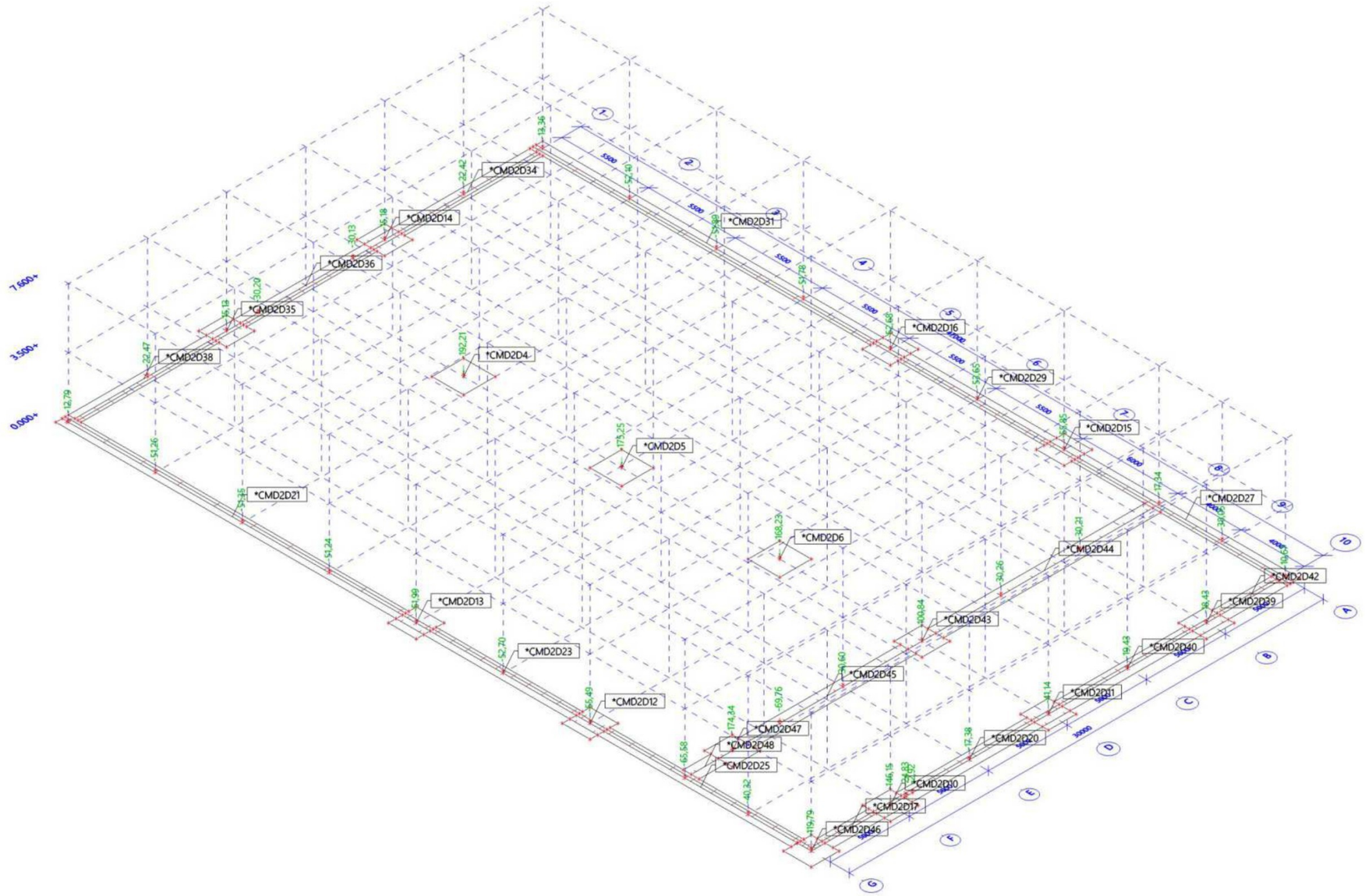
3.5.2.3. Combinaties uit bovenbouw - BG3

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG3	NC_ULS-Set B (auto)3	Variable	LG2	Short	None
	Standard	Static			



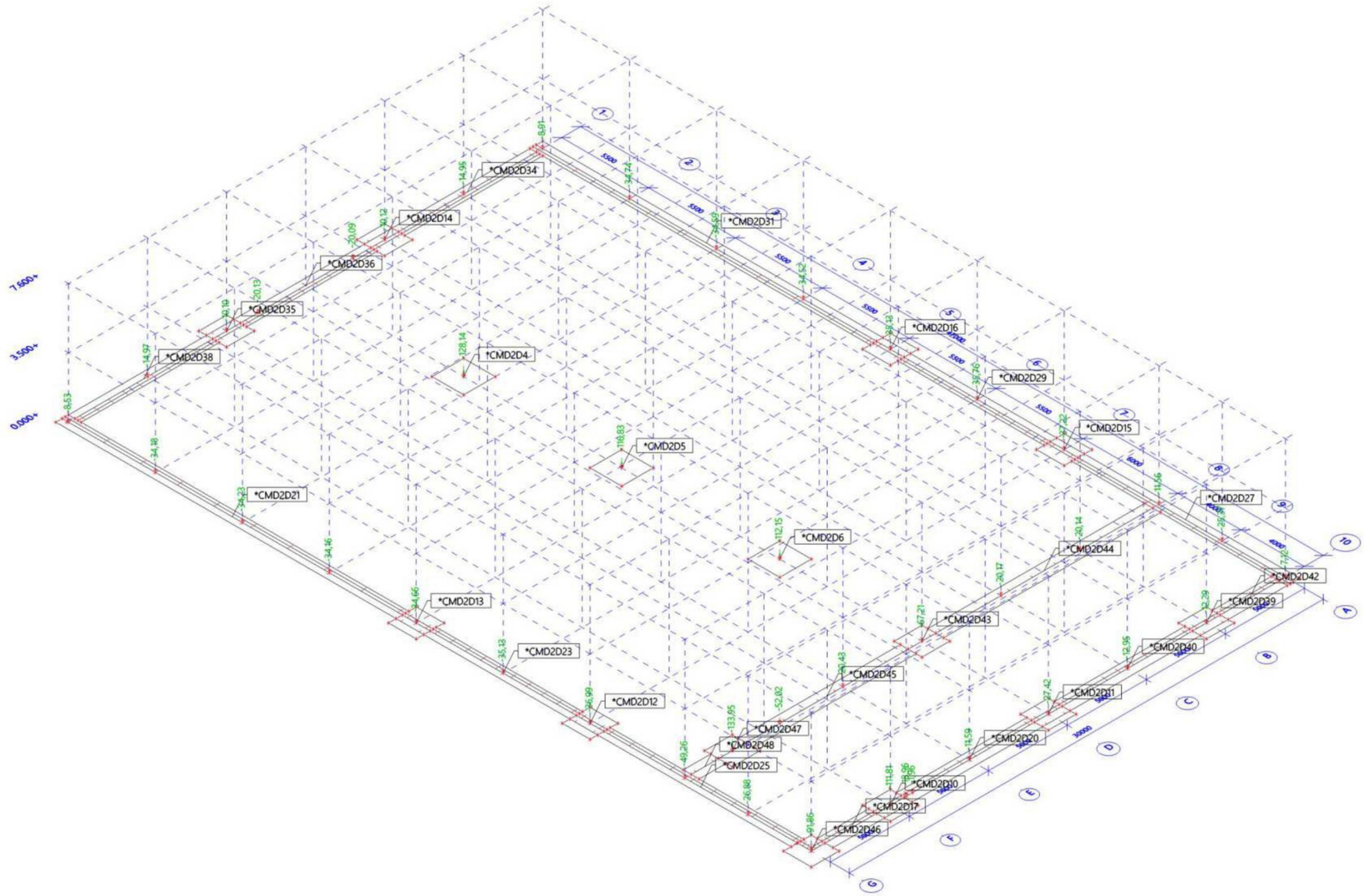
3.5.2.4. Combinaties uit bovenbouw - BG4

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG4	NC_ULS-Set B (auto)4	Variable	LG2	Short	None
	Standard	Static			



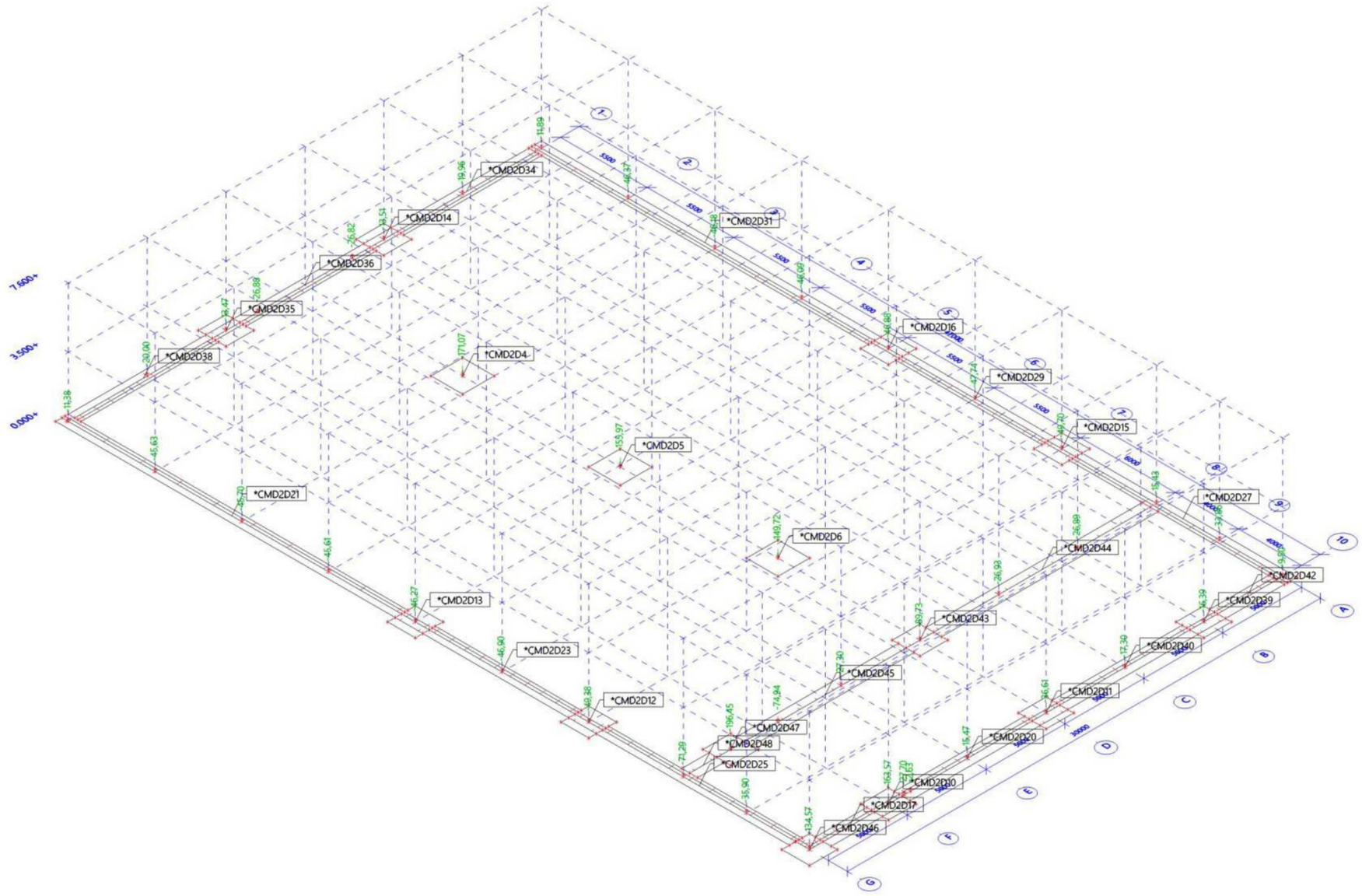
3.5.2.5. Combinaties uit bovenbouw - BG5

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG5	NC_ULS-Set B (auto)5	Variable	LG2	Short	None
	Standard	Static			



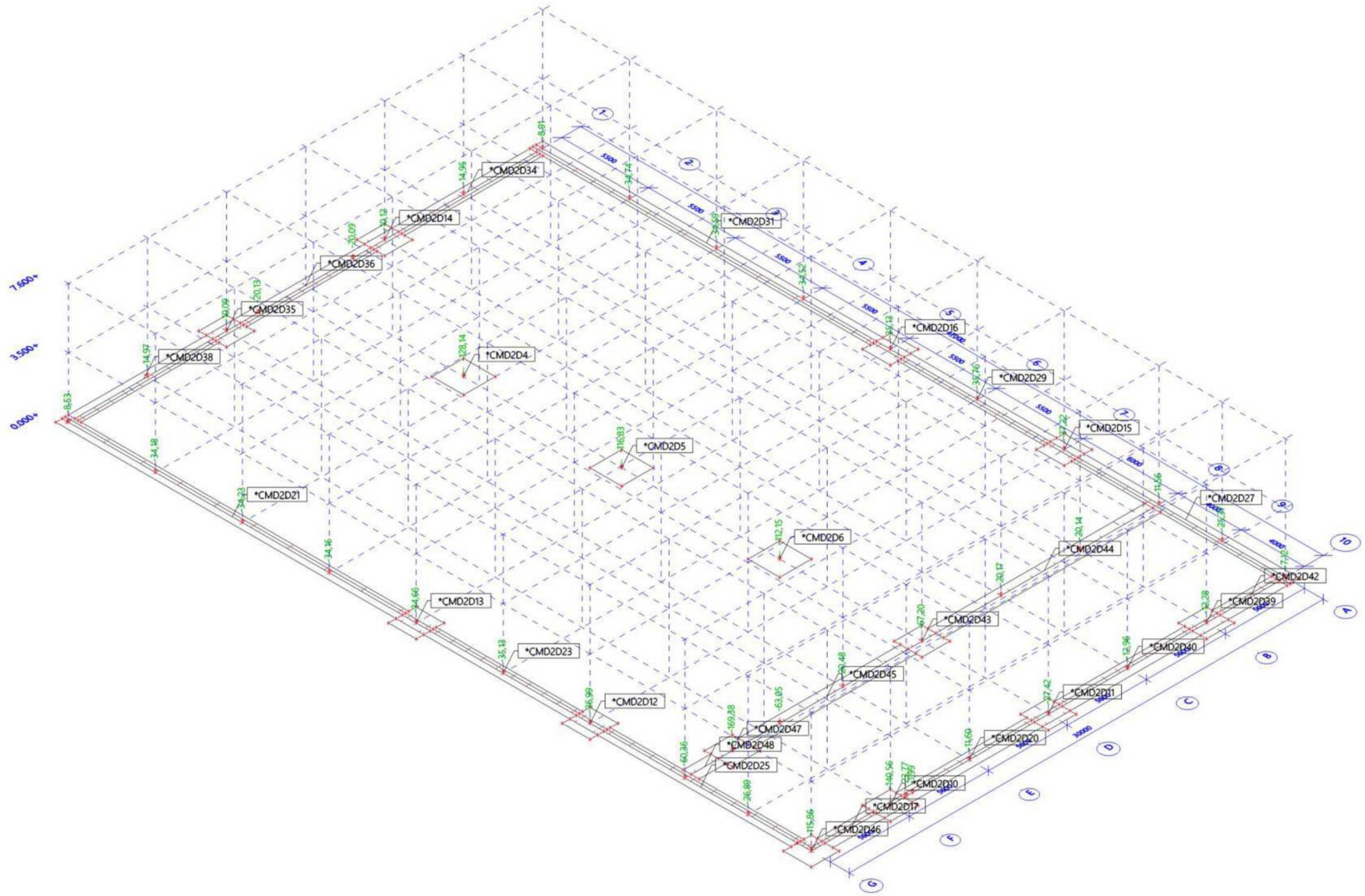
3.5.2.6. Combinaties uit bovenbouw - BG6

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG6	NC_ULS-Set B (auto)6	Variable	LG2	Short	None
	Standard	Static			



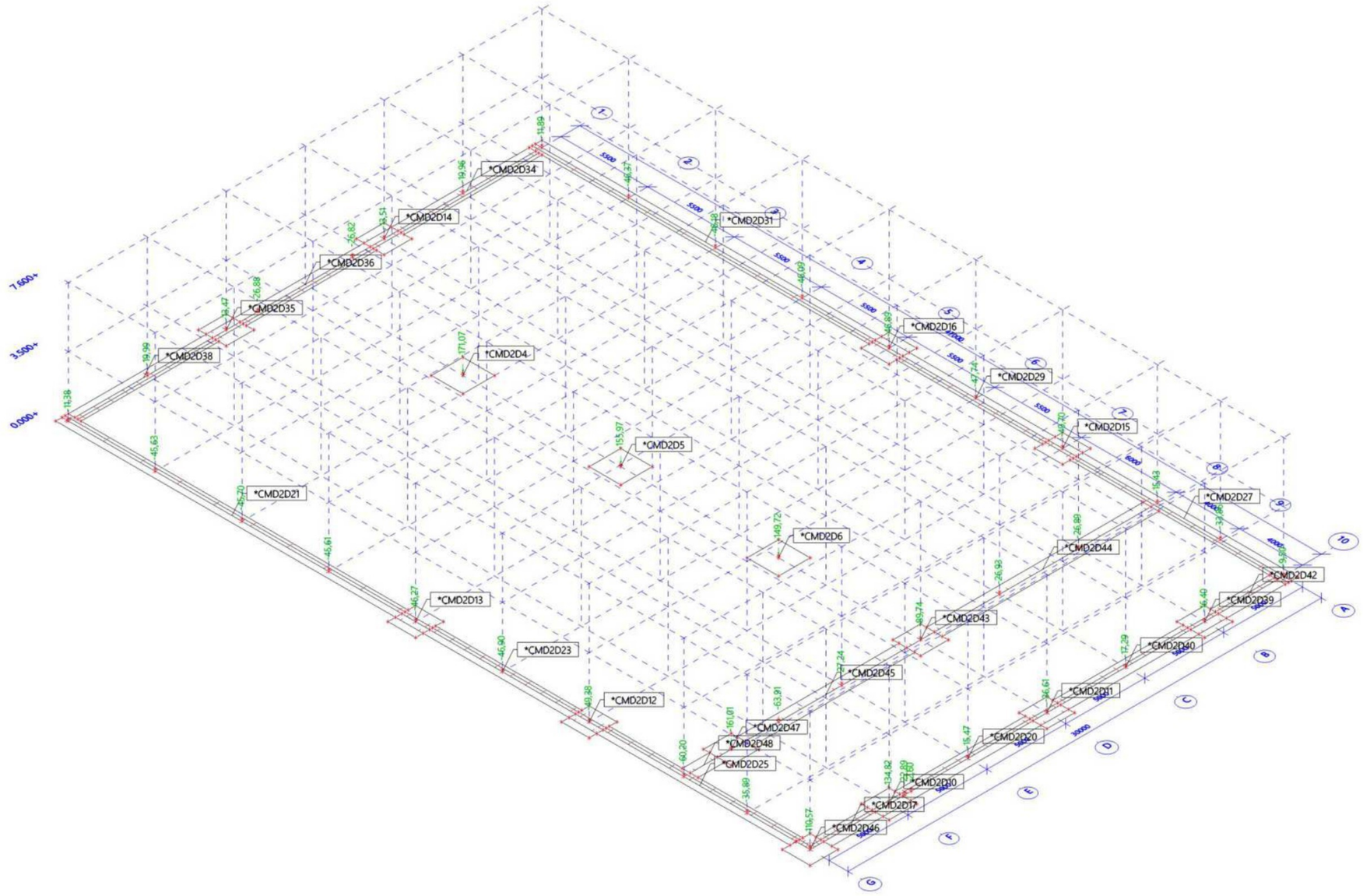
3.5.2.7. Combinaties uit bovenbouw - BG7

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG7	NC_ULS-Set B (auto)7	Variable	LG2	Short	None
	Standard	Static			



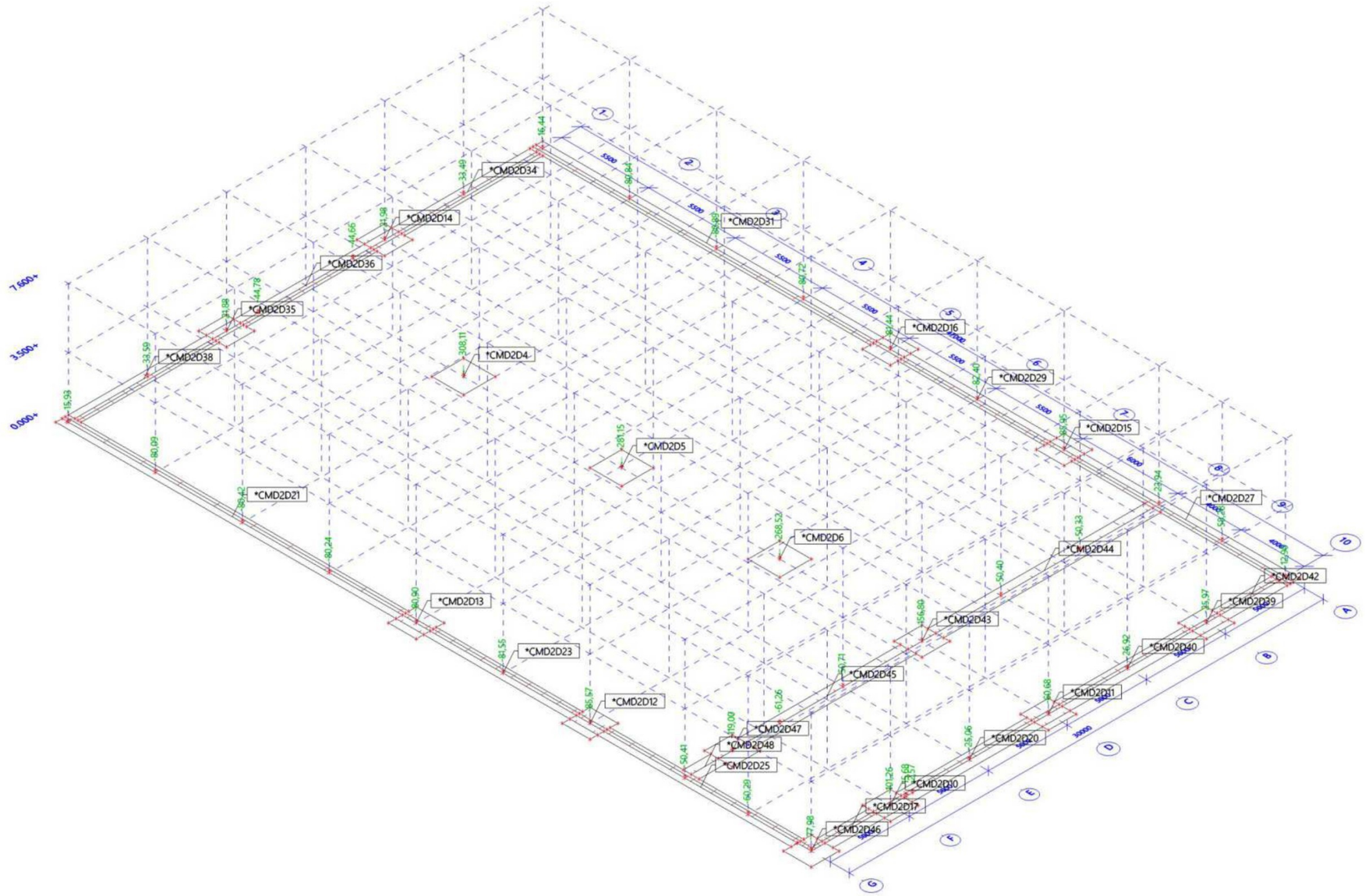
3.5.2.8. Combinaties uit bovenbouw - BG8

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG8	NC_ULS-Set B (auto)8	Variable	LG2	Short	None
	Standard	Static			



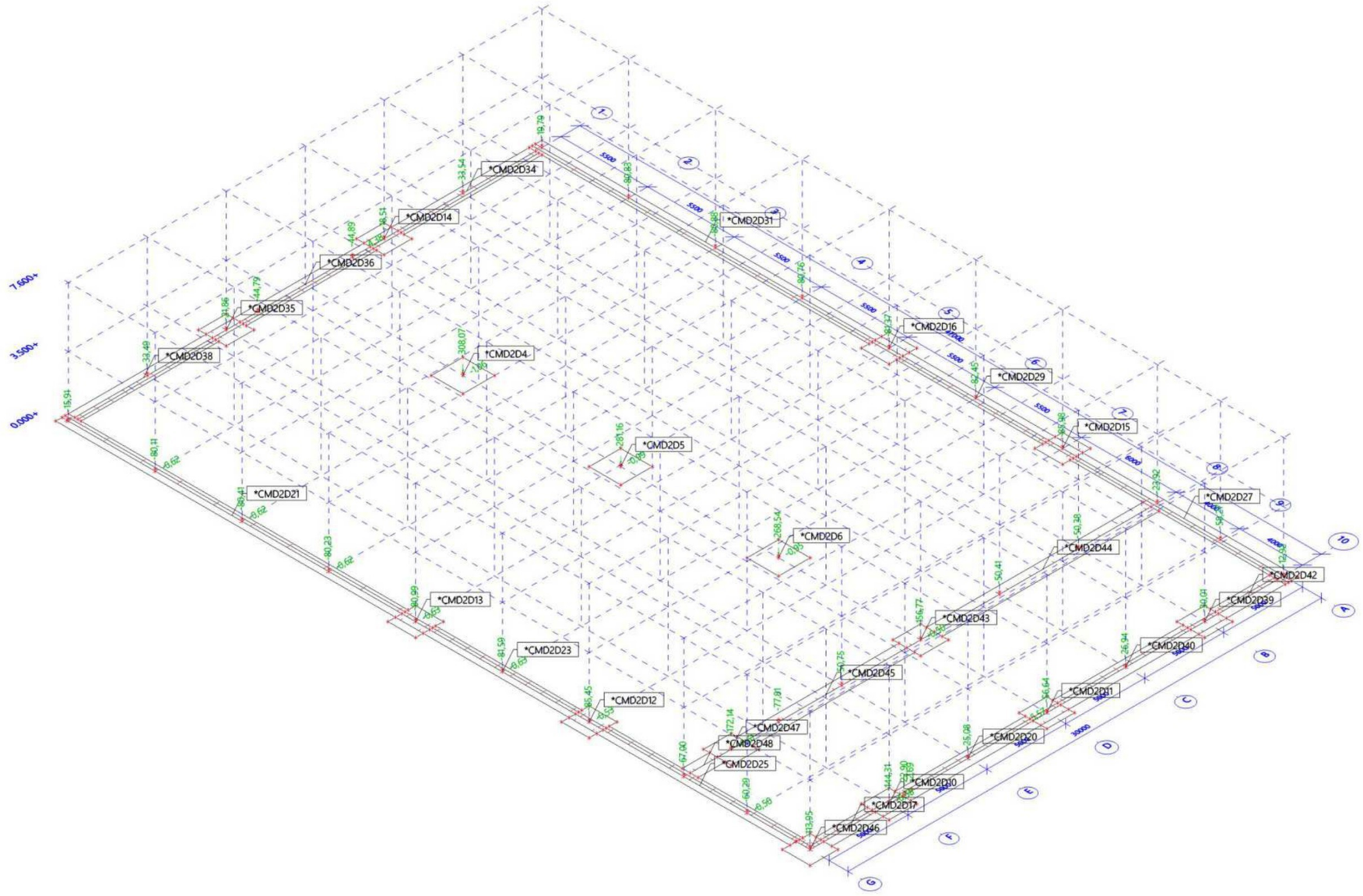
3.5.2.9. Combinaties uit bovenbouw - BG9

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG9	NC_ULS-Set B (auto)9	Variable	LG2	Short	None
	Standard	Static			



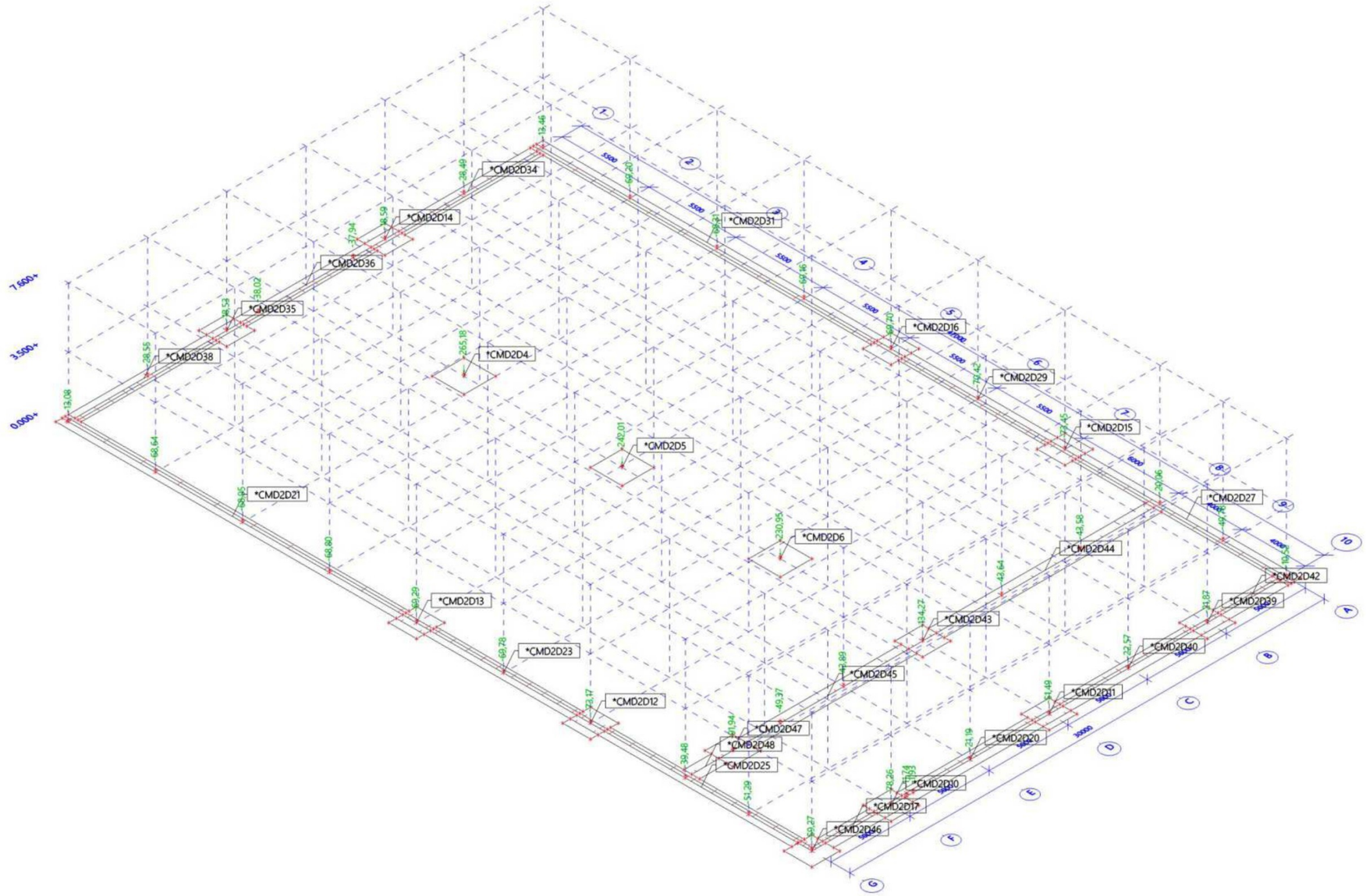
3.5.2.10. Combinaties uit bovenbouw - BG10

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG10	NC_ULS-Set B (auto)10	Variable	LG2	Short	None
	Standard	Static			



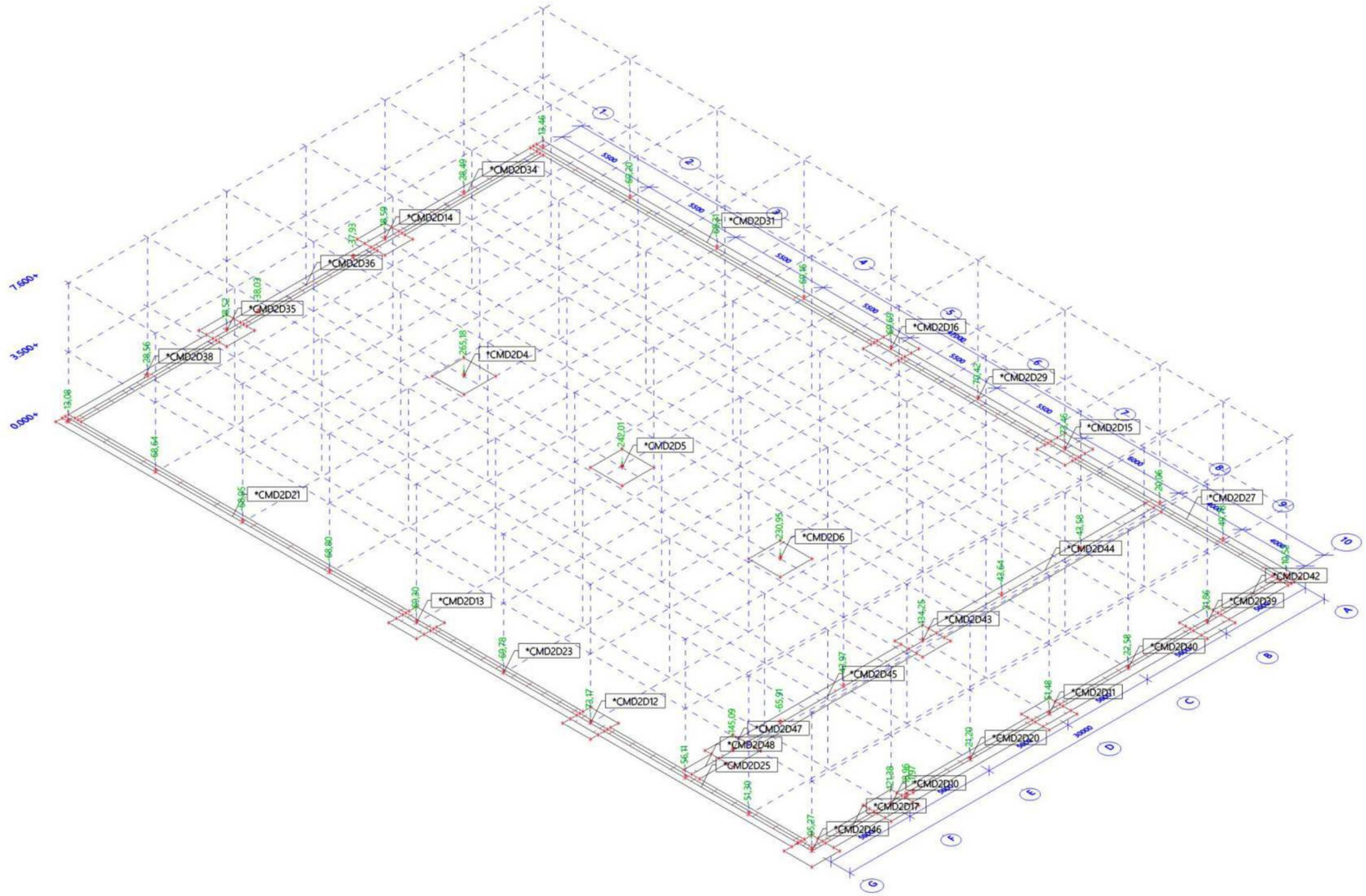
3.5.2.11. Combinaties uit bovenbouw - BG11

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG11	NC_ULS-Set B (auto)11	Variable	LG2	Short	None
	Standard	Static			



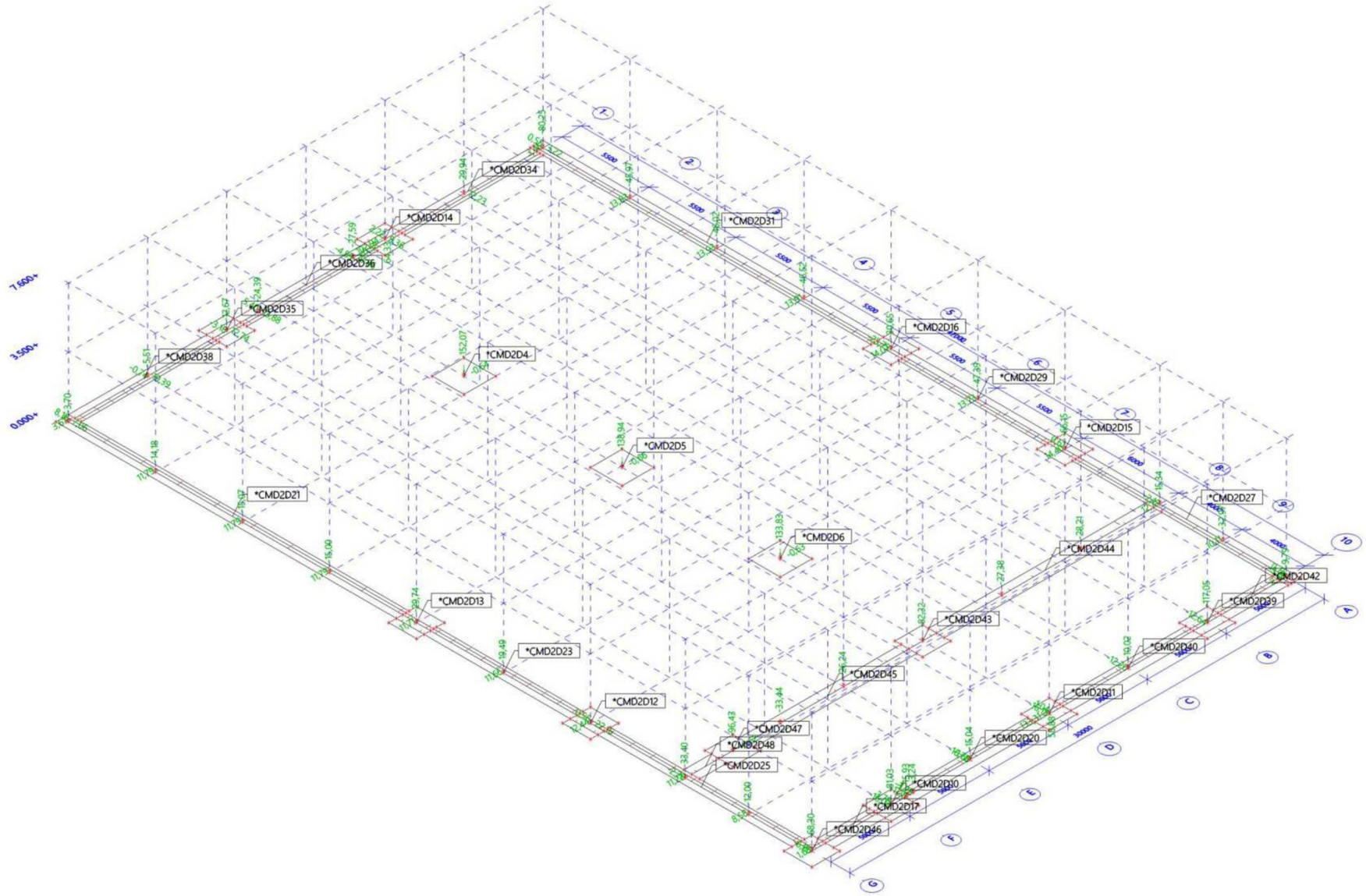
3.5.2.12. Combinaties uit bovenbouw - BG12

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG12	NC_ULS-Set B (auto)12	Variable	LG2	Short	None
	Standard	Static			



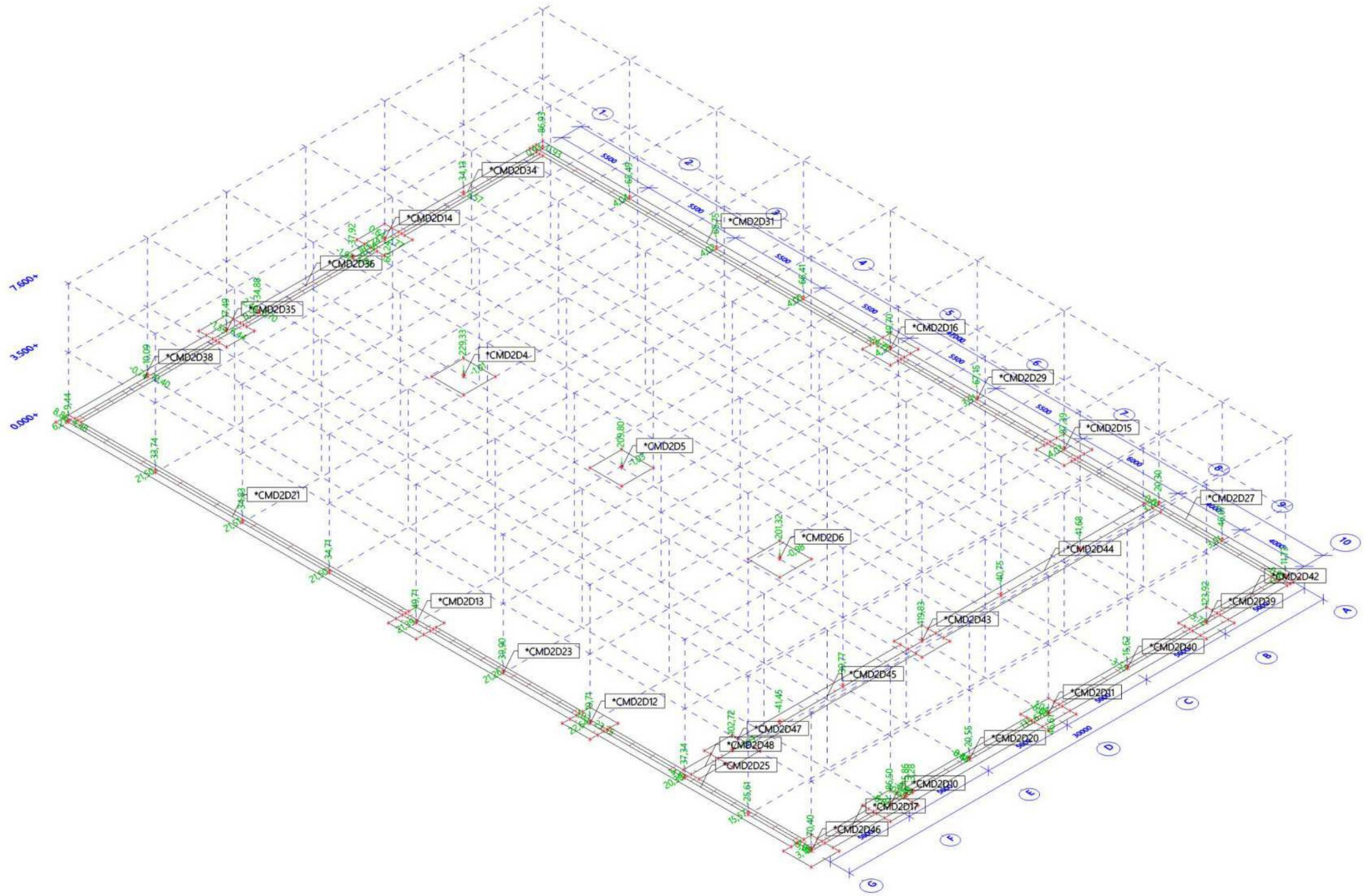
3.5.2.13. Combinaties uit bovenbouw - BG13

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG13	NC_ULS-Set B (auto)13	Variable	LG2	Short	None
	Standard	Static			



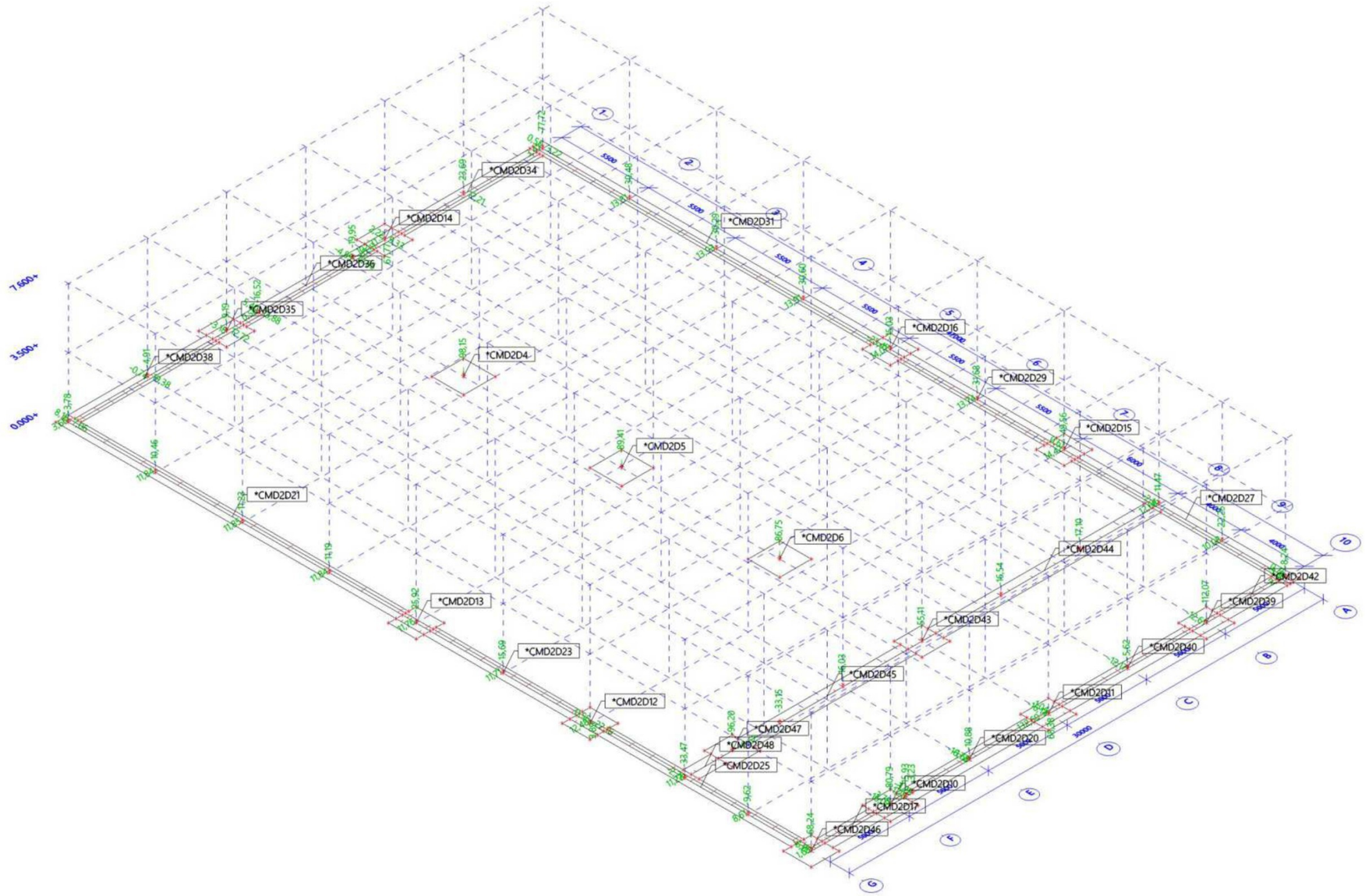
3.5.2.14. Combinaties uit bovenbouw - BG14

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG14	NC_ULS-Set B (auto)14	Variable	LG2	Short	None
	Standard	Static			



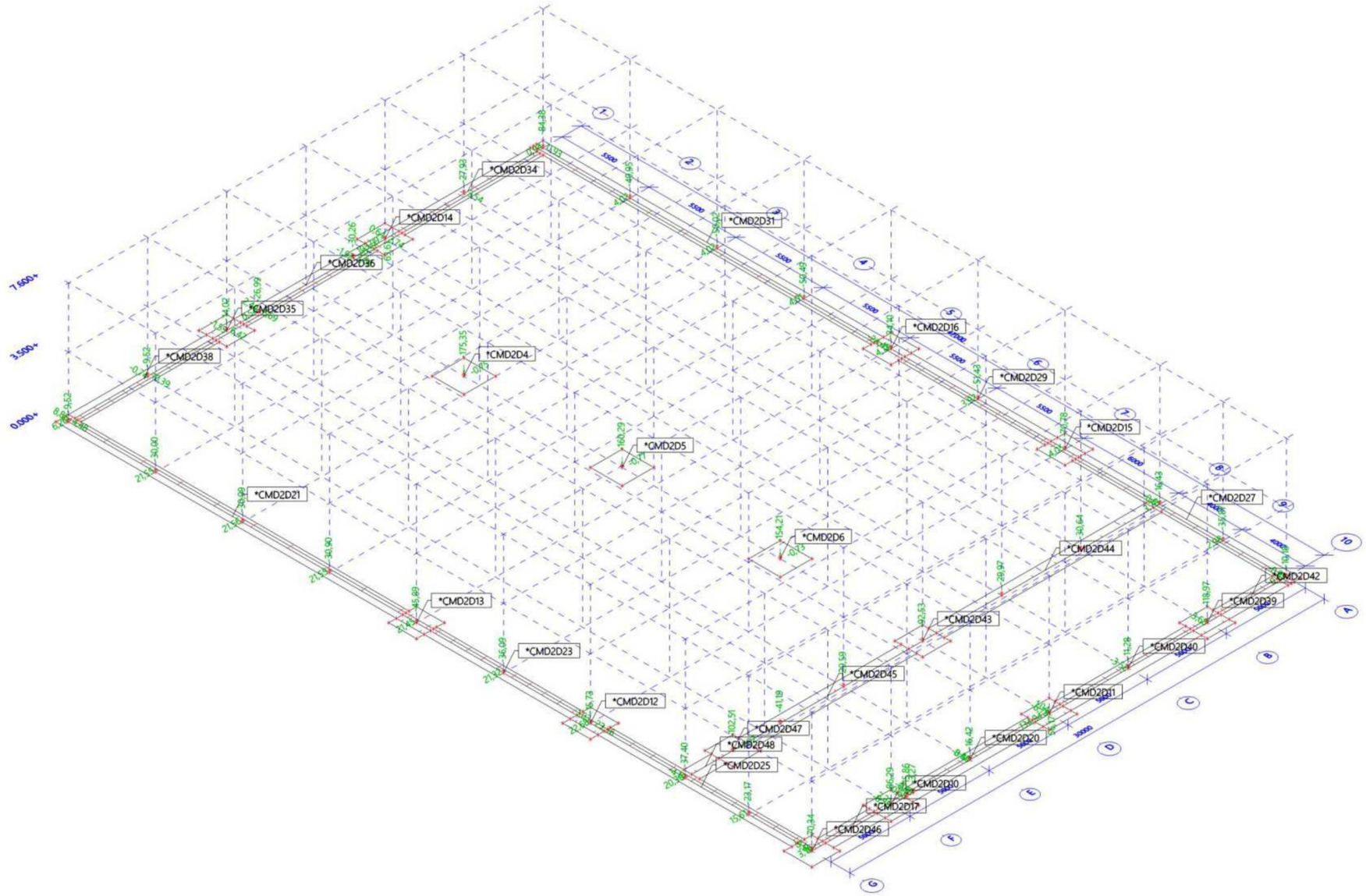
3.5.2.15. Combinaties uit bovenbouw - BG15

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG15	NC_ULS-Set B (auto)15	Variable	LG2	Short	None
	Standard	Static			



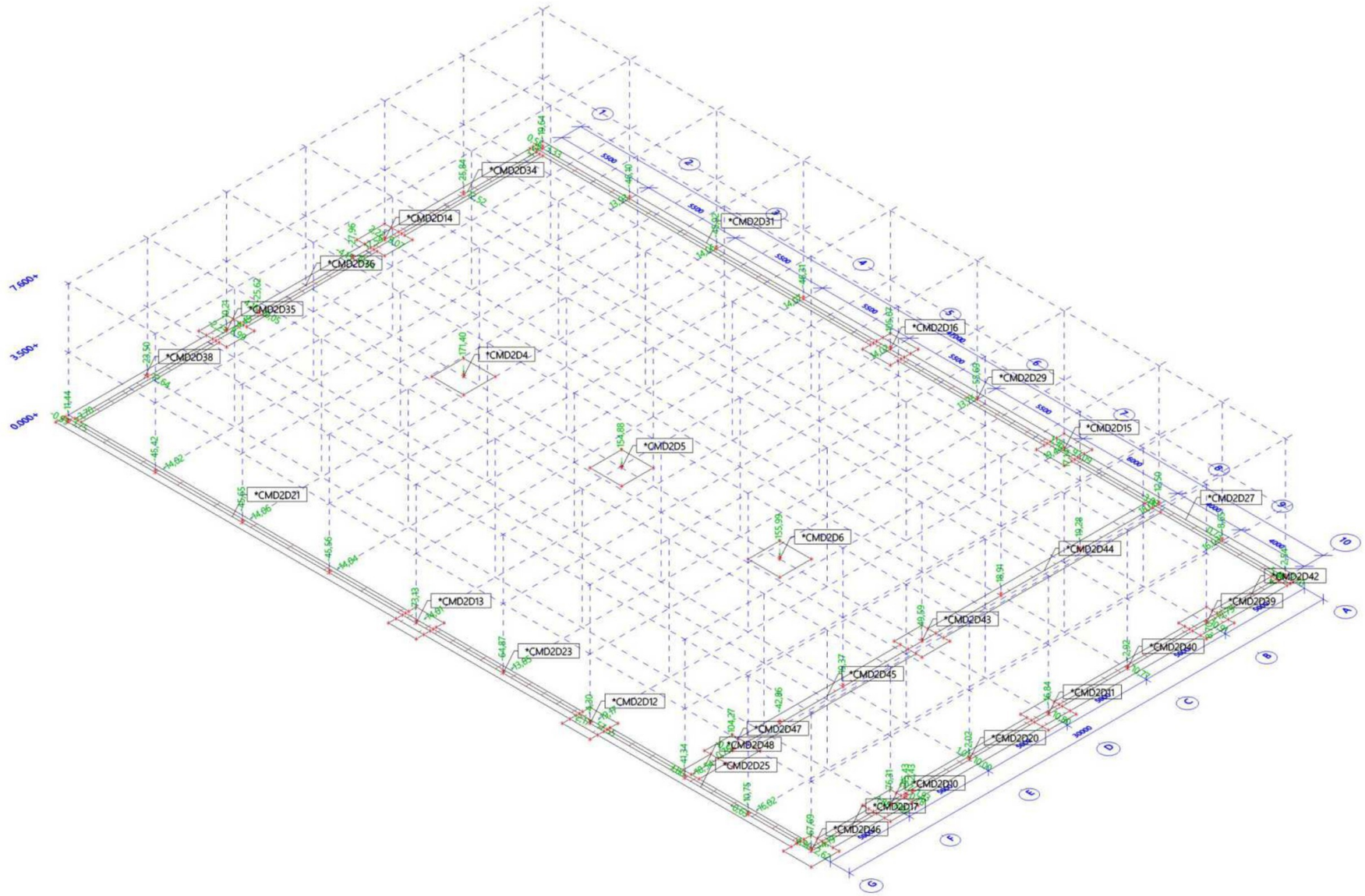
3.5.2.16. Combinaties uit bovenbouw - BG16

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG16	NC_ULS-Set B (auto)16	Variable	LG2	Short	None
	Standard	Static			



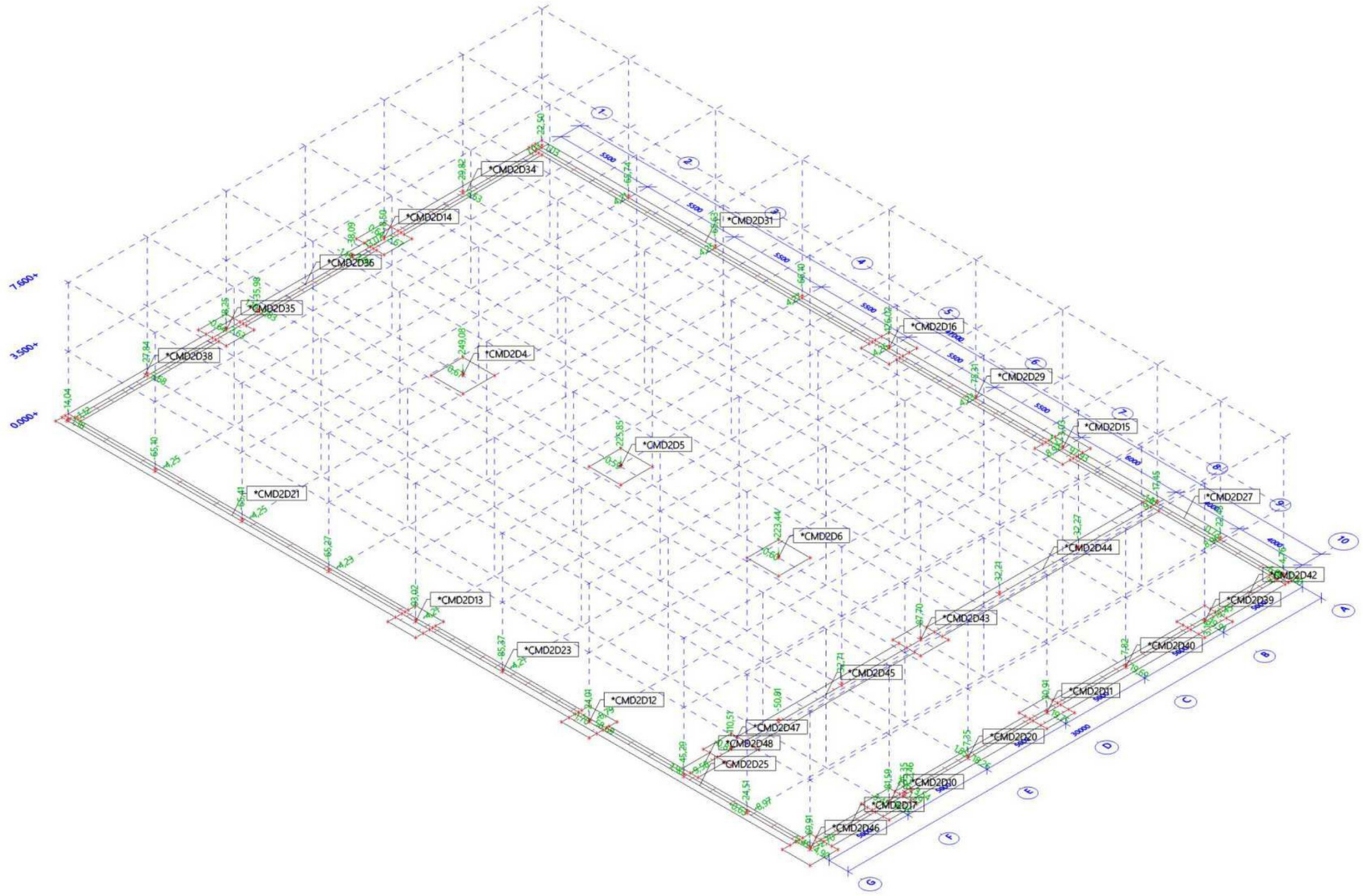
3.5.2.17. Combinaties uit bovenbouw - BG17

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG17	NC_ULS-Set B (auto)17	Variable	LG2	Short	None
	Standard	Static			



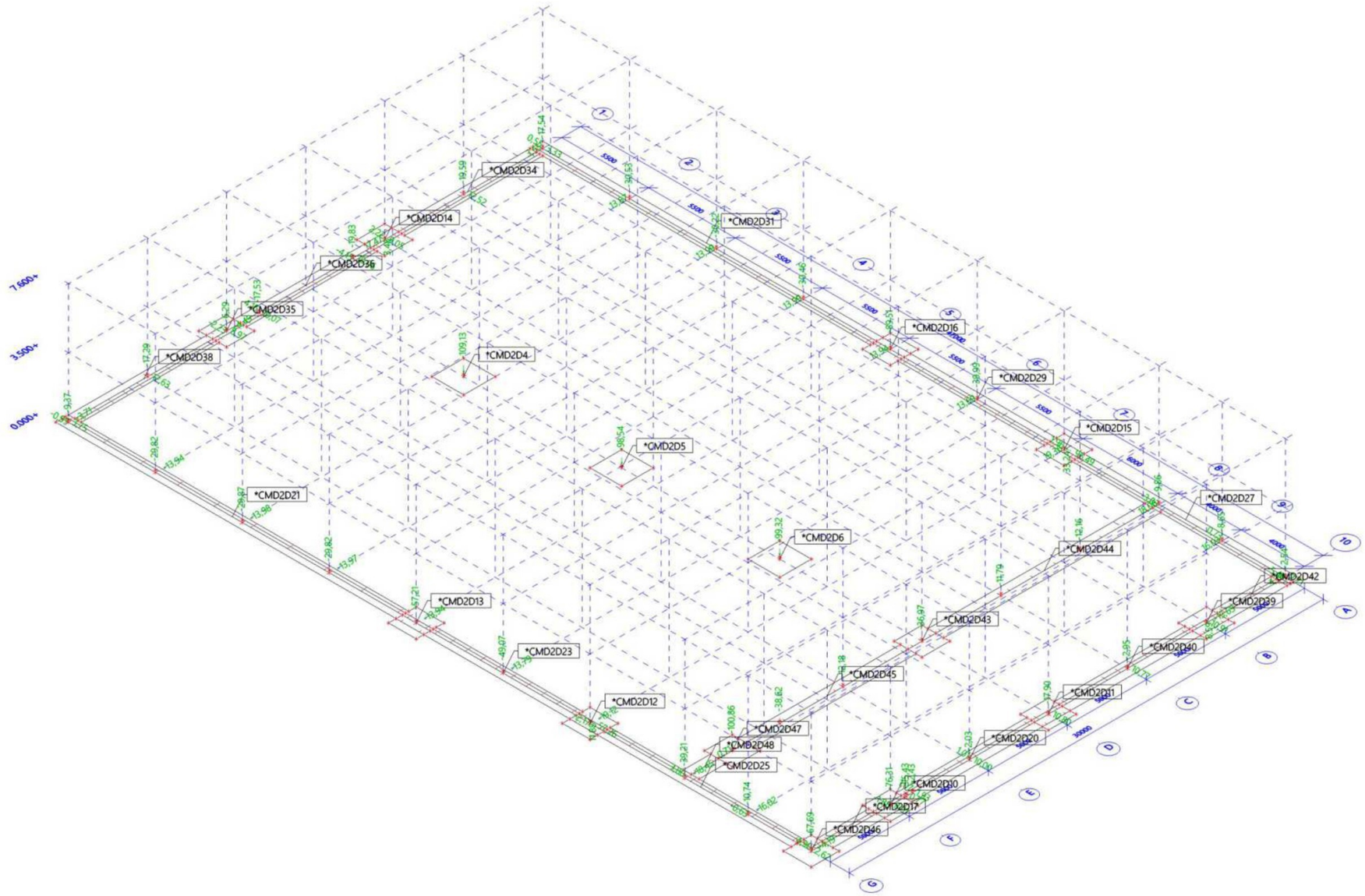
3.5.2.18. Combinaties uit bovenbouw - BG18

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG18	NC_ULS-Set B (auto)18	Variable	LG2	Short	None
	Standard	Static			



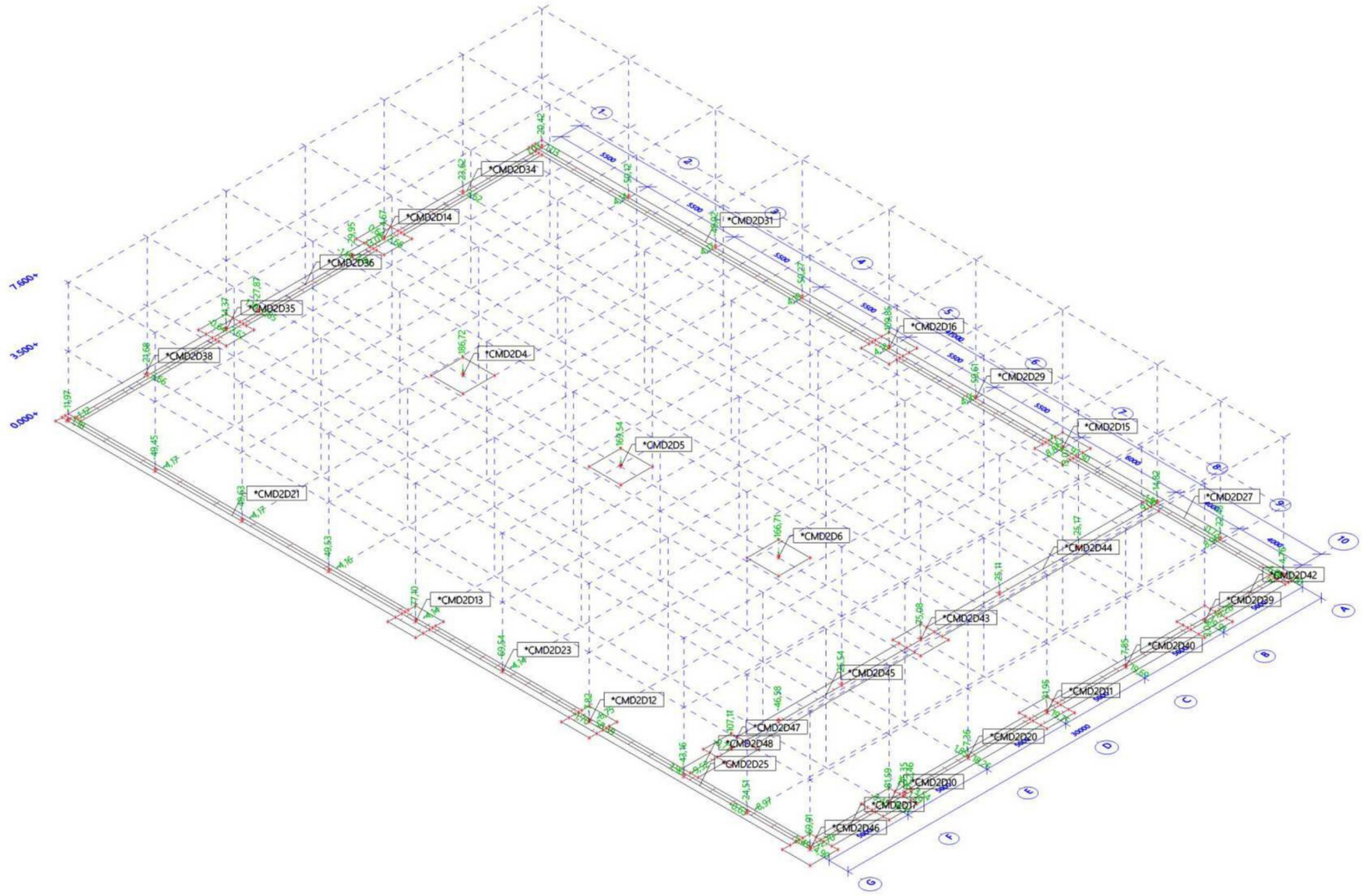
3.5.2.19. Combinaties uit bovenbouw - BG19

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG19	NC_ULS-Set B (auto)19	Variable	LG2	Short	None
	Standard	Static			



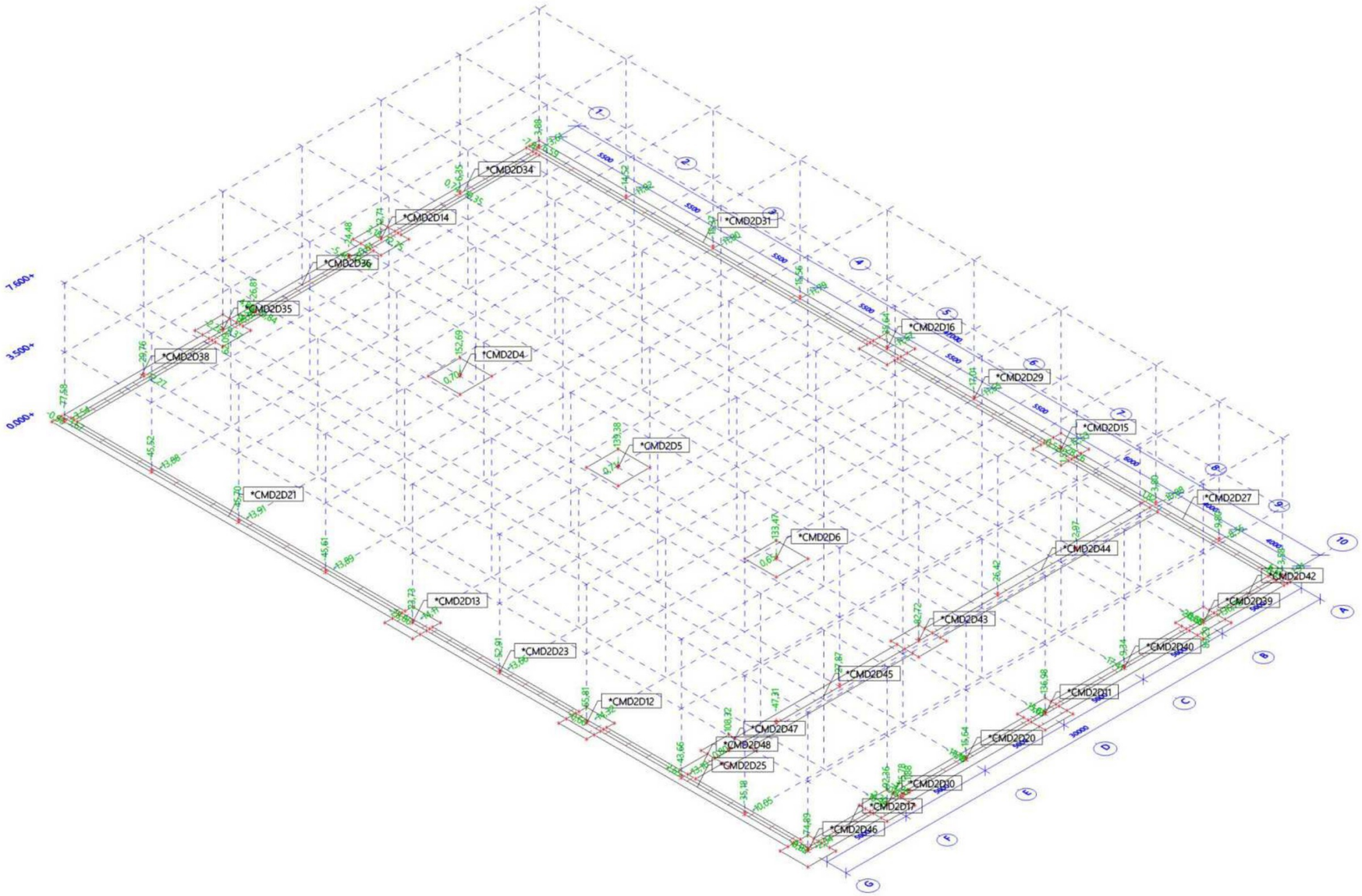
3.5.2.20. Combinaties uit bovenbouw - BG20

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG20	NC_ULS-Set B (auto)20	Variable	LG2	Short	None
	Standard	Static			



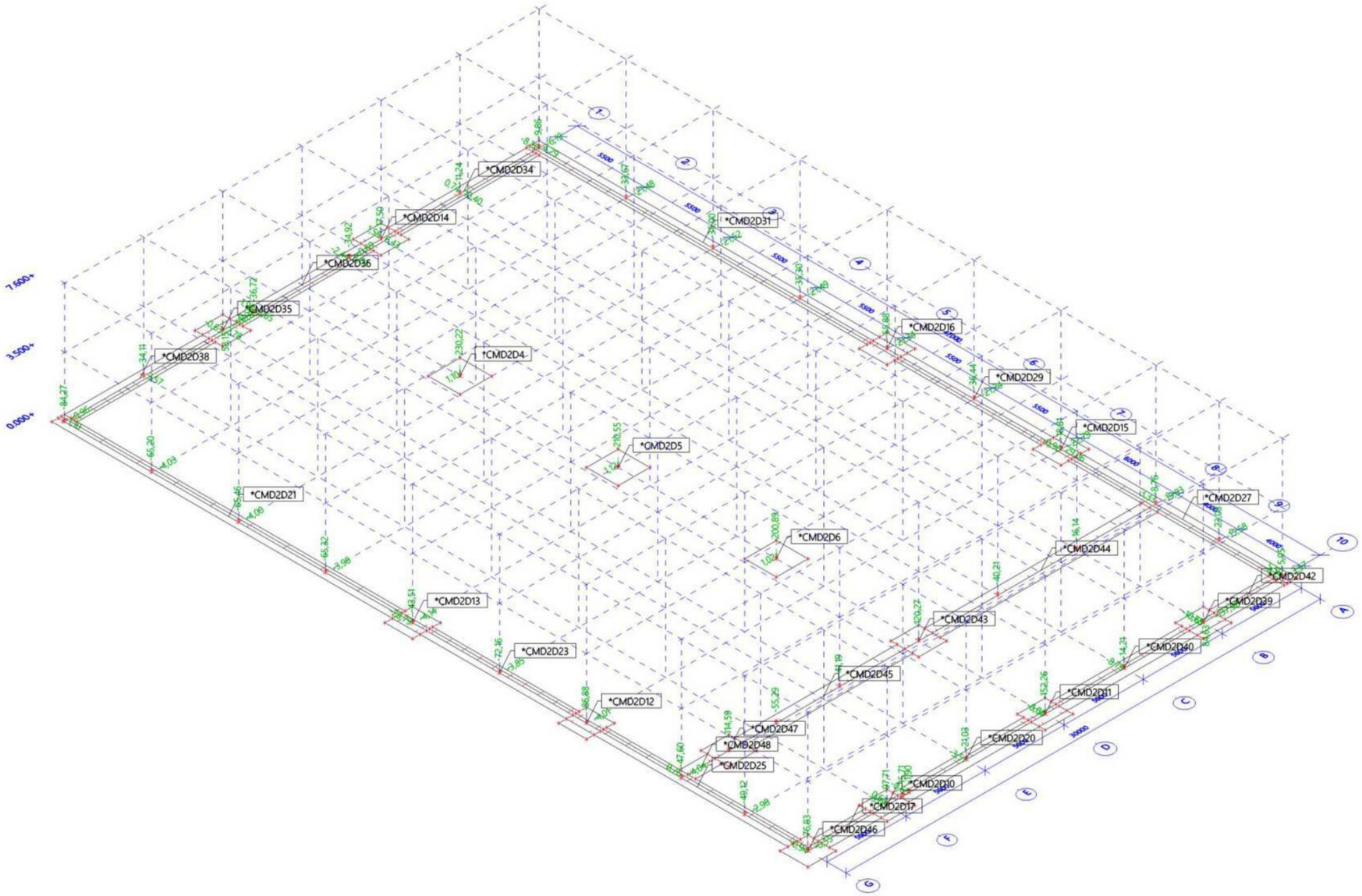
3.5.2.21. Combinaties uit bovenbouw - BG21

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG21	NC_ULS-Set B (auto)21	Variable	LG2	Short	None
	Standard	Static			



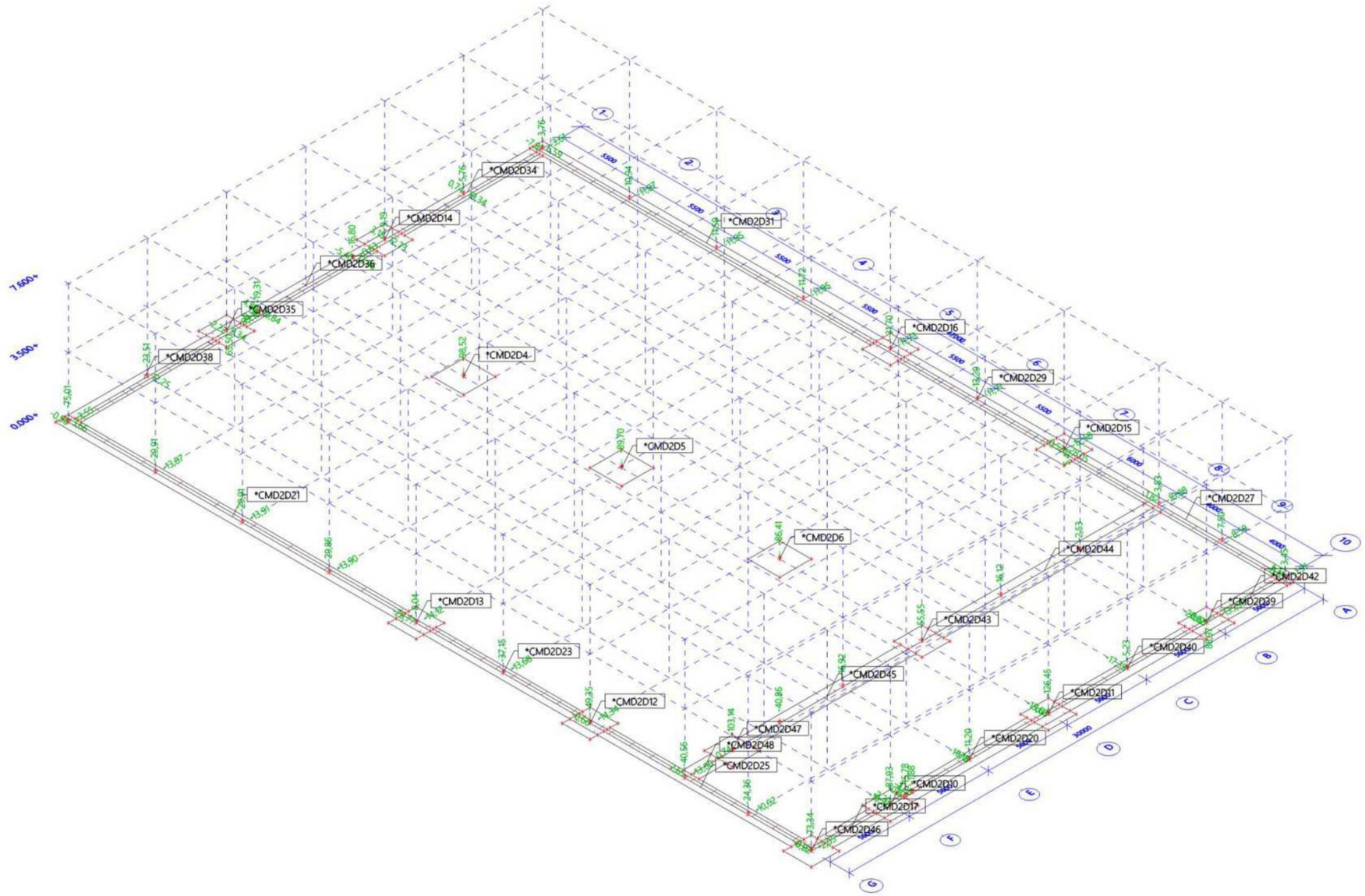
3.5.2.22. Combinaties uit bovenbouw - BG22

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG22	NC_ULS-Set B (auto)22	Variable	LG2	Short	None
	Standard	Static			



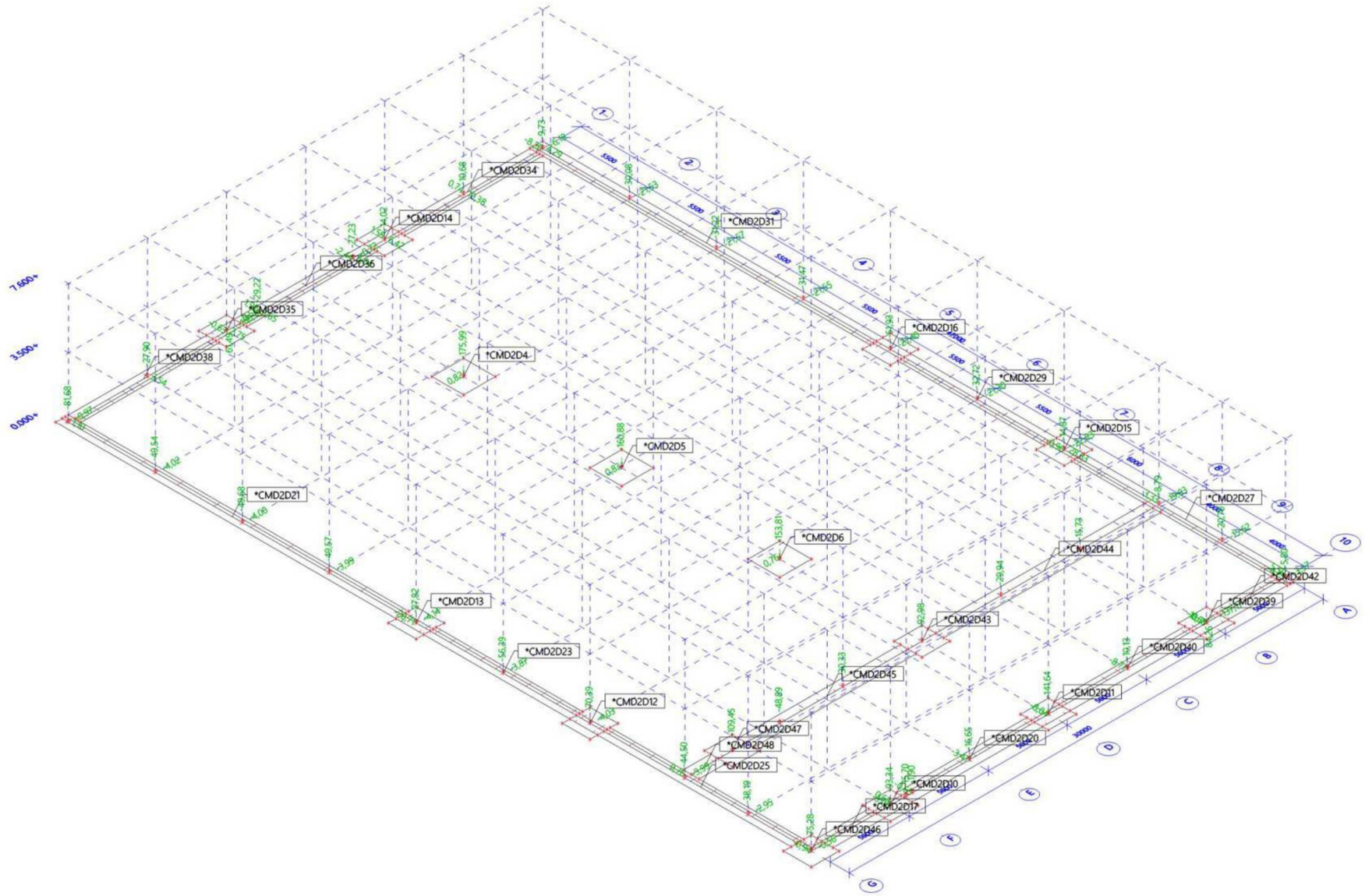
3.5.2.23. Combinaties uit bovenbouw - BG23

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG23	NC_ULS-Set B (auto)23	Variable	LG2	Short	None
	Standard	Static			



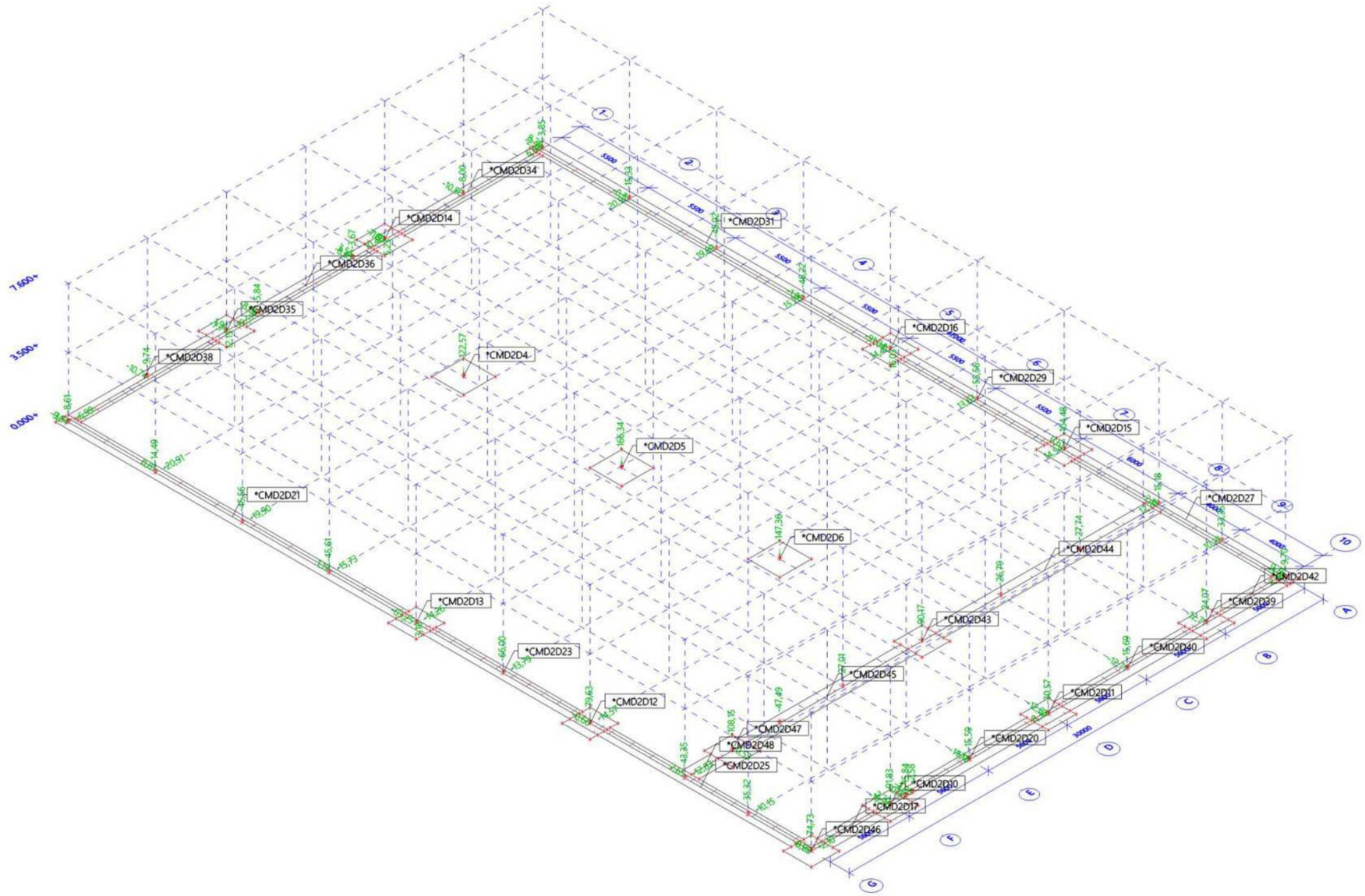
3.5.2.24. Combinaties uit bovenbouw - BG24

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG24	NC_ULS-Set B (auto)24	Variable	LG2	Short	None
	Standard	Static			



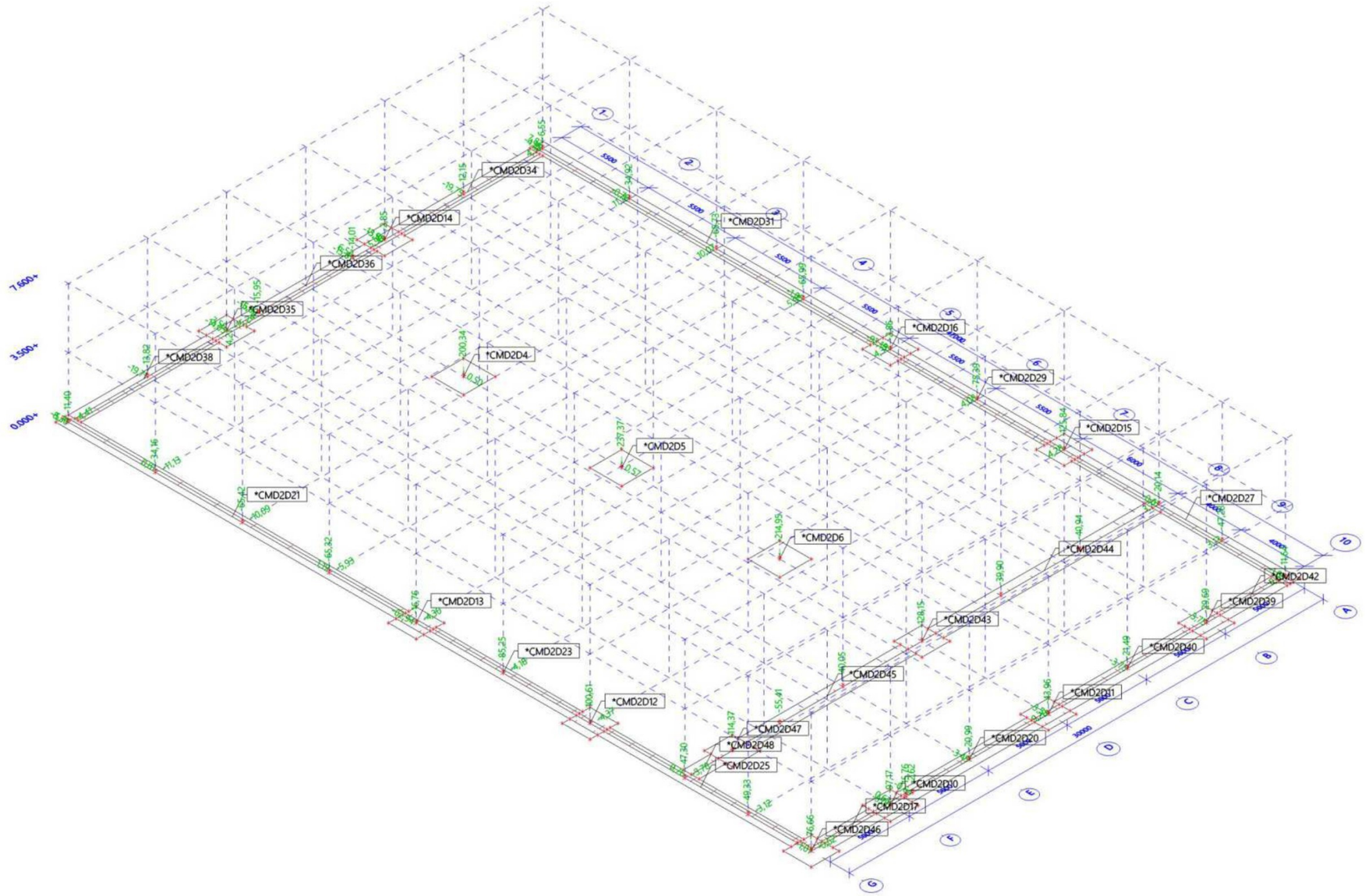
3.5.2.25. Combinaties uit bovenbouw - BG25

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG25	NC_ULS-Set B (auto)25	Variable	LG2	Short	None
	Standard	Static			



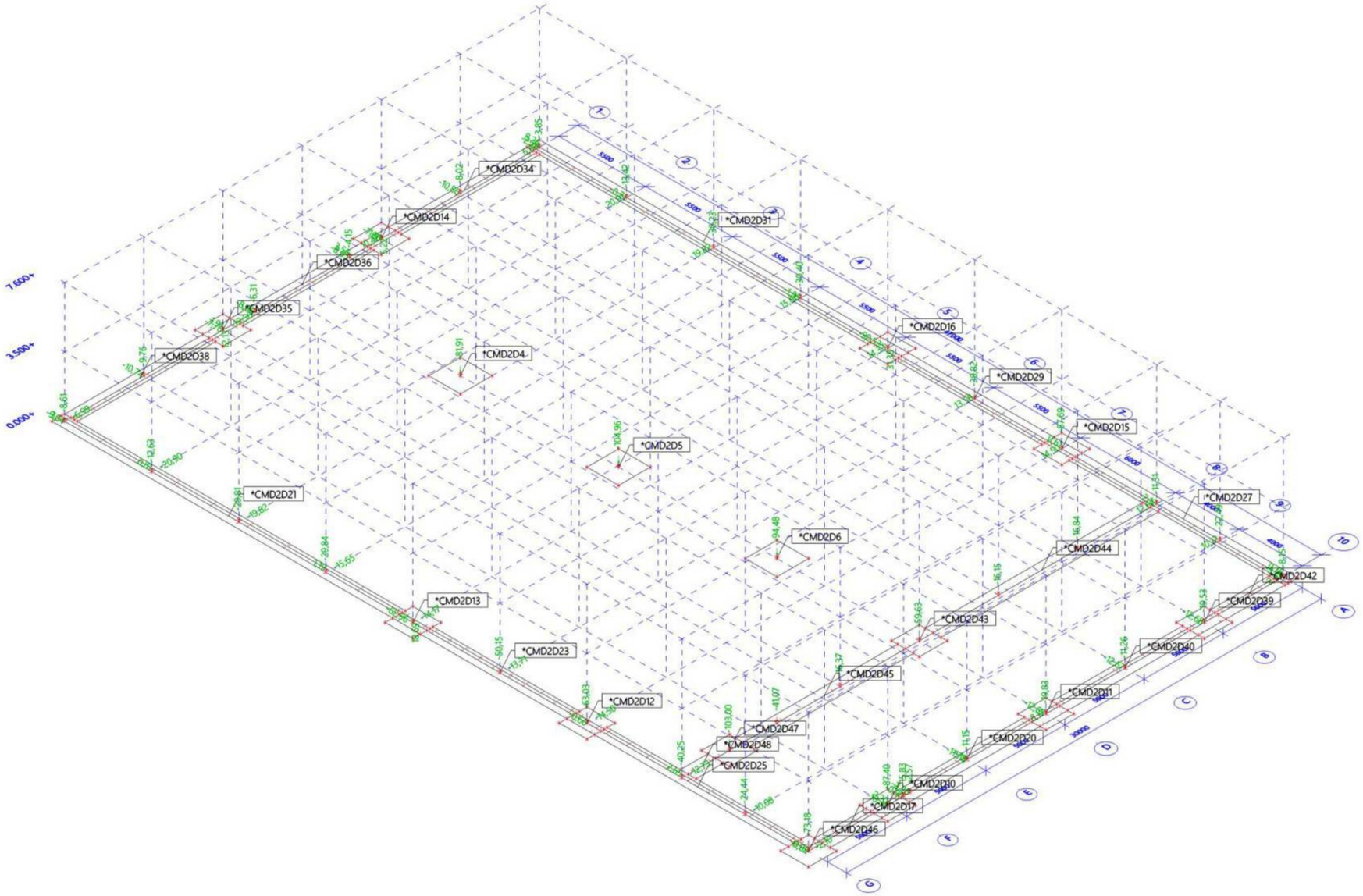
3.5.2.26. Combinaties uit bovenbouw - BG26

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG26	NC_ULS-Set B (auto)26	Variable	LG2	Short	None
	Standard	Static			



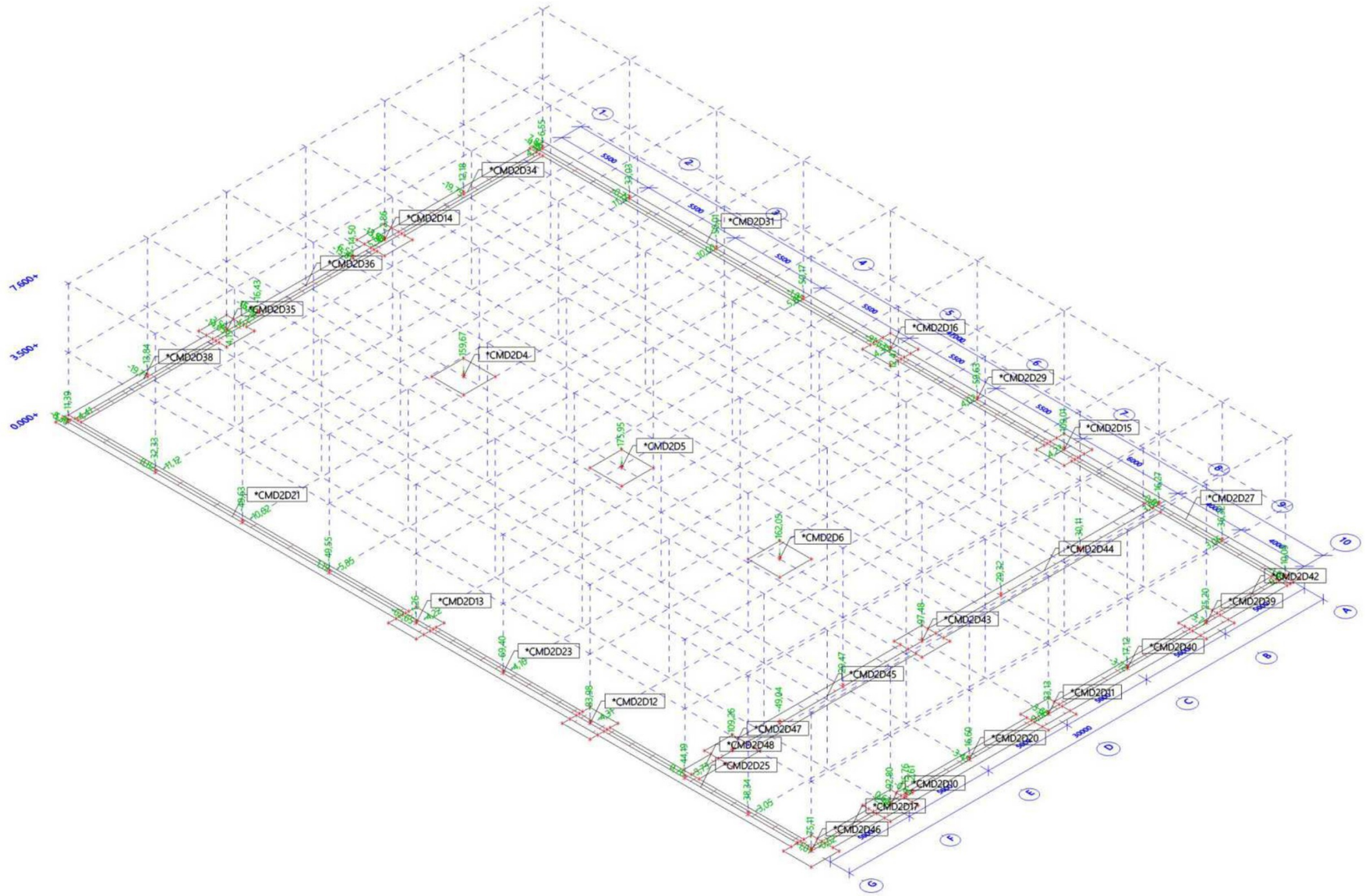
3.5.2.27. Combinaties uit bovenbouw - BG27

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG27	NC_ULS-Set B (auto)27	Variable	LG2	Short	None
	Standard	Static			



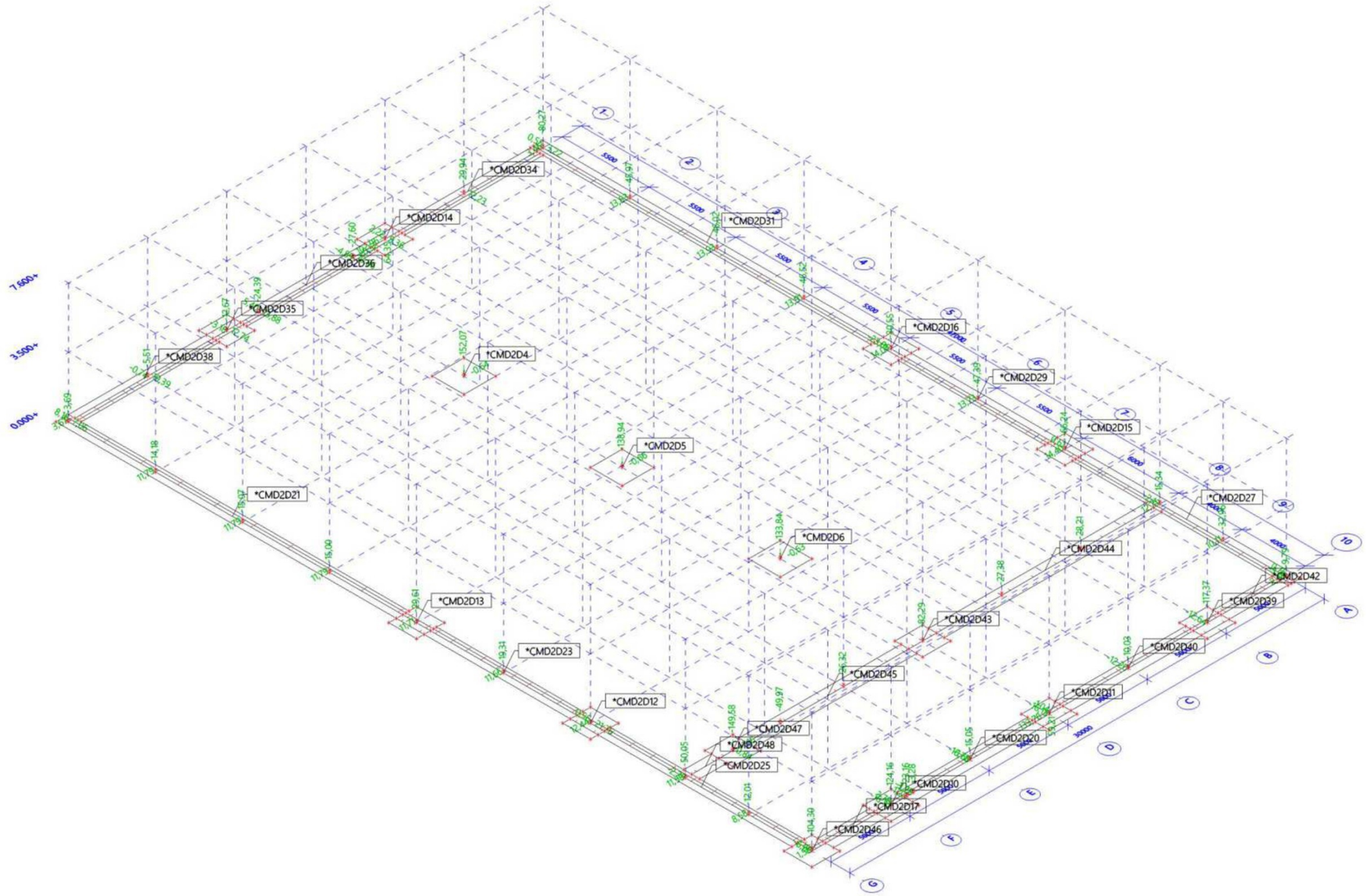
3.5.2.28. Combinaties uit bovenbouw - BG28

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG28	NC_ULS-Set B (auto)28	Variable	LG2	Short	None
	Standard	Static			



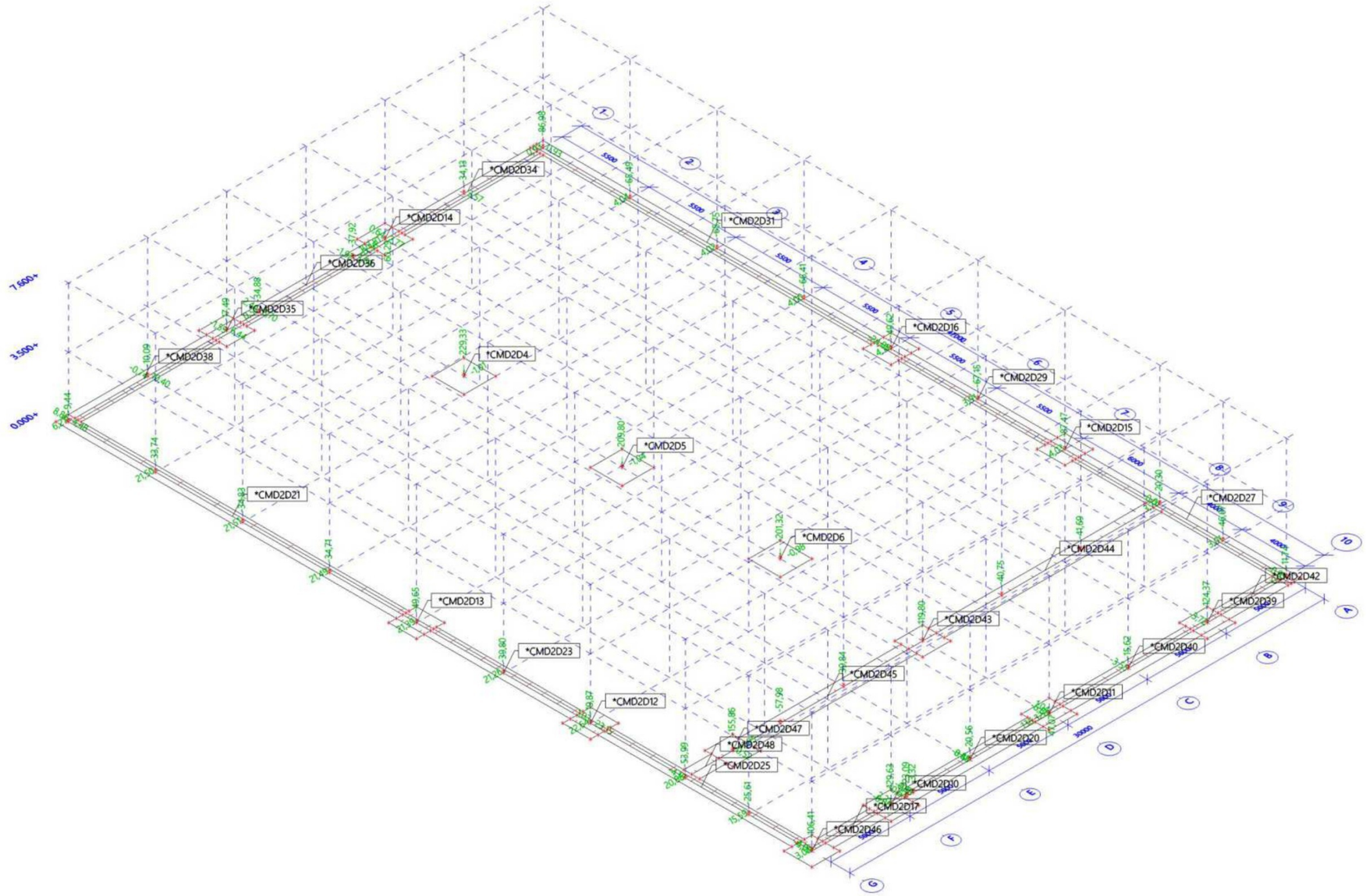
3.5.2.29. Combinaties uit bovenbouw - BG29

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG29	NC_ULS-Set B (auto)29	Variable	LG2	Short	None
	Standard	Static			



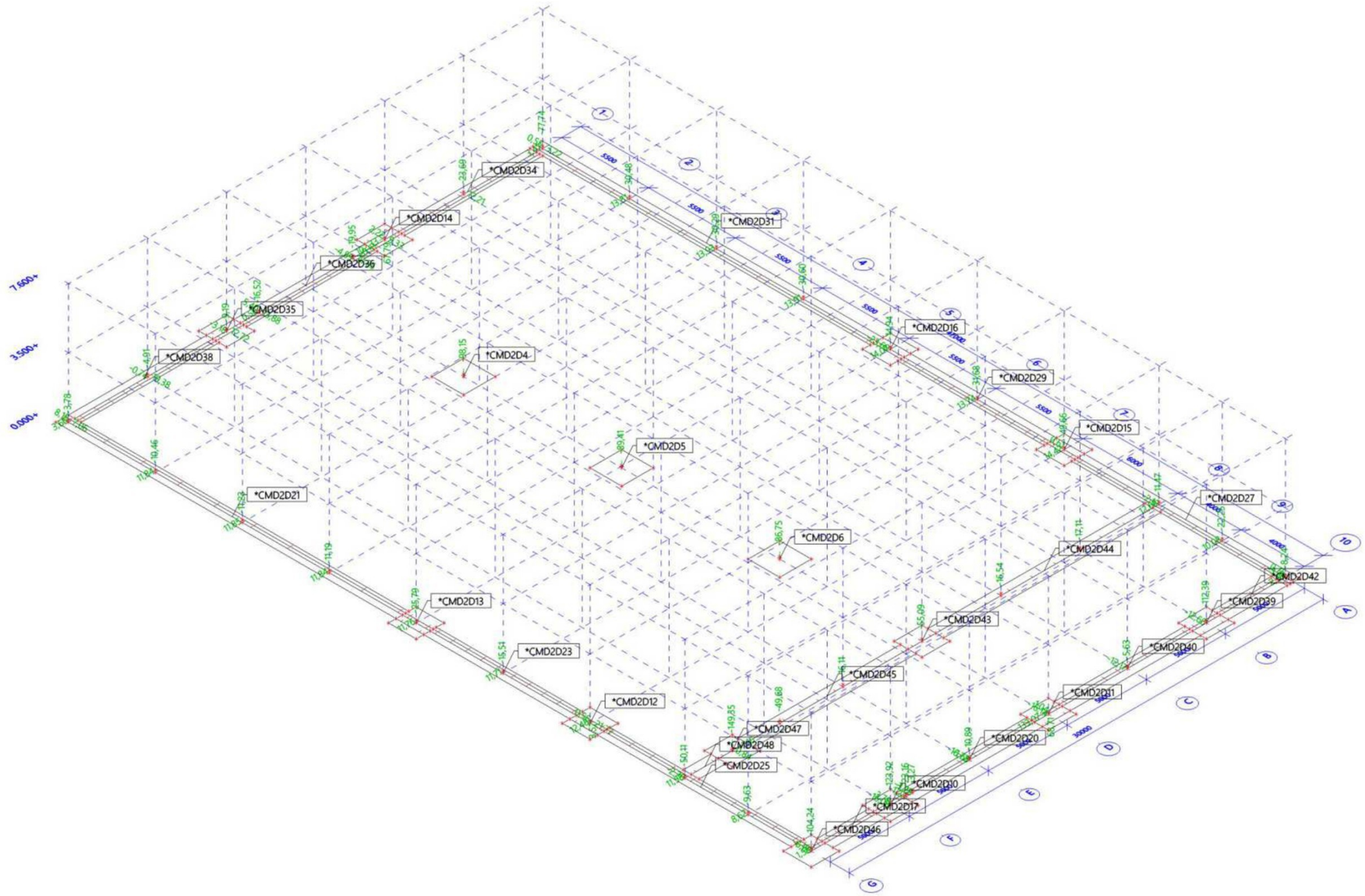
3.5.2.30. Combinaties uit bovenbouw - BG30

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG30	NC_ULS-Set B (auto)30	Variable	LG2	Short	None
	Standard	Static			



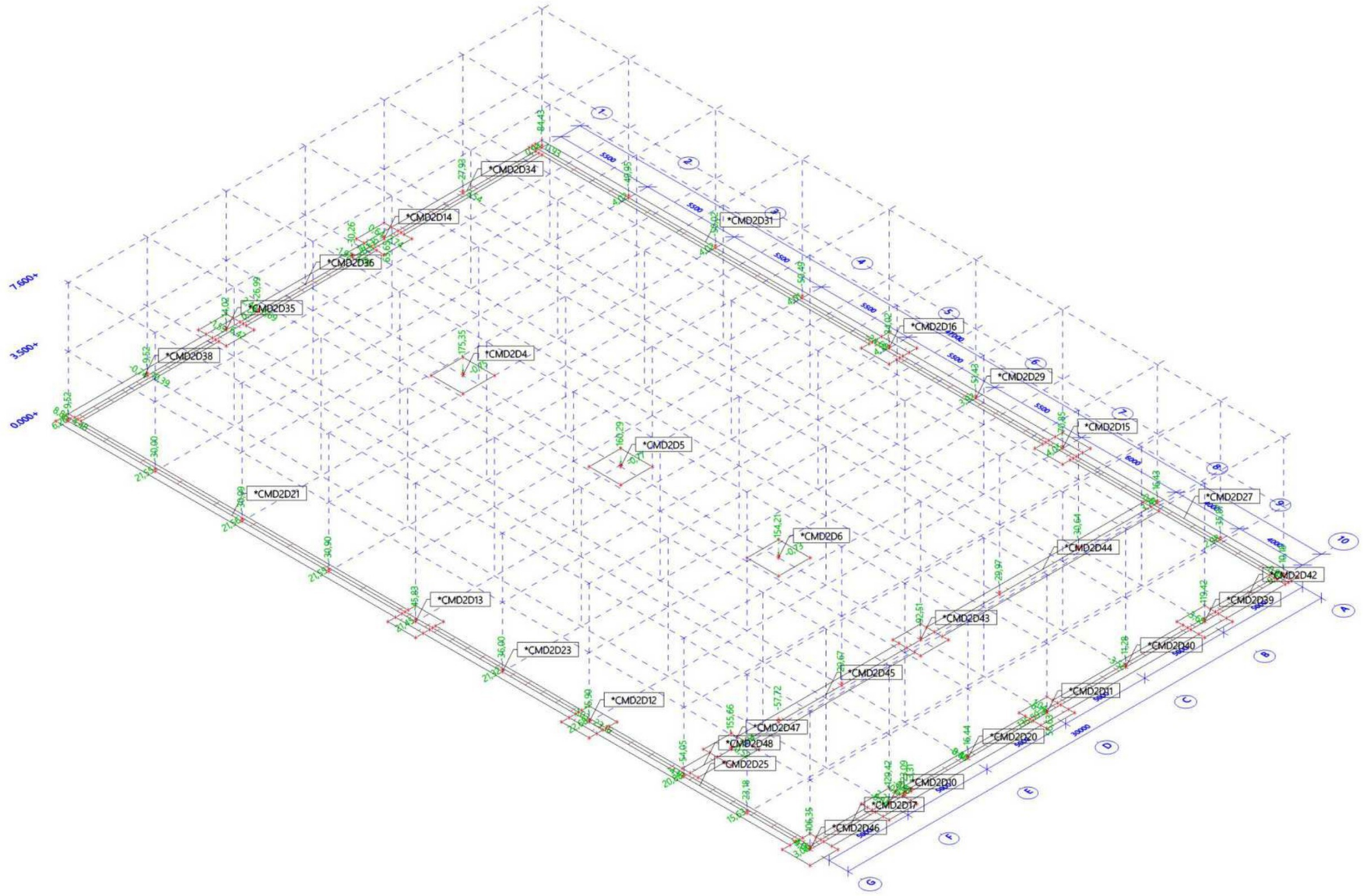
3.5.2.31. Combinaties uit bovenbouw - BG31

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG31	NC_ULS-Set B (auto)31	Variable	LG2	Short	None
	Standard	Static			



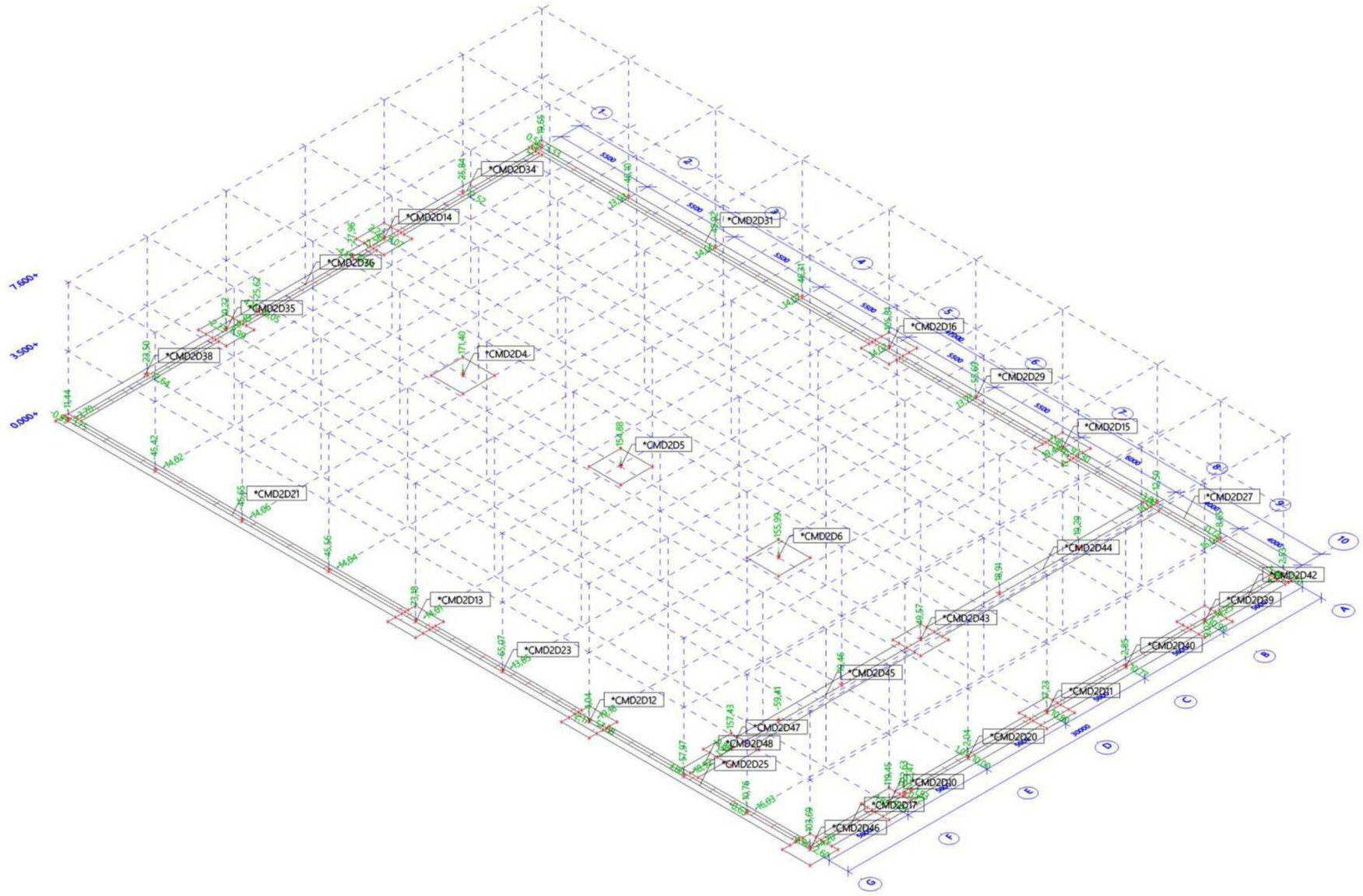
3.5.2.32. Combinaties uit bovenbouw - BG32

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG32	NC_ULS-Set B (auto)32	Variable	LG2	Short	None
	Standard	Static			



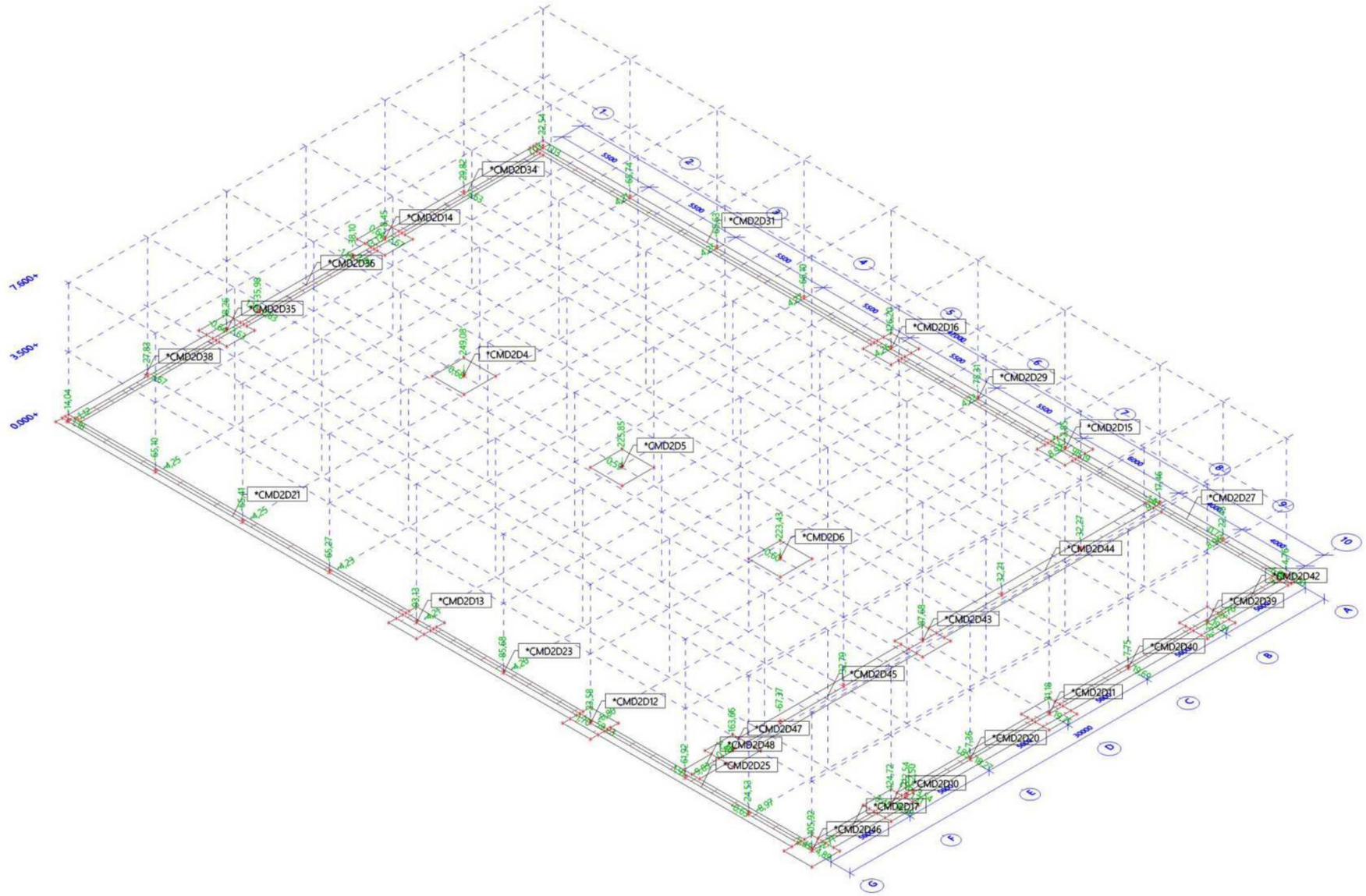
3.5.2.33. Combinaties uit bovenbouw - BG33

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG33	NC_ULS-Set B (auto)33	Variable	LG2	Short	None
	Standard	Static			



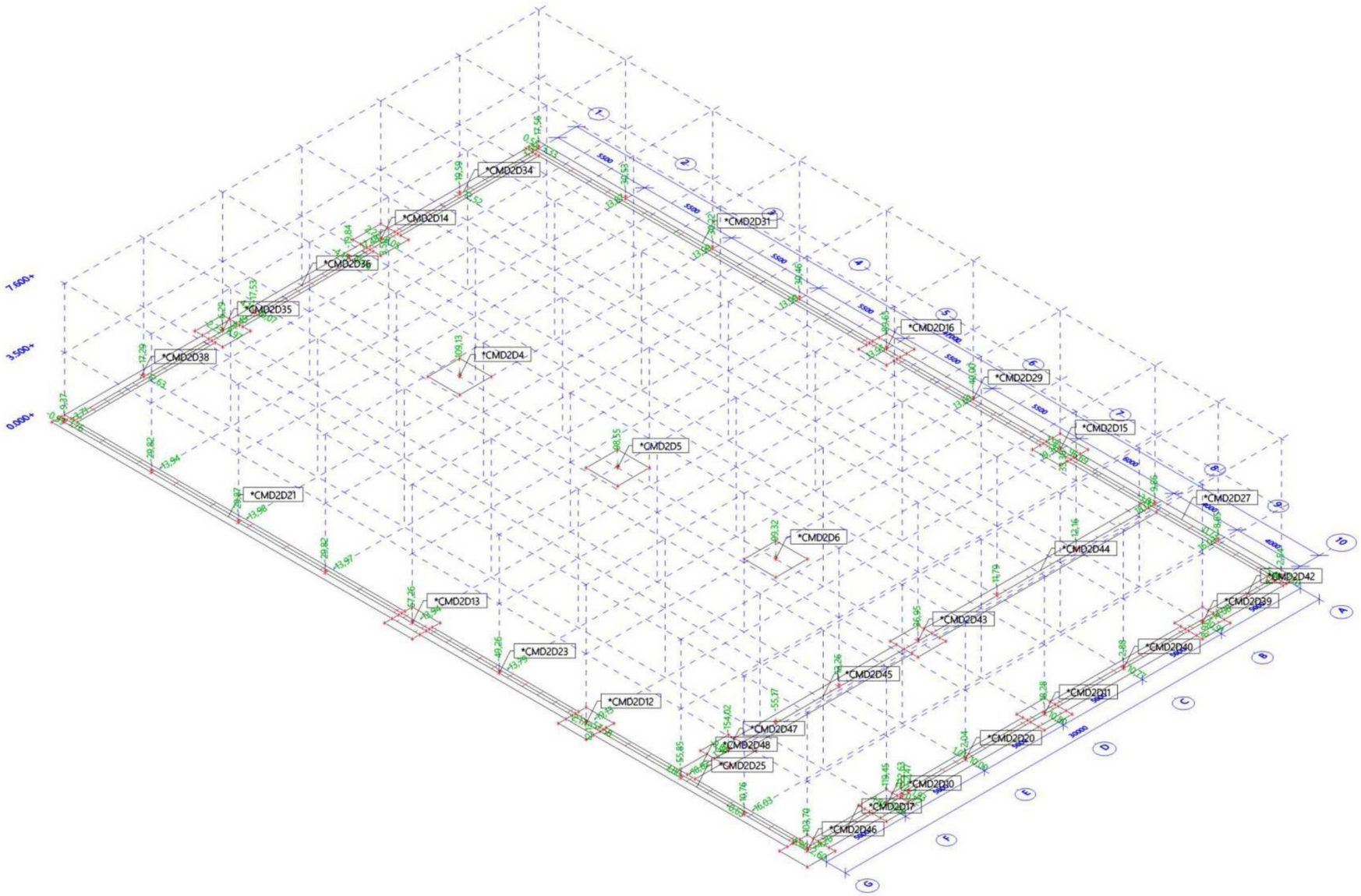
3.5.2.34. Combinaties uit bovenbouw - BG34

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG34	NC_ULS-Set B (auto)34	Variable	LG2	Short	None
	Standard	Static			



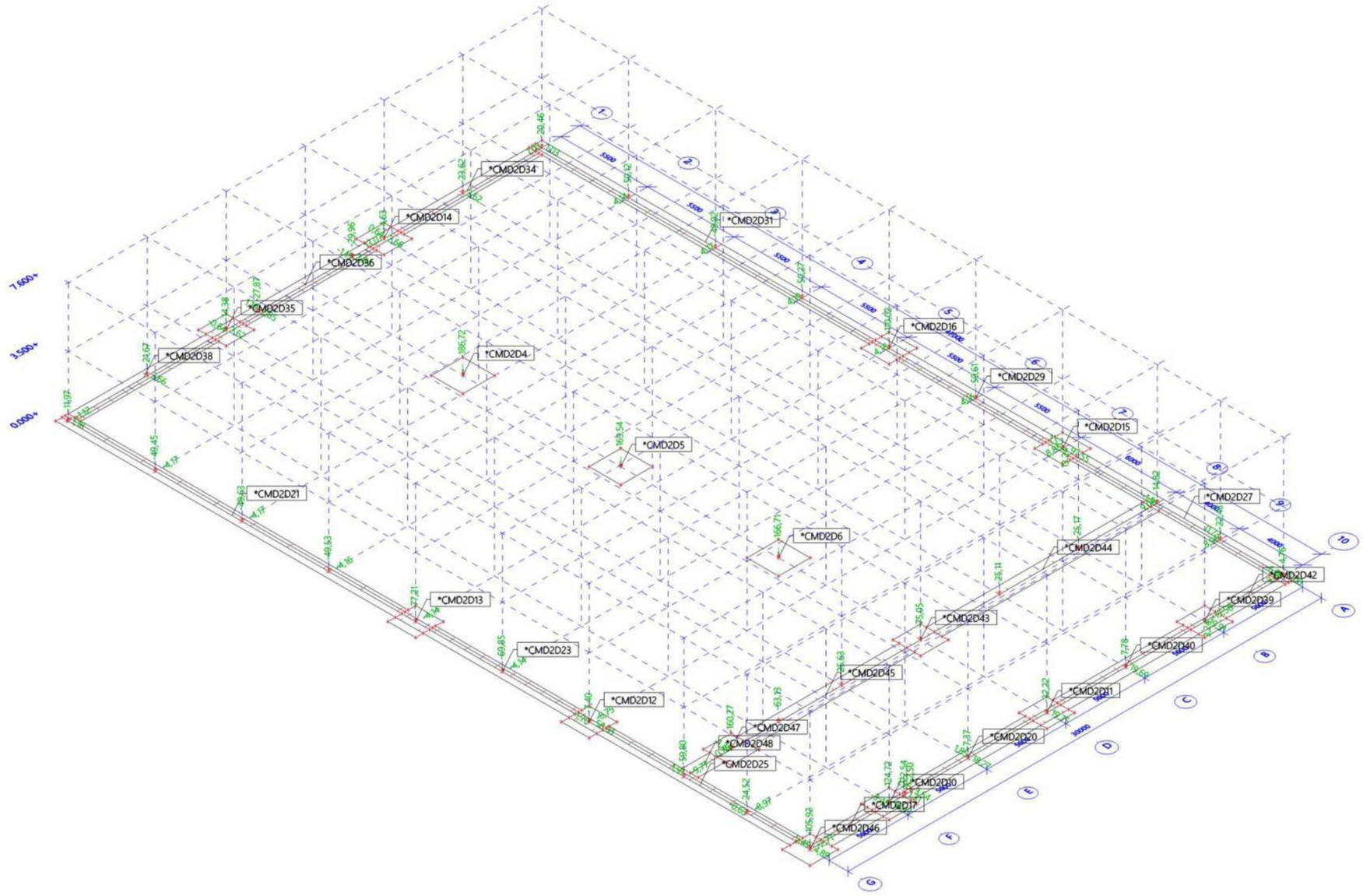
3.5.2.35. Combinaties uit bovenbouw - BG35

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG35	NC_ULS-Set B (auto)35	Variable	LG2	Short	None
	Standard	Static			



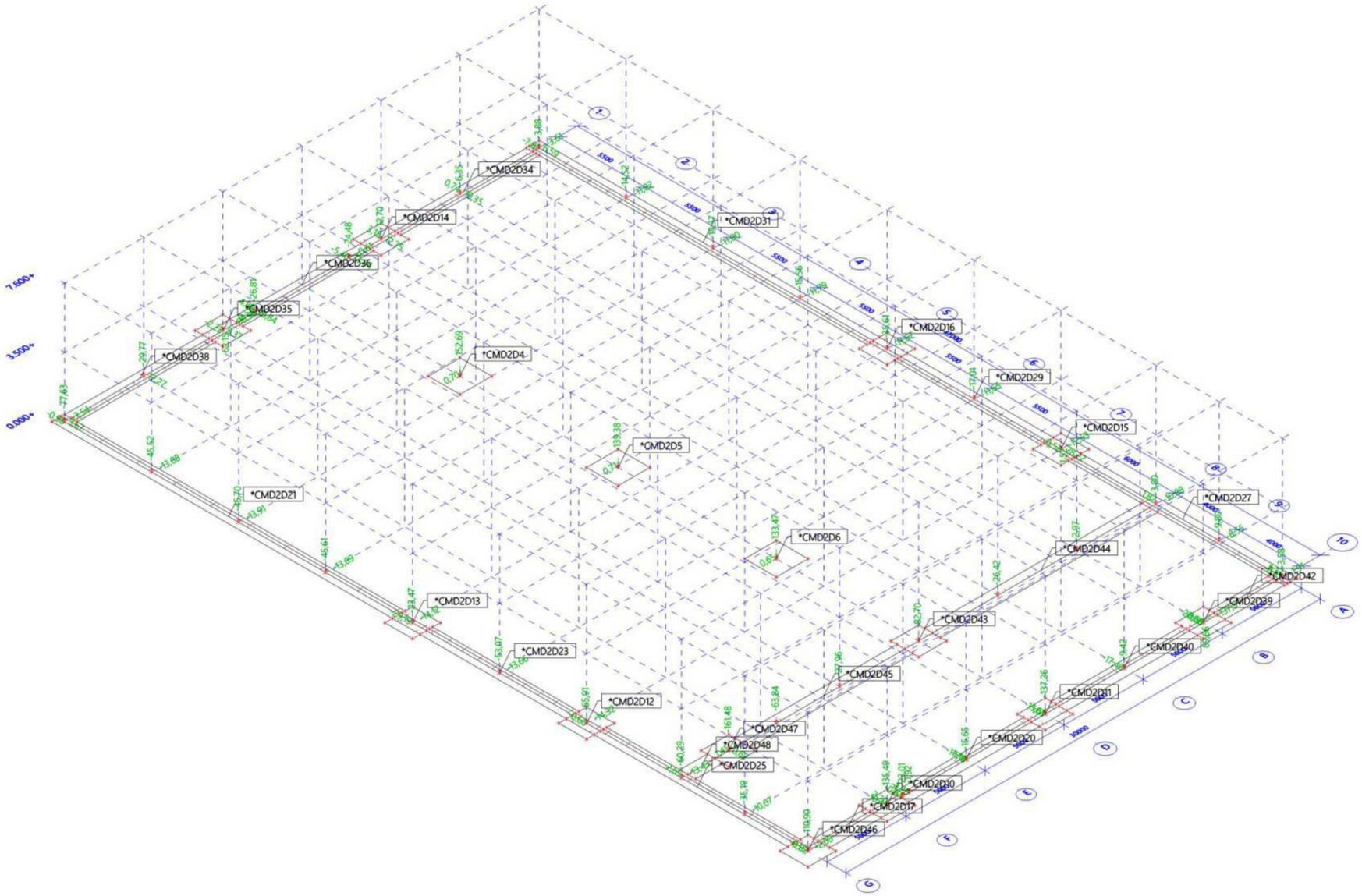
3.5.2.36. Combinaties uit bovenbouw - BG36

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG36	NC_ULS-Set B (auto)36	Variable	LG2	Short	None
	Standard	Static			



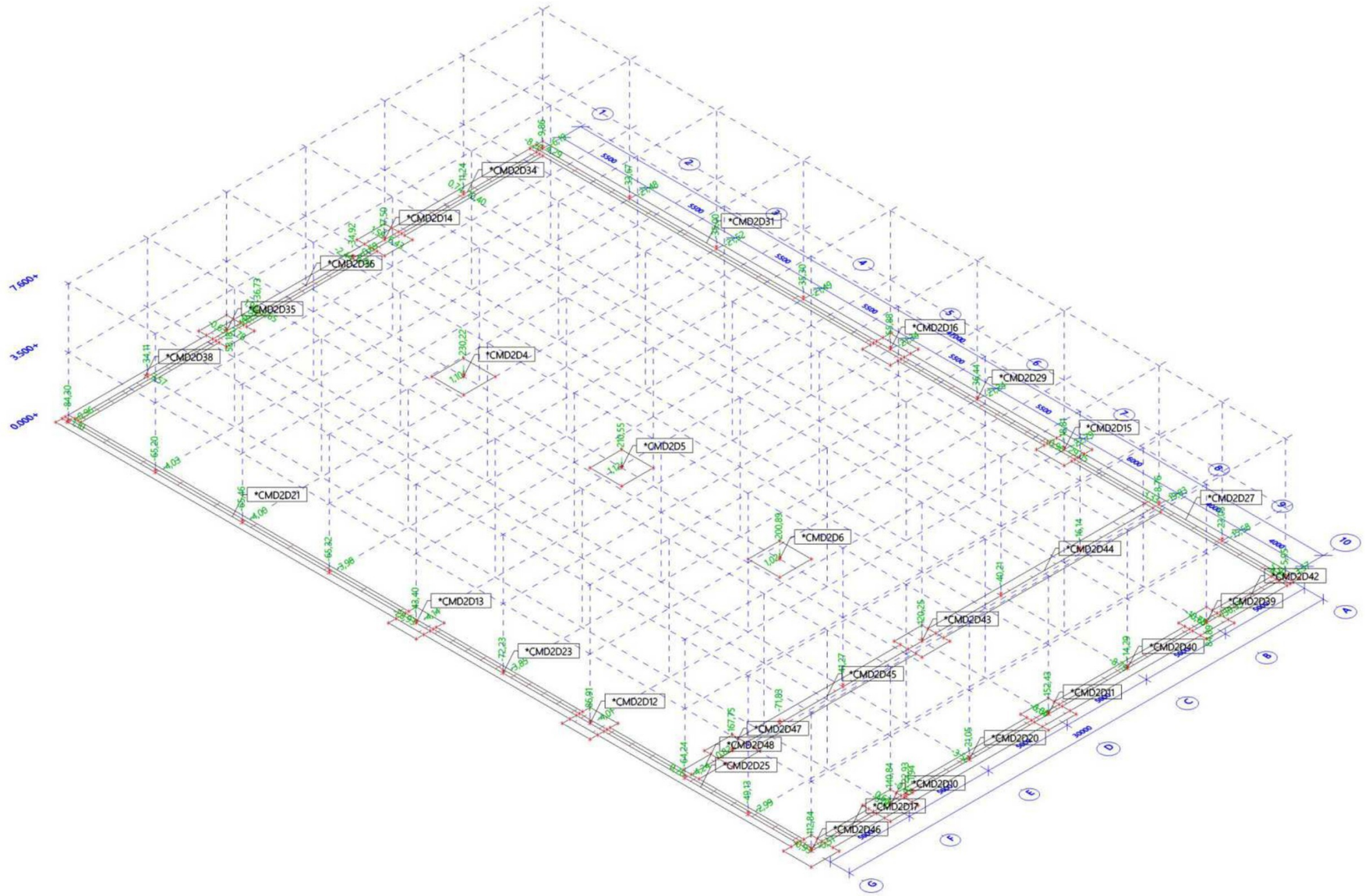
3.5.2.37. Combinaties uit bovenbouw - BG37

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG37	NC_ULS-Set B (auto)37	Variable	LG2	Short	None
	Standard	Static			



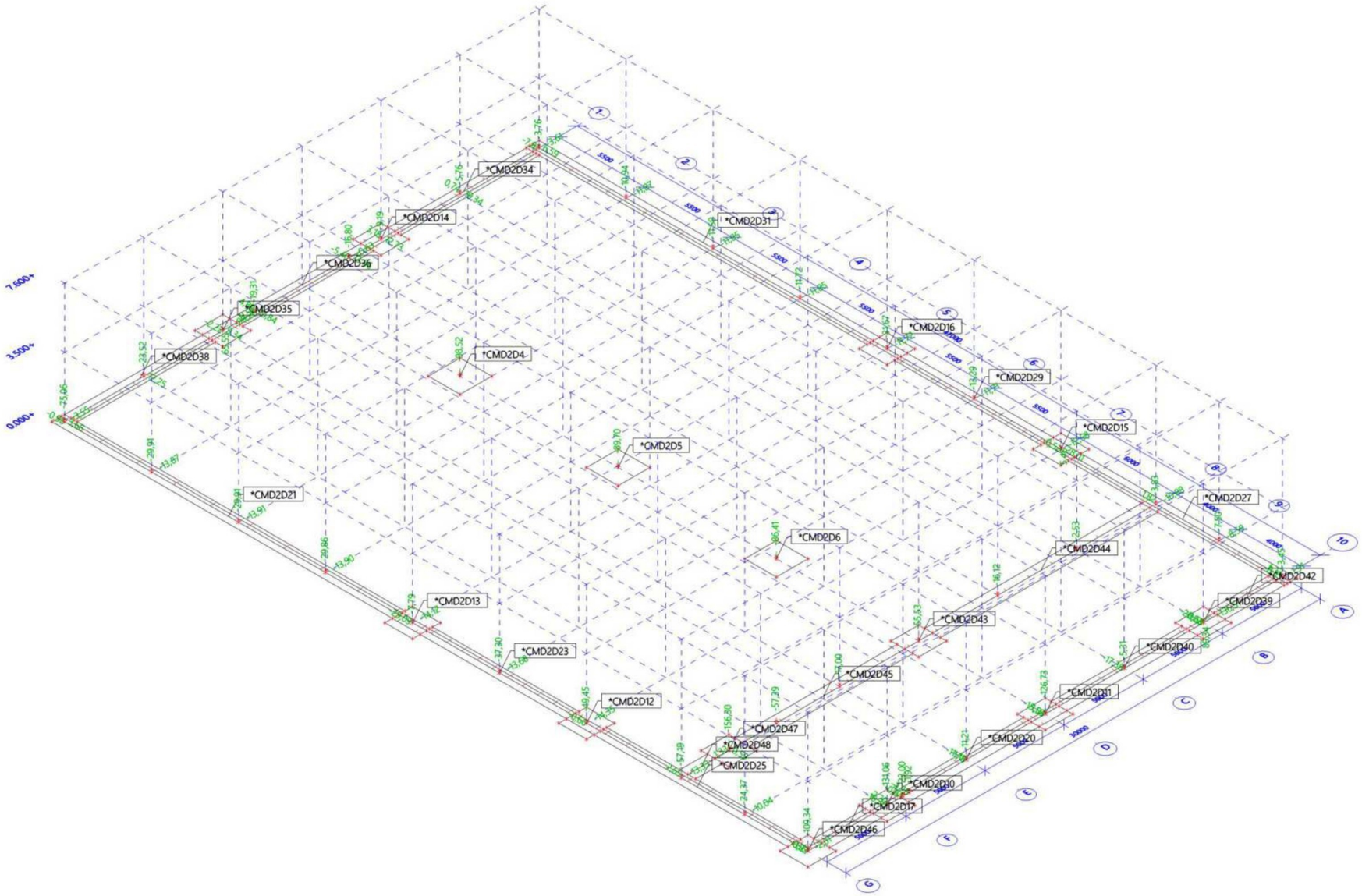
3.5.2.38. Combinaties uit bovenbouw - BG38

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG38	NC_ULS-Set B (auto)38	Variable	LG2	Short	None
	Standard	Static			



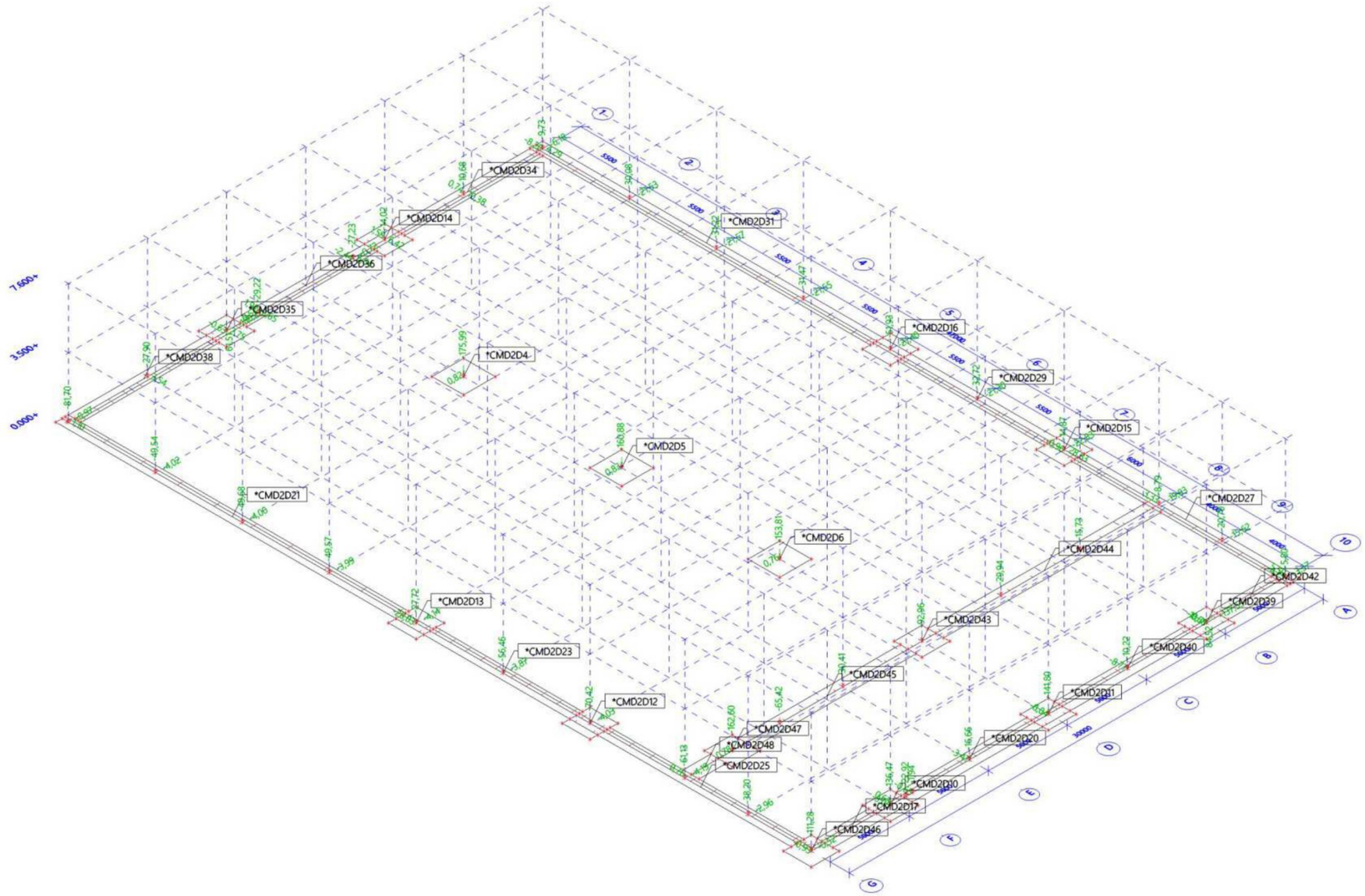
3.5.2.39. Combinaties uit bovenbouw - BG39

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG39	NC_ULS-Set B (auto)39	Variable	LG2	Short	None
	Standard	Static			



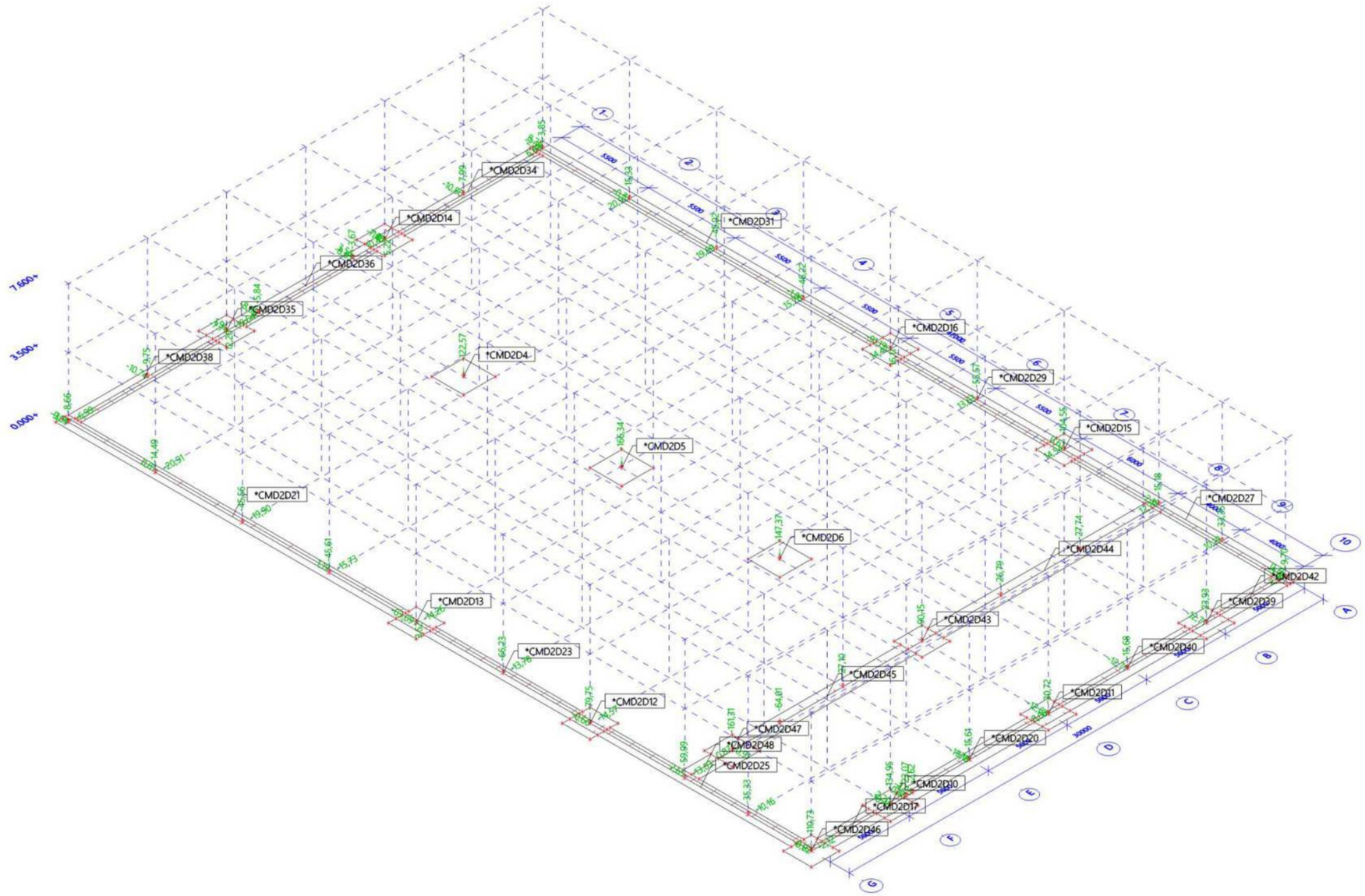
3.5.2.40. Combinaties uit bovenbouw - BG40

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG40	NC_ULS-Set B (auto)40	Variable	LG2	Short	None
	Standard	Static			



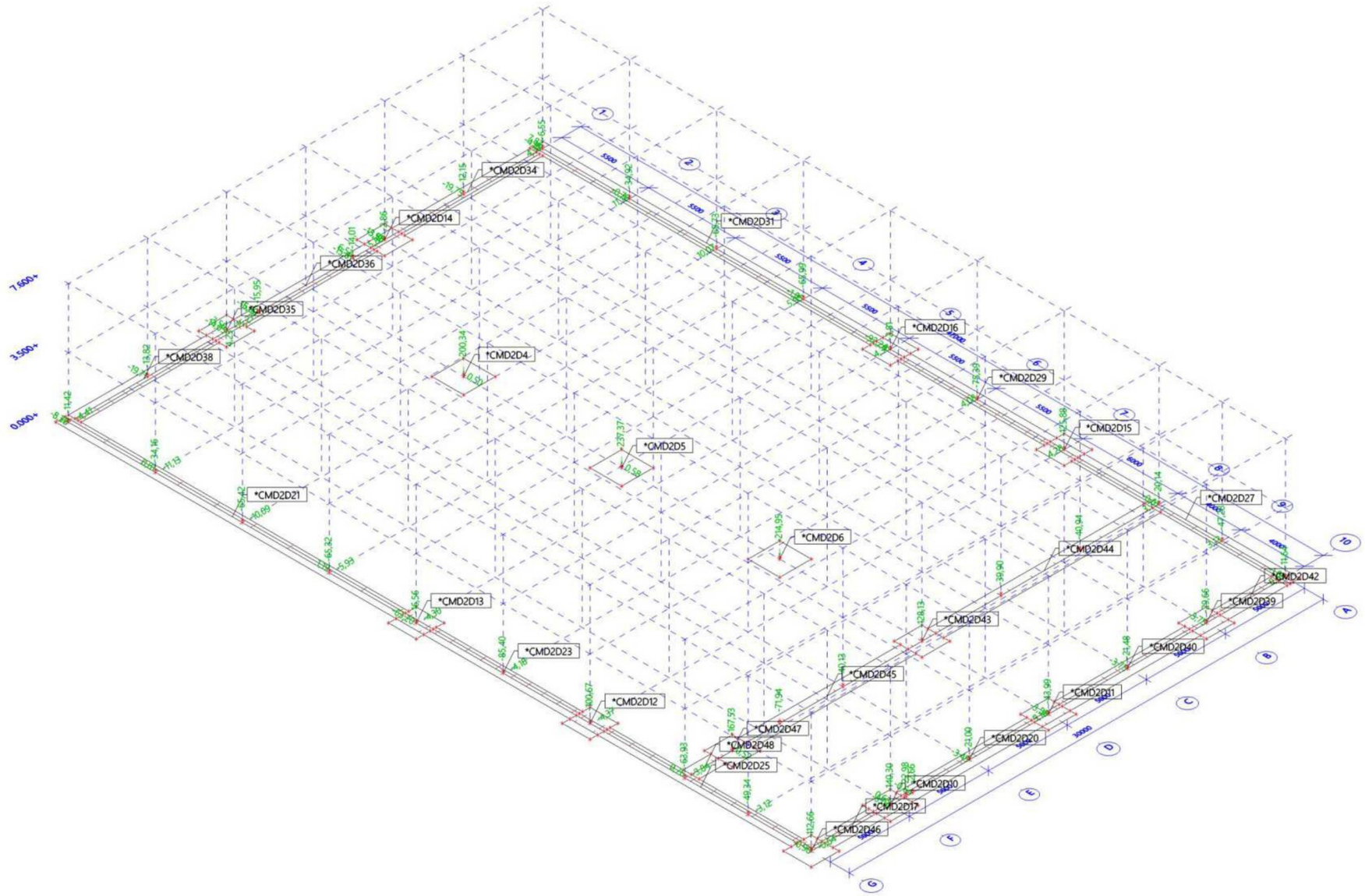
3.5.2.41. Combinaties uit bovenbouw - BG41

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG41	NC_ULS-Set B (auto)41	Variable	LG2	Short	None
	Standard	Static			



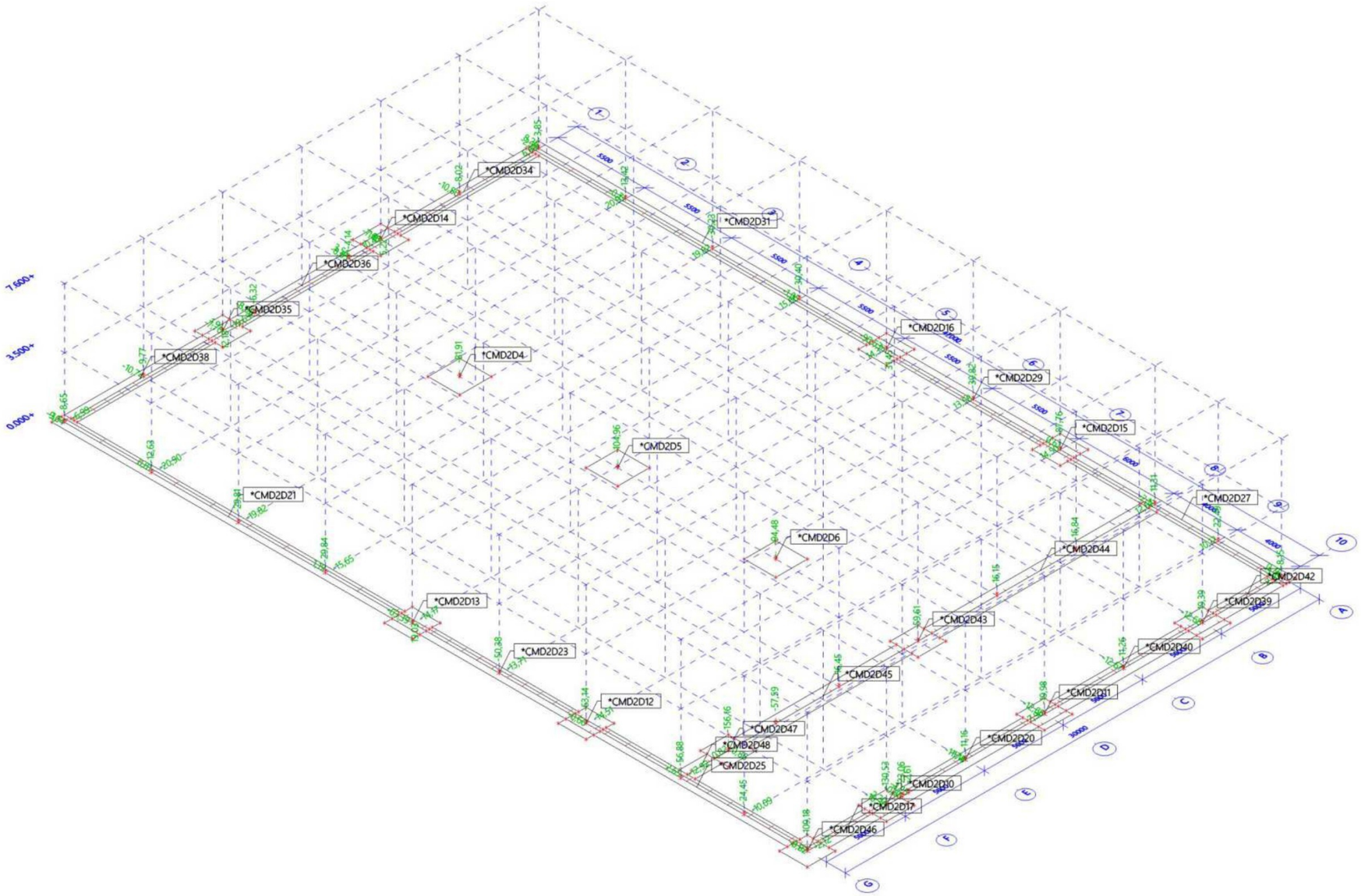
3.5.2.42. Combinaties uit bovenbouw - BG42

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG42	NC_ULS-Set B (auto)42	Variable	LG2	Short	None
	Standard	Static			



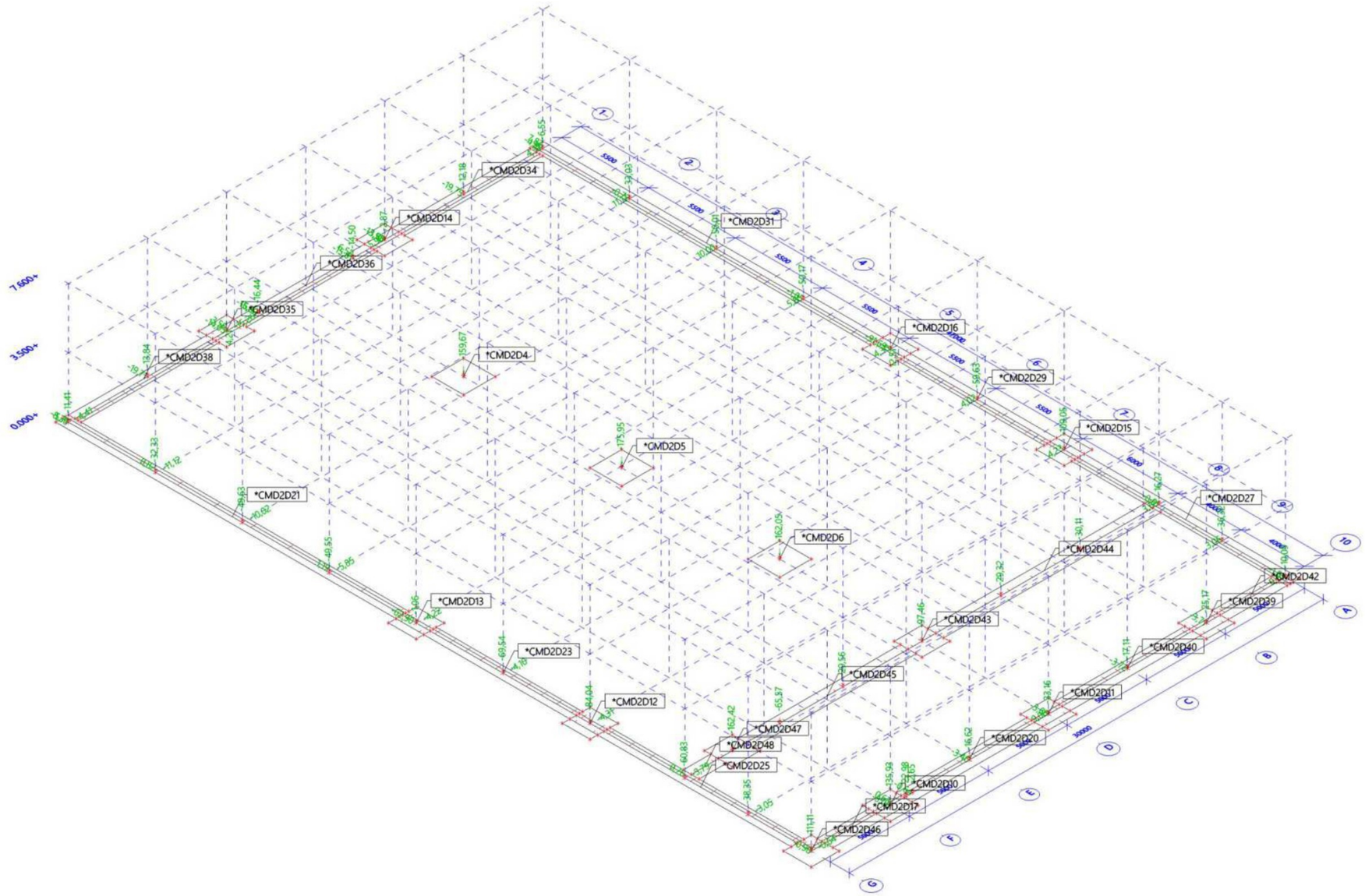
3.5.2.43. Combinaties uit bovenbouw - BG43

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG43	NC_ULS-Set B (auto)43	Variable	LG2	Short	None
	Standard	Static			



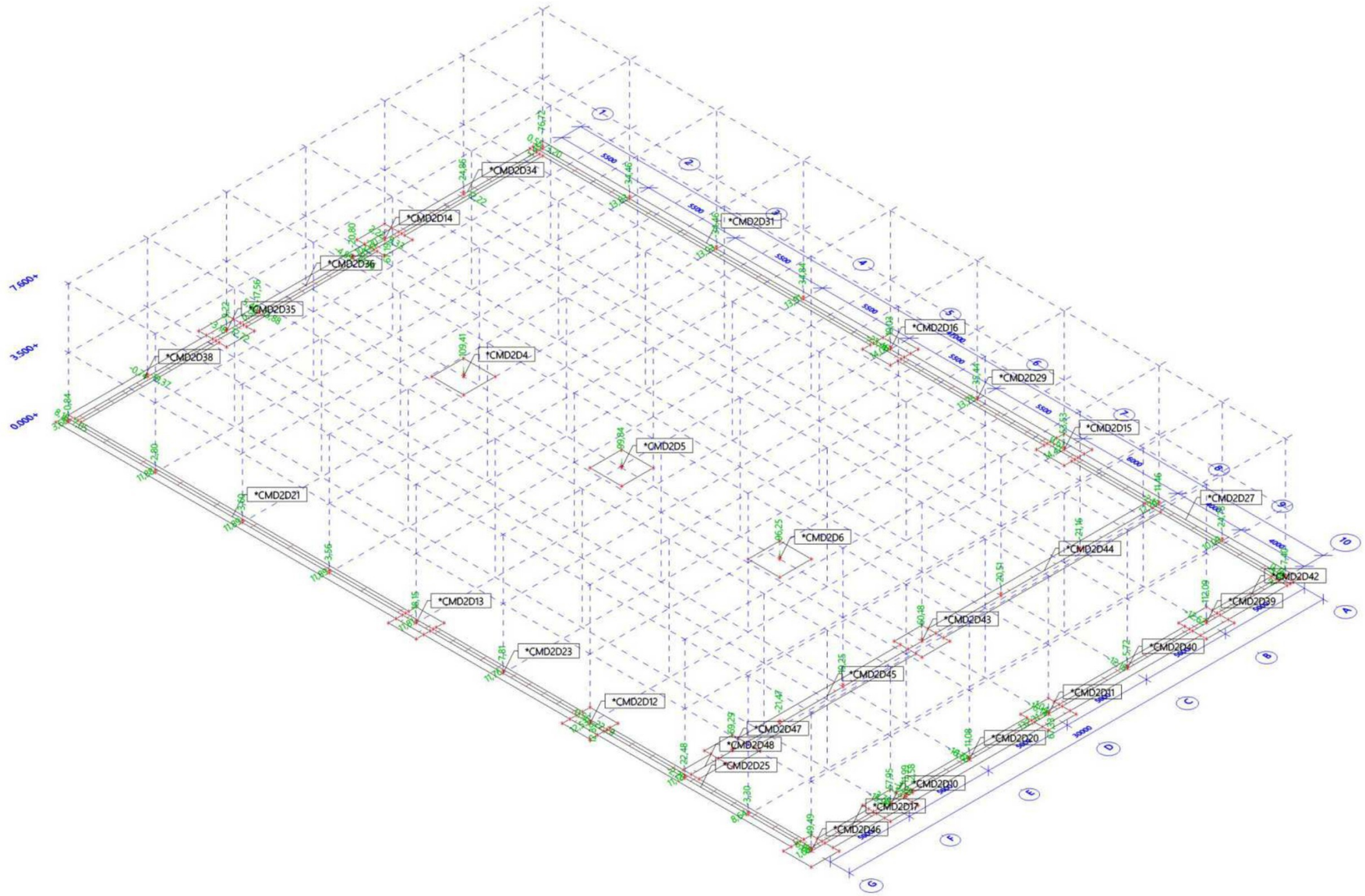
3.5.2.44. Combinaties uit bovenbouw - BG44

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG44	NC_ULS-Set B (auto)44	Variable	LG2	Short	None
	Standard	Static			



