When the Cut Goes Beyond 45

by Gill Gueths

The five-cut method for cutting steep bevels in framing lumber

Most circular saws, unless altered, will at best adjust to 47 degrees on a bevel cut. But on custom roofs and rake walls, a much steeper bevel is often required. On 2x4s you can make three marks and cut from the edges with your saw table set square. But this won't work on a 2x12. In this case, you'll need to think 90 degrees.

When you want to cut beyond 45 degrees, think of the angle that will bring the steep bevel to 90 degrees. If you want to cut a 60-degree bevel, for example, set your saw to a 30-degree bevel (60 + 30 = 90). Here's how it works:

Two-cut method. First, cut your lumber with a 30-degree bevel. Then, set the saw table square and follow the short point of the 30-degree cut with your blade. Your saw table will be riding on the first cut you made.

If you're using an 8 1/4-inch saw, you're done. But if you have a 7 1/4-inch saw, you need to make three more cuts to get all the way through 1 1/2-inch framing material at 55 degrees and beyond. This may seem like a lot of cutting, but it'll look tight and clean once it's nailed in place, and it looks much better than just butting up a square piece of stock, or nailing in the steepest angle you can get from your saw.

Five-cut method. To continue after you've made the first two cuts, cut along the angle on the top and bottom edges of the board, keeping your saw table set to the pitch of the hip, valley, or roof (for compound angles), or square (on simple bevel cuts). Then on the back side of the board, join the two edge cuts with a pencil line. This marks the short point of the 60-degree cut. For the final cut, I pull the guard back and plunge along the short point line, cutting a little deeper than the 60-degree cut I made on the other side. This will make a notch in the middle of the cut, but the end product will be tight on all sides once it's nailed in place. This five-cut technique works particularly well for cutting angled bay window rafters, unequal pitch hip and valley rafters, and studs for steep rake walls. I also use the two-cut method for safely cutting the double 45-degree tail on a hip rafter. ■

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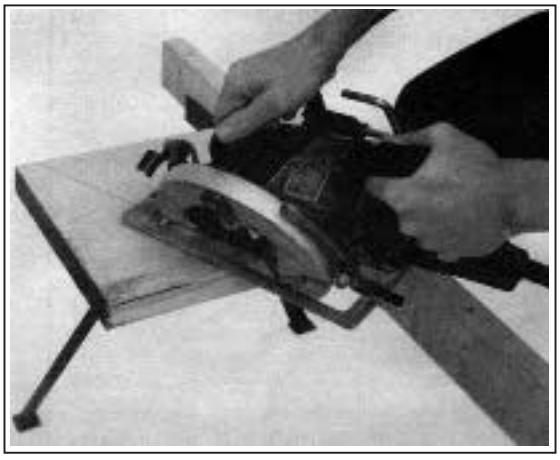
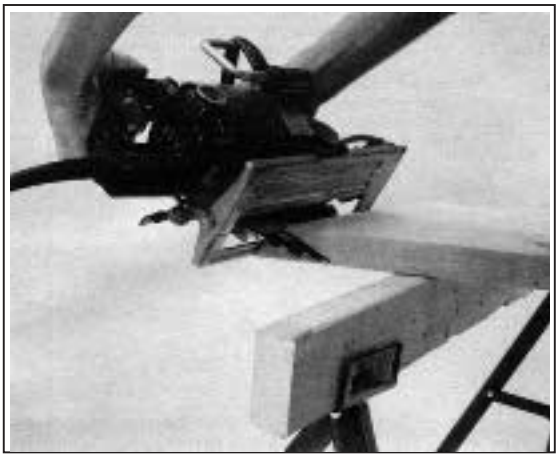
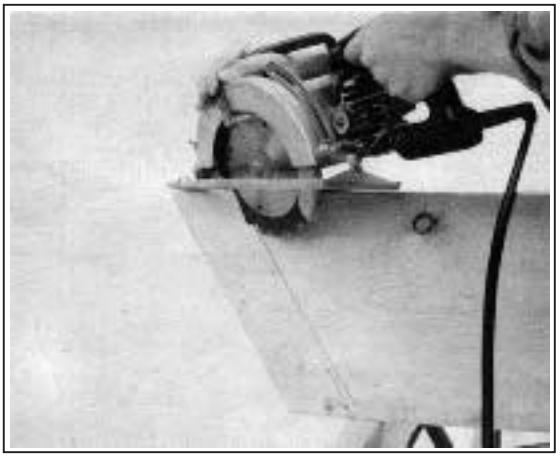


To cut a compound angle with a steep bevel (in this example, 60 degrees), make the following five cuts:

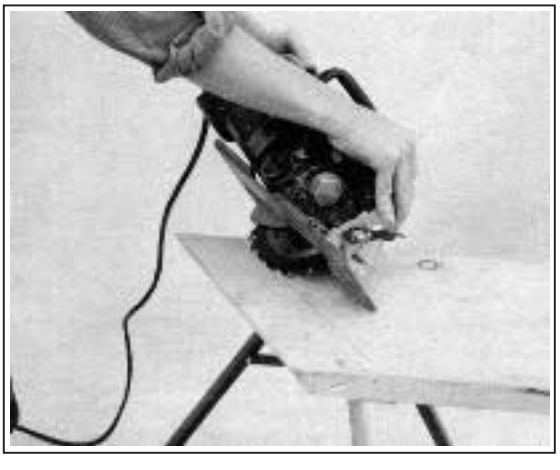
Cut #1:
Cut a 30-degree bevel along the cutline on the top face of the board. In this case, the cutline is the plumb cut on an unequal-pitch hip jack.



Cut #2:
Flip the board over, and with the saw table set square, follow the short point of the 30-degree cut with your blade. The blade will cut the angle you want, but won't go all the way through 1 1/2-inch lumber.



Cuts #3 and #4:
With the saw table set to the pitch of the hip, cut the angle along the edge of the board. Flip the board over and cut the angle on the other edge.



Cut #5:
Pull the blade guard back and plunge along the short point line of the 60-degree cut, cutting a little deeper than the 60-degree cut made on the other side of the board. To control the saw, it helps to pivot off one edge of the saw table.