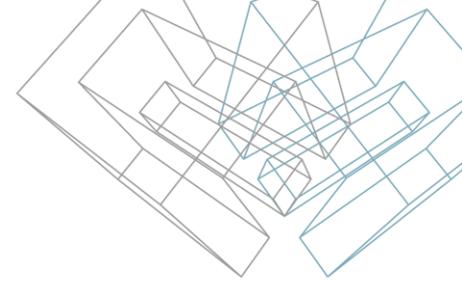


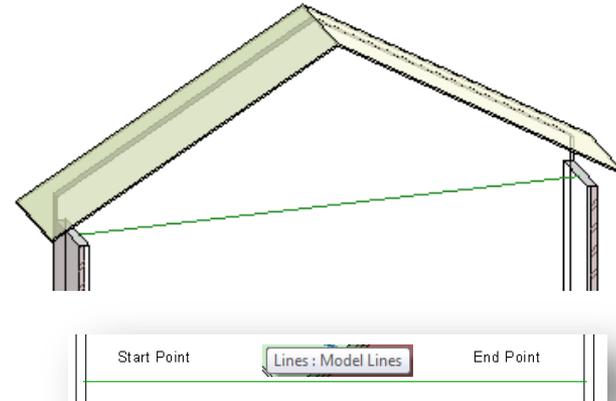
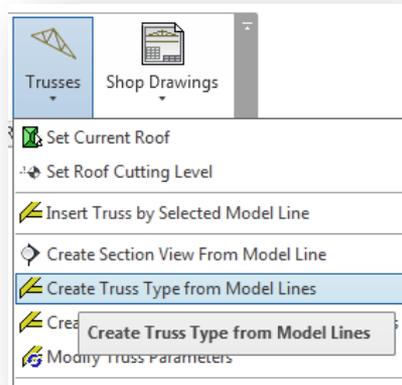
METAL FRAMING TRUSS+

