

Creating an Open Pole Barn Carport or Pavilion

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The information in this article applies to:



Question




I would like to design an open pole barn structure to use as a carport or pavilion. How can I do this in Home Designer?



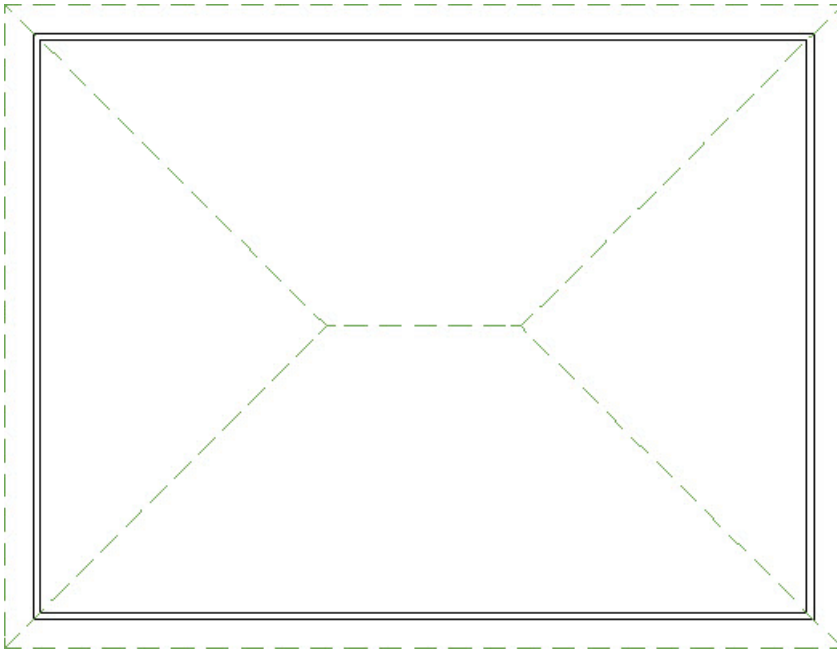
ANSWER



A simple open pole structure can be created using Railings. In Home Designer Pro, you can also use the dedicated Framing tools such as the Post, Beam, and Truss tools to accomplish this task.

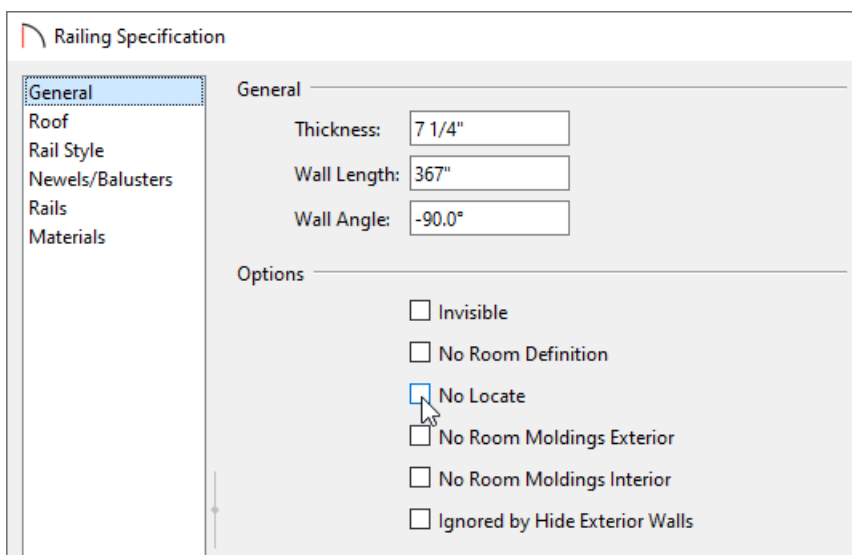
To create the building perimeter

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.
2. Select **Build > Railing and Deck > 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. Using the **Select Objects**  tool, click on one of the railings to select it, then click the **Open Object**  edit tool.
4. On the **GENERAL** panel of the **Railing Specification** dialog that displays:

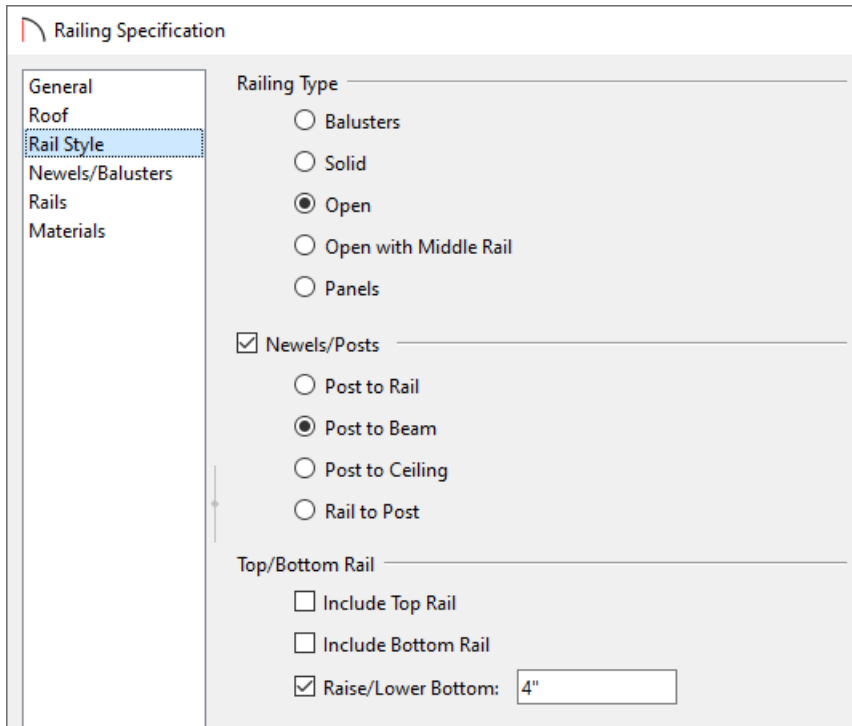


- o Specify the **Thickness** to equal the size of posts that you want.

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:

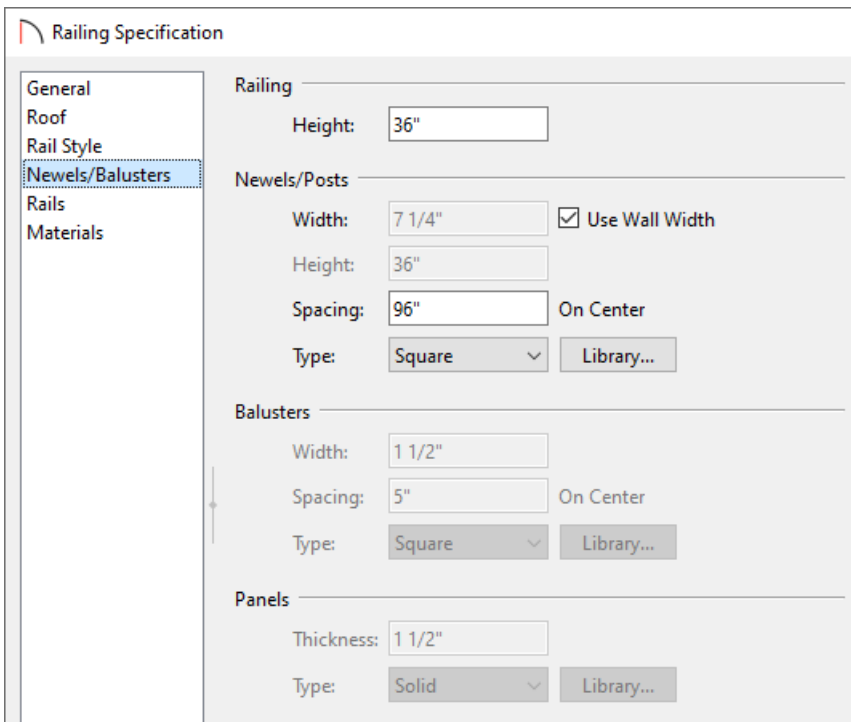


The screenshot shows the 'Railing Specification' dialog box with the 'Rail Style' panel selected in the left-hand menu. The 'Rail Style' panel contains the following settings:

- Railing Type**
 - Balusters
 - Solid
 - Open
 - Open with Middle Rail
 - Panels
- Newels/Posts**
 - Post to Rail
 - Post to Beam
 - Post to Ceiling
 - Rail to Post
- Top/Bottom Rail**
 - Include Top Rail
 - Include Bottom Rail
 - Raise/Lower Bottom:

- Specify the Railing Type to be **Open**.
- Specify the Newels/Posts to be **Post to Beam**.
- Uncheck both **Include Top Rail** and **Include Bottom Rail**.

6. On the **NEWELS/BALUSTERS** panel:

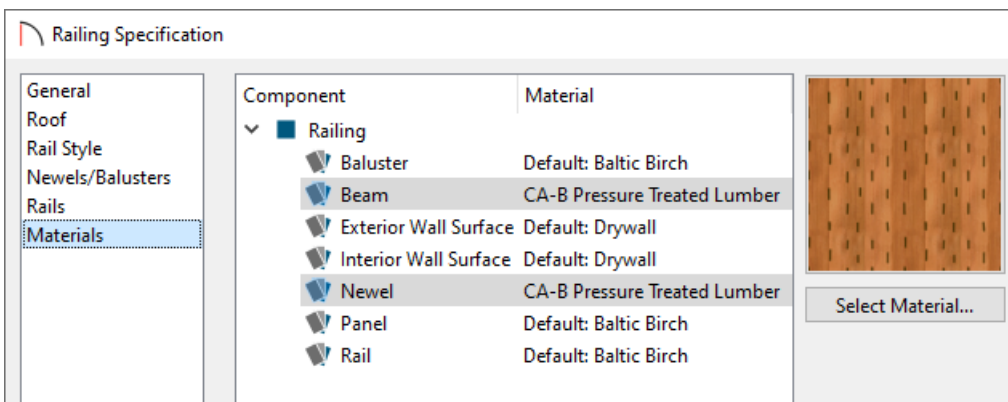


- Ensure that the **Width** of the Newels/Posts is the same as the railings width. This will be grayed out if the **Use Wall Width** box is checked.
- If you'd like, you can specify the (O.C.) **Spacing** for the Newels/Posts, as well as the **Type**.

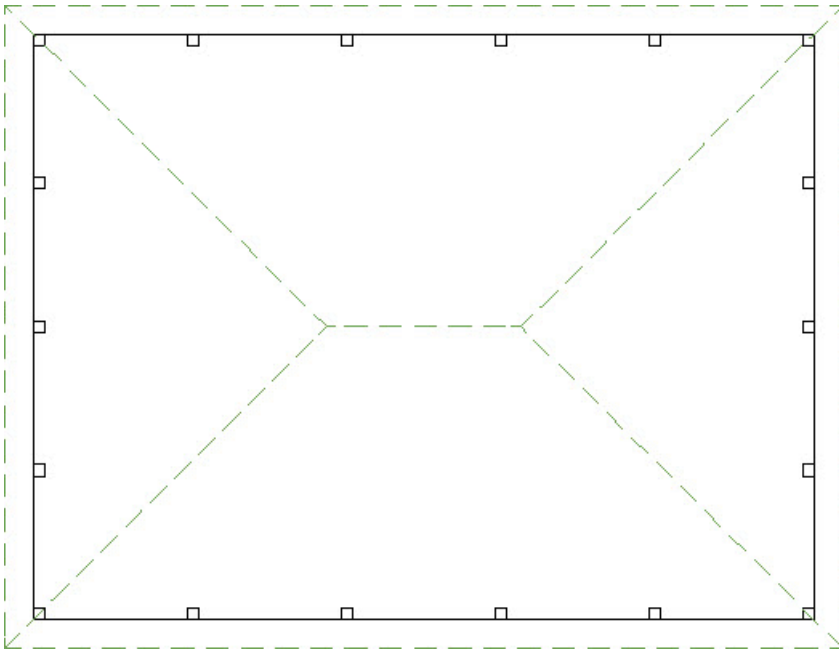
In this example, we will use Square newels and 96" Spacing, which are the defaults.

