

Creating a Pole Barn Structure

KB-01081

The information in this article applies to:



QUESTION



I would like to design a pole building. How can I do this in Home Designer?

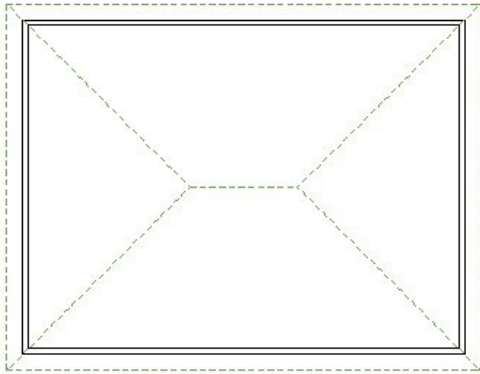


ANSWER



In Home Designer, a simple pole structure can be easily created using Railings.

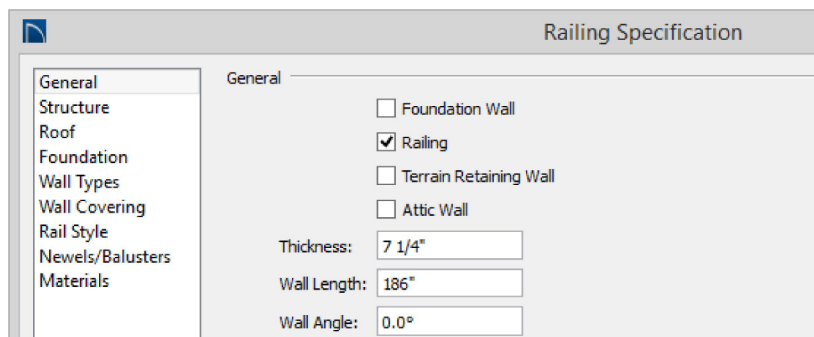
To create the building perimeter

1. Open the Home Designer plan in which you would like to create a pole structure or select **File> New Plan**  from the menu to open a new, blank plan using the Default style template.
2. Select **Build> Wall> Straight Railing**  from the menu, then click and drag in the drawing area to draw an enclosed rectangular structure.

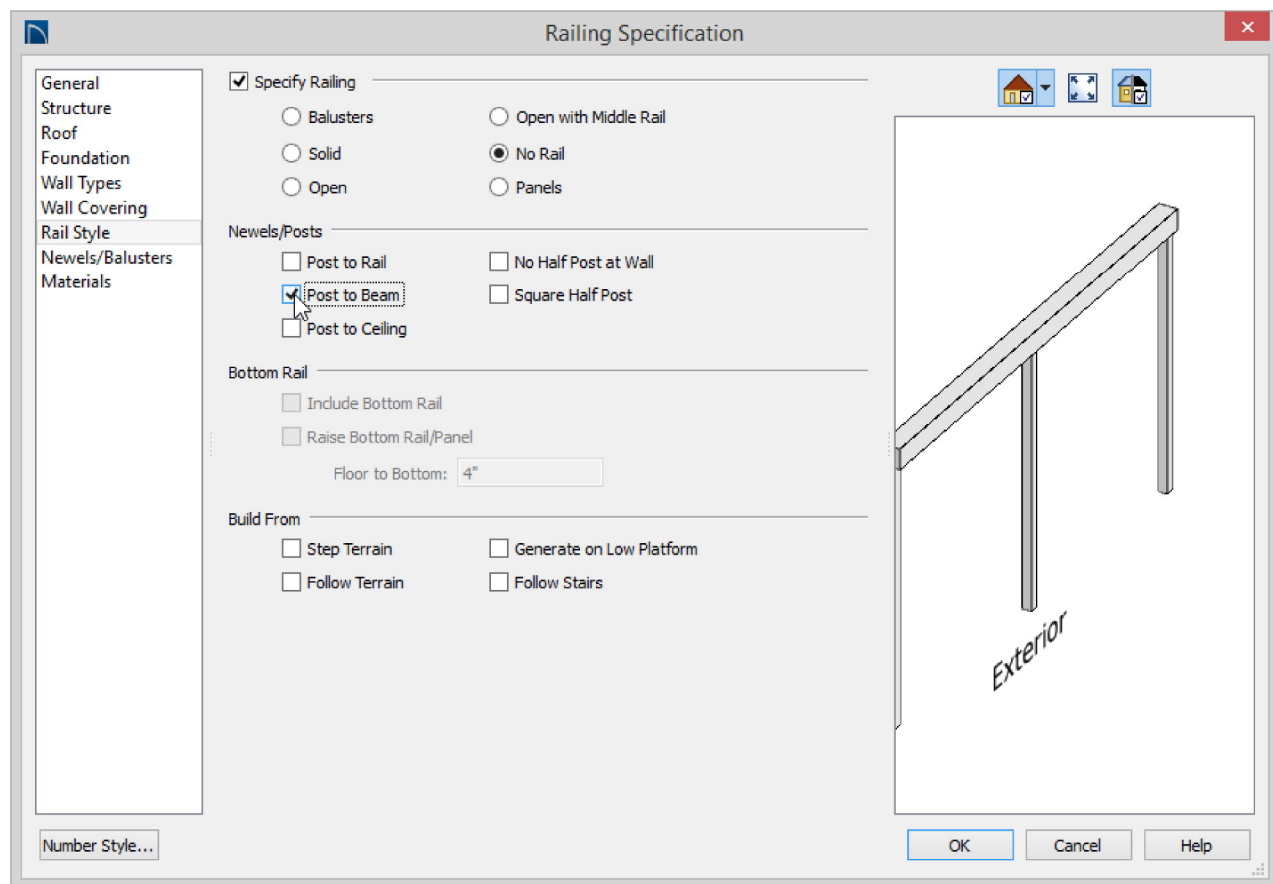


- In this example, a 30' x 40' structure is drawn.

3. With the **Select Objects**  tool, click on the wall to select it, then click the **Open Object**  edit button to open the **Railing Specification** dialog.
4. On the **General** section:

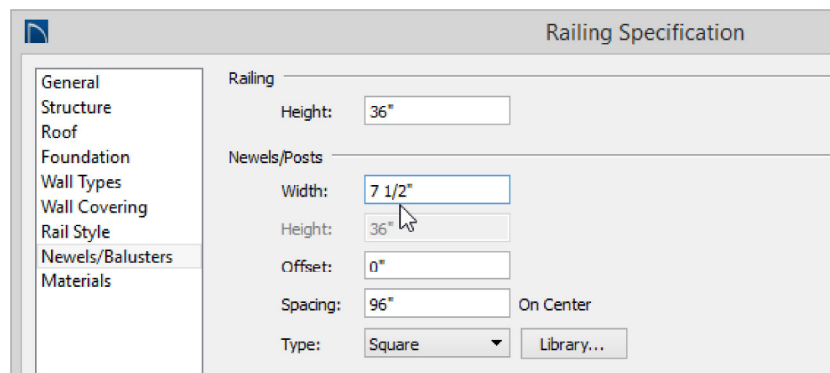


- Specify the **Thickness** to equal the size of posts that you want. In this example, 7 1/4" is used.
 - Uncheck **No Locate** so that the railing will be located if you choose to use the Auto Exterior Dimensions tool.
5. On the **Rail Style** panel:



- Specify the **Railing Type** to be **No Rail**.
- Specify the **Railing Option** to be **Post to Overhead Beam**.

6. On the **Newels/Balusters** section:



- Increase the **Newel Width** to be the same as the railing's width - in this example, 7 1/4".
- If you'd like, you can select the **Newel Type** and specify an on center (O.C.) spacing for the newels. In this example, we will use Square newels and 96" O.C.
- Click **OK** to close the dialog and apply your changes.



7. Repeat this procedure for each of your structure's perimeter walls.

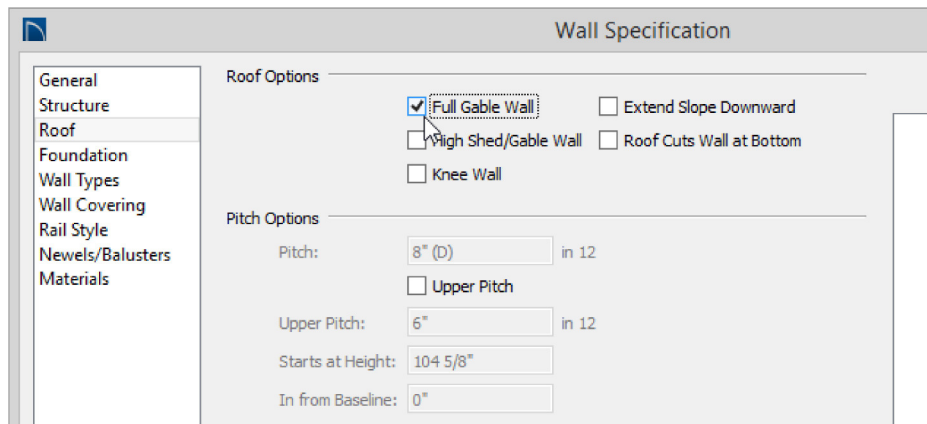
8. Select **3D> Create Camera View> Full Overview**  to see the results so far.




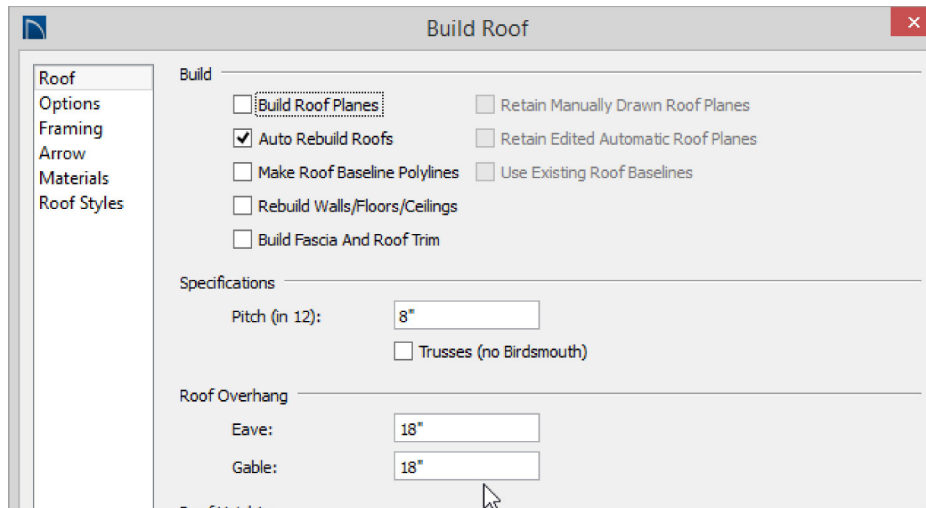
By default, the program will generate a roof plane over each exterior wall, producing a hip roof.

To create a gable roof

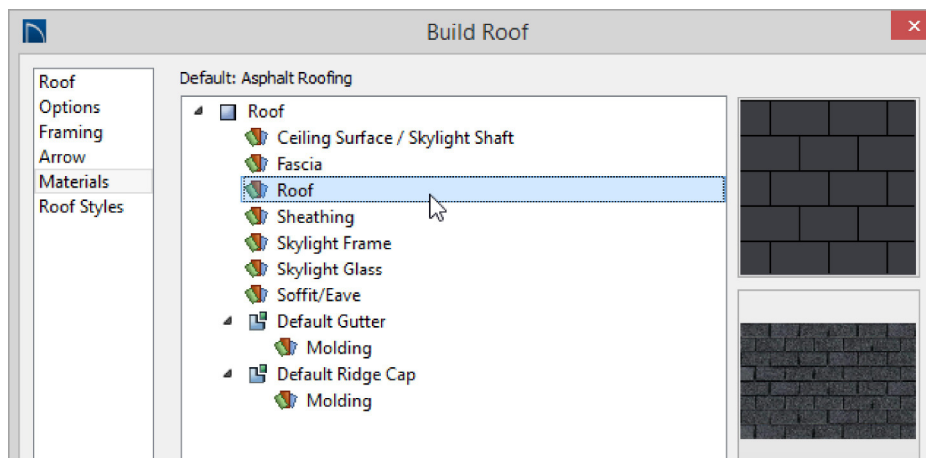
1. Click the **Select Objects**  button, then click on a wall that you would like to have a triangular gable wall above instead of a roof plane.
2. With the wall selected, click on the **Open Object**  edit tool to open the **Wall Specification** dialog. On the **Roof** panel, place a check the box beside **Full Gable Wall**, then click **OK**.



3. Select **Build> Roof> Build Roof**  to open the **Build Roof** dialog.
 - o On the **Roof** section, specify the desired **Pitch** and **Overhang** values.




- On the **Materials** section, you can select materials for the Roof surface, Fascia, and more.

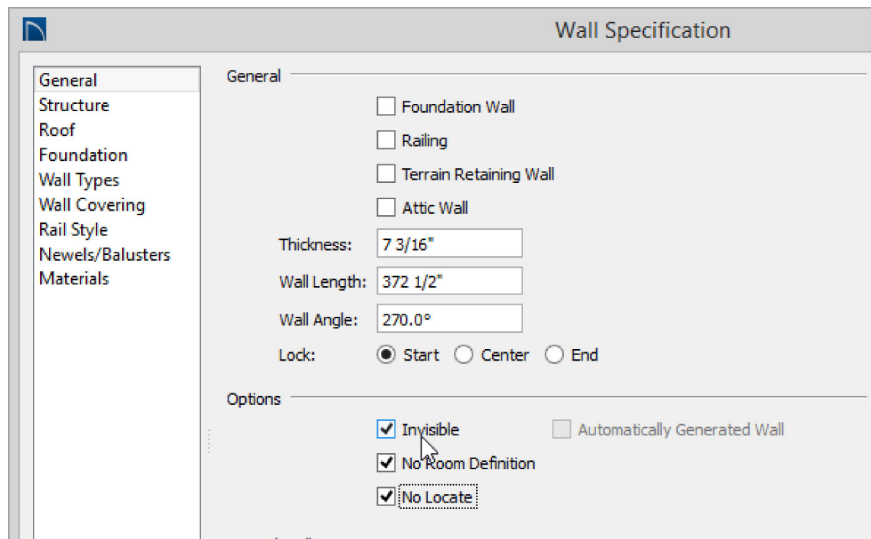


- When you are finished, click **OK** to rebuild the roof.



- If you would like to have an open gable rather than one enclosed by a wall with siding, select the gable wall and click the **Open Object**  edit button.

- In the Warning message box that displays, click **OK**.
- On the **General** section of the **Wall Specification** dialog, check the box beside **Invisible**.





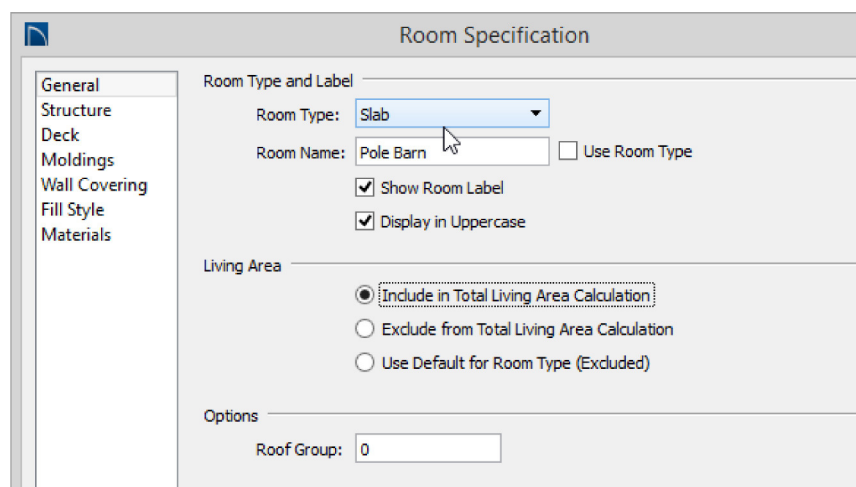
- Click **OK**.



The default floor structure for a new room is a framed platform with wood flooring. This can be easily changed to a slab, or to no floor platform whatsoever.

To add a concrete monolithic slab floor

1. Click the **Select Objects**  button, then click in an empty space in the pole structure's room to select it, then click the **Open Object**  edit tool. In the **Room Specification** dialog.
2. On the **General** section:




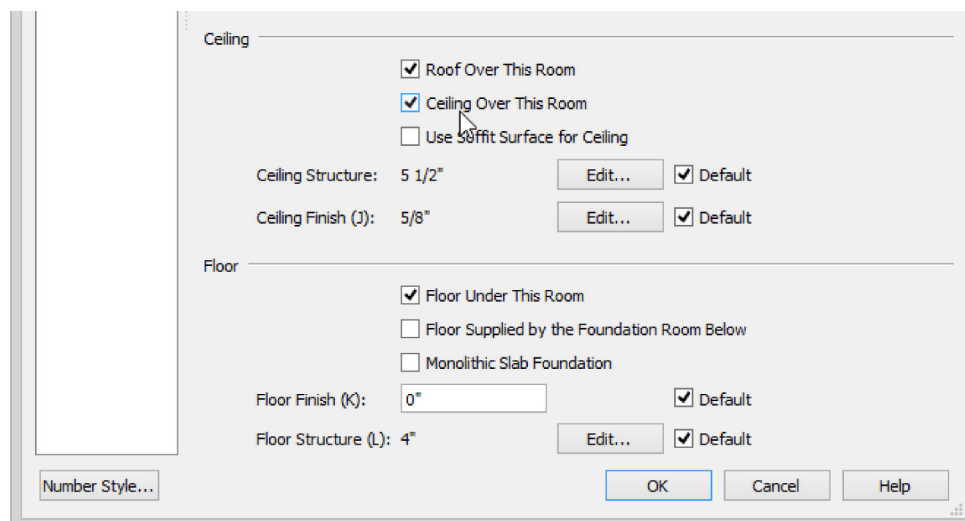
The **Room Specification** dialog box is shown with the **General** tab selected. The **Room Type and Label** section has **Room Type** set to **Slab** and **Room Name** set to **Pole Barn**. The **Use Room Type** checkbox is unchecked. The **Show Room Label** and **Display in Uppercase** checkboxes are checked. The **Living Area** section has the **Include in Total Living Area Calculation** radio button selected. The **Options** section has **Roof Group** set to **0**.

- For a concrete slab, select "Slab" from the **Room Type** drop-down list.
- For a structure with no floor, select "Open Below" as the **Room Type**.
- If you'd like, you can uncheck **Use Room Type** and then type a custom **Room Name** in the text field.
- Under the **Living Area** heading, select the radio button beside **Include in Total Living Area Calculation**.
- Click the **OK** button to close the dialog and apply your changes.

Most pole barns use the underside of the roof as a ceiling rather than a flat ceiling. This is easily specified.

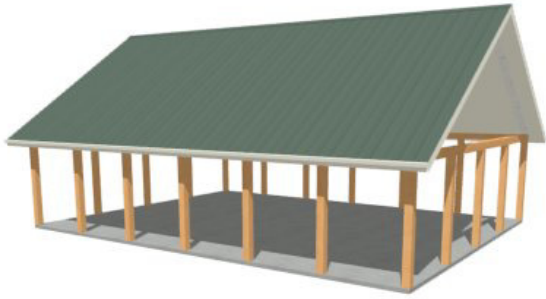
To create a sloped ceiling

1. Select the room and click on the **Open Object**  edit button once more.
2. On the **Structure** section of the **Room Specification** dialog, uncheck the check box beside **Ceiling Over This Room** and click **OK**.



The **Room Specification** dialog box is shown with the **Structure** tab selected. The **Ceiling** section has the **Roof Over This Room** checkbox checked, the **Ceiling Over This Room** checkbox checked, and the **Use Soffit Surface for Ceiling** checkbox unchecked. The **Ceiling Structure** is set to **5 1/2"** and the **Ceiling Finish (J)** is set to **5/8"**. The **Floor** section has the **Floor Under This Room** checkbox checked, the **Floor Supplied by the Foundation Room Below** checkbox unchecked, and the **Monolithic Slab Foundation** checkbox unchecked. The **Floor Finish (K)** is set to **0"** and the **Floor Structure (L)** is set to **4"**. The **OK**, **Cancel**, and **Help** buttons are at the bottom right.

3. You can also change the Ceiling Covering material on **Materials** section, then click the **OK** button.



Use corbels from the Library Browser to add angled braces at the top of the posts, or add other Millwork objects to add details to your structure, and add vehicles for space planning. If you don't see an item in the Home Designer library that suits your needs, you can import symbols from other sources. To learn more, see the related article below.