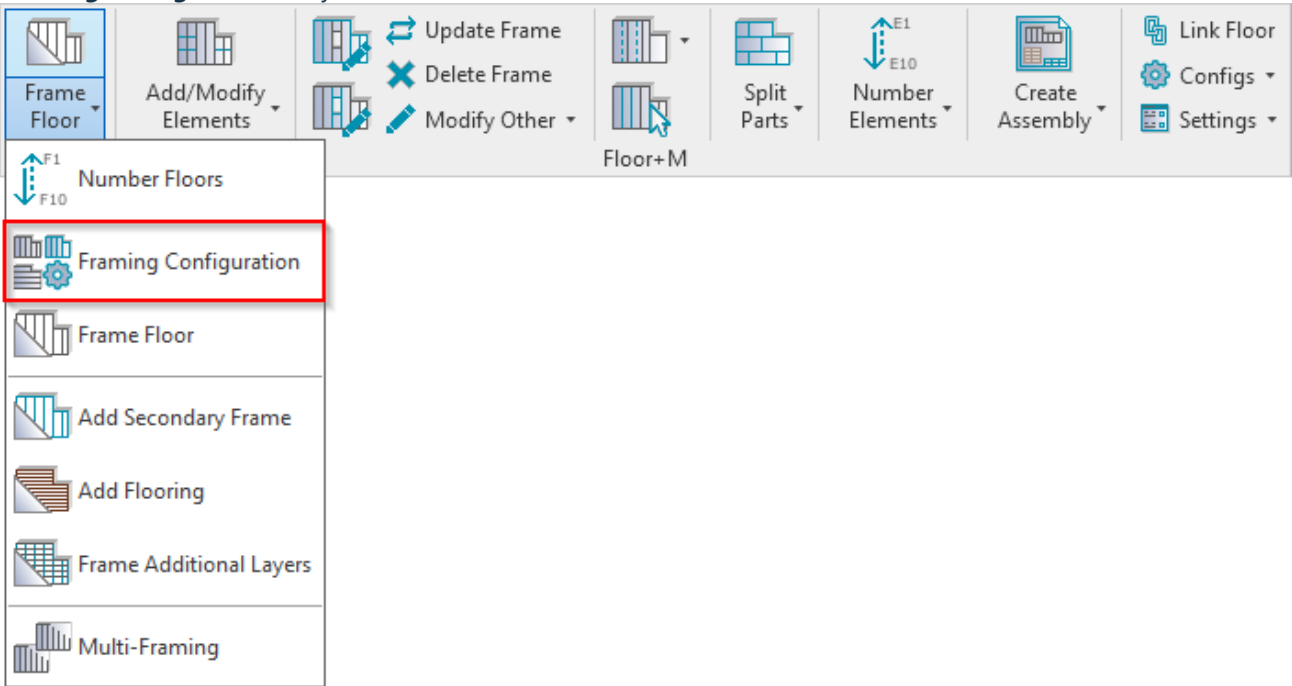


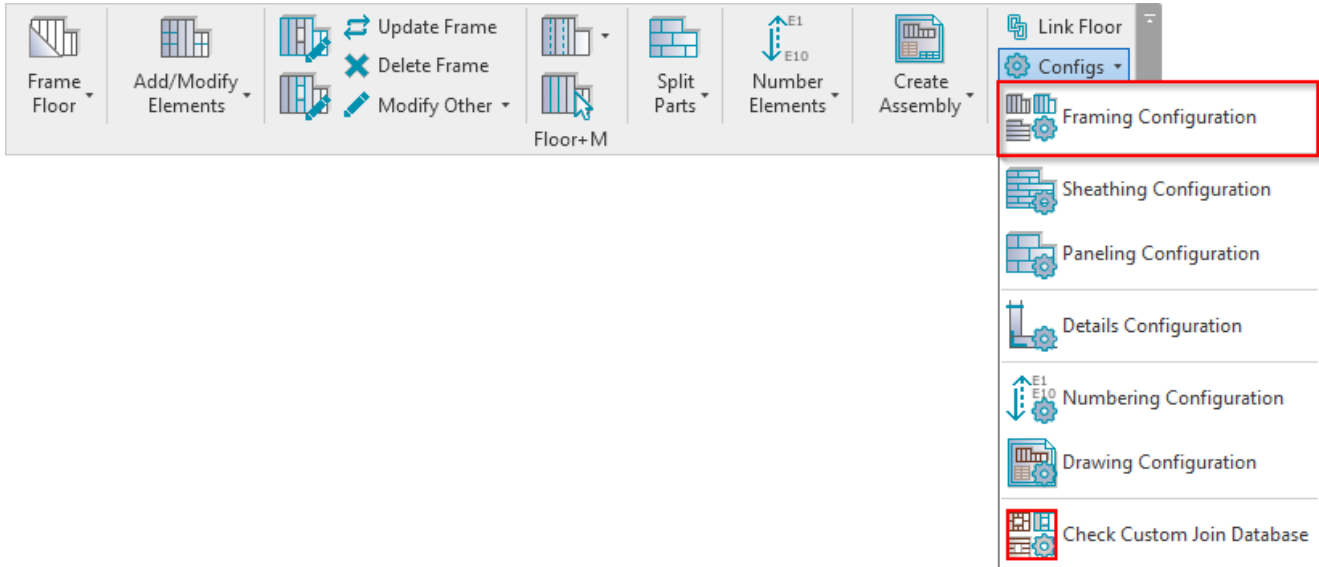
# FRAMING CONFIGURATION – Opening Framing – Edit

Modified on: Thu, 7 Jan, 2021 at 7:09 PM

**Framing Configuration** may be found in two locations:

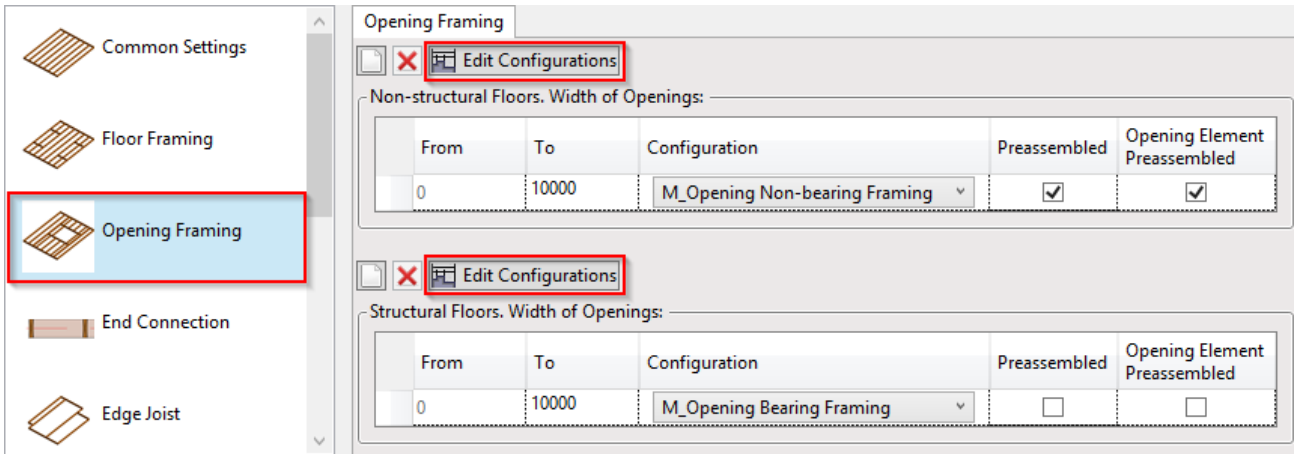


OR:



## Edit Opening Framing Configuration

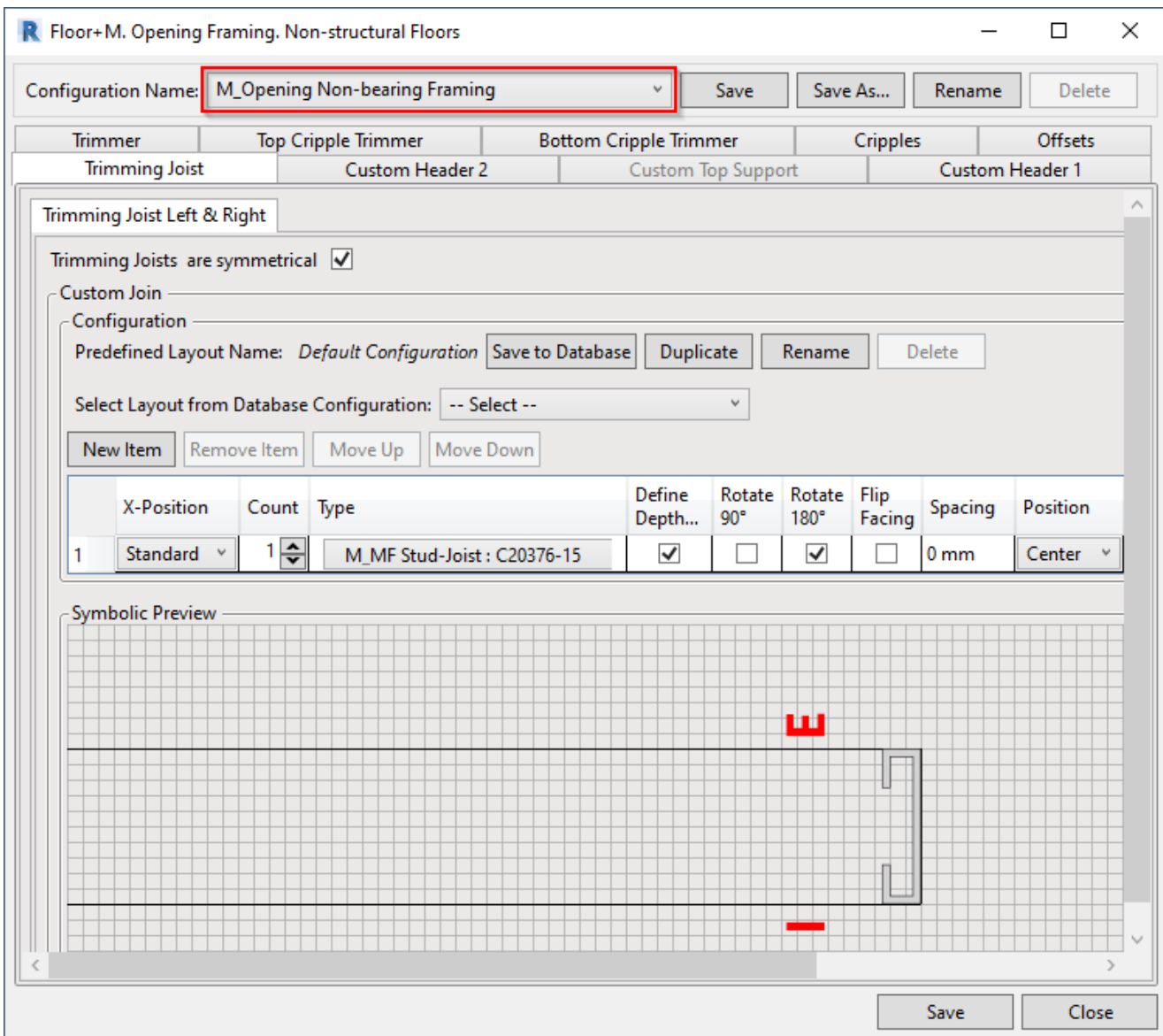
In order to edit, create new, rename, or delete opening framing configuration, you have to click **Edit Configuration** for the structural or non-structural floors:



Default configurations will come together with the software. Default path to opening configurations is:

*C:\Users\user name\AppData\Roaming\Tools 4 Revit\Floor+M(version) Configurations\Framing Configurations\Metric or Imperial\Configuration name\*

It saves all the settings of trimmer joists, headers, trimmers, other joists that are listed down below in the dialog:



## Trimming Joist

| Trimmer               | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        | Offsets |
|-----------------------|---------------------|------------------------|-----------------|---------|
| <b>Trimming Joist</b> | Custom Header 2     | Custom Top Support     | Custom Header 1 |         |

Trimming Joist Left & Right

Trimming Joists are symmetrical

Custom Join

Configuration

Predefined Layout Name: *Default Configuration*

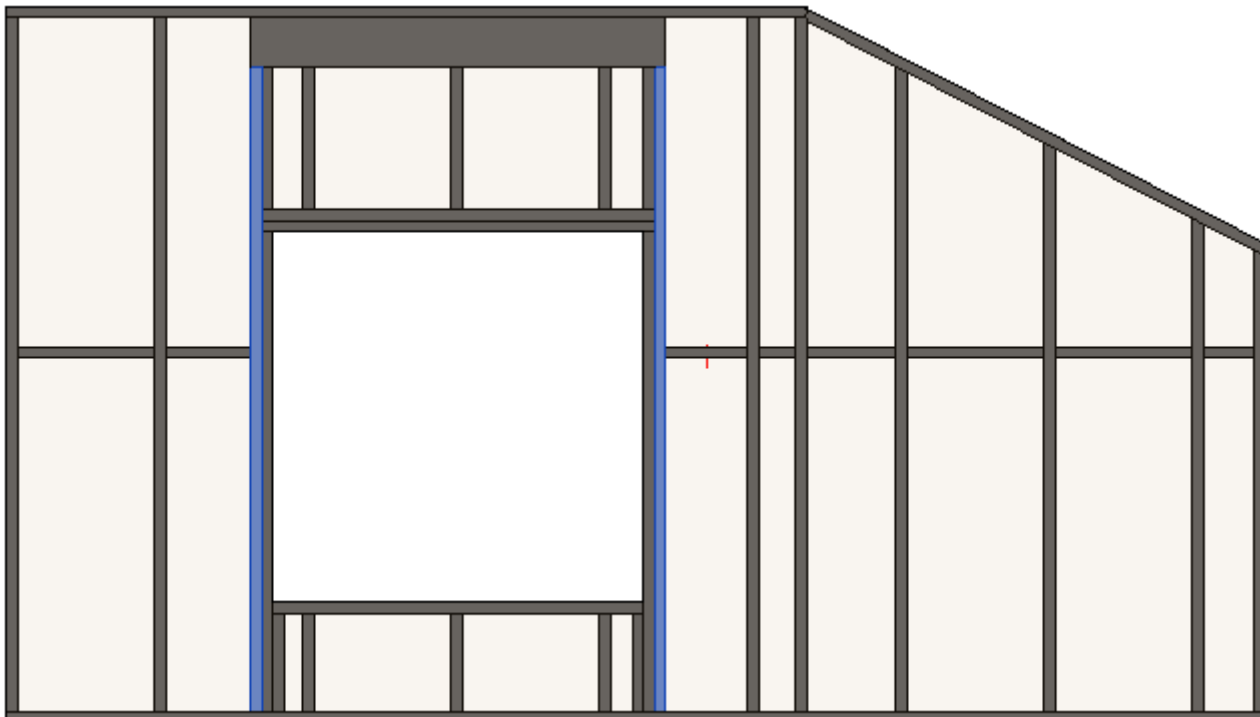
Select Layout from Database Configuration: -- Select --

|   | X-Position | Count | Type                        | Define Depth...                     | Rotate 90°               | Rotate 180°                         | Flip Facing              | Spacing | Position |
|---|------------|-------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------|----------|
| 1 | Standard   | 1     | M_MF Stud-Joist : C20376-15 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0 mm    | Center   |

Symbolic Preview

**Trimming Joist** tab – in this tab you will find all settings for creating trimming joist needed for the opening.

**Trimming Joists are symmetrical** – switch this *OFF* if trimming joists should be different on the left and right sides.



# Custom Join

| Trimmer        | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        | Offsets |
|----------------|---------------------|------------------------|-----------------|---------|
| Trimming Joist | Custom Header 2     | Custom Top Support     | Custom Header 1 |         |

Trimming Joist Left & Right

Trimming Joists are symmetrical

**Custom Join**

Configuration

Predefined Layout Name: *Default Configuration*

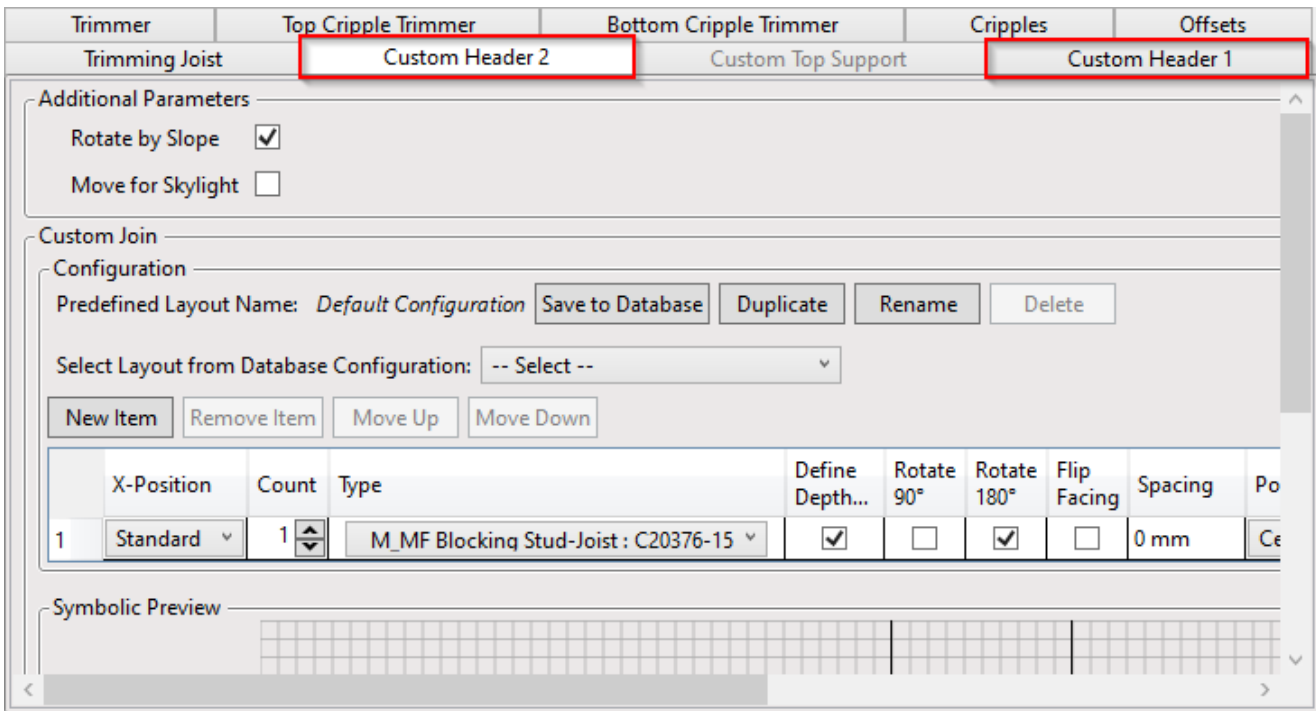
Select Layout from Database Configuration: -- Select --

|   | X-Position | Count | Type                        | Define Depth...                     | Rotate 90°               | Rotate 180°                         | Flip Facing              | Spacing | Position |
|---|------------|-------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------|----------|
| 1 | Standard   | 1     | M_MF Stud-Joist : C20376-15 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 0 mm    | Center   |

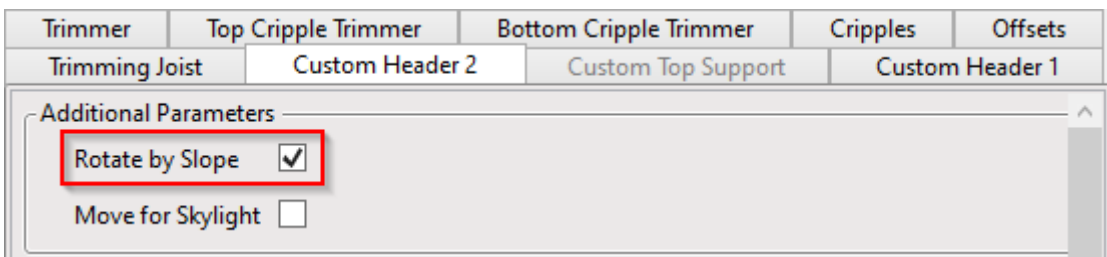
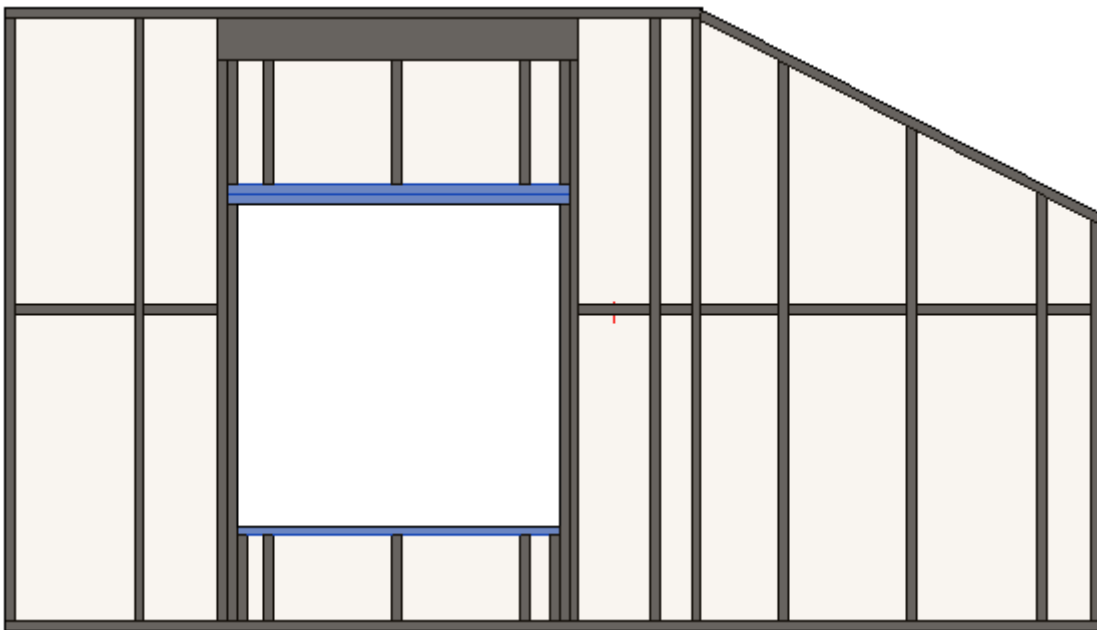
Symbolic Preview

**Custom Join** – is a multi-functional dialog where user can define rules for joins including size, count, position, rotation, spacing, alignment etc. All these rules can be saved and used in other framing configurations or shared with other users. This type of dialog is used frequently in our products, so here you can find [Custom Join detailed description >>](https://agacad.freshdesk.com/support/solutions/articles/44001990031-custom-join) (<https://agacad.freshdesk.com/support/solutions/articles/44001990031-custom-join>).

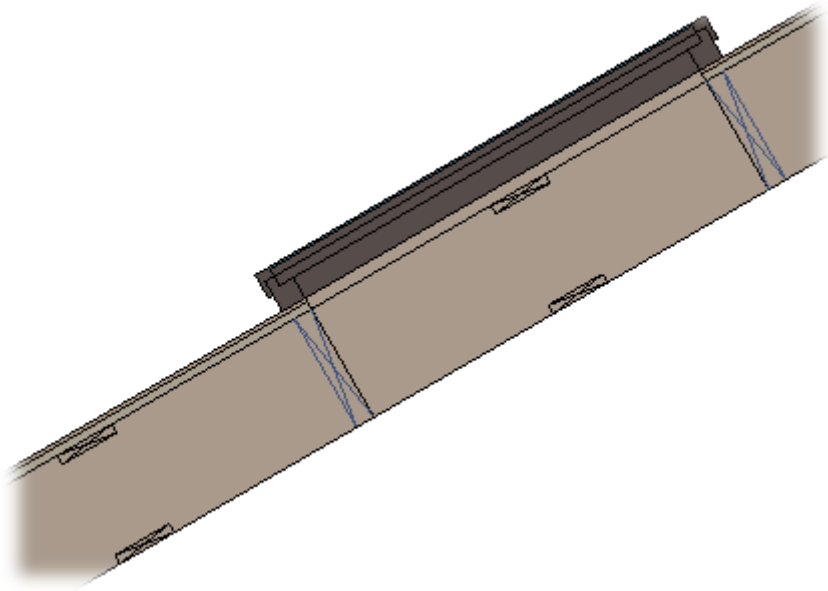
## Custom Header 1, Custom Header 2



**Custom Header 1/2** tab – in this tab you will find all settings for creating headers/sills needed for the opening.

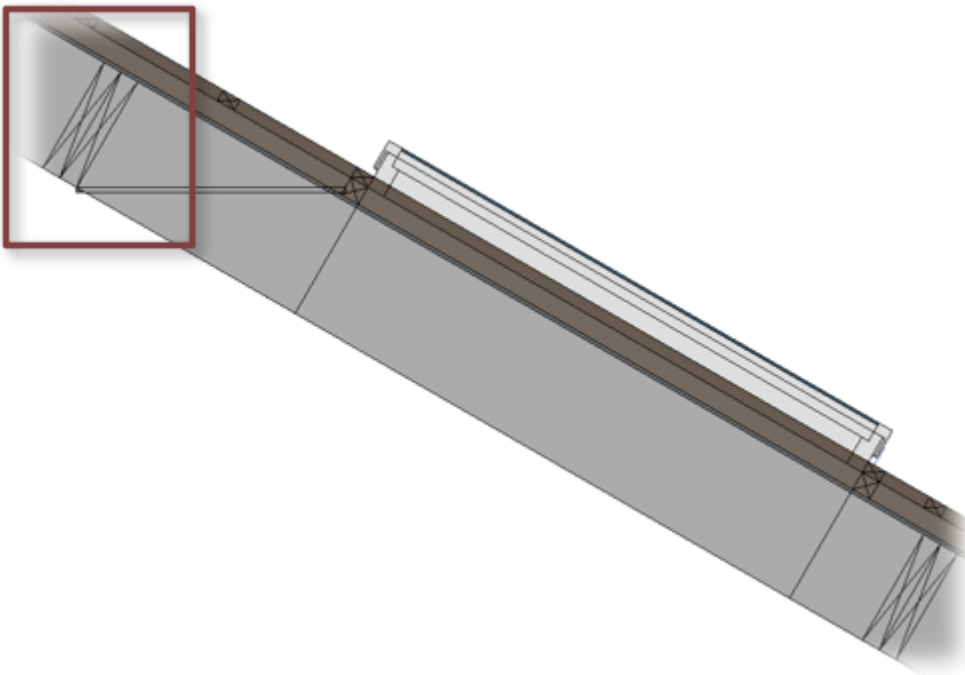


**Rotate by Slope** – rotates an element according to the floor slope.



| Trimmer               | Top Cripple Trimmer                 | Bottom Cripple Trimmer | Cripples        | Offsets |
|-----------------------|-------------------------------------|------------------------|-----------------|---------|
| Trimming Joist        | Custom Header 2                     | Custom Top Support     | Custom Header 1 |         |
| Additional Parameters |                                     |                        |                 |         |
| Rotate by Slope       | <input checked="" type="checkbox"/> |                        |                 |         |
| Move for Skylight     | <input type="checkbox"/>            |                        |                 |         |

**Move for Skylight** – if ticked, then the header will be moved to make a real skylight frame.



## Custom Top Support

|                |                     |                        |          |                 |
|----------------|---------------------|------------------------|----------|-----------------|
| Trimmer        | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples | Offsets         |
| Trimming Joist | Custom Header 2     | Custom Top Support     |          | Custom Header 1 |

Custom Join

Configuration

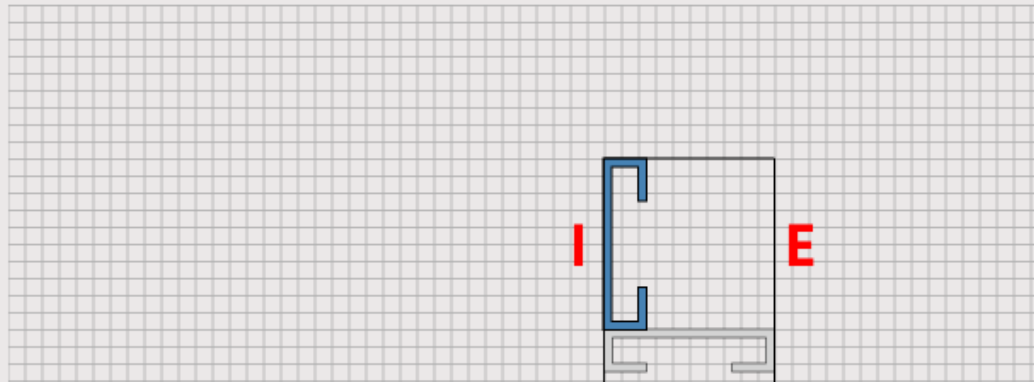
Predefined Layout Name: *Default Configuration* Save to Database Duplicate Rename Delete

Select Layout from Database Configuration: -- Select --

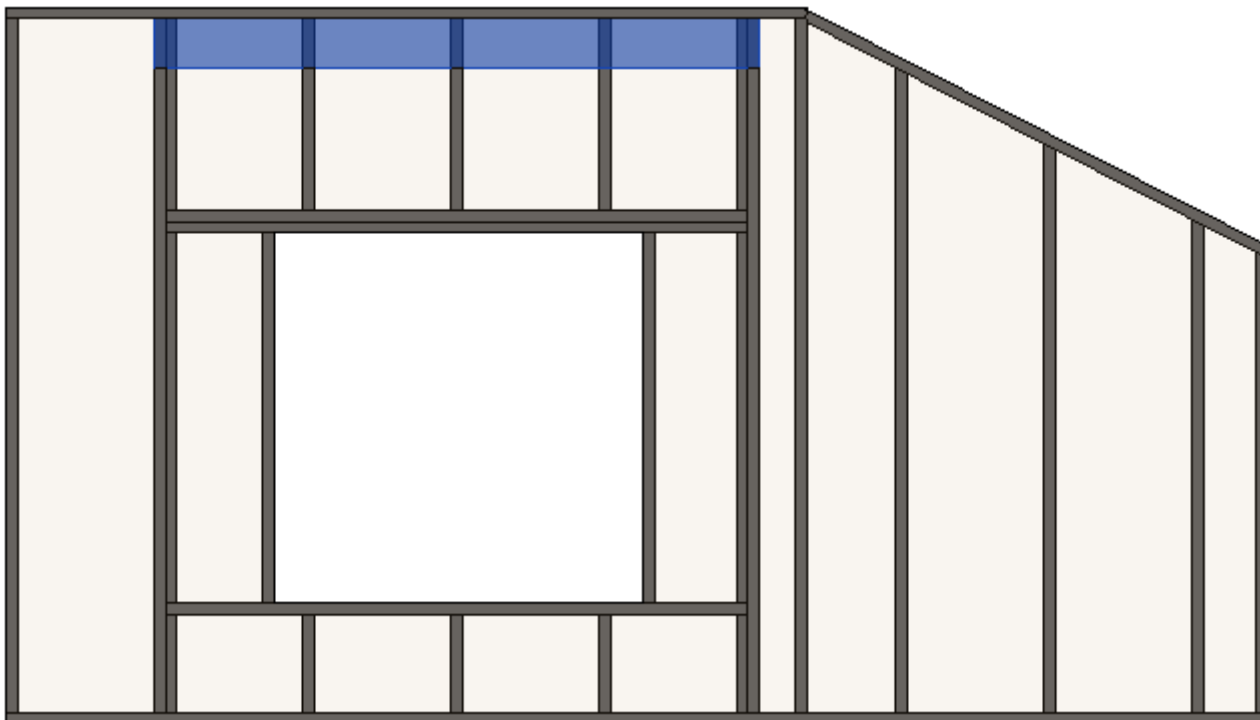
New Item Remove Item Move Up Move Down

|   | X-Position | Count | Type                                  | Define Depth...                     | Rotate 90°                          | Rotate 180°              | Flip Facing              | Spacing | Position |
|---|------------|-------|---------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|---------|----------|
| 1 | Standard   | 1     | M_MF Blocking Stud-Joist : C20376-15' | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | 0 mm    | Center   |
| 2 | Standard   | 1     | M_MF Blocking Stud-Joist : C20376-15' | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 mm    | Internal |

Symbolic Preview



**Custom Top Support** – place where user can control opening top support.



## Trimmers

|                |                     |                        |                 |
|----------------|---------------------|------------------------|-----------------|
| Trimming Joist | Custom Header 2     | Custom Top Support     | Custom Header 1 |
| <b>Trimmer</b> | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        |
|                |                     |                        | Offsets         |

Trimmer Left & Right

Trimmers are symmetrical

Extend Sill&Header

Extend Header

Insert Support Stud/Joist if extended

Extend Trimmer if it connects to Top Support and Trimming Joist is missing

Custom Join

Configuration

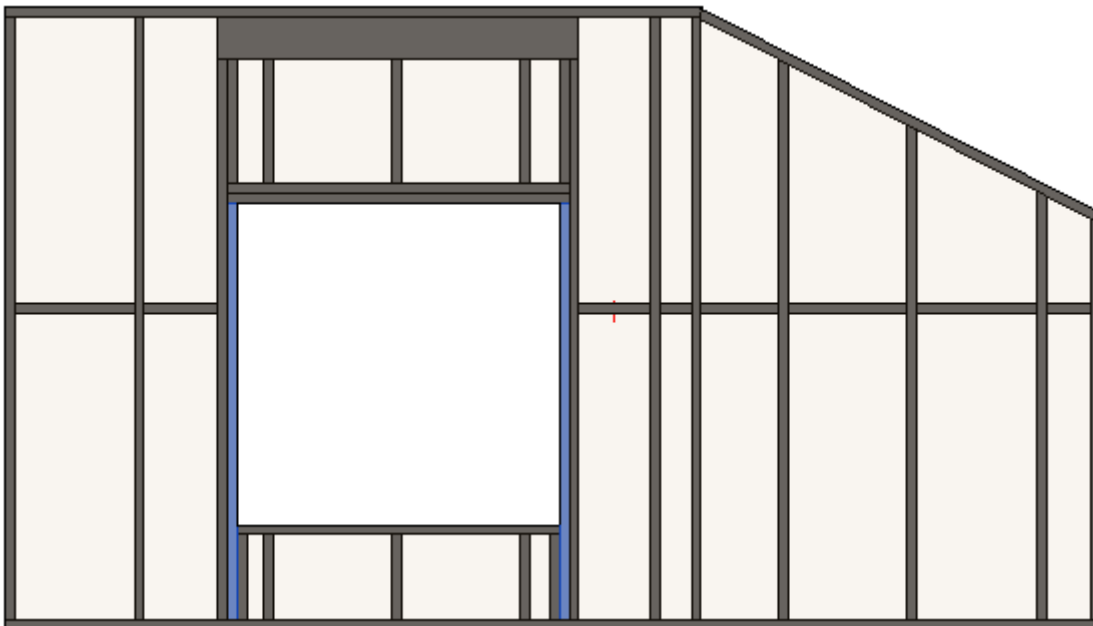
Predefined Layout Name: *Default Configuration*

Select Layout from Database Configuration: -- Select --

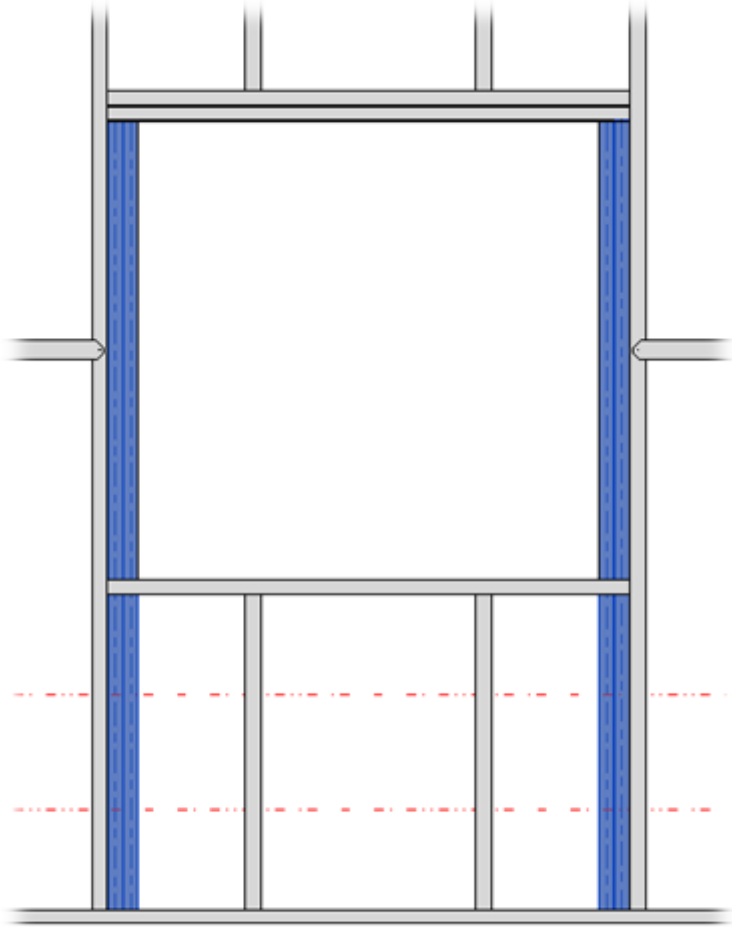
|   | X-Position | Count | Trimmer Type   | Type                        | Define Depth...                     | Rotate 90°               | Rotate 180°                         | Flip Facing              |
|---|------------|-------|----------------|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| 1 | Standard   | 1     | Sill to Header | M_MF Stud-Joist : C20376-15 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Symbolic Preview

**Trimmer** – place where user can control opening trimmers.







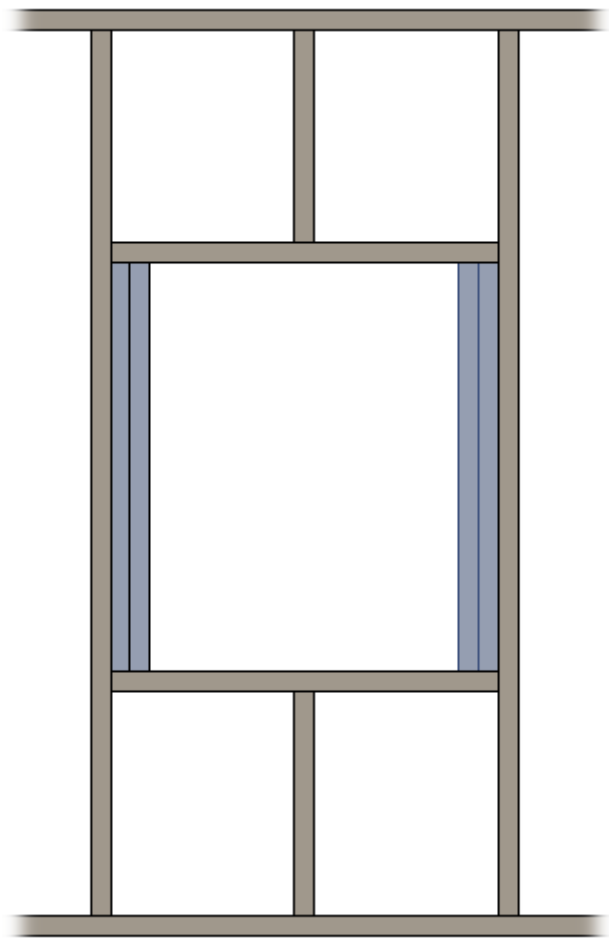
| Trimming Joist | Custom Header 2     | Custom Top Support     | Custom Header 1 |         |
|----------------|---------------------|------------------------|-----------------|---------|
| Trimmer        | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        | Offsets |

Trimmer Left & Right

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Trimmers are symmetrical              | <input checked="" type="checkbox"/> |
| Extend Sill&Header                    | <input type="checkbox"/>            |
| Extend Header                         | <input type="checkbox"/>            |
| Insert Support Stud/Joist if extended | <input type="checkbox"/>            |

Extend Trimmer if it connects to Top Support and Trimming Joist is missing

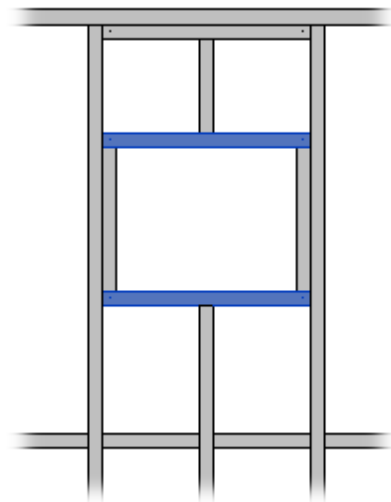
**Trimmers are symmetrical** – switch this *OFF* if trimmers should be different on the left and right sides.



| Trimming Joist   | Custom Header 2                            | Custom Top Support                              | Custom Header 1                          |
|--|--|---|--|
| Trimmer  | Top Cripple Trimmer                        | Bottom Cripple Trimmer                          | Cripples                                 |
| <b>Trimmer Left &amp; Right</b>  |  |   |  |
| Trimmers are symmetrical   |  |   | <input checked="" type="checkbox"/>      |
| Extend Sill&Header   |  |   | <input type="checkbox"/>                 |
| Extend Header  |  |   | <input type="checkbox"/>                 |
| Insert Support Stud/Joist if extended                                      |  |   | <input type="checkbox"/>                 |
| Extend Trimmer if it connects to Top Support and Trimming Joist is missing |  |   | <input checked="" type="checkbox"/>      |
| <b>Custom Join</b>   |  |   |  |
| Configuration  |  |   |  |
| Predefined Layout Name: <i>Default Configuration</i>                       |  | <input type="button" value="Save to Database"/> | <input type="button" value="Duplicate"/> |
|  |  | <input type="button" value="Rename"/>           | <input type="button" value="Delete"/>    |
| Select Layout from Database Configuration: <i>Default Configuration</i>    |  | <input type="checkbox"/> Update by Database     |  |
| <input type="button" value="New Item"/>                                    | <input type="button" value="Remove Item"/> | <input type="button" value="Move Up"/>          | <input type="button" value="Move Down"/> |
| X-Position   | Count                                      | Trimmer Type                                    | Type                                     |
| 1  | 1  | Bottom Plate                                    | M_WF Joist : LMBR 45x150                 |
| 2  | 1  | Bottom Plate                                    | M_WF Joist : LMBR 45x150                 |
|  |  |   | Define Depth...                          |
|  |  |   | Rotate 90°                               |

**Extend Sill&Header** – extends Sill and Header if **Bottom Plate to Sill, Header to Top Plate, Sill to Header** is selected near **Trimmer Type**. Also check if **Trimming Joist** is inserted.

*Result:*



| Trimming Joist | Custom Header 2     | Custom Top Support     | Custom Header 1 |
|----------------|---------------------|------------------------|-----------------|
| Trimmer        | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        |
| Offsets        |                     |                        |                 |

**Trimmer Left & Right**

Trimmers are symmetrical

Extend Sill&Header

**Extend Header**

Insert Support Stud/Joist if extended

Extend Trimmer if it connects to Top Support and Trimming Joist is missing

**Custom Join**

Configuration

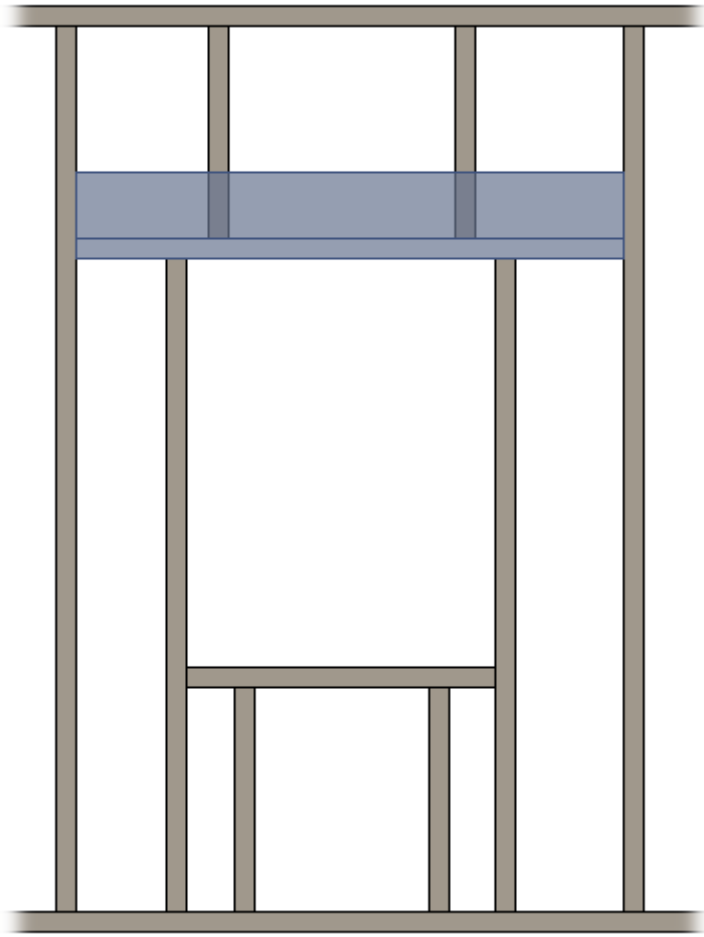
Predefined Layout Name: *Default Configuration*

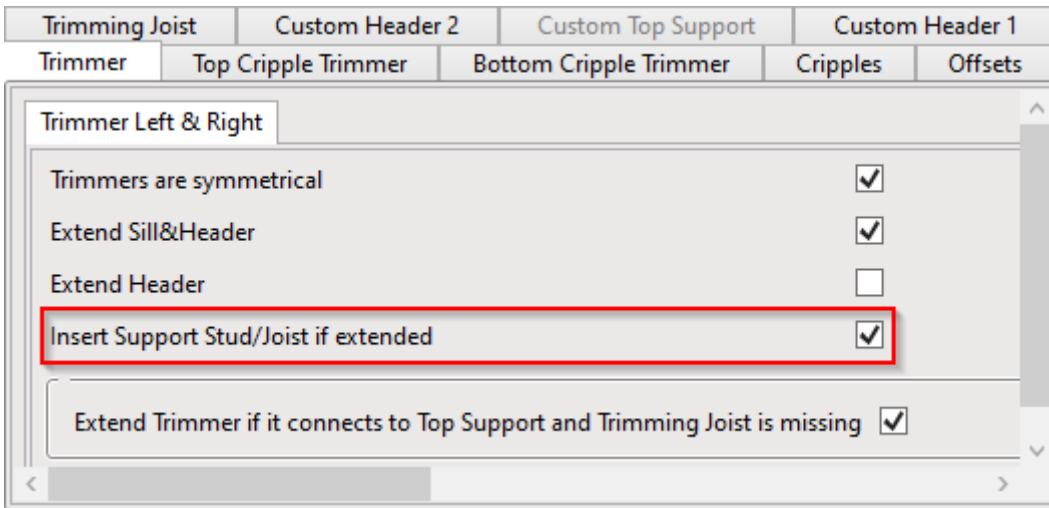
Select Layout from Database Configuration:   Update by Database

|   | X-Position | Count | Trimmer Type | Type                     | Define Depth...                     | Rotate 90°                          |
|---|------------|-------|--------------|--------------------------|-------------------------------------|-------------------------------------|
| 1 | Standard   | 1     | Bottom Plate | M_WF Joist : LMBR 45x150 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2 | Standard   | 1     | Bottom Plate | M_WF Joist : LMBR 45x150 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

**Extend Header** – extends the Header if **Bottom Plate to Header, Bottom Plate to Sill, Header to Top Plate, Sill to Header, Split Sill to Header** is selected near **Trimmer Type**. Also check if **Trimming Joist** is inserted.

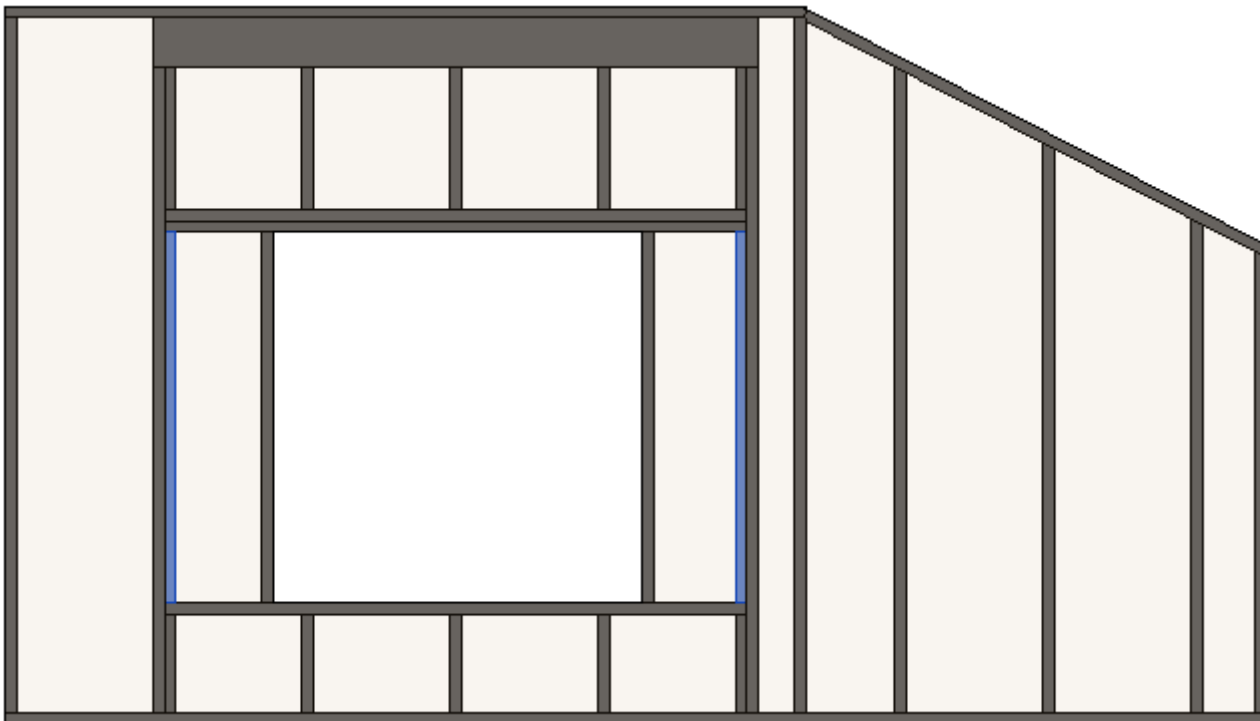
*Result:*

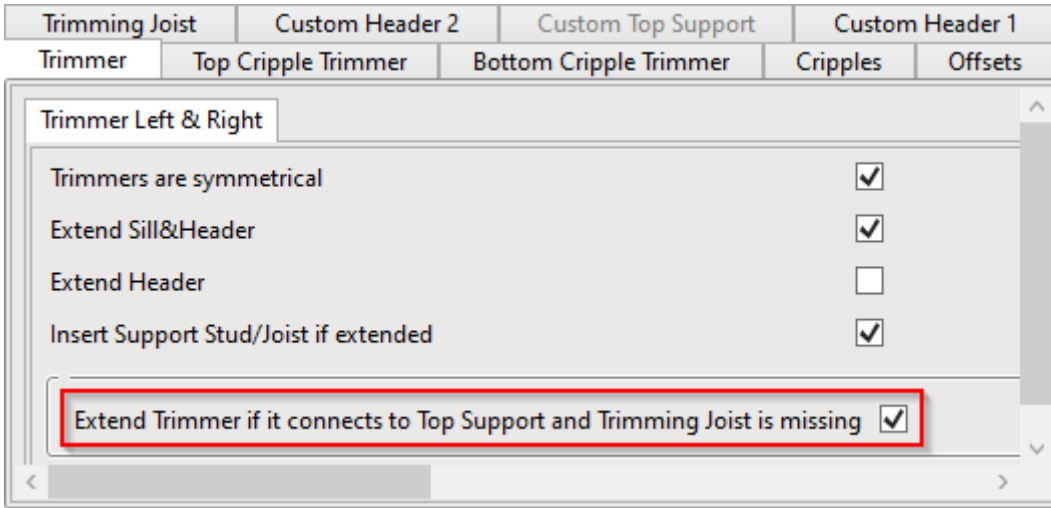




**Insert Support Stud/Joist if extended** – inserts support stud/joist to the opening if **Extend Sill&Header** is switched on.

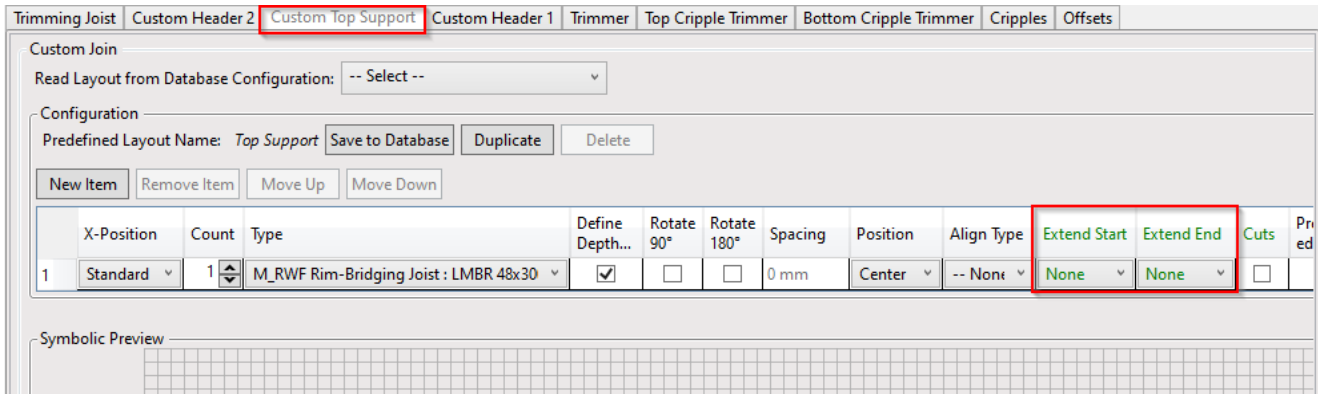
*Result:*



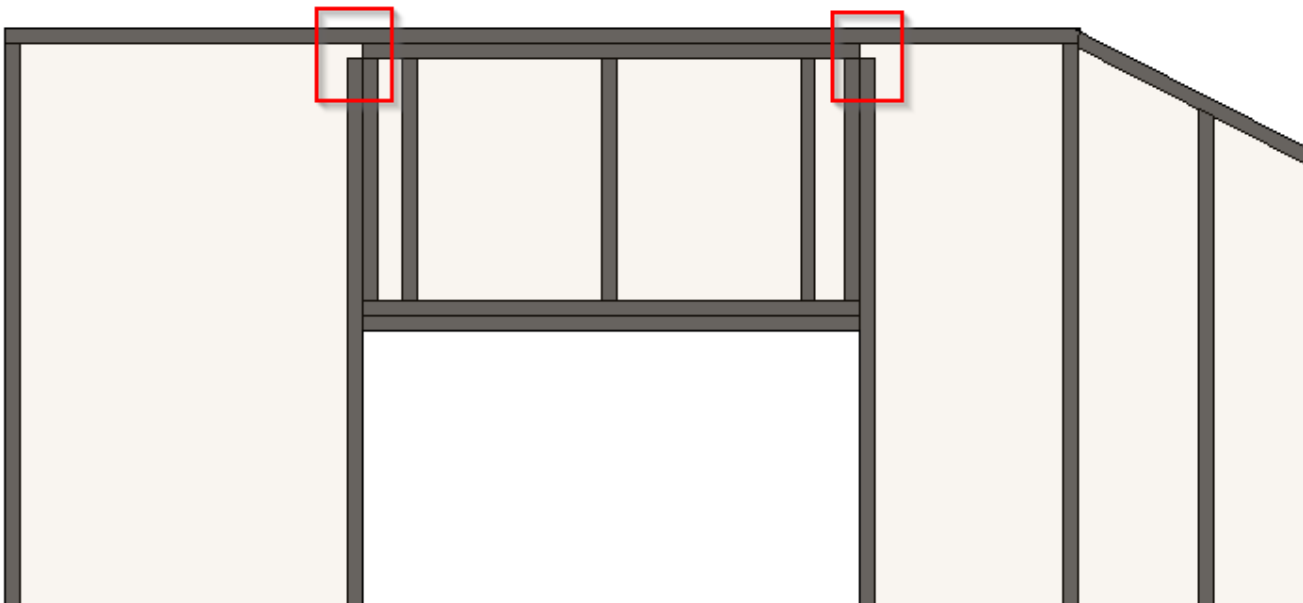


**Extend Trimmer if it connects to Top Support and Trimming Joist is missing** – extends trimmer ends if there is no King/Trimming Joists and **Trimmer Type = Bottom Plate to Top Plate Support**.

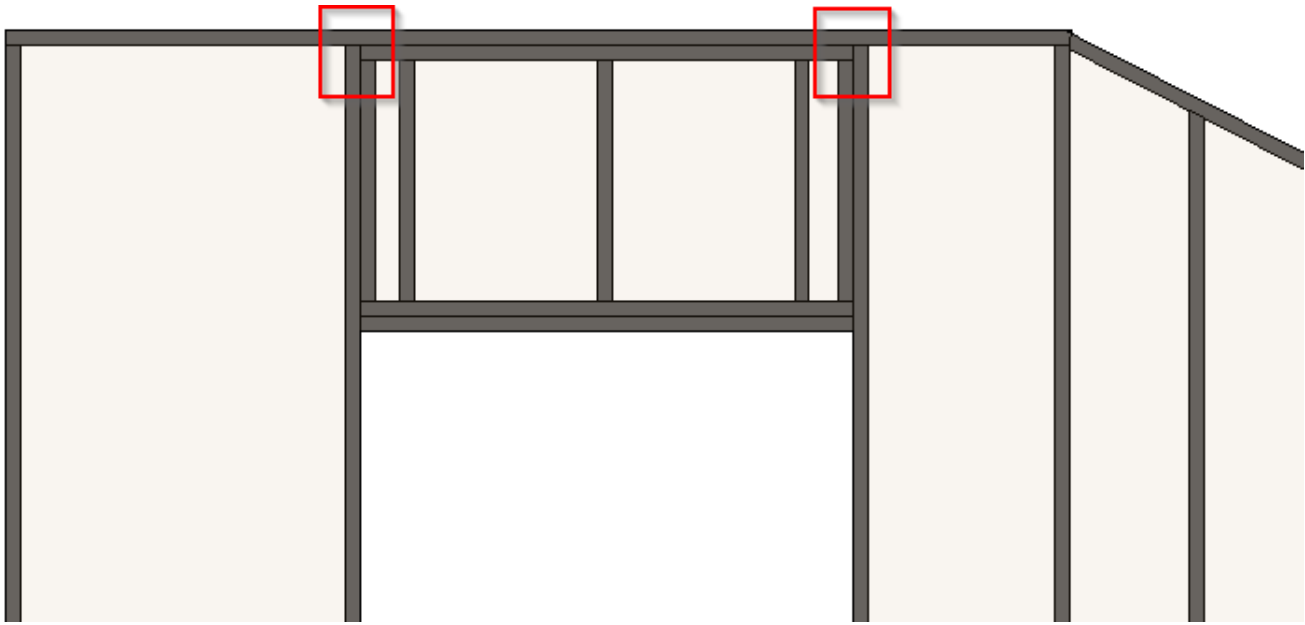
Also top support needs to be without extended ends:



*Result when is switched OFF:*



*Result when is switched ON:*





| Trimming Joist | Custom Header 2     | Custom Top Support     | Custom Header 1 |
|----------------|---------------------|------------------------|-----------------|
| <b>Trimmer</b> | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        |
|                |                     |                        | Offsets         |

Trimmer Left & Right

Trimmers are symmetrical

Extend Sill&Header

Extend Header

Insert Support Stud/Joist if extended

Extend Trimmer if it connects to Top Support and Trimming Joist is missing

Custom Join

Configuration


Predefined Layout Name: *Default Configuration*

Select Layout from Database Configuration: *Default Configuration*  Update by Database

|   | X-Position | Count | Trimmer Type   | Type                     | Define Depth...                     | Rotate 90°               | Flip Facing              | Spa |
|---|------------|-------|----------------|--------------------------|-------------------------------------|--------------------------|--------------------------|-----|
| 1 | Standard   | 1     | Sill to Header | M_WF Joist : LMBR 45x150 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 m |

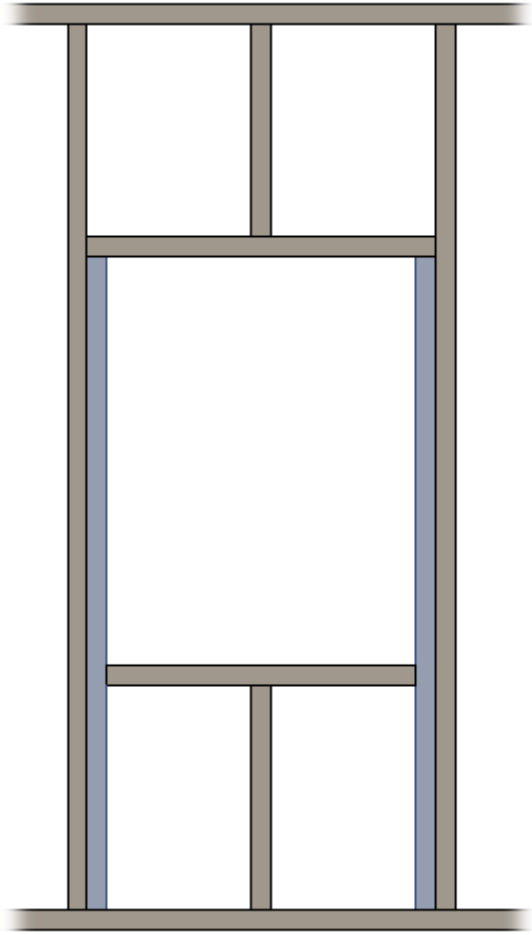
Symbolic Preview

Bottom Plate to Header  
 Bottom Plate to Top Plate  
 Bottom Plate to Top Plate Support  
 Sill to Header  
 Sill to Top Plate

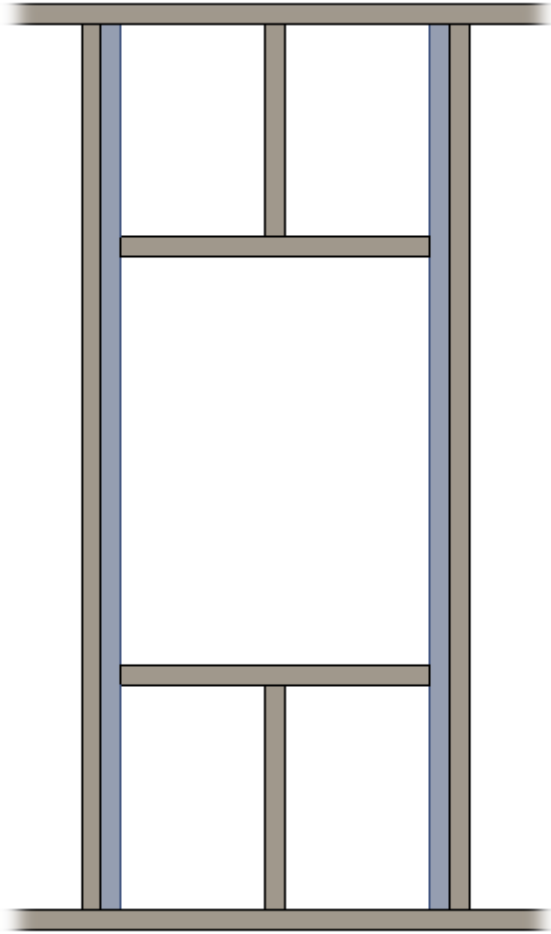


**Trimmer Type** – defines how the trimmer is positioned relative to opening Sill, Header, Top Plate, Bottom Plate, Top Plate Support.

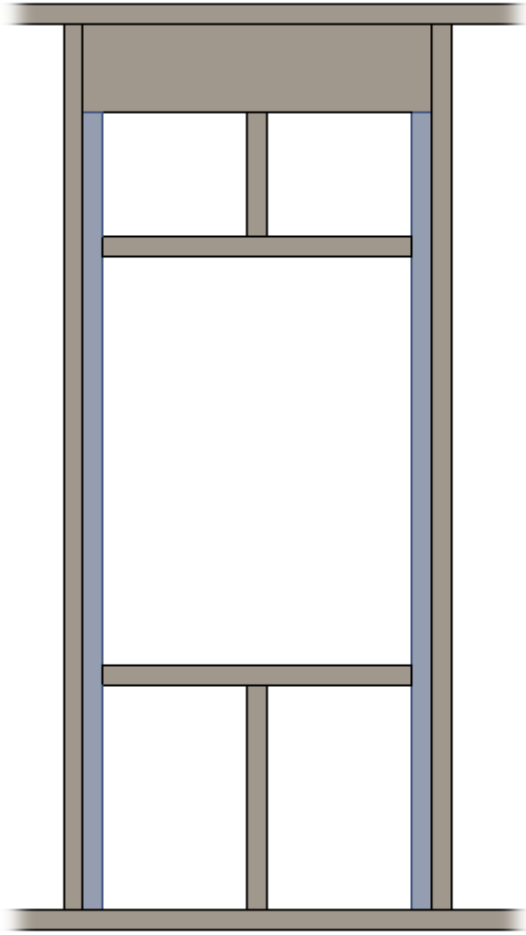
*Example: Trimmer goes from **Bottom Plate to Header**:*



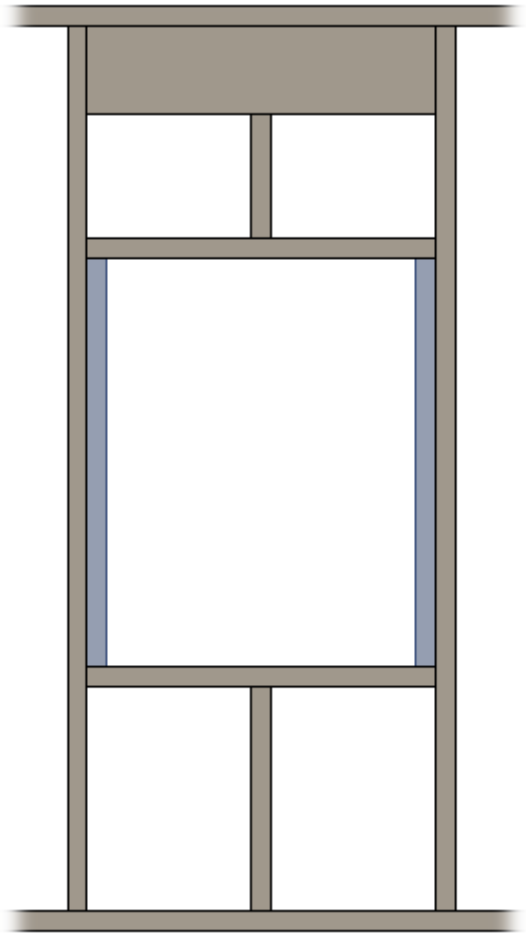
*Example: Trimmer goes from **Bottom Plate** to **Top Plate**:*



*Example: Trimmer goes from **Bottom Plate** to **Top Plate Support**:*



*Example: Trimmer goes from Sill to Header:*



## Top/Bottom Cripple Trimmer

| Trimming Joist | Custom Header 2     | Custom Top Support     | Custom Header 1 |
|----------------|---------------------|------------------------|-----------------|
| Trimmer        | Top Cripple Trimmer | Bottom Cripple Trimmer | Cripples        |
| Offsets        |                     |                        |                 |

Top Cripple Trimmer Left & Right

Trimmers are symmetrical

Custom Join

Configuration

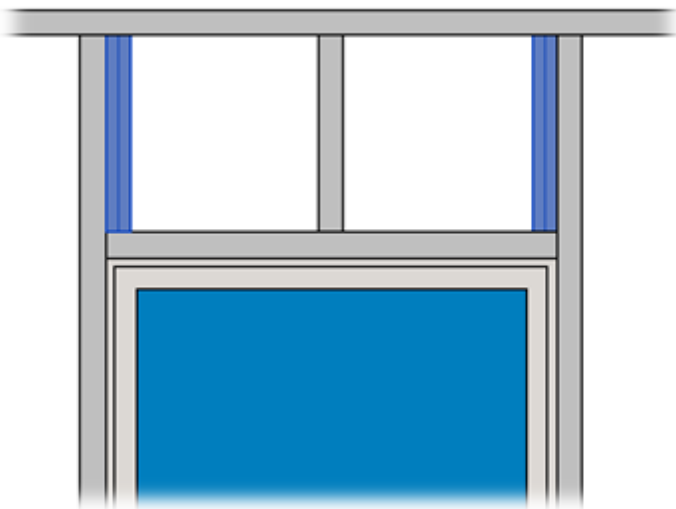
Predefined Layout Name: *Default Configuration*

Select Layout from Database Configuration: -- Select --

|   | X-Position | Count | Type                        | Define Depth...                     | Rotate 90°               | Rotate 180°              | Flip Facing              | Spacing | Position |
|---|------------|-------|-----------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|---------|----------|
| 1 | Standard   | 1     | M_MF Stud-Joist : C20376-15 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 mm    | Center   |

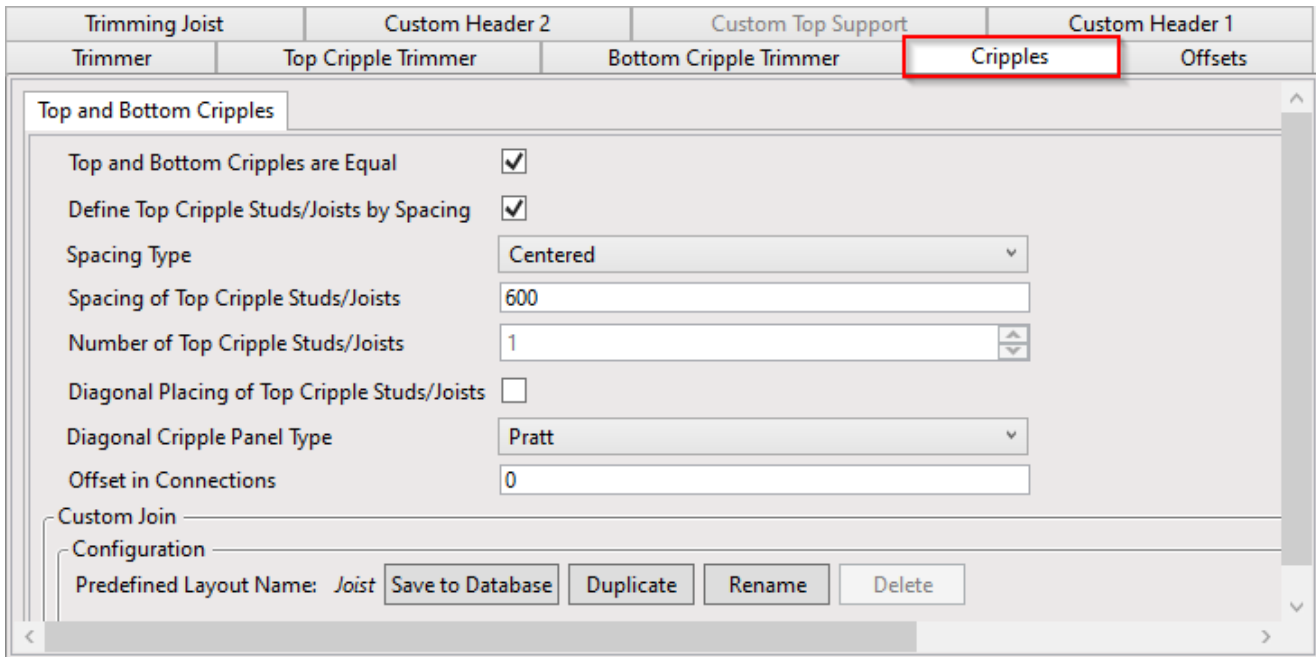
Symbolic Preview

**Top/Bottom Cripple Trimmer** – place where user can control opening top/bottom cripple .



**Trimmers are symmetrical** – switch this *OFF* if trimmers should be different on the left and right sides.

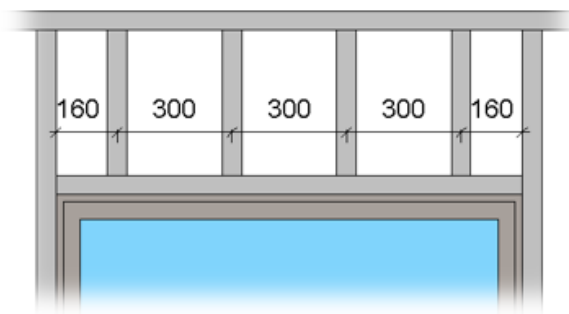
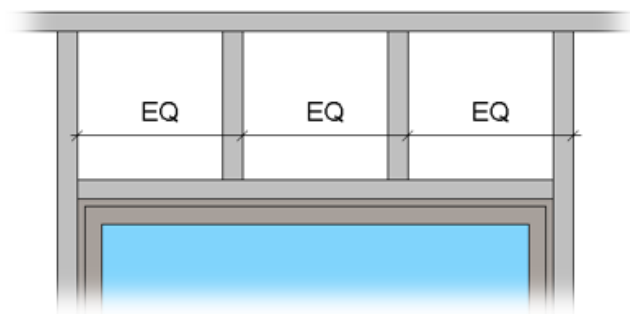
# Cripples



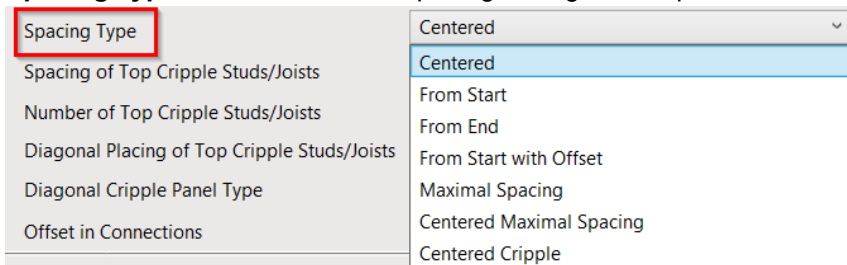
**Define Top Cripples Studs/Joists by Spacing** – if ticked ON, then you can predefine **Spacing Type** and **Spacing of Top Cripple Studs/Joists**. If unticked, then the software calculates the distance between top cripples automatically. You just need to define a **Number of Top Cripple Studs/Joists**.

