FRAMING CONFIGURATION – Floor Framing

Modified on: Thu, 7 Jan, 2021 at 6:20 PM

Framing Configuration may be found in two locations:



Floor Framing – Common Joists

Check Custom Join Database

FRAMING CONFIGURATION – Floor Framing : AGACAD

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets
Common Settings	Add Joists
	Align with Project Base Point
Floor Framing	Joist Spacing 600
~~~	First/Last Spacing
	Spacing 600
Opening Framing	First/Last Spacing
End Connection	<ul> <li>Use for First</li> <li>Use for Last</li> <li>Use for Both</li> </ul>
	Custom Join
	Configuration
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate Rename Delete
~	Select Layout from Database Configuration: Select ×
Bridging/Nogging	New Item         Remove Item         Move Up         Move Down
~	< > >

**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

FRAMING CONFIGURATION – Floor Framing : AGACAD

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets
Common Settings	Add Joists
	Align with Project Base Point
Floor Framing	Joist Spacing 600
	First/Last Spacing
	Spacing 600
Opening Framing	First/Last Spacing
End Connection	<ul> <li>Use for First</li> <li>Use for Last</li> <li>Use for Both</li> </ul>
	Custom Join
	Configuration
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate Rename Delete
$\sim$	Select Layout from Database Configuration: Select v
Bridging/Nogging	New Item Remove Item Move Up Move Down
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Add Joists – joists with rules listed below Add Joists in the menu (i.e. Align with Project Base Point, Joist Spacing, First/Last Spacing) will be (not) applied to the frame. The frame can be created without joists, just using, for example, horizontal elements.

### Align with Project Base Point

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets
Common Settings	Add Joists
	Align with Project Base Point
Floor Framing	Joist Spacing 600
~~	First/Last Spacing
	600
Opening Framing	First/Last Spacing
End Connection	Use for First     Use for Last     Use for Both
	Custom Join
Edge Joist	Configuration           Predefined Layout Name:         Joist         Save to Database         Duplicate         Rename         Delete
~	Select Layout from Database Configuration: Select ×
Bridging/Nogging	New Item         Remove Item         Move Up         Move Down
✓	< >>

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:

Model Group	Room Roo Separ	m Tag Area	Area Tag Boundary Area	By Shaft V Face	Wall Vertical Dormer	-1. Level Grid	Set Show Ref Plane Work Plane	Viewer	_
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	1								

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

7/9/2021	FRAMING CONFIGURATION – Floor Framing : AGACAD	
<b>A</b>	Common Joist Rim Joist 2 Rim Joist 1 Offsets	
Common Settings	Add Joists	`
	Align with Project Base Point 🗹	
Floor Framing	Joist Spacing 600	
~	First/Last Spacing	
	600	
Opening Framing	First/Last Spacing	
	Use for First     Use for Last     Use for Last	
End Connection		
	Custom Join	
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate Rename Delete	
$\sim$	Select Layout from Database Configuration: Select v	
Bridging/Nogging	New Item Remove Item Move Up Move Down	,
~	✓ <	

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 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

7/9	/2021		FRAMING CON	FIGURATION – Floor Framing : AGACAD			
		^	Common Joist Rim Joist 2 Rin	n Joist 1 Offsets			
	Common Settings		Add Joists	$\checkmark$			^
			Align with Project Base Point	$\checkmark$			
	Floor Framing		Joist Spacing	600			
	~~~		<ul> <li>First/Last Spacing</li> </ul>				-
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	Edge Joist		Predefined Layout Name: 5	Duplicate Rename		lete	
			Select Layout from Database	Configuration: Select	~		
	Bridging/Nogging		New Item Remove Item	Move Up Move Down			
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Joist Spacing – defines the distance between joists.



First/Last Spacing – first spacing will be on the side of the span direction line, and last on the opposite side.



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Custom Join

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets
Common Settings	Add Joists
flee famin	Align with Project Base Point 🗹
Floor Framing	First/Last Spacing
	Spacing 600
Opening Framing	First/Last Spacing
End Connection	 Use for First Use for Last Use for Both
	- Custom Join
Edge Joist	Predefined Layout Name: Joist Save to Database Duplicate Rename Delete
·	Select Layout from Database Configuration: Select v
Bridging/Nogging	New Item Remove Item Move Up Move Down v
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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

FRAMING CONFIGURATION – Floor Framing : AGACAD

^	Common Joist Rim Joist 2 Rim Joist 1 Offsets									
Common Settings	gs Rim Joist 2 Top Cover									
	Sloped and Non-Sloped Rim Joists are symmetrical 🗹									
Floor Framing	Rotate by Slope									
L V	Cut Type Don't Cut									
Opening Framing	Custom Join									
	Configuration									
	Predefined Layout Name: Top Plate Save to Database Duplicate Rename Delete									
End Connection	Select Layout from Database Configuration: Select ×									
	New Item Remove Item Meye IIe Meye Down									
Edge Joist	X-Position Count Type Define Rotate Rotate Flip Denth., 90° 180° Facing									
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Deideine (Namine										
Bridging/ Nogging	Symbolic Preview									
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Rotate by Slope – rotates rim joist by floor slope.

