

Specifying Different Roof Overhangs on Different Walls

Reference Number: **KB-00077**

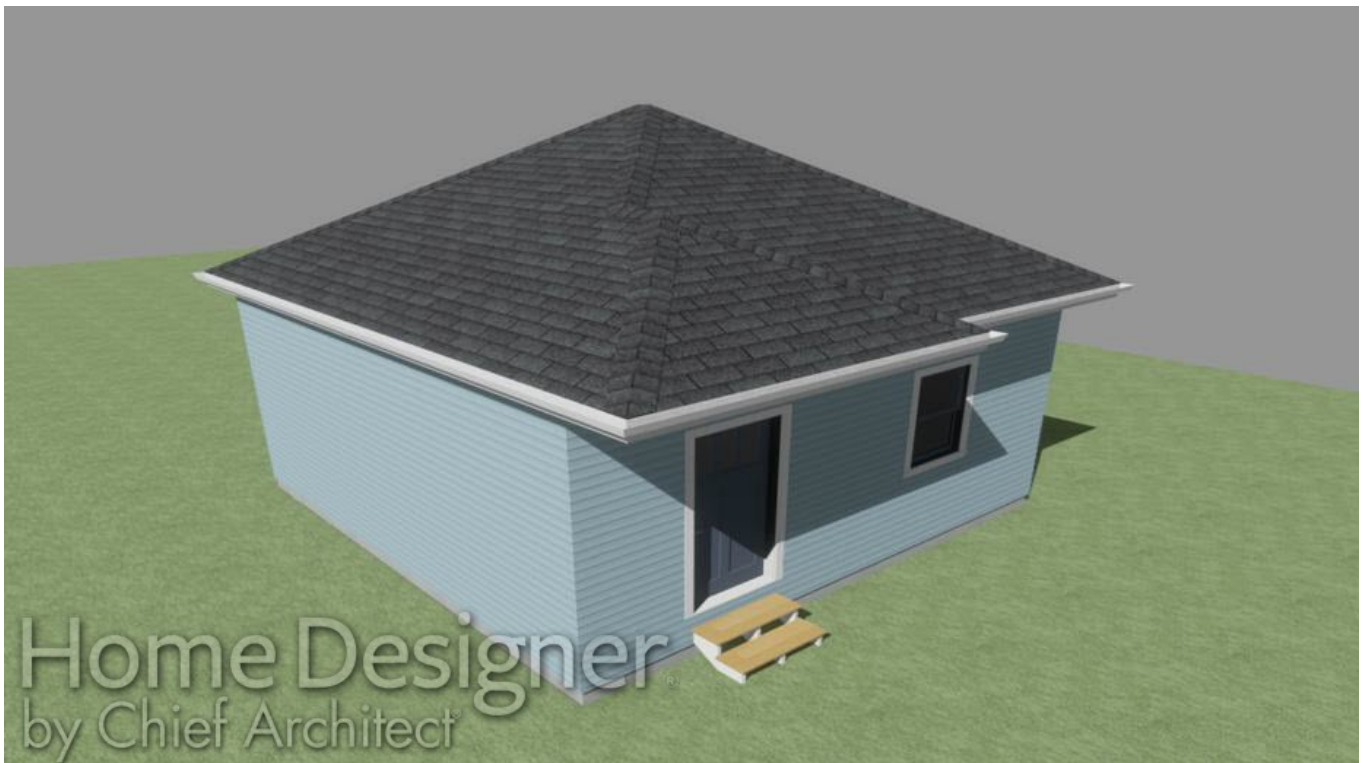
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The information in this article applies to:



QUESTION

How can I make a roof that has different overhangs on different sides?



ANSWER

When Roofs are automatically generated, a roof plane is created over each exterior wall, following the settings in the Build Roof dialog. However, there are times when you may want create a roof that the default settings are unable to automatically generate. In the Build Roof dialog, you will notice a check box for Auto Rebuild Roofs. When this is turned on, any changes made to the position of an exterior wall or to its roof directives will prompt the roof to regenerate to reflect these changes. Knowing how the program operates allows us to manipulate the


tools to create what we want.

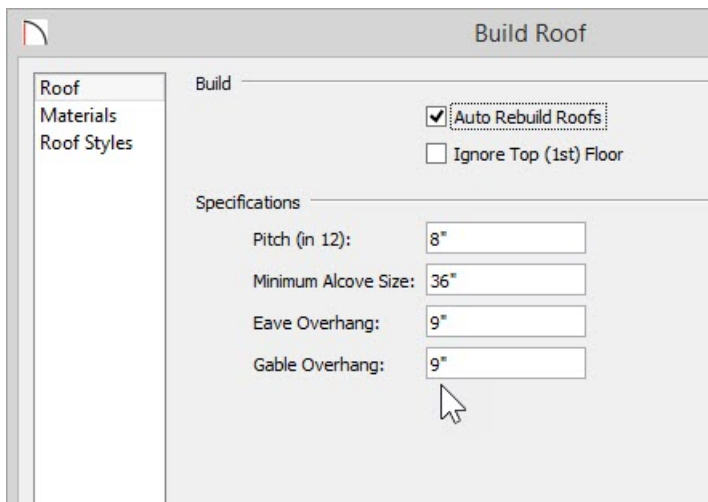
We know that roof planes build over exterior walls and we know that the build roof dialog has a setting for overhang, but what if we want different overhangs on different roof planes? This is when we want to use temporary walls to generate the roof planes. Once we have the roof perfect we can turn off Auto Rebuild Roofs and delete the temporary walls. In this article we will cover how to make overhangs of various depths using temporary walls.


This tutorial starts with a 20' by 20' structure.

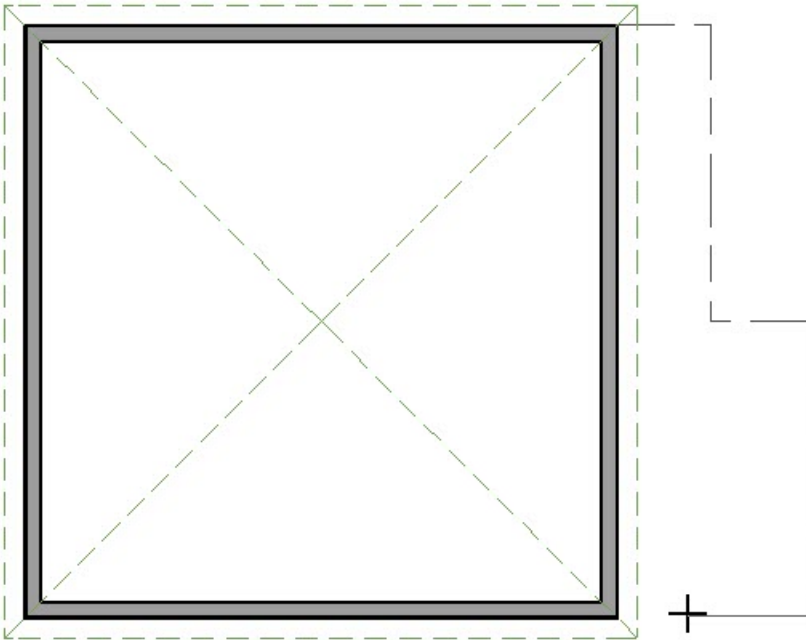
It is also possible to specify the overhang on a wall-by-wall basis by modifying the Overhang setting on the Roof panel of the Wall Specification dialog.


To create a roof

1. First, we want to specify the default overhang to be the smallest overhang we plan on having in our plan. We do this by clicking on **Build> Roof> Build Roof**  to open the Build Roof dialog.
2. In the **Specifications** section of the ROOF panel, we will specify the overhang for Eave and Gable sides.



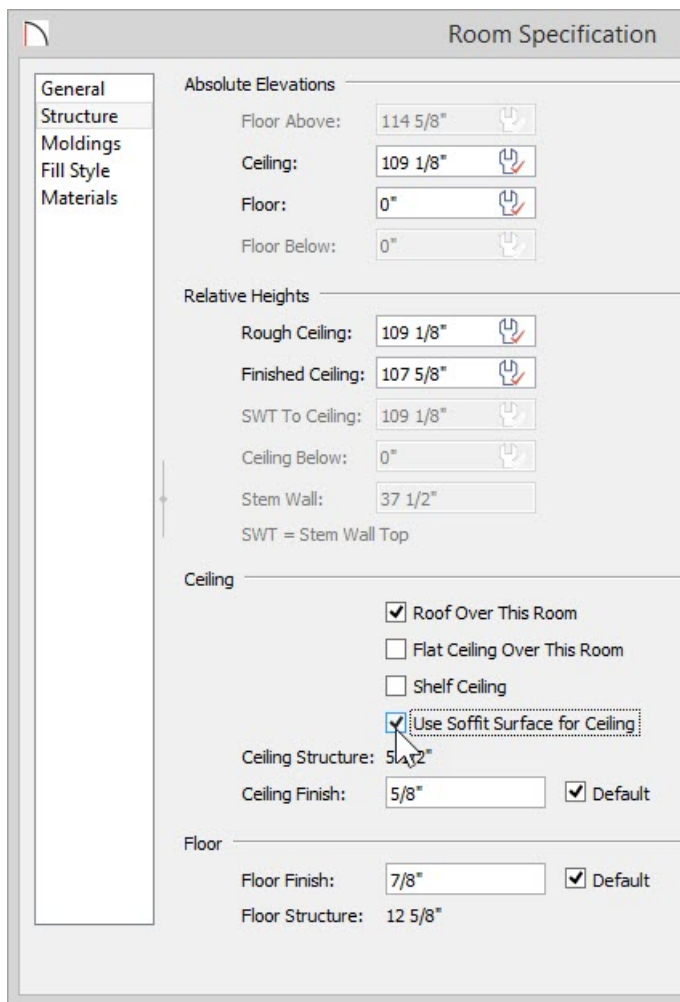
- In this example **9"** is used for both.
 - Make sure that **Auto Rebuild Roofs** has a checkmark enabling this feature.
 - Click the **OK** button.
3. Next, use invisible walls or room divider walls to delineate where the roof overhangs differ from the default.
 4. Click **Build> Wall> Room Divider**  then click and drag to create room divider lines for the areas where the overhangs are different. It doesn't have to be exact right now, refinements will be made later in the design.




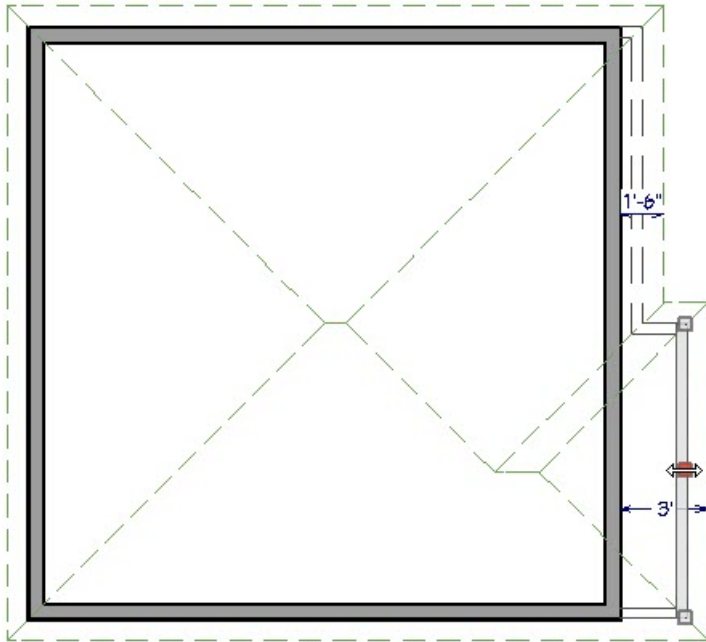
Notice that when you connect the Room Divider Lines to the existing structure, the Auto Rebuild Roofs feature automatically updates the roof structure to cover those lines. Within this overhang area, you will see a room form. Click on **Select Objects**  and then double-click within the room to open the **Room Specification** dialog box.

5. Within **Room Specification**, you will need to make the following changes:


- Click on the **GENERAL** panel and change the **Room Type** to **Open Below**.
- Next click on the **STRUCTURE** panel and remove the checkmark in the **Flat Ceiling Over This Room** check box.



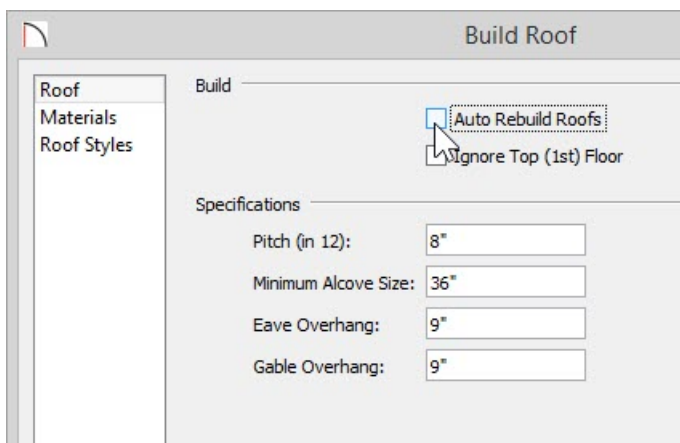
- Place a new checkmark in the **Use Soffit Surface for Ceiling** check box, and click the **OK** button. Once you close the Room Specification dialog box, you will notice that the Room Divider lines have converted to Invisible Walls.
6. Use **CAD> Dimensions> End to End Dimension**  to precisely place the walls.
- The default overhang was set to 9" and this is measured from the roof baseline, which is the outside edge of the framing layer.
 - Add the thickness of the invisible wall and the space between the invisible wall and the primary wall to determine the overhang depth.



