SHEATHING and PANELING LAYOUTS – Paneling Configuration – Paneling Layout

Modified on: Sat, 9 Jan, 2021 at 5:57 PM

Parallel or Perpendicular to Stud/Joist

Pa	aneling Layout Special Layout			
٢	Paneling Layout			
	Parallel to Stud/Joist	\checkmark	Perpendicular to Stud/Joist	
	Build in Place			
	Bottom/Base Extension	0	Top/End Extension	0
	Sloped Bottom/Base Extension	0	Sloped Top/End Extension	0
	Division Horizontal Offset	10	Division Vertical Offset	20
	Placement Direction	From Start v	Second Row Overlap Distance	0
	Vertical Elements Cut Panels	\checkmark	Horizontal Elements Cut Panels	\checkmark
	Add First Split Line		Add Last Split Line	

Parallel, Perpendicular to Stud/Joist - select if panels should be parallel or perpendicular to the studs or joist.

Example with wall:



Perpendicular is ticked



Example with floor/roof:

Parallel is ticked



Perpendicular is ticked



Bottom/Base Extension, Top/End Extension

Pa	aneling Layout Special Layout			
	Paneling Layout			
	Parallel to Stud/Joist	\checkmark	Perpendicular to Stud/Joist	
	Build in Place			
	Bottom/Base Extension	-12	Top/End Extension	-5
	Sloped Bottom/Base Extension	0	Sloped Top/End Extension	0
	Sloped Bottom/Base Extension Division Horizontal Offset	0	Sloped Top/End Extension Division Vertical Offset	0 20
	Sloped Bottom/Base Extension Division Horizontal Offset Placement Direction	0 10 From Start v	Sloped Top/End Extension Division Vertical Offset Second Row Overlap Distance	0 20 0
	Sloped Bottom/Base Extension Division Horizontal Offset Placement Direction Vertical Elements Cut Panels	0 10 From Start v	Sloped Top/End Extension Division Vertical Offset Second Row Overlap Distance Horizontal Elements Cut Panels	0 20 0

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

Example with wall:



Example with floor/roof:



Sloped Bottom/Base Extension, Sloped Top/End Extension

Paneling Layout	Special Layout			
Paneling Layout]
Parallel to Stud	I/Joist	\checkmark	Perpendicular to Stud/Joist	
Build in Place				
Bottom/Base E	xtension	-12	Top/End Extension	-5
Sloped Bottom	n/Base Extension	0	Sloped Top/End Extension	0
Division Horizo	ontal Offset	10	Division Vertical Offset	20
Placement Dire	ection	From Start 🗸 🗸	Second Row Overlap Distance	0
Vertical Elemer	nts Cut Panels		Horizontal Elements Cut Panels	
Add First Split	Line		Add Last Split Line	

Sloped Bottom/Base Extension, Sloped Top/End Extension – add an offset from the wall/floor/roof base or end for sloped walls/roofs/floors.

Division Horizontal/Vertical Offset

Paneling Layou	Special Layout			
Paneling Layo	ut			
Parallel to St	ud/Joist	√	Perpendicular to Stud/Joist	
Build in Plac	e			
Bottom/Bas	e Extension	-12	Top/End Extension	-5
Sloped Botto	om/Base Extension	0	Sloped Top/End Extension	0
Division Hor	izontal Offset	6	Division Vertical Offset	0
Placement D	Virection	From Start v	Second Row Overlap Distance	0
Vertical Elem	ients Cut Panels	✓	Horizontal Elements Cut Panels	
Add First Sp	it Line		Add Last Split Line	

Division Horizontal/Vertical Offset - adds division offset from the wall/floor/roof bottom or left side.

Example with wall:



Example with floor/roof:



Second Row Overlap Distance

Paneling Layout Special Lay	out		
- Paneling Layout]
Parallel to Stud/Joist	\checkmark	Perpendicular to Stud/Joist	
Build in Place			
Bottom/Base Extension	0	Top/End Extension	0
Sloped Bottom/Base Exter	nsion 0	Sloped Top/End Extension	0
Division Horizontal Offset	0	Division Vertical Offset	0
Placement Direction	From Start v	Second Row Overlap Distance	12
Vertical Elements Cut Pane	els 🗸	Horizontal Elements Cut Panels	
Add First Split Line		Add Last Split Line	

Second Row Overlap Distance – overlap distance between paneling layouts if Perpendicular to Stud/Joist is ticked.

