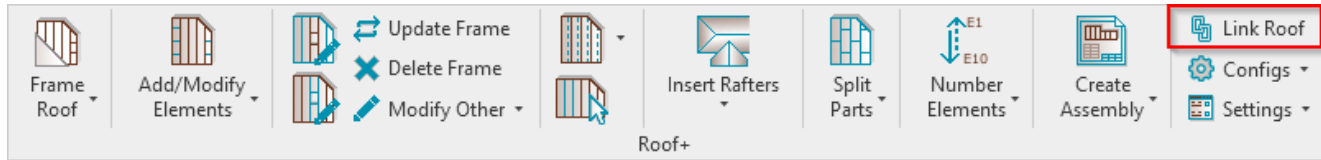


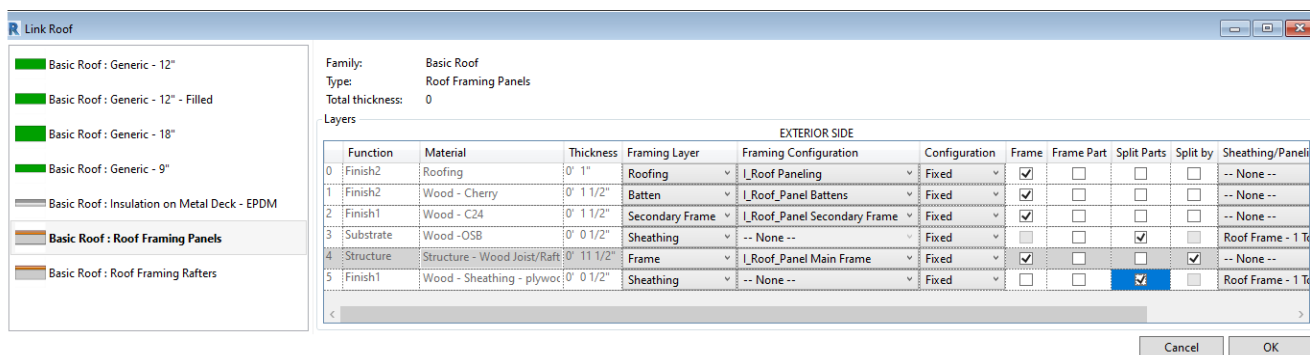
# LINK ROOF

Modified on: Sat, 9 Jan, 2021 at 7:35 PM

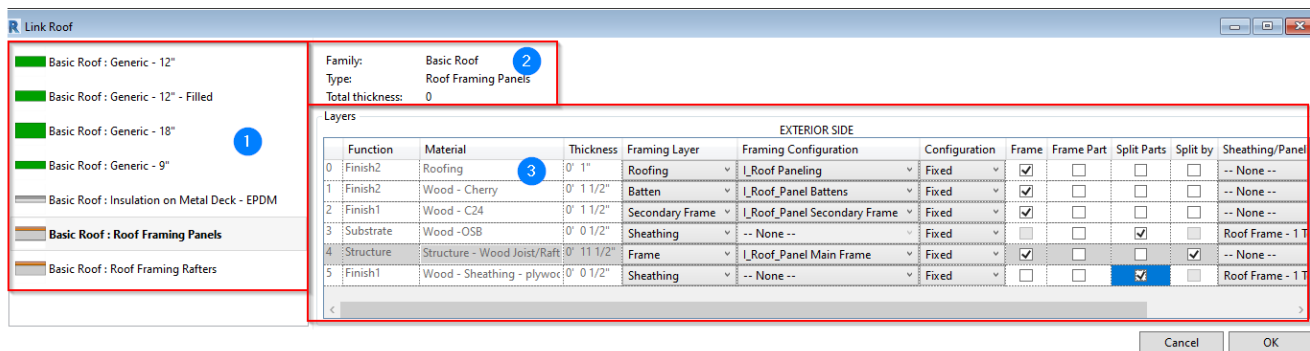
## Link Roof



**Link Roof** – makes a link between roof type from the project and the configuration. Choose the roof type you want to link and apply framing configuration to the layers.



### Dialog:



In the above dialog, you can see:

1. All roof types from the current project. If you select a roof from the project, it will automatically be selected in this dialog so that you can quickly apply settings.
2. Information of selected type.
3. Information of selected roof layers where you can apply settings.

Information from selected roof type:

*Note: Material is mandatory for assigning framing configuration!*

Family: Basic Roof  
 Type: Roof Framing Panels  
 Total thickness: 0

Layers

EXTERIOR SIDE							
	Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame
0	Finish2	Roofing	0' 1"	Roofing	I_Roof Paneling	Fixed	<input checked="" type="checkbox"/>
1	Finish2	Wood - Cherry	0' 1 1/2"	Batten	I_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>
2	Finish1	Wood - C24	0' 1 1/2"	Secondary Frame	I_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>
3	Substrate	Wood -OSB	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	0' 11 1/2"	Frame	I_Roof_Panel Main Frame	Fixed	<input checked="" type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>

### Framing Layer

Family: Basic Roof  
 Type: Roof Framing Panels  
 Total thickness: 0

Layers

EXTERIOR SIDE							
	Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame
0	Finish2	Roofing	0' 1"	Roofing	I_Roof Paneling	Fixed	<input checked="" type="checkbox"/>
1	Finish2	Wood - Cherry	0' 1 1/2"	Batten	I_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>
2	Finish1	Wood - C24	0' 1 1/2"	Secondary Frame	I_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>
3	Substrate	Wood -OSB	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	0' 11 1/2"	Frame	I_Roof_Panel Main Frame	Fixed	<input checked="" type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>

Select which framing layer has to be created.

Possible options: **Frame**, **Secondary Frame**, **Roofing**, **Battens**, **Paneling**, and two **Sheathing** layers.

