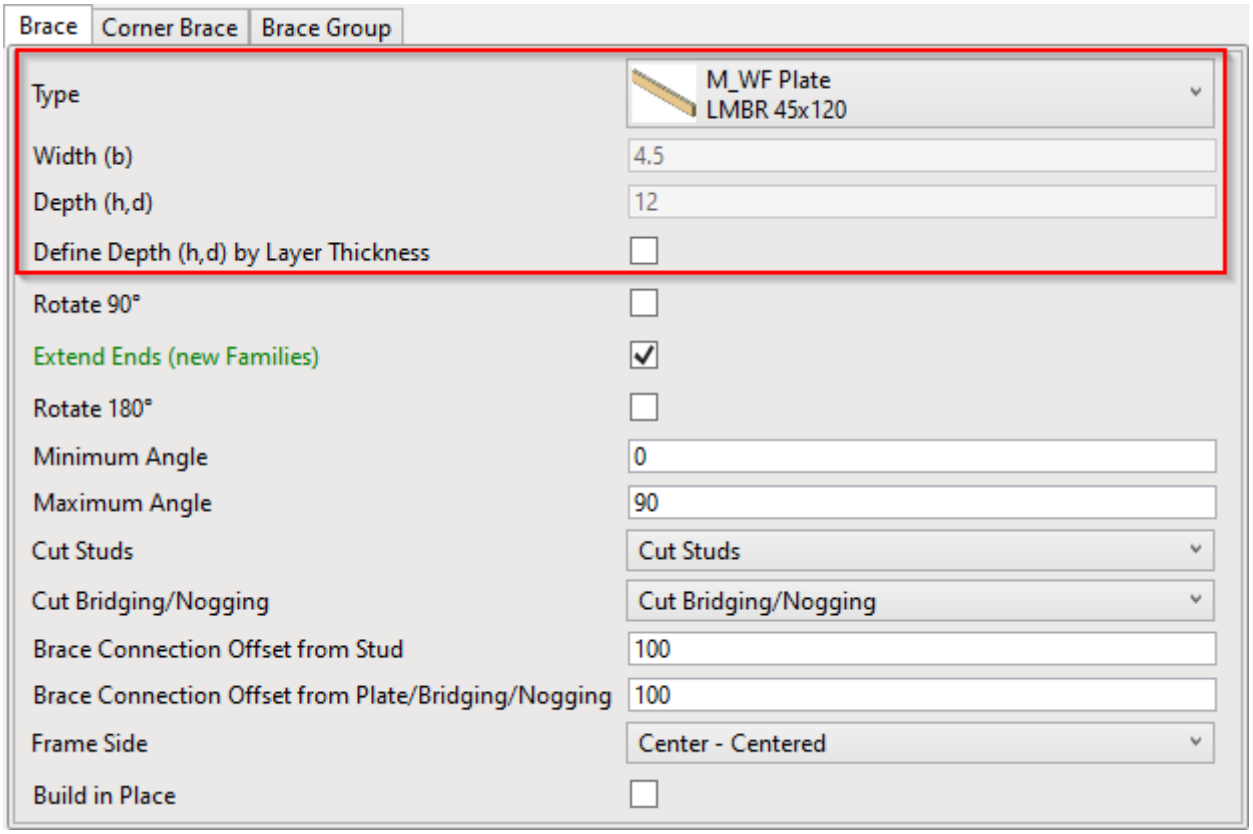
FRAMING CONFIGURATION – Brace

Modified on: Fri, 8 Jan, 2021 at 7:22 PM

Brace Type



Use Main Types – brace family and type will be taken from **Common Settings** tab.

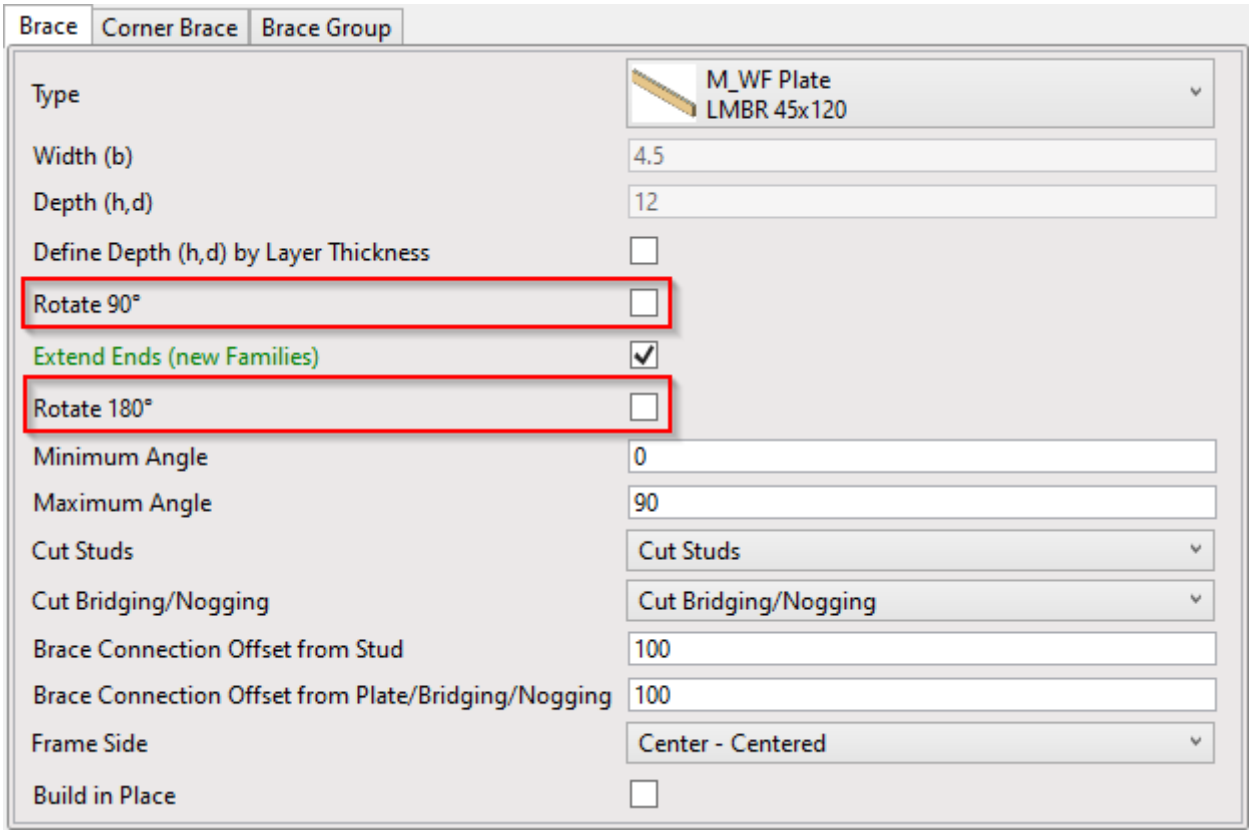
Type – select the family and type that will be used for the brace. Default families are predefined.

Width (b) – shows b size of selected type.

Depth (h,d) – shows h or d size of selected type.

Define Depth (h,d) by Layer Thickness – Wall+/Floor+/Roof+ will automatically create new type for selected family with new depth equal to selected wall/floor layer thickness.

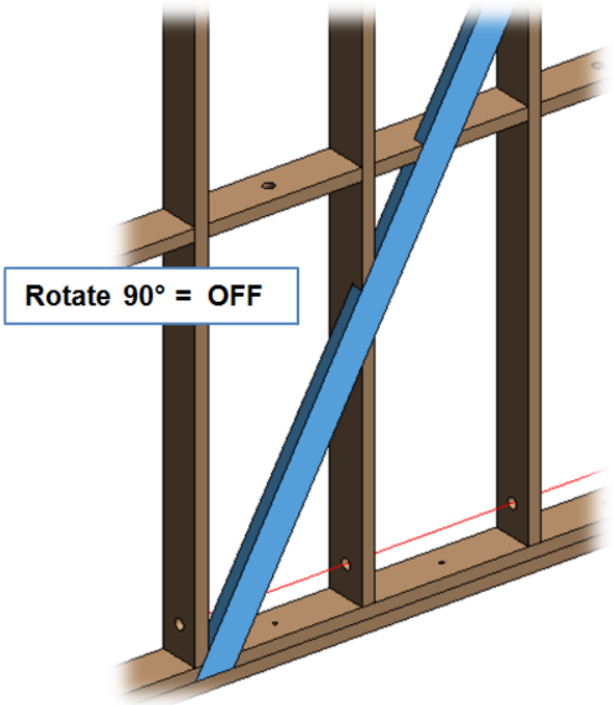
Rotate 90° and 180°



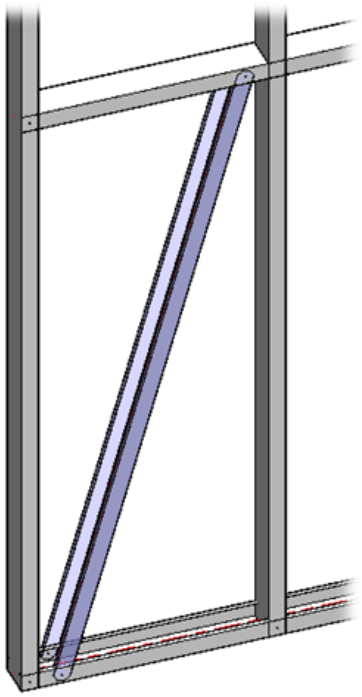
Rotate 90° – if ticked, then bracing rotates by 90 degrees.

Rotate 180° – if ticked, then bracing rotates by 180 degrees. Rotation depends on how the profile in the family is created.

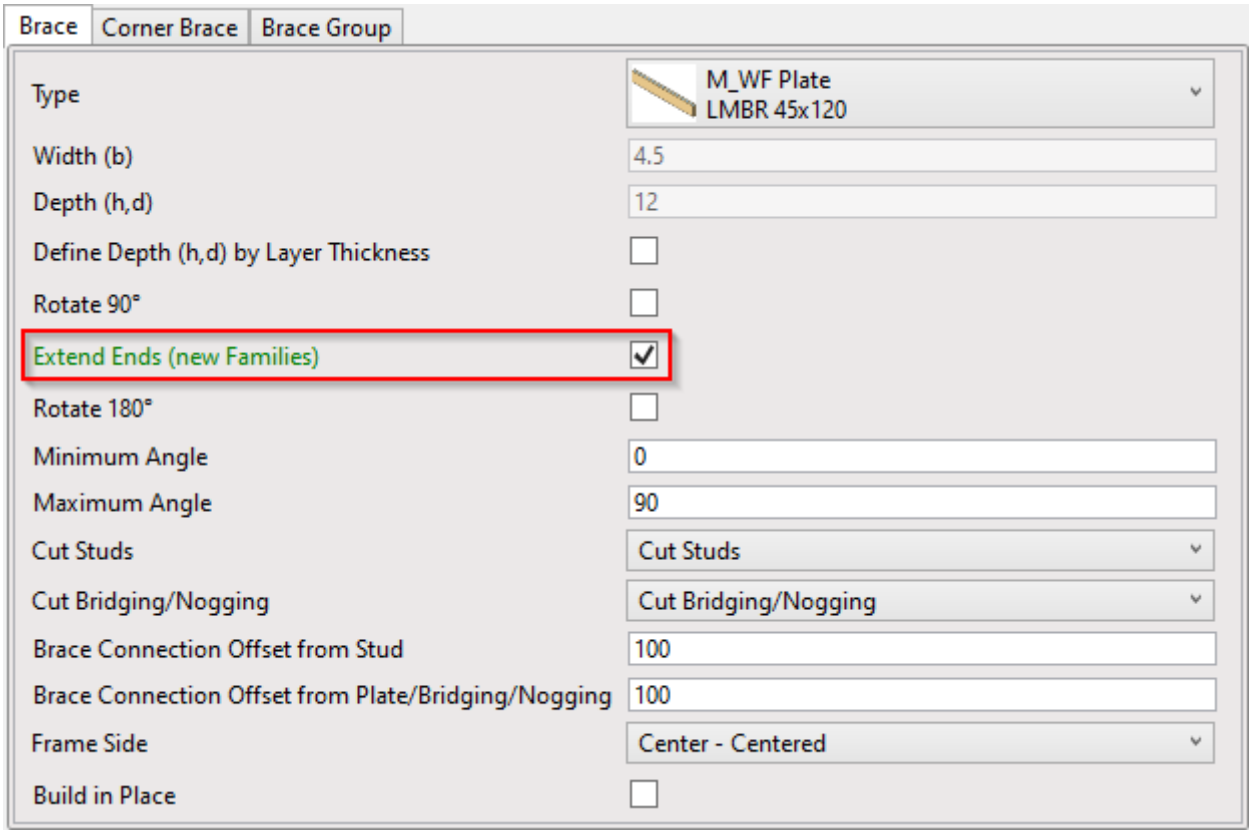
Example with wood wall frame:



Example with metal wall frame:

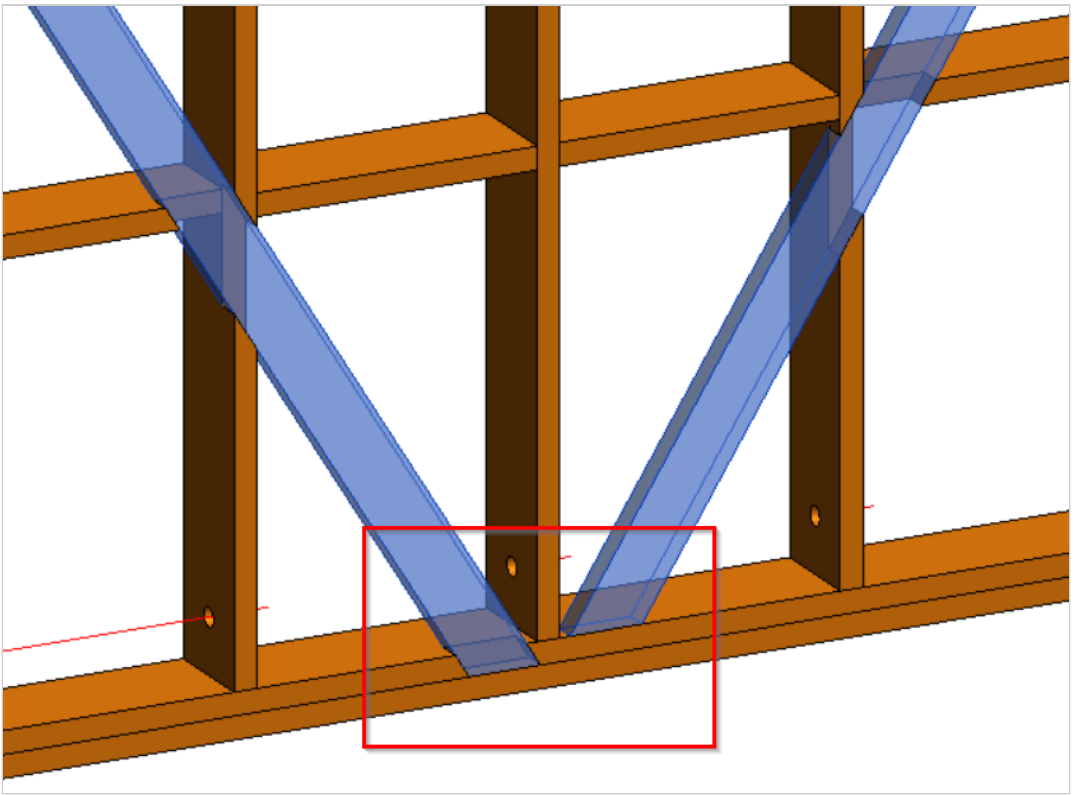


Extend Ends

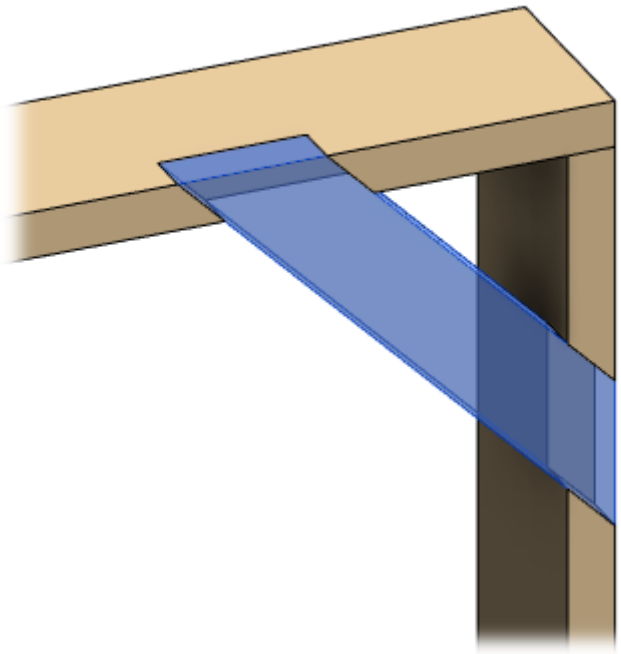


Extend Ends – extends brace ends if it connects other plates/rim joists or studs/joists.

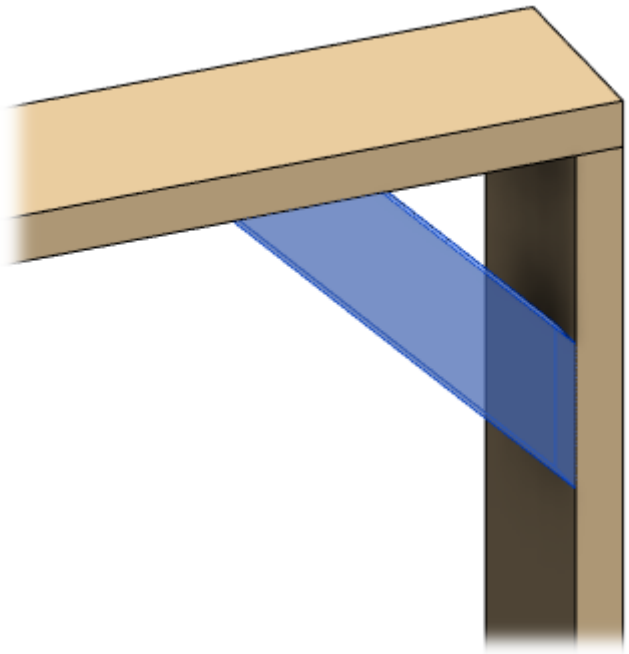
*Example: **Extend Ends** is switched ON for the left brace and switched OFF for the right brace:*



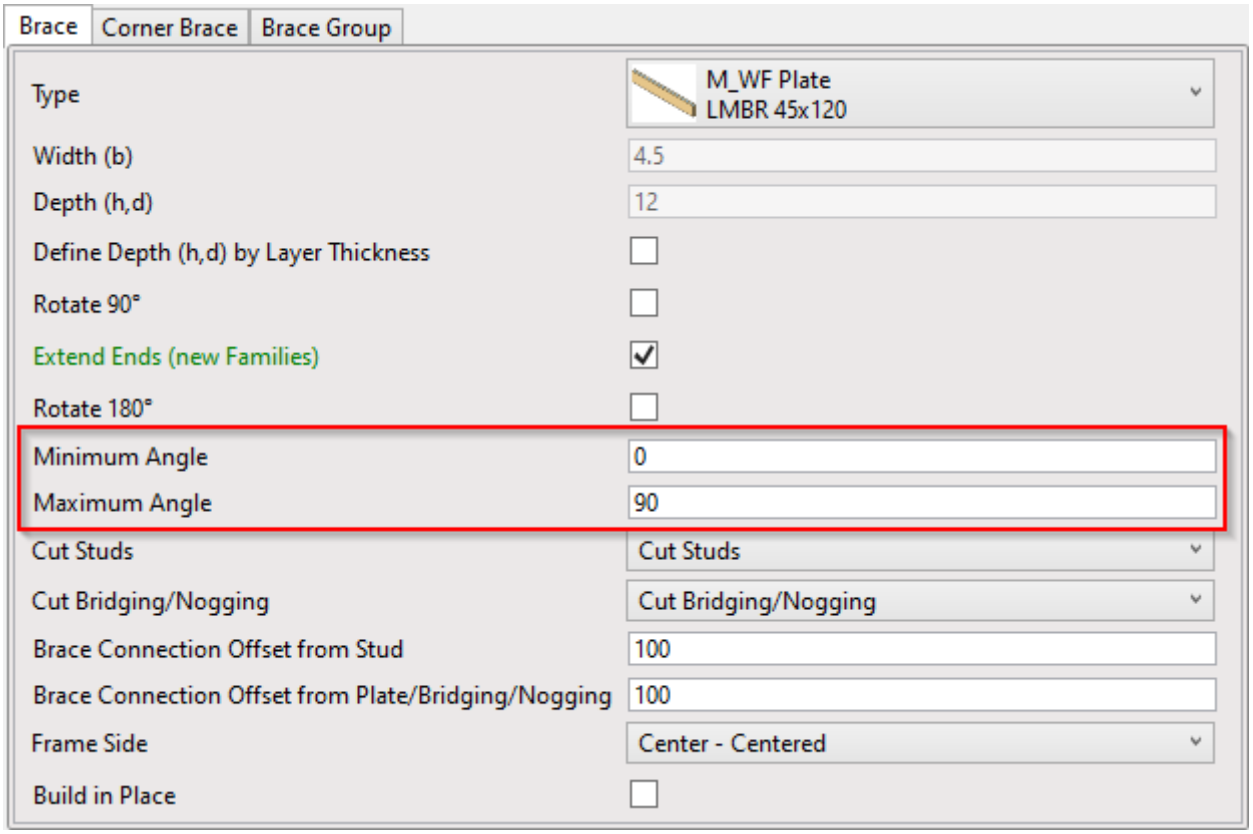
*Example: when **Extend Ends** is switched ON:*



*Example: when **Extend Ends** is switched OFF:*

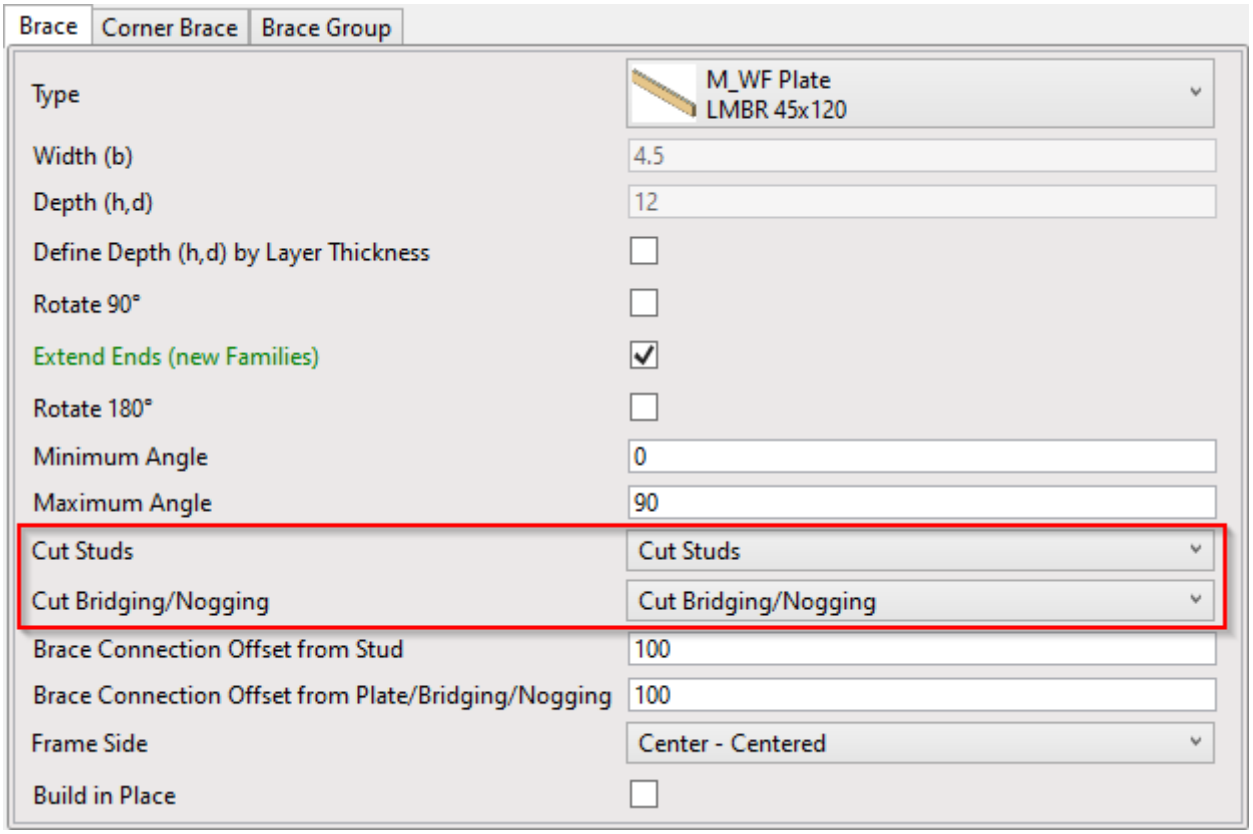


Minimum/Maximum Angle



Minimum Angle and **Maximum Angle** – define angle limits for adding bracing.

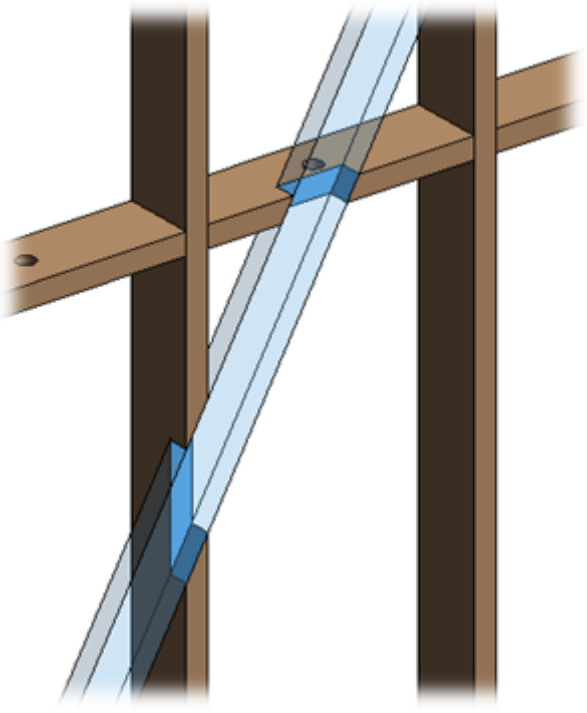
Cut Studs/Joists and Cut Bridging/Nogging



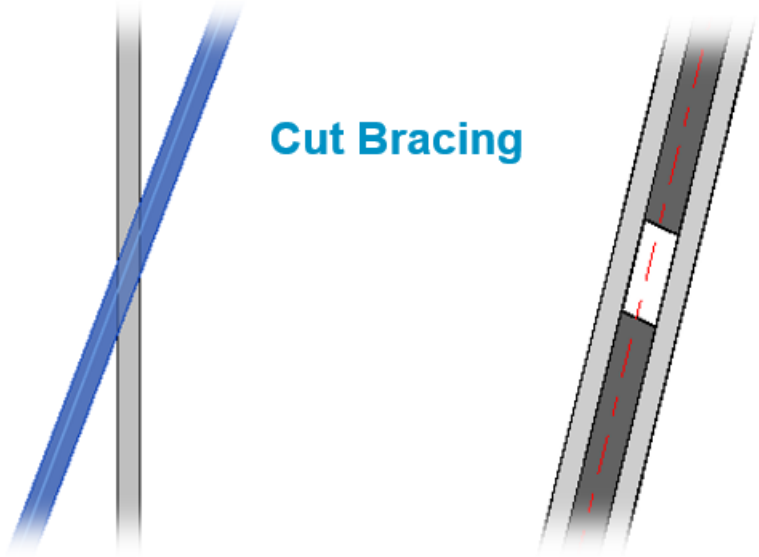
Cut Studs/Joists – select bracing and stud/joist connection cutting type.

Cut Bridging/Nogging – select bracing and bridging or nogging connection cutting type.

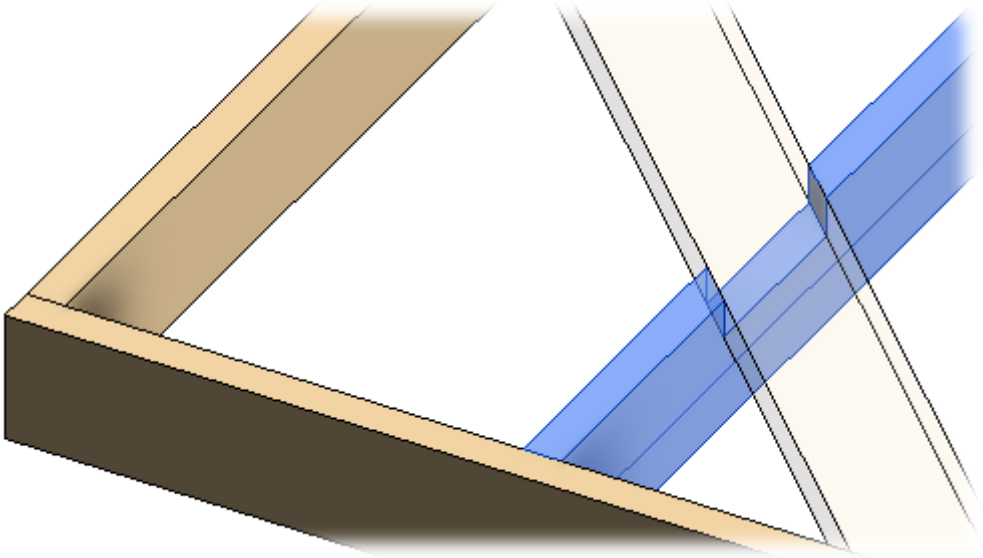
Example with wood wall frame:



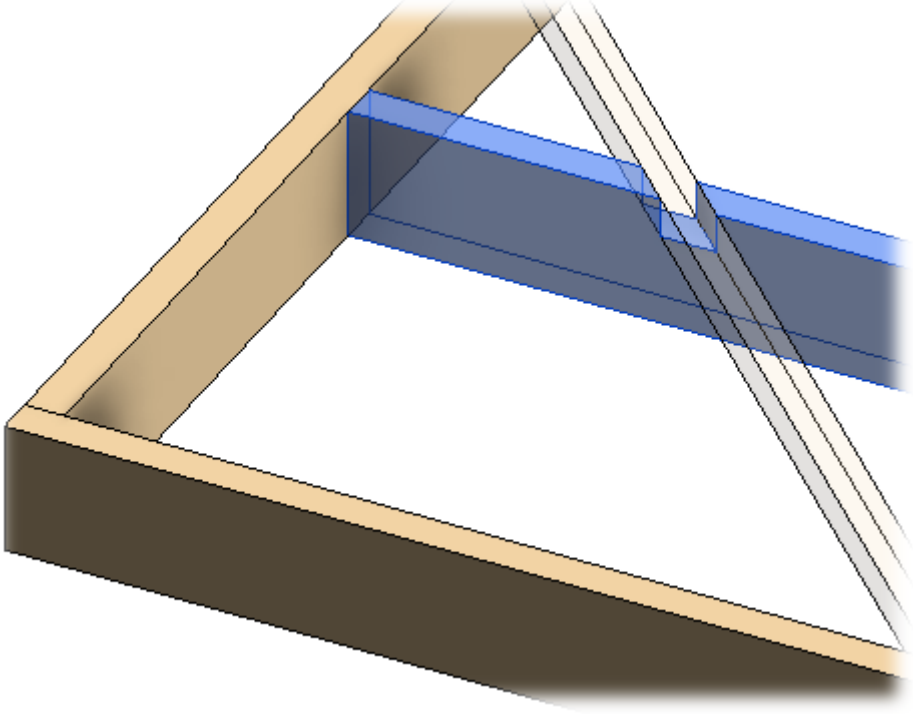
Example with metal wall frame:



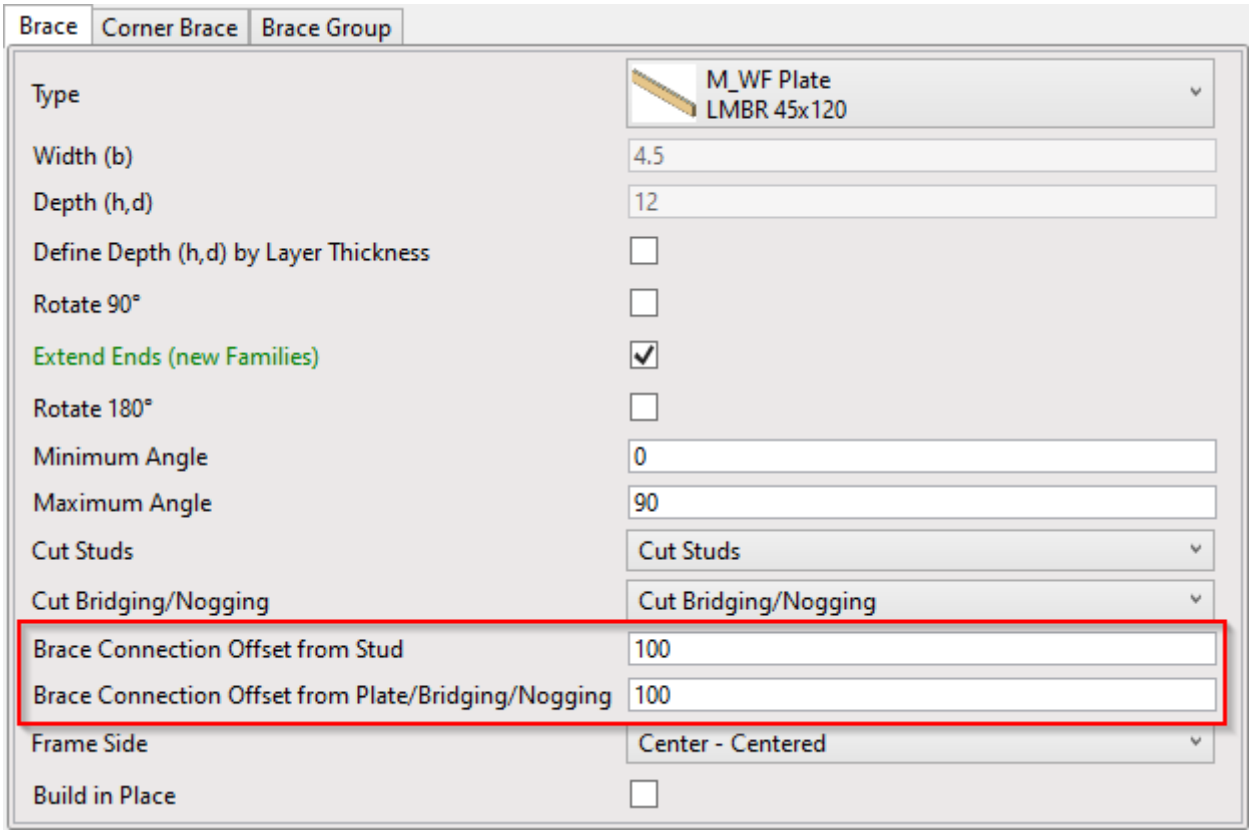
*Example with wood floor: when **Cut Joists** is selected:*



