

Drawing an Octagonal Structure with Railings

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The information in this article applies to:



QUESTION

I am trying to draw a deck structure in the shape of an octagon and I want all eight sides to be of equal length. I am having a difficult time accomplishing this as every time I adjust the length of one wall, another wall changes.

How do I draw an octagon shaped structure with equal sides?

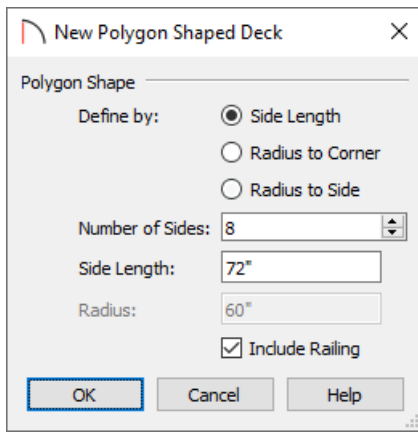
ANSWER

Creating an octagonal structure with railings is easy to accomplish using the Polygon Shaped Deck tool.

The [Chief Architect Premier](https://www.chiefarchitect.com/products/premier/) (<https://www.chiefarchitect.com/products/premier/>) version of the software also has a Polygon Shaped Room tool, which automatically creates walls, instead of railings.

To create an octagonal structure with railings

1. Select **Build> Railing and Deck> Polygon Shaped Deck**  to display the **New Polygon Shaped Deck** dialog.



- Choose your desired **Define by** setting.

In this example, we have selected Side Length.



- Set the **Number of Sides** and either the **Side Length** or **Radius**.

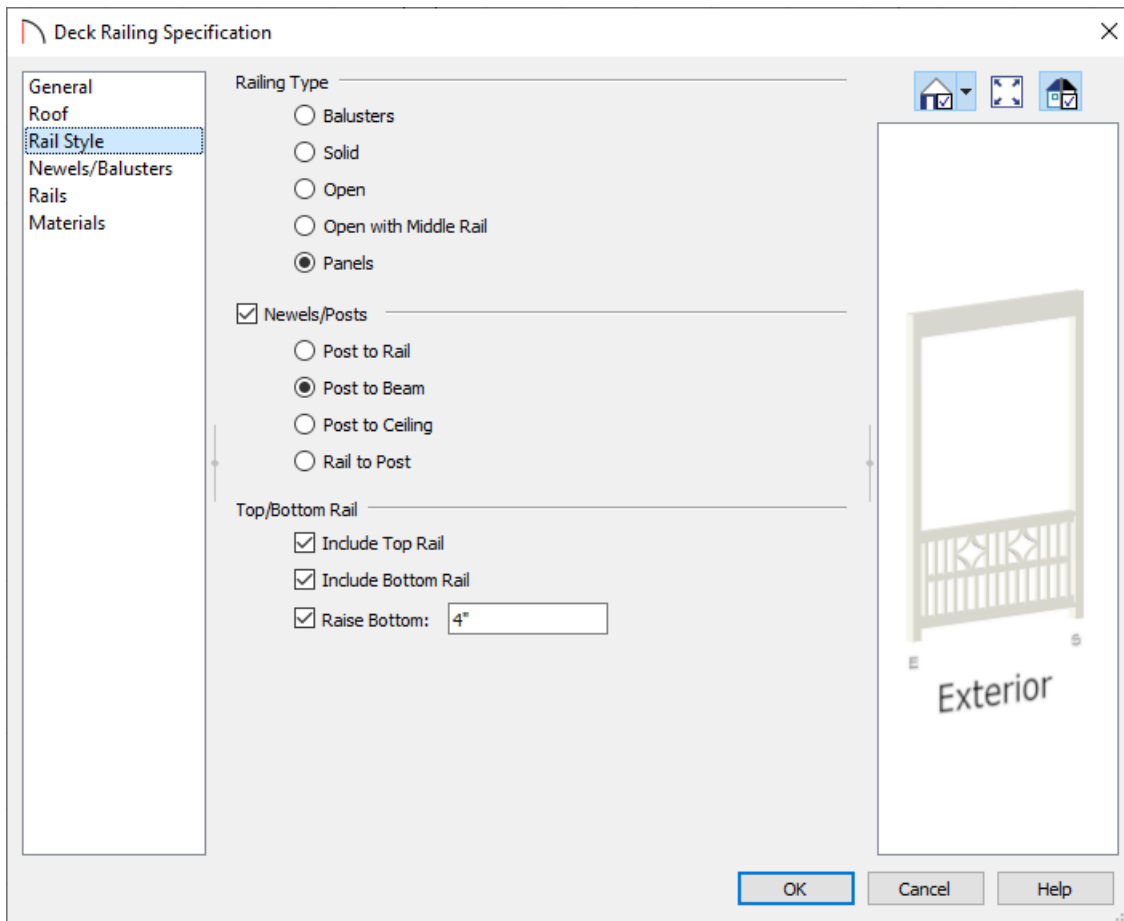
In this example, 8 sides are specified, with each side having a length of 6' (72").