### Framing Configuration

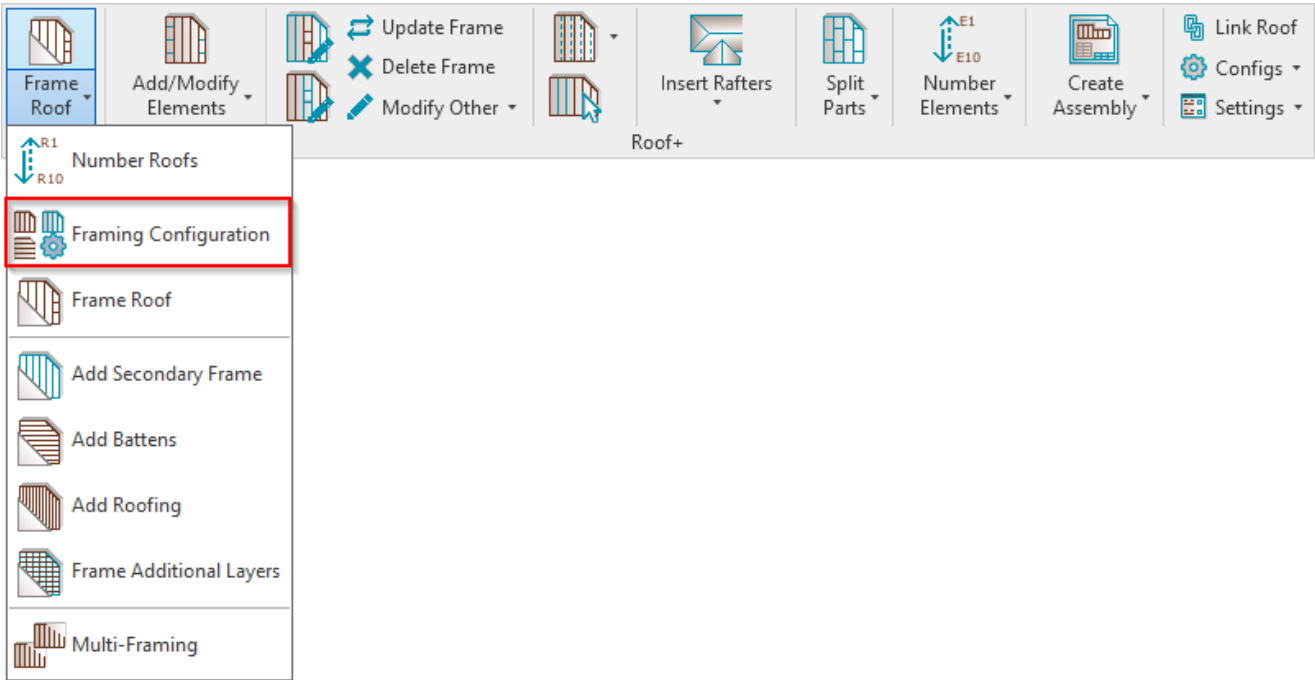
Family: Basic Roof  
 Type: Roof Framing Panels  
 Total thickness: 0

Layers

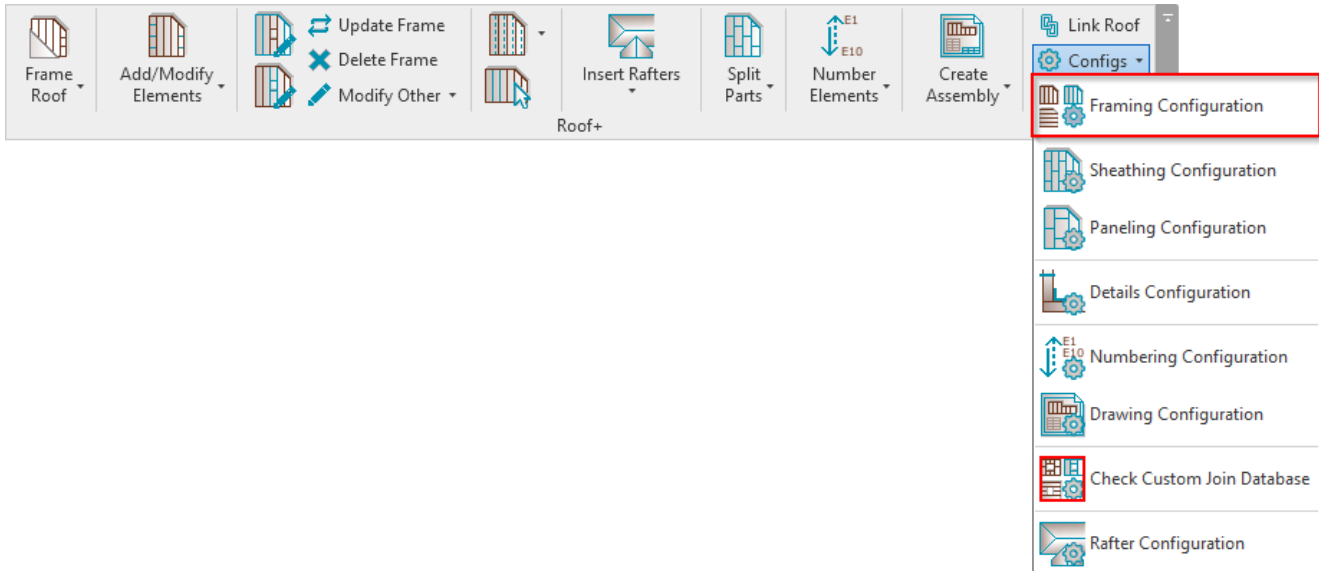
EXTERIOR SIDE							
	Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame
0	Finish2	Roofing	0' 1"	Roofing	I_Roof Paneling	Fixed	<input checked="" type="checkbox"/>
1	Finish2	Wood - Cherry	0' 1 1/2"	Batten	I_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>
2	Finish1	Wood - C24	0' 1 1/2"	Secondary Frame	I_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>
3	Substrate	Wood -OSB	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	0' 11 1/2"	Frame	I_Roof_Panel Main Frame	Fixed	<input checked="" type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>

**Framing Configuration** – select framing configuration with the definition of all framing parameters. There are default configurations that come with **Roof+**, but you can also create your own.

The list of framing configurations comes from the **Framing Configuration** dialog:



OR:



The list of configurations:

Roof+. Default Framing Parameters

Material Class: Wood

Configuration Type: Frame

Configuration Name: M\_Roof\_Panel Frame

Save Save As... Rename Delete

Common Settings

Roof Common Joists

Opening Framing

End Connection

Edge Joist

Elements Mark Definitions

Modify Settings

Configuration Visibility

Configuration Settings

Modify Configuration Settings

Use for all Vertical Framing Elements (except Openings)

Main Type of Joists M\_RWF Common Joist LMBR 48x300

Width (b) 4.8

Depth (h,d) 30

Use for all Horizontal Framing Elements (except Openings)

Main Type of Rim Joists M\_RWF Rim-Bridging Joist LMBR 24x300

Width (b) 2.4

Depth (h,d) 30

Define Depth (h,d) by Layer Thickness

Roof Frame Panels

Save Close

## Fixed or Variable Configuration

Family: Basic Roof

Type: Roof Framing Panels

Total thickness: 0

Layers

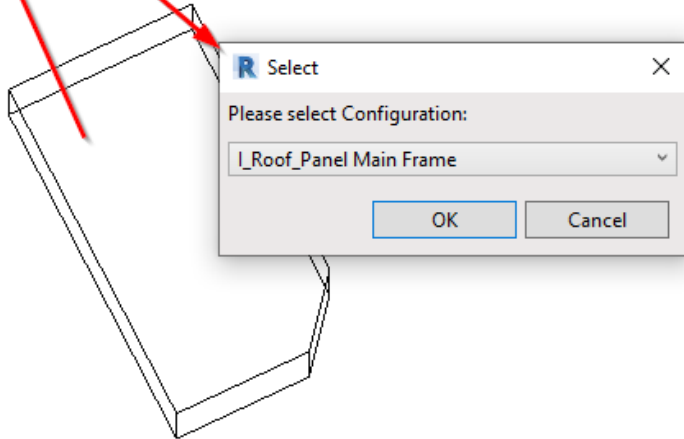
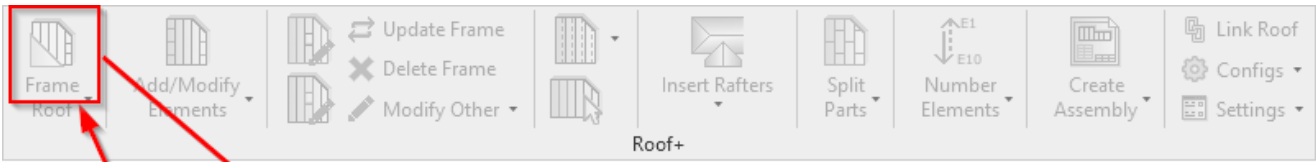
EXTERIOR SIDE

	Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame
0	Finish2	Roofing	0' 1"	Roofing	L_Roof_Paneling	Fixed	<input checked="" type="checkbox"/>
1	Finish2	Wood - Chery	0' 1 1/2"	Batten	L_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>
2	Finish1	Wood - C24	0' 1 1/2"	Secondary Frame	L_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>
3	Substrate	Wood -OSB	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	0' 1 1/2"	Frame	L_Roof_Panel Main Frame	Fixed	<input checked="" type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>

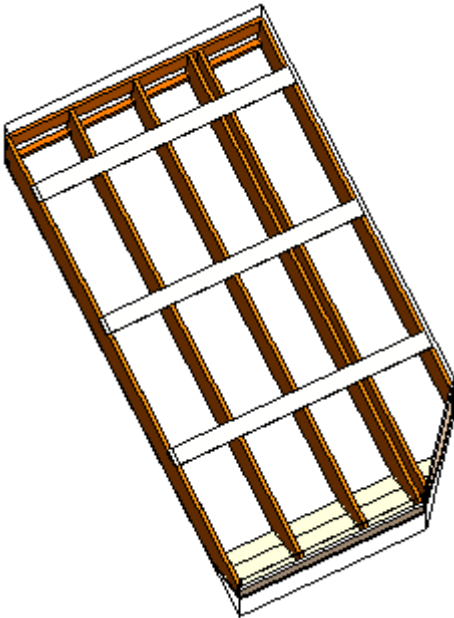
The selected configuration may be FIXED during the framing process or VARIABLE and selected during framing process.

- **Fixed** – after **Frame Roof** command (or when adding additional layers), the software will use the configuration that is set in the **Framing Configuration** column.
- **Variable** – after **Frame Roof** command (or when adding additional layers), the software will ask you which configuration you'd like to use:

*If configuration is variable, then you can select any framing configuration from the list during the framing process:*



Result:



### Frame

Family: Basic Roof  
 Type: Roof Framing Panels  
 Total thickness: 0

Layers

EXTERIOR SIDE							
	Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame
0	Finish2	Roofing	0' 1"	Roofing	L_Roof_Paneling	Fixed	<input checked="" type="checkbox"/>
1	Finish2	Wood - Cherry	0' 1 1/2"	Batten	L_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>
2	Finish1	Wood - C24	0' 1 1/2"	Secondary Frame	L_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>
3	Substrate	Wood - OSB	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	0' 11 1/2"	Frame	L_Roof_Panel Main Frame	Fixed	<input checked="" type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	0' 0 1/2"	Sheathing	-- None --	Fixed	<input type="checkbox"/>

**Frame** – choose whether layers should be framed during the framing process or later. This is very useful if there are many layers in the roof. For example, there might be two batten layers, but perhaps you only want to frame one of them.