*Example with wood floor: when **Cut Bridging/Nogging/Blocking** is selected:*

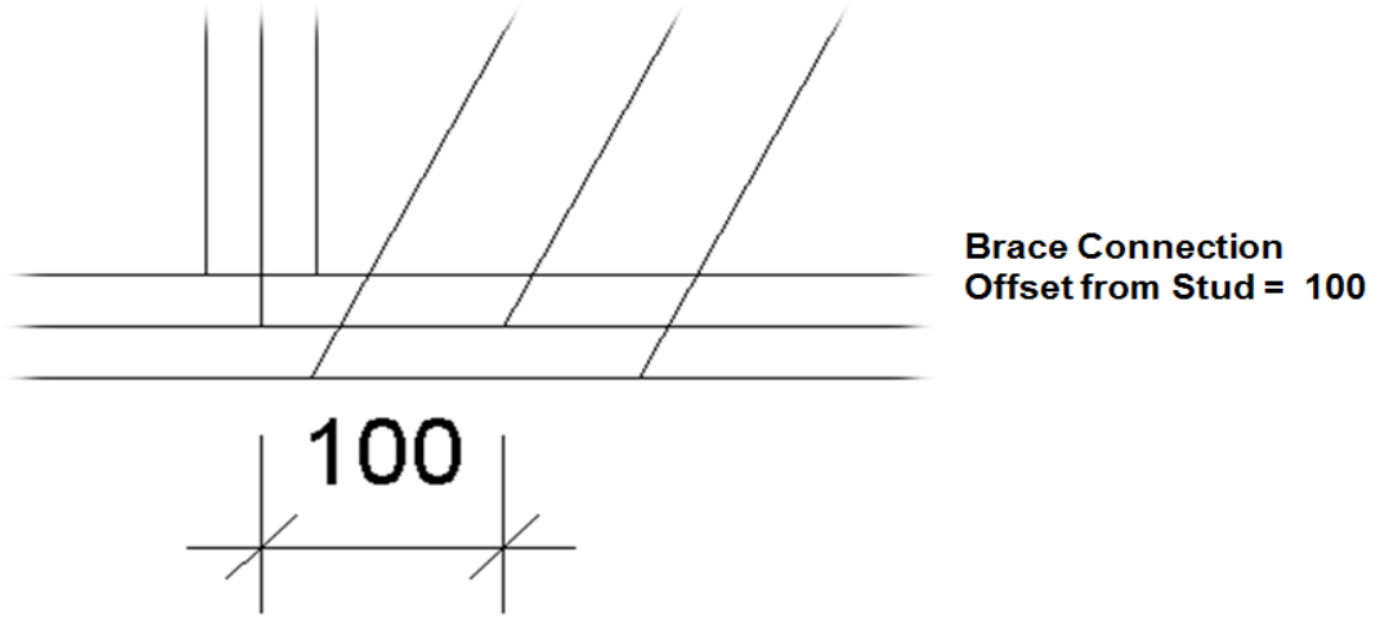


Brace Connection Offset from Stud/Joist or Plate/Bridging/Nogging

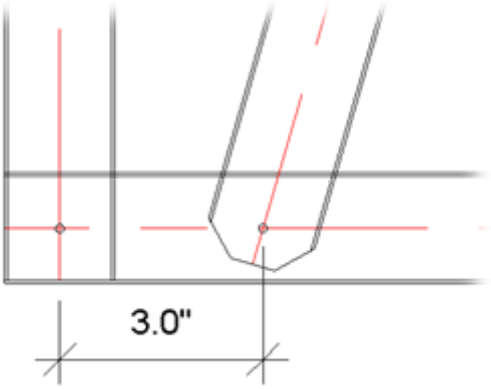


Brace Connection Offset from Stud/Joist – enter a distance between bracing and stud/joist.

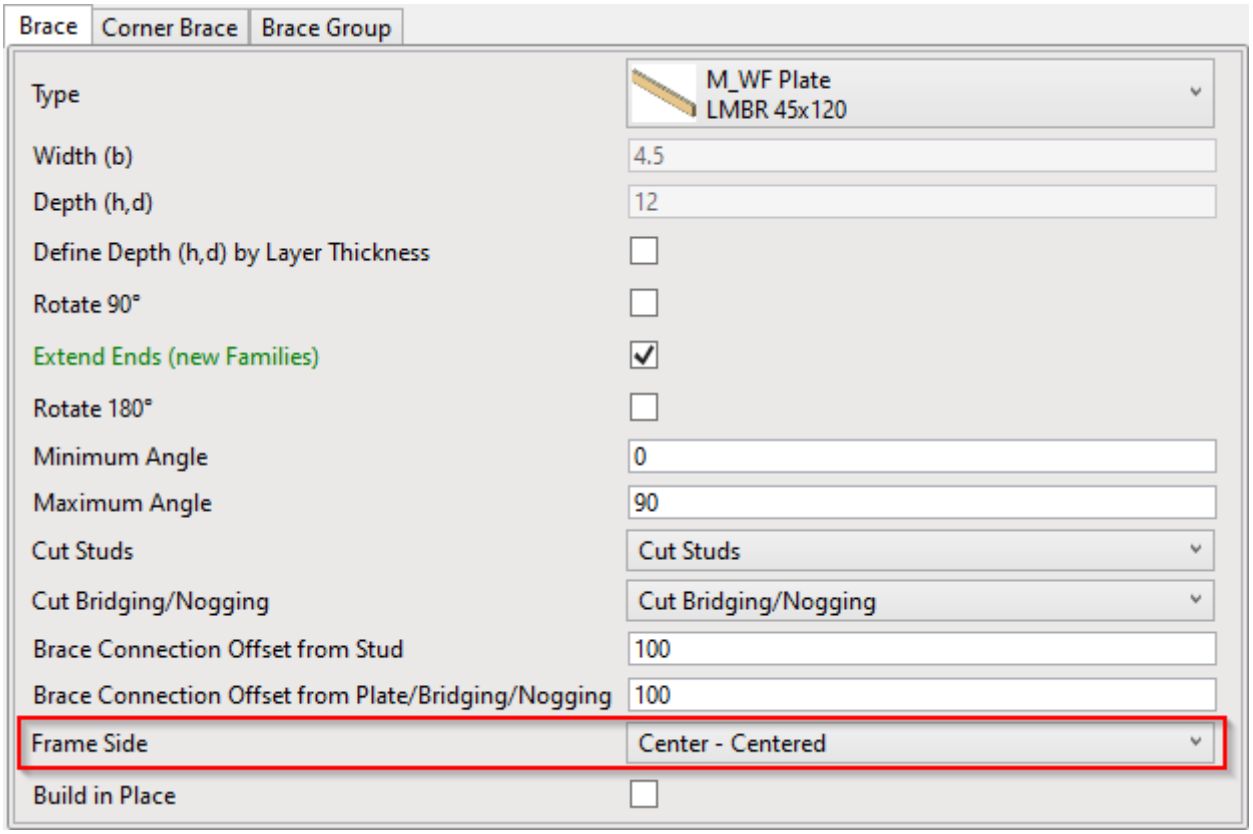
Brace Connection Offset from Plate/Bridging/Nogging – enter a distance between bracing and plate, bridging, or nogging.