Create Truss Type by Model Line

Create Truss Type by Model Line

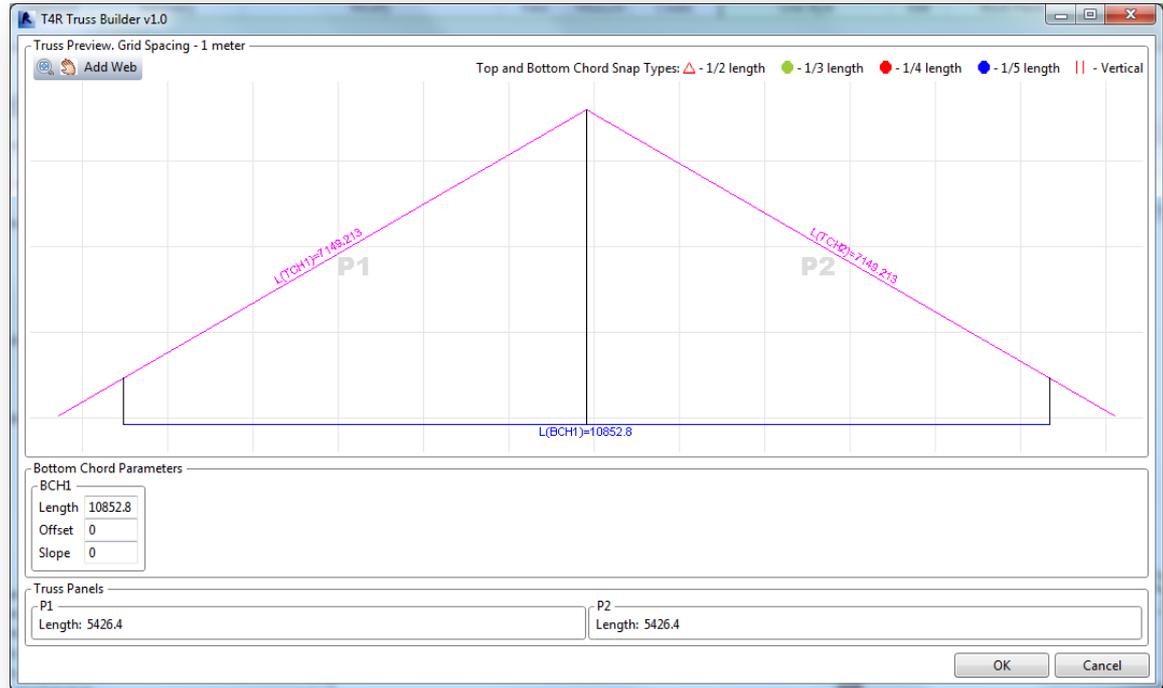


- Draw Model line in the plan from one wall core to another wall core (or from-to support elements) on correct level (level of wall's top).
- Start and end points of Model line will also be the start and end points of truss.
- Start and end points must be in correct positions - middle points (center line) of the heel webs.
- Select Model line and run the *Create Truss Type from Model Lines* function directly from “Truss+” menu.



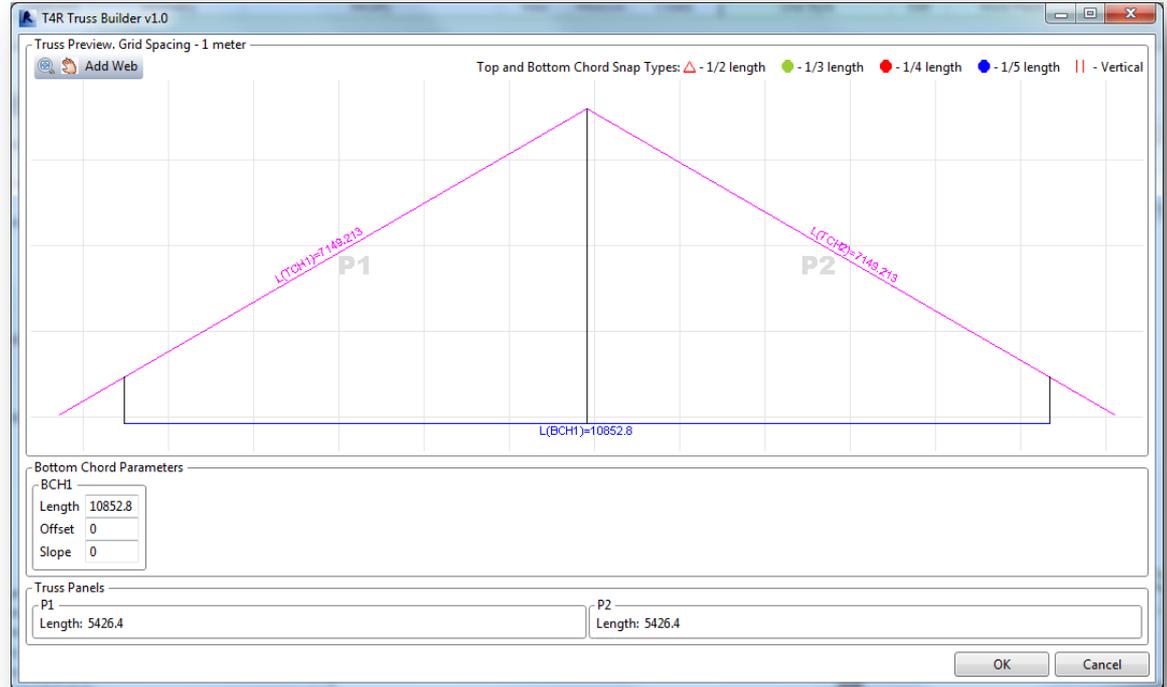
Create Truss Type by Model Line

- Pick the roof for the first time if software asks or use *Set Current Roof* function in the beginning.
- Software opens the graphic window of **T4R Truss Builder**.
- There are three graphic window commands: Zoom, Pan and Add Web.
- Colored symbols in the right top tile of the graphic window show all snap types which are visible and can be used when adding new webs.