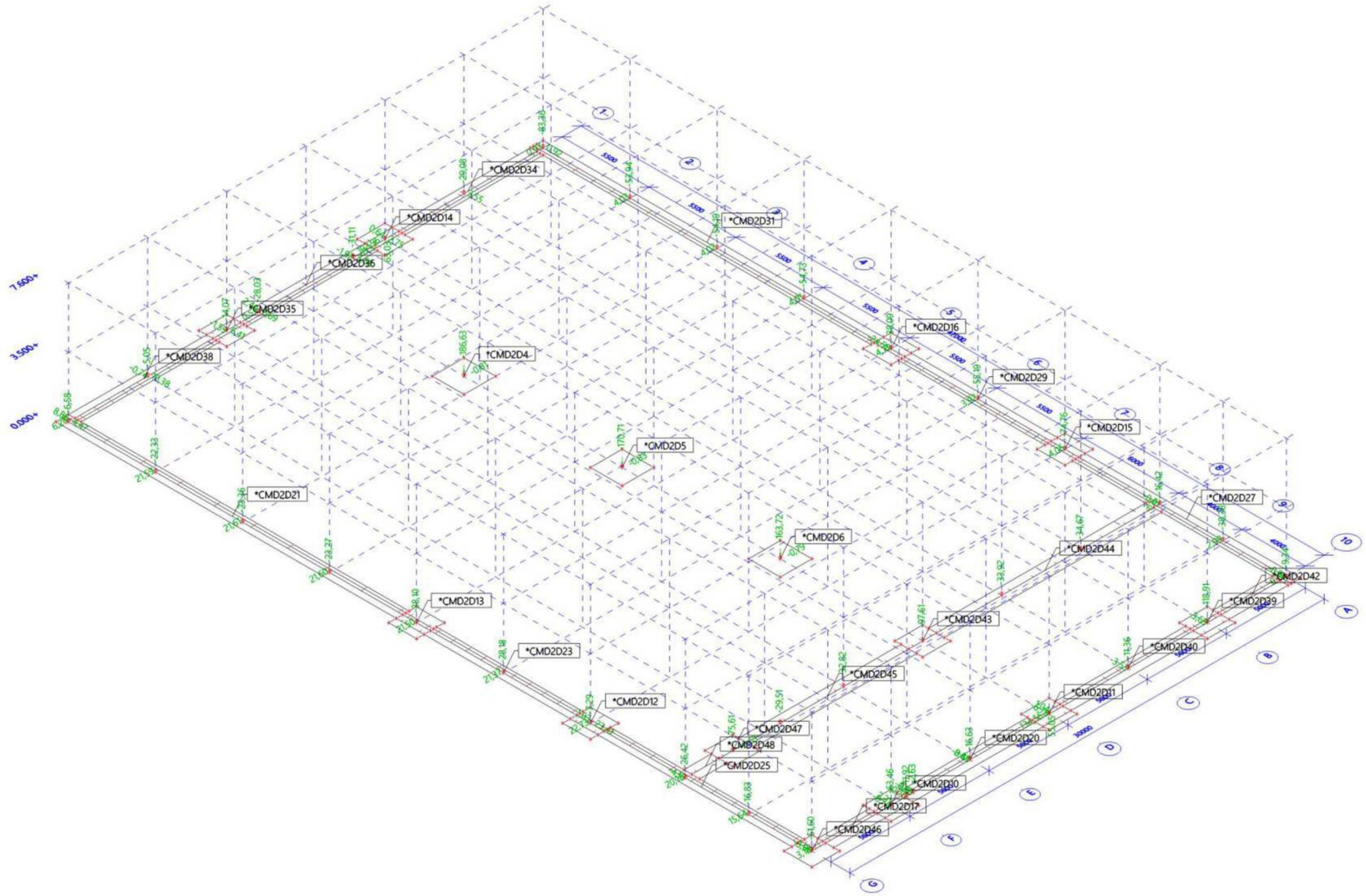
3.5.2.45. Combinaties uit bovenbouw - BG45

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG45	NC_ULS-Set B (auto)45	Variable	LG2	Short	None
	Standard	Static			



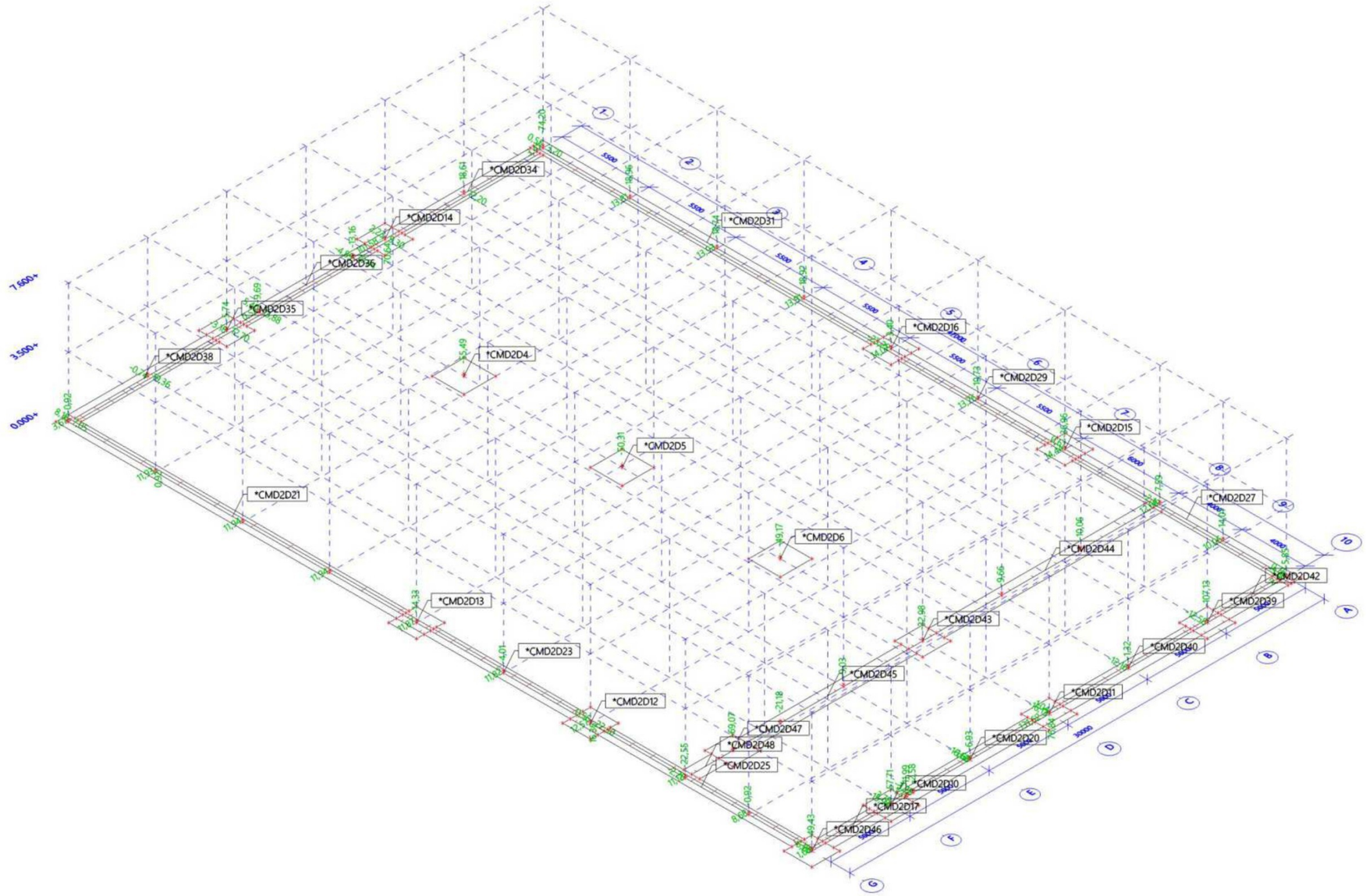
3.5.2.46. Combinaties uit bovenbouw - BG46

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG46	NC_ULS-Set B (auto)46	Variable	LG2	Short	None
	Standard	Static			



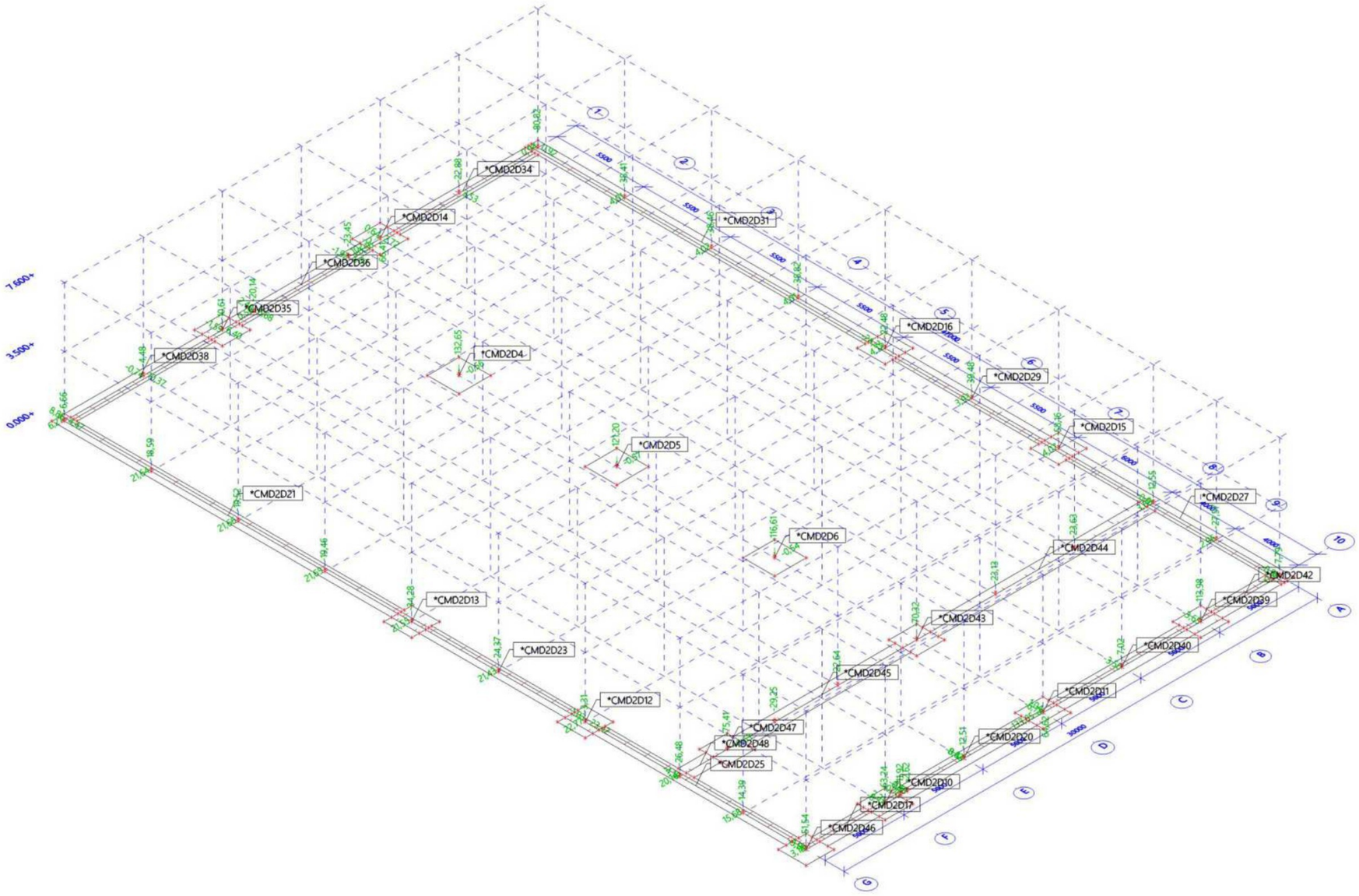
3.5.2.47. Combinaties uit bovenbouw - BG47

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG47	NC_ULS-Set B (auto)47	Variable	LG2	Short	None
	Standard	Static			



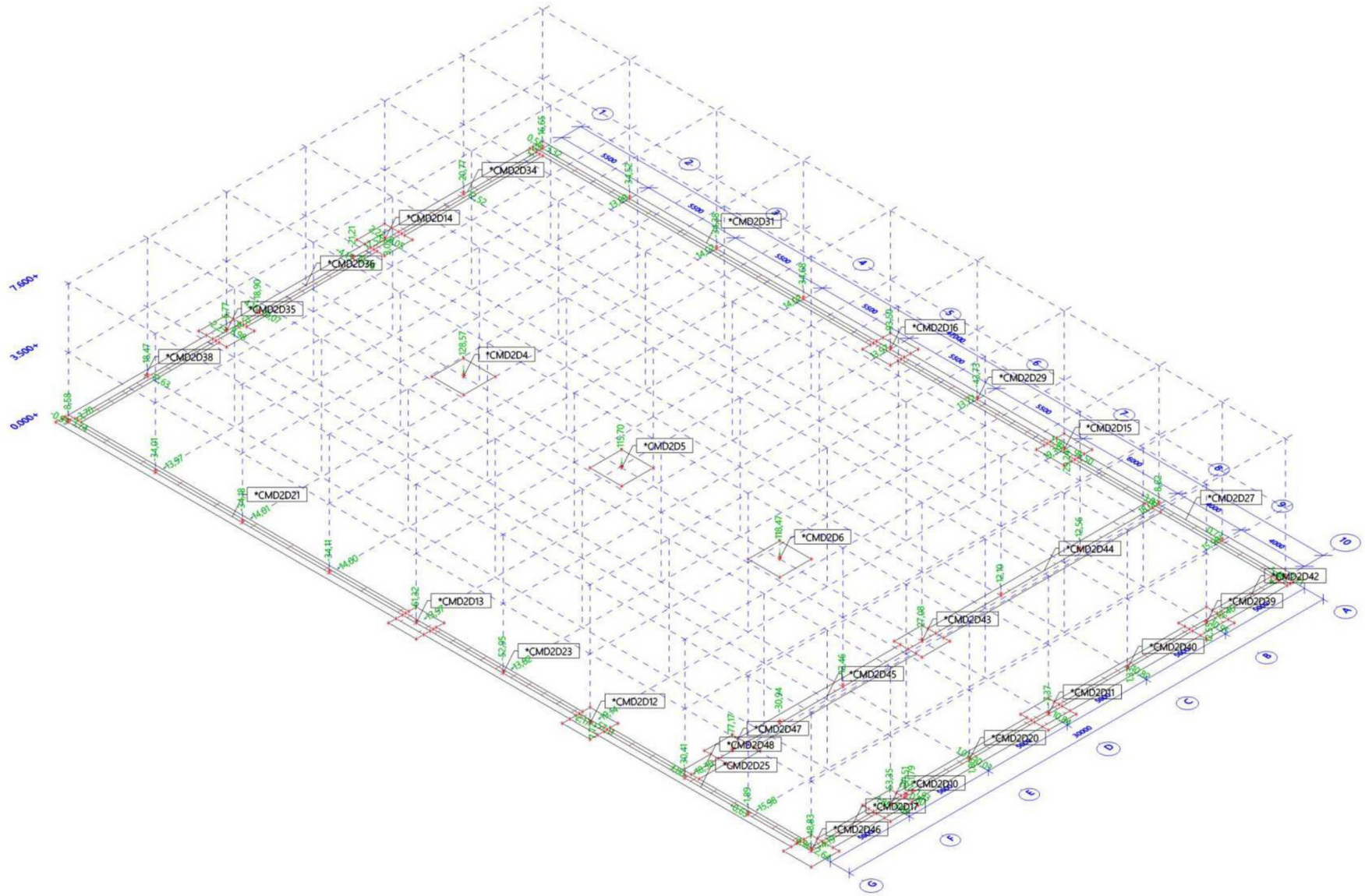
3.5.2.48. Combinaties uit bovenbouw - BG48

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG48	NC_ULS-Set B (auto)48	Variable	LG2	Short	None
	Standard	Static			



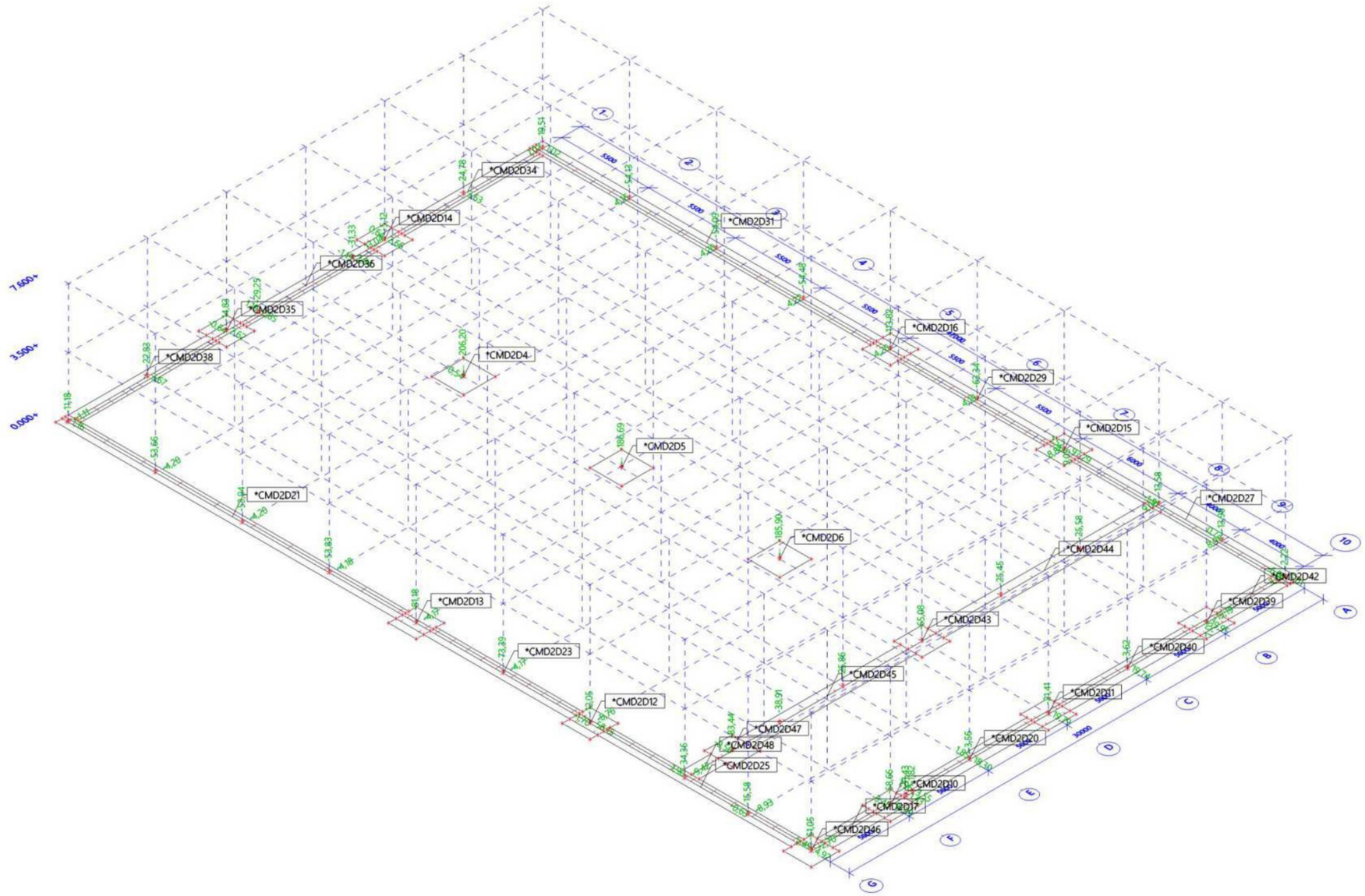
3.5.2.49. Combinaties uit bovenbouw - BG49

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG49	NC_ULS-Set B (auto)49	Variable	LG2	Short	None
	Standard	Static			



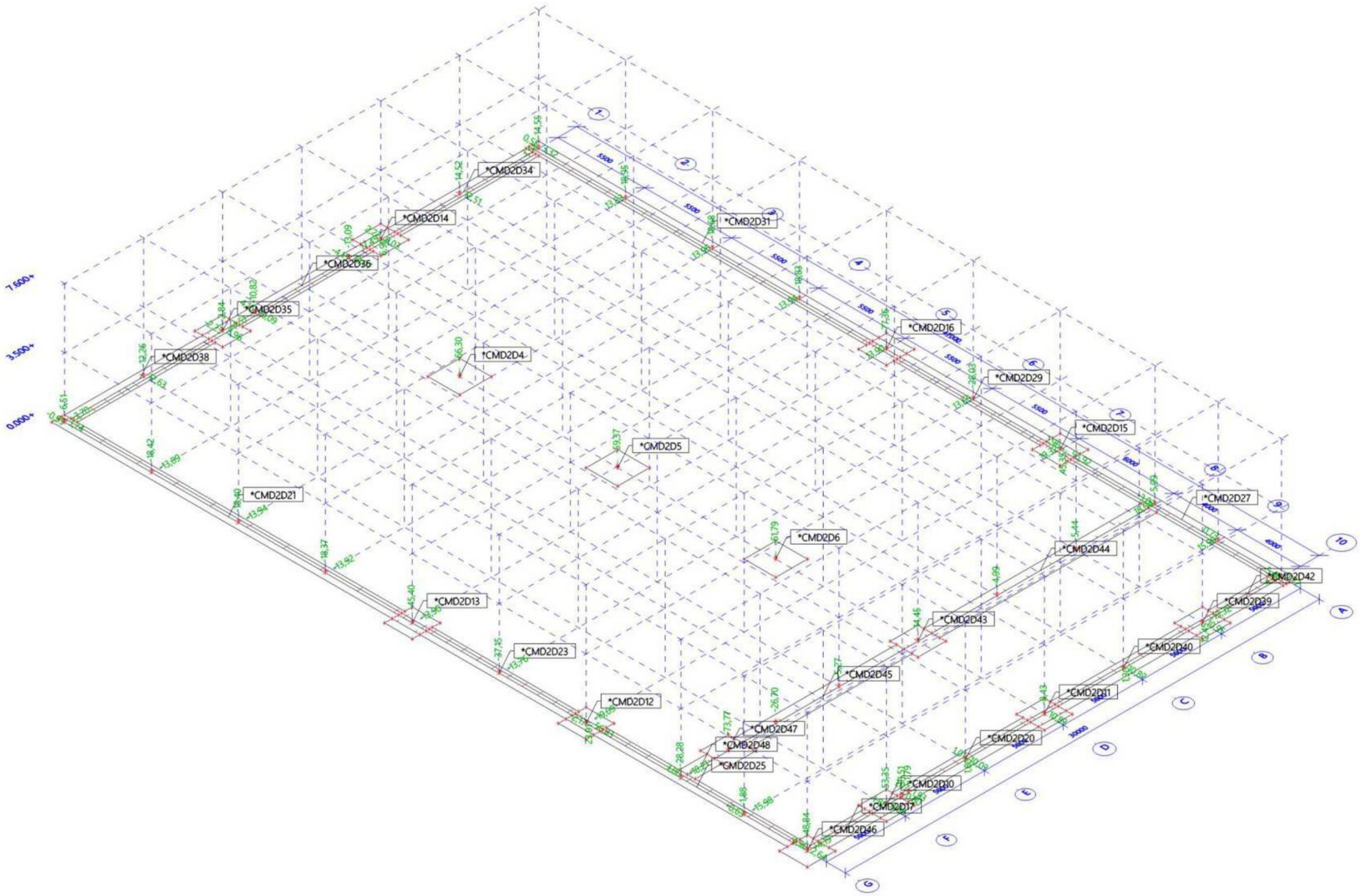
3.5.2.50. Combinaties uit bovenbouw - BG50

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG50	NC_ULS-Set B (auto)50	Variable	LG2	Short	None
	Standard	Static			



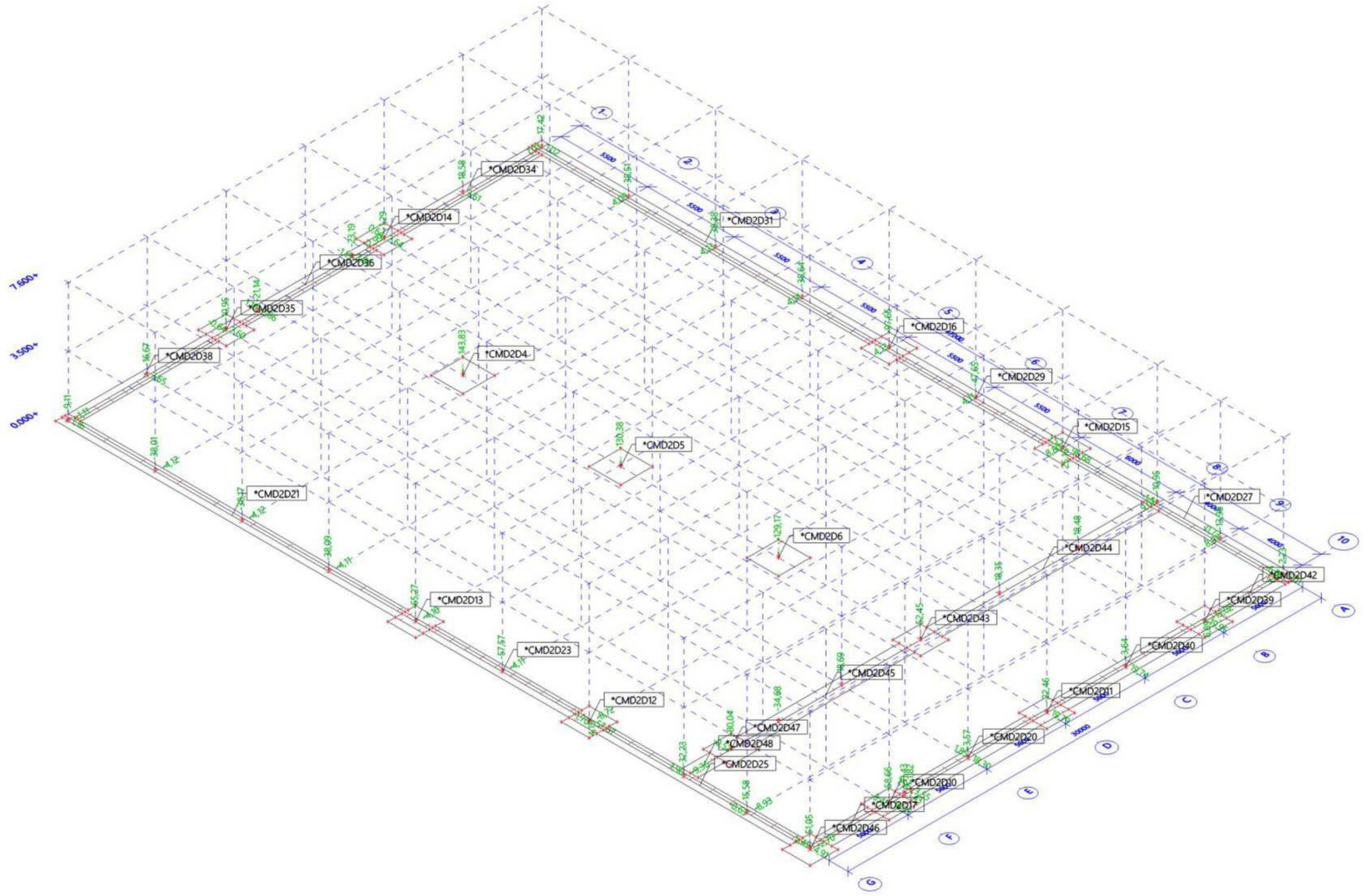
3.5.2.51. Combinaties uit bovenbouw - BG51

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG51	NC_ULS-Set B (auto)51	Variable	LG2	Short	None
	Standard	Static			



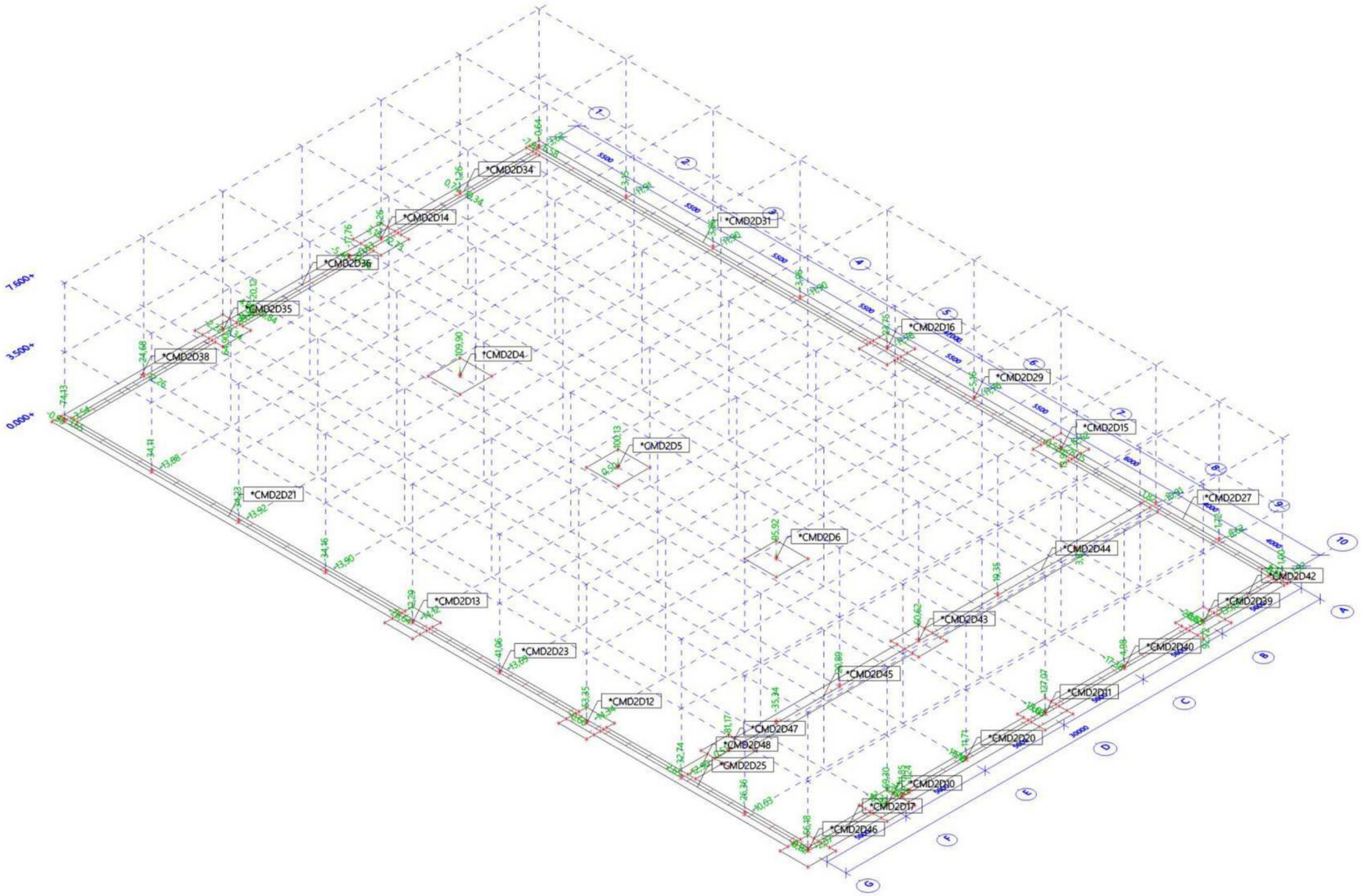
3.5.2.52. Combinaties uit bovenbouw - BG52

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG52	NC_ULS-Set B (auto)52	Variable	LG2	Short	None
	Standard	Static			



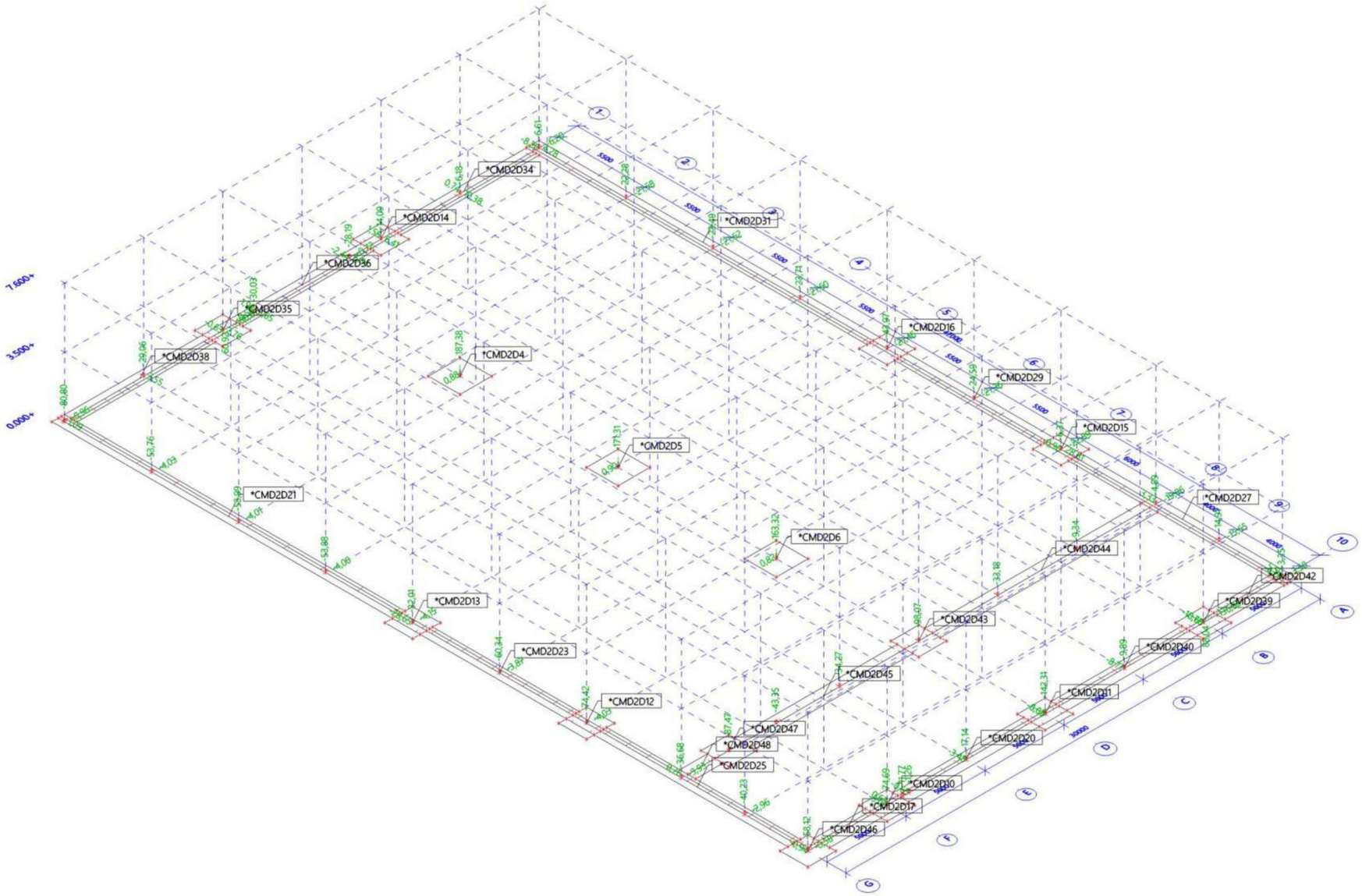
3.5.2.53. Combinaties uit bovenbouw - BG53

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG53	NC_ULS-Set B (auto)53	Variable	LG2	Short	None
	Standard	Static			



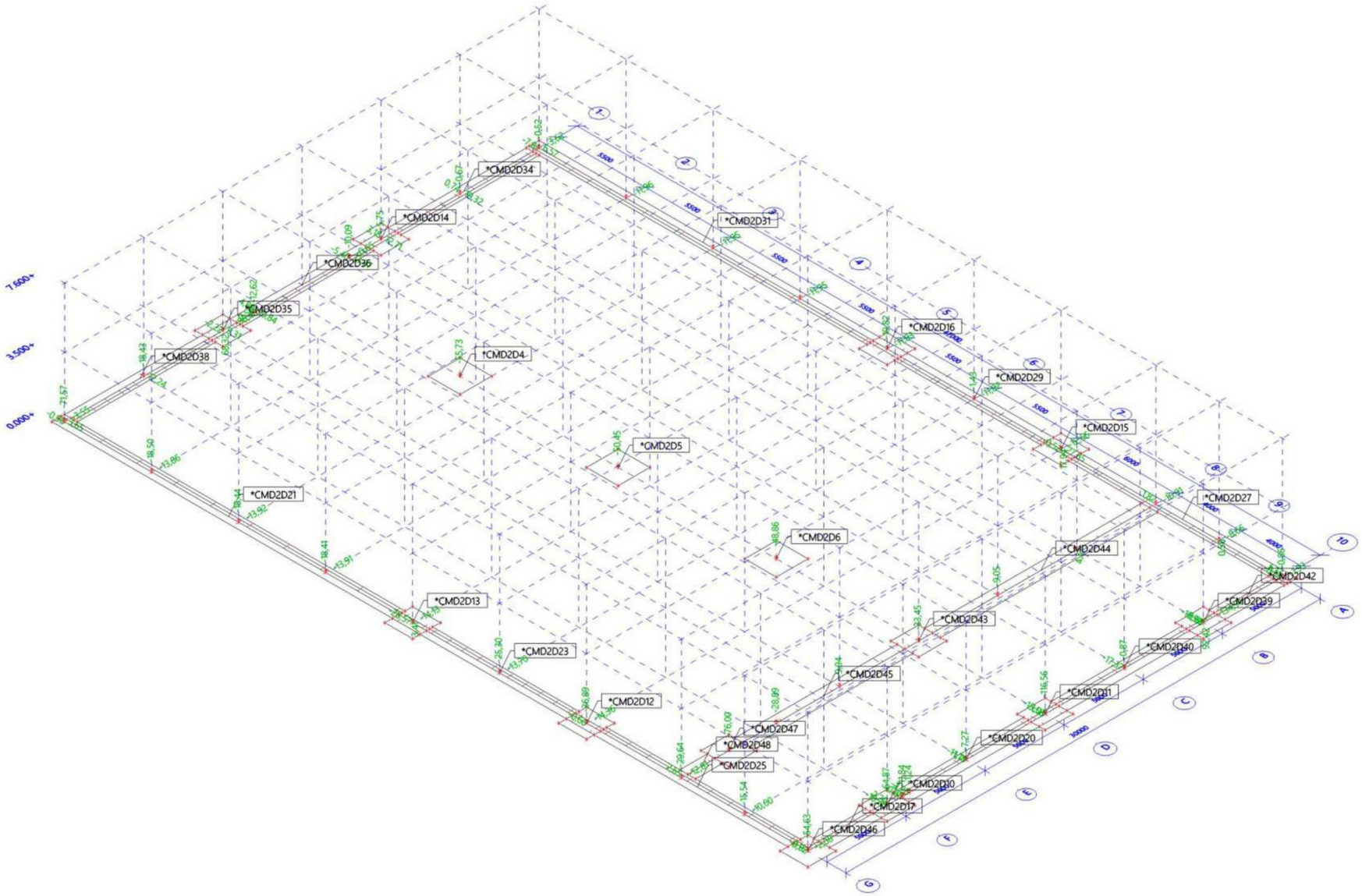
3.5.2.54. Combinaties uit bovenbouw - BG54

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG54	NC_ULS-Set B (auto)54	Variable	LG2	Short	None
	Standard	Static			



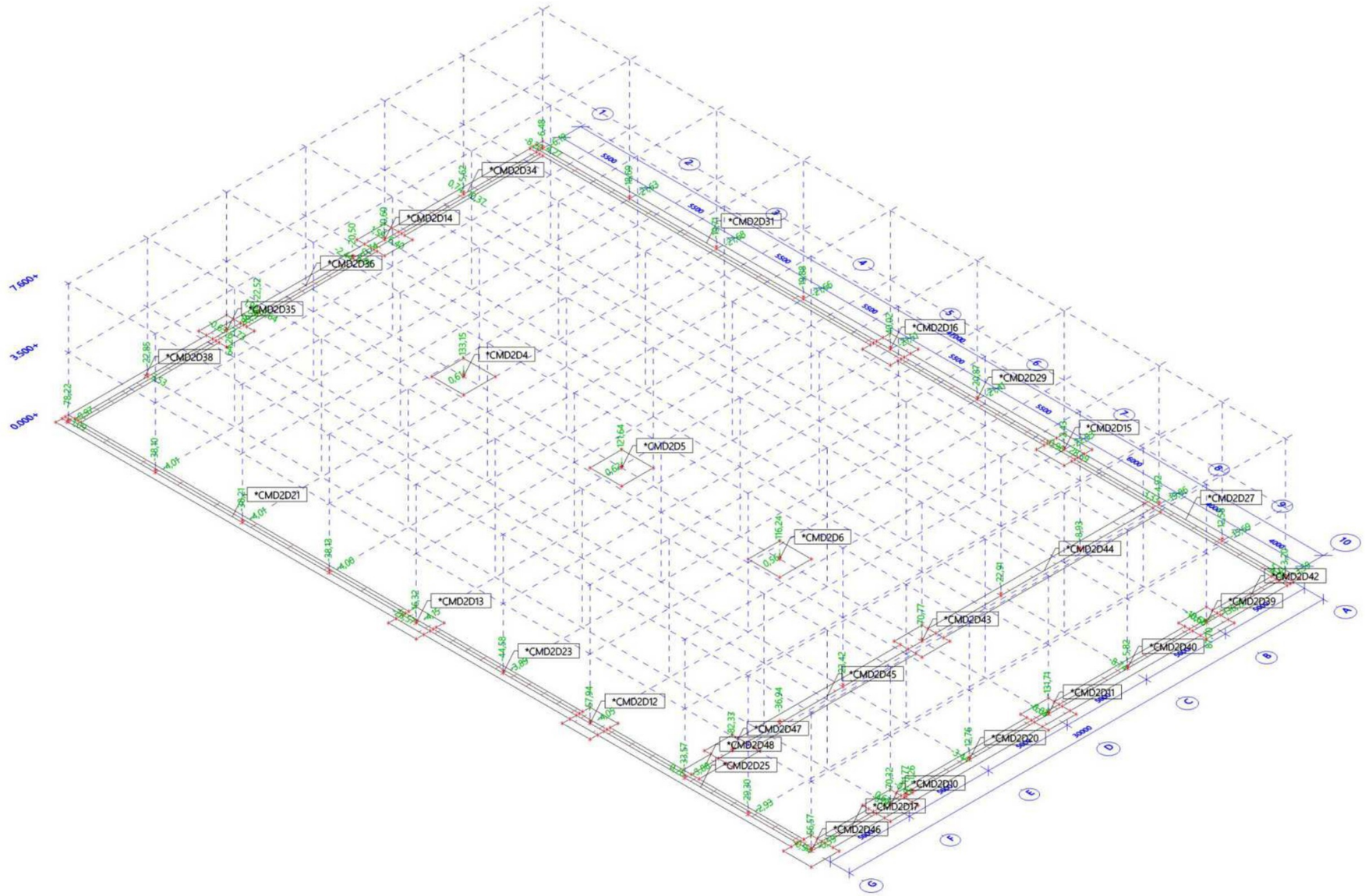
3.5.2.55. Combinaties uit bovenbouw - BG55

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG55	NC_ULS-Set B (auto)55	Variable	LG2	Short	None
	Standard	Static			



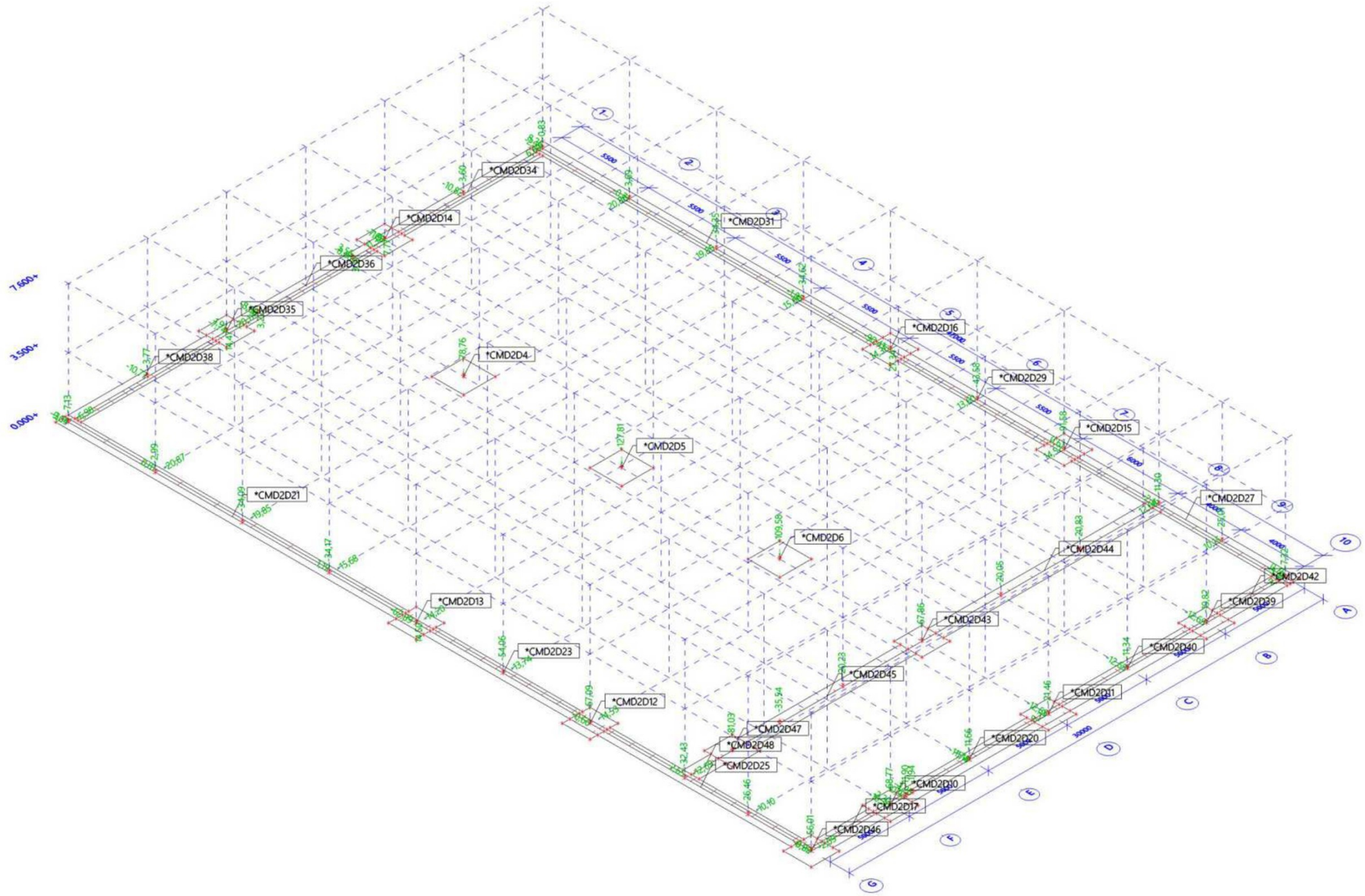
3.5.2.56. Combinaties uit bovenbouw - BG56

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG56	NC_ULS-Set B (auto)56	Variable	LG2	Short	None
	Standard	Static			



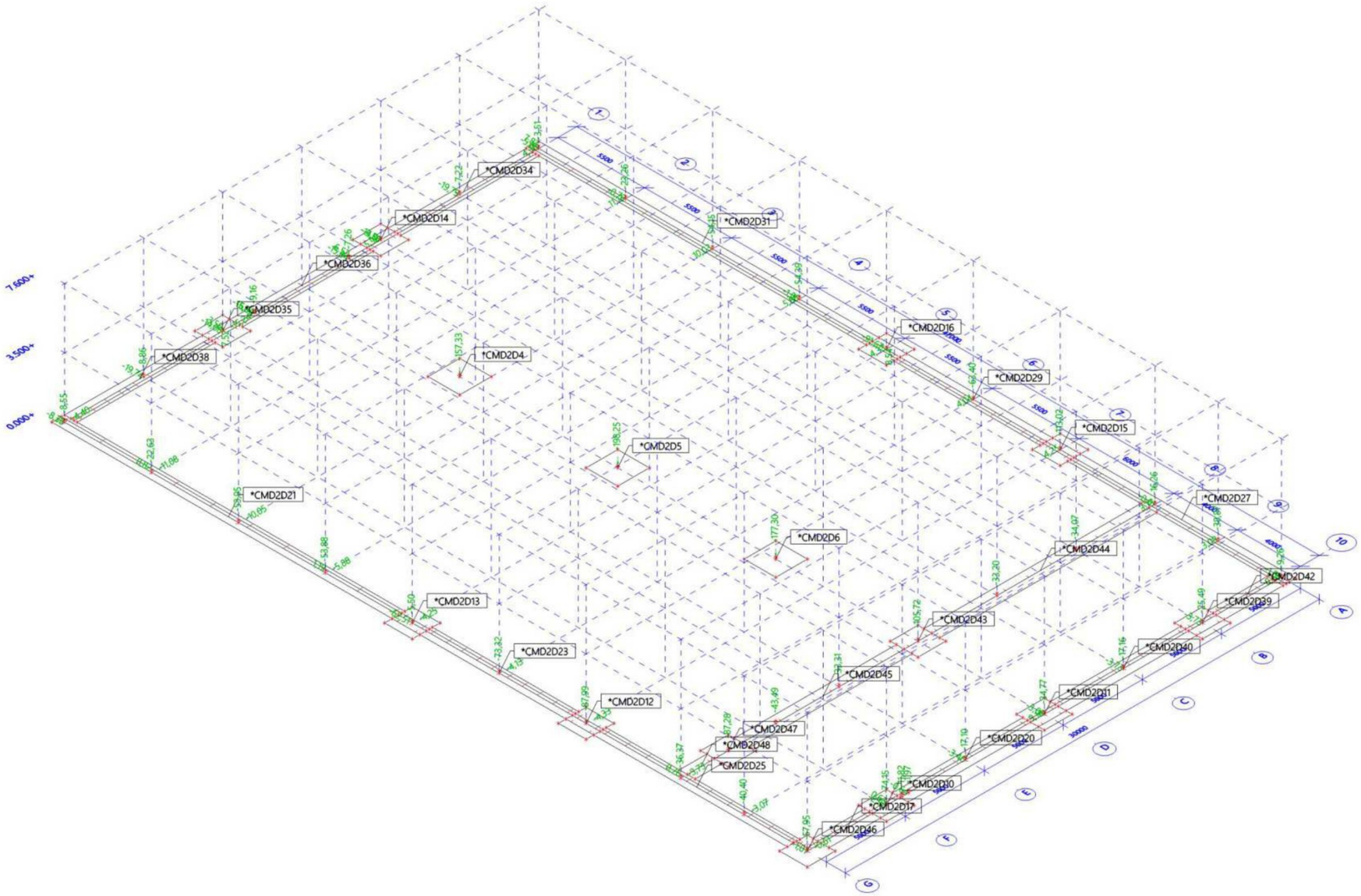
3.5.2.57. Combinaties uit bovenbouw - BG57

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG57	NC_ULS-Set B (auto)57	Variable	LG2	Short	None
	Standard	Static			



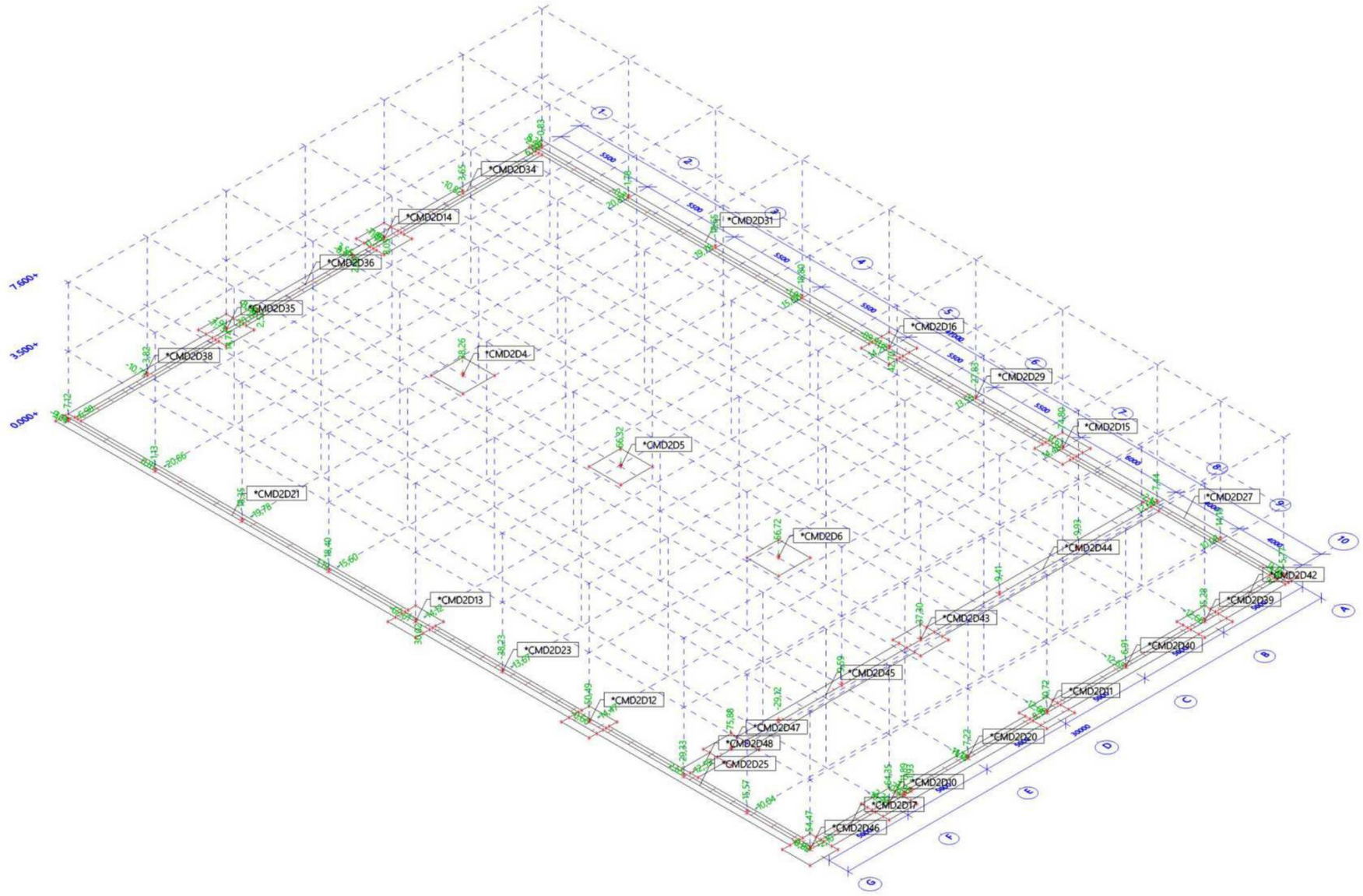
3.5.2.58. Combinaties uit bovenbouw - BG58

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG58	NC_ULS-Set B (auto)58	Variable	LG2	Short	None
	Standard	Static			



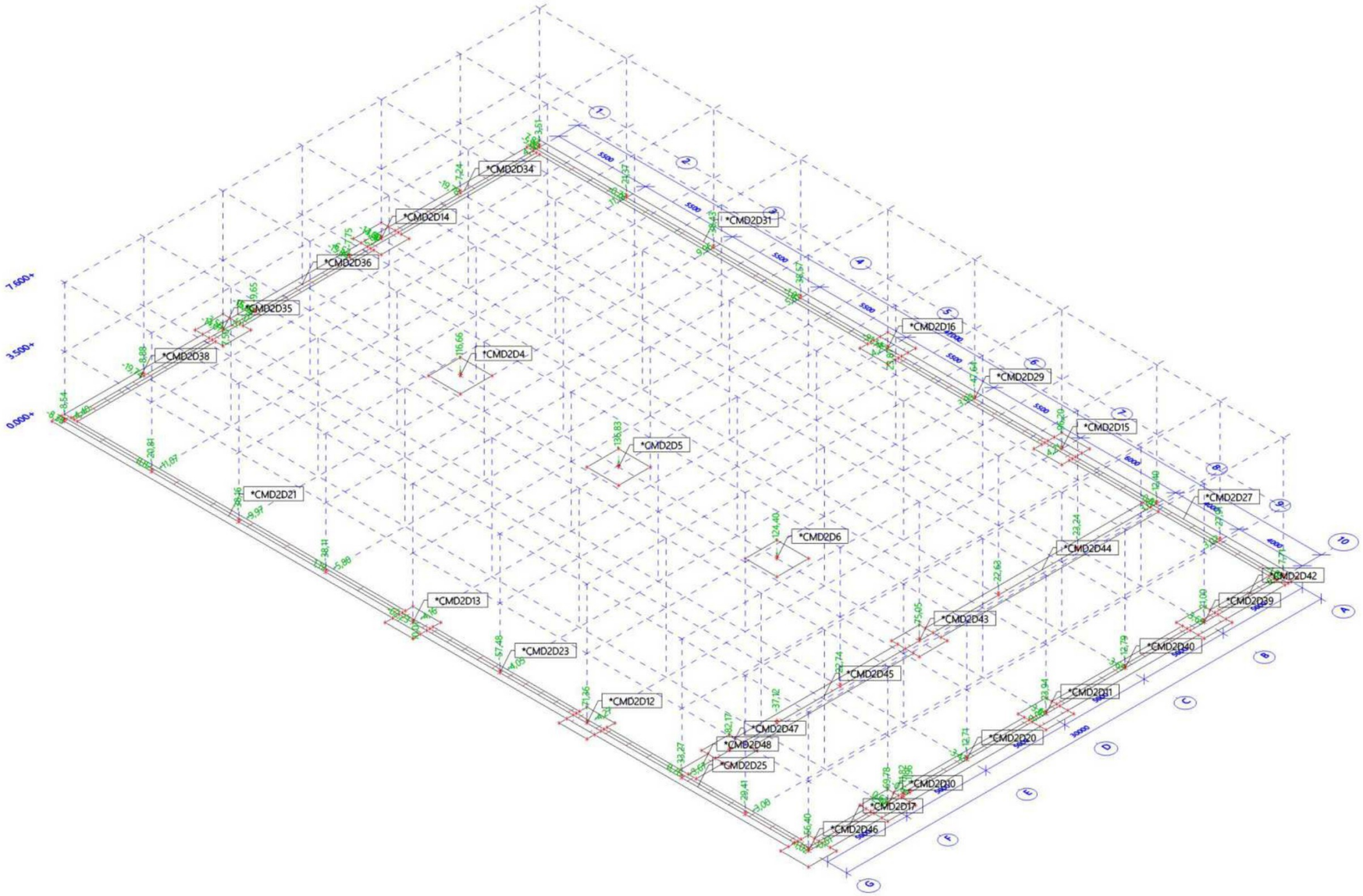
3.5.2.59. Combinaties uit bovenbouw - BG59

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG59	NC_ULS-Set B (auto)59	Variable	LG2	Short	None
	Standard	Static			



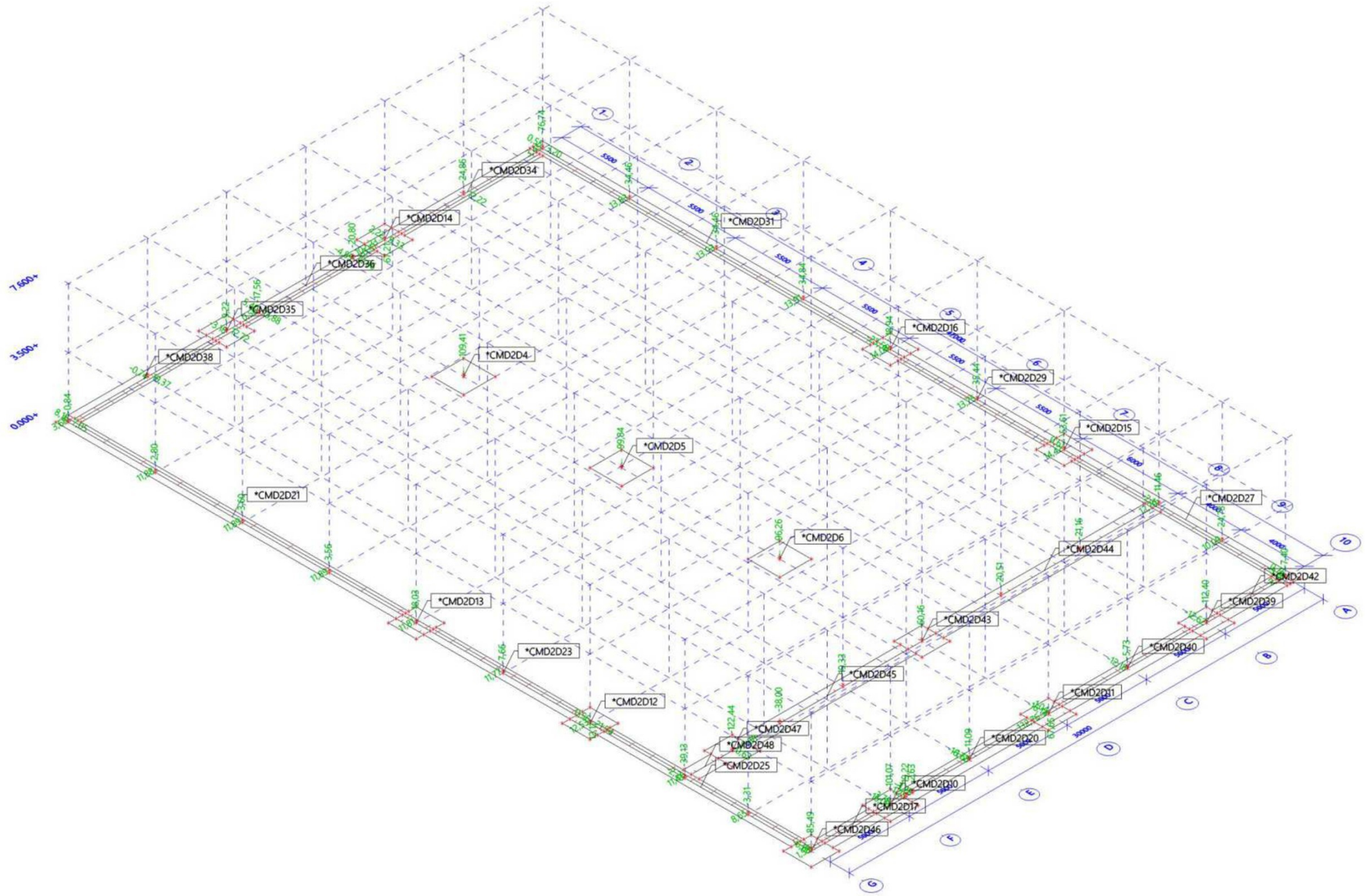
3.5.2.60. Combinaties uit bovenbouw - BG60

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG60	NC_ULS-Set B (auto)60	Variable	LG2	Short	None
	Standard	Static			



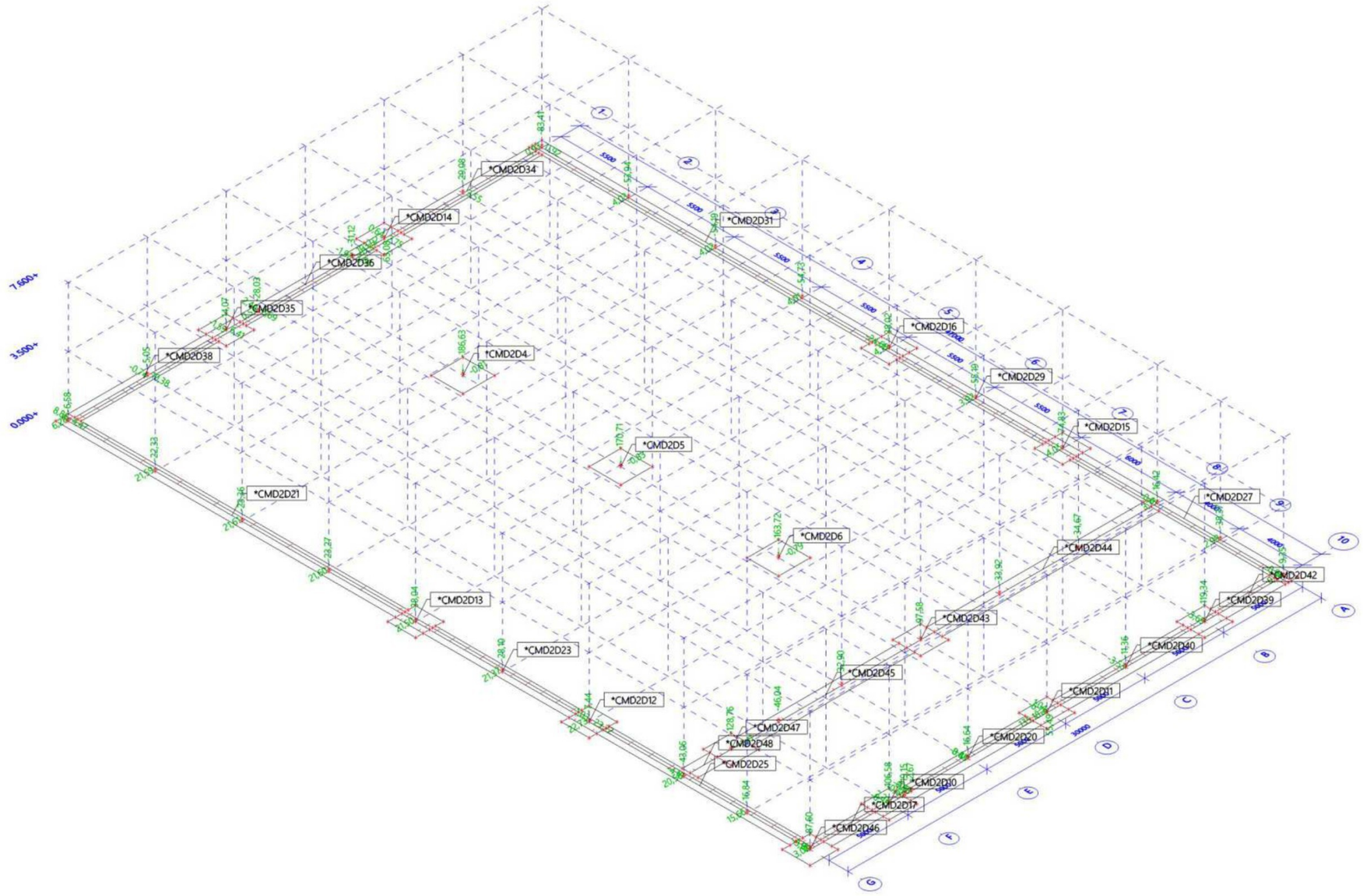
3.5.2.61. Combinaties uit bovenbouw - BG61

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG61	NC_ULS-Set B (auto)61	Variable	LG2	Short	None
	Standard	Static			



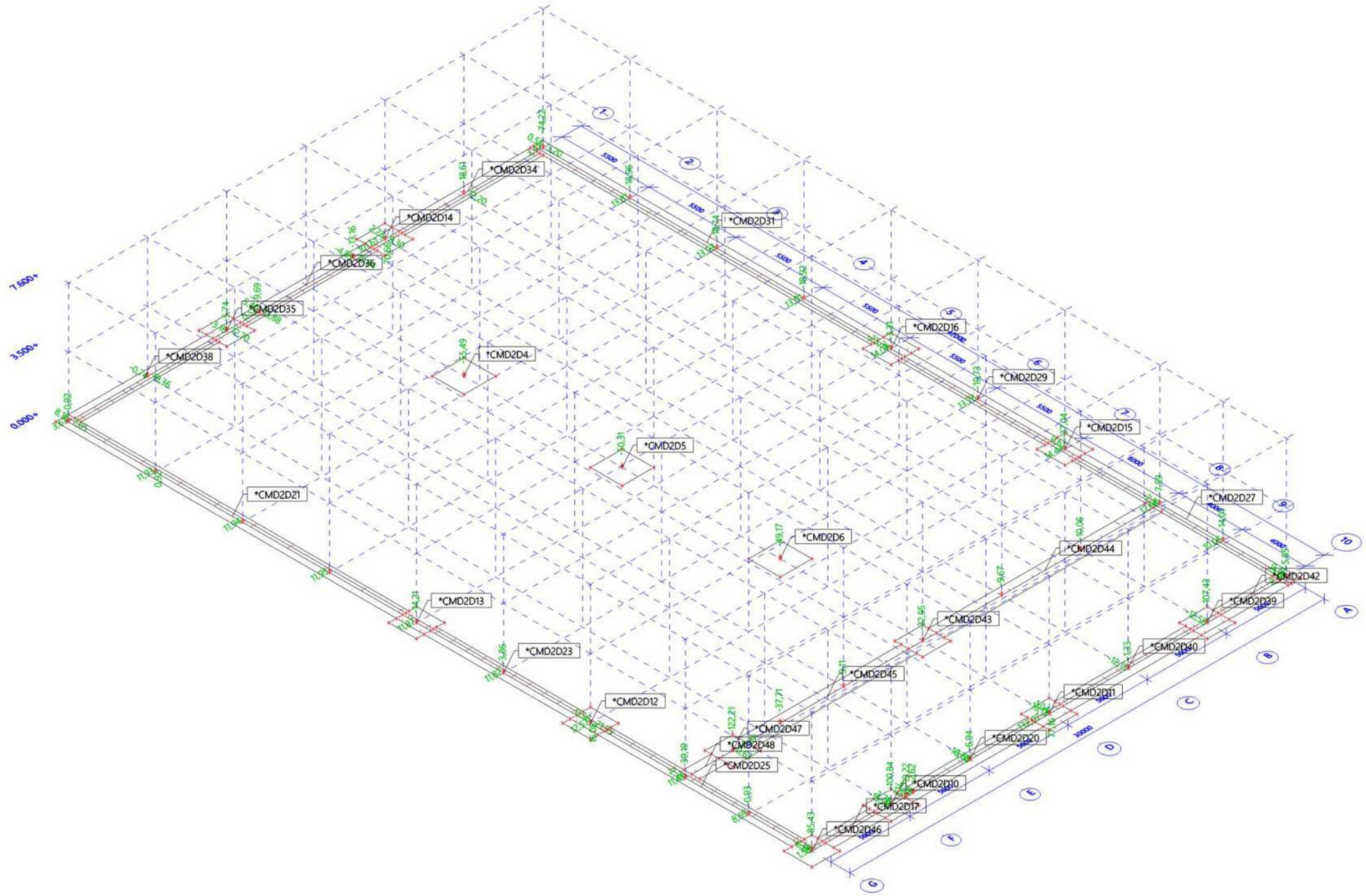
3.5.2.62. Combinaties uit bovenbouw - BG62

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG62	NC_ULS-Set B (auto)62	Variable	LG2	Short	None
	Standard	Static			



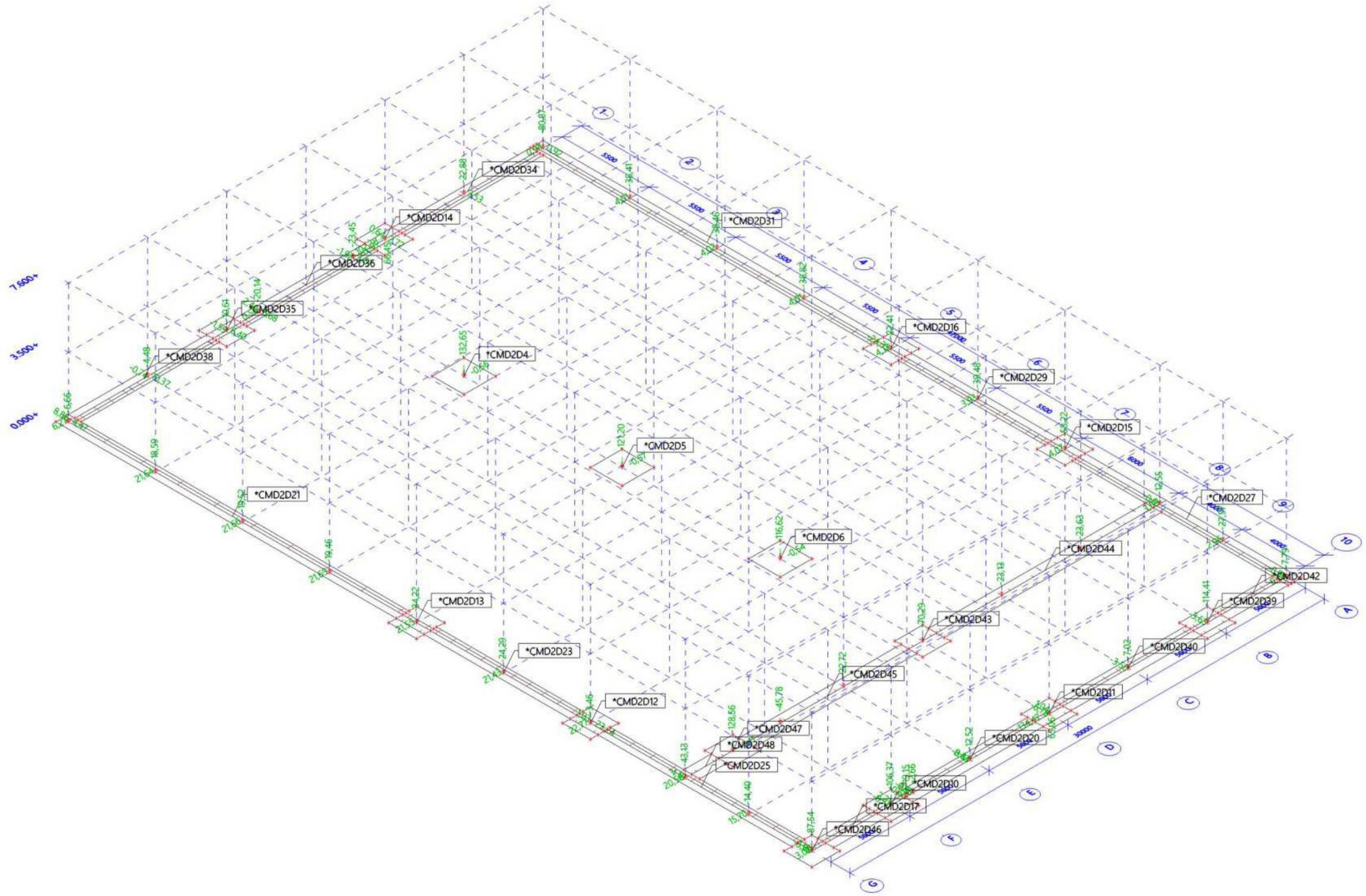
3.5.2.63. Combinaties uit bovenbouw - BG63

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG63	NC_ULS-Set B (auto)63	Variable	LG2	Short	None
	Standard	Static			



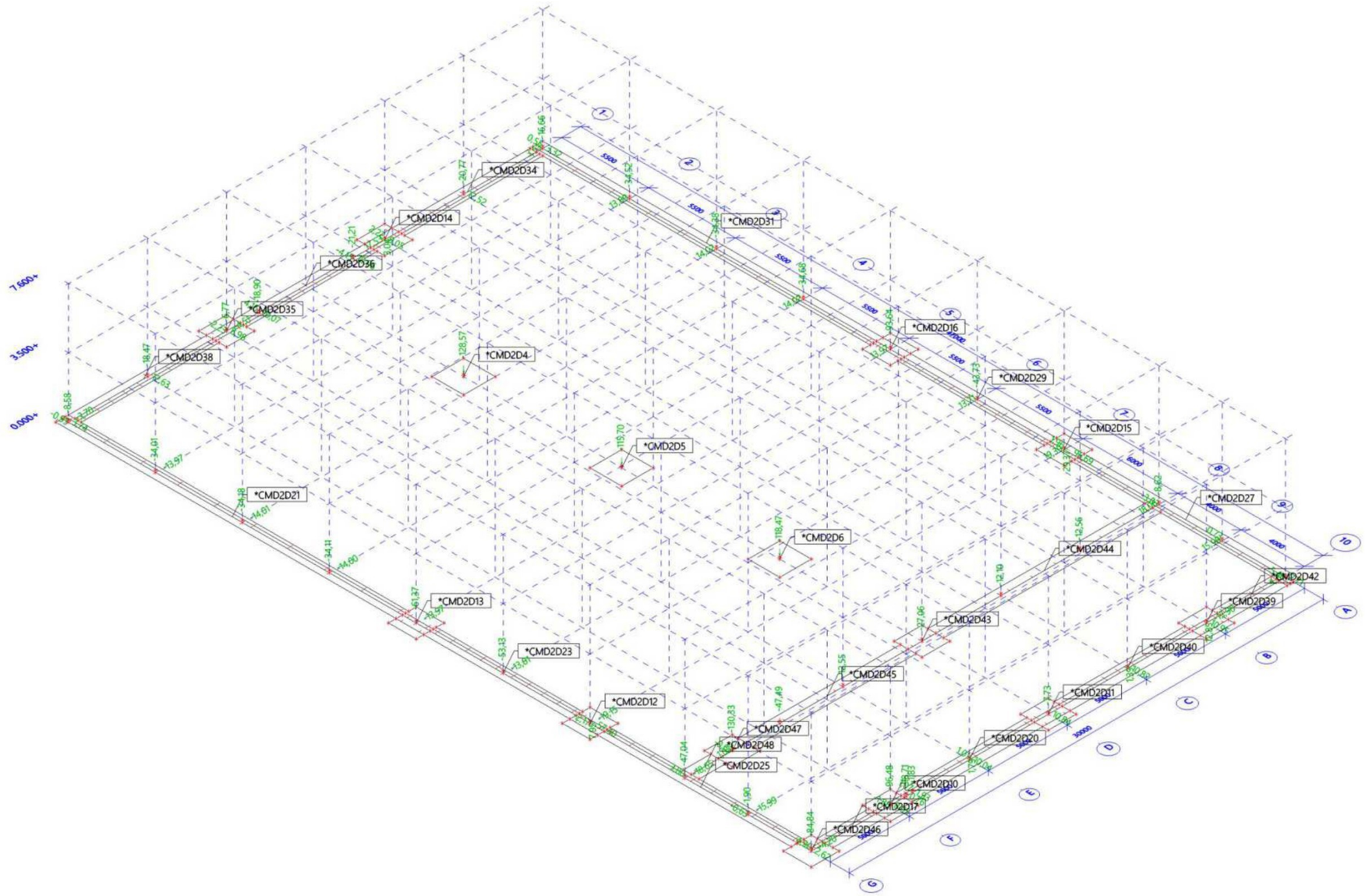
3.5.2.64. Combinaties uit bovenbouw - BG64

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG64	NC_ULS-Set B (auto)64	Variable	LG2	Short	None
	Standard	Static			



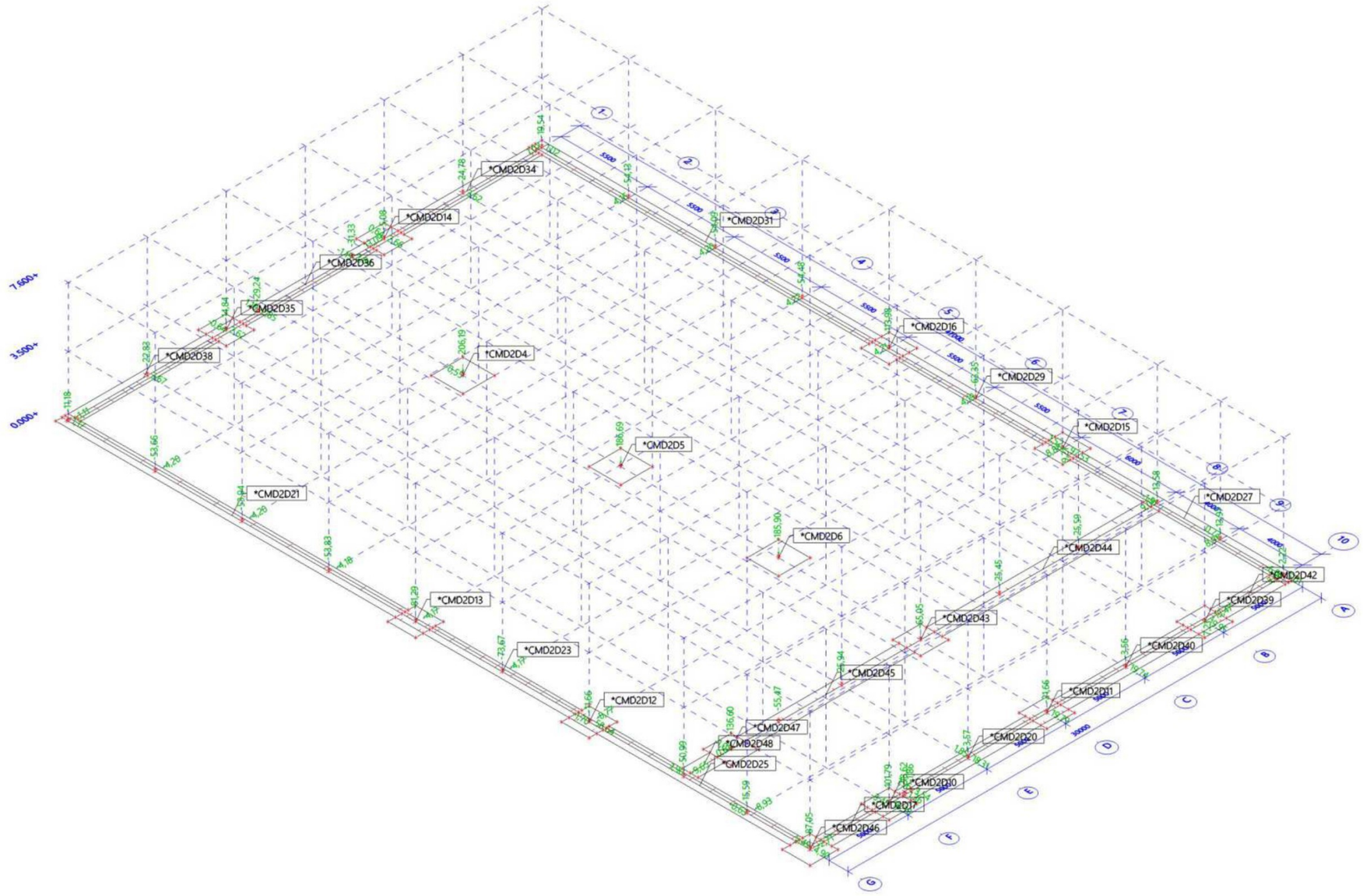
3.5.2.65. Combinaties uit bovenbouw - BG65

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG65	NC_ULS-Set B (auto)65	Variable	LG2	Short	None
	Standard	Static			



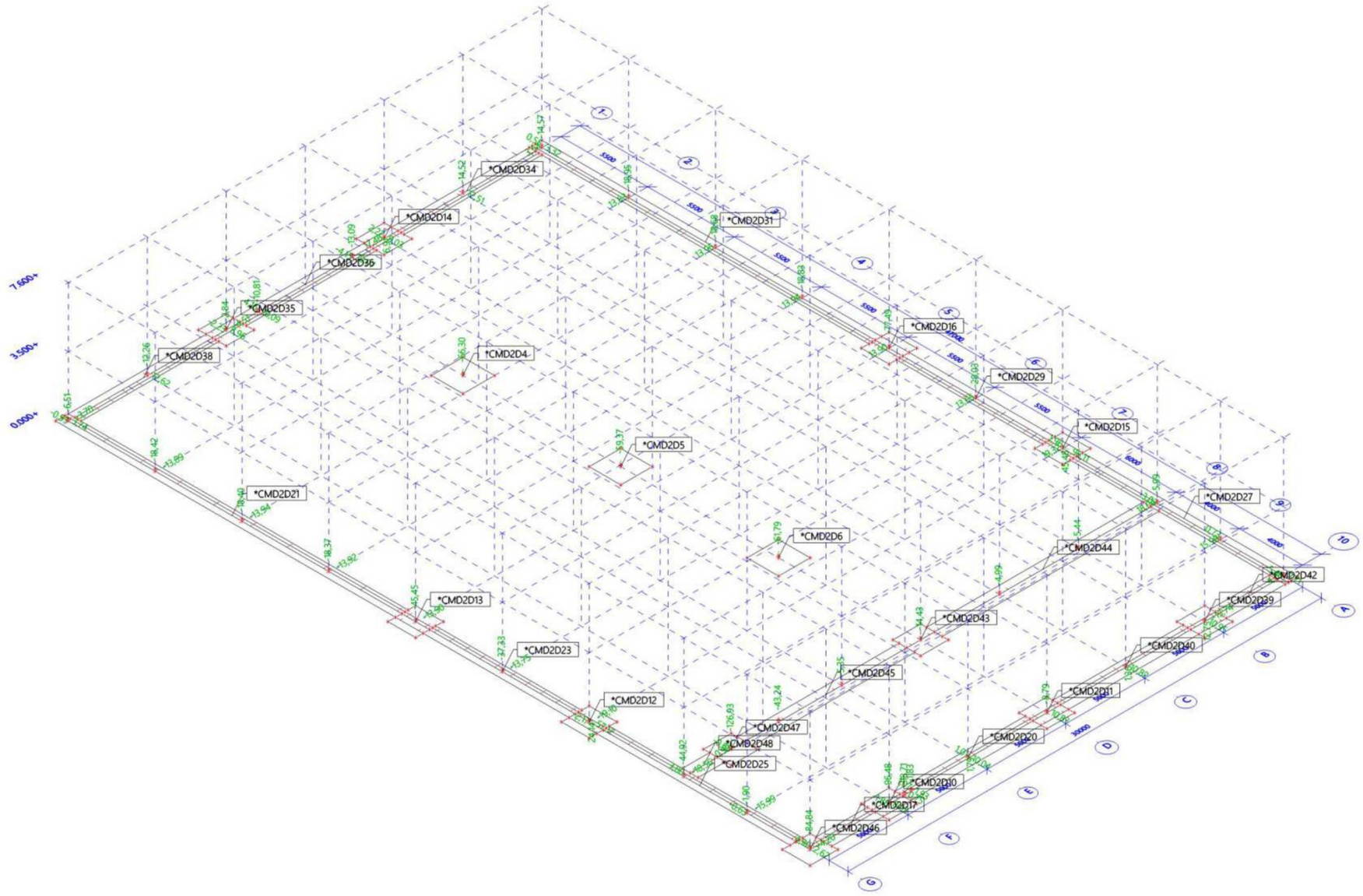
3.5.2.66. Combinaties uit bovenbouw - BG66

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG66	NC_ULS-Set B (auto)66	Variable	LG2	Short	None
	Standard	Static			



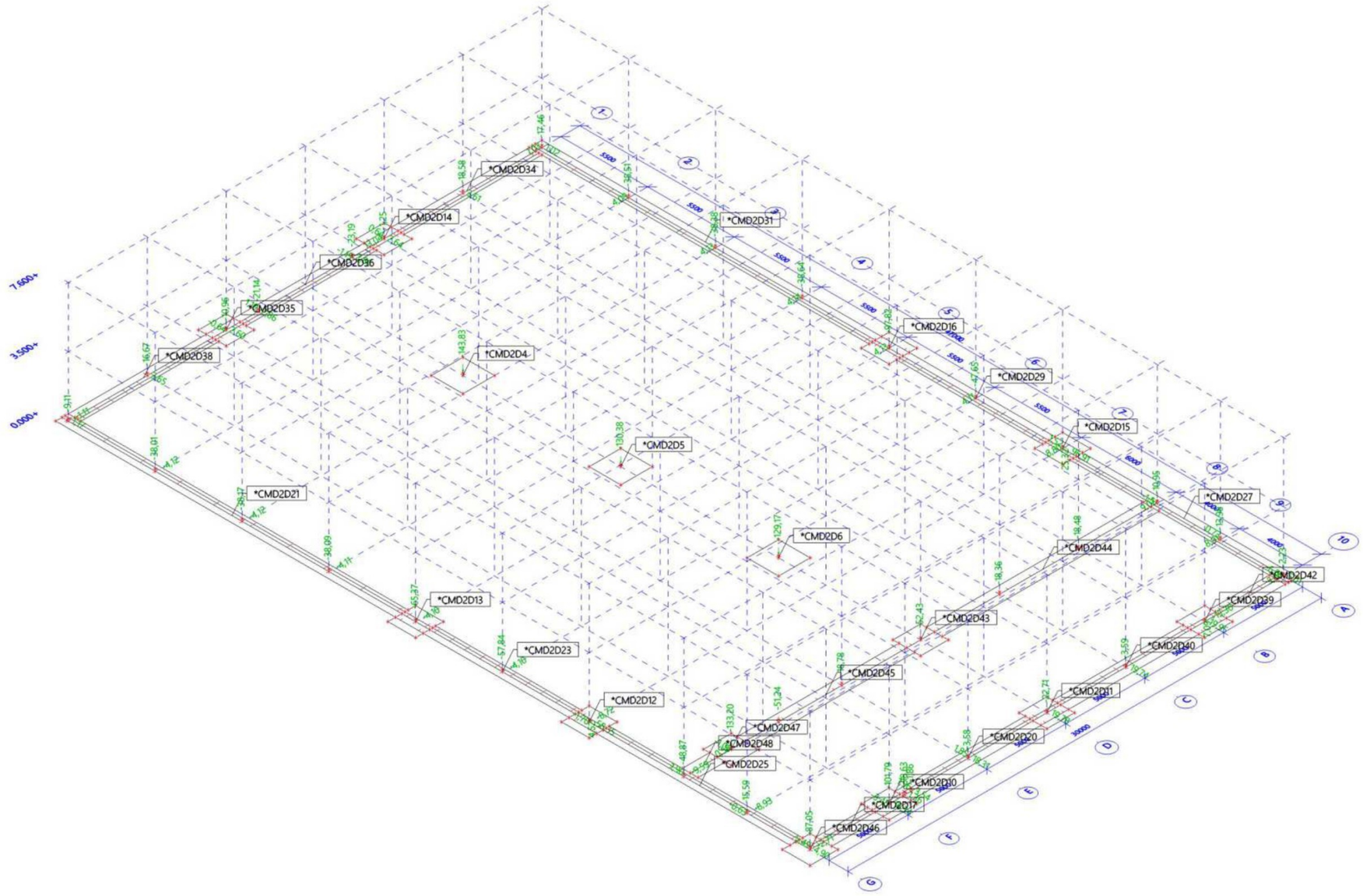
3.5.2.67. Combinaties uit bovenbouw - BG67

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG67	NC_ULS-Set B (auto)67	Variable	LG2	Short	None
	Standard	Static			



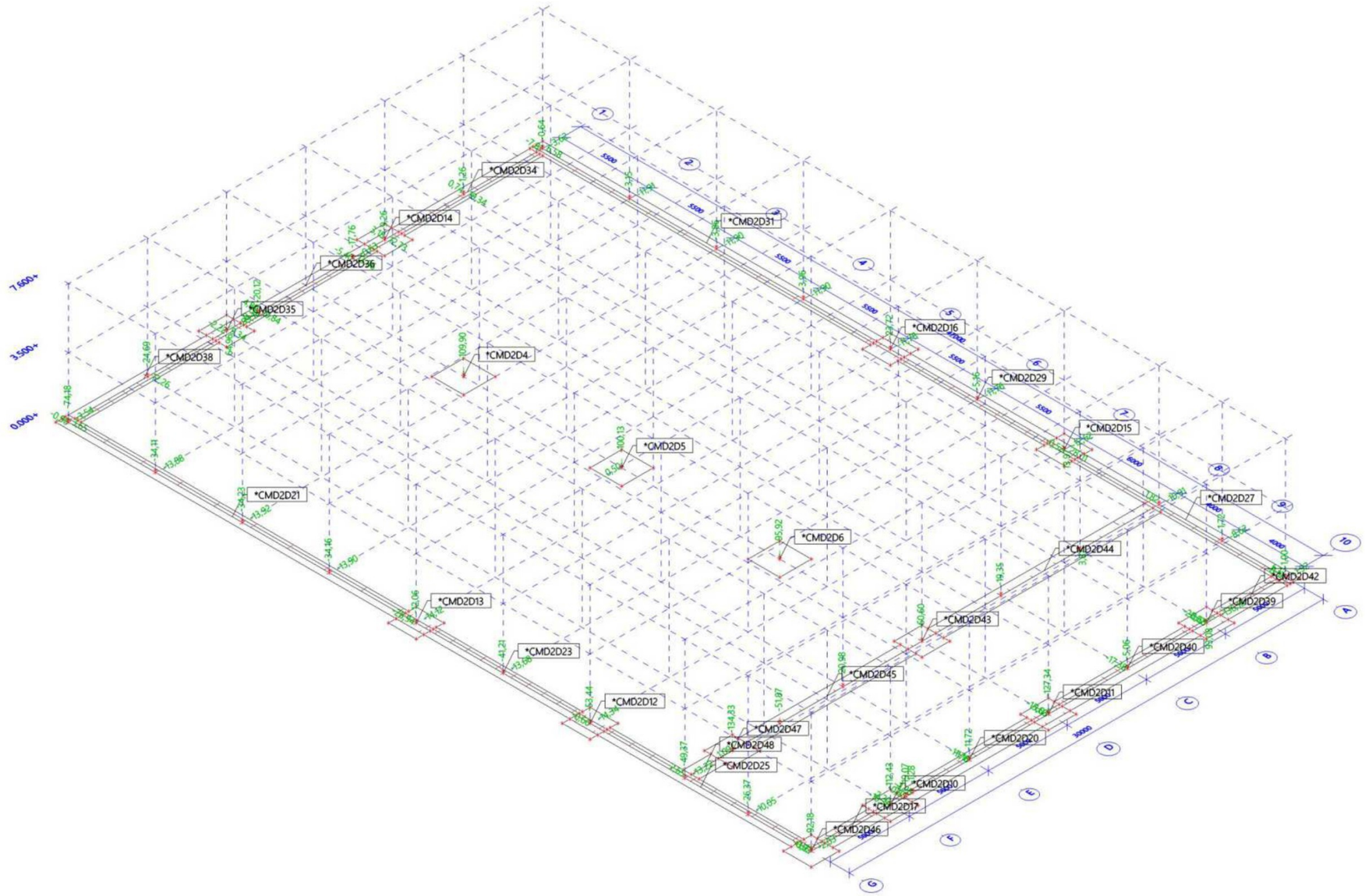
3.5.2.68. Combinaties uit bovenbouw - BG68

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG68	NC_ULS-Set B (auto)68	Variable	LG2	Short	None
	Standard	Static			



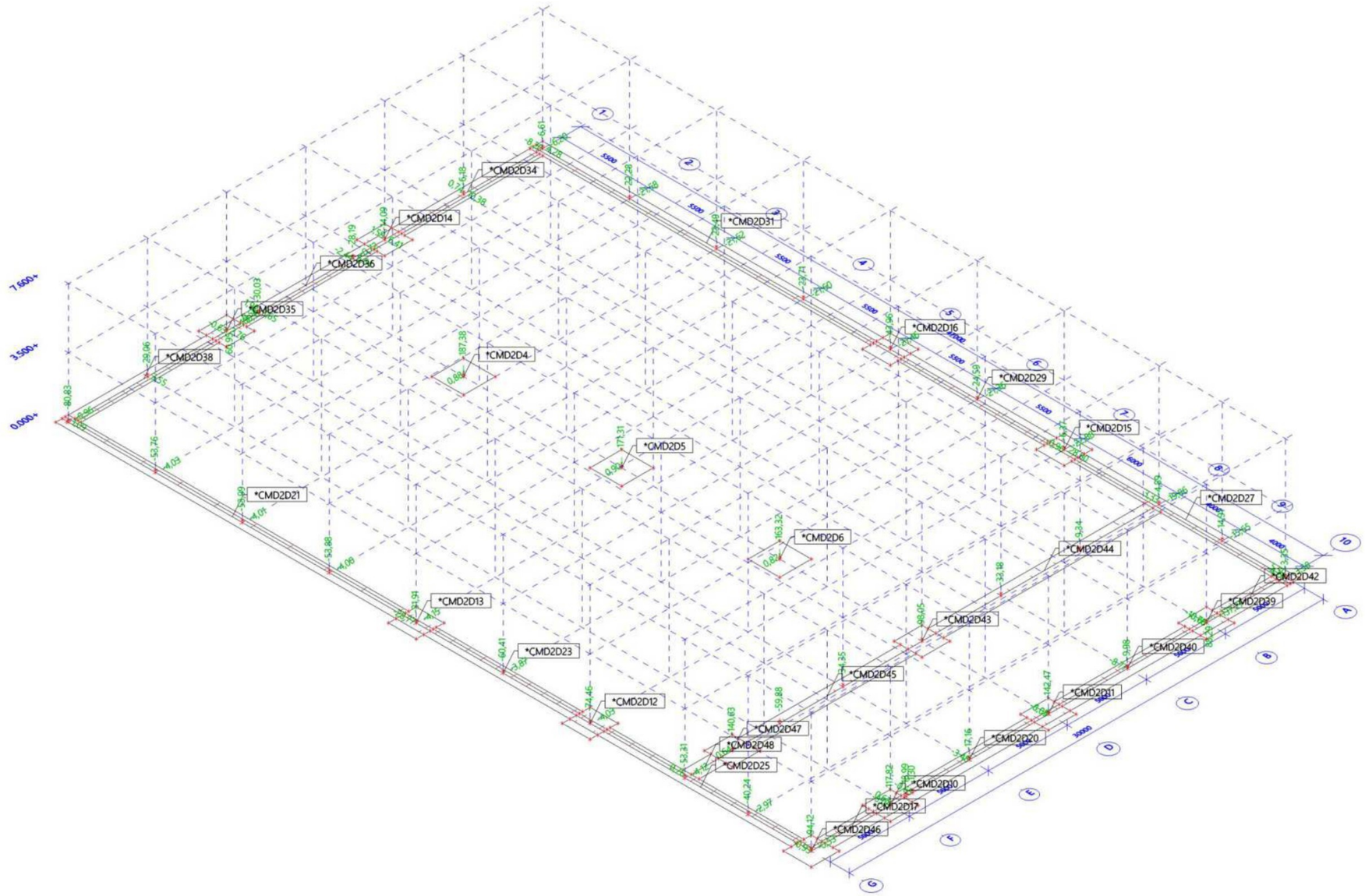
3.5.2.69. Combinaties uit bovenbouw - BG69

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG69	NC_ULS-Set B (auto)69	Variable	LG2	Short	None
	Standard	Static			



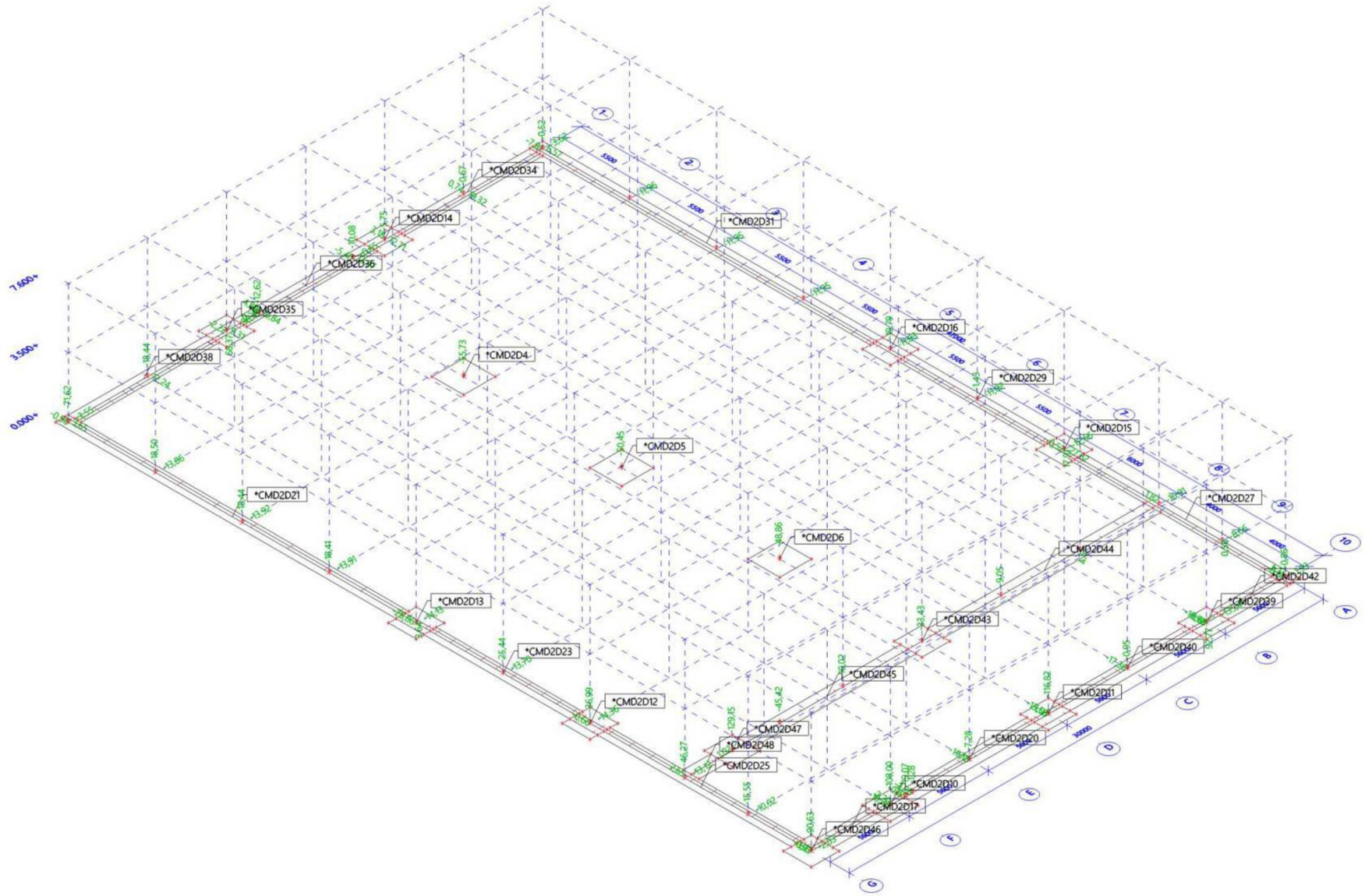
3.5.2.70. Combinaties uit bovenbouw - BG70

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG70	NC_ULS-Set B (auto)70	Variable	LG2	Short	None
	Standard	Static			



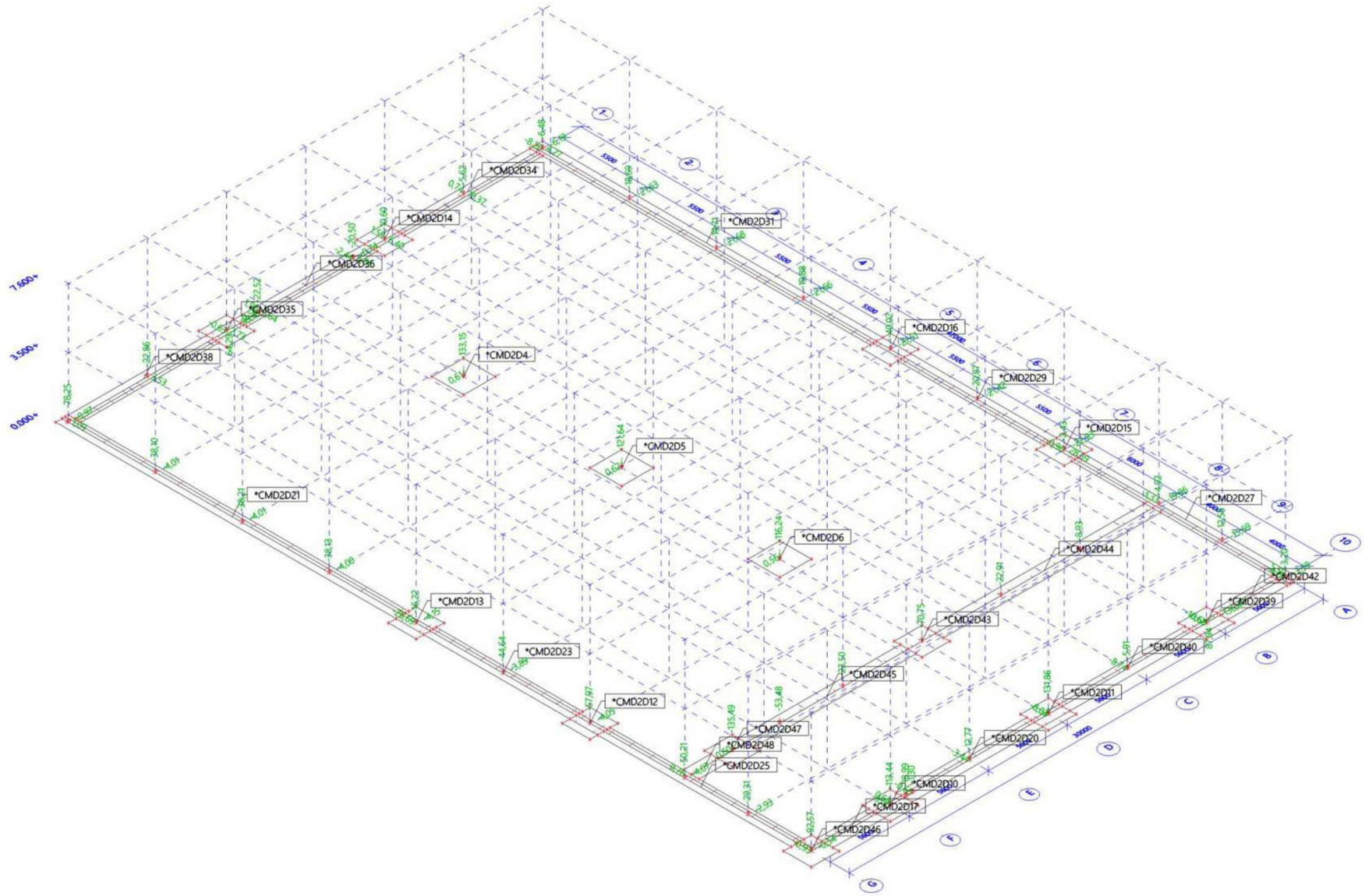
3.5.2.71. Combinaties uit bovenbouw - BG71

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG71	NC_ULS-Set B (auto)71	Variable	LG2	Short	None
	Standard	Static			



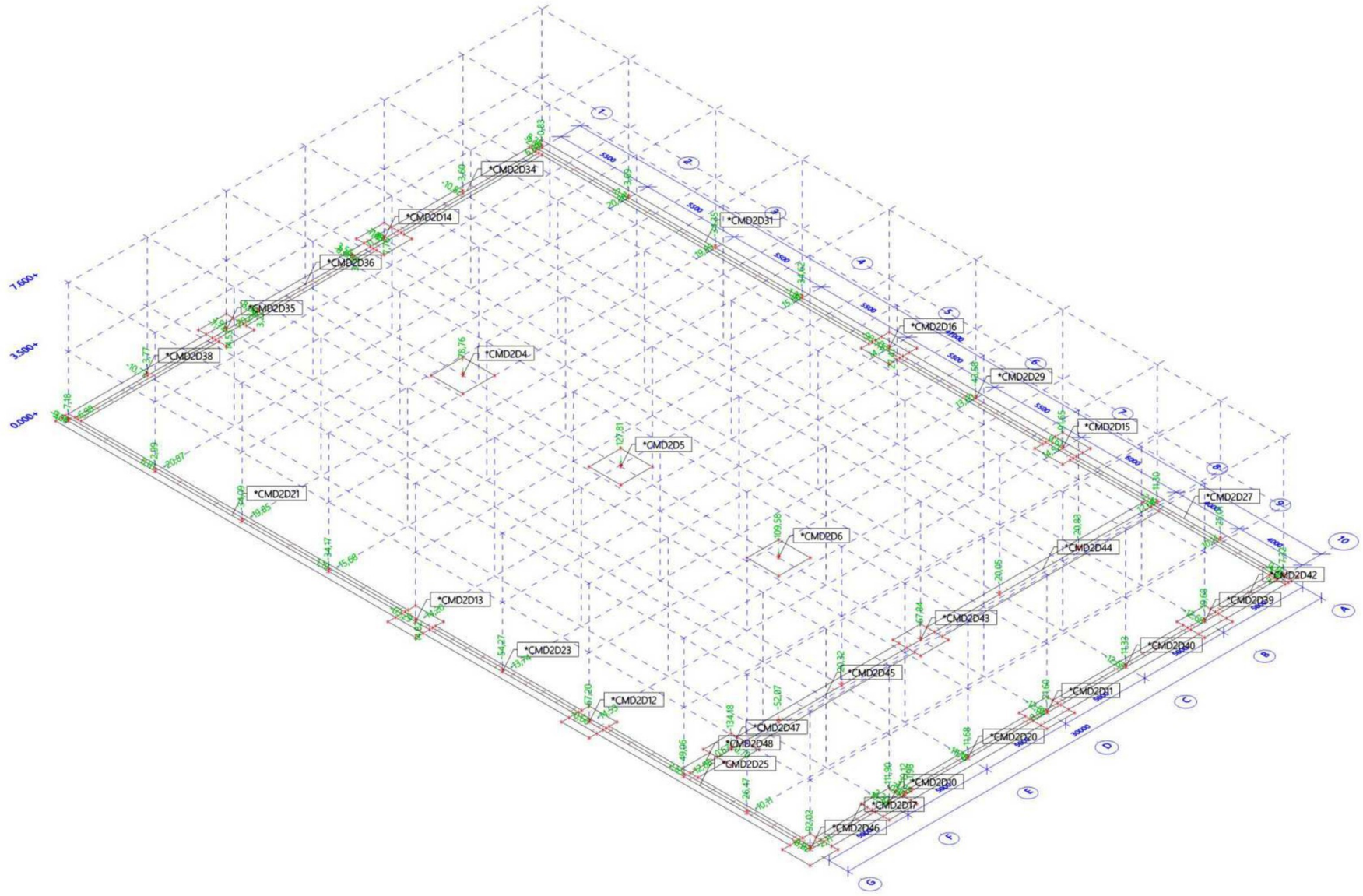
3.5.2.72. Combinaties uit bovenbouw - BG72

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG72	NC_ULS-Set B (auto)72	Variable	LG2	Short	None
	Standard	Static			



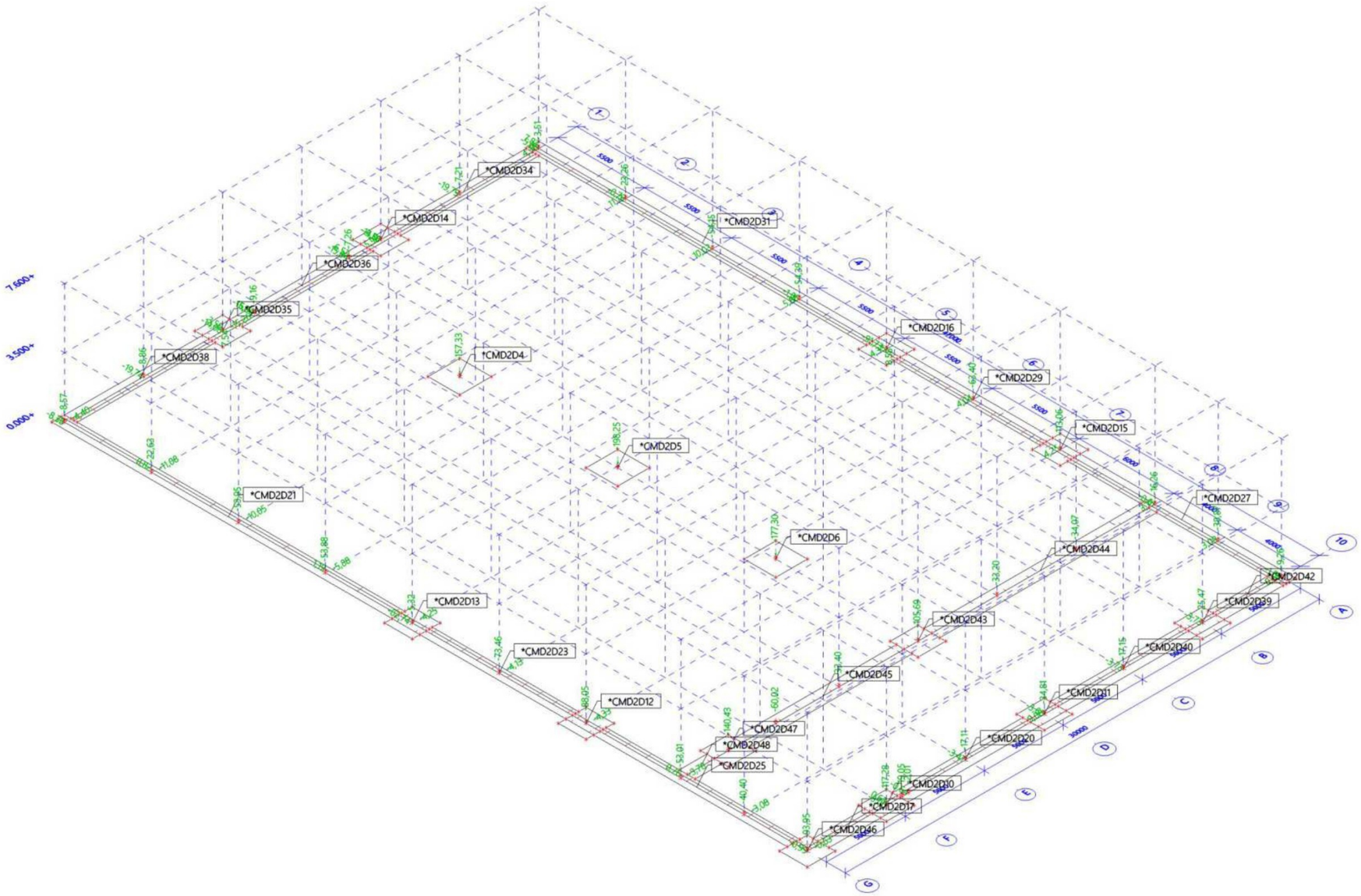
3.5.2.73. Combinaties uit bovenbouw - BG73

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG73	NC_ULS-Set B (auto)73	Variable	LG2	Short	None
	Standard	Static			



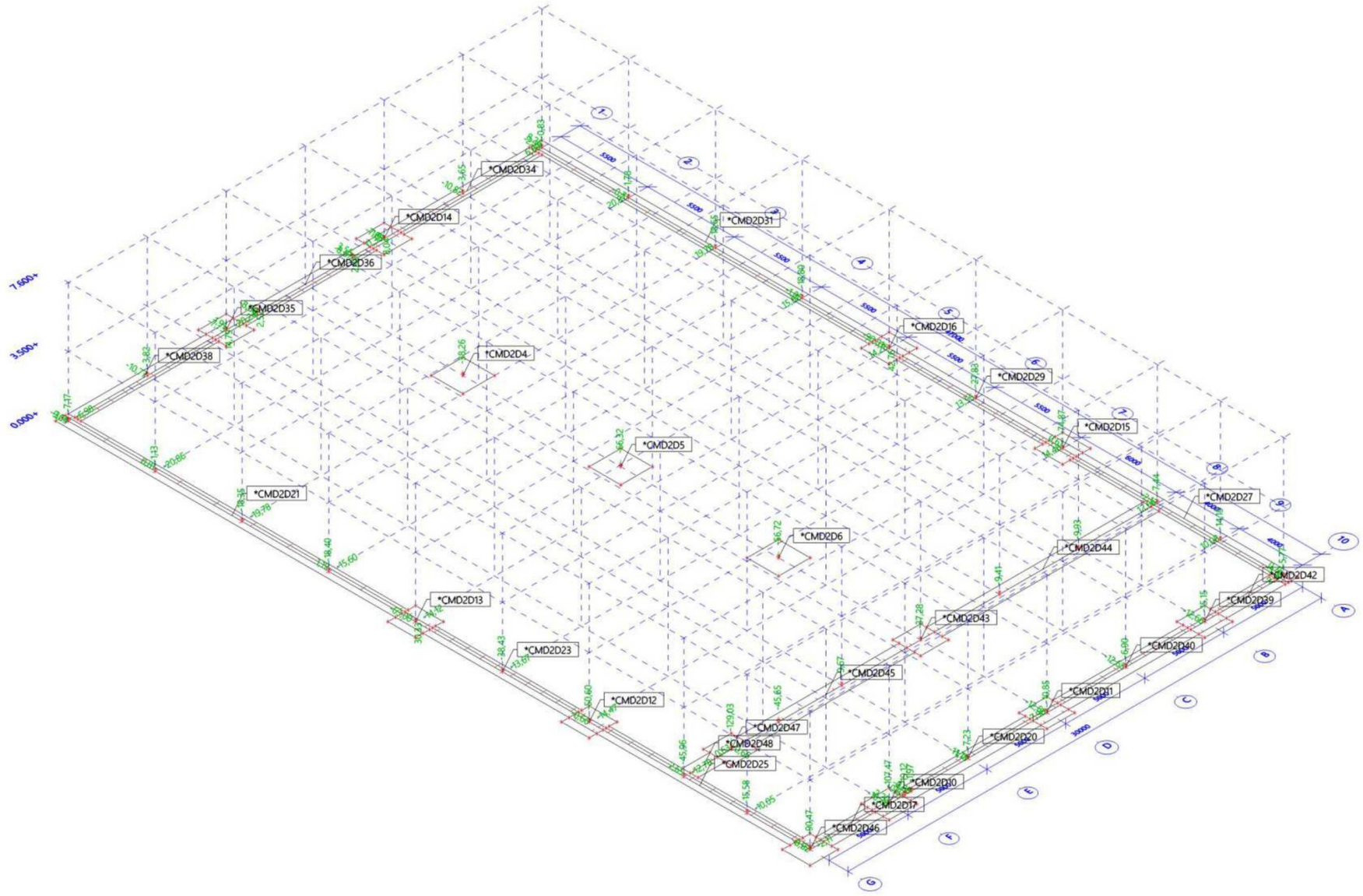
3.5.2.74. Combinaties uit bovenbouw - BG74

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG74	NC_ULS-Set B (auto)74	Variable	LG2	Short	None
	Standard	Static			



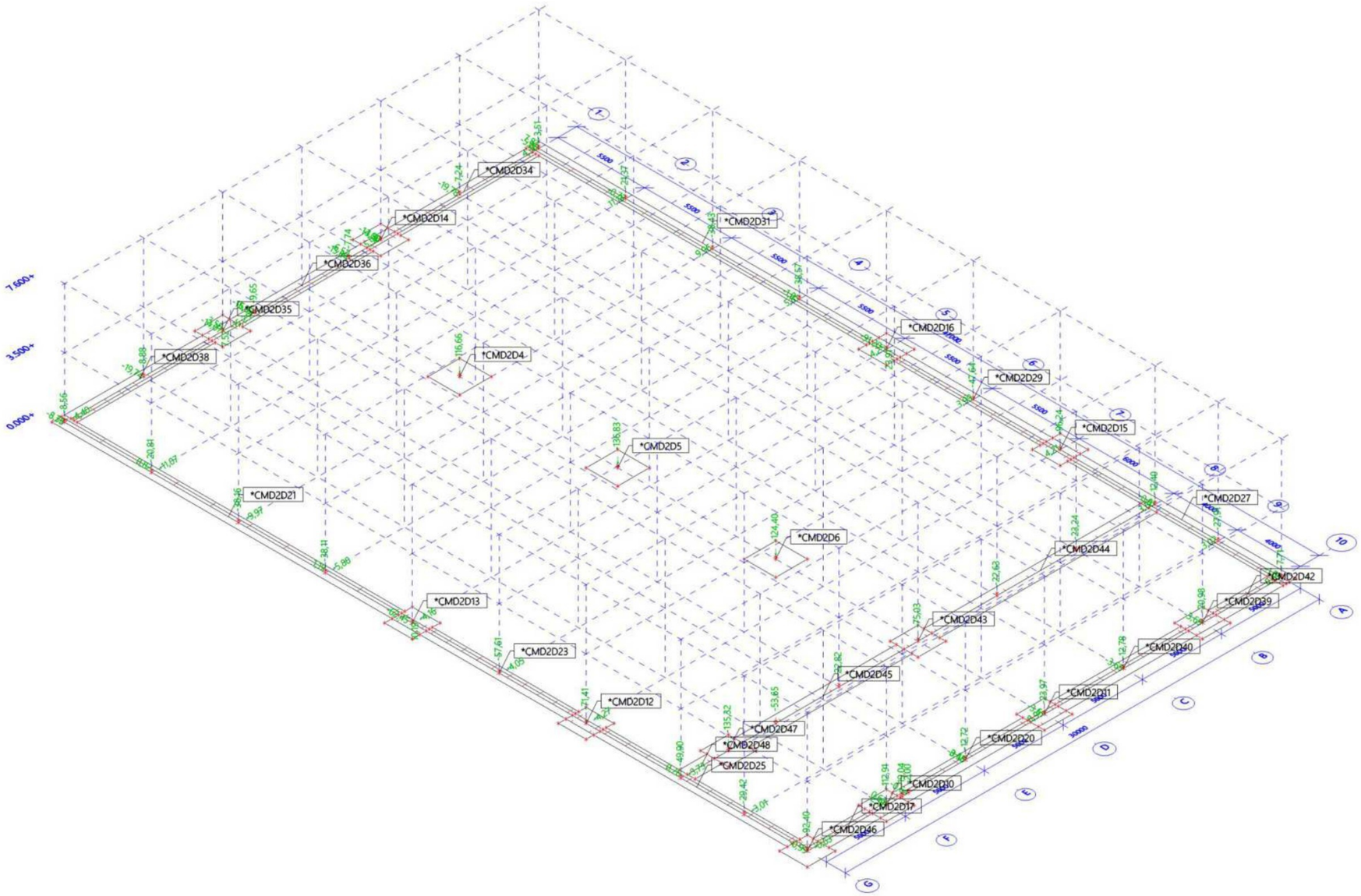
3.5.2.75. Combinaties uit bovenbouw - BG75

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG75	NC_ULS-Set B (auto)75	Variable	LG2	Short	None
	Standard	Static			



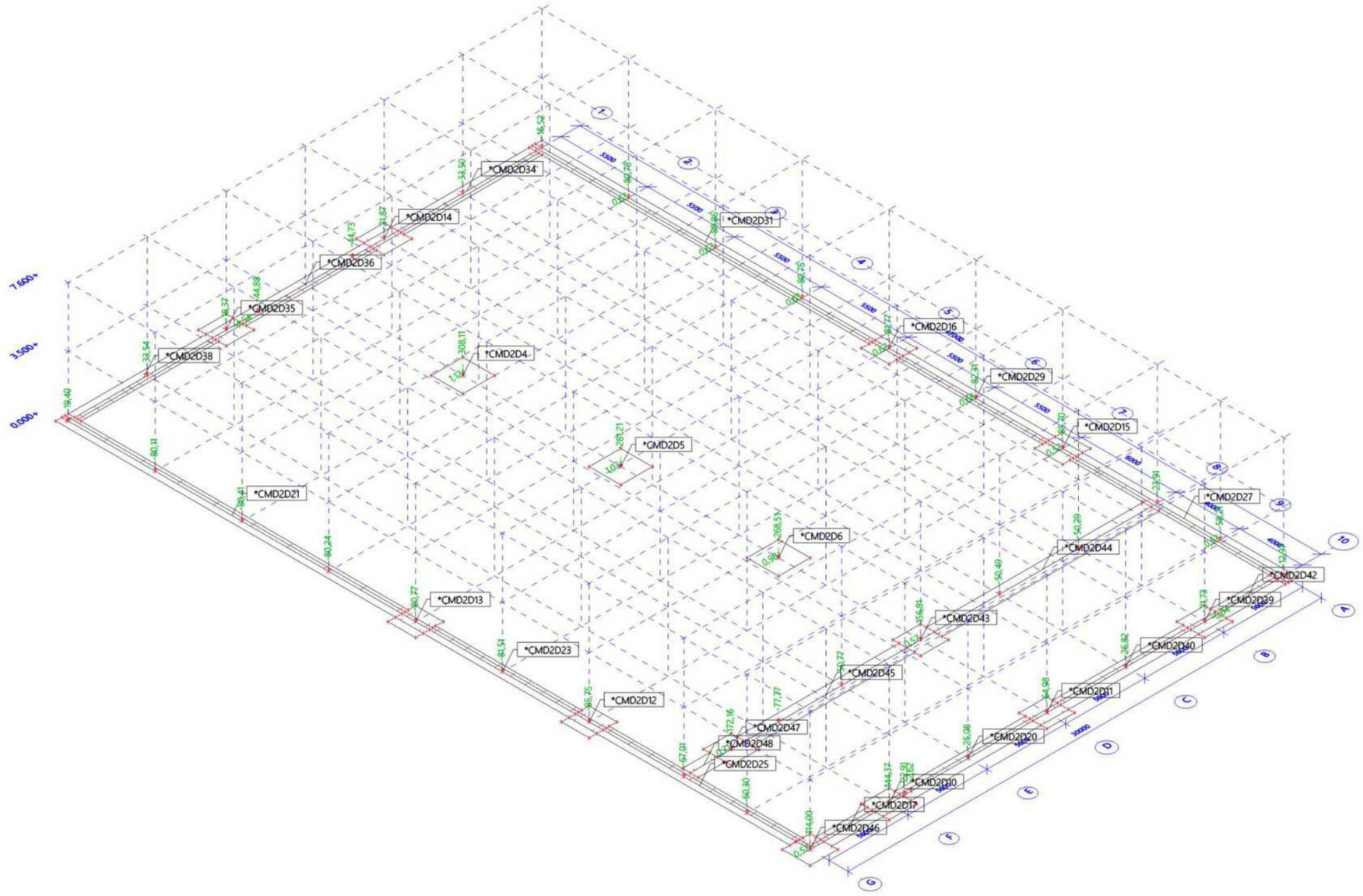
3.5.2.76. Combinaties uit bovenbouw - BG76

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG76	NC_ULS-Set B (auto)76	Variable	LG2	Short	None
	Standard	Static			



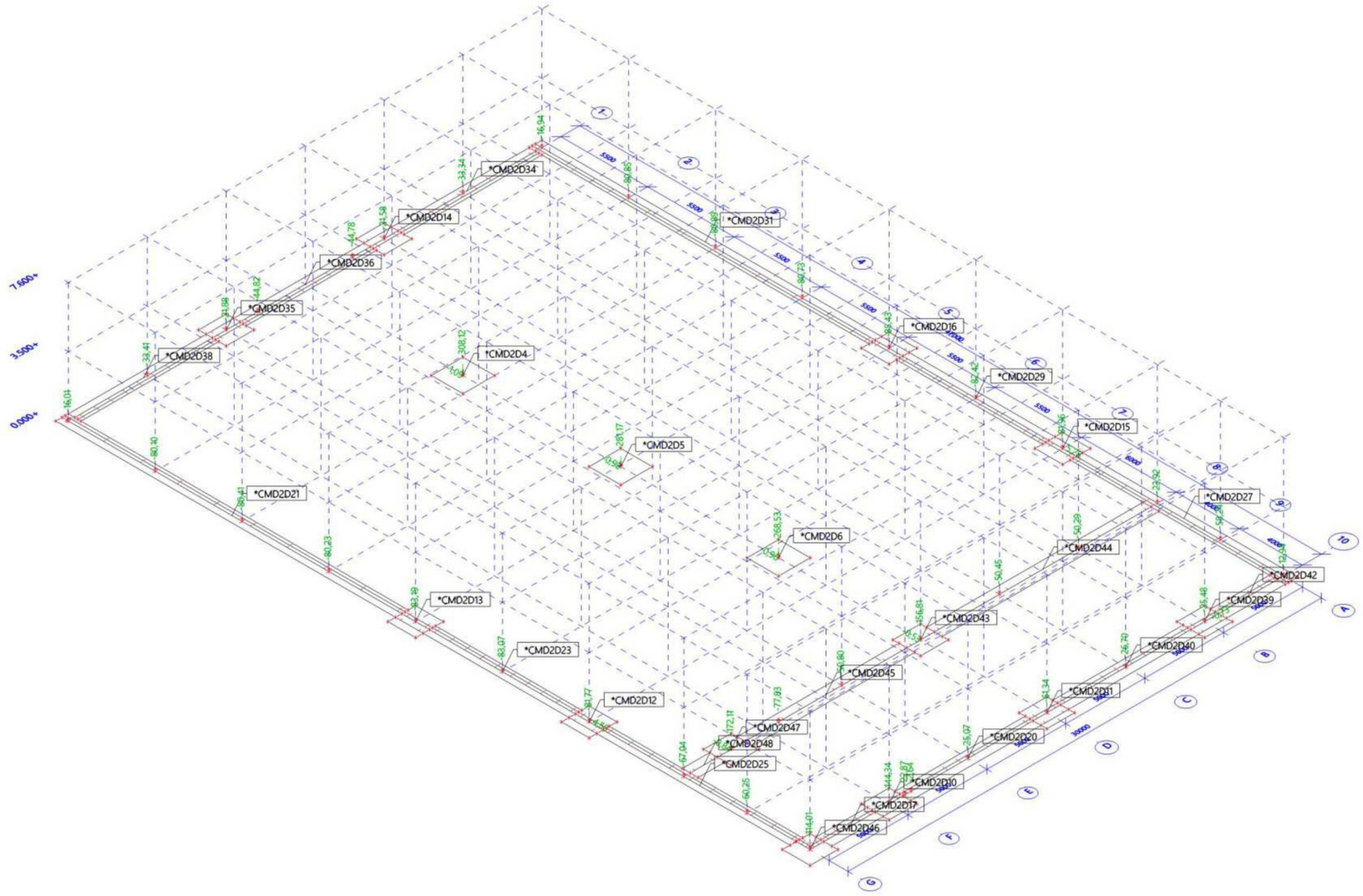
3.5.2.77. Combinaties uit bovenbouw - BG77

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG77	NC_ULS-Set B (auto)77	Variable	LG2	Short	None
	Standard	Static			



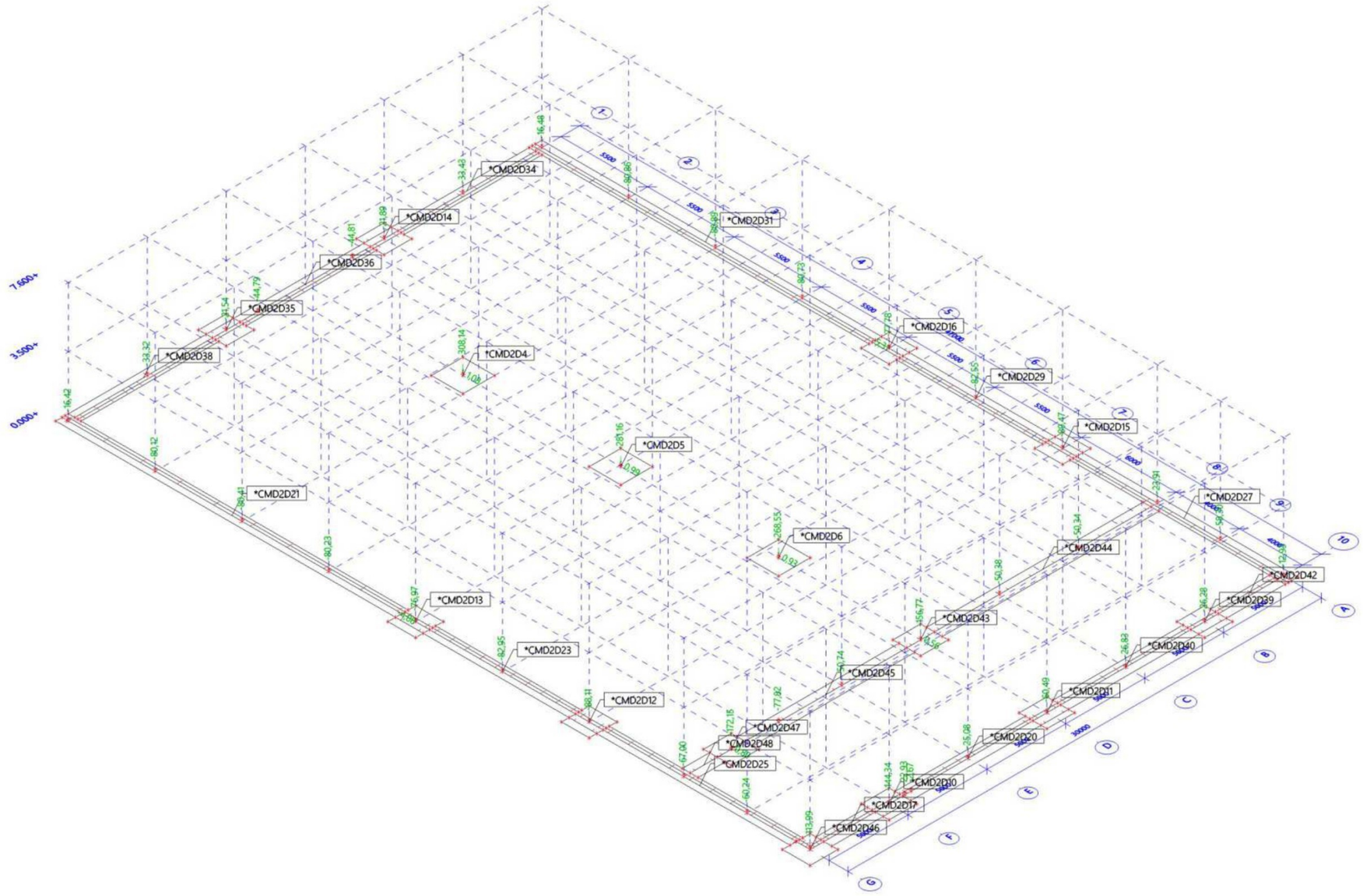
3.5.2.78. Combinaties uit bovenbouw - BG78

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG78	NC_ULS-Set B (auto)78	Variable	LG2	Short	None
	Standard	Static			



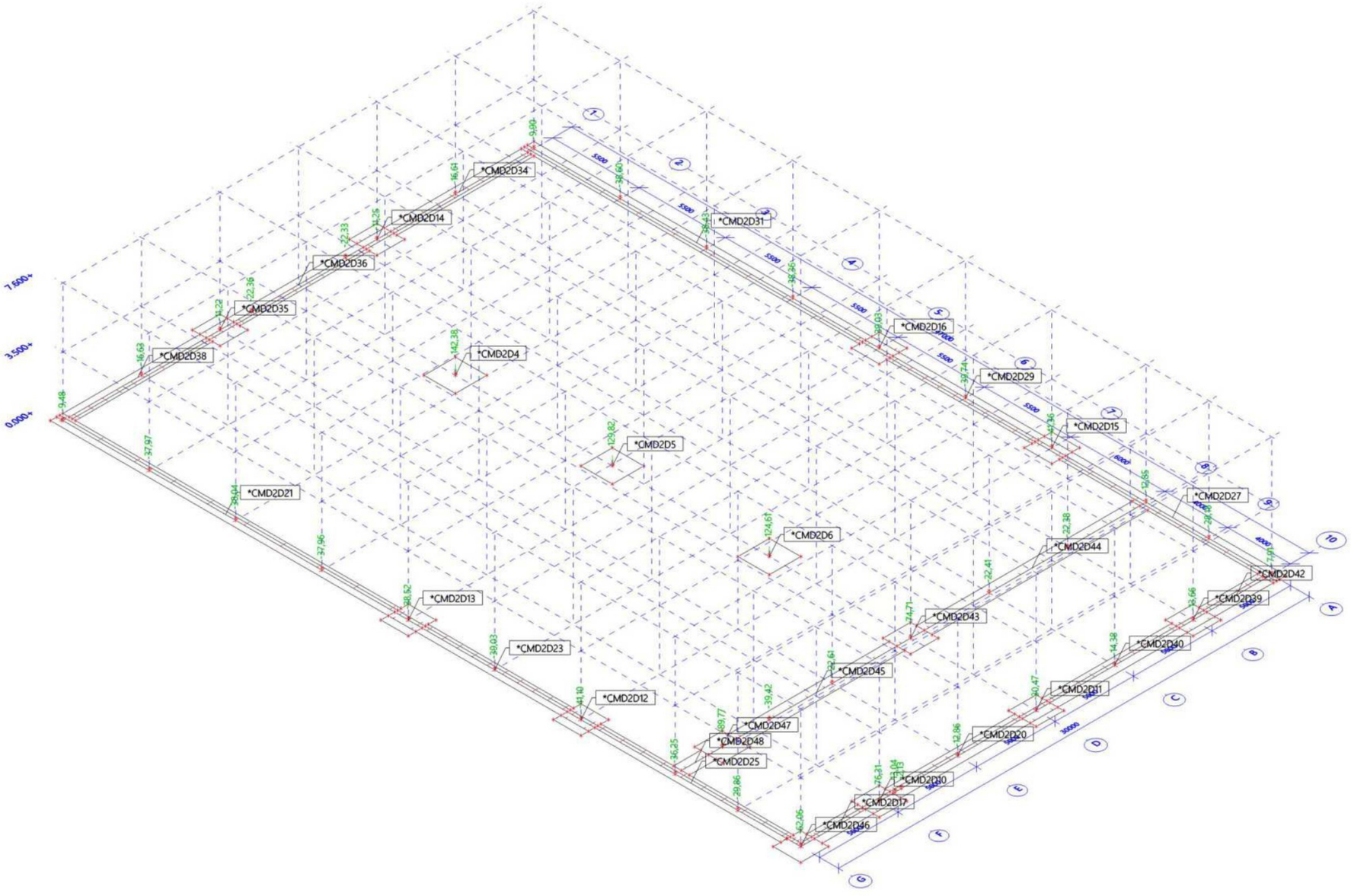
3.5.2.79. Combinaties uit bovenbouw - BG79

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG79	NC_ULS-Set B (auto)79	Variable	LG2	Short	None
	Standard	Static			



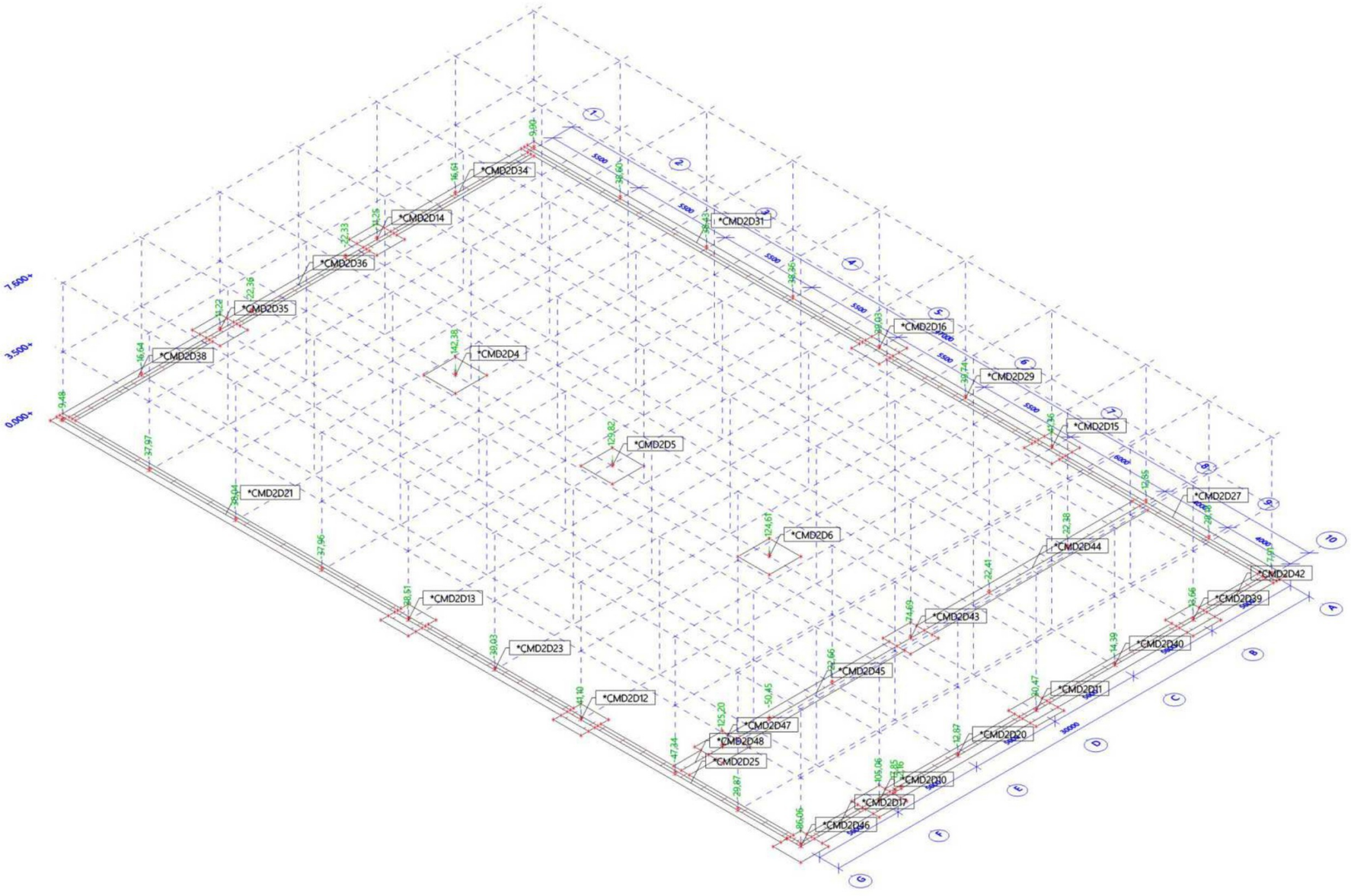
3.5.2.80. Combinaties uit bovenbouw - BG80

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG80	NC_SLS-Quasi 1	Variable	LG2	Short	None
	Standard	Static			



3.5.2.81. Combinaties uit bovenbouw - BG81

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
BG81	NC_SLS-Quasi 2	Variable	LG2	Short	None
	Standard	Static			



3.6. Belastingen onderbouw

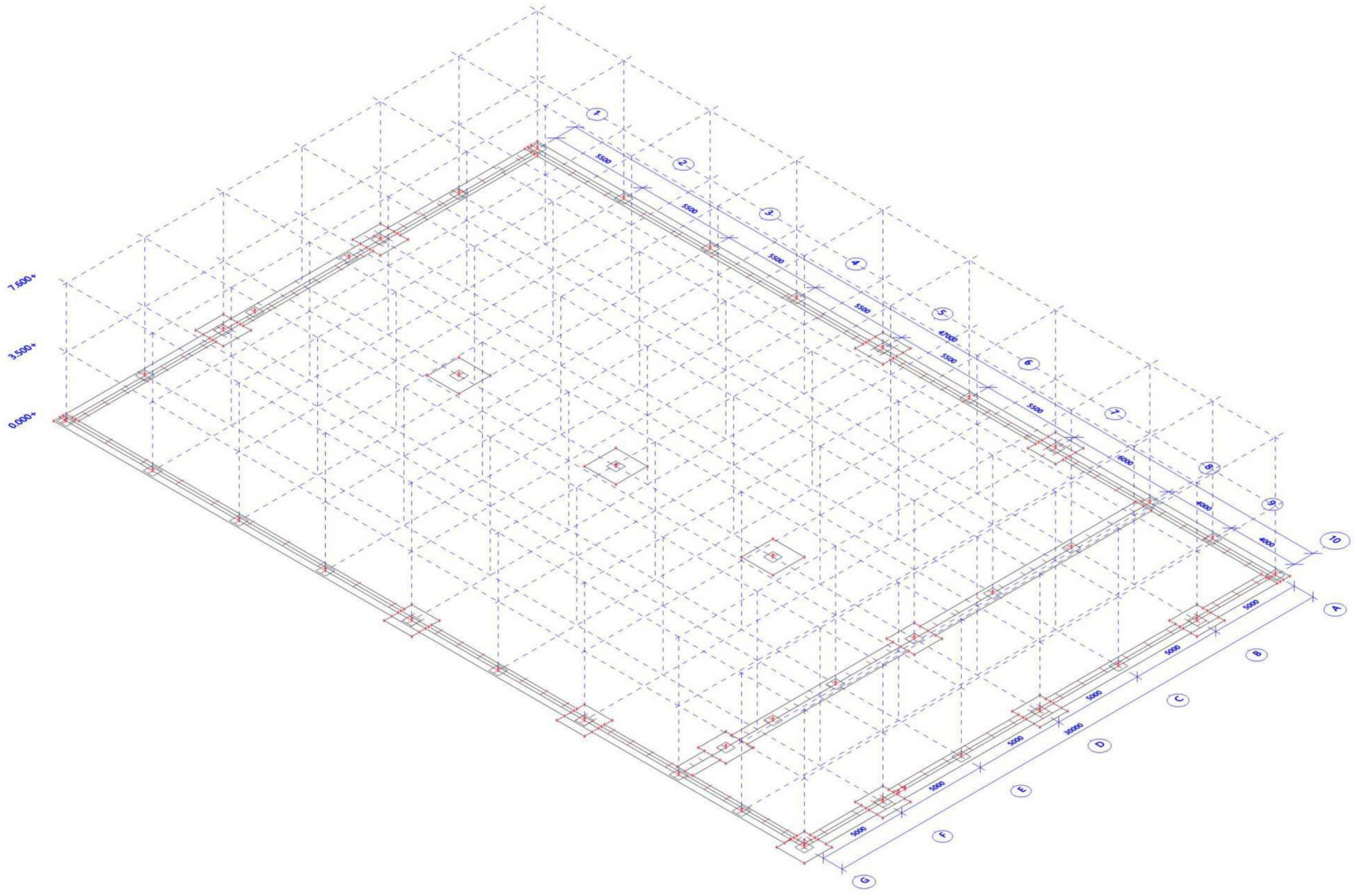
3.6.1. Combinaties onderbouw

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
LC1	Self weight	Permanent	LG1	-Z		
		Self weight				
LC2	Permanent	Permanent	LG1			
		Standard				
LC3	Veranderlijk	Variable	LG3		Short	None
	Standard	Static				

3.6.2. Combinaties onderbouw

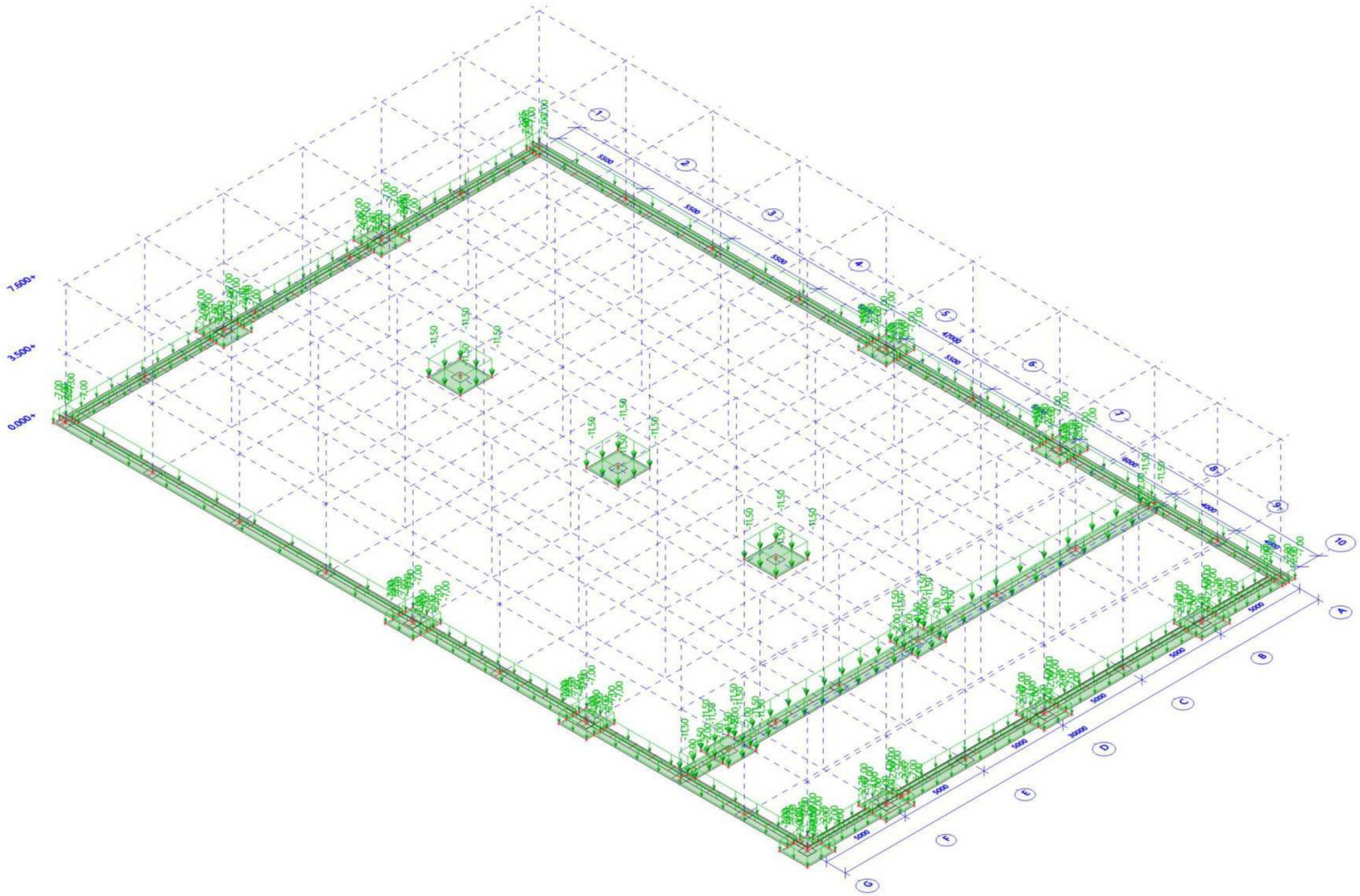
3.6.2.1. Combinaties onderbouw - LC1

Name	Description	Action type	Load group	Direction
	Spec	Load type		
LC1	Self weight	Permanent	LG1	-Z
		Self weight		


7.600+
3.500+
0.000+
1
2
3
4
5
6
7
5500
5500
5500
5500
47000
5500
5500
6000
4000
4000
10
A
B
C
D
E
F
G
5000
5000
5000
5000
5000
30000

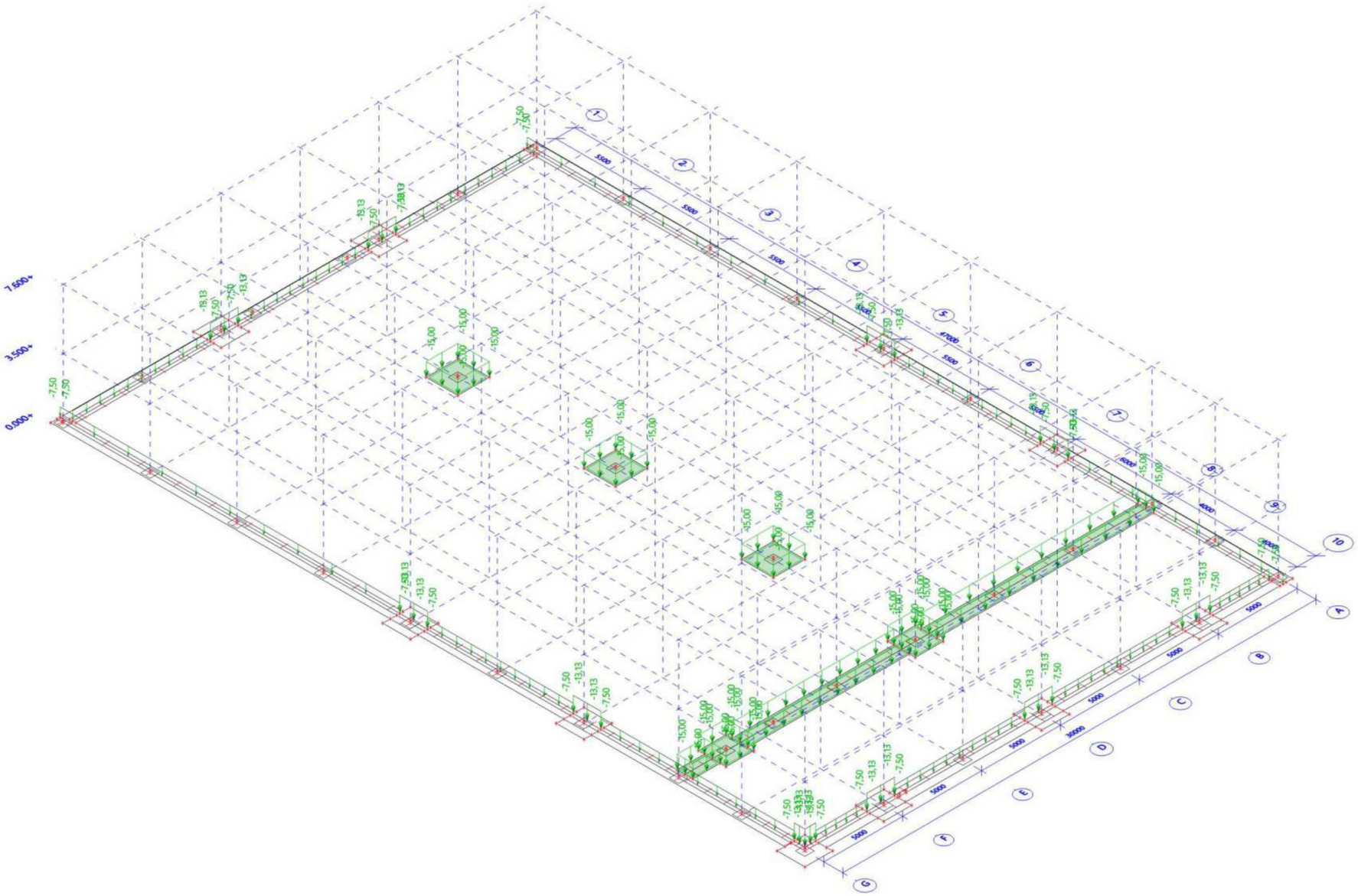
3.6.2.2. Combinaties onderbouw - LC2

Name	Description	Action type	Load group
	Spec	Load type	
LC2	Permanent	Permanent	LG1
		Standard	



3.6.2.3. Combinaties onderbouw - LC3

Name	Description	Action type	Load group	Duration	Master load case
	Spec	Load type			
LC3	Veranderlijk	Variable	LG3	Short	None
	Standard	Static			



4. Grondspanning

4.1. 2D contact stresses

Linear calculation
Class: All ULS Linear
Extreme: Member
Selection: All
Location: In centres. System: LCS mesh element

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
S5	Element: 397	14,950 37,050 0,000	1.2G + 1.5Q + 1.0BG/1	**-0,3**	0,0	103,4
S5	Element: 398	15,050 37,050 0,000	1.2G + 1.5Q + 1.0BG/2	**0,3**	0,0	103,4
S5	Element: 397	14,950 37,050 0,000	1.2G + 1.5Q + 1.0BG/3	0,0	**0,3**	103,4
S5	Element: 1	14,150 37,850 0,000	0.9G + 1.0BG/4	0,0	0,0	**17,0**
S5	Element: 397	14,950 37,050 0,000	1.2G + 1.5Q + 1.0BG/5	0,0	**-0,3**	**125,9**
S6	Element: 798	15,050 27,050 0,000	1.2G + 1.5Q + 1.0BG/6	**-0,3**	0,0	77,9
S6	Element: 797	14,950 27,050 0,000	1.2G + 1.5Q + 1.0BG/7	**0,3**	0,0	77,7
S6	Element: 797	14,950 27,050 0,000	1.2G + 1.5Q + 1.0BG/8	0,0	**-0,2**	96,4
S6	Element: 797	14,950 27,050 0,000	1.2G + 1.5Q + 1.0BG/3	0,0	**0,2**	96,4
S6	Element: 401	14,150 27,850 0,000	0.9G + 1.0BG/4	0,0	0,0	**17,0**
S6	Element: 799	15,050 26,950 0,000	1.2G + 1.5Q + 1.0BG/9	-0,3	0,0	**118,9**
S7	Element: 1197	14,950 17,050 0,000	1.2G + 1.5Q + 1.0BG/6	**-0,3**	0,0	75,3
S7	Element: 1197	14,950 17,050 0,000	1.2G + 1.5Q + 1.0BG/7	**0,2**	0,0	75,4
S7	Element: 1197	14,950 17,050 0,000	1.2G + 1.5Q + 1.0BG/3	0,0	**0,2**	93,1
S7	Element: 801	14,150 17,850 0,000	0.9G + 1.0BG/4	0,0	0,0	**17,0**
S7	Element: 1197	14,950 17,050 0,000	1.2G + 1.5Q + 1.0BG/5	0,0	**-0,2**	**115,6**
S11	Element: 1202	4,271 0,828 0,000	1.2G + 1.5Q + 1.0BG/10	**-3,6**	1,3	44,4
S11	Element: 1524	4,174 -0,828 0,000	1.2G + 1.5Q + 1.0BG/11	**3,4**	1,6	46,9
S11	Element: 1363	5,826 -0,050	1.2G + 1.5Q + 1.0BG/12	0,3	**-3,0**	48,7

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
		0,000				
S11	Element: 1363	5,826 -0,050 0,000	1.2G + 1.5Q + 1.0BG/13	-3,3	**2,0**	39,8
S11	Element: 1456	5,826 -0,828 0,000	0.9G + 1.0BG/4	0,0	0,0	**13,7**
S11	Element: 1213	5,340 0,828 0,000	1.2G + 1.5Q + 1.0BG/14	0,0	0,0	**80,9**
S12	Element: 1780	15,826 -0,828 0,000	1.2G + 1.5Q + 1.0BG/7	**-3,6**	1,2	11,8
S12	Element: 1780	15,826 -0,828 0,000	1.2G + 1.5Q + 1.0BG/6	**3,5**	1,3	46,1
S12	Element: 1668	15,049 0,050 0,000	1.2G + 1.5Q + 1.0BG/15	0,3	**-3,7**	25,9
S12	Element: 1525	14,174 0,828 0,000	1.2G + 1.5Q + 1.0BG/10	-3,4	**3,0**	9,7
S12	Element: 1742	14,757 -0,050 0,000	0.9G + 1.0BG/16	-3,5	3,0	**-0,3**
S12	Element: 1534	15,049 0,828 0,000	1.2G + 1.5Q + 1.0BG/17	3,4	1,3	**77,0**
S13	Element: 2172	0,828 13,174 0,000	1.2G + 1.5Q + 1.0BG/18	**-1,7**	-1,7	21,8
S13	Element: 1934	-0,828 13,174 0,000	1.2G + 1.5Q + 1.0BG/19	**1,6**	-1,7	34,6
S13	Element: 1940	-0,250 14,826 0,000	1.2G + 1.5Q + 1.0BG/20	-1,3	**-2,3**	19,4
S13	Element: 2047	0,250 14,826 0,000	1.2G + 1.5Q + 1.0BG/21	-0,3	**3,3**	23,9
S13	Element: 1934	-0,828 13,174 0,000	0.9G + 1.0BG/16	-0,5	1,5	**7,4**
S13	Element: 2116	0,828 13,951 0,000	1.2G + 1.5Q + 1.0BG/22	1,3	-0,6	**72,1**
S14	Element: 2248	-0,828 24,368 0,000	1.2G + 1.5Q + 1.0BG/12	**-1,3**	-0,9	35,7
S14	Element: 2258	-0,828 24,174 0,000	1.2G + 1.5Q + 1.0BG/19	**1,6**	-2,7	18,7
S14	Element: 2377	0,828 25,826 0,000	1.2G + 1.5Q + 1.0BG/19	1,5	**-2,8**	20,4
S14	Element: 2353	0,050 24,951 0,000	1.2G + 1.5Q + 1.0BG/23	-0,4	**4,2**	29,1
S14	Element: 2173	-0,828 25,826 0,000	1.2G + 1.5Q + 1.0BG/24	1,6	-2,8	**5,9**
S14	Element: 2433	0,828 25,049 0,000	1.2G + 1.5Q + 1.0BG/25	-1,3	-0,8	**73,5**
S15	Element: 2514	20,826	1.2G + 1.5Q + 1.0BG/10	**-3,8**	-2,7	8,7

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
		47,828 0,000				
S15	Element: 2499	19,368 47,828 0,000	1.2G + 1.5Q + 1.0BG/6	**3,4**	-1,9	28,9
S15	Element: 2656	19,174 47,250 0,000	1.2G + 1.5Q + 1.0BG/26	3,2	**-3,7**	26,4
S15	Element: 2658	19,174 47,050 0,000	1.2G + 1.5Q + 1.0BG/27	0,2	**4,3**	22,2
S15	Element: 2677	19,951 46,950 0,000	0.9G + 1.0BG/16	-3,6	-2,8	**0,9**
S15	Element: 2820	19,174 46,172 0,000	1.2G + 1.5Q + 1.0BG/5	0,0	0,0	**67,3**
S16	Element: 2940	29,172 13,174 0,000	1.2G + 1.5Q + 1.0BG/18	**-2,6**	1,6	16,8
S16	Element: 3144	30,828 13,174 0,000	1.2G + 1.5Q + 1.0BG/19	**2,1**	1,7	40,4
S16	Element: 2827	29,750 14,826 0,000	1.2G + 1.5Q + 1.0BG/28	-0,4	**-3,3**	23,8
S16	Element: 2985	30,250 14,826 0,000	1.2G + 1.5Q + 1.0BG/18	-2,2	**2,2**	18,2
S16	Element: 3144	30,828 13,174 0,000	0.9G + 1.0BG/29	-2,0	1,6	**4,4**
S16	Element: 2884	29,172 13,951 0,000	1.2G + 1.5Q + 1.0BG/22	1,9	0,7	**77,6**
S17	Element: 3378	30,350 24,174 0,000	1.2G + 1.5Q + 1.0BG/12	**-2,1**	0,9	43,8
S17	Element: 3383	30,828 25,826 0,000	1.2G + 1.5Q + 1.0BG/30	**2,2**	0,9	15,6
S17	Element: 3290	29,950 24,951 0,000	1.2G + 1.5Q + 1.0BG/31	-0,5	**-4,1**	30,4
S17	Element: 3145	29,172 25,826 0,000	1.2G + 1.5Q + 1.0BG/32	2,1	**2,8**	17,4
S17	Element: 3383	30,828 25,826 0,000	1.2G + 1.5Q + 1.0BG/24	2,2	2,8	**2,9**
S17	Element: 3201	29,172 25,049 0,000	1.2G + 1.5Q + 1.0BG/25	-2,0	0,8	**80,7**
S18	Element: 3702	4,076 0,450 0,000	1.2G + 1.5Q + 1.0BG/7	**-3,5**	0,5	44,5
S18	Element: 3629	0,924 -0,450 0,000	1.2G + 1.5Q + 1.0BG/11	**3,4**	0,8	40,1
S18	Element: 3469	4,076 -0,450 0,000	1.2G + 1.5Q + 1.0BG/12	0,2	**-2,5**	42,4
S18	Element: 3469	4,076 -0,450 0,000	1.2G + 1.5Q + 1.0BG/11	3,3	**1,6**	45,7

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
S18	Element: 3629	0,924 -0,450 0,000	0.9G + 1.0BG/4	0,0	0,0	**14,4**
S18	Element: 3702	4,076 0,450 0,000	1.2G + 1.5Q + 1.0BG/14	0,0	0,0	**68,3**
S21	Element: 4628	14,075 -0,450 0,000	1.2G + 1.5Q + 1.0BG/7	**-3,6**	1,3	9,9
S21	Element: 4628	14,075 -0,450 0,000	1.2G + 1.5Q + 1.0BG/6	**3,5**	1,2	45,9
S21	Element: 4624	14,076 -0,050 0,000	1.2G + 1.5Q + 1.0BG/15	0,3	**-3,7**	24,4
S21	Element: 3824	11,590 0,450 0,000	1.2G + 1.5Q + 1.0BG/33	-3,4	**3,1**	21,6
S21	Element: 4628	14,075 -0,450 0,000	0.9G + 1.0BG/16	-3,5	3,0	**0,7**
S21	Element: 3881	5,925 0,450 0,000	1.2G + 1.5Q + 1.0BG/14	0,0	0,0	**74,2**
S22	Element: 5329	-0,350 43,446 0,000	1.2G + 1.5Q + 1.0BG/18	**-1,4**	-1,1	24,9
S22	Element: 6348	0,350 47,350 0,000	1.2G + 1.5Q + 1.0BG/34	**1,6**	-0,1	25,3
S22	Element: 5697	0,050 36,347 0,000	1.2G + 1.5Q + 1.0BG/32	1,4	**-4,6**	40,6
S22	Element: 5036	-0,050 36,048 0,000	1.2G + 1.5Q + 1.0BG/23	-0,4	**5,1**	28,5
S22	Element: 4629	-0,350 25,925 0,000	0.9G + 1.0BG/35	1,5	-2,8	**8,0**
S22	Element: 5485	-0,350 47,350 0,000	1.2G + 1.5Q + 1.0BG/6	0,6	-3,6	**100,8**
S24	Element: 6912	0,350 14,925 0,000	1.2G + 1.5Q + 1.0BG/18	**-1,5**	-2,3	22,8
S24	Element: 6700	-0,350 24,075 0,000	1.2G + 1.5Q + 1.0BG/19	**1,5**	-2,7	19,8
S24	Element: 6514	-0,059 19,500 0,000	1.2G + 1.5Q + 1.0BG/36	-1,3	**-3,1**	50,9
S24	Element: 6861	0,030 19,552 0,000	1.2G + 1.5Q + 1.0BG/23	-0,4	**4,5**	32,4
S24	Element: 6700	-0,350 24,075 0,000	0.9G + 1.0BG/35	1,5	-2,7	**10,2**
S24	Element: 7004	0,350 19,500 0,000	1.2G + 1.5Q + 1.0BG/25	-1,4	-1,0	**87,4**
S26	Element: 8068	0,350 12,473 0,000	1.2G + 1.5Q + 1.0BG/18	**-1,6**	-1,4	20,5
S26	Element: 7105	-0,350 12,278	1.2G + 1.5Q + 1.0BG/19	**1,5**	-1,4	29,1

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
		0,000				
S26	Element: 7588	-0,050 0,892 0,000	1.2G + 1.5Q + 1.0BG/6	0,4	**-3,0**	39,8
S26	Element: 7584	-0,050 1,259 0,000	1.2G + 1.5Q + 1.0BG/10	-0,2	**3,5**	33,8
S26	Element: 7097	-0,350 13,075 0,000	0.9G + 1.0BG/29	-1,3	-1,6	**9,2**
S26	Element: 7898	0,350 3,995 0,000	1.2G + 1.5Q + 1.0BG/37	0,0	0,0	**69,9**
S28	Element: 8898	29,650 13,075 0,000	1.2G + 1.5Q + 1.0BG/18	**-2,4**	1,6	16,2
S28	Element: 8101	30,350 12,574 0,000	1.2G + 1.5Q + 1.0BG/19	**2,0**	1,5	36,2
S28	Element: 9146	29,650 0,651 0,000	1.2G + 1.5Q + 1.0BG/11	-0,3	**-3,8**	22,7
S28	Element: 8621	30,350 -0,450 0,000	1.2G + 1.5Q + 1.0BG/10	0,3	**3,5**	23,1
S28	Element: 8081	30,350 13,075 0,000	0.9G + 1.0BG/29	-2,2	1,6	**4,8**
S28	Element: 9080	29,650 3,952 0,000	1.2G + 1.5Q + 1.0BG/5	0,1	0,0	**70,2**
S30	Element: 9916	29,650 14,925 0,000	1.2G + 1.5Q + 1.0BG/18	**-2,4**	2,3	19,4
S30	Element: 9517	30,350 24,075 0,000	1.2G + 1.5Q + 1.0BG/30	**2,2**	0,8	20,8
S30	Element: 9682	29,970 19,552 0,000	1.2G + 1.5Q + 1.0BG/31	-0,5	**-4,5**	30,8
S30	Element: 9334	30,059 19,500 0,000	1.2G + 1.5Q + 1.0BG/36	-2,2	**3,1**	46,4
S30	Element: 9520	30,350 14,925 0,000	0.9G + 1.0BG/29	-2,2	2,3	**8,2**
S30	Element: 9824	29,650 19,500 0,000	1.2G + 1.5Q + 1.0BG/5	0,1	0,0	**86,1**
S32	Element: 9917	30,350 25,925 0,000	1.2G + 1.5Q + 1.0BG/12	**-2,1**	0,8	43,2
S32	Element: 9917	30,350 25,925 0,000	1.2G + 1.5Q + 1.0BG/30	**2,2**	0,9	17,4
S32	Element: 10663	30,050 36,048 0,000	1.2G + 1.5Q + 1.0BG/28	-0,5	**-5,1**	28,6
S32	Element: 11001	29,950 36,147 0,000	1.2G + 1.5Q + 1.0BG/19	2,0	**4,6**	41,8
S32	Element: 9917	30,350 25,925 0,000	0.9G + 1.0BG/35	2,2	2,8	**5,1**
S32	Element: 10131	30,350	1.2G + 1.5Q + 1.0BG/7	0,6	3,7	**103,5**

