Once the joinery is complete, the next step is to shape the cope.

The cope profile is positioned just above each tenon. During assembly the cope matches the sticking profile for a perfect fit.

To prepare for this cut, first mount the cope router bit in your router table and adjust the height. The bit is at the correct height when it makes slight contact with the tenon. To make this adjustment, place the workpiece on the router table face down, then, with the power off, gradually raise the bit until it skims the surface of the tenon.

Once the height is set, the next step is to position the fence. I use a strip of 1/4" thick plywood as a fence; it registers against the tenon shoulder to control the cutting depth. A small cutout in the center of the fence provides an opening for the bit. I use a miter gauge to guide the workpiece through the cut.

Secure the fence to the router table with a pair of small clamps and make a trial cut. Test the fit of the cope to the sticking and make any necessary adjustments to the fence. Finally, cut the cope on each piece of stock that has a tenon (rails, muntins and mullions).

Shape the Sticking

The next step is to shape the sticking. But first rip the bars to the final size (7/8"). To safely shape the narrow bars, I use a simple jig: a board with an L shaped notch in which the bar fits. 1/4" thick plywood provides a cap for the jig, which applies pressure on the workpiece during the cut.

Cut the Rabbets

The final step before assembly is to cut the rabbets for the glass. To hold the bar securely while shaping I use the same jig that I used when shaping the sticking. First cut the rabbet along the first edge on all the stock; then tack a strip of wood into the jig to fill the rabbet and provide stability during the second cut.

After shaping all the frame and bar pieces, dry clamp the final assembly to check for fit. Then proceed to final glue-up and assembly.
**Making a Divided Light Door by Lonnie Bird**

**First Make a Drawing**

Begin with the drawing, which shows the design and dimensions of the door.

**Mill the Stock**

Next, select stock and mill it to the sizes needed for the door you intend to build. Clear, straight-grain stock is best because it will not have a tendency to warp. Also, when sizing the stock for the bars, I rip each piece wide enough to make two bars. After cutting the tenons and the cope, I rip the bars to final width. This method ensures greater accuracy. Its also helpful to mill a few extra pieces for use when setting up each cut.

**Layout the Joints**

I begin the layout process with a stile (see Fig. 1). First, I mark the location of the mortises for the top and bottom rails; then I layout the mortises for each muntin. For greatest accuracy I clamp the stiles and mullions edge-to-edge and transfer the layout marks. The next step is to layout the tenons on the muntins, mullions and rails. Remember that the tenon shoulders are offset (see fig. 2)

**Cut the Mortises**

Cut the mortises first, using a router or a hollow chisel mortiser. You’ll need to cut mortises in all the stock except for the mullions, which have no mortises. Also, remember to cut the mortises on the muntins all the way through.

**Cut the Tenons**

The next step is to cut the tenons for a friction fit with the mortise. Although I prefer to use a tablesaw for this step, you can use your favorite method. However remember to offset the shoulders by 1/16" (see fig. 2)