

Sign. DAIM	Dato / Date 05.01.2021	Prosjekt / Project Nome kommune: ny kulvert	Prosj.nr / Proj.no 1350039498
Ktr. / Chkd ???	Dato / Date ???		

Project: Nome kommune: ny kulvert
 Description: Ny GS-kulvert, KS-beregning: endelig situasjon (statisk delvis innspenning bunnplate)
 Designer: RAMBØLL
 Signature: DAIM
 Comments:
 Code: Eurocode (NA: Norwegian)
 File path: C:\Users\DAIM\OneDrive - Ramboll\Documents\StruSoft\FEM-Design 17\drawing
 File name: 1350039498 Nome kommune_Ny GS-kulvert_kontrollberegning_V04.str
 Date/Time: 05.01.2021 08:35
 FEM-Design

Ny kulvert, endelig situasjon, kontrollberegning

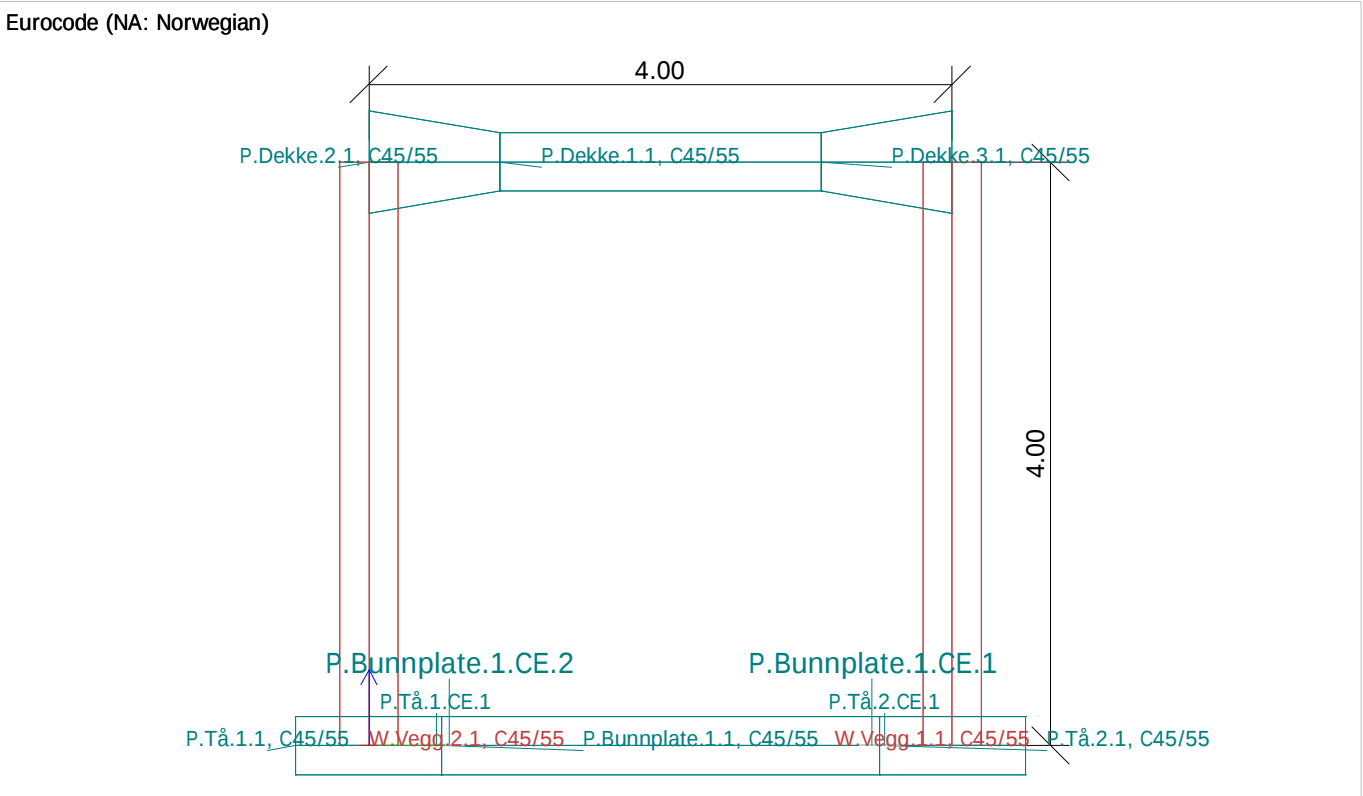
Contents

1	Struktur.....	3...
2	Laster og innvirkninger.....	7
3	Lastkombinering.....	16
4	Beregningsresultater.....	20

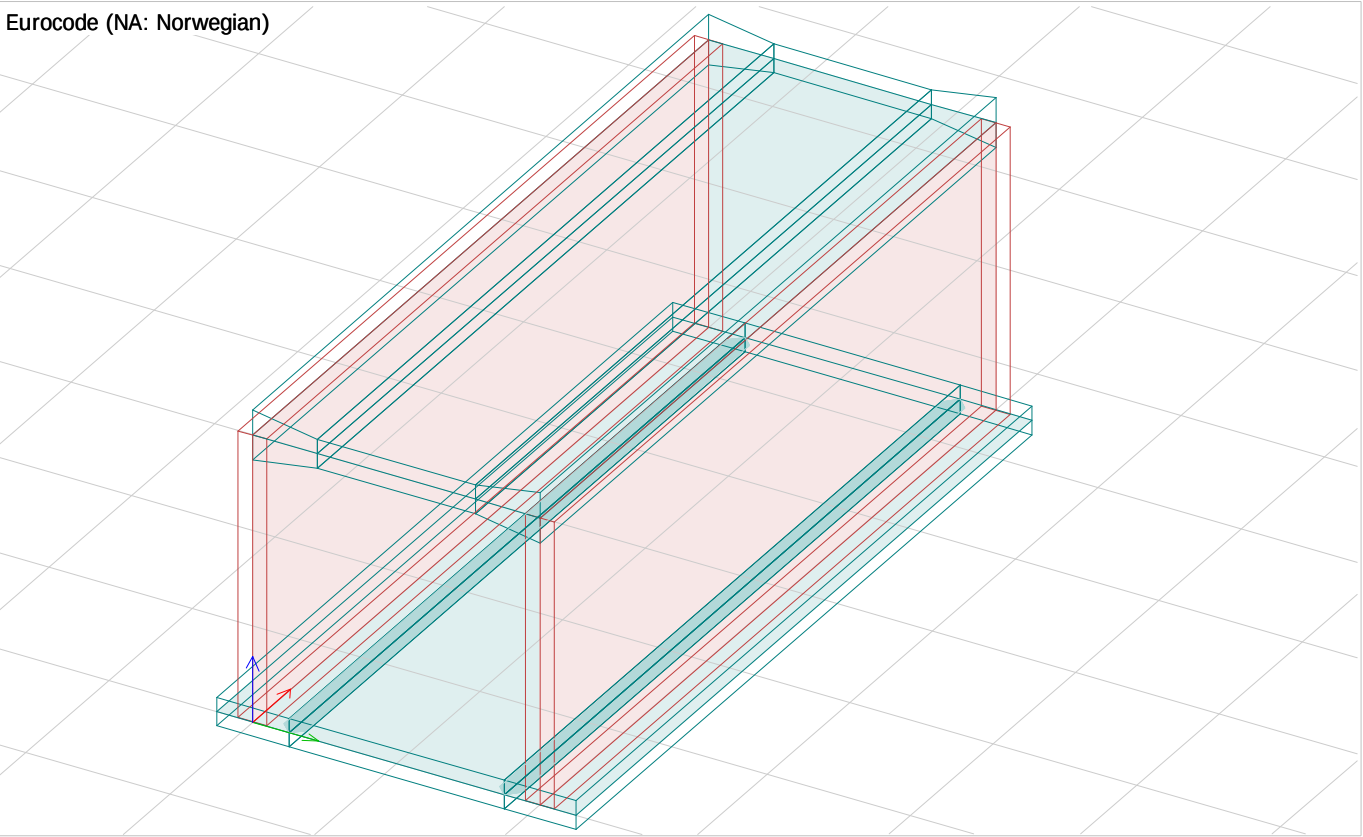
1 Struktur

Geometri

Eurocode (NA: Norwegian)

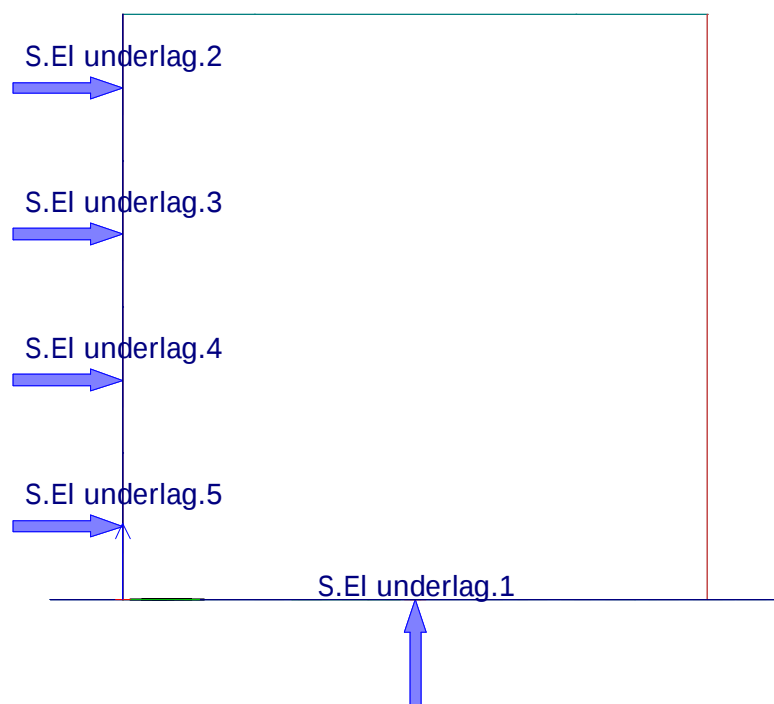


Eurocode (NA: Norwegian)



Statisk system

Eurocode (NA: Norwegian)



Concrete materials

No.	Name	Fck	Fck,cube	Fctm	Fctk	Ecm	Yield strain
[-]	[-]	[N/mm2]	[N/mm2]	[N/mm2]	[N/mm2]	[N/mm2]	[-]
1	C45/55	45.000	55.000	3.800	2.700	36000.000	0.00175

Ultimate strain	Gamma c	Gamma c, Acc	Gamma cE	Gamma s	Gamma s, Acc	Alfa cc	Alfa ct
[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]
0.00350	1.50	1.20	1.20	1.15	1.00	0.85	0.85

Density	Therm. coeff.	Poisson's ratio	Creep coefficient, SLS	Creep coefficient, ULS
[t/m3]	[1/°C]	[-]	[-]	[-]
2.548	0.000010	0.200	0.900	1.250

Shrinkage	Dyna r.	Stab r.
[-]	[-]	[-]
0.260	0.200	0.500

Plates

ID	Material	t1	t2	t3	E2 / E1	Alpha	Ecc.	Ecc. calc.	Ecc. crack.
[-]	[-]	[m]	[m]	[m]	[-]	[rad]	[m]	[-]	[-]
P.Bunnplate.1.1	C45/55	0.400	0.400	0.400	1.000	0.000	0.000	No	No
P.Dekke.1.1	C45/55	0.400	0.400	0.400	1.000	0.000	0.000	No	No
P.Dekke.2.1	C45/55	0.700	0.400	0.400	1.000	0.000	0.000	No	No

ID	Material	t1	t2	t3	E2 / E1	Alpha	Ecc.	Ecc. calc.	Ecc. crack.
[-]	[-]	[m]	[m]	[m]	[-]	[rad]	[m]	[-]	[-]
P.Dekke.3.1	C45/55	0.700	0.400	0.400	1.000	0.000	0.000	No	No
P.Tå.1.1	C45/55	0.400	0.400	0.400	1.000	0.000	0.000	No	No
P.Tå.2.1	C45/55	0.400	0.400	0.400	1.000	0.000	0.000	No	No

Walls

ID	Material	t1	t2	t3	E2 / E1	Alpha	Ecc.	Ecc. calc.	Ecc. crack.	Length
[-]	[-]	[m]	[m]	[m]	[-]	[rad]	[m]	[-]	[-]	[m]
W.Vegg.1.1	C45/55	0.400	0.400	-	1.000	0.000	0.000	No	No	11.000
W.Vegg.2.1	C45/55	0.400	0.400	-	1.000	0.000	0.000	No	No	11.000

Height
[m]
4.000
4.000

Surface support groups

ID	Kx' comp.	Kx' tens.	Ky' comp.	Ky' tens.	Kz' comp.	Kz' tens.
[-]	[kN/m/m2]	[kN/m/m2]	[kN/m/m2]	[kN/m/m2]	[kN/m/m2]	[kN/m/m2]
S.El underlag.1	3500	3500	3500	3500	9000	0
S.El underlag.2	0	0	0	0	3583	3583
S.El underlag.3	0	0	0	0	4750	4750
S.El underlag.4	0	0	0	0	5917	5917
S.El underlag.5	0	0	0	0	7083	7083

Pl. lim. force, x', comp.	Pl. lim. force, x', tens.	Pl. lim. force, y', comp.	Pl. lim. force, y', tens.	Pl. lim. force, z', comp.
[kN/m2]	[kN/m2]	[kN/m2]	[kN/m2]	[kN/m2]
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Pl. lim. force, z', tens.	Type	Disconn.
[kN/m2]		
-	-	No
-	-	No
-	-	No
-	-	No
-	-	No

Line connections

ID	Kx' comp.	Kx' tens.	Ky' comp.	Ky' tens.	Kz' comp.
[-]	[kN/m/m]	[kN/m/m]	[kN/m/m]	[kN/m/m]	[kN/m/m]
P.Bunnplate.1.CE.1	10000000	10000000	10000000	10000000	10000000
P.Bunnplate.1.CE.2	10000000	10000000	10000000	10000000	10000000
P.Tå.1.CE.1	10000000	10000000	10000000	10000000	10000000
P.Tå.2.CE.1	10000000	10000000	10000000	10000000	10000000

Kz' tens.	Cx' comp.	Cx' tens.	Cy' comp.	Cy' tens.	Cz' comp.	Cz' tens.
[kN/m/m]	[kNm/rad/m]	[kNm/rad/m]	[kNm/rad/m]	[kNm/rad/m]	[kNm/rad/m]	[kNm/rad/m]
10000000	10000000	10000000	45000	45000	10000000	10000000
10000000	10000000	10000000	45000	45000	10000000	10000000
10000000	10000000	10000000	45000	45000	10000000	10000000
10000000	10000000	10000000	45000	45000	10000000	10000000

Pl. lim. force, x', comp.	Pl. lim. force, x', tens.	Pl. lim. force, y', comp.	Pl. lim. force, y', tens.	Pl. lim. force, z', comp.
[kN/m]	[kN/m]	[kN/m]	[kN/m]	[kN/m]
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Pl. lim. force, z', tens.	Pl. lim. moment, x', comp.	Pl. lim. moment, x', tens.	Pl. lim. moment, y', comp.	Pl. lim. moment, y', tens.
[kN/m]	[kNm/m]	[kNm/m]	[kNm/m]	[kNm/m]
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

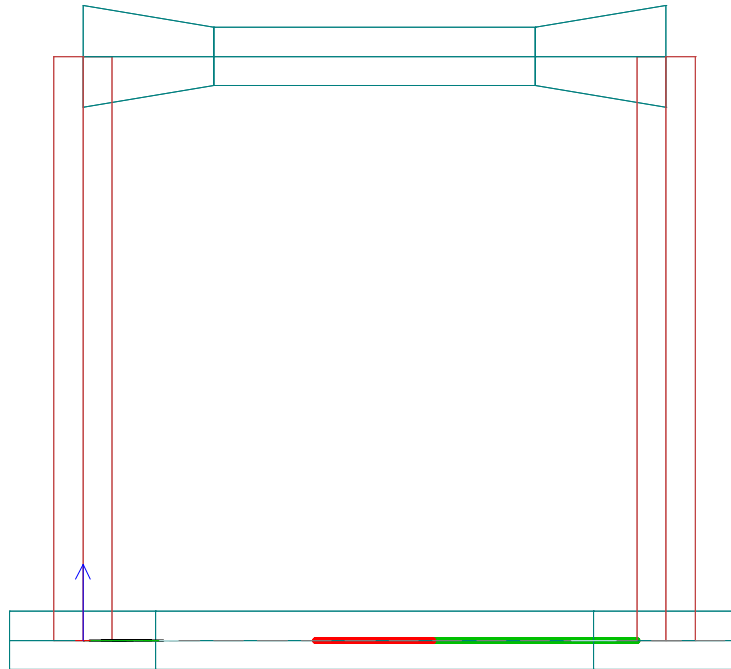
Pl. lim. moment, z', comp.	Pl. lim. moment, z', tens.	rs	re	Direction
[kNm/m]	[kNm/m]	[-]	[-]	[-]
-	-	0.000e+00	0.000e+00	Direction changes along line.
-	-	0.000e+00	0.000e+00	Direction changes along line.
-	-	0.000e+00	0.000e+00	Direction changes along line.
-	-	0.000e+00	0.000e+00	Direction changes along line.

Type	Disconn.	Friction
		[-]
-	No	3.000e-01
-	No	3.000e-01
-	No	3.000e-01
-	No	3.000e-01

2 Laster og innvirkninger

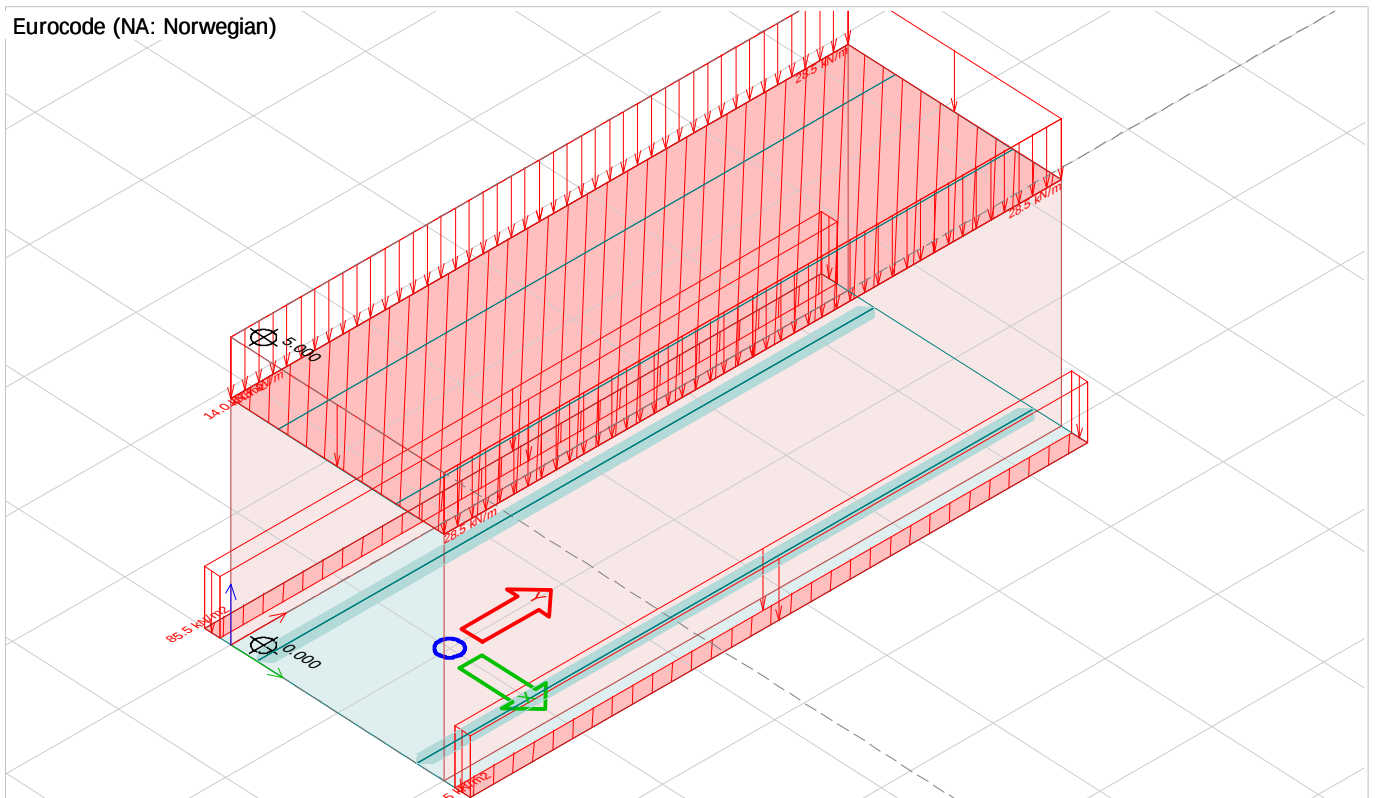
Egenvekt (program styrt)

Eurocode (NA: Norwegian)



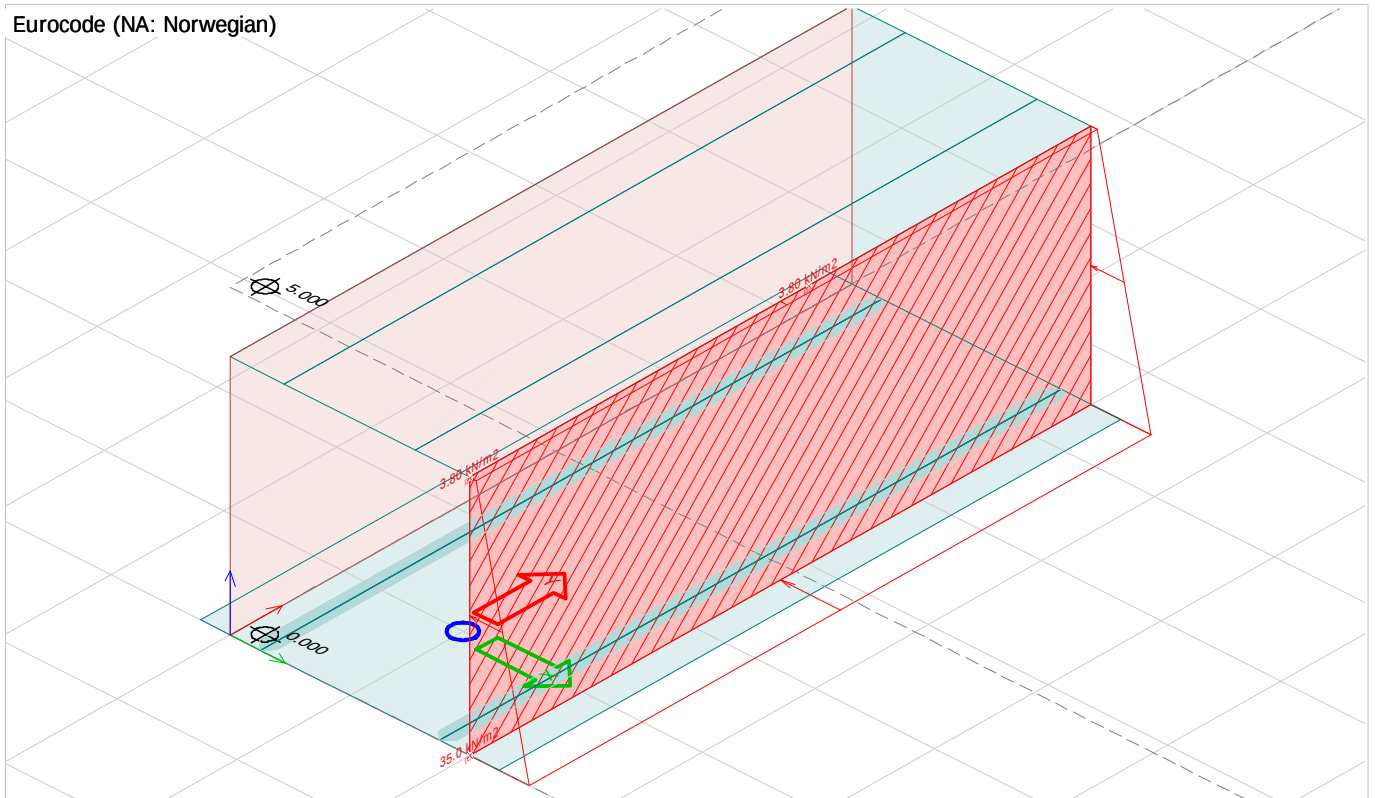
Fylling vertikalt inkl ballast: FV

Eurocode (NA: Norwegian)



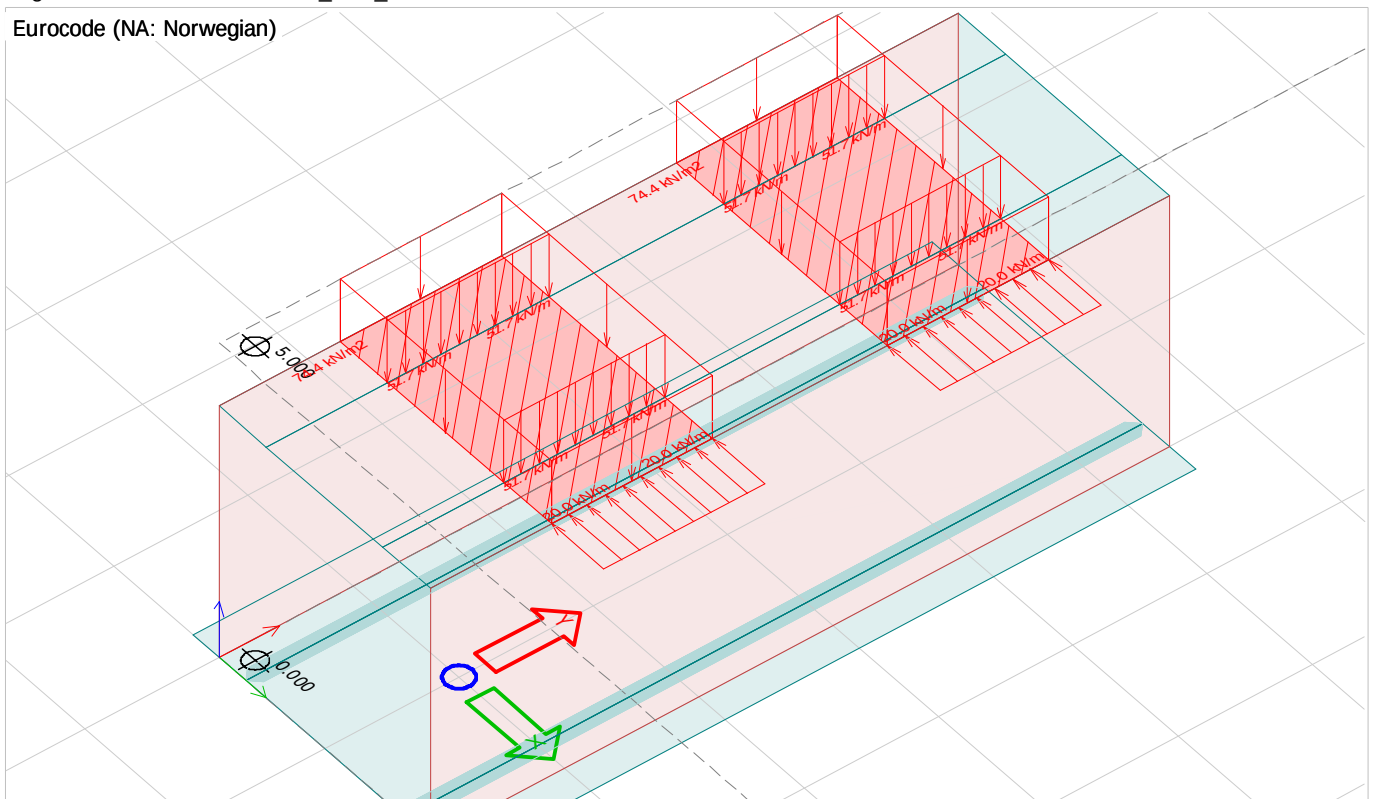
Fylling horisontalt (jordtrykk): FH

Eurocode (NA: Norwegian)



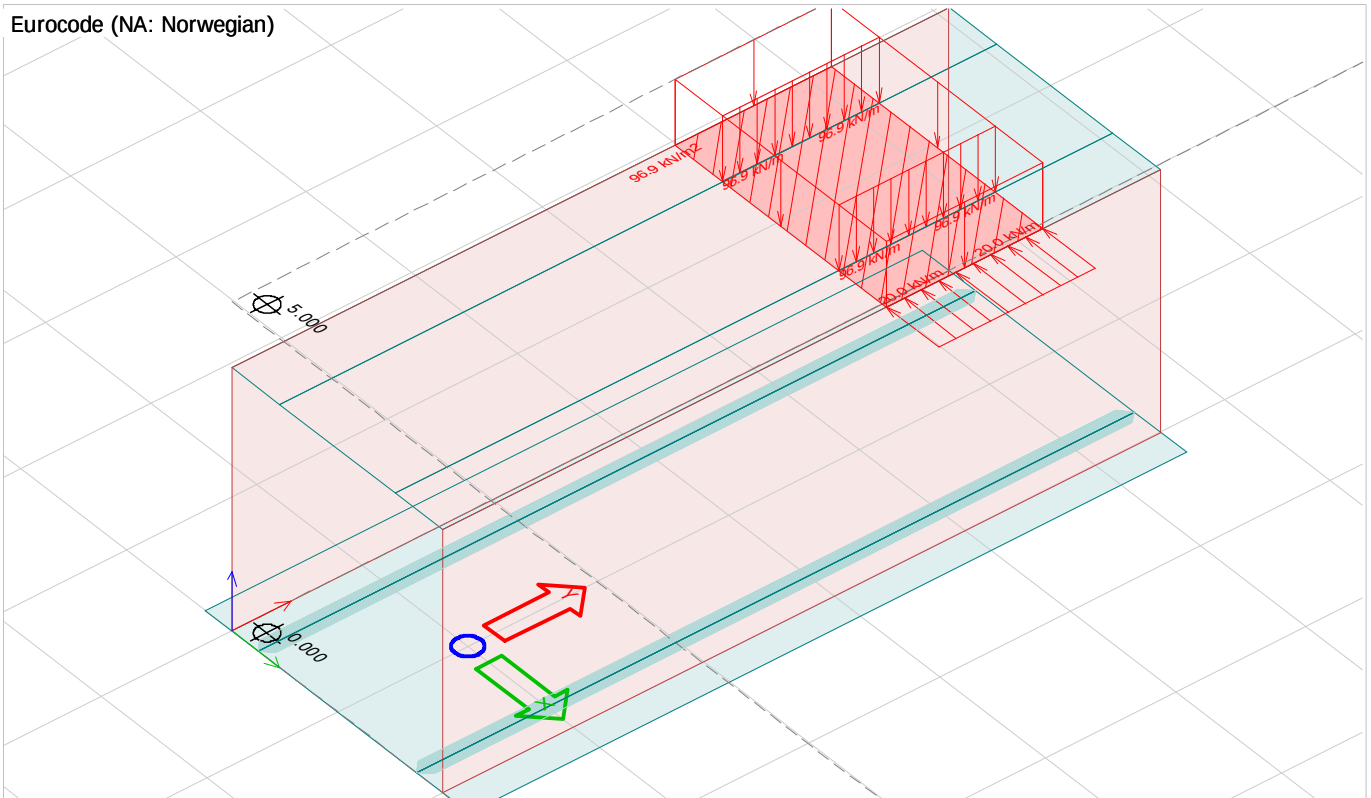
Togtrafikk LM71 vert. + hor.: TD_V+H_1

Eurocode (NA: Norwegian)



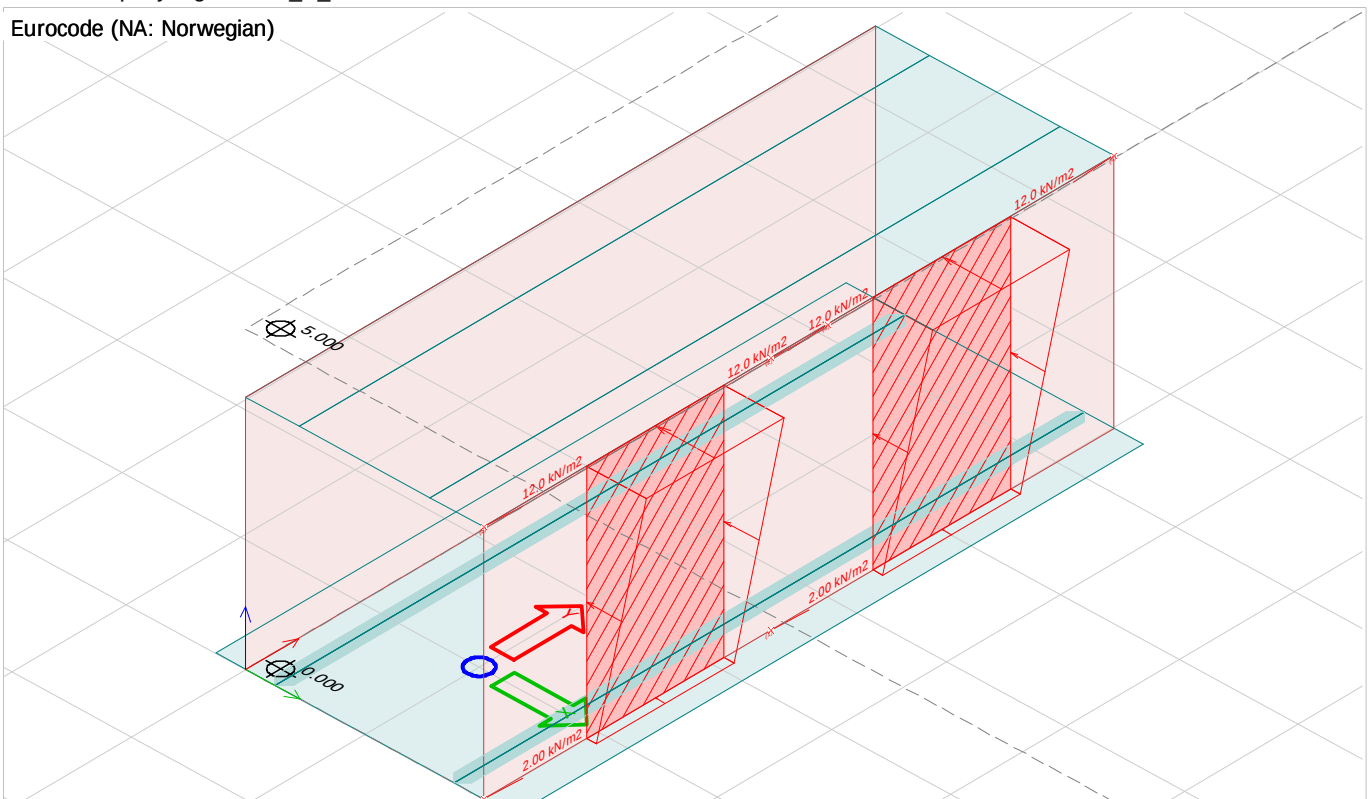
Togtrafikk SW2 vert. + hor.: TD_V+H_2

Eurocode (NA: Norwegian)



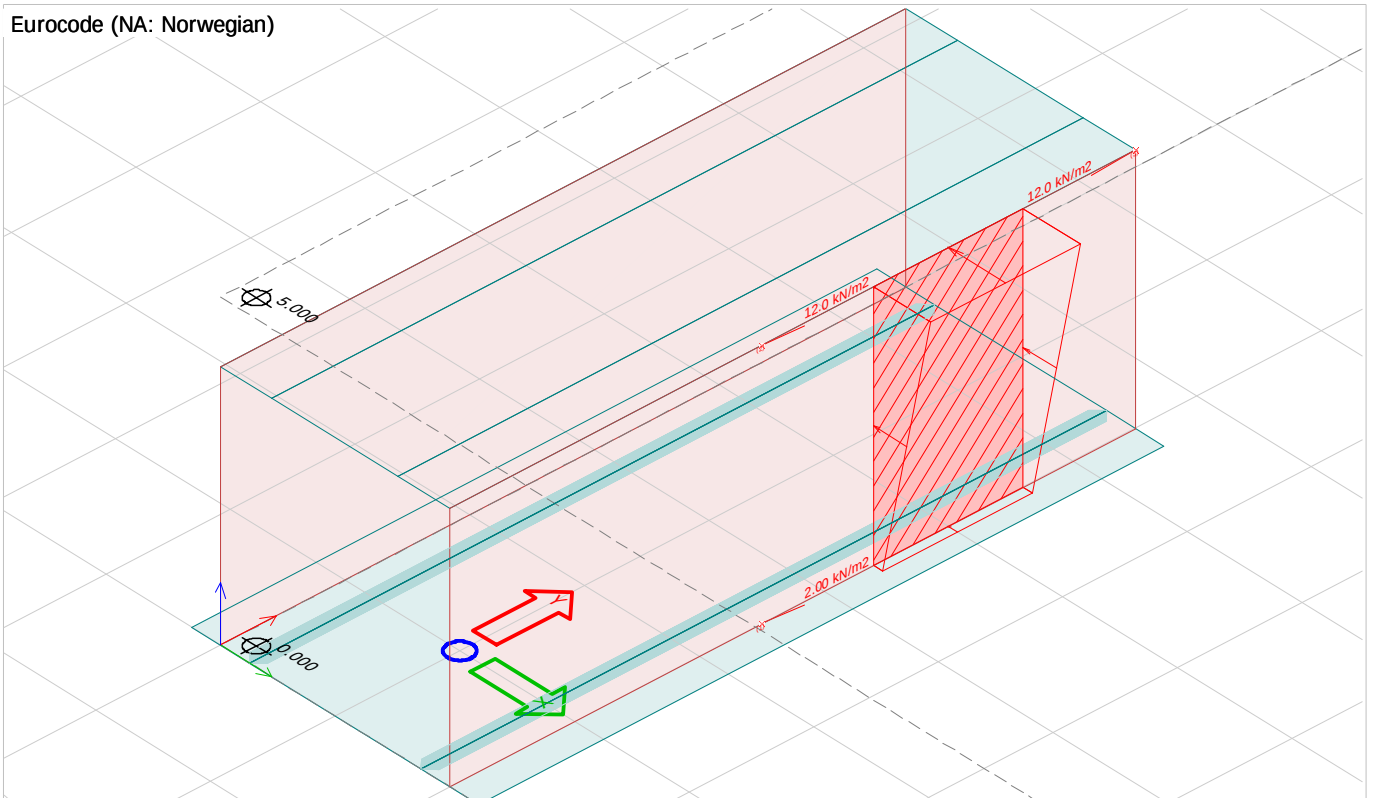
Ekv. trafikk på fylling hor.: TF_H_1

Eurocode (NA: Norwegian)



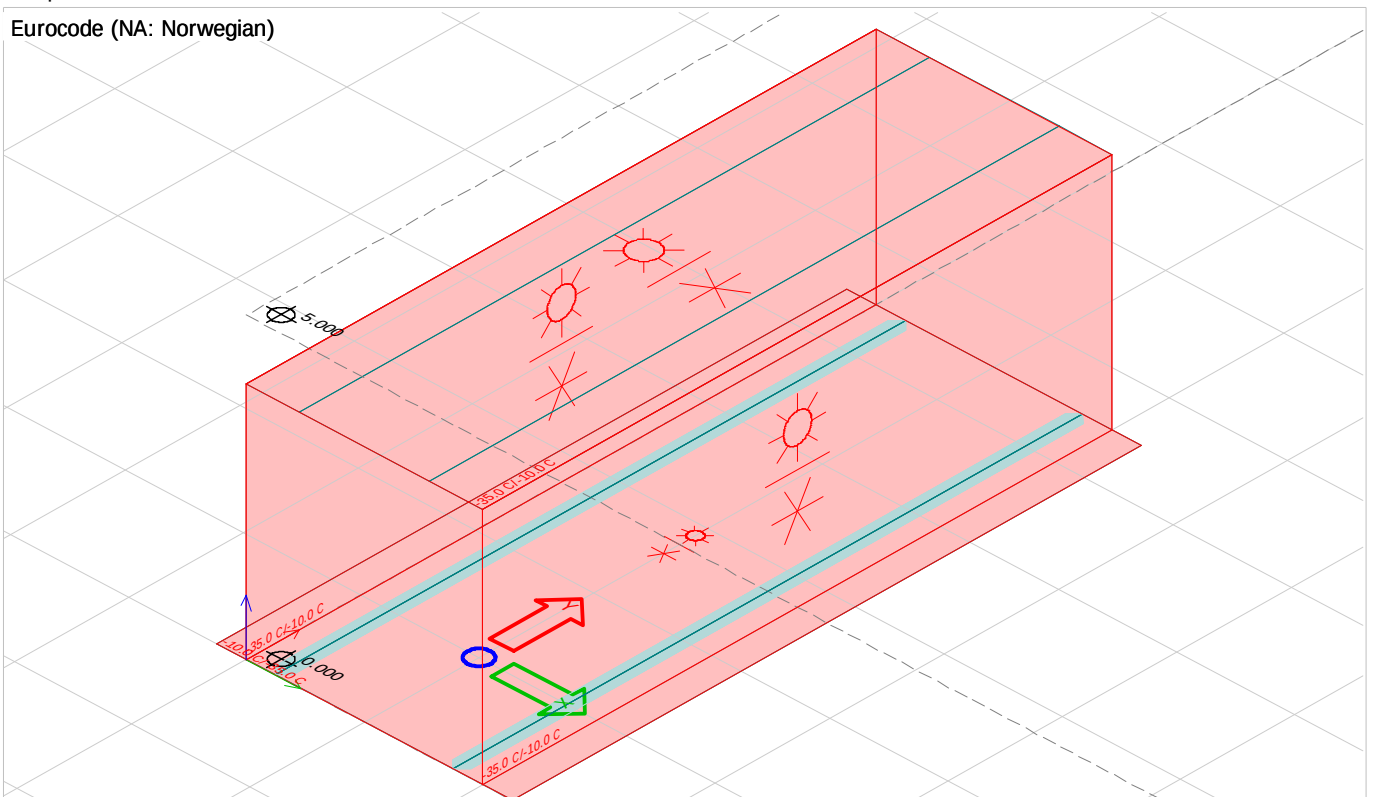
Ekv. trafikk på fylling hor.: TF_H_2

Eurocode (NA: Norwegian)



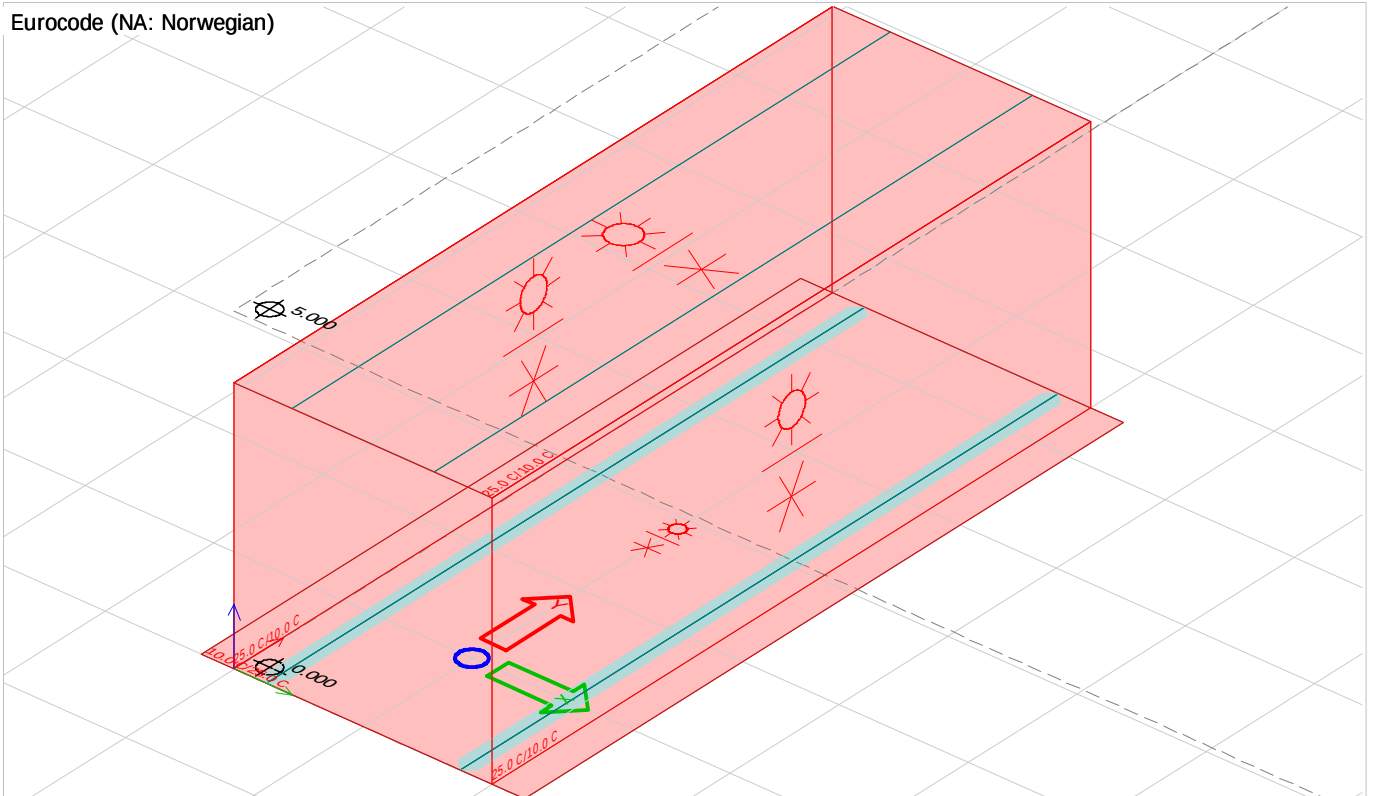
Temperatur: T,ned

Eurocode (NA: Norwegian)



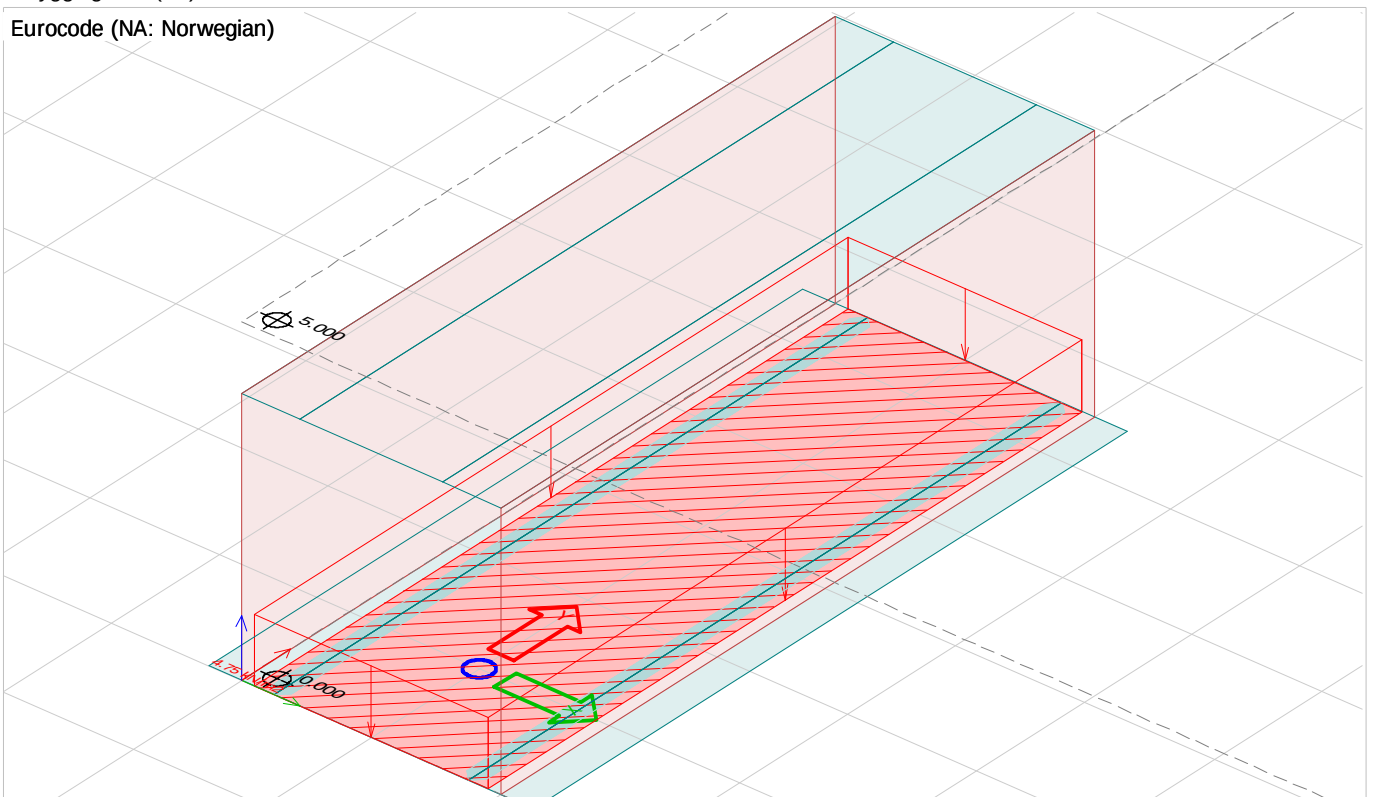
Temperatur: T_{opp}

Eurocode (NA: Norwegian)



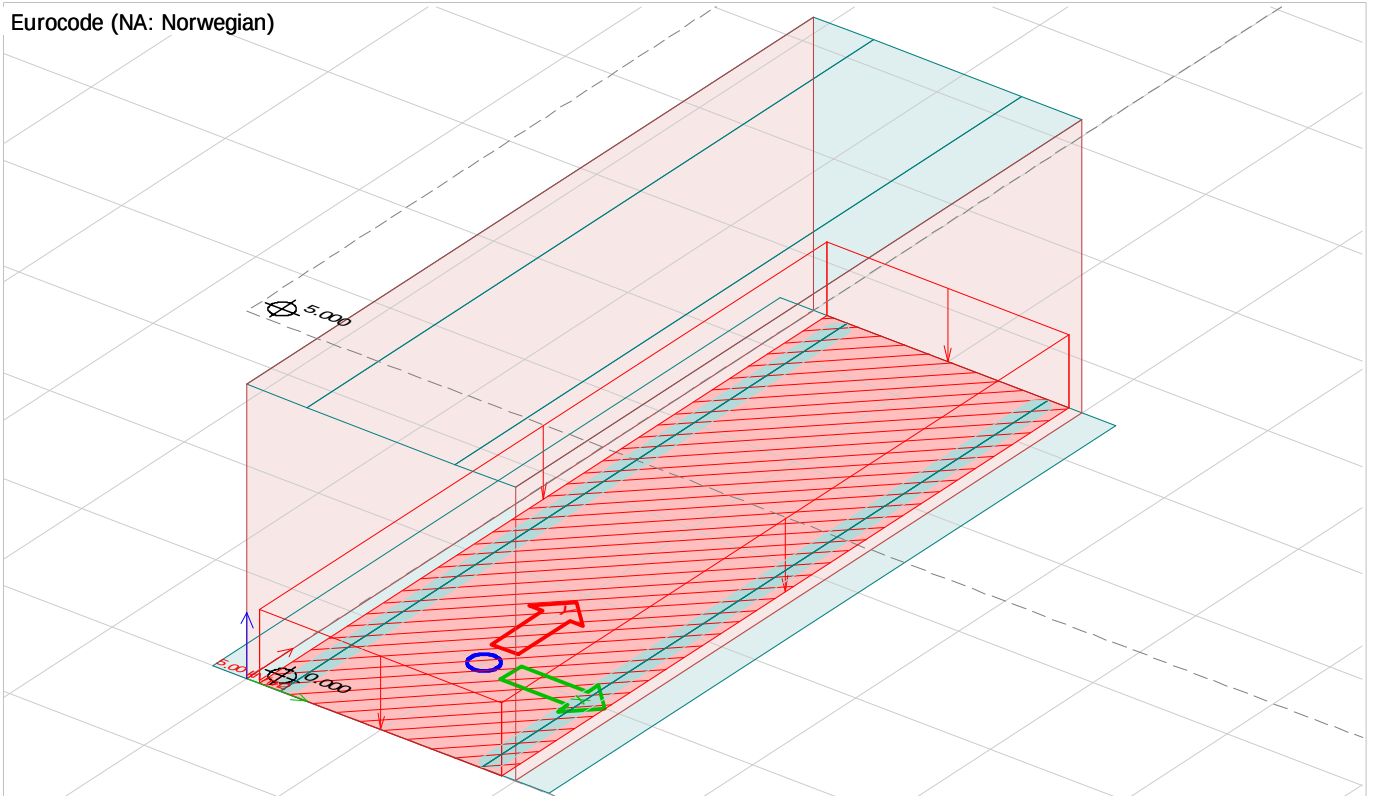
Utbyggingslast (vei): UL

Eurocode (NA: Norwegian)



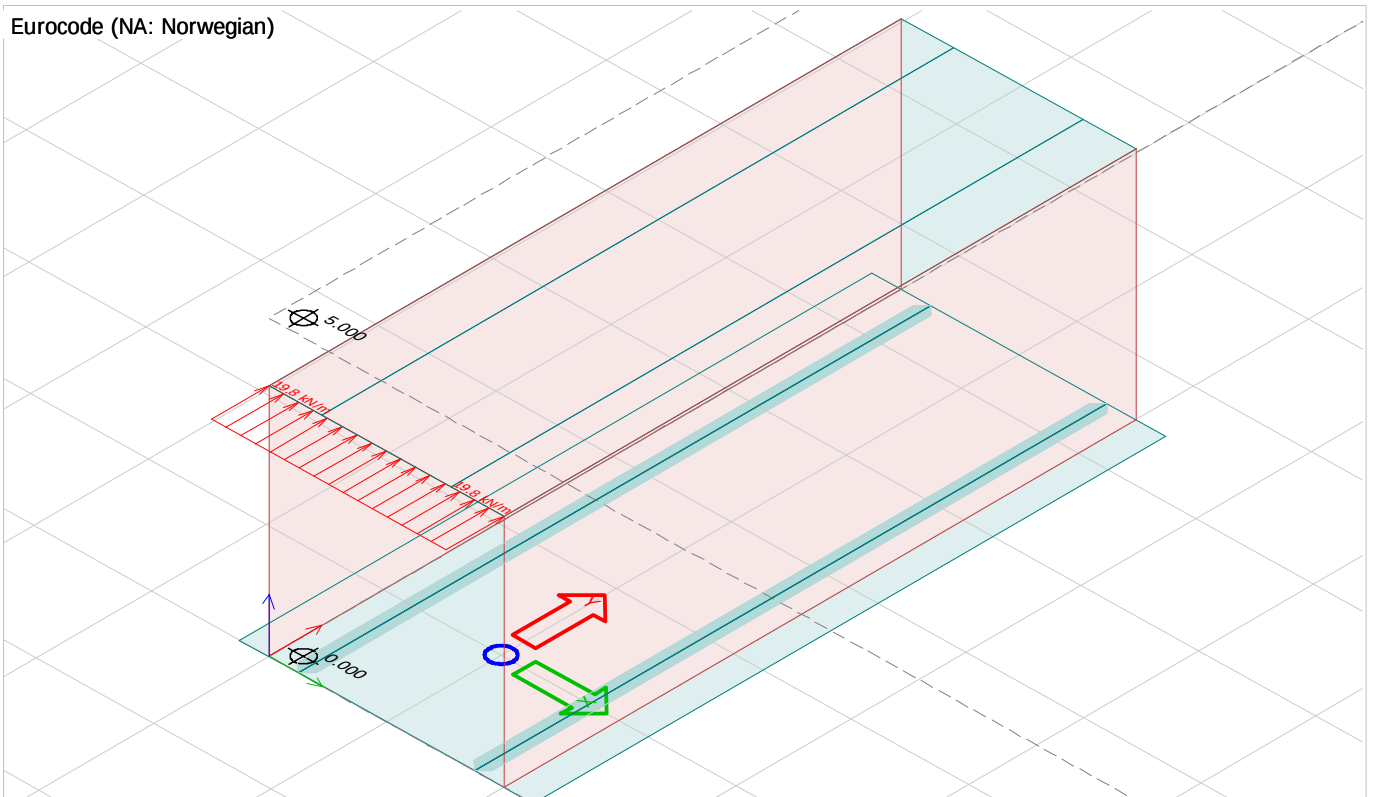
Trafikklast vei LM4: TV_B

Eurocode (NA: Norwegian)



Vindlast y-retning: Vind

Eurocode (NA: Norwegian)



Line loads

No.	q1	q2	m1	m2	Load case	Comment	Intensity	Direction
[-]	[kN/m]	[kN/m]	[kNm/m]	[kNm/m]	[-]	[-]	[-]	[-]
1	28.500	28.500	0.000	0.000	FV		Action	Constant
2	28.500	28.500	0.000	0.000	FV		Action	Constant
3	51.700	51.700	0.000	0.000	TD_V+H_1		Action	Constant
4	51.700	51.700	0.000	0.000	TD_V+H_1		Action	Constant
5	20.000	20.000	0.000	0.000	TD_V+H_1		Action	Constant
6	51.700	51.700	0.000	0.000	TD_V+H_1		Action	Constant
7	51.700	51.700	0.000	0.000	TD_V+H_1		Action	Constant
8	20.000	20.000	0.000	0.000	TD_V+H_1		Action	Constant
9	19.800	19.800	0.000	0.000	Vind		Action	Constant
10	96.900	96.900	0.000	0.000	TD_V+H_2		Action	Constant
11	96.900	96.900	0.000	0.000	TD_V+H_2		Action	Constant
12	20.000	20.000	0.000	0.000	TD_V+H_2		Action	Constant

Surface loads (Ordinary)

No.	q1	q2	q3	Load case	Comment	Intensity
[-]	[kN/m2]	[kN/m2]	[kN/m2]	[-]	[-]	[-]
1	14.000	14.000	14.000	FV		Action
2	35.000	3.800	3.800	FH		Action
3	85.500	85.500	85.500	FV		Action
4	85.500	85.500	85.500	FV		Action
5	74.400	74.400	74.400	TD_V+H_1		Action
6	2.000	12.000	12.000	TF_H_1		Action
7	4.750	4.750	4.750	UL		Action
8	5.000	5.000	5.000	TB_V		Action
9	74.400	74.400	74.400	TD_V+H_1		Action
10	2.000	12.000	12.000	TF_H_1		Action
11	96.900	96.900	96.900	TD_V+H_2		Action
12	2.000	12.000	12.000	TF_H_2		Action

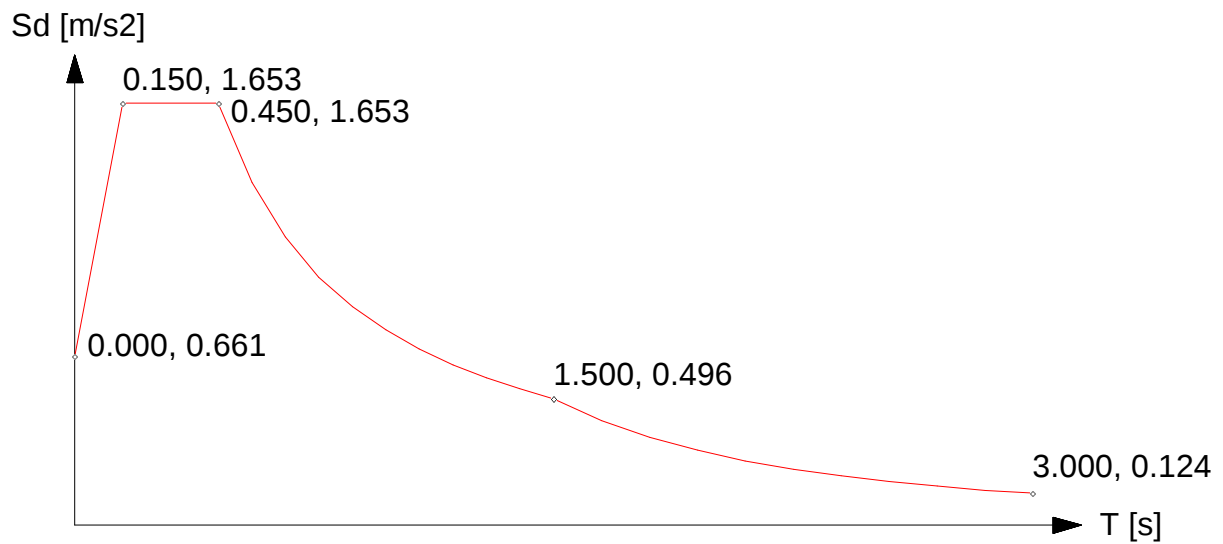
Surface temperature loads

No.	t1	t1'	t2	t2'	t3	t3'	Load case	Comment
[-]	[°C]	[°C]	[°C]	[°C]	[°C]	[°C]	[-]	[-]
1	-35.0	-10.0	-35.0	-10.0	-35.0	-10.0	T,ned	
2	-35.0	-10.0	-35.0	-10.0	-35.0	-10.0	T,ned	
3	-10.0	-35.0	-10.0	-35.0	-10.0	-35.0	T,ned	
4	-35.0	-10.0	-35.0	-10.0	-35.0	-10.0	T,ned	
5	25.0	10.0	25.0	10.0	25.0	10.0	T,opp	
6	25.0	10.0	25.0	10.0	25.0	10.0	T,opp	
7	10.0	25.0	10.0	25.0	10.0	25.0	T,opp	
8	25.0	10.0	25.0	10.0	25.0	10.0	T,opp	

Seismic load, structure information

Value	Quantity
Structure type	Building structure

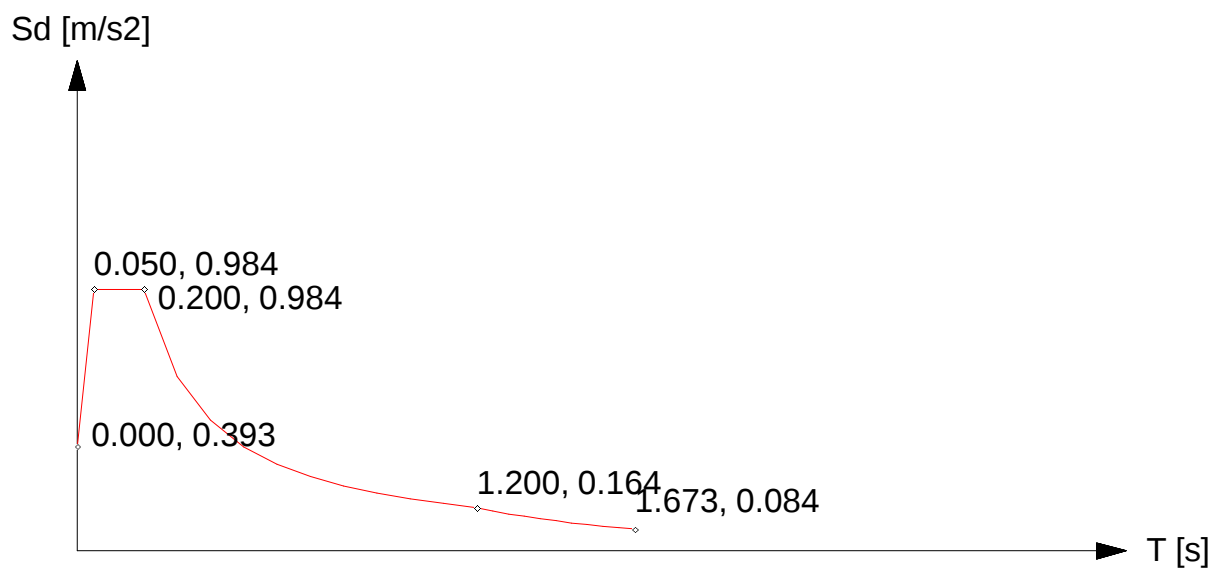
Value	Quantity
xi (damping factor) [%]	5.000
qd (behaviour factor for displacements)	1.500



Seismic load, horizontal sp., standard

Value	Quantity
Type	1
Ground	D
a_g [m/s ²]	0.620
S	1.600
TB [s]	0.150

Value	Quantity
TC [s]	0.450
TD [s]	1.500
q	1.500
beta	0.200



Seismic load, vertical sp., standard

Value	Quantity
Type	2
agv/ag [m/s ²]	0.680
S	1.400
TB [s]	0.050

Value	Quantity
TC [s]	0.200
TD [s]	1.200
q	1.500
beta	0.200

3 Lastkombinering

Load cases

No.	Name	Type	Duration class
1	Egenvekt	+Struc. dead load	Permanent
2	FV	Ordinary	Permanent
3	FH	Ordinary	Permanent
4	TD_V+H_1	Ordinary	Permanent
5	TD_V+H_2	Ordinary	Permanent
6	TF_H_1	Ordinary	Permanent
7	TF_H_2	Ordinary	Permanent
8	T,ned	Ordinary	Permanent
9	T,opp	Ordinary	Permanent
10	K+S	+Shrinkage	Permanent
11	UL	Ordinary	Permanent
12	TB_V	Ordinary	Permanent
13	Vind	Ordinary	Permanent
14	F,seis,x+	+Seis load, Fx+Mx	Short-term
15	F,seis,x-	+Seis load, Fx-Mx	Short-term

Load combinations analysis setup

No	Type	Load combination	Construction	Non-linear	Plastic	Non-linear	Cracked	2nd	Imperfection
			stages	elements	elements	soil	section	order	shape
1	U	ULS STR 6.10a_1	No	Yes	No	No	No	Yes	-
2	U	ULS STR 6.10a_2	No	Yes	No	No	No	Yes	-
3	U	ULS STR 6.10b_1	No	Yes	No	No	No	Yes	-
4	U	ULS STR 6.10b_2	No	Yes	No	No	No	Yes	-
5	U	ULS GEO Sett C 6.10_1	No	Yes	No	No	No	Yes	-
6	U	ULS GEO Sett C 6.10_2	No	Yes	No	No	No	Yes	-
7	Sq	SLS til.-perm._1	No	Yes	No	No	No	Yes	-
8	Sq	SLS til.-perm._2	No	Yes	No	No	No	Yes	-
9	Sc	SLS karakt._1	No	Yes	No	No	No	Yes	-
10	Sc	SLS karakt._2	No	Yes	No	No	No	Yes	-
11	Sc	G (egenvekt)	No	Yes	Yes	No	No	No	-

Ground
water level
-
-
-
-
-
-
-
-
-
-

No	Type	Load combination	Construction	Non-linear	Plastic	Non-linear	Cracked	2nd	Imperfection
			stages	elements	elements	soil	section	order	shape
12	Us	ALS jordskjelv, Fx+	No	Yes	No	No	No	Yes	-
13	Us	ALS jordskjelv, Fx-	No	Yes	No	No	No	Yes	-
14	Us	ALS jordskjelv, max	No	Yes	No	No	No	Yes	-

Ground
water level
-
-
-

Load combinations

No.	Name	Type	Factor	Load cases
1	ULS STR 6.10a_1	Ultimate	1.350	Egenvekt (+Struc. dead load)
			1.350	FV
			1.350	FH
			1.050	TD_V+H_1
			1.050	TF_H_1
			0.840	T,ned
			1.000	K+S (+Shrinkage)
			1.120	Vind
			1.350	UL
2	ULS STR 6.10a_2	Ultimate	0.950	TB_V
			1.350	Egenvekt (+Struc. dead load)
			1.350	FV
			1.350	FH
			1.050	TD_V+H_2
			1.050	TF_H_2
			0.840	T,ned
			1.000	K+S (+Shrinkage)
			1.120	Vind
			1.350	UL
3	ULS STR 6.10b_1	Ultimate	0.950	TB_V
			1.200	Egenvekt (+Struc. dead load)
			1.200	FV
			1.200	FH
			1.500	TD_V+H_1
			1.500	TF_H_1
			0.840	T,ned
			1.000	K+S (+Shrinkage)
			1.120	Vind
			1.200	UL
4	ULS STR 6.10b_2	Ultimate	0.950	TB_V
			1.200	Egenvekt (+Struc. dead load)
			1.200	FV
			1.200	FH
			1.500	TD_V+H_2

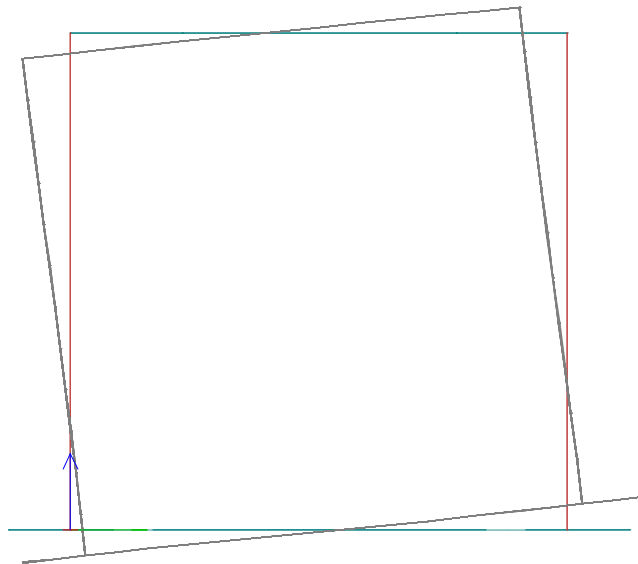
No.	Name	Type	Factor	Load cases
5	ULS GEO Sett C 6.10_1	Ultimate	1.500	TF_H_2
			0.840	T,ned
			1.000	K+S (+Shrinkage)
			1.120	Vind
			1.200	UL
			0.950	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.300	FH
			1.300	TD_V+H_1
			1.300	TF_H_1
			0.910	T,opp
			1.000	K+S (+Shrinkage)
			0.810	Vind
			1.000	UL
6	ULS GEO Sett C 6.10_2	Ultimate	0.810	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.300	FH
			1.300	TD_V+H_2
			1.300	TF_H_2
			0.910	T,opp
			1.000	K+S (+Shrinkage)
			0.810	Vind
			1.000	UL
			0.810	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.000	FH
			0.500	TD_V+H_1
7	SLS til.-perm._1	Quasi-permanent	0.500	TF_H_1
			1.000	T,ned
			1.000	K+S (+Shrinkage)
			0.500	Vind
			0.500	UL
			0.500	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.000	FH
			0.500	TD_V+H_2
			0.500	TF_H_2
			1.000	T,ned
			1.000	K+S (+Shrinkage)
			0.500	Vind
			0.500	UL
8	SLS til.-perm._2	Quasi-permanent	0.500	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.000	FH
			0.500	TD_V+H_2
			0.500	TF_H_2
			1.000	T,ned
			1.000	K+S (+Shrinkage)
			0.500	Vind
			0.500	UL
			0.500	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.000	FH
			0.500	TD_V+H_1
9	SLS karakt._1	Characteristic	0.500	TF_H_1
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV

No.	Name	Type	Factor	Load cases
10	SLS karakt._2	Characteristic	1.000	FH
			1.000	TD_V+H_1
			1.000	TF_H_1
			1.000	T,ned
			1.000	K+S (+Shrinkage)
			1.000	Vind
			1.000	UL
			1.000	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.000	FH
			1.000	TD_V+H_2
			1.000	TF_H_2
			1.000	T,ned
			1.000	K+S (+Shrinkage)
			1.000	Vind
			1.000	UL
11	G (egenvekt)	Characteristic	1.000	TB_V
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
12	ALS jordskjelv, Fx+	Seismic	1.000	UL
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
13	ALS jordskjelv, Fx-	Seismic	1.000	FH
			1.000	TB_V
			1.000	F,seis,x+ (+Seis load, Fx+Mx)
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
14	ALS jordskjelv, max	Seismic	1.000	FH
			1.000	UL
			1.000	F,seis,x- (+Seis load, Fx-Mx)
			1.000	Egenvekt (+Struc. dead load)
			1.000	FV
			1.000	FH
			1.000	UL
			1.000	Seismic max.

4 Beregningsresultater

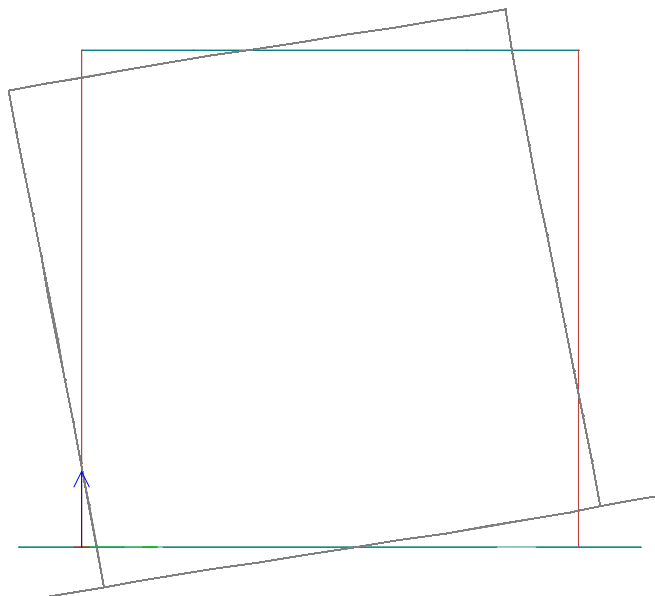
1. kritisk eigenform | ULS (alpha,cr)

Eurocode (NA: Norwegian) code: Stability analysis - ULS STR 6.10b_1 - 1.shape (56.715) - Translational displacements - []



1. kritisk eigenform | ALSse (alpha,cr)

Eurocode (NA: Norwegian) code: Stability analysis - ALS jordskjelv, max - 1.shape (132.307) - Translational displacements - []



Seis. calc.: modal analysis

Value	Quantity
Alpha (angle of x-x')	0.000 [rad]
Summation rule	SRSS
Combination rule	Ex "+" 0.3Ey "+" 0.3Ez...
Signed result	No
Torsional effect	5.0 [%]

Selected shapes & effective masses

Shape no.	T	mx'	my'	mz'
[-]	[s]	[%]	[%]	[%]
1	0.308	0.0	85.1	-
2	0.307	81.3	0.0	-
4	0.163	-	-	98.6
5	0.131	-	14.7	-
6	0.119	12.8	-	-
8	0.055	4.5	-	-
9	0.049	1.3	-	0.8
Summa		99.8	99.8	99.4

Effective/Modal masses in the x'-y'-z' coordinate system

Shape no.	T	mx'	my'	mz'	mx'	my'	mz'
[-]	[s]	[%]	[%]	[%]	[t]	[t]	[t]
1	0.308	0.0	85.1	0.0	0.000	225.510	0.000
2	0.307	81.3	0.0	0.0	215.413	0.000	0.000
3	0.204	0.0	0.0	0.0	0.000	0.000	0.000
4	0.163	0.0	0.0	98.6	0.000	0.000	261.168
5	0.131	0.0	14.7	0.0	0.000	38.849	0.000
6	0.119	12.8	0.0	0.0	33.914	0.000	0.000
7	0.067	0.0	0.0	0.0	0.000	0.000	0.000
8	0.055	4.5	0.0	0.0	11.823	0.000	0.000
9	0.049	1.3	0.0	0.8	3.320	0.000	2.245
10	0.046	0.0	0.0	0.0	0.000	0.000	0.000

Eigenfrequencies

Shape	Frequency	Period
[-]	[Hz]	[s]
1	3.246	0.308
2	3.262	0.307
3	4.900	0.204
4	6.128	0.163

Shape	Frequency	Period
[-]	[Hz]	[s]
5	7.642	0.131
6	8.391	0.119
7	14.966	0.067
8	18.193	0.055

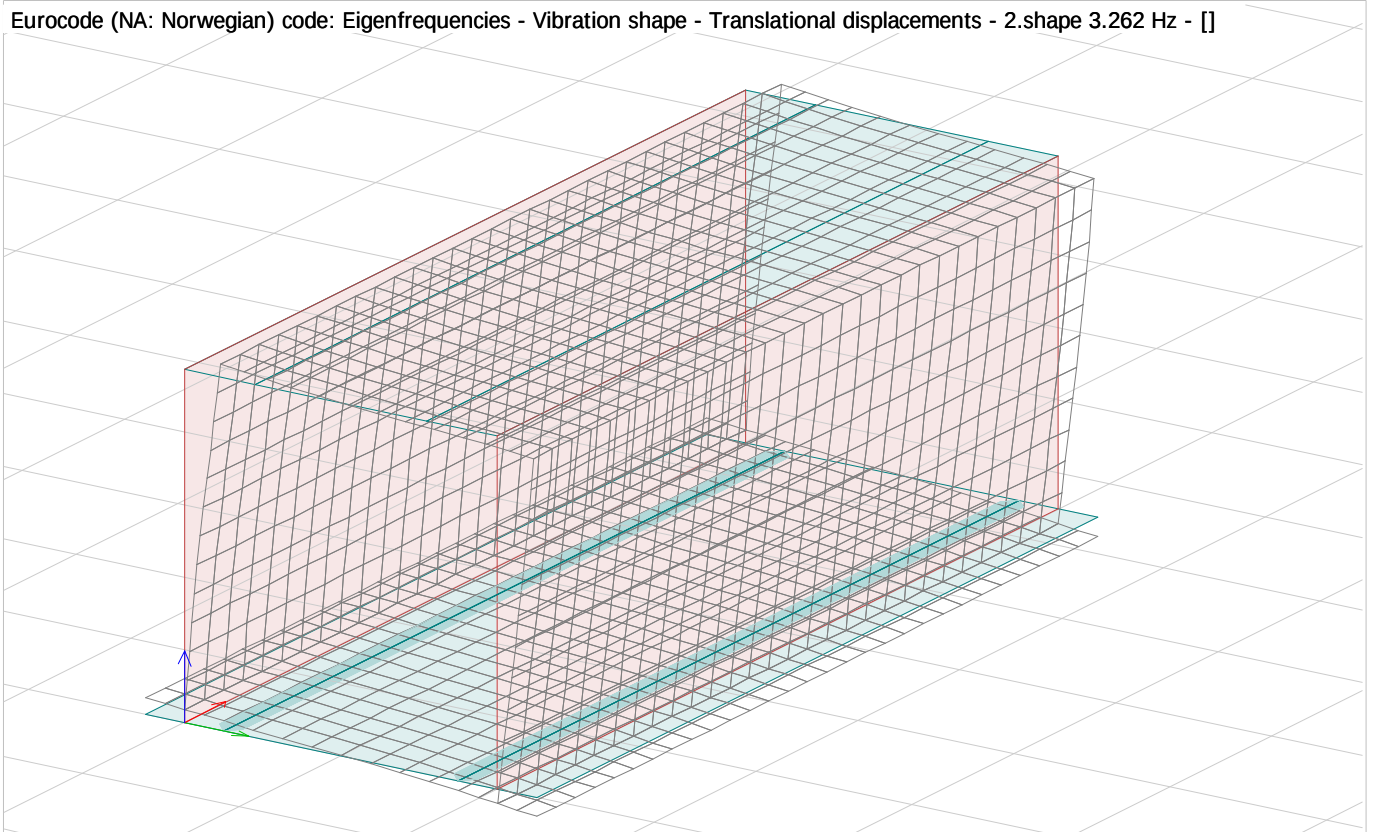
Shape	Frequency	Period
[-]	[Hz]	[s]
9	20.461	0.049
10	21.853	0.046

Second order effects (p-delta)

Storey	Theta x	Theta y
1	0.006	0.003

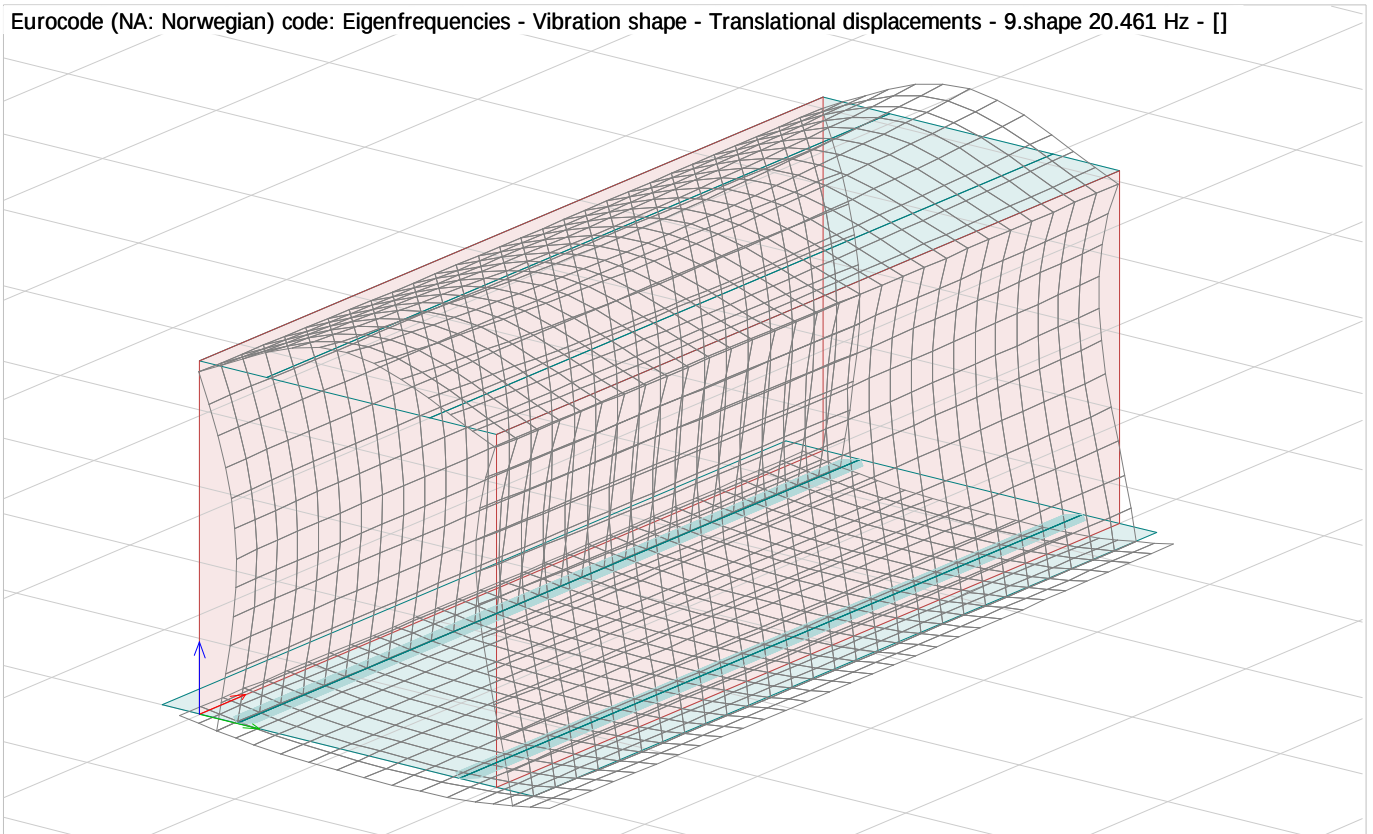
Eigensvingningsform: glob stabilitet

Eurocode (NA: Norwegian) code: Eigenfrequencies - Vibration shape - Translational displacements - 2.shape 3.262 Hz - []