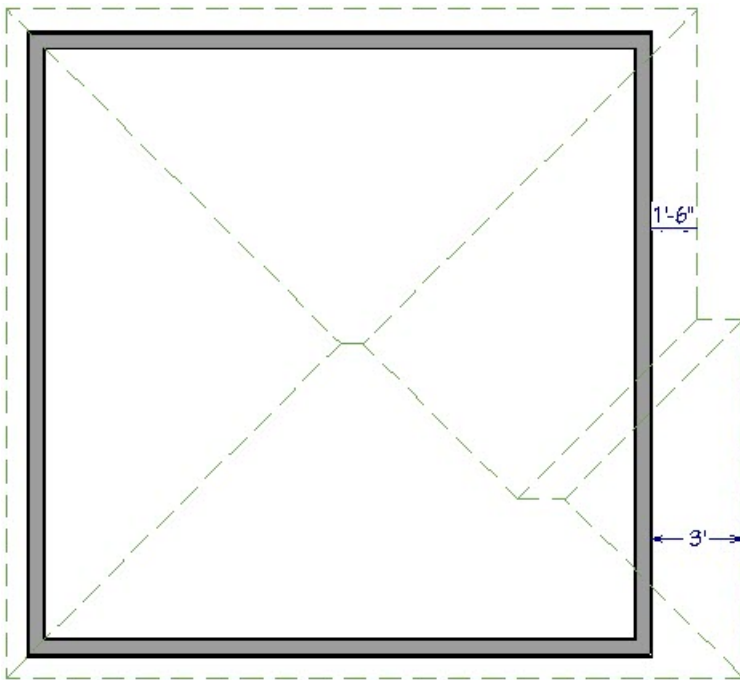
End to End dimensions were used in this image to show the overall depth of the overhang.

7. When the roof is correct click on **Build> Roof> Build Roof**  to open the Build Roof dialog again.

8. Uncheck **Auto Rebuild Roofs** and click **OK**.




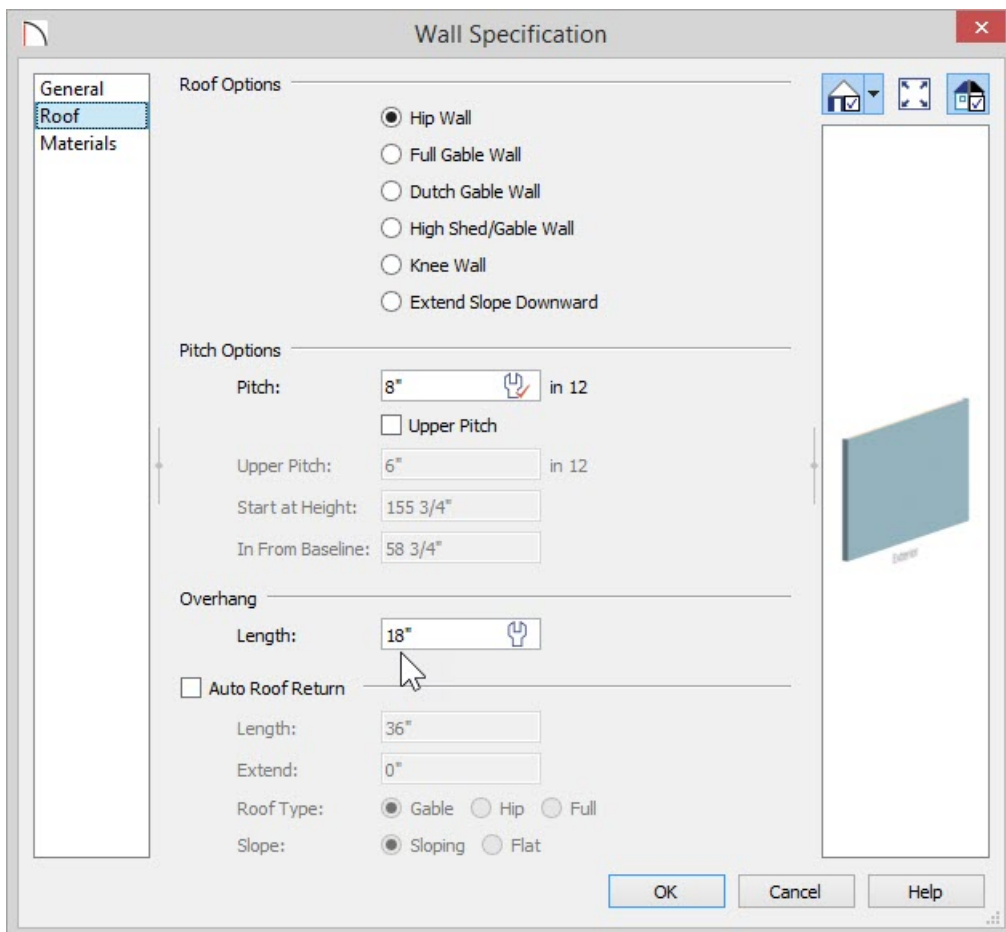
9. Delete the invisible walls.