## Frame Part

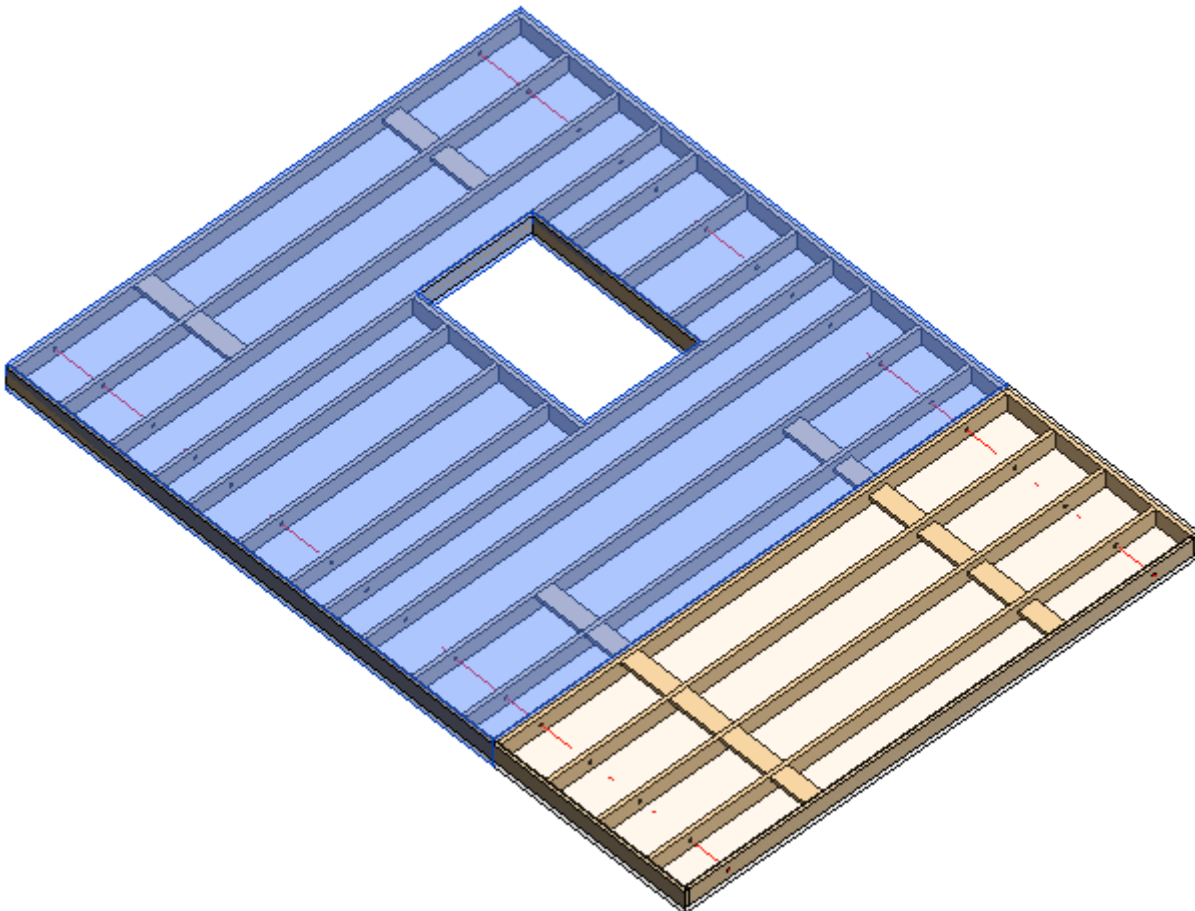
Family: Basic Roof  
 Type: Roof Framing Panels  
 Total thickness: 0

Layers

EXTERIOR SIDE							
Framing Configuration	Configuration	Frame	Frame Part	Split Parts	Split by	Sheathing/Paneling Configuration	Exclude Parts
I_Roof_Paneling	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>
I_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>
I_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>
-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Roof Frame - 1 Top & 1 Bottom I	<input type="checkbox"/>
I_Roof_Panel Main Frame	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>
-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Roof Frame - 1 Top & 1 Bottom I	<input checked="" type="checkbox"/>

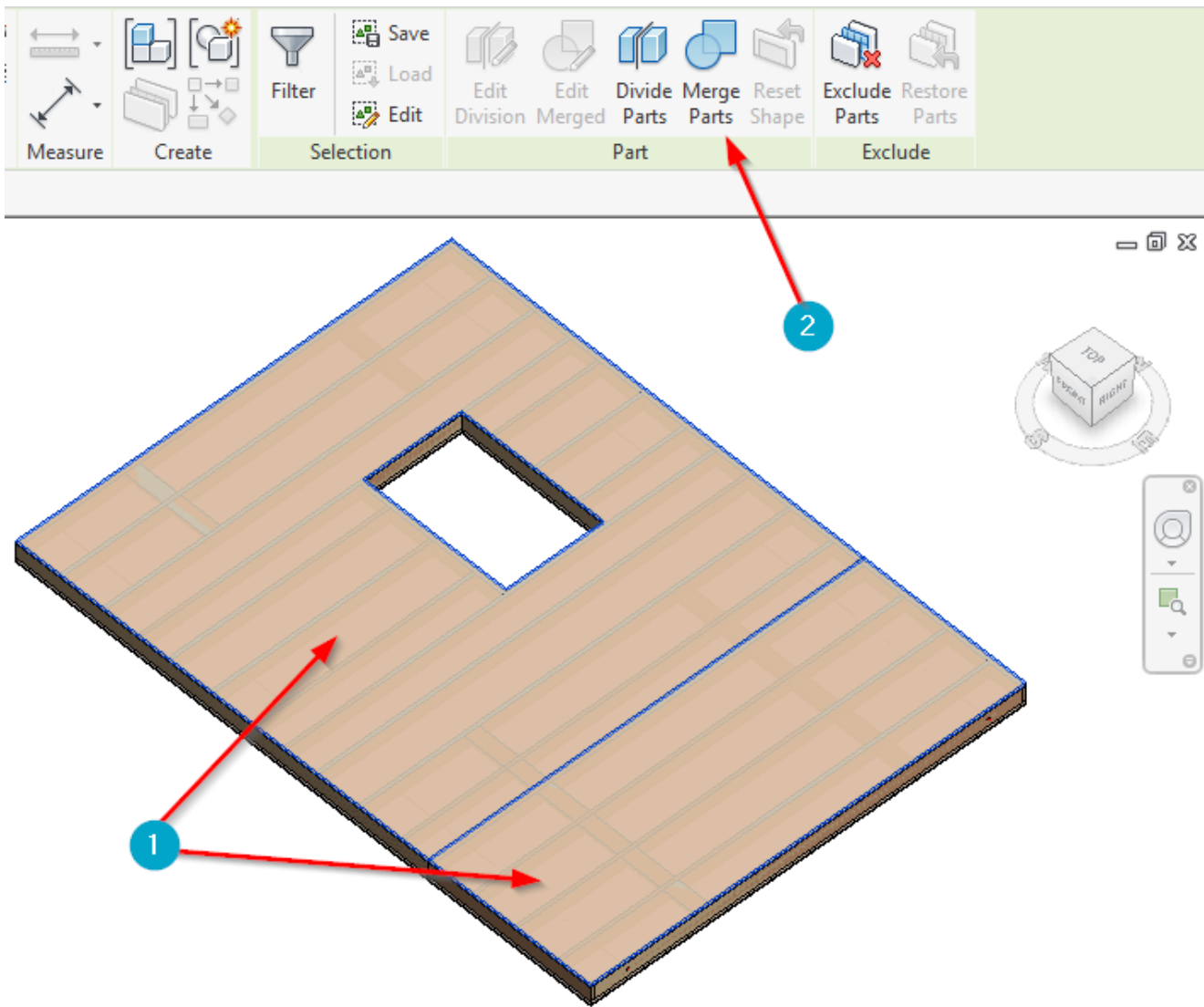
**Frame Part** – frames separate parts, not the whole roof layer.