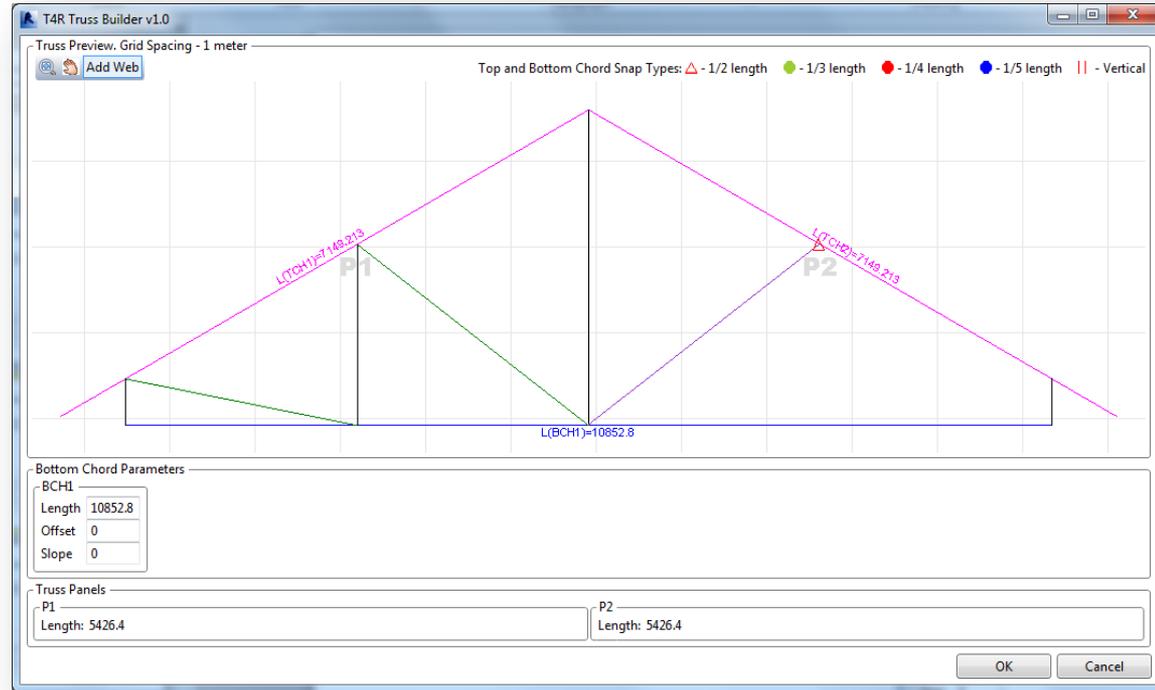
Create Truss Type by Model Line

- Main geometrical parameters of the new truss boundary are shown; in the bottom tile of window.
- Boundary of new truss is divided into the panels: P1,P2, Number of panels depend on the number of roof slopes (number of top chord slopes) and the number of bottom chord slopes.

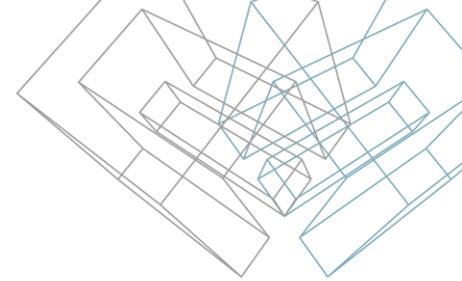


Create Truss Type by Model Line

- With the *Add Web* command user can draw vertical and diagonal webs.
- Start and end points of webs connect to the nearest snap points of top and bottom chords.
- To delete a web – select it and push the *Delete* button on your keyboard.
- When the profile of the truss is ready, push *OK* button on the graphic window.



Create Truss Type by Model Line



- New dialog window opens to define a new truss family name and its global parameters in the project: 'Truss Group', 'Framing Member Mark' and 'Truss Type Description'.
- Correct selection of Truss Group allows select this truss in different functions like *Generate Trusses by System Grid*.
- 'Family Name', 'Framing Member Mark' and 'Truss Type' description depends on the user's wish.

