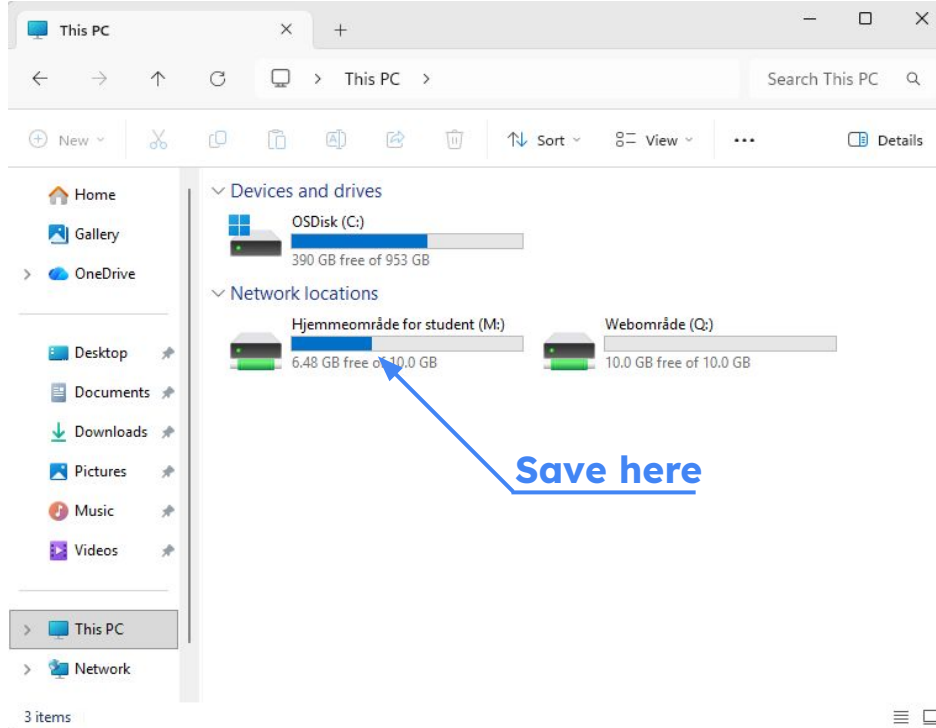




Introduction

Save file



Or:



Google Drive



OneDrive

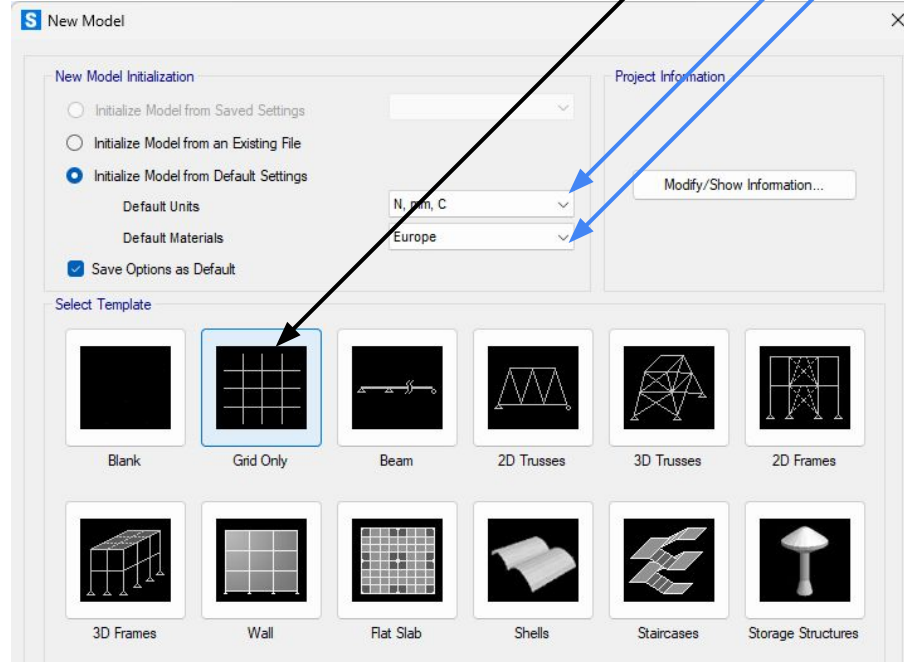
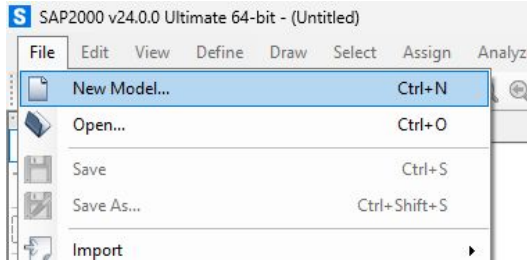
Structure/Geometry

Workflow

1. Grid
2. Materials
3. Frame Sections
4. Frame objects
5. Connections



New model



Click Grid Last

N/kN
Europe

Grid Setup

Modify grid later:

1.

Quick Grid Lines

Cartesian Cylindrical

Coordinate System Name: GLOBAL

Number of Grid Lines

X direction: 5

Y direction: 10

Z direction: 2

Grid Spacing

X direction: 100

Y direction: 100

Z direction: 100

First Grid Line Location

X direction: 0.

Y direction: 0.

Z direction: 0.

OK Cancel

2.

Coordinate/Grid Systems

Systems: GLOBAL

Click to:

Add New System...

Add Copy of System...

Modify/Show System...

Delete System

☐ Convert to General Grid

OK Cancel

3.

Define Grid System Data

System Name: GLOBAL

Grid Lines: Quick Start...

Add Delete

Display Grids as: ☒ Ordinates ☐ Spacing

☐ Hide All Grid Lines

☐ Glue to Grid Lines

Bubble Size: 25

Reset to Default Color

Reorder Ordinates

OK Cancel

X Grid Data

Grid ID	Ordinate (mm)	Line Type	Visible	Bubble Loc	Grid Color
A	0	Primary	Yes	End	
B	100	Primary	Yes	End	
C	200	Primary	Yes	End	
D	300	Primary	Yes	End	
E	400	Primary	Yes	End	
F	500	Primary	Yes	End	

Y Grid Data

Grid ID	Ordinate (mm)	Line Type	Visible	Bubble Loc	Grid Color
1	0	Primary	Yes	Start	
2	100	Primary	Yes	Start	
3	200	Primary	Yes	Start	
4	300	Primary	Yes	Start	
5	400	Primary	Yes	Start	
6	500	Primary	Yes	End	

Z Grid Data

Grid ID	Ordinate (mm)	Line Type	Visible	Bubble Loc	Grid Color
Z1	0	Primary	Yes	End	
Z2	100	Secondary	Yes	End	
Z3	200	Primary	Yes	End	

Add Line (same spacing)

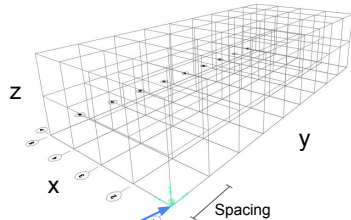
Switch Coordinates/Spacing

Bubble

Primary (w/ Bubble)

Secondary (No Bubble)

Last: OK



First Grid Line Location (Origin)

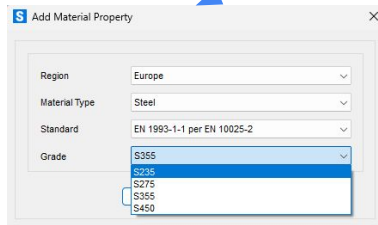
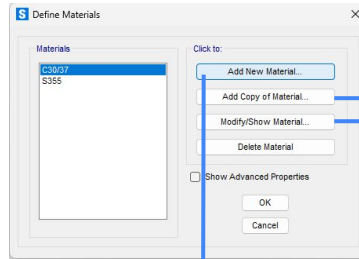
5

Materials

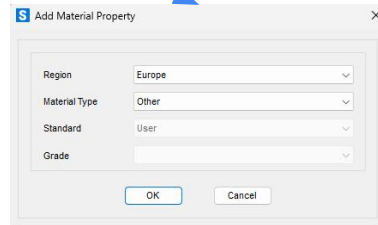
1.



2.

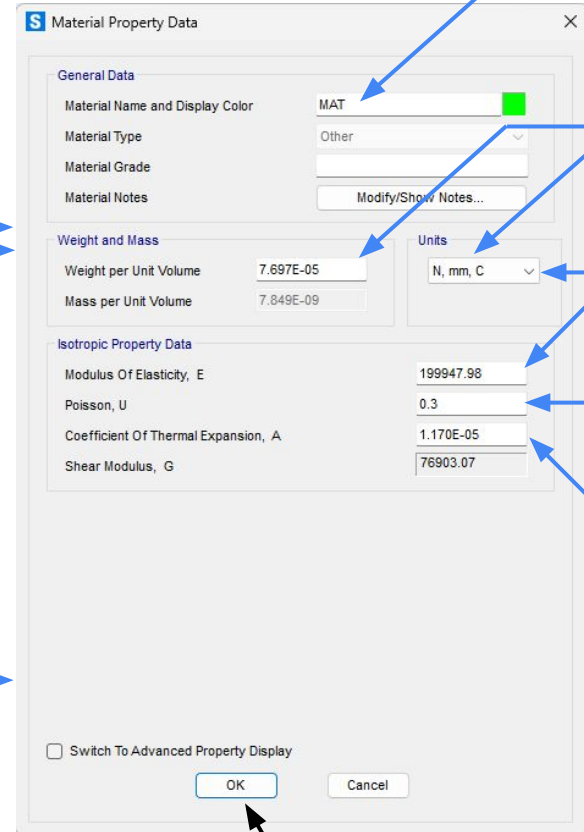


Eurocode Materials



Timber and other materials

3.



Material Name:
GL24h, C24 etc.

Density
(NEWTONS)

Watch units

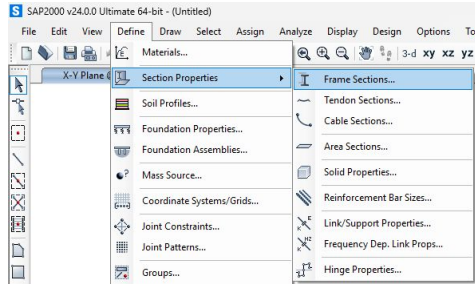
$$\nu = \frac{\epsilon_{\perp}}{\epsilon_{\parallel}}$$

$$\alpha \cdot \Delta T = \epsilon$$

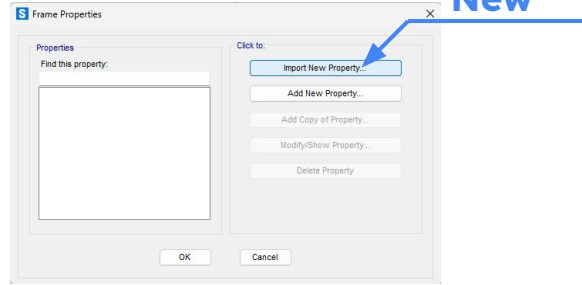
Frame sections (Cross section/tverrsnitt)

Complex sections (I, H, C)

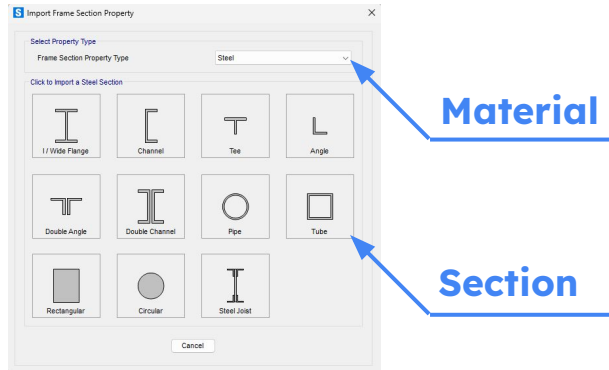
1.



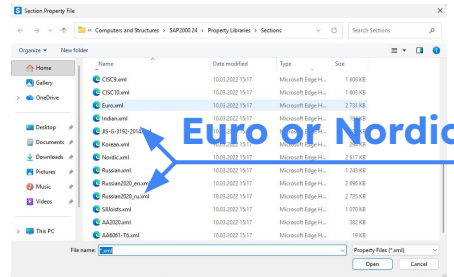
2.



3.

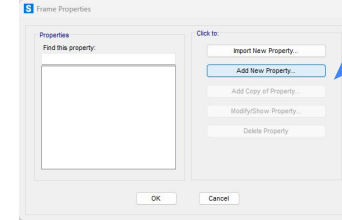


4.

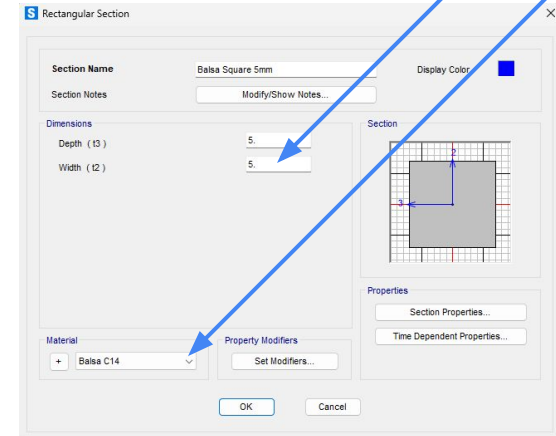


Simple Sections (or non standard)

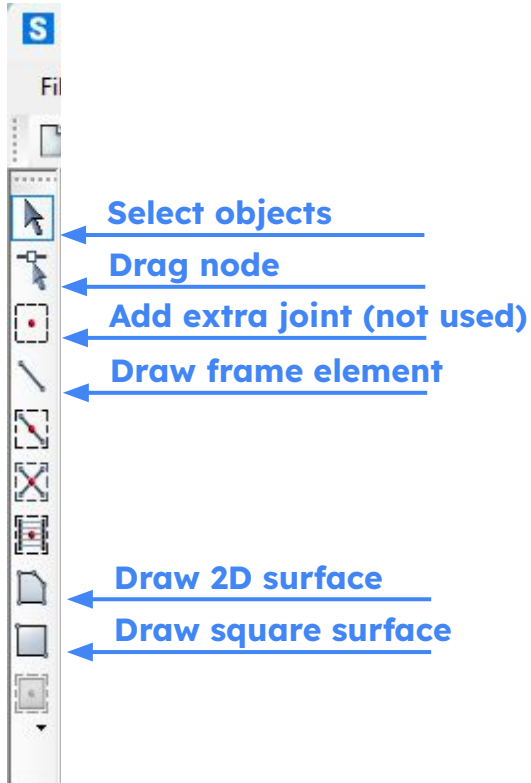
Add New



Fill out



Frame objects



Select object

Select frame or node to edit

Element drawing options



Draw frame element

Draw a frame or brace element (Ramme-element/stav).



Draw 2D surface or square

Use to draw walls/shear walls

Node snapping options: Choose after element selected



Snap to Grid (intersections)

Snaps to defined grid



Snap to perpendicular

Snaps to a point perpendicular to the frame element of the first point



Snap to ends and midpoints

Useful for Bracing/fagverk



Snap to closest (Dont use)

Snaps to closest element/node. Only use for ideas or tests.



Snap to element intersections

Intersections between frame elements



Snap to increment

Snaps to every 0.1cm etc.

Connections

Static Analysis

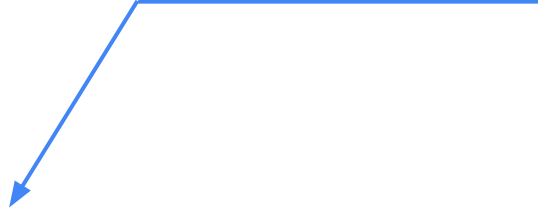
Workflow

1. Loads
2. Load Combinations
- 3.

Load Combinations

1.

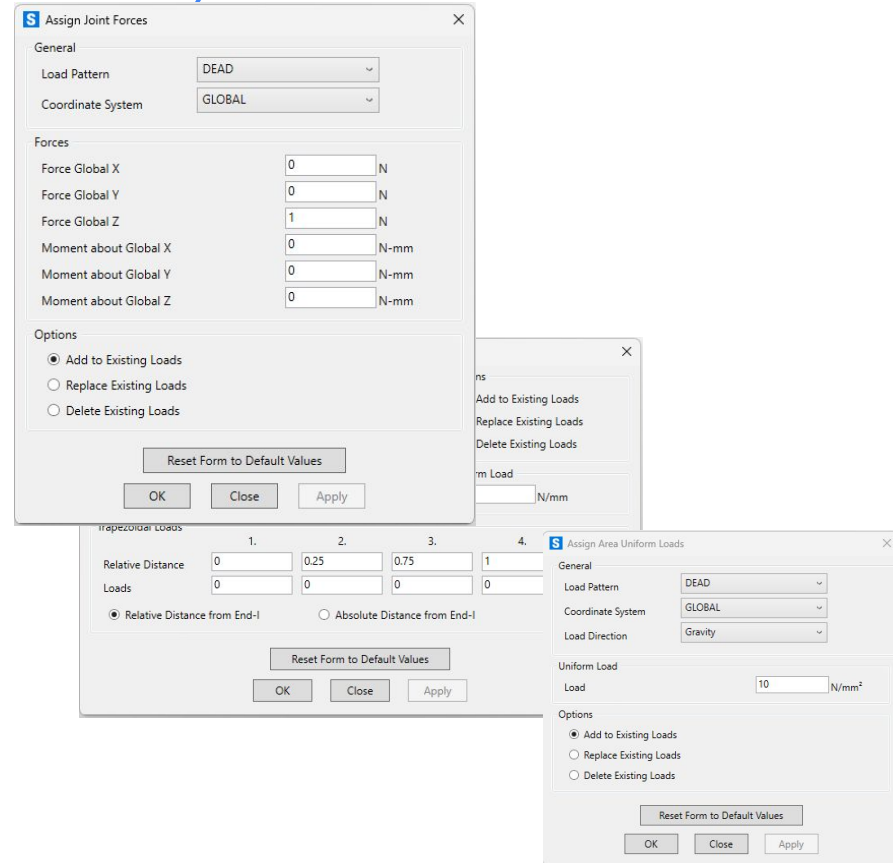
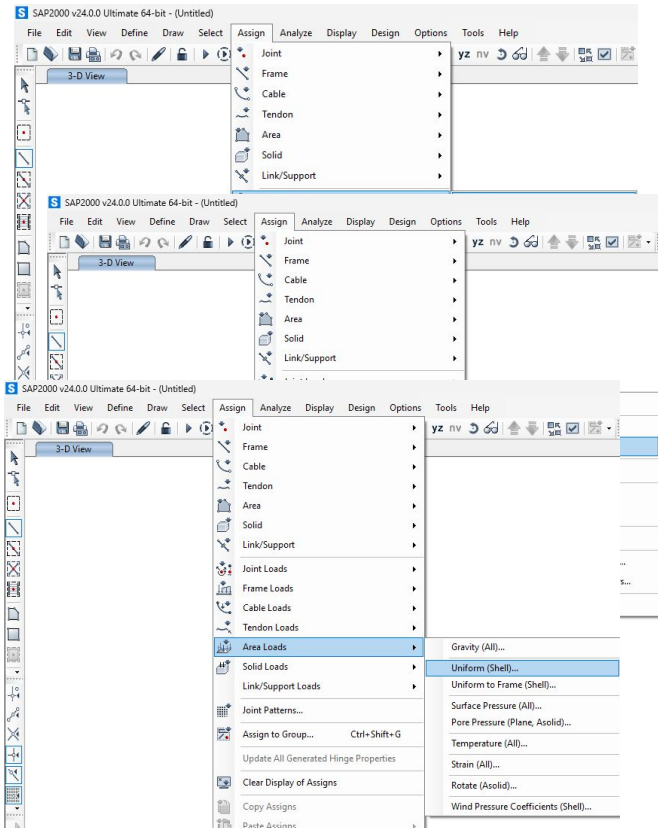
TEXT