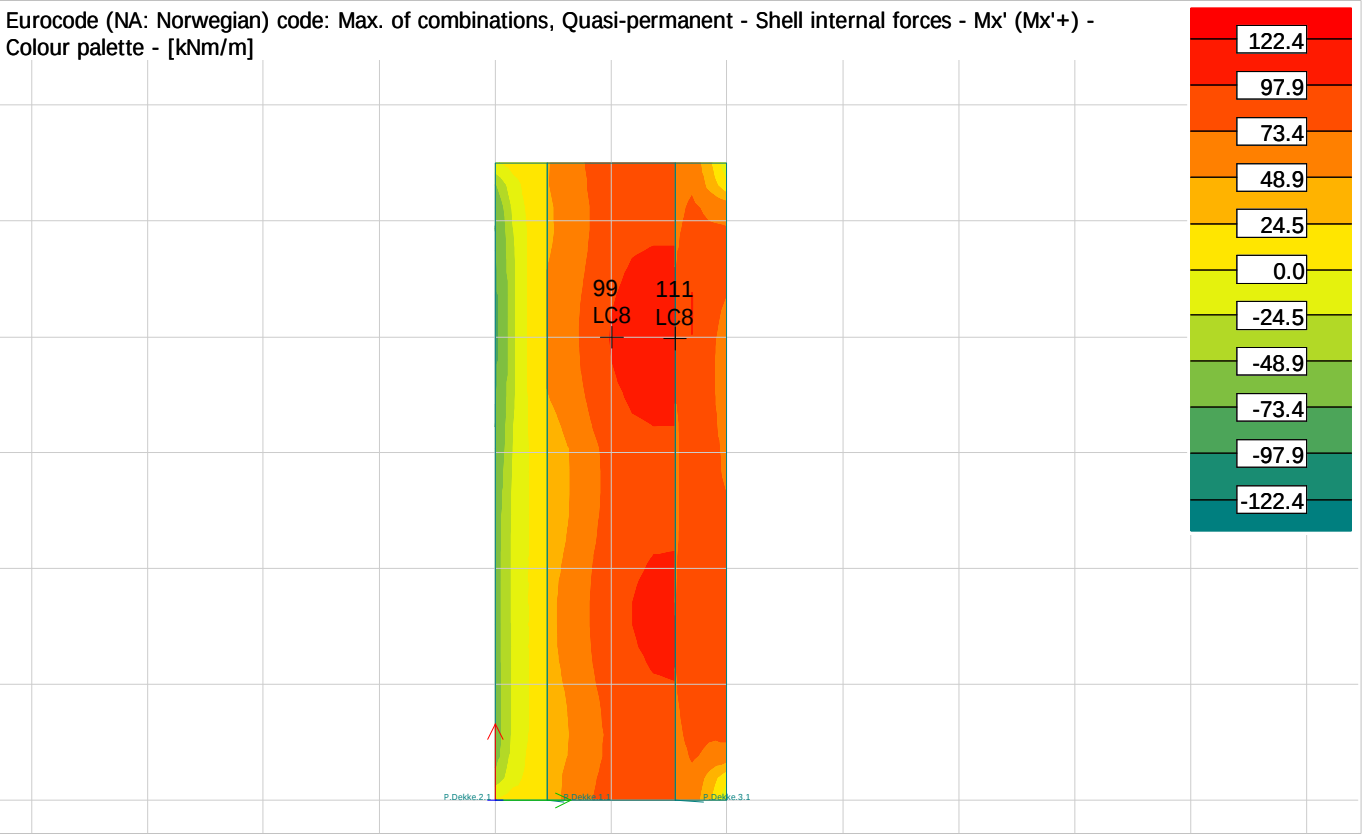
Eigensvingningsform: vert deform takplat

Eurocode (NA: Norwegian) code: Eigenfrequencies - Vibration shape - Translational displacements - 9.shape 20.461 Hz - []



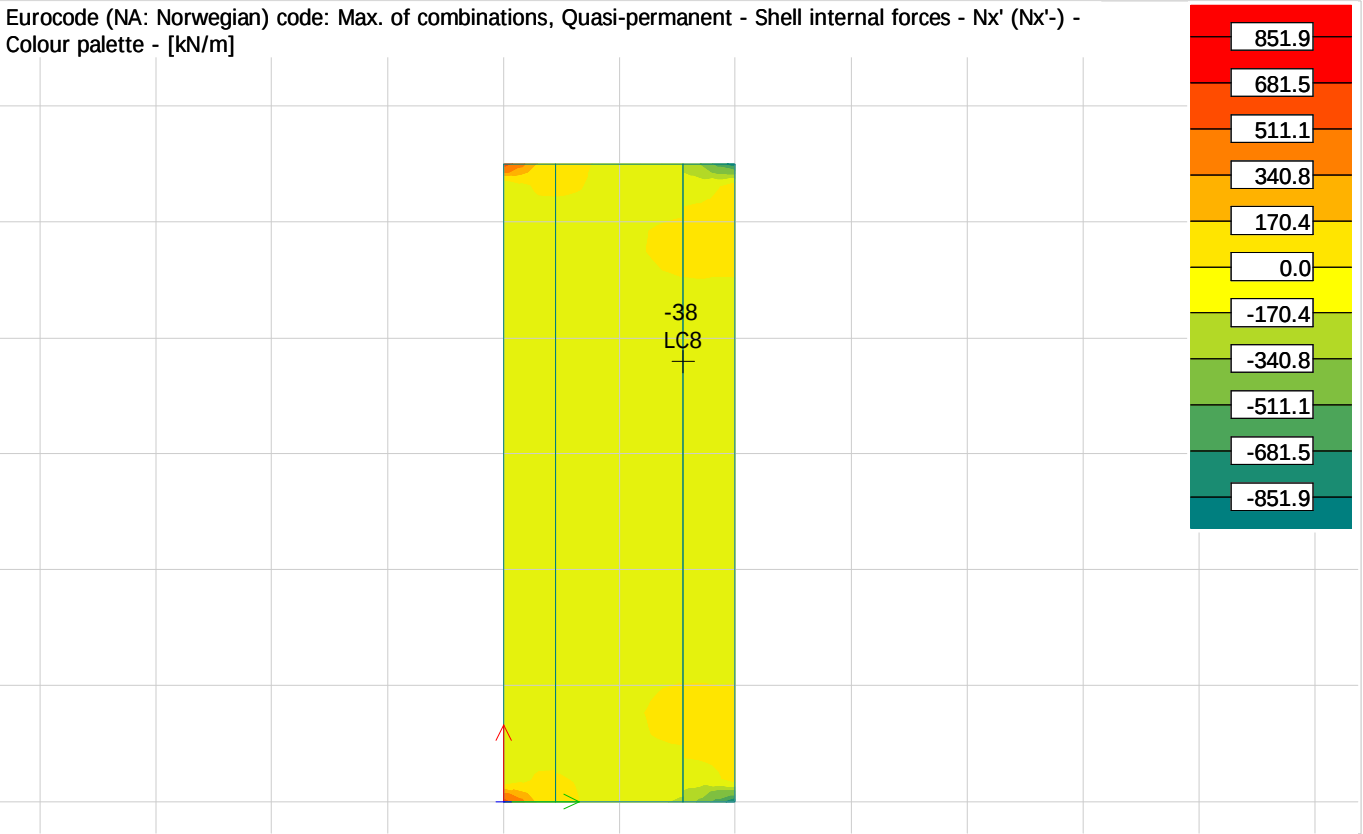
Mx+' topplate | SLSquasi perm.

Eurocode (NA: Norwegian) code: Max. of combinations, Quasi-permanent - Shell internal forces - Mx' (Mx'+) - Colour palette - [kNm/m]



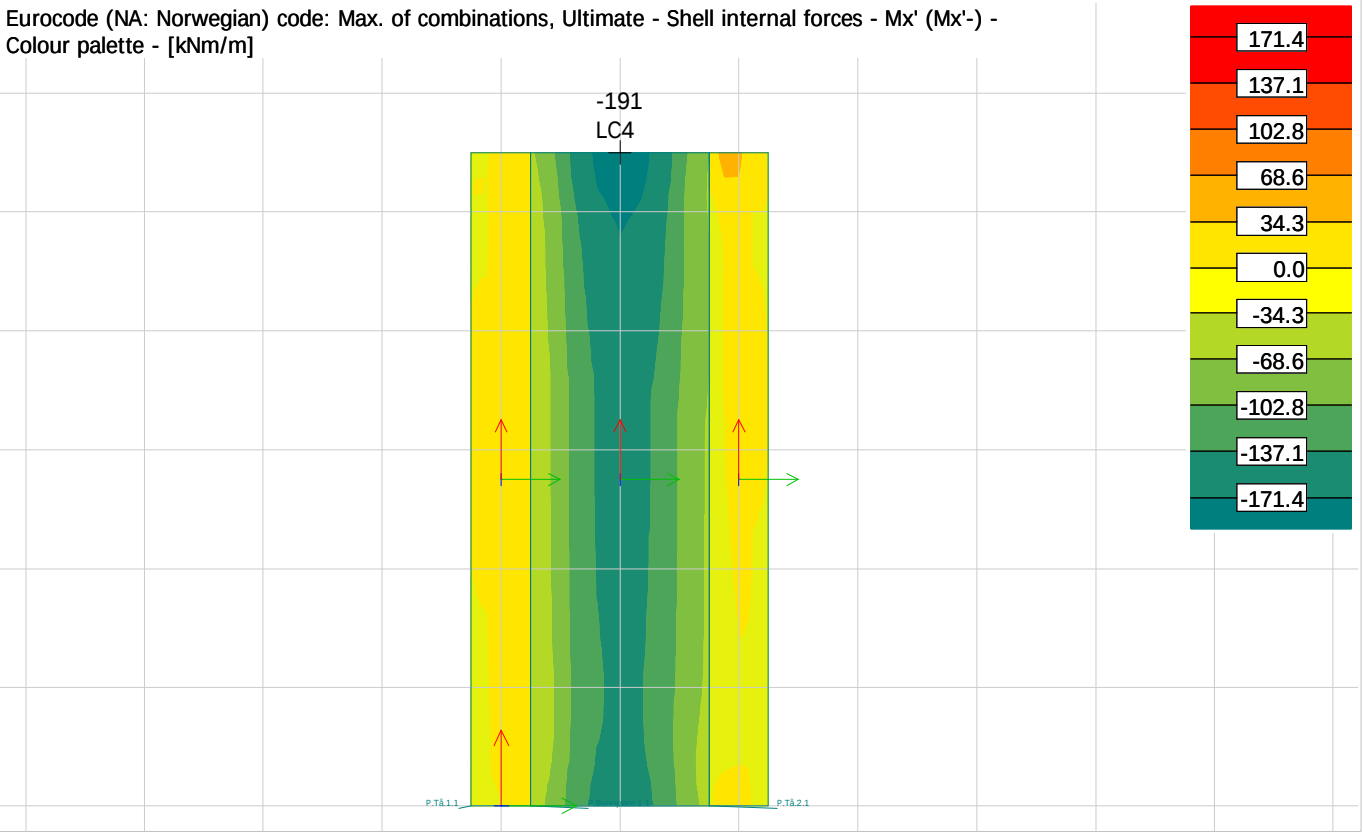
Nx-' topplate | SLSquasi perm.

Eurocode (NA: Norwegian) code: Max. of combinations, Quasi-permanent - Shell internal forces - Nx' (Nx'-) - Colour palette - [kN/m]



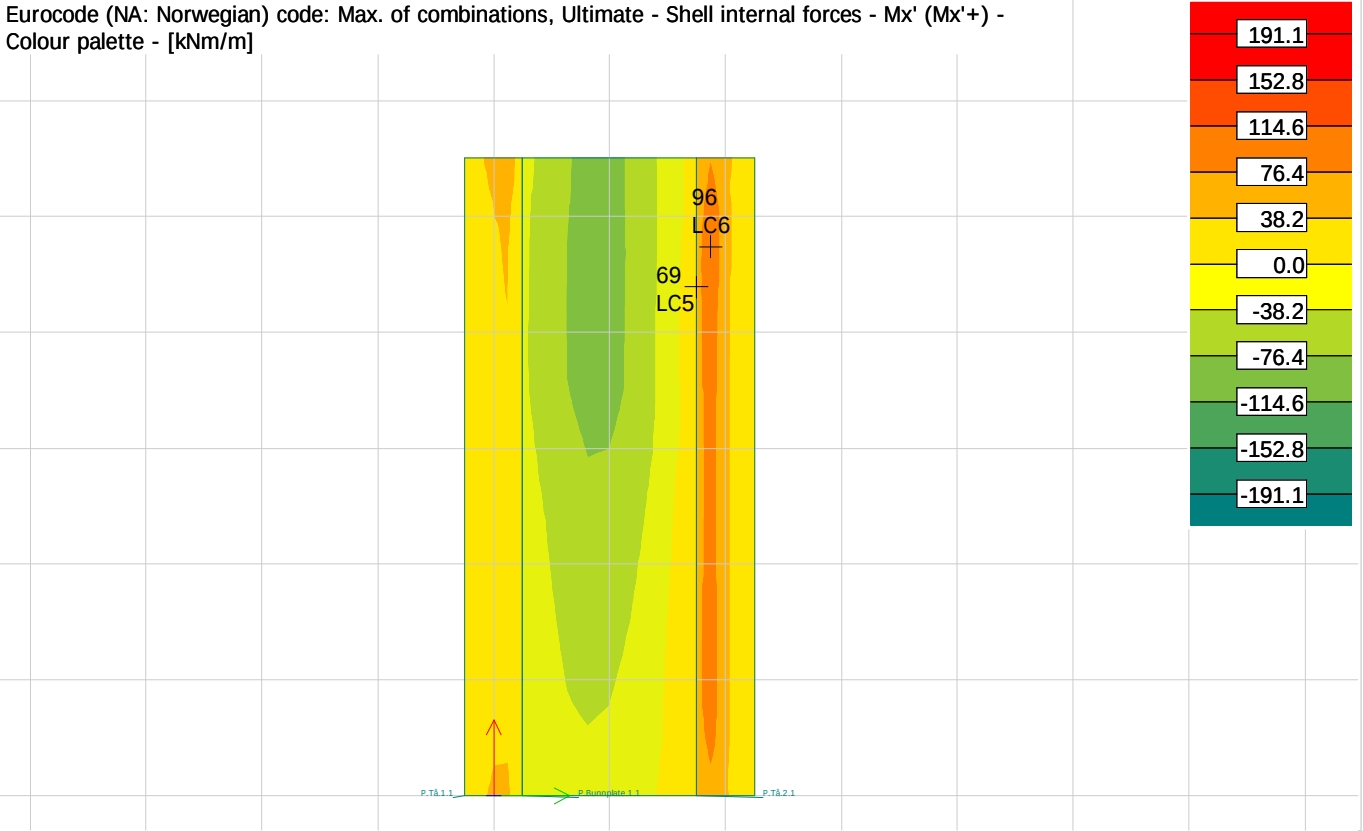
Mx-' Bunnplate | ULS

Eurocode (NA: Norwegian) code: Max. of combinations, Ultimate - Shell internal forces - Mx' (Mx'-) -
Colour palette - [kNm/m]



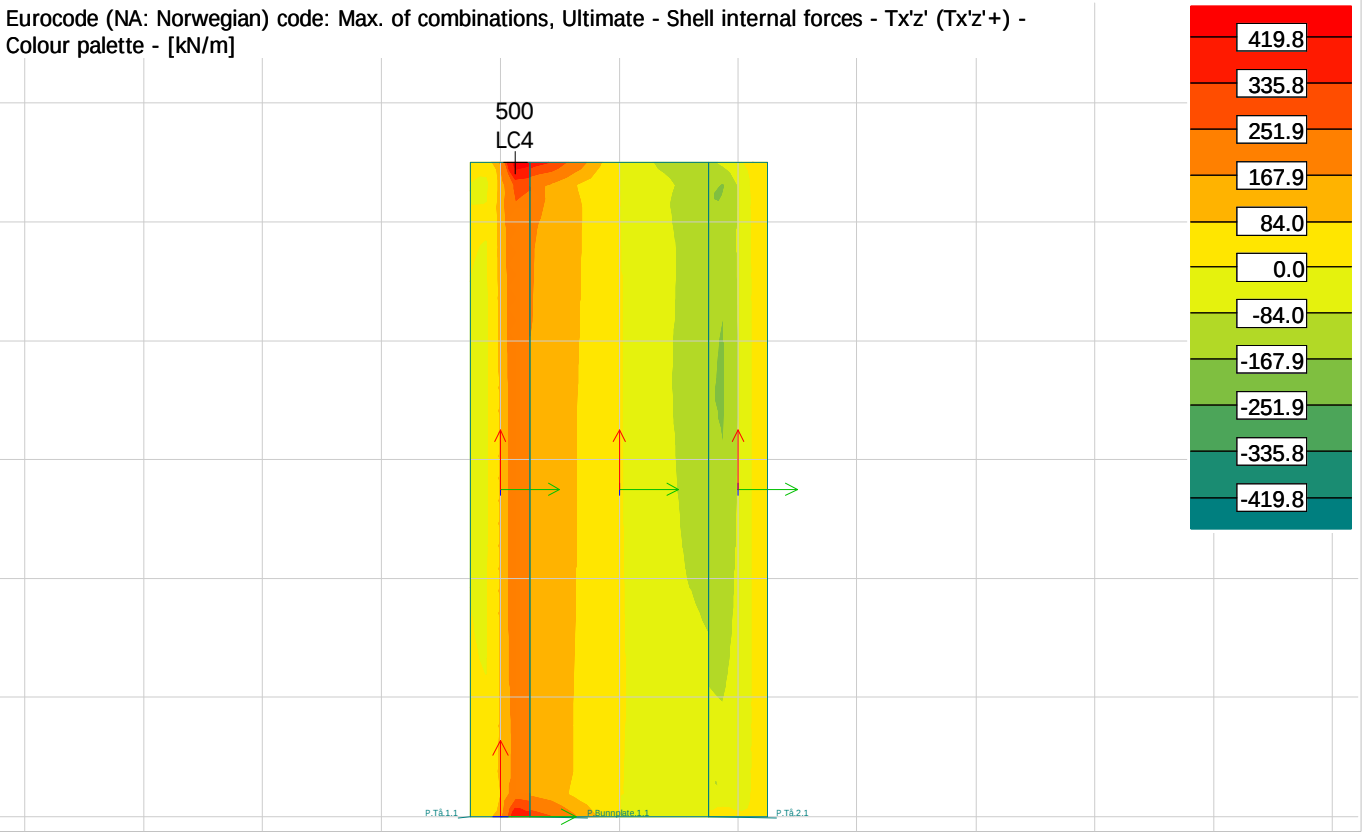
Mx+' Bunnplate | ULS

Eurocode (NA: Norwegian) code: Max. of combinations, Ultimate - Shell internal forces - Mx' (Mx'+) -
Colour palette - [kNm/m]



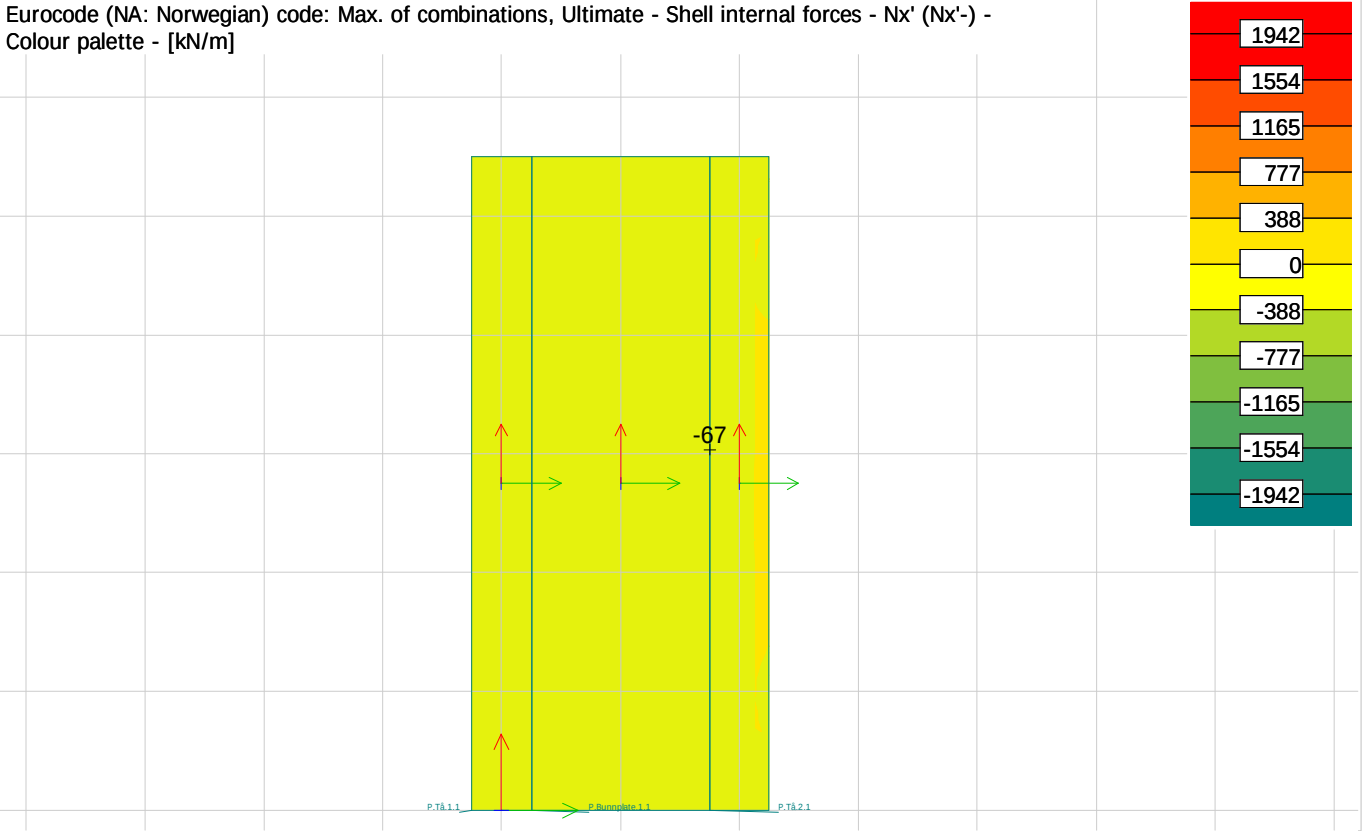
Tx(z)' bunnplate | ULS

Eurocode (NA: Norwegian) code: Max. of combinations, Ultimate - Shell internal forces - Tx'z' (Tx'z'+) - Colour palette - [kN/m]



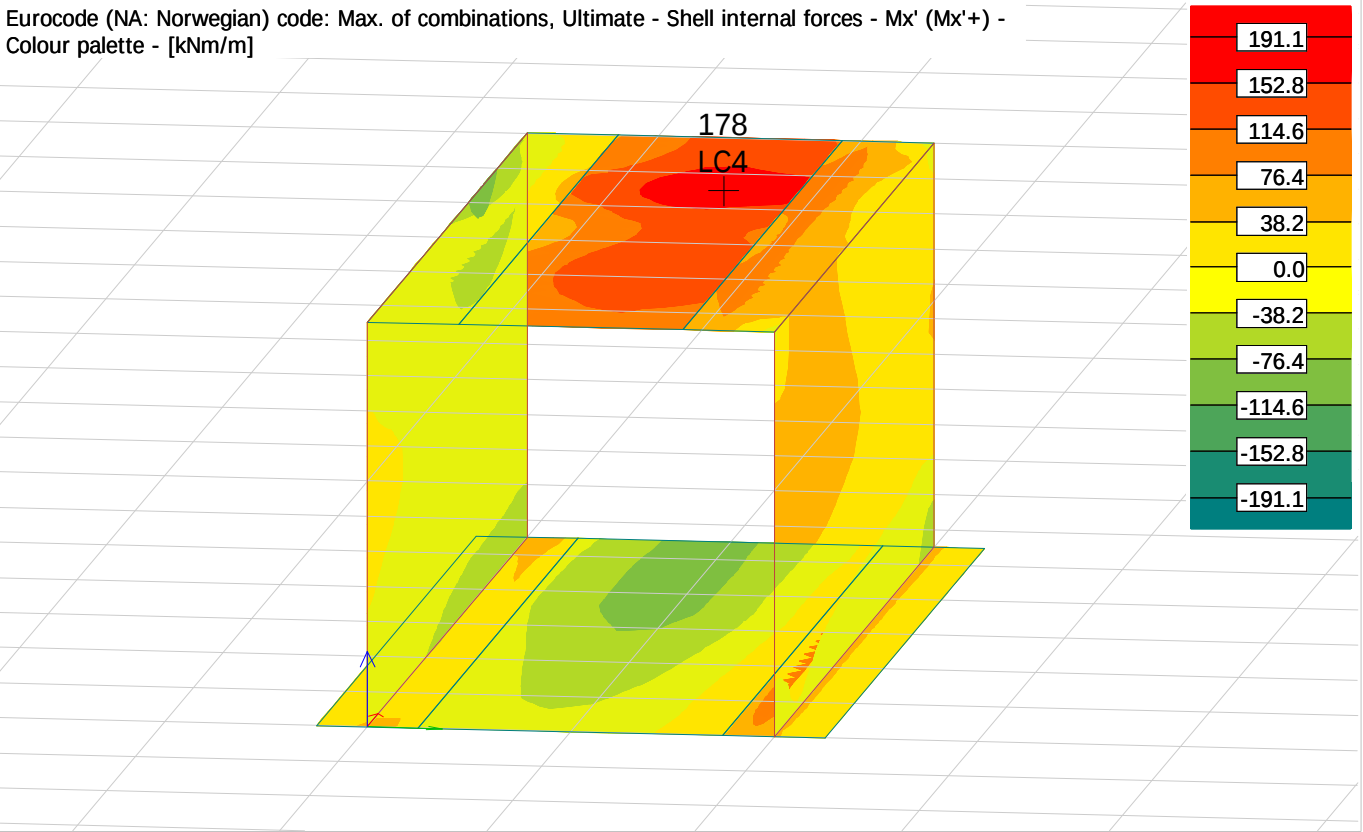
Nx' bunnplate | ULS

Eurocode (NA: Norwegian) code: Max. of combinations, Ultimate - Shell internal forces - Nx' (Nx'-) - Colour palette - [kN/m]



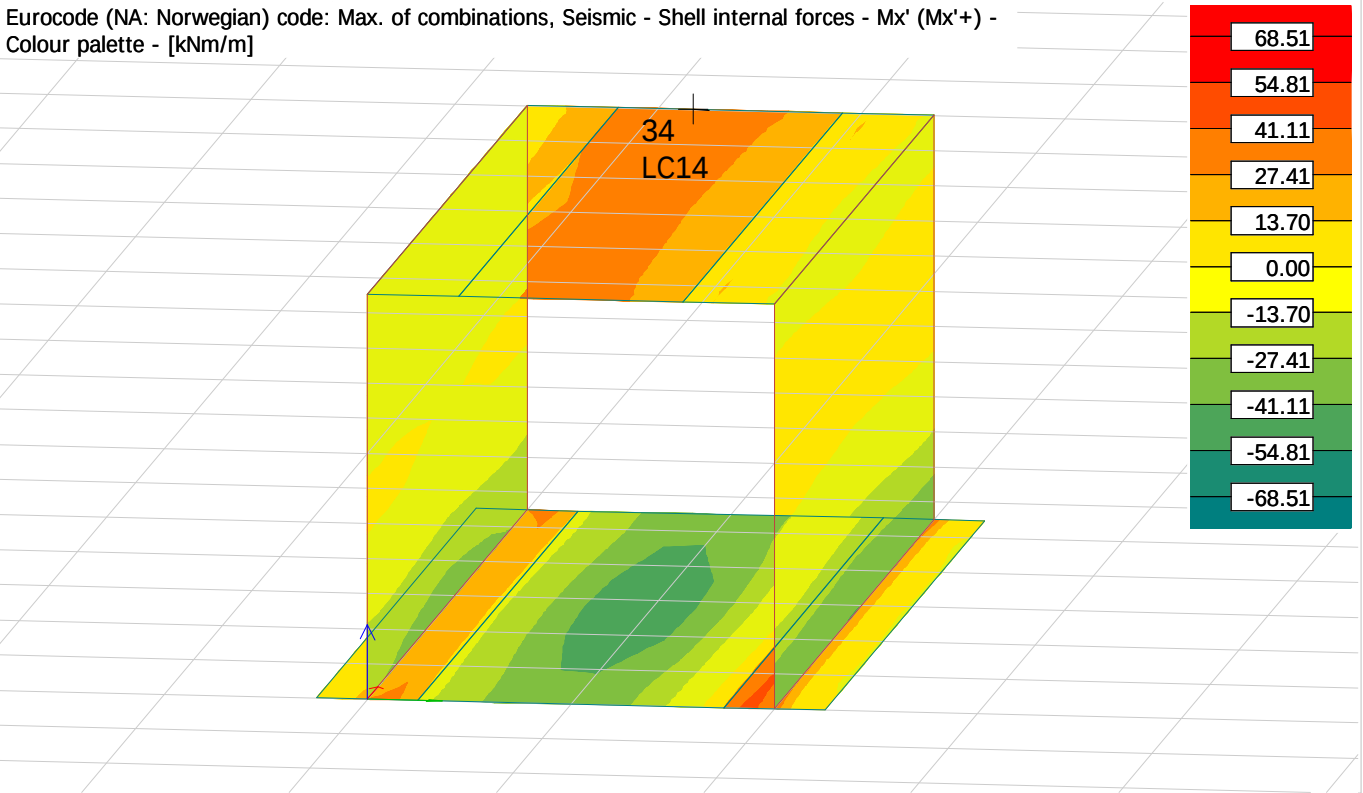
Mx+ | ULS

Eurocode (NA: Norwegian) code: Max. of combinations, Ultimate - Shell internal forces - Mx' (Mx'+) -
Colour palette - [kNm/m]



