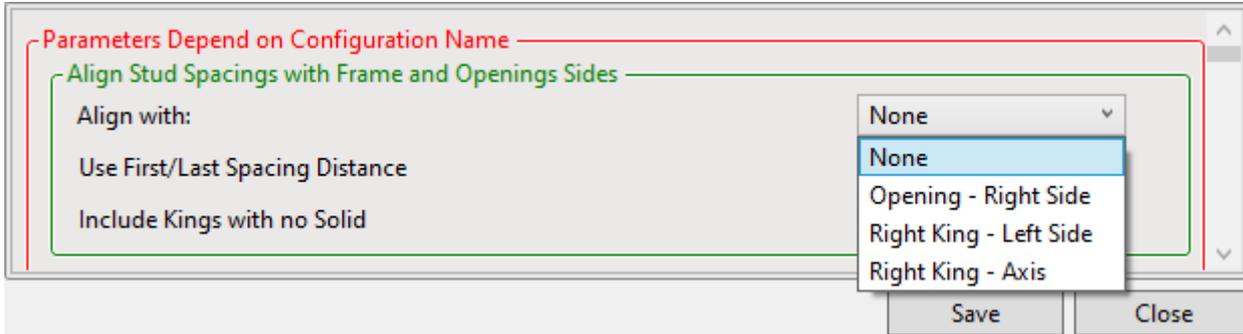


FRAMING CONFIGURATION – Modify Configuration Settings

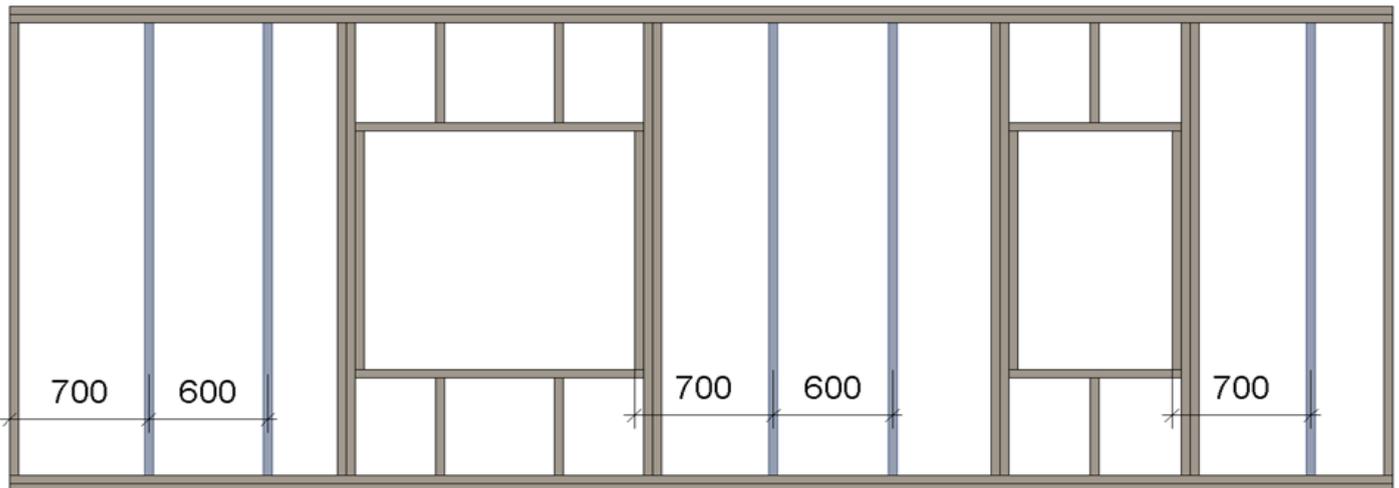
Modified on: Wed, 14 Jul, 2021 at 4:36 PM

Align Stud Spacing with Frame and Openings Sides

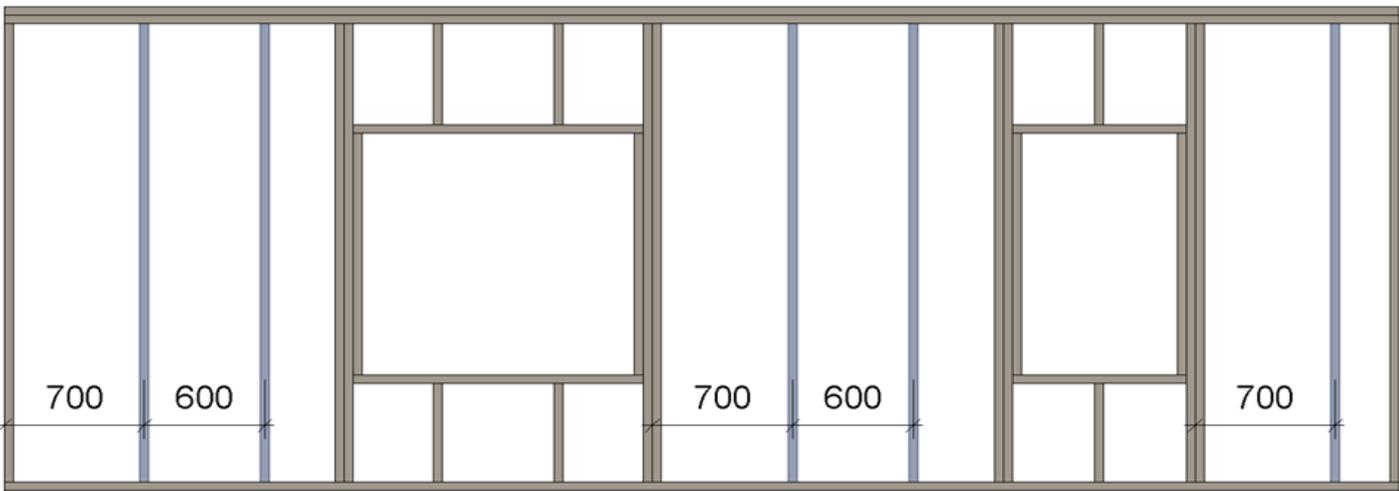


Align Stud Spacing with Frame and Openings Sides – option to align stud/joist spacing with **opening right side**, **right king-left side** or **right king-axis**.

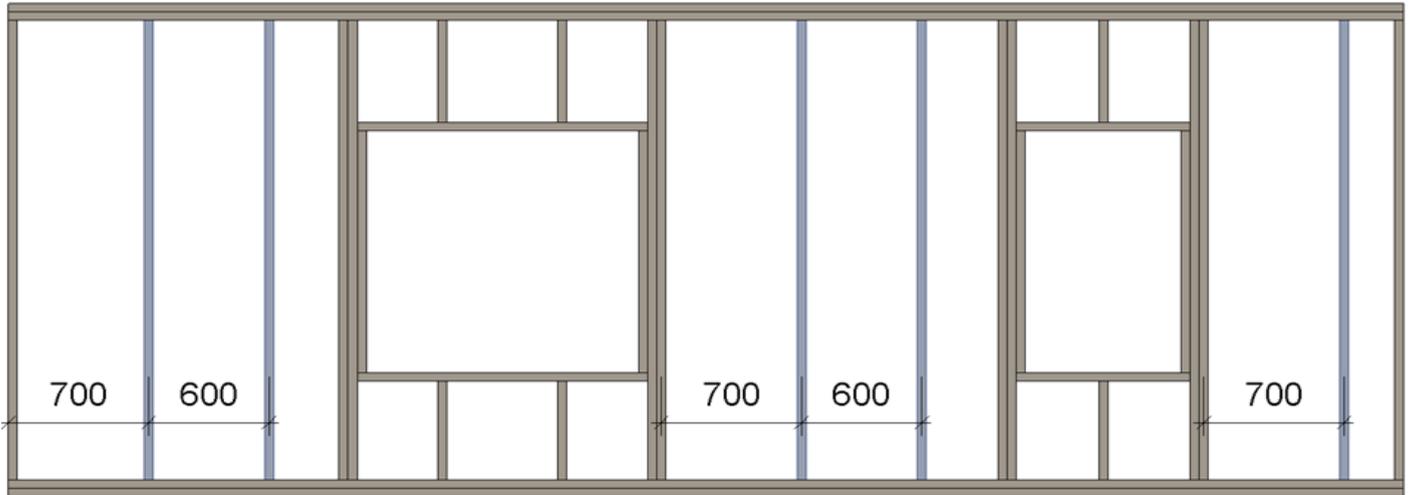
Example: Studs/Joists are aligned with the right side of the opening (opening right side):



Example: Studs/Joists are aligned with the left side of the right king (right king-left side):



Example: Studs/Joists are aligned with the axis of the right king (right king-axis):



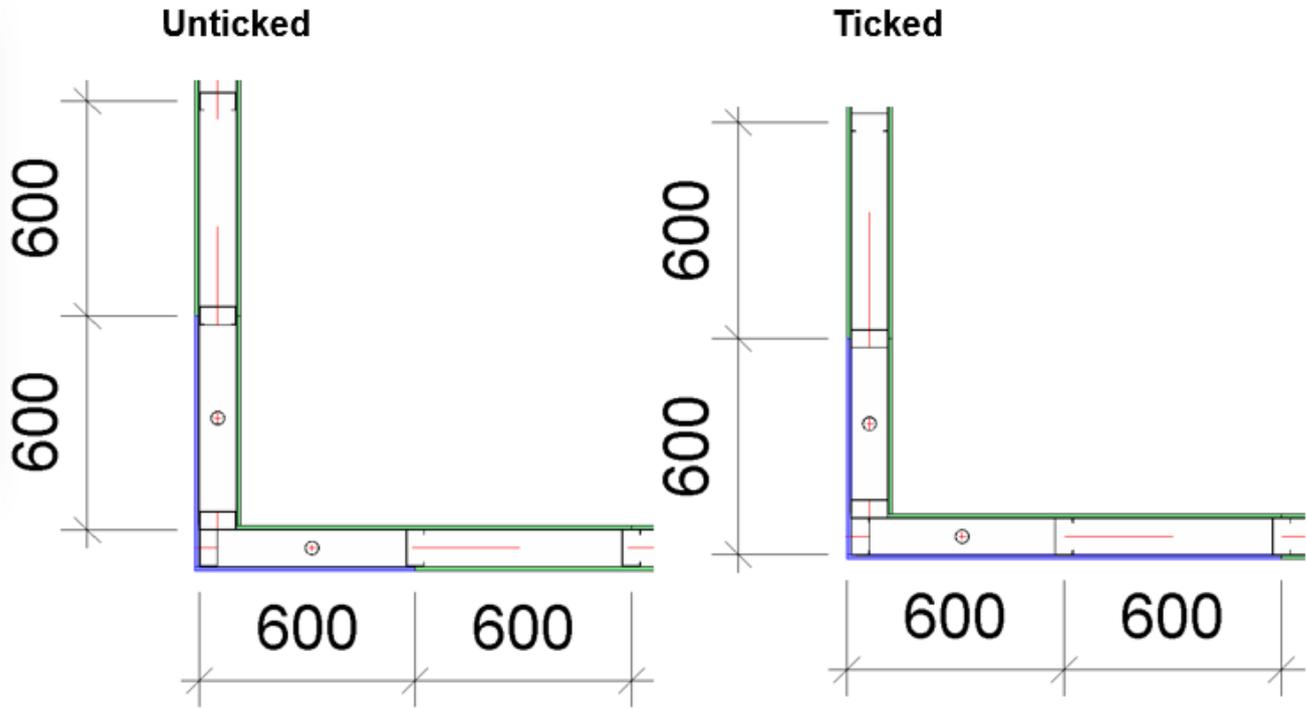
Recalculate First/Last Stud Spacing for External Corners

Parameters Depend on Configuration Name

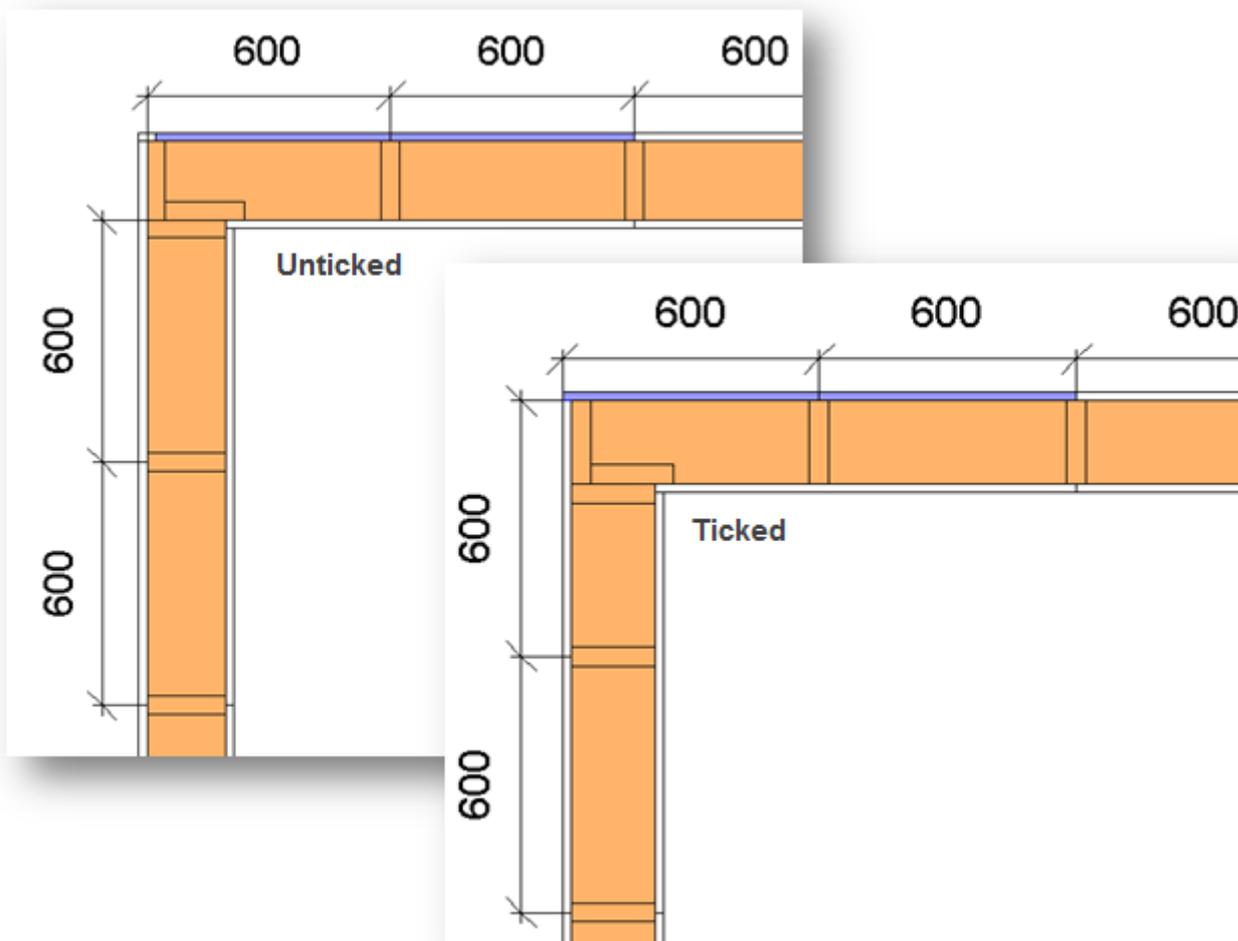
Recalculate First/Last Stud Spacing for External Corners	<input type="checkbox"/>
Align with Main Frame	<input type="checkbox"/>
Automatically Align Opening Cripples with Studs	<input checked="" type="checkbox"/>
Automatically Align Opening Cripples with Nearest Left Stud	<input type="checkbox"/>
Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing	<input type="checkbox"/>
Delete or Move Studs when they Collide	Delete
Connect Long Bridging/Nogging to Internal Opening King Joist/Stud	<input checked="" type="checkbox"/>

Recalculate First/Last Stud Spacing for External Corners – recalculates position of first or last stud. Ticking this option ensures good sheathing coverage from external corners.

Example with metal frames:



Example with wooden frames:



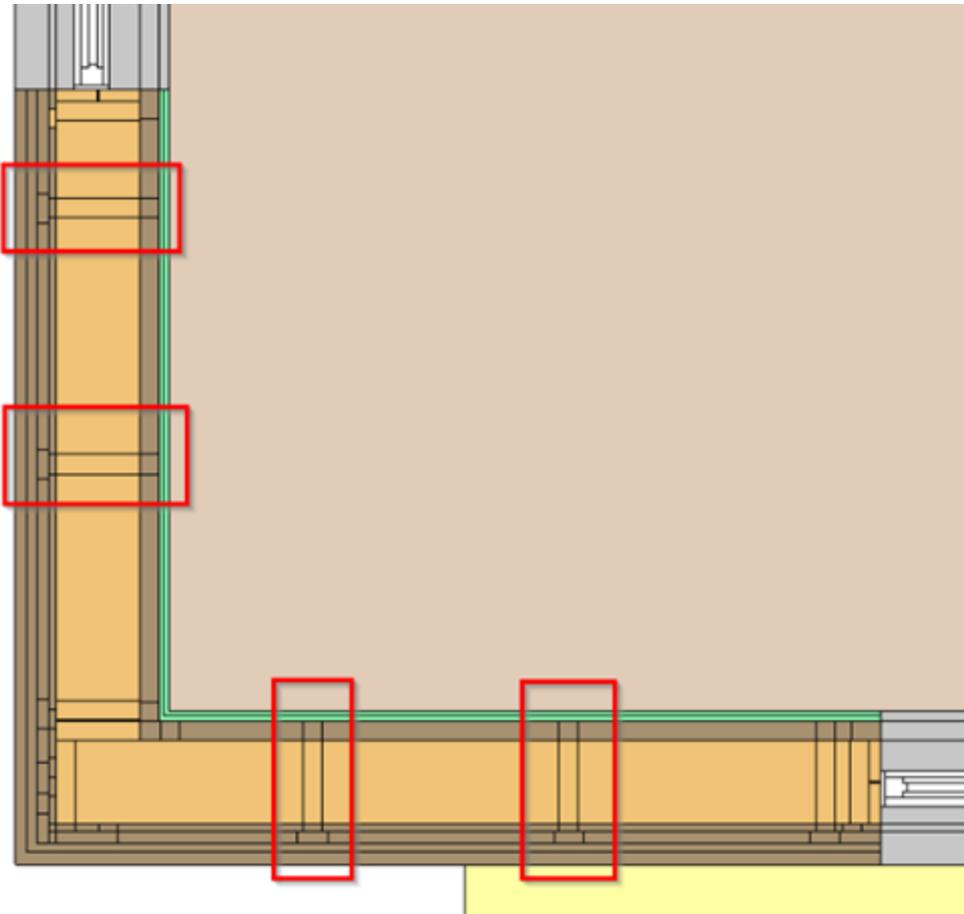
Align with Main Frame

Parameters Depend on Configuration Name

Recalculate First/Last Stud Spacing for External Corners	<input type="checkbox"/>
Align with Main Frame	<input type="checkbox"/>
Automatically Align Opening Cripples with Studs	<input checked="" type="checkbox"/>
Automatically Align Opening Cripples with Nearest Left Stud	<input type="checkbox"/>
Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing	<input type="checkbox"/>
Delete or Move Studs when they Collide	Delete ▾
Connect Long Bridging/Nogging to Internal Opening King Joist/Stud	<input checked="" type="checkbox"/>

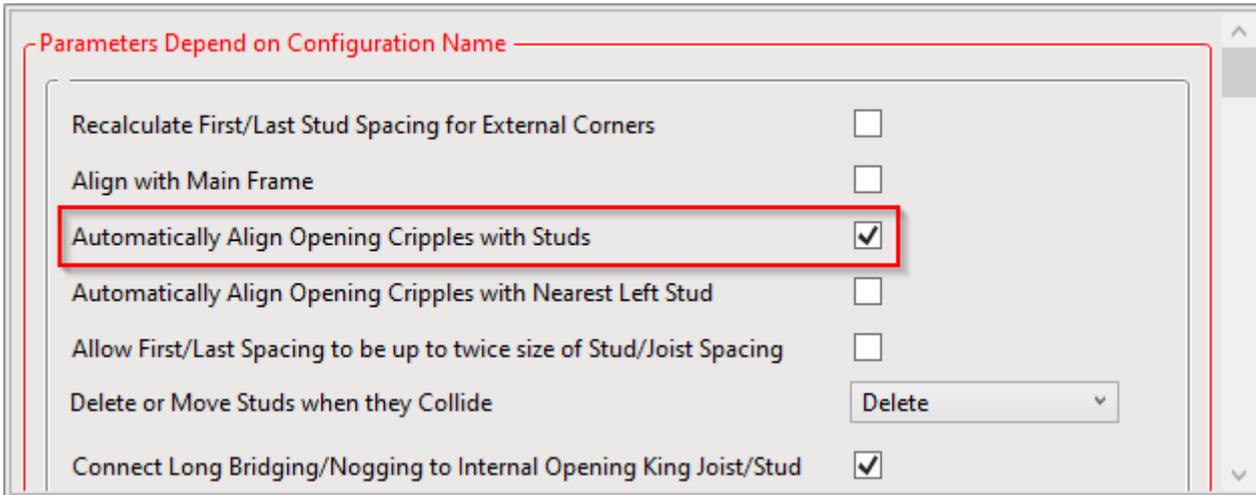
Align with Main Frame – aligns frame with main frame. Mostly used for **Vertical Nailier** or **Secondary Frame** layers.

