

Creating a Clerestory Style Roof

Reference Number: **KB-00955**

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The information in this article applies to:



QUESTION

I need to create a clerestory. How do I do this?

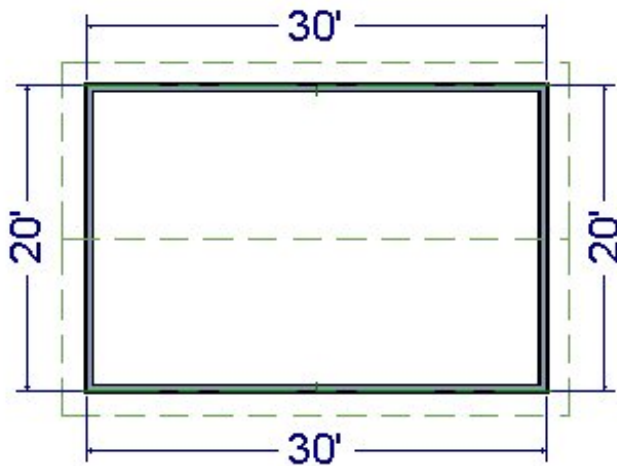



ANSWER

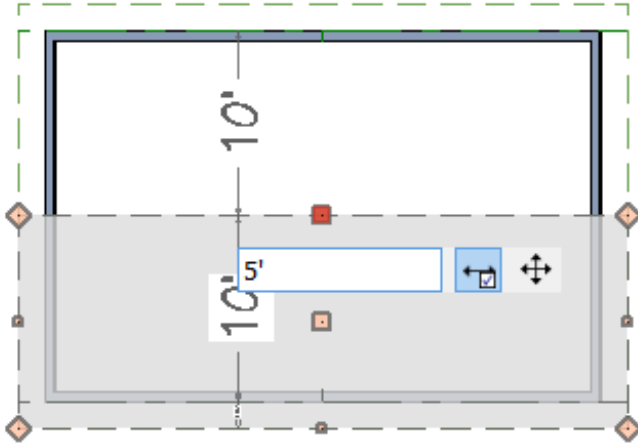
A clerestory is an interior wall built above part of the roof with high windows to let in light. A clerestory can be easily created using the Roof Cuts Wall at Bottom wall specification.




To create a clerestory

1. Open the plan in which you would like to create a clerestory.



- In this example, a 20' x 30' rectangular structure with a 4:12 gable roof is used.
 - If you need instruction on how to create a gable roof please, visit the [Related Articles](#) section below.
2. Using the **Select Objects**  tool, click on the ridge edge of the roof plane that will be below and in front of the clerestory wall to select it.
 3. Click on the temporary dimension that tells you how far the ridge is from the baseline.




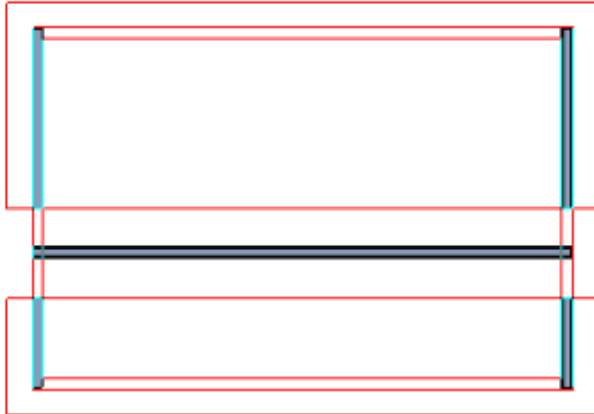
- Click on the temporary dimension that displays the ridge edge's distance to the wall.
 - In the inline text field, type how far in from the baseline the roof plane should extend to meet the interior surface of the clerestory wall and press **Enter** on your keyboard.
 - In this example, a value of **5'** (60") is used.
 - If you do not see a temporary dimension, select **View> Temporary Dimensions**  from the menu to turn on this feature.
4. Go **Up One Floor**  and select **Tools> Floor/Reference Display> Reference Display**  from the menu to turn on the Reference Display.


In Chief Architect X10 and prior program versions, navigate to Tools> Reference Floors> Reference Floor Display.

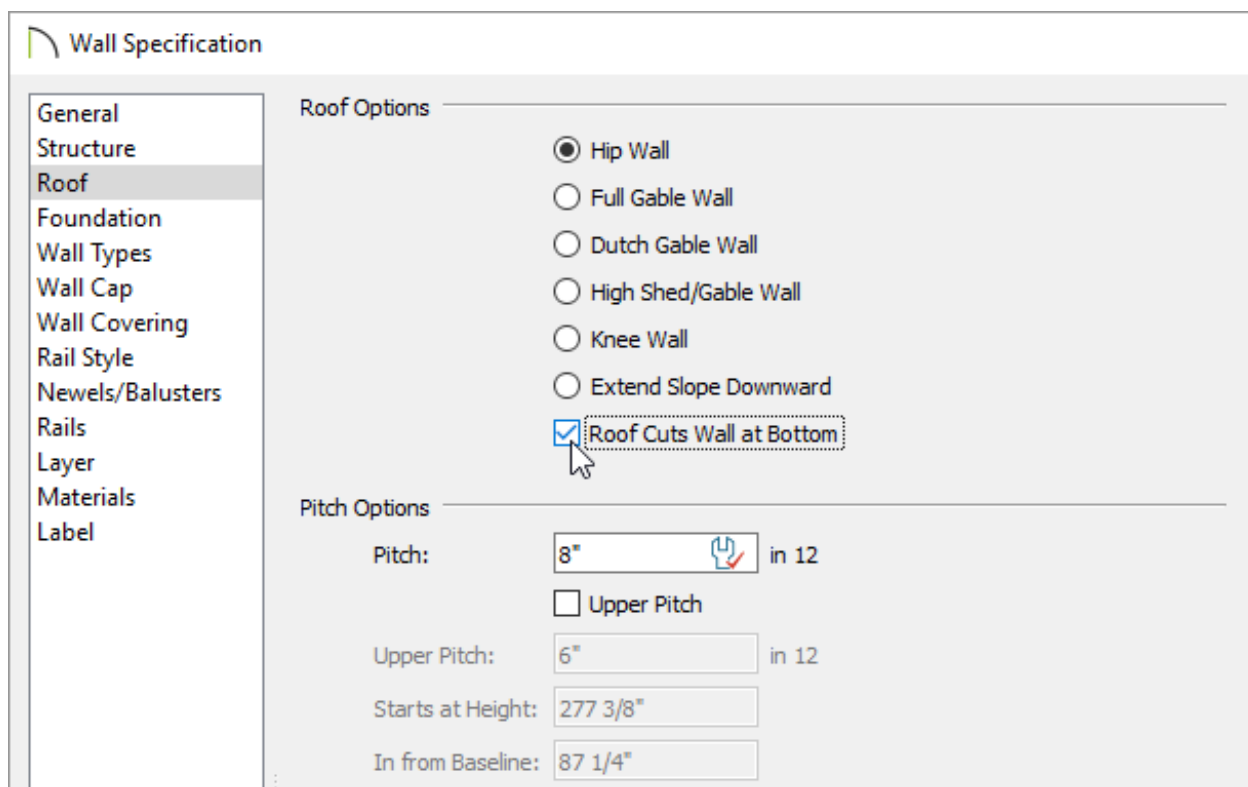


- When the Reference Display is enabled, objects on another floor of the plan, such as roof planes and walls, display for reference. By default, the objects in the Reference Display are red.

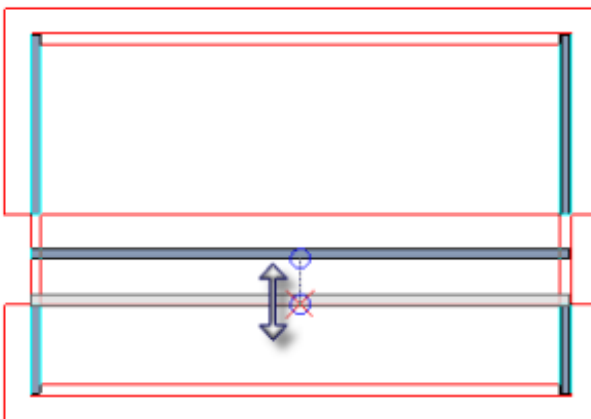
5. Select **Build> Wall> Straight Exterior Wall** , then click and drag, from right to left, to draw a wall. This wall will become the clerestory.





- Do not worry about positioning it precisely as you draw - the wall can be moved to the correct location accurately in a moment.
 - If you draw the wall on the Attic floor, a warning message may display as you draw. Click **OK** to continue.
6. Click on the newly drawn wall to select it, then click the **Open Object**  edit button.
 7. On the **ROOF** panel of the **Wall Specification** dialog that opens, check **Roof Cuts Wall at Bottom**, then click **OK**.



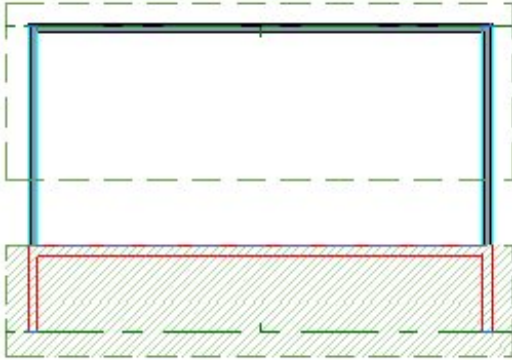
8. With the wall still selected, use its **Move**  edit handle to reposition the wall so that its exterior surface snaps to the ridge edge of the roof plane edited in step 3.