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
		47,350 0,000				
S35	Element: 12084	27,144 47,350 0,000	1.2G + 1.5Q + 1.0BG/10	**-3,7**	-1,0	25,8
S35	Element: 11695	26,742 46,650 0,000	1.2G + 1.5Q + 1.0BG/11	**3,4**	-2,1	22,3
S35	Element: 12332	20,925 47,350 0,000	1.2G + 1.5Q + 1.0BG/38	3,2	**-3,6**	21,5
S35	Element: 12221	23,641 47,050 0,000	1.2G + 1.5Q + 1.0BG/39	0,2	**4,2**	21,6
S35	Element: 11637	20,925 46,650 0,000	0.9G + 1.0BG/16	-3,6	-2,7	**3,4**
S35	Element: 11988	29,550 47,350 0,000	1.2G + 1.5Q + 1.0BG/40	-3,7	0,3	**81,5**
S36	Element: 12348	10,632 47,828 0,000	1.2G + 1.5Q + 1.0BG/7	**-3,4**	-1,9	28,9
S36	Element: 12333	9,174 47,828 0,000	1.2G + 1.5Q + 1.0BG/11	**3,7**	-2,7	9,0
S36	Element: 12424	10,826 47,250 0,000	1.2G + 1.5Q + 1.0BG/33	-3,3	**-3,8**	28,8
S36	Element: 12424	10,826 47,250 0,000	1.2G + 1.5Q + 1.0BG/27	0,3	**4,3**	19,1
S36	Element: 12511	10,049 46,950 0,000	0.9G + 1.0BG/41	3,5	-2,8	**1,4**
S36	Element: 12537	10,826 46,172 0,000	1.2G + 1.5Q + 1.0BG/42	0,0	0,0	**67,3**
S37	Element: 12985	19,075 47,350 0,000	1.2G + 1.5Q + 1.0BG/10	**-3,7**	-3,0	12,9
S37	Element: 12657	10,925 47,350 0,000	1.2G + 1.5Q + 1.0BG/11	**3,6**	-3,0	13,2
S37	Element: 13007	11,840 46,950 0,000	1.2G + 1.5Q + 1.0BG/10	-3,4	**-3,8**	32,5
S37	Element: 12728	12,636 47,050 0,000	1.2G + 1.5Q + 1.0BG/39	0,3	**4,4**	23,1
S37	Element: 13320	19,075 46,650 0,000	0.9G + 1.0BG/16	-3,5	-3,0	**3,1**
S37	Element: 13178	12,018 46,650 0,000	1.2G + 1.5Q + 1.0BG/42	0,0	0,0	**65,4**
S39	Element: 13900	3,258 46,650 0,000	1.2G + 1.5Q + 1.0BG/10	**-3,4**	-2,1	22,2
S39	Element: 13383	2,856 47,350 0,000	1.2G + 1.5Q + 1.0BG/11	**3,6**	-0,9	25,7
S39	Element: 13321	9,075 47,350 0,000	1.2G + 1.5Q + 1.0BG/10	-3,3	**-3,6**	22,6

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
S39	Element: 13841	9,075 46,950 0,000	1.2G + 1.5Q + 1.0BG/39	0,3	**4,2**	20,1
S39	Element: 14016	9,075 46,650 0,000	0.9G + 1.0BG/41	3,4	-2,7	**3,8**
S39	Element: 13407	0,450 47,350 0,000	1.2G + 1.5Q + 1.0BG/43	3,6	0,3	**79,7**
S40	Element: 14272	25,826 -0,828 0,000	1.2G + 1.5Q + 1.0BG/10	**-3,5**	1,6	40,8
S40	Element: 14034	25,826 0,828 0,000	1.2G + 1.5Q + 1.0BG/11	**4,1**	1,3	3,8
S40	Element: 14107	24,174 0,350 0,000	1.2G + 1.5Q + 1.0BG/44	0,2	**-3,3**	22,0
S40	Element: 14107	24,174 0,350 0,000	1.2G + 1.5Q + 1.0BG/32	-0,2	**2,0**	25,7
S40	Element: 14158	25,146 0,050 0,000	0.9G + 1.0BG/45	3,7	1,6	**-3,5**
S40	Element: 14025	24,951 0,828 0,000	1.2G + 1.5Q + 1.0BG/40	-3,4	0,9	**69,7**
S41	Element: 14719	15,925 -0,450 0,000	1.2G + 1.5Q + 1.0BG/7	**-3,6**	1,2	13,3
S41	Element: 14928	24,075 0,450 0,000	1.2G + 1.5Q + 1.0BG/11	**3,9**	2,0	7,6
S41	Element: 14876	19,471 0,050 0,000	1.2G + 1.5Q + 1.0BG/44	0,3	**-3,7**	22,2
S41	Element: 14420	18,605 -0,450 0,000	1.2G + 1.5Q + 1.0BG/46	3,5	**3,1**	23,7
S41	Element: 14928	24,075 0,450 0,000	0.9G + 1.0BG/45	3,9	2,0	**1,5**
S41	Element: 15174	15,925 0,450 0,000	1.2G + 1.5Q + 1.0BG/43	3,4	1,3	**66,7**
S43	Element: 15211	29,550 -0,450 0,000	1.2G + 1.5Q + 1.0BG/10	**-3,5**	0,6	22,7
S43	Element: 15532	26,328 0,450 0,000	1.2G + 1.5Q + 1.0BG/11	**3,9**	1,1	6,4
S43	Element: 15175	25,925 -0,450 0,000	1.2G + 1.5Q + 1.0BG/12	0,4	**-3,0**	18,0
S43	Element: 15544	25,925 0,450 0,000	1.2G + 1.5Q + 1.0BG/32	-0,2	**1,9**	25,6
S43	Element: 15544	25,925 0,450 0,000	0.9G + 1.0BG/45	3,9	1,3	**-1,9**
S43	Element: 15544	25,925 0,450 0,000	1.2G + 1.5Q + 1.0BG/40	-3,4	0,8	**60,9**
S44	Element: 15548	14,465 8,828	1.2G + 1.5Q + 1.0BG/47	**-1,0**	0,0	34,9

Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
		0,000				
S44	Element: 15560	15,632 8,828 0,000	1.2G + 1.5Q + 1.0BG/48	**1,0**	0,0	45,6
S44	Element: 15863	14,174 7,650 0,000	1.2G + 1.5Q + 1.0BG/19	0,0	**-0,1**	39,4
S44	Element: 15617	14,174 8,450 0,000	1.2G + 1.5Q + 1.0BG/12	0,0	**0,2**	38,9
S44	Element: 15562	15,826 8,828 0,000	0.9G + 1.0BG/4	0,0	0,0	**17,8**
S44	Element: 15779	15,049 7,950 0,000	1.2G + 1.5Q + 1.0BG/42	0,0	0,1	**77,8**
S45	Element: 16638	27,947 8,450 0,000	1.2G + 1.5Q + 1.0BG/47	**-1,0**	0,4	24,5
S45	Element: 15869	29,550 7,550 0,000	1.2G + 1.5Q + 1.0BG/48	**1,1**	-0,5	23,9
S45	Element: 16558	29,550 8,450 0,000	1.2G + 1.5Q + 1.0BG/12	0,0	**-2,2**	25,8
S45	Element: 15869	29,550 7,550 0,000	1.2G + 1.5Q + 1.0BG/19	-0,1	**1,8**	25,0
S45	Element: 16104	24,842 7,550 0,000	0.9G + 1.0BG/49	1,0	-0,4	**16,2**
S45	Element: 16549	15,925 7,550 0,000	1.2G + 1.5Q + 1.0BG/42	0,0	0,0	**72,8**
S46	Element: 18268	3,925 8,450 0,000	1.2G + 1.5Q + 1.0BG/50	**-1,1**	-0,3	39,4
S46	Element: 18268	3,925 8,450 0,000	1.2G + 1.5Q + 1.0BG/38	**1,0**	0,3	39,4
S46	Element: 17749	3,925 7,550 0,000	1.2G + 1.5Q + 1.0BG/51	0,2	**-0,7**	44,4
S46	Element: 18268	3,925 8,450 0,000	1.2G + 1.5Q + 1.0BG/34	0,1	**0,6**	48,1
S46	Element: 18033	8,607 8,450 0,000	0.9G + 1.0BG/4	0,0	0,0	**17,6**
S46	Element: 17749	3,925 7,550 0,000	1.2G + 1.5Q + 1.0BG/14	0,0	0,0	**87,2**
S47	Element: 18550	0,827 0,828 0,000	1.2G + 1.5Q + 1.0BG/7	**-3,4**	-0,2	33,8
S47	Element: 18497	-0,535 -0,826 0,000	1.2G + 1.5Q + 1.0BG/11	**3,5**	0,3	54,1
S47	Element: 18385	0,826 -0,150 0,000	1.2G + 1.5Q + 1.0BG/12	0,2	**-1,6**	38,7
S47	Element: 18421	0,826 -0,349 0,000	1.2G + 1.5Q + 1.0BG/19	-0,1	**1,3**	40,7
S47	Element: 18494	-0,826	1.2G + 1.5Q + 1.0BG/52	0,0	0,0	**10,3**

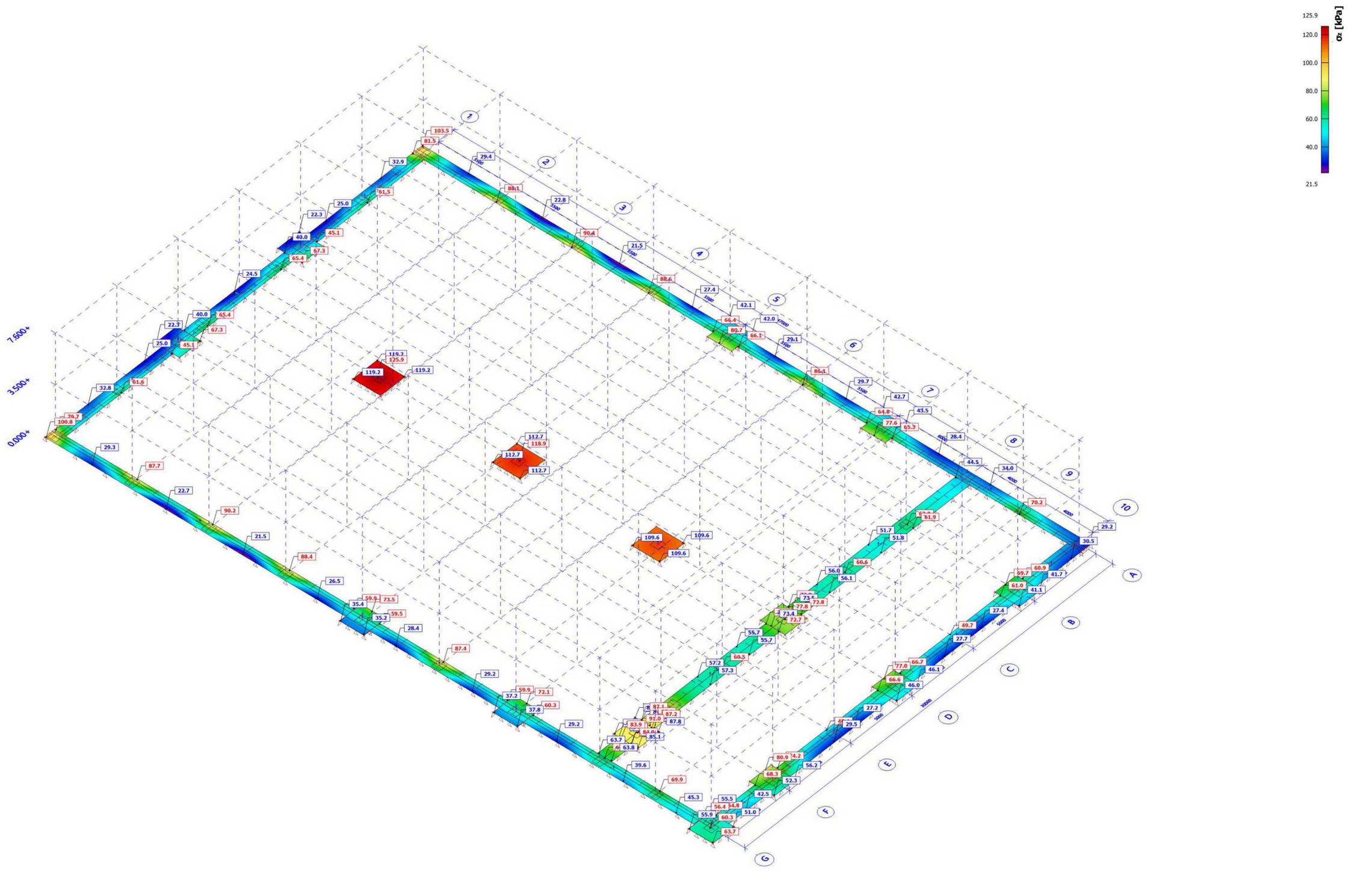
Name	Mesh	Position [m]	Case	τ_{zx} [kPa]	τ_{yz} [kPa]	σ_z [kPa]
		-0,826 0,000				
S47	Element: 18494	-0,826 -0,826 0,000	1.2G + 1.5Q + 1.0BG/53	0,0	0,0	**63,7**
S48	Element: 18596	2,465 8,828 0,000	1.2G + 1.5Q + 1.0BG/50	**-1,1**	-0,3	39,4
S48	Element: 18595	2,368 8,828 0,000	1.2G + 1.5Q + 1.0BG/38	**1,0**	0,4	38,7
S48	Element: 18909	2,174 7,850 0,000	1.2G + 1.5Q + 1.0BG/51	0,2	**-1,0**	42,8
S48	Element: 18737	2,174 8,050 0,000	1.2G + 1.5Q + 1.0BG/34	0,0	**0,9**	45,7
S48	Element: 18610	3,826 8,828 0,000	0.9G + 1.0BG/4	0,0	0,0	**18,0**
S48	Element: 18827	3,049 7,950 0,000	1.2G + 1.5Q + 1.0BG/14	0,0	0,0	**91,0**
S49	Element: 18997	0,451 7,550 0,000	1.2G + 1.5Q + 1.0BG/50	**-1,1**	-0,4	31,1
S49	Element: 19006	2,074 8,450 0,000	1.2G + 1.5Q + 1.0BG/38	**1,0**	0,4	37,8
S49	Element: 19086	0,451 8,450 0,000	1.2G + 1.5Q + 1.0BG/12	0,0	**-1,4**	42,4
S49	Element: 18997	0,451 7,550 0,000	1.2G + 1.5Q + 1.0BG/54	0,0	**1,2**	35,1
S49	Element: 19082	0,451 8,050 0,000	0.9G + 1.0BG/4	0,0	0,0	**16,5**
S49	Element: 18917	2,074 7,550 0,000	1.2G + 1.5Q + 1.0BG/14	0,0	0,0	**84,0**

Name	Combination key
1.2G + 1.5Q + 1.0BG/1	1.20*LC1 + 1.20*LC2 + BG77
1.2G + 1.5Q + 1.0BG/2	1.20*LC1 + 1.20*LC2 + BG10
1.2G + 1.5Q + 1.0BG/3	1.20*LC1 + 1.20*LC2 + BG78
0.9G + 1.0BG/4	0.90*LC1 + 0.90*LC2
1.2G + 1.5Q + 1.0BG/5	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG79
1.2G + 1.5Q + 1.0BG/6	1.20*LC1 + 1.20*LC2 + BG38
1.2G + 1.5Q + 1.0BG/7	1.20*LC1 + 1.20*LC2 + BG30
1.2G + 1.5Q + 1.0BG/8	1.20*LC1 + 1.20*LC2 + BG79
1.2G + 1.5Q + 1.0BG/9	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG77
1.2G + 1.5Q + 1.0BG/10	1.20*LC1 + 1.20*LC2 + BG29
1.2G + 1.5Q + 1.0BG/11	1.20*LC1 + 1.20*LC2 + BG37
1.2G + 1.5Q + 1.0BG/12	1.20*LC1 + 1.20*LC2 + BG34
1.2G + 1.5Q + 1.0BG/13	1.20*LC1 + 1.20*LC2 + BG15
1.2G + 1.5Q + 1.0BG/14	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG6
1.2G + 1.5Q + 1.0BG/15	1.20*LC1 + 1.20*LC2 + BG50
0.9G + 1.0BG/16	0.90*LC1 + 0.90*LC2 + BG63
1.2G + 1.5Q + 1.0BG/17	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG22
1.2G + 1.5Q + 1.0BG/18	1.20*LC1 + 1.20*LC2 + BG33
1.2G + 1.5Q + 1.0BG/19	1.20*LC1 + 1.20*LC2 + BG41
1.2G + 1.5Q + 1.0BG/20	1.20*LC1 + 1.20*LC2 + BG49
1.2G + 1.5Q + 1.0BG/21	1.20*LC1 + 1.20*LC2 + BG48
1.2G + 1.5Q + 1.0BG/22	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG42

Name	Combination key
1.2G + 1.5Q + 1.0BG/23	1.20*LC1 + 1.20*LC2 + BG64
1.2G + 1.5Q + 1.0BG/24	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG75
1.2G + 1.5Q + 1.0BG/25	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG34
1.2G + 1.5Q + 1.0BG/26	1.20*LC1 + 1.20*LC2 + BG23
1.2G + 1.5Q + 1.0BG/27	1.20*LC1 + 1.20*LC2 + BG58
1.2G + 1.5Q + 1.0BG/28	1.20*LC1 + 1.20*LC2 + BG56
0.9G + 1.0BG/29	0.90*LC1 + 0.90*LC2 + BG67
1.2G + 1.5Q + 1.0BG/30	1.20*LC1 + 1.20*LC2 + BG42
1.2G + 1.5Q + 1.0BG/31	1.20*LC1 + 1.20*LC2 + BG72
1.2G + 1.5Q + 1.0BG/32	1.20*LC1 + 1.20*LC2 + BG25
1.2G + 1.5Q + 1.0BG/33	1.20*LC1 + 1.20*LC2 + BG13
1.2G + 1.5Q + 1.0BG/34	1.20*LC1 + 1.20*LC2 + BG26
0.9G + 1.0BG/35	0.90*LC1 + 0.90*LC2 + BG75
1.2G + 1.5Q + 1.0BG/36	1.20*LC1 + 1.20*LC2 + BG17
1.2G + 1.5Q + 1.0BG/37	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG9
1.2G + 1.5Q + 1.0BG/38	1.20*LC1 + 1.20*LC2 + BG55
1.2G + 1.5Q + 1.0BG/39	1.20*LC1 + 1.20*LC2 + BG76
1.2G + 1.5Q + 1.0BG/40	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG30
0.9G + 1.0BG/41	0.90*LC1 + 0.90*LC2 + BG71
1.2G + 1.5Q + 1.0BG/42	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG78
1.2G + 1.5Q + 1.0BG/43	1.20*LC1 + 1.20*LC2 + 1.50*LC3 + BG38
1.2G + 1.5Q + 1.0BG/44	1.20*LC1 + 1.20*LC2 + BG66
0.9G + 1.0BG/45	0.90*LC1 + 0.90*LC2 + BG69
1.2G + 1.5Q + 1.0BG/46	1.20*LC1 + 1.20*LC2 + BG21
1.2G + 1.5Q + 1.0BG/47	1.20*LC1 + 1.20*LC2 + BG45
1.2G + 1.5Q + 1.0BG/48	1.20*LC1 + 1.20*LC2 + BG22
0.9G + 1.0BG/49	0.90*LC1 + 0.90*LC2 + BG55
1.2G + 1.5Q + 1.0BG/50	1.20*LC1 + 1.20*LC2 + BG46
1.2G + 1.5Q + 1.0BG/51	1.20*LC1 + 1.20*LC2 + BG19
1.2G + 1.5Q + 1.0BG/52	1.20*LC1 + 1.20*LC2 + 1.50*LC3
1.2G + 1.5Q + 1.0BG/53	1.20*LC1 + 1.20*LC2 + BG6
1.2G + 1.5Q + 1.0BG/54	1.20*LC1 + 1.20*LC2 + BG27

4.2. 2D contact stresses; σ_z

Values: σ_z
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Location: In centres. System: LCS
mesh element



5. Benodigde wapening fundering UGT en BGT

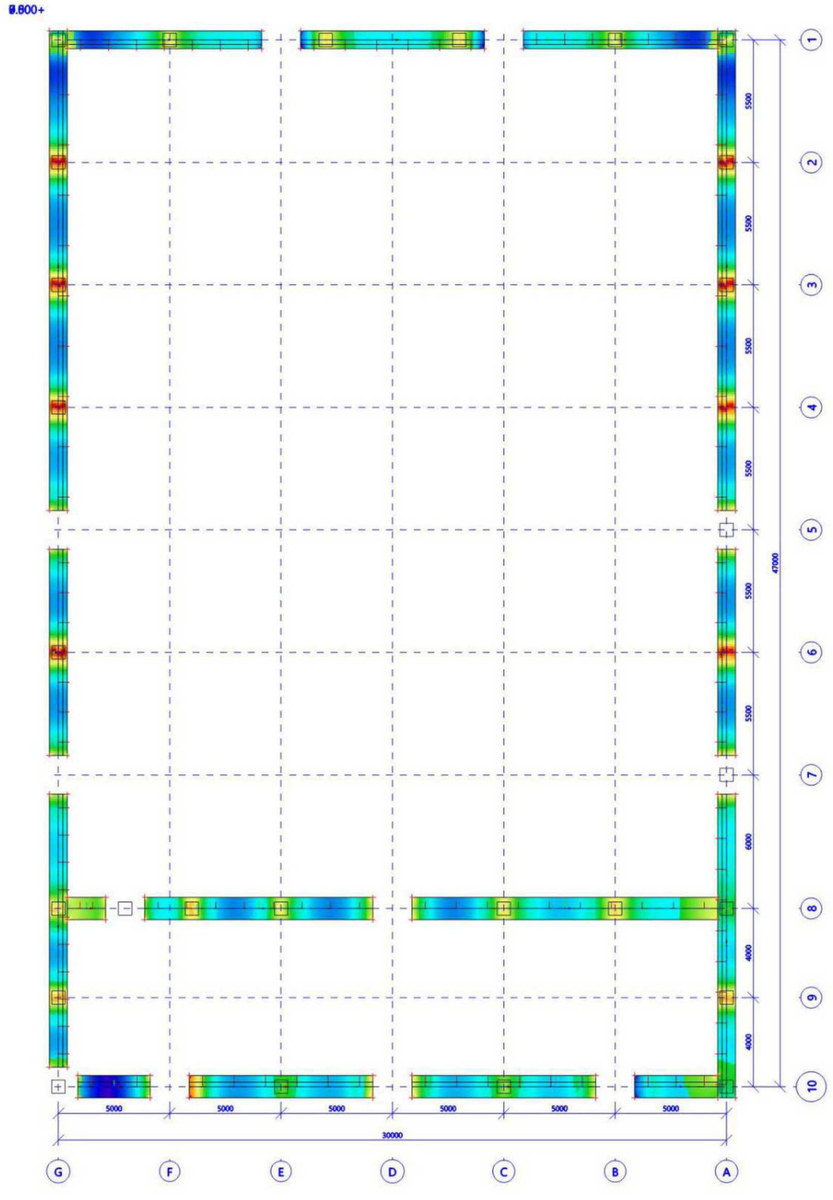
5.1. Wapening funderingsstroken

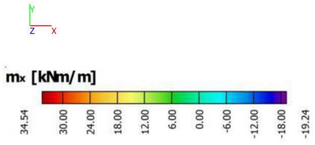
5.1.1. Wapening funderingsstroken - Funderingsstrook

Name	Structural model only	Colour
Funderingsstrook	×	

5.1.1.1. 2D internal forces; m_x

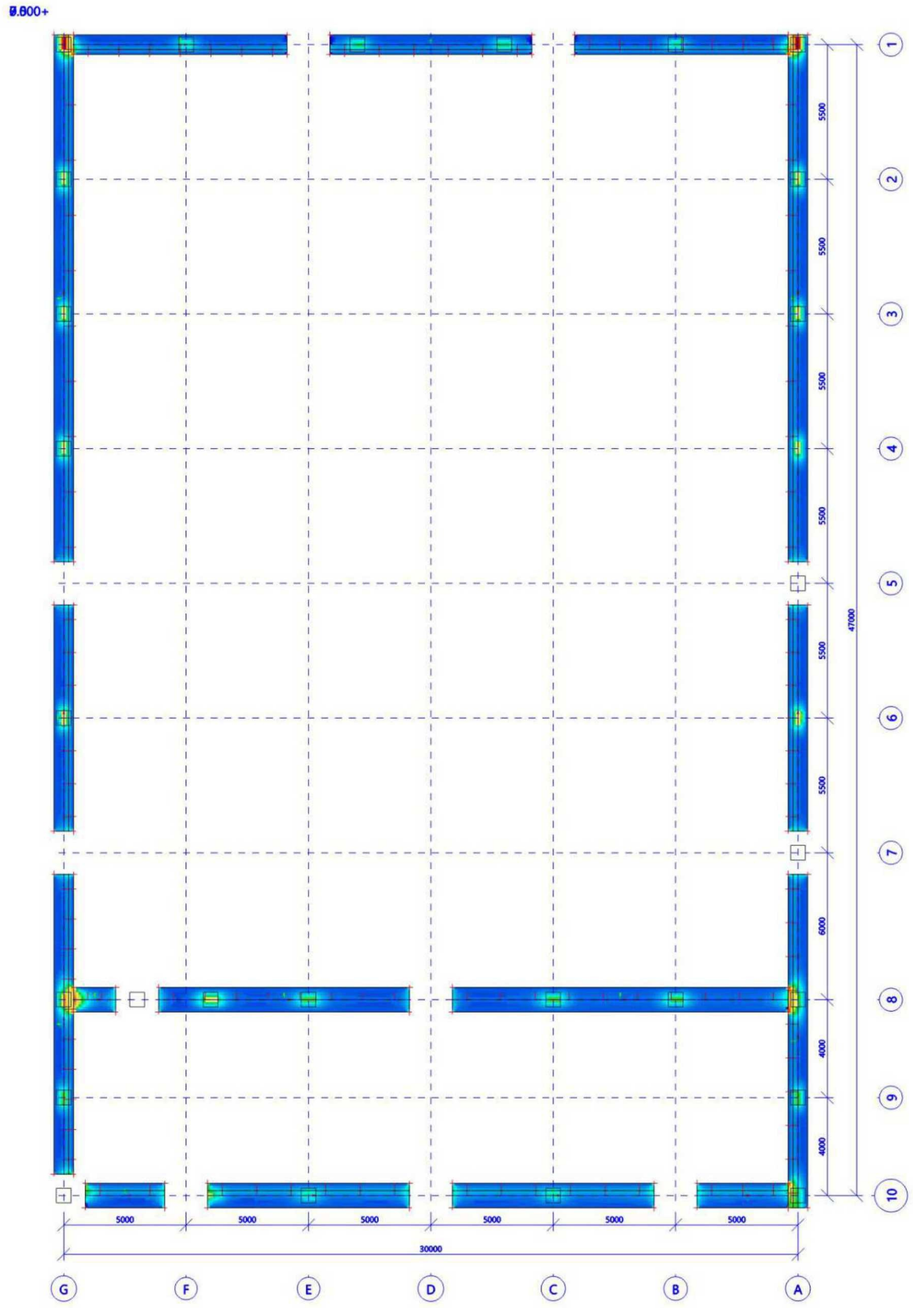
Values: m_x
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element





5.1.1.2. 2D internal forces; m_y

Values: m_y
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element

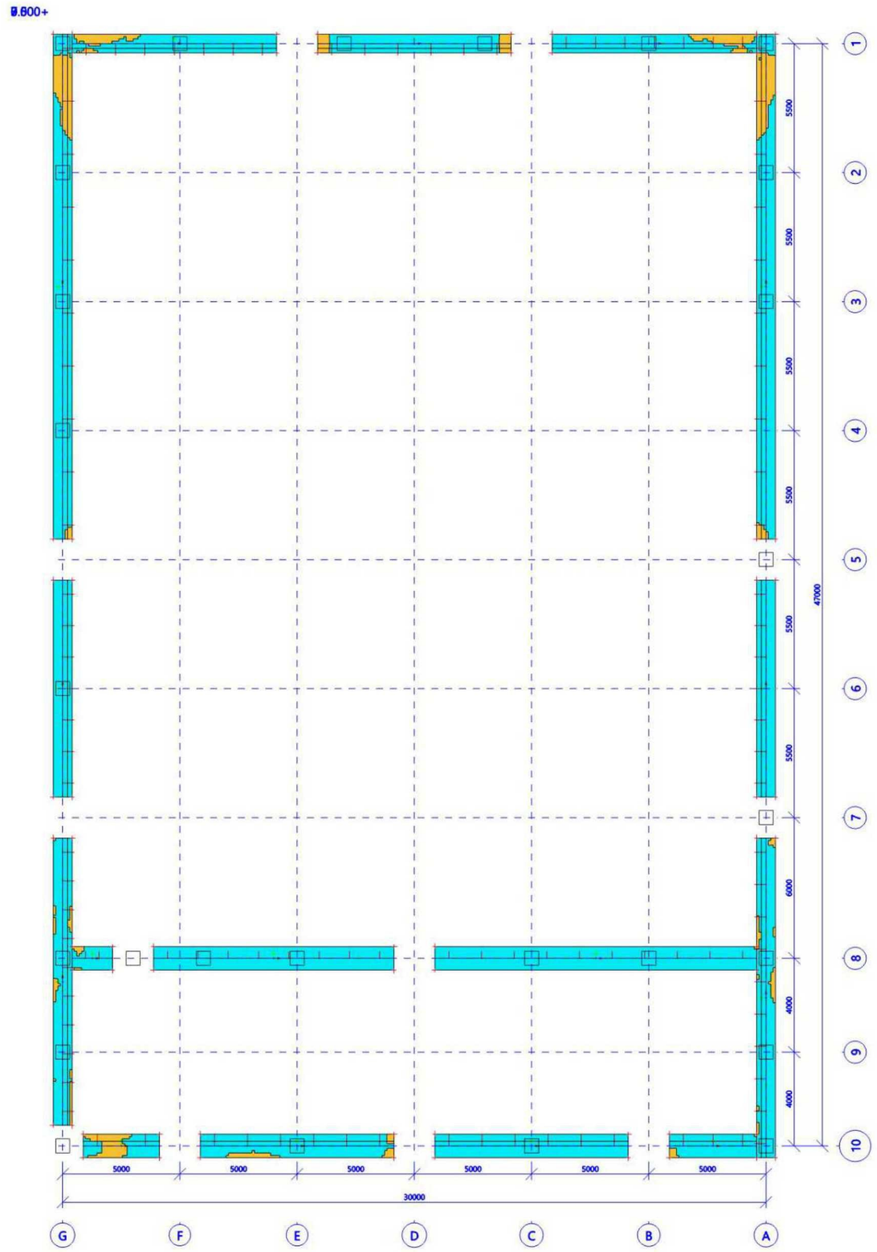


m_y [kNm/m]
16.47 16.00 14.00 12.00 10.00 8.00 6.00 4.00 2.00 0.00 -2.00 -2.23

5.1.1.3. X-richting 1+

5.1.1.4. 2D-wapeningsontwerp; Nø,prov,1+

Values: $N_{ø,prov,1+}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element



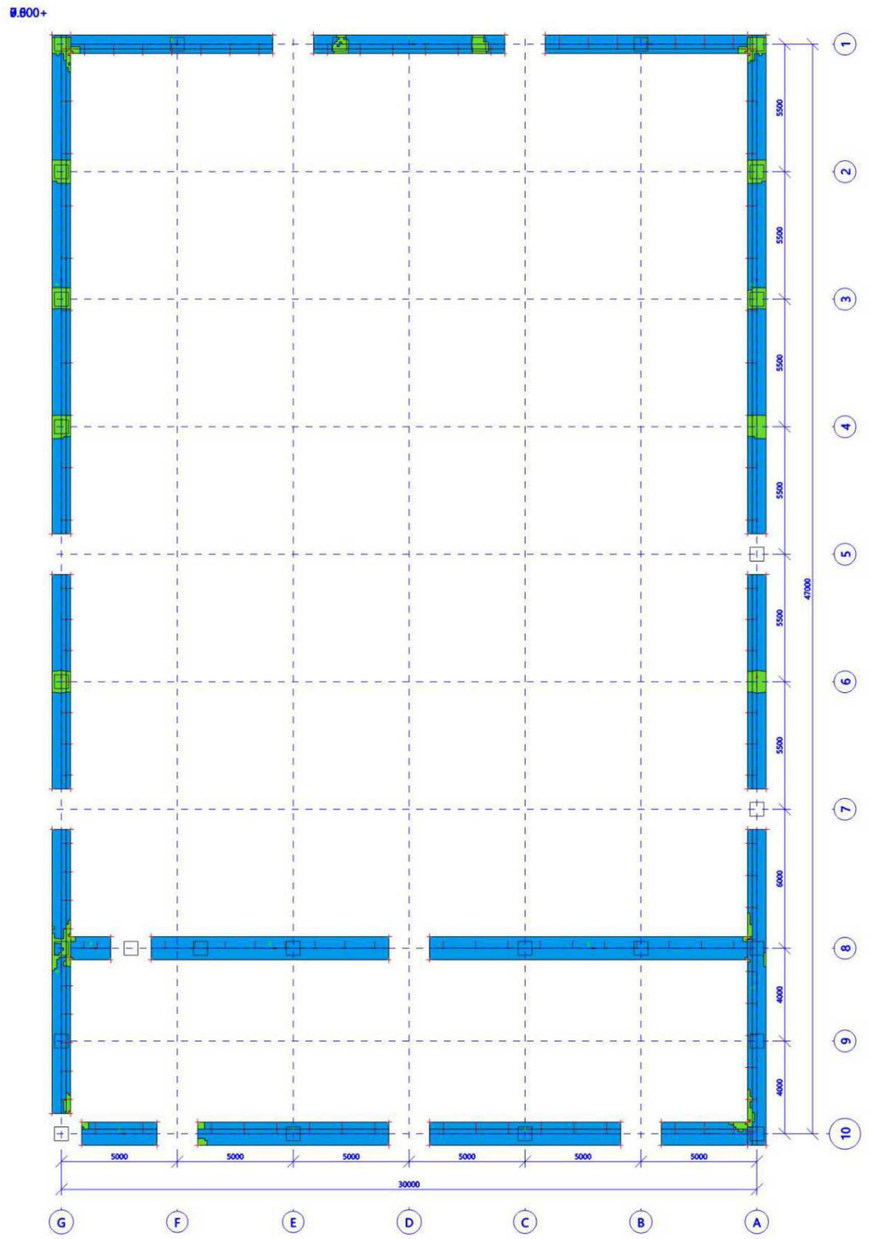
$N_{ø,prov,1+}$

ø7,0/150 + ø10,0/300
ø7,0/150

5.1.1.5. X-richting 1-

5.1.1.6. 2D-wapeningsontwerp; Nø,prov,1-

Values: $N_{ø,prov,1-}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS mesh element



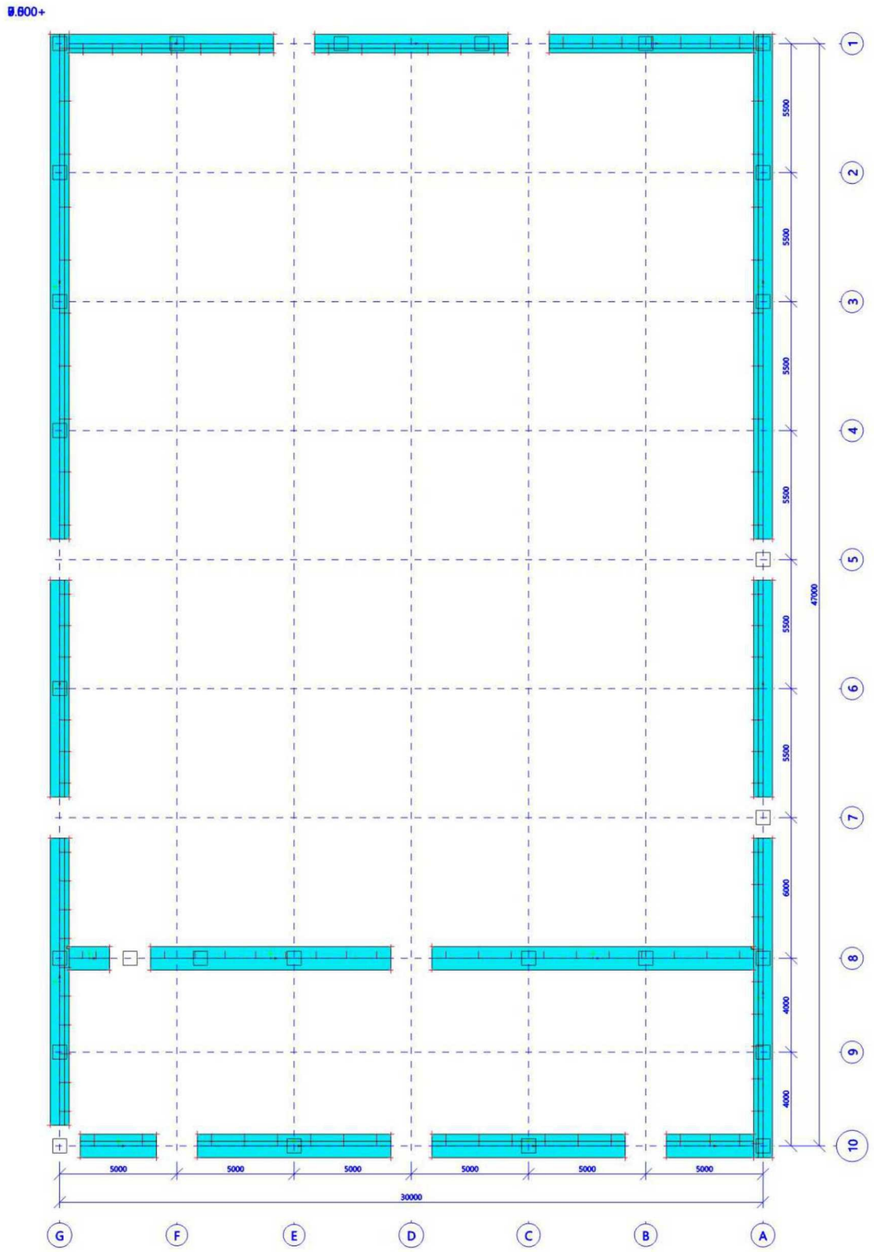
$N_{ø,prov,1-}$

ø8,0/150 + ø10,0/150
ø8,0/150 + ø10,0/300
ø8,0/150

5.1.1.7. Y-richting 2+

5.1.1.8. 2D-wapeningsontwerp; Nø,prov,2+

Values: $N_{ø,prov,2+}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element



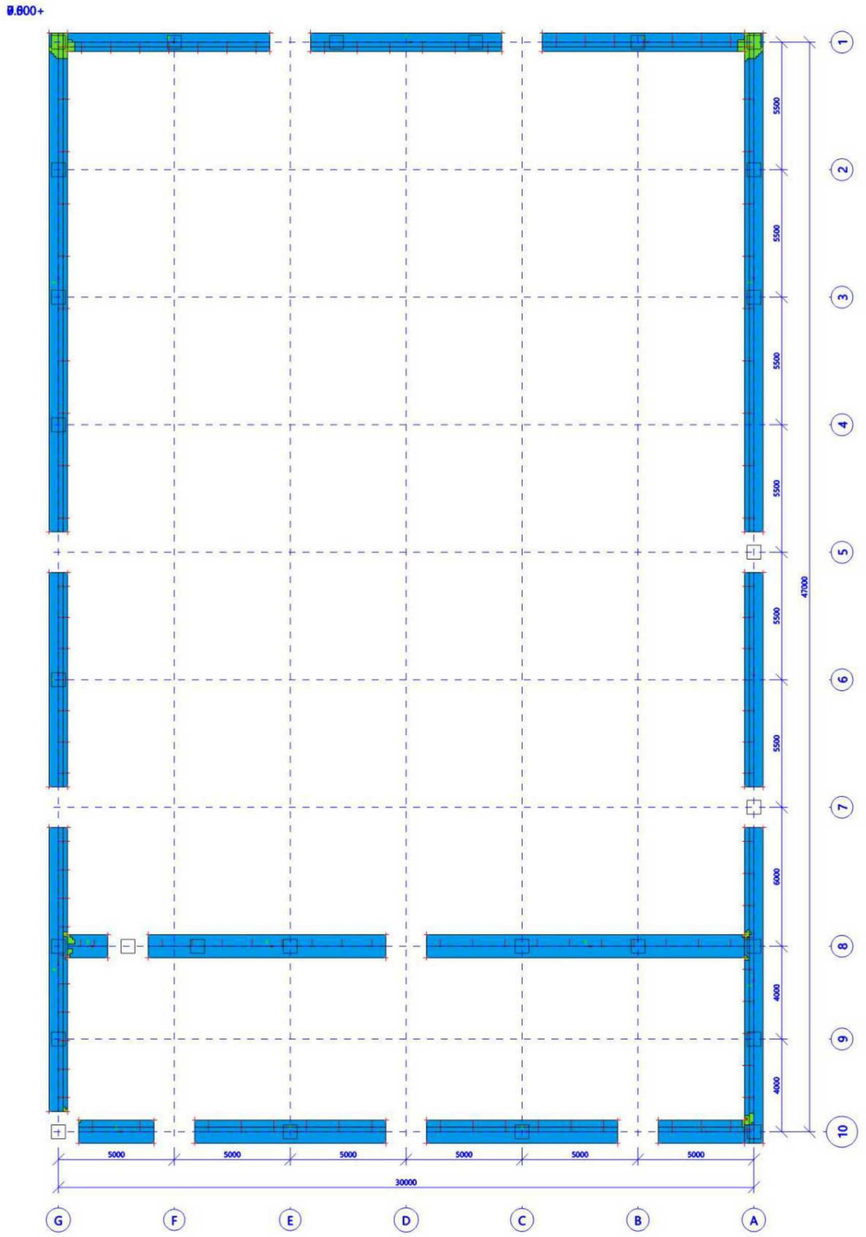
$N_{ø,prov,2+}$

ø7,0/150 + ø10,0/300
ø7,0/150

5.1.1.9. Y-richting 2-

5.1.1.10. 2D-wapeningsontwerp; Nø,prov,2-

Values: $N_{ø,prov,2-}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element



$N_{ø,prov,2-}$

ø8,0/150 + ø10,0/150
ø8,0/150 + ø10,0/300
ø8,0/150

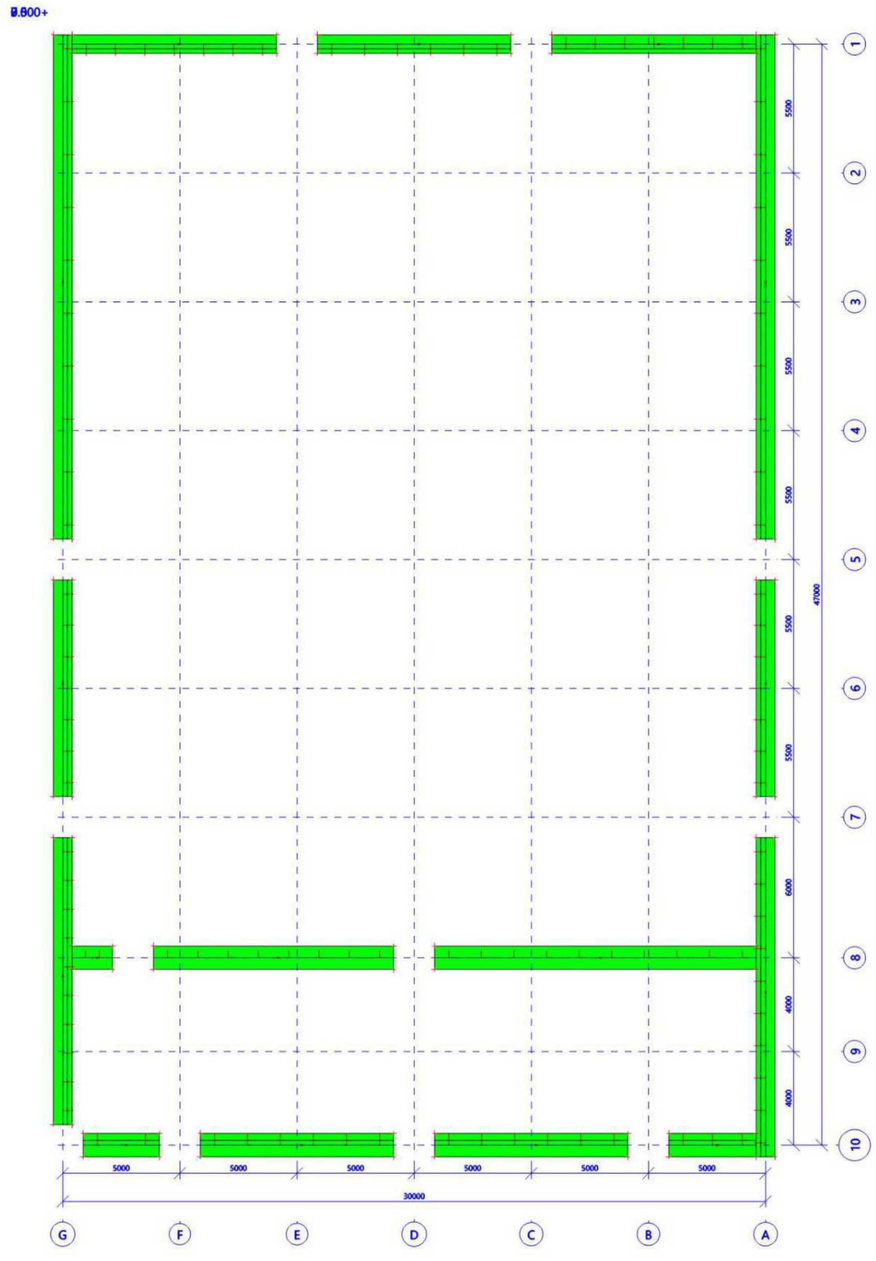
5.2. Scheurwijdte bij berekende UGT wapening

5.2.1. Scheurwijdte bij berekende UGT wapening - Funderingsstrook

Name	Structural model only	Colour
Funderingsstrook	×	

5.2.1.1. Scheurwijdte (BGT); w+

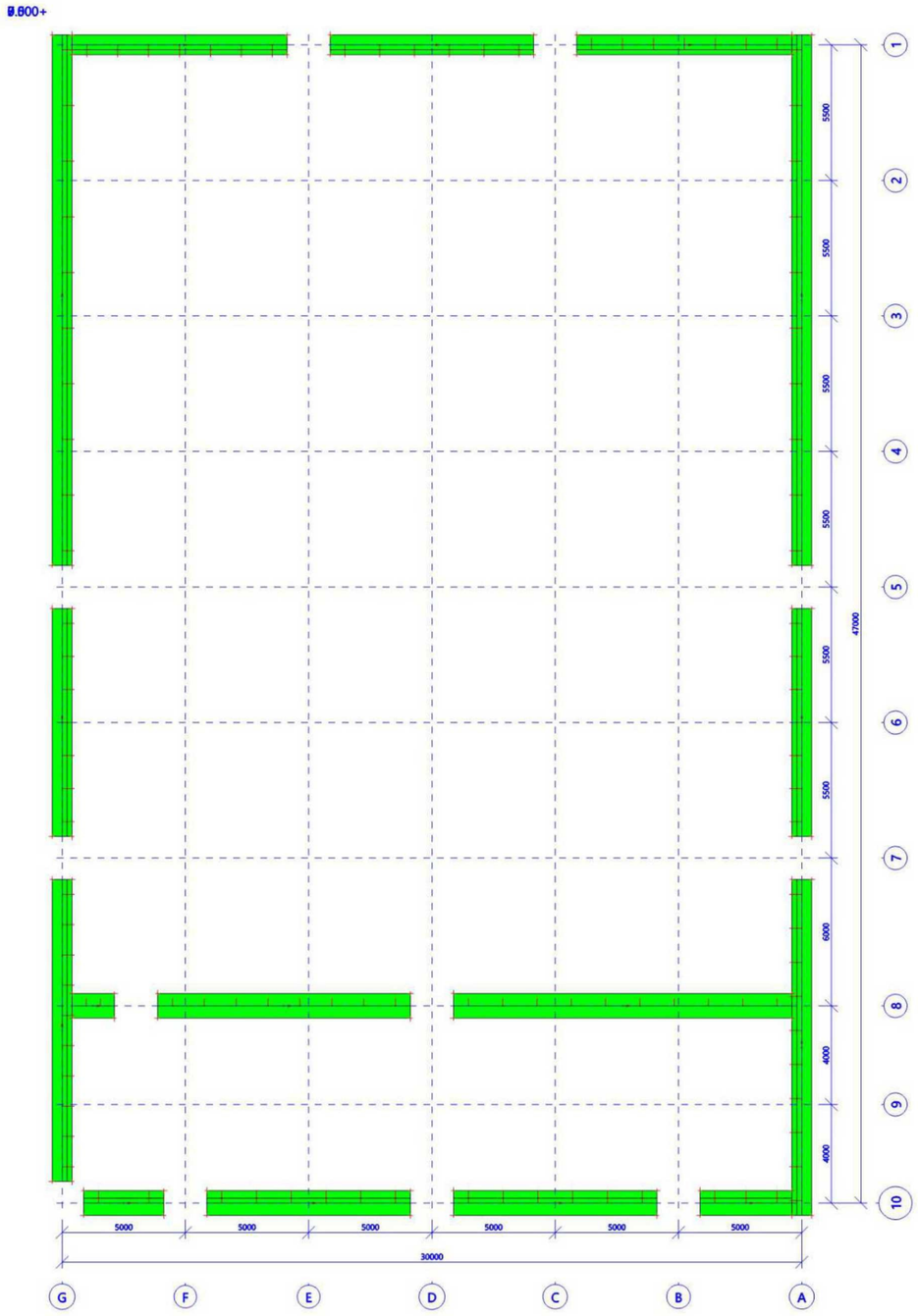
Values: w+
Linear calculation
Class: All SLS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element



w+ [mm]
Constant value 0.000

5.2.1.2. Scheurwijdte (BGT); w-

Values: w-
Linear calculation
Class: All SLS Linear
Extreme: Global
Selection: All
Filter: Layer = Funderingsstrook
Location: In centres. System: LCS
mesh element



w- [mm]
Constant value 0.000

6. Benodigde wapening poeren UGT en BGT

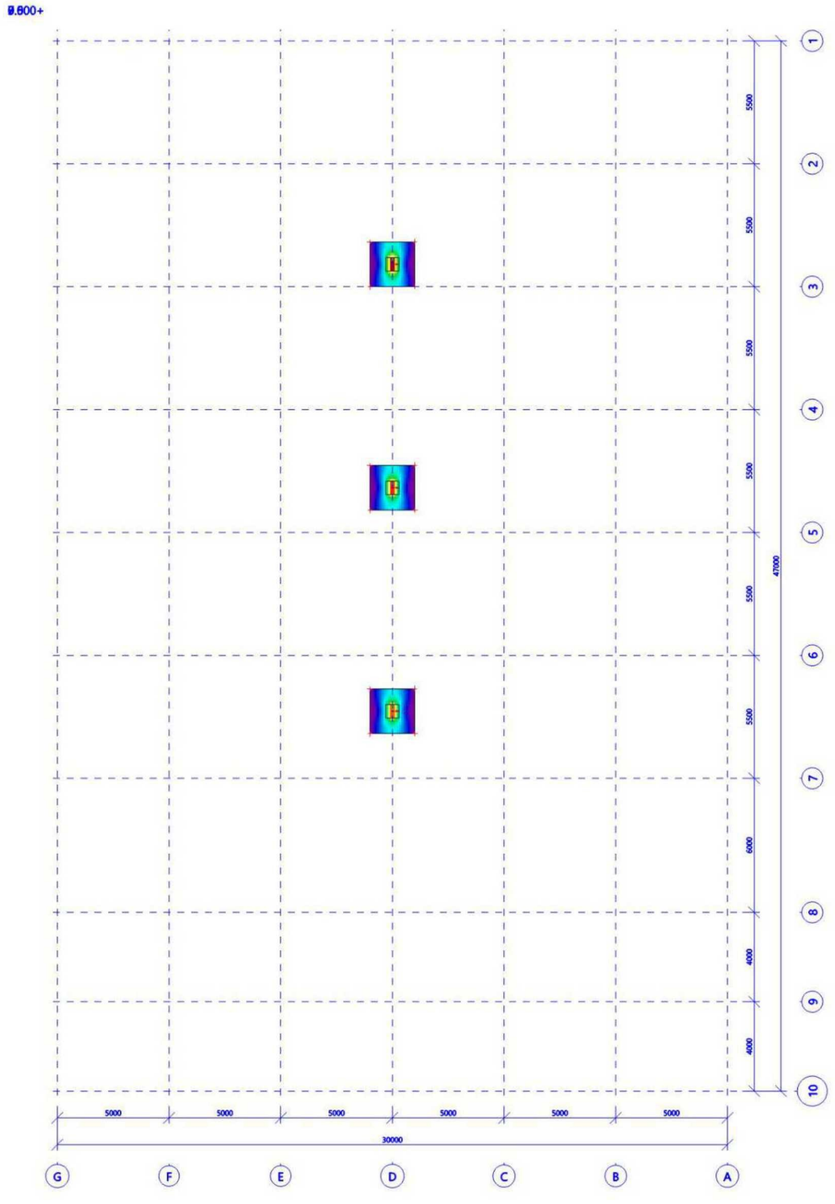
6.1. Wapening poeren

6.1.1. Wapening poeren - Poer 2000x2000x300

Name	Structural model only	Colour
Poer 2000x2000x300	×	

6.1.1.1. 2D internal forces; m_x

Values: m_x
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element

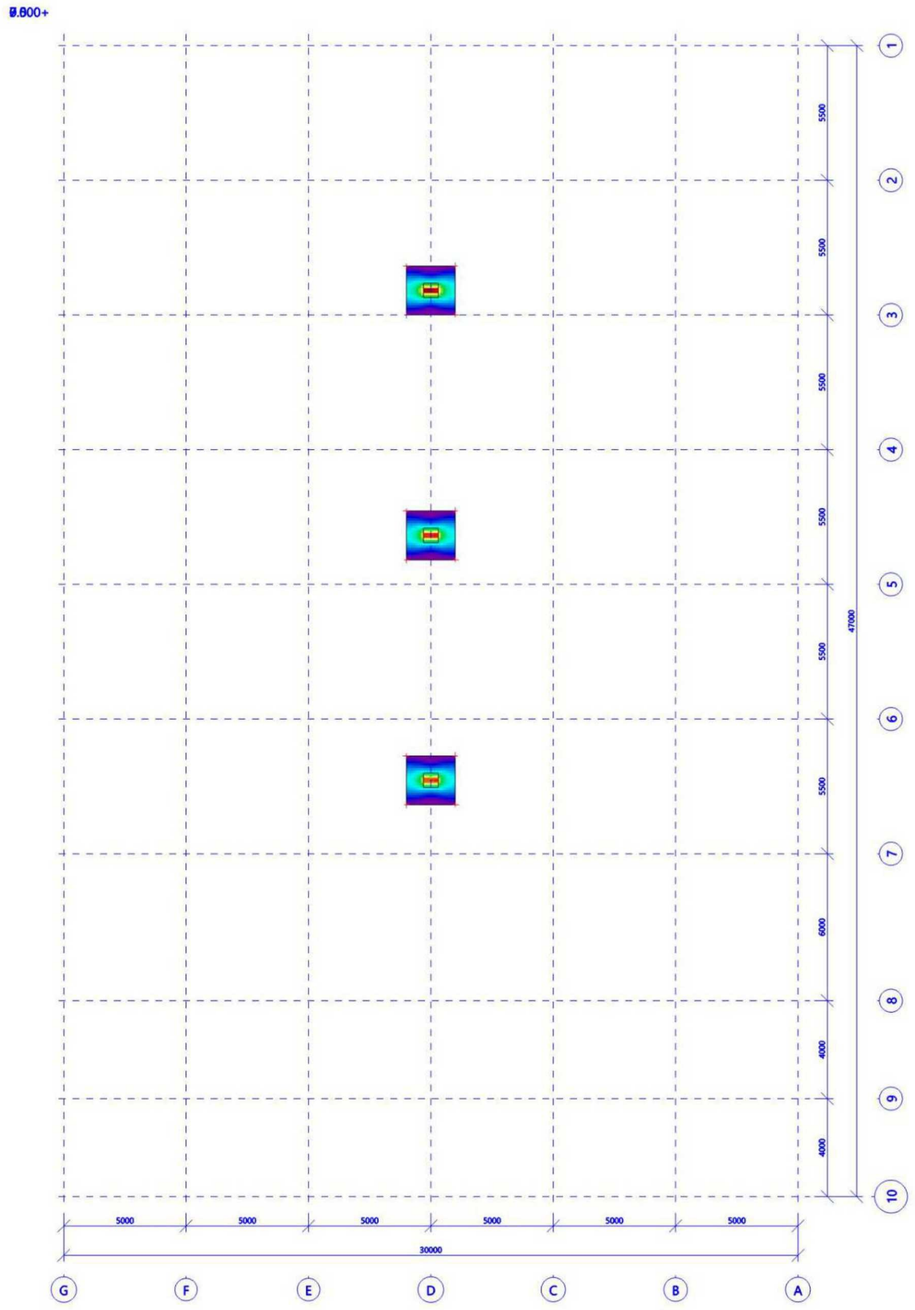


m_x [kNm/m]

