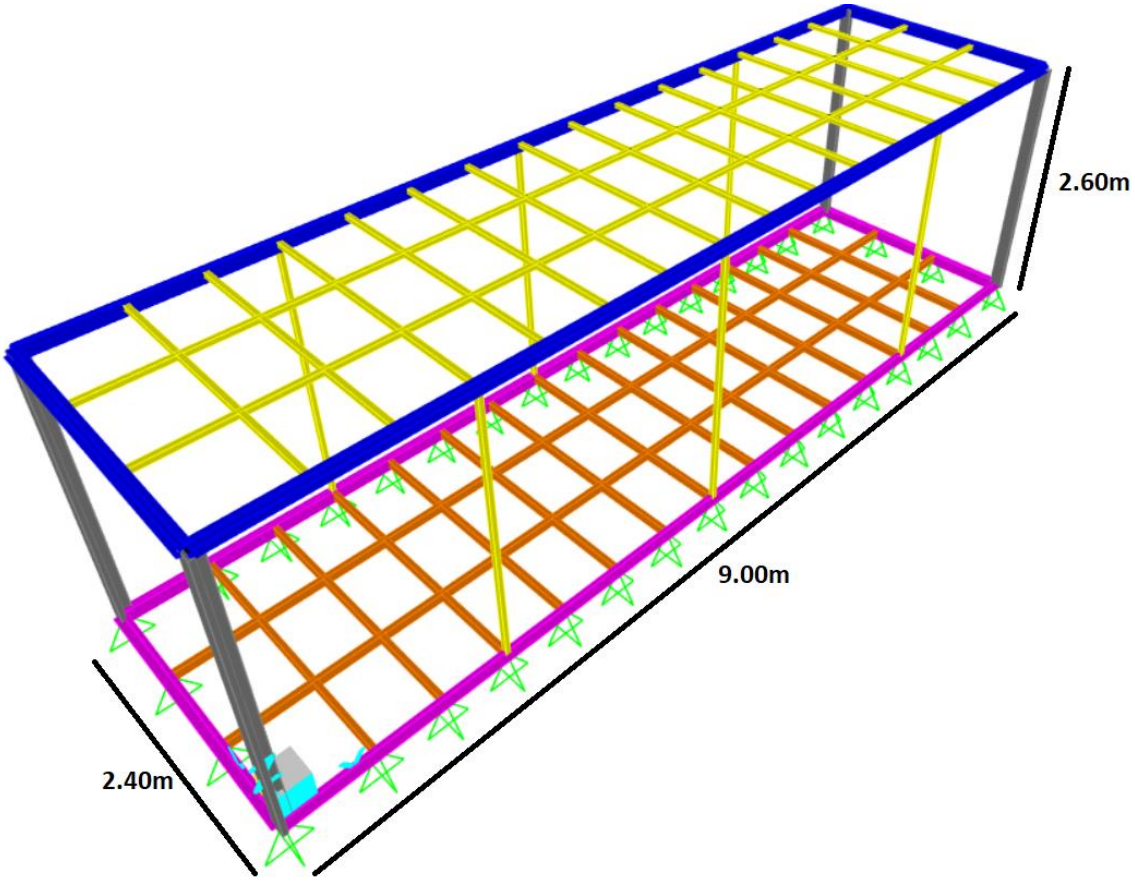
Container Static Calculation Report



Hazırlayan (Prepared By) :

****

İnşaat Mühendisi MSc (Structure Engineer)

Oda No (Engineer Number) : **********

Rules Of Calculation Report

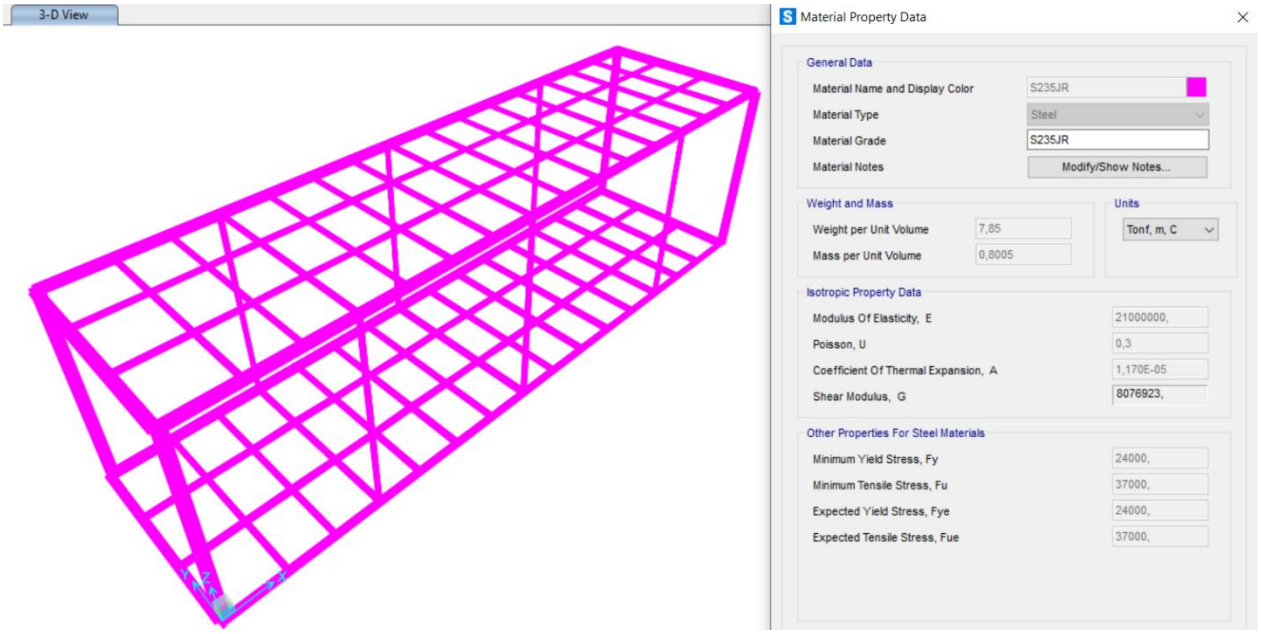
- TS 498 (Design Loads for Buildings)
- TS 648 (Design Code for Steel Structures)
- TS 11372 (Design Code for Light Gauge Steel)
- TS 500 (Requirements for design and construction of reinforced concrete structures)
- A.B.Y.Y.H.Y 2007 (Earthquake Design Code for Turkish Buildings)
- AISC 360-10
- DIN 18800 German design code
- DIN EN 1990 Eurocode 0: Basis of structural design
- DIN EN 1990/A1 Eurocode 0: Basis of structural design,Düzenlemeler 1
- DIN EN 1991-1-1 Eurocode 1: General actions
- TS EN 1991-1-1 Eurocode 1: Yapılar üzerindeki etkiler
- DIN EN 1991-1-3 (2004) Eurocode 1: Kar yükleri (Snow Load)
- TS EN 1991-1-3 Eurocode 1: Kar yükleri (Snow Load)
- DIN EN 1991-1-4 (2005) Eurocode 1: Rüzgar yükleri (Wind Load)
- TS EN 1991-1-4 Eurocode 1: Rüzgar yükleri (Wind Load)
- DIN EN 1993-1-1 Eurocode 3: General rules and rules for buildings
- DIN EN 1998-1 Eurocode 8: Deprem Yönetmeliği (Earthquake rules)

Structure Steel

Profiles: St 37 (S235)

Malzeme Material	Yield Stress $f_{y,k}$ [kN/cm²]	Tensile Stress $f_{u,k}$ [kN/cm²]	γ_M	$\sigma_{R,d}$ [kN/cm²]
S 235	24	36	1,1	21,81
S 275	27	41	1,1	24,54
S 355	36	47	1,1	32,72

The Steel Material Define in the Sap2000 Calculation Programme



Displacement Criteria

Deflection Limit Oft he AISC360-10 (Sap2000 Program Check Manual)

Table B-1: Steel Frame Design Preferences

Item	Possible Values	Default Value	Description
Super DL+LL Limit, L/	≥ 0	120	Deflection limit for superimposed dead plus live load. Inputting 120 means that the limit is L/120. Inputting zero means no check will be made of this item.
Live Load Limit, L/	≥ 0	360	Deflection limit for superimposed live load. Inputting 360 means that the limit is L/360. Inputting zero means no check will be made of this item.
Total Limit, L/	≥ 0	240	Deflection limit for total load. Inputting 240 means that the limit is L/240. Inputting zero means no check will be made of this item.
Total-Camber Limit, L/	≥ 0	240	Limit for net deflection. Camber is subtracted from the total load deflection to get net deflection. Inputting 240 means that the limit is L/240. Inputting zero means no check will be made of this item.
Pattern Live Load Factor	≤1.0	0.75	The live load factor for automatic generation of load combinations involving pattern live loads and dead loads.
D/C Ratio Limit	≤1.0	0.95	The demand/capacity ratio limit to be used for acceptability. D/C ratios that are less than or equal to this value are considered acceptable. The program will select members from the auto select list with D/C ratios less than or equal to this value.
Maximum Number of Auto Iteration	≥ 1	1	Sets the number of iterations of the analysis-design cycle that the program will complete automatically assuming that the frame members have been assigned auto select sections. This is currently only available in ETABS.

Using Program

- **SAP2000 V.22.2.0** Structural Analyse Program (Version 22.2.0)
- AutoCAD 2010 Copyright © 1982-2004 Autodesk
- MS-Excel 2002 Copyright © Microsoft Corporation 1985-2001
- MS-Word 2002 Copyright © Microsoft Corporation 1983-2001

Static Model

Container calculation by Sap2000 V.20.2.0 static analyse program.

SAP2000

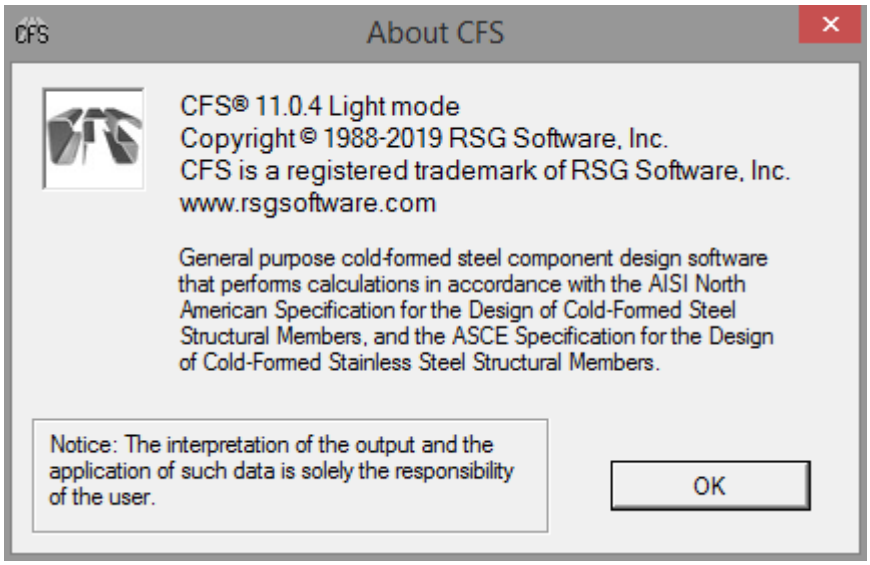
The SAP name has been synonymous with state-of-the-art analytical methods. SAP2000 follows in the same tradition featuring a very sophisticated, intuitive and versatile user interface powered by an unmatched analysis engine and design tools for engineers working on transportation, industrial, public works, sports, and other facilities.

From its 3D object based graphical modeling environment to the wide variety of analysis and design options completely integrated across one powerful user interface, this allows you to create structural models rapidly and intuitively without long learning curve delays. Now you can harness the power of SAP2000 for all of your analysis and design tasks, including small day-to-day problems. Complex Models can be generated and meshed with powerful built in templates. Integrated design code features can automatically generate wind, wave, bridge, and seismic loads with comprehensive automatic steel and concrete design code checks per US, Canadian and international design standards.

Advanced analytical techniques allow for step-by-step large deformation analysis, Eigen and Ritz analyses based on stiffness of nonlinear cases, catenary cable analysis, material nonlinear analysis with fiber hinges, multi-layered nonlinear shell element, buckling analysis, progressive collapse analysis, energy methods for drift control, velocity-dependent dampers, base isolators, support

plasticity and nonlinear segmental construction analysis. Nonlinear analyses can be static and/or time history, with options for FNA nonlinear time history dynamic analysis and direct integration.

CFS11.0.4 Structural Analyse Program (Version 14.1.0)



Design Rule

THE STANDARDS USED (American Rules)

Steel Frame Design Preferences for AISC 360-10

	Item	Value
1	Design Code	AISC 360-10
2	Multi-Response Case Design	Envelopes
3	Framing Type	SMF
4	Seismic Design Category	D
5	Importance Factor	1,
6	Design System Rho	1,
7	Design System Sds	0,5
8	Design System R	8,
9	Design System Omega0	3,
10	Design System Cd	5,5
11	Design Provision	LRFD
12	Analysis Method	Effective Length
13	Second Order Method	General 2nd Order
14	Stiffness Reduction Method	Tau-b Fixed
15	Phi(Bending)	0,9
16	Phi(Compression)	0,9
17	Phi(Tension-Yielding)	0,9
18	Phi(Tension-Fracture)	0,75
19	Phi(Shear)	0,9
20	Phi(Shear-Short Webed Rolled I)	1,
21	Phi(Torsion)	0,9
22	Ignore Seismic Code?	Yes
23	Ignore Special Seismic Load?	Yes

- ASCE 7–5, ASCE 7–10 for Loadings on structures
- AISC 360–10 - Specification for steel buildings
- (AISC) Steel Guide 1- Column base plate and anchor rod design
- (AISC) Steel Guide 3- Serviceability design considerations
- (AISC) Steel Guide 4- Extended end plate Moment connections
- (AISC) Steel Guide 24- Hollow Structural section Connections.

LOAD ANALYSE

Roof Analyse :

Snow Load.…….....**= 0,120t/m^2**

Cover Load…….....**= 0,030t/m^2**

Construction…….....**= (Program calculated)**

Floor Analyse:

Lıve Load…….....= 0,350t/m^2

Construction…….....**= (Program calculated)**

Wind Loads ;

0 m - 8 m	q = 0,50 kN/m²
8 m – 20 m	q = 0,80 kN/m²

Container Height ➔ 0 - 8,0m ➔ q=0,5 kN/m²

Statical Conditios and Load Combination;

Static Load Case :

TABLE: Load Pattern Definitions			
LoadPat	DesignType	SelfWtMult	AutoLoad
Text	Text	Unitless	Text
DEAD	Dead	1	
ROOF COVER	Super Dead	0	
FLOOR COVER	Super Dead	0	
LIVE	Live	0	
SNOW	Snow	0	
WXP	Wind	0	None
WXN	Wind	0	None
WYP	Wind	0	None
WYN	Wind	0	None

Load Combination :

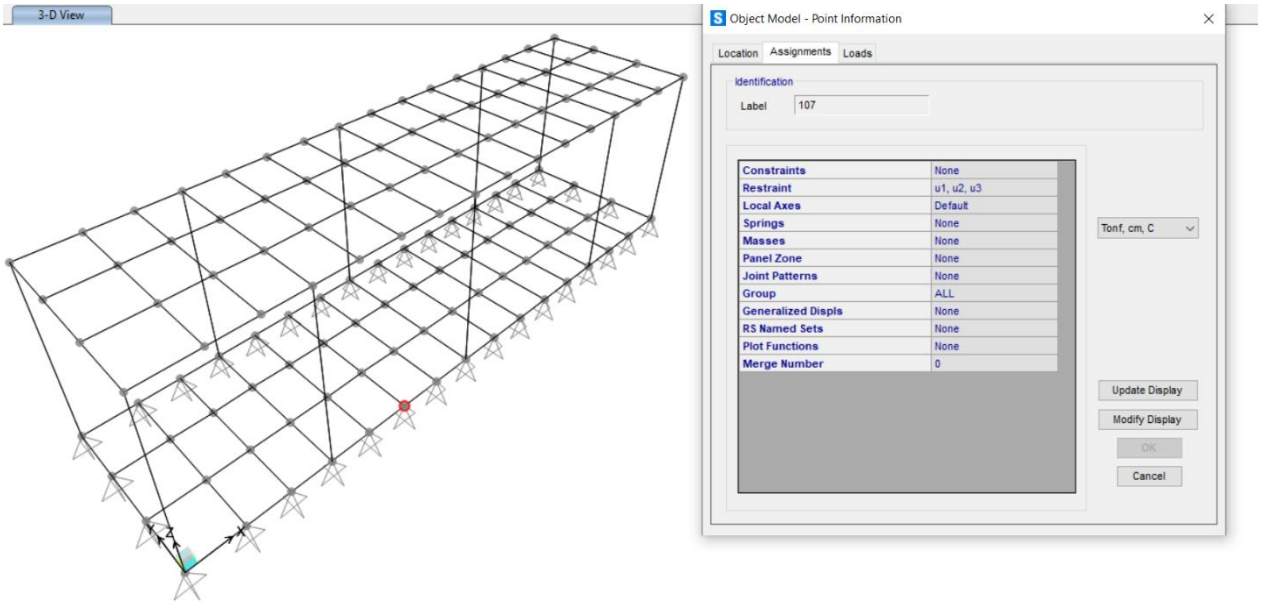
TABLE: Combination Definitions					
ComboName	ComboType	AutoDesign	CaseType	CaseName	ScaleFactor
Text	Text	Yes/No	Text	Text	Unitless
DSTL1	Linear Add	Yes	Linear Static	DEAD	1,4
DSTL1			Linear Static	ROOF COVER	1,4
DSTL1			Linear Static	FLOOR COVER	1,4
DSTL2	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL2			Linear Static	ROOF COVER	1,2
DSTL2			Linear Static	FLOOR COVER	1,2
DSTL2			Linear Static	LIVE	1,6
DSTL2			Linear Static	SNOW	0,5
DSTL3	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL3			Linear Static	ROOF COVER	1,2
DSTL3			Linear Static	FLOOR COVER	1,2
DSTL3			Linear Static	LIVE	1
DSTL3			Linear Static	SNOW	1,6
DSTL4	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL4			Linear Static	ROOF COVER	1,2
DSTL4			Linear Static	FLOOR COVER	1,2
DSTL4			Linear Static	LIVE	1
DSTL4			Linear Static	SNOW	0,5
DSTL4			Linear Static	WXP	1

DSTL5	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL5			Linear Static	ROOF COVER	1,2
DSTL5			Linear Static	FLOOR COVER	1,2
DSTL5			Linear Static	LIVE	1
DSTL5			Linear Static	SNOW	0,5
DSTL5			Linear Static	WXP	-1
DSTL6	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL6			Linear Static	ROOF COVER	1,2
DSTL6			Linear Static	FLOOR COVER	1,2
DSTL6			Linear Static	LIVE	1
DSTL6			Linear Static	SNOW	0,5
DSTL6			Linear Static	WXN	1
DSTL7	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL7			Linear Static	ROOF COVER	1,2
DSTL7			Linear Static	FLOOR COVER	1,2
DSTL7			Linear Static	LIVE	1
DSTL7			Linear Static	SNOW	0,5
DSTL7			Linear Static	WXN	-1
DSTL8	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL8			Linear Static	ROOF COVER	1,2
DSTL8			Linear Static	FLOOR COVER	1,2
DSTL8			Linear Static	LIVE	1
DSTL8			Linear Static	SNOW	0,5
DSTL8			Linear Static	WYP	1
DSTL9	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL9			Linear Static	ROOF COVER	1,2
DSTL9			Linear Static	FLOOR COVER	1,2
DSTL9			Linear Static	LIVE	1
DSTL9			Linear Static	SNOW	0,5
DSTL9			Linear Static	WYP	-1
DSTL10	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL10			Linear Static	ROOF COVER	1,2
DSTL10			Linear Static	FLOOR COVER	1,2
DSTL10			Linear Static	LIVE	1
DSTL10			Linear Static	SNOW	0,5
DSTL10			Linear Static	WYN	1
DSTL11	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL11			Linear Static	ROOF COVER	1,2
DSTL11			Linear Static	FLOOR COVER	1,2
DSTL11			Linear Static	LIVE	1
DSTL11			Linear Static	SNOW	0,5
DSTL11			Linear Static	WYN	-1
DSTL12	Linear Add	Yes	Linear Static	DEAD	1,2

DSTL12			Linear Static	ROOF COVER	1,2
DSTL12			Linear Static	FLOOR COVER	1,2
DSTL12			Linear Static	SNOW	1,6
DSTL12			Linear Static	WXP	0,5
DSTL13	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL13			Linear Static	ROOF COVER	1,2
DSTL13			Linear Static	FLOOR COVER	1,2
DSTL13			Linear Static	SNOW	1,6
DSTL13			Linear Static	WXP	-0,5
DSTL14	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL14			Linear Static	ROOF COVER	1,2
DSTL14			Linear Static	FLOOR COVER	1,2
DSTL14			Linear Static	SNOW	1,6
DSTL14			Linear Static	WXN	0,5
DSTL15	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL15			Linear Static	ROOF COVER	1,2
DSTL15			Linear Static	FLOOR COVER	1,2
DSTL15			Linear Static	SNOW	1,6
DSTL15			Linear Static	WXN	-0,5
DSTL16	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL16			Linear Static	ROOF COVER	1,2
DSTL16			Linear Static	FLOOR COVER	1,2
DSTL16			Linear Static	SNOW	1,6
DSTL16			Linear Static	WYP	0,5
DSTL17	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL17			Linear Static	ROOF COVER	1,2
DSTL17			Linear Static	FLOOR COVER	1,2
DSTL17			Linear Static	SNOW	1,6
DSTL17			Linear Static	WYP	-0,5
DSTL18	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL18			Linear Static	ROOF COVER	1,2
DSTL18			Linear Static	FLOOR COVER	1,2
DSTL18			Linear Static	SNOW	1,6
DSTL18			Linear Static	WYN	0,5
DSTL19	Linear Add	Yes	Linear Static	DEAD	1,2
DSTL19			Linear Static	ROOF COVER	1,2
DSTL19			Linear Static	FLOOR COVER	1,2
DSTL19			Linear Static	SNOW	1,6
DSTL19			Linear Static	WYN	-0,5
DSTL20	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL20			Linear Static	ROOF COVER	0,9
DSTL20			Linear Static	FLOOR COVER	0,9
DSTL20			Linear Static	WXP	1

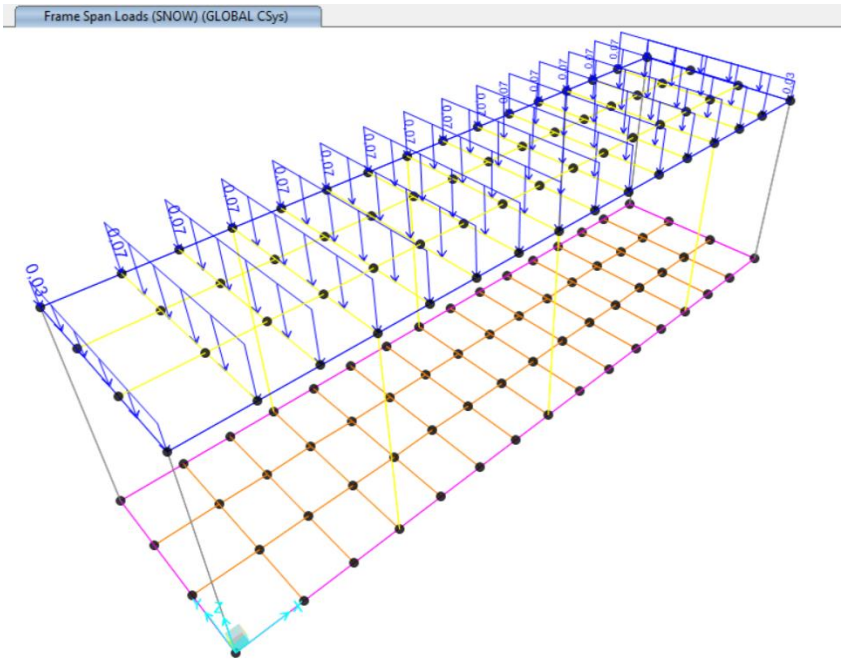
DSTL21	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL21			Linear Static	ROOF COVER	0,9
DSTL21			Linear Static	FLOOR COVER	0,9
DSTL21			Linear Static	WXP	-1
DSTL22	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL22			Linear Static	ROOF COVER	0,9
DSTL22			Linear Static	FLOOR COVER	0,9
DSTL22			Linear Static	WXN	1
DSTL23	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL23			Linear Static	ROOF COVER	0,9
DSTL23			Linear Static	FLOOR COVER	0,9
DSTL23			Linear Static	WXN	-1
DSTL24	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL24			Linear Static	ROOF COVER	0,9
DSTL24			Linear Static	FLOOR COVER	0,9
DSTL24			Linear Static	WYP	1
DSTL25	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL25			Linear Static	ROOF COVER	0,9
DSTL25			Linear Static	FLOOR COVER	0,9
DSTL25			Linear Static	WYP	-1
DSTL26	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL26			Linear Static	ROOF COVER	0,9
DSTL26			Linear Static	FLOOR COVER	0,9
DSTL26			Linear Static	WYN	1
DSTL27	Linear Add	Yes	Linear Static	DEAD	0,9
DSTL27			Linear Static	ROOF COVER	0,9
DSTL27			Linear Static	FLOOR COVER	0,9
DSTL27			Linear Static	WYN	-1
DSTL28	Linear Add	Yes	Linear Static	DEAD	1
DSTL28			Linear Static	ROOF COVER	1
DSTL28			Linear Static	FLOOR COVER	1
DSTL29	Linear Add	Yes	Linear Static	DEAD	1
DSTL29			Linear Static	ROOF COVER	1
DSTL29			Linear Static	FLOOR COVER	1
DSTL29			Linear Static	LIVE	1

Support System Of the Container System

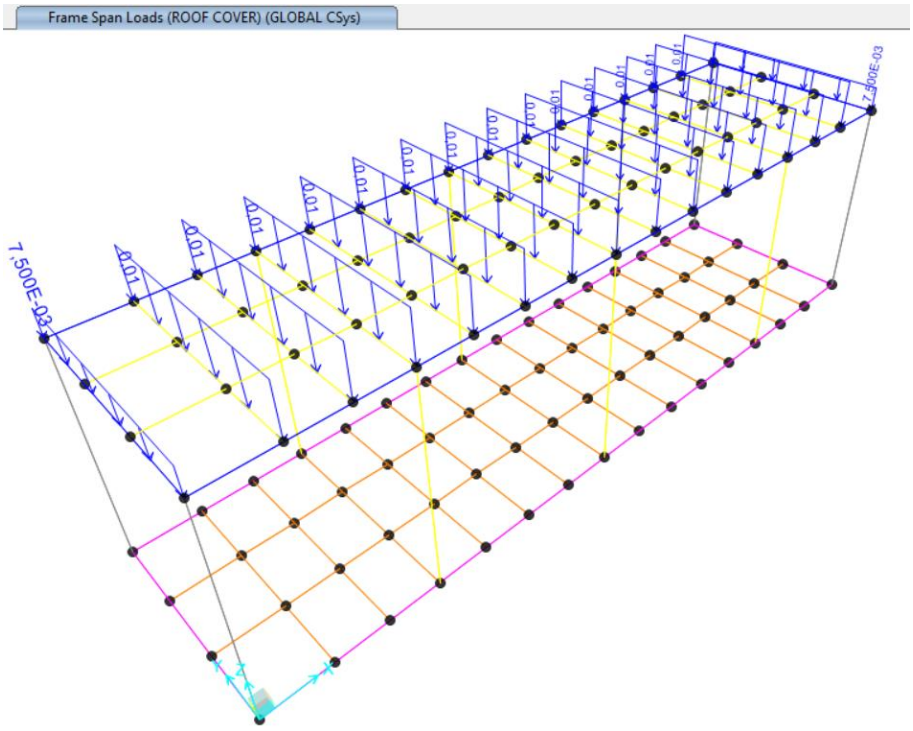


LOADS TYPES (Units are ton-m):

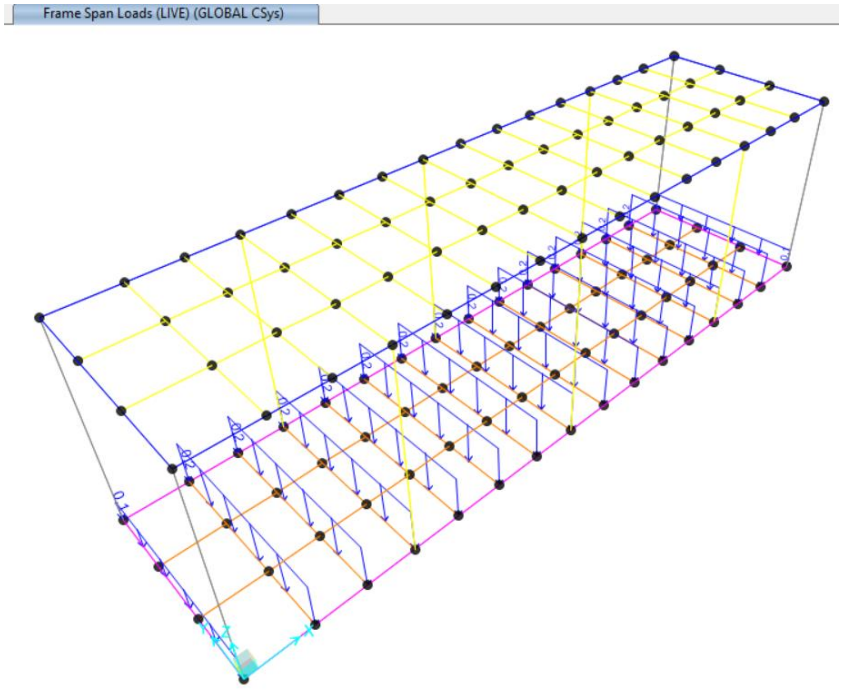
Snow Loads : (0,120t/m^2)