With Auto Rebuild Roofs turned off your roof will not regenerate if you make changes to the walls. You should not turn Auto Rebuild Roofs off until you are confident that the roof is perfect. If you Rebuild the roof without the temporary walls in place, the roof planes will generate over the exterior walls with the default overhang.


To specify different overhangs for different walls in the Wall Specification dialog

1. Click on the wall that supports the overhang that needs to change.
2. Click on the **Open Object**  edit tool to display the **Wall Specification** dialog.
3. In the **Wall Specification** dialog click on the **Roof Panel**.
4. Specify the desired overhang for that wall then press **OK**.

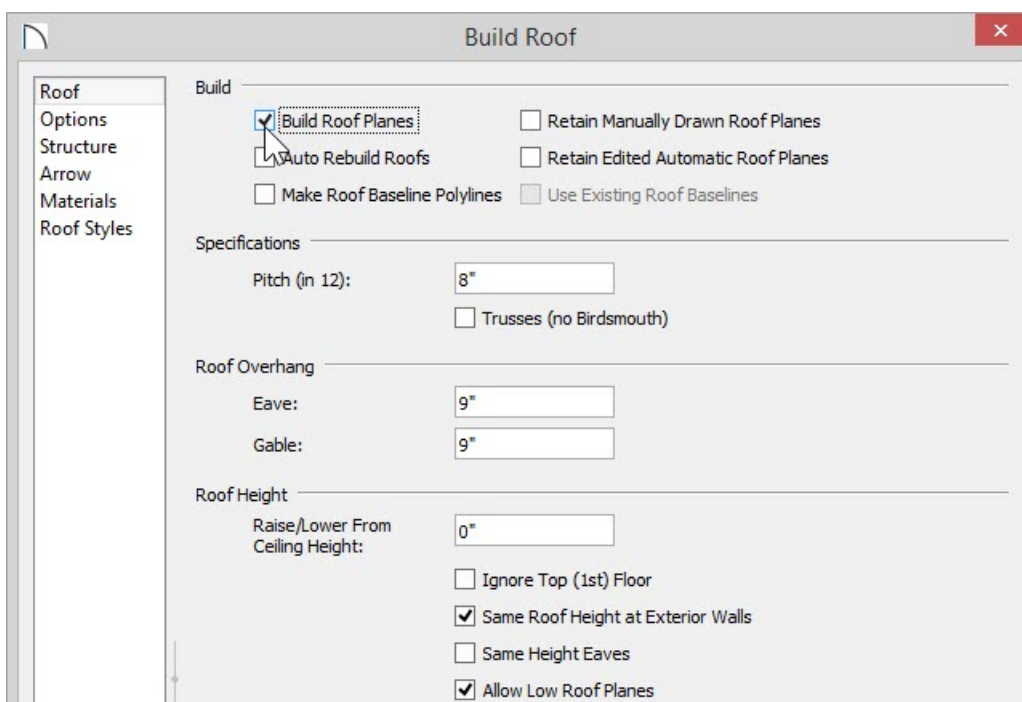


5. If Auto Rebuild Roofs is turned on you will see the change right away.

If Auto Rebuild Roofs is turned off, it will be necessary to tell the program to build roof planes.


For Architectural, Suite, Interiors, and Essentials click **Build> Roof> Build Roof**  and click **OK**.

For Home Designer Pro click **Build> Roof> Build Roof**  to open the **Build Roof** dialog.



6. Place a checkmark in the **Build Roof Planes** check box, and then click **OK**.

Related Articles

 [Setting Exact Wall Dimension Lengths \(/support/article/KB-00245/setting-exact-wall-dimension-lengths.html\)](/support/article/KB-00245/setting-exact-wall-dimension-lengths.html)