PROFESSIONAL ROUTER BITS

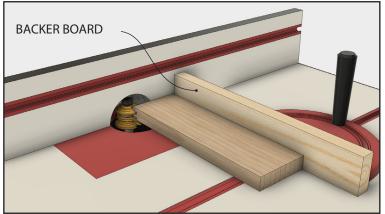
Route stiles and rails for frame-and-panel doors with a single bit. Make the cope cut first, and then adjust the bit height to route the profile. See the instructions below for easy setup.

Step 1: Set the bit height.

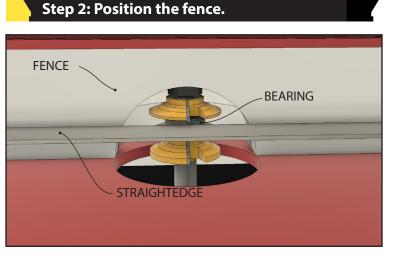


Install the bit in your router table and adjust the height for the coping cut. Place a piece of the stock you plan to route on the router table to help you gauge the height. Move the bit up or down until the top edge of the slot cutter is at least 1/8" above the tabletop.

Step 3: Make the coping cut.

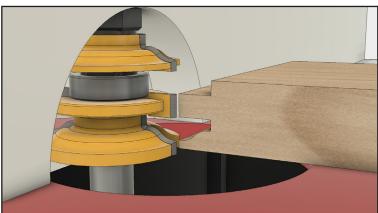


Use a miter gauge or a coping sled with a backer board to cope the ends of your rails. The backer board will prevent tear out in the back edge of your stock. Route both ends of all the rails.



The fence should be flush with the bearing on the router bit. Place a straightedge against the bearing and pull the fence forward until it's flush. Then lock the fence in position.

Step 4: Adjust the bit height.



Now that you've finished the coping cuts, you'll need to raise the bit to route the profile. Place one of the rails you just routed on the table and align the bottom cutter with the coping cut. There's no need to adjust the fence.

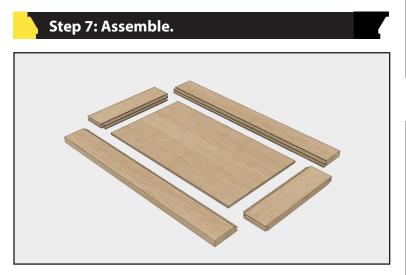
Step 5: Make a test cut.

Route a test cut in a piece of scrap that's equal in thickness to your stile and rail stock. Test the joint's fit and adjust the bit height, if necessary.

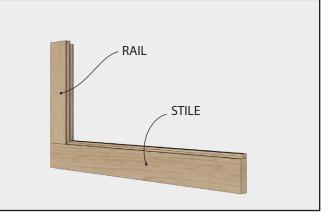
Step 6: Route the profile.



When the bit height is properly set, route the stiles and rails. Run the stock through the router face down.



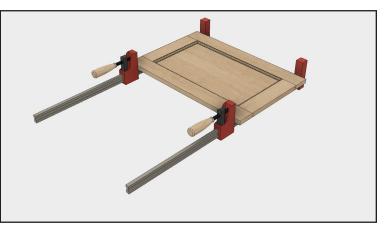
Cut a panel to fit inside the doorframe. Make sure you have all the parts together before starting assembly. There should be two stiles, two rails and one panel.



Apply a thin, even layer of glue to the surfaces of the tenons on each rail. Place one of the rails in the groove of one stile.



Install the second rail and slide the panel in place.



Add the second stile and clamp the door together. When the glue has dried, remove the clamps and sand the door.