

Creating Exposed Trusses in Home Designer Pro

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Last Modified: **July 16, 2015**

The information in this article applies to:



QUESTION

In Home Designer Pro, how can I create exposed roof trusses in a room with a cathedral ceiling?




ANSWER

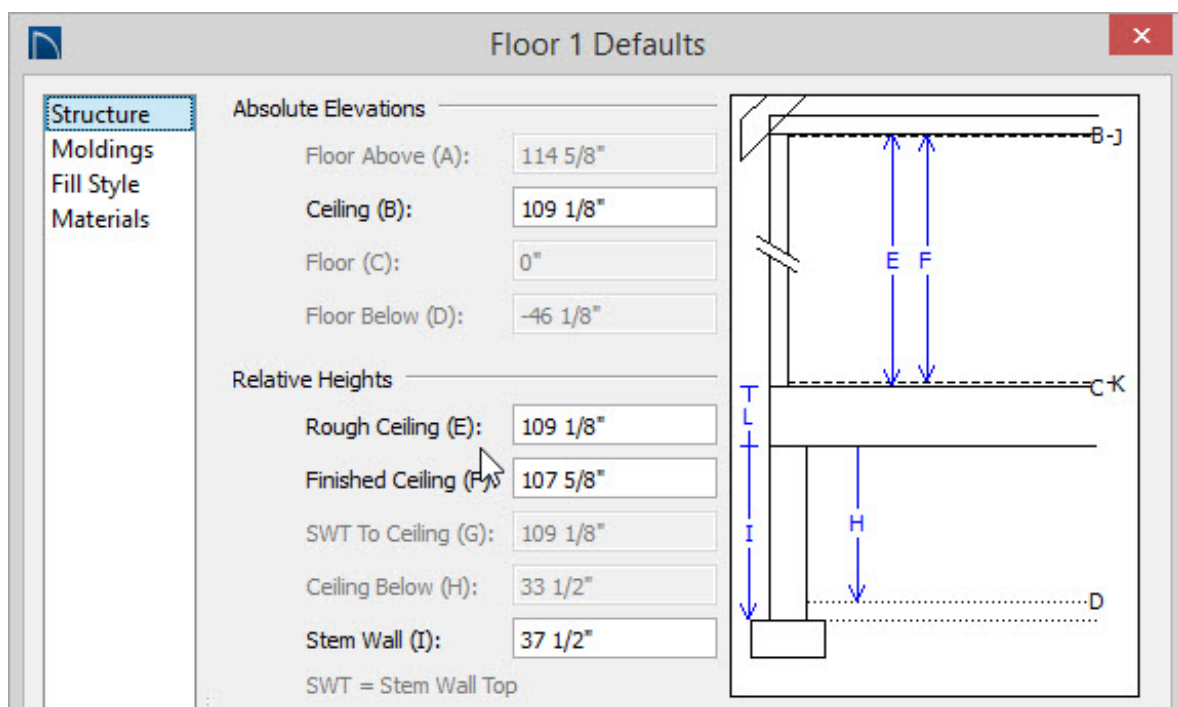
When a roof truss is drawn in Home Designer Pro, the program locates a roof plane to define the top chords of the truss, and a ceiling plane to define the location of the bottom chord. You can create exposed trusses by creating a ceiling to define where you want the trusses' bottom chords, drawing the trusses, and then removing the ceiling.

To set up the structure for exposed trusses

1. Open the plan file in which you would like to create exposed roof trusses.



- In this example, a simple rectangular structure is used.
 - If your plan has multiple floors, go up to the floor where you want to create exposed trusses.
2. Select **Edit> Default Settings**  from the menu. Select **Floor** from the Default Settings list and click the **Edit** button.
 3. On the **STRUCTURE** panel of the **Floor Defaults** dialog for the current floor:

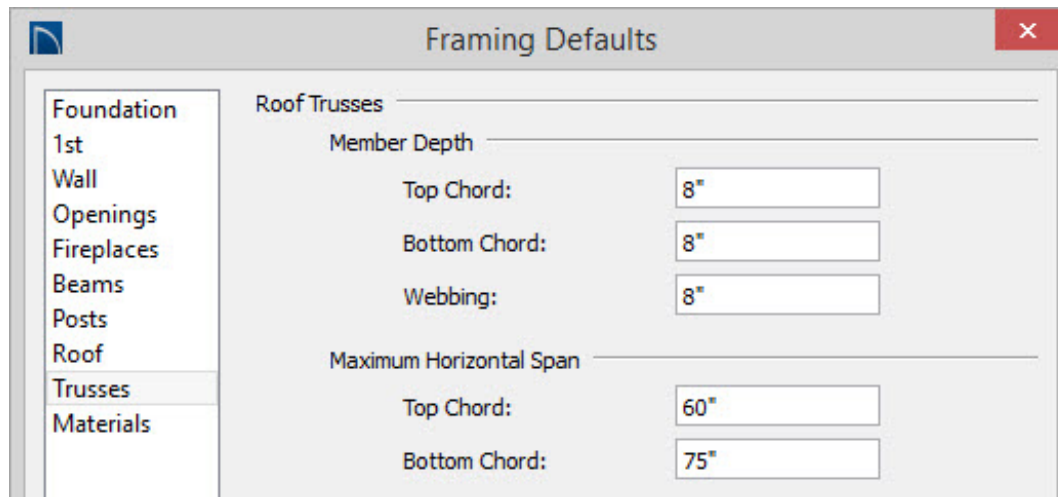


- Specify the desired top plate height for your bearing walls as the **Rough Ceiling** height, then click **OK**. This will also be the height of your roof truss bottom chords in a standard truss. (In version 9 and prior, specify the Ceiling height.)
 - Specifying the Ceiling height in the Floor Defaults dialog will affect all rooms set to use the default on the current floor. If you want to modify the Ceiling height of only one room in your plan, you can do so on the **STRUCTURE** panel of the room's specification dialog.
4. In the **Default Settings** dialog, select **Framing** from the list and click the **Edit**

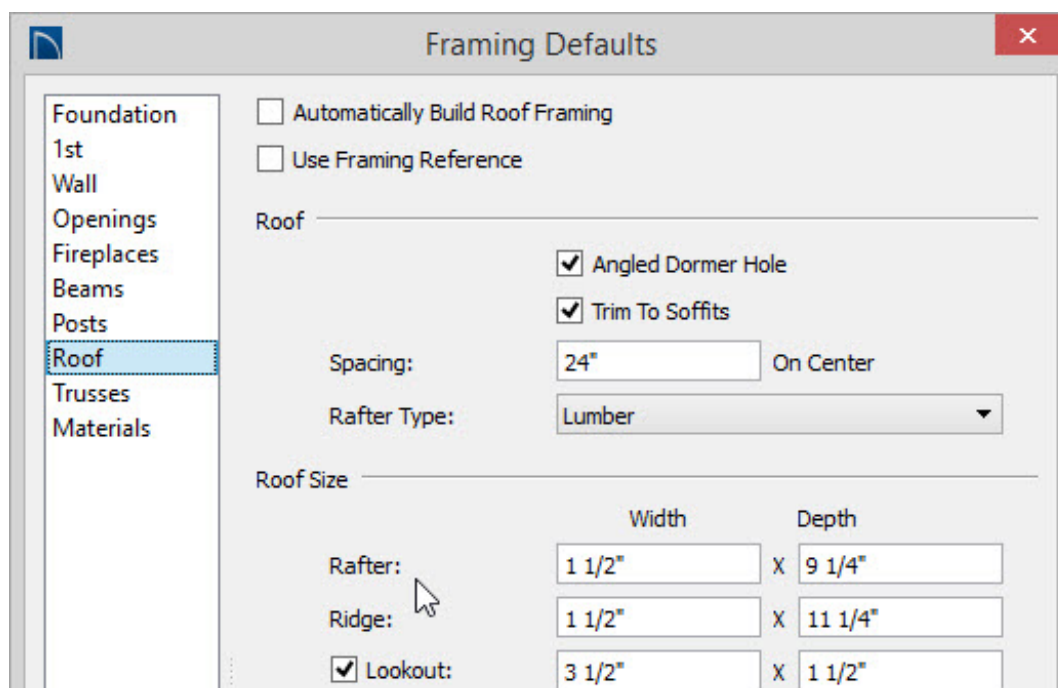
button.