When framing a prefabricated roof panel in Revit, the **Frame Part** function is useful when you have parts of the roof that do not belong to the prefabricated panel, e.g., roofing that will be built in place. Here's a workflow showing how you can frame the parts.

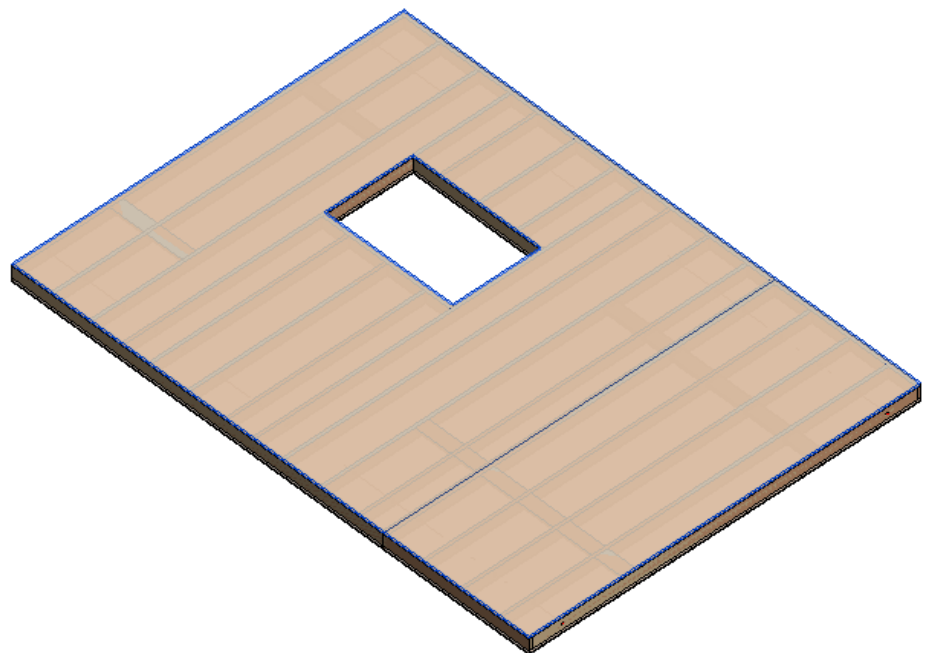
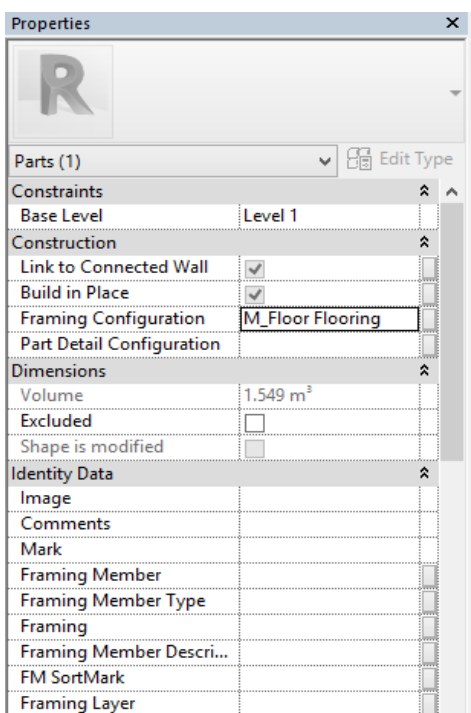


In the above picture, there are two roof panels framed and the roofing needs to be continuous.

1. Turn on **Parts Visibility** in Revit's **View Properties**. Then select and merge the parts:



You can also write a framing configuration name for that part in the **Framing Configuration** parameter:



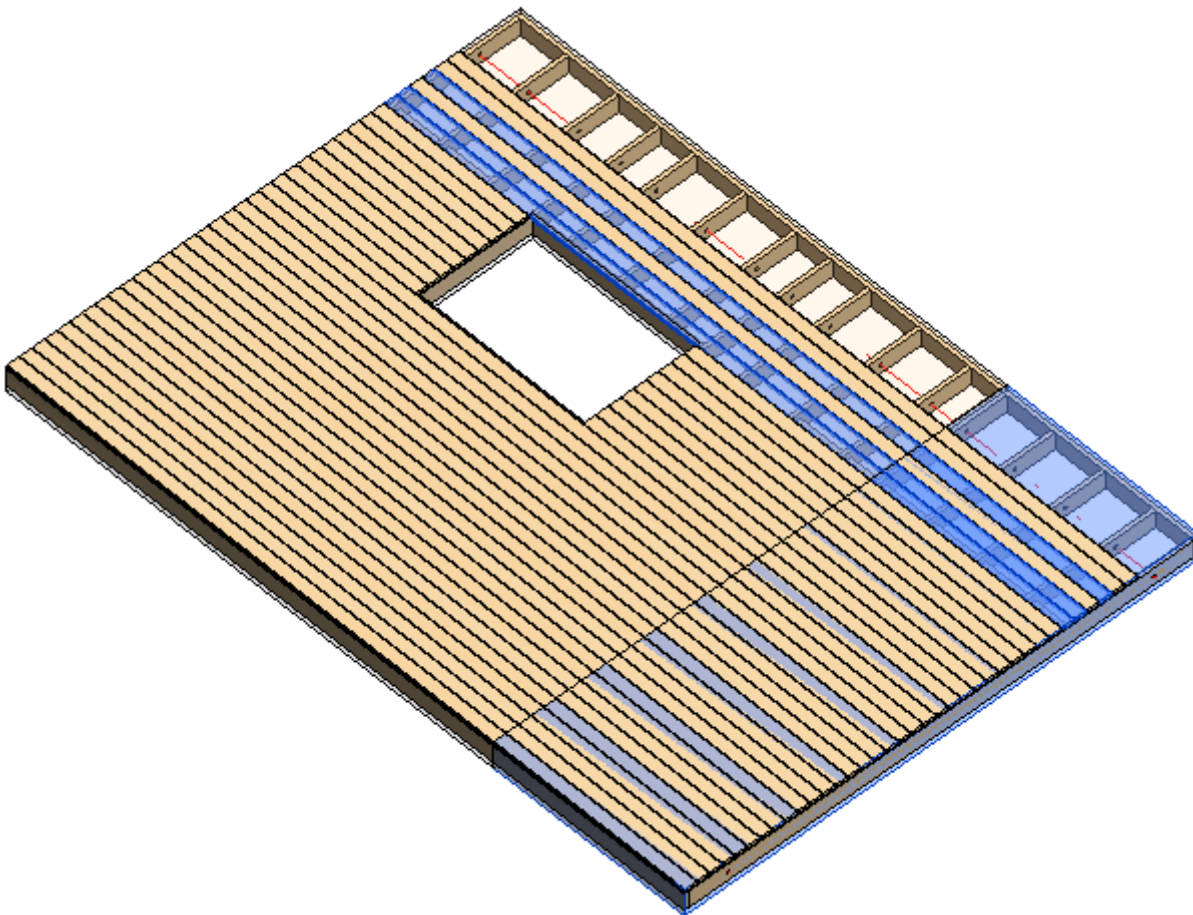
2. In the **Link Roof** dialog, tick **Frame Parts** for that layer:

Family: Basic Roof  
 Type: Roof 300 - for Rafters  
 Total thickness: 450

EXTERIOR SIDE									
Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame	Frame Part	Split Parts	
0	Finish2	Roofing	50.00 mm	Roofing	M_Roof_Paneling	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1	Finish2	Wood - Chery	30.00 mm	Batten	M_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Finish1	Wood - C24	48.00 mm	Secondary Frame	M_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Substrate	Wood - Sheathing - particleboard/ OSB	9.00 mm	Sheathing	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	300.00 mm	Frame	M_Roof_Rafter Main Frame	Variable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	13.00 mm	Paneling	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Going back to the original view, select the part and use **Add Roofing**.

As a result, you'll have split roof panels (with the main frame, battens, and so on) and a separate roofing layer that is not split or can be split differently:



## Split Parts

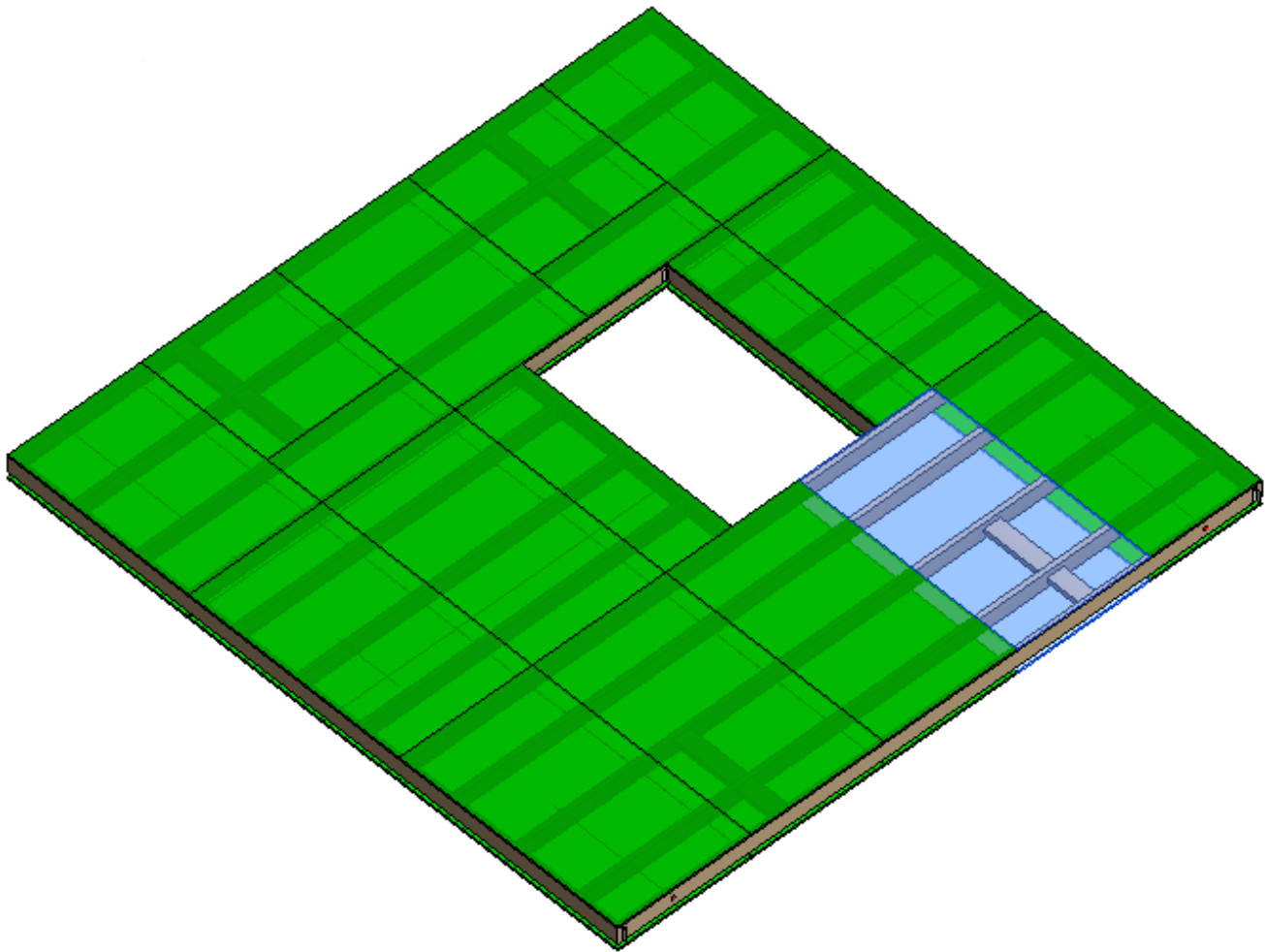
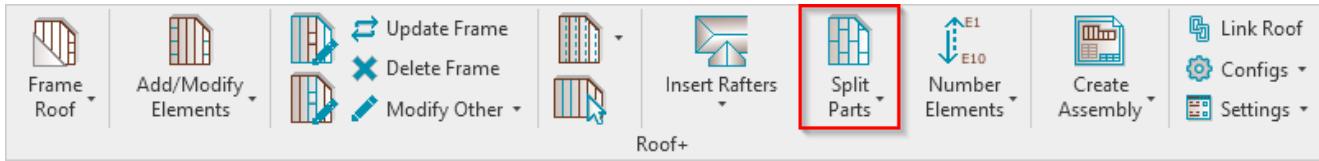