Example with wooden frames:



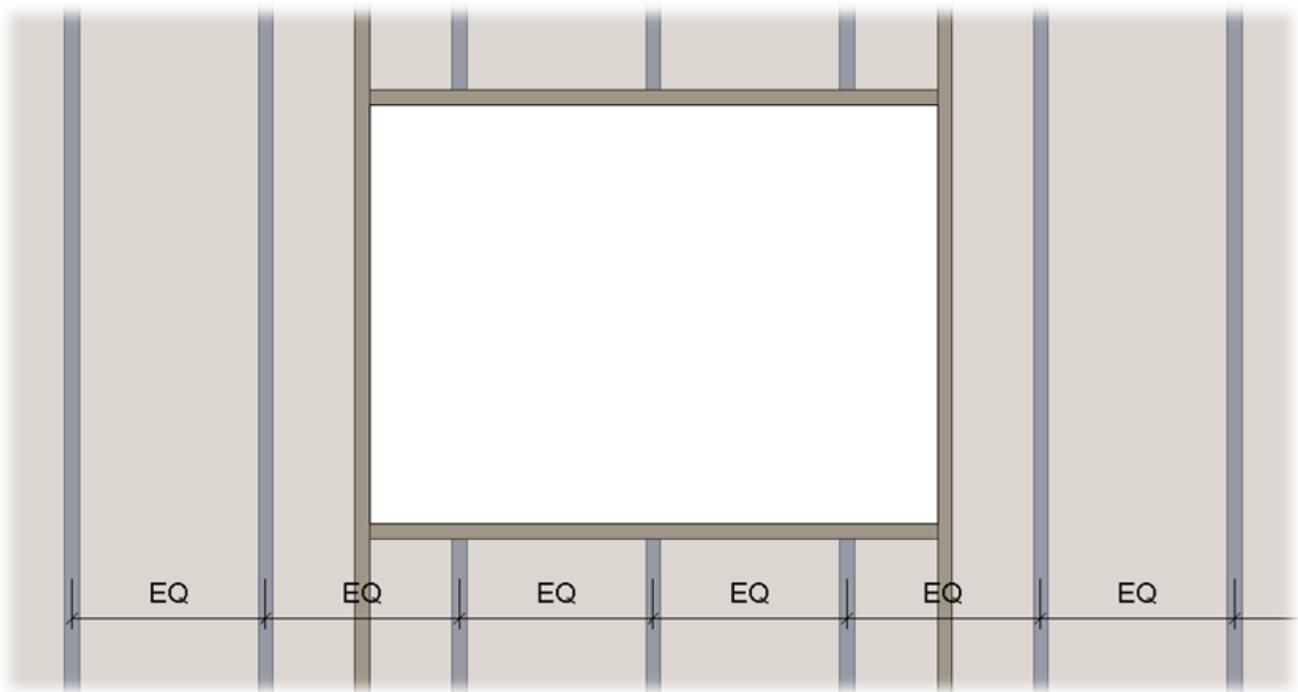
Example with metal frames:

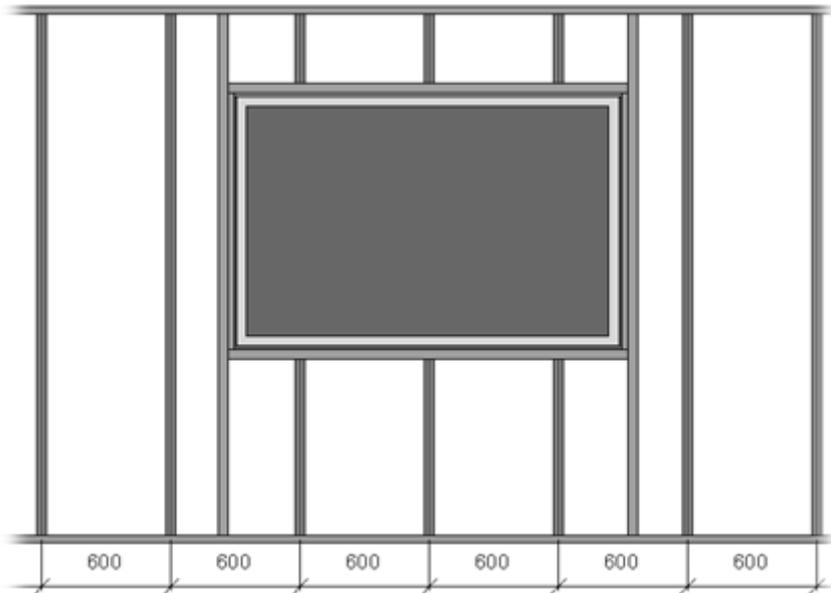


Automatically Align Opening Cripples with Studs (in Wall+, Wall+M) or**Automatically Align Opening Cripples with Joists (in Floor+, Floor+M, Roof+, Roof+M)**

Automatically Align Opening Cripples with Studs/Joists – aligns cripples below and above openings with main studs/joists.

*Example: When **Automatically Align Opening Cripples with Studs/Joists** is ticked on:*





Automatically Align Opening Cripples with Nearest Left Stud

(in Wall+, Wall+M)

Automatically Align Opening Cripples with Nearest Left Joist

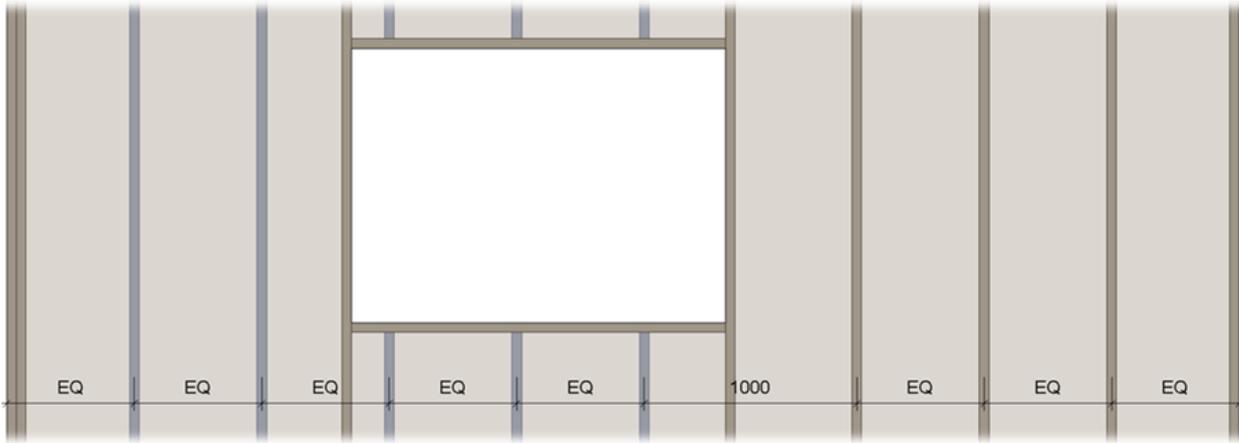
(in Floor+, Floor+M, Roof+, Roof+M)

Parameters Depend on Configuration Name

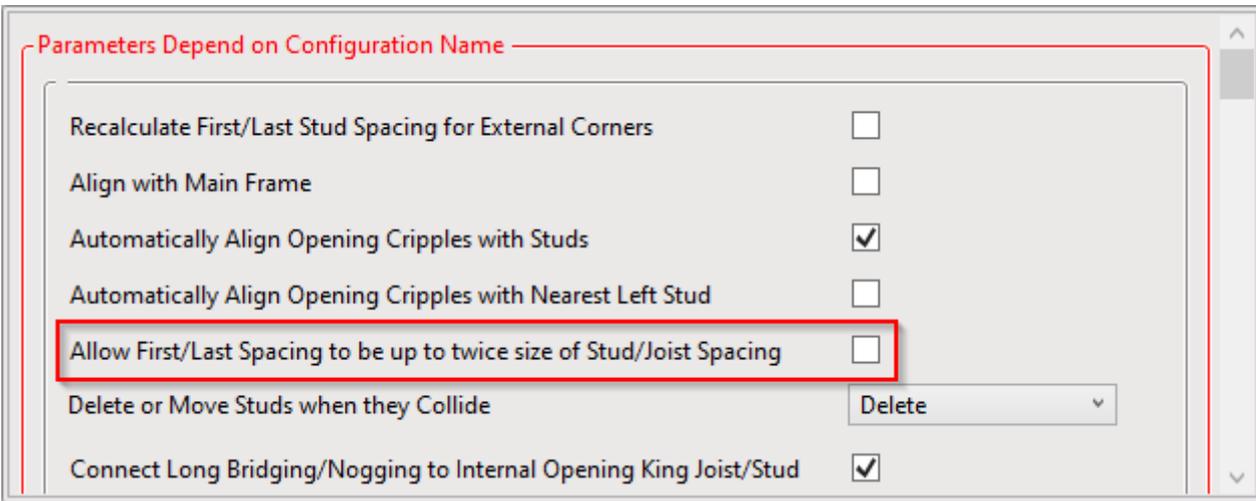
Recalculate First/Last Stud Spacing for External Corners	<input type="checkbox"/>
Align with Main Frame	<input type="checkbox"/>
Automatically Align Opening Cripples with Studs	<input checked="" type="checkbox"/>
Automatically Align Opening Cripples with Nearest Left Stud	<input type="checkbox"/>
Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing	<input type="checkbox"/>
Delete or Move Studs when they Collide	Delete ▾
Connect Long Bridging/Nogging to Internal Opening King Joist/Stud	<input checked="" type="checkbox"/>

Automatically Align Opening Cripples with Nearest Left Stud/Joist – aligns cripples below and above openings with the nearest left stud/joist. This option is usually used when the main studs/joists are distributed from both sides.

*Example: When **Automatically Align Opening Cripples with Nearest Left Stud/Joist** is ticked on:*

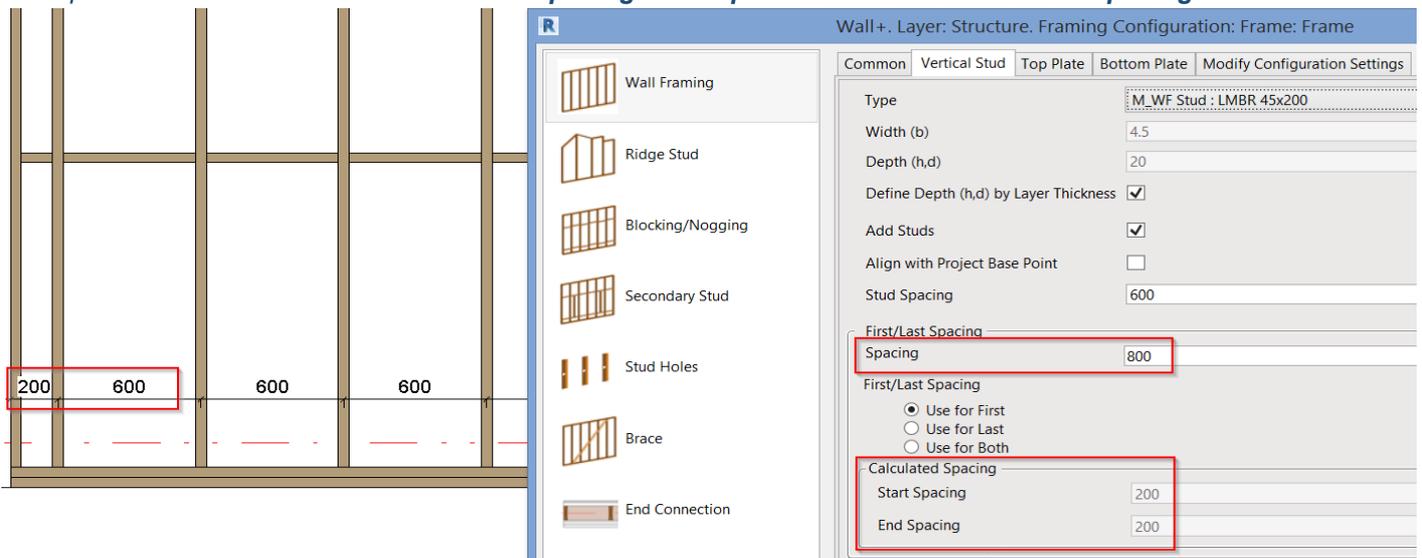


Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing



Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing – allows changing **First/Last Spacing** from **Wall/Floor/Roof Framing** to be up to twice that of the **Stud/Joist Spacing**.

*Example with wood: When **Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing** is ticked OFF:*



*Example: When **Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing** is ticked ON:*

Wall Framing

Ridge Stud

Blocking/Nogging

Secondary Stud

Stud Holes

Brace

End Connection

Wall+. Layer: Structure, Framing Configuration: Frame: Frame

Common Vertical Stud Top Plate Bottom Plate Modify Configuration Settings

Type M_WF Stud : LMBR 45x200

Width (b) 4.5

Depth (h,d) 20

Define Depth (h,d) by Layer Thickness

Add Studs

Align with Project Base Point

Stud Spacing 600

First/Last Spacing

Spacing 800

First/Last Spacing

Use for First

Use for Last

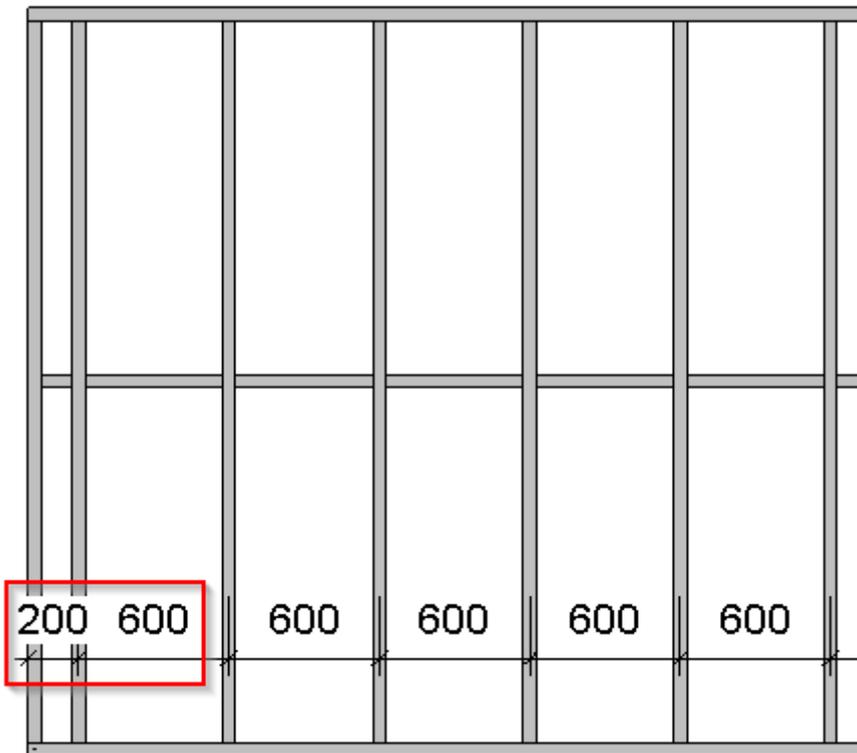
Use for Both

Calculated Spacing

Start Spacing 800

End Spacing 200

Example with metal: When Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing is ticked OFF:



Common	Vertical Stud	Top Plate	Bottom Plate	Modify Configuration Settings
Type	M_MF C+C Stud : C10251-15			
Width (b)	5.08			
Depth (h,d)	10.2			
Define Depth (h,d) by Layer Thickness	<input checked="" type="checkbox"/>			
Rotate 180°	<input type="checkbox"/>			
Add Studs	<input checked="" type="checkbox"/>			
Align with Project Base Point	<input type="checkbox"/>			
Stud Spacing	600			
First/Last Spacing				
Spacing	800			
First/Last Spacing				
<input checked="" type="radio"/> Use for First				
<input type="radio"/> Use for Last				
<input type="radio"/> Use for Both				
Calculated Spacing				
Start Spacing	200			
End Spacing	400			

Example: When Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing is ticked ON:



Common	Vertical Stud	Top Plate	Bottom Plate	Modify Configuration Settings
Type	M_MF C+C Stud : C10251-15			
Width (b)	5.08			
Depth (h,d)	10.2			
Define Depth (h,d) by Layer Thickness	<input checked="" type="checkbox"/>			
Rotate 180°	<input type="checkbox"/>			
Add Studs	<input checked="" type="checkbox"/>			
Align with Project Base Point	<input type="checkbox"/>			
Stud Spacing	600			
First/Last Spacing				
Spacing	800			
First/Last Spacing				
<input checked="" type="radio"/> Use for First				
<input type="radio"/> Use for Last				
<input type="radio"/> Use for Both				
Calculated Spacing				
Start Spacing	800			
End Spacing	400			

Delete or Move Studs when they Collide (in Wall+, Wall+M)

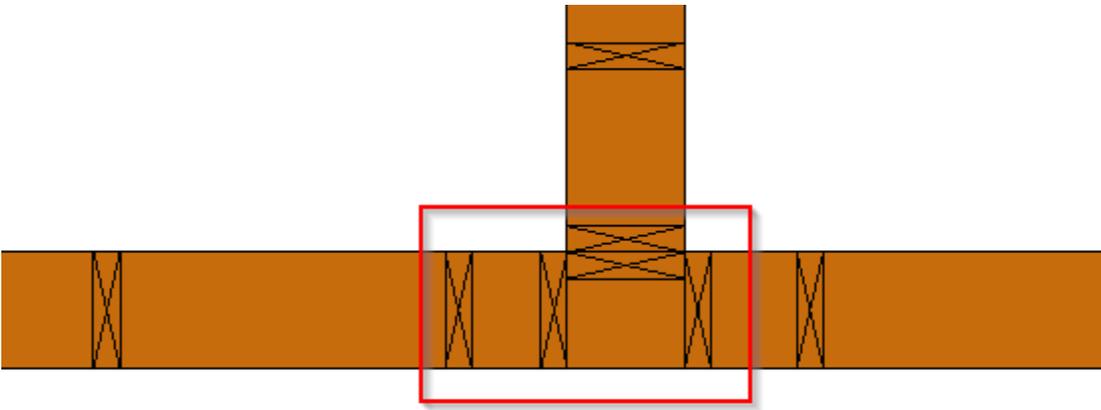
Delete or Move Joists when they Collide (in Floor+, Floor+M, Roof+, Roof+M)

Parameters Depend on Configuration Name

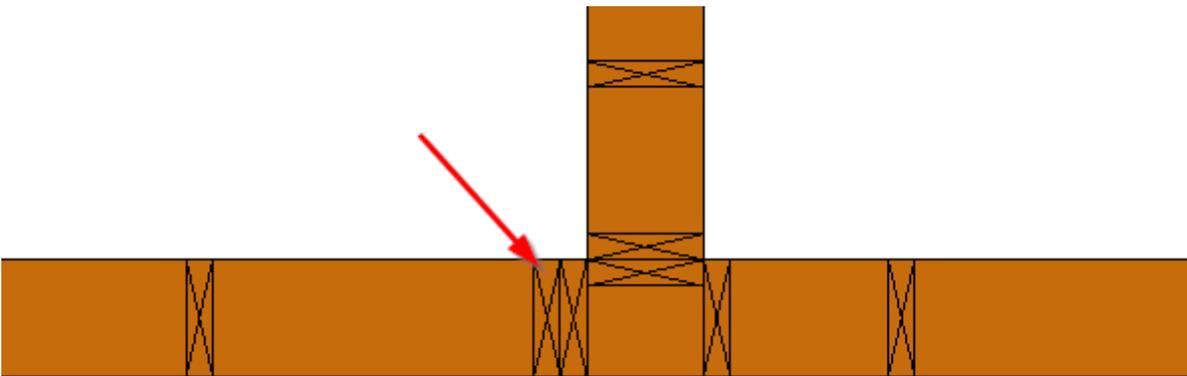
Recalculate First/Last Stud Spacing for External Corners	<input type="checkbox"/>
Align with Main Frame	<input type="checkbox"/>
Automatically Align Opening Cripples with Studs	<input checked="" type="checkbox"/>
Automatically Align Opening Cripples with Nearest Left Stud	<input type="checkbox"/>
Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing	<input type="checkbox"/>
Delete or Move Studs when they Collide	Delete
Connect Long Bridging/Nogging to Internal Opening King Joist/Stud	<input checked="" type="checkbox"/>

Delete or Move Studs/Joists when they Collide – choose what to do with studs/joists when they collide. (This function supports a more convenient framing workflow.)

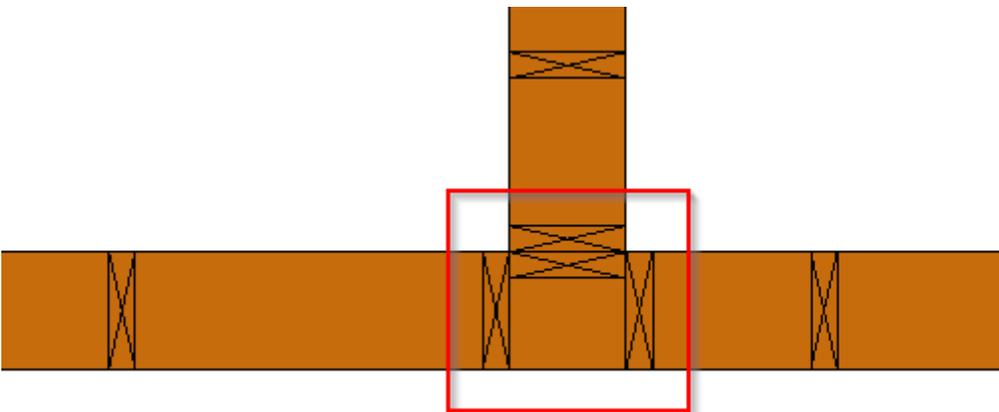
Example with wood wall frame from plan view: If the internal wall is moved, it collides with the existing stud. The function allows the existing stud to be deleted or moved.



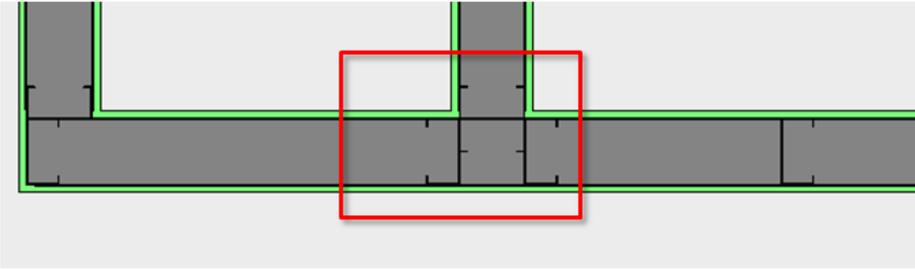
Stud was moved:



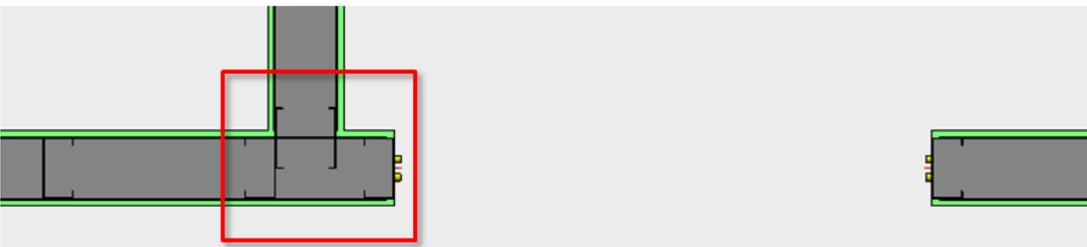
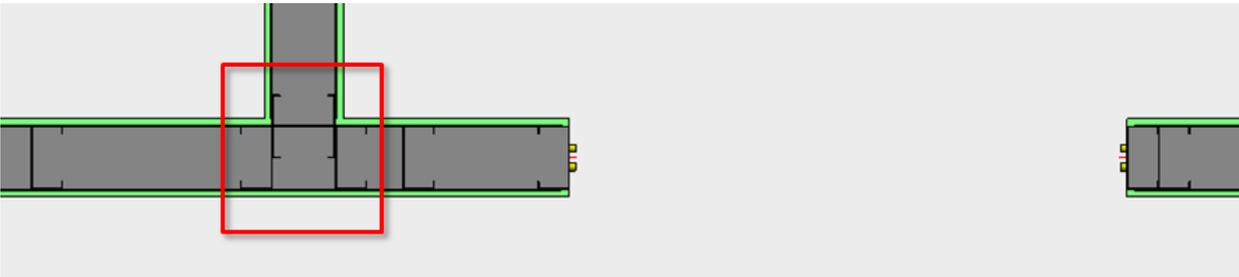
Stud was deleted:



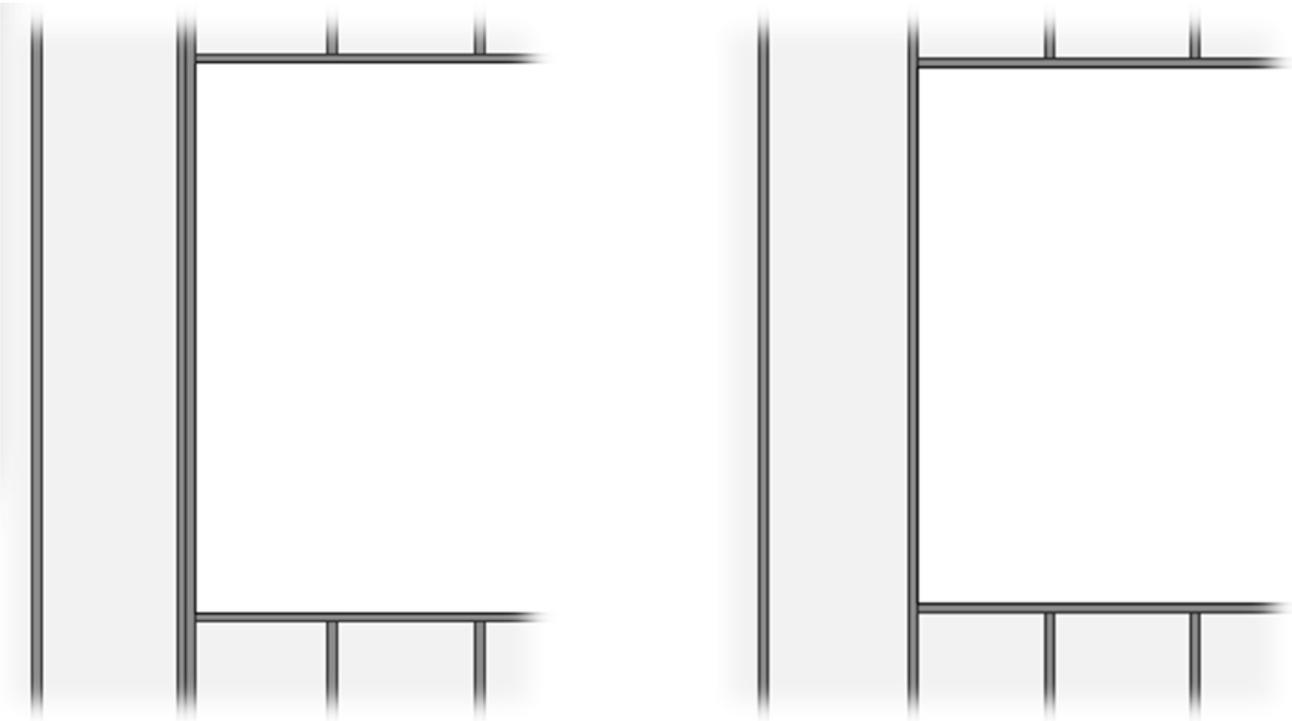
Example with metal wall frame from plan view:



For a more convenient framing workflow, **King Stud** stays and deletes existing **Stud** from the connection:



Example: The trimming joist stays while the existing joist is moved or deleted from the connection.



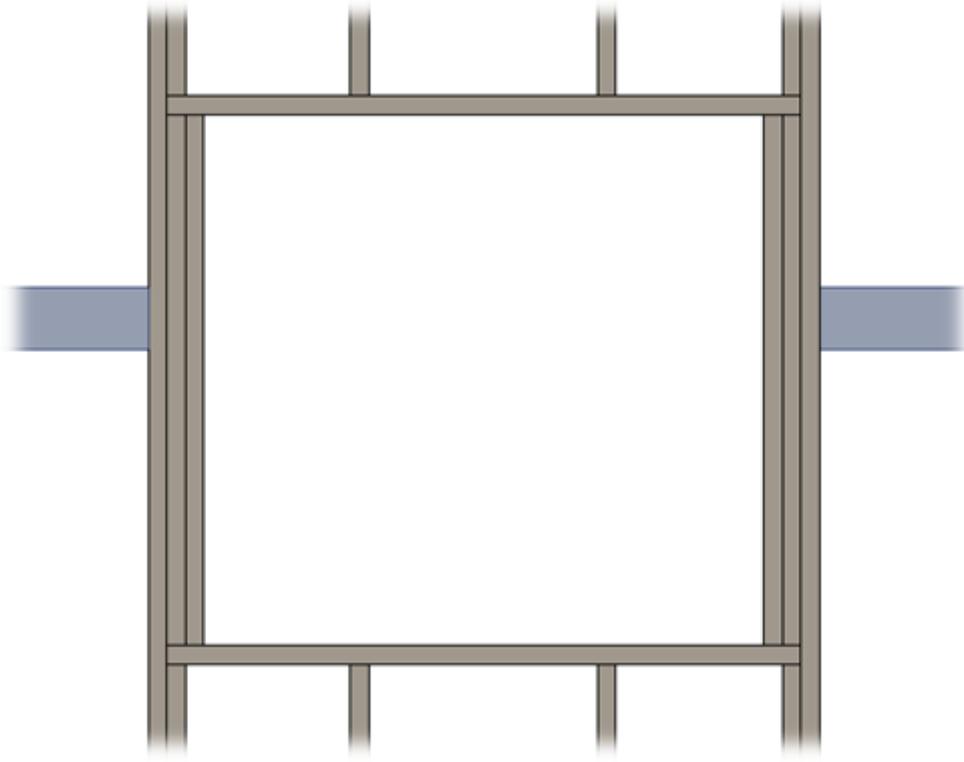
Connect Long Bridging/Nogging to Internal Opening King Joist/Stud

Parameters Depend on Configuration Name

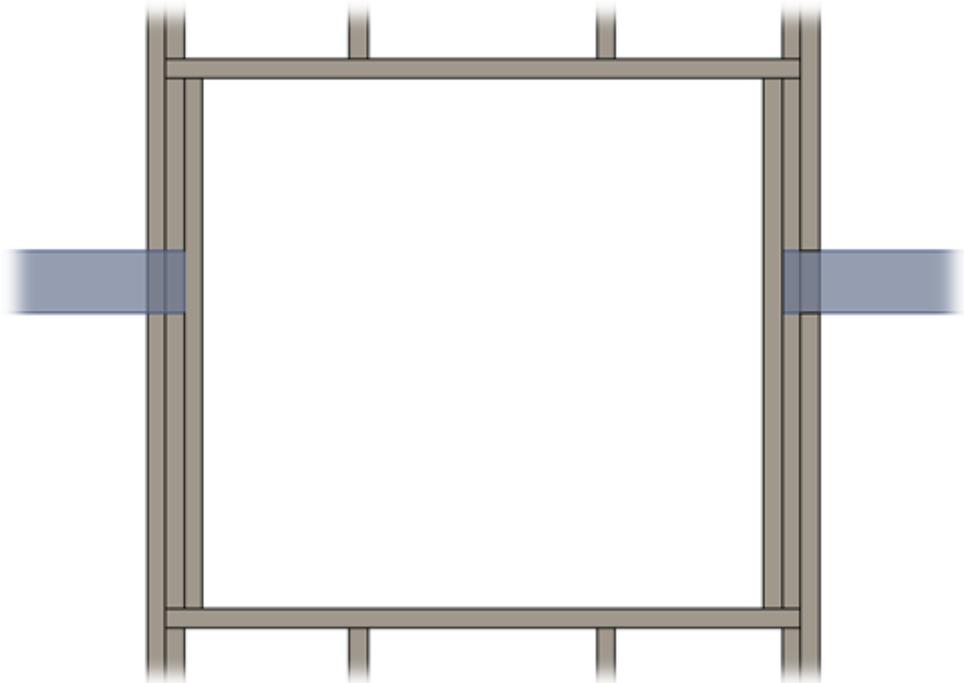
Recalculate First/Last Stud Spacing for External Corners	<input type="checkbox"/>
Align with Main Frame	<input type="checkbox"/>
Automatically Align Opening Cripples with Studs	<input checked="" type="checkbox"/>
Automatically Align Opening Cripples with Nearest Left Stud	<input type="checkbox"/>
Allow First/Last Spacing to be up to twice size of Stud/Joist Spacing	<input type="checkbox"/>
Delete or Move Studs when they Collide	Delete ▾
Connect Long Bridging/Nogging to Internal Opening King Joist/Stud	<input checked="" type="checkbox"/>

Connect Long Bridging/Nogging to Internal Opening King Joist/Stud – connects bridging/nogging with internal opening king studs or trimming joists.

*Example: **Connect Long Bridging/Nogging to Internal Opening King Joist/Stud** is ticked OFF:*



*Example: **Connect Long Bridging/Nogging to Internal Opening King Joist/Stud** is ticked ON:*

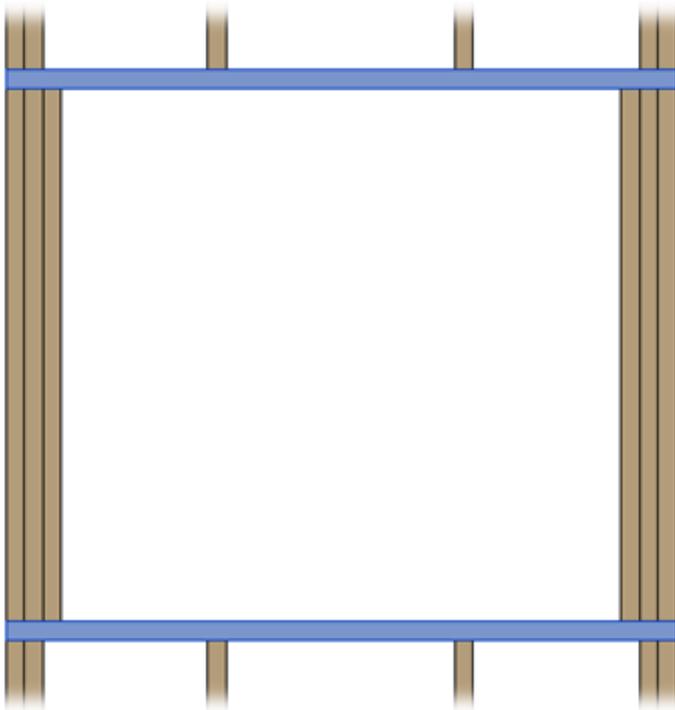


Connect Headers to Internal King Stud/Trimming Joist

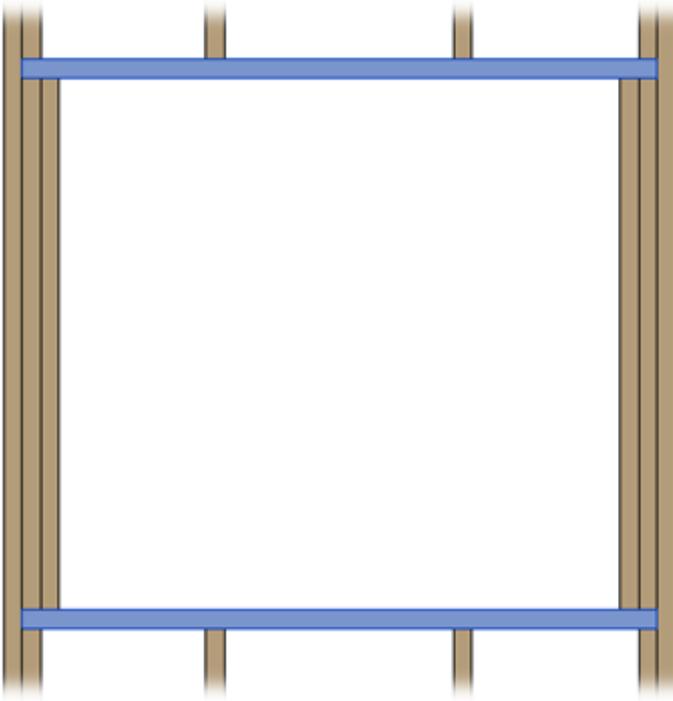
Connect Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Connect Top Plate Support Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Separate Joined Opening's Preassemblies	<input type="checkbox"/>
Top Plate Support: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
King\Trimmer: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Header: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Allow Brace and Opening intersection	<input type="checkbox"/>

Connect Headers to Internal King Stud/Trimming Joist – headers can be connected to internal or external kings or trimming joists.