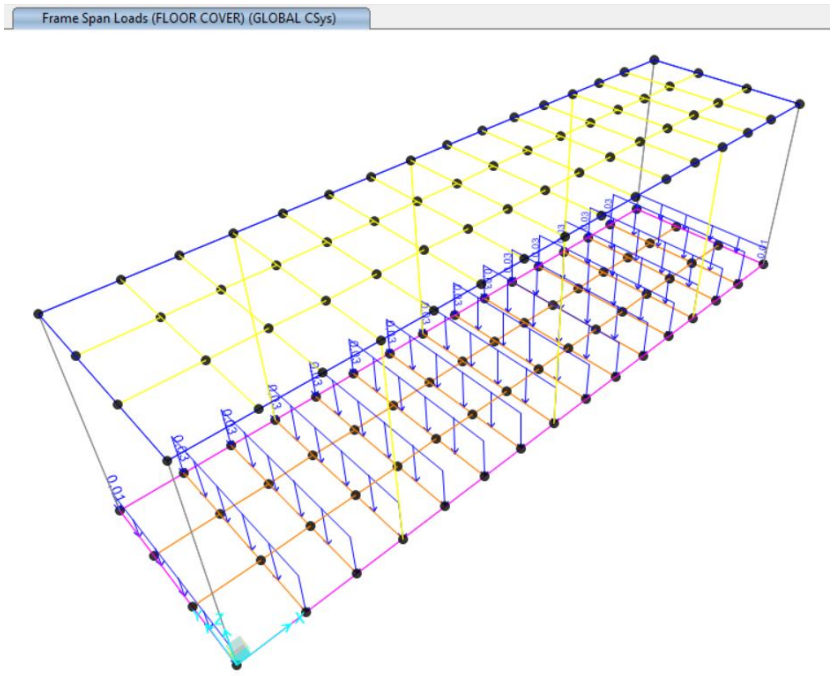
Roof Cover Loads : (0,025t/m^2)



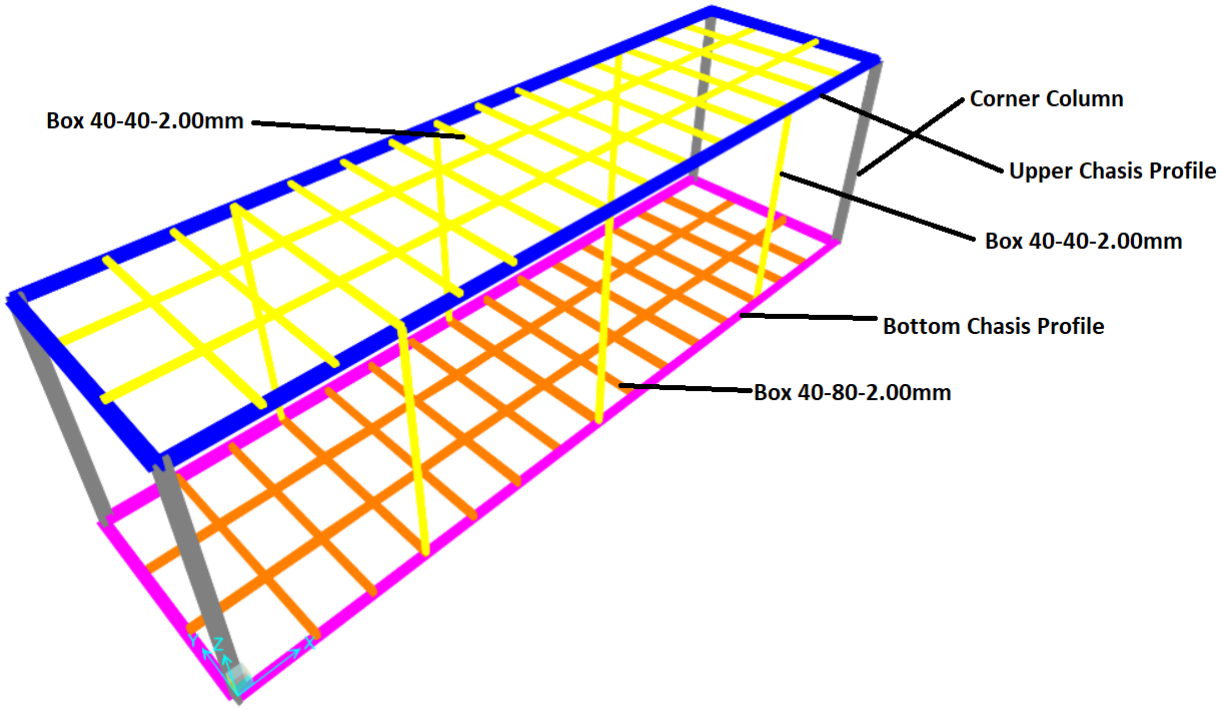
Live Loads : (0,350t/m^2)



Floor Cover Loads : (0,050t/m^2)

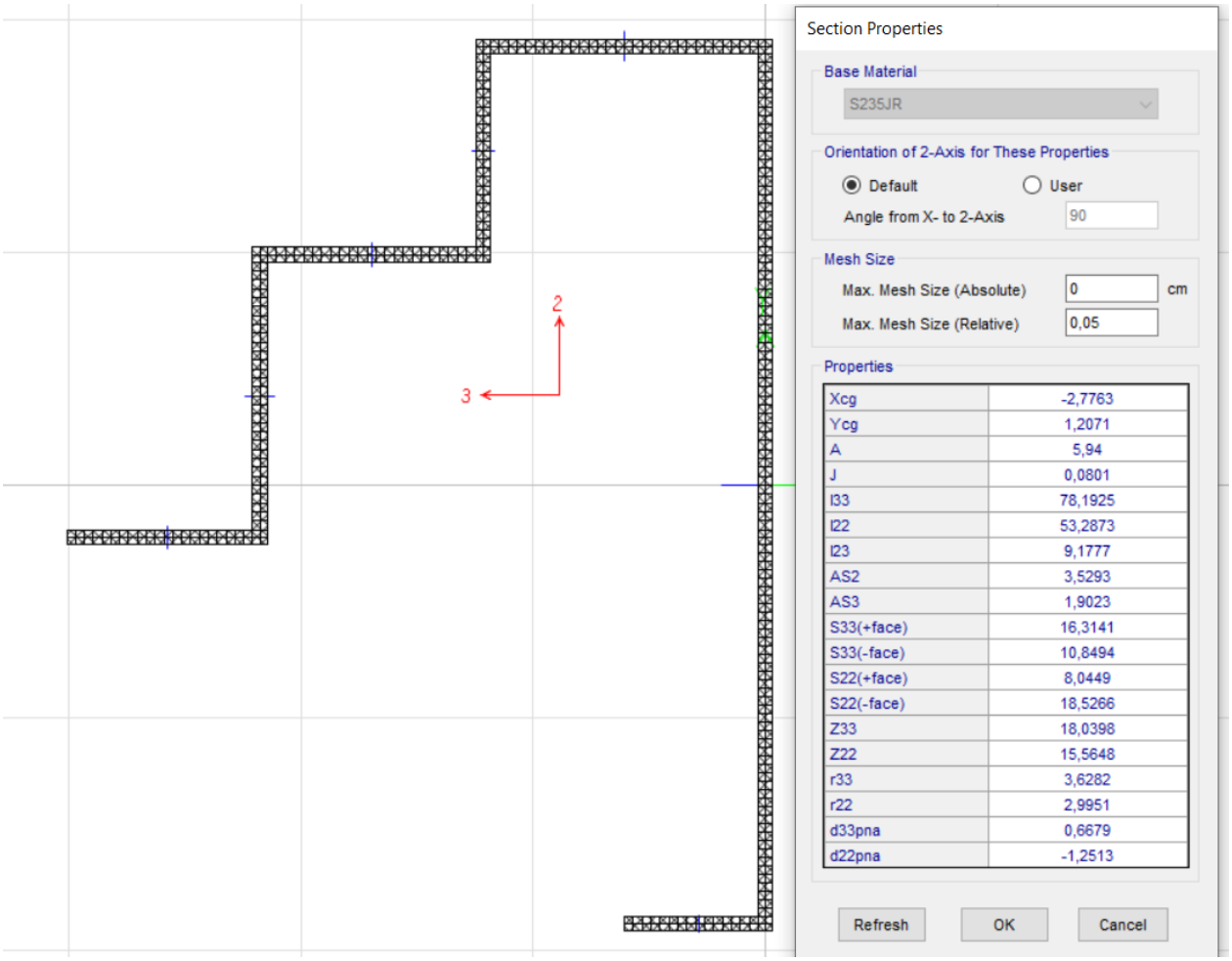


Profile Material Properties



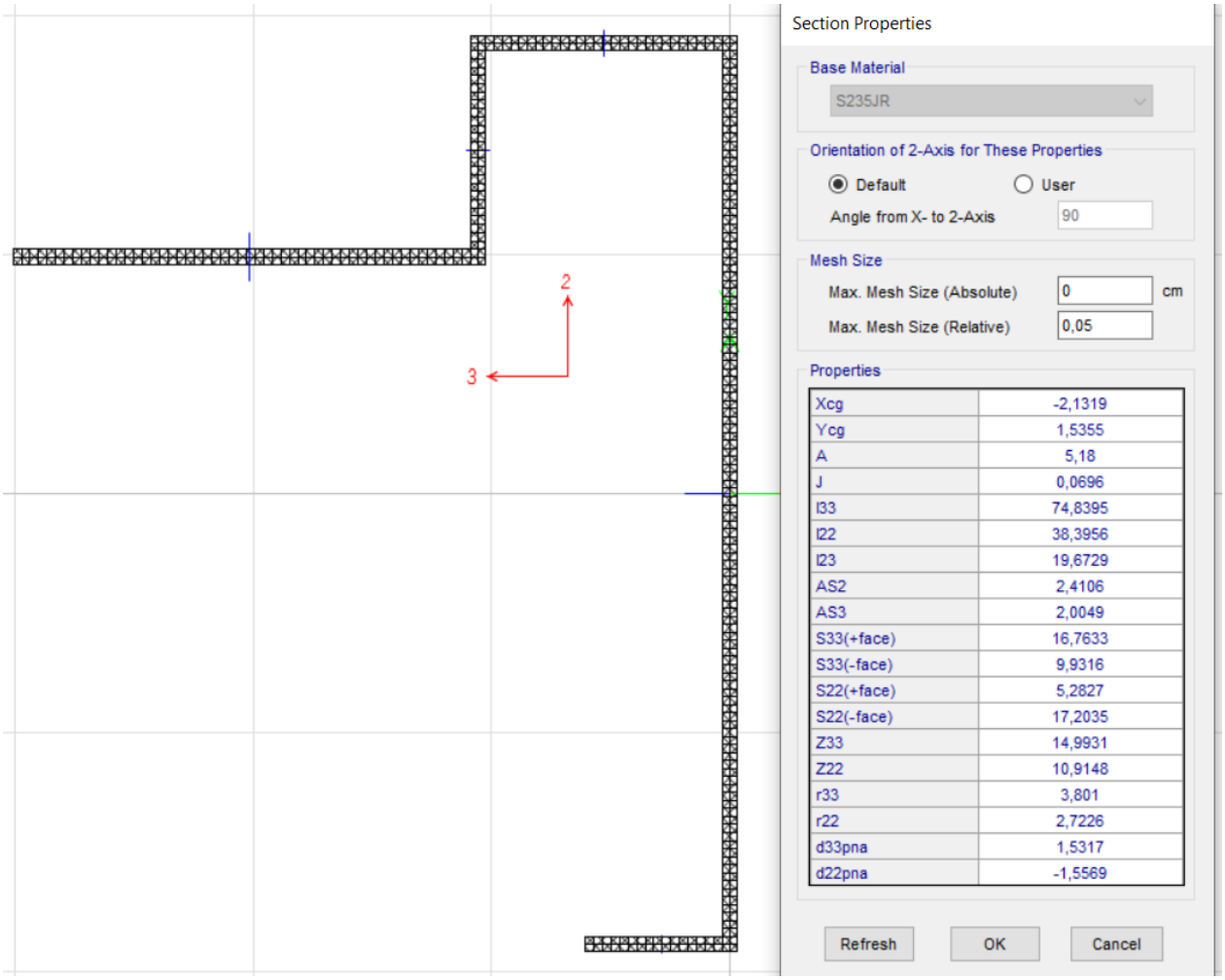
Upper Chasis Profile (Units are ton-cm)

Thickness : 2,00mm



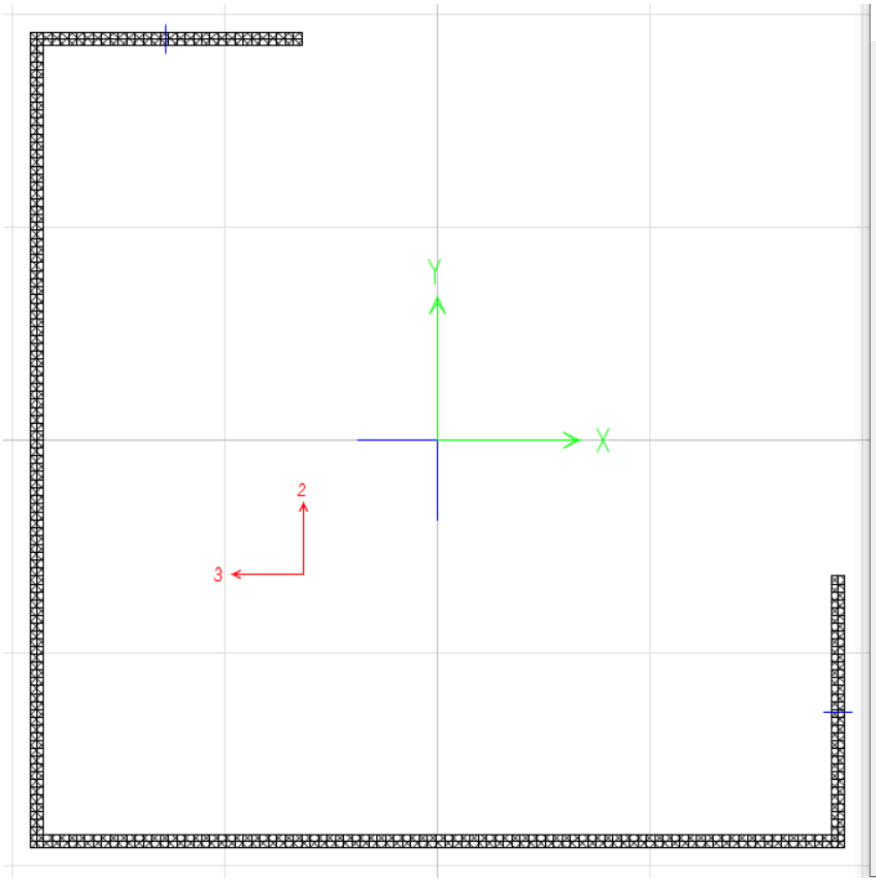
Bottom Chasis Profile (Units are ton-cm)

Thickness : 2.00mm



Corner Column (Units are ton-cm)

Thickness : 2.0mm



Section Properties

Base Material

S235JR

Orientation of 2-Axis for These Properties

Default User

Angle from X- to 2-Axis 90

Mesh Size

Max. Mesh Size (Absolute) 0 cm

Max. Mesh Size (Relative) 0,05

Properties

Xcg	-1,9752
Ycg	-1,9752
A	6,28
J	0,084
I33	125,3919
I22	125,3919
I23	60,8675
AS2	2,8586
AS3	2,8573
S33(+face)	15,7228
S33(-face)	31,1545
S22(+face)	31,1545
S22(-face)	15,7228
Z33	23,131
Z22	23,131
r33	4,4684
r22	4,4684
d33pna	-1,9748
d22pna	1,9748

Refresh OK Cancel

Box 40-80 (Units are ton-cm)

Thickness : 2.00mm

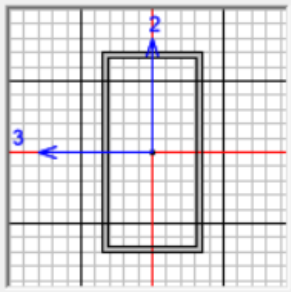
Box/Tube Section

Section Name	BOX40-80-2.00mm
Display Color	
Section Notes	Modify/Show Notes...

Dimensions

Outside depth (t3)	8,
Outside width (t2)	4,
Flange thickness (tf)	0,2
Web thickness (tw)	0,2

Section



Properties

Section Properties...

Time Dependent Properties...

Material

S235JR

Property Modifiers

Set Modifiers...

Property Data

Section Name	BOX40-80-2.00mm

Properties

Cross-section (axial) area	4,64	Section modulus about 3 axis	9,7435
Moment of Inertia about 3 axis	38,9739	Section modulus about 2 axis	6,5589
Moment of Inertia about 2 axis	13,1179	Plastic modulus about 3 axis	12,016
Product of Inertia about 2-3	0,	Plastic modulus about 2 axis	7,376
Shear area in 2 direction	3,2	Radius of Gyration about 3 axis	2,8982
Shear area in 3 direction	1,6	Radius of Gyration about 2 axis	1,6814
Torsional constant	30,2941	Shear Center Eccentricity (x3)	0,

Box 40-40 (Units are ton-cm)

Thickness : 2.00mm

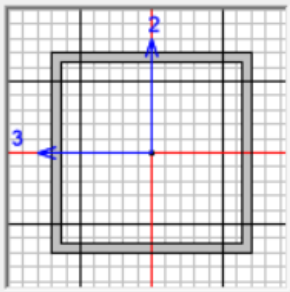
Box/Tube Section

Section Name	BOX40-40-2.00mm
Display Color	
Section Notes	Modify/Show Notes...

Dimensions

Outside depth (t3)	4,
Outside width (t2)	4,
Flange thickness (tf)	0,2
Web thickness (tw)	0,2

Section



Material

S235JR

Property Modifiers

Set Modifiers...

Properties

Section Properties...

Time Dependent Properties...

Property Data

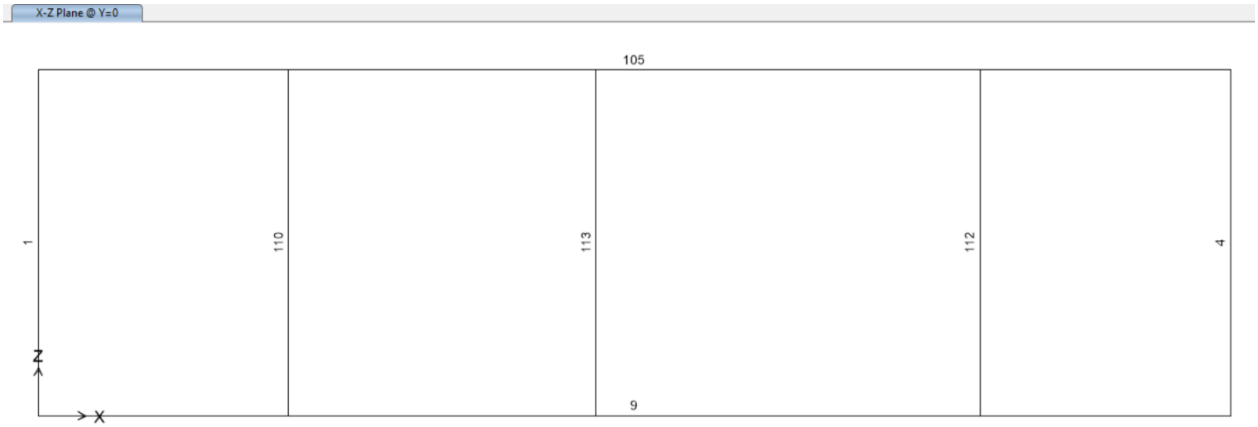
Section Name: BOX40-40-2.00mm

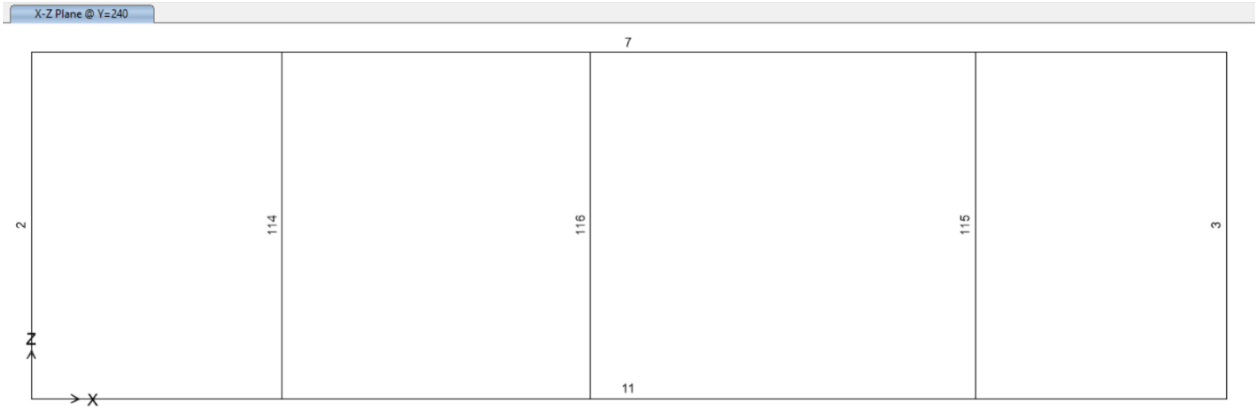
Properties

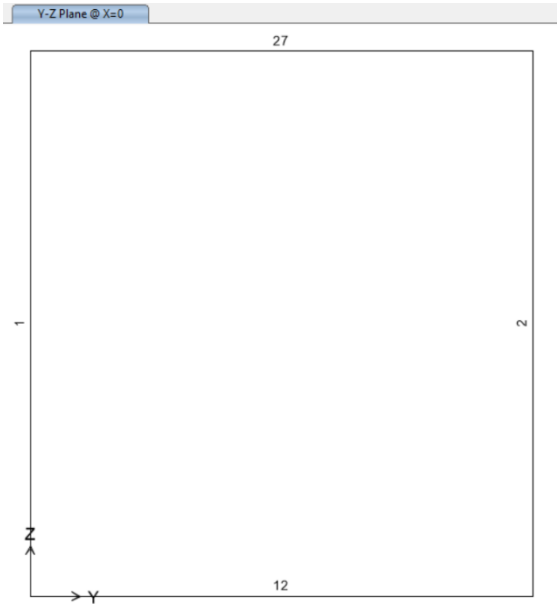
Cross-section (axial) area	3,04	Section modulus about 3 axis	3,6683
Moment of Inertia about 3 axis	7,3365	Section modulus about 2 axis	3,6683
Moment of Inertia about 2 axis	7,3365	Plastic modulus about 3 axis	4,336
Product of Inertia about 2-3	0,	Plastic modulus about 2 axis	4,336
Shear area in 2 direction	1,6	Radius of Gyration about 3 axis	1,5535
Shear area in 3 direction	1,6	Radius of Gyration about 2 axis	1,5535
Torsional constant	10,9744	Shear Center Eccentricity (x3)	0,

Design Results

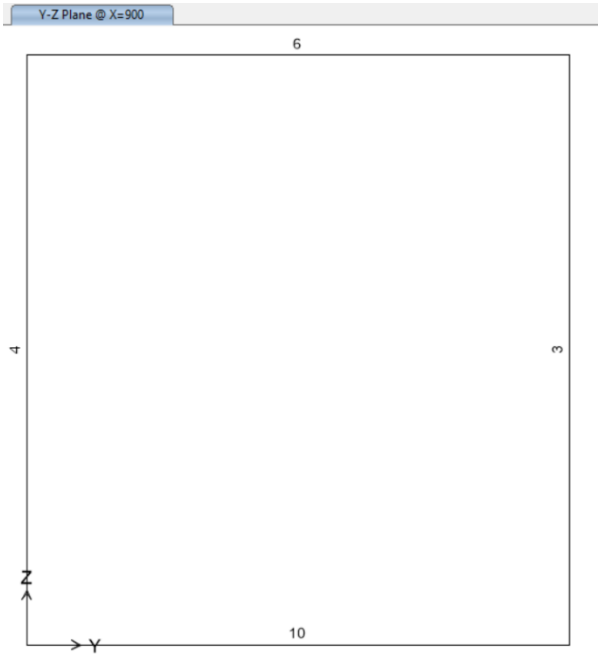
Seciton Views Of Profile (Label Name)



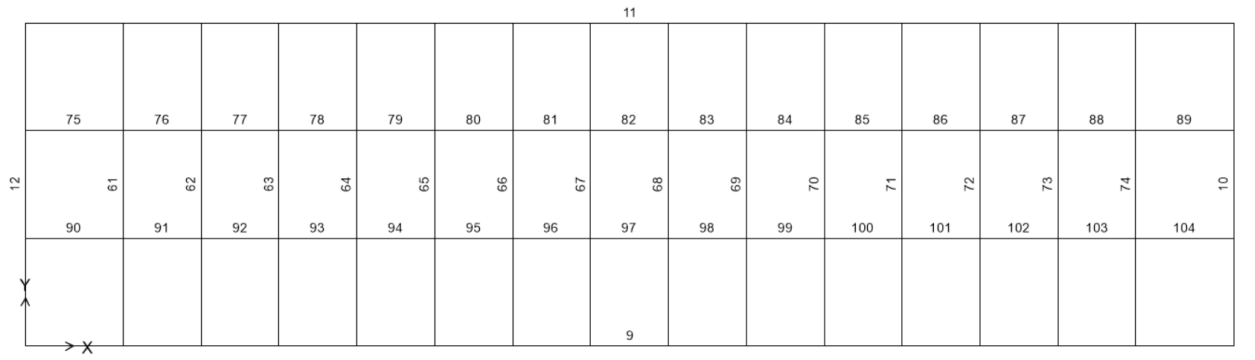




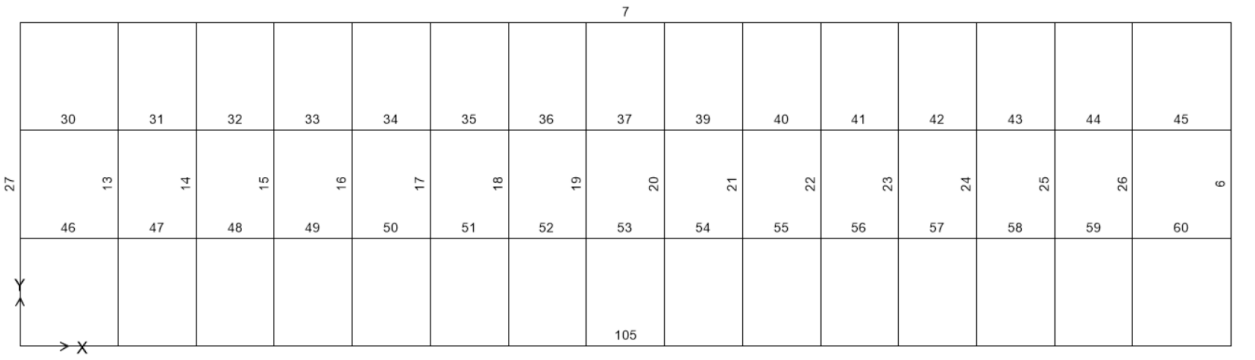
Y-Z Plane @ X=900

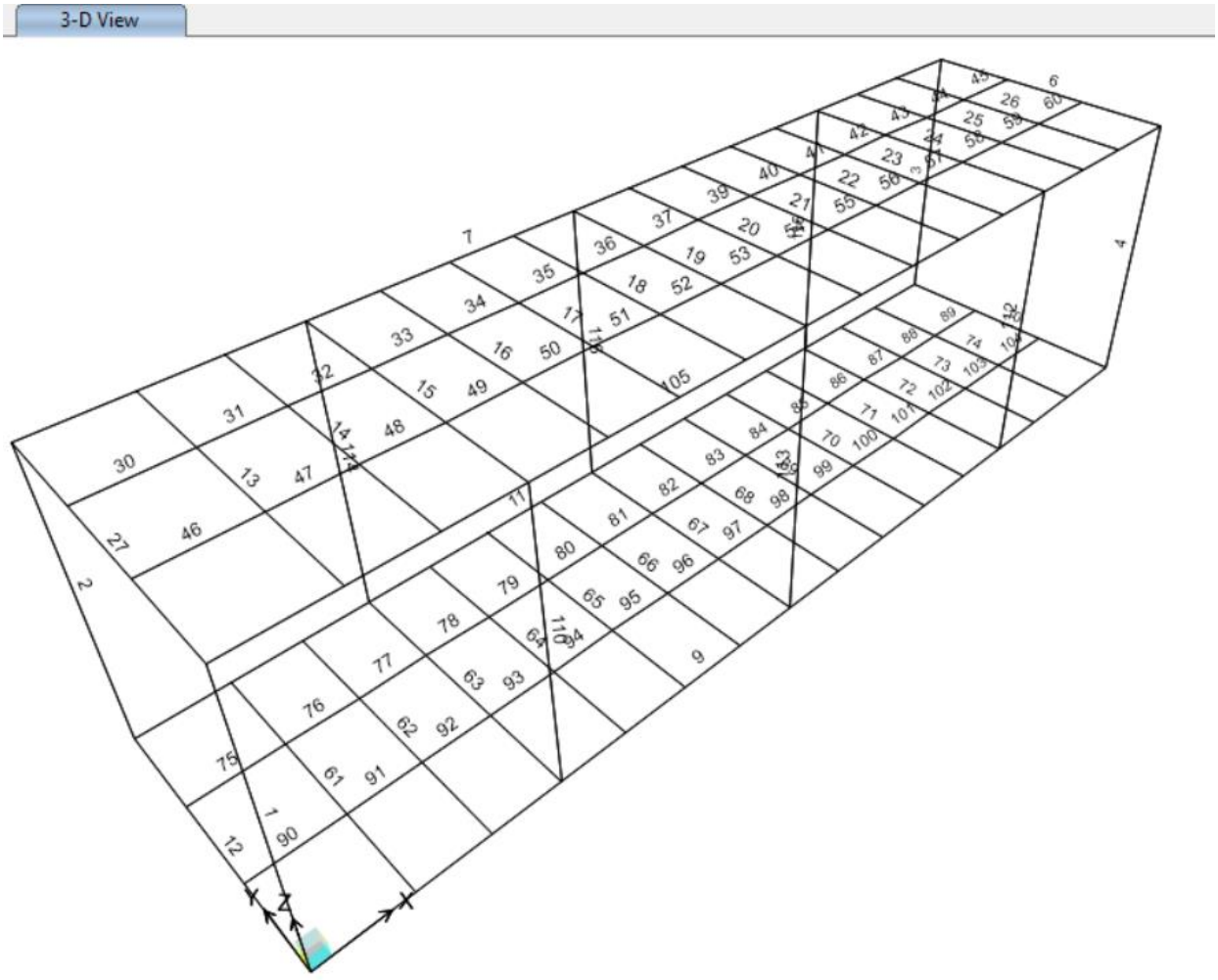


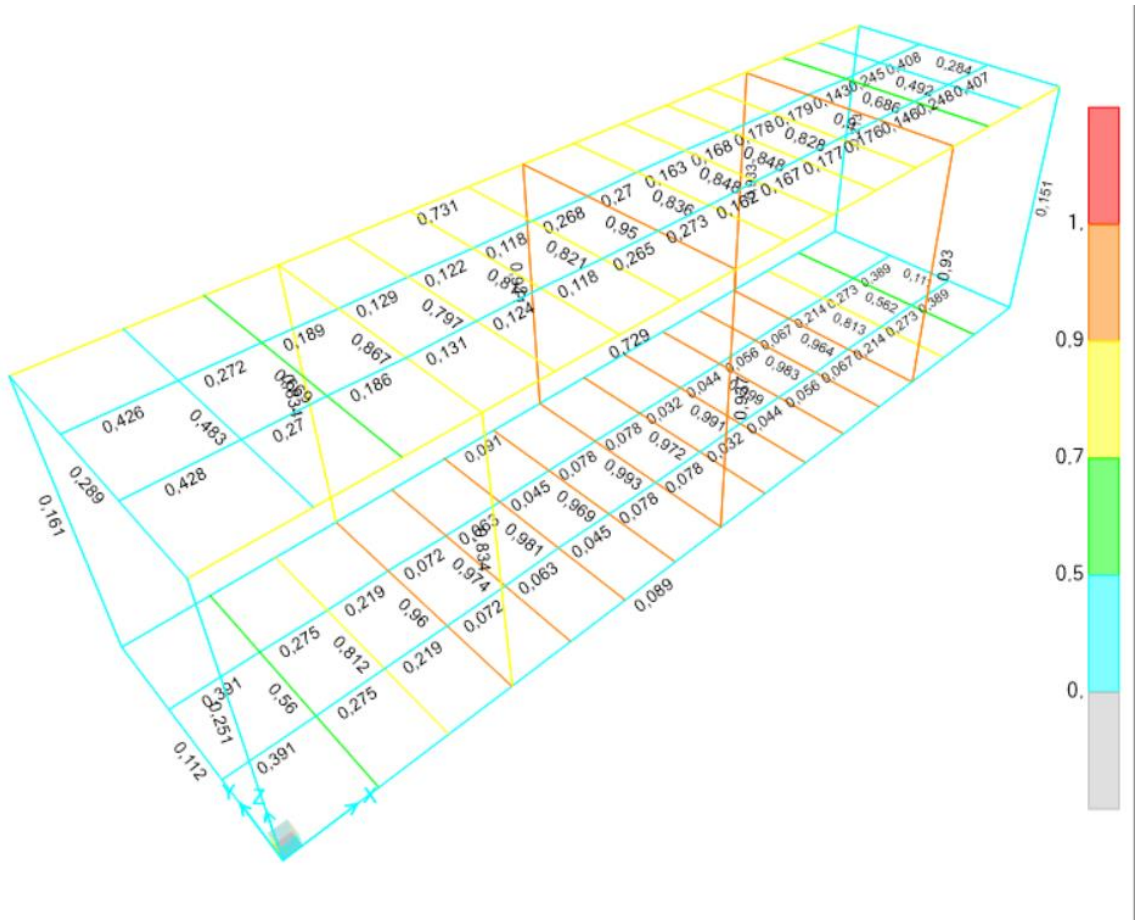
X-Y Plane @ Z=0



X-Y Plane @ Z=260




3-D View
Z
X



Design Result Table

TABLE: Steel Design 1 - Summary Data - AISC 360-10						
Frame	**DesignSect**	**DesignType**	**Ratio**	**RatioType**	**Combo**	**Location**
Text	Text	Text	Unitless	Text	Text	cm
1	CORNER COLUMN	Column	0,251084	PMM	DSTL3	260
2	CORNER COLUMN	Column	0,161371	PMM	DSTL3	260
3	CORNER COLUMN	Column	0,212677	PMM	DSTL3	260
4	CORNER COLUMN	Column	0,150652	PMM	DSTL3	260
6	UPPER CHASIS PROFILE	Beam	0,283537	PMM	DSTL3	120
7	UPPER CHASIS PROFILE	Beam	0,731196	PMM	DSTL3	479,2
9	BOTTOM CHASIS PROFILE	Beam	0,088881	PMM	DSTL2	826,8
10	BOTTOM CHASIS PROFILE	Beam	0,111073	PMM	DSTL2	80
11	BOTTOM CHASIS PROFILE	Beam	0,090843	PMM	DSTL2	73,2
12	BOTTOM CHASIS PROFILE	Beam	0,111624	PMM	DSTL2	160
13	BOX40-40-2.00mm	Beam	0,483162	PMM	DSTL3	120
14	BOX40-40-2.00mm	Beam	0,668606	PMM	DSTL3	120
15	BOX40-40-2.00mm	Beam	0,86749	PMM	DSTL3	120
16	BOX40-40-2.00mm	Beam	0,797145	PMM	DSTL3	120
17	BOX40-40-2.00mm	Beam	0,813313	PMM	DSTL3	120

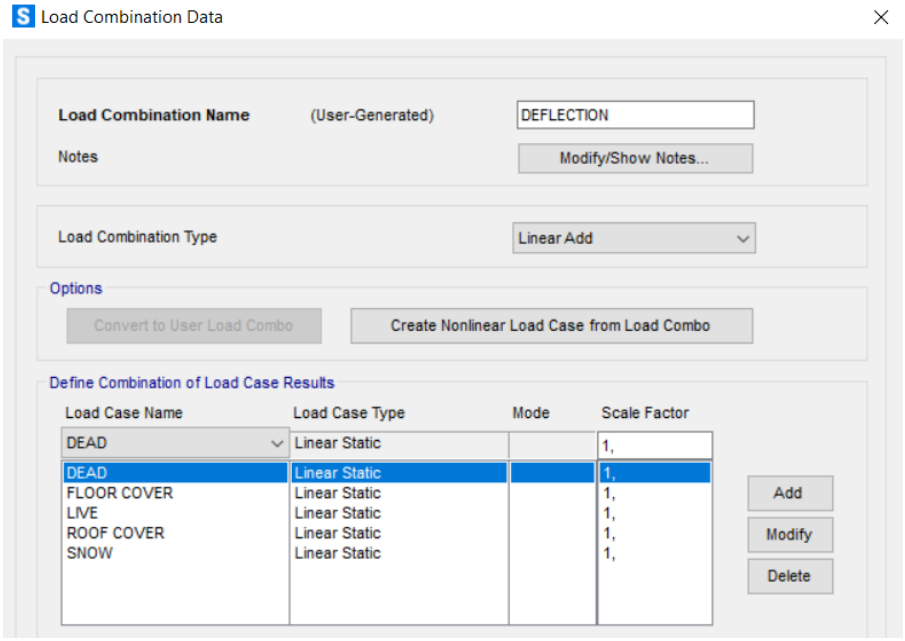
18	BOX40-40-2.00mm	Beam	0,820917	PMM	DSTL3	120
19	BOX40-40-2.00mm	Beam	0,94974	PMM	DSTL3	120
20	BOX40-40-2.00mm	Beam	0,836296	PMM	DSTL3	120
21	BOX40-40-2.00mm	Beam	0,847839	PMM	DSTL3	120
22	BOX40-40-2.00mm	Beam	0,847738	PMM	DSTL3	120
23	BOX40-40-2.00mm	Beam	0,828049	PMM	DSTL3	120
24	BOX40-40-2.00mm	Beam	0,900493	PMM	DSTL3	120
25	BOX40-40-2.00mm	Beam	0,685844	PMM	DSTL3	120
26	BOX40-40-2.00mm	Beam	0,491954	PMM	DSTL3	120
27	UPPER CHASIS PROFILE	Beam	0,288782	PMM	DSTL3	120
30	BOX40-40-2.00mm	Beam	0,42647	PMM	DSTL3	72,8
31	BOX40-40-2.00mm	Beam	0,272011	PMM	DSTL3	0
32	BOX40-40-2.00mm	Beam	0,188716	PMM	DSTL3	0
33	BOX40-40-2.00mm	Beam	0,128566	PMM	DSTL3	0
34	BOX40-40-2.00mm	Beam	0,122367	PMM	DSTL3	58
35	BOX40-40-2.00mm	Beam	0,11787	PMM	DSTL3	0
36	BOX40-40-2.00mm	Beam	0,26828	PMM	DSTL3	58
37	BOX40-40-2.00mm	Beam	0,269643	PMM	DSTL3	0
39	BOX40-40-2.00mm	Beam	0,162517	PMM	DSTL3	58
40	BOX40-40-2.00mm	Beam	0,167543	PMM	DSTL3	58
41	BOX40-40-2.00mm	Beam	0,178167	PMM	DSTL3	0
42	BOX40-40-2.00mm	Beam	0,179403	PMM	DSTL3	58
43	BOX40-40-2.00mm	Beam	0,143259	PMM	DSTL3	58
44	BOX40-40-2.00mm	Beam	0,245182	PMM	DSTL3	58
45	BOX40-40-2.00mm	Beam	0,407649	PMM	DSTL3	0
46	BOX40-40-2.00mm	Beam	0,428311	PMM	DSTL3	72,8
47	BOX40-40-2.00mm	Beam	0,269928	PMM	DSTL3	0
48	BOX40-40-2.00mm	Beam	0,186386	PMM	DSTL3	0
49	BOX40-40-2.00mm	Beam	0,131137	PMM	DSTL3	0
50	BOX40-40-2.00mm	Beam	0,124109	PMM	DSTL3	58
51	BOX40-40-2.00mm	Beam	0,118486	PMM	DSTL3	0
52	BOX40-40-2.00mm	Beam	0,264968	PMM	DSTL3	58
53	BOX40-40-2.00mm	Beam	0,273123	PMM	DSTL3	0
54	BOX40-40-2.00mm	Beam	0,162445	PMM	DSTL3	58
55	BOX40-40-2.00mm	Beam	0,166659	PMM	DSTL3	58
56	BOX40-40-2.00mm	Beam	0,176609	PMM	DSTL3	0
57	BOX40-40-2.00mm	Beam	0,176343	PMM	DSTL3	58
58	BOX40-40-2.00mm	Beam	0,146365	PMM	DSTL3	58
59	BOX40-40-2.00mm	Beam	0,248004	PMM	DSTL3	58
60	BOX40-40-2.00mm	Beam	0,407055	PMM	DSTL3	0
61	BOX40-80-2.00mm	Beam	0,560066	PMM	DSTL2	120
62	BOX40-80-2.00mm	Beam	0,811643	PMM	DSTL2	120
63	BOX40-80-2.00mm	Beam	0,96006	PMM	DSTL2	120