Family: Basic Roof  
 Type: Roof 300 - for Rafters  
 Total thickness: 450

Layers

EXTERIOR SIDE									
Function	Material	Thickness	Framing Layer	Framing Configuration	Configuration	Frame	Frame Part	Split Parts	
0	Finish2	Roofing	50.00 mm	Roofing	M_Roof Paneling	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1	Finish2	Wood - Chery	30.00 mm	Batten	M_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Finish1	Wood - C24	48.00 mm	Secondary Frame	M_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Substrate	Wood - Sheathing - particleboard/ OSB	9.00 mm	Sheathing	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Structure	Structure - Wood Joist/Rafter Layer	300.00 mm	Frame	M_Roof_Rafter Main Frame	Variable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Finish1	Wood - Sheathing - plywood	13.00 mm	Paneling	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Split Parts** – select if parts need to be split after using **Split Parts** function or should be split later. This is very useful if there are many layers in the roof, for example, two sheathing/paneling layers and you only want to split one.



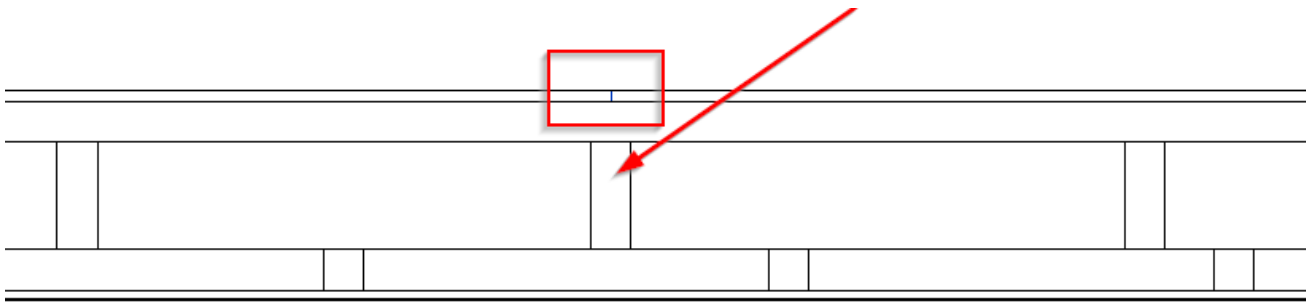
**Split by**

Family: Basic Roof  
 Type: Roof 300 - for Rafters  
 Total thickness: 450

Layers

EXTERIOR SIDE								
Framing Layer	Framing Configuration	Configuration	Frame	Frame Part	Split Parts	Split by	Sheathing/Paneling Configuration	Exclude Parts
Roofing	M_Roof Paneling	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-- None --	<input type="checkbox"/>
Batten	M_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>
Secondary Frame	M_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Panel	<input checked="" type="checkbox"/>
Sheathing	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roof Frame - 1 Top & 1 Bottom Layer	<input type="checkbox"/>
Frame	M_Roof_Rafter Main Frame	Variable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Panel	<input checked="" type="checkbox"/>
Paneling	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Panel	<input checked="" type="checkbox"/>