5. In the **Framing Defaults** dialog:

- Go to the **TRUSSES** panel and specify the desired **Member Depth** and **Maximum Span** for your trusses.




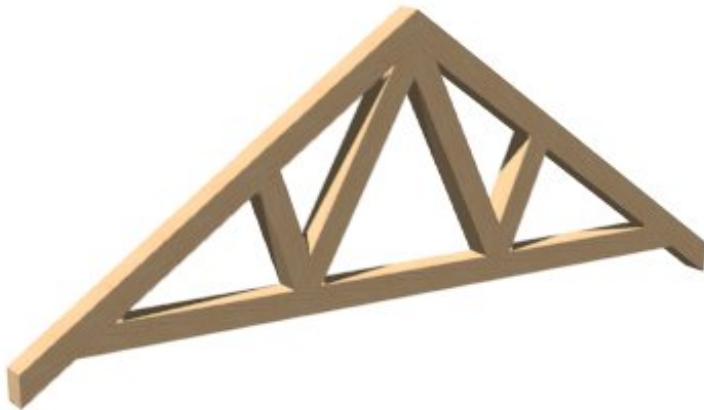
- In this example, the **Depth** values are set at 8" and the span values are unchanged.
- On the **ROOF** panel, specify the desired truss width in the **Rafter Width** text field.



- Click **OK** to close the Framing Defaults dialog, then click **Done** to close the **Default**

Settings dialog.

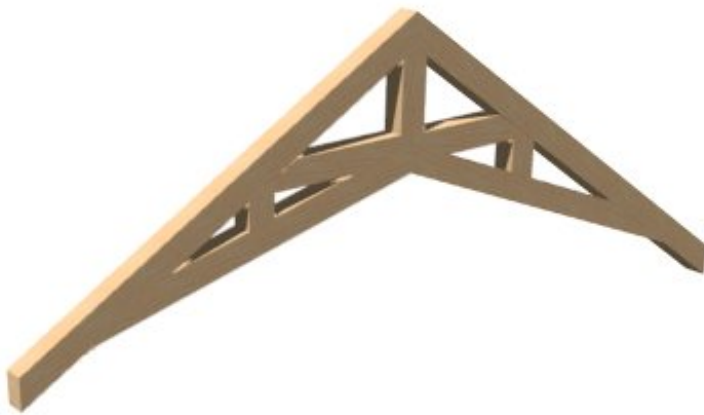
6. Select **Build> Roof> Build Roof**  from the menu.
7. In the Build Roof dialog:
 - Check **Build Roof Planes** on the ROOF panel;
 - Check **Trusses (No Birdsmouth)**
 - Specify the desired **Pitch** and other attributes of the roof;
 - Click **OK** to close the dialog and build the roof.
8. Make any needed modifications to the ceiling to produce truss bottom chords that meet your needs. For example,
 - Use the default flat ceiling to produce a standard truss:



- Raise the ceiling height of a room to produce a modified truss with a raised bottom chord (make a note of the original value before doing so):



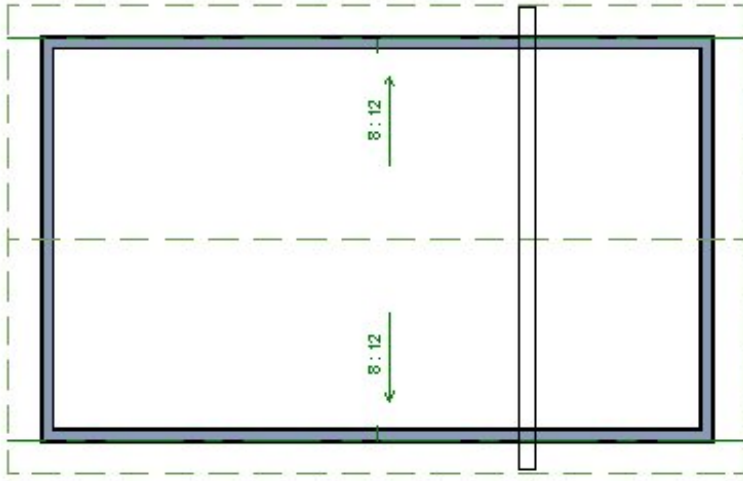
- Remove the default flat ceiling and draw sloped Ceiling Planes to produce a scissor truss.



