



Truss+ 2010

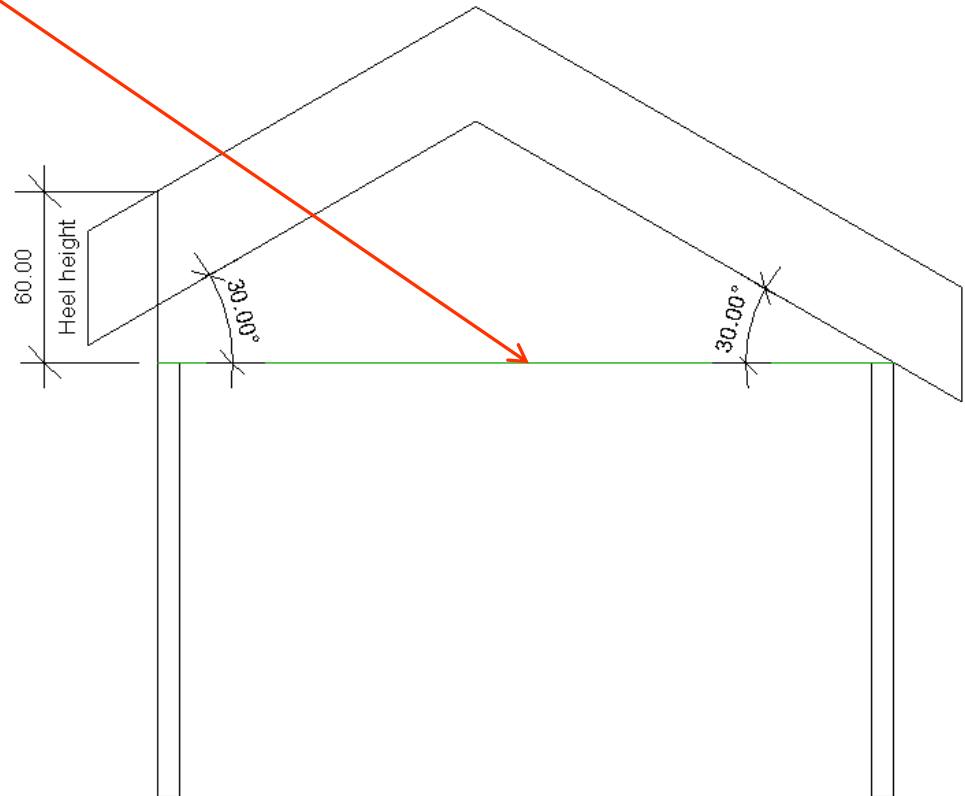
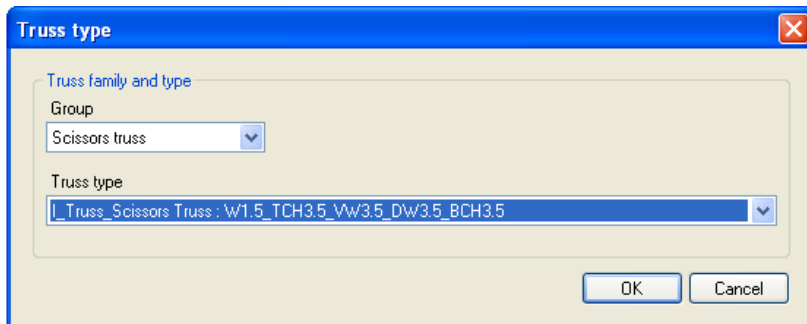
Insert Truss by Selected Model Line

Scissors Truss



Insert Truss by Selected Model Line

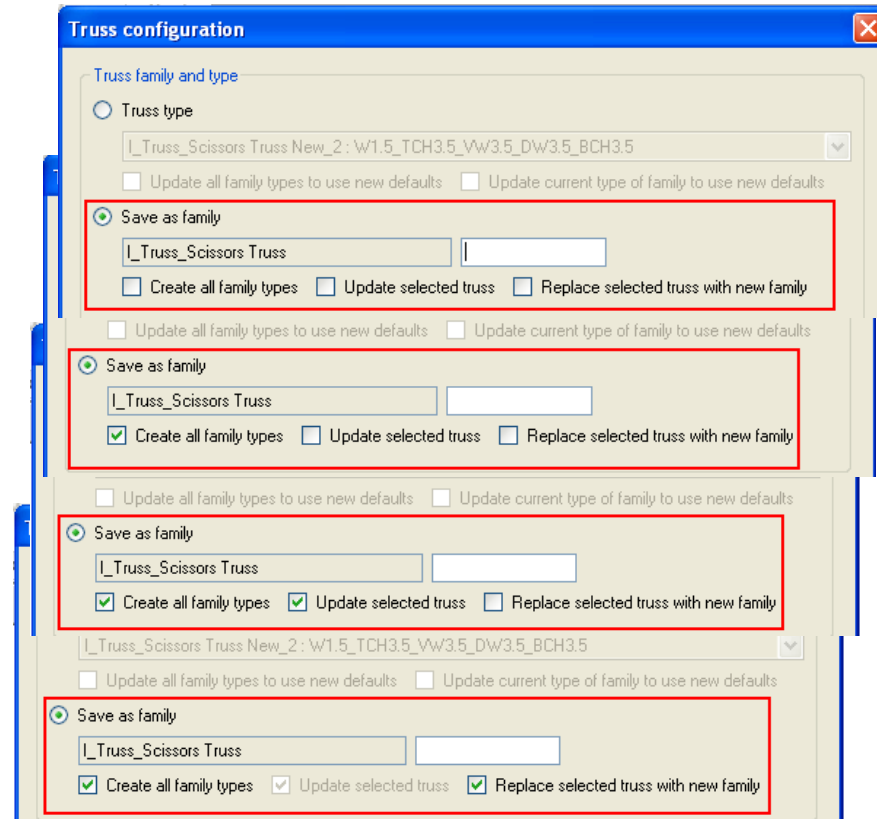
- Select Model Line
- Choose the *Insert Truss by Selected Model line* function from “Truss+” menu.
- Pick *Scissors truss* in the “Group” dialog and select Truss type you want.



NOTE: Start point of Model line will be the start point of Truss and End point of Model line - the end point of Truss.

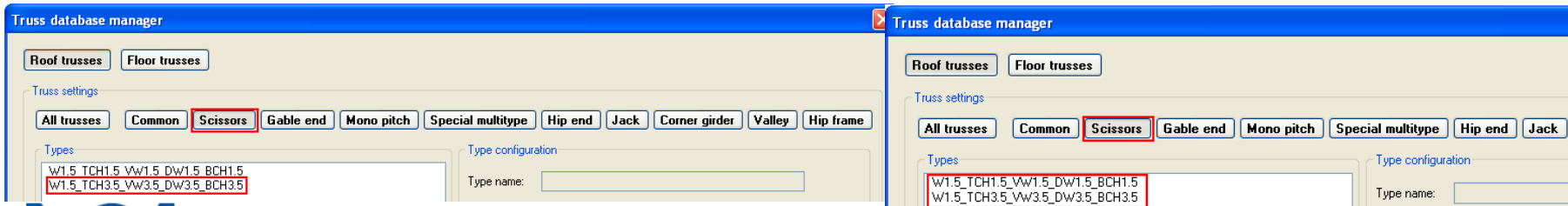
Insert Truss by Selected Model Line

- Create a new family additionally (one type, as selected one) without updating selected one.
- Create **all Scissors truss new family types** (all Truss types created by Database manager) without updating selected one.
- Create new **Scissors truss family types** and update instance parameters of **selected truss**.
- Create new **Scissors truss family types** and replace **selected truss** with a new family.



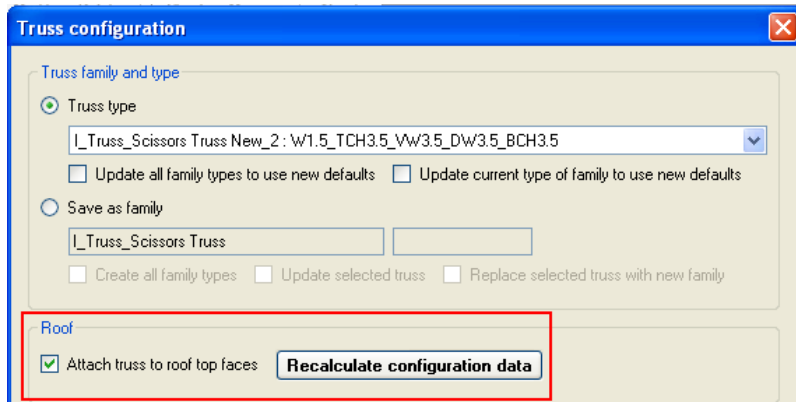
Current type of family

All family types

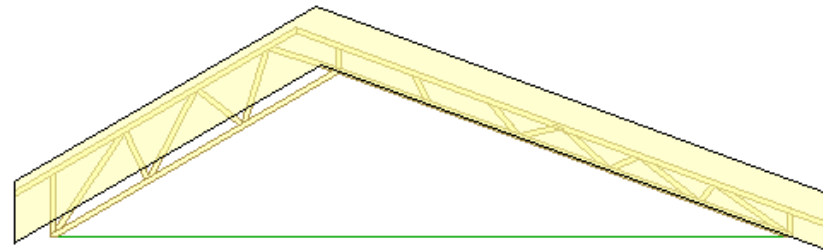


Insert Truss by Selected Model Line

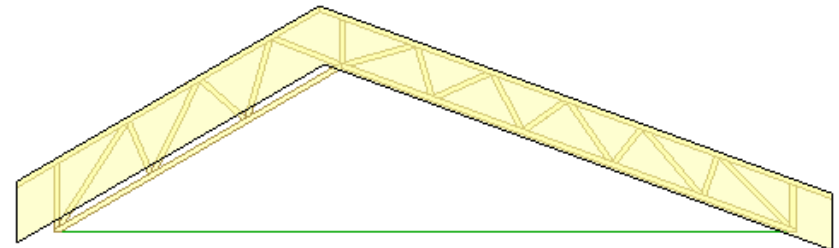
- *Recalculate configuration data* function enables you to recalculate truss configuration relative to the roof geometry. Truss can be attached to the roof top faces or not.



Before



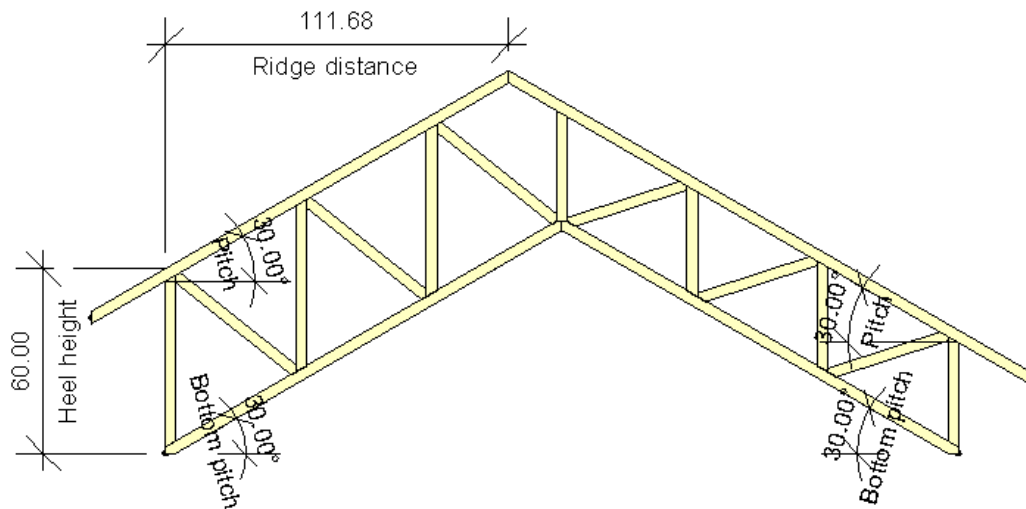
After



Insert Truss by Selected Model Line

In Truss configuration dialog the user should define:

- *Pitch*
- *Bottom pitch*
- *Web profile*
- *Ridge distance*. User can *Pick line* (Model line), showing the distance or switch On the *Ridge distance* check box and add this value manually. In case Ridge distance is not defined, the ridge will be at the center of the span.
- *Heel height*



Truss configuration

Truss family and type

Truss type
L_Truss_Scissors Truss New_2 : w1.5_TCH3.5_VW3.5_DW3.5_BCH3.5

Update all family types to use new defaults Update current type of family to use new defaults

Save as family
L_Truss_Scissors Truss

Create all family types Update selected truss Replace selected truss with new family

Roof

Attach truss to roof top faces **Recalculate configuration data**

Truss configuration

	Start/Left	End/Right
Pitch	30.000	30.000
Bottom pitch	30.000	30.000
Calculated bottom pitch	30.000	30.000
Web profile	Howe	Howe
<input checked="" type="checkbox"/> Ridge distance	111.680	Pick line...
Cut and cut angle	<input type="checkbox"/> 0.000	<input type="checkbox"/> 0.000
<input type="checkbox"/> Set overhang	24.000	24.000
	<input type="checkbox"/> Overhang framing	<input type="checkbox"/> Overhang framing

Truss configuration

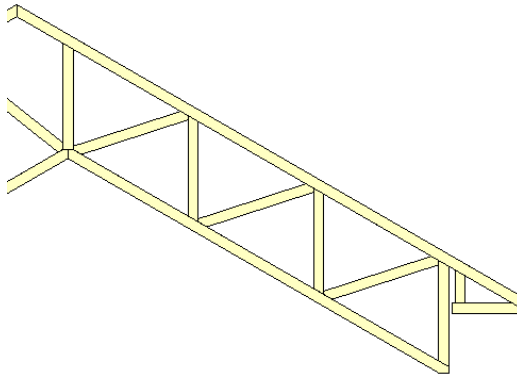
Default overhang 24.000 **Overhang framing settings...**

Cantilevered **Cantilever settings...**

Support type Bottom chord End web

Heel height/Truss height 60.000 True heel height 60.000

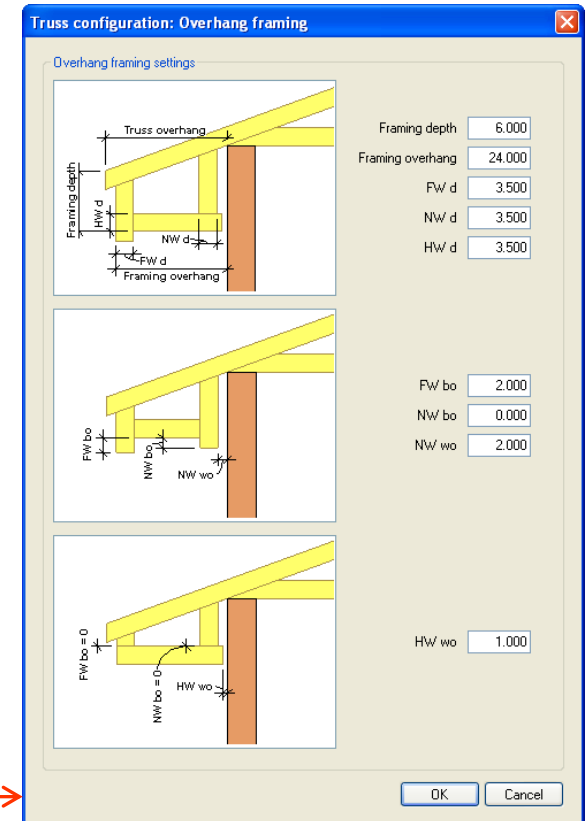
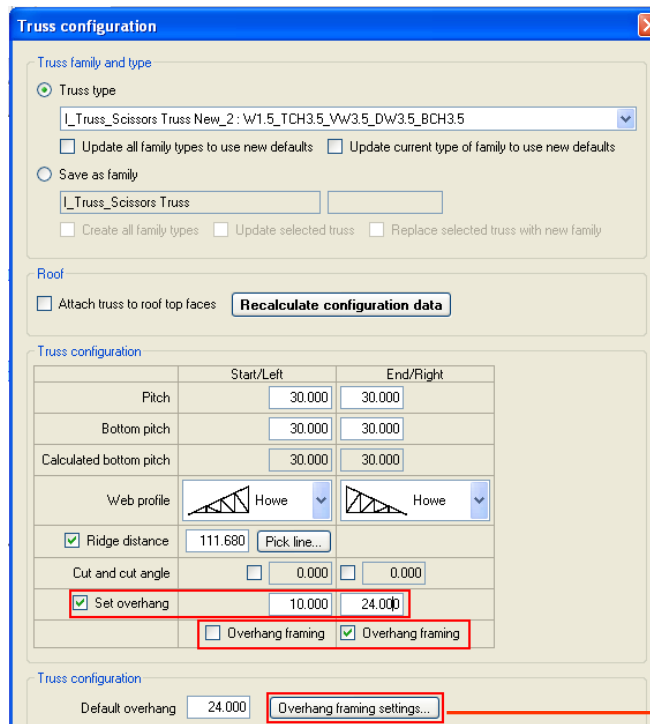
Insert Truss by Selected Model Line



- Switch On the option *Overhang framing* if it's needed.

- Define *Overhang framing settings*.

User can define different values of overhang on Start and End points of the truss.



Insert Truss by Selected Model Line

Truss configuration

Truss family and type

Truss type

I_Truss_Scissors Truss New_2: W1.5_TCH3.5_VW3.5_DW3.5_BCH3.5

Update all family types to use new defaults Update current type of family to use new defaults

Save as family

I_Truss_Scissors Truss

Create all family types Update selected truss Replace selected truss with new family

Roof

Attach truss to roof top faces **Recalculate configuration data**

Truss configuration

	Start/Left	End/Right
Pitch	30.000	30.000
Bottom pitch	30.000	30.000
Calculated bottom pitch	30.000	30.000
Web profile	Howe	Howe
<input checked="" type="checkbox"/> Ridge distance	111.680	<input type="button" value="Pick line..."/>
<input checked="" type="checkbox"/> Cut and cut angle	<input type="checkbox"/> 0.000	<input checked="" type="checkbox"/> 45.000
<input checked="" type="checkbox"/> Set overhang	10.000	0.000
<input type="checkbox"/> Overhang framing	<input type="checkbox"/> Overhang framing	<input type="checkbox"/> Overhang framing

Truss configuration

Default overhang 24.000

Cantilevered

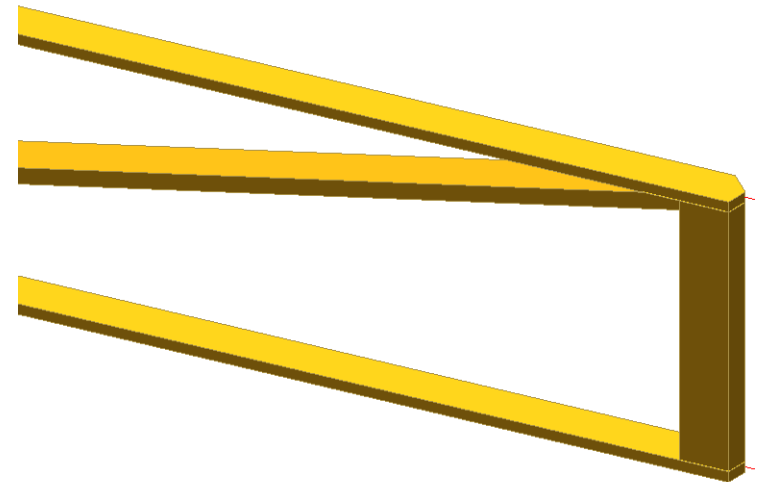
Support type Bottom chord End web

Heel height/Truss height 60.000 True heel height 60.000

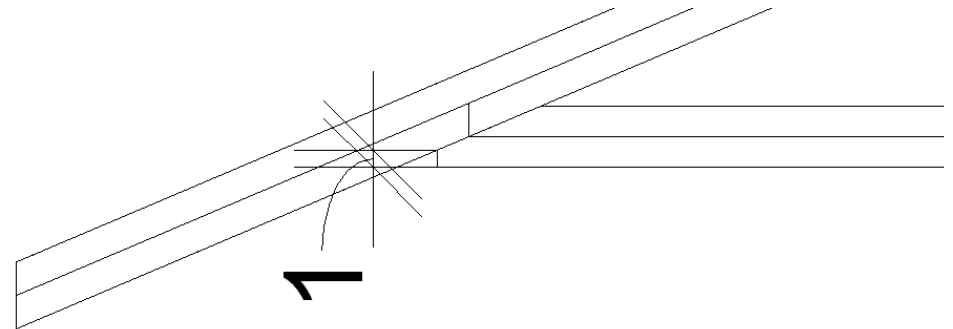
Truss length 258.000 **Butt cut 1**

If it's needed:

- Define *Cut and cut angle*

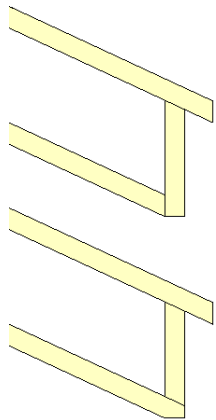


- Define the *Butt cut* value



Insert Truss by Selected Model Line

- Define *Support type*. It can be *End web* or *Bottom chord*.
- *Spacing*, *Set station/Setback* and *Number* options are described in the other chapters (“Insert Truss by Selected Model Line/ Hip end truss”).



Support type – End web

Support type – Bottom chord

NOTE: All described options are the same for Scissors Mono trusses. The only difference is that all parameters should be defined only for one side of the truss.

Truss configuration

Truss family and type

Truss type: I_Truss_Scissors Truss New_2 : W1.5_TCH3.5_VW3.5_DW3.5_BCH3.5

Update all family types to use new defaults: Update current type of family to use new defaults:

Save as family: I_Truss_Scissors Truss

Create all family types: Update selected truss: Replace selected truss with new family:

Roof

Attach truss to roof top faces: **Recalculate configuration data**

Truss configuration

	Start/Left	End/Right
Pitch	30.000	30.000
Bottom pitch	30.000	30.000
Calculated bottom pitch	30.000	30.000
Web profile	Howe	Howe
Ridge distance	111.680	Pick line...
Cut and cut angle	<input type="checkbox"/> 0.000	<input type="checkbox"/> 0.000
Set overhang	<input checked="" type="checkbox"/> 24.000	<input type="checkbox"/> 0.000
	<input type="checkbox"/> Overhang framing	<input type="checkbox"/> Overhang framing

