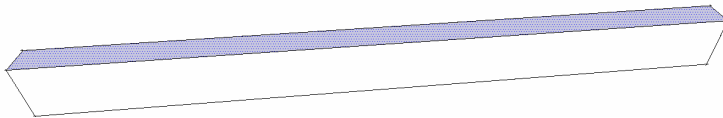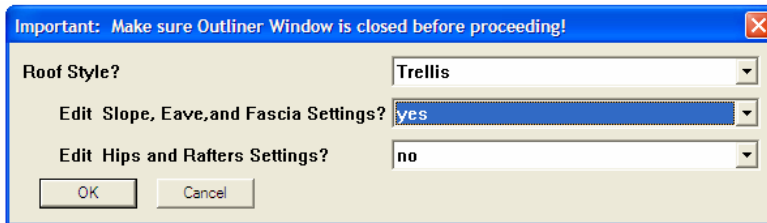# Instant Roof

## *Example:* Hipped Trellis

*In this lesson I make a sloped hip roof trellis. A Gable or Flat trellis can also be made with this method.*
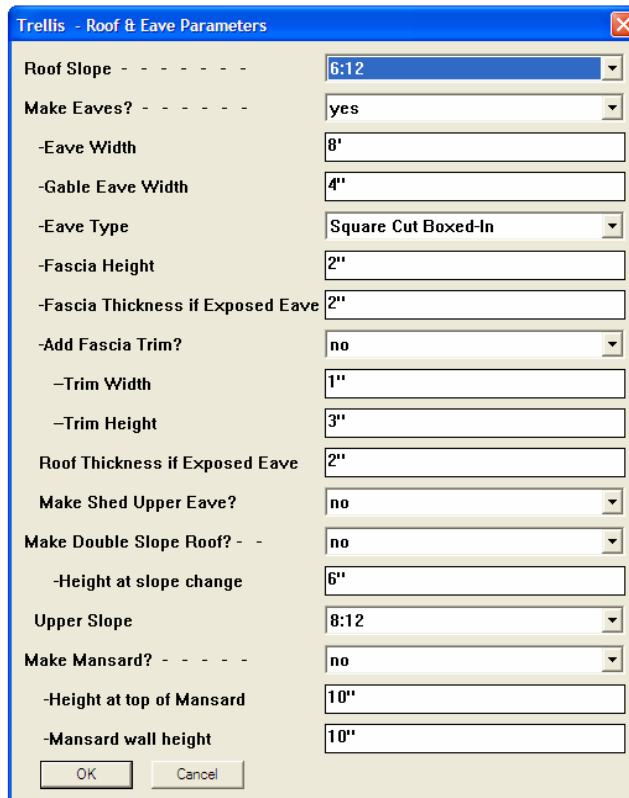
1. Draw a beam shape and select the top face as shown below. Think of the top of the beam as a building outline and the trellis as a wide eave extending from the building.
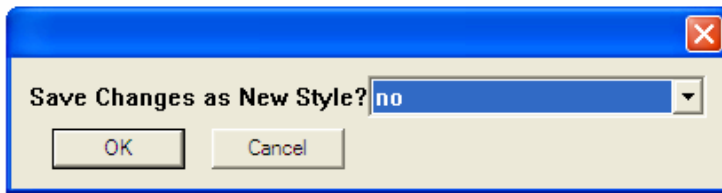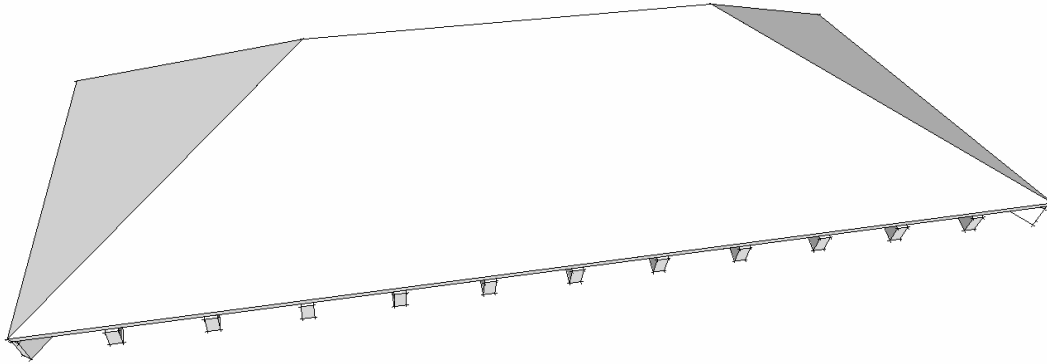
2. Choose "*Plugins/ Instant Roof/ Make Roof*".

**Important: Make sure Outliner Window is closed before proceeding!**

| | |
|---|---|
| Roof Style? | Trellis |
| Edit Slope, Eave,and Fascia Settings? | yes |
| Edit Hips and Rafters Settings? | no |

OK    Cancel

3. In the pop-up menu, then choose "*Trellis*" from the "*Roof Style?*" pull down menu. In the second field, "*Edit Slope, Eave, and Fascia Settings?*", choose "*yes*". Then choose "*OK*" to show the next menu:
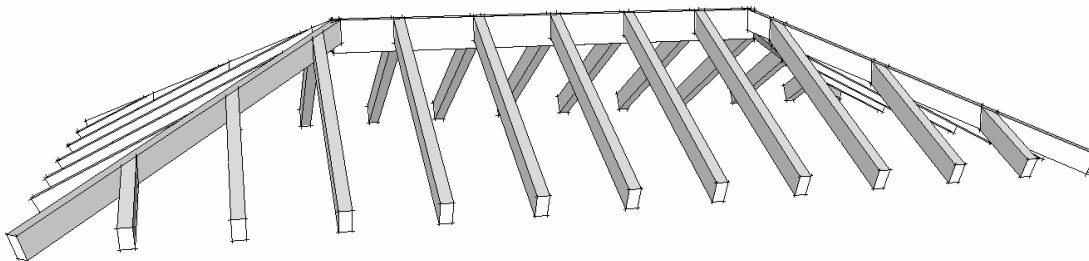
**Trellis  - Roof & Eave Parameters**

| | |
|---|---|
| Roof Slope - - - - - - - | 6:12 |
| Make Eaves? - - - - - - | yes |
| -Eave Width | 8' |
| -Gable Eave Width | 4" |
| -Eave Type | Square Cut Boxed-In |
| -Fascia Height | 2" |
| -Fascia Thickness if Exposed Eave | 2" |
| -Add Fascia Trim? | no |
| —Trim Width | 1" |
| —Trim Height | 3" |
| Roof Thickness if Exposed Eave | 2" |
| Make Shed Upper Eave? | no |
| Make Double Slope Roof? -  - | no |
| -Height at slope change | 6" |
| Upper Slope | 8:12 |
| Make Mansard? - - - - - | no |
| -Height at top of Mansard | 10" |
| -Mansard wall height | 10" |

OK    Cancel

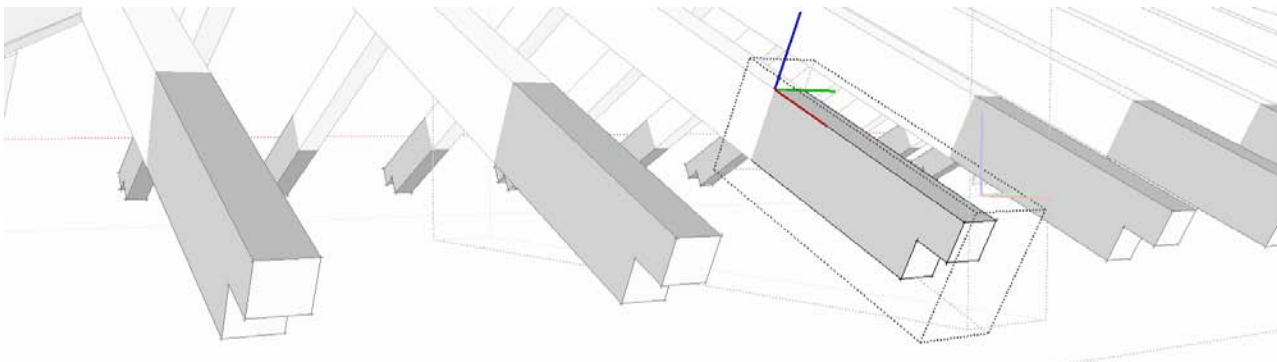4. Under "*Roof Slope*", choose "*6:12*". Then choose "*OK*" to show the next menu:



5. Choose "*OK*" to accept the changes without making a new style. A Hip roof will be generated:
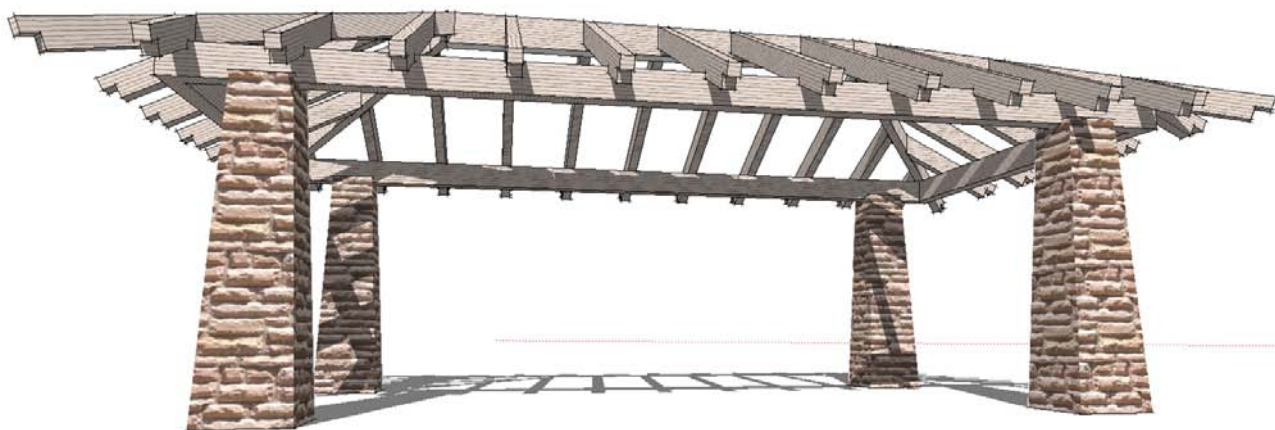


6. Select and erase the 2 groups containing the roof surface and fascia to retain only the beams:



7. Double click the end of a rafter twice to open the end component for editing. Here I draw a horizontal line on the end and used the push-pull tool to make a notch.

8.  I edited a hip beam similarly. Then added some columns, beams, and texture to get the completed structure:
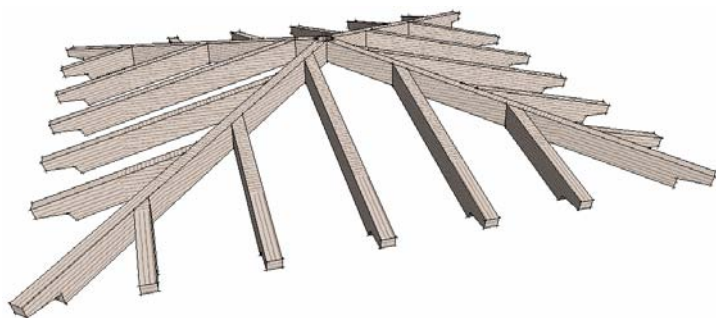
9.  Here are a few more open beam structures that were made using the same method:

Extrude a circle to make a post. Select the top of the post and repeat steps 2-5.

Draw an "L" shaped beam. Select the top face and repeat steps 2-6.

Draw a small square face. Select it and repeat steps 2-6.

Draw a beam. Select the top face plus the short edges on each end. Repeat steps 2-6.