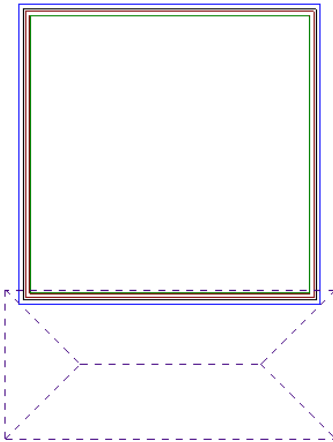


Creating a Porch Roof

Envisioneer's versatile roofing functions make it possible to create shed and verandah roofs with ease. In this article we step you through a sample exercise that illustrates the creation of a simple porch roof.

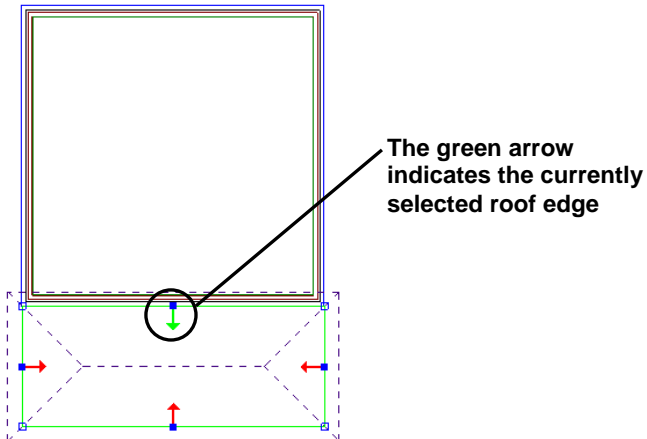
Constructing a Basic Roof

1. Use the **Walls** tool to construct a simple 20' x 20' building.
2. Select **Insert > Roofs > Roof by Picking Points**.
3. In the catalog select the **4/12 Slope Hip Roof, Asphalt Shingles** element in the **Hip** folder.
4. Pick points outside the building to define the outline of the porch roof, then right-click and select **Finish**. The roof's surface edges are marked with a dashed line.

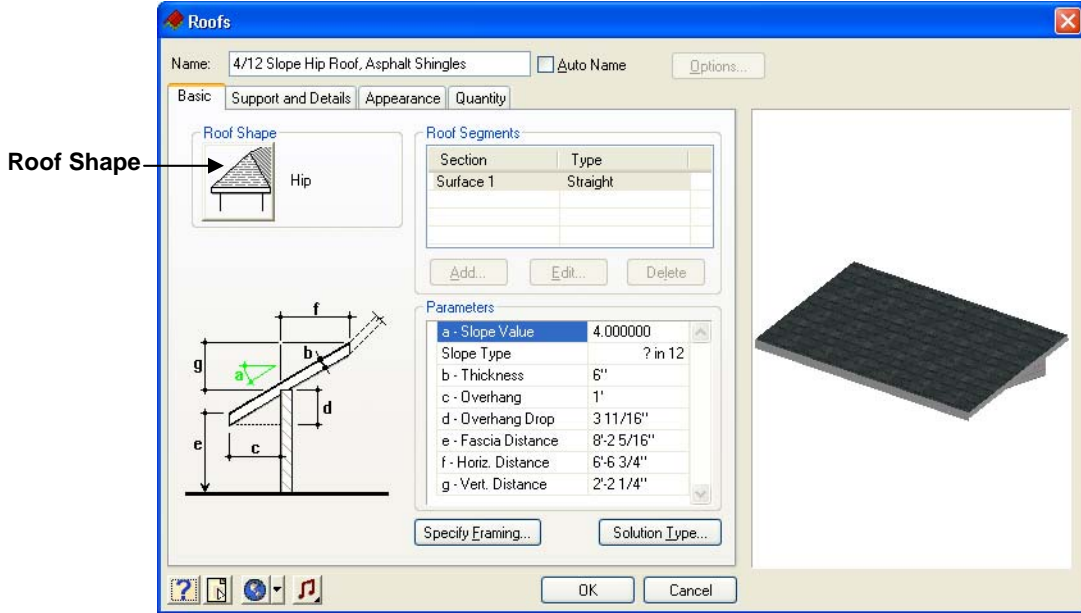


Converting a Roof Edge to a Gable

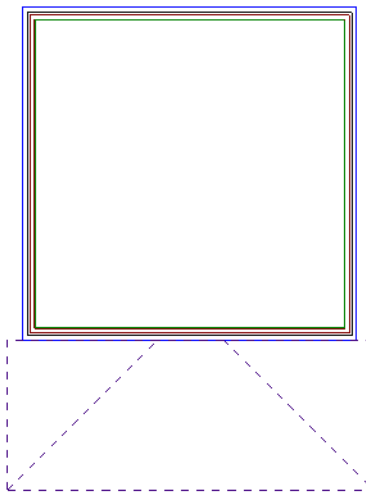
1. Click on the rear overhang line that abuts the house. The plate line is highlighted green. A green arrow appears on the rear roof edge indicating that it is the currently selected roof edge. At this point, general editing tools such as Move and Rotate will affect the roof as a whole. However, changes to the roof's Properties will affect only the rear section of the roof.



2. Right-click and select **Properties**.
3. In the **Roofs** dialog, click the Roof Shape button.

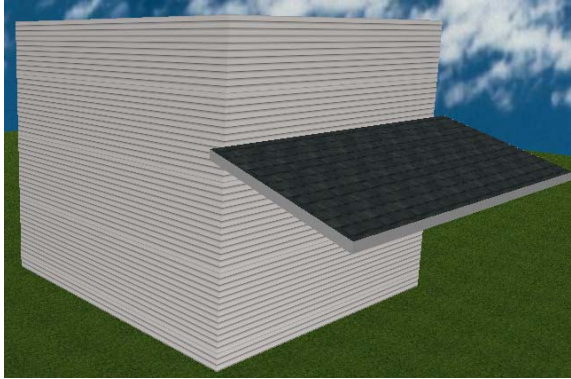


4. In the **Roof Shape** dialog, click on the **Gable** option. You are returned to the **Roofs** dialog, where the settings now correspond to a gable roof style.
5. Click in the **Overhang** edit box and type **0**.
6. Make sure the **Display Gable** check box is disabled. If enabled, this option will display a wall with siding beneath the gable. By leaving this option disabled, the existing wall beneath the gable will extend right up to the peak of the gable.
7. Click **OK** to accept the new roof settings. Your model should now look like this:



Shed Roof

If you wanted you could change the side roof edges to gable as well if you wanted to create a shed roof appearance as shown below.

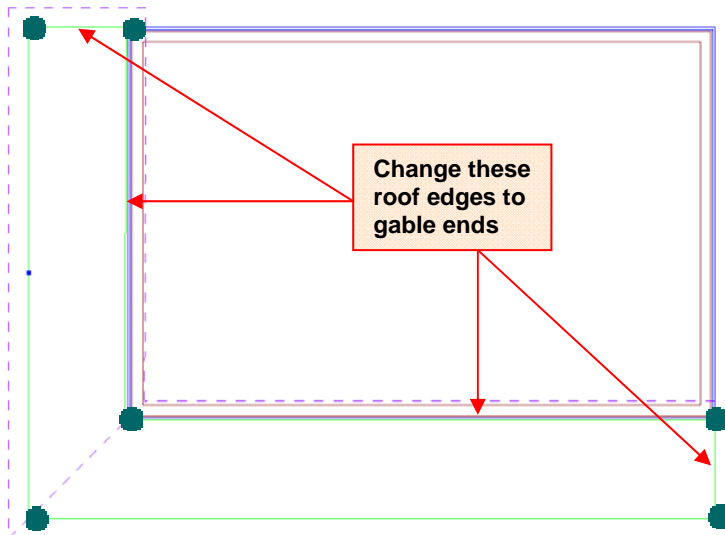


To create a shed roof you can also use the Surfaces tool instead of the Roofs tool to create a sloped roof surface (**Insert > Surfaces > Surfaces**). When using the Surfaces tool you pick points to define the outline of the surface, then specify the height of the upper and lower end, or specify the desired slope.

Wrap-around Porch Roof

When using the Roof by Picking Points tool to create a porch roof, you can pick as many points as you want to define the entire shape of the roof. This allows you to create a wrap-around porch roof.

To create the wrap-around porch shown below, you would select the sides of the building (indicated by the green dots) to create the roof, and then change the sides indicated to gable ends.



Alternatively you could use the Surfaces tool to create the two roof portions, then use the Intersect Planes tool (**Insert > Surfaces > Intersect Planes**) to join the two surfaces together.

Stretching an Existing Roof to Create a Porch Roof

If you have already inserted the main roof, you can use a Move Edge tool to stretch one of its edges to create a porch roof or carport.

1. Click on the roof edge that you want to move. The surface arrow on that edge will be green.
2. Right-click and select **Move Edge**, then select either **Maintain Support Height** or **Adjust Support Height**. The Maintain Support Height option maintains the current support height of the selected roof edge. The Adjust Support Height option allows the support height to adjust as you move the edge. Note however, that when using the Adjust Support Height option, you cannot stretch the roof so that it extends below the floor level of the building location on which the roof resides.
3. Click and drag to stretch the roof, then release your mouse button. Or, pick a start point for the move, then type a stretch distance in the Commander and press Enter.