- Leave the check next to **Include Railing** if you would like physical deck railings to be generated. If you uncheck this box, invisible railings will generate to form the octagonal structure.

2. Once these values are set to your liking, click **OK**, then simply click in plan view at the location you want to place the polygon shaped deck.

To customize the railings

1. Once you have placed the deck, use the **Select Objects**  tool to click on one of the deck railings, then select the **Open Object**  edit button.
2. In the **Deck Railing Specification** dialog that displays:



- Select the **RAIL STYLE** panel, choose your desired **Railing Type**, how you would like the Newels/Posts to generate, as well as other properties for the rails.

In this example, we have selected the Panels option and have selected the Post to Beam option.

- On the **NEWELS/BALUSTERS** panel, you can specify the **Height** of the railing, properties for Newels/Posts and Balusters, as well as Panels, if chosen.

In this example, we selected the Library button next to the Panel Type and selected the Acapulco panel option located in the library by navigating to Home Designer Core Catalogs> Architectural> Fences & Railings> Decorator.



- On the **RAILS** panel, specify the **Width** and **Height** for each rail, as well as the Beam, if necessary.
- On the **MATERIALS** panel, choose the appropriate materials for each component of your railing.

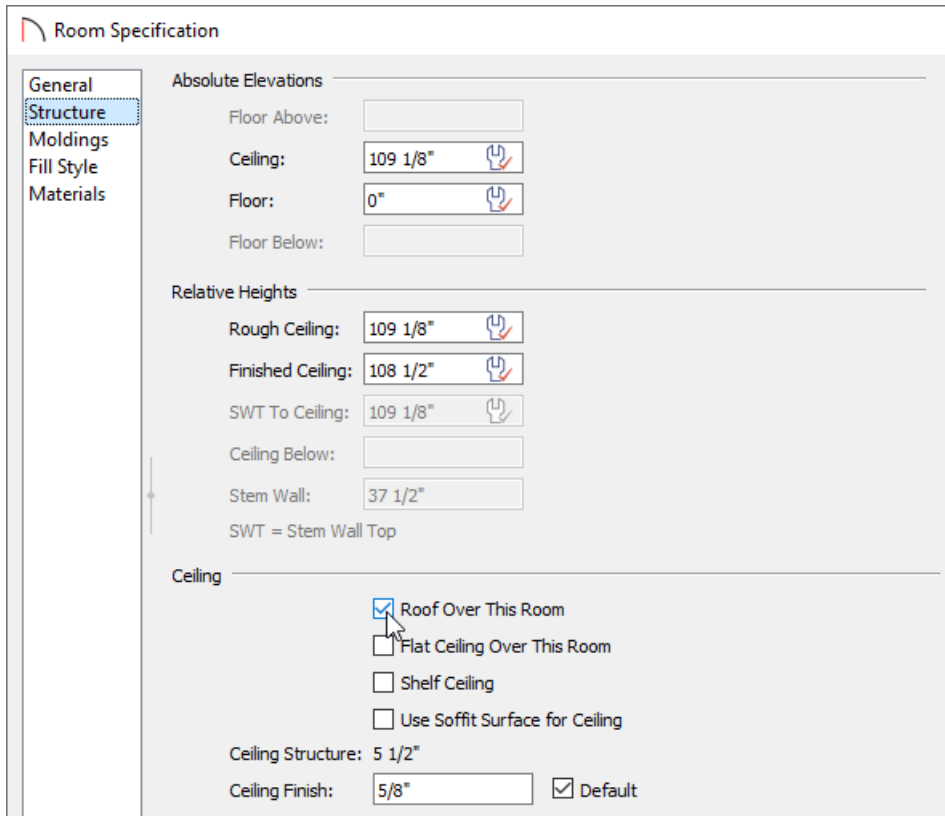
3. Click **OK** to apply the changes. Repeat this procedure for each of the subsequent railings.