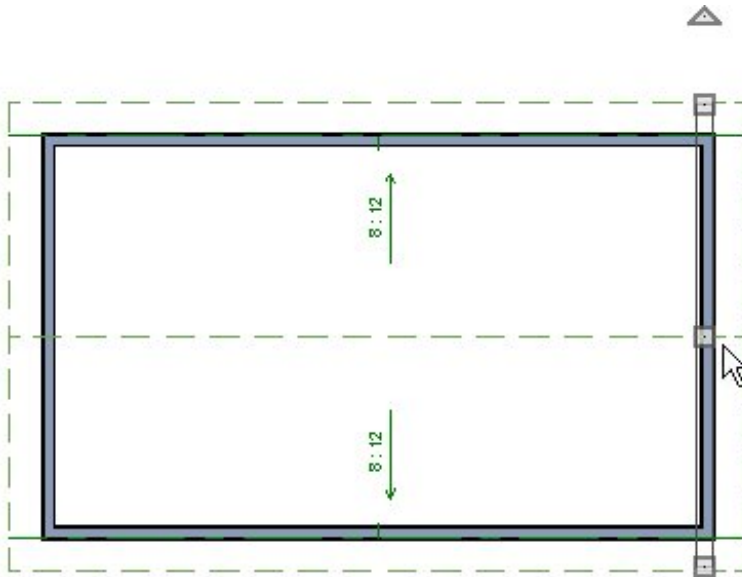
9. In Home Designer Pro 10 and later, you can specify a room's ceiling structure: for example, 5/8" sheetrock with a covering of paint, or a single layer of planking or tongue and groove.


To draw the roof trusses

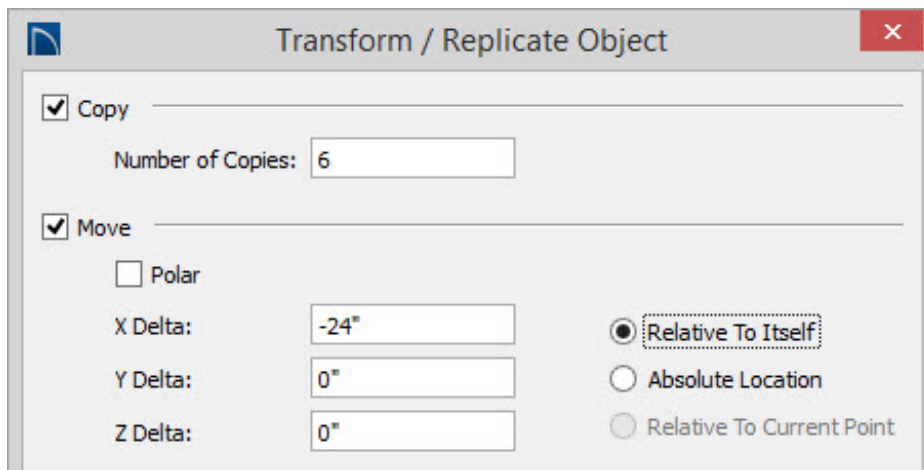
1. Select **Build> Framing> Roof Truss**  from the menu, then click and drag a line over the roof to create a single roof truss.



2. Move the truss into position over a non-bearing wall by either using its edit handles or by using a dimension line.



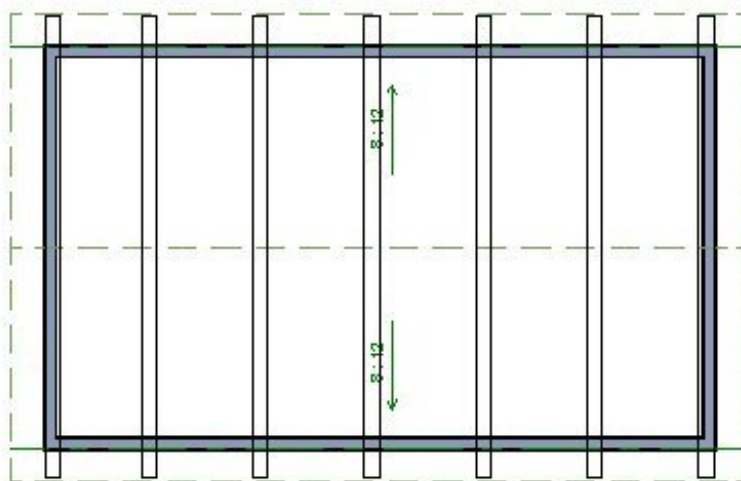
3. With the first truss in place over an exterior wall, click on it to select it, then click the **Transform/Replicate Object**  edit button to make copies of the trusses.





