

CS Installer

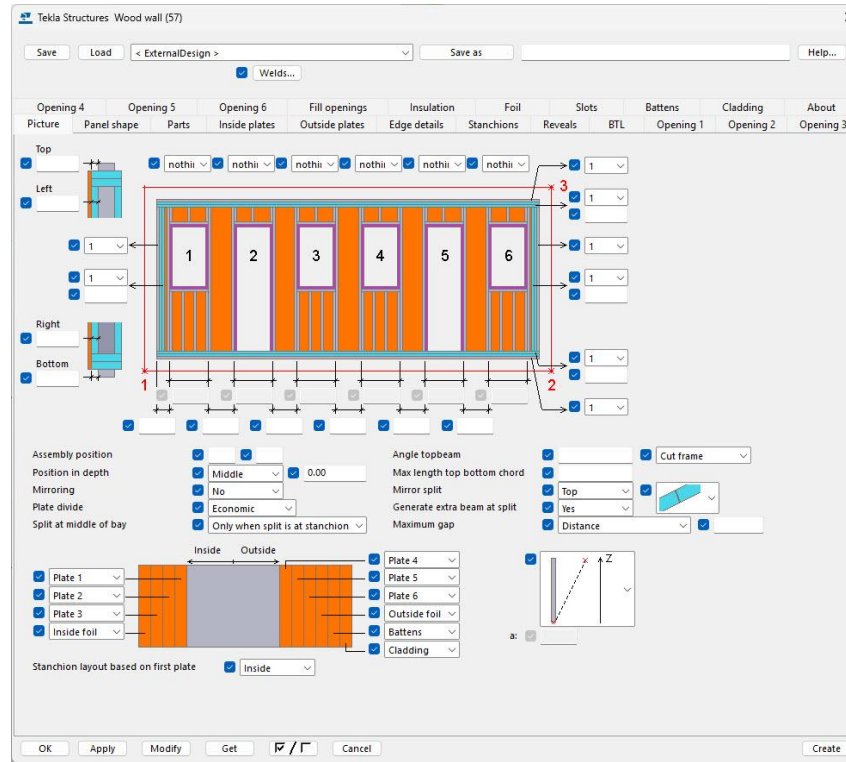
Tools 2025

construsoft

Timber

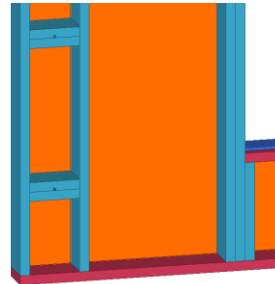
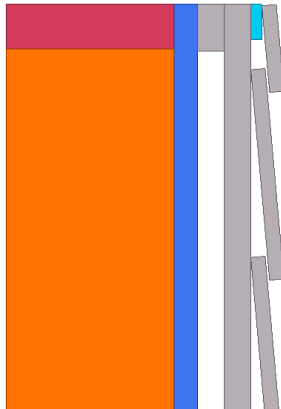
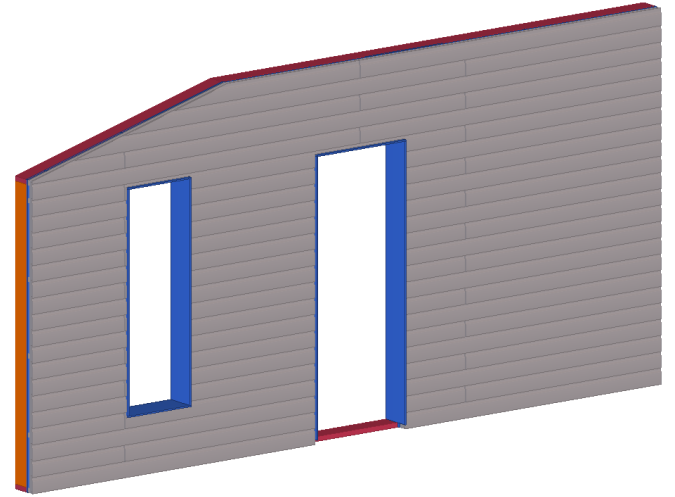
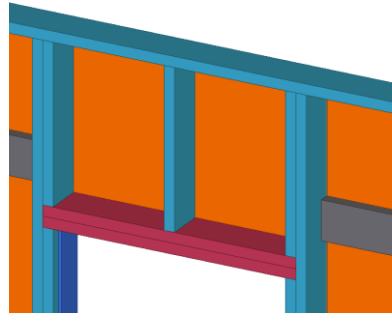
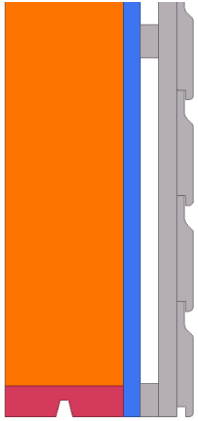
Wood wall (57)

- Generates a timber wall element.



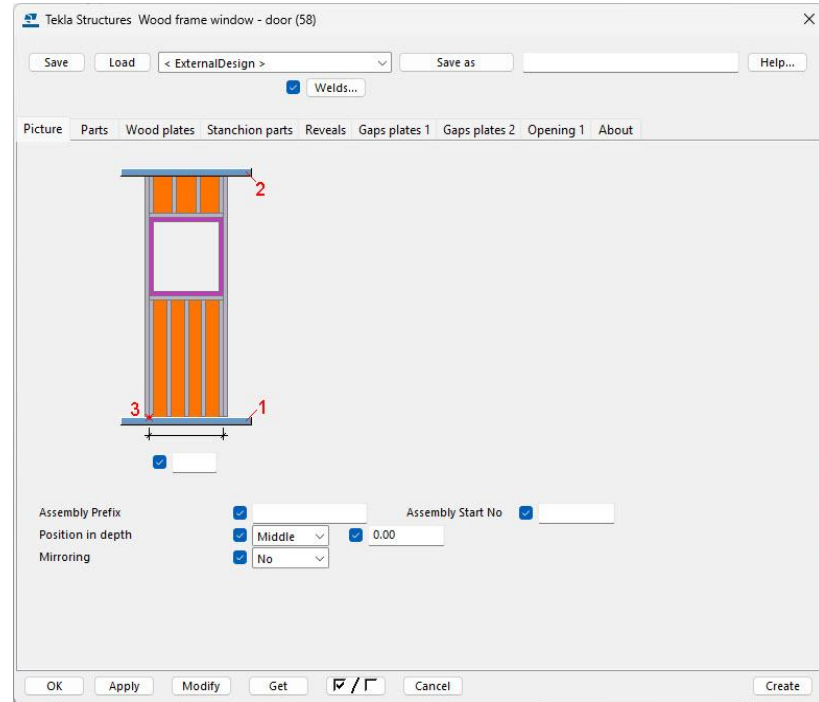
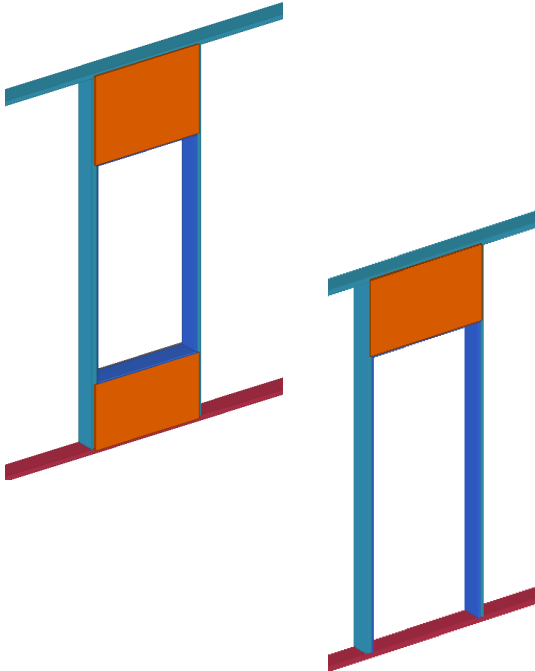
Wood wall (57)

- Generated a timber wall element.



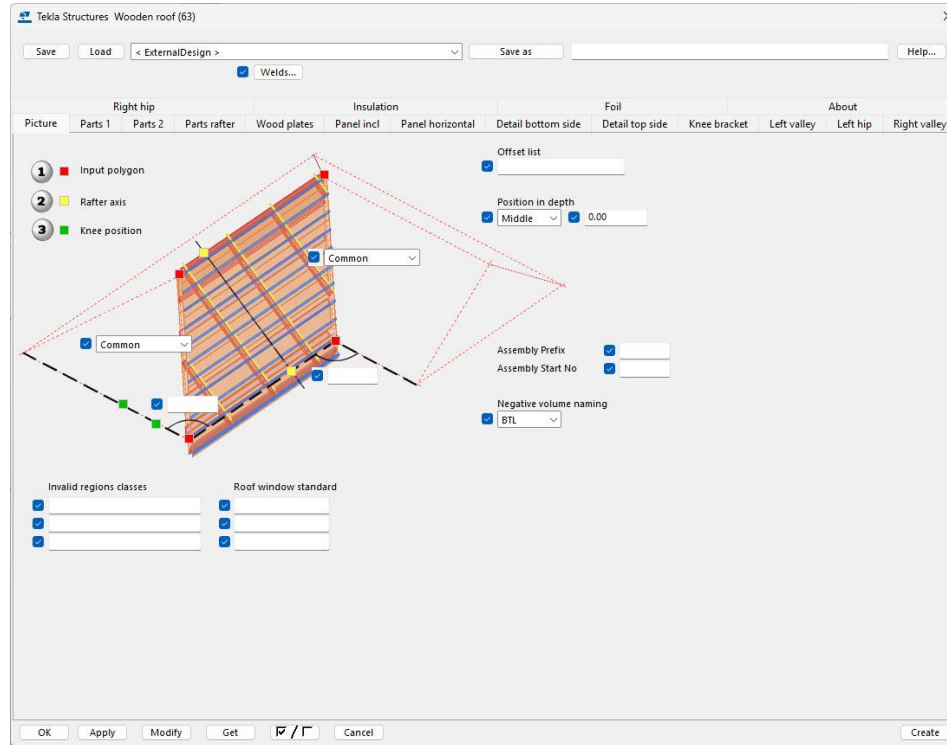
Wood frame window – door (58)

- Creates a timber window /door.



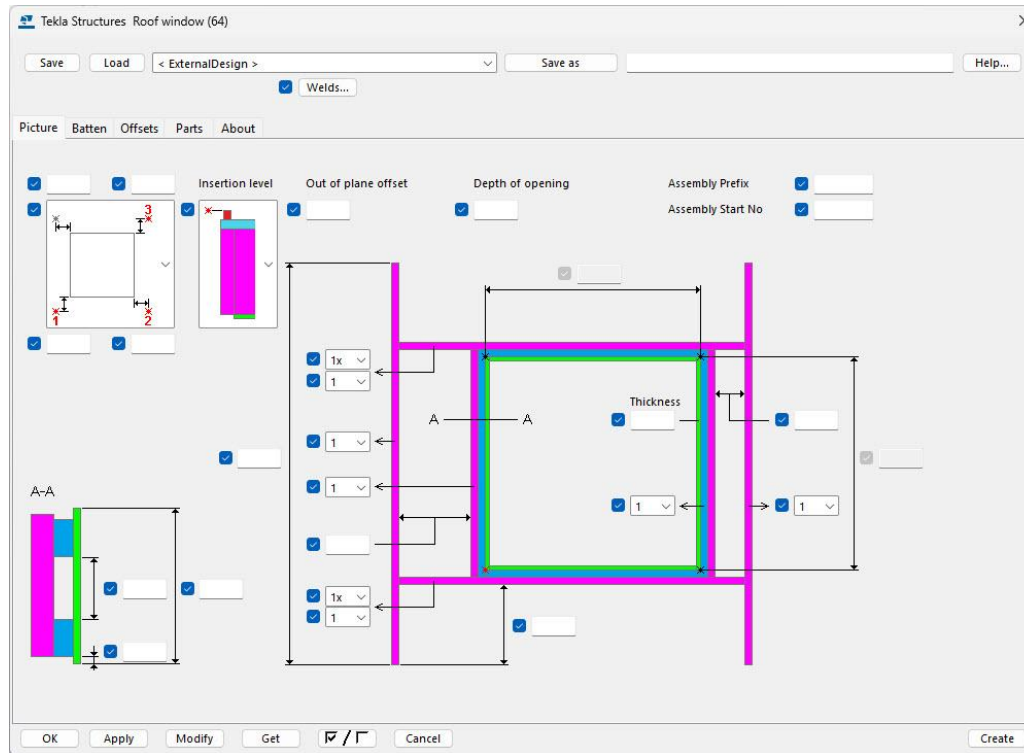
Wooden roof (63)

- Creates a timber roof element.



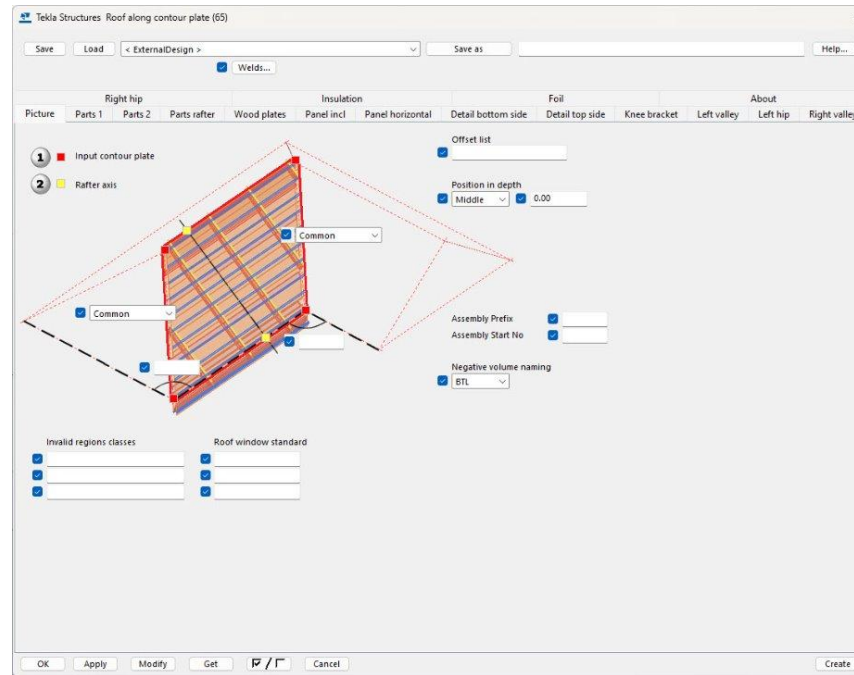
Roof window (64)

- Creates a window in a timber roof element.



Roof along contour plate (65)

- Generates a timber roof element through vertices of a contour plate.



Border detail (d112)

Border detail (d112)

Save Load standard Save As Help

Detail Joints About

Component name/number Configuration file Detail type

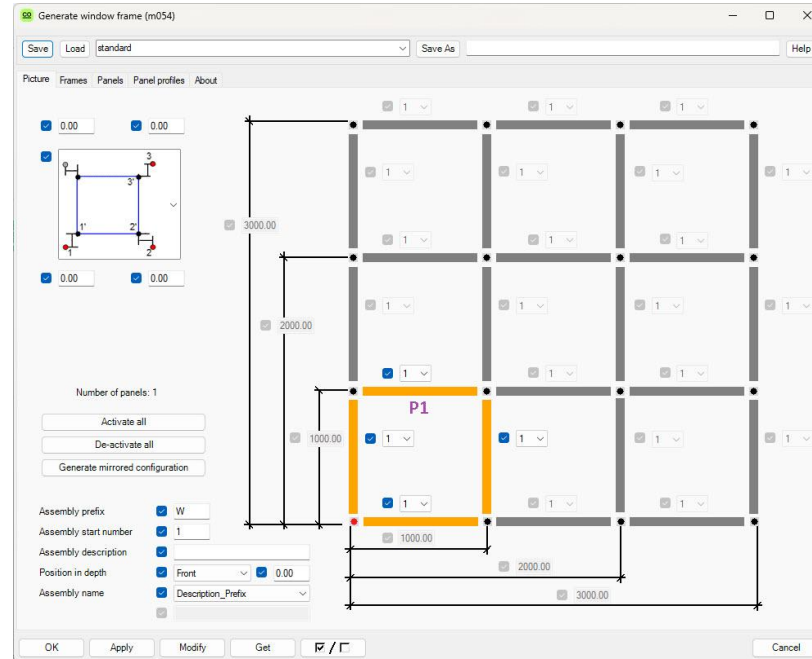
Roof Detail Component ☒ ☒ ☒ Intermediate detail reverse

OK Apply Modify Get ☒ / ☐ Cancel



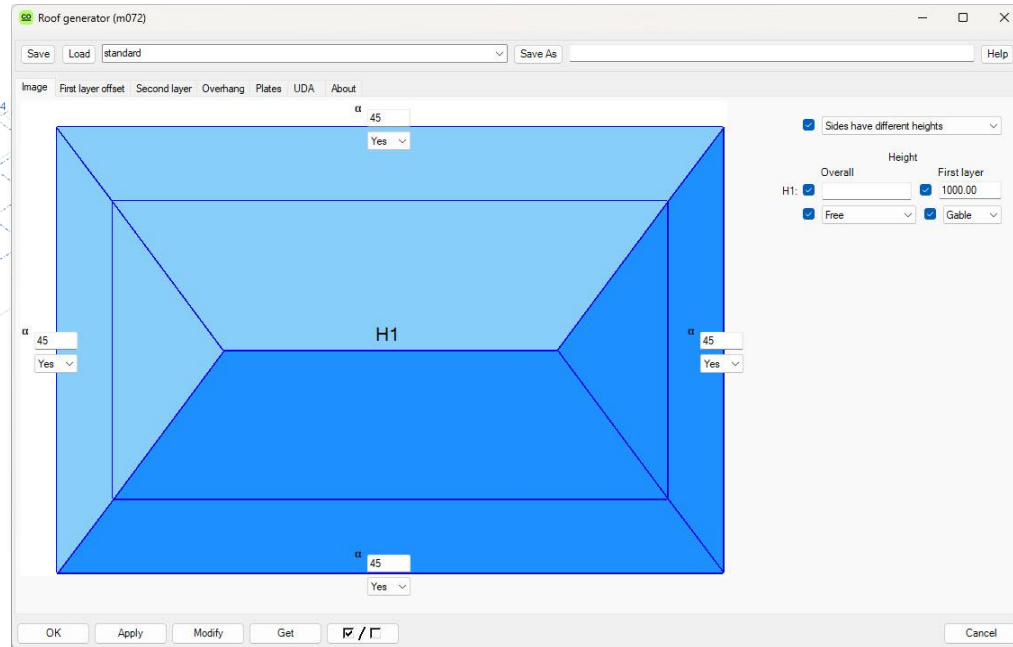
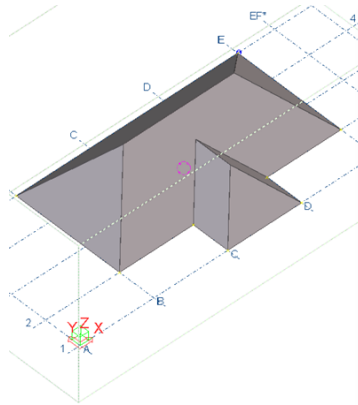
Generate window frame (m054)

- Generates door- and windowframes (LOD200).
- Multiple (up to 9) panels and option for opening direction symbols.



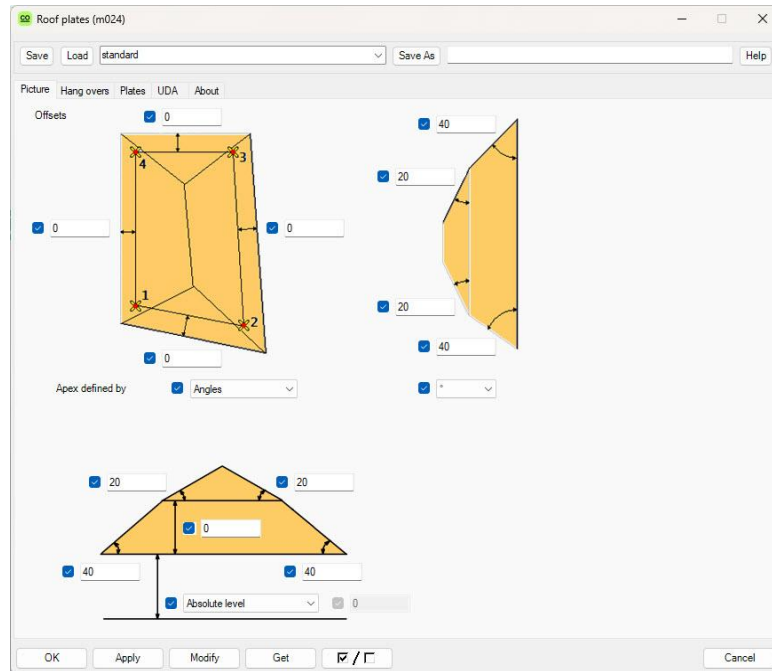
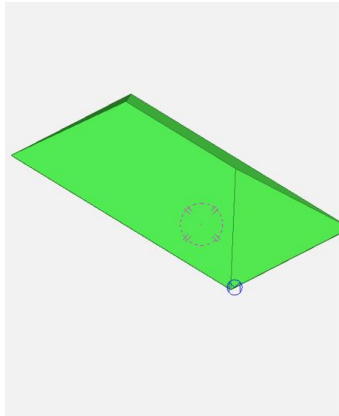
Roof generator (m072)

- Creates roof planes by tracing a closed polygon.
- The result can serve as input for m025.



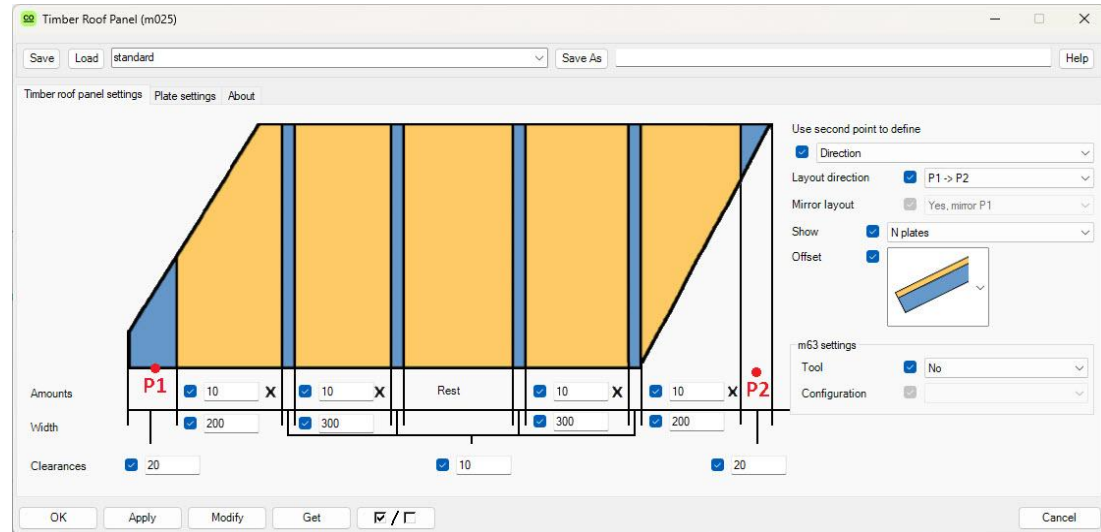
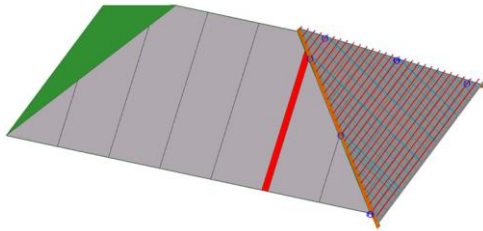
Roof plates (m024)

- Generates standard roof plates.
- The result can serve as input for m025.



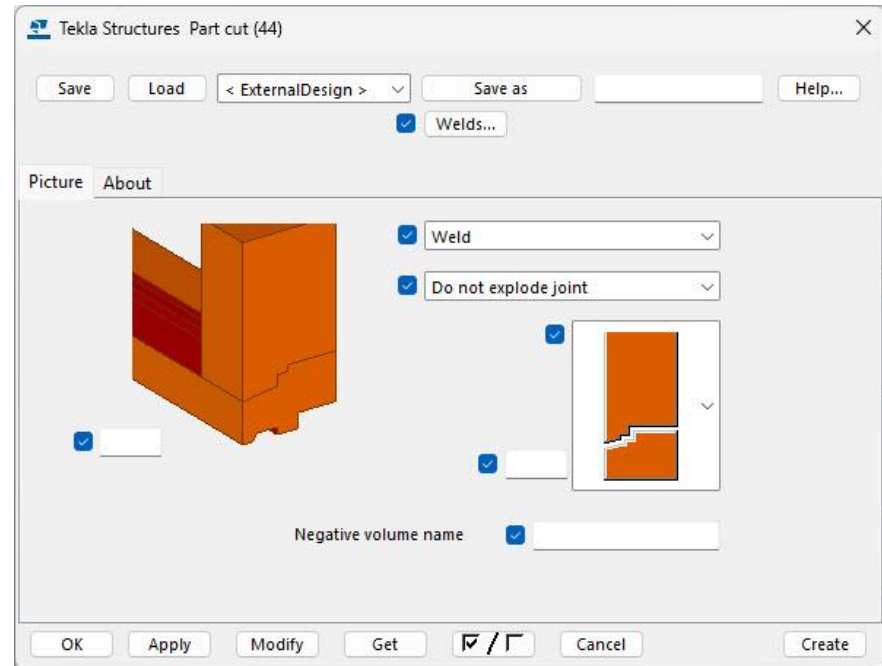
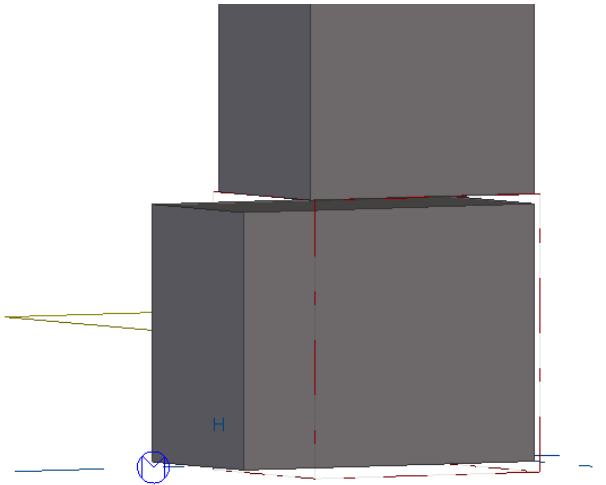
Timber roof Panel (m025)

- Can be used in combination with m024 and m072. This plugin calls for the (roof) surface, and the X-axis. Thereafter, plates are generated.
- In this plugin tool m63 (Timber Roof) can be invoked.



Part cut (44)

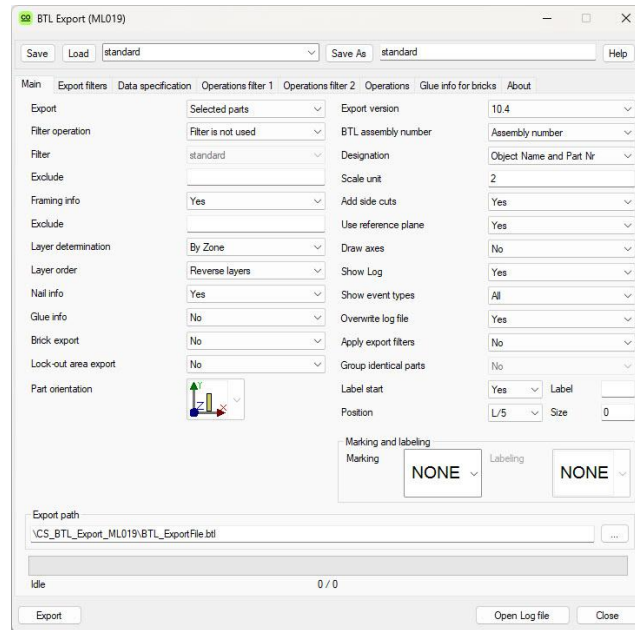
- Create a part cut with possible seam. Part can be added as cast unit.



Export tools

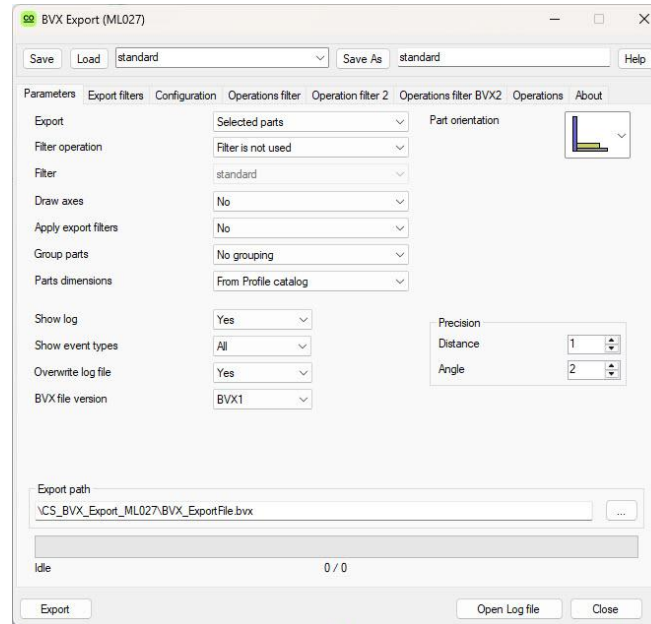
BTL export (ML019)

- Allows export of parts and assemblies, including their processes from Tekla Structures to the BTL file format. A public format used on most machines in the Timber sector.



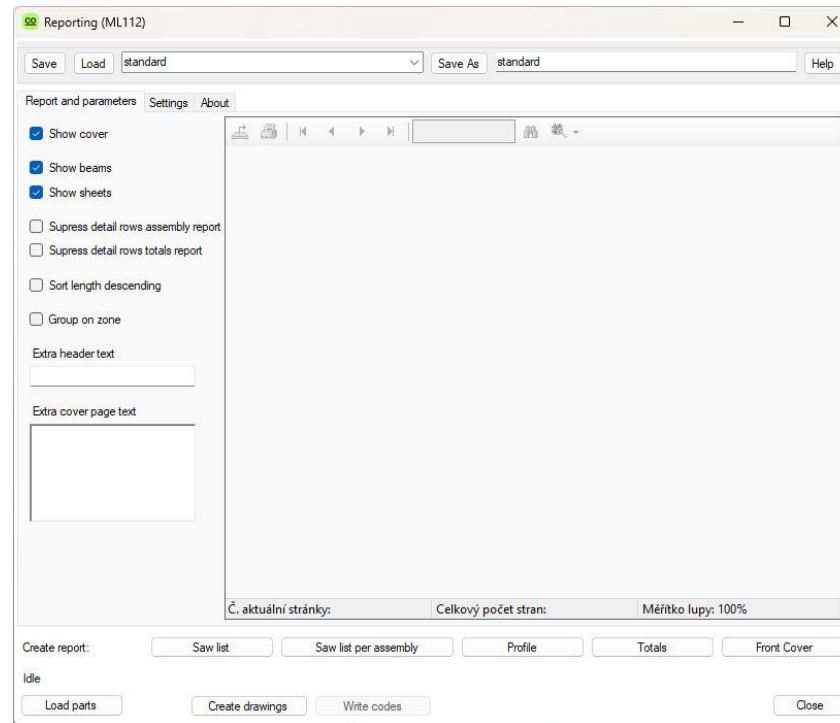
BVX export (ML027)

- Allows export of parts, including their processes from Tekla Structures to the BVX and BVX2 format for the Hundegger SC1, SC2, SC3, Robot-Drive, Turbo-Drive, SPM and PBA.



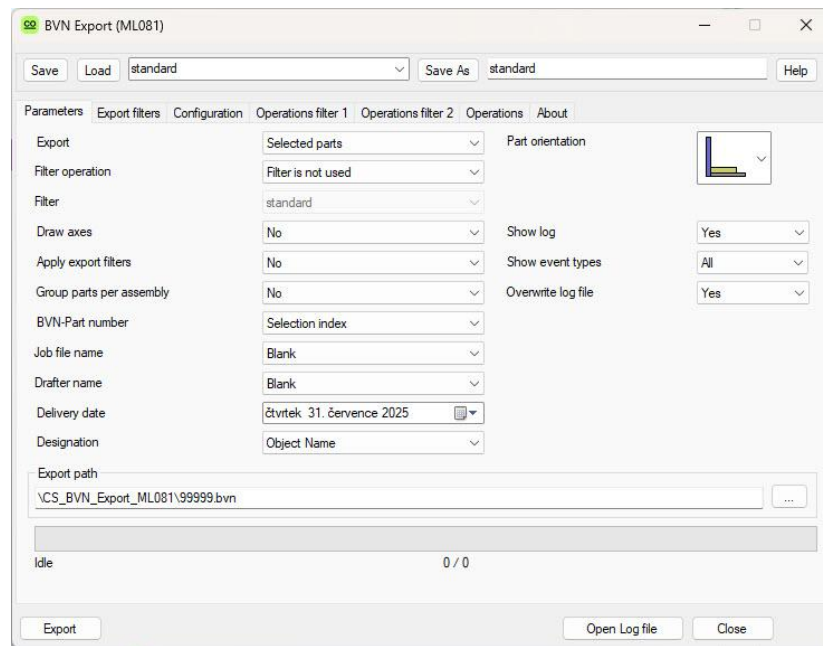
Reporting (ML112)

- Generates advanced timber saw reports.



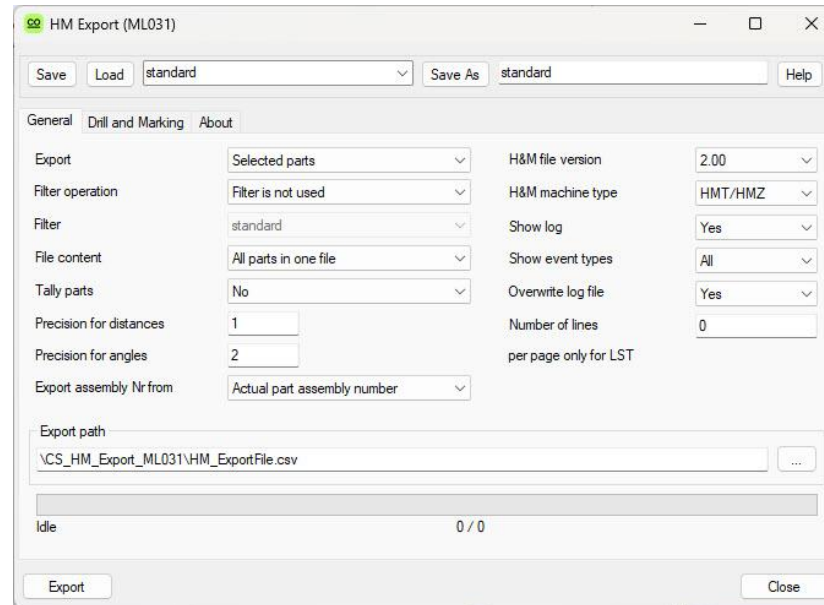
BVN export (ML081)

- Allows export of beams, including their processes from Tekla Structures to the BVN files for the Hundegger K1, K2, and K2I.



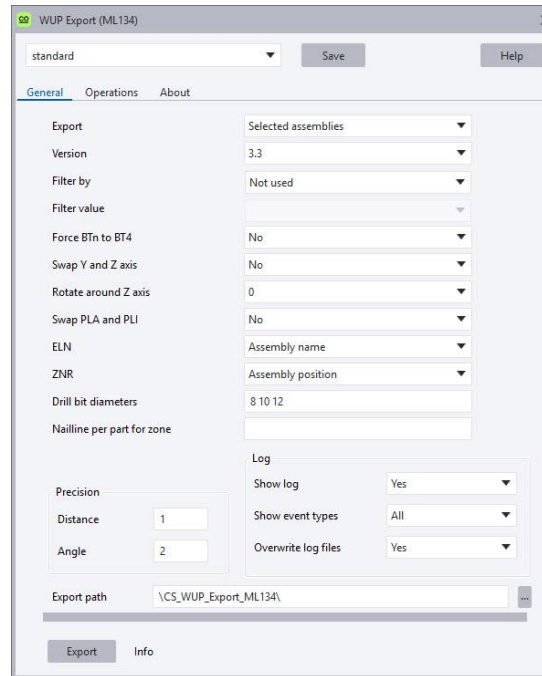
HM export (ML031)

- Allows export of beams, including their processes from Tekla Structures to the CSV and LST format for the H&M woodworking machines HM-T, HM-D, HM-Z and HM-Trussmaster.



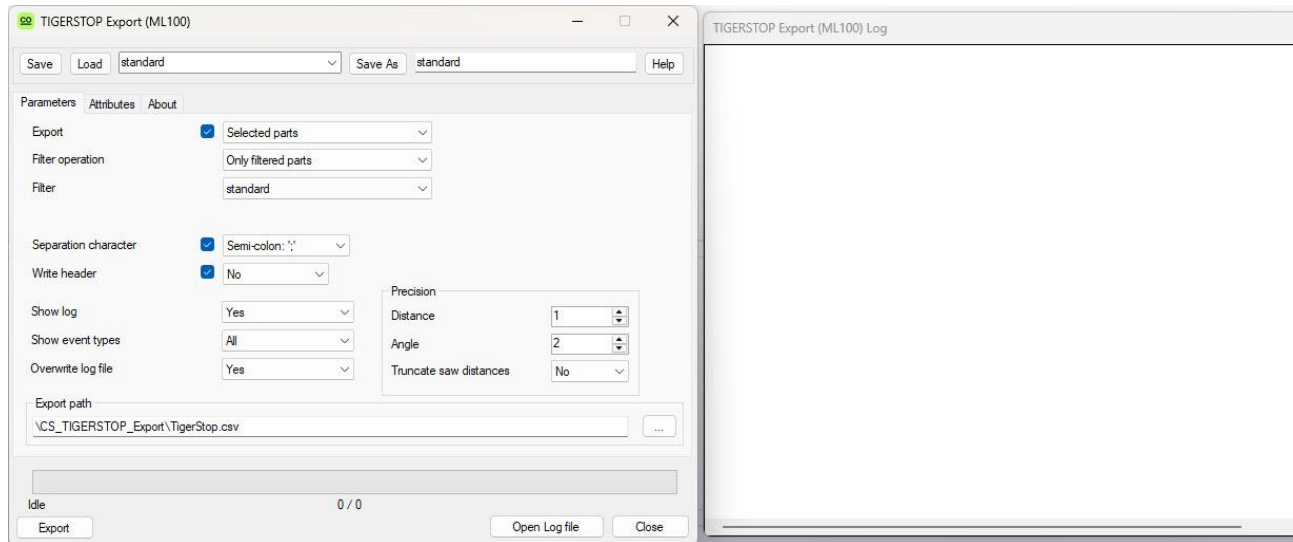
WUP export (ML134)

- Allows export of assemblies, including their processes from Tekla Structures to WUP files for Weinmann machines.



Tigerstop export (ML100)

- Allows export of beams, including their processes from Tekla Structures to the TigerStop machines.



Randek export (ML077)

- Allows export of assemblies, including their processes from Tekla Structures to the Randek woodworking-/woodframing machines.

Randek export (ML077)

Save Load standard Save As standard Help

General About

Export Selected assemblies Randek file version 7.02q

Separation character . Panel facing upwards INSIDE

Board nailing tool 1 - Default setting

Filter operation Filter is not used Filter standard

Optional export settings

ELM ; TS ; BS ; ST ; STL All parameters

BO : Optional parameters Z as a coordinate

BO : Layers indexing Yes

NL : Board nailing parameters All parameters

Sorting ST ; STL ; BO ; NL Do not sort BO only X in layers

Swap measurement lx and by No ST only

Frame connection

bmax	n
40	1
100	2
300	3
600	4

Export path

C:\Users\Kotka\OneDrive - Construsoft\02. Tekla Structures\TeklaStructuresModels\Test_2023Default\Randek

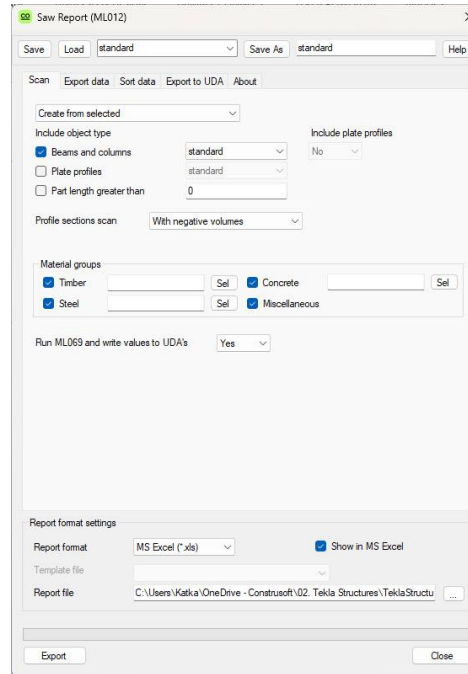
Idle

Export Cancel



Saw report (ML012)

- Creates a sawlist including pictures of cross sections including pictures of the end views.



DXF export (ML184)

- DXF Export combines the extensions NC Files and DSTV to DXF Converter from Tekla Structures. It can also generate a report csv file.

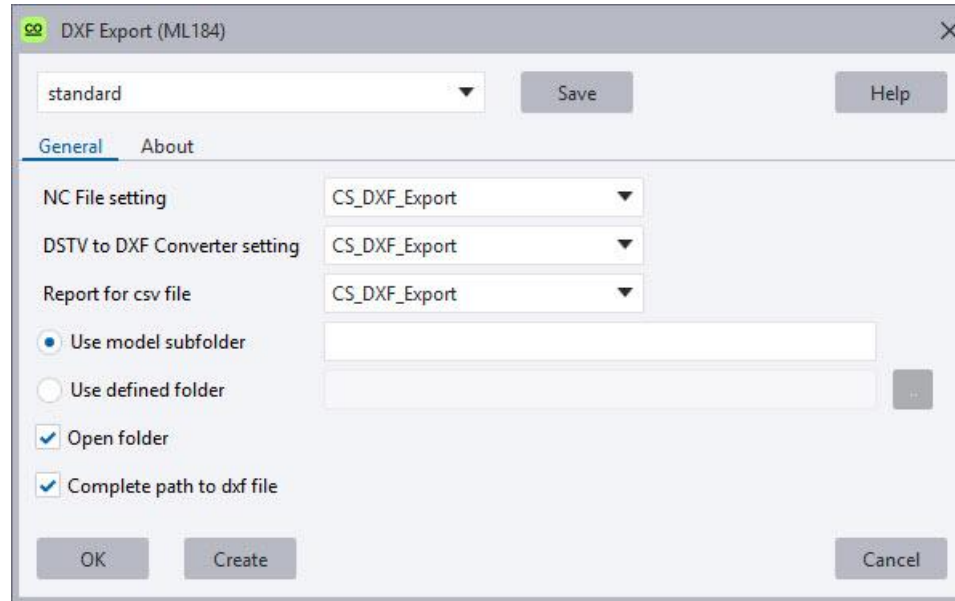
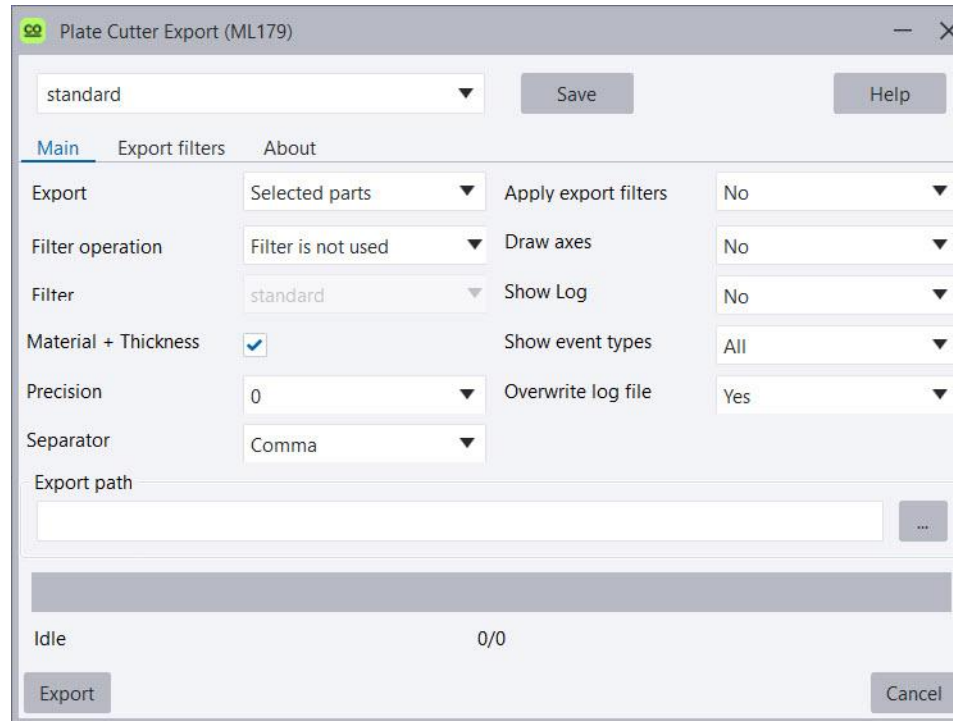


Plate cutter export (ML179)

- Exports the dimensions of the rectangle in which the contour plate fits, into a text file.



The screenshot shows the 'Plate Cutter Export (ML179)' dialog box. At the top, there is a dropdown menu set to 'standard', a 'Save' button, and a 'Help' button. Below this is a tabbed interface with 'Main', 'Export filters', and 'About' tabs. The 'Main' tab is active and contains the following settings:

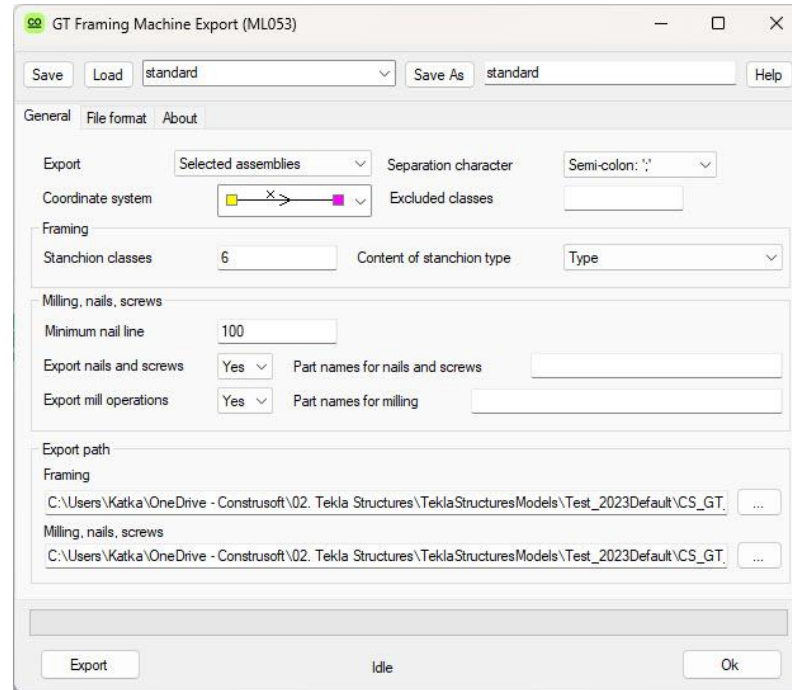
Setting	Value	Setting	Value
Export	Selected parts	Apply export filters	No
Filter operation	Filter is not used	Draw axes	No
Filter	standard	Show Log	No
Material + Thickness	☒	Show event types	All
Precision	0	Overwrite log file	Yes
Separator	Comma		

Below the settings is an 'Export path' field with a text input and a browse button (...). At the bottom, there is a status bar showing 'Idle' and '0/0', and two buttons: 'Export' and 'Cancel'.



GT Framing Machine export (ML053)

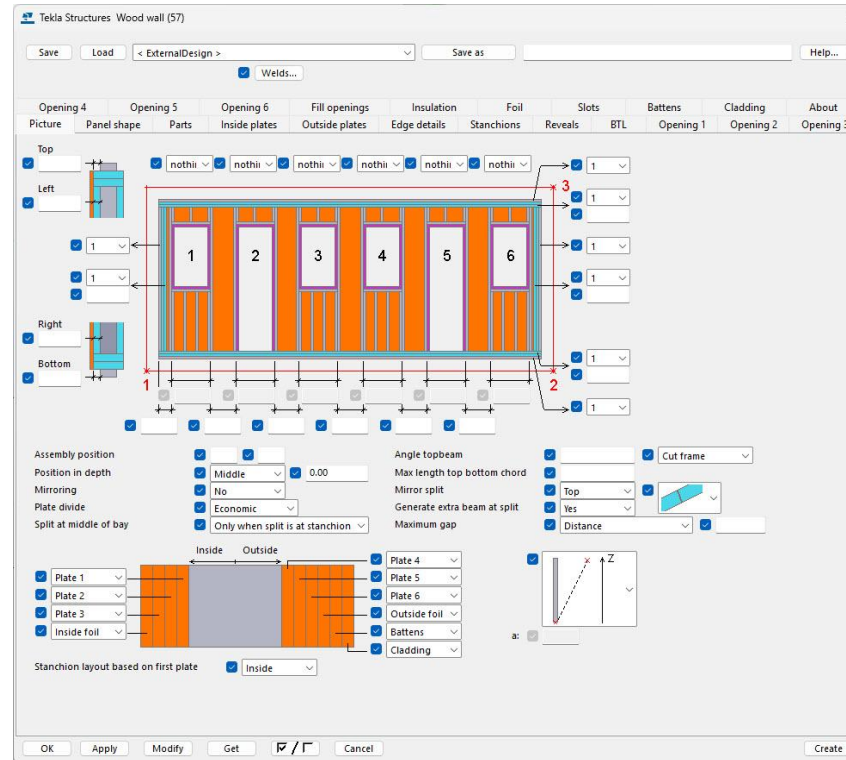
- Allows export of assemblies, including their processes from Tekla Structures to the GT framing machines.



Timber tools

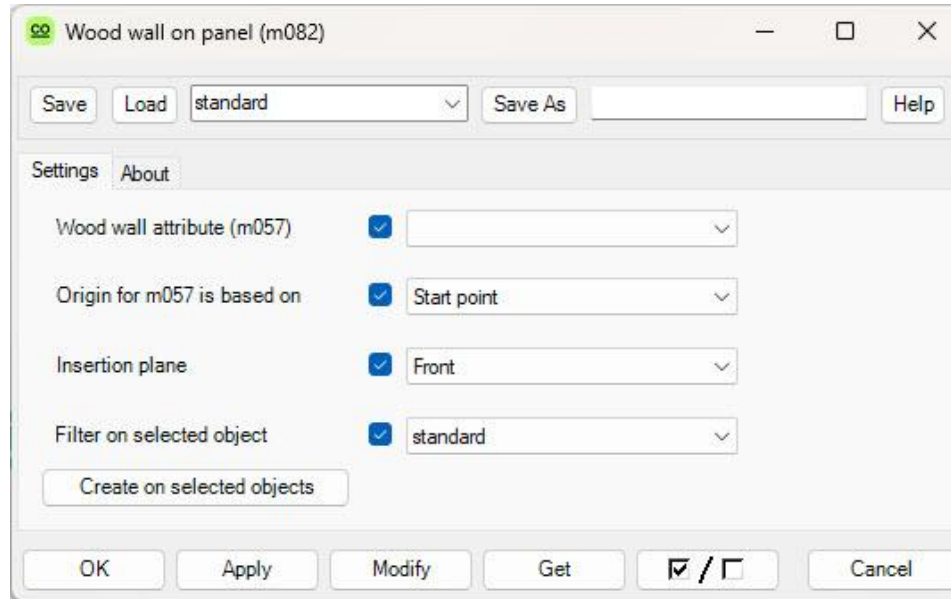
Wood Wall (57)

- Generates a timber wall element.



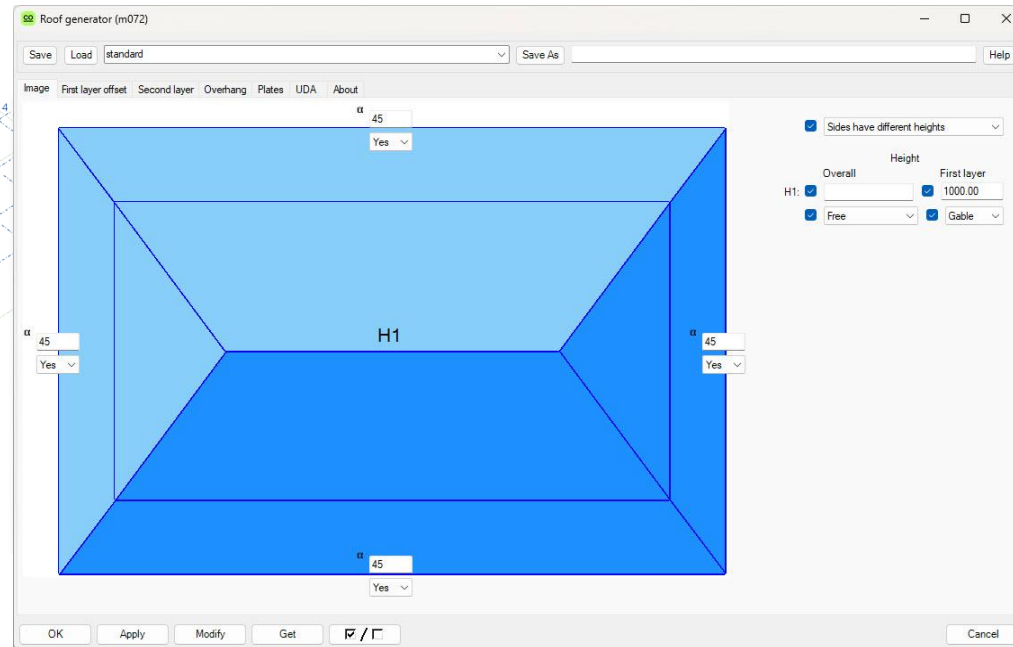
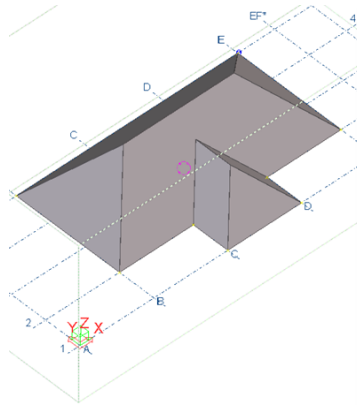
Wood wall on panel (m082)

- Generates an instance of the timber wall tool m057 within the outer contour of a solid-(concrete) shape.



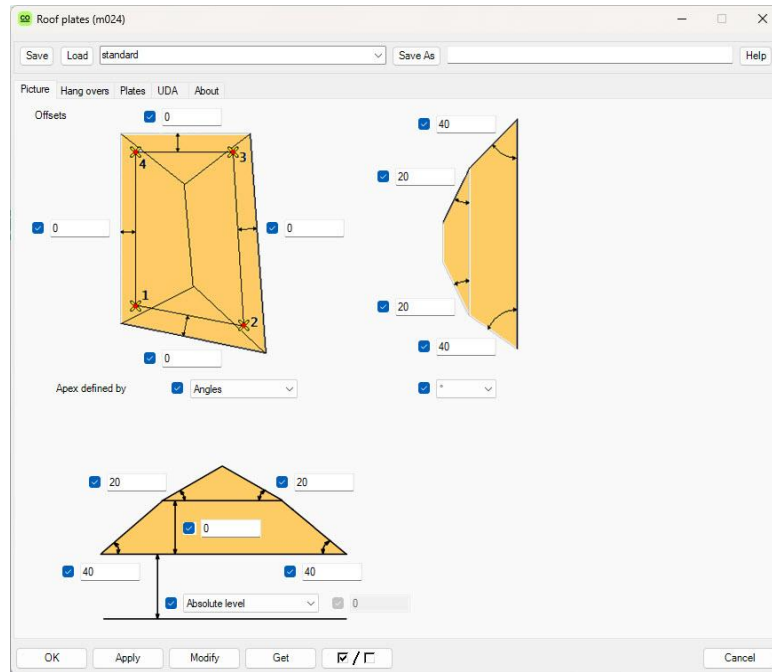
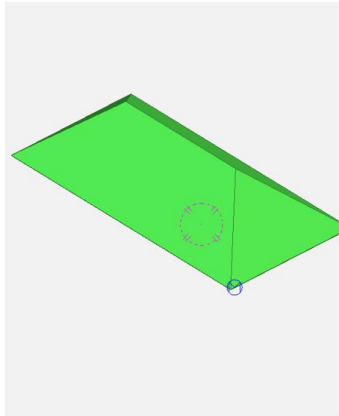
Roof generator (m072)

- Creates roof planes by tracing a closed polygon.
- The result can serve as input for m025.



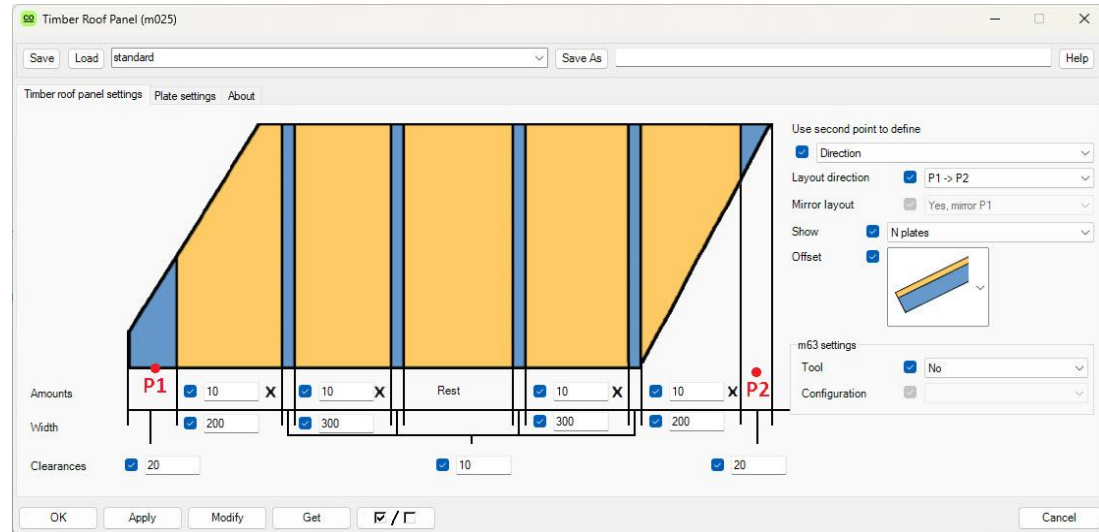
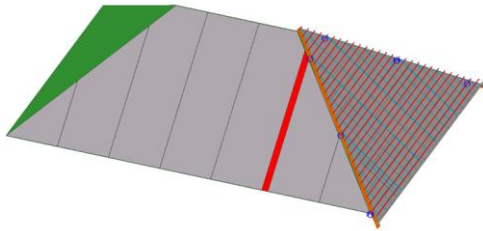
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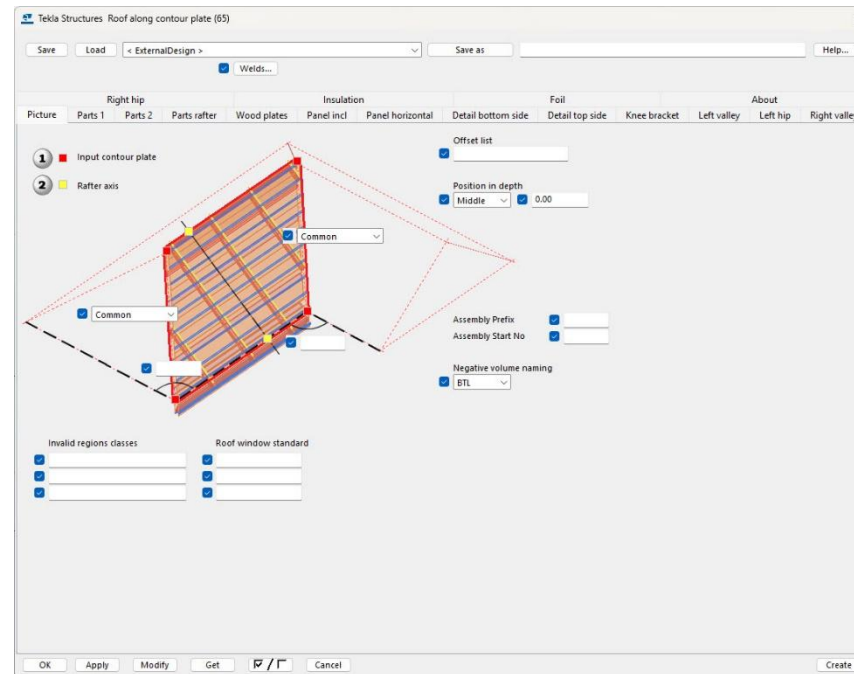
Timber roof panel (m025)

- Can be used in combination with m024 and m072. This plugin calls for the (roof) surface, and the X-axis. Thereafter, plates are generated.
- In this plugin tool m63 (Timber Roof) can be invoked.



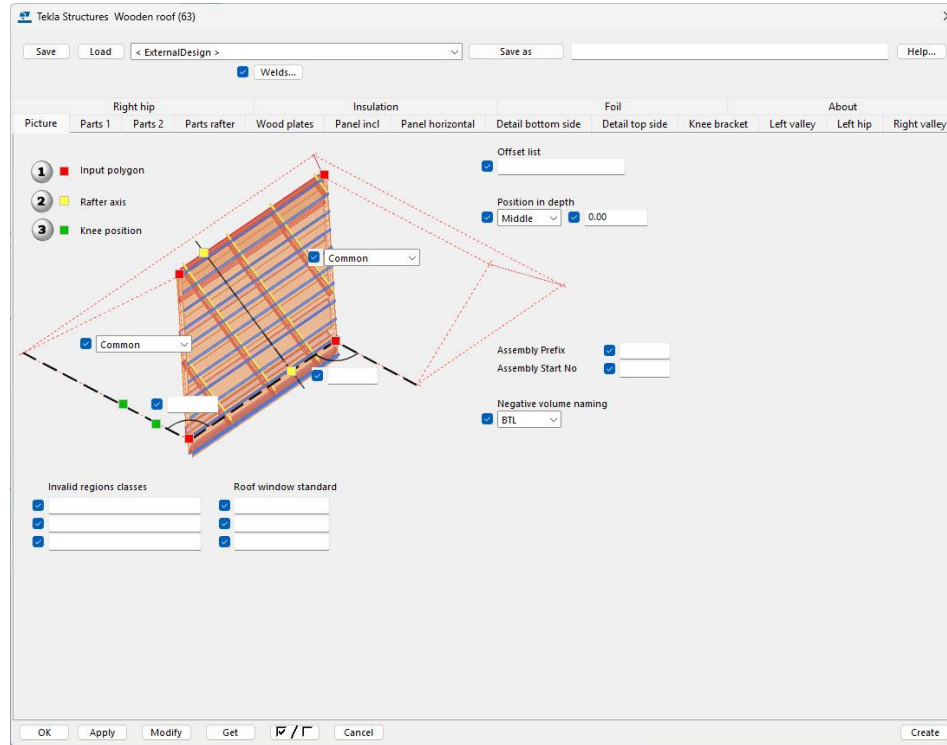
Roof along contour plate (65)

- Generates a timber roof element through vertices of a contour plate.



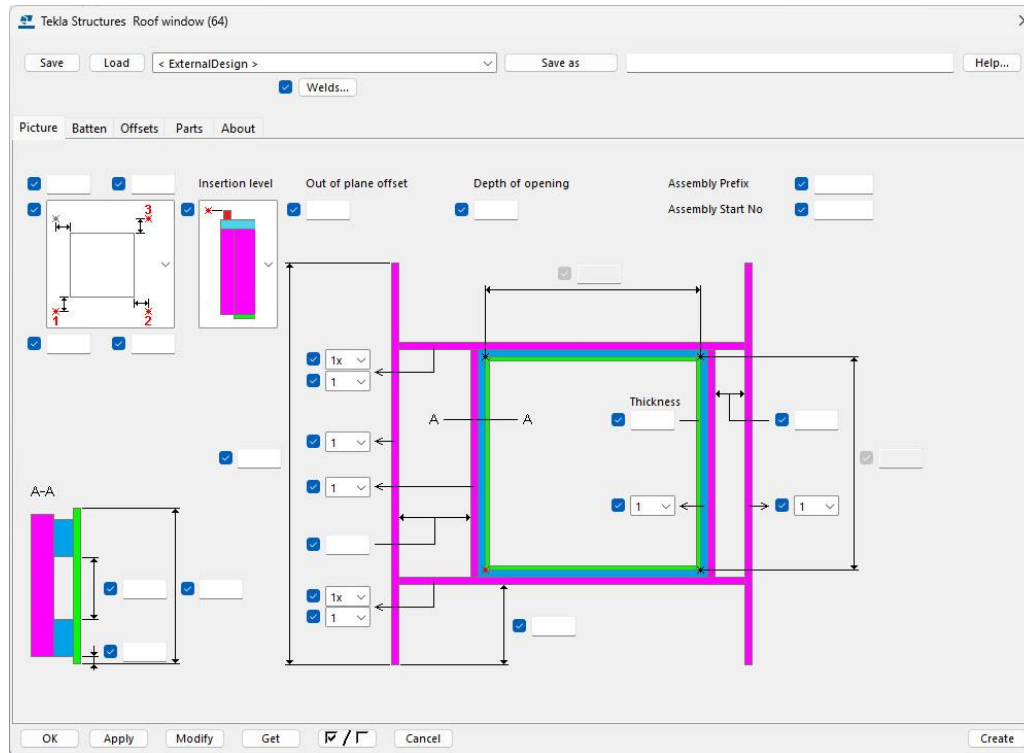
Wooden roof (63)

- Creates a timber roof element.



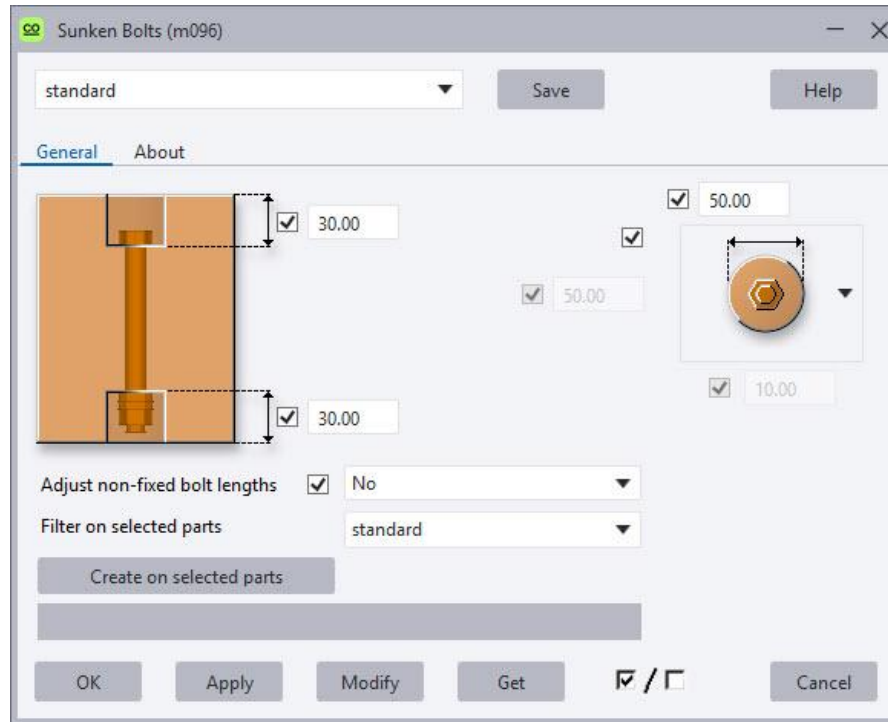
Roof window (64)

- Creates a window in a timber roof element.



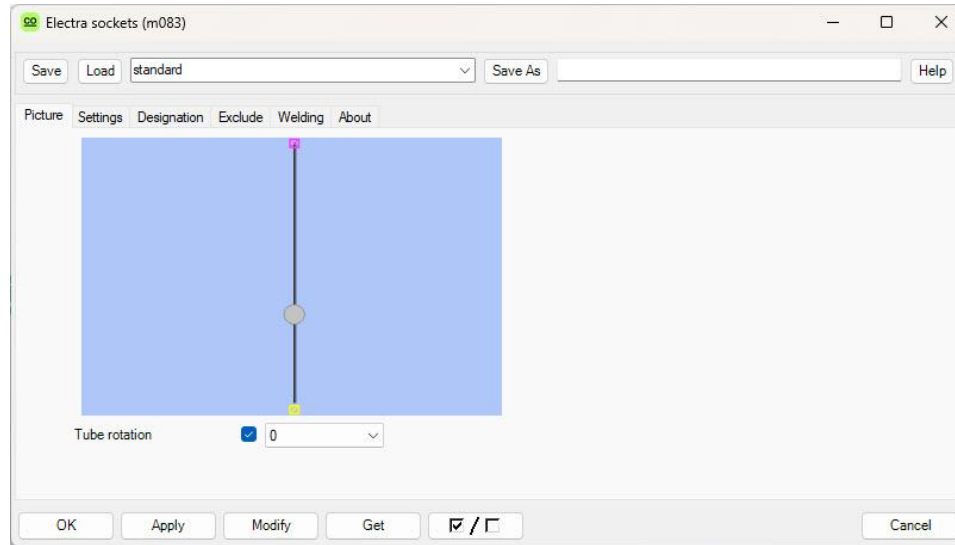
Sunken bolts (m096)

- Modifies standard bolts and holed into countersunk bolts and holes.



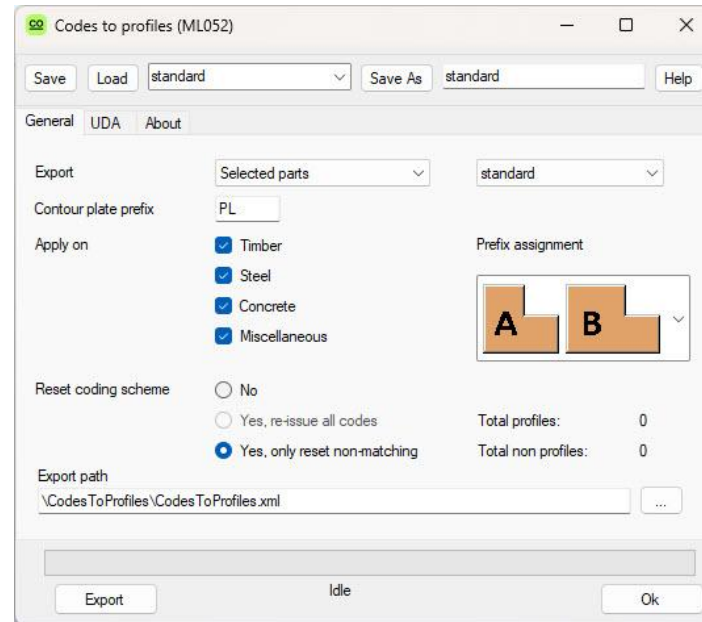
Electra sockets (m083)

- Allows modeling electra sockets including corresponding recesses in timber wall elements, metal stud and concrete walls.



Codes to profiles (ML052)

- Recognizes / classifies profiled parts and writes the dimensions of the cross-section and the code of the profile to the user-defined attributes of the parts.



Detail numbering (m135)

- Allows quickly marking and numbering detail positions. It can also generate a detail drawing at that position.

Detail Numbering (m135)

Save Load standard Save As Help

Common Drawing About

Detail

Detail Label ☒ A

Separator ☒ -

Detail Number ☒ 1

Auto Number ☒ No Reset

Detail UDA ☒ DET_NUMBER

Common

Name DETAILLABEL

Material ☒ Misc_Undefined S

Profile ☒ 10*10 S

Length ☒ 10.00

Class ☒ 2

Direction ☒ +X

Position

Plane ☒ Middle 0.00

Rotation ☒ Front 0

Depth ☒ Middle 0.00

Offset

Offset X ☒ 0.00

Offset Y ☒ 0.00

Offset Z ☒ 0.00

Numbering

Part ☒ DL 1

Assembly ☒ DLA 1

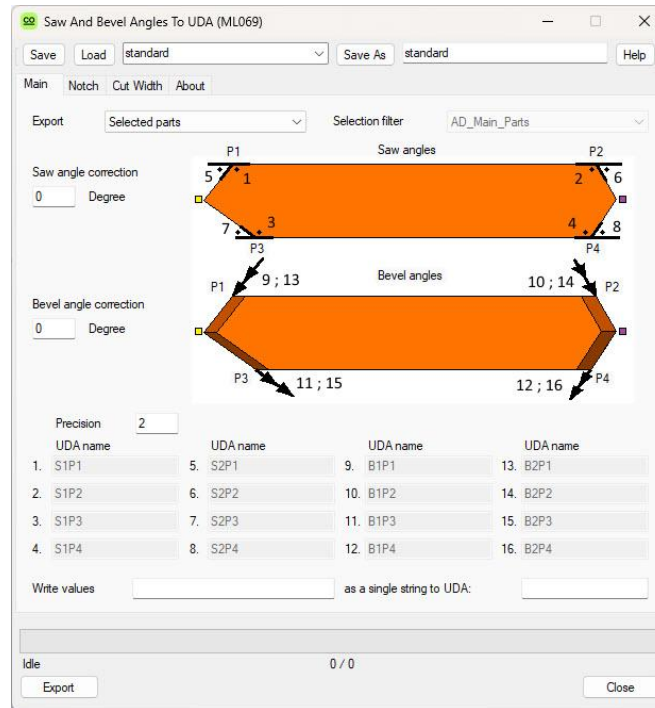
Generate Drawing

OK Apply Modify Get ☒ / ☐ Cancel



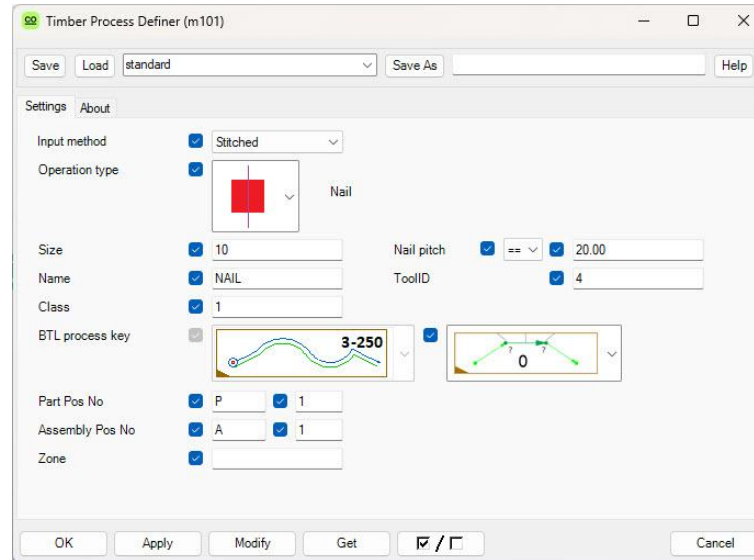
Saw and bevel angles to UDA (ML069)

- Writes saw and bevel angles information to part UDA's. These UDA values are now also available with the custom properties.



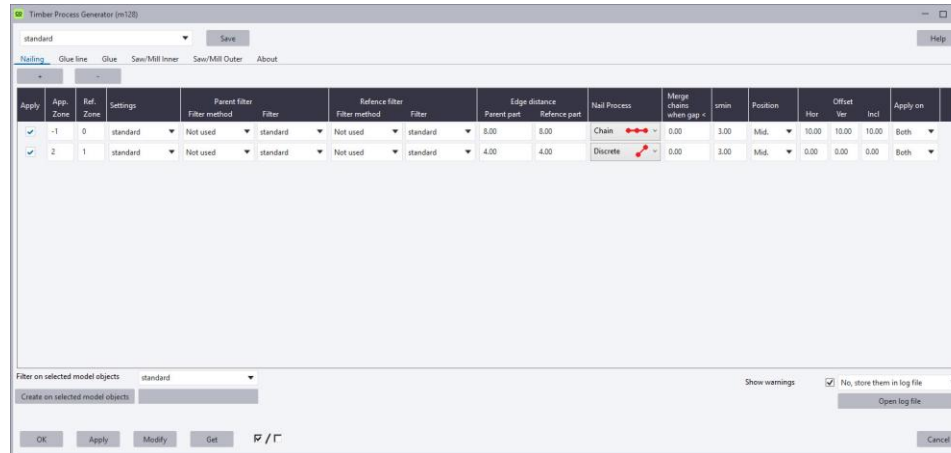
Timber process definier (m101)

- Adding processes such as nailing, glueing, sawing and milling lines to elements required on production lines such as the Mobi-One from MBA and Weinmann from Homag.
- Use it in combination with CS Timber process generator Net (m128).



Timber process generator (m128)

- Applies the processes of plug-in Timber Process Definer (m101) to an element per zone automatically, which are required on production lines such as the Mobi-One from MBA and Weinmann from Homag.



Timber percentage (m166)

- Calculates the timber percentage per element according to the NTA 8800 standard.

Timber Percentage (m166)

Save Help

General UDAs About

Exclude parts by filter ☒

Selection filter for openings ☒

Selection filter for concave cuts ☒

Calculation mode based on: ☒ Based on direct manipulation

Calculation plane ☒ Outside

Shape of ACON defined by ☒ Beams in zone 0

Filter on selected assemblies

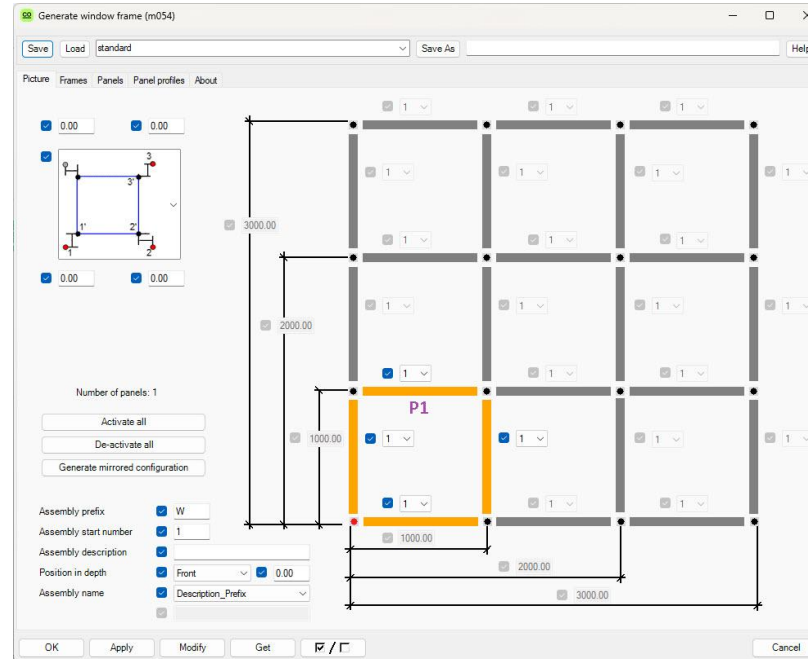
Create on selected assemblies

OK Apply Modify Get ☒ / ☐ Cancel



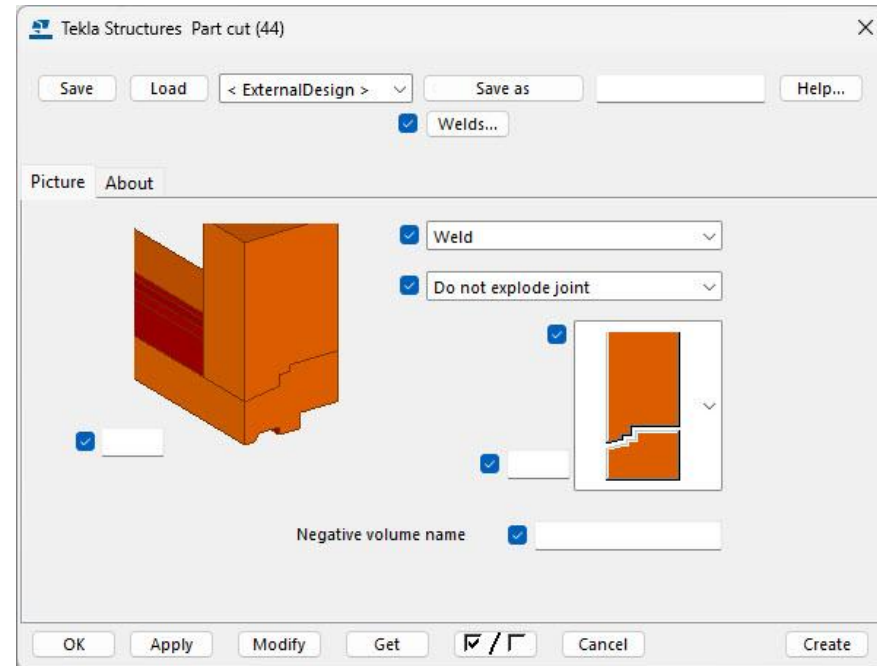
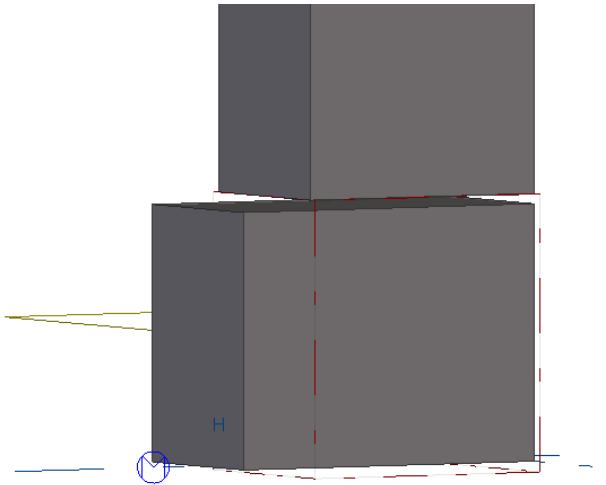
Generate window frame (m054)

- Generates door- and window frames (LOD200).
- Multiple (up to 9) panels and option for opening direction symbols.



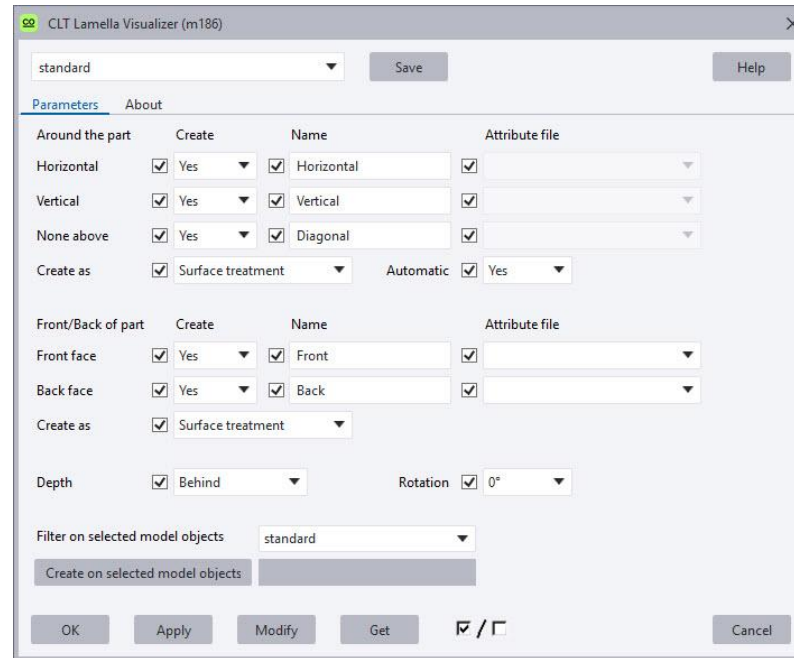
Part cut (44)

- Creates a part cut with possible seam. Part can be added as cast unit.



CLT Lamella Visualizer (m186)

- Tool for creating surfaces around parts, especially for CLT walls and floors, so that the slats of the CLT part are visible and it is clear what the front and back of the part are.



The screenshot shows the 'CLT Lamella Visualizer (m186)' window. At the top, there is a dropdown menu set to 'standard', a 'Save' button, and a 'Help' button. Below this is a tabbed interface with 'Parameters' and 'About' tabs. The 'Parameters' tab is active and contains several sections:

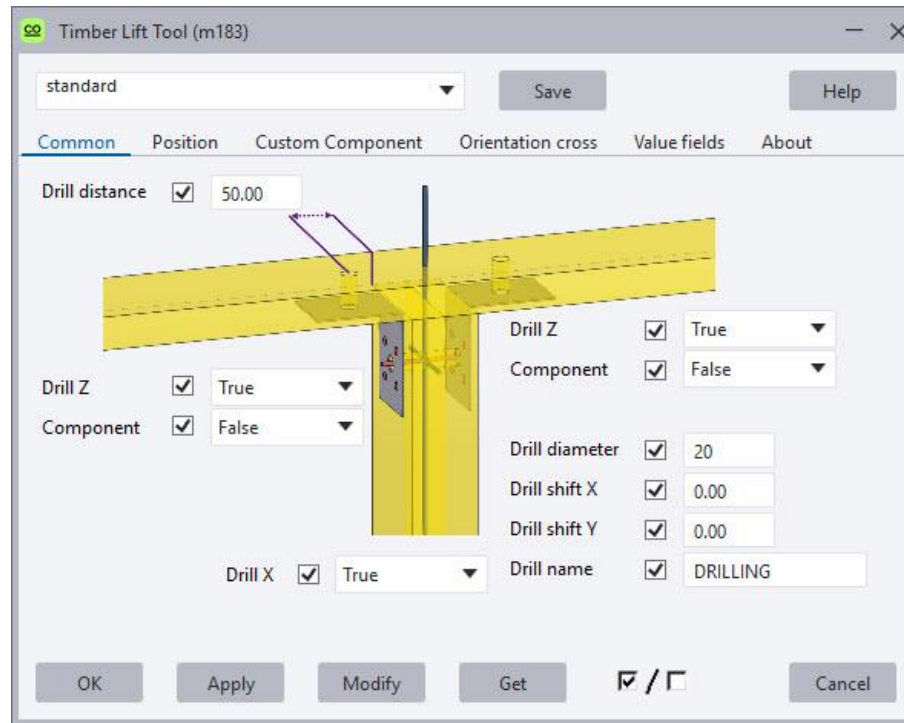
- Around the part:** This section has columns for 'Create', 'Name', and 'Attribute file'. It includes checkboxes for 'Horizontal', 'Vertical', and 'None above', each with a 'Yes' dropdown. There is also a 'Create as' checkbox and a 'Surface treatment' dropdown, followed by an 'Automatic' checkbox and a 'Yes' dropdown.
- Front/Back of part:** This section has columns for 'Create', 'Name', and 'Attribute file'. It includes checkboxes for 'Front face' and 'Back face', each with a 'Yes' dropdown. There is also a 'Create as' checkbox and a 'Surface treatment' dropdown.
- Depth:** This section has a 'Behind' dropdown and a 'Rotation' checkbox with a '0°' dropdown.
- Filter on selected model objects:** This section has a 'standard' dropdown and a 'Create on selected model objects' button.

At the bottom of the window, there are buttons for 'OK', 'Apply', 'Modify', 'Get', a view toggle icon (eye and square), and 'Cancel'.



Timber Lift Tool (m183)

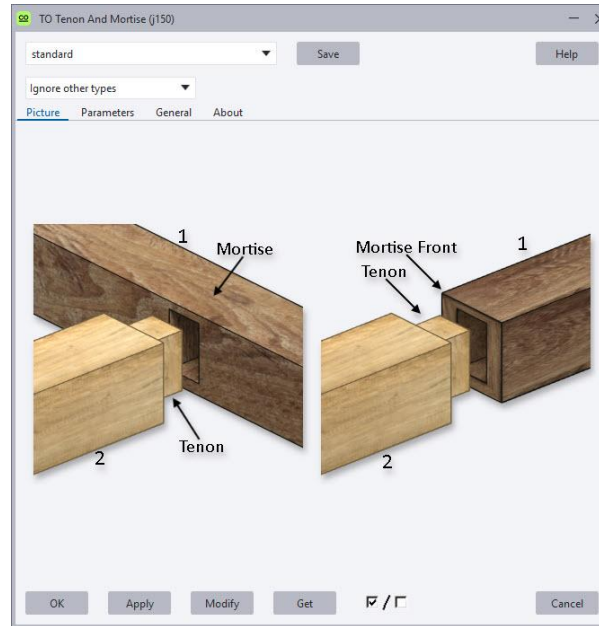
- This tool generates lifting supplies for timber frames.



Timber operations

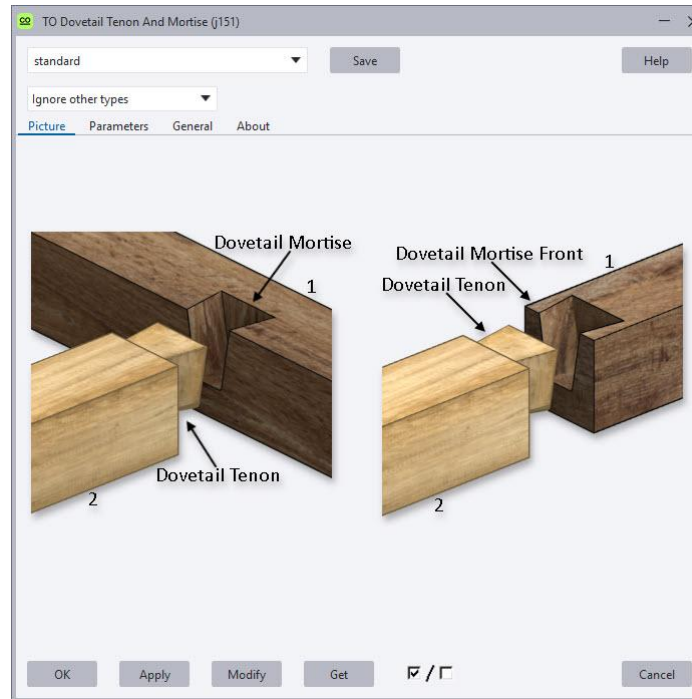
TO Tenon and mortise (j150)

- Serves for modelling tenon and mortise connections between two beams, regardless of whether they are at an angle or collinear.



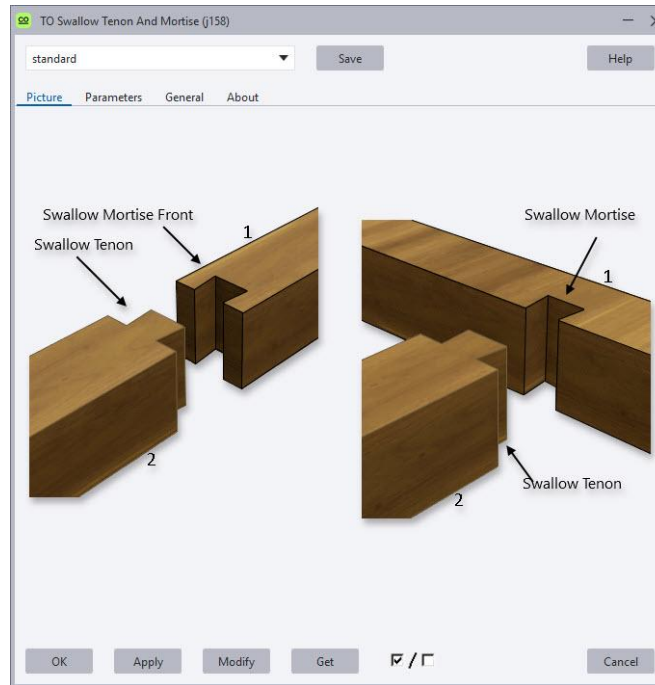
TO Dovetail tenon and mortise (j151)

- Creates a dovetail connection between 2 beams , regardless of whether they are at an angle or collinear.



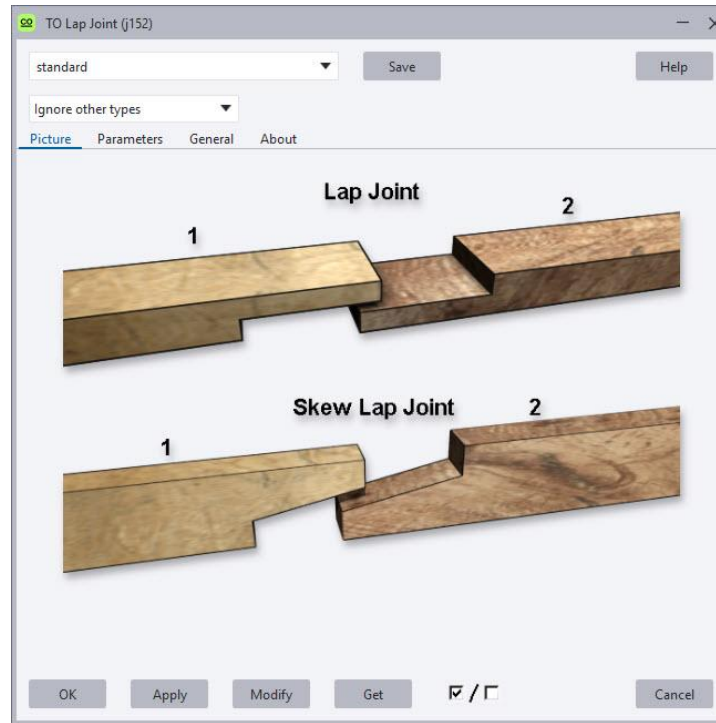
TO Swallow tenon and mortise (j158)

- Creates a swallow tail connection between 2 beams , regardless of whether they are at an angle or collinear.



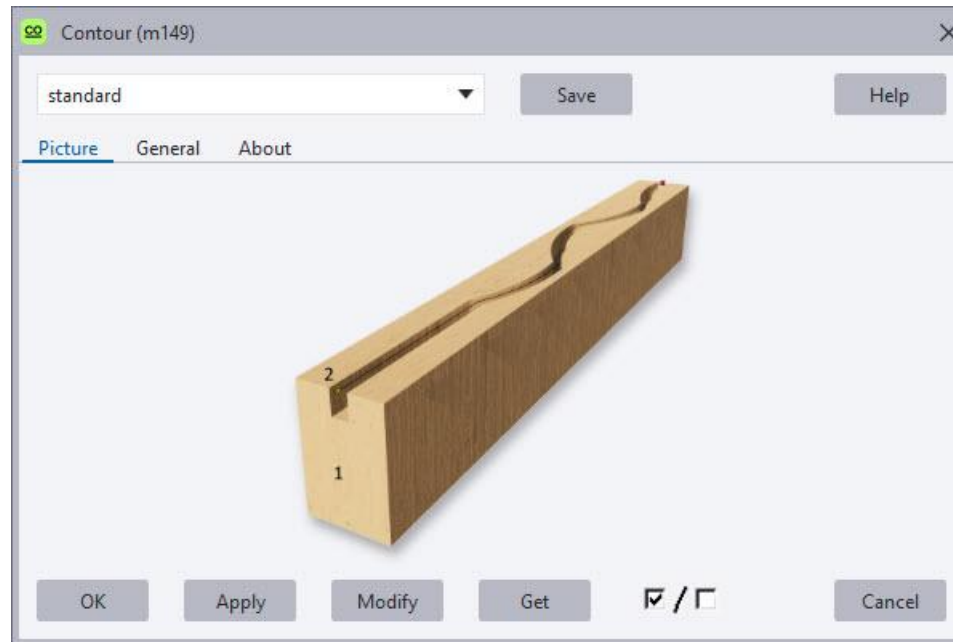
TO Lap joint (j152)

- Serves for modeling specific timber connections.



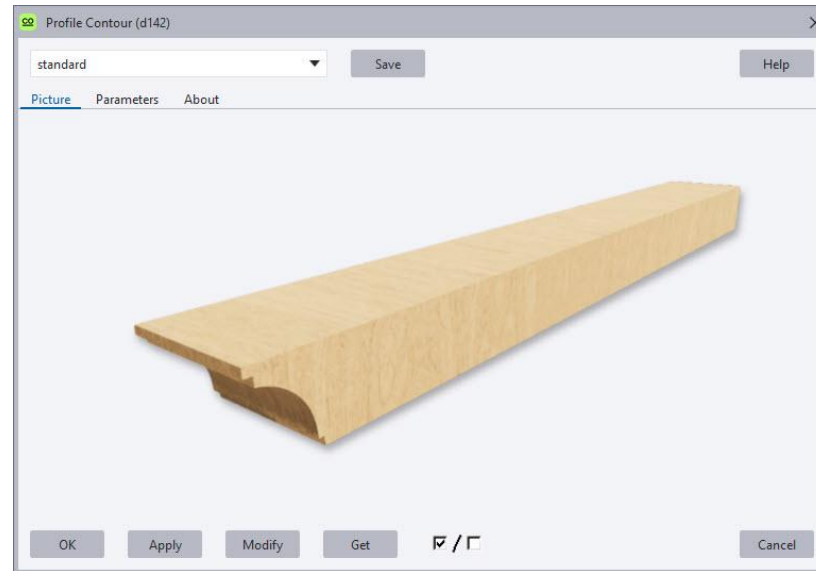
TO Contour (m149)

- Serves for modeling a free contour operation on the basis of a (poly) curve. Next this operation can be exported to BTL.



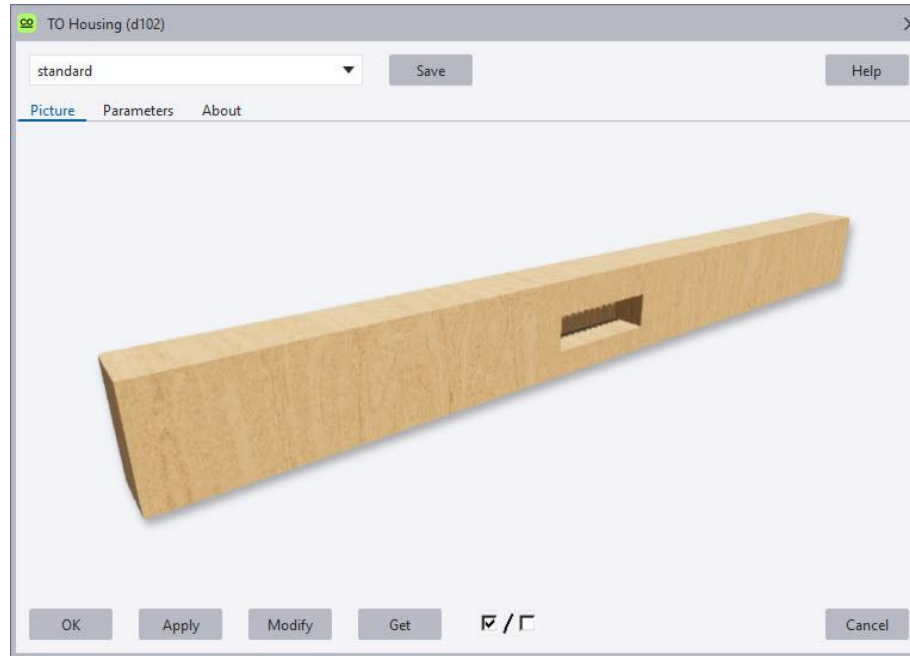
TO Profile contour (d142)

- Creates a profile contour at the end of a beam which can be performed on woodworking machines such as Hundegger and machines using BTL files.



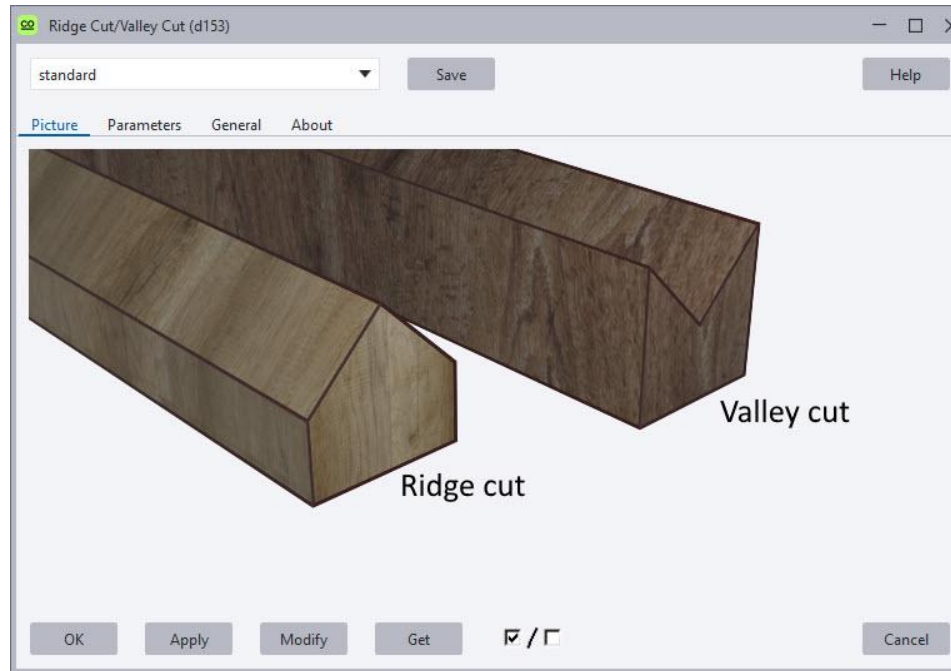
TO Housing (d102)

- Serves for modelling a specific type of timber operation that in BVX and BVN is referred to as Housing (In BTL, this operation is called Pocket).



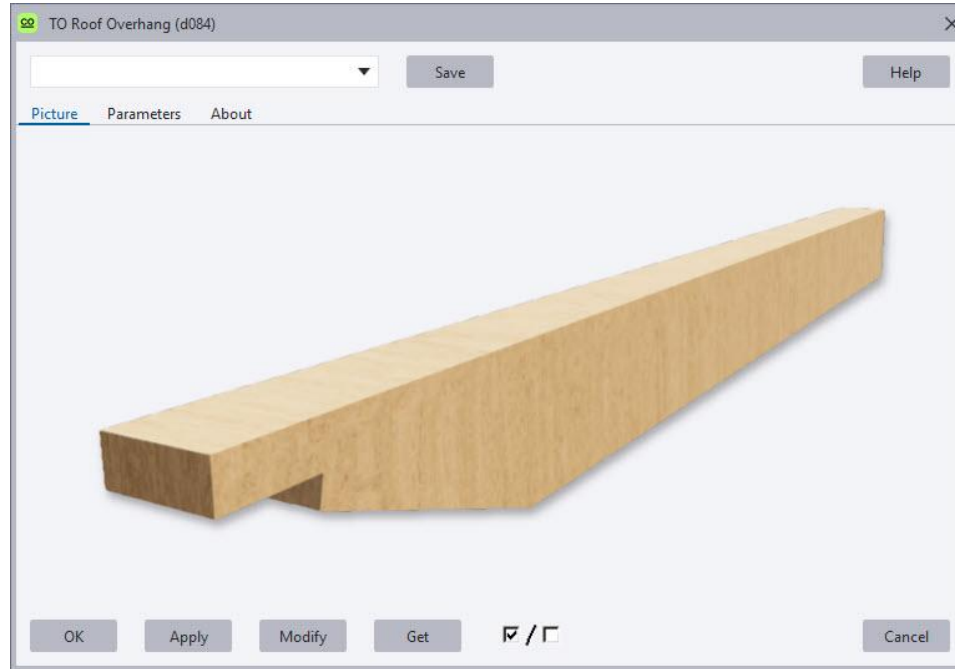
TO Ridge cut valley cut (d153)

- Creates ridge cut or valley cut.



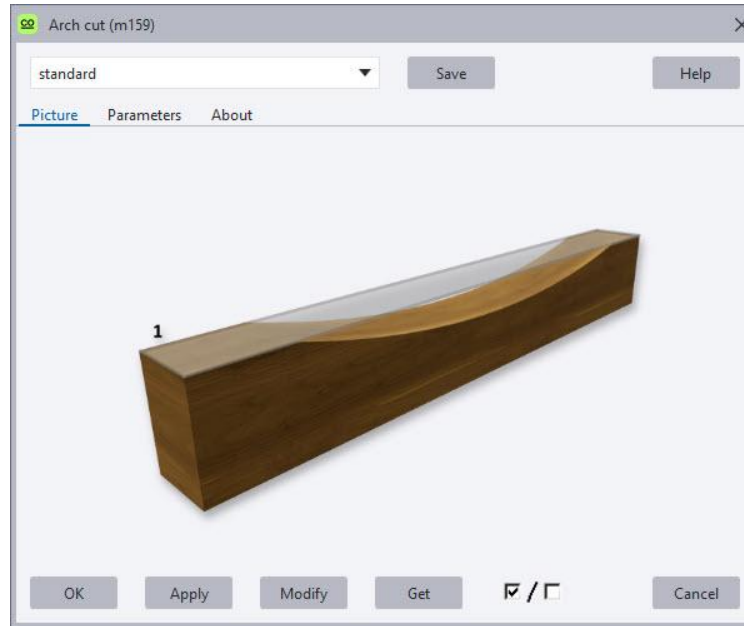
TO Roof overhang (d084)

- Creates a roof overhang.



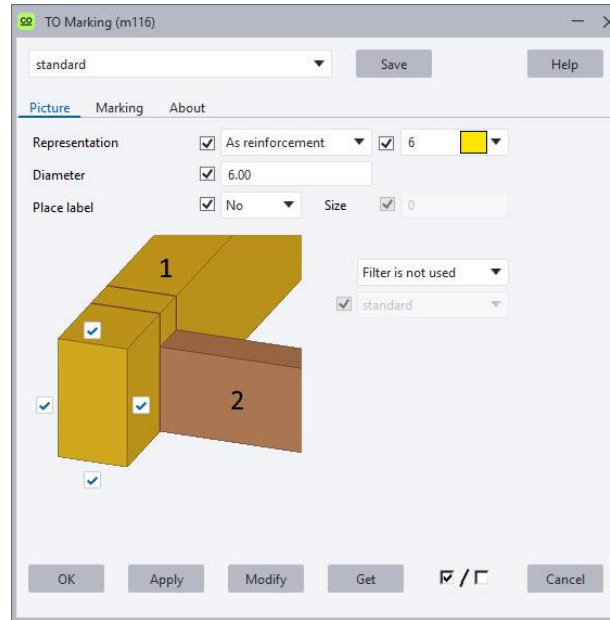
TO Arch cut (m159)

- Creates a round arc operation on a beam which can be performed on woodframingmachines such as Hundegger or machines using BTL files.



TO Marking (m116)

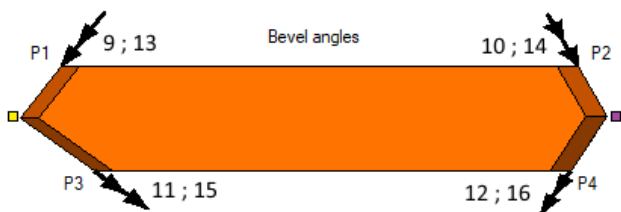
- Tool for marking the position of the secondary parts. The tool is compatible with the export to Hundegger, H&M and BTL machines.



Tool Specific Properties

CUSTOM.B1P1
CUSTOM.B1P2
CUSTOM.B1P3
CUSTOM.B1P4
CUSTOM.B2P1
CUSTOM.B2P2
CUSTOM.B2P3
CUSTOM.B2P4

- Gets beam's bevel angles. [See ML069](#)



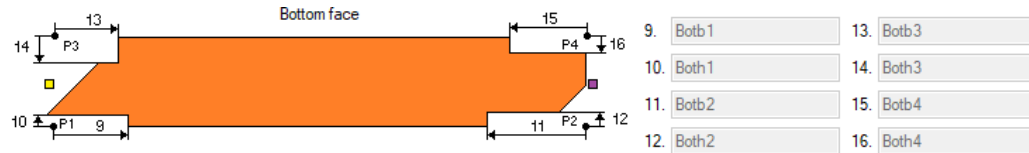
9.	B1P1	13.	B2P1
10.	B1P2	14.	B2P2
11.	B1P3	15.	B2P3
12.	B1P4	16.	B2P4



CUSTOM.BOTB1
CUSTOM.BOTB2
CUSTOM.BOTB3
CUSTOM.BOTB4
CUSTOM.BOTH1
CUSTOM.BOTH2
CUSTOM.BOTH3
CUSTOM.BOTH4

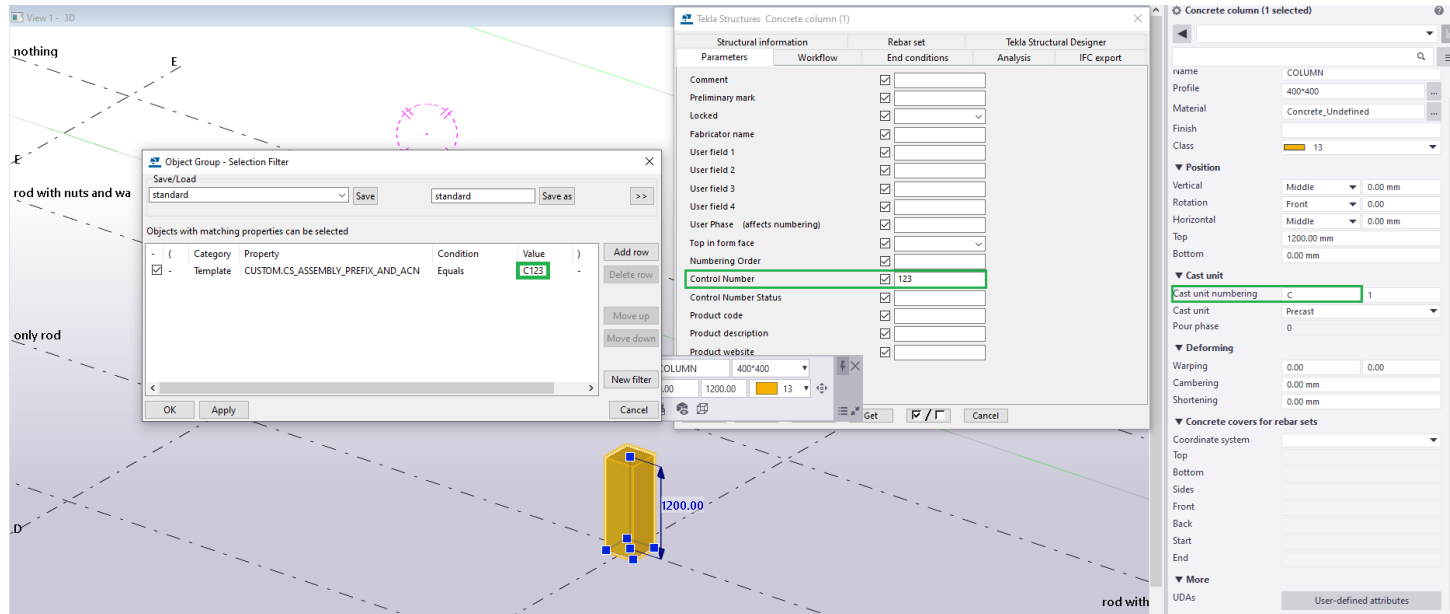
- Gets beam's bottom start and end notch lengths.

[See ML069](#)



CUSTOM.CS_ASSEMBLY_PREFIX_AND_ACN

- Contains the concatenation of assembly prefix and ACN.



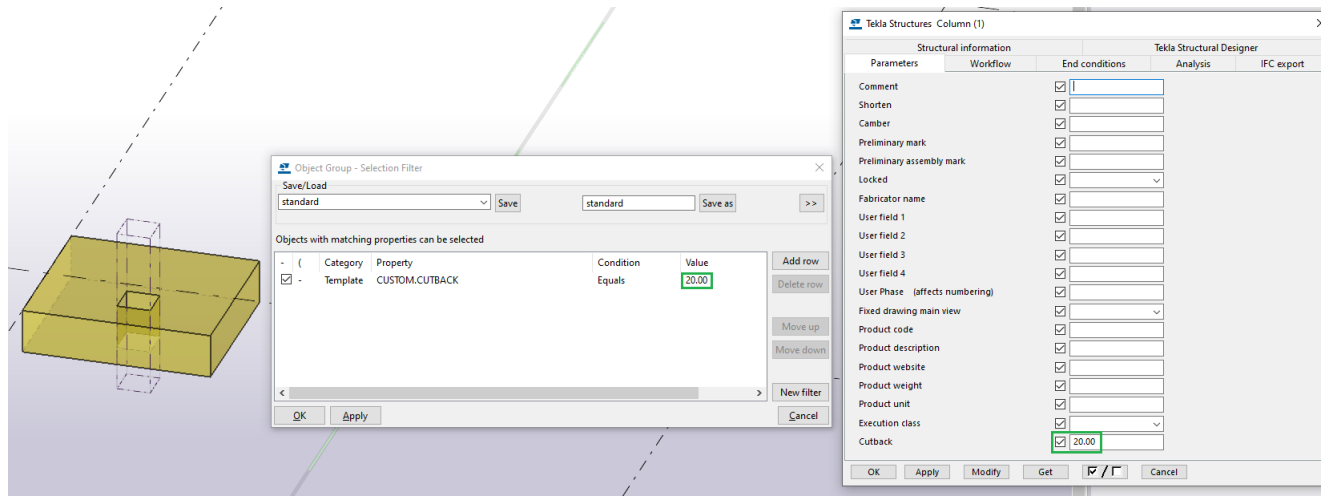
CUSTOM.CS_WELD_CONNECT_AS

- Returns 1 if weld connection is as: Sub-assembly.
- Returns 0 if weld connection is as: Secondary part.



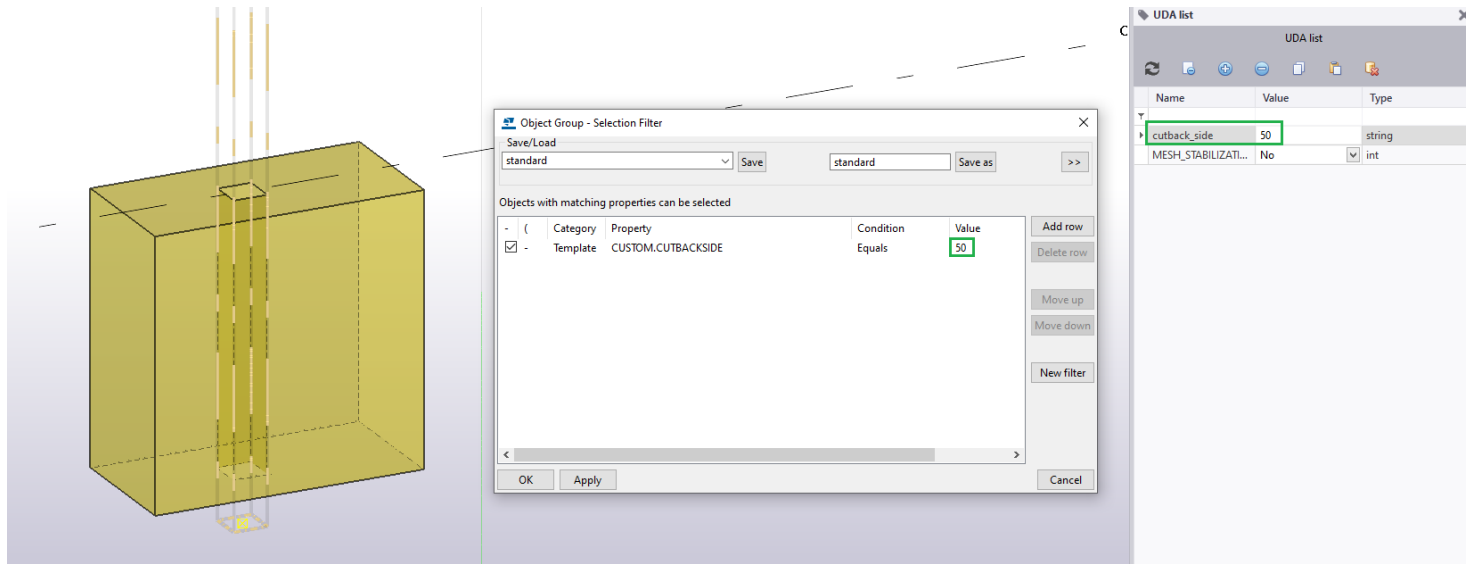
CUSTOM.CUTBACK

- Gets the cutback value from the boolean made by custom component CUTBACK.



CUSTOM.CUTBACKSIDE

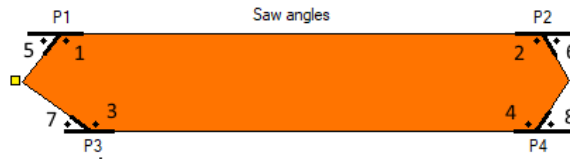
- Gets the cutback side from the boolean made by custom component CUTBACK.



CUSTOM.S1P1
CUSTOM.S1P2
CUSTOM.S1P3
CUSTOM.S1P4
CUSTOM.S2P1
CUSTOM.S2P2
CUSTOM.S2P3
CUSTOM.S2P4

- Gets beam's saw angles.

[See ML069](#)

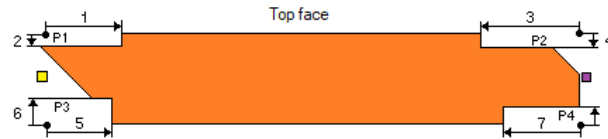


1. S1P1	5. S2P1
2. S1P2	6. S2P2
3. S1P3	7. S2P3
4. S1P4	8. S2P4



CUSTOM.TOPB1
CUSTOM.TOPB2
CUSTOM.TOPB3
CUSTOM.TOPB4
CUSTOM.TOPH1
CUSTOM.TOPH2
CUSTOM.TOPH3
CUSTOM.TOPH4

- Gets beam's top start and end notch lengths. [See ML069](#)



1. Topb1	5. Topb3
2. Toph1	6. Toph3
3. Topb2	7. Topb4
4. Toph2	8. Toph4



CUSTOM.YL1
CUSTOM.YL2
CUSTOM.YL3
CUSTOM.YL4

- Gets beam's cut widths at the middle of the part. [See ML069](#)



CUSTOM.TOP_YL1
CUSTOM.TOP_YL2
CUSTOM.TOP_YL3
CUSTOM.TOP_YL4

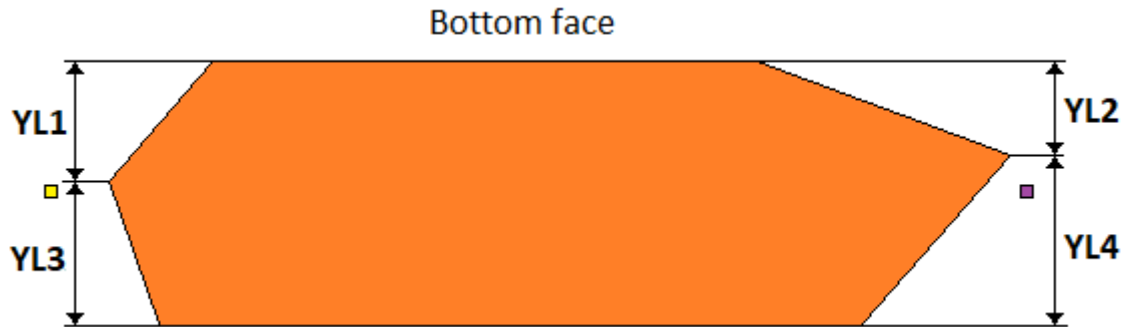
- Gets beam's cut widths at part's top face.

See ML069



CUSTOM.BOTTOM_YL1
CUSTOM.BOTTOM_YL2
CUSTOM.BOTTOM_YL3
CUSTOM.BOTTOM_YL4

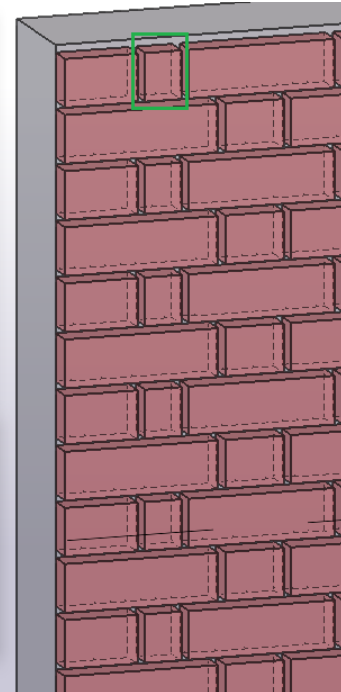
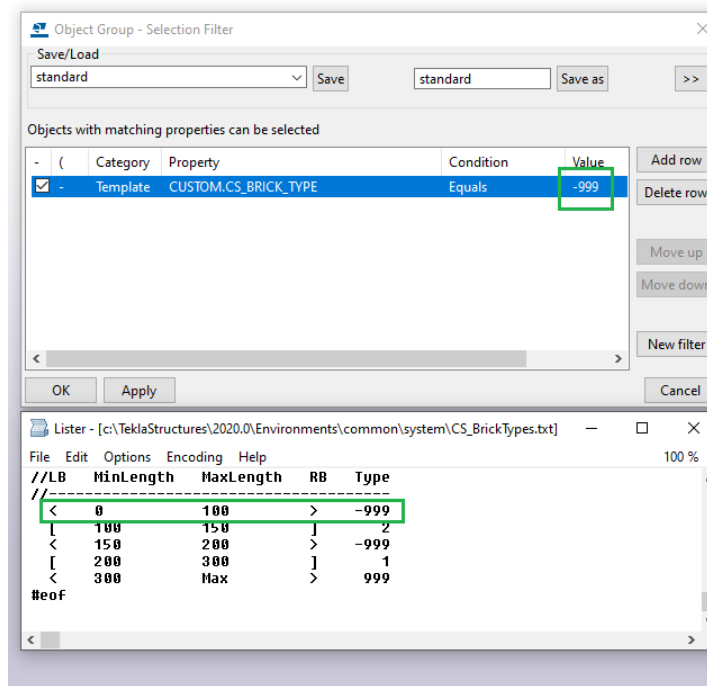
- Gets beam's cut widths at part's bottom face. See [ML069](#)



General Purpose Properties

CUSTOM.CS_BRICK_TYPE

- Gets brick type based on length and CS_BrickTypes.txt placed at Environments\common\system\

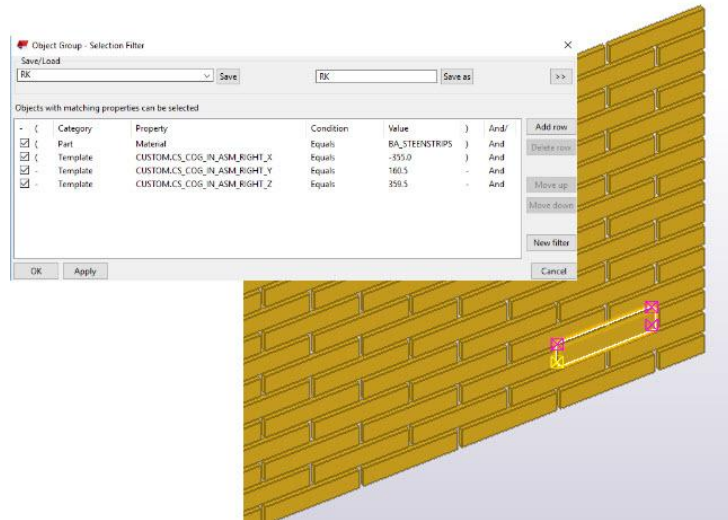


CUSTOM.CS_COG_IN_ASM_RIGHT_X

CUSTOM.CS_COG_IN_ASM_RIGHT_Y

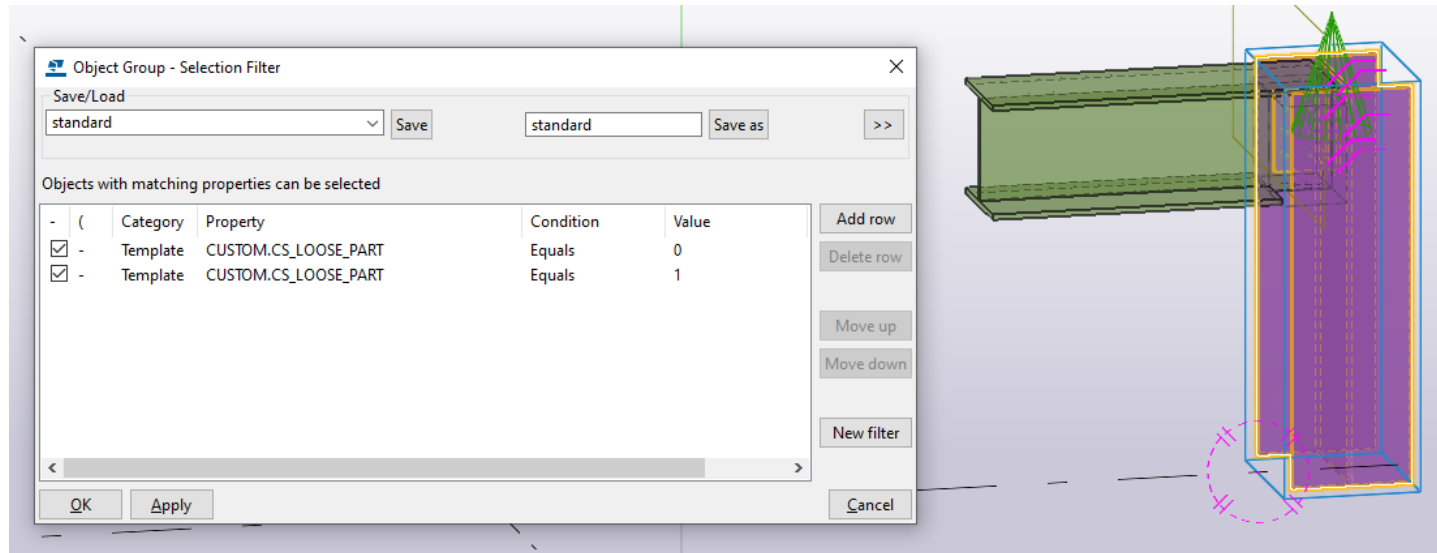
CUSTOM.CS_COG_IN_ASM_RIGHT_Z

- Gets coordinate of cog with respect to assembly coordinate system on right side.



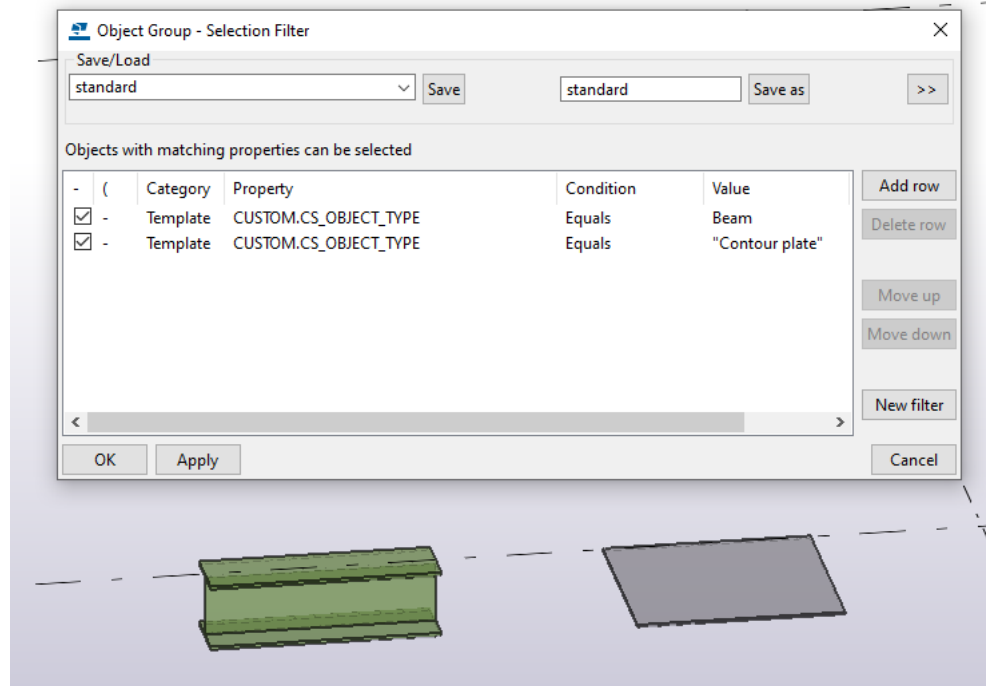
CUSTOM.CS_LOOSE_PART

- Yields 1 if assembly contains only one part.



CUSTOM.CS_OBJECT_TYPE

- Yields type of most existing model objects.



CUSTOM.DIFF_B_DIAM_MOST_USED

CUSTOM.DIFF_B_DIAM_LG_MOST_USED

CUSTOM.DIFF_B_DIAM_TR_MOST_USED

- Gets the difference between current bar diameter and most used bars diameter from the part bottom mesh.
- Gets the difference between current bar diameter and most used longitudinal bars diameter from the part bottom mesh.
- Gets the difference between current bar diameter and most used transversal bars diameter from the part bottom mesh.



CUSTOM.DIFF_T_DIAM_MOST_USED

CUSTOM.DIFF_T_DIAM_LG_MOST_USED

CUSTOM.DIFF_T_DIAM_TR_MOST_USED

- Gets the difference between current bar diameter and most used bars diameter from the part top mesh.
- Gets the difference between current bar diameter and most used longitudinal bars diameter from the part top mesh.
- Gets the difference between current bar diameter and most used transversal bars diameter from the part top mesh.



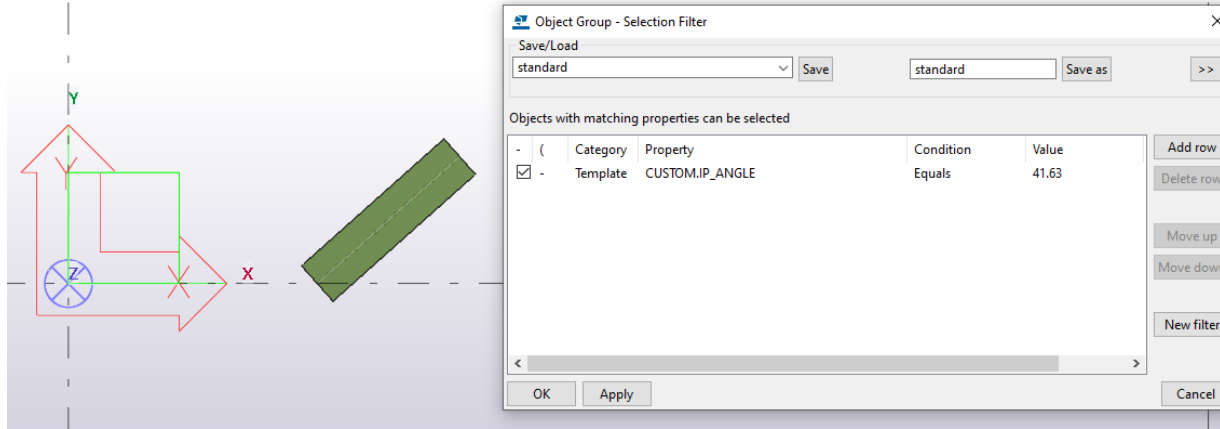
CUSTOM.DOUBLECUT_1 (local xy-plane) CUSTOM.DOUBLECUT_2 (colac xz-plane)

- To select part with double cut and the start or at the end.
Value 0 means no double cut, value 1 means double cut.



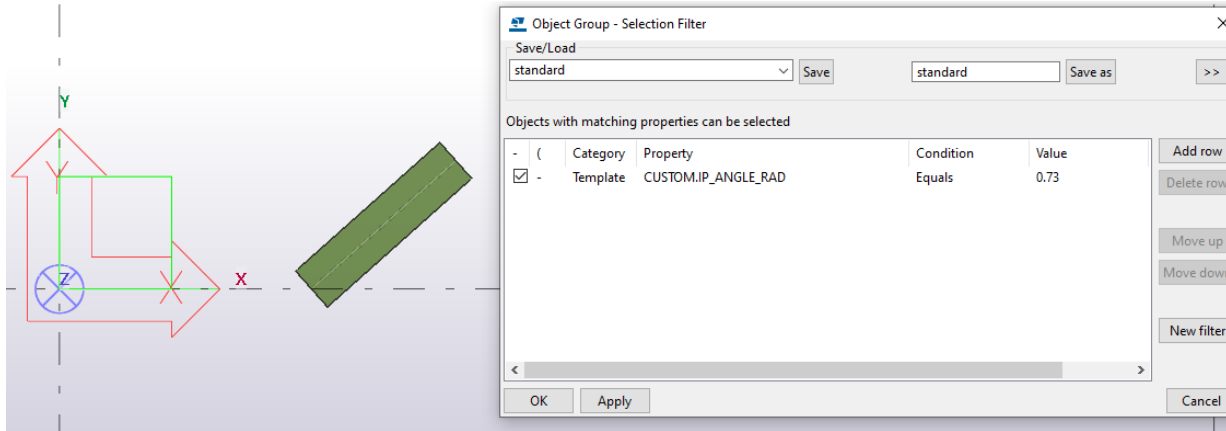
CUSTOM.IP_ANGLE

- Gets the in-plane angle of the system line in degrees.



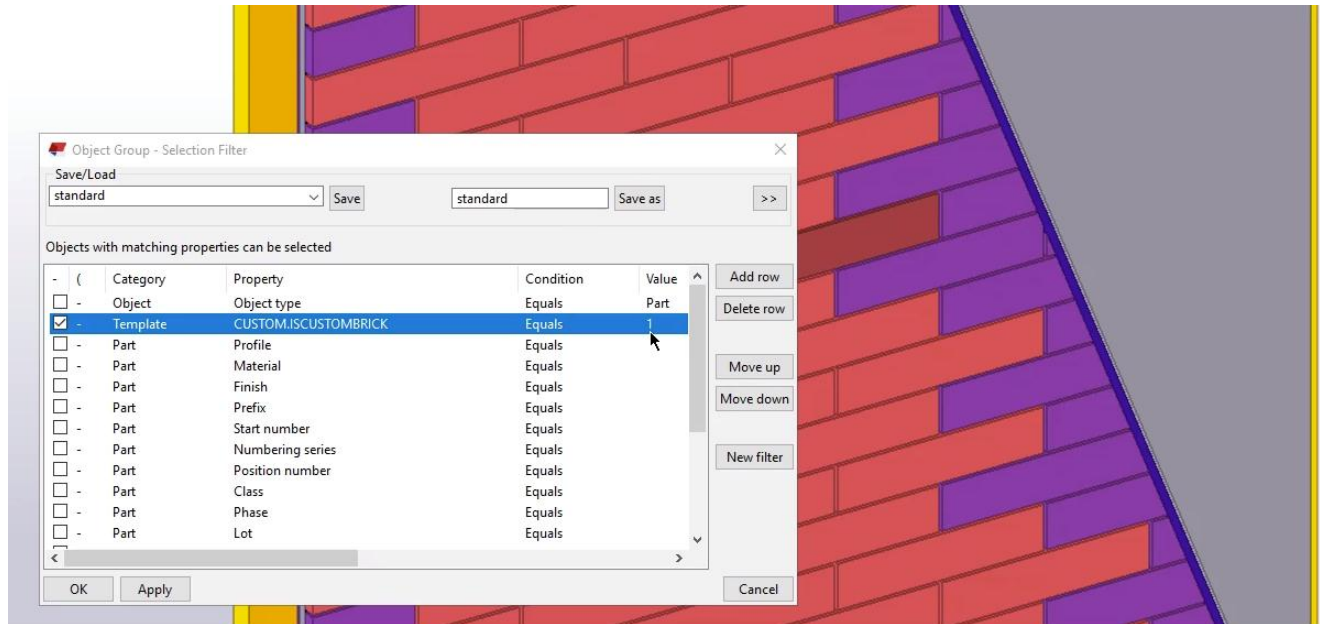
CUSTOM.IP_ANGLE_RAD

- Gets the in-plane angle of the system line in radians.



CUSTOM.ISCUSTOMBRICK

- Determine whether brick has non-rectangular or default shape.



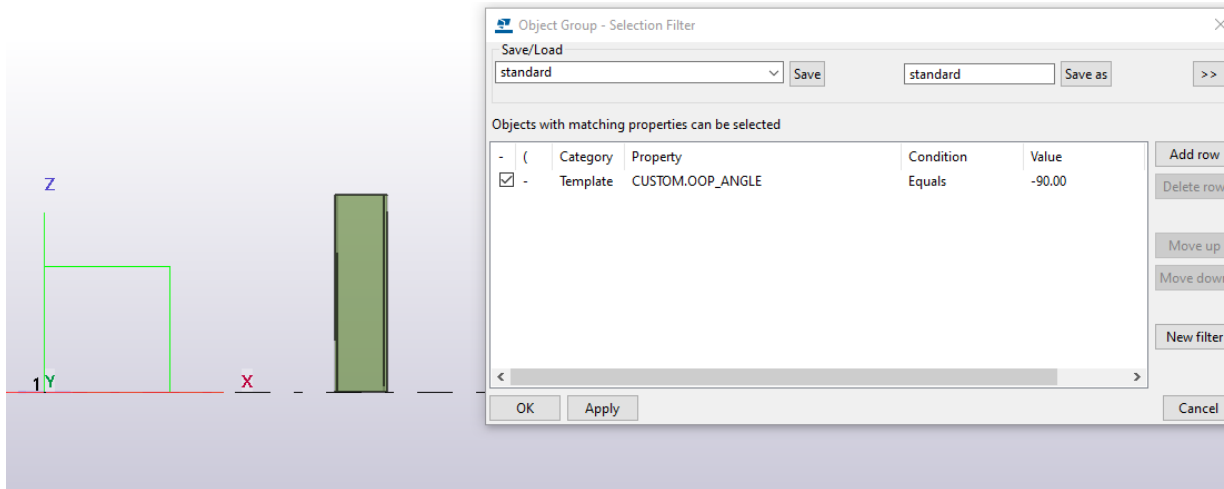
CUSTOM.NOMINAL_DIAM_MOST_USED
CUSTOM.NOMINAL_DIAM_LONG_MOST_USED
CUSTOM.NOMINAL_DIAM_TRANS_MOST_USED

- Gets the most used bars diameter from the part meshes.
- Gets the most used longitudinal bars diameter from the part meshes.
- Gets the most used transversal bars diameter from the part meshes.



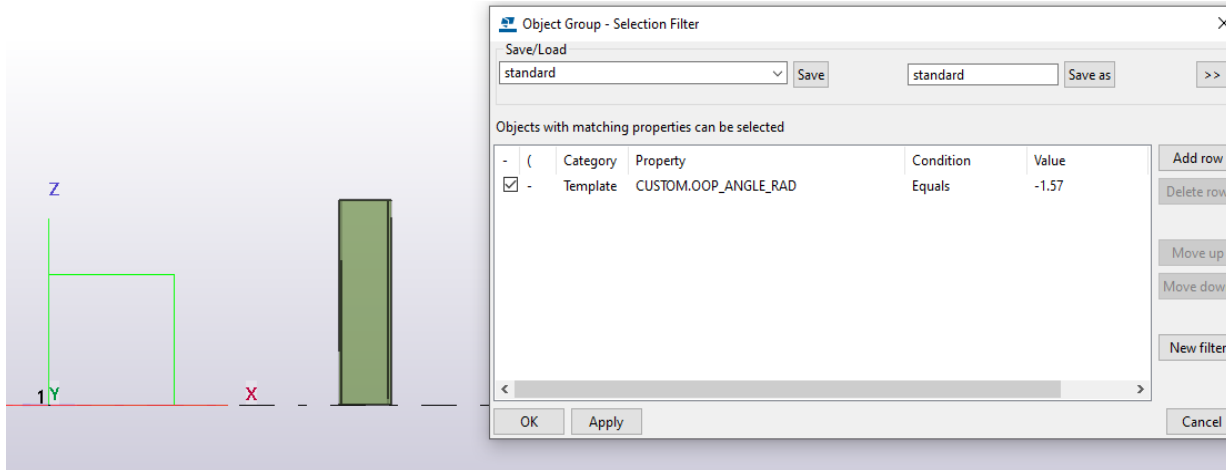
CUSTOM.OOP_ANGLE

- Gets the out-of-plane angle of the system line in degrees.



CUSTOM.OOP_ANGLE_RAD

- Gets the out-of-plane angle of the system line in radians.

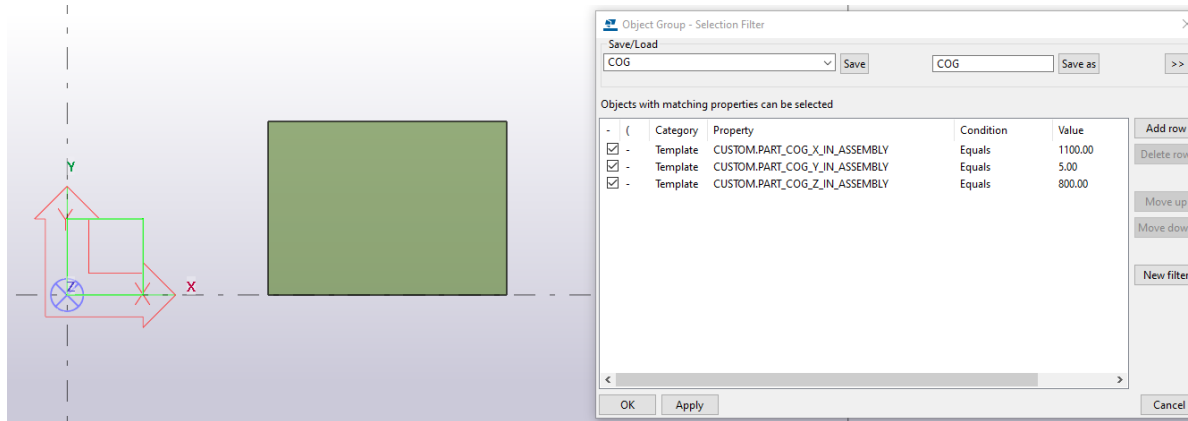


CUSTOM.PART_COG_X_IN_ASSEMBLY

CUSTOM.PART_COG_Y_IN_ASSEMBLY

CUSTOM.PART_COG_Z_IN_ASSEMBLY

- Gets coordinates of cog with respect to assembly coordinate system, used mainly with bricks in Wood wall (57).

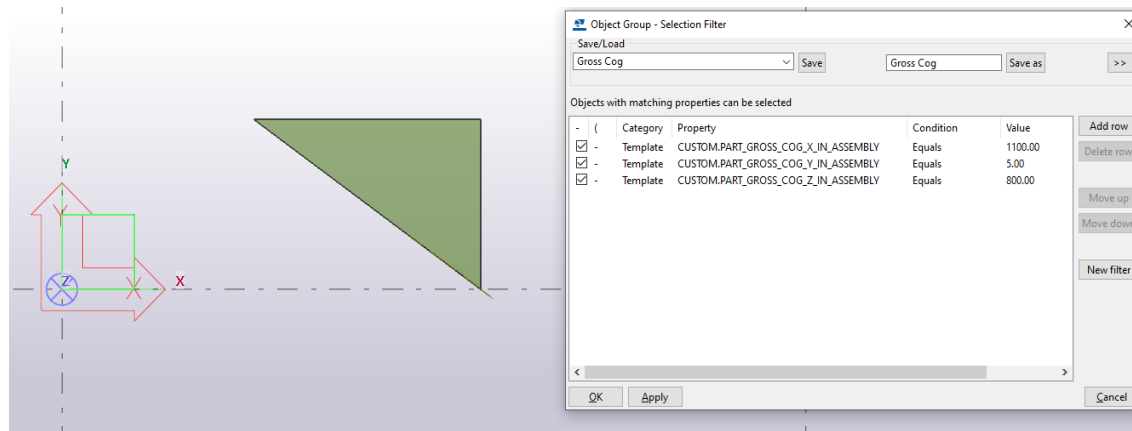


CUSTOM.PART_GROSS_COG_X_IN_ASSEMBLY

CUSTOM.PART_GROSS_COG_Y_IN_ASSEMBLY

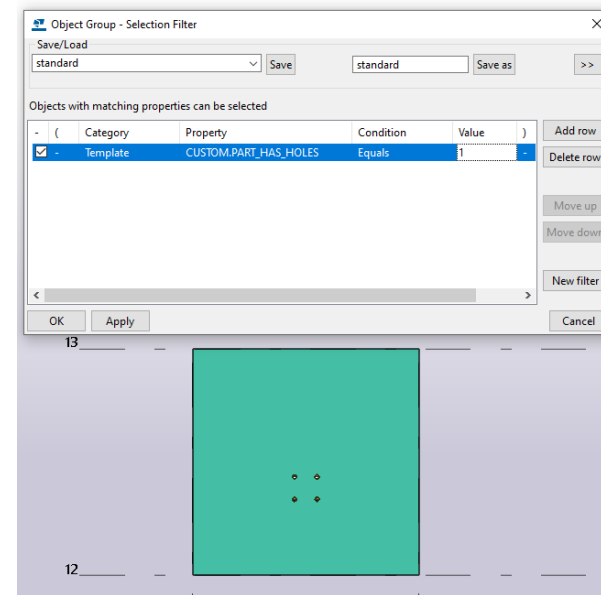
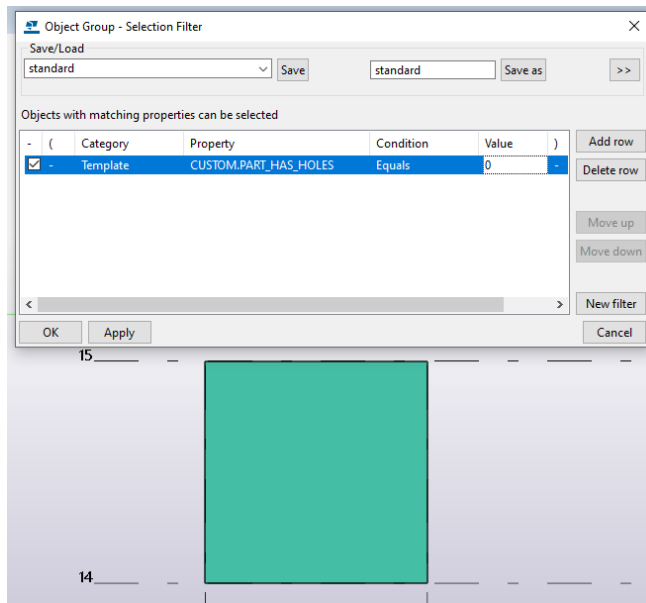
CUSTOM.PART_GROSS_COG_Z_IN_ASSEMBLY

- Gets coordinates of gross cog with respect to assembly coordinate system, used mainly with bricks in Wood wall (57).



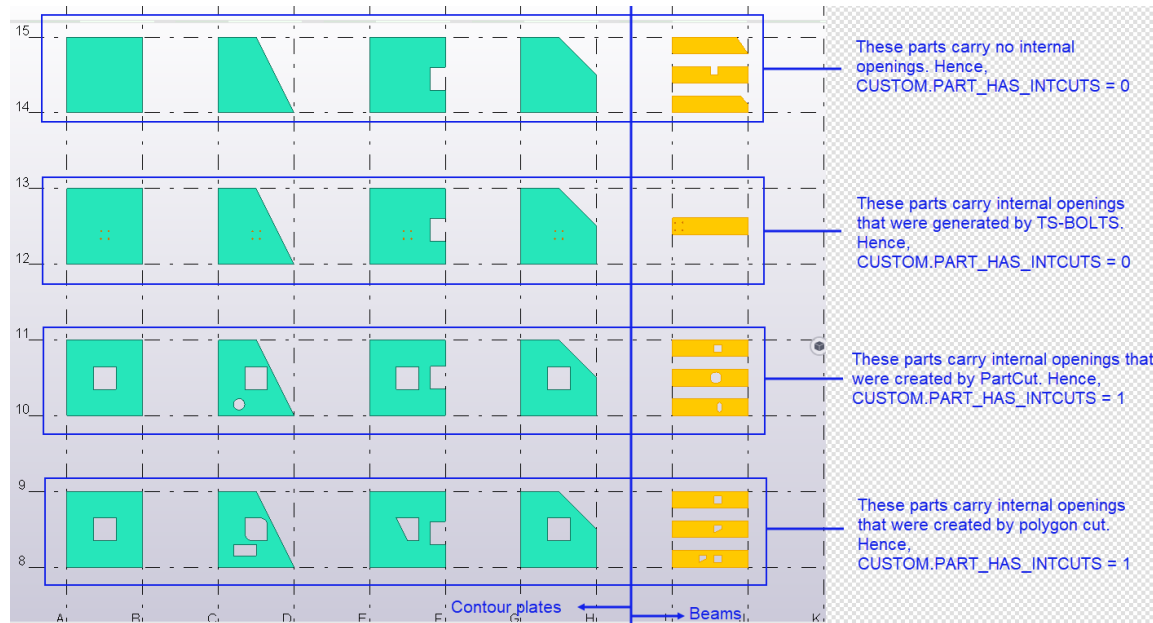
CUSTOM.PART_HAS_HOLES

- Determine whether a beam or contour plate carries drills or bolt holes.



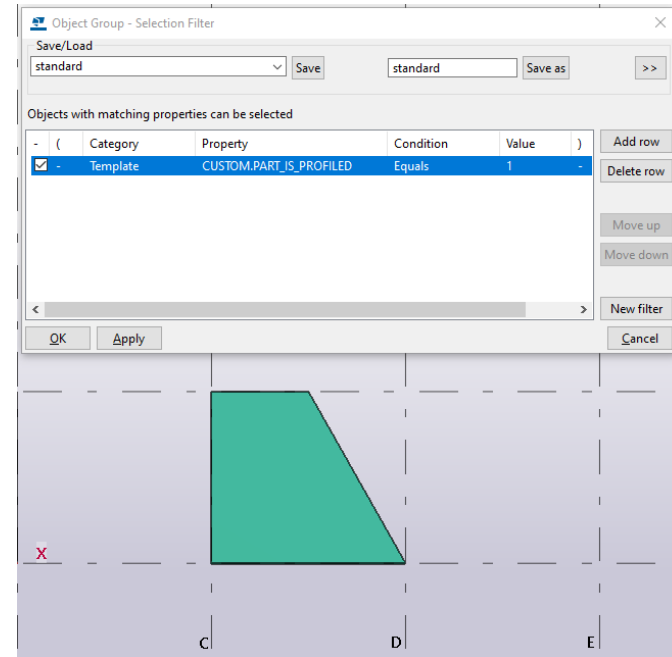
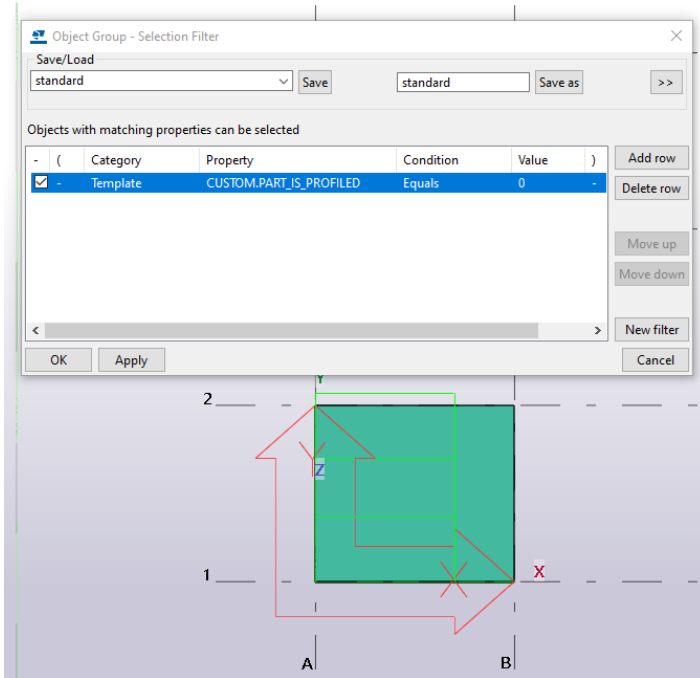
CUSTOM.PART_HAS_INTCUTS

- Determines whether a beam or contour plate carries any internal cut which was not created by the Bolts command.



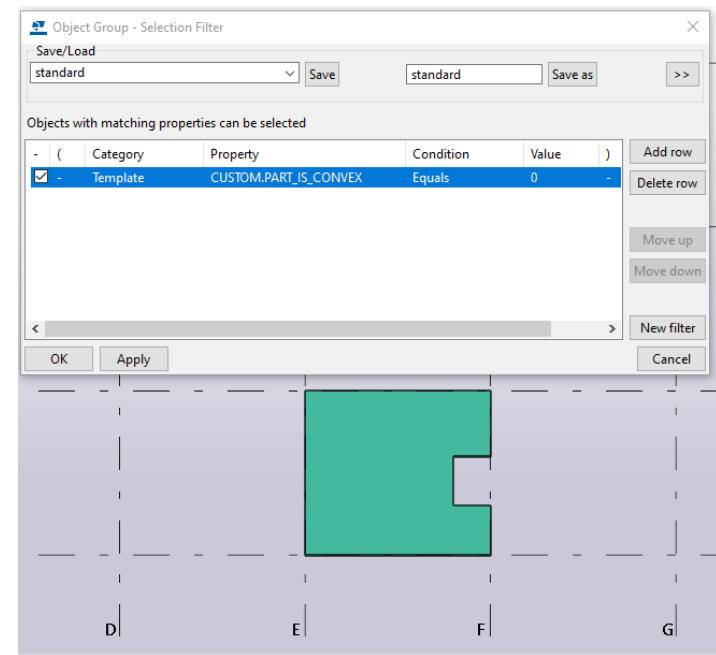
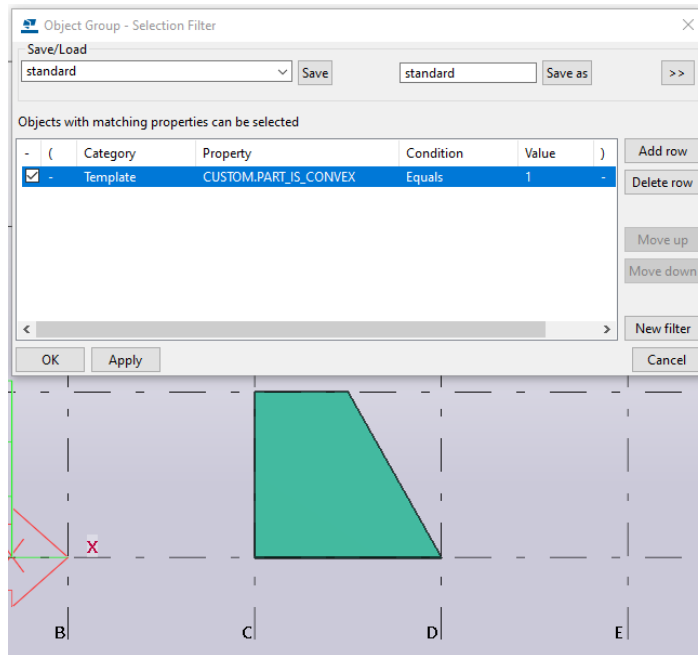
CUSTOM.PART_IS_PROFILED

- Determines whether a beam or contour plate is profiled.



CUSTOM.PART_IS_CONVEX

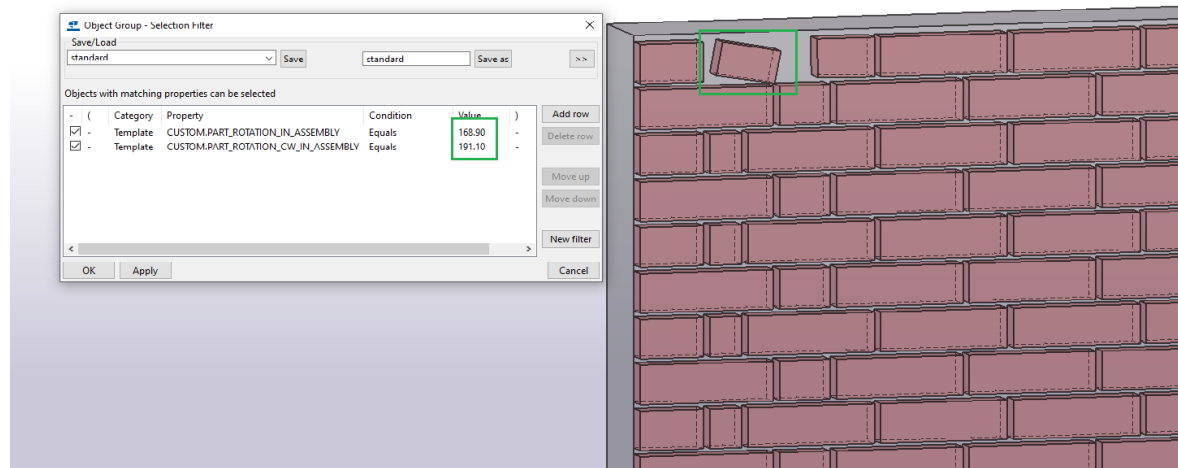
- Determine whether the final solid of a beam or contour plate is convex.



CUSTOM.PART_ROTATION_IN_ASSEMBLY

CUSTOM.PART_ROTATION_CW_IN_ASSEMBLY

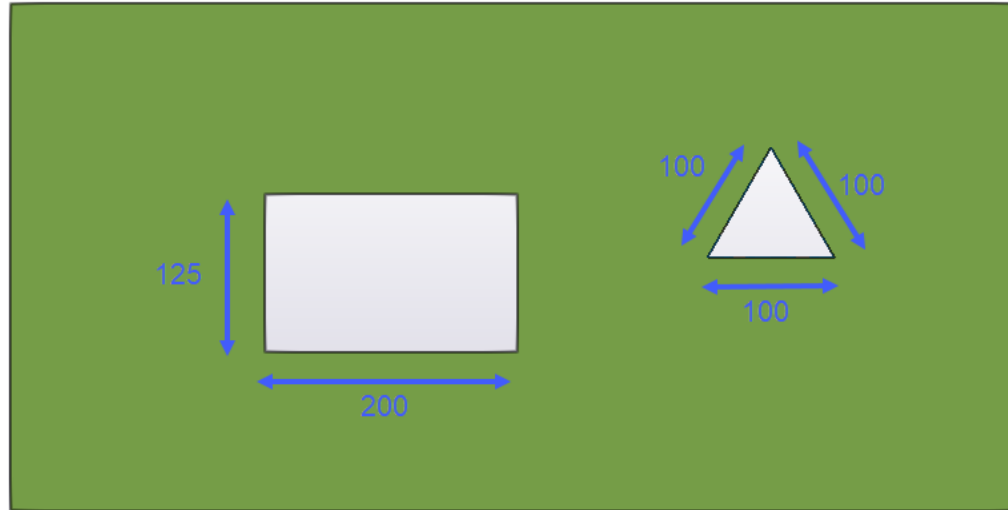
- Rotation of part with respect to assembly coordinate system.
- Clock-wise rotation of part with respect to assembly coordinate system.



Rest

CUSTOM.CS_INNER_PERIMETER

- Yields the sum of the perimeters of the inner contours on a contour plate.



-	(	Category	Property	Condition	Value
☒	-	Template	CUSTOM.CS_INNER_PERIMETER	Equals	950.00



CUSTOM.CS_LEVEL

- $\text{ASSEMBLY.BOTTOM_LEVEL_GLOBAL_UNFORMATTED} + \text{PROJECT.USERDEFINED.LEVEL_TAKEN_AT}) * 0,001$



CUSTOM.CS_NR_OF_PARTS_IN_ASM

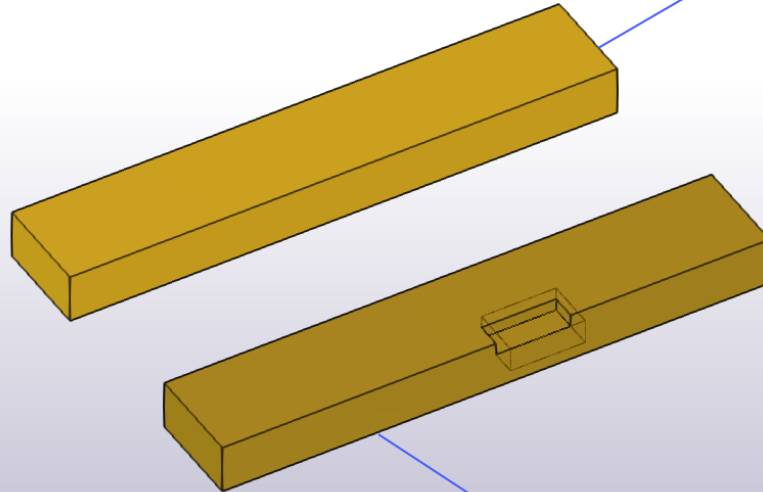
- A custom property that determines the number of parts in an assembly.



CUSTOM.PART_HAS_EDGE CUTS

- Indicates whether the selected part carries any negative volumes along its outer faces/edges.

-	(	Category	Property	Condition	Value
☒	-	Template	CUSTOM.PART_HAS_EDGE CUTS	Equals	0



-	(	Category	Property	Condition	Value
☒	-	Template	CUSTOM.PART_HAS_EDGE CUTS	Equals	1



CUSTOM.PART_IS_PROFILED

- Indicates whether or not the selected part is profiled.

