

## Autodesk Products Tip & Tricks

**Product:** Revit Architecture 2009  
**Topic:** Creating a Gable/Hip Hybrid Roof  
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In some situations, it may be necessary to create a roof type that is not a simple gable or hip. The following example will demonstrate how to create a gable/hip hybrid roof.

From a 3D view, it is easy to select a roof to be edited (Figure 1).

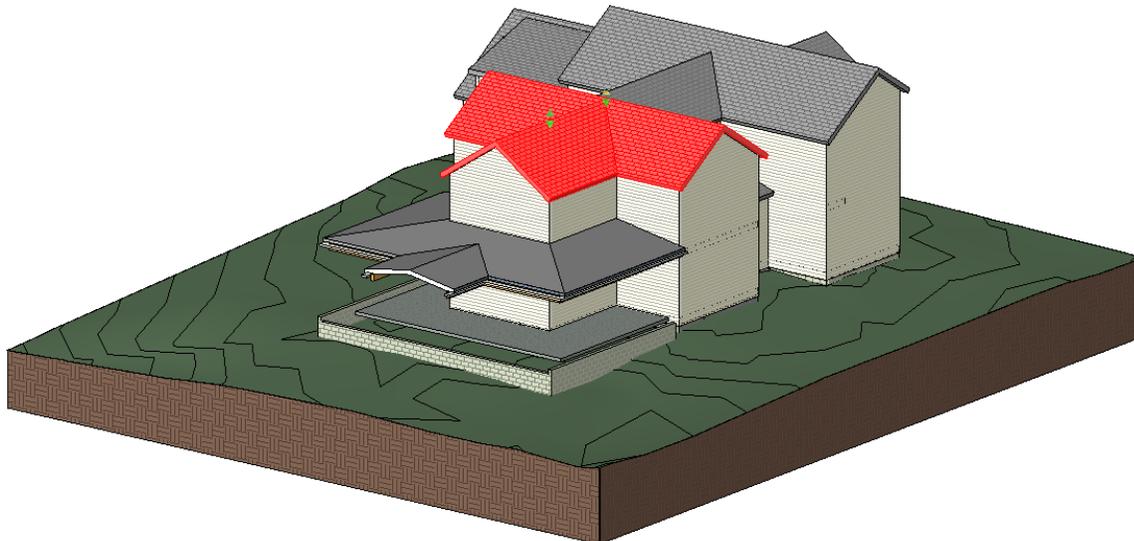


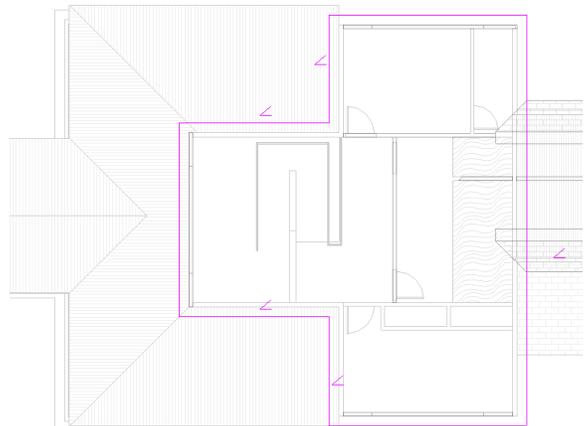
Figure 1

On the Options bar the “Edit” Icon should be selected



By switching to a floor plan view one can easily see the footprint of the roof. From this view, you can manipulate the overhang, slope, or in this example, the plate offset from base.

- Completed Residence
  - Floor Plans
    - 00 T.O. Basement FTG - Completed
    - 01 T.O. Crawl FTG - Completed
    - 02 Garage Slab - Completed
    - 03 First Floor - Completed
    - 04 Garage T.P - Completed
    - 05 Second Floor - Completed
    - 06 Second Floor T.P. - Completed**
  - Ceiling Plans
  - 3D Views
    - 3D - Completed
  - Elevations (Building Elevation)



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After switching to a floor plan view, add in Reference Planes. They will become a snapping point to split the roof footprint lines. Try to pick a consistent offset from each side of a perpendicular wall or line (Figure 2).

 Ref Plane

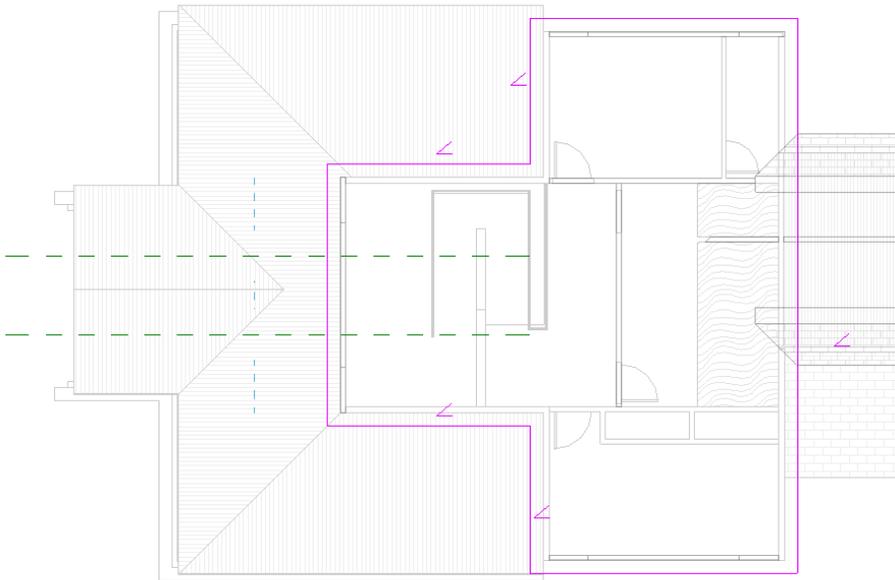


Figure 2

After adding in the appropriate Reference Planes use the split command to break the footprint line into three sections. This will allow you to manipulate the middle line's properties separate from the outer two (Figure 3). Once the lines have been split, two properties will need to be configured.

 Split

1. With the middle line selected, check the "Defines Slope" box. This will tell the selected line to slope back toward the ridge. Also, set the appropriate slope.

Defines Slope

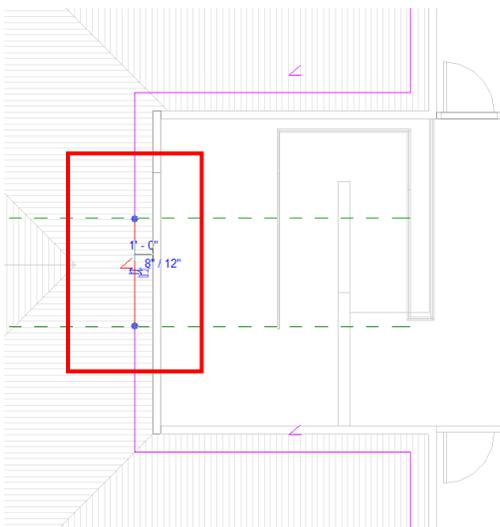


Figure 3

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2. With the middle line still selected click on the element properties icon in the options bar. From here, you will be able to set the middle line's plate offset from base. This will tell the line that its spring point is different from the other lines defining the roof boundary (Figure 4).