- Check the box beside **Copy** and specify the number of copies that you want.
- Check the box beside **Move** and specify the intervals at which you want the copies, as well as along what axis.

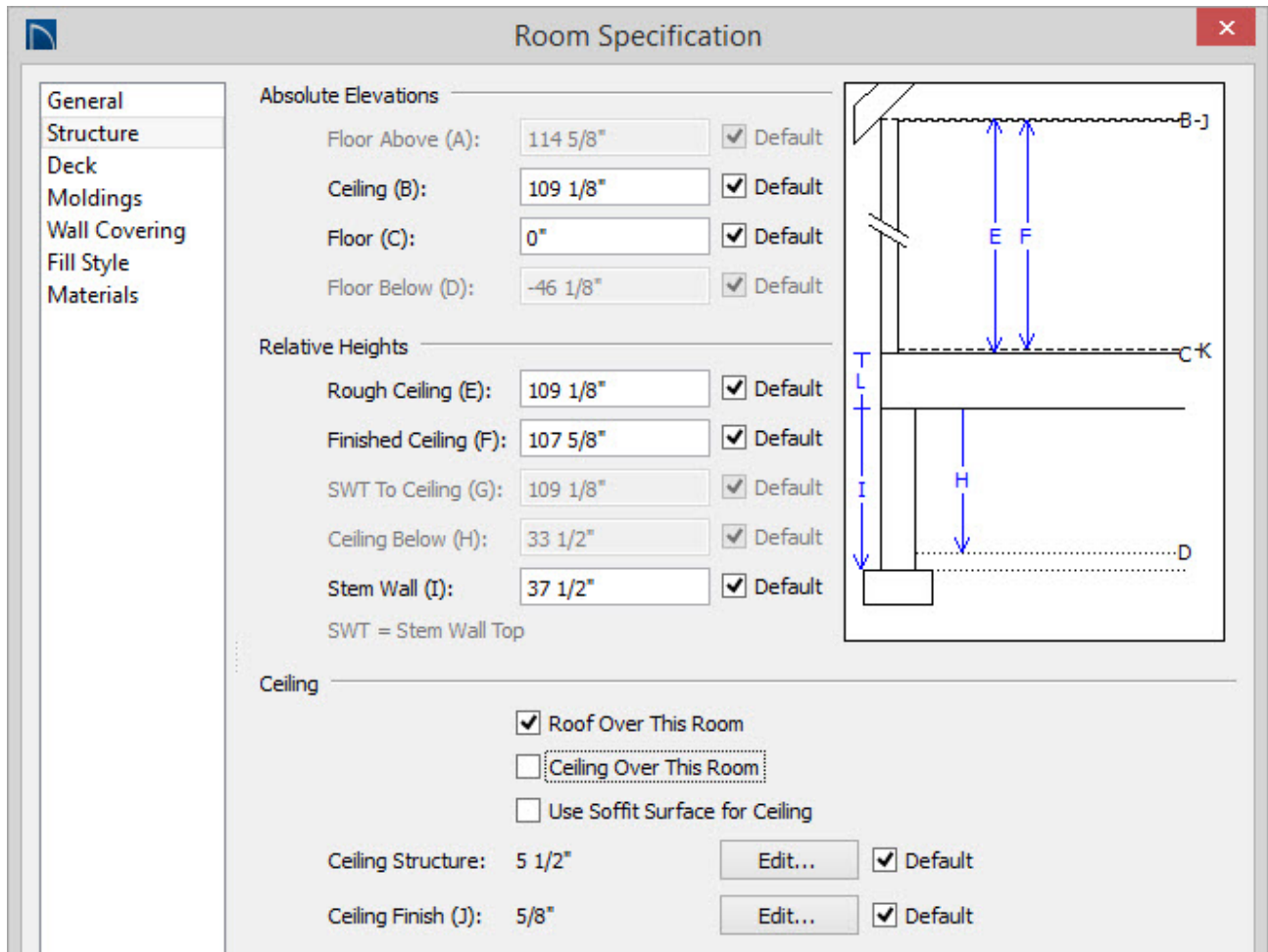
A Negative X will copy the trusses left. A positive X will copy the trusses right. A negative Y will copy the trusses down the screen. A positive Y will copy the trusses up the screen.


4. You may find that you need to adjust the position of the last replicated truss to agree with your particular structure.



To make the trusses exposed

1. When your trusses are in place, click the **Select Objects**  tool, select the room below the trusses and click the **Open Object**  edit button. On the **STRUCTURE** panel of the **Room Specification** dialog:



- Uncheck the box beside **Ceiling Above This Room**.
 - If you changed the Ceiling height value to produce a modified truss, restore the value that you made a note of in step 5, above.
 - Click **OK** to close the dialog and apply your changes.
2. Select **3D> Create Perspective View> Full Camera**  from the menu, then click and drag a camera arrow inside the room with the trusses above.

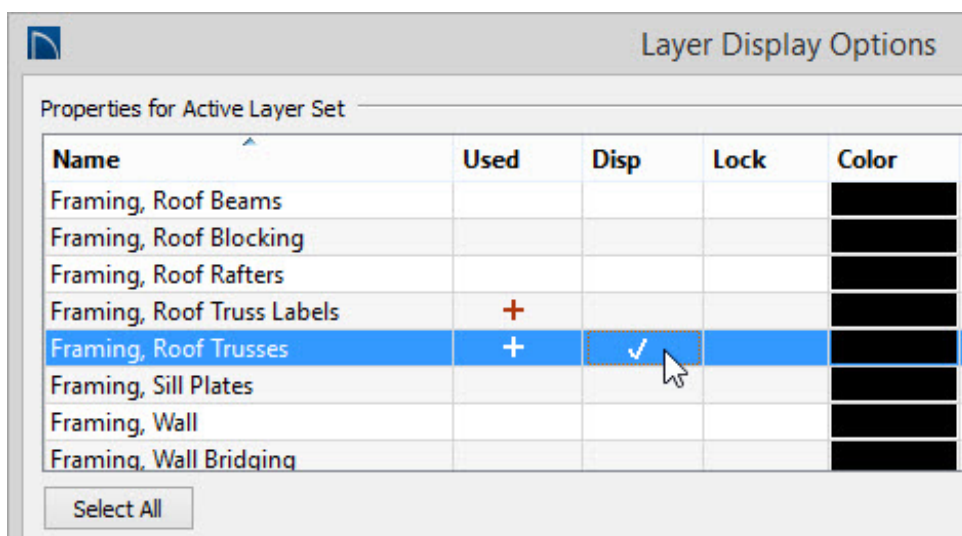


3. With the 3D view active, select **Tools > Display Options**  from the menu.

In Prior versions of Home designer select Tools > Display Settings > Display Options


4. In the **Layer Display Options** dialog:

- Scroll down to the **Framing, Roof Trusses** layer and click in the **Disp** column to place a checkmark in that column.



- Click **OK** to close the dialog and apply your change.



5. If you would like the top chords of your trusses to be exposed, click on the roof planes above to select them, then click **Open Object**  edit button.

6. On the **GENERAL** panel of the **Roof Plane Specification** dialog:
 - Lock the pitch by clicking the radio button to the right of the **Pitch** text field.

 - Increase the **Baseline Height** by typing in the text field. The height that you specify may depend on the Ceiling Finish that you specified above. For example:
 - If you specified planking, you may want roof planes that bear entirely on the trusses and should raise the Baseline Height by an amount equal to your trusses' top chord depth.

 - If you specified sheetrock, you wouldn't want the sheetrock to bear on the trusses, and might increase the Baseline Height by the top chord depth minus the sheetrock thickness.

 - You may also want to adjust the **Rafter Depth** value.

 - Click **OK** to close the dialog and apply your change.



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