Ticked:



Unticked:



Cut Type

Common Joist Rim Joist 2 Rim Joist 1 Offsets												
Common Settings	Rim Joist 2 Top Cover	Rim Joist 2 Top Cover										
	Floor Framing Floor Framing Sloped and Non-Sloped Rim Joists are symmetrical											
Floor Framing												
	Cut Type Don't Cut											
Opening Framing	Custom Join											
	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 Flip Depth 90° 180° Facing											
	1 Standard ▼ 1 ♀ M_MF Track : U20876-15 ✓ □ □											
Bridging/Nogging	C Symbolic Preview	~										

Cut Type – select Rim Joist cutting type.

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



Number of Elements not to Cut

FRAMING CONFIGURATION – Floor Framing : AGACAD

<u>^</u>	Common Joist Rim Joist 2 Rim Joist 1 Offsets								
Common Settings	Rim Joist 1 Bottom Pad	^							
	Sloped and Non-Sloped Rim Joists are symmetrical								
Floor Framing	Rotate by Slope								
	Cut Type Don't Cut								
Opening Framing	Number of Elements not Cut 1	È							
	Custom Join								
End Connection	Predefined Layout Name: Bottom Plate Save to Database Duplicate Rename Delete								
	Select Lavout from Database Configuration: Select V								
Edge Joist	New Item Remove Item Move Up Move Down								
~	X-Position Count Type Define Define Rotate Flip Pacing 180° Facing	s							
Bridging/Nogging	1 Standard ▼ 1 → M_MF Track : U20876-15 ✓ □	0							
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Number of Elements not to Cut – if there is at least one rim joist 1, you can cut it or leave it as a whole.



Top Cover/Bottom Pad Type

FRAMING CONFIGURATION – Floor Framing : AGACAD

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Common Settings		Rim Jois	st 1 Bottom Pa	d							^
		Sloped	and Non-Slope	d Rim Joi	sts are symmetrical	✓					
Floor Framing		Numb	er of Elements n	ot Cut		0					▲ ▽
		Custo	om Join								
Opening Framing		Prec	defined Layout N	Name: B	ottom Plate Save to	Database	Duplicate	Ren	ame	Delete	
		Sele	ect Layout from I	Database	Configuration:	Select					
End Connection		Ne	witem Remo	ve Item	Move Un Mov	e Down					
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			X-Position	Count	Туре		Depth	90°	180°	Flip Facing	Spacii
		1	Standard ¥	1 📤	M_MF Track : U2	20876-15	\checkmark		✓		0 mm
R		Sym	bolic Preview -								
Bridging/Nogging											
•											
Secondary Joist											
	~	<									> ``

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



Custom Join

FRAMING CONFIGURATION – Floor Framing : AGACAD

~	^	Commo	n Joist	Rim Jois	t 2 Rim	Joist 1	Offsets						
Common Settings		Rim Jois	t 1 Bot	ttom Pac	ł								^
Floor Framing		Sloped Numbe	and Nor	n-Sloped ments no	l Rim Jois ot Cut	ts are sy	mmetrical	✓0					.
Opening Framing		- Custo - Conf Prec	m Join - figuratio lefined L	on — Layout N	lame: Bo	ttom Pla	te Save t	o Database	Duplicate	Rena	ame	Delete	:
End Connection		Sele	ct Layou w ltem	ut from D	Ve Item	Move Nove	ation: Jp Mov	Select ve Down	Define	Rotate	Rotate	Flin	
Edge Joist			X-Posi	ition	Count	Туре			Depth	90°	180°	Facing	Spacii
\checkmark		1	Stand	lard Y	1 🗲	_M_N	F Track : U	20876-15	✓		~		0 mm
Bridging/Nogging		Sym	bolic Pre	eview —									
Secondary Joist													
1													

Example:

- 1 **Rim Joist 1**, **Count** = 1
- 2 **Rim Joist 2**, **Count** = 2



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Offsets

FRAMING CONFIGURATION – Floor Framing : AGACAD

~	\sim	Common Joist Rim Joist 2 Rim Joist 1 Offsets	
Common Settings		Framing Top/End Offset -200	Apply Horizontally
Floor Framing		Framing Bottom/Base Offset 0	Apply Horizontally
Opening Framing			
	~		

Offset - frame offsets from floor end or base.

Example, framing top offset = -200:

