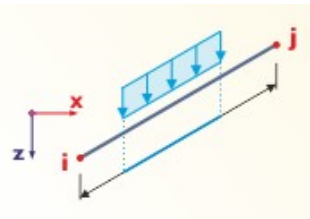
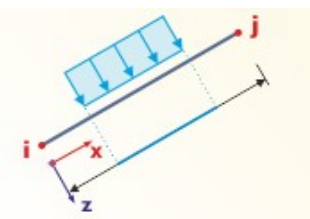


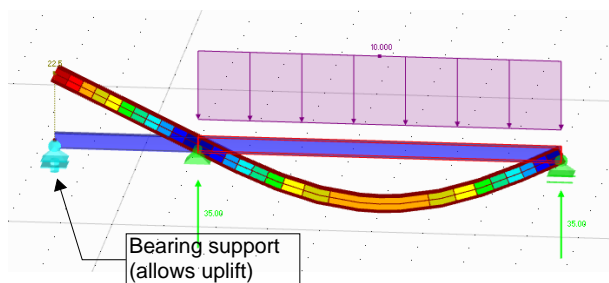
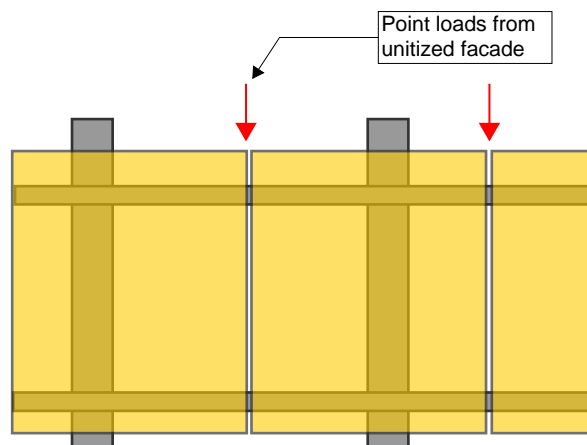
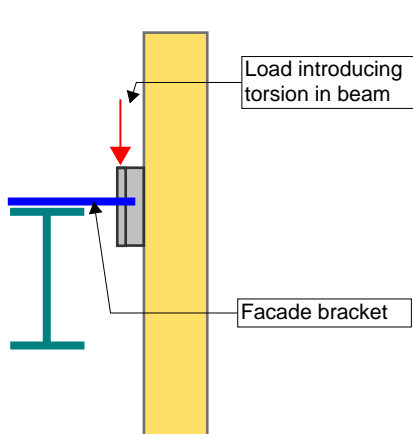
Snow load

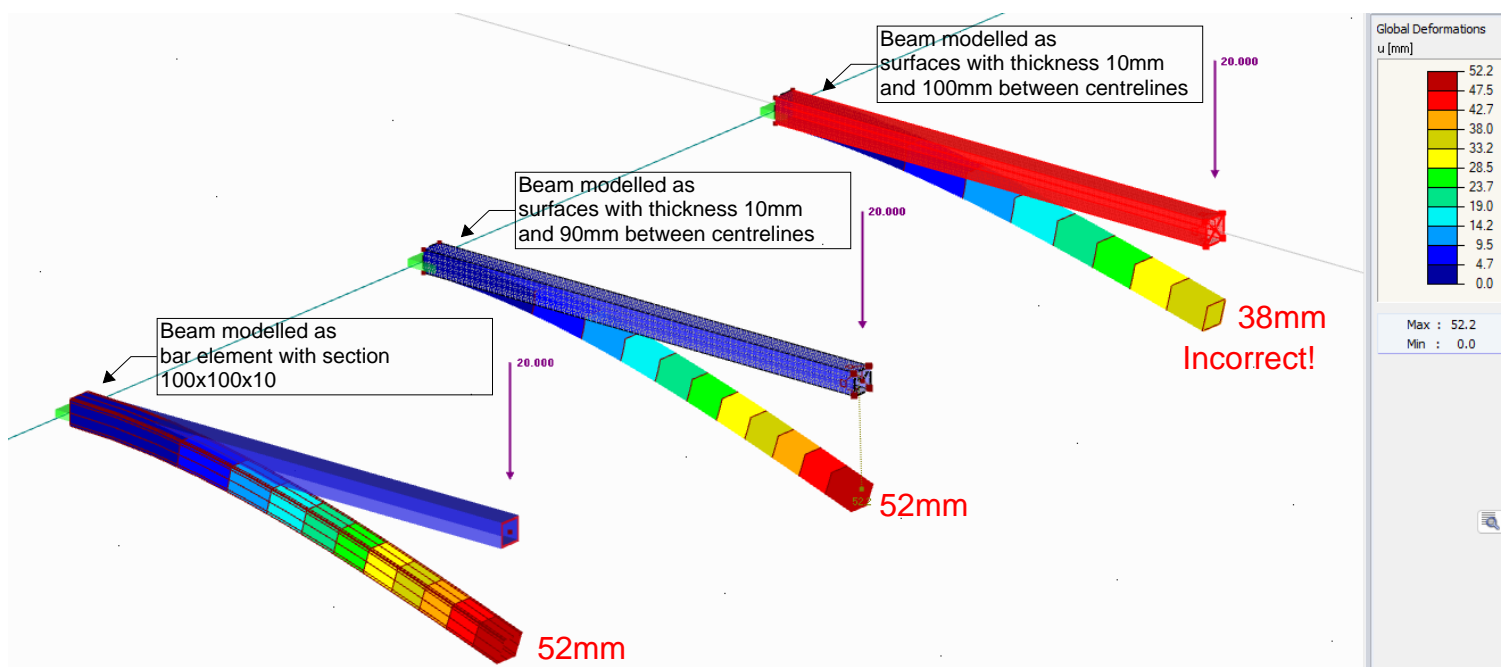
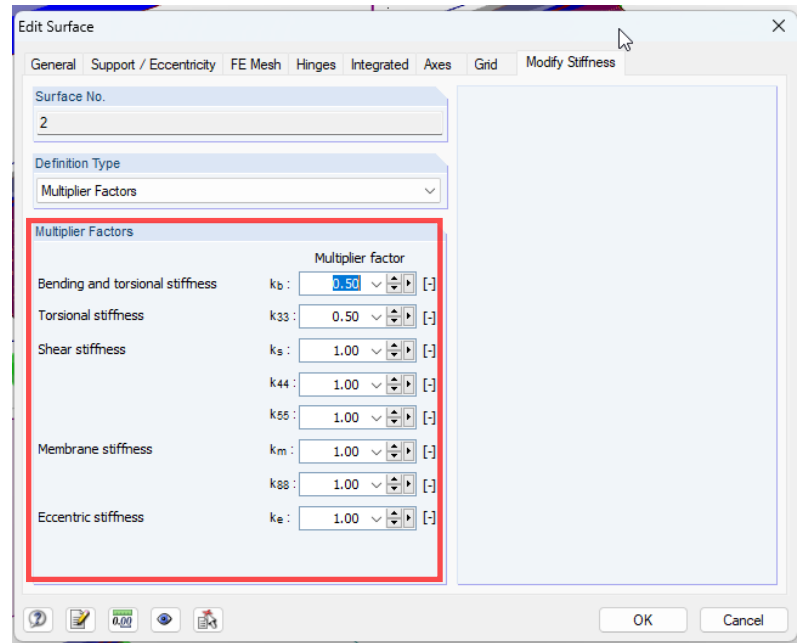
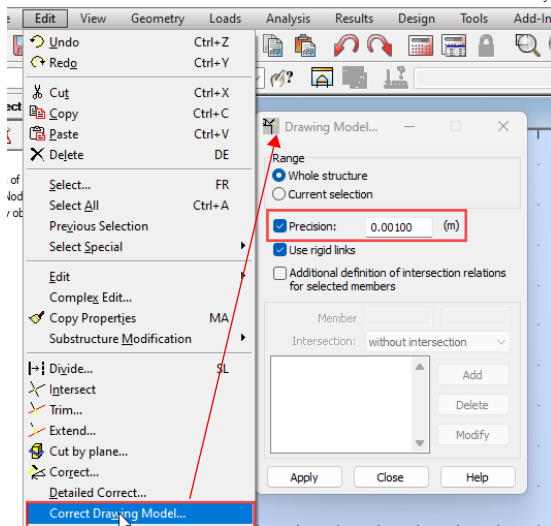
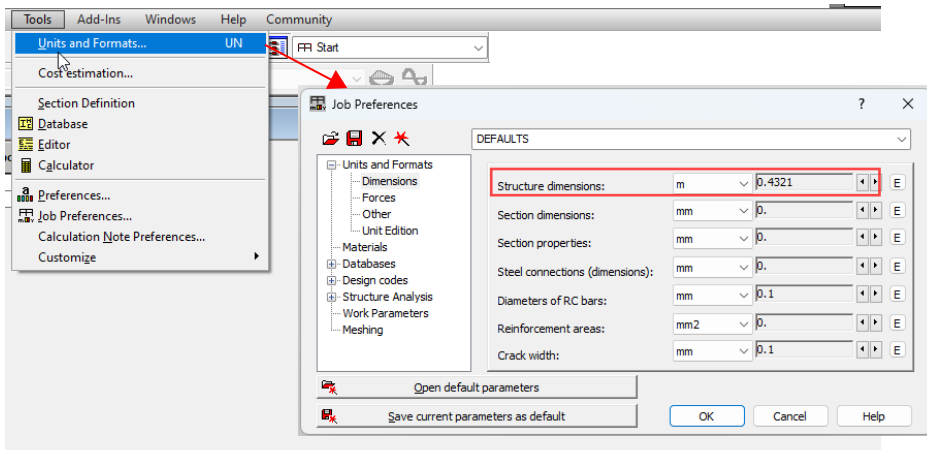


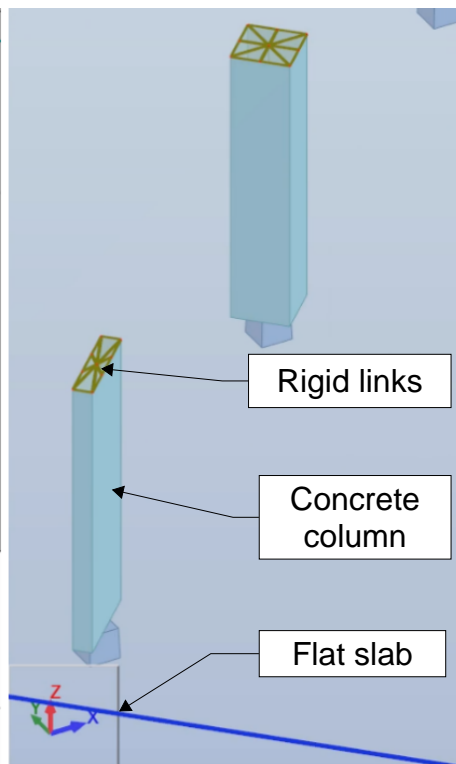
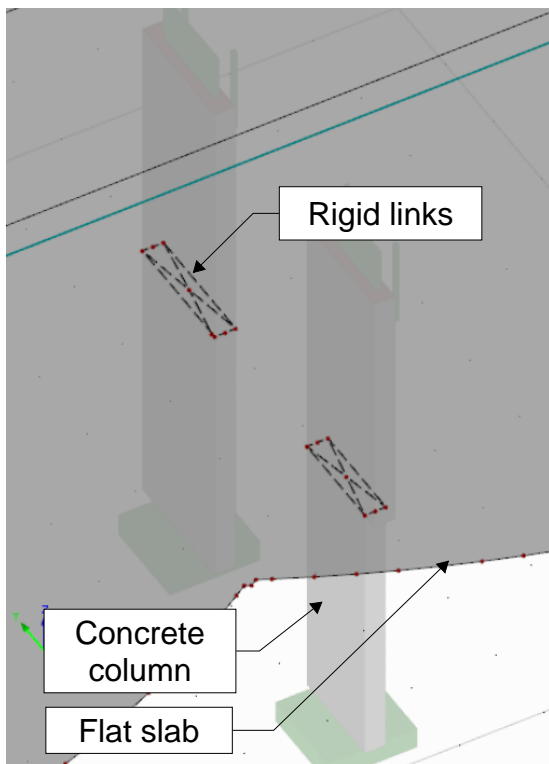
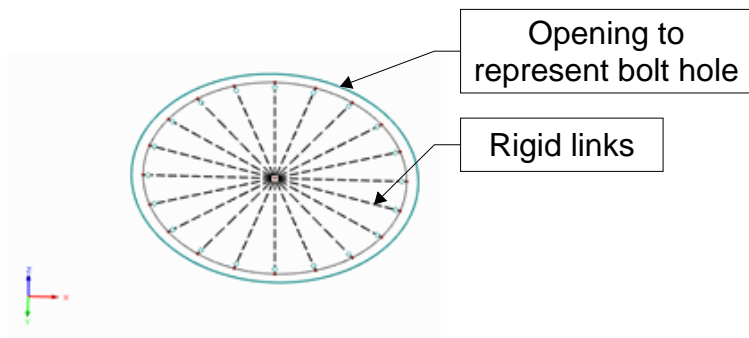
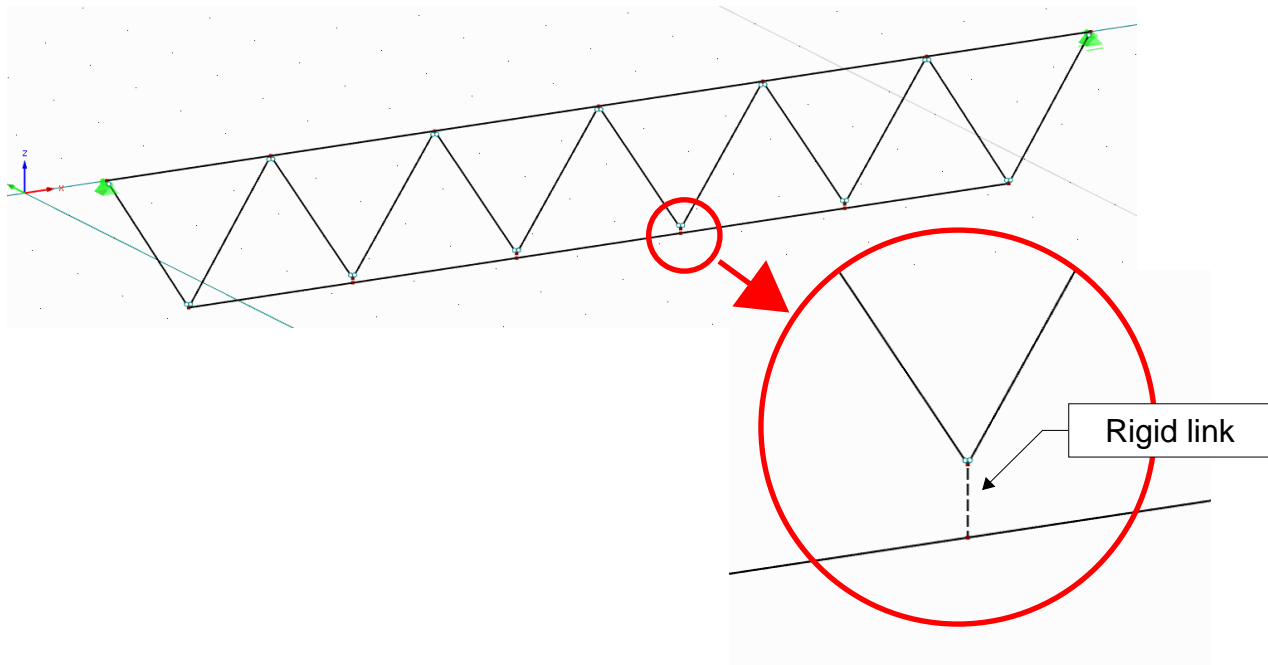
Self weight

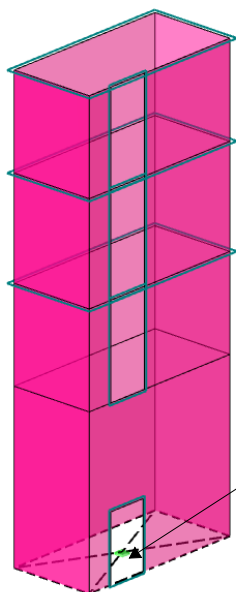
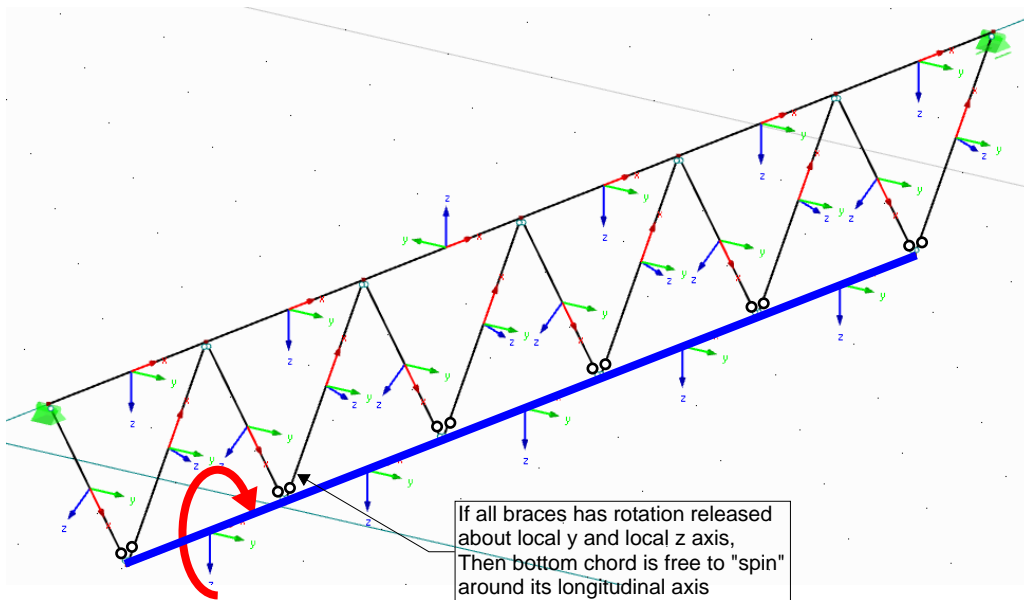


Wind load









Members: Internal Forces M-y [kNm]
 Surfaces: Basic Internal Forces n-y [kN/m]
 LC1 : Example load
 Loads [kN/m]

Bending moment
 integrated from forces
 in surface

Bending moment
 calculated for bar
 element

Simple calculation:
 $20\text{kN/m} \cdot 15\text{m} \cdot 15\text{m} / 2 = 2250\text{kNm}$

Max M-y: 2250.00, Min M-y: -0.30 kNm
 Max n-y: 1837.36, Min n-y: -1977.56 kN/m

Members: Internal Forces M-y [kNm]
 Surfaces: Basic Internal Forces n-y [kN/m]
 LC1 : Example load
 Loads [kN/m]

Member defined as "Result beam"
 Integrates the forces in all
 surfaces that are within 3x3m
 section from centreline

Member section size does not
 affect results in Dlubal RFEM, but
 this may not be universal to all
 software

Max M-y: 2250.00, Min M-y: -0.30 kNm
 Max n-y: 1837.36, Min n-y: -1977.56 kN/m

Edit Member

General Options Effective Lengths

Member No. 1 Line No. 6

Node No. 5,6

Member Rotation via

Angle β : 0.00 [°]

Help node No.: Inside

In plane: ☒ xy ☐ xz

Cross-Section

Member start: 1 Rectangle 10/10 Concrete C25/30

Member end: As member start

Member Hinge

Member start: None

Member end: None

Edit Parameters for Member of Type 'Result Beam'

Integrate Stresses and Forces

☒ Within cuboid - quadratic

Yz: 3.000 [m]

☐ Within cuboid - general

Y+: [m] Y-: [m]

Z+: [m] Z-: [m]

☐ Within cylinder

R: [m]

☐ From listed including objects

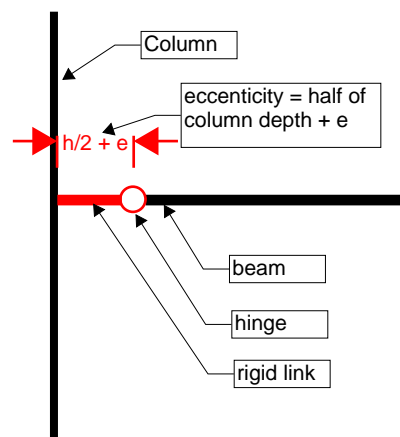
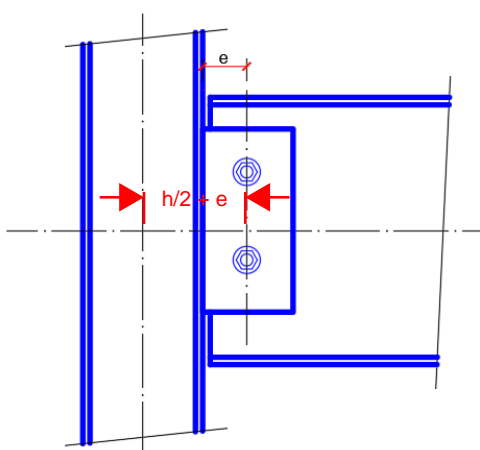
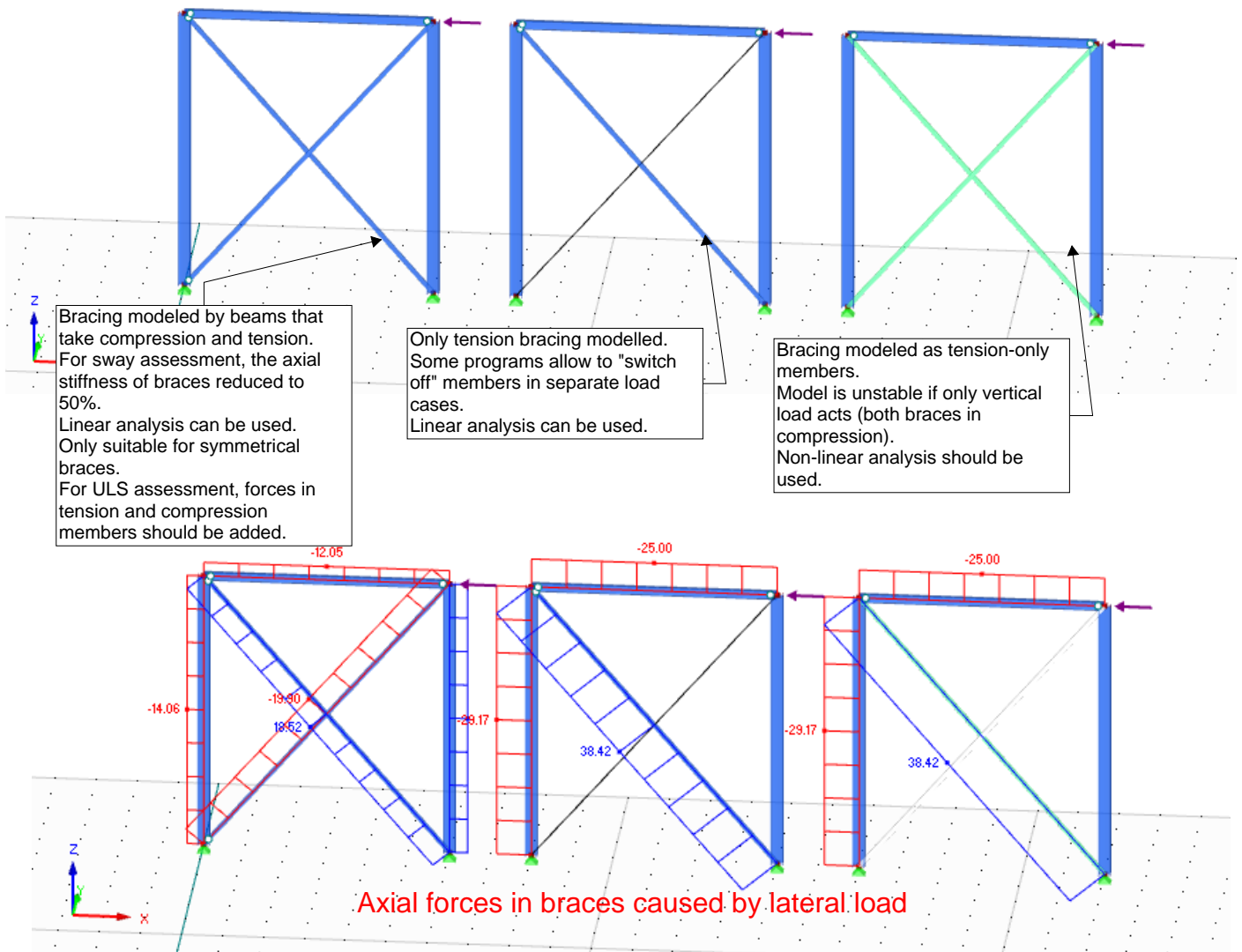
Including Objects

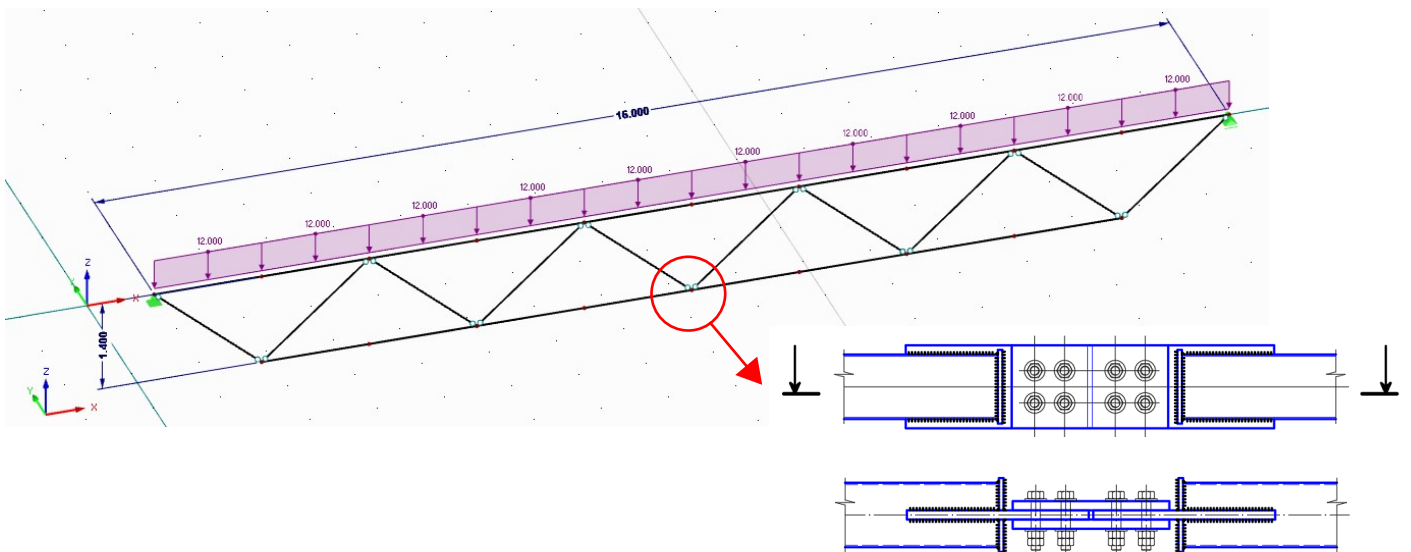
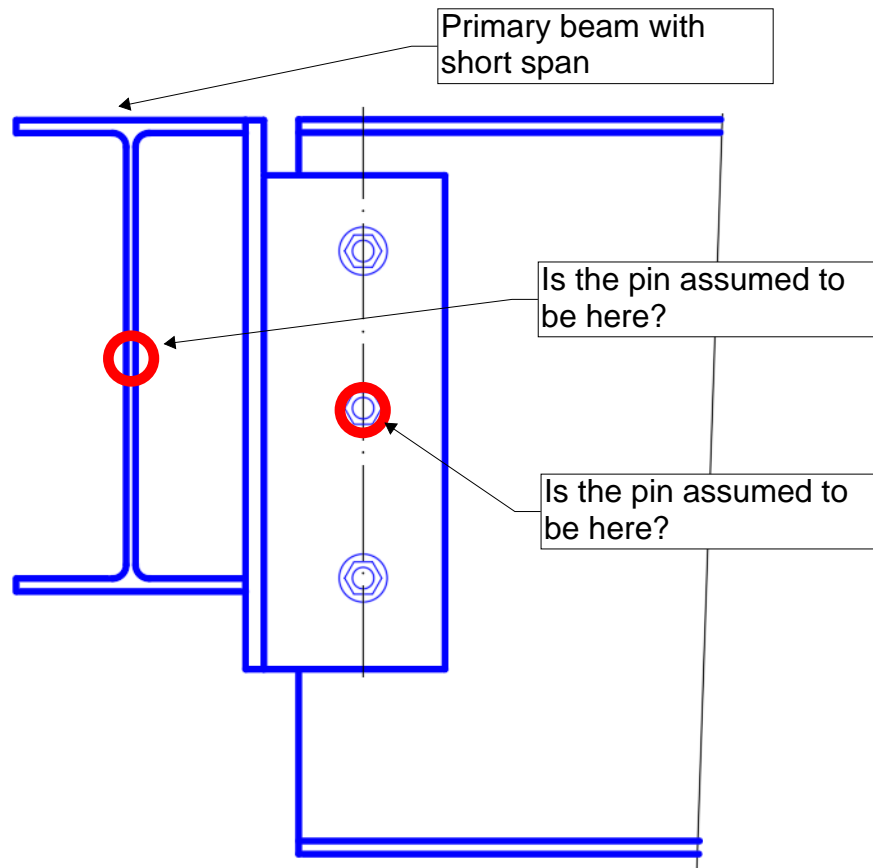
No. Surfaces: All Solids: All Members: All

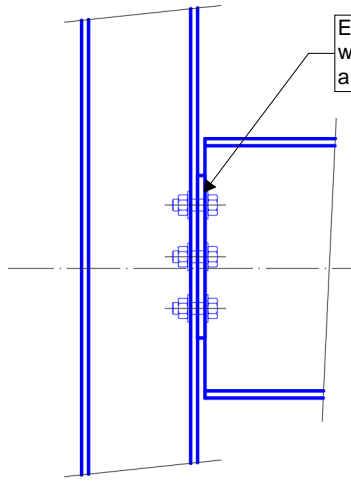
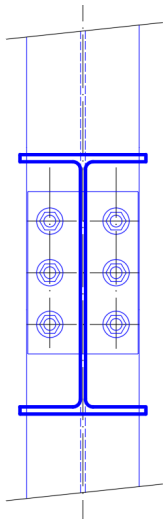
Except from Including Objects

No. Surfaces: Solids: Members:

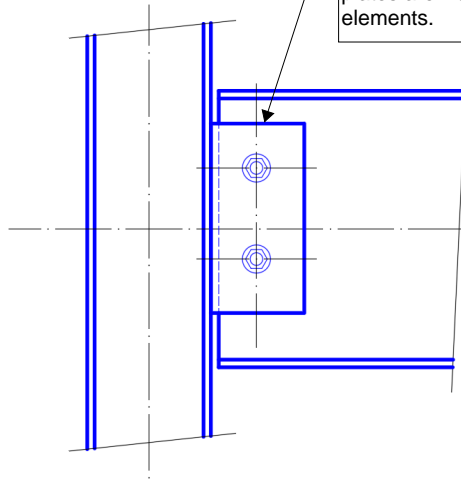
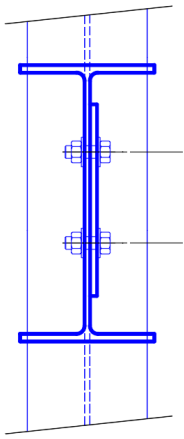
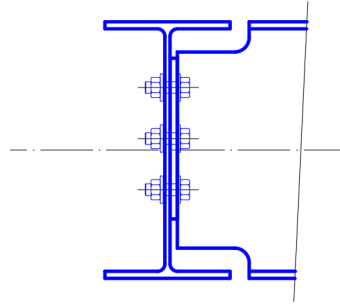
OK Cancel



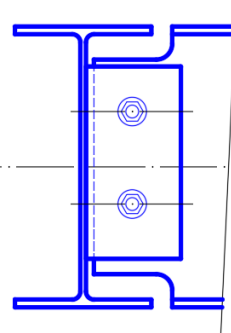




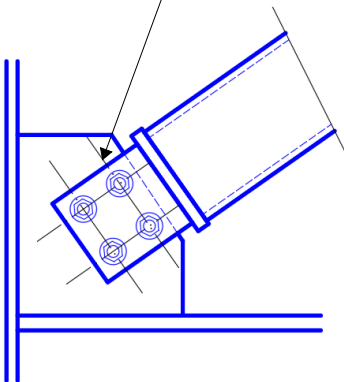
Endplates welded to beam web. These can be connected to a column, or another beam.



Fin plates welded to bearing element. These can be connected to beam, to column and even to column with hollow section (SHS, CHS). Sometimes fin plates are "replaced" with L-angles bolted to both elements.



Connections of bracing is often nothing else than a another variation of "fin plate" connection.



Column bases fixed with post-fix anchors (e.g. Hilti) or grouted anchors. These can be calculated as both moment or pinned connections. But if the base plate is thin enough - you can likely assume this to be a pinned connection.