7. On the **MATERIALS** panel, change the materials of the **Beam** and **Newel** components, then click **OK** to close the dialog.

In this example, the CA-B Pressure Treated Lumber material is used.



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




In situations where no posts are desired on one or more sides of your structure, you can either specify the Spacing (O.C.) to be as large as the total length of the railing wall, or you can set the railing wall to be No Post under the Newels/Posts section within the Railing Specification dialog. Please see Step 5 and Step 6 above for reference.


9. Take a **Camera**  view to see the results so far.

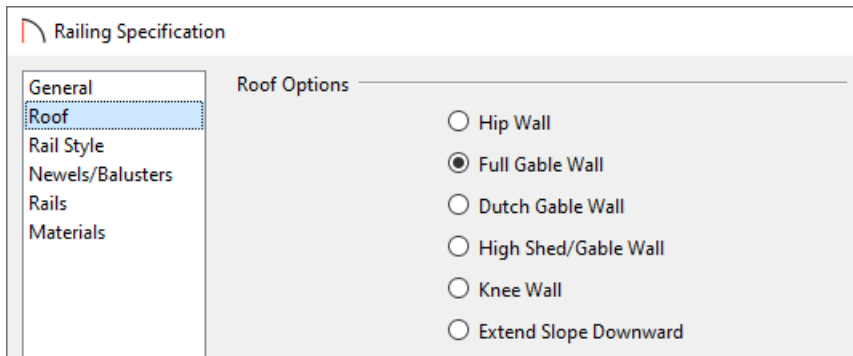



By default, the program will generate a roof plane over each exterior wall, defining a hip roof.

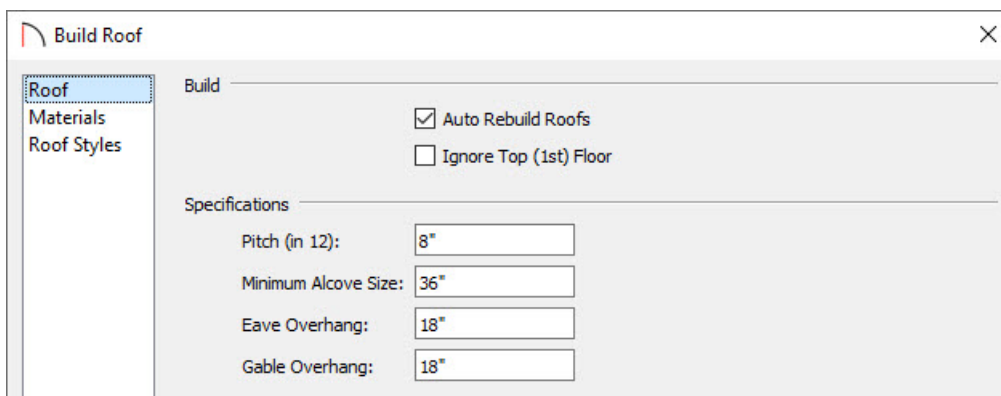
To create a gable roof


1. Click the **Select Objects**  button, then click on a railing wall that you would like to have a gable above.

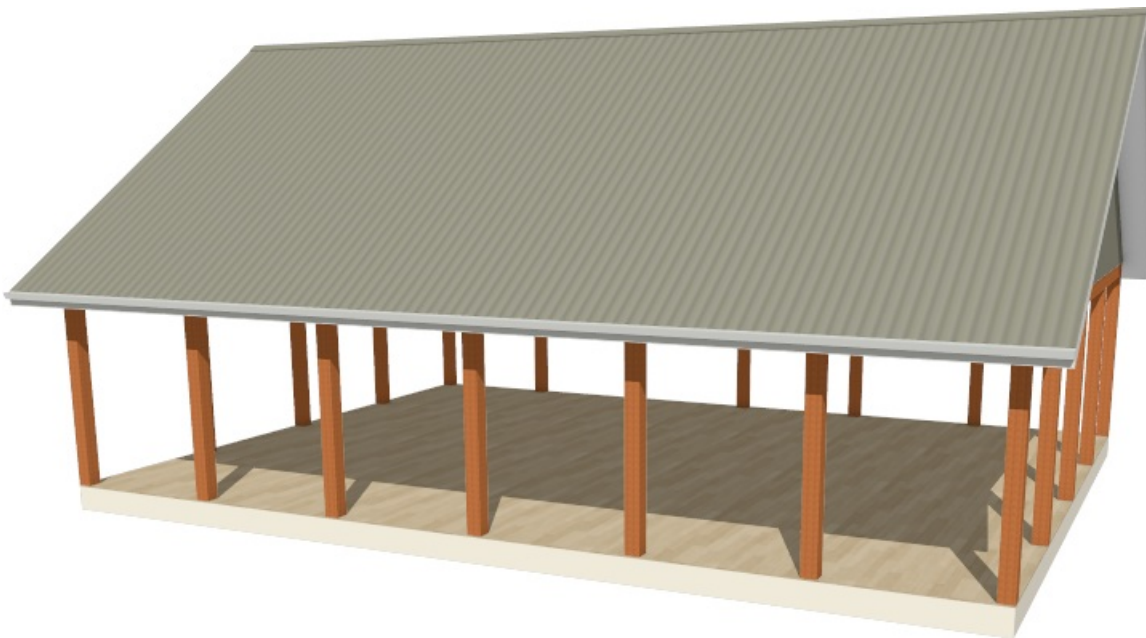
2. With the railing wall selected, click on the **Open Object**  edit tool.
3. On the **Roof** panel of the **Railing/Wall Specification** dialog that opens, select the **Full Gable Wall** option, then click **OK**.



4. Select **Build> Roof> Build Roof**  from the menu.
5. On the **Roof** panel of the **Build Roof** dialog that opens, specify the desired **Pitch** and **Overhang** values.



6. On the **MATERIALS** panel, you can select materials for the **Roof Surface**, Fascia, and more.
7. When you are finished making your desired changes, click **OK** to rebuild the roof and take a **Camera**  view to see the results.





Note: If you would like to have an open gable rather than one enclosed by a physical wall, navigate up to Floor A (Attic) in a plan view, select each of the gable attic walls here, and click the Make Wall(s) Invisible edit tool.

A Question box may appear that mentions that you're editing an automatically generated wall. Click Yes to confirm the change.

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. Using the **Select Objects**  tool, click in an empty space in the pole structure's room to select it, then click the **Open Object**  edit tool.
2. On the GENERAL panel of the **Room Specification** dialog that opens:

A screenshot of the 'Room Specification' dialog box. The 'General' tab is selected in the left-hand sidebar. The main area is divided into two sections: 'General' and 'Living Area'. In the 'General' section, 'Room Type' is set to 'Slab' in a drop-down menu, and 'Room Name' is 'Pole Barn' in a text field with a hand icon. There is a checked checkbox for 'Show Room Label'. In the 'Living Area' section, there are three radio button options: 'Include in Total Living Area Calculation' (which is selected), 'Exclude from Total Living Area Calculation', and 'Use Default (Excluded)'.

