

Joining a Barrel Roof to a Flat Roof Plane

Reference Number: **KB-00684**

Last Modified: **August 23, 2023**

The information in this article applies to:



QUESTION

I would like to join a barrel roof to a flat gable roof. How is this accomplished?

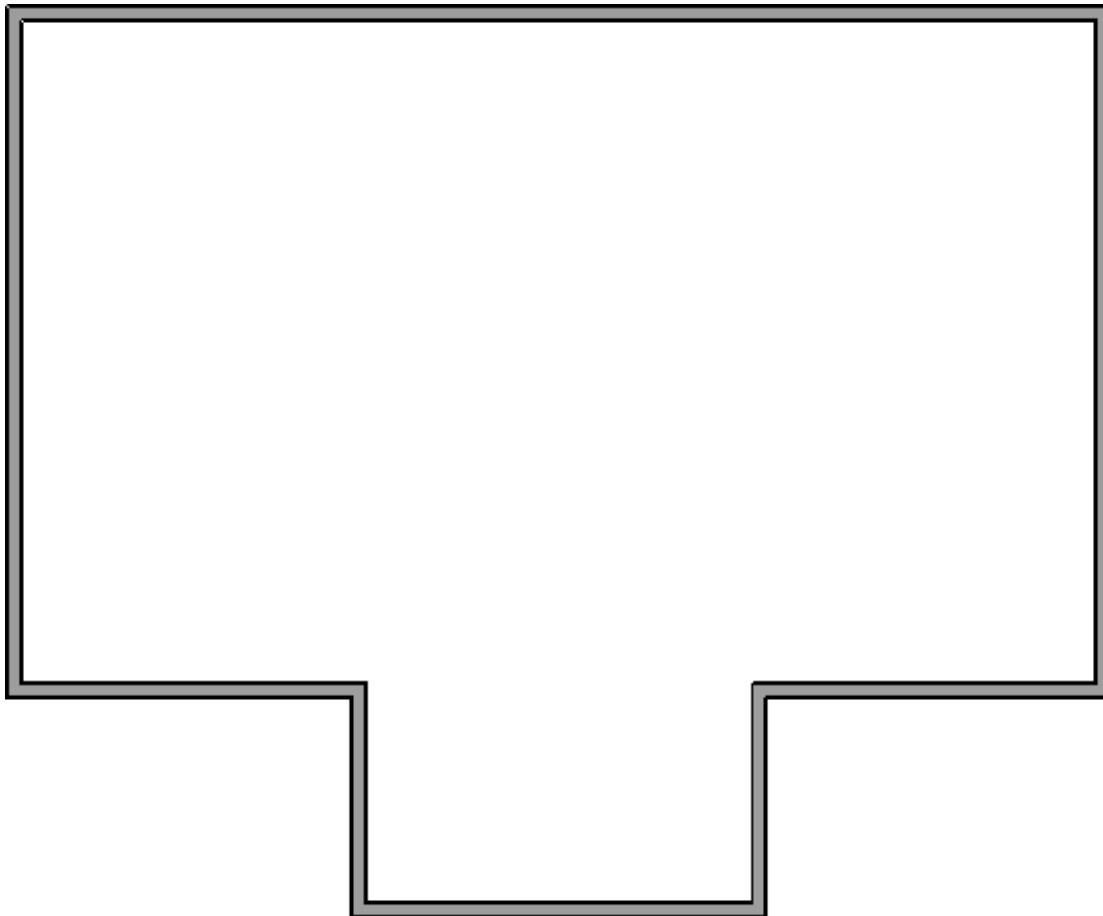



ANSWER

An almost endless variety of roof combinations is possible using the manual and automatic roof tools in Chief Architect.

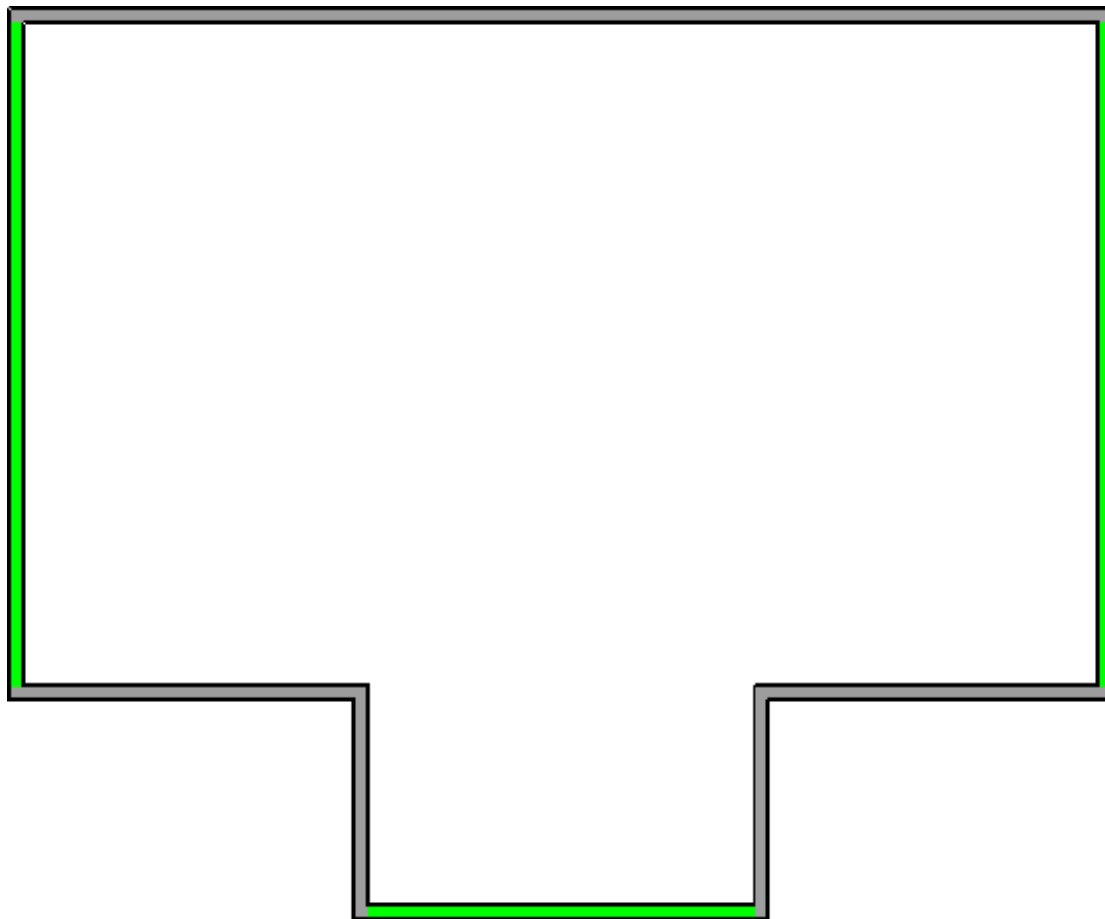
To create curved and flat roof planes

1. Draw the walls of a structure with a bump-out in a clockwise fashion, as shown below.

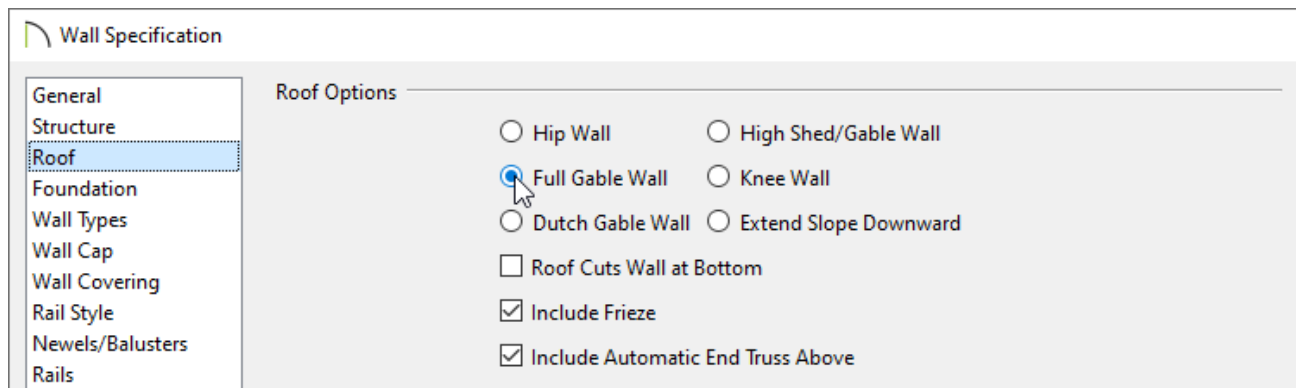



2. Select the walls that are marked in green within the image below, then click the **Open Object**  edit button.

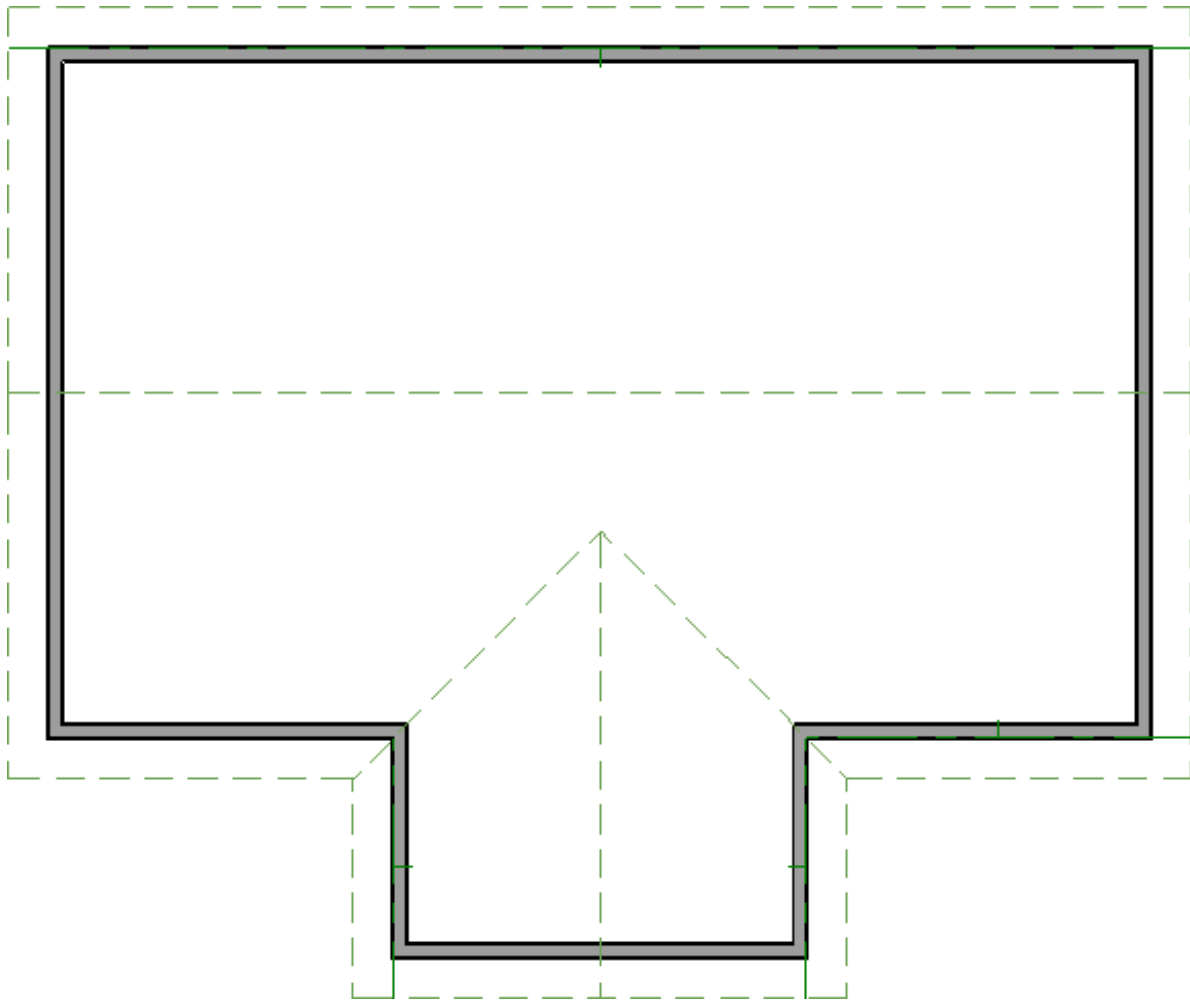
Walls can be group selected by first selecting one, holding down the Shift key, then selecting each additional wall.




3. On the **Roof** panel of the **Wall Specification** dialog that displays, select the **Full Gable Wall** option, then click **OK**.



4. Select **Build> Roof> Build Roof**  from the menu.
5. On the **Roof** panel of the **Build Roof** dialog that displays, check the **Build Roof Planes** box, ensure that the Auto Rebuild Roofs box is unchecked, then click **OK** to generate an automatic double gable roof.



6. Group select the two roof planes that are directly above the bump-out, then click the **Open Object**  edit button.
7. On the **GENERAL** panel of the **Roof Plane Specification** dialog that displays:

Roof Plane Specification

General

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

General

Framing Method: ☐ Trusses ☒ Rafters

Height/Pitch

Top of Plate: 109 1/8" ☒ Lock

Heel Height: 7 7/16"

Baseline Height: 116 9/16" ☐ Lock

Ridge Top Height: 176 9/16" ☐ Lock

Fascia Top Height: 105 3/16" ☐ Lock

Shadow Boards Top Height: 105 3/16" ☐ Lock

Pitch (in 12): 8" ☐ Lock

☐ Pitch in Degrees

Measurements

Structure Thickness: 9 1/4"

Birdsmouth Depth: 3 11/16"

Birdsmouth Seat: 5 1/2"

Vertical Structure Depth: 11 1/8"

Overhang From Baseline: 18"

☐ Mark as Edited

☒ Use Special Snapping

☒ Curved Roof

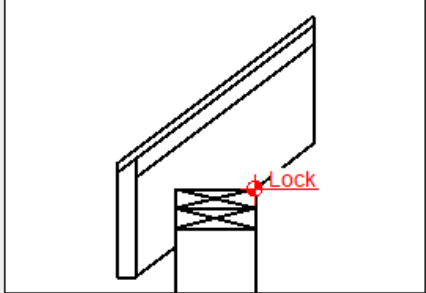
Angle at Eave: 67.380135°

Angle at Ridge: 0.0°


Radius to Framing Top: 117"

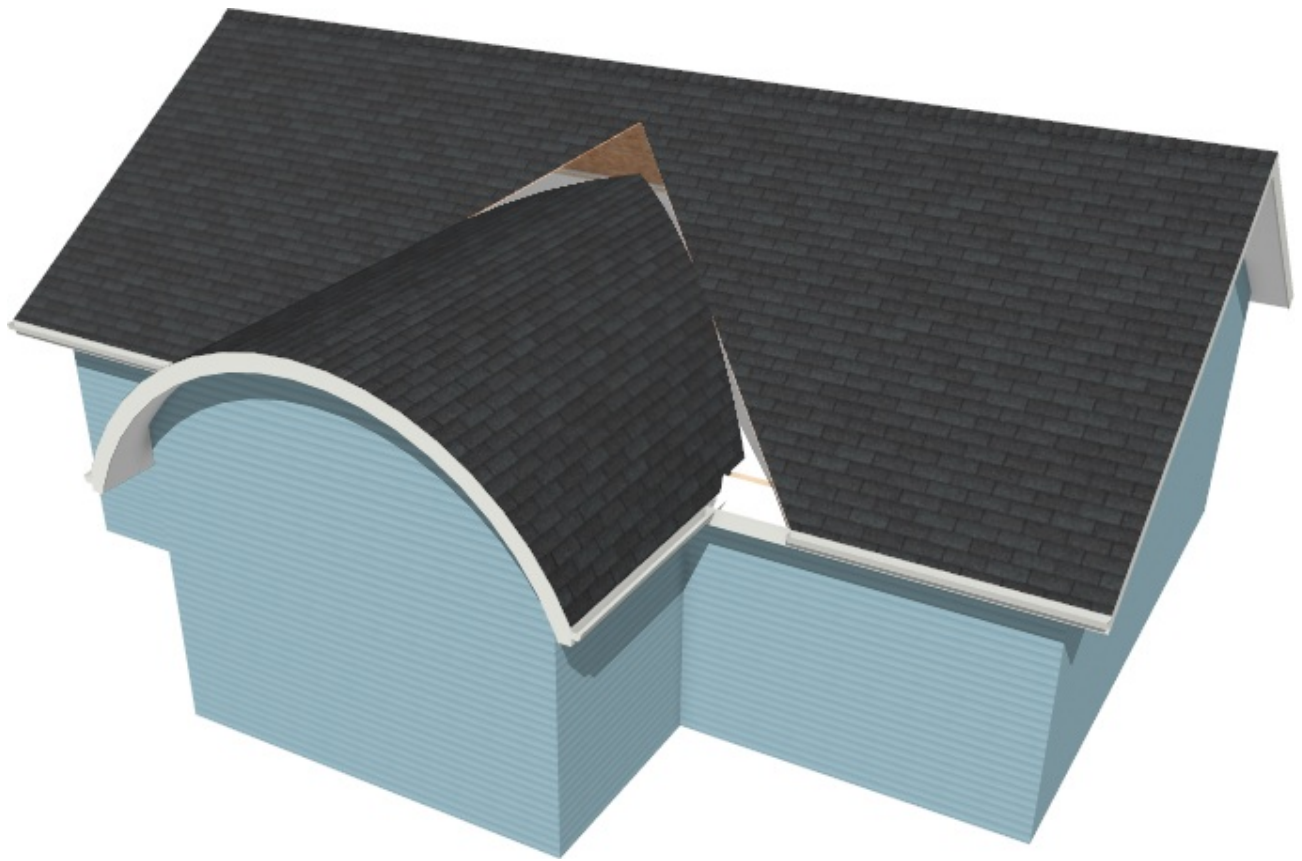
Facet Angle: 7.5°

☒ Automatic Facet Angle



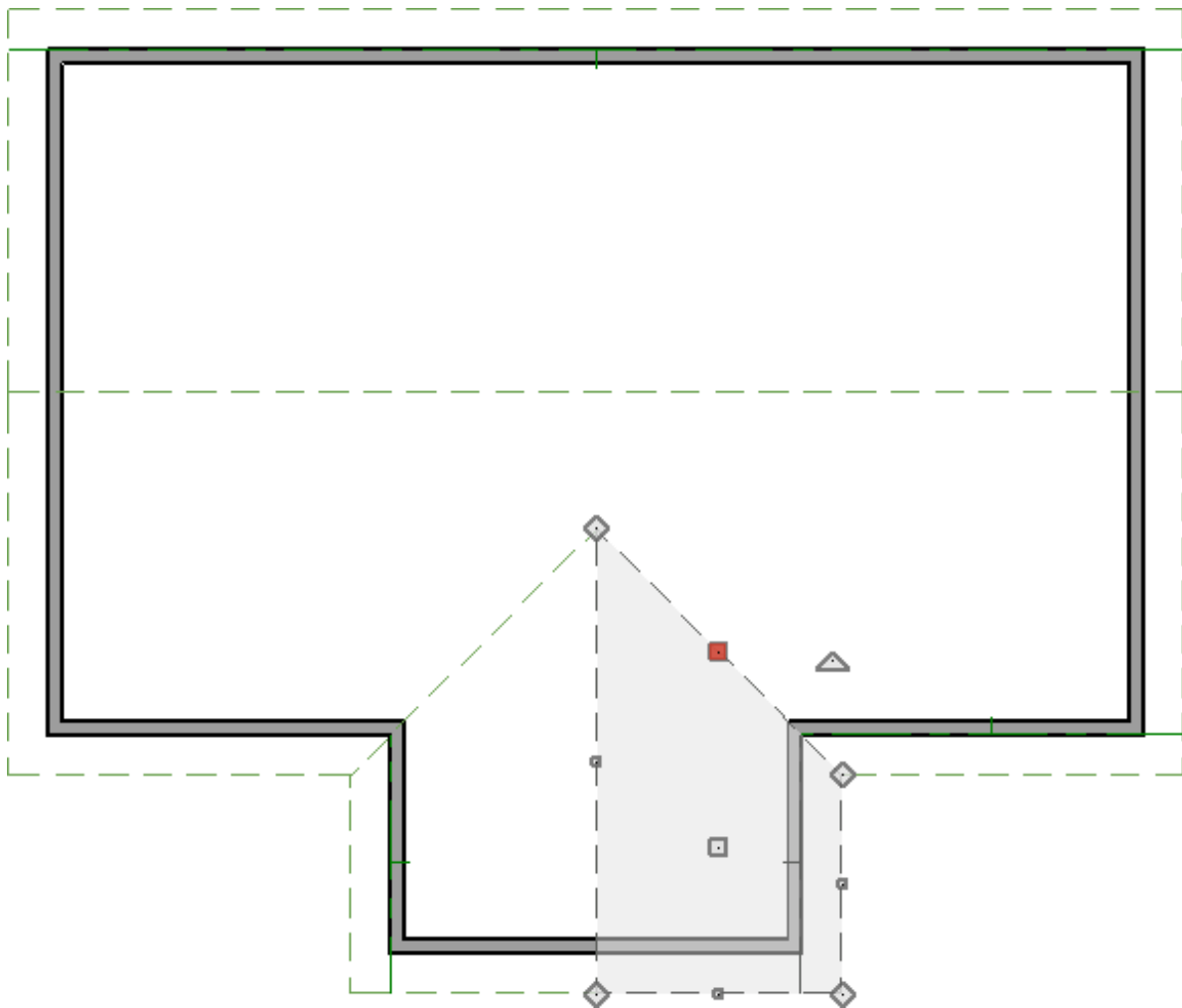
- Check the **Curved Roof** box, which will enable the options directly below it. A Warning message may display explaining that a change to the roof forced the plate height to change even though it was locked. Click **OK**.
- Specify the **Angle at Ridge** to be 0.
- Press the **Tab** key on your keyboard to apply this change without closing the dialog and notice that both the **Angle at Eave** and **Radius** values adjust to the change. Additionally, the same Warning message mentioned above may display. Click **OK**.
- Click **OK** to close the dialog.


8. Select **3D> Create Perspective View> Perspective Full Overview**  to create a 3D view, and notice the gap between the flat and curved roof planes

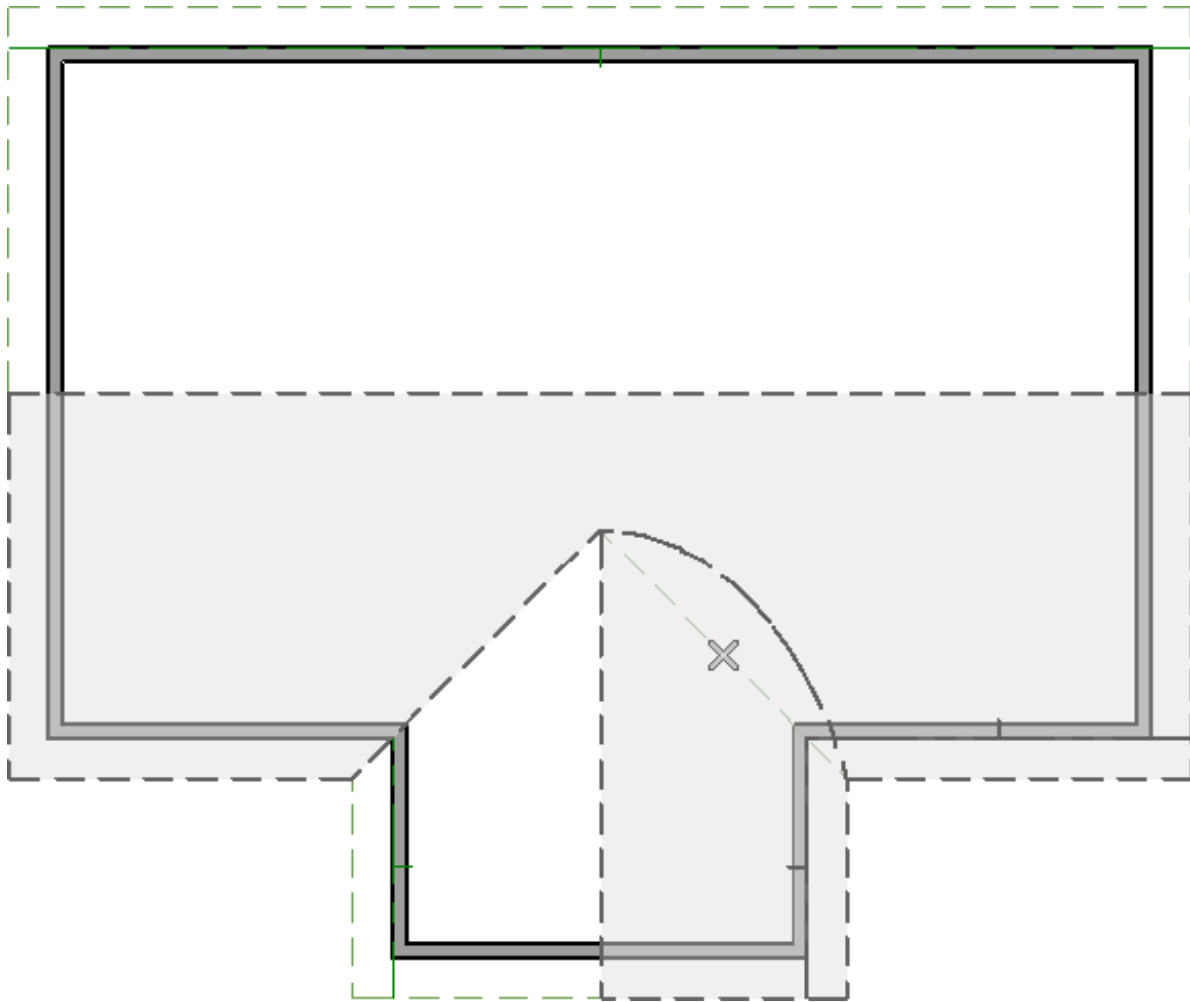



To join the roof planes

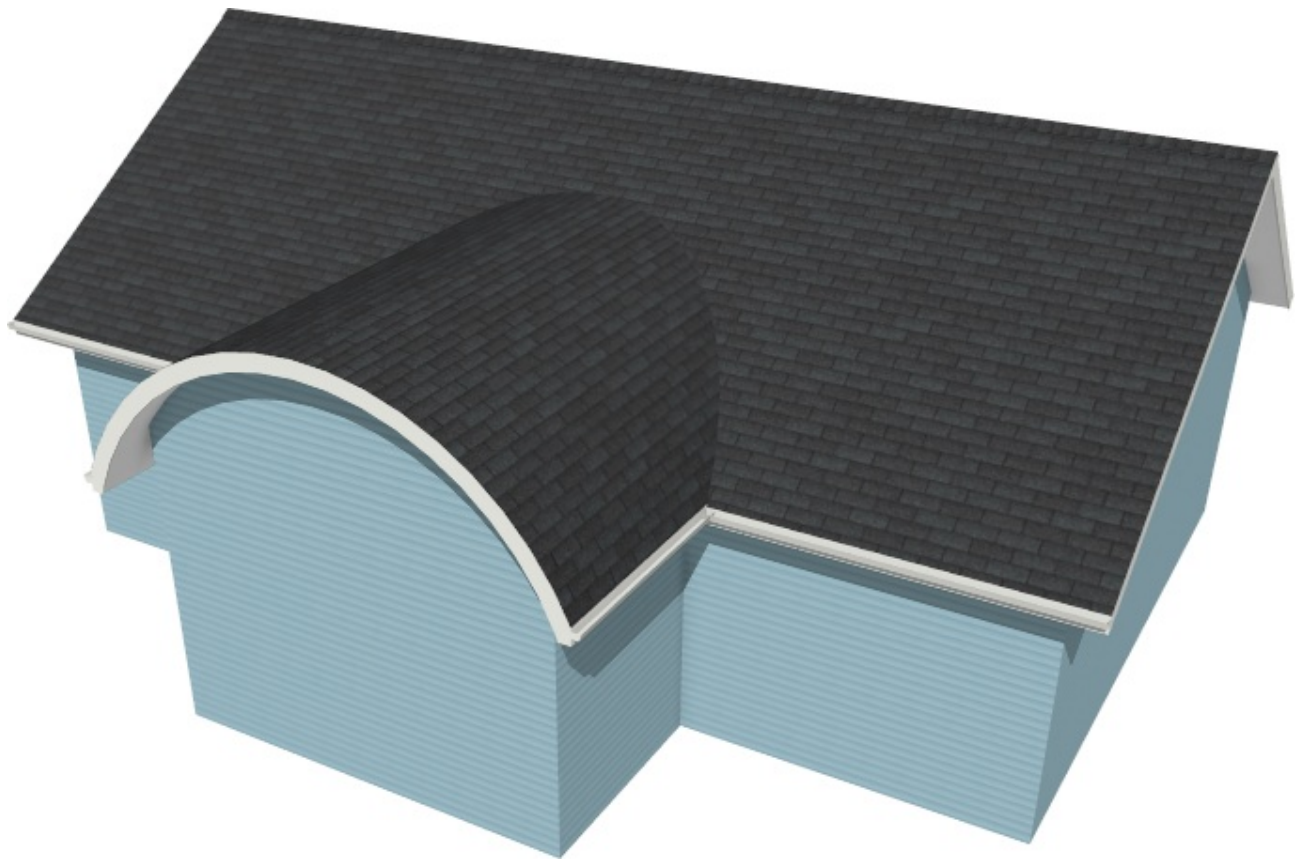
1. Return to floor plan view and click on one of the curved roof planes near the edge adjacent to the flat roof plane to select it and display its edit handles.



2. With the curved roof plane selected, click the **Join Roof Planes**  edit button, then click on the edge of the flat roof plane that you wish to join to. The roof edges will move, joining at the most appropriate location.



3. Repeat this process with the other curved roof plane, then select **3D> Create Perspective View> Perspective Full Overview**  to confirm that your roof planes now join properly.



Note: The above procedure can be used to join curved roof planes to any style roof with flat roof planes, not just gable roofs.

Related Articles

📄 [Creating a Curved Barrel Roof \(/support/article/KB-00649/creating-a-curved-barrel-roof.html\)](https://support/article/KB-00649/creating-a-curved-barrel-roof.html)

📄 [Group Selecting Objects \(/support/article/KB-00623/group-selecting-objects.html\)](https://support/article/KB-00623/group-selecting-objects.html)



[\(https://chieftalk.chiefarchitect.com/\)](https://chieftalk.chiefarchitect.com/)

CA [\(/blog/\)](https://chieftalk.chiefarchitect.com/blog/)



[\(https://www.facebook.com/ChiefArchitect\)](https://www.facebook.com/ChiefArchitect)



[\(https://www.youtube.com/user/ChiefArchitectInc\)](https://www.youtube.com/user/ChiefArchitectInc)



[\(https://www.instagram.com/chiefarchitect/\)](https://www.instagram.com/chiefarchitect/)



[\(https://www.houzz.com/pro/chiefarchitect/\)](https://www.houzz.com/pro/chiefarchitect/)



[\(https://www.pinterest.com/chiefarchitect/\)](https://www.pinterest.com/chiefarchitect/)

[208-292-3400 \(tel:+1-208-292-3400\)](tel:+1-208-292-3400)

© 2000–2023 Chief Architect, Inc.

[Terms of Use \(/company/terms.html\)](/company/terms.html)

[Privacy Policy \(/company/privacy.html\)](/company/privacy.html)