Assign loads

1.

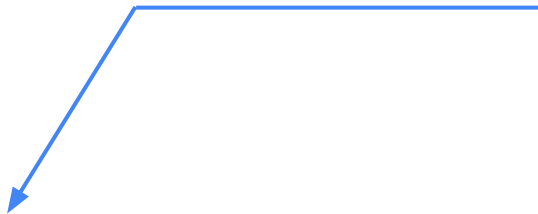
TEXT



Analysis

1.

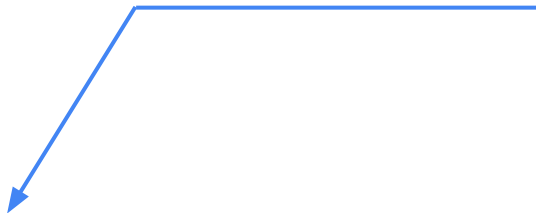
TEXT



View

1.

TEXT



Dynamic Analysis

Workflow RHA

1. Mass
2. Time history
3. Load Case

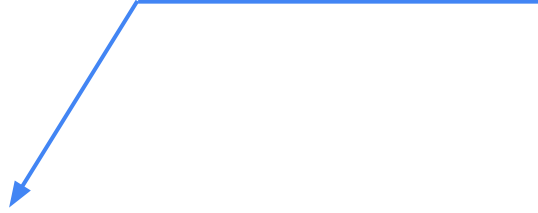
Video on Response Time History (RHA) analysis

https://www.youtube.com/watch?v=VjkqA4_hIMk

Define Mass Source

1.

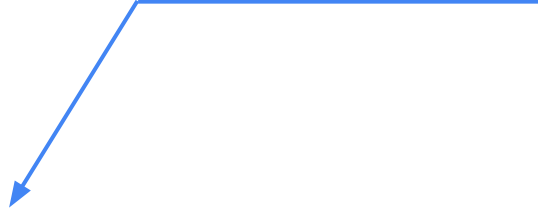
TEXT



Time History

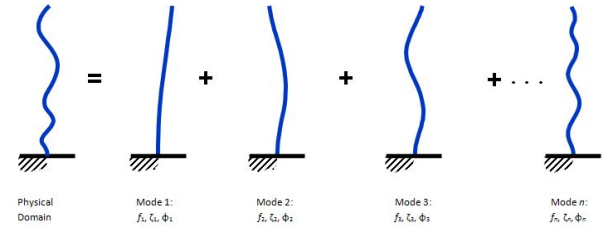
1.

TEXT



Modal Load Case

Recall:



Modes refer to the structures oscillating behaviour.

1.

TEXT

