

Raftered Roof Framing

When the timber framework is in place on the foundation/floor, the roof and wall system can progress. The timber ridge and plates of our project building allow for common rafters to complete the structural roof framework (see Figure 5-1). The rafters have a birdsmouth notch cut to fit to the ridge and plate and fastened with screws. Depending on the building's final destination, hurricane fasteners may

also be required.

Depending on the type of roof covering to be applied, the spacing of the rafters is usually 16" (406 mm) or 24" (610 mm) centers. Conventional 2" x 10" (51 x 254 mm) wood materials are easy to apply and, due to their uniform sizing, provide a flat surface for finish materials. Describe here is a simple method for utilizing irregular timber rafter material.

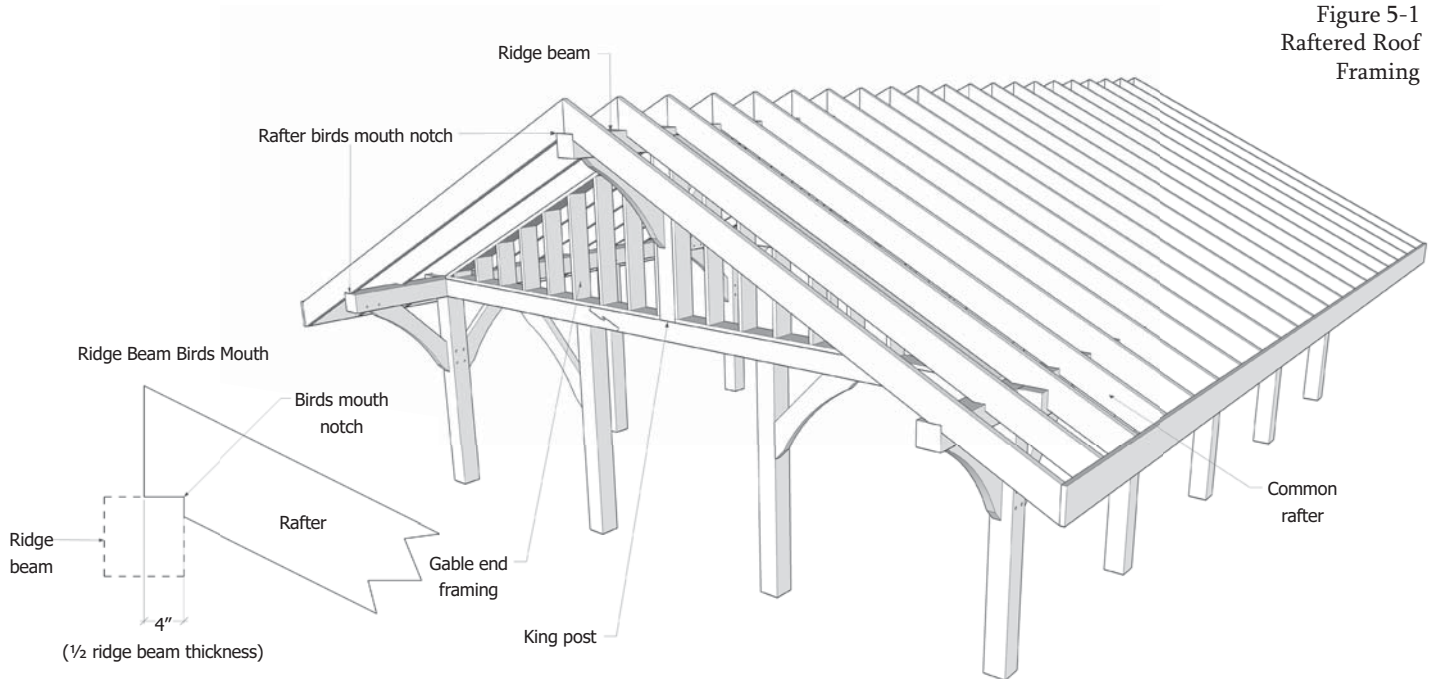


Figure 5-1
Raftered Roof
Framing

5.1 Common Rafter Length

The rafter completes the triangle from ridge to plate to king post. The project building has a 6/12 roof pitch, giving a dimension of 12' (3658 mm) for the run and 6' (1829 mm) for the rise (measured from

the centerlines). Referring to Figure 5-2a, all that remains to complete the triangle is to figure out the hypotenuse or line length of the rafter. We can accomplish this using a variety of methods: