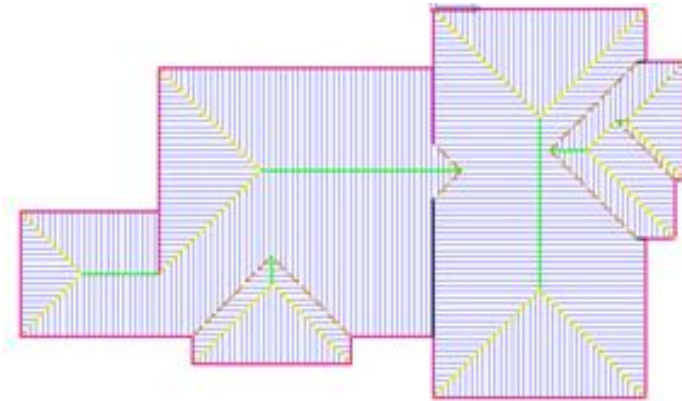




Tips and Tricks # 36

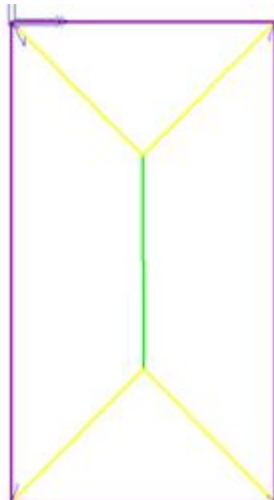
Complex Multi-level Roof



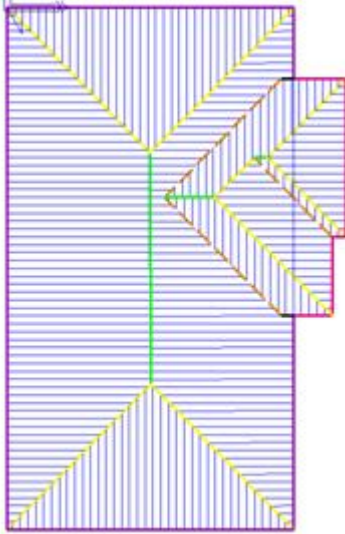
Objective: This exercise is to show how to use the various **Construct Roof** functions to draw the required geometry for an apparently complex roof with multiple eave heights. At first glance it looks almost impossible. However, once you break it down into individual features, it becomes quite a simple process.

Once complete, the model may be used as normal to check the roof geometry and apply materials to determine quantities. It is assumed that reasonable competence using the software has been attained already as we describe the process, not the specific detail.

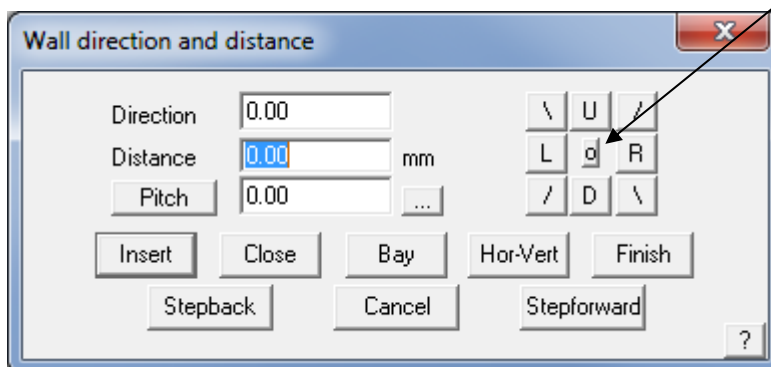
1. Model the highest part of the roof – the main body of the roof is the simple part so do this first:



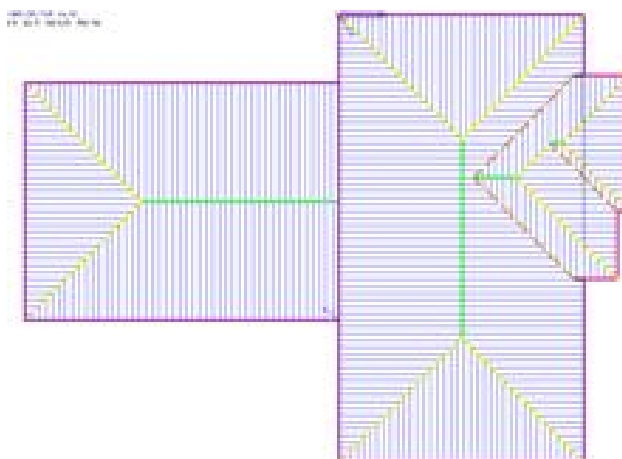
2. Then add the remainder as a couple of hip dormers, one after the other to appear to be a set of 'nested' dormers:



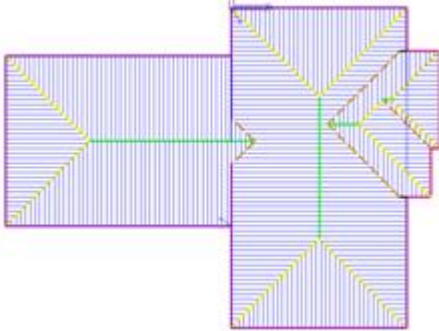
3. Next, draw up the low set area of roof, but leave off the dropped eave bit near the lower left for now. Remember to use the **Reference** button in the middle of the UDLR buttons to establish the start point for the low set roof:



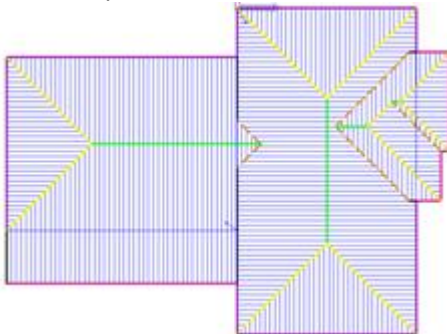
Ensure you use the correct eave height for the low set roof, so that it connects with the main roof at the desired height.



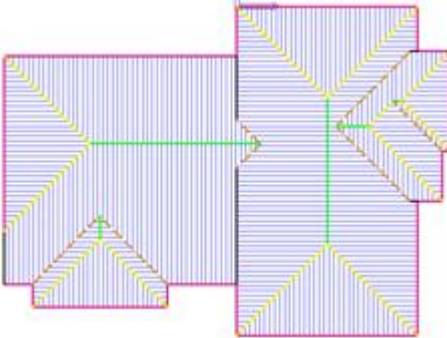
4. ...and project it into the main roof using **Mod-Roof > Project Gable**. Specify tuck-under as required.



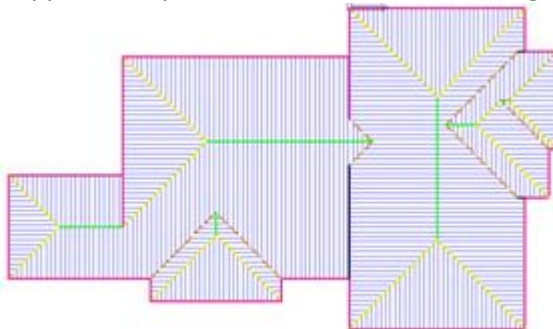
5. Then, drop the Eave down on the bottom of this roof – **Mod-Roof > Drop Eave**:



6. Add in the dormer on this dropped eave then:



7. Lastly draw up the last bit of roof using Reference again, and aligning and merging it into the dropped eave plane **Mod-Roof > More...> Align planes** and **Mod-Roof > More... > Merge Planes**:



END