Save Truss Family

Truss Group
Group: Special multitype truss

Truss Family Name
Family Name: New truss
Full Family Name: M_Truss_Special Multitype Truss New truss

Framing Member
Framing Member: Special Multitype Truss
Framin Member Mark: SM
Framing Member Type: Truss
Truss Type Description: Description
Framing Member Description: Description Special Multitype Truss

OK Cancel

Save Truss Family

Truss Group
Group: Special multitype truss

Truss Family
Truss Family: Special multitype truss

Family
Family: Hip end truss

Full Family Name
Full Family Name: M_Truss_Special Multitype Truss New truss

Framing Member
Framing Member: Special Multitype Truss
Framin Member Mark: SM
Framing Member Type: Truss
Truss Type Description: Description
Framing Member Description: Description Special Multitype Truss

OK Cancel

Save Truss Family

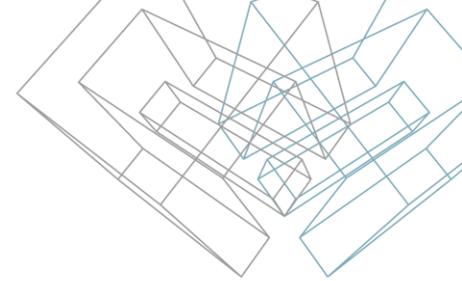
Truss Group
Group: Common truss

Truss Family Name
Family Name: My Howe
Full Family Name: M_Truss_Common Truss My Howe

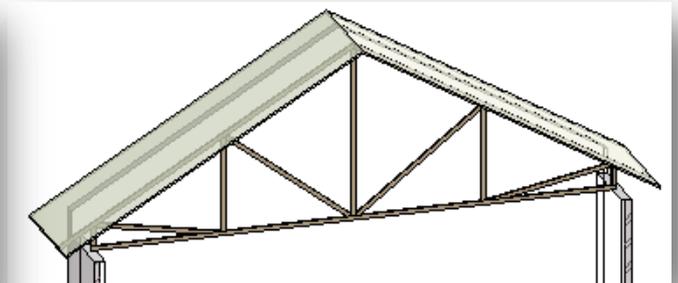
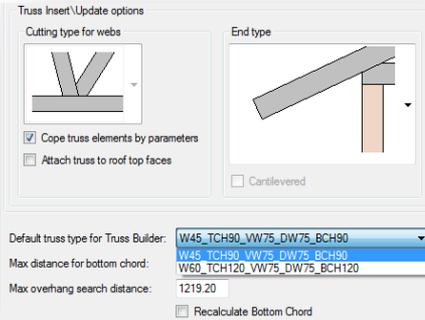
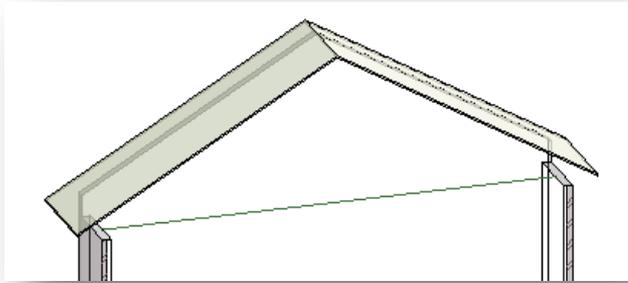
Framing Member
Framing Member: Common Truss
Framin Member Mark: C
Framing Member Type: Truss
Truss Type Description: Howe
Framing Member Description: Howe Common Truss

OK Cancel

Create Truss Type by Model Line



- New truss family is automatically inserted in place of Model line.
- Types of chords and webs used in new truss depend on *Truss Design Settings – Default truss type for Truss Builder*.
- Number of bottom chords depends on *Truss Design Settings – Max distance for bottom chord*. Bottom chord splits in the middle of truss or in location of the nearest ridge.
- This new truss family can be used in other roof framing functions like *Generate Trusses*, *Copy/Array/AutoArray Truss* and other.
- New truss family can be used if number of top chord slopes is equal to the number of roof slopes.



