

1. Load cases (sets)

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
VT	vlastita težina	Permanent Self weight	LG1	-Z		
DS	dodatno stalno	Permanent Standard	LG1			
DS_P	dodatno stalno podrum	Permanent Standard	LG1			
DS_K	dodatno stalno krov	Permanent Standard	LG1			
Q	uporabno Standard	Variable Static	LG2		Short	None
Q_P	uporabno podrum Standard	Variable Static	LG2		Short	None
Q_K	uporabno krov Standard	Variable Static	LG2		Short	None
S_X	potres X Seismicity	Variable Dynamic	LGS			None
S_X_AE	Accidental eccentricity for S_X Seismic accidental eccentricity	Variable Static	S_X_AE		Short	S_X - potres X
S_Y	potres Y Seismicity	Variable Dynamic	LGS			None
S_Y_AE	Accidental eccentricity for S_Y Seismic accidental eccentricity	Variable Static	S_Y_AE		Short	S_Y - potres Y

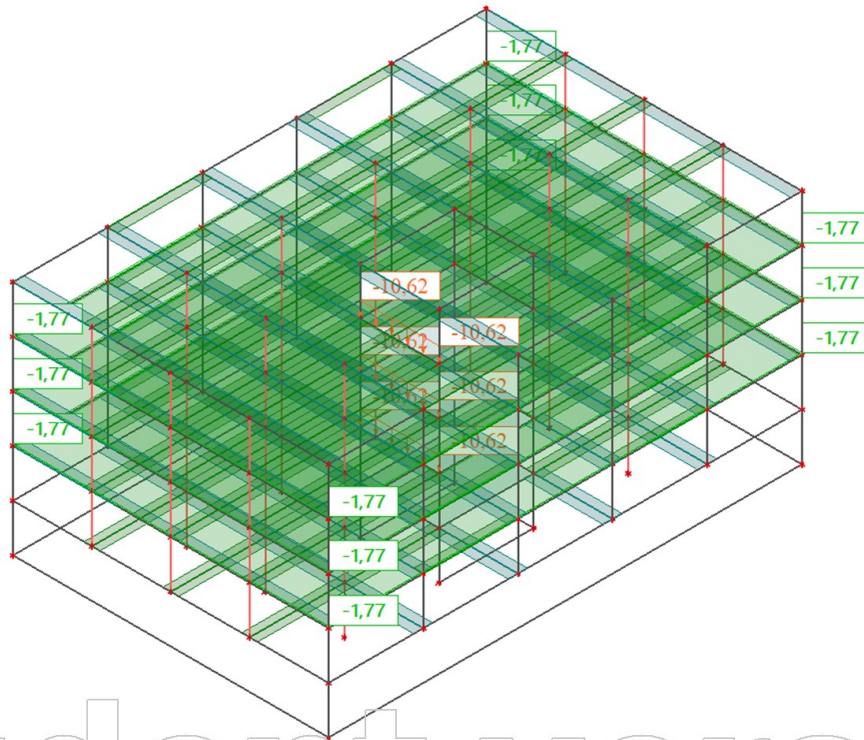
2. Load groups (sets)

Name	Load	Relation	Type
LG1	Permanent		
LG2	Variable	Standard	Cat A : Domestic
LGS	Seismic	Together	
S_X_AE	Seismic Accidental Eccentricity	Exclusive	
S_Y_AE	Seismic Accidental Eccentricity	Exclusive	

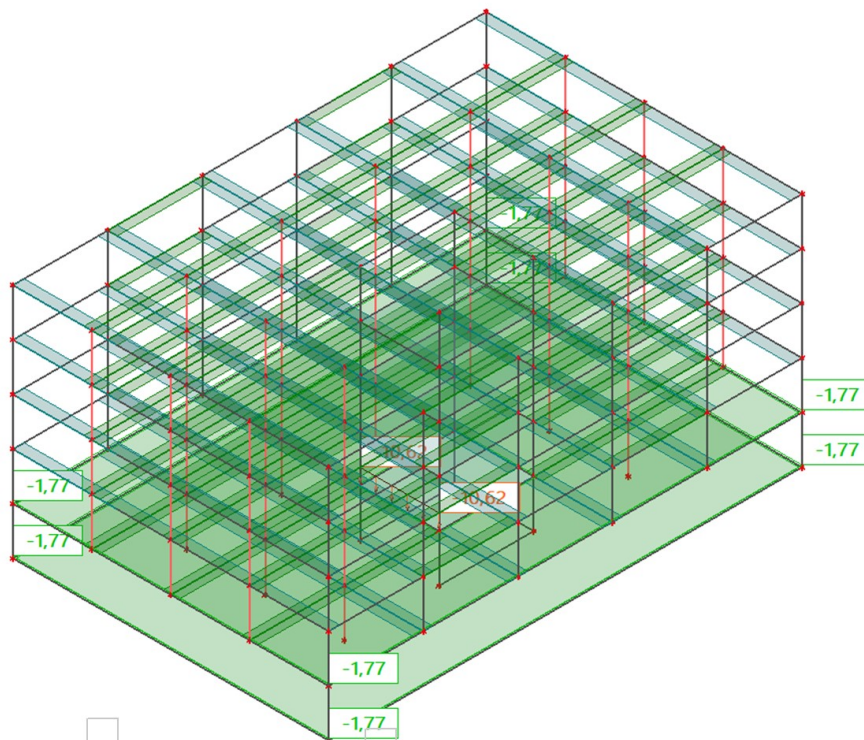
3. Surface load (load)

Name	Dir	Type	Value [kN/m ²]	2D member	Load case	System	Loc
SF1	Z	Force	-1,77	S22	DS - dodatno stalno	LCS	Length
SF2	Z	Force	-1,77	S29	DS - dodatno stalno	LCS	Length
SF3	Z	Force	-1,77	S30	DS - dodatno stalno	LCS	Length
SF4	Z	Force	-1,77	S12	DS_P - dodatno stalno podrum	LCS	Length
SF5	Z	Force	-1,77	S1	DS_P - dodatno stalno podrum	LCS	Length
SF6	Z	Force	-1,77	S40	DS_K - dodatno stalno krov	LCS	Length
SF7	Z	Force	-3,00	S22	Q - uporabno	LCS	Length
SF8	Z	Force	-3,00	S29	Q - uporabno	LCS	Length
SF9	Z	Force	-3,00	S30	Q - uporabno	LCS	Length
SF10	Z	Force	-3,00	S12	Q_P - uporabno podrum	LCS	Length
SF11	Z	Force	-3,00	S1	Q_P - uporabno podrum	LCS	Length
SF12	Z	Force	-3,00	S40	Q_K - uporabno krov	LCS	Length

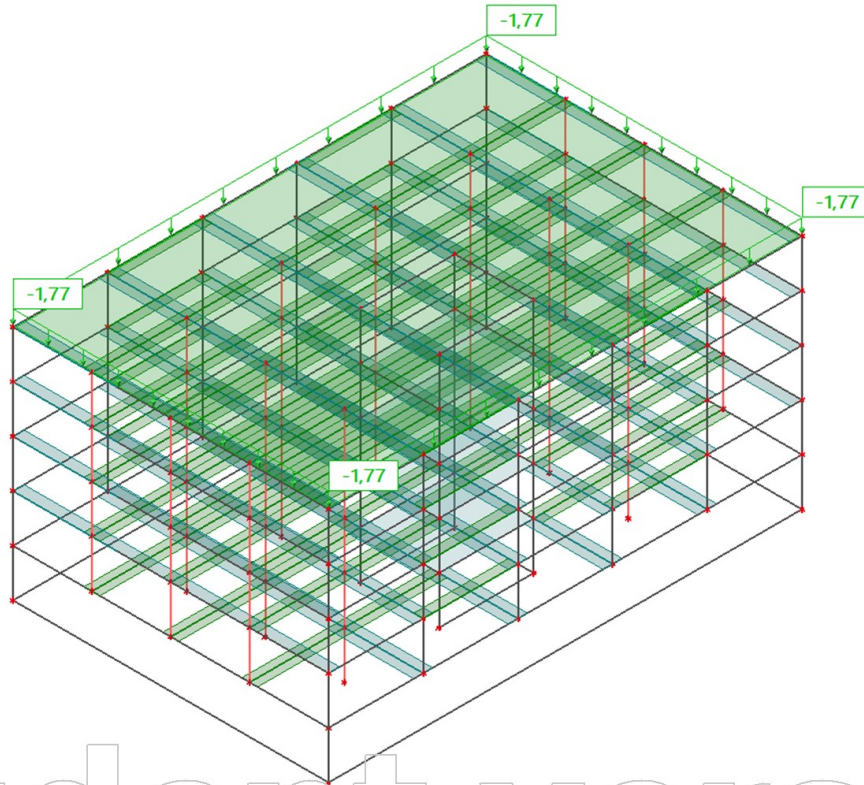
4. DS / Tot. value



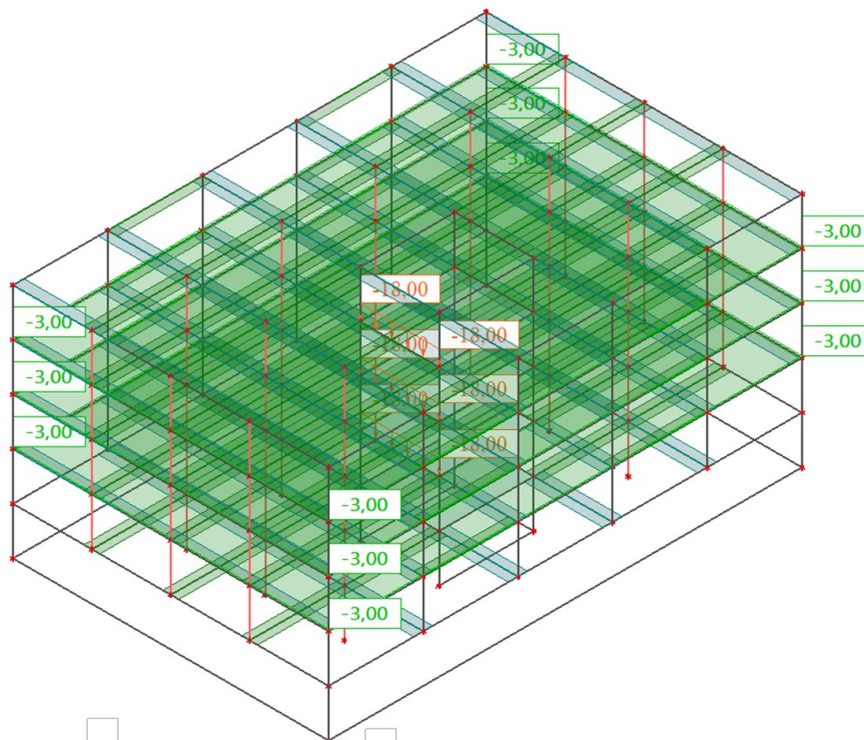
5. DS_P / Tot. value



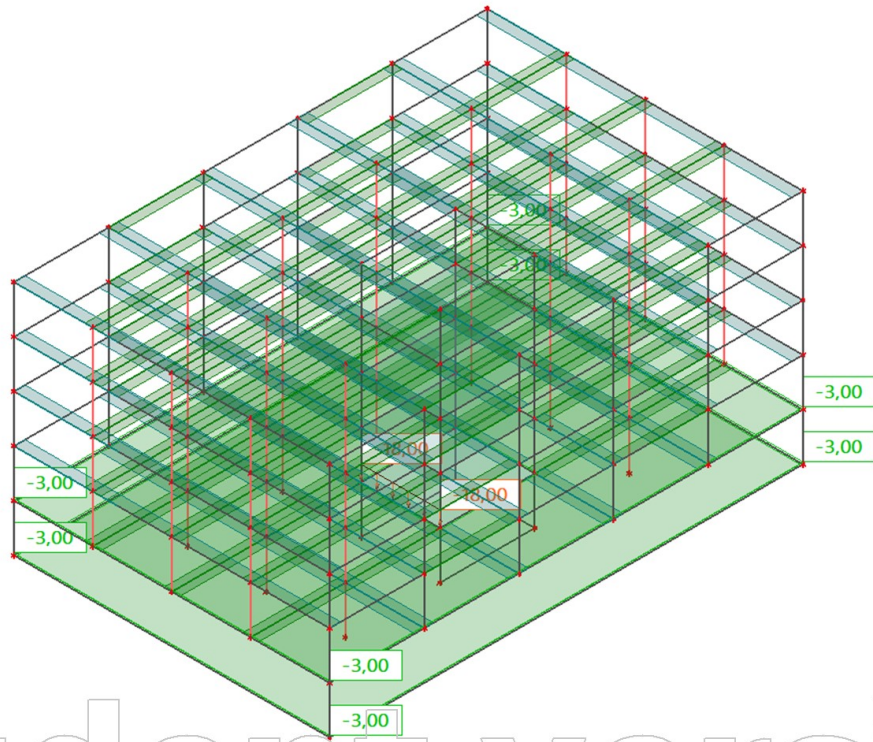
6. DS_K / Tot. value



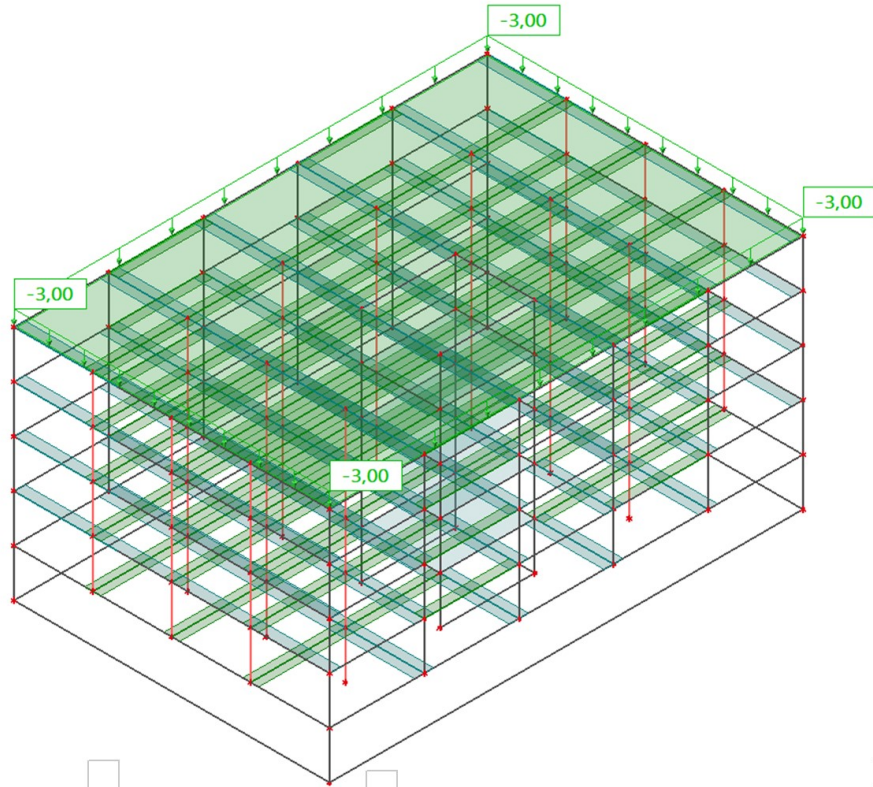
7. Q / Tot. value



8. Q_P / Tot. value



9. Q_K / Tot. value



10. Mass groups (sets)

Name	Load case
M_VT	VT - vlastita težina
M_DS	DS - dodatno stalno
M_Q	Q - uporabno
M_DS_K	DS_K - dodatno stalno krov

11. Combination of mass groups (sets)

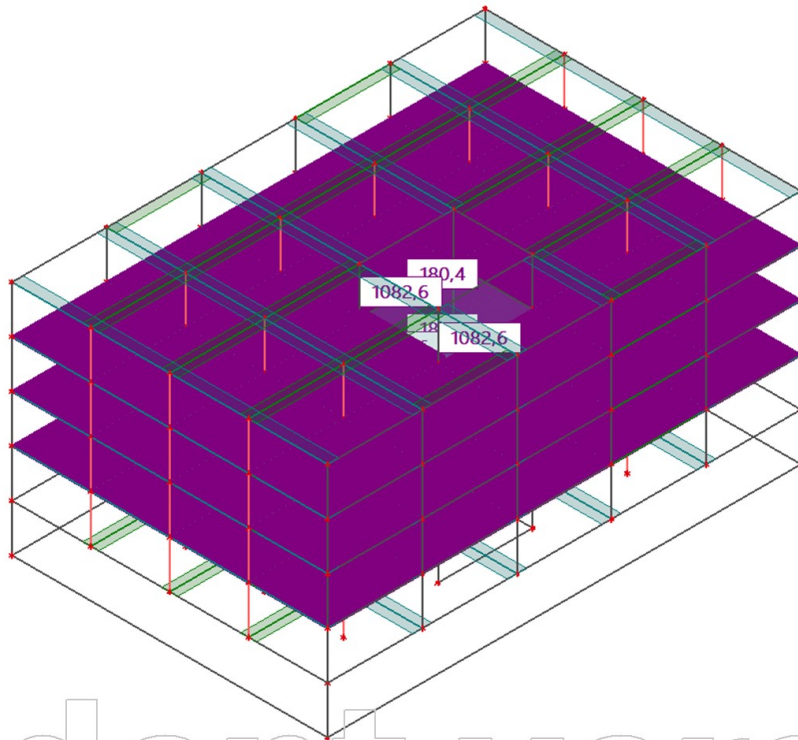
Name	Mass group	Coeff. [-]
CM	M_VT	1,00
	M_DS	1,00
	M_Q	0,15
CM/1 - 1,80		
CM/2 - 2,56		
CM/3 - 2,74		
CM/4 - 6,37		
CM/5 - 6,45		
CM/6 - 6,47		
CM/7 - 7,37		
CM/8 - 9,77		
CM/9 - 10,21		
CM/10 - 11,50		
CM/11 - 12,45		
CM/12 - 12,58		

12. Surface mass (mass)

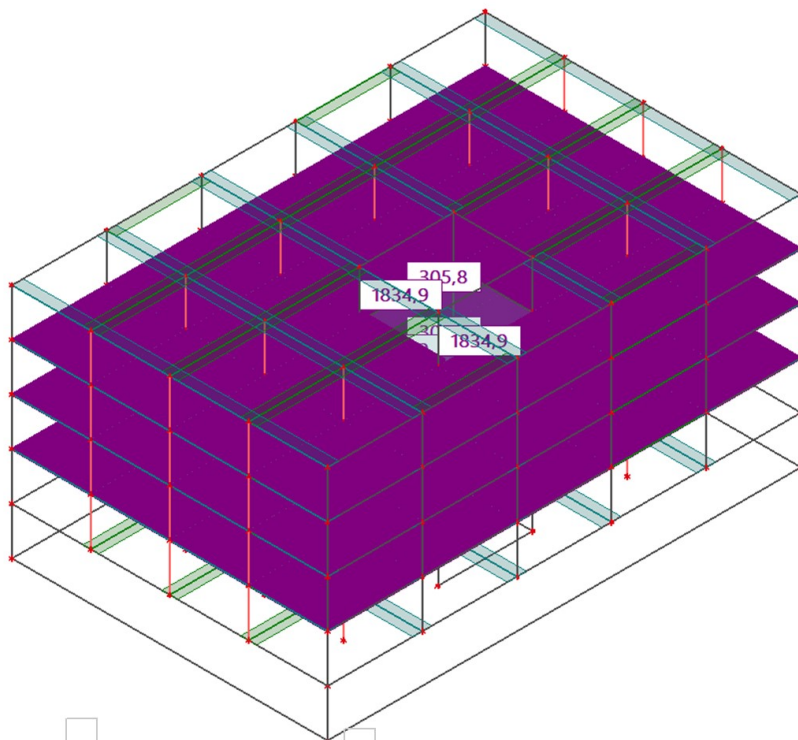
Name	Mass group	M [kg/m ²]	Koeff mx	Koeff my	Koeff mz	2D member
SM1	M_DS	180,4	1	1	1	S22
SM2	M_DS	180,4	1	1	1	S29
SM3	M_DS	180,4	1	1	1	S30
SM4	M_Q	305,8	1	1	1	S22
SM5	M_Q	305,8	1	1	1	S29
SM6	M_Q	305,8	1	1	1	S30
SM7	M_DS_K	180,4	1	1	1	S40

Explanations of symbols	
2D member	2D member S22

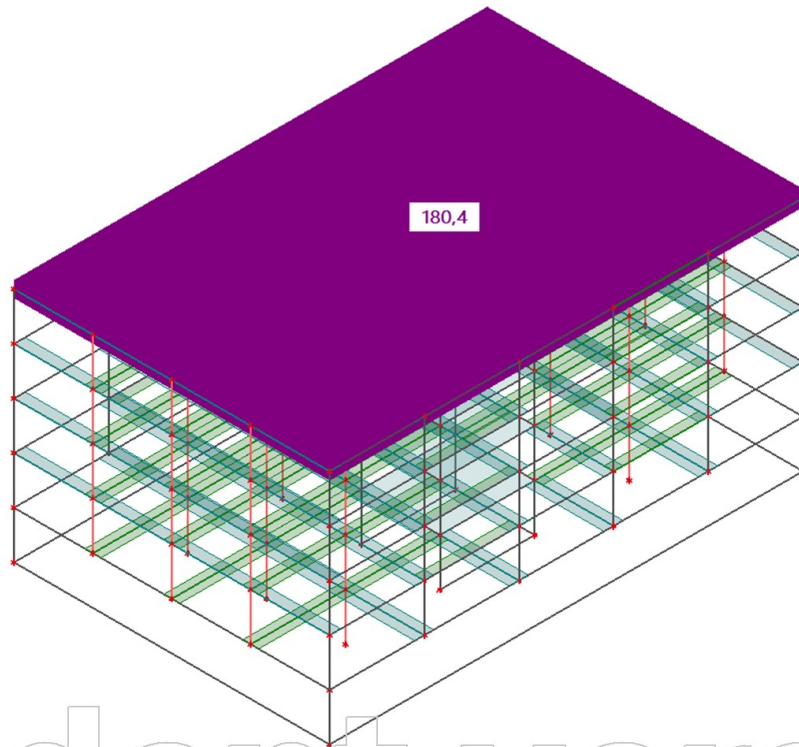
13. mase DS



14. mase Q



15. mase DS krov



16. Calculation protocol (Results V16 and older)

Solution of Free vibration

Number of 2D elements	17868
Number of 1D elements	2362
Number of mesh nodes	18301
Number of equations	109806
Combination of mass groups	MC1 CM
Number of frequencies	12
Method	Lanczos
Bending theory	Mindlin
Type of analysis model	Standard using improved reduced system (IRS)
Start of calculation	30.10.2019 14:38
End of calculation	30.10.2019 14:38

Sum of masses

	Mass type	X [kg]	Y [kg]	Z [kg]
1	Moving mass	2236589,4	2236589,4	2236589,4
1	Total mass	2236589,4	2236589,4	2236589,4

Relative modal masses

Mode	mega [rad/s]	Period [s]	Freq. [Hz]	W_{xi} / W_{xtot}	W_{yi} / W_{ytot}	W_{zi} / W_{ztot}	W_{xi_R} / W_{xtot_R}	W_{yi_R} / W_{ytot_R}	W_{zi_R} / W_{ztot_R}
1	11.2932	0,56	1,80	0,8771	0,0000	0,0000	0,0000	0,0564	0,0116
2	16.0885	0,39	2,56	0,0002	0,9238	0,0000	0,0492	0,0000	0,0052
3	17.2287	0,36	2,74	0,0116	0,0053	0,0000	0,0003	0,0014	0,9289
4	40.0407	0,16	6,37	0,0035	0,0005	0,8777	0,0103	0,0862	0,0000
5	40.5084	0,16	6,45	0,0374	0,0069	0,0563	0,1488	0,7134	0,0000
6	40.641	0,15	6,47	0,0065	0,0338	0,0451	0,7670	0,1146	0,0000

Mode	mega [rad/s]	Period [s]	Freq. [Hz]	W _{xi} /W _{xtot}	W _{yi} /W _{ytot}	W _{zi} /W _{ztot}	W _{xi_R} /W _{xtot_R}	W _{yi_R} /W _{ytot_R}	W _{zi_R} /W _{ztot_R}
7	46.3327	0,14	7,37	0,0502	0,0000	0,0005	0,0001	0,0002	0,0046
8	61.3731	0,10	9,77	0,0032	0,0009	0,0000	0,0004	0,0023	0,0440
9	64.128	0,10	10,21	0,0000	0,0263	0,0000	0,0136	0,0000	0,0010
10	72.2309	0,09	11,50	0,0000	0,0003	0,0039	0,0000	0,0000	0,0002
11	78.2071	0,08	12,45	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
12	79.0325	0,08	12,58	0,0028	0,0000	0,0001	0,0000	0,0013	0,0000
				0,9926	0,9979	0,9836	0,9897	0,9759	0,9955

Seismicity

Number of 2D elements	17868
Number of 1D elements	2362
Number of mesh nodes	18301
Mass in analysis	Participating mass only
Signed results	✓
Load case	S_X
Combination of mass groups	CM
Bending theory	Mindlin
Type of analysis model	Standard using improved reduced system (IRS)
Start of calculation	30.10.2019 14:38
End of calculation	30.10.2019 14:38

Seismicity

Number of 2D elements	17868
Number of 1D elements	2362
Number of mesh nodes	18301
Mass in analysis	Participating mass only
Signed results	✓
Load case	S_Y
Combination of mass groups	CM
Bending theory	Mindlin
Type of analysis model	Standard using improved reduced system (IRS)
Start of calculation	30.10.2019 14:38
End of calculation	30.10.2019 14:38

17. Summary storey result (results)

Storey data:

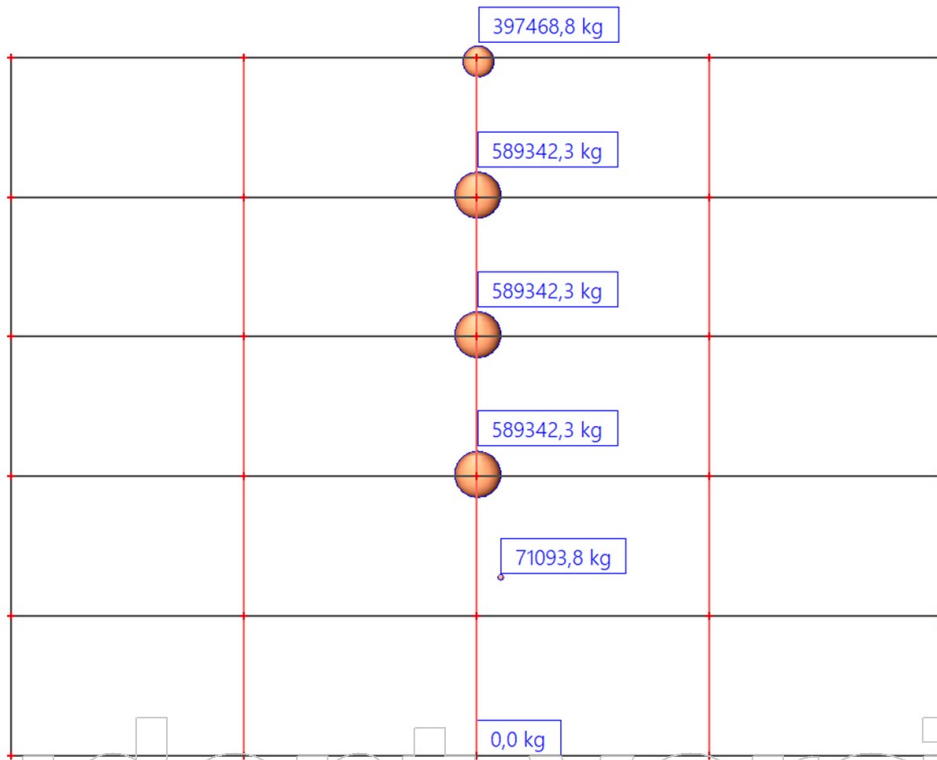
Eigen solution, Extreme: Global, System: Principal

Selection: All

Mass combinations : CM/1 - 1,80

Name	M [kg]	XG [m]	YG [m]	ZG [m]	Mxx [kg]	Myy [kg]	Mzz [kg]	Ixx [kgm ²]	Iyy [kgm ²]	Izz [kgm ²]
ET1	0,0	10,000	15,000	0,000	0,0	0,0	0,0	0,0	0,0	0,0
ET2	71093,8	10,522	15,231	3,832	71093,8	71093,8	71093,8	5741471,9	4380594,8	10085613,2
ET3	589342,3	10,028	15,006	6,042	589342,3	589342,3	589342,3	47362605,8	23604972,9	70768943,6
ET4	589342,3	10,028	15,006	9,042	589342,3	589342,3	589342,3	47362605,8	23604972,9	70768943,6
ET5	589342,3	10,028	15,006	12,042	589342,3	589342,3	589342,3	47362605,8	23604972,9	70768943,6
ET6	397468,8	10,042	15,020	14,914	397468,8	397468,8	397468,8	31382147,3	14747625,0	46069798,0

18. Summary storey result



19. Seismic spectrums (libraries)

Name	Type drawing	Info	Drawing
FSX	Period	Type code - Eurocode Subsoil type - B Direction - Horizontal Spectrum type - type 2 coeff accel. ag - 0,2 ag - design acceleration - 1,962 beta - 0,2 q - behaviour factor - 3,9	

Name UniqueID	Type drawing	Info	Drawing
FSY	Period	Type code - Eurocode Subsoil type - B Direction - Horizontal Spectrum type - type 2 coeff accel. ag - 0,2 ag - design acceleration - 1,962 beta - 0,2 q - behaviour factor - 3	<p>The graph displays a seismic spectrum with acceleration in m/s^2 on the y-axis (ranging from 0.0 to 2.5) and frequency in Hz on the x-axis (ranging from 0.0 to 4.0). The curve starts at 0.0, rises to a peak of 2.21 m/s^2 at approximately 0.2 Hz, and then decays. At 1.5 Hz, the acceleration is 0.3924 m/s^2, and it remains constant at this level up to 4.0 Hz.</p>

20. Dampers (libraries)

Name	Freq./Damp
CQC	0.000000 / 0.050000 100.000000 / 0.050000

Drawing