**Number of Top Cripple Stud = 2**

**Spacing of Top Cripple Studs = 300**

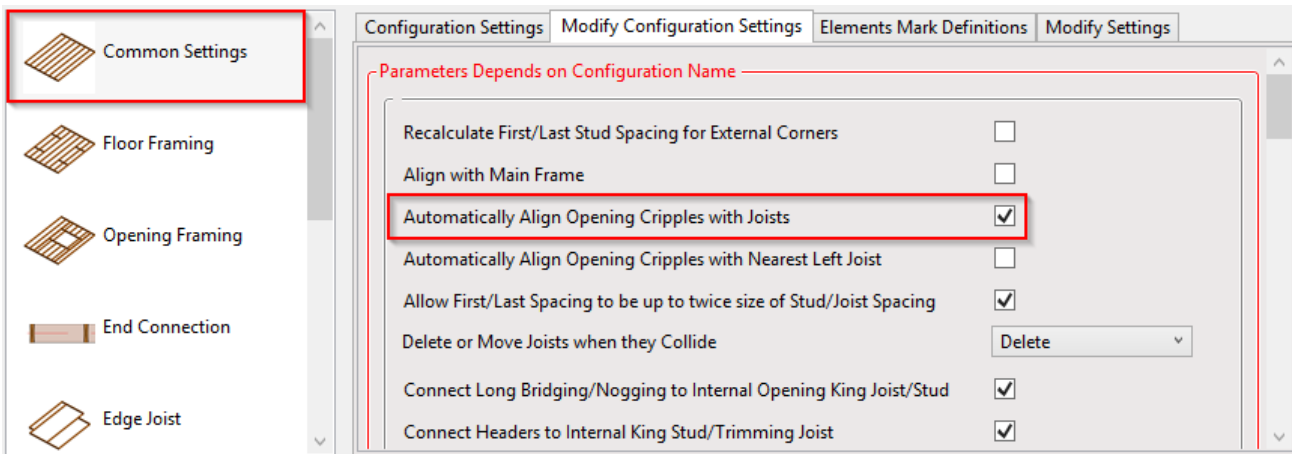


**Spacing Type** – defines different spacing arrangement options:

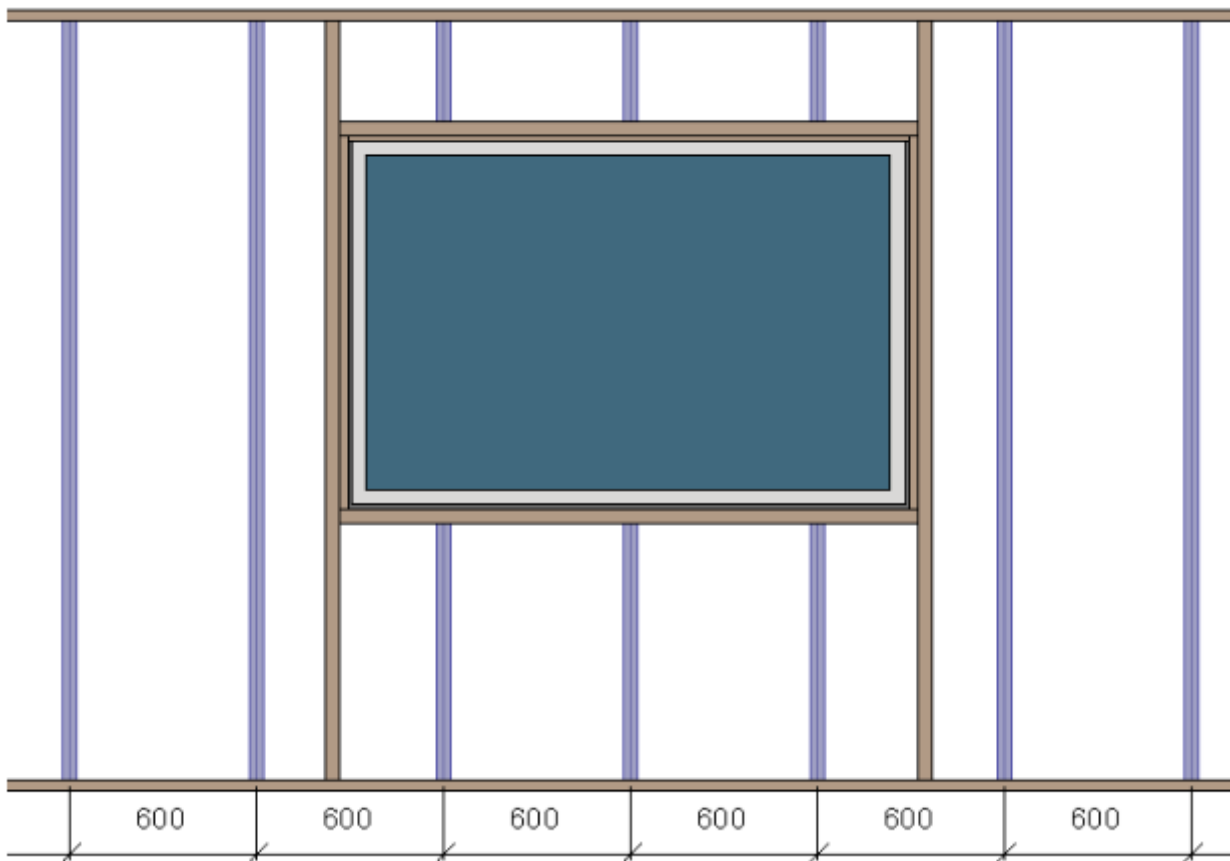


Bottom Cripples will always be the same as the top.

*Note: **Define Top Cripples Studs/Joists by Spacing** will work if **Automatically Align Opening Cripples with Joists** is switched OFF near **Common Settings**. If it is ticked ON, then the cripples will be aligned with the main framing joists.*



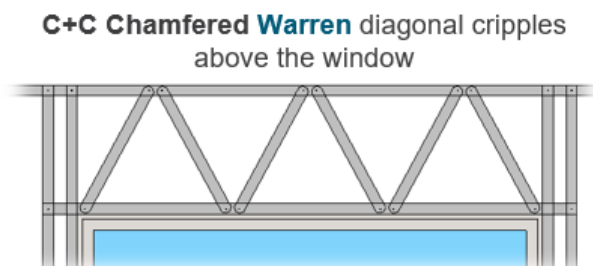
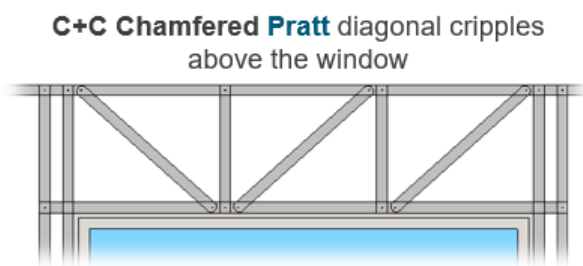
***Automatically Align Opening Cripples with Joists is switched ON:***



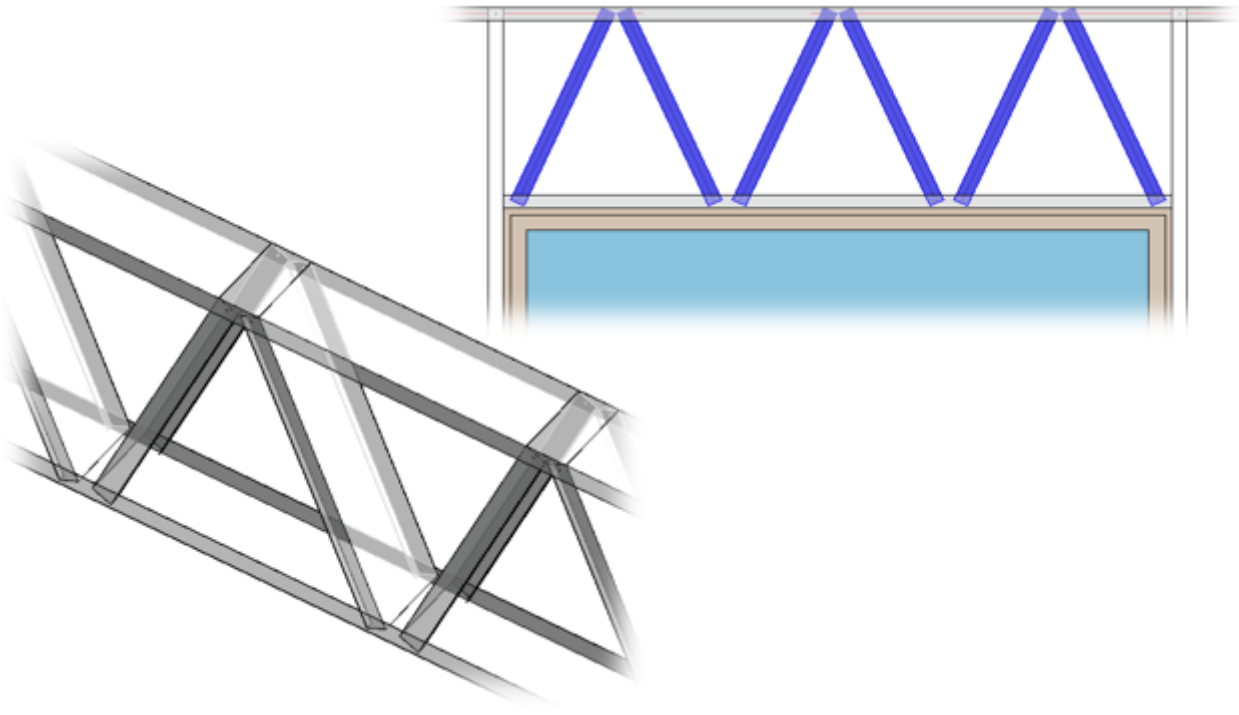
**Diagonal Placing of Top Cripple Studs/Joists** – select this option if you would like to use diagonal top cripples.

**Diagonal Cripple Panel Type** – possible options: **Warren** or **Pratt**.

**Offset in Connections** – distance between diagonal cripples.



Sample **C+U Special Warren** diagonal cripples above the window:



## Offset

**Opening Top, Bottom, Left, Right Offset** – offsets frame in all preferred directions.

| King Stud             | Custom Header                  | Custom Top Support | Custom Sill | Trimmer | Other Studs | Offsets |
|-----------------------|--------------------------------|--------------------|-------------|---------|-------------|---------|
| Opening Top Offset    | <input type="text" value="2"/> |                    |             |         |             |         |
| Opening Bottom Offset | <input type="text" value="2"/> |                    |             |         |             |         |
| Opening Left Offset   | <input type="text" value="3"/> |                    |             |         |             |         |
| Opening Right Offset  | <input type="text" value="3"/> |                    |             |         |             |         |



