

Building a Clerestory/Skillion Roof

Reference Number: **KB-00492**

Last Modified: **July 21, 2021**

The information in this article applies to:



QUESTION

How can I build a structure with two shed roofs facing each other?



ANSWER

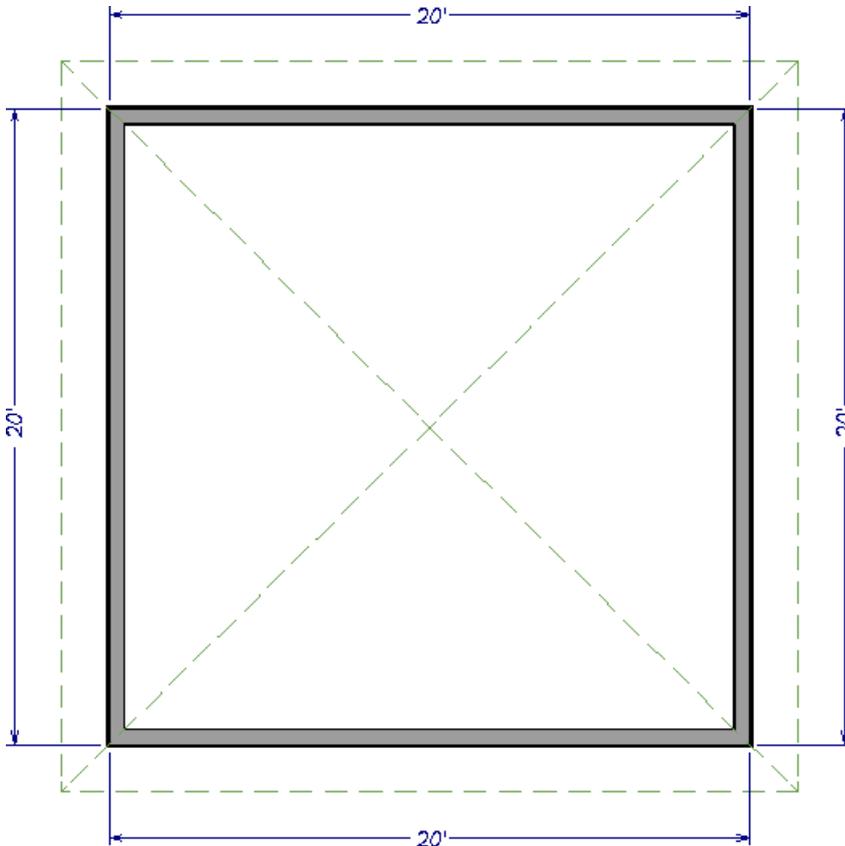
A clerestory style roof, also known as a mono-pitched, lean-to, or skillion roof, has two shed roofs with ridge or top edges that face one another, and with one top of the ridges higher than the other.

Home Designer will attempt to generate a single, integrated roof plan whenever possible, but by adjusting a structure's height and roof pitch, you can produce different results - like a clerestory.

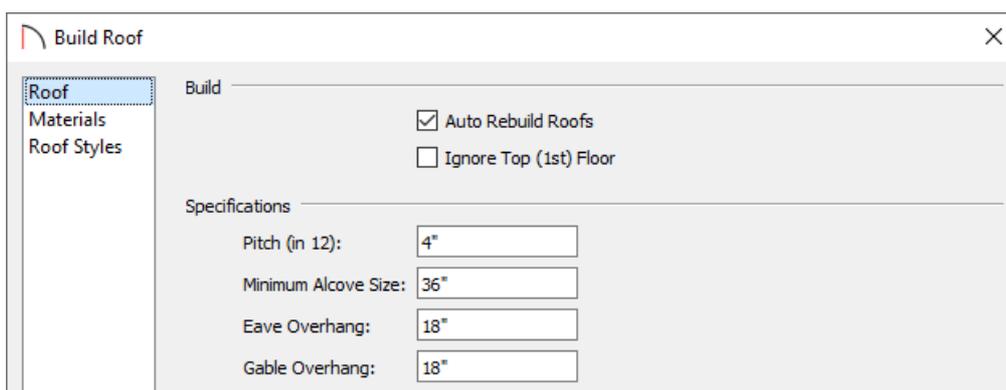
To create the main structure

1. In a **New Plan** , select **Build> Wall> Straight Exterior Wall**  and create a basic rectangular structure.

In this example, a 20' x 20' structure is used.



2. Select **Build> Roof> Build Roof**  and in the **Build Roof** dialog that displays:



- o Specify the desired **Pitch (in 12)** of the roof.

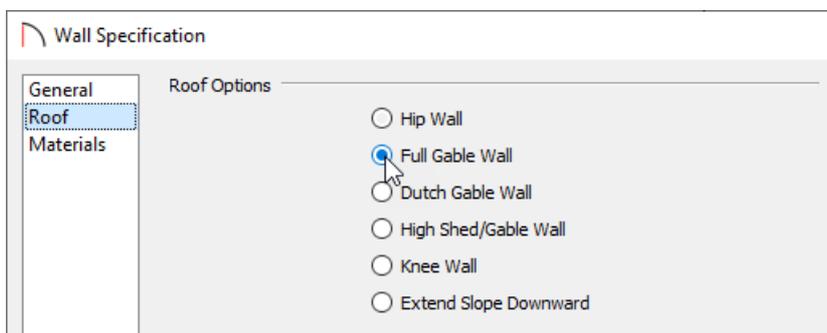
In this example, a pitch of 4" in 12 is used.

Note: If a higher pitch is desired, a clerestory will require more room to be created. In the clerestory section below, specify a larger value if a larger pitch is used.

If you don't want the pitch of the roof planes that make up the clerestory to be the same, you can

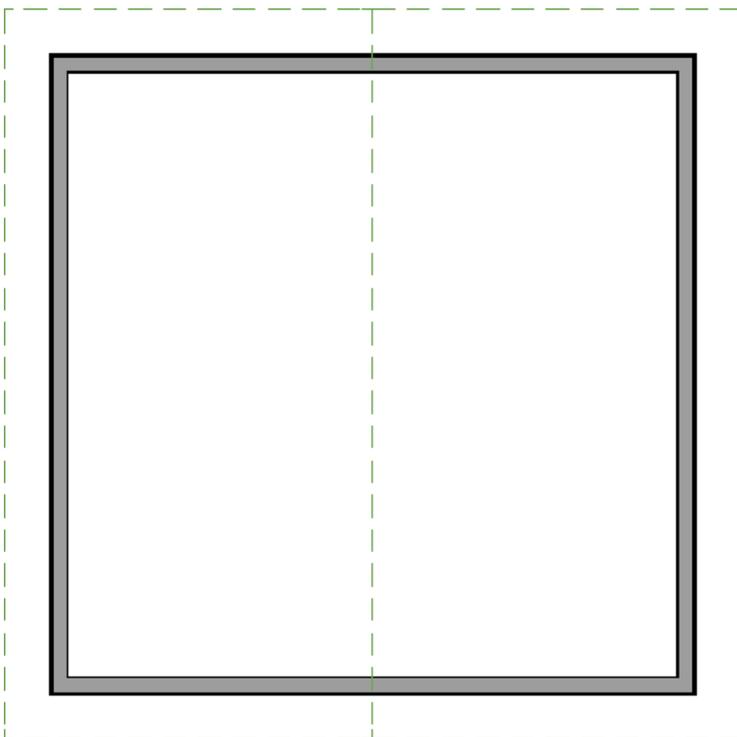
instead specify the pitch value on a per wall basis. Please see the [Related Articles](#) section to learn more.

- Specify the **Overhangs** to your liking.
 - Make any additional changes such as the **MATERIALS** of the roof, then click **OK**.
3. Using the **Select Objects**  tool, select the top wall and click the **Open Object**  edit tool.
 4. On the **ROOF** panel of the **Wall Specification** dialog that opens, select the **Full Gable Wall** option and click **OK**.



Alternatively, you can select the wall and click the **Change to Gable Wall(s)**  edit tool to set this wall as a gable wall without needing to access the dialog box above.

5. Repeat this process to set the bottom wall as a **Full Gable Wall** so that a gable roof with a ridge in the center of the building is created.



To add the clerestory

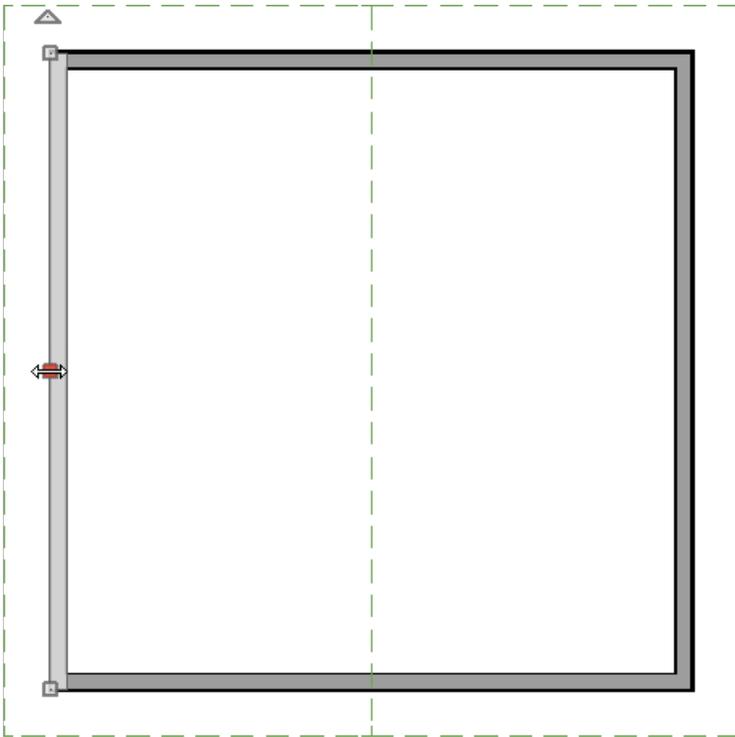
1. Navigate to **Build> Floor> Build New Floor**  from the menu, select the **Derive new 2nd floor plan from the 1st floor plan** option in the **New Floor** dialog that displays, then click **OK**.
2. In the **2nd Floor Defaults** dialog, change the **Rough Ceiling** value to be the height of the clerestory you want to create, then click **OK**.

In this example, a value of 48" is used.

2nd Floor Defaults	
Structure Moldings Fill Style Materials	Absolute Elevations
	Floor Above: <input type="text"/>
	Ceiling: <input "="" type="text" value="169 3/4\"/>
	Floor: <input "="" type="text" value="121 3/4\"/>
	Floor Below: <input "="" type="text" value="0\"/>
	Relative Heights
	Rough Ceiling: <input "="" type="text" value="48\"/>
	Finished Ceiling: <input "="" type="text" value="46 1/2\"/>
	SWT To Ceiling: <input "="" type="text" value="48\"/>
	Ceiling Below: <input "="" type="text" value="109 1/8\"/>
Stem Wall: <input "="" type="text" value="37 1/2\"/>	
SWT = Stem Wall Top	

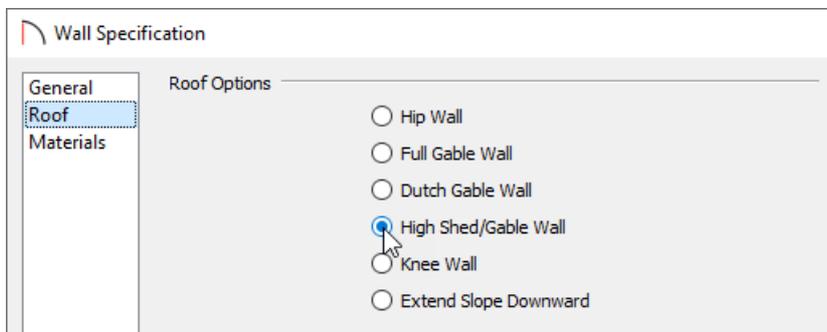
Note: The value specified here may need to be adjusted to accommodate the roof planes that generate. Alternatively, the pitch of the roof planes may need to be adjusted to be lower if a smaller clerestory is desired.

3. With the second floor present in the floor plan, select the left or right hip wall, and move it into the center of the structure.

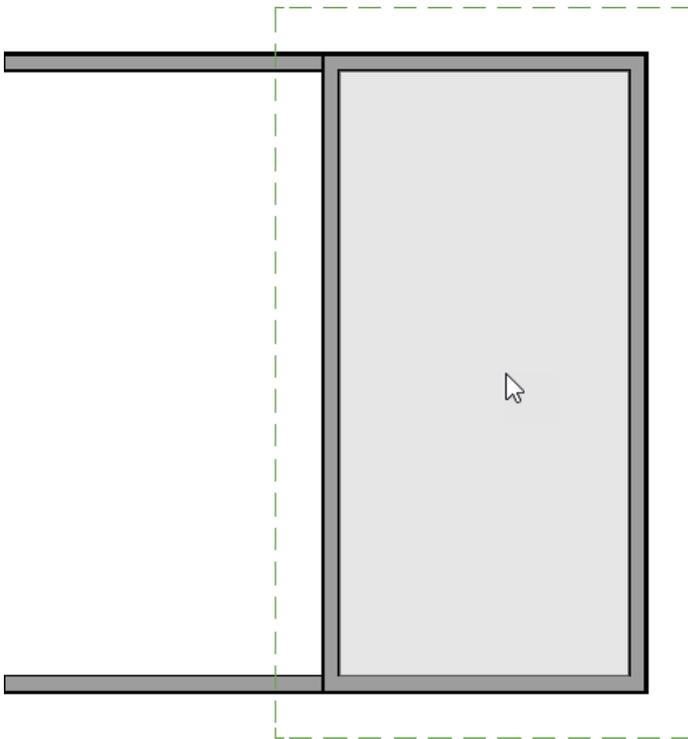


4. After the wall has been moved, select it, and click the **Open Object**  edit tool.

5. In the **Wall Specification** dialog that displays, click on the **Roof** panel, select the **High Shed/Gable Wall** option, then click **OK**.