*Example with wood: **Connect Headers to Internal King Stud/Trimming Joist** is ticked OFF:*

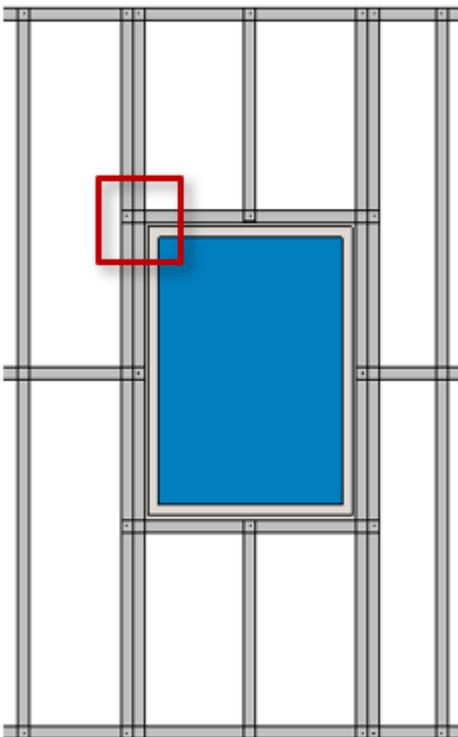


*Example: **Connect Headers to Internal King Stud/Trimming Joist** is ticked ON:*

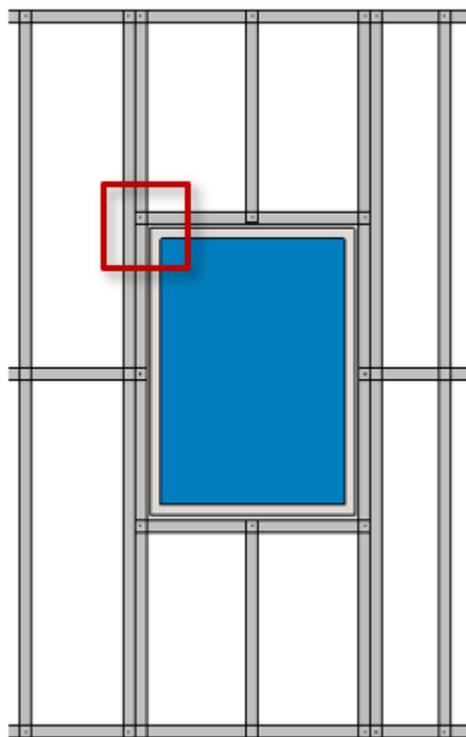


Example with metal:

Unticked



Ticked

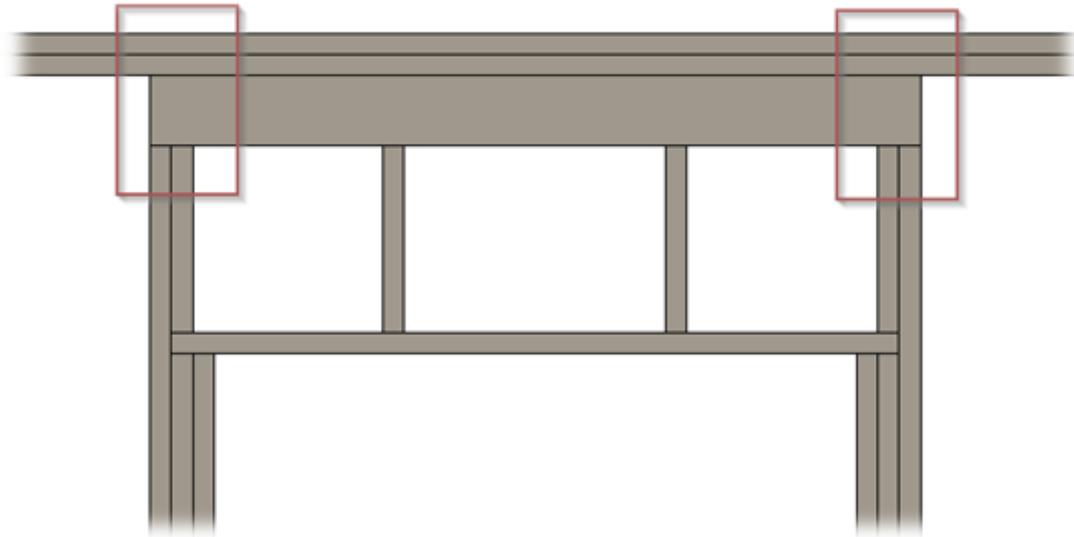


Connect Top Plate Support Headers to Internal King Stud/Trimming Joist

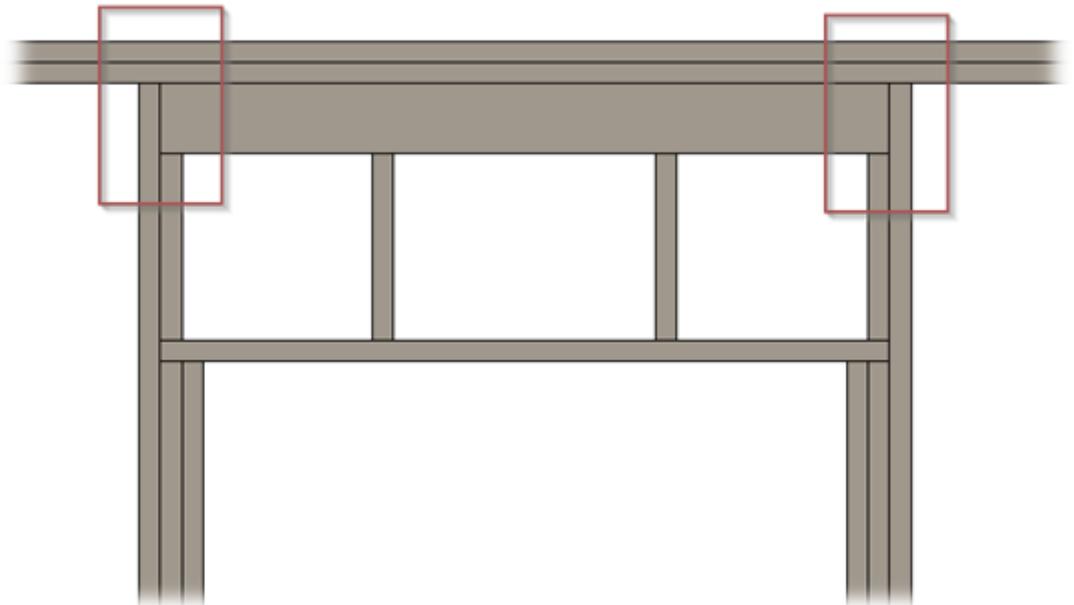
Connect Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Connect Top Plate Support Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Separate Joined Opening's Preassemblies	<input type="checkbox"/>
Top Plate Support: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
King\Trimmer: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Header: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Allow Brace and Opening intersection	<input type="checkbox"/>

Connect Top Plate Support Headers to Internal King Stud/Trimming Joist – top plate supports can be connected to internal or external kings or trimming joists.

Example: Connect Top Plate Support Headers to Internal King Stud/Trimming Joist is ticked OFF:



Example: Connect Top Plate Support Headers to Internal King Stud/Trimming Joist is ticked ON:



Separate Joined Opening's Preassemblies

Connect Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Connect Top Plate Support Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Separate Joined Opening's Preassemblies	<input type="checkbox"/>
Top Plate Support: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
King\Trimmer: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Header: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Allow Brace and Opening intersection	<input type="checkbox"/>

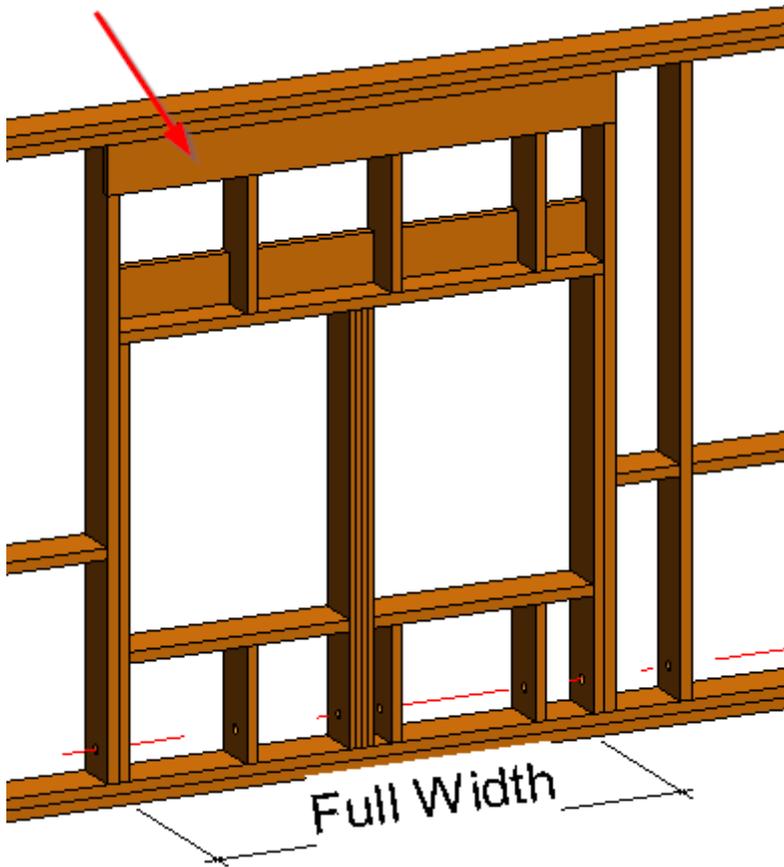
Separate Joined Opening's Preassemblies – this feature lets you make separate preassemblies for openings that are part of a joined opening — and the preassemblies will exclude other elements (like top plate supports, etc.) that extend across the joined opening.

Top Plate Support: Select Configuration by Full Width of Joined Opening

Connect Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Connect Top Plate Support Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Separate Joined Opening's Preassemblies	<input type="checkbox"/>
Top Plate Support: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
King\Trimmer: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Header: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Allow Brace and Opening intersection	<input type="checkbox"/>

Top Plate Support: Select Configuration by Full Width of Joined Opening – top plate support can be created according to opening width or full width of joined openings.

Example with wood:



-  Common Settings
-  Wall Framing
-  Opening Framing
-  L Connection
-  End Connection
-  V Connection

Window Framing
Door Framing
Opening Framing
Window - Window Join Framing
Window - Door Join Framing

Edit Configurations

Non-structural Walls. Width of Openings:

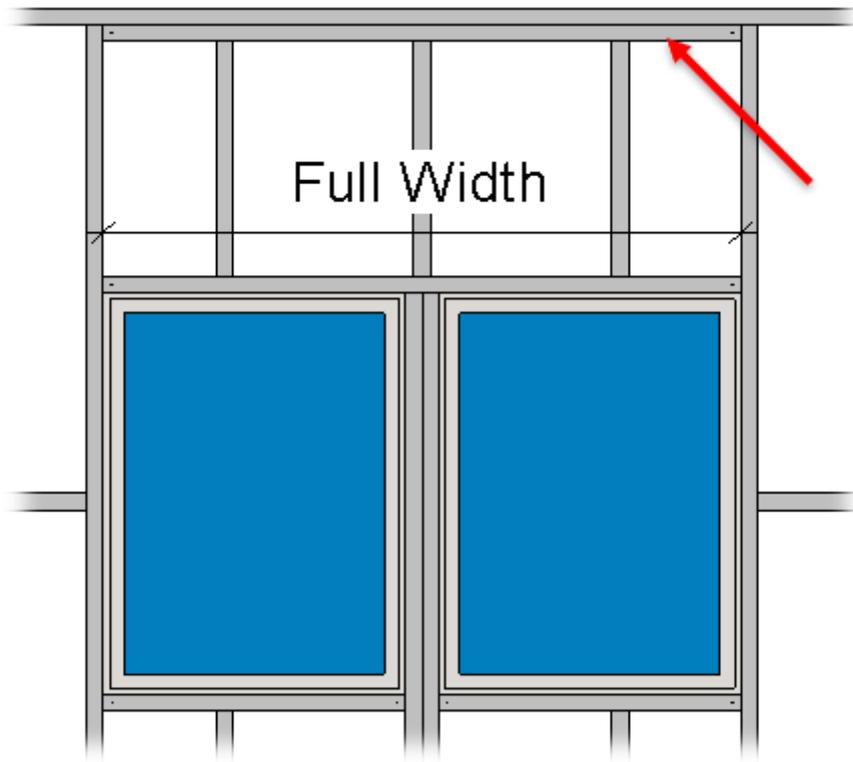
From	To	Configuration	Preassembled	Opening Element Preassembled
0	1500	M_Window Non-bearing Framing	<input type="checkbox"/>	<input type="checkbox"/>
1500	10000	M_Window Non-bearing Framing 1501	<input type="checkbox"/>	<input type="checkbox"/>

Edit Configurations

Structural Walls. Width of Openings:

From	To	Configuration	Preassembled	Opening Element Preassembled
0	1000	M_Window Bearing Framing	<input type="checkbox"/>	<input type="checkbox"/>
1000	10000	M_Window Bearing Framing 1001	<input type="checkbox"/>	<input type="checkbox"/>

Example with metal:



Window Framing | Door Framing | Opening Framing | Window - Window Join Framing | Window - Door Join Framing

Edit Configurations

Non-structural Walls. Width of Openings:

From	To	Configuration	Preassembled	Opening Element Preassembled
0	1500	M_Window Non-bearing Framing	<input type="checkbox"/>	<input type="checkbox"/>
1500	10000	M_Window Non-bearing Framing 1501	<input type="checkbox"/>	<input type="checkbox"/>

Edit Configurations

Structural Walls. Width of Openings:

From	To	Configuration	Preassembled	Opening Element Preassembled
0	1000	M_Window Bearing Framing	<input type="checkbox"/>	<input type="checkbox"/>
1000	10000	M_Window Bearing Framing 1001	<input type="checkbox"/>	<input type="checkbox"/>

Common Settings

Wall Framing

Opening Framing

L Connection

End Connection

V Connection

King\Trimmer: Select Configuration by Full Width of Joined Opening

Connect Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Connect Top Plate Support Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Separate Joined Opening's Preassemblies	<input type="checkbox"/>
Top Plate Support: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
King\Trimmer: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Header: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Allow Brace and Opening intersection	<input type="checkbox"/>

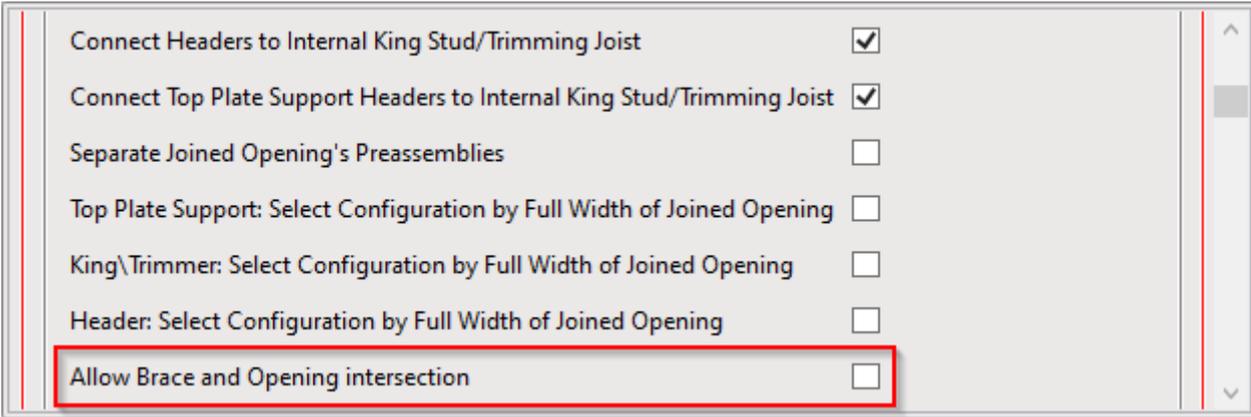
King\Trimmer: Select Configuration by Full Width of Joined Opening – kings or trimmers can be created according to opening width or full width of joined openings.

Header: Select Configuration by Full Width of Joined Opening

Connect Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Connect Top Plate Support Headers to Internal King Stud/Trimming Joist	<input checked="" type="checkbox"/>
Separate Joined Opening's Preassemblies	<input type="checkbox"/>
Top Plate Support: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
King\Trimmer: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Header: Select Configuration by Full Width of Joined Opening	<input type="checkbox"/>
Allow Brace and Opening intersection	<input type="checkbox"/>

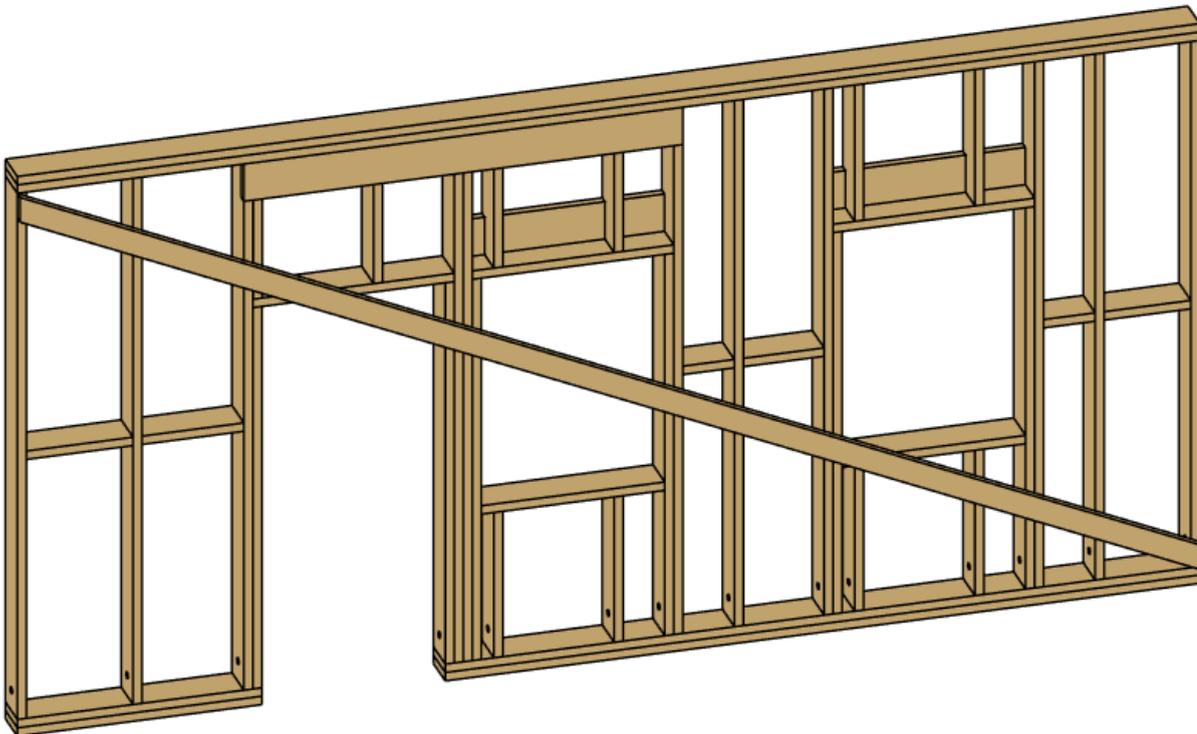
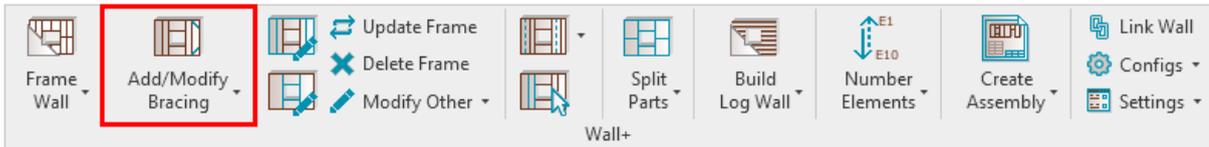
Header: Select Configuration by Full Width of Joined Opening – header can be created according to opening width or full width of joined openings.

Allow Brace and Opening Intersection



Allow Brace and Opening Intersection – if ticked, allows to create braces which crosses openings. This option is usually used when prefabricated frame is transported and braces could go through openings to make the frame more stable.

