

**Instant Roof**

**Examples** Merge Roof Planes

**Example 1:** Extend Roof along Eave

1. Draw a couple of attached boxes representing a main building plus a building extension. Select the 2 top faces.

2. Choose **Plugins/ Instant Roof/ Make Roof**. In the pop-up menu, then choose **Calif Ranch** from the **Roof Style?** pull down menu.

![Roof Style Options](image)

3. Choose **OK** to accept default parameters and generate the roof shown. The next step is to raise the building extension to the correct height. (This is the vertical distance between the top roof planes)
4. Erase the groups containing the top of roof, the fascia, and the rafters but retain the group containing the gable wall outline.

5. Select the lower face. Use the move tool to raise the face by the distance between the top of the gable wall outline to the upper face. (Inference-lock the z axis)

6. Erase the group containing the gable wall outline. Reselect the 2 faces.

7. Repeat steps 2 and 3 to create the roof:
8. Double click the roof top to open the group for editing. Select the 2 edges shown:

9. Hide the edges by choosing *Edit/Hide*.

10. For a hip roof, return to step 6. Select the top 2 faces and the 5 edges shown. Repeat steps 2 and 3:

11. For a shed roof, return to step 6. Select the top faces and all but 2 of the top edges as shown. Repeat steps 2 and 3:
Example 2: Extend Roof Parallel to Ridge

There are 2 ways to extend the roof parallel to a ridge. The first method works only for Gable or Shed roofs but not Hip roofs. The second works for all roof types.

12. **Method 1 - Gable Roof with Offset Ridge**: Draw geometry similar to below and select all but 3 top edges as shown. Repeat steps 2 and 3 to generate the gable roof:

13. **Method 1 - Gable Roof with Continuous Ridge**: Draw geometry similar to below and select all but 2 top edges as shown. Repeat steps 2 and 3 to generate the gable roof:
14. **Method 1 - Shed Roof**: Draw geometry similar to below and select the edges as shown. Repeat steps 2 and 3 to generate the shed roof:

![Shed Roof Diagram]

15. **Method 2** - Draw geometry similar to below and select the 6 edges shown. Repeat steps 2 and 3 to generate the gable roof.

![Gable Roof Diagram]

16. Erase the groups containing the top of roof, the fascia, and the rafters but retain the group containing the gable walls.
17. Select the lower face. Use the move tool to raise the face by the distance between the lower face and the top of the upper triangular gable wall directly above. (Inference-lock the z axis)

18. Erase the group containing the gable walls. Select the 2 top faces plus all but 4 top edges. Repeat steps 2 and 3 to create the Gable roof:

19. Had the extension been centered on the wall, and the same steps followed, the ridge would have been continuous:

20. For a shed roof, select the top faces and all but 2 top edges. Repeat steps 2 and 3
21. For a hip roof, an additional step is required. Use the Push-Pull tool to extend the higher area over the lower as shown. The exact distance is not important. (the extra line can

22. Select only the top faces but no edges. Repeat steps 2 and 3.

23. Had the extension been centered on the wall, and the same steps followed, the ridge would have been continuous: