

HOW TO BUILD A ROOF FRAME

Note: The following instructions are based on the sample rafter template shown here, which is designed for a 6-in-12 roof slope.

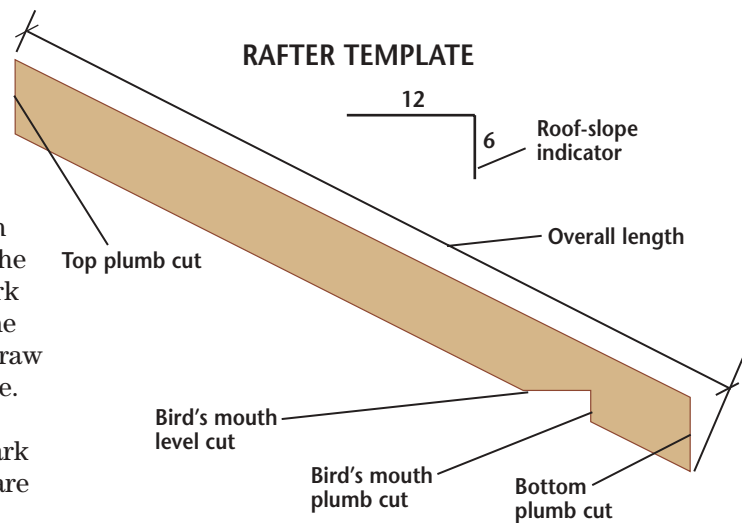
Step A: Mark the Plumb Cuts

1. Select a straight board to use for the pattern rafter. Mark the top plumb cut near one end of the board: Position a framing square with the 6" mark of the tongue (short part) and the 12" mark of the blade (wide part) on the top edge of the board. Draw a pencil line along the outside edge of the tongue.

2. Starting from the top of the plumb-cut mark, measure along the top edge of the board and mark the overall length of the rafter, then use the square to transfer this mark to the bottom edge of the board. Position the square so the tongue points down, and align the 6" mark of the tongue and the 12" mark of the blade with the bottom board edge, while aligning the tongue with the overall length mark. Draw a line along the tongue. If the bottom end cut of the rafter is square (perpendicular to the edges) rather than parallel to the top end, mark a square cut at the overall length mark.

Step B: Mark the Bird's Mouth Cuts

1. Measure from the bottom of the lower plumb cut and mark the plumb cut of the bird's mouth. Position the square as you did for the lower plumb cut and draw a line across the board face at the new mark.



2. Measure along the bird's mouth plumb cut and mark the bird's mouth level cut. Use the square to draw the level cut—it must be perpendicular to the bird's mouth plumb cut.

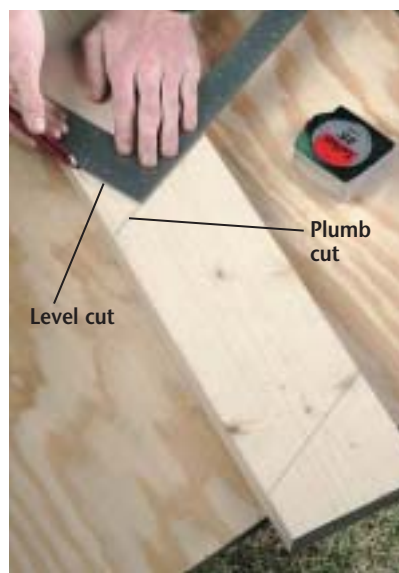
Step C: Make the Cuts

1. Cut the rafter ends at the plumb-cut lines, using a circular saw or power miter saw.

2. Set the base of a circular saw to cut at the maximum depth. Make the bird's mouth cuts, overcutting slightly to complete the cut through the thickness of the board. As an alternative to overcutting (for aesthetic reasons), you can stop the circular saw at the line intersections, then finish the cuts with a handsaw.



A. Position the framing square at the 6" and 12" marks to draw the top and bottom plumb-cut lines.



B. Mark the bird's mouth level cut by squaring off of the bird's mouth plumb cut.



C. Cut the bird's mouth by overcutting the lines just until the blade cuts entirely through the board.