*Example, **Brace Connection Offset from Stud/Joist** = 3":*

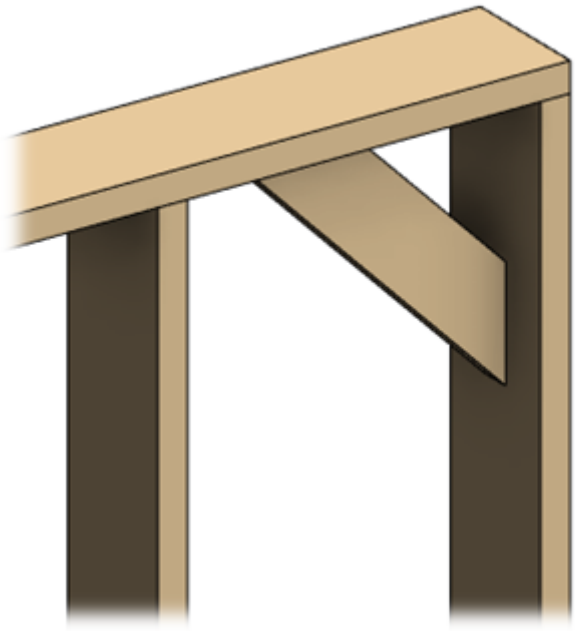

3.0"

Frame Side

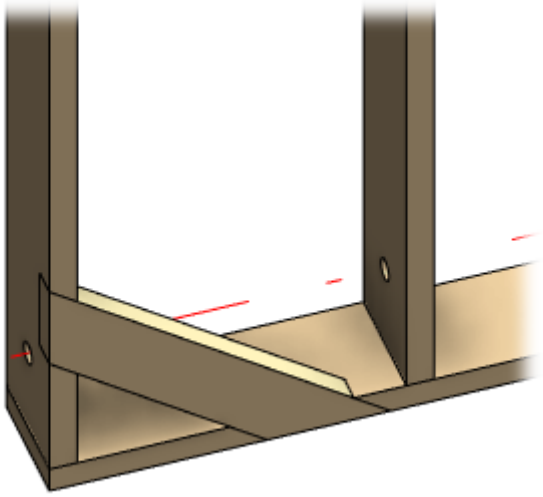


Frame Side – select whether a brace should be applied in the center, external or internal side of the frame.

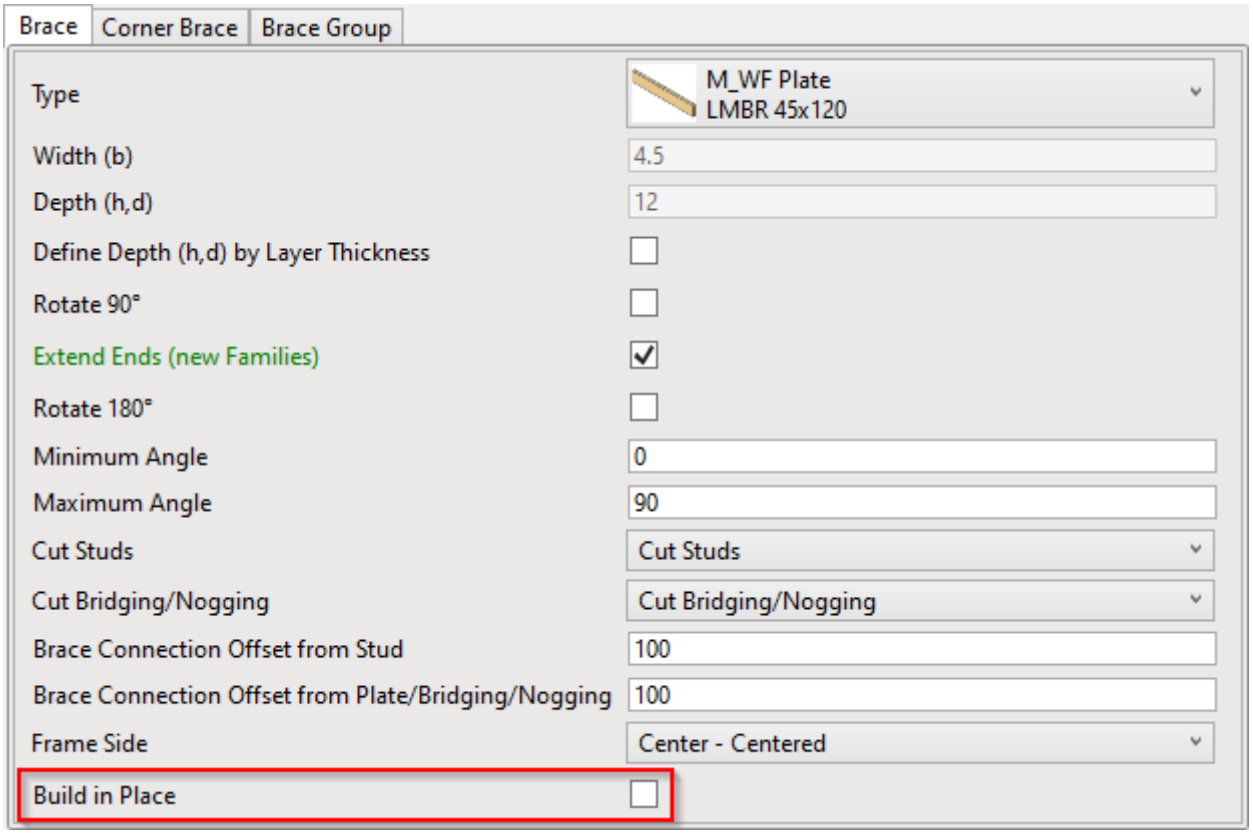
*Example: when **Frame Side** = **Center**:*



*Example: when **Frame Side** = **External**:*

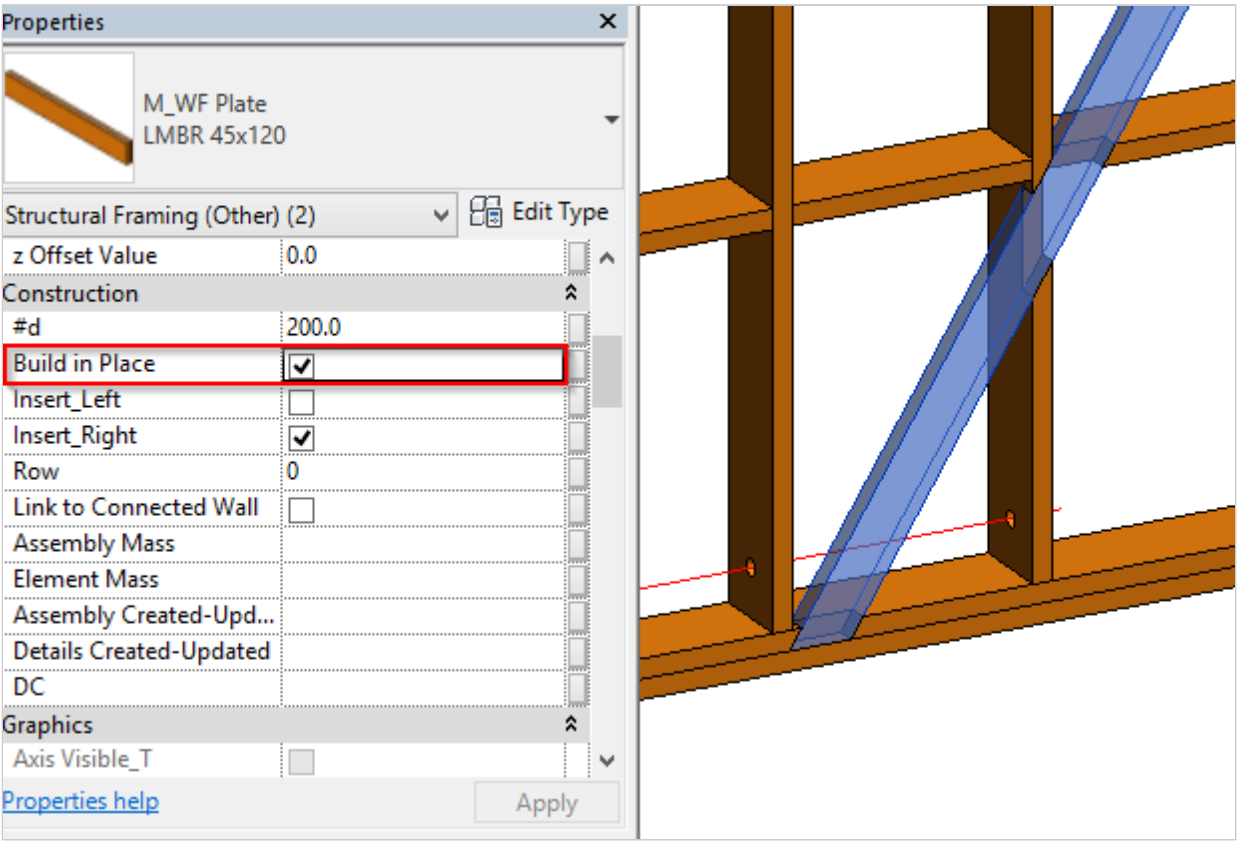


Build in Place

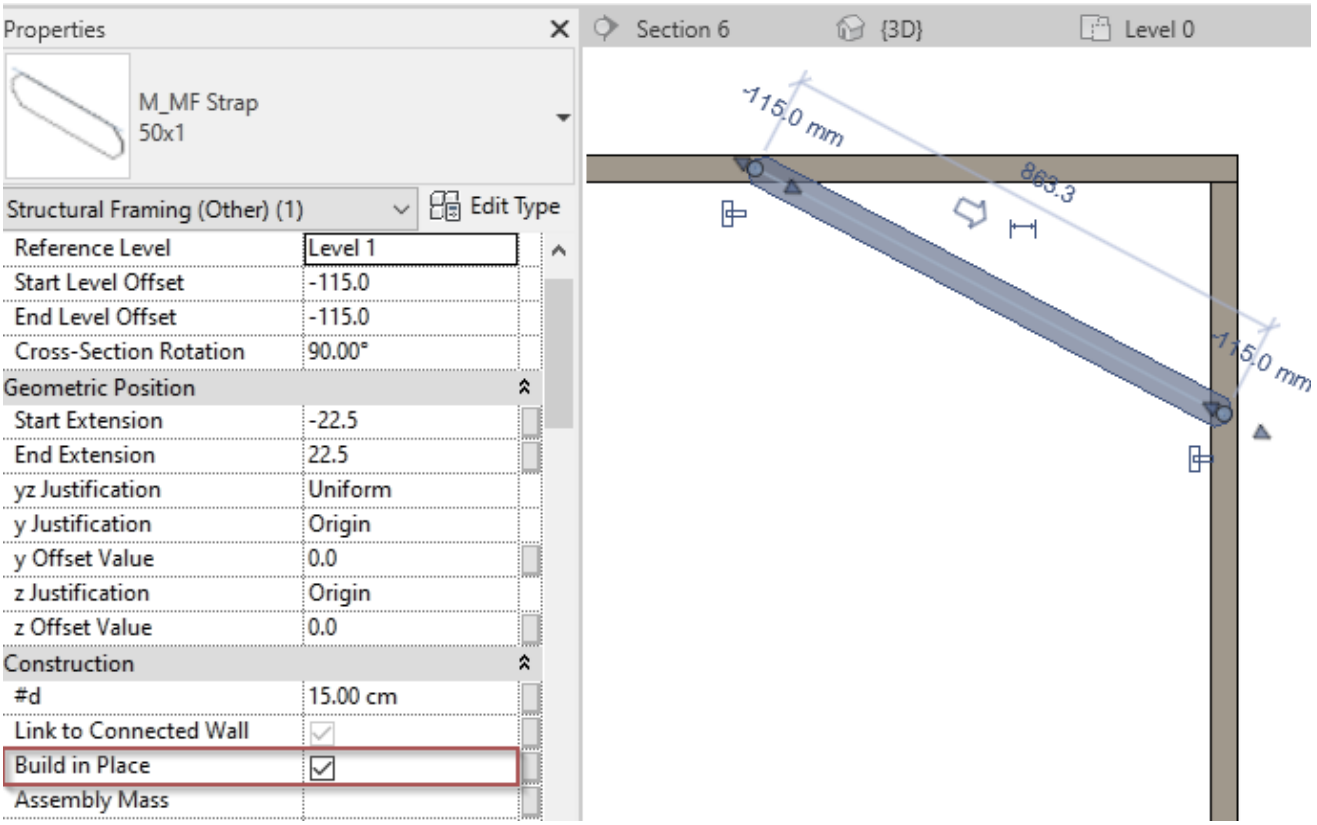


Build in Place – writes Yes/No information into the brace instance parameter if it is build-in-place or is prefabricated with the whole wall frame. Later this parameter can be used in schedules or view filters.

Example with wood wall:



Example with wood floor:


Properties
M_MF Strap
50x1
Structural Framing (Other) (1)
Edit Type
Reference Level
Level 1
Start Level Offset
-115.0
End Level Offset
-115.0
Cross-Section Rotation
90.00°
Geometric Position
Start Extension
-22.5
End Extension
22.5
yz Justification
Uniform
y Justification
Origin
y Offset Value
0.0
z Justification
Origin
z Offset Value
0.0
Construction
#d
15.00 cm
Link to Connected Wall
Build in Place
Assembly Mass
Section 6
{3D}
Level 0
-115.0 mm
863.3
-115.0 mm