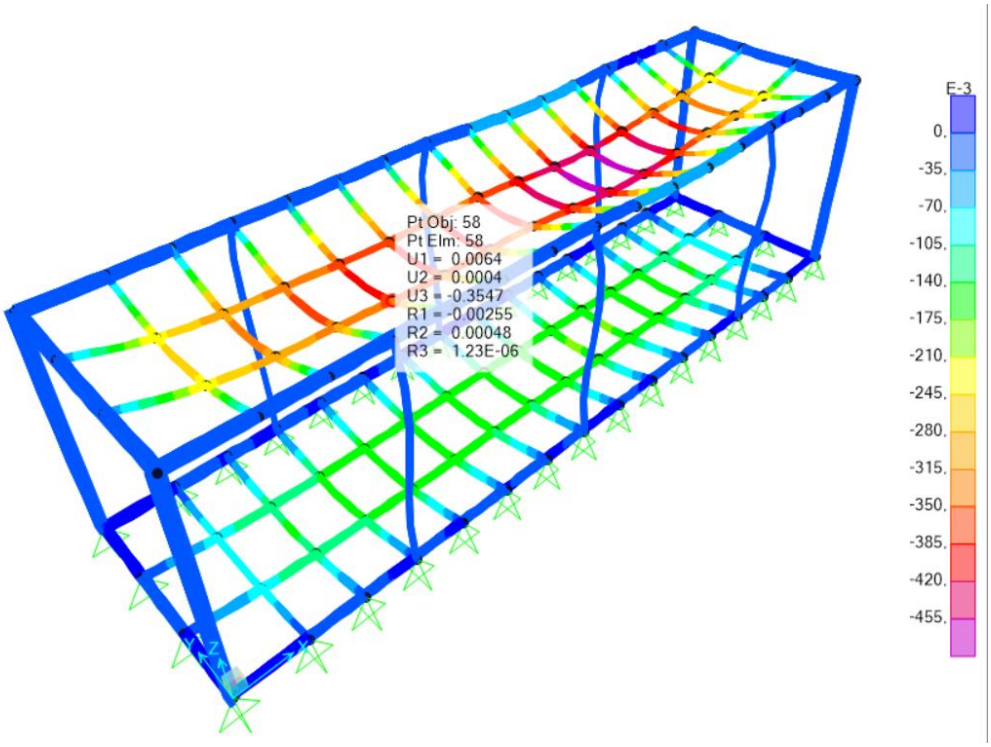
64	BOX40-80-2.00mm	Beam	0,973553	PMM	DSTL2	120
65	BOX40-80-2.00mm	Beam	0,980793	PMM	DSTL2	120
66	BOX40-80-2.00mm	Beam	0,968903	PMM	DSTL2	120
67	BOX40-80-2.00mm	Beam	0,993015	PMM	DSTL2	120
68	BOX40-80-2.00mm	Beam	0,971595	PMM	DSTL2	120
69	BOX40-80-2.00mm	Beam	0,991077	PMM	DSTL2	120
70	BOX40-80-2.00mm	Beam	0,999153	PMM	DSTL2	120
71	BOX40-80-2.00mm	Beam	0,983396	PMM	DSTL2	120
72	BOX40-80-2.00mm	Beam	0,964296	PMM	DSTL2	120
73	BOX40-80-2.00mm	Beam	0,813135	PMM	DSTL2	120
74	BOX40-80-2.00mm	Beam	0,561676	PMM	DSTL2	120
75	BOX40-80-2.00mm	Beam	0,391026	PMM	DSTL2	72,8
76	BOX40-80-2.00mm	Beam	0,274694	PMM	DSTL2	29
77	BOX40-80-2.00mm	Beam	0,218613	PMM	DSTL2	0
78	BOX40-80-2.00mm	Beam	0,071748	PMM	DSTL2	58
79	BOX40-80-2.00mm	Beam	0,062999	PMM	DSTL2	0
80	BOX40-80-2.00mm	Beam	0,045037	PMM	DSTL2	0
81	BOX40-80-2.00mm	Beam	0,078259	PMM	DSTL2	58
82	BOX40-80-2.00mm	Beam	0,078451	PMM	DSTL2	0
83	BOX40-80-2.00mm	Beam	0,031797	PMM	DSTL3	58
84	BOX40-80-2.00mm	Beam	0,044165	PMM	DSTL2	58
85	BOX40-80-2.00mm	Beam	0,055775	PMM	DSTL2	58
86	BOX40-80-2.00mm	Beam	0,067057	PMM	DSTL2	0
87	BOX40-80-2.00mm	Beam	0,214343	PMM	DSTL2	58
88	BOX40-80-2.00mm	Beam	0,272738	PMM	DSTL2	58
89	BOX40-80-2.00mm	Beam	0,388742	PMM	DSTL2	0
90	BOX40-80-2.00mm	Beam	0,390972	PMM	DSTL2	72,8
91	BOX40-80-2.00mm	Beam	0,274694	PMM	DSTL2	29
92	BOX40-80-2.00mm	Beam	0,218607	PMM	DSTL2	0
93	BOX40-80-2.00mm	Beam	0,071752	PMM	DSTL2	58
94	BOX40-80-2.00mm	Beam	0,063002	PMM	DSTL2	0
95	BOX40-80-2.00mm	Beam	0,045038	PMM	DSTL2	0
96	BOX40-80-2.00mm	Beam	0,07825	PMM	DSTL2	58
97	BOX40-80-2.00mm	Beam	0,07845	PMM	DSTL2	0
98	BOX40-80-2.00mm	Beam	0,031805	PMM	DSTL3	58
99	BOX40-80-2.00mm	Beam	0,044167	PMM	DSTL2	58
100	BOX40-80-2.00mm	Beam	0,055775	PMM	DSTL2	58
101	BOX40-80-2.00mm	Beam	0,067053	PMM	DSTL2	0
102	BOX40-80-2.00mm	Beam	0,214338	PMM	DSTL2	58
103	BOX40-80-2.00mm	Beam	0,272726	PMM	DSTL2	58
104	BOX40-80-2.00mm	Beam	0,38877	PMM	DSTL2	0
105	UPPER CHASIS PROFILE	Beam	0,728763	PMM	DSTL3	420,8
110	BOX40-40-2.00mm	Column	0,833712	PMM	DSTL3	0

112	BOX40-40-2.00mm	Column	0,930085	PMM	DSTL3	0
113	BOX40-40-2.00mm	Column	0,937385	PMM	DSTL3	0
114	BOX40-40-2.00mm	Column	0,833811	PMM	DSTL3	0
115	BOX40-40-2.00mm	Column	0,933353	PMM	DSTL3	0
116	BOX40-40-2.00mm	Column	0,940827	PMM	DSTL3	0

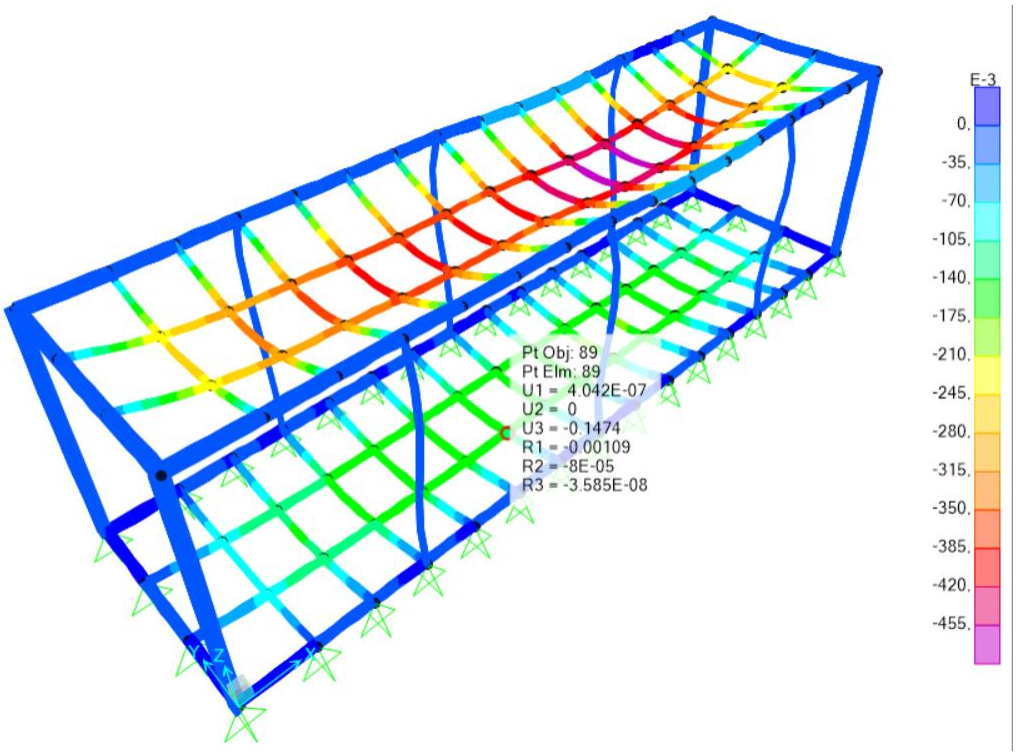
Displacement Control Of the Container Chasis Profile

Deflection Control Combination





240cm/360 = 0,66cm > 0,35cm



240cm/360 = 0,66cm > 0,14cm