Creating an Energy Heel Truss

Reference Number: **KB-00032**

Last Modified: **April 6, 2018**

The information in this article applies to:
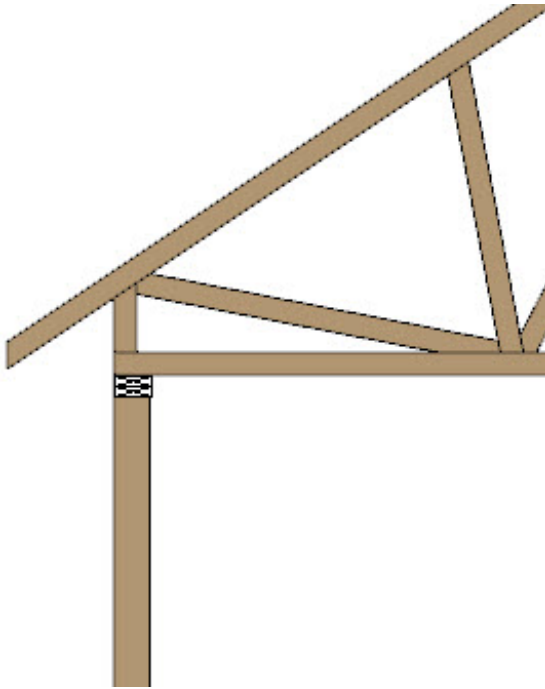
Premier

Pro

QUESTION

How do I make an energy heel truss?

ANSWER

For energy efficiency, some areas recommend an energy heel, or raised heel, so that there is not a cold spot in the intersection where the roof meets the wall. An energy heel raises the roof, and allows for more insulation to reach the outside wall.

To build the roof

1. Click **Build> Roof> Build Roof** to display the **Build Roof** dialog.

2. On the ROOF panel:

Build Roof

Roof / Options / Framing / Rafter Tails / Ridge Caps / Gutter / Frieze / Shadow Boards / Arrow / Materials / Roof Styles

Build

- ☑ Build Roof Planes
- ☐ Auto Rebuild Roofs
- ☐ Make Roof Baseline Polylines
- ☑ Rebuild Walls/Floors/Ceilings
- ☑ Build Fascia And Roof Trim
- ☐ Retain Manually Drawn Roof Planes
- ☐ Retain Edited Automatic Roof Planes
- ☐ Use Existing Roof Baselines

Specifications

Pitch (in 12): 8"

☑ Trusses (no Birdsmouth)

Roof Overhang

Eave: 18"

Gable: 18"

Roof Height

Raise/Lower From Ceiling Height: 0"

- ☐ Ignore Top (1st) Floor
- ☑ Same Roof Height at Exterior Walls
- ☐ Same Height Eaves
- ☑ Allow Low Roof Planes

☐ Automatic Birdsmouth Cut

Raise Off Plate (+) or Birdsmouth (-): 12"

Birdsmouth Seat: 0"

Vertical Rafter Depth: 11 1/8"

Options

Segment Angle at Curved Wall: 15.0°

Minimum Alcove Size: 36"

Number Style...   OK   Cancel   Help

- Under the Build heading, place a checkmark next to **Build Roof Planes**.

- Under the Specifications heading, check **Trusses (no Birdsmouth)**.

- Remove the checkmark next to **Automatic Birdsmouth Cut**.

- Specify the **Raise Off Plate (+)** value to the height you want the energy heel. For the purposes of this example, use 12".

- Click **OK** to close the Build Roof dialog and generate the roof planes based on these settings.

To build the energy heel truss

1. Click **Build> Framing> Roof Truss** ⟁ .

2. Click and drag to draw a roof truss.
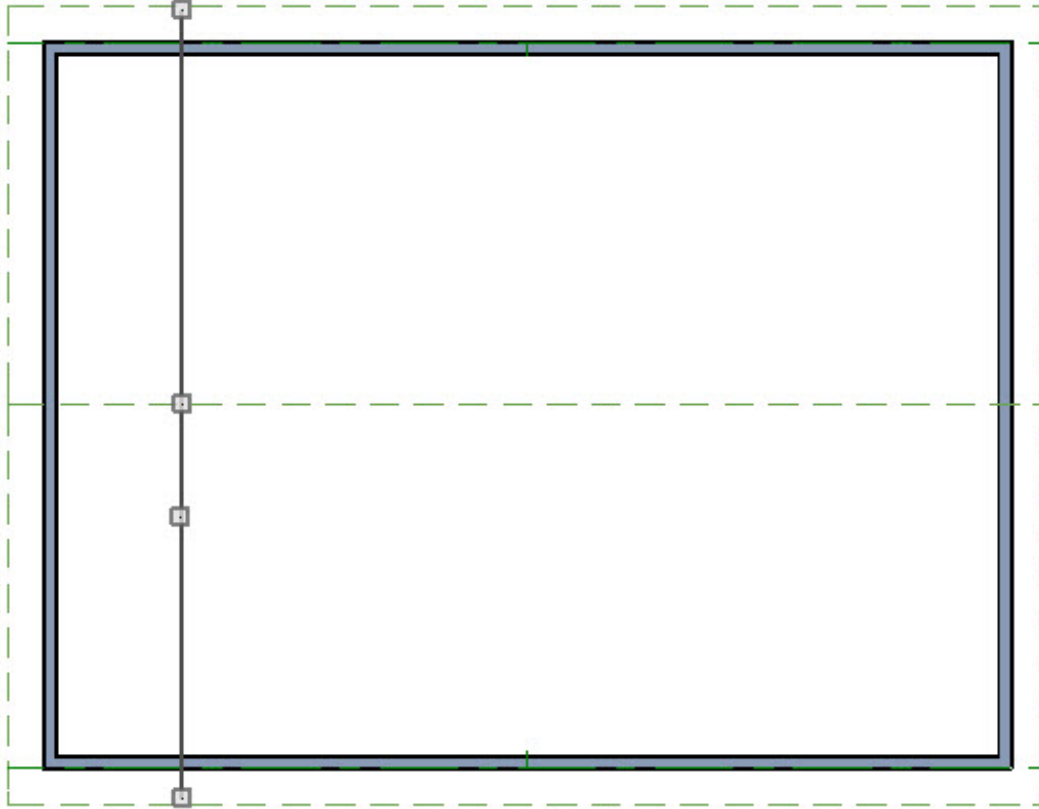
3. If prompted that, the layer "Framing, Roof Trusses" is not displayed, click **Yes** to turn on the display of this layer in the current view.

4. Using the **Select Objects** ⟍ tool, select the roof truss and then use the **Open Object** ⬒ edit button to display the **Roof Truss Specification** dialog.

5. On the GENERAL panel:

- Check **Energy Heel**.

- Check **Force Truss Rebuild**.

- Click **OK** to apply these changes and close the dialog.
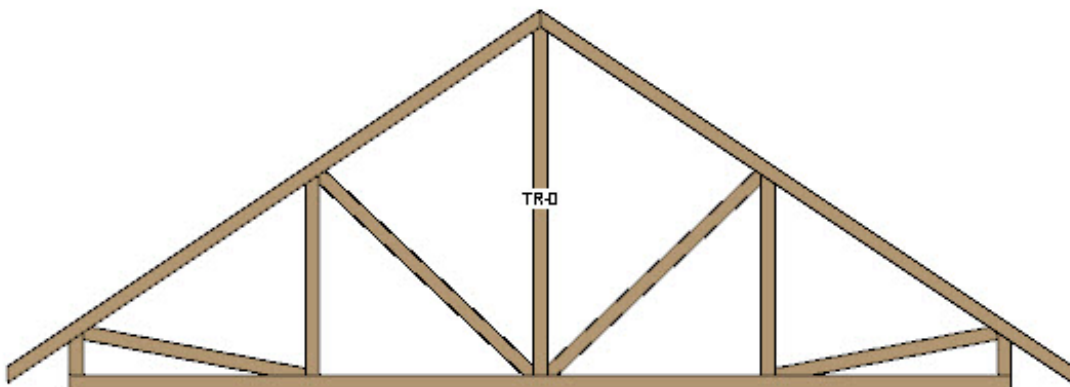
To use the Multiple Copy tool to copy the truss across the structure