**Split by** – select framing layer to be used for splitting sheathing/paneling.



### Sheathing/Paneling Configuration

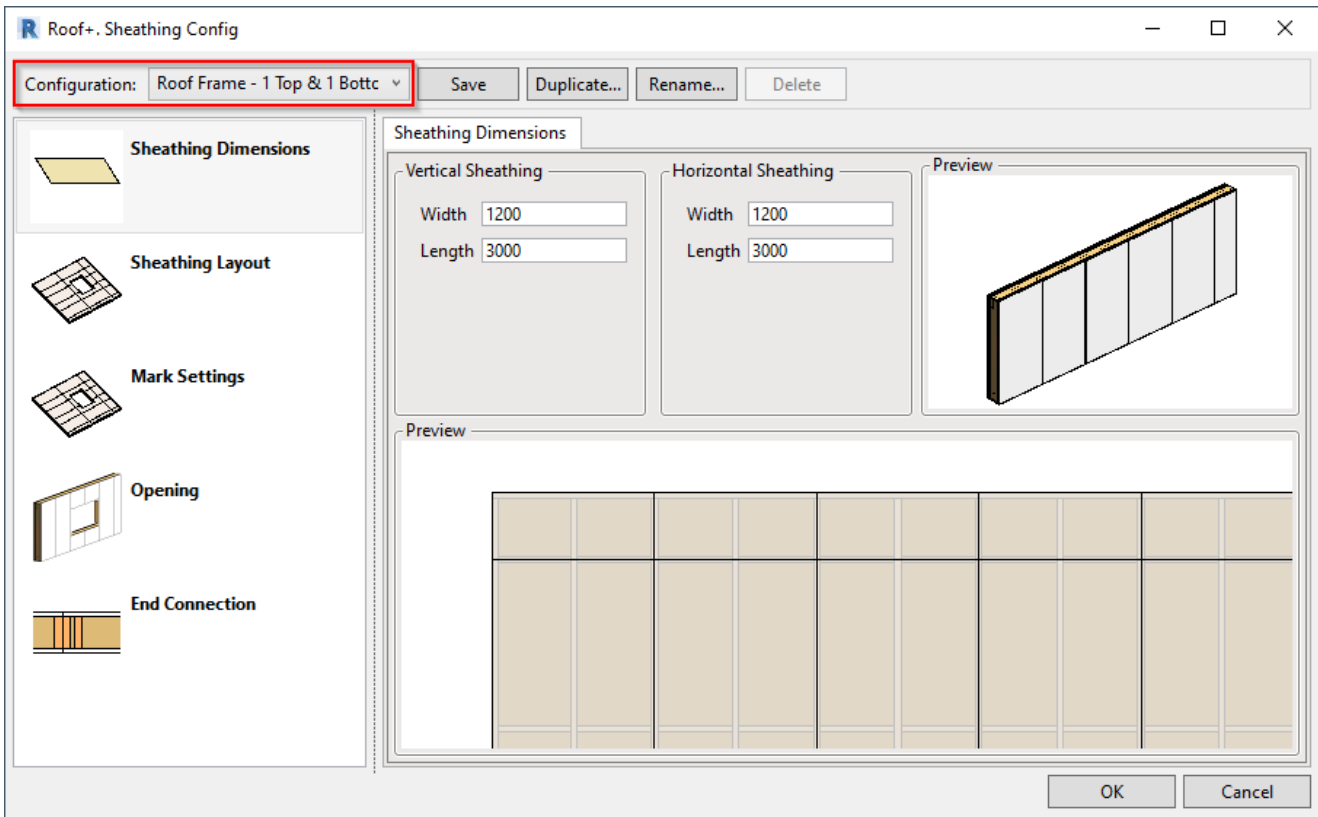
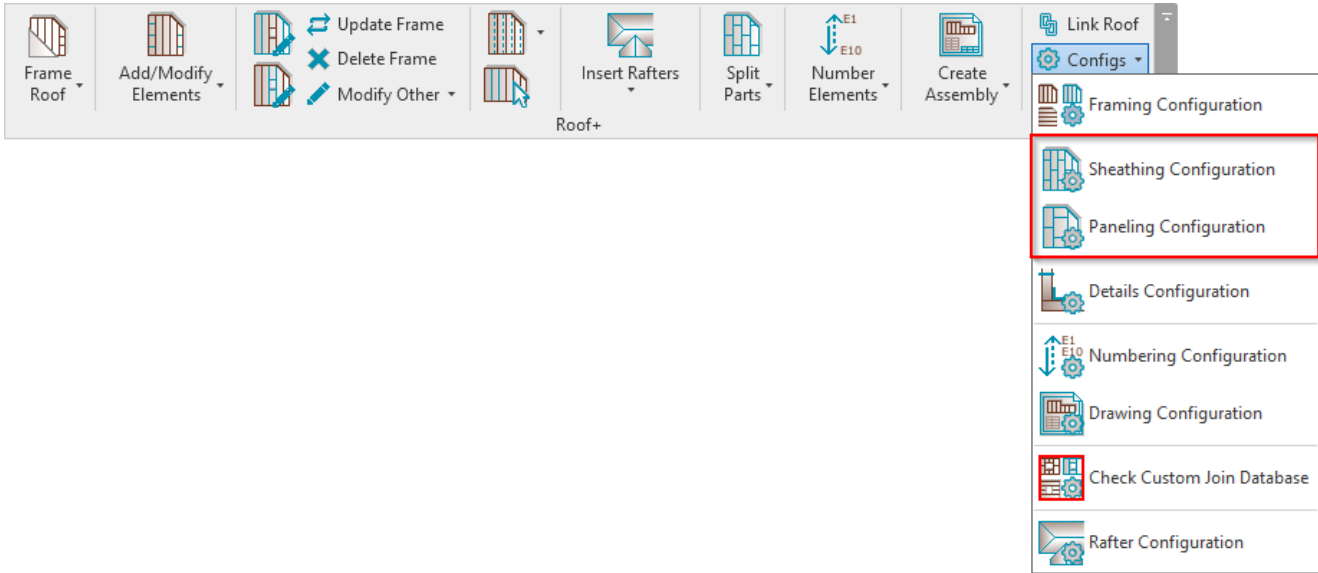
Family: Basic Roof  
 Type: Roof 300 - for Rafters  
 Total thickness: 450

Layers

EXTERIOR SIDE								
Framing Layer	Framing Configuration	Configuration	Frame	Frame Part	Split Parts	Split by	Sheathing/Paneling Configuration	Exclude Parts
Roofing	M_Roof Paneling	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-- None --	<input type="checkbox"/>
Batten	M_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>
Secondary Frame	M_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Panel	<input checked="" type="checkbox"/>
Sheathing	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roof Frame - 1 Top & 1 Bottom Layer	<input type="checkbox"/>
Frame	M_Roof_Rafter Main Frame	Variable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Panel	<input checked="" type="checkbox"/>
Paneling	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Panel	<input checked="" type="checkbox"/>

**Sheathing/Paneling Configuration** – select sheathing/paneling configuration with definition of all sheathing/paneling parameters. There are default configurations that come with **Roof+**, but you can also create your own.

The list of sheathing/paneling configurations comes from here:



### Exclude Parts

Family: Basic Roof  
 Type: Roof 300 - for Rafters  
 Total thickness: 450

Layers

EXTERIOR SIDE									
Framing Layer	Framing Configuration	Configuration	Frame	Frame Part	Split Parts	Split by	Sheathing/Paneling Configuration	Exclude Parts	
Roofing	M_Roof Paneling	Fixed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-- None --	<input type="checkbox"/>	
Batten	M_Roof_Panel Battens	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-- None --	<input checked="" type="checkbox"/>	
Secondary Frame	M_Roof_Panel Secondary Frame	Fixed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Panel	<input checked="" type="checkbox"/>	
Sheathing	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roof Frame - 1 Top & 1 Bottom Layer	<input type="checkbox"/>	
Frame	M_Roof_Rafter Main Frame	Variable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Panel	<input checked="" type="checkbox"/>	
Paneling	-- None --	Fixed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Panel	<input checked="" type="checkbox"/>	

**Exclude Parts** – select the parts that need to be excluded from the roof. You can exclude parts from the project so that they will not be included in material takeoffs, schedules, and other lists or calculations.

