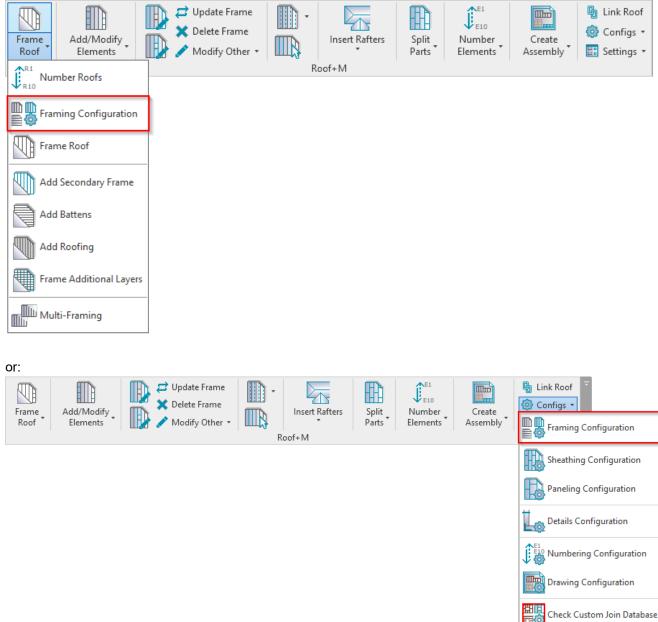
FRAMING CONFIGURATION – Roof Common Joists

Modified on: Sun, 10 Jan, 2021 at 5:12 PM

Framing Configuration may be found in two locations:



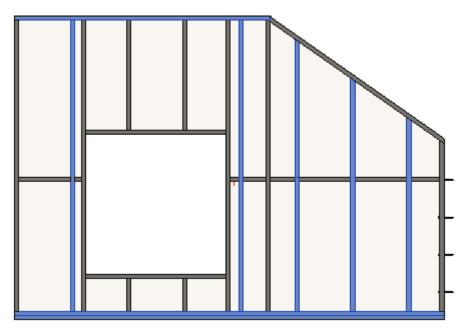
Roof Common Joists

Rafter Configuration

10

08/09/21, 08:44 FRAMING CONFIGURATION – Roof Common Joists : AGACAD			
🥂 Roof+M. Default Fr	raming Parameters	>	
Material Class:	Steel	v	
Configuration Type:	Frame	v	
Configuration Name:	M_Roof Metal Panel	Save Save As Rename Delete	
	^	Common Joist Rim Joist 2 Rim Joist 1 Offsets	
Common S	Settings	Add Joists 🗸	
		Align with Project Base Point	
Roof Com	mon Joists	Joist Spacing 600	
***		First/Last Spacing	
		Spacing 600	
Opening Fr	aming	First/Last Spacing Use for First	
		Use for Last	
End Conne	ction	O Use for Both	
		Custom Join	
Edge Joist		Configuration Predefined Layout Name: Joist Save to Database Duplicate Rename Delete	
		Select Layout from Database Configuration: Select v	
Horizontal .	Joist/Rafter/Bridging	New Item Remove Item Move Up Move Down	
~		X-Position Count Type Define Rotate Rotate	
Secondary.	loist	Deptn 90° 180°	
		1 Center ∨ 1 → M_MF Stud-Joist : C20351-15 ✓ □	
	~		
		Save Close	

Roof Common Joists – here you can control regular joists (**Common Joist** tab), top (**Rim Joist 2** tab) joists and bottom (**Rim Joist 1** tab) joists:



Add Joists

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets	
Common Settings	Add Joists	^
	Align with Project Base Point	
Roof Common Joists	Joist Spacing 600	
	First/Last Spacing	
L	Spacing 600	
Opening Framing	First/Last Spacing	
· · · · · · · · · · · · · · · · · · ·	 Use for First 	
	O Use for Last	
End Connection	 Use for Both 	
	Custom Join	
	Configuration	
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate	Rename Delete
	Select Layout from Database Configuration: Select	*
Horizontal Joist/Rafter/Bridging	New Item Remove Item Move Up Move Down	
~	X-Position Count Type	Define Rotate Rotate
	·····	Depth 90° 180°
Secondary Joist	1 Center v 1 🗢 M_MF Stud-Joist : C20351-15	
↓ ↓	<	>

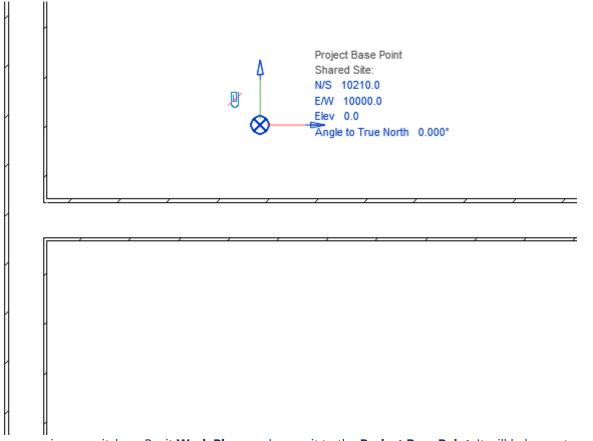
Add Joists – adds joists with rules listed below to the frame. The frame can be created without joists, just using, for example, horizontal elements.

Align with Project Base Point

<u>^</u>	Common Joist Rim Joist 2 Rim Joist 1 Offsets			
Common Settings	Add Joists 🗸			^
	Align with Project Base Point			
Roof Common Joists	Joist Spacing 600			
	First/Last Spacing			_
	Spacing 600			
Opening Framing	First/Last Spacing			
	 Use for First 			
	 Use for Last 			
End Connection	 Use for Both 			
	Custom Join			
	Configuration			
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate	Rename	D	elete
	Select Layout from Database Configuration: Select		Ŷ	
Horizontal Joist/Rafter/Bridging	New Item Remove Item Move Up Move Down			
•	X-Position Count Type	Define Depth	Rotate 90°	Rotate 180°
Secondary Joist	1 Center ∨ 1	~		
¥ _	<			>

Align with Project Base Point – allows joists to be positioned not only in relation to each other but according to Revit gridlines.

First step – unclip the state of the Revit Project Base Point and move it to the needed position:



For more convenience, switch on Revit **Work Plane** and move it to the **Project Base Point**. It will help you to understand if the studs or joists are created in the right position:

FRAMING CONFIGURATION - Roof Common Joists : AGACAD

Model Group	Room Roor Separa	a Area Tag Boundary Area	By Shaft W Face	all Vertical Dormer	Set Show Ref Plane Work Plane	Viewer	
						Properties Work Plane Grid (1) Other Work Plane Grid Space	► Edit Type
		 			<i>.</i>		

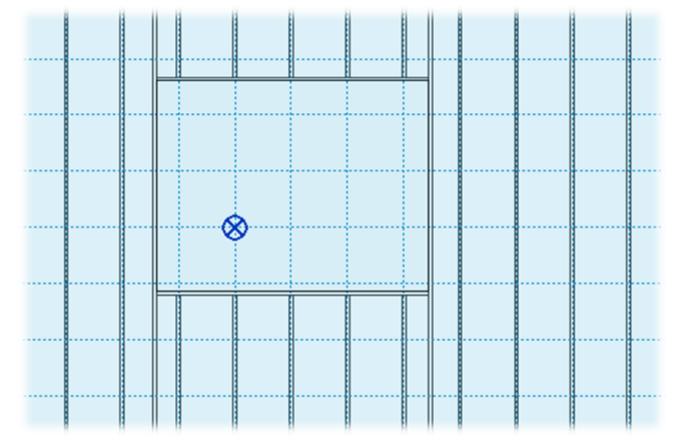
Turn on Align with Project Base Point in the Framing Configuration dialog:

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets		
Common Settings	Add Joists 🗸		^
	Align with Project Base Point 🗹		
Roof Common Joists	Joist Spacing 600		
~~	First/Last Spacing		
	Spacing 600		
Opening Framing	First/Last Spacing		
	 Use for First 		
	 Use for Last 		
End Connection	 Use for Both 		
	Custom Join		
	Configuration		
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate	Rename	te
~	Select Layout from Database Configuration: Select	~	
Horizontal Joist/Rafter/Bridging	New Item Remove Item Move Up Move Down		
•	X-Position Count Type		otate 80°
Secondary Joist	1 Center ∨ 1 ← M_MF Stud-Joist : C20351-15		
× ×			>

Frame the walls, floors, or roof.

Joists are positioned on the gridlines – and where necessary to fill in gaps or form intersections – so that they always match up across a corridor or room.

Notice how the joists are spaced according to the grid.

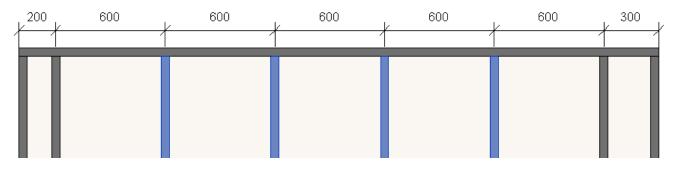


In the case you need to relocate the frame, just move the Project Base Point to the new position and update the frame!