Create Truss Type by Model Line

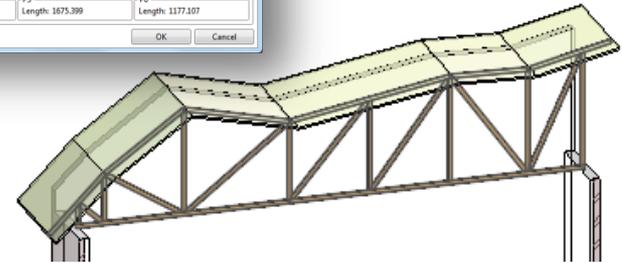
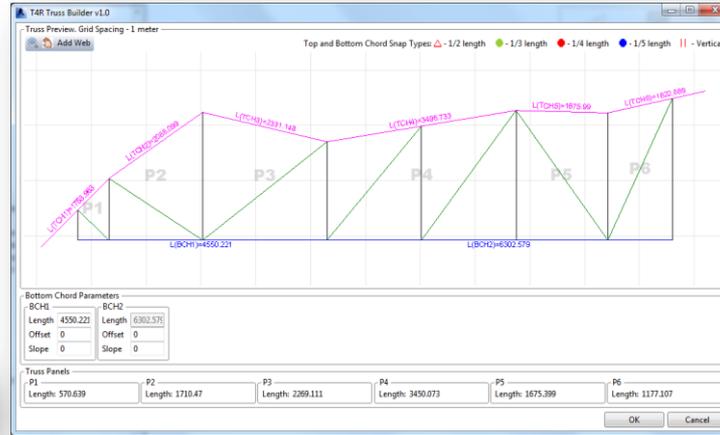
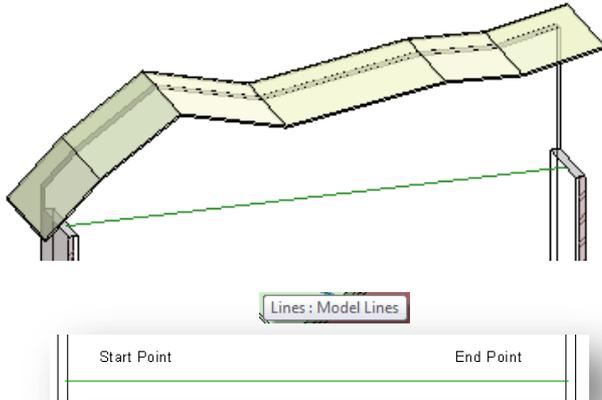
- It is possible to generate other profile of truss if Roof Cutting Level is set to corresponding level.

The image displays the workflow for creating a truss type in a BIM software environment. It features several key components:

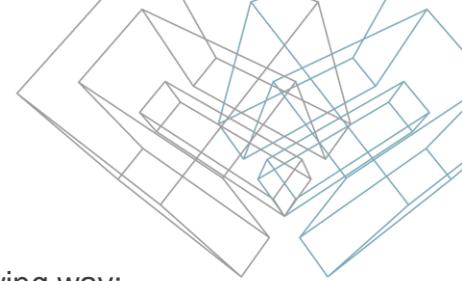
- SplitLevel Dialog:** A dialog box for setting the roof cutting level. It includes fields for "Roof Cutting Level" (set to "Level 3") and "Level Elevation" (set to "6000").
- Save Truss Family Dialog:** A dialog box for saving the truss family. It includes fields for "Truss Group" (Hip end truss), "Truss Family Name" (My Hip), "Full Family Name" (M_Truss_Hip Truss My Hip), "Framing Member" (Hip Truss), "Framing Member Mark" (H), "Framing Member Type" (Truss), "Truss Type Description" (Howel), and "Framing Member Description" (Howe Hip Truss).
- T4R Truss Builder v1.0:** A window showing a truss diagram with various parameters. The diagram includes labels for "Top and Bottom Chord Snap Types" (1/2 length, 1/3 length, 1/4 length, 1/5 length, Vertical) and "Bottom Chord Parameters" (BCH1, Length: 10852.8, Offset: 0, Slope: 0). It also shows "Truss Panels" (P1, P2, P3) with their respective lengths (3498.418, 3498.418, 4177.185).
- 3D Model:** A 3D perspective view of the roof truss structure, showing the truss members and the roof surface.
- Toolbar:** A toolbar at the bottom left showing "Start Point", "Lines: Model Lines", and "End Point" buttons.

Create Truss Type by Model Line

- **Truss Builder** works well in case of multi pitched roofs too.

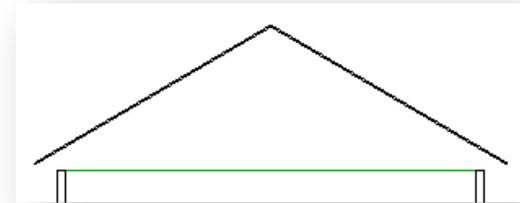
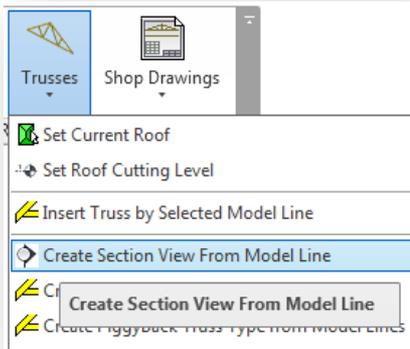
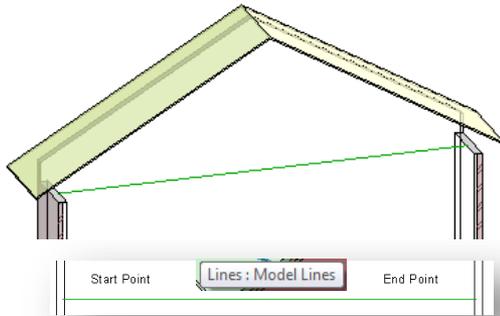


Create Truss Type by Model Line



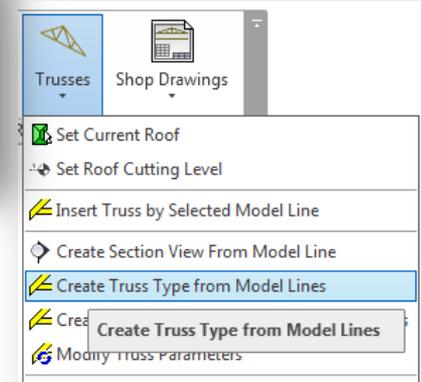
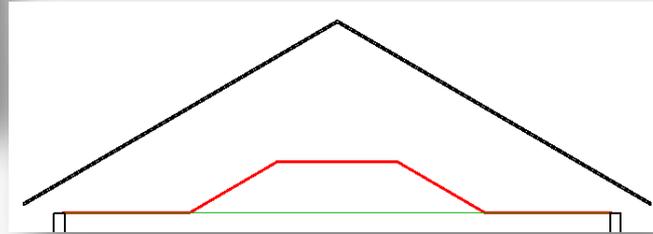
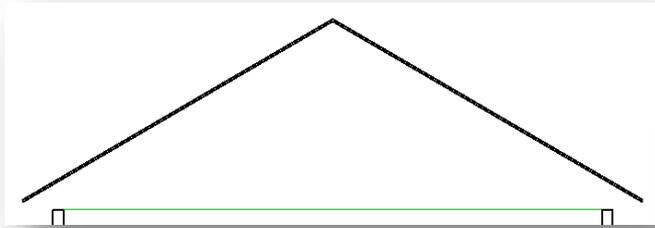
With the **Truss Builder** user can create a new truss with multi pitched bottom chord in the following way:

- Draw Model line in the plan from one wall core to another (or from-to support elements) on correct level (level of wall's top).
- Start and end points of Model line will be start and end points of the truss.
- Start and end points must be in correct positions: middle points (center line) of the heel webs.
- Select Model line and run *Create Section View by Model Line*.



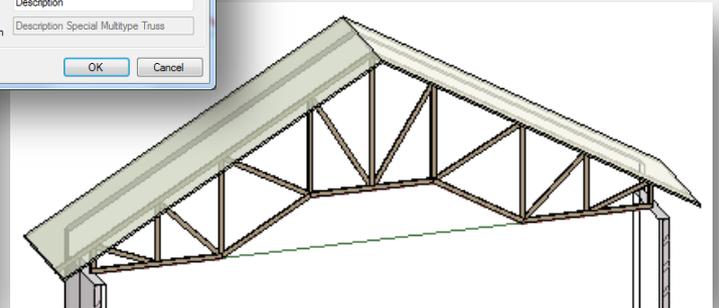
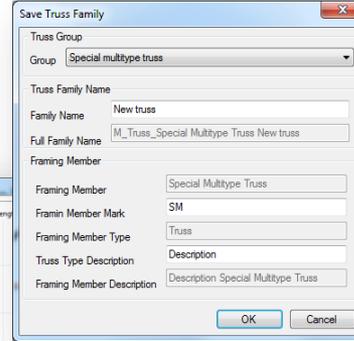
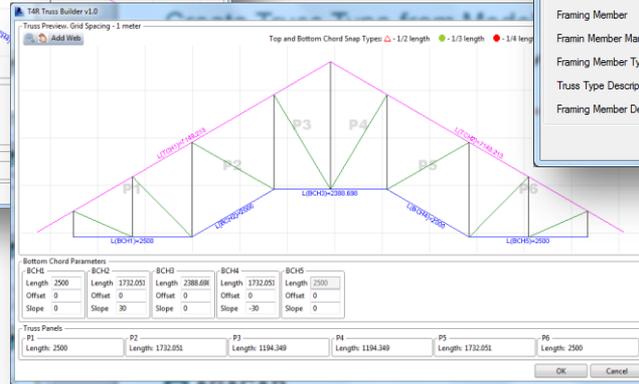
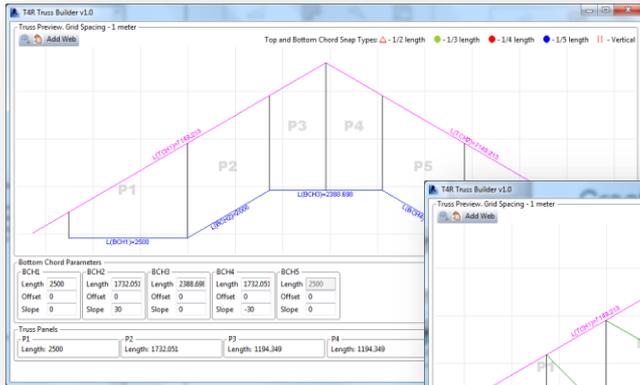
Create Truss Type by Model Line

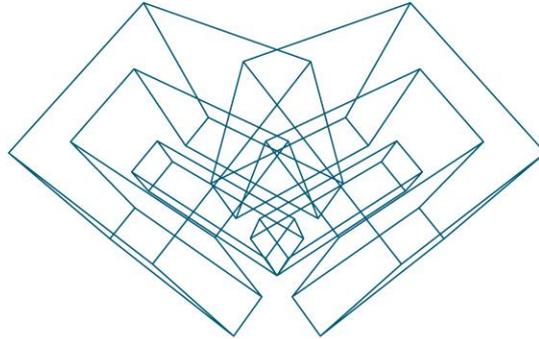
- Use Model line to correctly draw a profile of bottom chord in new created section view.
- Select new Model lines and run the *Create Truss by Model Line* function from “Truss+” menu.



Create Truss Type by Model Line

- Draw webs in the graphical window of **Truss Builder**.
- Select Group, write new truss family name and fill values of other parameters.
- New truss will be created in the place of Model line. Section view will be automatically deleted.





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