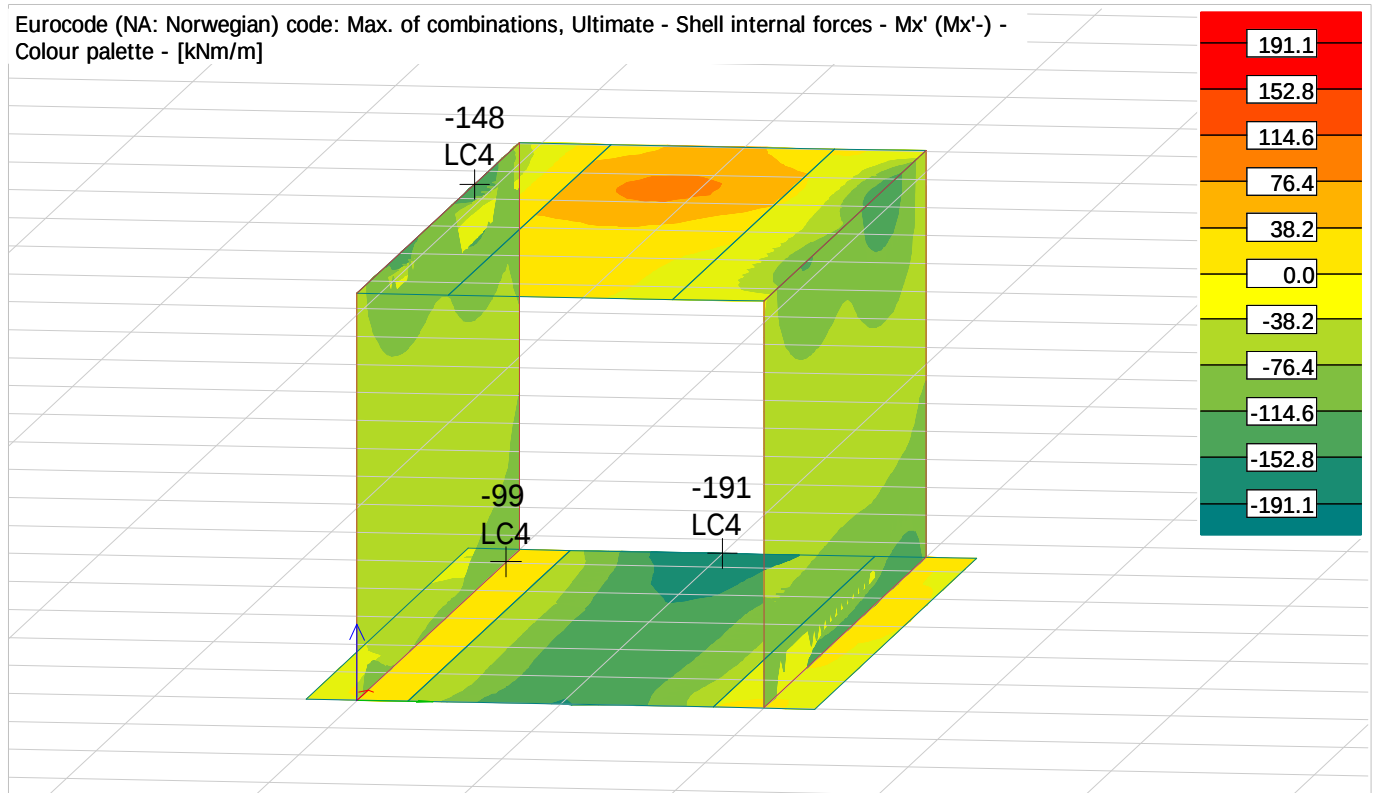
Mx+ | ALSseis

Eurocode (NA: Norwegian) code: Max. of combinations, Seismic - Shell internal forces - Mx' (Mx'+) -
Colour palette - [kNm/m]



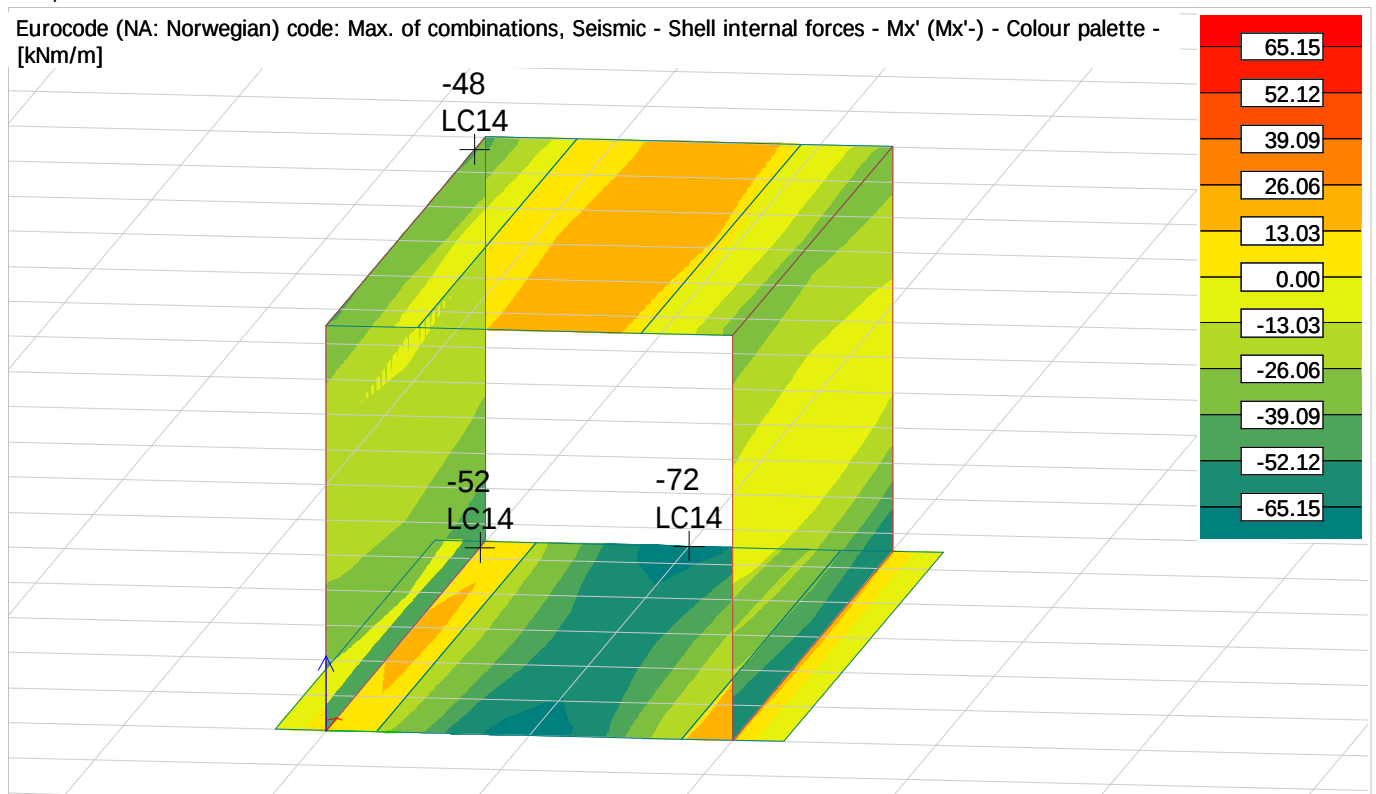
Mx- | ULS

Eurocode (NA: Norwegian) code: Max. of combinations, Ultimate - Shell internal forces - Mx' (Mx'-) - Colour palette - [kNm/m]



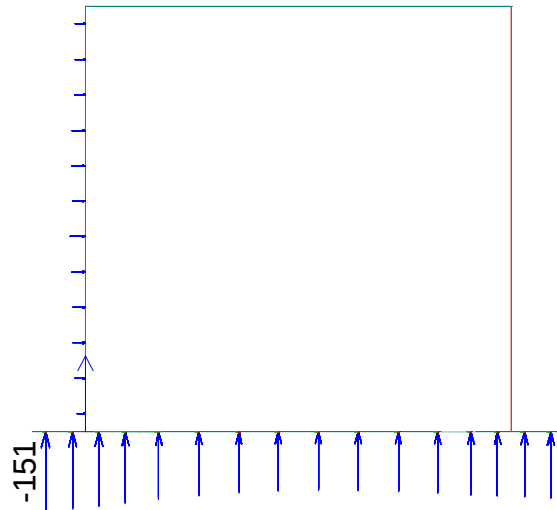
Mx- | ALSseis

Eurocode (NA: Norwegian) code: Max. of combinations, Seismic - Shell internal forces - Mx' (Mx'-) - Colour palette - [kNm/m]



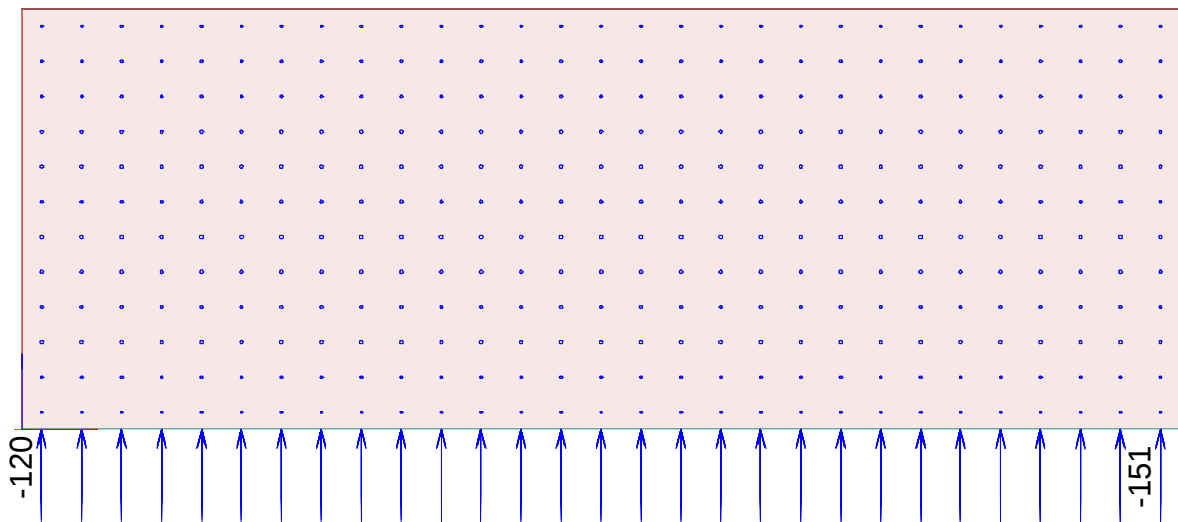
Opplagerreaksjoner: LM71 | ULS Sett C

Eurocode (NA: Norwegian) code: 2nd order theory - Load combinations - ULS GEO Sett C 6.10_1 - Reactions - [kN, kNm, kN/m, kNm/m, kN/m2]



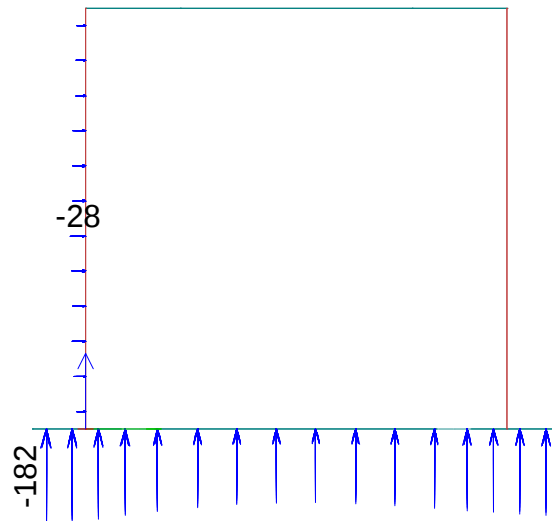
Opplagerreaksjoner: LM71 | ULS Sett C

Eurocode (NA: Norwegian) code: 2nd order theory - Load combinations - ULS GEO Sett C 6.10_1 - Reactions - [kN, kNm, kN/m, kNm/m, kN/m2]



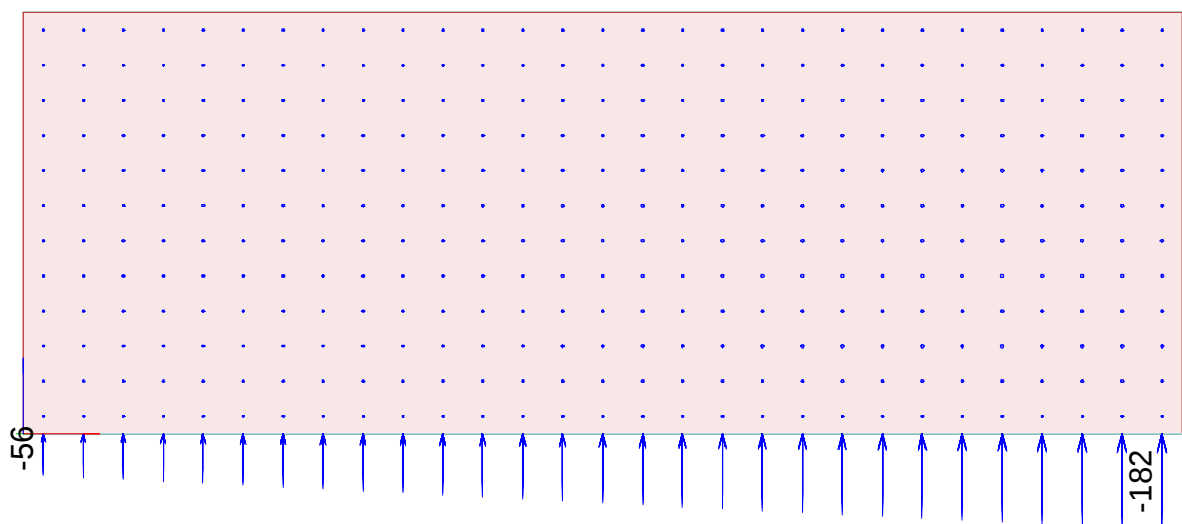
Opplagerreaksjoner: SW2 | ULS Sett C

Eurocode (NA: Norwegian) code: 2nd order theory - Load combinations - ULS GEO Sett C 6.10_2 - Reactions - [kN, kNm, kN/m, kNm/m, kN/m2]



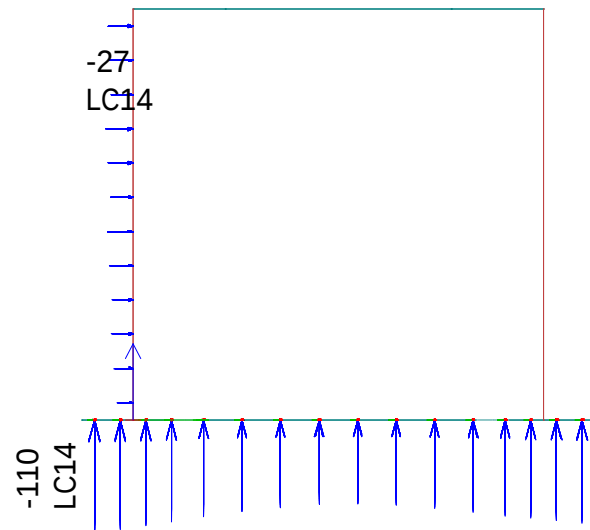
Opplagerreaksjoner: SW2 | ULS Sett C

Eurocode (NA: Norwegian) code: 2nd order theory - Load combinations - ULS GEO Sett C 6.10_2 - Reactions - [kN, kNm, kN/m, kNm/m, kN/m2]



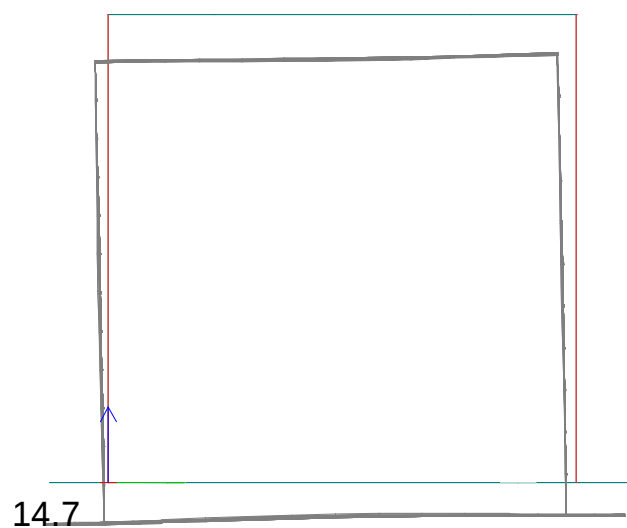
Opplagerreaksjoner: ALSseis

Eurocode (NA: Norwegian) code: Max. of combinations, Seismic - Reactions - Fz'- - [kN, kNm, kN/m, kNm/m, kN/m2]



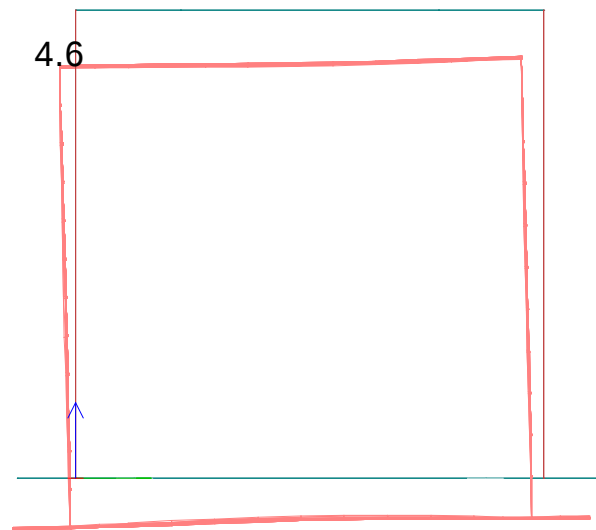
Deformasjon z (vertikalt) | SLS

Eurocode (NA: Norwegian) code: 2nd order theory - Load combinations - SLS karakt._1 - Translational displacements - Graph - [mm]



Deformasjon x (hor.) | SLS

Eurocode (NA: Norwegian) code: 2nd order theory - Load combinations - SLS karakt._1 - Translational displacements - Graph - [mm]



Deformasjon x (hor.) | ALSseis

Eurocode (NA: Norwegian) code: Max. of combinations, Seismic - Translational displacements - ex- - Graph - [mm]