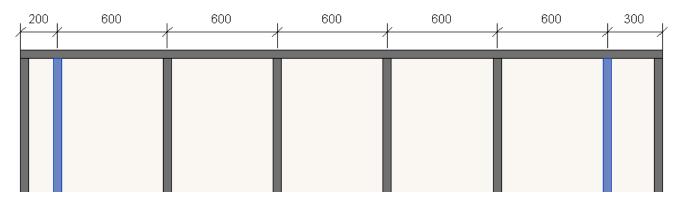
Joist Spacing and First/Last Spacing

<u>^</u>	Common Joist Rim Joist 2 Rim Joist 1 Offsets			
Common Settings	Add Joists 🗸			^
	Align with Project Base Point			
Roof Common Joists	Joist Spacing 600			
~~	 First/Last Spacing 			
	Spacing 600			
Opening Framing	First/Last Spacing			
*	Use for First			
5 IG - 2	 Use for Last Use for Both 			
End Connection	Custom Join			L
	Configuration			
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate	Rename	D	elete
	Select Layout from Database Configuration: Select		*	
Horizontal Joist/Rafter/Bridging	New Item Remove Item Move Up Move Down			
×	X-Position Count Type	Define	Rotate	Rotate
A Coundary Init	27	Depth	90°	180°
Secondary Joist	1 Center v 1 🗘 M_MF Stud-Joist : C20351-15	✓		
~	<			>

Joist Spacing – defines the distance between the joists.



First/Last Spacing – first spacing will be on the side of the left side, and last on the right side.



Custom Join

<u>^</u>	Common Joist Rim Joist 2 Rim Joist 1 Offsets			
Common Settings	Add Joists 🗸			^
	Align with Project Base Point			
Roof Common Joists	Joist Spacing 600			
***	First/Last Spacing			_
~	Spacing 600			
Opening Framing	First/Last Spacing			
~	Use for First			
	Use for Last			
End Connection	0.111111			_
	Custom Join			_
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate	Rename	D	elete
	Select Layout from Database Configuration: Select		~	
Horizontal Joist/Rafter/Bridging	New Item Remove Item Move Up Move Down			
·	X-Position Count Type	Define	Rotate	Rotate
Secondary Joist		Depth	90°	180°
Secondary Joist	1 Center ∨ 1 🖨 M_MF Stud-Joist : C20351-15	✓		
~				>

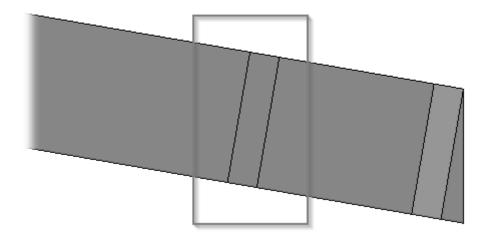
Custom Join – is a multi-functional dialog where user can define rules for joins including size, count, position, rotation, spacing, alignment etc. All these rules can be saved and used in other framing configurations or shared with other users. This type of dialog is used frequently in our products,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

Rotate by Slope

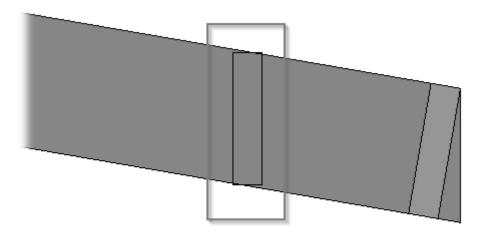
	Common Joist Rim Joist 2 Rim Joist 1 Offsets						
Common Settings	Rim Joist 2 Top Cover						
Roof Common Joists	Sloped and Non-Sloped Rim Joists are symmetrical						
Kool Common Joists	Rotate by Slope Cut Type Don't Cut		~				
Opening Framing	Custom Join						
End Connection	Select Layout from Database Configuration: Select New Item Remove Item Move Up Move Down	Y					
Edge Joist	X-Position Count lype De	efine Rotate epth 90°	Rotate Flip 180° Facing Sp.				
Horizontal Joist/Rafter/Bridging	1 Standard ∨ 1 M_MF Track: U20851-15		0 n				
Secondary Joist							
Brace	\[\] \[······································				

Rotate by Slope – rotates rim joist by roof slope.

Ticked:



Unticked:

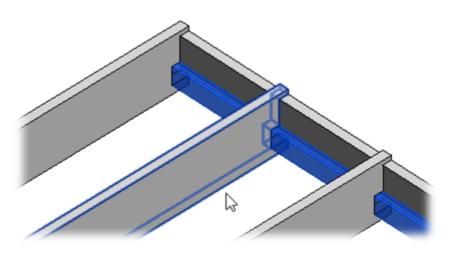


Cut Type

<u>^</u>	Common Joist Rim Joist 2 Rim Joist 1 Offsets						
Common Settings	Rim Joist 2 Top Cover						
	Sloped and Non-Sloped Rim Joists are symmetrical 🗹						
Roof Common Joists	Rotate by Slope						
~	Cut Type Don't Cut	Ŷ					
Opening Framing	Configuration						
	Predefined Layout Name: Top Plate Save to Database Duplicate Rename Delete						
End Connection	Select Layout from Database Configuration: Select v						
	New Item Remove Item Move Up Move Down						
Edge Joist	X-Position Count Type Define Rotate FI Depth 90° 180° Fa	ip scing Sp.					
	1 Standard ∨ 1 → M_MF Track : U20851-15	🗆 0 n					
Horizontal Joist/Rafter/Bridging	C Symbolic Preview						
Secondary Joist							
Ť							
Brace		~					
* ~		>					

Cut Type – select Rim Joist cutting type.

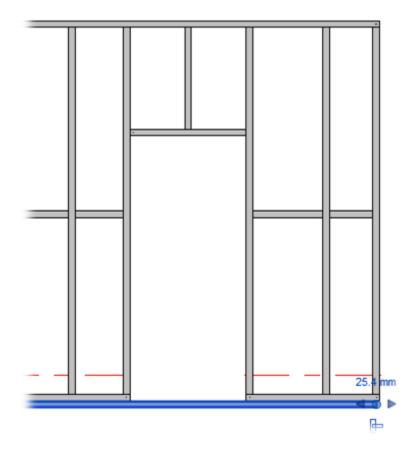
Example: when **Plate Cut Joist** is selected:



Number of Elements not Cut

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets					
Common Settings	Rim Joist 1 Bottom Pad					
	Sloped and Non-Sloped Rim Joists are symmetrical 🗹					
Roof Common Joists	Rotate by Slope					
	Cut Type Don't Cut v					
Opening Framing	Number of Elements not Cut					
~~	Custom Join —					
End Connection	Predefined Layout Name: Bottom Plate Save to Database Duplicate Rename Delete					
Edge Joist	New Item Remove Item Move Up Move Down					
~	X-Position Count Type Define Rotate F Depth 90° 180° F					
Horizontal Joist/Rafter/Bridging	1 Standard ∨ 1 😴 M_MF Track : U20851-15 ∨ 🗌 🗹					
~						
Secondary Joist						
Brace						
~						

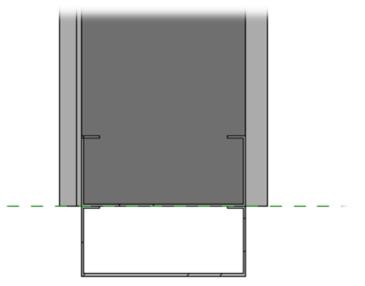
Number of Elements not Cut – if there is at least one rim joist 1, you can cut it or leave it as a whole.



Top Cover/Bottom Pad

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets						
Common Settings	Rim Joist 2 Top Cover						
Roof Common Joists	Sloped and Non-Sloped Rim Joists are symmetrical Custom Join				_		
Configuration							
Opening Framing	Select Layout from Database Configuration: Select v						
End Connection	New Item Remove Item Move Up Move Down X-Position Count Type	Define Depth	Rotate 90°	Rotate 180°	Flip Facing		
Edge Joist	1 Standard ∨ 1						
Horizontal Joist/Rafter/Bridging	Symbolic Preview						

Top Cover/Bottom Pad will be added above/below the main frame.



~ .	
Custom	loin
Custom	50111

Common Settings				
Roof Common Joists	Sloped and Non-Sloped Rim Joists are symmetrical 🔽			
Opening Framing Configuration Predefined Layout Name: Top Plate Save to Database Duplicate Rename Delete Select Layout from Database Configuration: Select				
End Connection	New Item Remove Item Move Up Move Down X-Position Count Type Define Depth Rotate 90° Rotate 180° Flip Facing			
Edge Joist	1 Standard v 1 M_MF Track: U20851-15 Image: Comparison of the standard standar			
Horizontal Joist/Rafter/Bridging				
Example: 1 - Rim Joist 1, Count = 1 2 - Rim Joist 2, Count = 2				

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)

Offsets

Common Settings	Common Joist Rim Joist 2 Rim Joist 1 Offsets	
	Framing Top/End Offset -200	Apply Horizontally
Roof Common Joists	Framing Bottom/Base Offset 0	Apply Horizontally
Opening Framing		
	v	

Offset – frame offsets from roof end or base.

Example, framing top offset = -200:

