USING SET-UP BLOCKS ON 3/4” THICK STOCK
(For Rail and Stile Doors)

See pages 4-8 for instructions on how to use these router bits/shaper cutters. The stock you are using must be 3/4” uniform thickness for proper setup using the set-up block. We recommend that you start with the cope/rail end (tongue profile) first.

NOTE: the set-up block is not guaranteed to match the profile cut; it is guaranteed to allow the router bit/shaper cutter height to be set quickly and properly.

Install into your router/shaper table, the correct router bit/shaper cutter assembly to create the cope/rail end. Using the set-up block, raise or lower the cutting profile so it corresponds with the proper cut on the set-up block. NOTE: If you are using a coping safety sled (MLCS item #9544, #9546 or #9548), you must compensate for the thickness of the sled base when setting the router bit/shaper cutter height.

Using a piece of scrap stock, the same thickness as your rail/stile stock, make a test cut. For 1/4” shank router bits, adjust the fence to make the full cut in 3-4 passes; or, for 1/2” shank router bits or shaper cutters, adjust the fence to make the full cut in 1-2 passes. When making the final pass, the fence should be properly aligned with the router bit/shaper cutter by placing a metal straight edge across both the infeed and outfeed fences of the router/shaper table fences. The straight edge must also be in contact with the ball bearing guide/rub collar or smallest diameter of the carbide cutting surface if no ball bearing guide/rub collar is used. When you are satisfied that the cope/rail end cut is correct, proceed to make your actual cope/rail end cuts.

After you have completed the cope/rail end cuts, remove the router bit/shaper cutter assembly and install the correct router bit/shaper cutter assembly to make the stick/stile cut. Using the opposite side of the set-up block raise or lower the cutting profile so it corresponds to the proper profile cut on the set-up block. Now, using one of the rail pieces cut in the previous step, verify that the profile cut on the rail piece mirrors the cutting profile on the router bit/shaper cutter assembly. If the tongue on the rail piece and the slot cutter on the router bit/shaper cutter assembly are not exactly at the same height, adjust the router bit/shaper cutter assembly height accordingly.

Make another test cut, again using a piece of stock the same thickness as your rail/stile stock. Follow the same guidelines as you did when making the test cut in the rail piece. When you have completed this cut, test the fit against one of the cope/rail end pieces you have already cut. If the joint properly fits together and the height of the pieces properly align, proceed to make your actual stick/stile cuts.

NOTE: In order to get a proper joint, it is important to make sure that the router bit/shaper cutter assembly is cut the full depth to the ball bearing guide/rub collar. Also, your stock must be of uniform thickness and your height adjustment must be properly set.