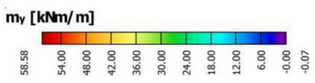
58.58 54.00 48.00 42.00 36.00 30.00 24.00 18.00 12.00 6.00 -0.00 -0.07

6.1.1.2. 2D internal forces; m_y

Values: m_y
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element



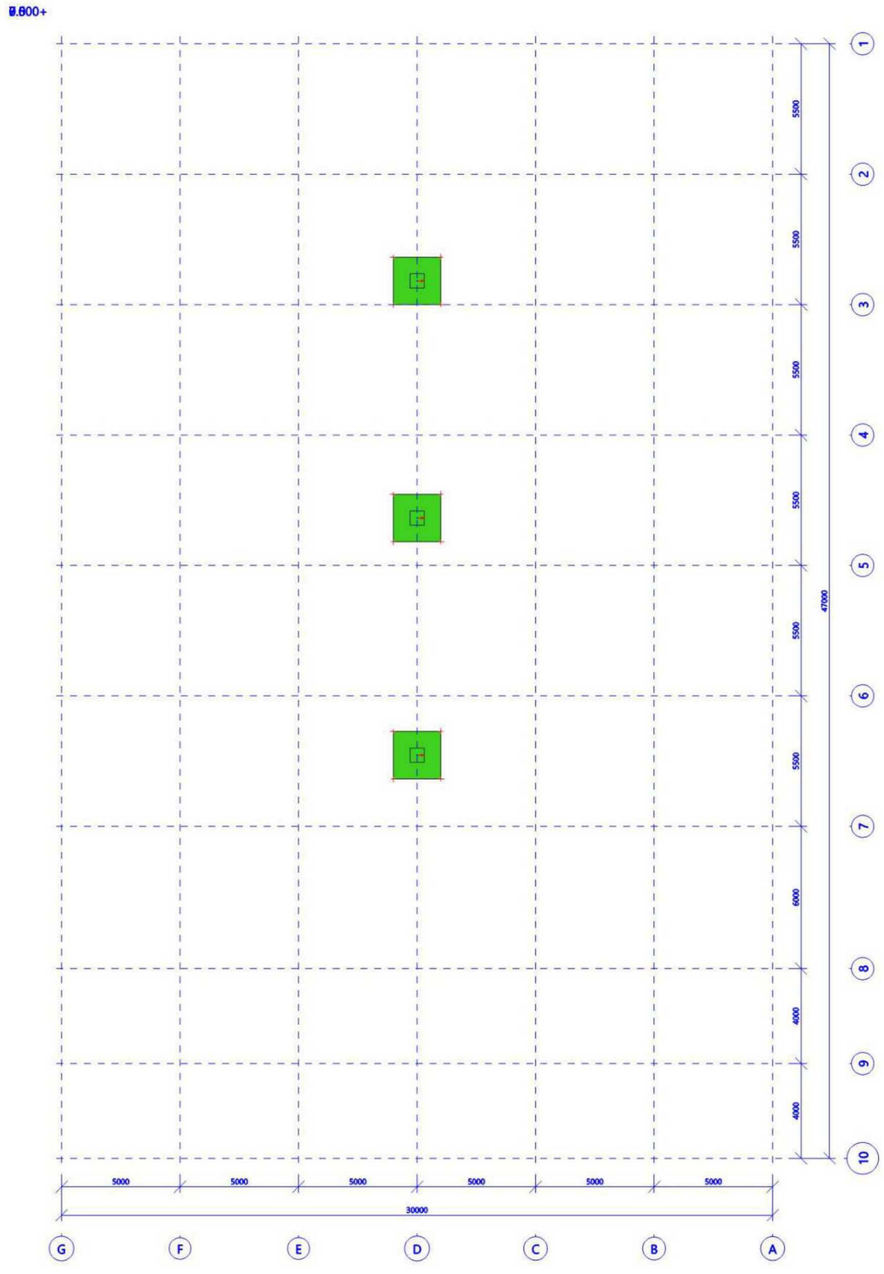




6.1.1.3. X-richting 1+

6.1.1.4. 2D-wapeningsontwerp; Nø,prov,1+

Values: $N_{ø,prov,1+}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element

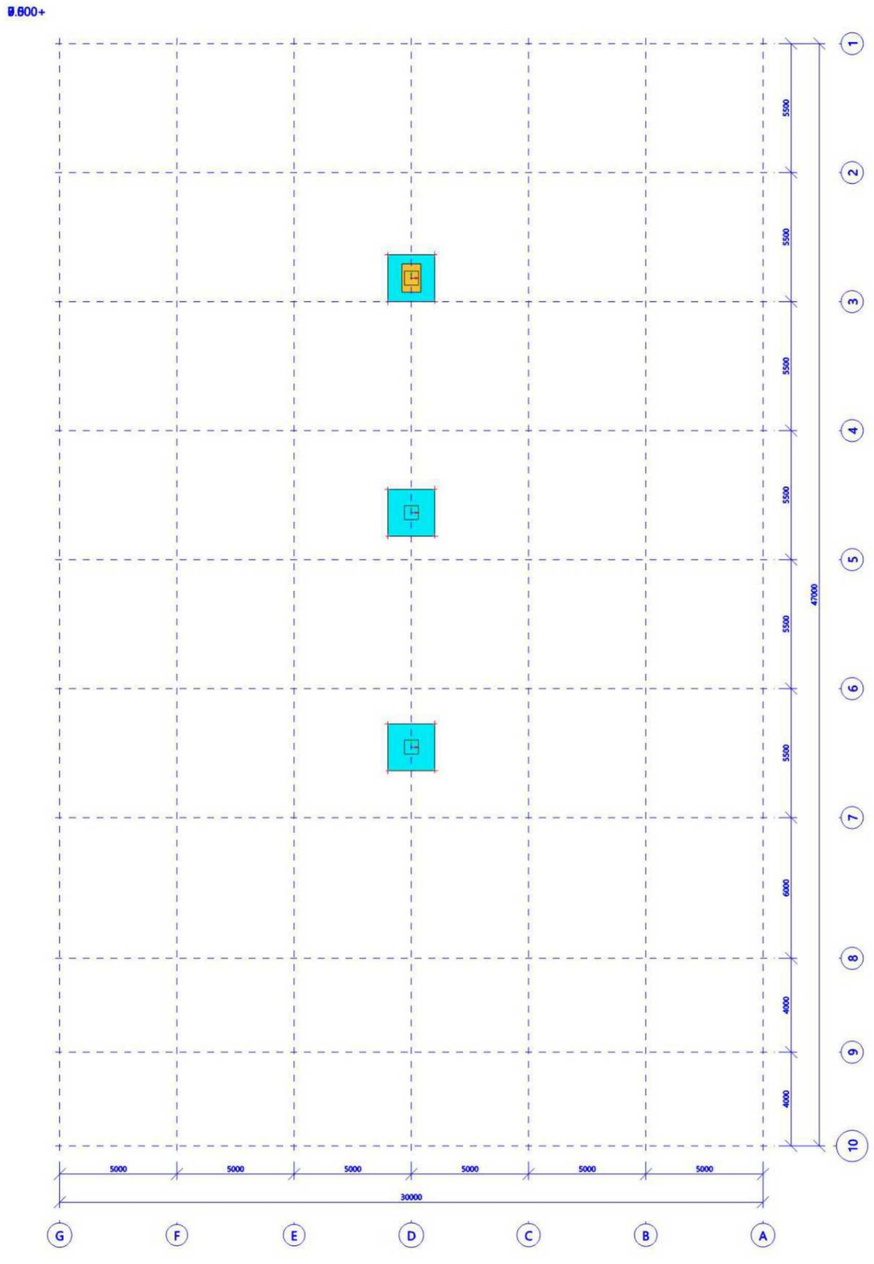


$N_{ø,prov,1+}$
ø8,0/150

6.1.1.5. X-richting 1-

6.1.1.6. 2D-wapeningsontwerp; Nø,prov,1-

Values: $N_{ø,prov,1-}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element



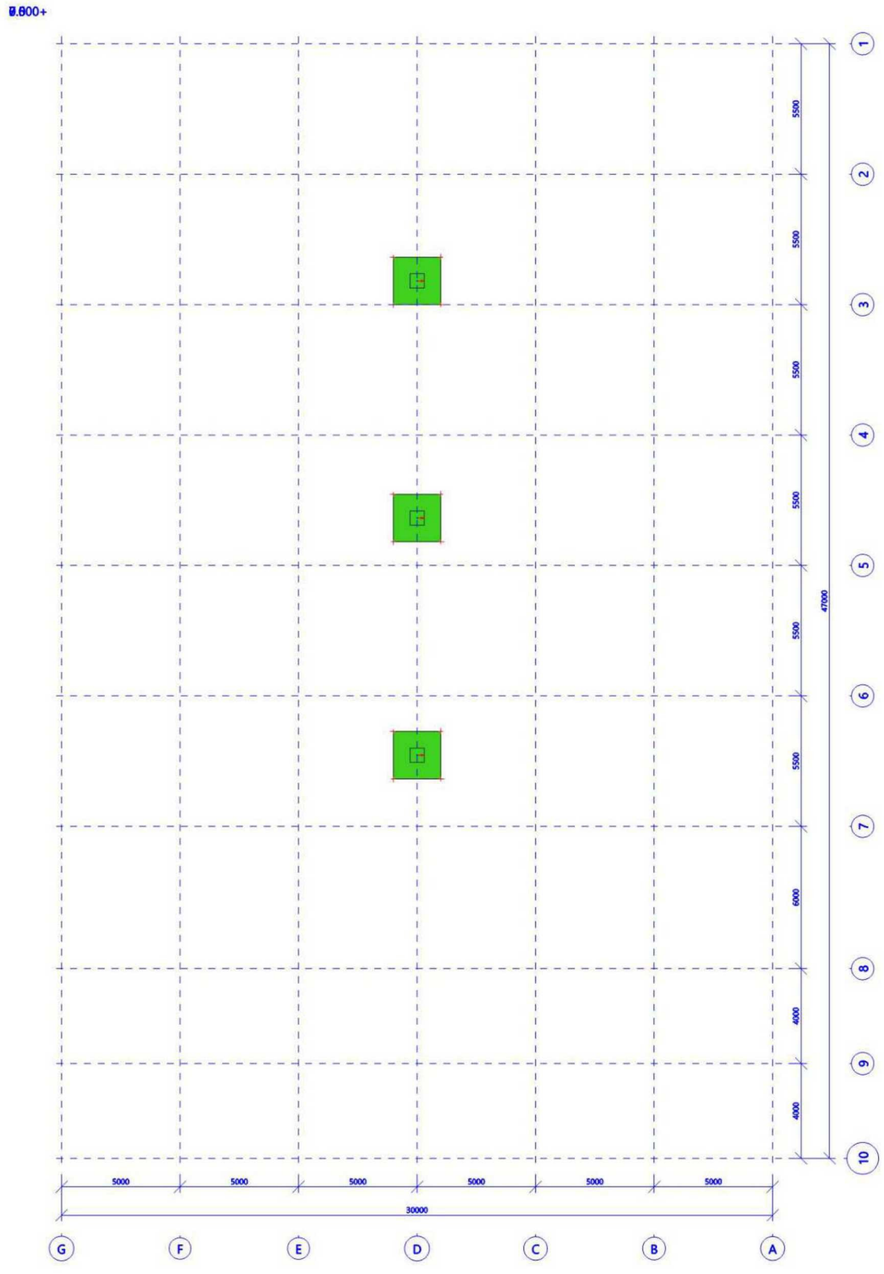
$N_{ø,prov,1-}$

ø10,0/150 + ø10,0/300	
ø10,0/150	

6.1.1.7. Y-richting 2+

6.1.1.8. 2D-wapeningsontwerp; Nø,prov,2+

Values: $N_{ø,prov,2+}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element



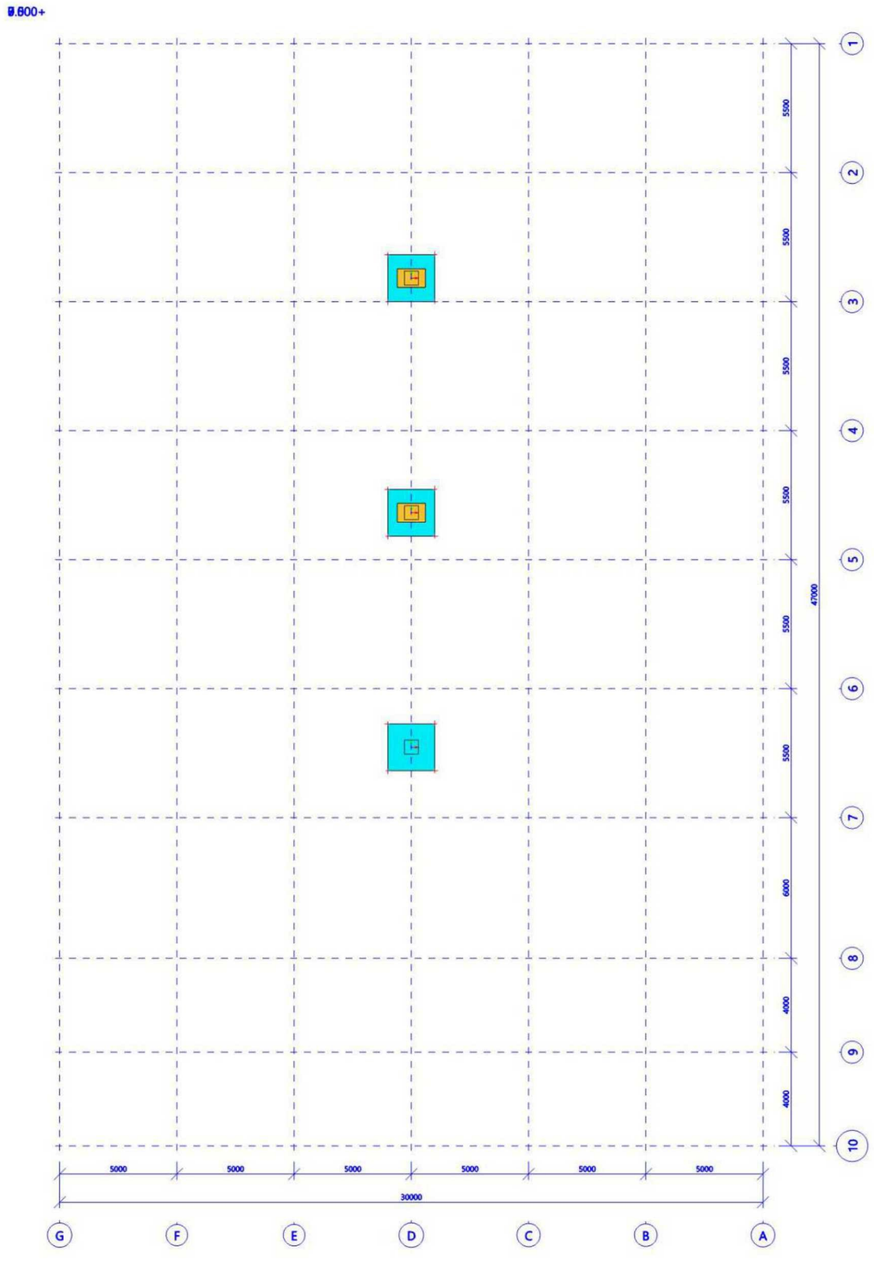


$N_{ø,prov,2+}$
ø8,0/150

6.1.1.9. Y-richting 2-

6.1.1.10. 2D-wapeningsontwerp; Nø,prov,2-

Values: $N_{ø,prov,2-}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element



$N_{ø,prov,2-}$

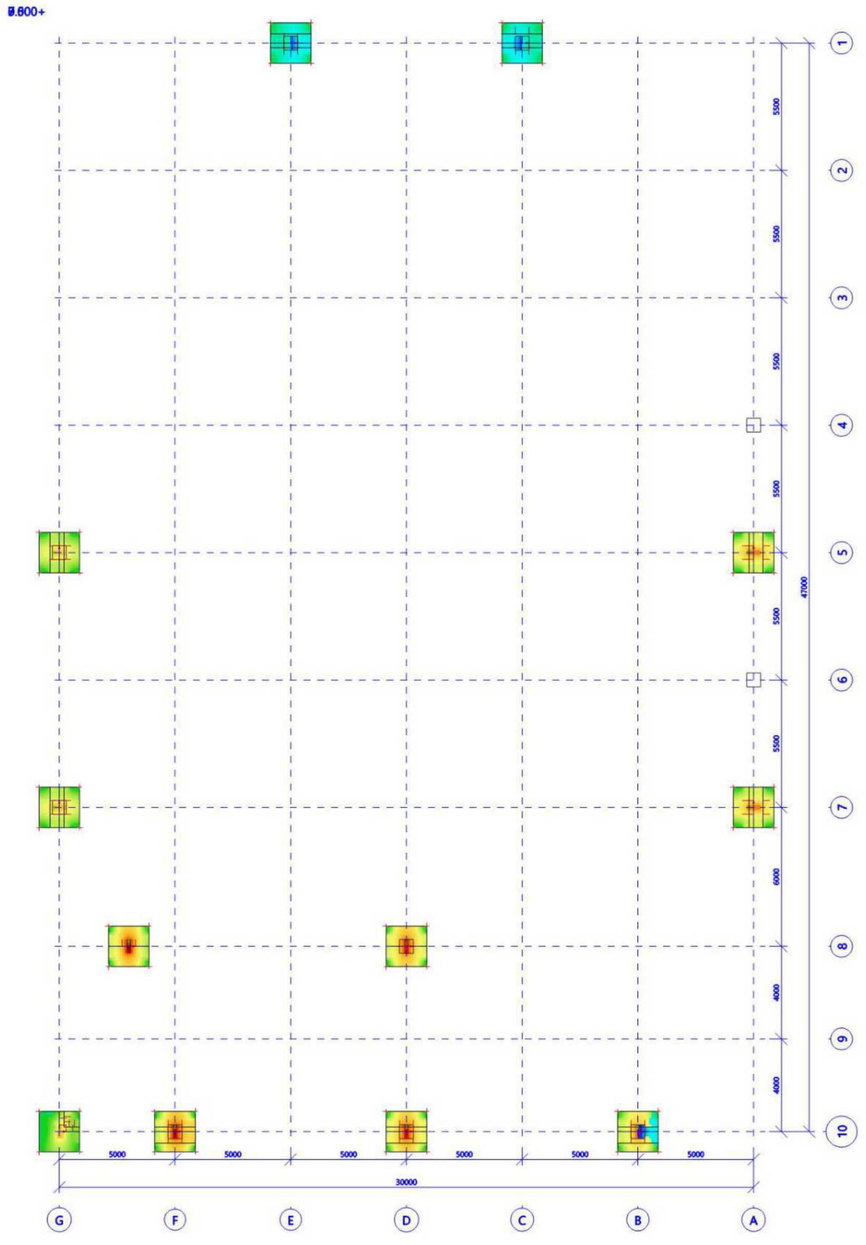
ø10,0/150 + ø10,0/300	
ø10,0/150	

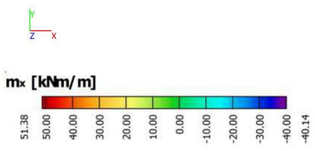
6.1.2. Wapening poeren - Poer 1750x1750x250

Name	Structural model only	Colour
Poer 1750x1750x250	×	

6.1.2.1. 2D internal forces; m_x

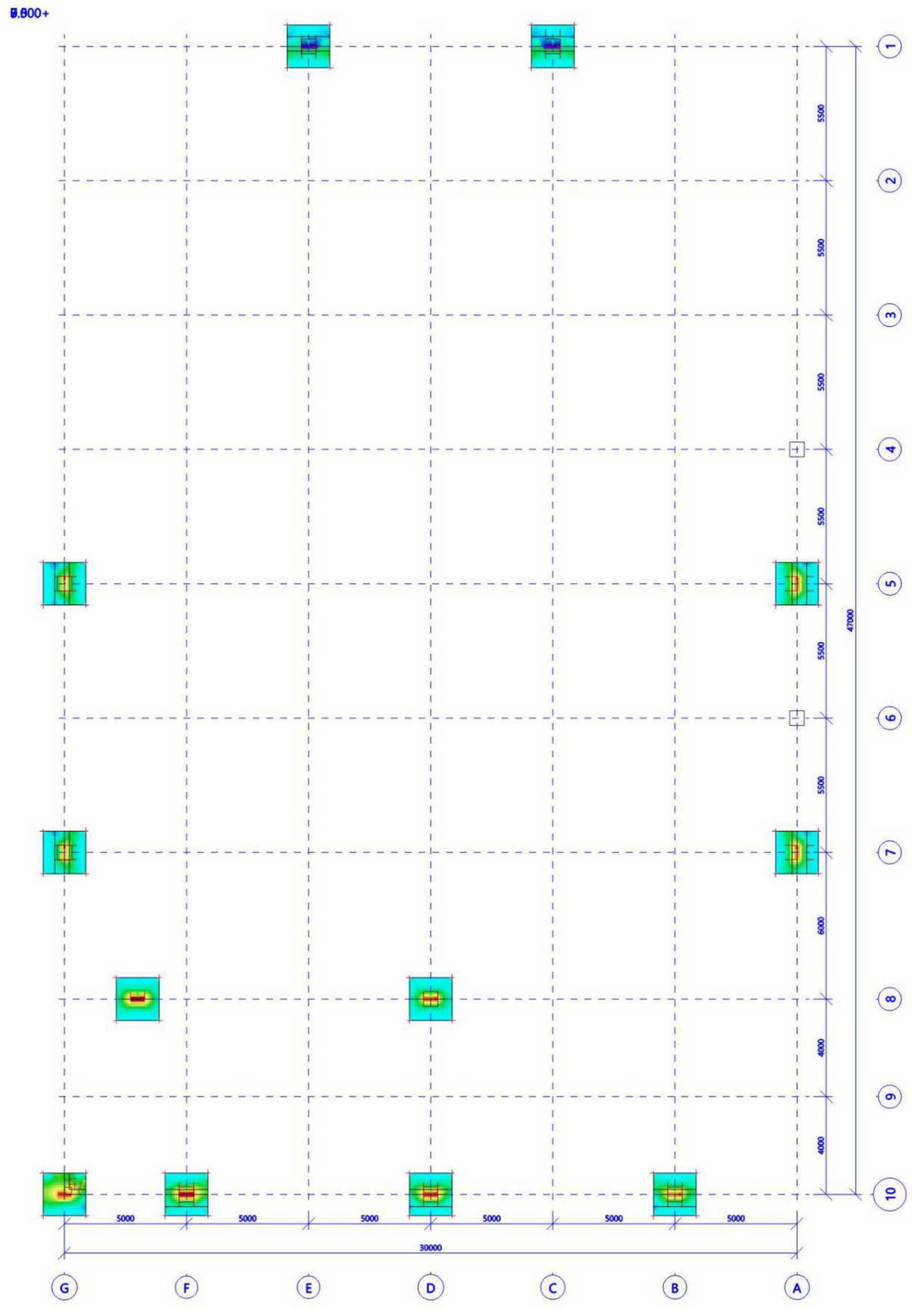
Values: m_x
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element





6.1.2.2. 2D internal forces; m_y

Values: m_y
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element



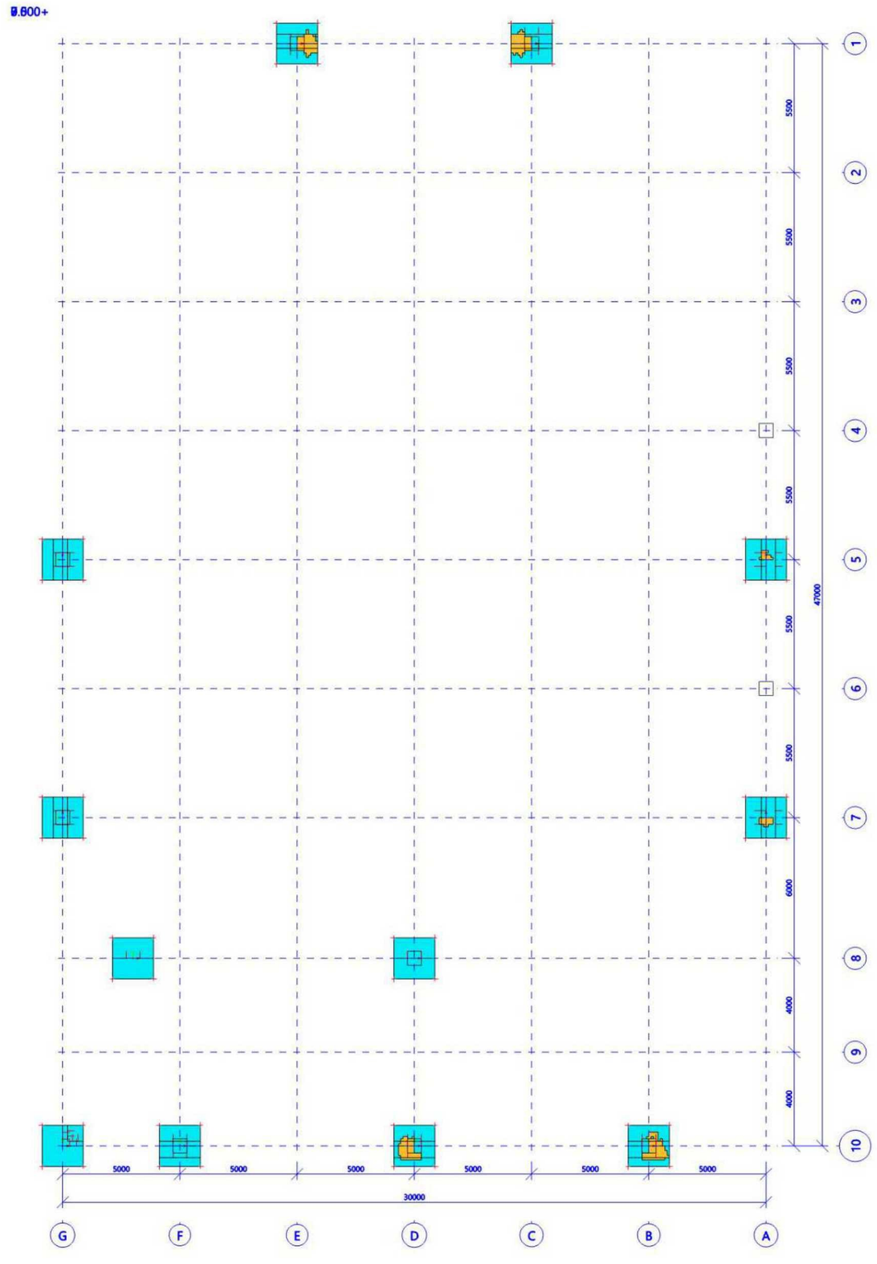
m_y [kNm/m]

33.20 30.00 25.00 20.00 15.00 10.00 5.00 -0.00 -5.00 -10.00 -11.66

6.1.2.3. X-richting 1+

6.1.2.4. 2D-wapeningsontwerp; Nø,prov,1+

Values: $N_{ø,prov,1+}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element



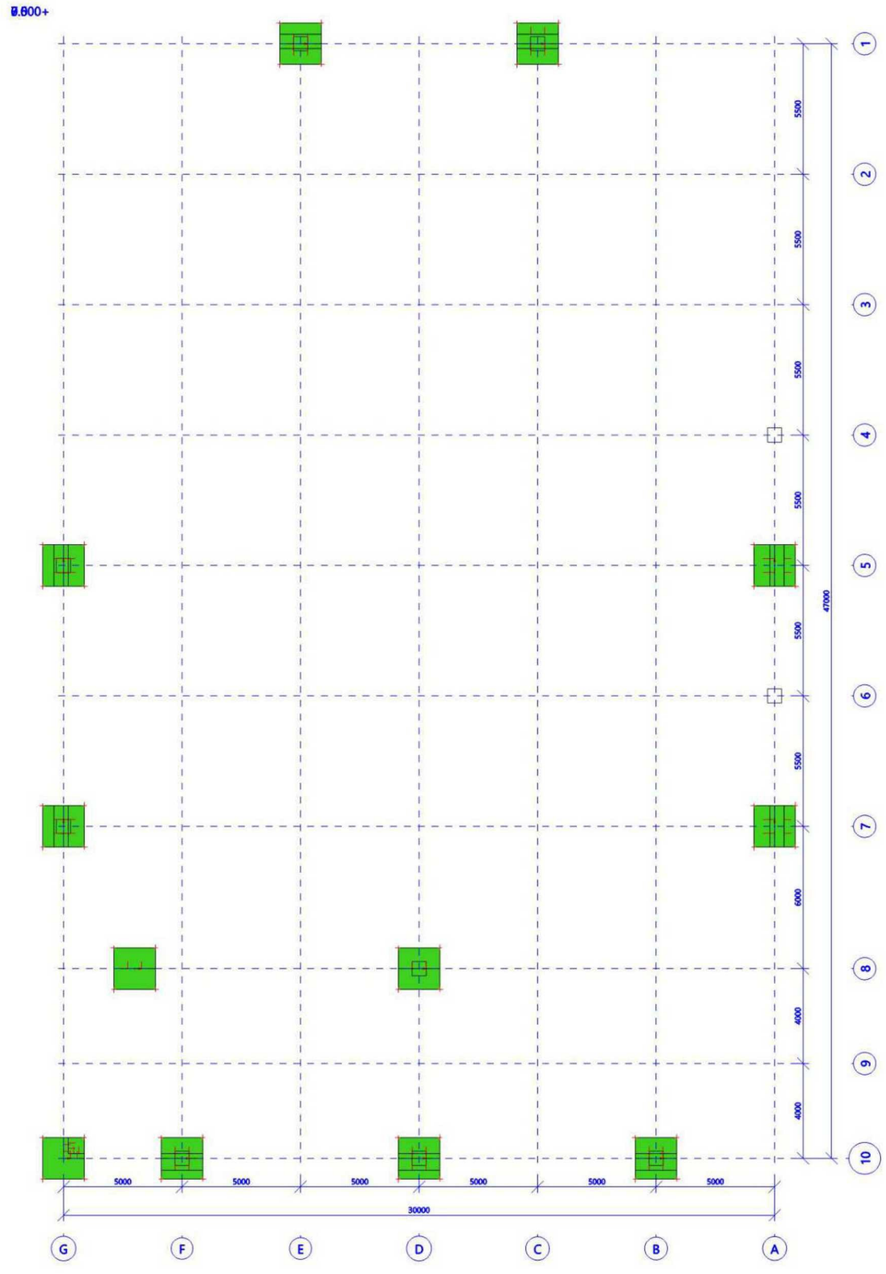
Nø,prov,1+

ø8,0/150 + ø10,0/300
ø8,0/150

6.1.2.5. X-richting 1-

6.1.2.6. 2D-wapeningsontwerp; Nø,prov,1-

Values: $N_{ø,prov,1-}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element

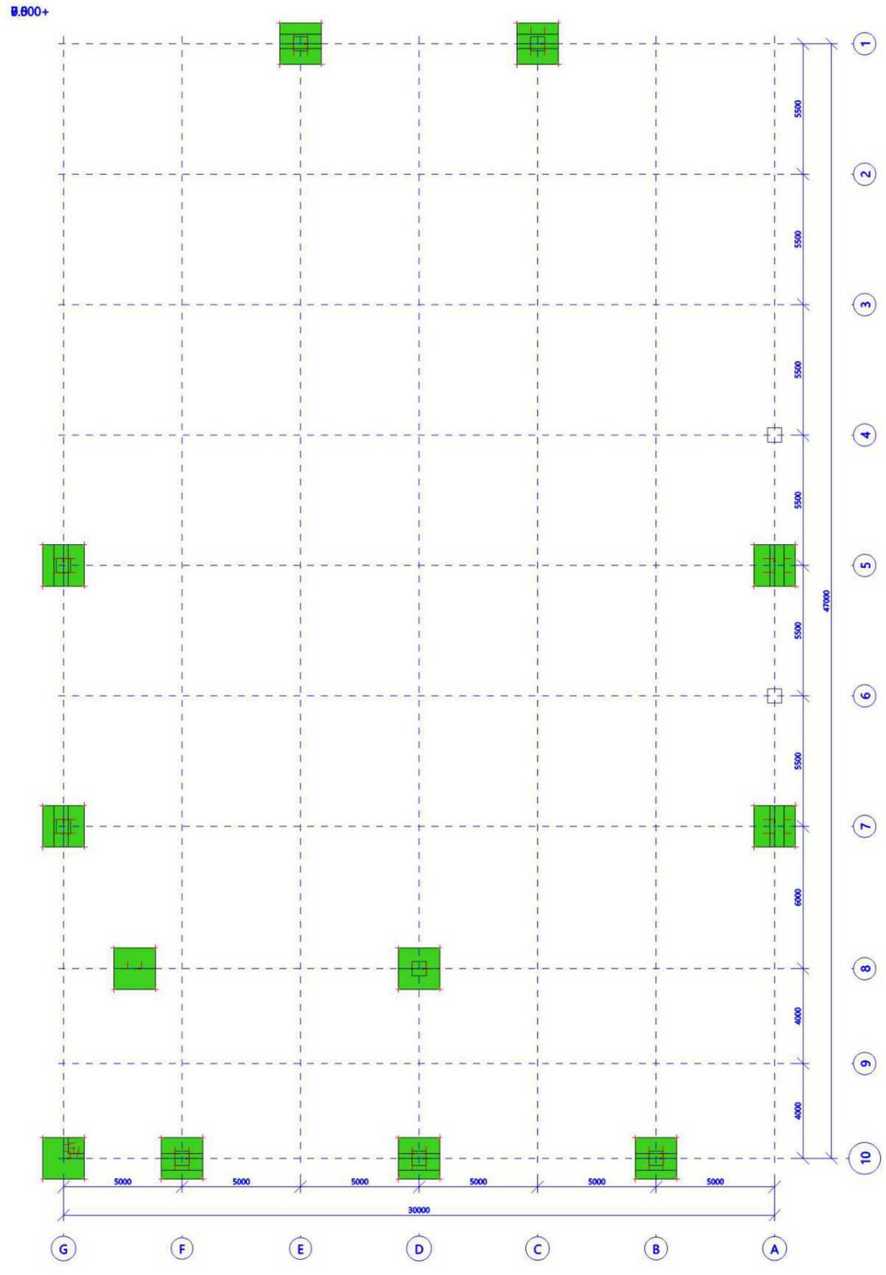


Nø,prov,1-
ø10,0/150

6.1.2.7. Y-richting 2+

6.1.2.8. 2D-wapeningsontwerp; Nø,prov,2+

Values: $N_{ø,prov,2+}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element

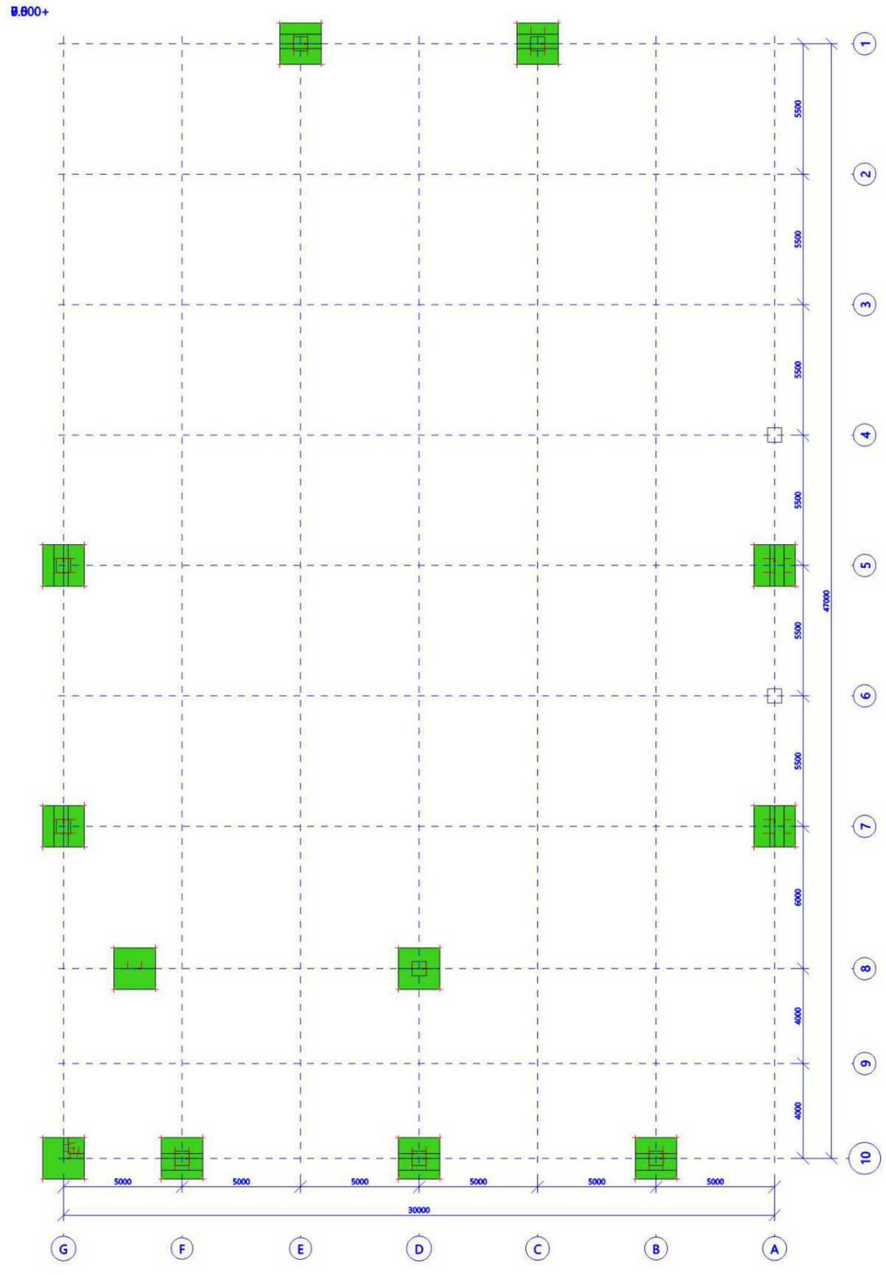


$N_{ø,prov,2+}$
ø8,0/150

6.1.2.9. Y-richting 2-

6.1.2.10. 2D-wapeningsontwerp; Nø,prov,2-

Values: $N_{ø,prov,2-}$
Linear calculation
Class: All ULS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element



$N_{ø,prov,2-}$
ø10,0/150

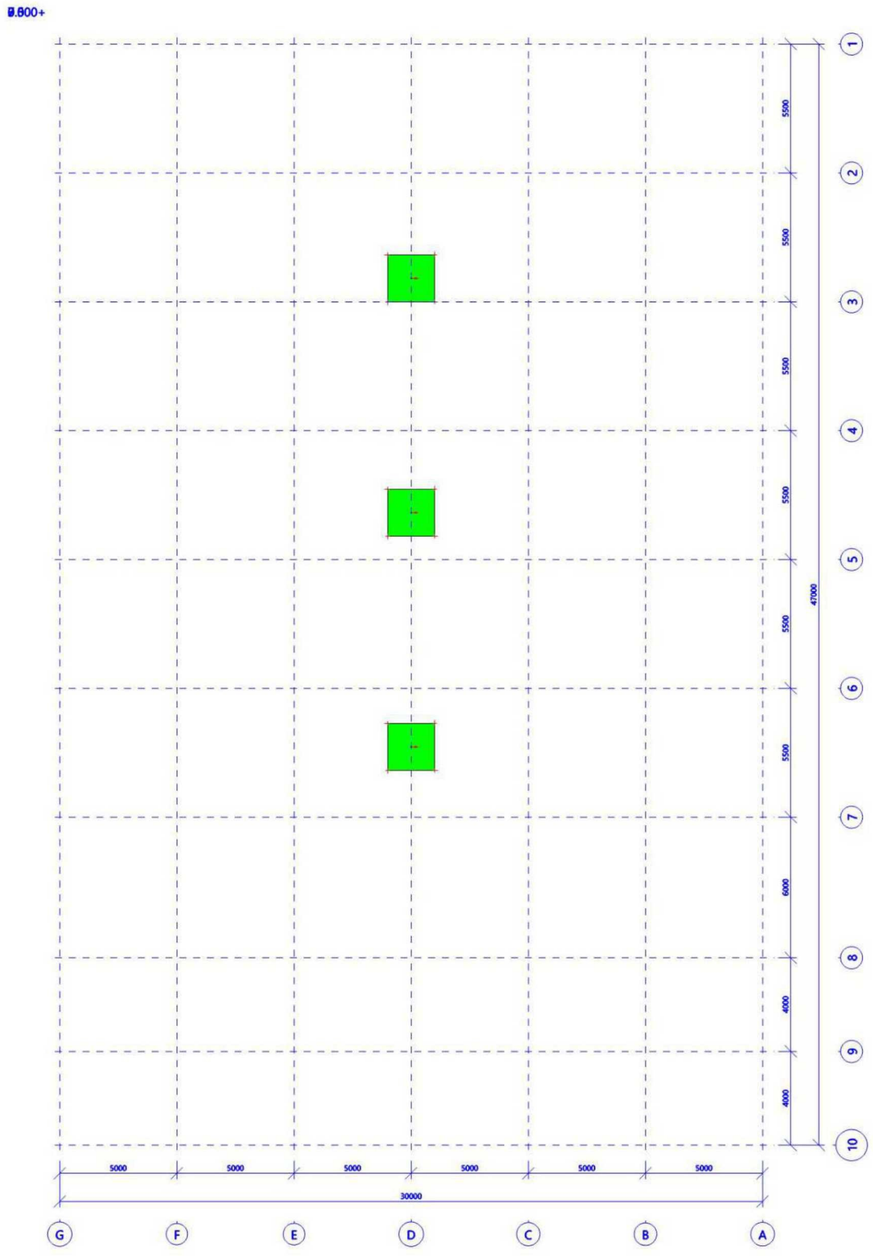
6.2. Scheurwijdte bij berekende UGT wapening

6.2.1. Scheurwijdte bij berekende UGT wapening - Poer 2000x2000x300

Name	Structural model only	Colour
Poer 2000x2000x300	×	

6.2.1.1. Scheurwijdte (BGT); w+

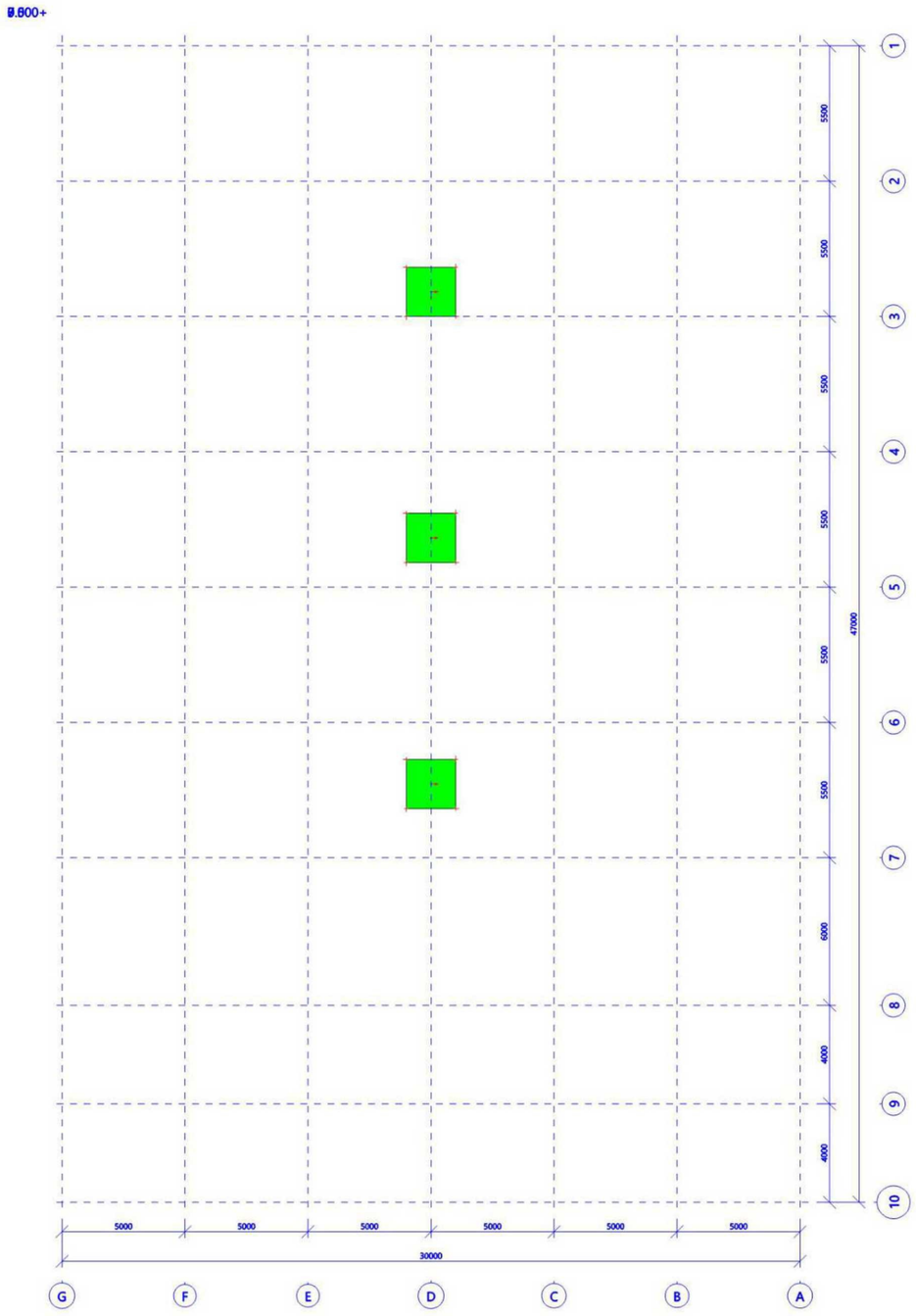
Values: w+
Linear calculation
Class: All SLS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element



w+ [mm]
Constant value 0.000

6.2.1.2. Scheurwijdte (BGT); w-

Values: w-
Linear calculation
Class: All SLS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 2000x2000x300
Location: In centres. System: LCS
mesh element



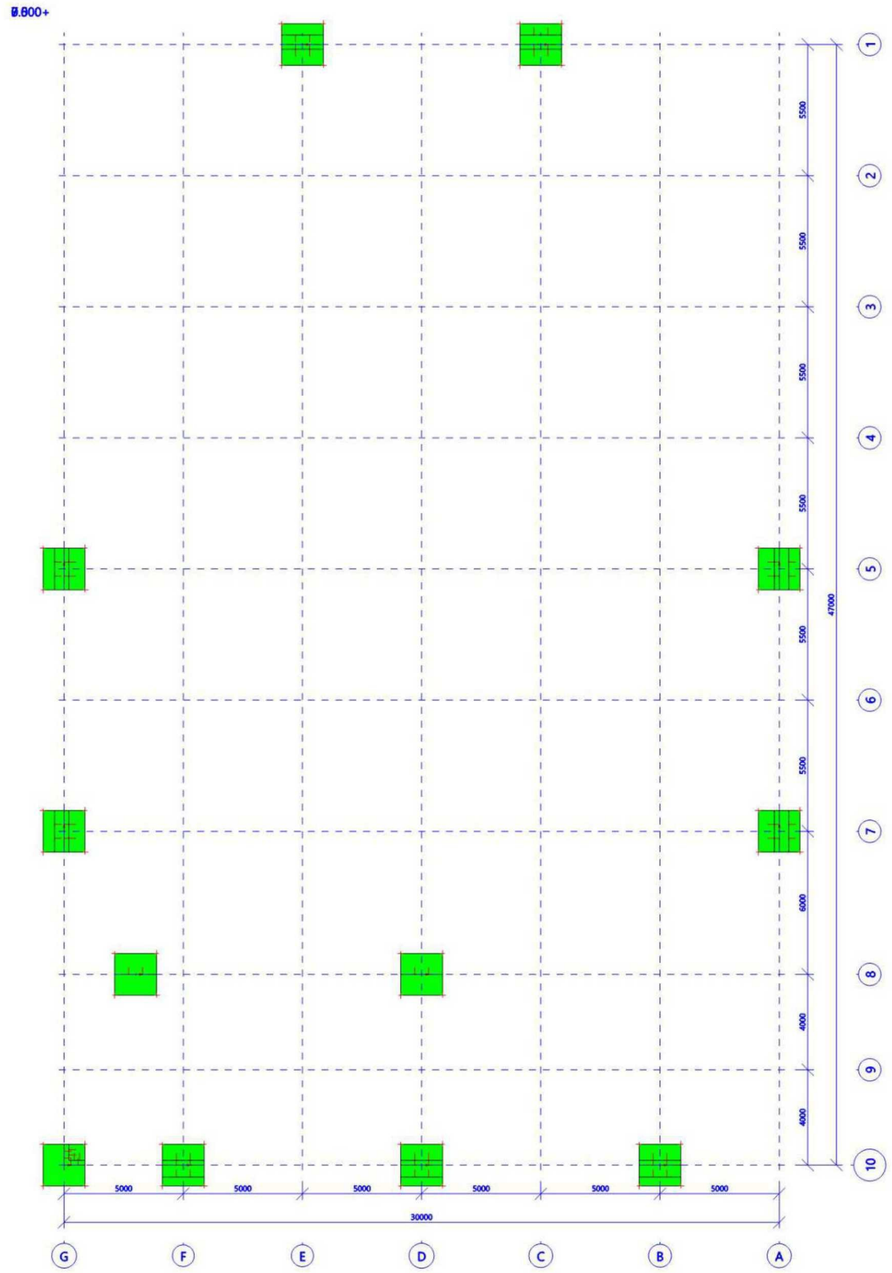
w- [mm]
Constant value 0.000

6.2.2. Scheurwijdte bij berekende UGT wapening - Poer 1750x1750x250

Name	Structural model only	Colour
Poer 1750x1750x250	×	

6.2.2.1. Scheurwijdte (BGT); w+

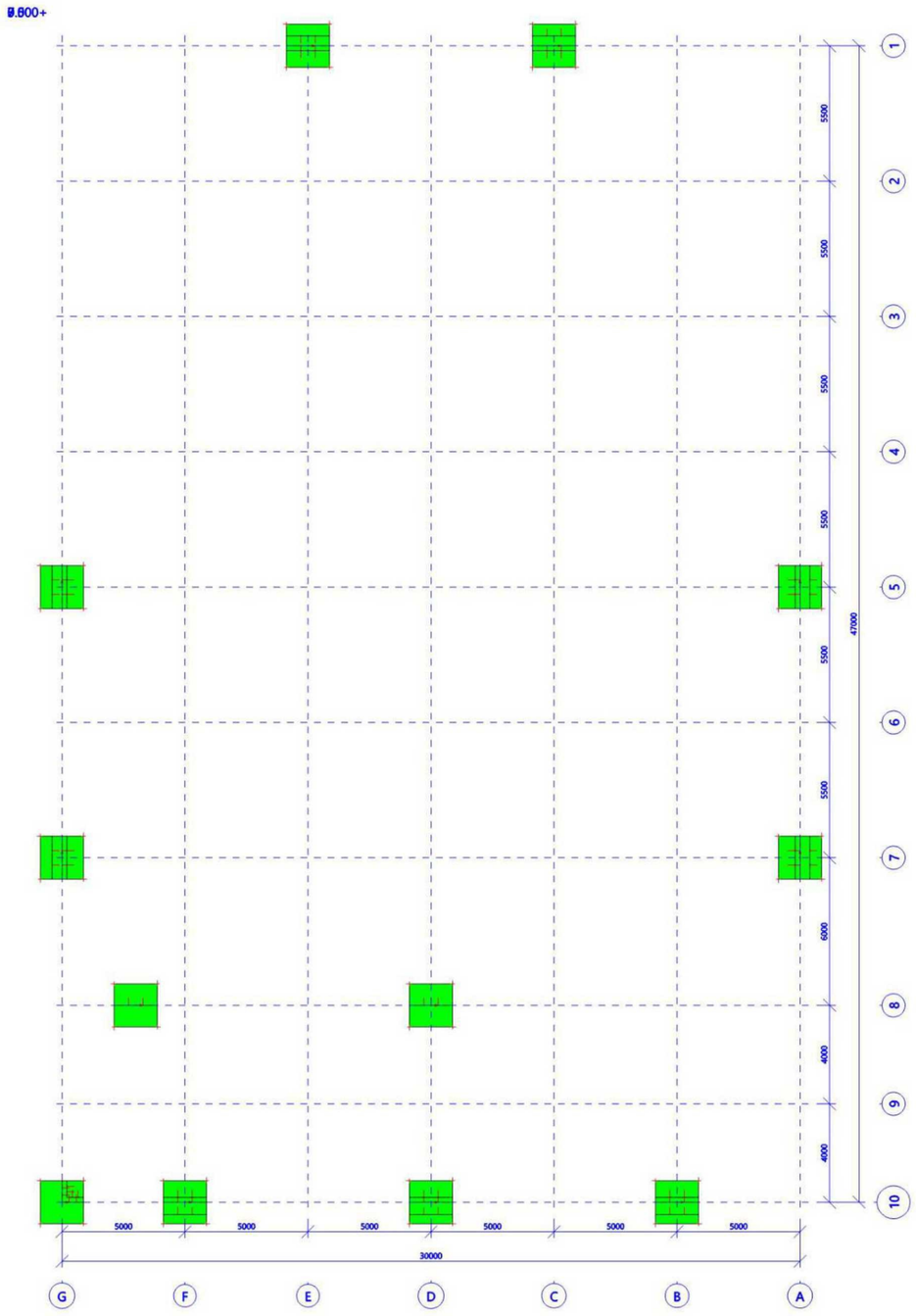
Values: w+
Linear calculation
Class: All SLS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element



w+ [mm]
Constant value 0.000

6.2.2.2. Scheurwijdte (BGT); w-

Values: w-
Linear calculation
Class: All SLS Linear
Extreme: Global
Selection: All
Filter: Layer = Poer 1750x1750x250
Location: In centres. System: LCS
mesh element



w- [mm]
Constant value 0.000