6. Using the **Select Objects**  tool, click inside of the second floor room to select it and click on the **Open Object**  edit tool.



7. In the **Room Specification** dialog:

Room Specification

General
Structure
 Moldings
 Fill Style
 Materials

Absolute Elevations

Floor Above:

Ceiling:

Floor:

Floor Below:

Relative Heights

Rough Ceiling:

Finished Ceiling:

SWT To Ceiling:

Ceiling Below:

Stem Wall:

SWT = Stem Wall Top

Ceiling

Roof Over This Room

Flat Ceiling Over This Room

Shelf Ceiling

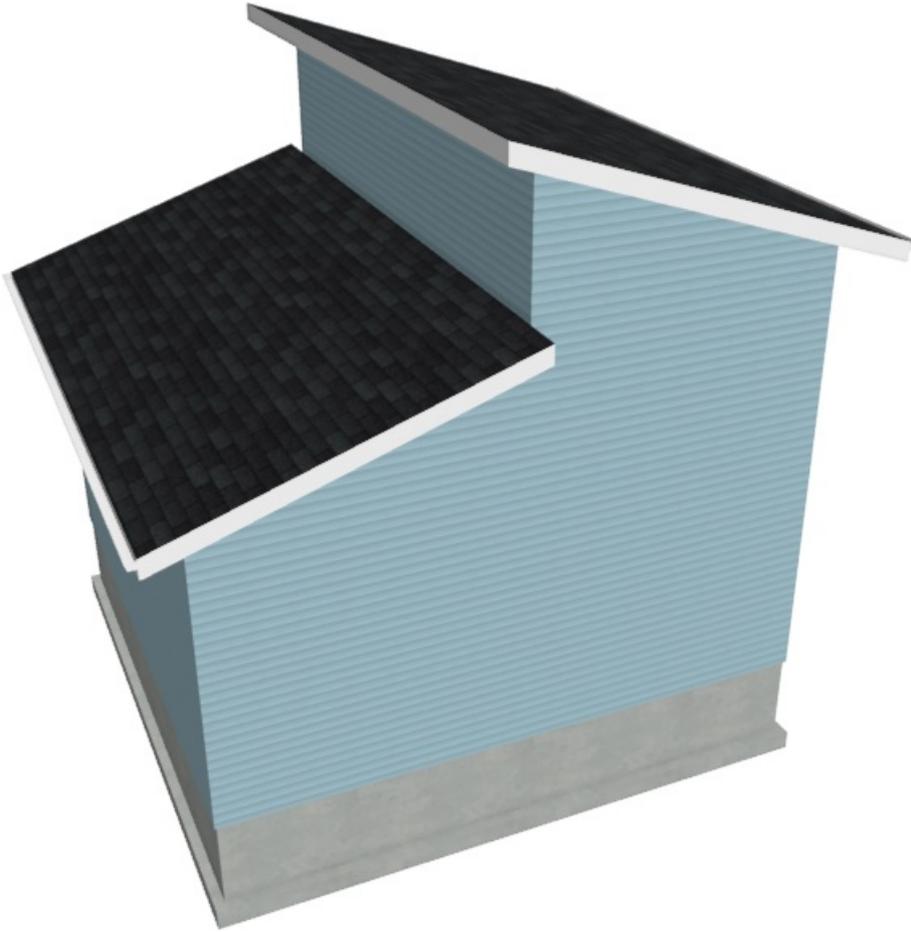
Use Soffit Surface for Ceiling

Ceiling Structure:

Ceiling Finish: Default

- On the **GENERAL** panel, change the **Room Type** to **Open Below**.
- On the **STRUCTURE** panel, uncheck **Flat Ceiling Over This Room**.
- This would also be a good time to change the **Rough Ceiling** value again if needed.
- Click **OK** to confirm the changes and close the dialog.

8. Lastly, take a **Camera**  view to see the results.



Related Articles

 [Creating Multiple Shed Roofs \(/support/article/KB-01020/creating-multiple-shed-roofs.html\)](/support/article/KB-01020/creating-multiple-shed-roofs.html)

 [Specifying Roof Pitches \(/support/article/KB-00127/specifying-roof-pitches.html\)](/support/article/KB-00127/specifying-roof-pitches.html)