Truss configuration

Default overhang: 24.000 **Overhang framing settings...**

Cantilevered: **Cantilever settings...**

Support type: Bottom chord **End web**

Heel height/Truss height: 60.000 True heel height: 60.000

Truss length: 258.000 Butt cut: 0.000

Spacing: 24.000 Number: 1

Set station / Setback: 100.000

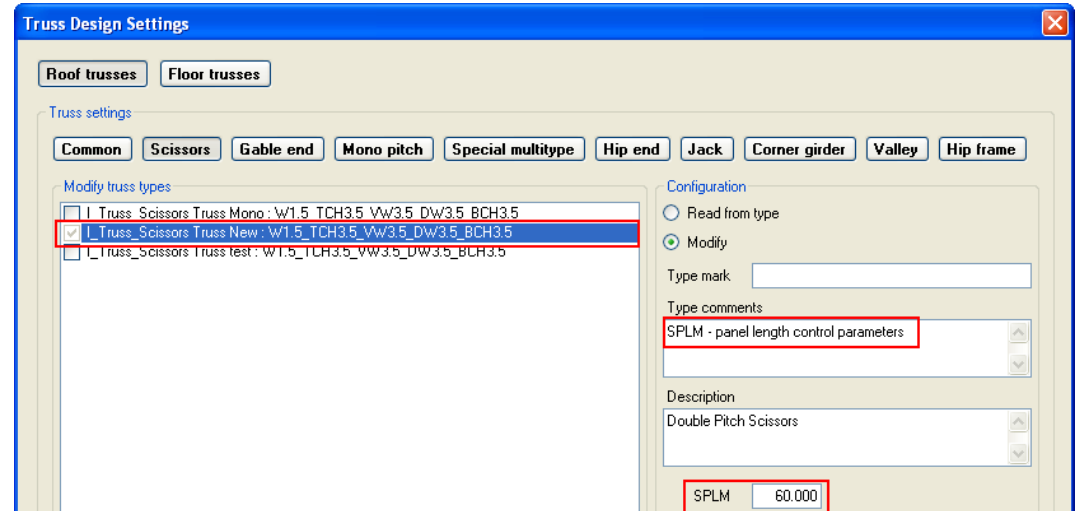
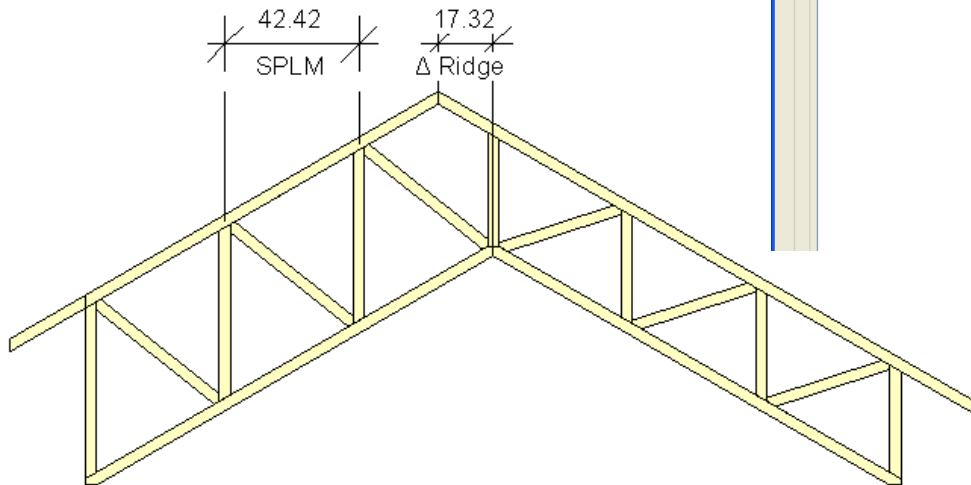
Girder

OK Cancel

Insert Truss by Selected Model Line

There are two things you have to know when you are inserting Scissor trusses:

1. Difference between *Start/Left Pitch* and *Start/Left Bottom Pitch* should be equal to the difference between *End/Right Pitch* and *End/Right Bottom Pitch*.
2. A distance between Top and Bottom Ridges (Δ Ridge) should be not bigger then panel length control parameter SPLM. If this condition is not satisfied, both ridges will be at the center of the span.



Increase your productivity !



AGA CAD Ltd.
Zalgirio 112A, LT-09300 Vilnius,
Lithuania
Tel. +370 5 2398111
Fax +370 5 2398113
Email info@aga-cad.lt
info@tools4revit.com
www.tools4revit.com