Note: You can also group select railings and change their properties all at once. To learn more, please see the "Group Selecting Objects" resource in the [Related Articles](#) section below.


By default, a roof does not generate over a deck room. However, you can tell the program that you do want a roof over this area by following the instructions below.

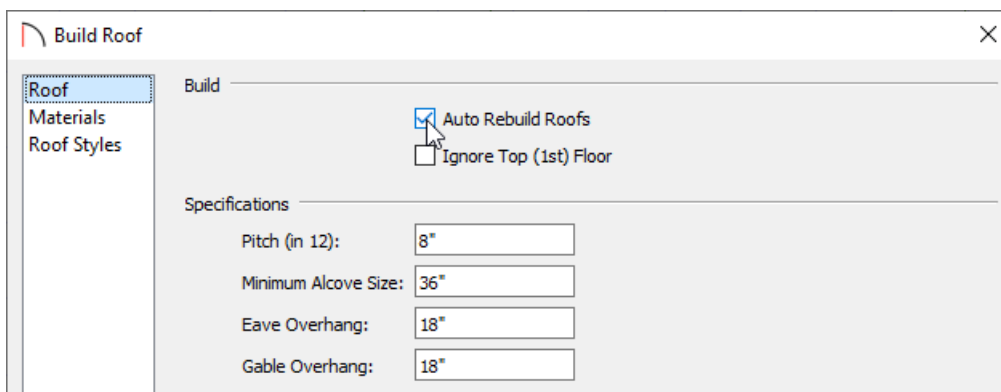
To generate a roof over the structure

1. Using the **Select Objects**  tool, click inside of the octagonal room enclosed by railings, then click on the **Open Object**  edit button.
2. On the **STRUCTURE** panel of the **Room Specification** dialog that displays, place a check in the **Roof Over This Room** box, then click **OK**.



3. If **Auto Rebuild Roofs** is enabled, your structure will update to have a roof over it, based on the pitch and material settings in the **Build Roof** dialog.

If the roof doesn't generate or update, navigate to **Build > Roof > Build Roof**  from the menu, check the **Auto Rebuild Roofs** box located on the **Roof** panel, then click **OK**.



4. Take a **Camera**  view to see the results.



Related Articles

- [🏠 Creating a Covered Patio \(/support/article/KB-01010/creating-a-covered-patio.html\)](/support/article/KB-01010/creating-a-covered-patio.html)
- [🏠 Creating a Custom Pergola \(/support/article/KB-00889/creating-a-custom-pergola.html\)](/support/article/KB-00889/creating-a-custom-pergola.html)
- [🏠 Group Selecting Objects \(/support/article/KB-00624/group-selecting-objects.html\)](/support/article/KB-00624/group-selecting-objects.html)