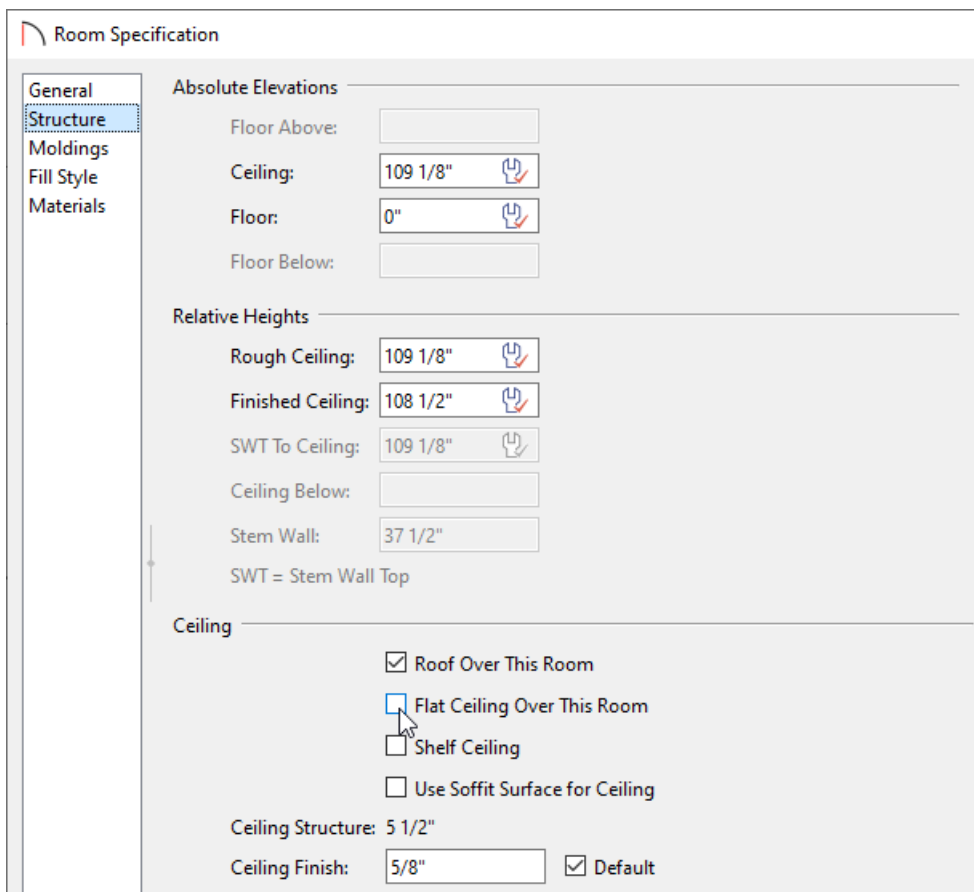
- Use the **Room Type** drop-down and select the "Slab" option if you're wanting a concrete slab.

- For a structure with no floor, select "Open Below."
- If you'd like, you can 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 **OK** 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 can be 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** panel of the **Room Specification** dialog, uncheck **Flat Ceiling Over This Room**, then click **OK**.





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

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.

Related Articles

- 📄 [Creating Beams in Home Designer Pro \(/support/article/KB-00458/creating-beams-in-home-designer-pro.html\)](/support/article/KB-00458/creating-beams-in-home-designer-pro.html)
- 📄 [Downloading Library Catalogs \(/support/article/KB-00048/downloading-library-catalogs.html\)](/support/article/KB-00048/downloading-library-catalogs.html)
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- 📄 [Locating and Importing 3D Symbols \(/support/article/KB-00888/locating-and-importing-3d-symbols.html\)](/support/article/KB-00888/locating-and-importing-3d-symbols.html)