- You may want to **Zoom**  in to make sure the exterior surface of the wall is snapping to the roof plane edge.
- When the wall snaps to the roof plane edge in the Reference Display, an intersection snap indicator will display on one side of the roof plane edge where it intersects with an attic gable wall.
- To snap the wall to the roof plane, make sure that **Object Snaps** , and

particularly, **Intersection Snaps** ✗ are enabled.

9. When the clerestory wall is in the correct position, go **Down One Floor** ✓.
10. Using the **Select Objects** 🖱️ tool, click on the roof plane in front of the clerestory wall to select it.

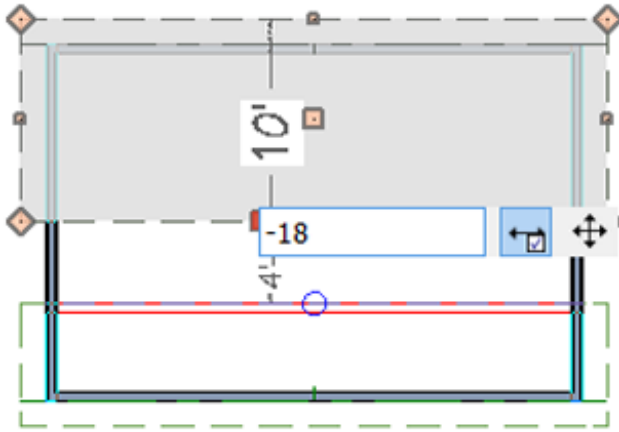


- Extend the top edge of the roof plane through the clerestory wall so that it snaps to the interior surface of the wall.

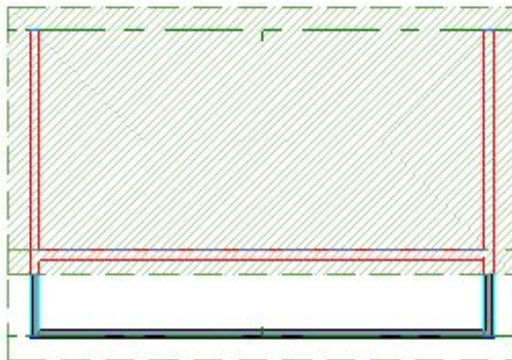
In the above image, the roof plane has a green angled fill pattern to better illustrate its final position.


Zoom in to make sure that the roof plane snaps to the interior surface rather than the interior Main Layer surface. If you do not, the clerestory wall may not look right in interior 3D views.

11. Now use the **Select Objects** 🖱️ tool to select the ridge edge of the other roof plane to select it. This edge can now be extended forward to cover the clerestory.



- Click on the temporary dimension indicating the selected edge's distance from the ridge edge of the other roof.
- In the inline text field, type the distance inside the wall's dimension layer that the eave edge should be moved to. To move the selected edge from the outside of the wall to the inside, use a negative number.
- In this example, the roof plane's ridge edge is positioned 18" in from the wall so a value of -18" is used.



- In the above image, the roof plane is shown with a green fill to better illustrate its final position.
12. Finally, click in an empty space within the room under the clerestory to select it and click the **Open Object**  edit button.
 13. On the **STRUCTURE** panel of the **Room Specification** dialog that opens, remove the



check beside **Flat Ceiling Over This Room**, then click **OK**.



Room Specification


General
Structure
Deck
Deck Support
Moldings
Wall Covering
Fill Style
Materials

Absolute Elevations



Floor Above: 114 5/8"



Ceiling: 109 1/8"  


Floor: 0"  


Floor Below: 0" 

Relative Heights

Rough Ceiling: 109 1/8"  

Finished Ceiling: 107 5/8"  

SWT To Ceiling: 109 1/8" 

Ceiling Below: 0" 

Stem Wall: 37 1/2"

SWT = Stem Wall Top

Ceiling

Roof Over This Room

Flat Ceiling Over This Room

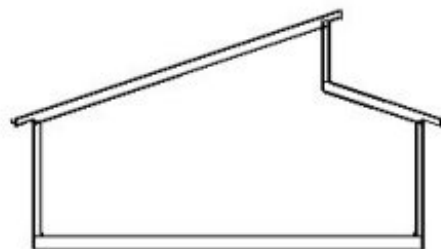
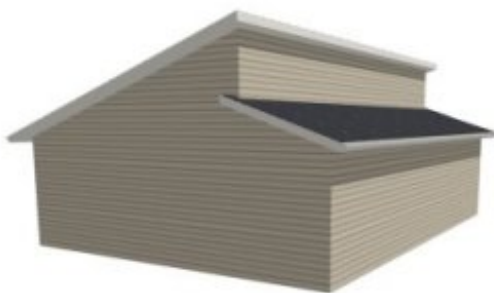
Shelf Ceiling

Use Soffit Surface for Ceiling


Ceiling Structure: 5 1/2" Default

Ceiling Finish: 5/8" Default

14. Create 3D views of both the interior and exterior to see the results.



Related Articles

 [Generating Automatic Hip and Gable Roofs \(/support/article/KB-00758/generating-](/support/article/KB-00758/generating-)