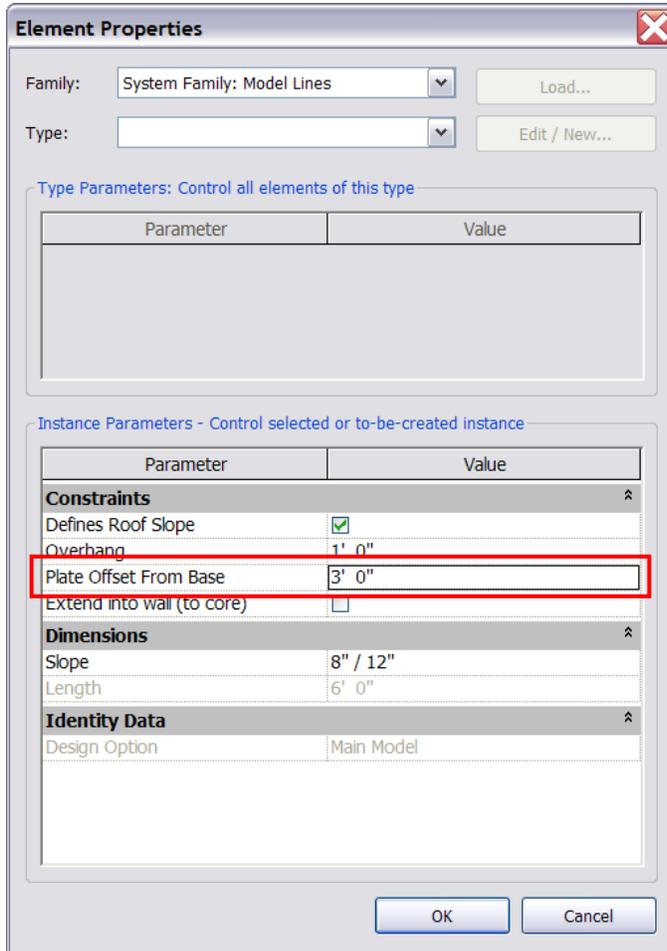


Figure 4

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After finishing the roof sketch and switching back to a 3D view (Figure 5), you can see that a gable/hip hybrid roof has been created. The Fascia edge of the hip is 3'-0" from the base of the gable spring line. If you were to edit the roof again and change the plate offset, the fascia edge would change accordingly.

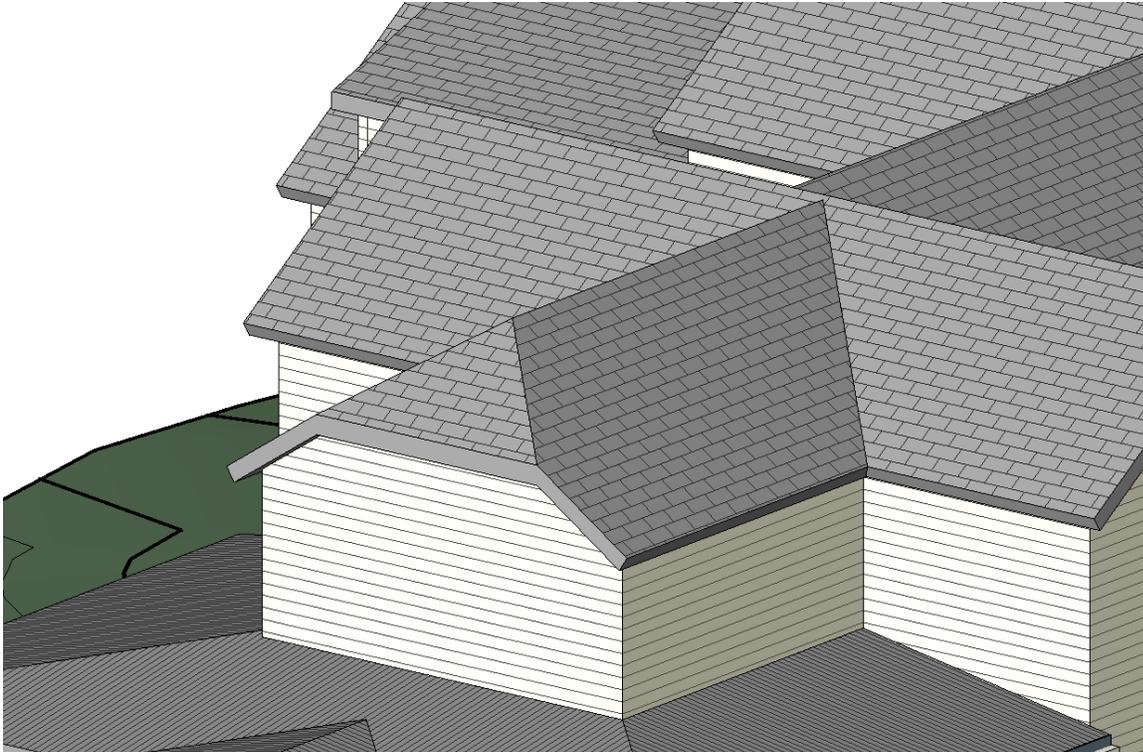


Figure 5