

Creating a Curved Barrel Roof

Reference Number: **KB-00649**

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QUESTION



I would like to quickly create a curved, or barrel roof on my structure. How can I accomplish this?




ANSWER

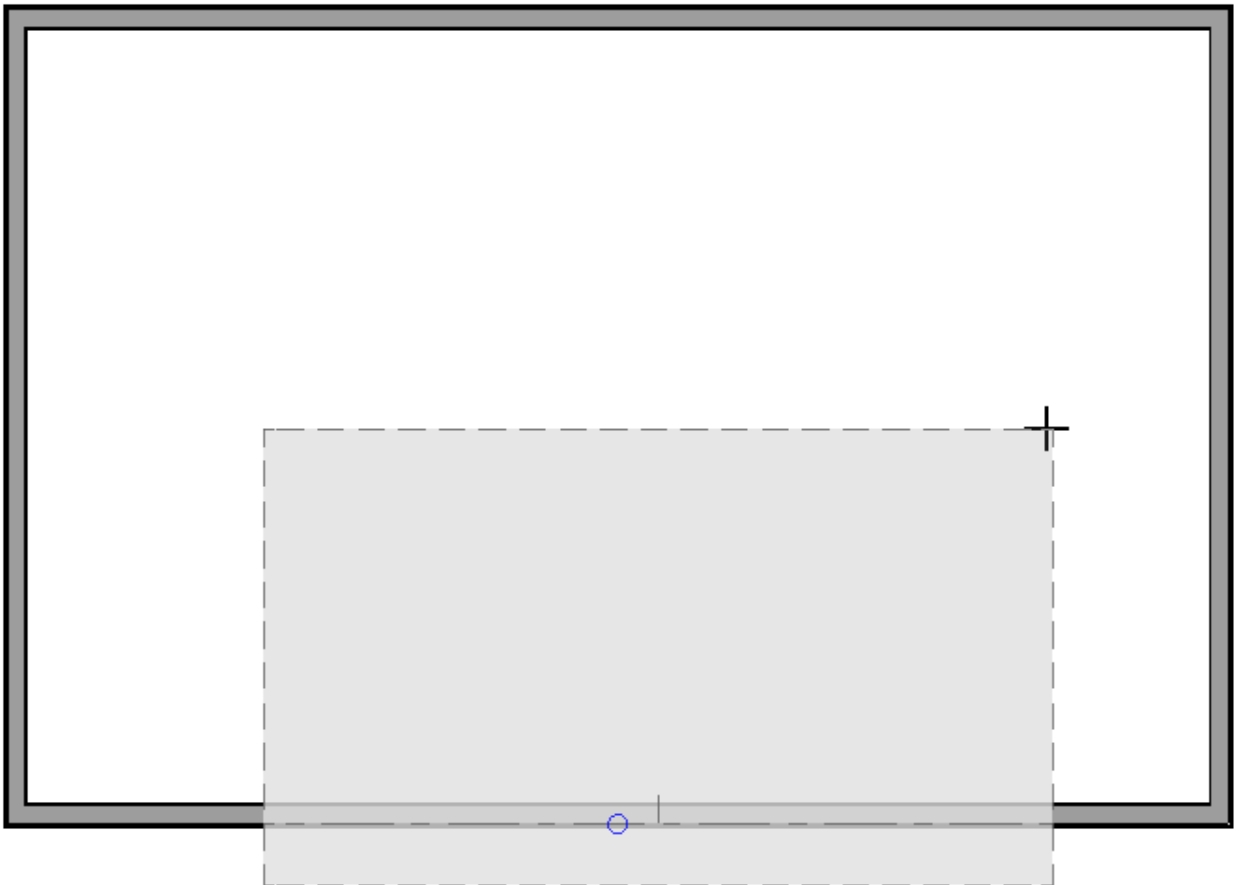
You can quickly create a custom curved roof for your structure by drawing and then editing a roof plane.


To create a barrel roof

1. **Open**  the plan in which you would like to create a barrel roof or select **File> New Plan**  from the menu.

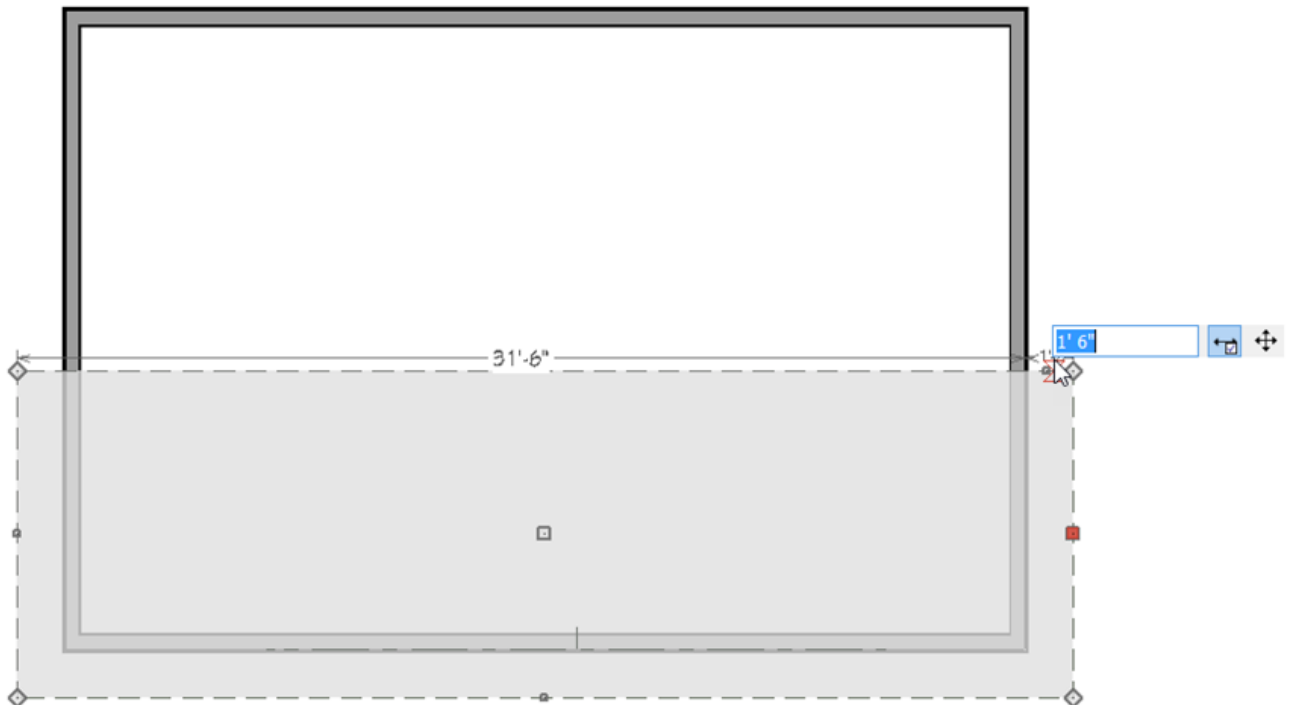
In this example a simple 20' x 30' building is used.


2. Select **Build> Roof> Roof Plane**  from the menu, then draw a single roof plane over your structure.
 - Click and drag along one of the exterior walls on which the roof will rest to create a roof baseline.
 - Release the mouse and click anywhere in the middle of the room to set the ridge top of the roof plane.



- The roof plane will display as a dashed rectangle.
3. Using the **Select Objects**  tool, click one time on the roof plane near one of its edges to select it and display its edit handles.

4. Use the side edit handles to resize the plane so that it completely encompasses the area over which you would like the barrel roof. Dimensions can also be used to accurately locate roof overhangs.



5. When the roof plane is appropriately sized, select it and click on the **Open Object**  edit button.
6. On the **GENERAL** panel of the **Roof Plane Specification** dialog that opens:

Roof Plane Specification

General

- Options
- Structure
- Rafter Tails
- Ridge Caps
- Gutter
- Frieze
- Shadow Boards
- Polyline
- Selected Line
- Line Style
- Fill Style
- Materials
- Arrow
- Label
- Components
- Object Information
- Schedule

Height/Pitch

Top of Plate: 109 1/8" Lock

Ridge Top Height: 116 9/16" Lock

Baseline Height: 116 9/16" Lock

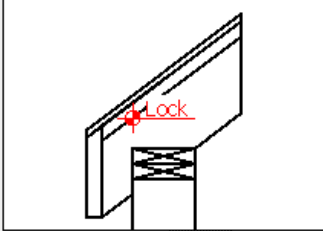
Fascia Top Height: 117 1/16" Lock

Shadow Boards Top Height: 117 1/16" Lock

Pitch (in 12): 0" Lock

Pitch in Degrees

Show Diagram for: Rafters Trusses



Measurements

Structure Thickness: 9 1/4"

Birdsmouth Depth: 1 13/16"

Birdsmouth Seat: 0"

Vertical Structure Depth: 9 1/4"

Overhang From Baseline: 18"

Mark as Edited

Use Special Snapping

Curved Roof

Angle at Eave: 0.0°

Angle at Ridge: 0.0°

Radius to Framing Top: 0"

Facet Angle: 7.5°

Automatic Facet Angle

Baseline

Baseline Angle: 0.0°

Baseline Height at: Start End

Number Style...

OK Cancel Help

- Click the radio button beside **Lock Baseline Height** to lock this value.
- Specify the **Lock Pitch** as **0"**.
- The Ridge Top Height and Baseline Height should now be the same value.

7. Next, check the box beside **Curved Roof**.

In X14 and newer program versions, you don't have to change the values in the curved roof section in order to get a curved roof plane, but you are welcome to adjust them to fit your needs.


- Assign an **Angle at Eave** (in degrees) value between **0°** and **89°**. **0°** would give you a flat ceiling and **89°** degrees, a full 1/2 barrel. Notice that when you press the **Tab** key on your keyboard, the angle values update so that they are symmetrical.
- If you are not sure what **Angle at Eave** you should use, specify **45°**. This is a good starting point, and you can make adjustments to this value at any time.

<input checked="" type="checkbox"/> Curved Roof	
Angle at Eave:	<input type="text" value="45.0°"/>
Angle at Ridge:	<input type="text" value="-45.0°"/>
Radius to Framing Top:	<input type="text" value="108 3/16\"/>
Facet Angle:	<input type="text" value="7.5°"/>
	<input checked="" type="checkbox"/> Automatic Facet Angle

- When you are satisfied with the settings for your barrel roof, click **OK** to close the dialog and apply your changes.

8. To see the results, select **3D> Create Perspective View> Perspective Full Overview**  from the menu.

Related Articles

 [Creating a Curved Barrel Ceiling \(/support/article/KB-00650/creating-a-curved-barrel-ceiling.html\)](/support/article/KB-00650/creating-a-curved-barrel-ceiling.html)



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