Example with wall:



Example with floor/roof:



Placement Direction

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Paneling Layout	Special Layout			
-Paneling Layout				
Parallel to Stud	l/Joist		Perpendicular to Stud/Joist	
Build in Place				
Bottom/Base B	xtension	0	Top/End Extension	0
Sloped Bottom	n/Base Extension	0	Sloped Top/End Extension	0
Division Horizo	ontal Offset	0	Division Vertical Offset	0
Placement Dire	ection	From Start v	Second Row Overlap Distance	12
Vertical Elemen	nts Cut Panels	✓	Horizontal Elements Cut Panels	\checkmark
Add First Split	Line		Add Last Split Line	

Placement Direction – predefine paneling direction: From Start, From End or From Both Sides. Make sure that **Complete Sheets in First Row** is switched on.

Example with wall:



Example with floor/roof:





Add First/Last Split Line

Paneling Layout Special Layout			
- Paneling Layout			
Parallel to Stud/Joist	\checkmark	Perpendicular to Stud/Joist	
Build in Place			
Bottom/Base Extension	0	Top/End Extension	0
Sloped Bottom/Base Extension	0	Sloped Top/End Extension	0
Division Horizontal Offset	0	Division Vertical Offset	0
Placement Direction	From Start v	Second Row Overlap Distance	12
Vertical Elements Cut Panels		Horizontal Elements Cut Panels	✓
Add First Split Line		Add Last Split Line	

Add First/Last Split Line - adds the split profile into the first or last panel.

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Align with Studs/Joists

Align with Studs/Joists Allow to Split on Second King/Joist		Always Try to Merge Parts Including Parts with Different Edges	Vertically ~	
Vertical Split by "Split Part" Vertical Split Limits	Throughout V	Vertical Split On Opening Side	Opening Side v	
Horizontal Split by "Split Part" Split by "Split Part Priority"		Minimal Width of Opening for Split Horizontal Split On Opening Side		
Split by "Part Division Profile" (beta) Complete Sheets in First Row	 ✓ 	Split by Steeped Top Ridge Split by Steeped Bottom Ridge		

Align with Studs/Joists – aligns panels with studs/joists.

Example 1 with wood frame:



Example 1 with metal frame:



Example 2:



Allow to Split on Second King/Joist

Align with Studs/Joists		Always Try to Merge Parts	Vertically	~
Allow to Split on Second King/Joist		Including Parts with Different Edges		
Vertical Split by "Split Part"			On an in a Cide	-
Vertical Split Limits	Throughout \vee	Vertical Split On Opening Side	Opening Side	*
Horizontal Split by "Split Part"		Minimal Width of Opening for Split	0	
Split by "Split Part Priority"	\checkmark	Horizontal Split On Opening Side		
Split by "Part Division Profile" (beta)		Split by Steeped Top Ridge		
Complete Sheets in First Row	 ✓ 	Split by Steeped Bottom Ridge		

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

Example with wood frame:



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Example with metal wall frame:







Example with metal floor frame:



Always Try to Merge Parts

Always Try to Merge Parts	Horizontally v
Including Parts with Different Edges	>
Vertical Split On Opening Side	Opening Side v
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	
Split by Steeped Top Ridge	
Split by Steeped Bottom Ridge	

Example: Let's split parts by openings horizontally and set the horizontal direction for merging:



If we were to increase the paneling dimensions to 4000 x 1200 mm, we'd get this result:



Let's try setting the paneling dimensions to 3000 x 1200 mm for another wall/floor/roof, but this time, we'll split the paneling vertically, add vertical splits on the opening sides, and set the vertical prioritization for merging:

Always Try to Merge Parts	Vertically	~
Including Parts with Different Edges	✓	
Vertical Split On Opening Side	Opening Side	~
Minimal Width of Opening for Split	0	
Horizontal Split On Opening Side	\checkmark	
Split by Steeped Top Ridge		
Split by Steeped Bottom Ridge		



Also, we can predefine the paneling dimensions to 3000 x 1200 mm, split the paneling vertically, add horizontal splits and vertical splits on the nearest opening king, and set to horizontal prioritization for merging:

Always Try to Merge Parts	Vertically	Ŷ
Including Parts with Different Edges	✓	
Vertical Split On Opening Side	Opening Side	Ŷ
Minimal Width of Opening for Split	0	
Horizontal Split On Opening Side	✓	
Split by Steeped Top Ridge		
Split by Steeped Bottom Ridge		

Here are the above settings applied to two different walls/floors/roofs:



Vertical Split on Opening Side

Always Try to Merge Parts Including Parts with Different Edges	Horizontally ~
Vertical Split On Opening Side	Opening Side v
Minimal Width of Opening for Split	0
Horizontal Split On Opening Side	\checkmark
Split by Steeped Top Ridge	
Split by Steeped Bottom Ridge	

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

Example with floor frame:





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



Example with metal wall frame:



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



rimmers		
Number of Top Trimmer Studs/Joists	1	Rotate 18
Number of Bottom Trimmer Studs/Joists	1	Rotate 18
Туре	I_MF C+C_CH Stud : 3505162-43	~
Width (b)	1.625	
Depth (h,d)	3.5	
Define Depth (h.d) by Layer Thickness	v	

Minimal Width of Opening for Split

Always Try to Merge Parts	Horizontally	Ŷ
Including Parts with Different Edges	\checkmark	
Vertical Split On Opening Side	Opening Side	~
Minimal Width of Opening for Split	0	
Horizontal Split On Opening Side	\checkmark	
Split by Steeped Top Ridge		
Split by Steeped Bottom Ridge		

Minimal Width of Opening for Split - define the minimum opening width for which splitting is applied.

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



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



Horizontal Split on Opening Side

Always Try to Merge Parts Including Parts with Different Edges	Horizontally ~
Vertical Split On Opening Side Minimal Width of Opening for Split	Opening Side v
Horizontal Split On Opening Side	
Split by Steeped Top Ridge	
Split by Steeped Bottom Ridge	

Horizontal Split on Opening Side – define whether the panels 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:



Vertical/Horizontal Split by Parameter – Split Part

Align with Studs/Joists	
Allow to Split on Second King/Joist	\checkmark
Vertical Split by "Split Part"	
Vertical Split Limits	Throughout v
Horizontal Split by "Split Part"	
Horizontal Split by "Split Part" Split by "Split Part Priority"	
Horizontal Split by "Split Part" Split by "Split Part Priority" Split by "Part Division Profile" (beta)	

In order to activate all these features, Align with Studs/Joists and Split by "Split Part Priority" must be switched OFF.

Vertical/Horizontal Split by Parameter – Split Part — splits panels vertically by the **Split Part** parameter from stud or joist.



In order to activate the **Split Part** parameter, you have to open **Type Properties** of the stud or joist family and add **Part Split Number**. **Wall+/Floor+/Roof+** will know where to split the panel, for example, every 4 studs or joists.

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< <td>6 ×.</td> <td></td> <td>Edit Hi Family Ar</td> <td colspan="2">Type Properties</td> <td>×</td>	6 ×.		Edit Hi Family Ar	Type Properties		×	
Modify	View Measure	Create	Mode Ar	Family:	M_MF L-T Profile	¥	Load
			_	Type:	LT06040-80-18	¥	Duplicate
							Rename
				Type Param	eters		
					Parameter	Value	= ^
				Construct	tion		*
				Length Ex	tension	0.00	
	A			Length Ex	tension on Slope	0.00	
A				Part Split	Number	4	
			_	Butt Conn	nection	5.00	
	_			End Exten	sion	5.00	
				Screw Cal	culation Parameter	1.000000	
				Smart Det	ail Configuration		
				Smart Ass	embly Configuration		
				Graphics			*
				Axis Line \	Visible	✓	
				Materials	and Finishes		\$
				Structural	Material	Metal Stud Layer	
				Structura	al de la companya de		*
				Interior Ex	tension	0.00	
				tf		0.18 cm	
				d		6.00 cm	
				lbf		4.00 cm	•
				<< Prev	riew O	Cancel	Apply
							.11

There are special families provided together with Wall+, Floor+, Roof+, which can be used for splitting panels vertically or horizontally:

M WF Part Split Stud-Joist (Metric for vertical splits) I WF Part Split Stud-Joist (Imperial for vertical splits) **M_WF Part Split Bridging** (Metric for horizontal splits) I_WF Part Split Bridging (Imperial for horizontal splits)



Result: Panels are split by vertical and horizontal studs/joists and bridgings. Example: If the horizontal bridgings should be short, then please make sure **Perpendicular to Stud/Joist** is selected. In such case, Wall+, Floor+, Roof+ will split the segments vertically first and then horizontally.



Complete Sheets in First Row

Align with Studs/Joists	
Allow to Split on Second King/Joist	\checkmark
Vertical Split by "Split Part"	✓
Vertical Split Limits	Throughout v
Horizontal Split by "Split Part"	
Split by "Split Part Priority"	
Split by "Part Division Profile" (beta)	\checkmark
Complete Sheets in First Row	

Complete Sheets in First Row – reverses panel placement direction. If **Placement Direction** is set to **From Start** and **Complete Sheets in First Row** is OFF, then the placement direction will be from end.

This option should be used when there are a few insulation layers.