

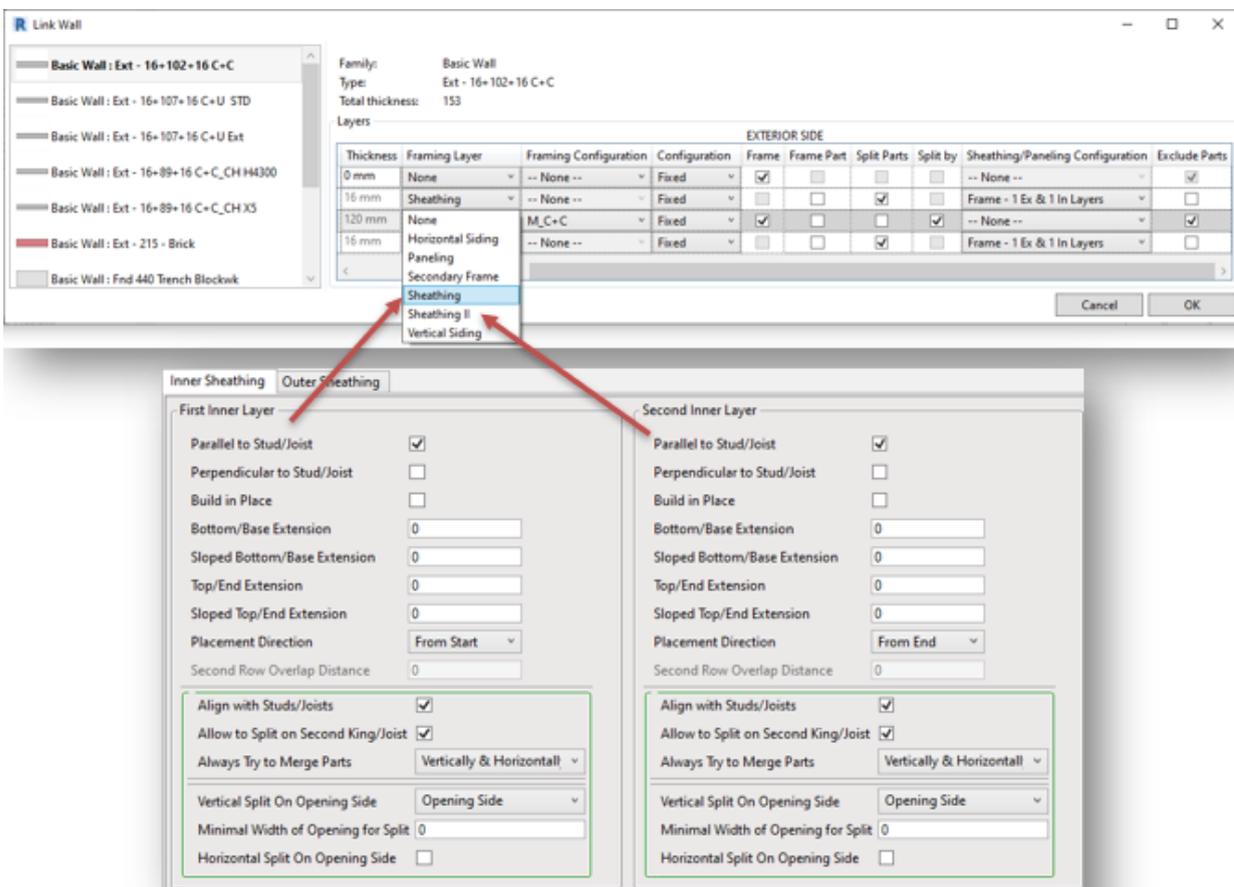
SHEATHING and PANELING LAYOUTS – Sheathing Configuration – Sheathing Layout

Modified on: Sat, 16 Jan, 2021 at 9:11 PM

Sheathing Layout – predefine settings for Inner/Top and Outer/Bottom sheathing layers.

Up to two sheathing layers can be created from each side. That's why there are separate settings for the first and second layer.

First and **Second** sheathing layers can be predefined in the **Link Wall**, **Link Floor** or **Link Roof** using **Sheathing** and **Sheathing II** from **Framing Layer** column.



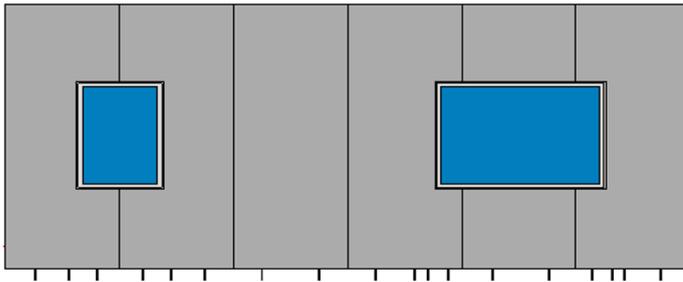
Parallel or Perpendicular to Stud/Joist

First Inner Layer

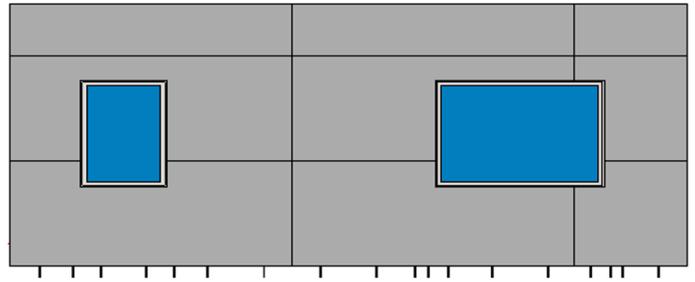
Parallel to Stud/Joist	<input checked="" type="checkbox"/>
Perpendicular to Stud/Joist	<input type="checkbox"/>
Build in Place	<input type="checkbox"/>
Bottom/Base Extension	<input type="text" value="0"/>
Sloped Bottom/Base Extension	<input type="text" value="0"/>
Top/End Extension	<input type="text" value="0"/>
Sloped Top/End Extension	<input type="text" value="0"/>
Placement Direction	<input type="text" value="From Start"/>
Vertical Elements Cut Panels	<input type="checkbox"/>
Horizontal Elements Cut Panels	<input type="checkbox"/>
Second Row Overlap Distance	<input type="text" value="0"/>

Parallel or **Perpendicular to Stud/Joist** – select if the sheathing should be parallel or perpendicular to the joist.

Parallel is ticked



Perpendicular is ticked



Build in Place

First Inner Layer

Parallel to Stud/Joist

Perpendicular to Stud/Joist

Build in Place

Bottom/Base Extension

Sloped Bottom/Base Extension

Top/End Extension

Sloped Top/End Extension

Placement Direction

Vertical Elements Cut Panels

Horizontal Elements Cut Panels

Second Row Overlap Distance

Build in Place – writes Yes/No information into the sheathing instance parameter if it is build-in-place or is prefabricated with the whole wall/floor/roof frame. This parameter can later be used in schedules or view filters.

Example with wall:

Properties

Parts (1) Edit Type

Constraints

Base Level

Construction

Link to Connected Wall

Framing Configuration

Build in Place

Part Detail Configuration

Assembly Mass

Element Mass

Assembly Created-Updated

Details Created-Updated

DC

Dimensions

Volume

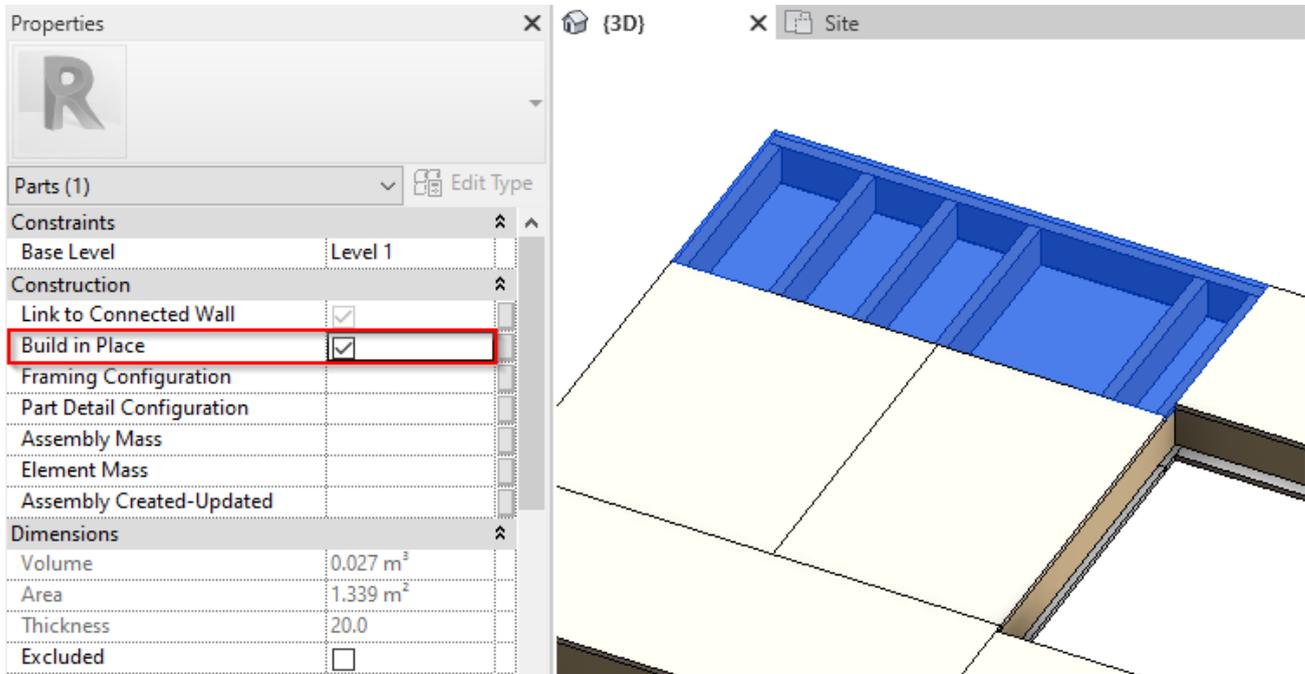
Area

Length

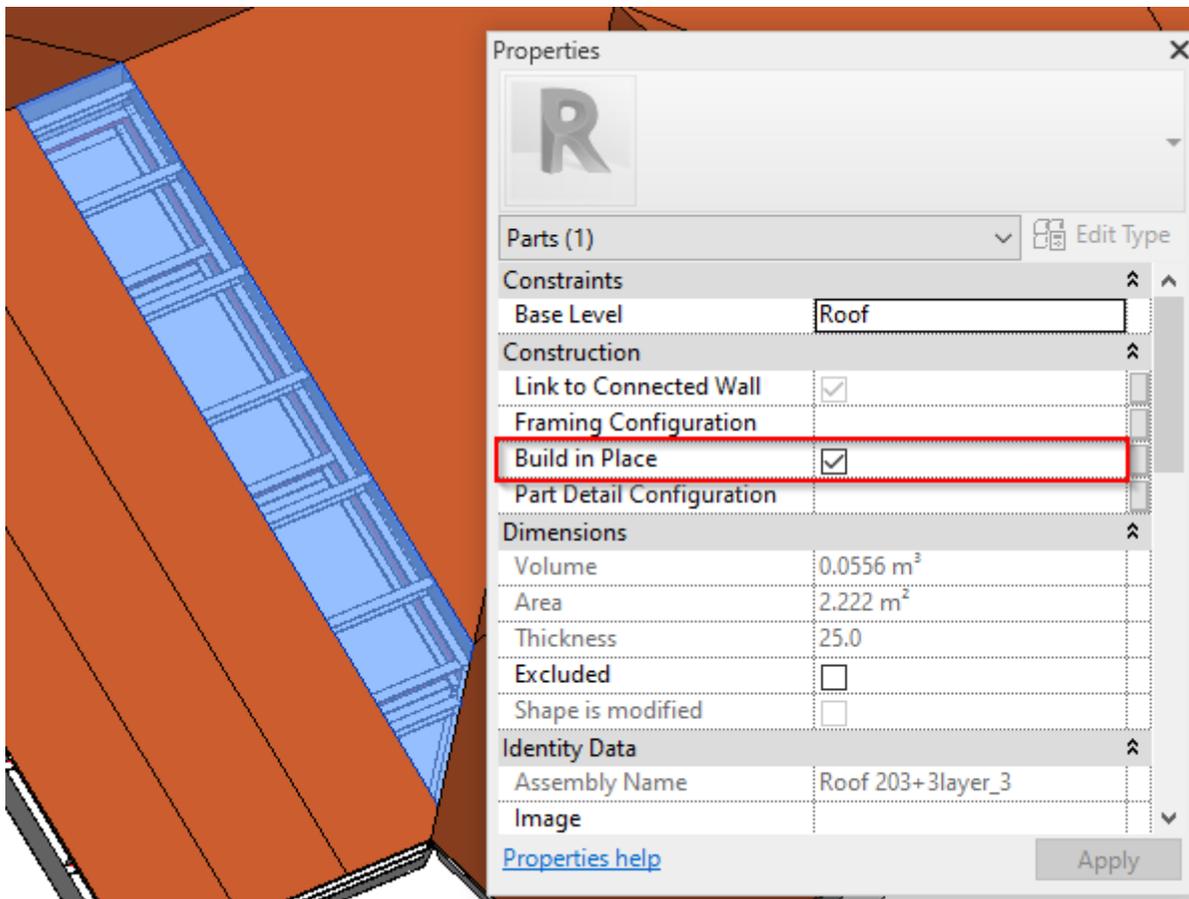
Height

[Properties help](#)

Example with floor/roof:



Example with metal roof:



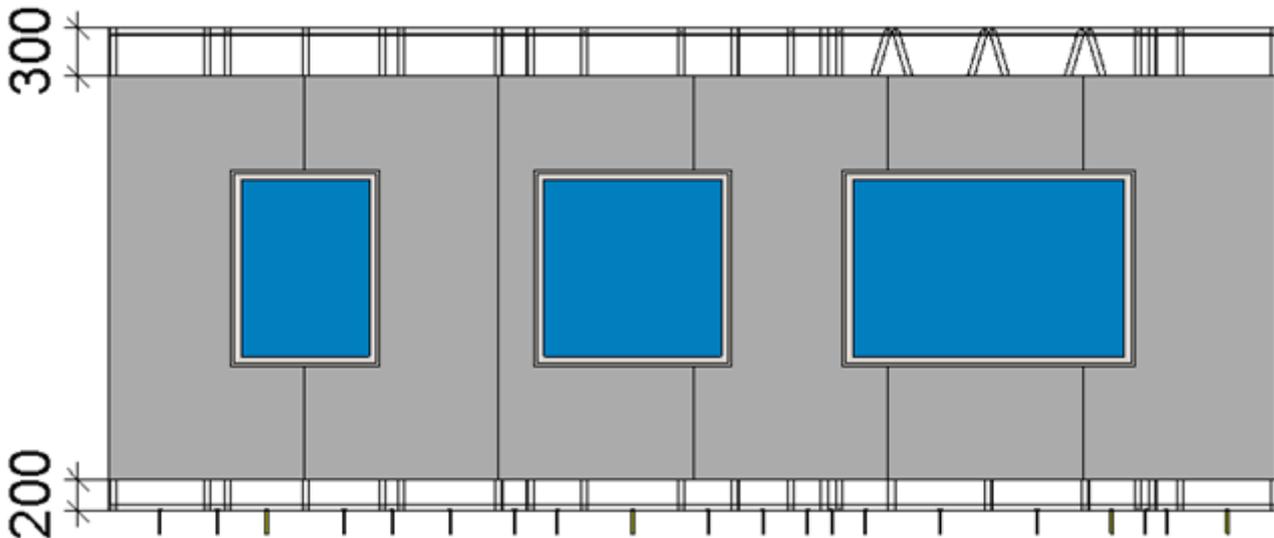
Bottom/Base Extension and Top/End Extension

First Inner Layer

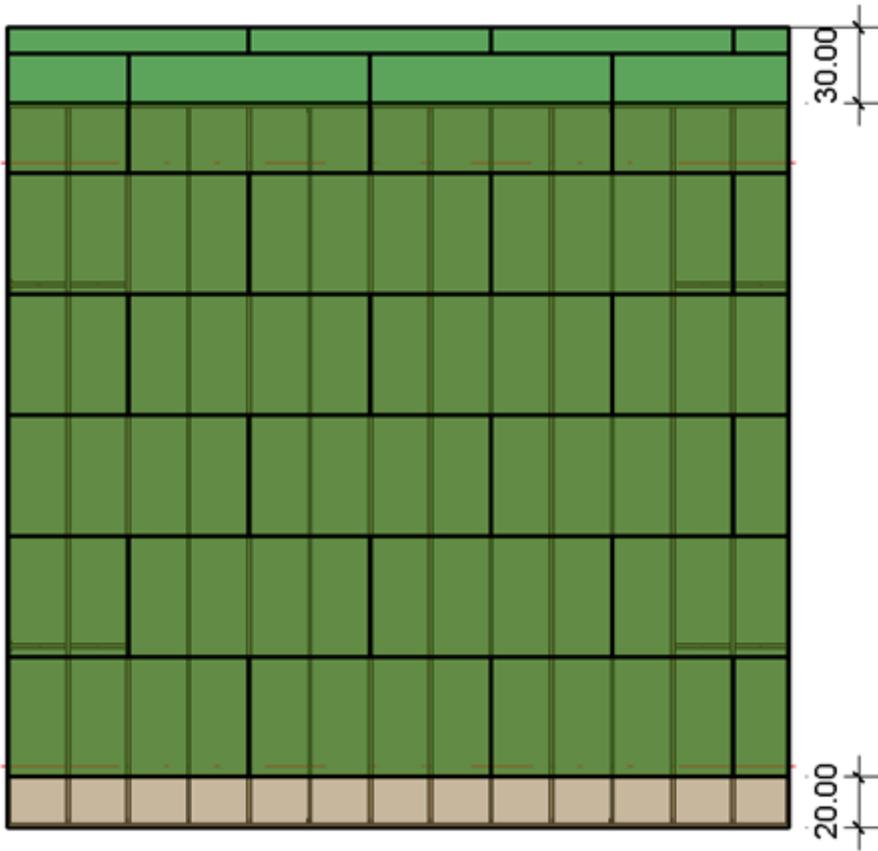
Parallel to Stud/Joist	<input checked="" type="checkbox"/>
Perpendicular to Stud/Joist	<input type="checkbox"/>
Build in Place	<input type="checkbox"/>
Bottom/Base Extension	<input type="text" value="200"/>
Sloped Bottom/Base Extension	<input type="text" value="0"/>
Top/End Extension	<input type="text" value="-300"/>
Sloped Top/End Extension	<input type="text" value="0"/>
Placement Direction	<input type="text" value="From Start"/>
Vertical Elements Cut Panels	<input type="checkbox"/>
Horizontal Elements Cut Panels	<input type="checkbox"/>
Second Row Overlap Distance	<input type="text" value="0"/>

Bottom/Base Extension, Top/End Extension – adds an offset from the wall/floor/roof base or end.

Example with metal wall:



Example with wood floor/roof:

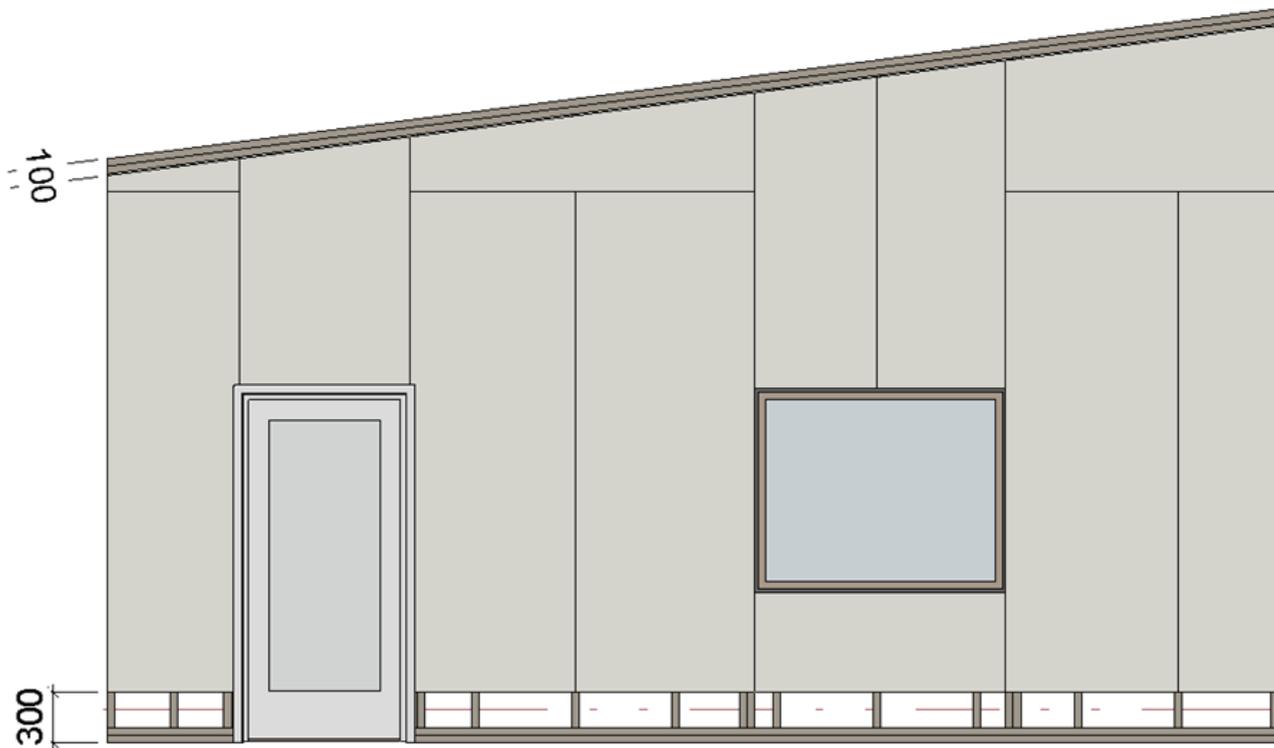


Sloped Top/End Extension and Sloped Bottom/Base Extension Extension

First Inner Layer

Parallel to Stud/Joist	<input checked="" type="checkbox"/>
Perpendicular to Stud/Joist	<input type="checkbox"/>
Build in Place	<input type="checkbox"/>
Bottom/Base Extension	200
Sloped Bottom/Base Extension	300
Top/End Extension	-300
Sloped Top/End Extension	-100
Placement Direction	From Start
Vertical Elements Cut Panels	<input type="checkbox"/>
Horizontal Elements Cut Panels	<input type="checkbox"/>
Second Row Overlap Distance	0

Sloped Top/End Extension and **Sloped Bottom/Base Extension** – adds an offset from the sloped wall/roof/roof base or end.



Placement Direction

First Inner Layer

Parallel to Stud/Joist

Perpendicular to Stud/Joist

Build in Place

Bottom/Base Extension

Sloped Bottom/Base Extension

Top/End Extension

Sloped Top/End Extension

Placement Direction

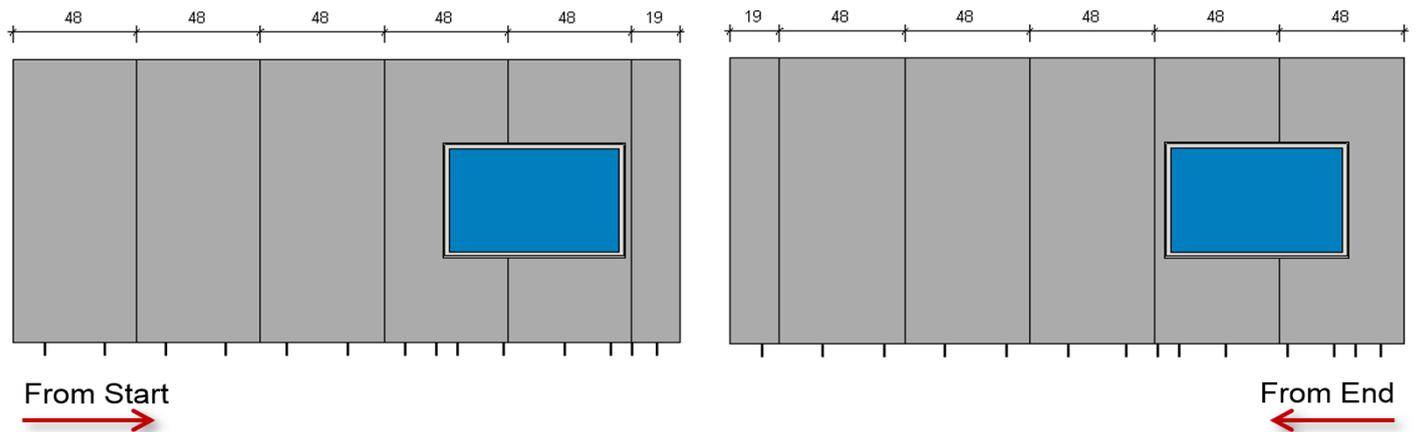
Vertical Elements Cut Panels

Horizontal Elements Cut Panels

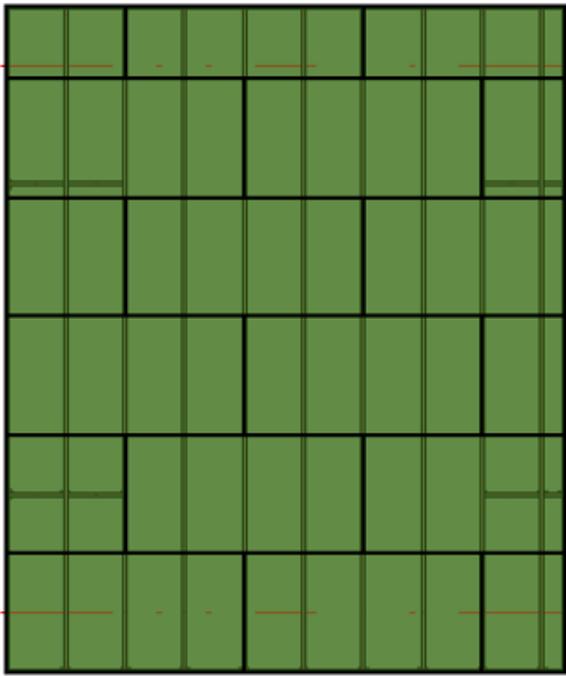
Second Row Overlap Distance

Placement Direction – predefines sheathing direction: **From Start**, **From End** or **From Both Sides**.

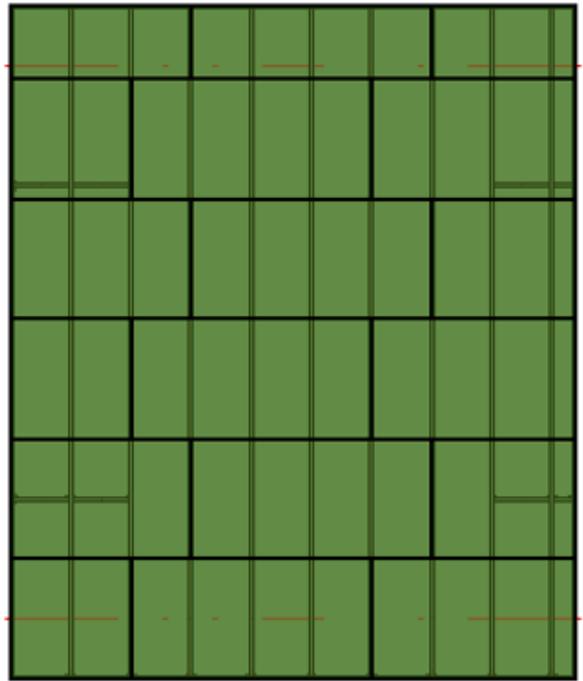
Example with wall:



Example with floor/roof:



From Start
→



From End
←

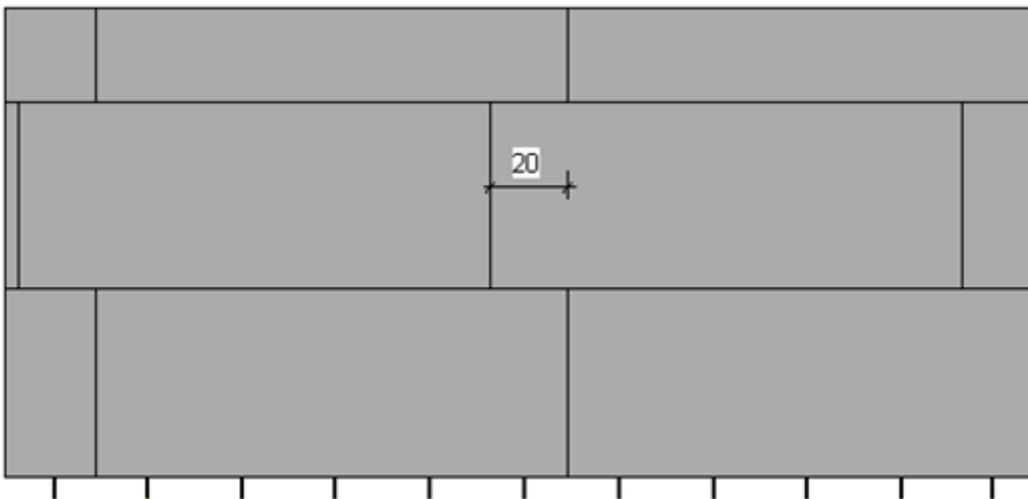
Second Row Overlap Distance

First Inner Layer

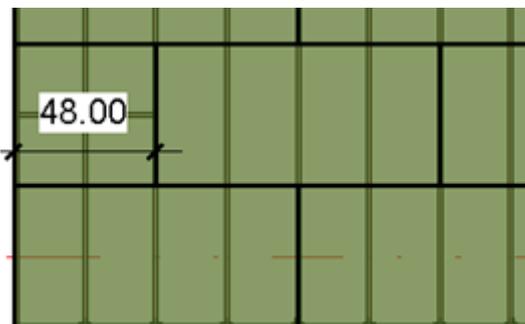
Parallel to Stud/Joist	<input checked="" type="checkbox"/>
Perpendicular to Stud/Joist	<input type="checkbox"/>
Build in Place	<input type="checkbox"/>
Bottom/Base Extension	<input type="text" value="0"/>
Sloped Bottom/Base Extension	<input type="text" value="0"/>
Top/End Extension	<input type="text" value="0"/>
Sloped Top/End Extension	<input type="text" value="0"/>
Placement Direction	<input type="text" value="From Start"/>
Vertical Elements Cut Panels	<input type="checkbox"/>
Horizontal Elements Cut Panels	<input type="checkbox"/>
Second Row Overlap Distance	<input type="text" value="20"/>

Second Row Overlap Distance – defines overlap distance between sheathing layouts if **Perpendicular to Stud/Joist** checkbox is ticked.

Example with wall:



Example with floor/roof:

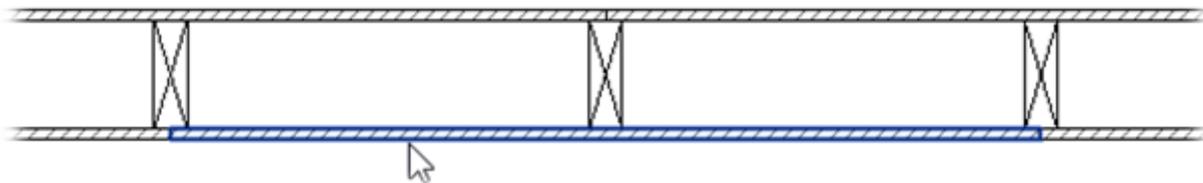


Align with Studs/Joists

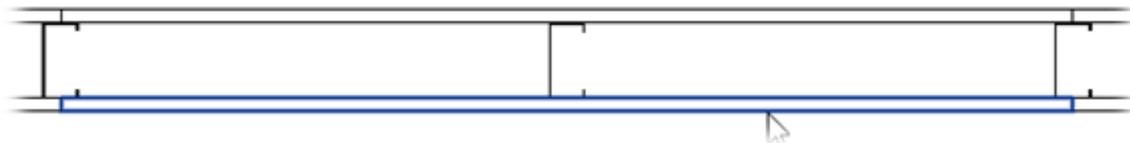
Align with Studs/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studs/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Align with Studs/Joists – aligns sheathing with studs or joists.

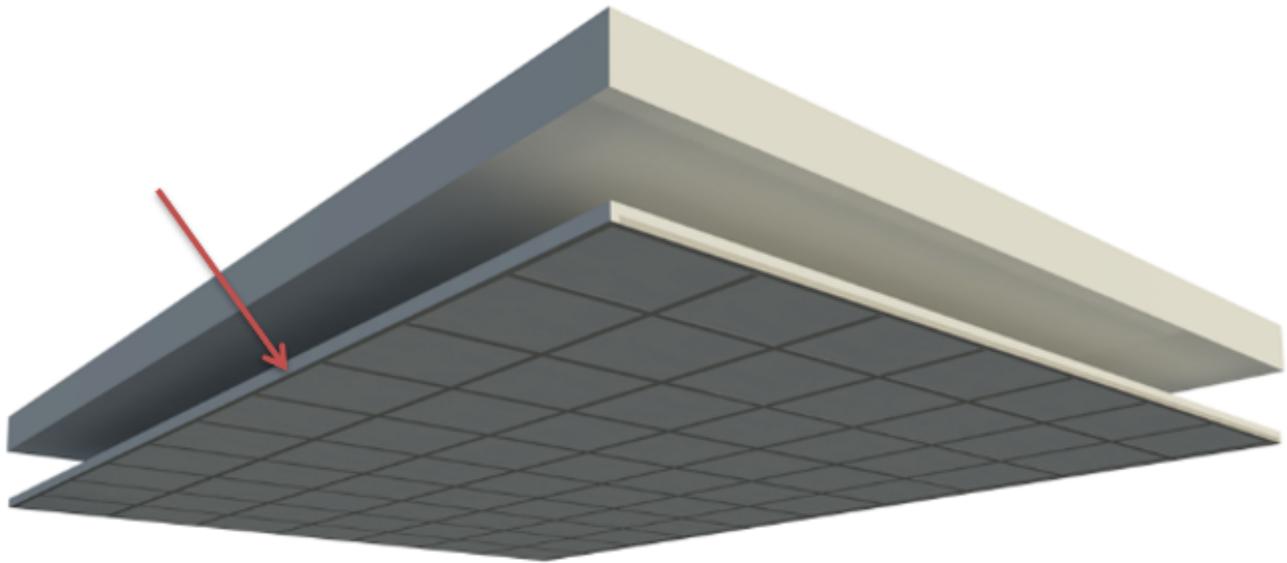
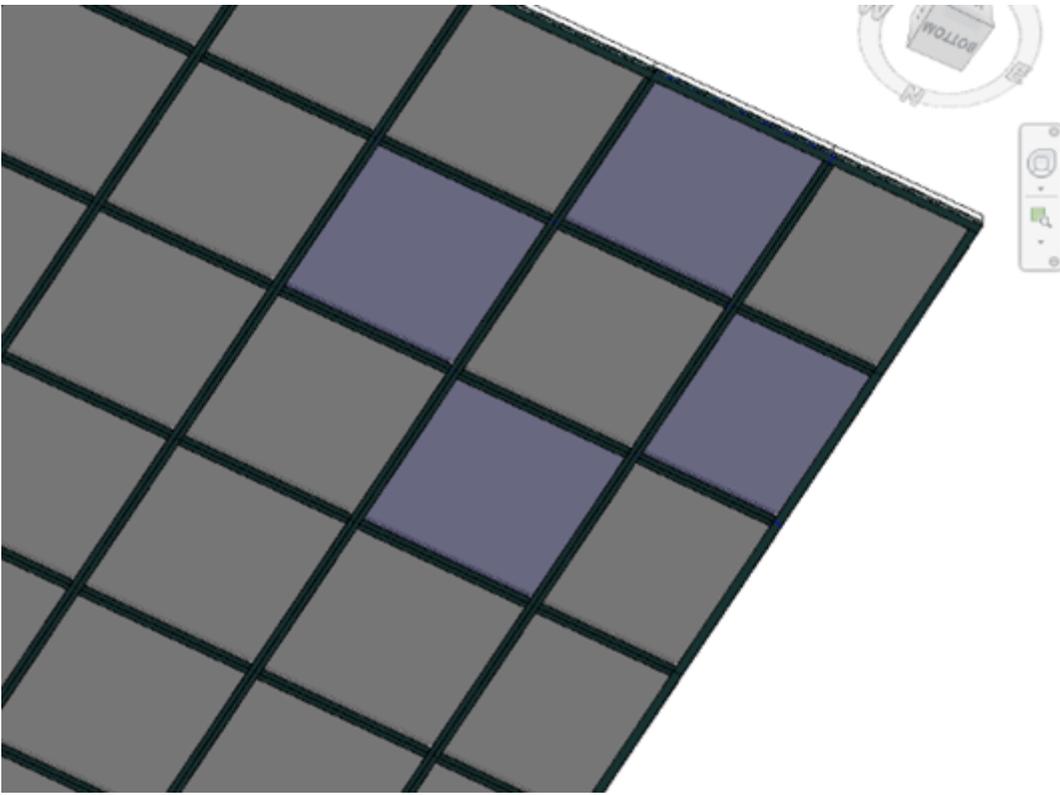
Example with wood frame:



Example with metal frame:



Example - ceiling gypsum elements can be divided into Parts and aligned with ceiling frames:

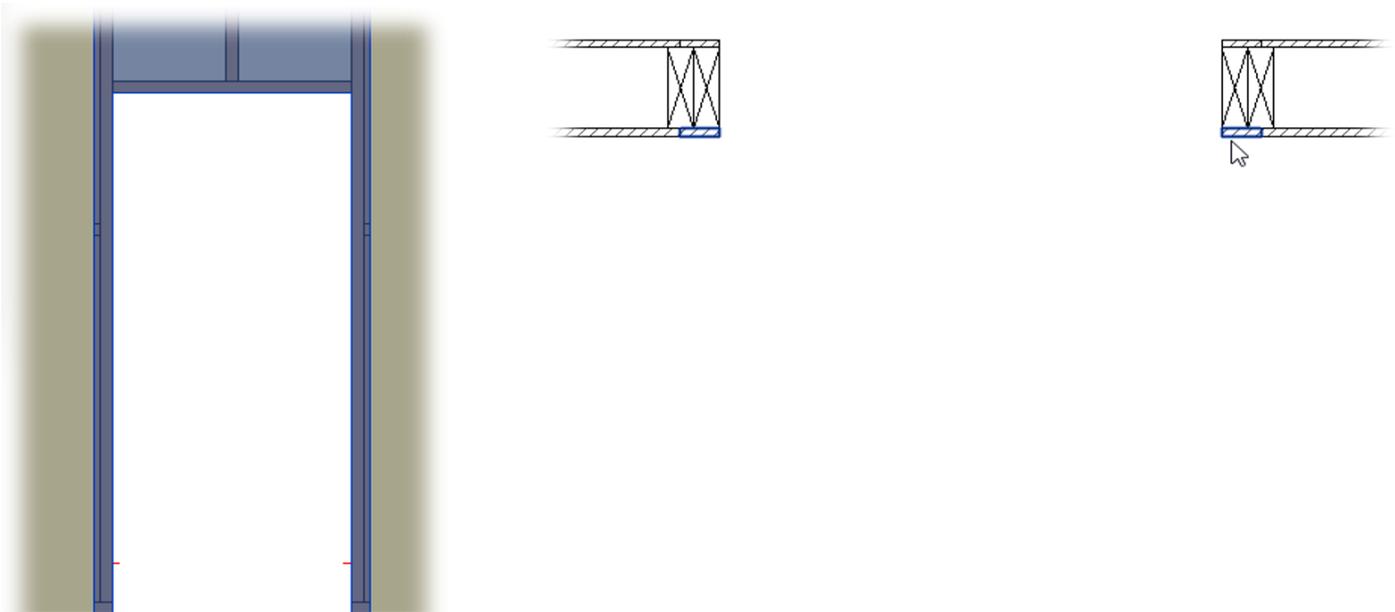


Allow to Split on Second King/Joist

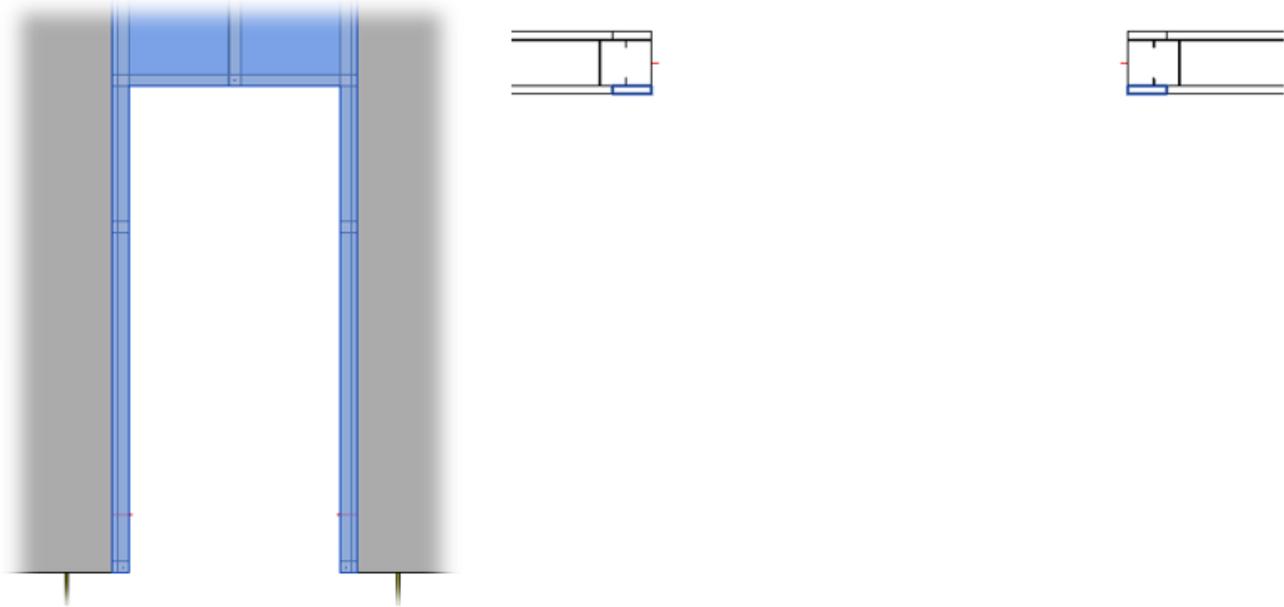
Align with Studs/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studs/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Allow to Split on Second King/Joist – splits the sheathing on the second king or joist of the opening.

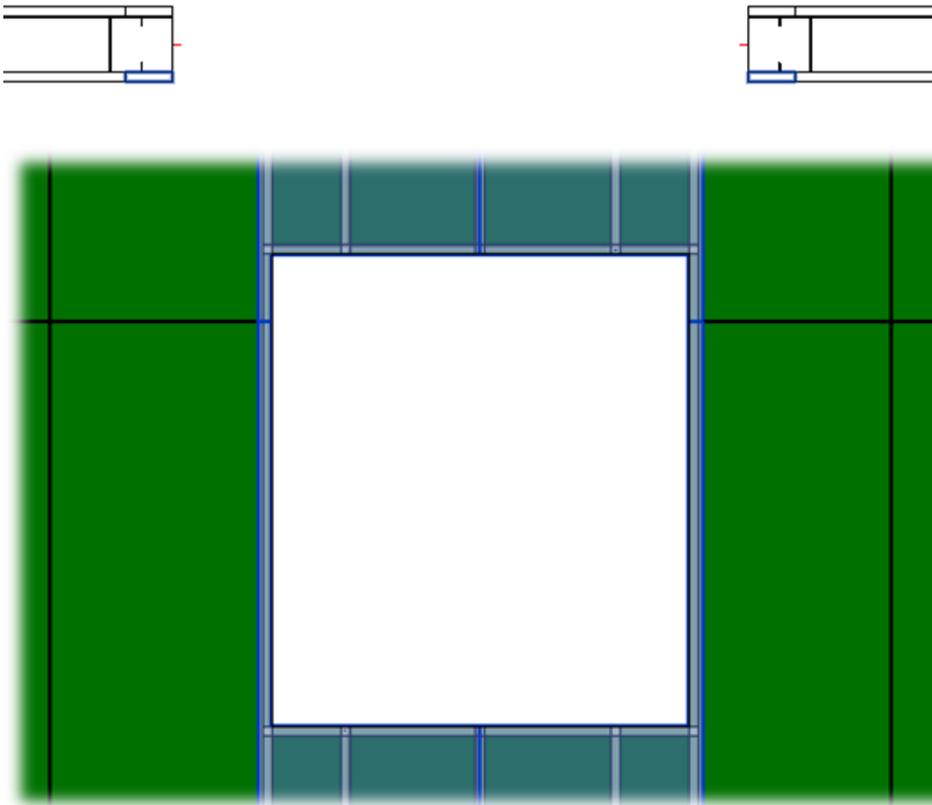
Example with wood frame:



Example with metal frame:



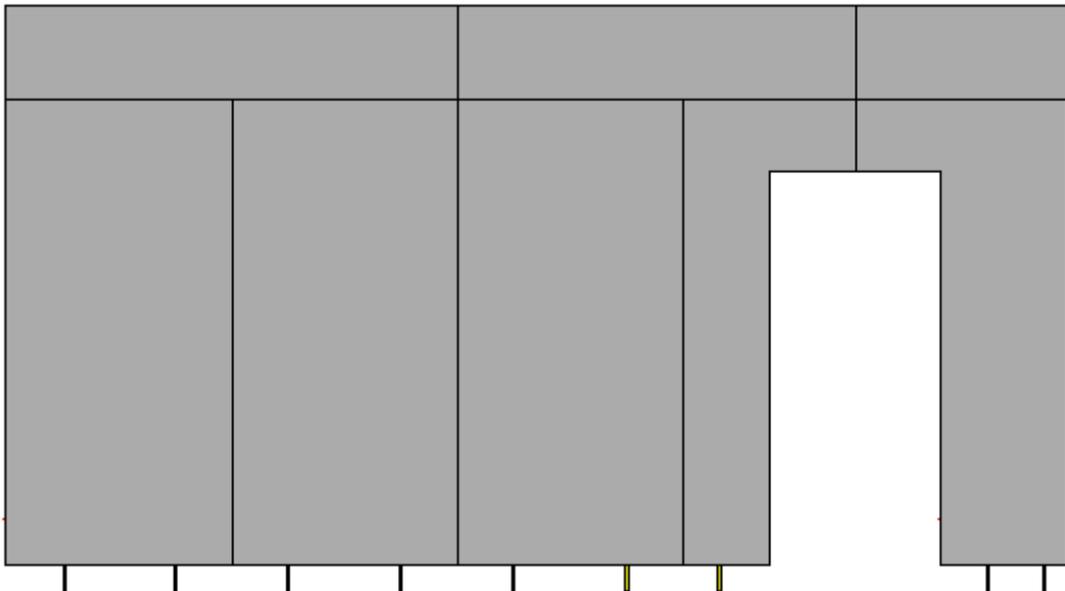
Example with metal floor frame:



Always Try to Merge Parts

Align with Studds/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studds/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
<hr/>	
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Always Try to Merge Parts – tries to merge parts if two parts share the same edge. Merged part size will not exceed the sheathing size that is predefined under **Sheathing Dimensions**.

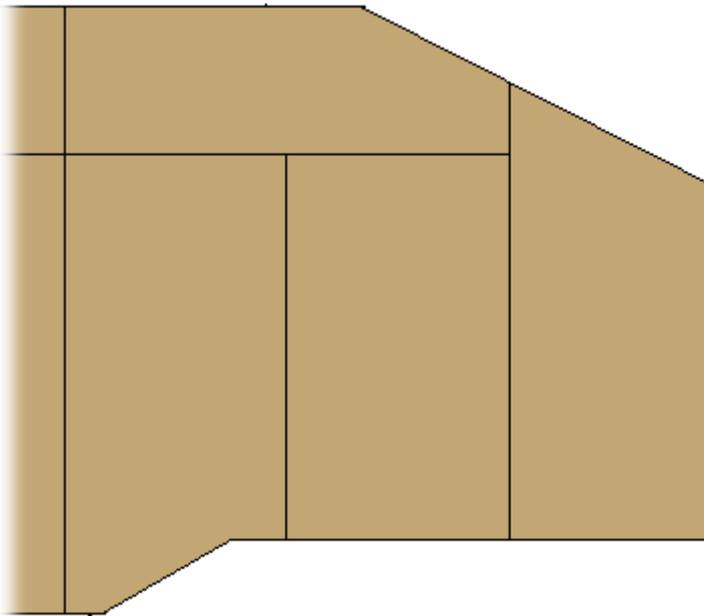


Including Part with Different Edges

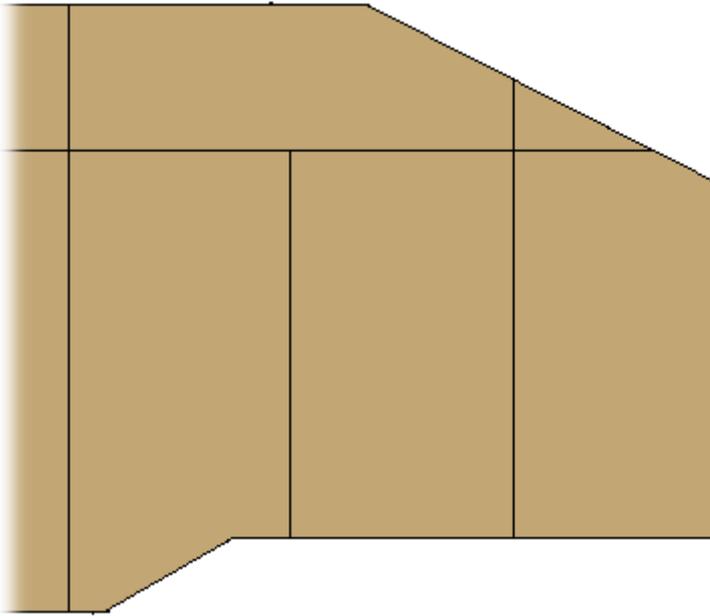
Align with Studs/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studs/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Including Part with Different Edges – tries to merge parts with different edges of two parts. Merged part size will not exceed the sheathing size that is predefined under **Sheathing Dimensions**.

Including Part with Different Edges is switched ON:



Including Part with Different Edges is switched OFF:

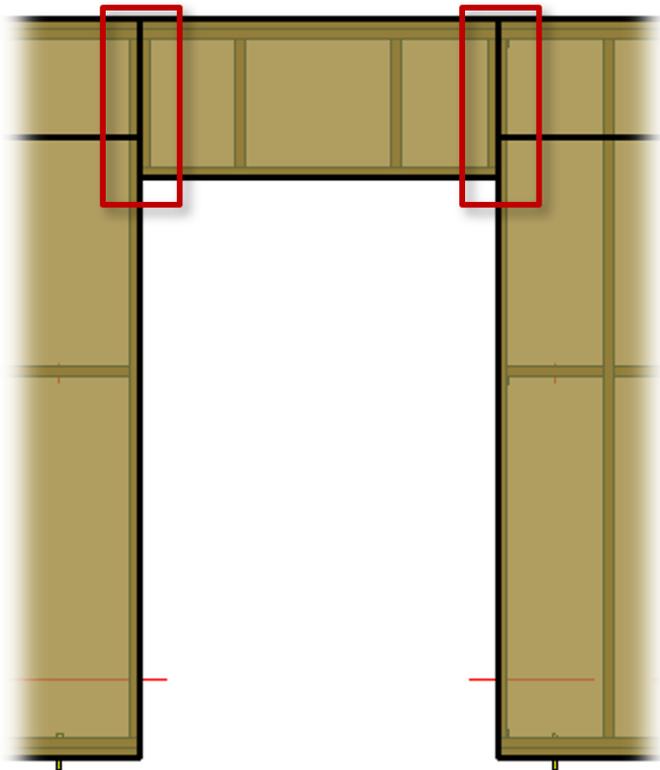


Vertical Split on Opening Side

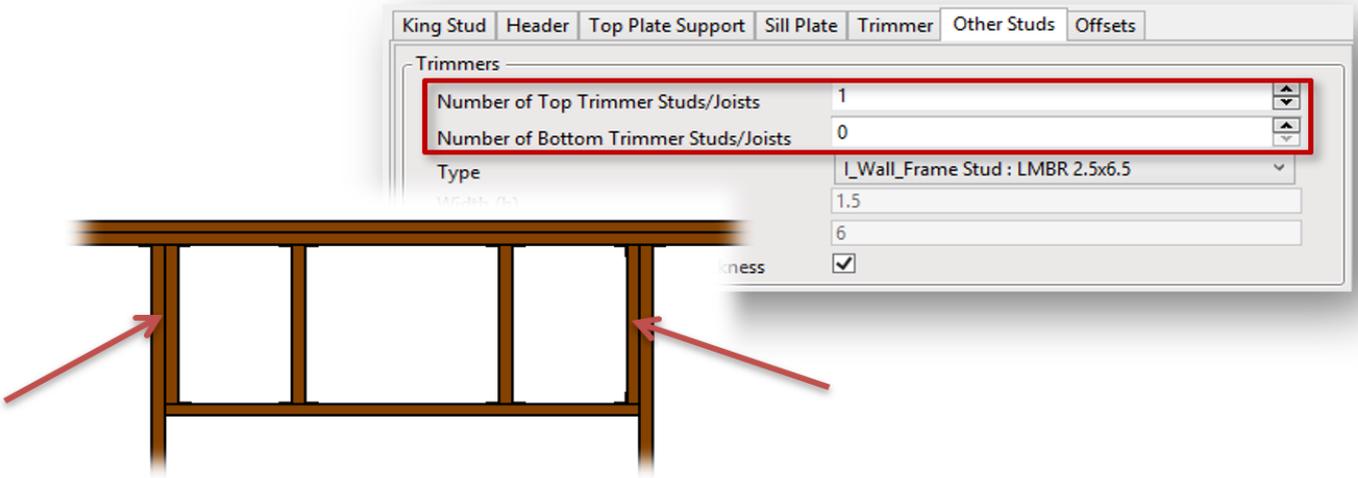
Align with Studds/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studds/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Vertical Split on Opening Side – splits sheathing on the opening side, the nearest stud/joist, or the nearest king if top and bottom trimmers are predefined in the **Opening Framing**.

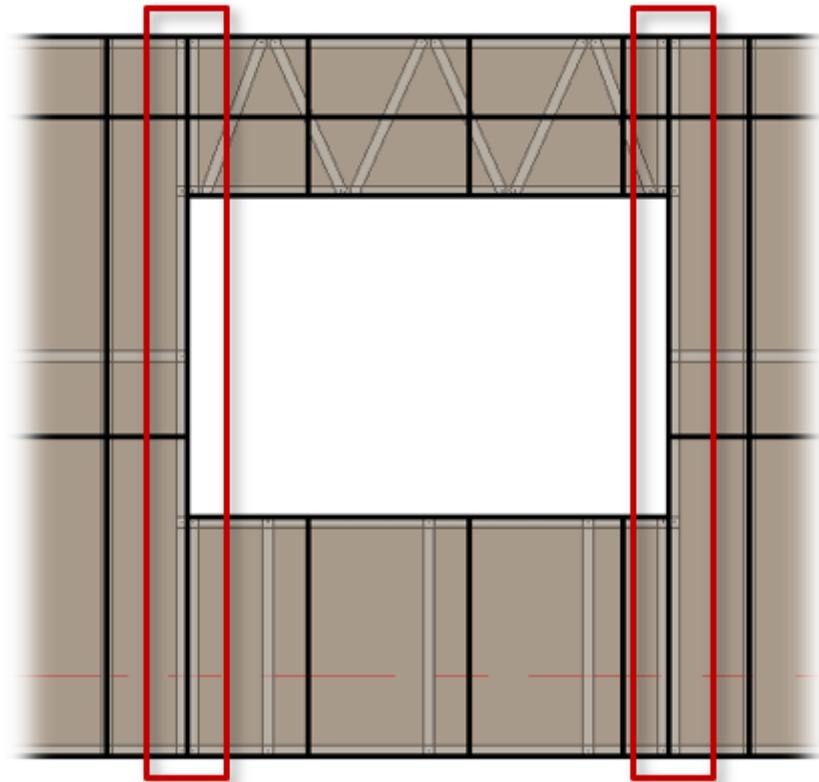
Example with wood wall frame:



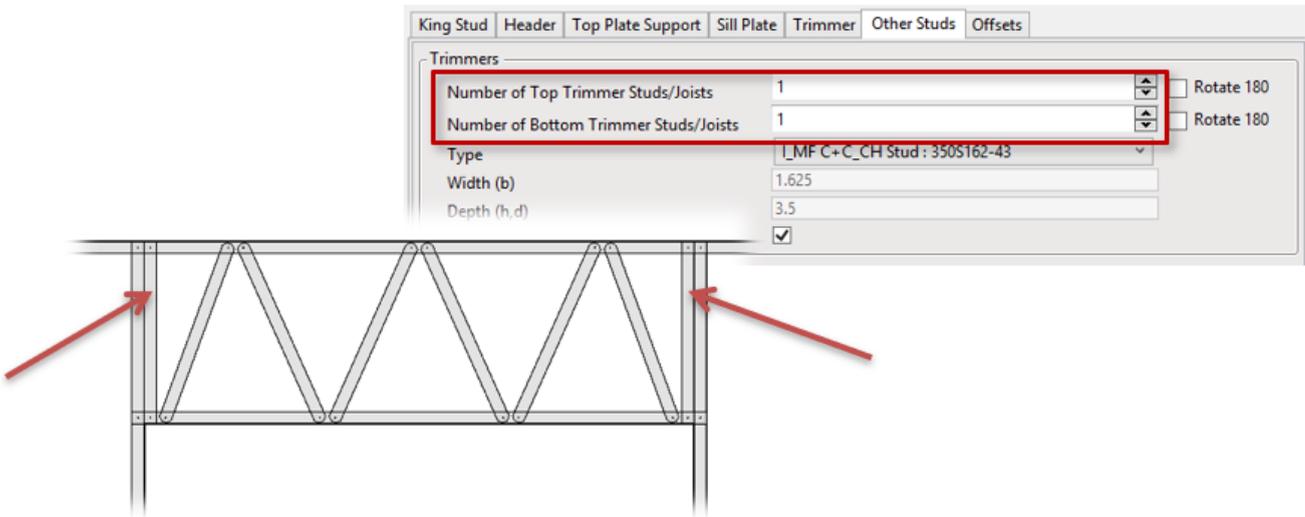
You can predefine top and bottom trimmers under **Wall+ → Configs → Framing Configuration → Opening Framing**:



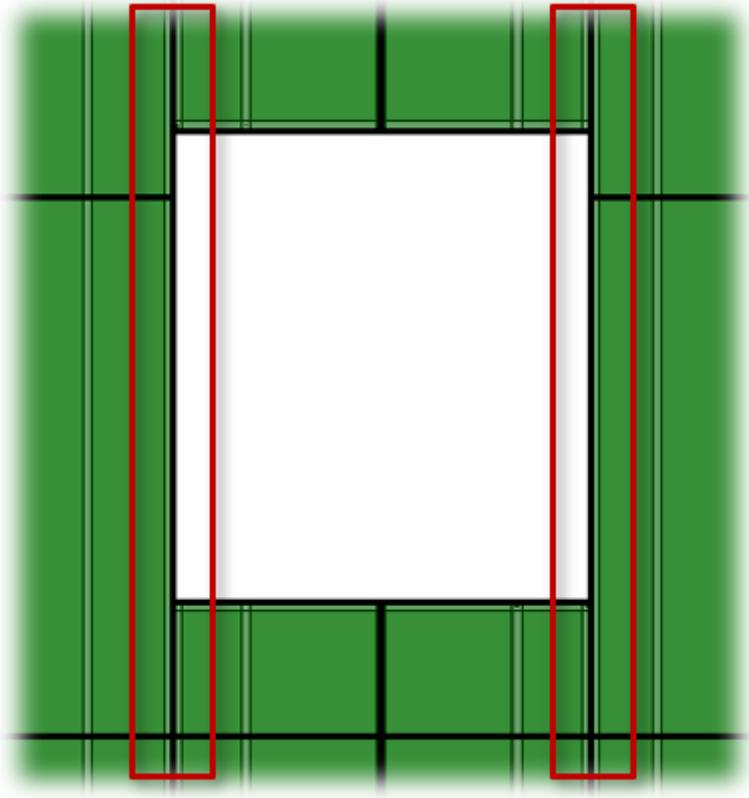
Example with metal wall frame:



You can predefine top and bottom trimmers under **Wall+M** → **Configs** → **Framing Configuration** → **Opening Framing**:

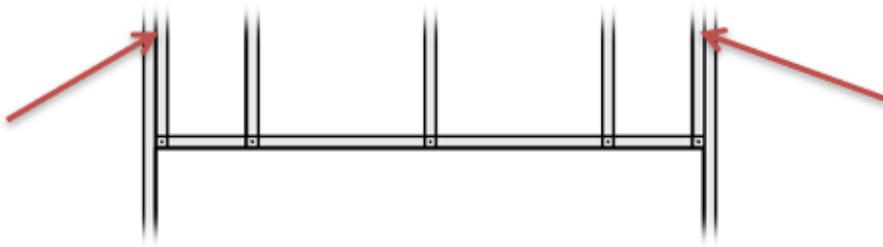


Example with metal floor:



You can predefine top and bottom trimmers under **Floor+M** → **Configs** → **Framing Configuration** → **Opening Framing**:

Trimmers	
Number of Top Trimmer Studs/Joists	1 <input type="checkbox"/> Rotate 180
Number of Bottom Trimmer Studs/Joists	1 <input type="checkbox"/> Rotate 180
Type	L MF Stud-Joist : 1000S162-43
Width (b)	0' - 1 5/8"
Depth (h,d)	0' - 10"
Define Depth (h,d) by Layer Thickness	<input checked="" type="checkbox"/>

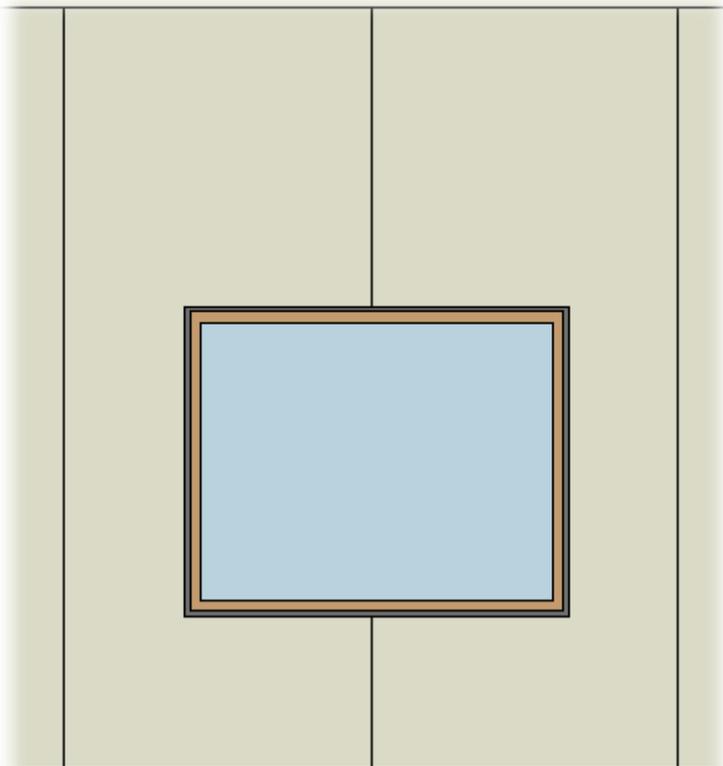


Minimal Width of Opening for Split

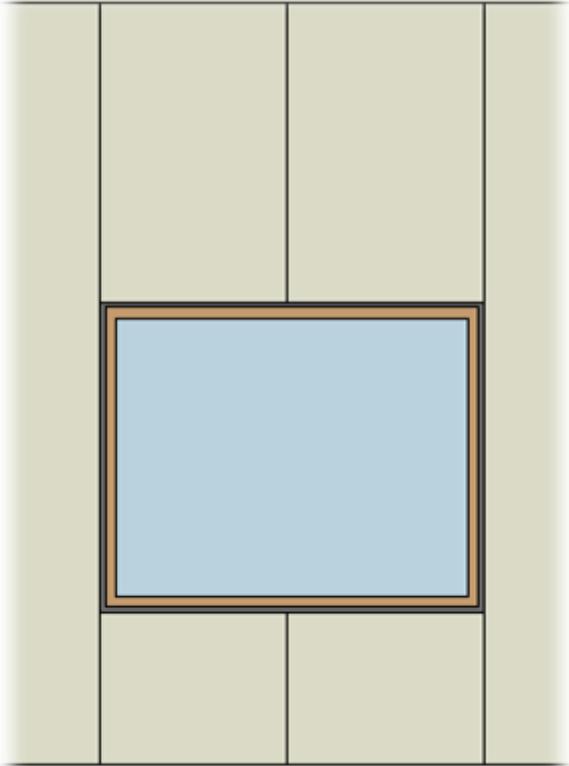
Align with Stud/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Stud/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steepled Top Ridge	<input type="checkbox"/>
Split by Steepled Bottom Ridge	<input type="checkbox"/>

Minimal Width of Opening for Split – define the minimum width of opening for which splits would be available.

Example: If the window, door, or other opening width is less than the predefined value, then there will be no splits around the opening:



If the window, door, or other opening width is more than the predefined value, then there will be splits around the opening:

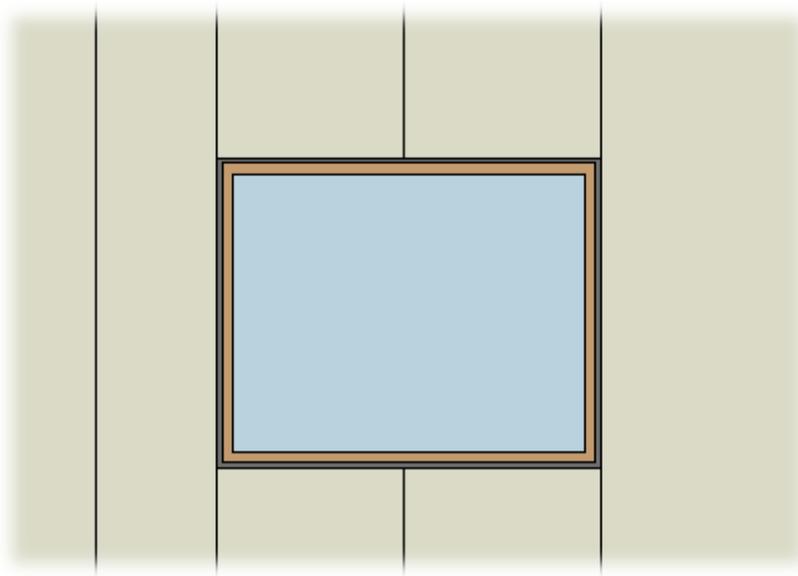


Horizontal Split on Opening Side

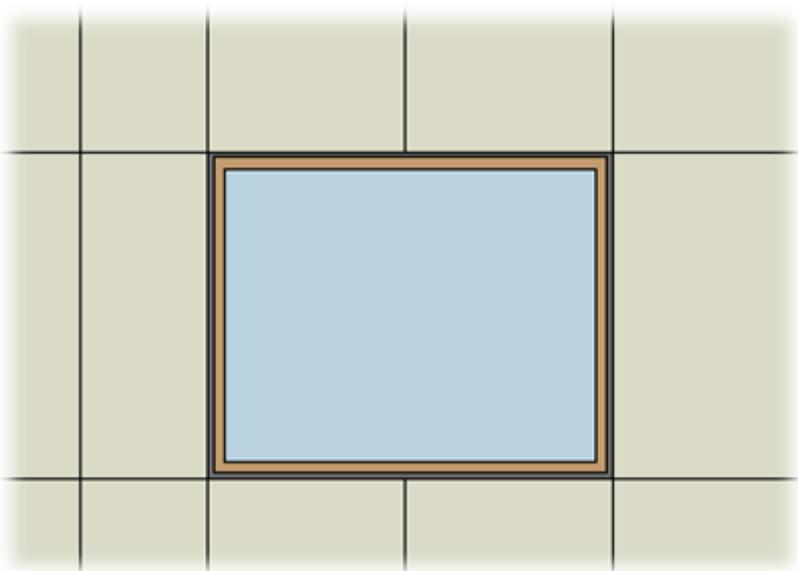
Align with Stud/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studs/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Horizontal Split on Opening Side – defines if the sheathing must be split horizontally around the opening.

Example: **Horizontal Split on Opening Side** is ticked OFF:



Example: **Horizontal Split on Opening Side** is ticked ON:



Split by Steeped Top/Bottom Ridge

Align with Studds/Joists	<input checked="" type="checkbox"/>
Split by Secondary Custom Studds/Joists Axis	<input type="checkbox"/>
Allow to Split on Second King/Joist	<input checked="" type="checkbox"/>
Always Try to Merge Parts	Vertically & Horizontal
Including Parts with Different Edges	<input checked="" type="checkbox"/>
Vertical Split On Opening Side	Opening Side
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	<input type="checkbox"/>
Split by Steeped Top Ridge	<input type="checkbox"/>
Split by Steeped Bottom Ridge	<input type="checkbox"/>

Split by Steeped Top/Bottom Ridge – splits sheathing by steeped top or bottom ridges.

