Chief Architect®

Architectural Home Design
Software

Joining Curved Roof Planes

The information in this article applies to:
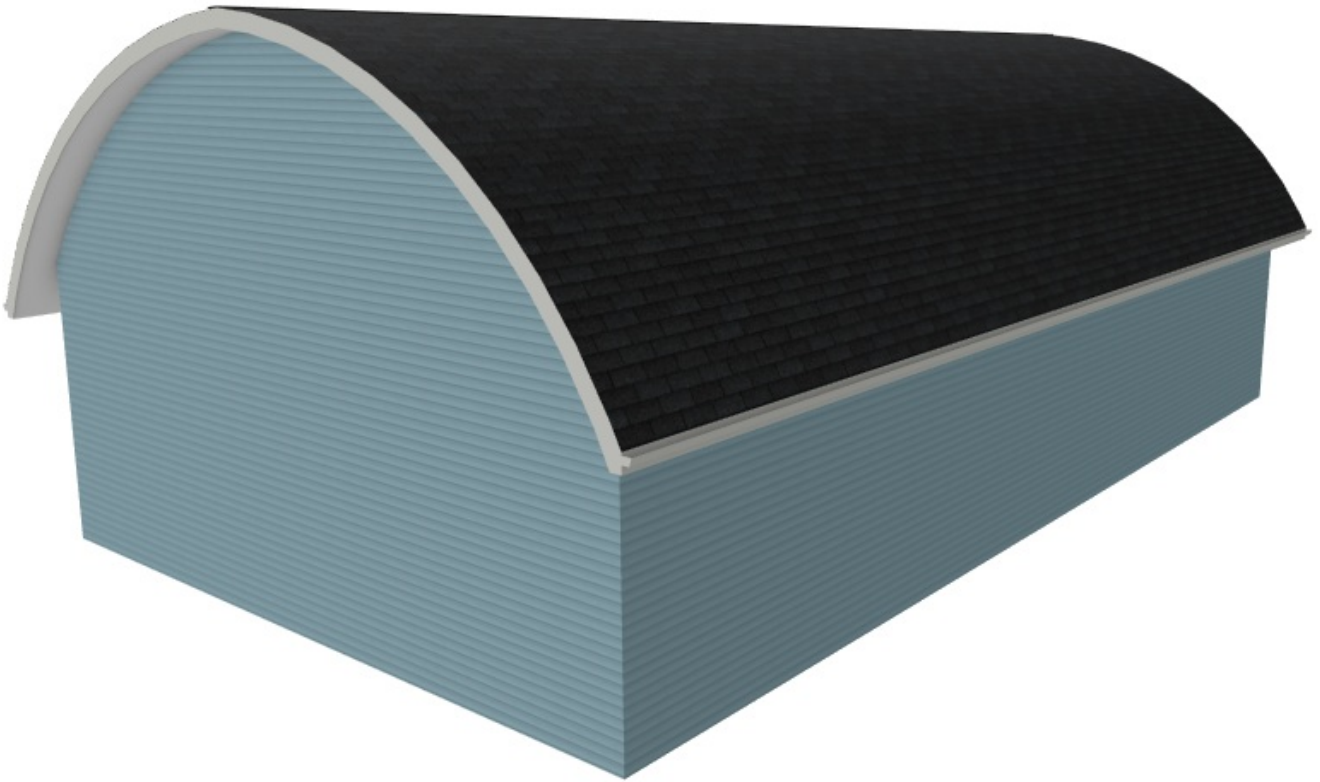
PREMIER   INTERIORS

QUESTION

I tried to create a barrel roof using two roof planes, but I am having trouble joining them to form a smooth curve. What is the best way to accomplish this?

ANSWER

There are a number of different ways to create a barrel roof in Chief Architect. The easiest way to do this using two roof planes is to join them before they are specified as curved.

Use one of the following procedures to join two curved roof planes so that they form a single, smooth curve.

In this example, two roof planes were created manually using the Roof Plane tool, and then specified as curved in their Roof Plane Specification dialogs.

Using either the edit handles, or the Join Roof Planes edit tool, the planes do not meet in the center of the building to form a single curve.
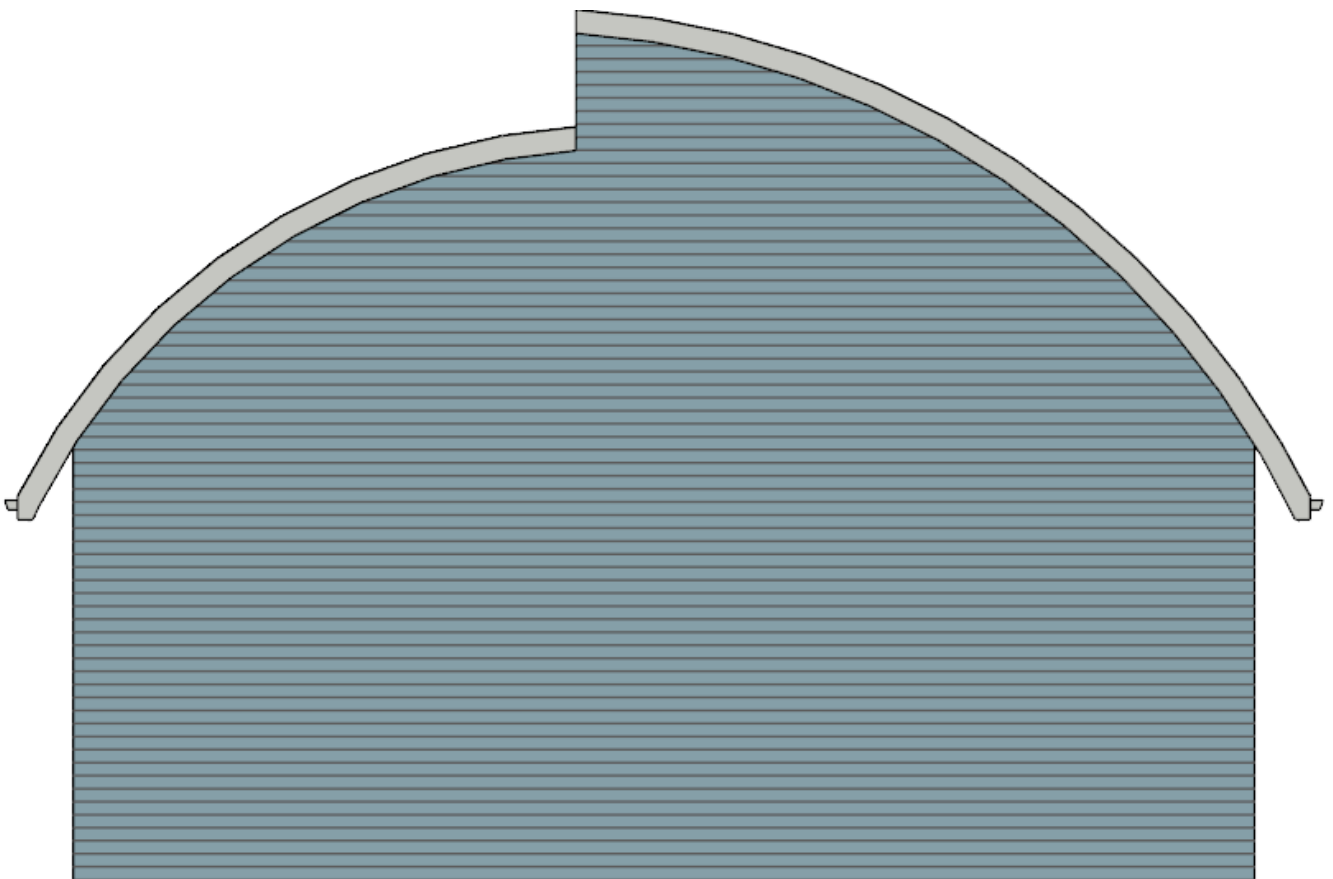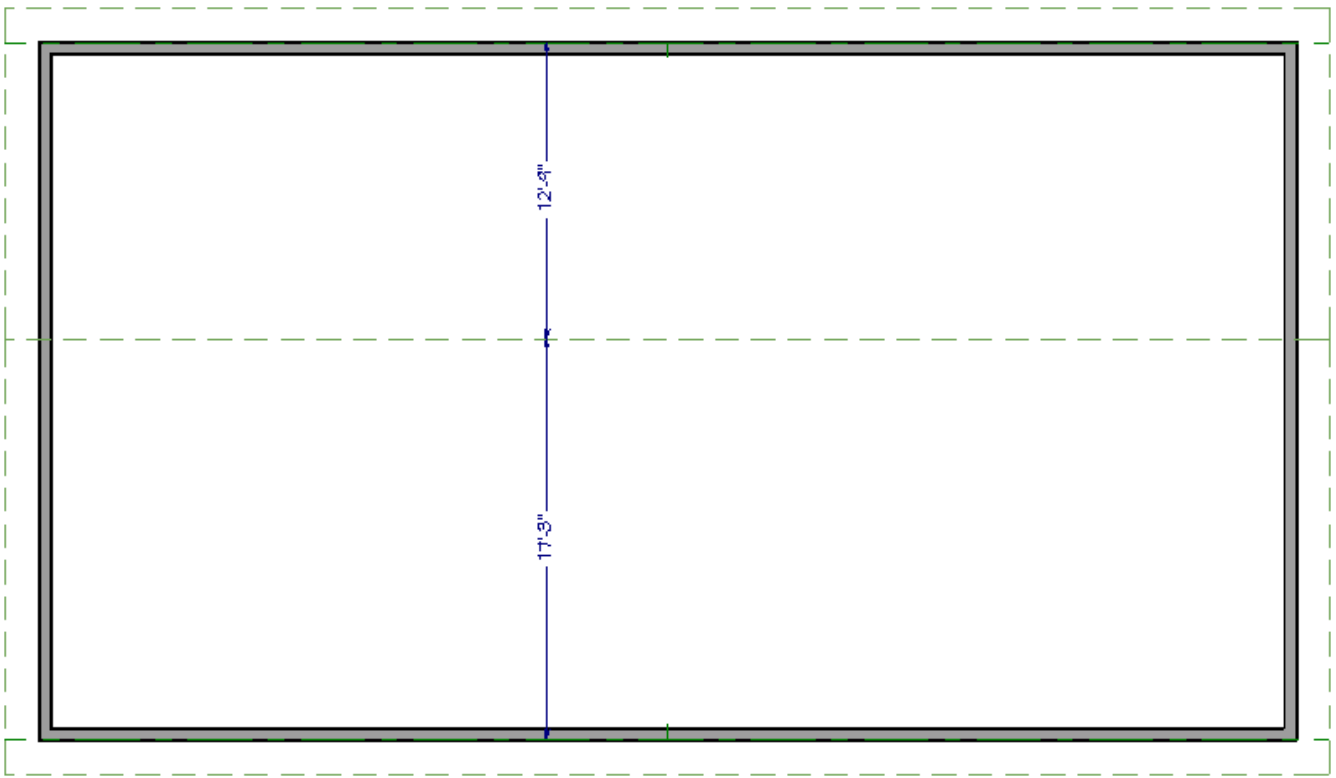
Because the width of this structure is exactly 30 feet (9.14 m) and both roof planes

have the same fascia height, it is possible to accurately position the joining edges by enabling Object Snaps and specifying dimensions in the Move Object Using Dimension dialog.

To use the Move Object Using Dimensions feature

1. Open up both roof planes to specification and enable the **Curved Roof** option.

2. Still in the **Roof Plane Specification** dialog, specify the **Angle at Ridge** value as **0** and hit **OK**.

3. Select one of the roof planes near the edge where it meets the other to display its edit handles and temporary dimensions.

4. Click on a temporary dimension to open the **Move Object Using Dimension** in line text box.
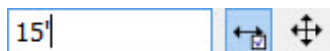
5. Specify the distance that the edge should be from each wall, in this example, 15 feet (4.57 m) and click the **OK** button to close the dialog and apply the change.

6. Select the other roof plane near the edge nearest the other plane and use the move edit handle that displays to reposition the edge until it snaps to join the other roof plane.

7. Select **3D> Create Orthographic View> Cross Section/Elevation** then click and drag out to generate the view to confirm that the roof planes are curved as expected.
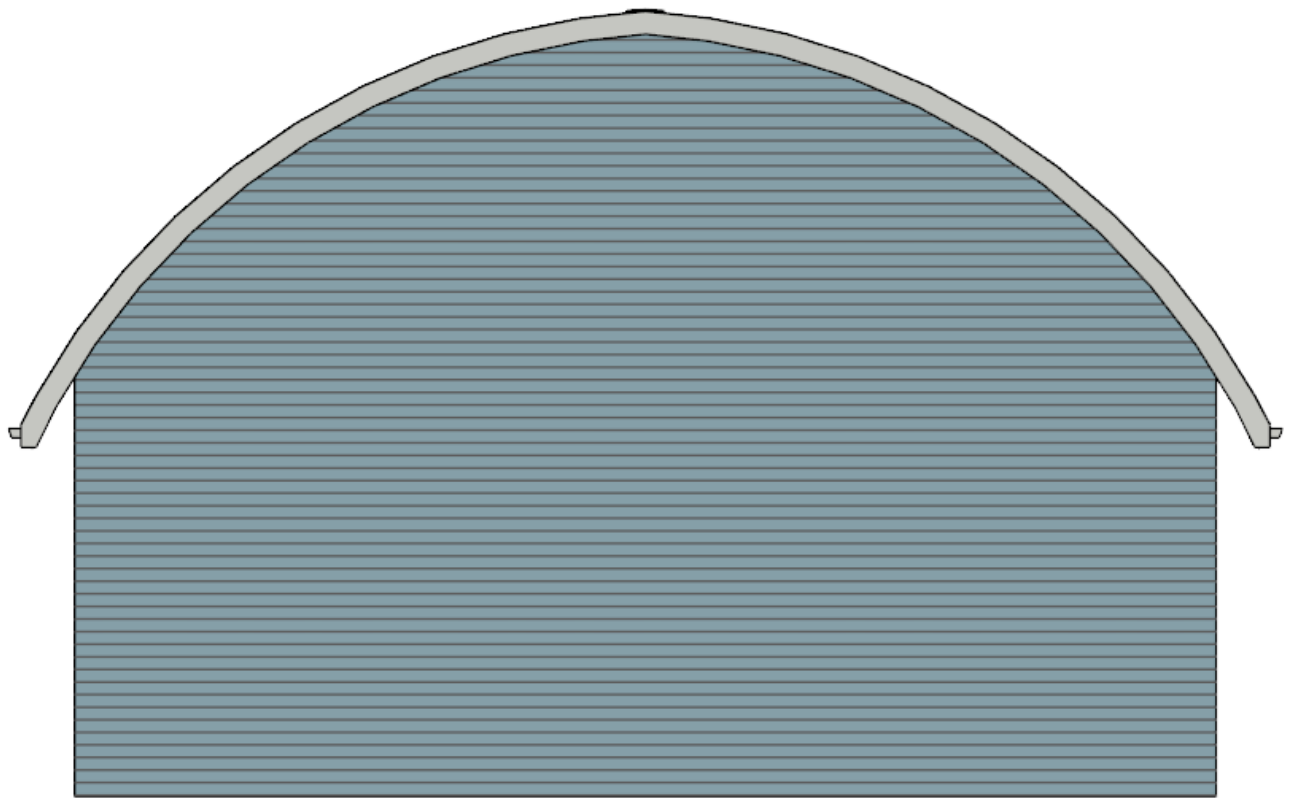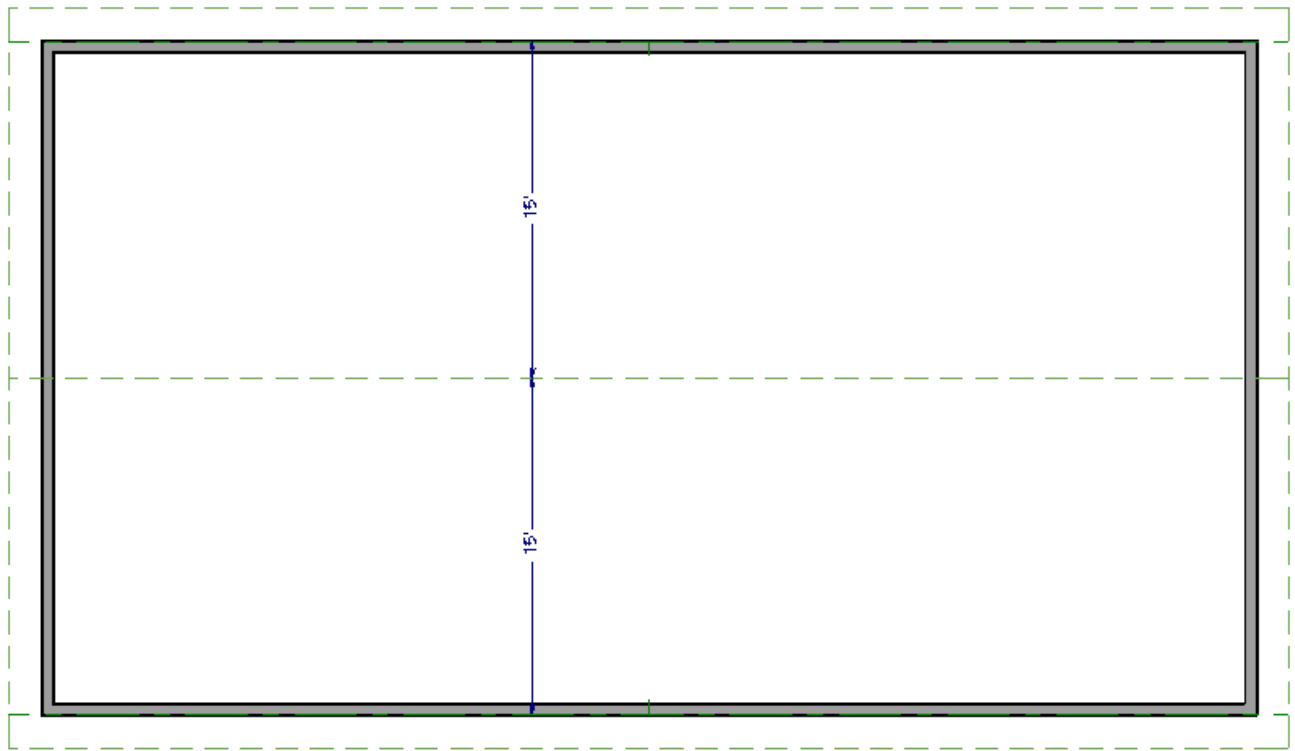
In most situations, however, joining curved roof planes will not be this simple. The easiest way to join roof planes to make a smooth barrel shape is to join them while they are flat and then curve them.

To curve flat roof planes

1. For existing curved roof planes, begin by clicking on one of the planes near an edge to select it, hold down the **Shift** key on your keyboard and click on the other plane to select them both.

2. Click the **Open Object** ▯ edit button to open the **Roof Plane Specification** dialog.

3. Remove the check in the box beside **Curved Roof** to make both planes flat, as they were when they were first created. Click the **OK** button to close the dialog and apply the changes.

4. Select one of these flat roof planes near the edge where it should meet the other roof plane to display its edit handles.

5. Click the **Join Roof Planes** ▨ edit button and then click on the other roof plane's edge to which it should join.

   The Join Roof Planes tool automatically joins the two roof planes at a point equidistant from their baselines.

6. Group-select the two roof planes using the **Shift + Click** method described above and click the **Open Object** ▯ edit button to open the **Roof Plane Specification** dialog and edit both planes at the same time.

7. Place a check in the box beside **Curved Roof** and then specify the **Angle at Ridge** to be **0**. Notice that the Angle at Eave value adjusts to the change.

   > In X14 and newer 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.

8. Click the **OK** button to close the dialog and select **3D> Create Perspective View> Perspective Full Overview** to confirm that the roof planes are curved as expected.

Related Articles

> Creating a Curved Barrel Ceiling (/support/article/KB-00650/creating-a-curved-barrel-ceiling.html)
>
> Creating a Curved Barrel Roof (/support/article/KB-00649/creating-a-curved-barrel-roof.html)

Privacy Policy (/company/privacy.html)