1. Move the truss to the outside edge of your structure. It will snap to the outer edge of framing automatically.

2. With the truss still selected click on the **Multiple Copy** ▭▭▭ edit tool.

    Multiple Copy is not available in Home Designer Pro; instead, use the **Transform/Replicate** ▭→▭ edit tool. As an example, if you wanted to create 6 copies all separated a certain distance from each other, you would check the **Copy** box, set the Number of Copies to **6**, then check the **Move** box and set the X Delta to be **24"**. Negative values can also be set for each of the Deltas if needed.

3. Click on the **Multiple Copy Interval** ▭ edit button and verify that the **All Trusses** is set to the desired spacing and click **OK**.

 | Multiple Copy | | |
    |---|---|---|
    | **Offset Between Copies When Dragging** | | |
    | | Primary Offset | Secondary Offset (Alternate Behavior) |
    | General Objects: | 24" | 24" |
    | All Trusses: | 24" | 24" |
    | Rafters: | 24" | 24" |
    | Joists/Posts/Beams: | 16" | 16" |
    | Wall Studs: | 16" | 16" |
    | Rotation Of All Objects: | 15.0° | |
    | **Evenly Distribute Copies When Dragging** | | |
    | | Primary Number Of Copies | Secondary Copies (Alternate Behavior) |
    | All Objects: | 1 | 1 |
    | | OK   Cancel   Help | |

4. Move your cursor over the **Move** edit handle of the truss. You will notice that your cursor changes to the multiple copy cursor.

5. Click and drag across your plan to place trusses at regular intervals.

6. Click **3D> Create Perspective View> Perspective Framing Overview** to see the results.
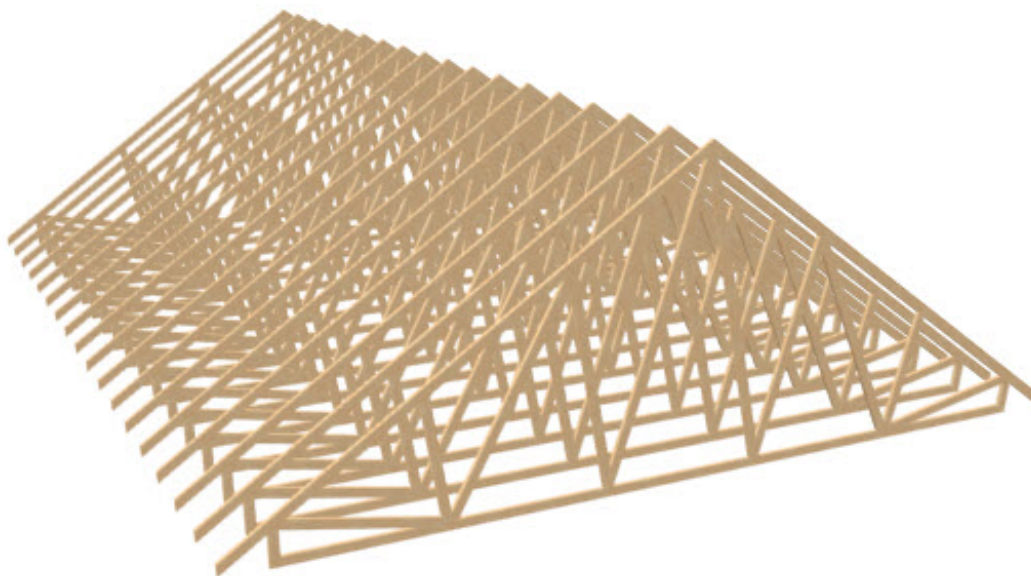
Related Articles

📄 Creating an Attic Truss (/support/article/KB-00933/creating-an-attic-truss.html)

208-292-3400 (tel:+1-208-292-3400)   © 2003–2018 Chief Architect, Inc.

Terms of Use (https://www.chiefarchitect.com/company/terms.html)

Privacy Policy (https://www.chiefarchitect.com/company/privacy.html)