Example:

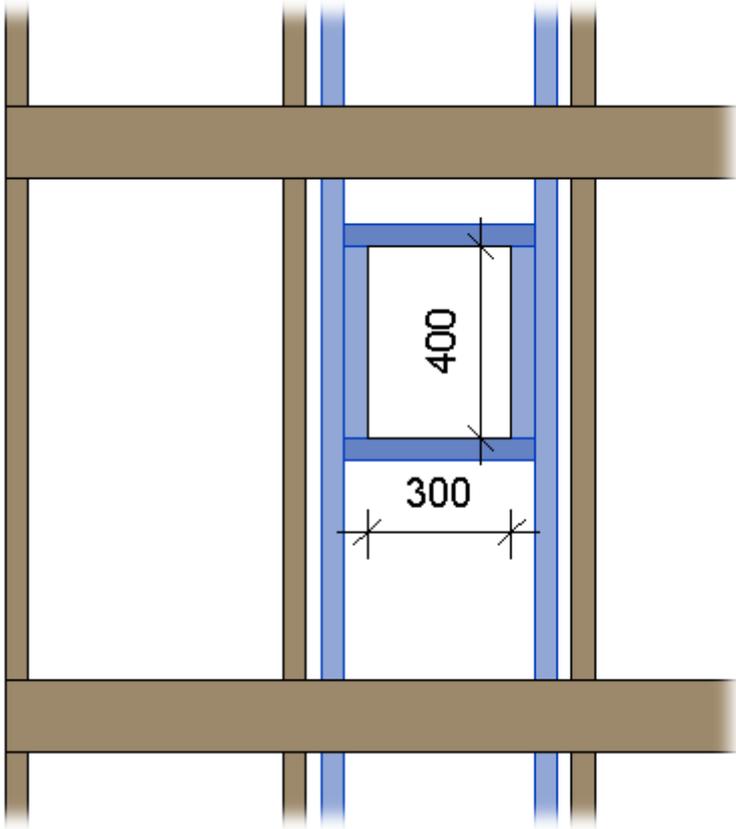


Minimum Window/Door/Generic/System Opening Width\Height

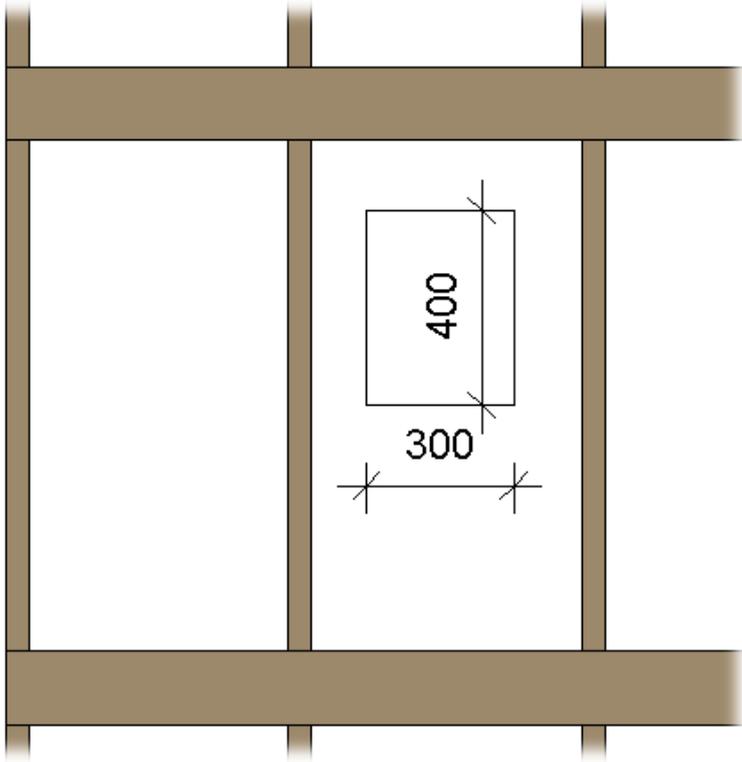
Frame Openings	
Minimum Window Width\Height	0
Minimum Door Width\Height	0
Minimum Generic Opening Width\Height	0
Minimum System Opening Width\Height	310
Enable Partial Opening Analysis	<input type="checkbox"/>

Minimum Window/Door/Generic/System Opening Width\Height – define minimal sizes for windows, doors, generic or system openings which will be framed.

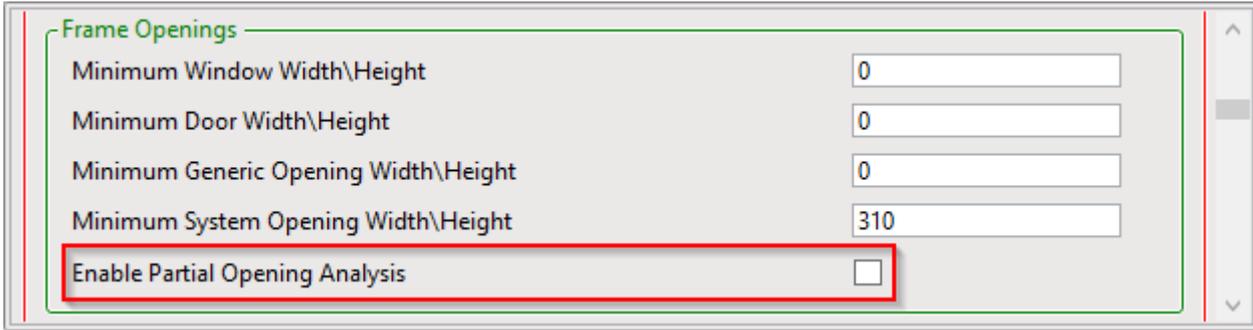
Example, Minimum System Opening Width\Height = 0, then the opening is framed:



Example, Minimum System Opening Width\Height = 310, then the opening is not framed:

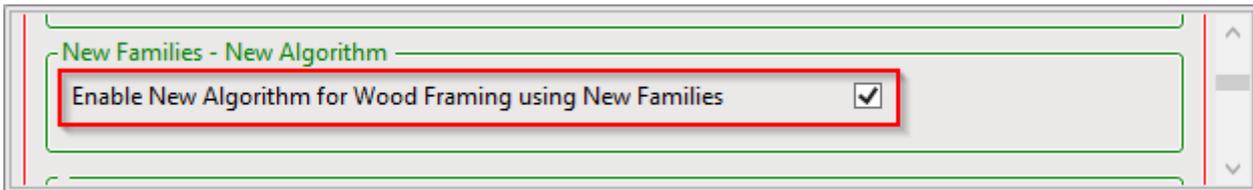


Enable Partial Opening Analysis



Enable Partial Opening Analysis – turns on more complicated calculation method and analysis for the frame when openings are created just for few roof layers. This method is quite rare and slows down framing speed, so could be switched on separately.

Enable New Algorithm for Wood Framing using New Families



Enable New Algorithm for Wood Framing using New Families – enables new, faster algorithm for wood framing using new families from new version. This option is automatically switched after installing new **Wall+**, **Floor+**, **Roof+** version with new configurations. The new families are easier to use than the old ones that they have replaced, and you'll find that they greatly expand your framing possibilities.

Advantages of the new families:

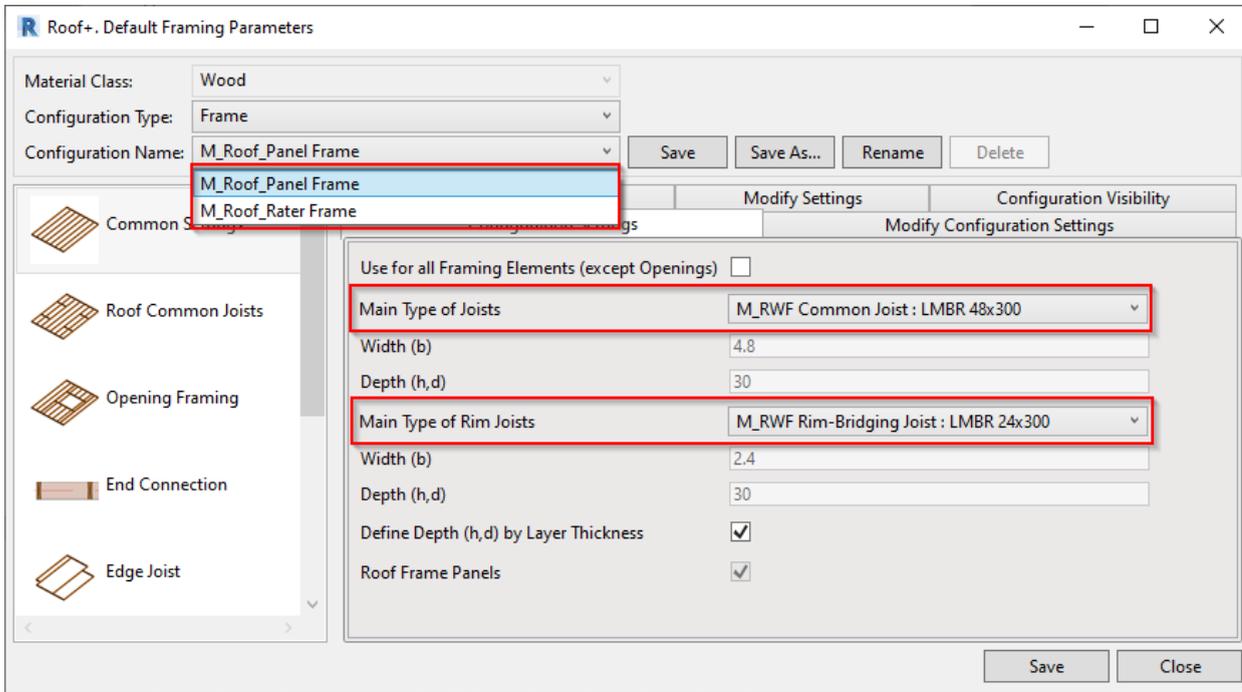
- The new families are simple and speed up wall/floor/roof framing by a factor of 2.
- The new families replace and expand the possibilities of the old families.
- The new framing technology is more flexible, making it possible to get good results in all situations faster than using the old families.

Here is a side-by-side list of the new **Wood Framing Roof+** families and the old families being replaced in Imperial projects. (For Metric projects, there will be M_ at the beginning):

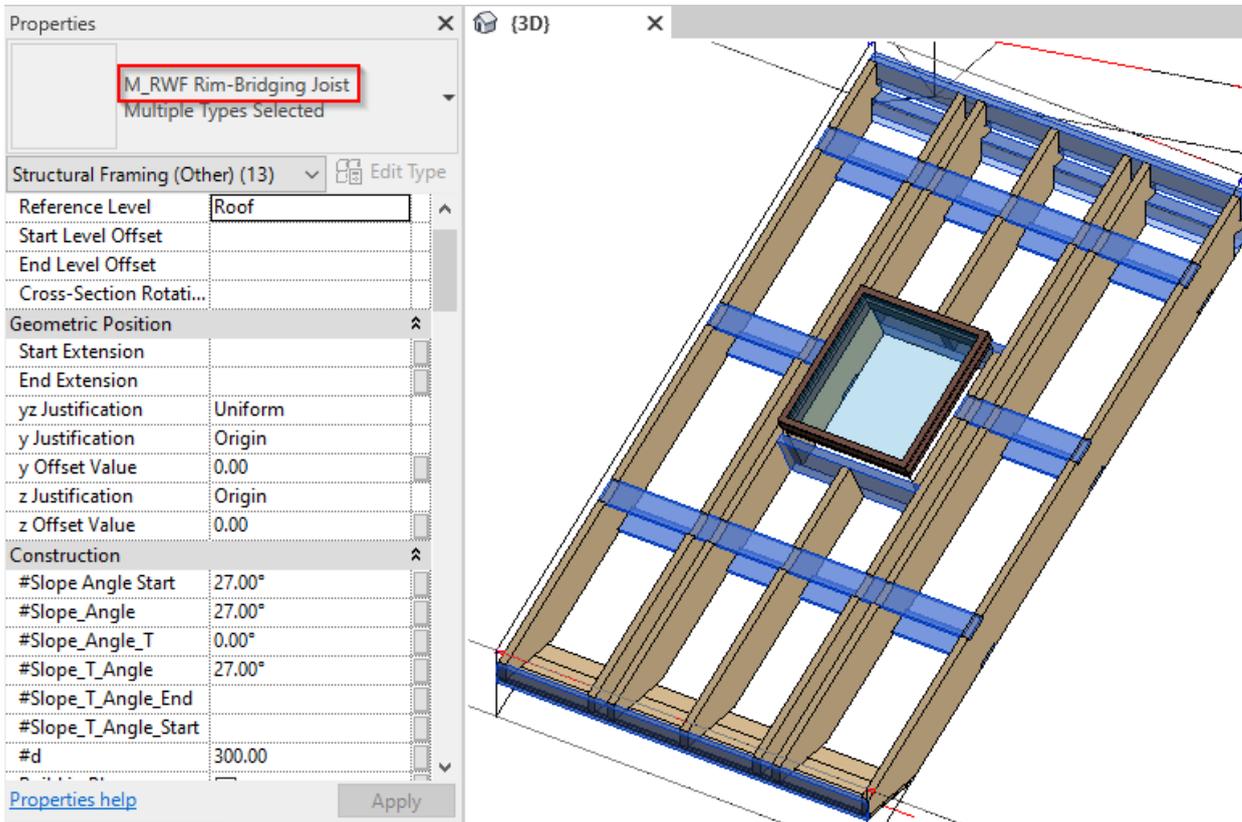
New families for new Roof+2021 configurations	Old families for old configurations
I_RWF Common Joist.rfa	I_Roof_Frame Common Rafter.rfa I_Roof_Frame Common Joist.rfa

I_RWF Rim-Bridging Joist.rfa	I_Roof_Frame Valley_Hip Board.rfa I_Roof_Frame Trimmer.rfa I_Roof_Frame Trimmer Joist.rfa I_Roof_Frame Trapezoid Girder Joist.rfa I_Roof_Frame Top Trimmer_Bevelled.rfa I_Roof_Frame Top Trimmer.rfa I_Roof_Frame Top Trap_Trimmer.rfa I_Roof_Frame Horizontal Board.rfa I_Roof_Frame Header.rfa I_Roof_Frame Fascia & Trimmer.rfa I_Roof_Frame Brace Board.rfa I_Roof_Frame Bottom Trimmer.rfa I_Roof_Frame Batten Joist.rfa
I_RWF Rim-Bridging I-Joist.rfa I_RWF Common I-Joist.rfa	I_Roof_Frame Trimmer I-Joist.rfa I_Roof_Frame Common Rafter I-Joist.rfa I_Roof_Frame Common I-Joist.rfa
I_RWF Valley Rafter.rfa I_RWF Valley Rafter I-Joist.rfa I_RWF Hip Rafter.rfa I_RWF Hip Rafter I-Joist.rfa	I_Roof_Frame Valley Rafter.rfa I_Roof_Frame Valley Rafter I-Joist.rfa I_Roof_Frame Hip Rafter.rfa I_Roof_Frame Hip Rafter I-Joist.rfa
I_RWF_Joist Diagonal Cut.rfa I_RWF_Joist Bottom Cut.rfa	
I_RWF Soffit Board_Profiled.rfa I_RWF Soffit Board.rfa I_RWF Soffit Board_Groove.rfa	I_Roof_Frame Soffit Board_MultiProfile.rfa I_Roof_Frame Soffit Board.rfa I_Roof_Frame Groove Board.rfa
I_RWF Ridge Joist.rfa I_RWF Girder Joist.rfa I_RWF Ridge I-Joist.rfa I_RWF Girder I-Joist.rfa	I_Roof_Frame Ridge Joist_Bevelled_Spec.rfa I_Roof_Frame Ridge Joist_Bevelled.rfa I_Roof_Frame Ridge Joist.rfa I_Roof_Frame Ridge I-Joist.rfa I_Roof_Frame Girder Joist_Bevelled.rfa I_Roof_Frame Girder Joist.rfa I_Roof_Frame Trapezoid Girder Joist.rfa
I_RWF Collar Joist.rfa I_RWF Collar I-Joist.rfa I_RWF Sleeper.rfa	I_Roof_Frame Collar Joist.rfa I_Roof_Frame Collar I-Joist.rfa I_Roof_Frame Sleeper Board.rfa

Here are the new framing configurations that we prepared to speed up your project. Again, they come with the new families:



Example: all these different blockings and headers were created using just one family:



Related blogpost:

<http://www.aga-cad.com/blog/wood-framing-roof-for-revit-new-families-new-version-new-features>
(<http://www.aga-cad.com/blog/wood-framing-roof-for-revit-new-families-new-version-new-features>)

Minimal Top/Bottom Cripple Stud "Cut Length" (in Wall+, Wall+M) or

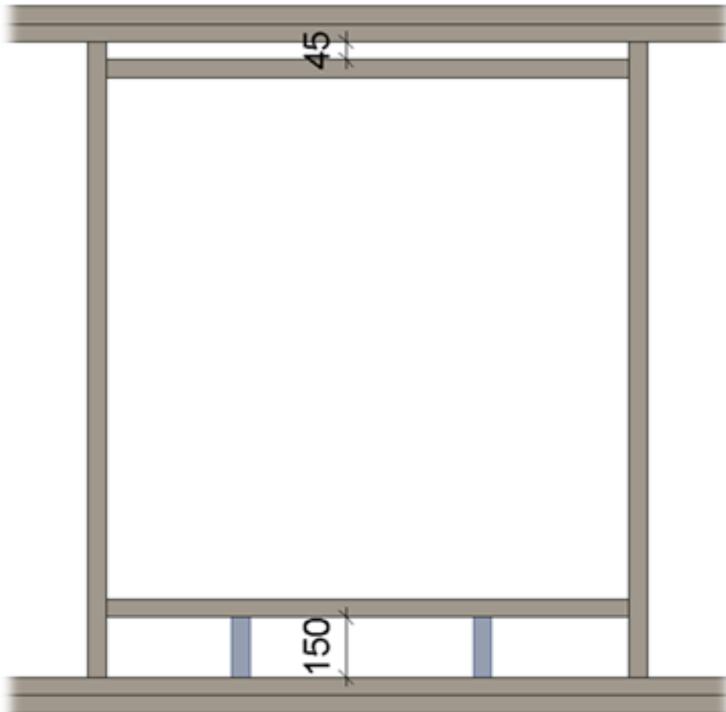
Minimal Top/Bottom Tile Joist "Cut Length" (in Floor+, Floor+M, Roof+, Roof+M)

Minimal Top Cripple Stud "Cut Length"	50
Minimal Bottom Cripple Stud "Cut Length"	50
Delete Cripple Studs if "Cut Length" is Less than Minimal	<input checked="" type="checkbox"/>
Minimal Top Cripple Trimmer "Cut Length"	50
Minimal Bottom Cripple Trimmer "Cut Length"	50
Delete Trimmer Studs if "Cut Length" is Less than Minimal	<input checked="" type="checkbox"/>
Cut Log Ends	<input type="checkbox"/>

Minimal Top/Bottom Cripple Stud/Tile Joist "Cut Length" – defines the minimum top/bottom cripple/tile joist cut length.

Delete Cripple Studs/Tile Joists if "Cut Length" is Less than Minimal – deletes cripples/tile joists if length is less than the value under **Minimal Top/Bottom Cripple Stud/Tile Joists "Cut Length"**.

Example: Top cripples studs have been deleted because length was less than 50:



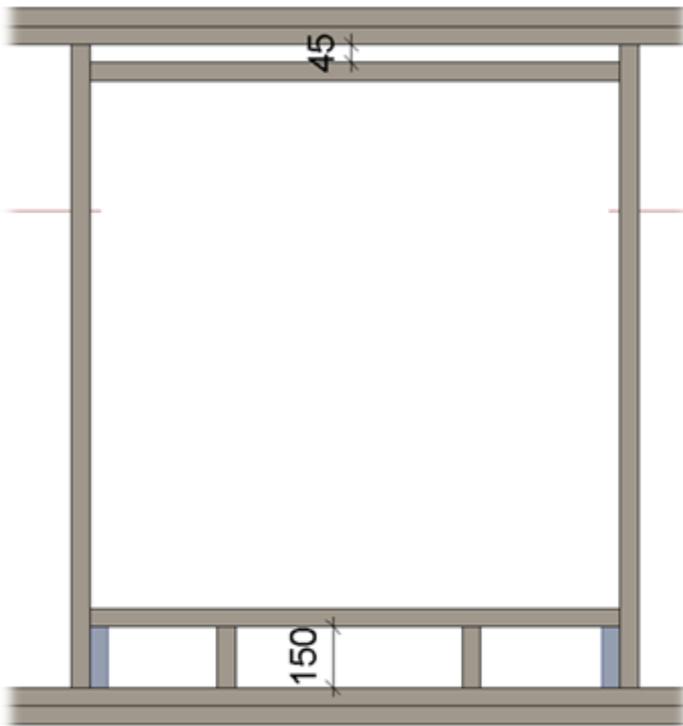
Minimal Top/Bottom Trimmer "Cut Length"

Minimal Top Cripple Stud "Cut Length"	50
Minimal Bottom Cripple Stud "Cut Length"	50
Delete Cripple Studs if "Cut Length" is Less than Minimal	<input checked="" type="checkbox"/>
Minimal Top Cripple Trimmer "Cut Length"	50
Minimal Bottom Cripple Trimmer "Cut Length"	50
Delete Trimmer Studs if "Cut Length" is Less than Minimal	<input checked="" type="checkbox"/>
Cut Log Ends	<input type="checkbox"/>

Minimal Top/Bottom Trimmer "Cut Length" – defines the minimum top/bottom trimmer cut length.

Delete Top/Bottom Trimmer Studs if "Cut Length" is Less than Minimal – deletes trimmers if length is less than the value under **Minimal Top/Bottom Trimmer "Cut Length"**.

Example: Top trimmers have been deleted because length was less than 50:



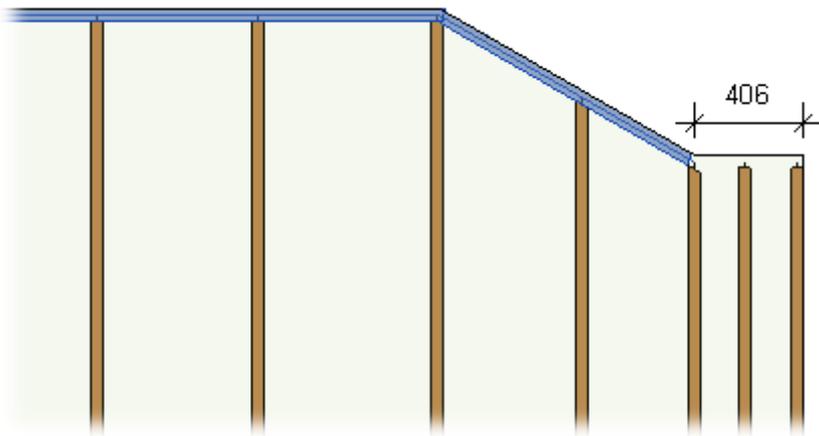
Minimal Rim Joist Length *(in Floor+, Floor+M, Roof+, Roof+M) or*

Minimal Plate Length *(in Wall+, Wall+M)*

Minimal Rim Joist Length	500
Minimal Bridging Length	150
Minimal Stud/Joist Length	150
Split the Flooring Strip if Width is less than	20
Minimal Flooring Support Width for the Last Row	12.7
Minimal Length of Split Rim/Joist	0
Maximal Length of Split Rim/Joist	6000
Maximal Length of Cover Plate/Joist	6000
Offset Distance of Split	300
Special Split Rule	<input type="checkbox"/>

Minimal Rim Joist Length or **Minimal Rim Joist Length** – defines the minimum length for the rim joist (in floors and roofs) or plate (in walls). If a length is less than the defined value, then the element will not be created.

Example: No top rim joist was created because the length is less than 500:

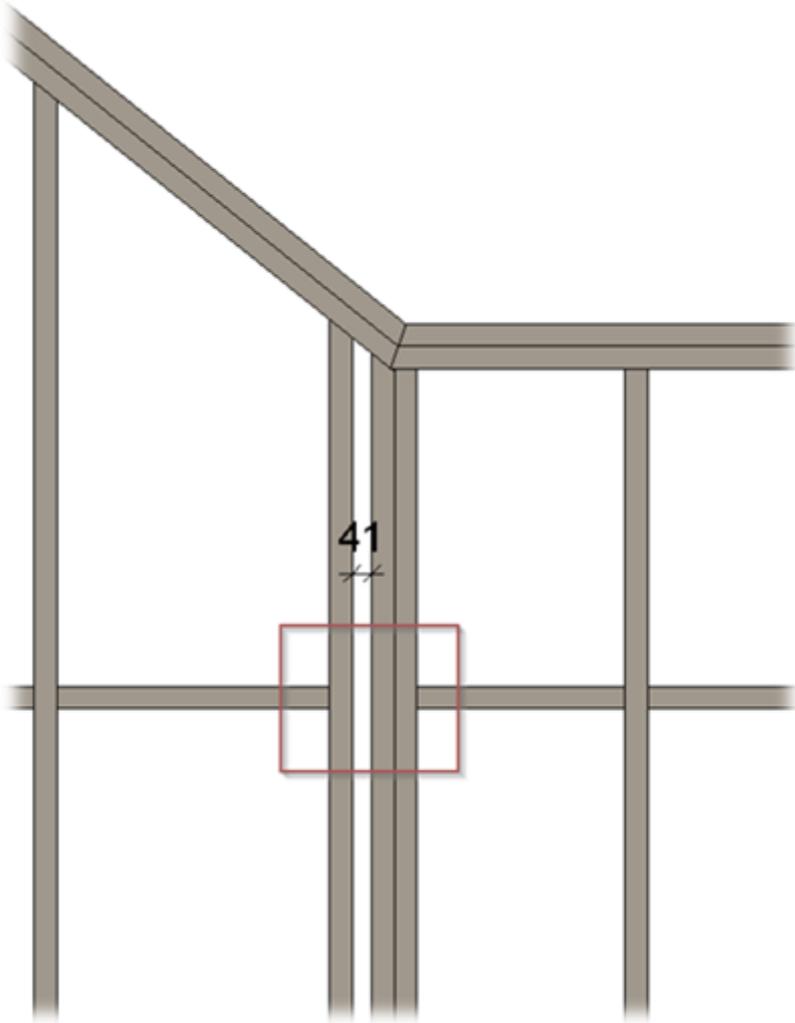


Minimal Bridging Length

Minimal Bridging Length	50
Minimal Stud/Joist Length	50
Split the Siding Strip if Width is less than	80
Minimal Siding Support Width for the Last Row	12.7
Minimal Length of Split Plate	1000
Maximal Length of Split Plate	6000
Maximal Length of Cover Plate/Joist	6000
Offset Distance of Split	300

Minimal Bridging Length – defines the minimum length for the bridging. If a length is less than the defined value, then the element will not be created.

Example: No bridging was created in the red box because the length is less than 100:

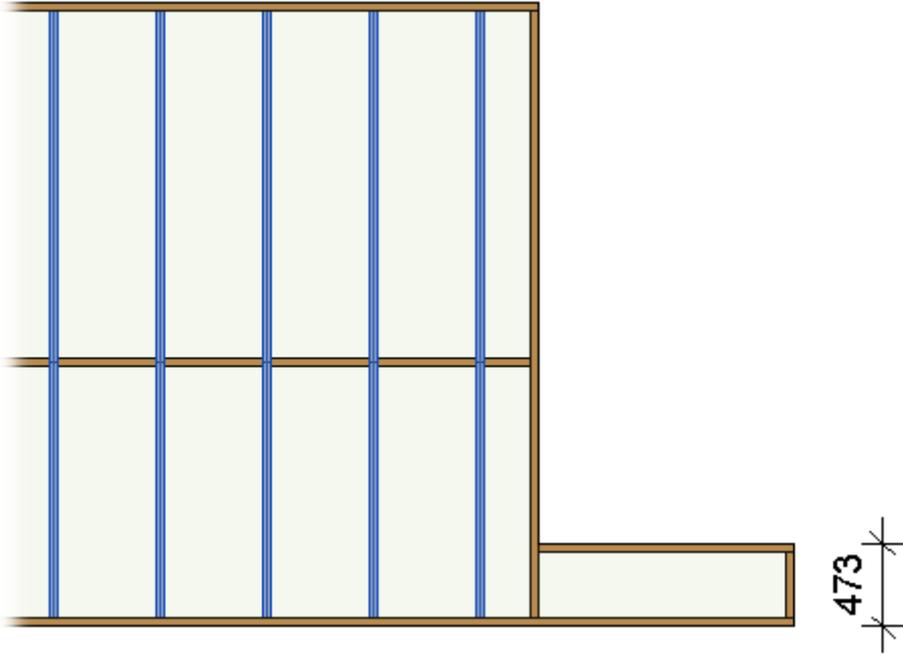


Minimal Stud/Joist Length

Minimal Bridging Length	<input type="text" value="50"/>
Minimal Stud/Joist Length	<input type="text" value="50"/>
Split the Siding Strip if Width is less than	<input type="text" value="80"/>
Minimal Siding Support Width for the Last Row	<input type="text" value="12.7"/>
Minimal Length of Split Plate	<input type="text" value="1000"/>
Maximal Length of Split Plate	<input type="text" value="6000"/>
Maximal Length of Cover Plate/Joist	<input type="text" value="6000"/>
Offset Distance of Split	<input type="text" value="300"/>

Minimal Stud/Joist Length – defines the minimum length for stud/joist. If a length is less than the defined value, then the element will not be created.

Example: No studs were created because the length is less than 500:



Split the Siding Strip if Width is less than

(in Wall+, Wall+M) or

Split the Flooring Strip if Width is less than

(in Floor+, Floor+M) or

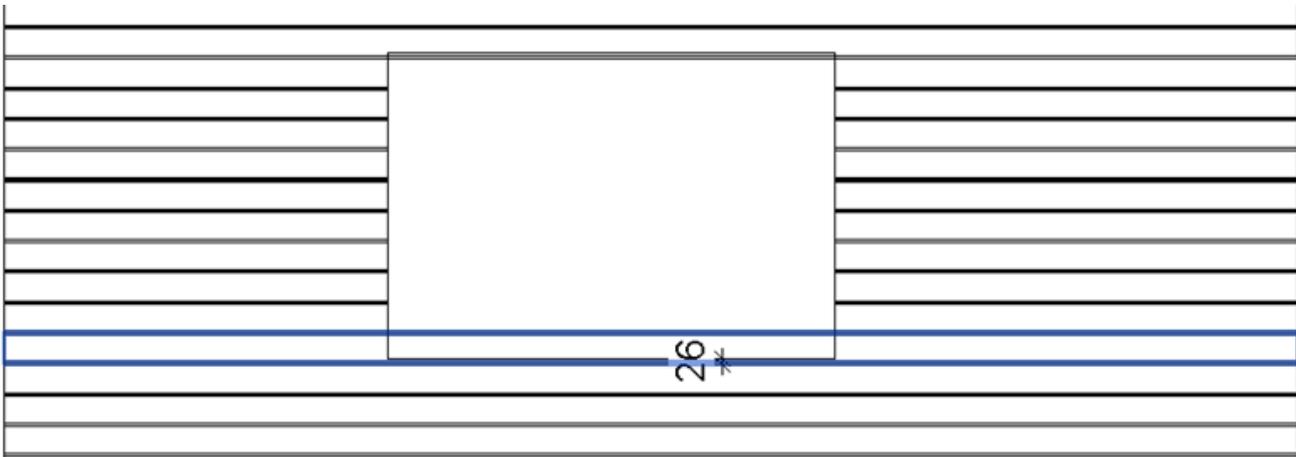
Split the Roofing Strip if Width is less than

(in Roof+, Roof+M)

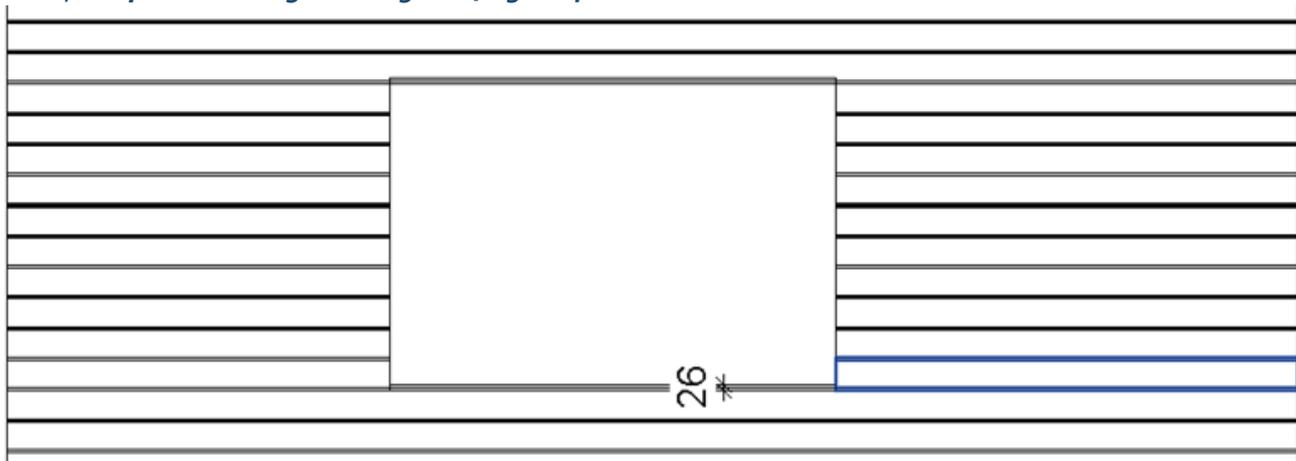
Minimal Bridging Length	<input type="text" value="50"/>
Minimal Stud/Joist Length	<input type="text" value="50"/>
Split the Siding Strip if Width is less than	<input type="text" value="80"/>
Minimal Siding Support Width for the Last Row	<input type="text" value="12.7"/>
Minimal Length of Split Plate	<input type="text" value="1000"/>
Maximal Length of Split Plate	<input type="text" value="6000"/>
Maximal Length of Cover Plate/Joist	<input type="text" value="6000"/>
Offset Distance of Split	<input type="text" value="300"/>

Split the Siding/Flooring/Roofing Strip if Width is less than – defines the rule when siding/flooring/roofing strip must be split or cut near the opening.

Example: Split the Siding/Flooring/Roofing Strip if Width is less than - 20:



Example: *Split the Siding/Flooring/Roofing Strip if Width is less than - 80:*



Minimal Siding Support Width for the Last Row (in Wall+, Wall+M) or

Minimal Flooring Support Width for the Last Row

(in Floor+, Floor+M)

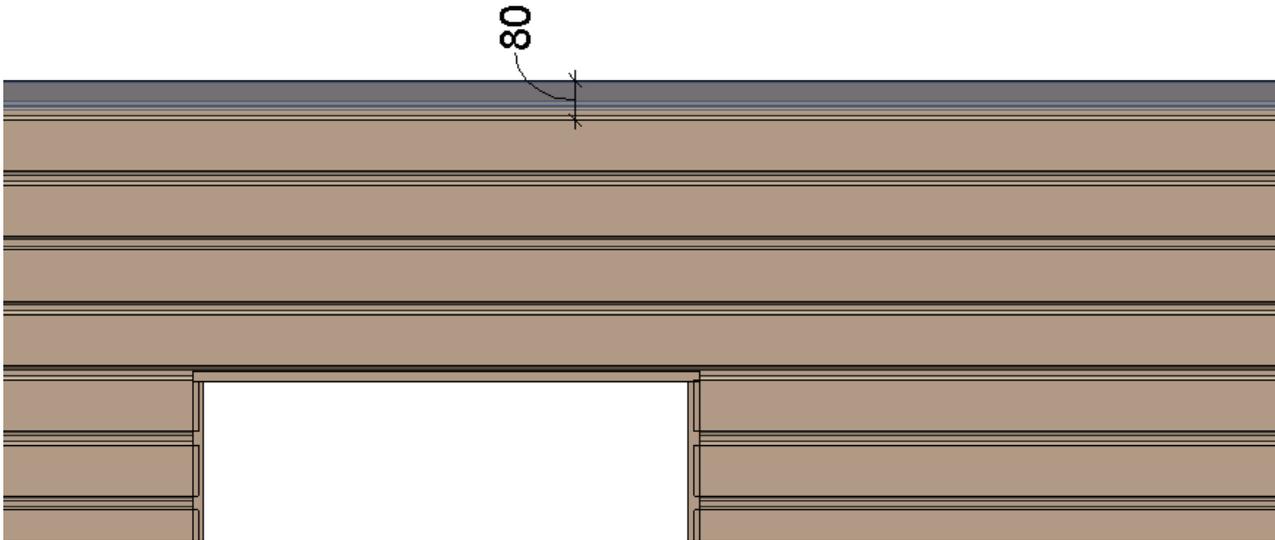
Minimal Roofing Support Width for the Last Row

(in Roof+, Roof+M)

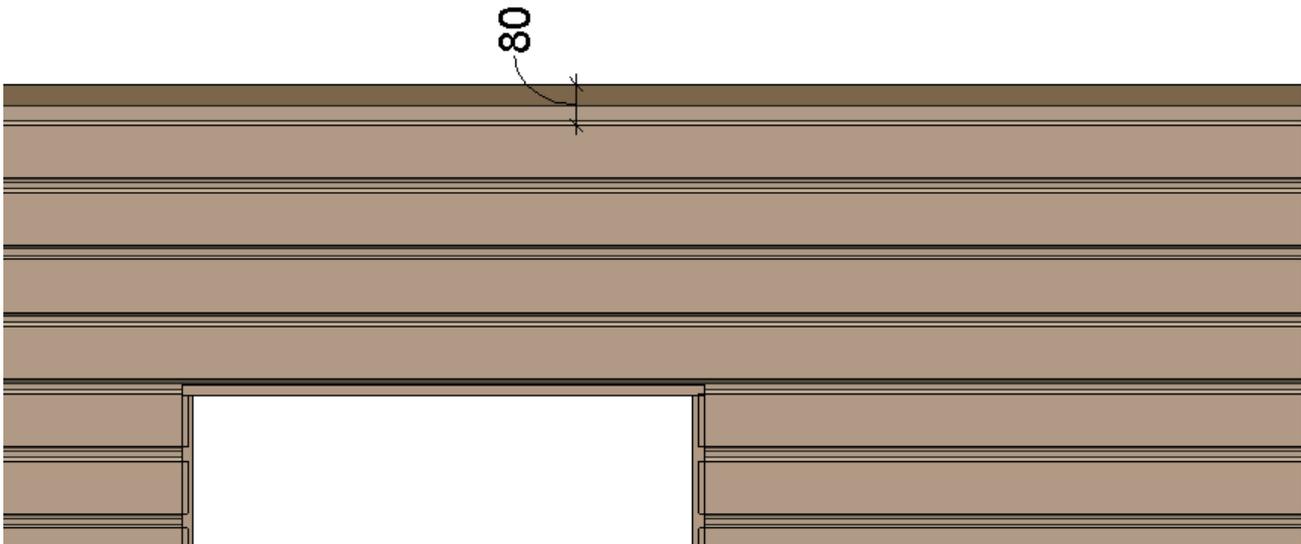
Minimal Bridging Length	<input type="text" value="50"/>
Minimal Stud/Joist Length	<input type="text" value="50"/>
Split the Siding Strip if Width is less than	<input type="text" value="80"/>
Minimal Siding Support Width for the Last Row	<input type="text" value="12.7"/>
Minimal Length of Split Plate	<input type="text" value="1000"/>
Maximal Length of Split Plate	<input type="text" value="6000"/>
Maximal Length of Cover Plate/Joist	<input type="text" value="6000"/>
Offset Distance of Split	<input type="text" value="300"/>

Minimal Siding/Flooring/Roofing Support Width for the Last Row – defines the rule when last siding/flooring row must be created or deleted.

Example: Minimal Siding/Flooring/Roofing Support Width for the Last Row = 0, so the last siding exists:



Example: Minimal Siding/Flooring/Roofing Support Width for the Last Row = 100, so the last siding was NOT created:



Minimal/Maximal Length of Split Plate (in Wall+, Wall+M) or

Minimal/Maximal Length of Split Rim/Joist

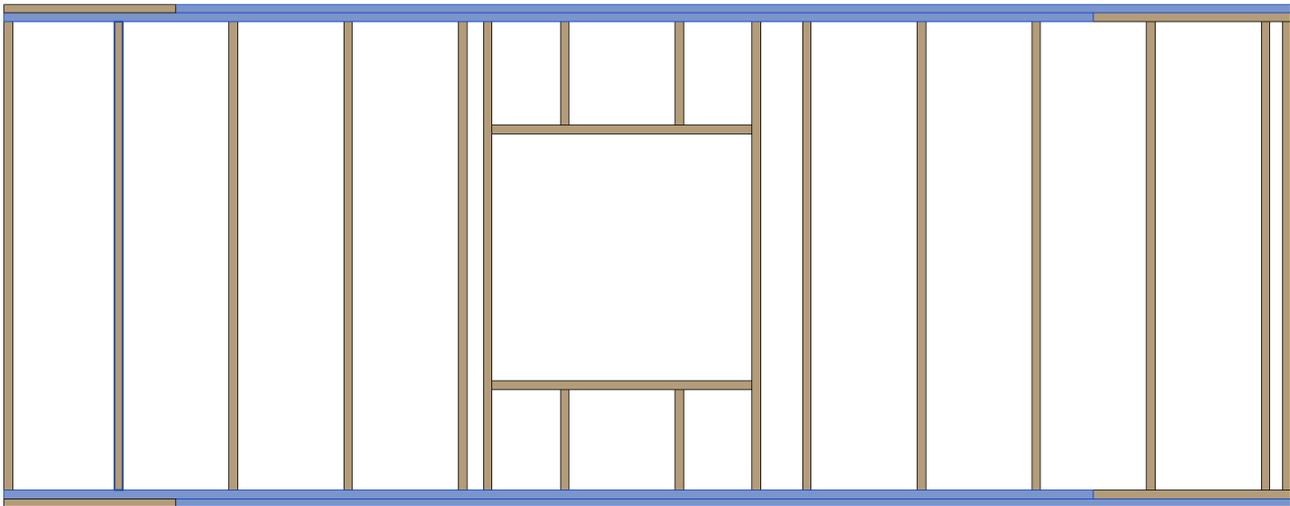
(in Floor+, Floor+M, Roof+, Roof+M)

Minimal Bridging Length	<input type="text" value="50"/>
Minimal Stud/Joist Length	<input type="text" value="50"/>
Split the Siding Strip if Width is less than	<input type="text" value="80"/>
Minimal Siding Support Width for the Last Row	<input type="text" value="12.7"/>
Minimal Length of Split Plate	<input type="text" value="1000"/>
Maximal Length of Split Plate	<input type="text" value="6000"/>
Maximal Length of Cover Plate/Joist	<input type="text" value="6000"/>
Offset Distance of Split	<input type="text" value="300"/>

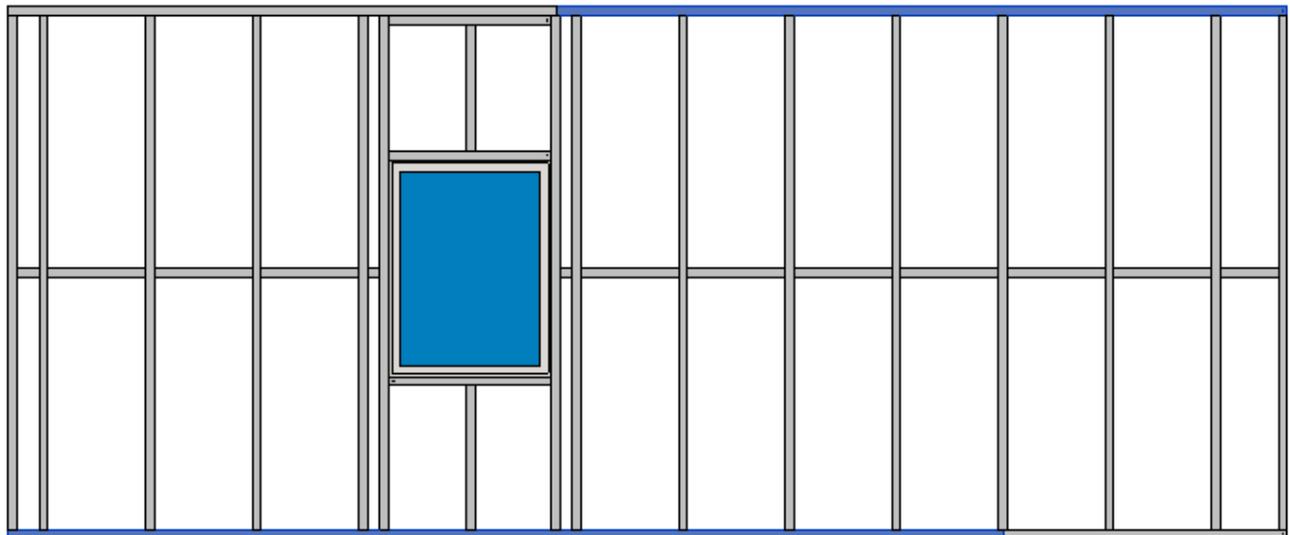
Minimal/Maximal Length of Split Plate/Rim/Joist – predefines min/max length for splitting top/bottom plates.

Wall+, Floor+ or Roof+ → **Align/Trim/Extend** → **Split Elements** → **Split Top/Bottom Plates Automatically** splits elements according to this setting.

Example with wood:



Example with metal:



Maximal Length of Cover Plate/Joist

Minimal Bridging Length	50
Minimal Stud/Joist Length	50
Split the Siding Strip if Width is less than	80
Minimal Siding Support Width for the Last Row	12.7
Minimal Length of Split Plate	1000
Maximal Length of Split Plate	6000
Maximal Length of Cover Plate/Joist	6000
Offset Distance of Split	300

Maximal Length of Cover Plate/Joist – predefines maximal length for splitting cover plates\joists. **Wall+**, **Floor+** or **Roof+** → **Align/Trim/Extend** → **Split Elements** → **Split Rim Joists Automatically** splits elements according to this setting.

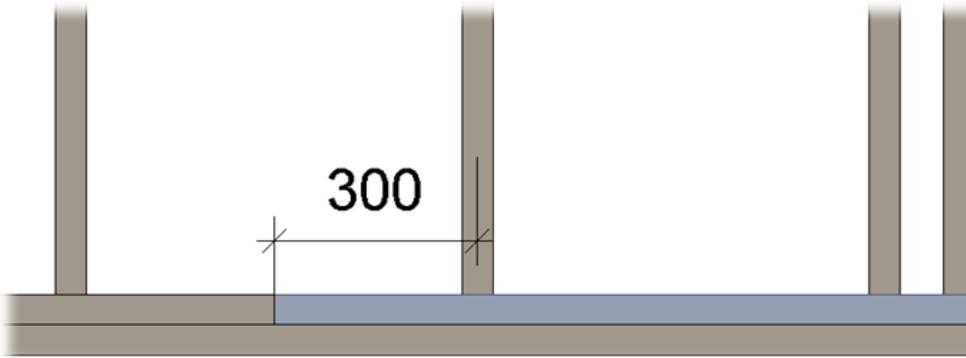


Offset Distance of Split

Minimal Bridging Length	50
Minimal Stud/Joist Length	50
Split the Siding Strip if Width is less than	80
Minimal Siding Support Width for the Last Row	12.7
Minimal Length of Split Plate	1000
Maximal Length of Split Plate	6000
Maximal Length of Cover Plate/Joist	6000
Offset Distance of Split	300

Offset Distance of Split – defines splitting distance for the selected top/bottom plate from the selected stud. **Wall+**, **Floor+** or **Roof+** → **Align/Trim/Extend** → **Split Elements** → **Split Top/Bottom Plate Manually** splits selected top/bottom plate by selected stud according to this setting.

Example: Bottom plate is split a distance of 300 from the stud:

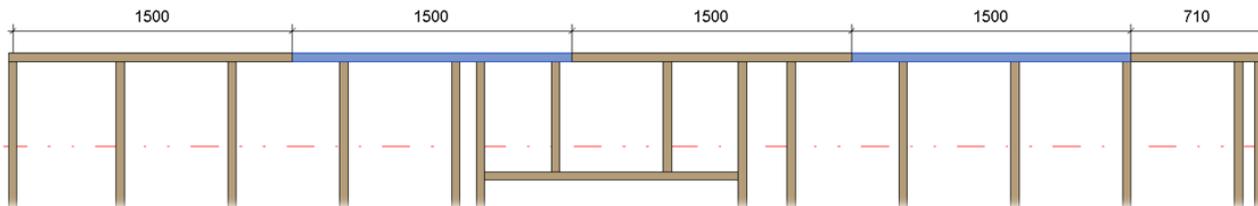


Special Split Rule

Minimal Rim Joist Length	500
Minimal Bridging Length	150
Minimal Stud/Joist Length	150
Split the Flooring Strip if Width is less than	20
Minimal Flooring Support Width for the Last Row	12.7
Minimal Length of Split Rim/Joist	0
Maximal Length of Split Rim/Joist	6000
Maximal Length of Cover Plate/Joist	6000
Offset Distance of Split	300
Special Split Rule	<input type="checkbox"/>

Special Split Rule – splits rim joists according to **Maximal Length of Split Rim/Joist** setting value. **Floor+ → Add Elements → Split Elements → Split Rim Joists Automatically** splits elements according to this setting.

*Example: Rim joist was split when **Maximal Length of Split Rim/Joist** = 1500:*

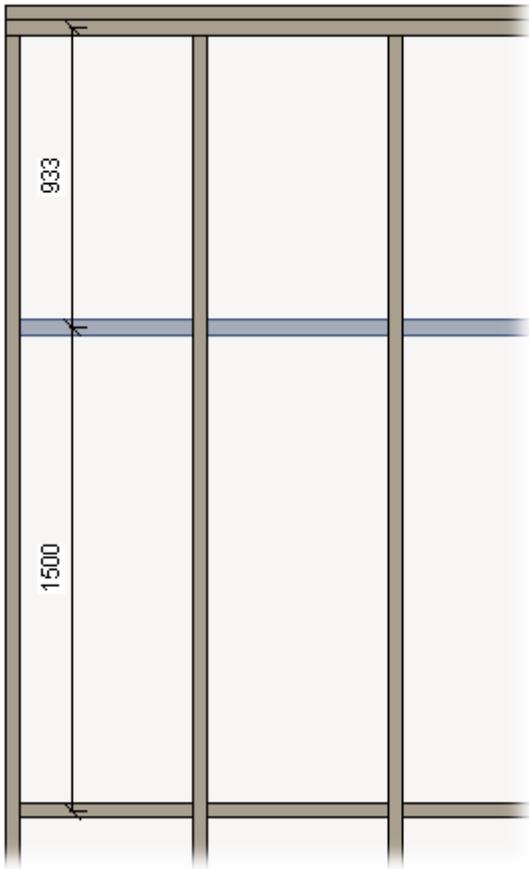


Minimal Distance Between Axis of Plate and Blocking/Nogging

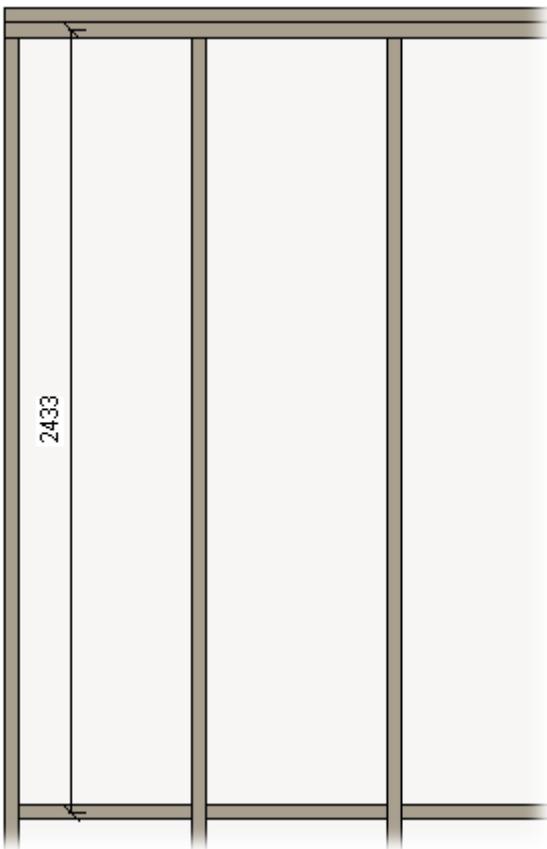
Minimal Distance Between Axis of Plate and Blocking/Nogging	<input checked="" type="checkbox"/>
Minimal Distance	50

Minimal Distance Between Axis of Plate and Blocking/Nogging – apply minimal between top/bottom plates and blocking/nogging. If distance is less that predefined near Minimal Distance then blocking/nogging will not be created.

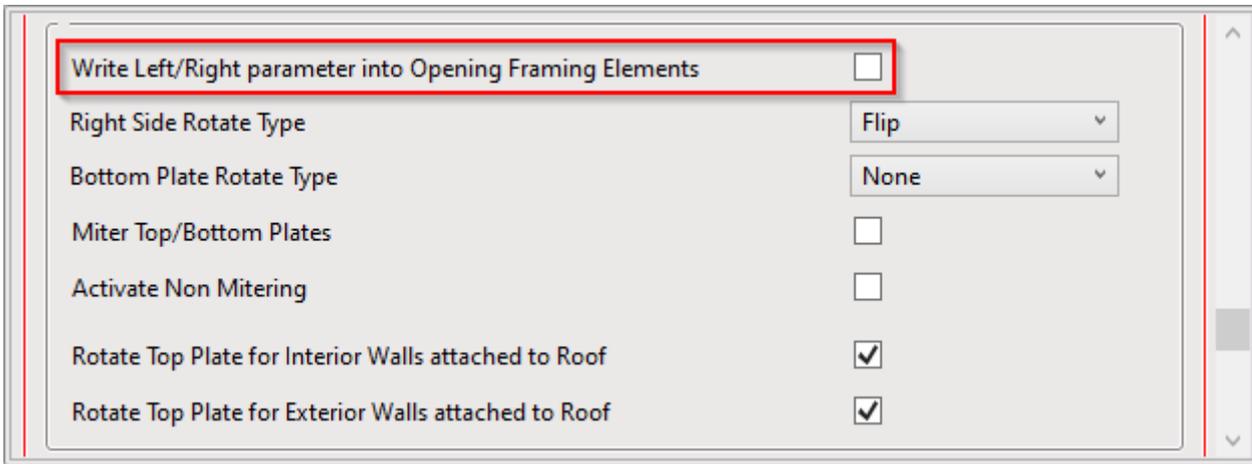
Example, if **Minimal Distance** < 1000 then the selected blocking is created:



Example, if **Minimal Distance** > 1000 then the blocking is not created:

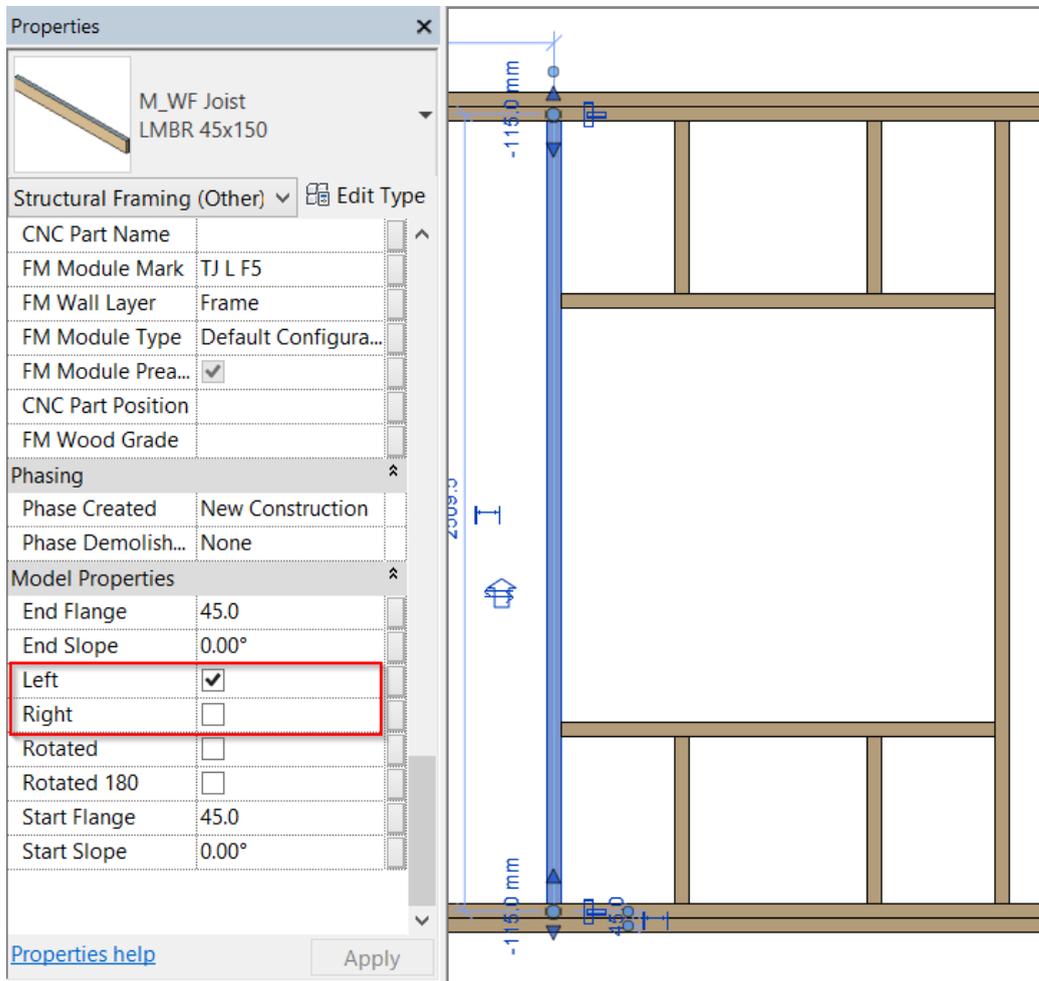


Write Left/Right parameter into Opening Framing Elements



Write Left/Right parameter into Opening Framing Elements – if ticked then changes Yes/No instance parameters **Left** and **Right** in opening framing.

Example with wood:



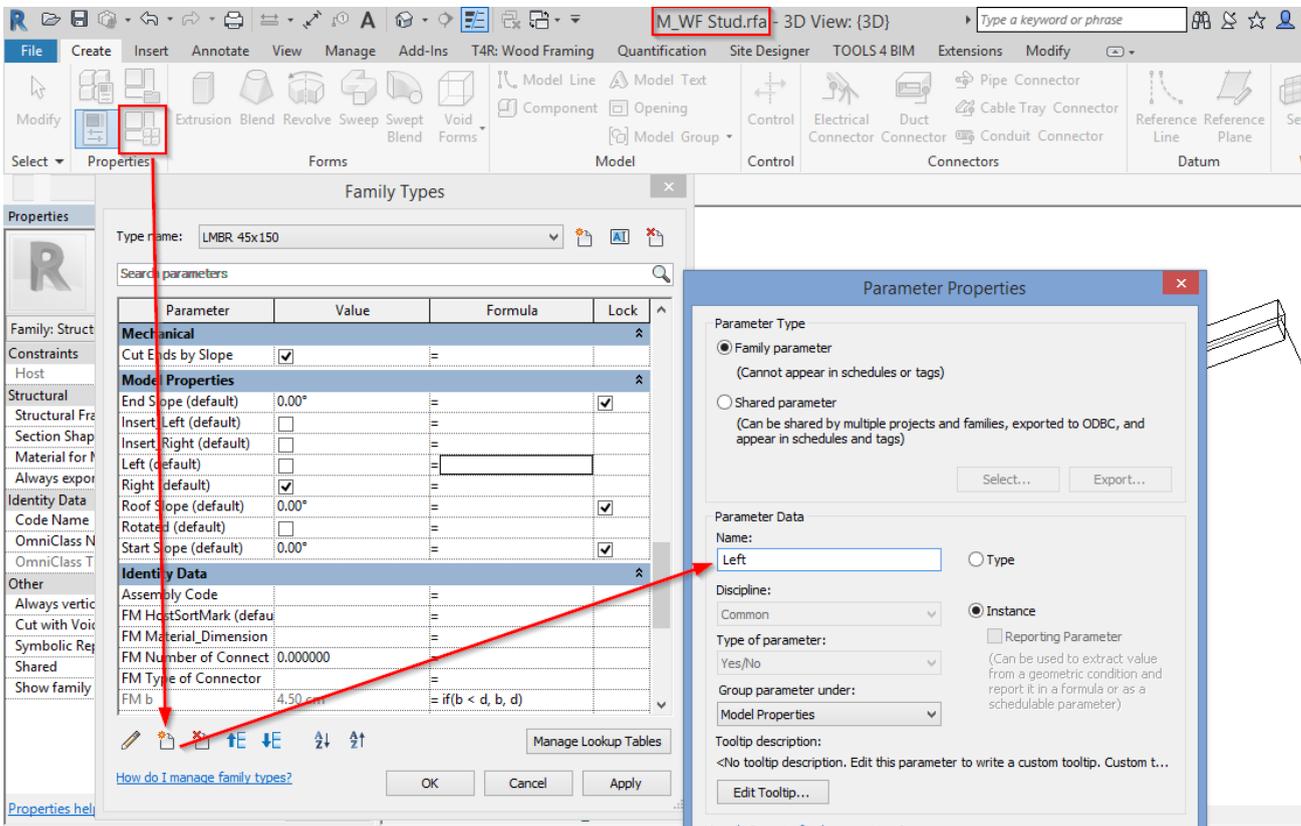
Left and **Right** parameters can be easily created in **M_WF Stud.rfa** or **I_WF Stud.rfa** families:

Mandatory conditions:

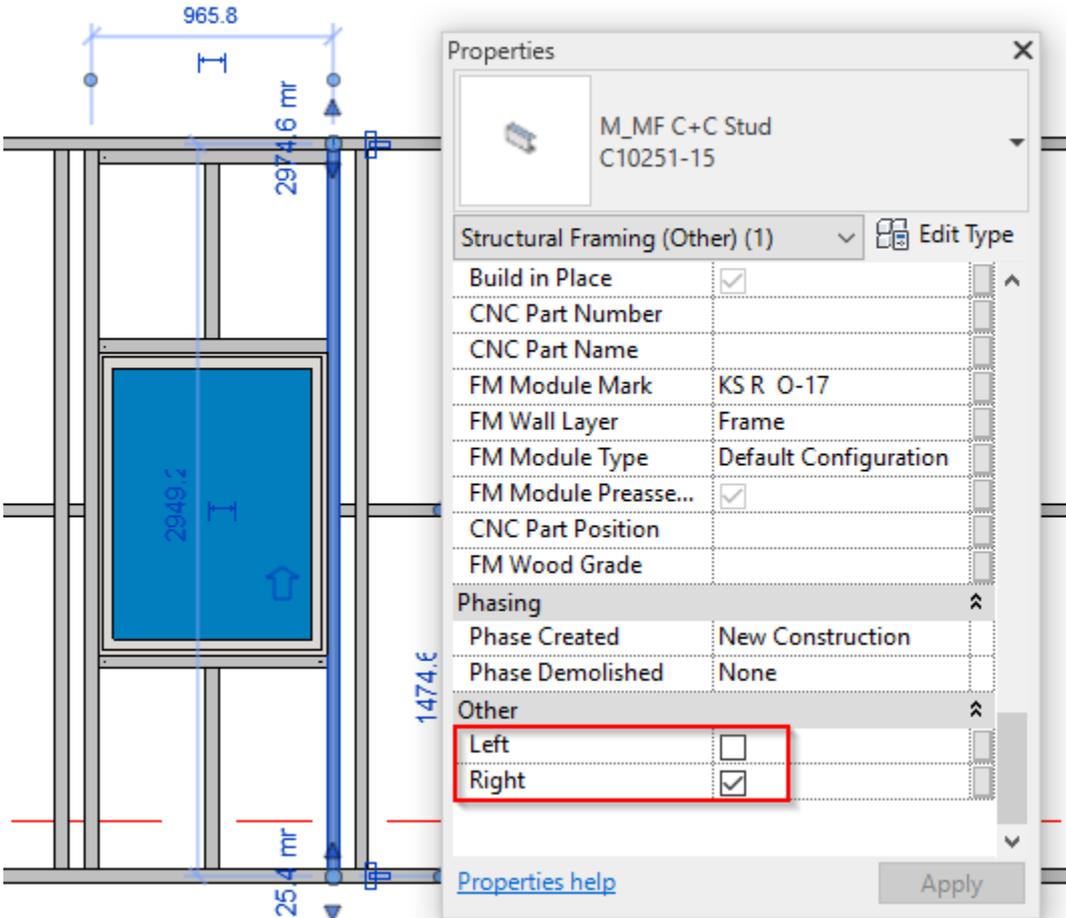
*Name - **Left** or **Right***

*Type of Parameter - **Yes/No***

Instance



Example with metal:

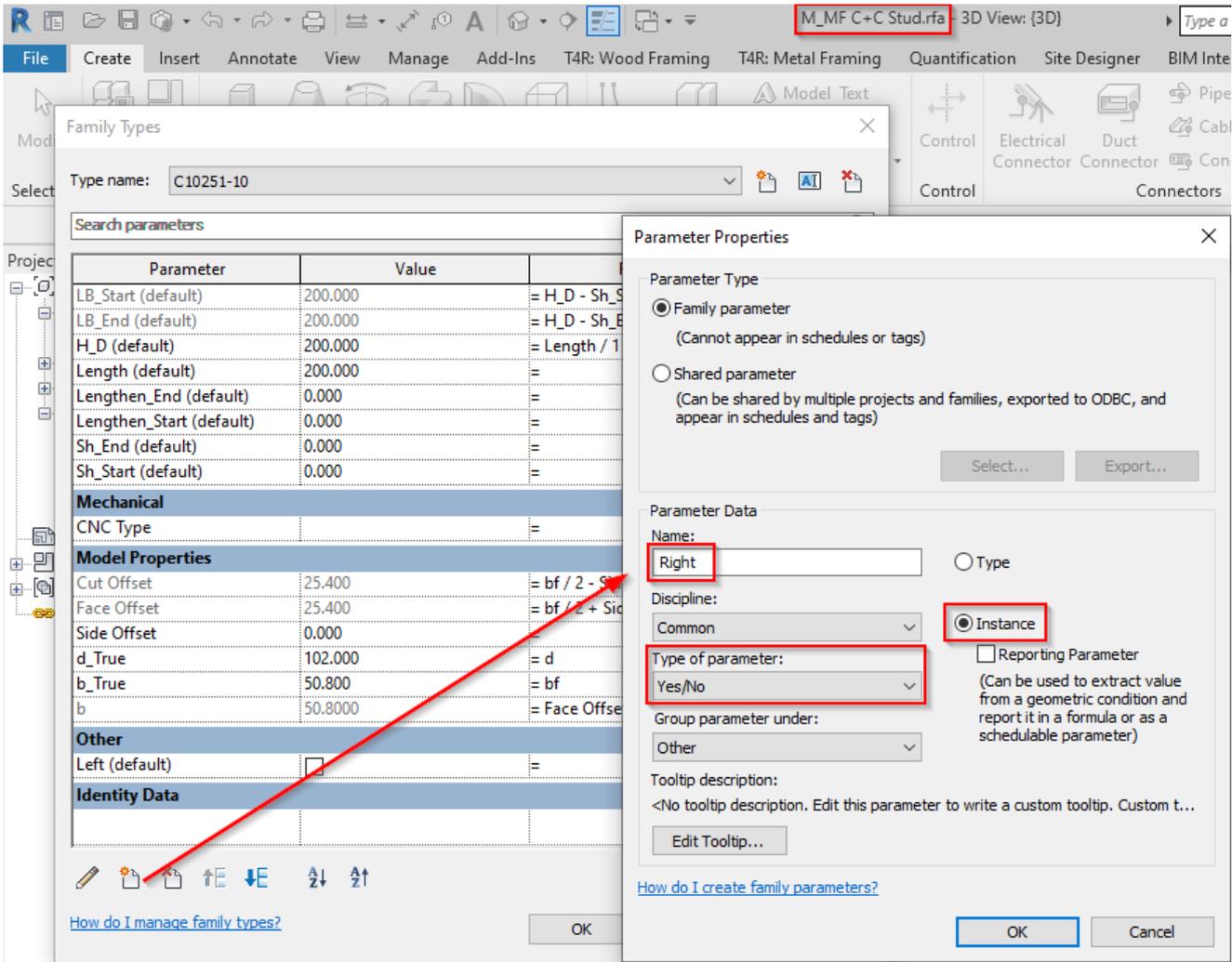


Left and **Right** parameters can be easily created in Stud families:

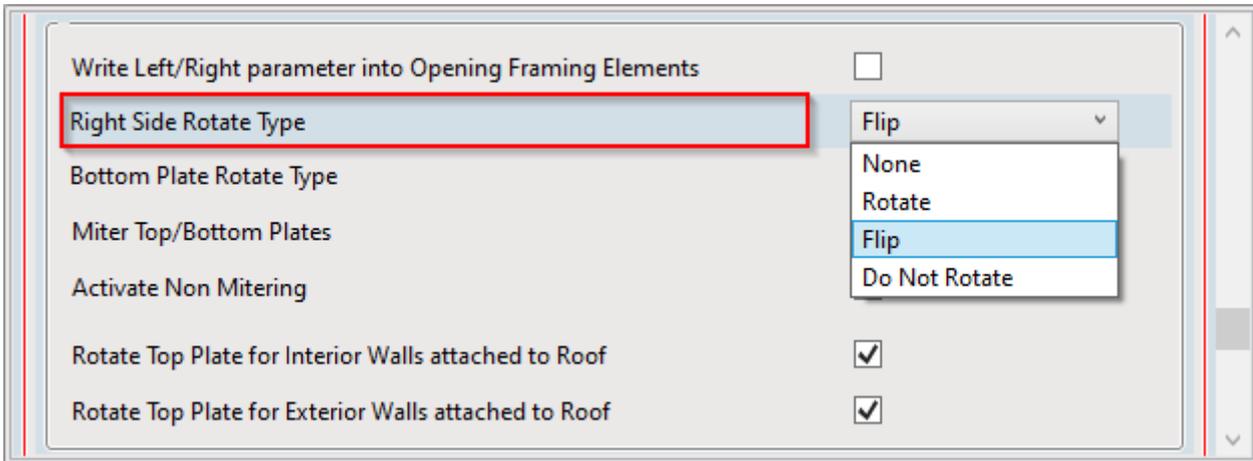
Mandatory conditions:

Name - Left or Right

Type of Parameter - Yes/No
Instance



Right Side Rotate Type



Right Side Rotate Type – select if the studs in opening right side should be flipped, rotated or do not rotated.

Bottom Plate Rotate Type

Write Left/Right parameter into Opening Framing Elements	<input type="checkbox"/>
Right Side Rotate Type	Flip
Bottom Plate Rotate Type	None
Miter Top/Bottom Plates	None
Activate Non Mitering	<input type="checkbox"/>
Rotate Top Plate for Interior Walls attached to Roof	<input checked="" type="checkbox"/>
Rotate Top Plate for Exterior Walls attached to Roof	<input checked="" type="checkbox"/>

Bottom Plate Rotate Type – select if the bottom plates should be flipped or not.

Miter Top/Bottom Plates

Write Left/Right parameter into Opening Framing Elements	<input type="checkbox"/>
Right Side Rotate Type	Flip
Bottom Plate Rotate Type	None
Miter Top/Bottom Plates	<input type="checkbox"/>
Activate Non Mitering	<input type="checkbox"/>
Rotate Top Plate for Interior Walls attached to Roof	<input checked="" type="checkbox"/>
Rotate Top Plate for Exterior Walls attached to Roof	<input checked="" type="checkbox"/>

Miter Top/Bottom Plates – miters top or bottom plates in the connection.

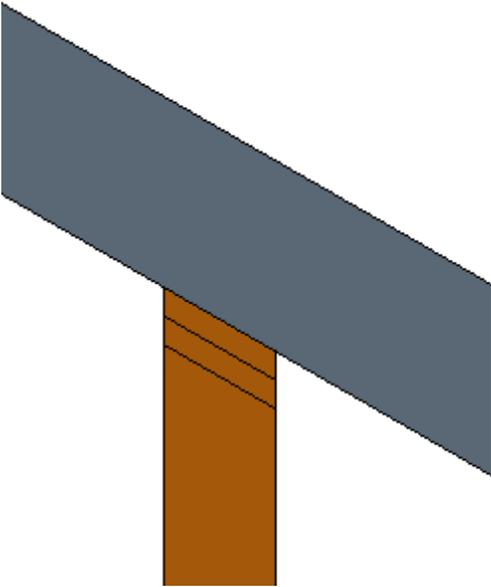
Rotate Top Plate for Interior/Exterior Walls attached to Roof

(in Wall+ and Wall+M)

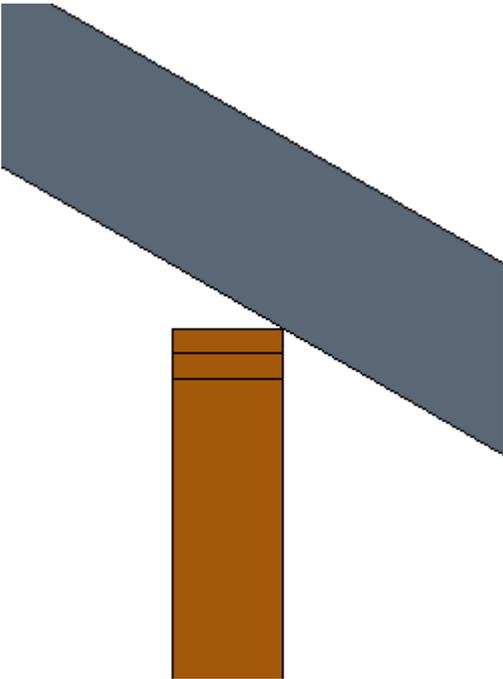
Write Left/Right parameter into Opening Framing Elements	<input type="checkbox"/>
Right Side Rotate Type	Flip
Bottom Plate Rotate Type	None
Miter Top/Bottom Plates	<input type="checkbox"/>
Activate Non Mitering	<input type="checkbox"/>
Rotate Top Plate for Interior Walls attached to Roof	<input checked="" type="checkbox"/>
Rotate Top Plate for Exterior Walls attached to Roof	<input checked="" type="checkbox"/>

Rotate Top Plate for Interior/Exterior Walls attached to Roof - rotates top plate for interior/exterior walls which are attached to roof.

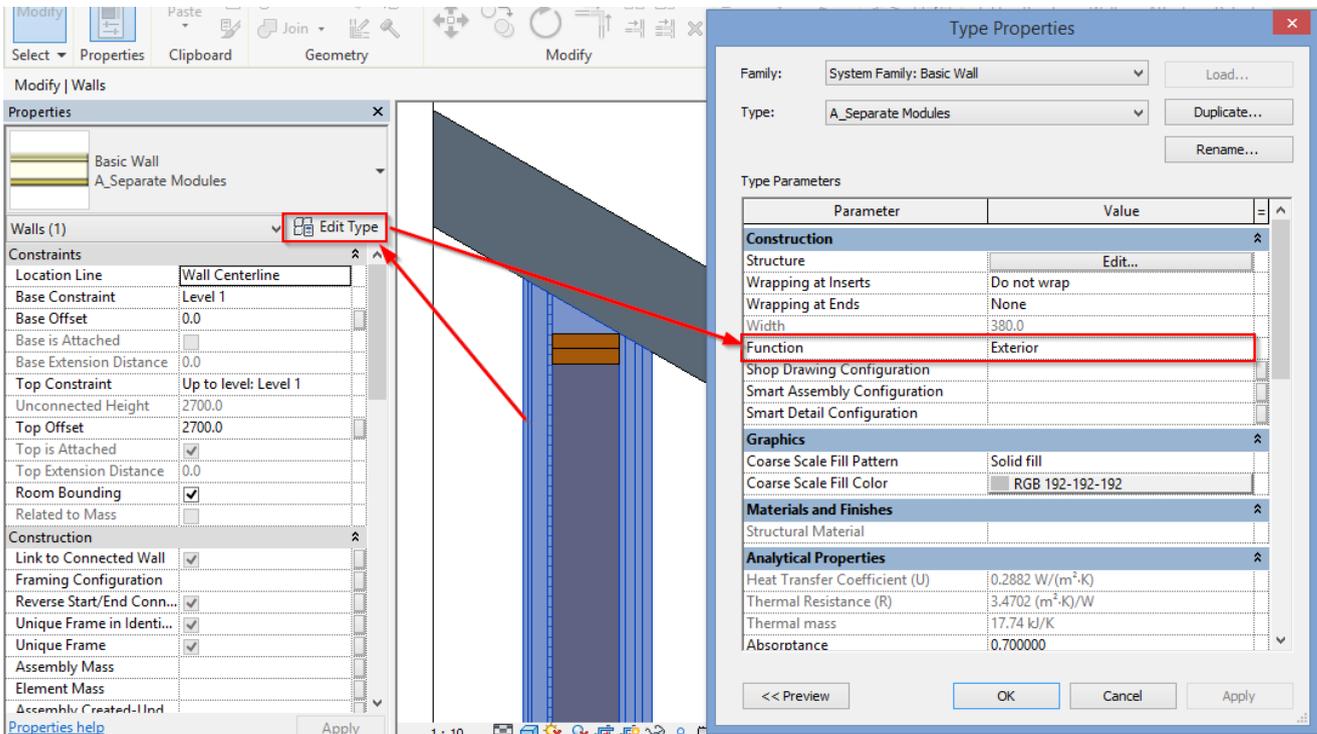
Ticked ON:



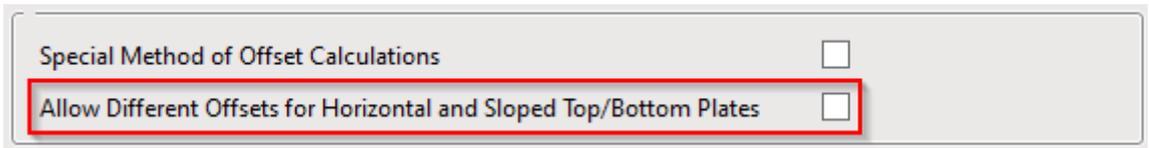
Ticked OFF:



*Note: Pay attention if your walls are exterior or interior under wall type parameter **Function**:*

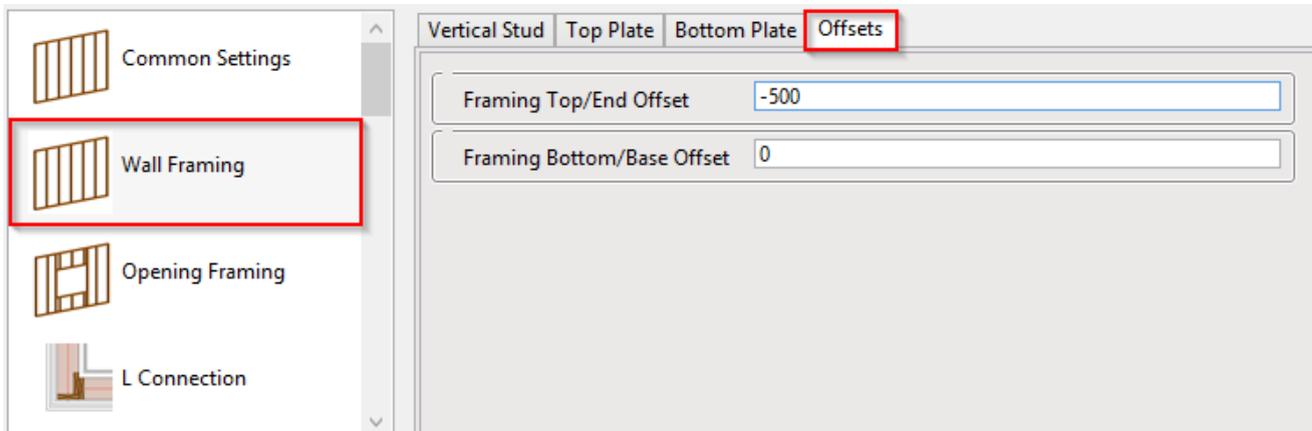


Allow Different Offsets for Horizontal and Sloped Top/Bottom Plates



Allow Different Offsets for Horizontal and Sloped Top/Bottom Plates – adds additional options near **Wall/Floor/Roof Framing - Offsets**, which allow controlling offsets for horizontal and sloped top/bottom plates separately.

Ticked OFF:



Ticked ON:

The screenshot displays the 'FRAMING CONFIGURATION – Modify Configuration Settings : AGACAD' window. On the left is a navigation pane with four categories: 'Common Settings', 'Wall Framing', 'Opening Framing', and 'L Connection'. The 'Wall Framing' category is highlighted with a red border. The main area contains four tabs: 'Vertical Stud', 'Top Plate', 'Bottom Plate', and 'Offsets', with the 'Offsets' tab selected and highlighted in red. The 'Offsets' tab contains four input fields:

Framing Top/End Offset	-500
Framing Sloped Top/End Offset	-200
Framing Bottom/Base Offset	0
Framing Sloped Bottom/Base Offset	0