# PROFESSIONAL ROUTER BITS

#### Step-by-Step Instructions Yonico Item #12319

Use this three-piece set to create door frames with mullions for glass panels. Follow the instructions below for easy setup. See the legend on the last page if you're unsure about which part is shown in any of the illustrations.

### Step 1: Set the coping bit height.



You'll cut the cope on the ends of the rails and mullions first, so install the coping bit in your router table. Set the height of the bit to produce a 1/16" to 1/8" flat spot at the top face of the stock.



For each bit in this set, the fence should be positioned flush with the bearing. Place a straightedge against the bearing and pull the fence forward until it's in the correct position. Lock the fence in place.

### Step 3: Make the cope cut.





Use a miter gauge or coping sled to cope the ends of the rails and mullions. Place a backer board behind

each piece to prevent tear out on the back edge during routing. Machine the stock with the front face down.

### Step 4: Install the profile bit.



Once you've coped the ends of the rails and mullions, remove the coping bit from the router table and replace it with the profile cutter. Set a piece of the rail stock on the table and adjust the bit height to match the cope cut.

### Step 5: Reposition the fence.



Set the fence in the same manner used for Step 2, using a straightedge to ensure the fence and bearing on top of the router bit are flush.

## Step 6: Route the profile.





Now route the inside edges of the rails and stiles with the stock face down. Then route two edges of the mullions.

### Step 7: Install the rabbeting bit.



Place one of the coped rails on the router table face up. Raise or lower the bit until the top edge of the bit is aligned with the flat portion of the cope cut. Place one of the coped rails on the router table face up. Raise or lower the bit until the top edge of the bit is aligned with the flat portion of the cope cut.

### Step 8: Adjust the fence.



Move the fence in or out until it's flush with the bearing on top of the router bit. Use a straightedge to align the fence to the bearing.

### Step 9: Cut the rabbet.



Route the rabbet in the inside edges of the rails and stiles, and route both edges of the mullions.

### Step 10: Assemble the door.



Begin assembly by applying glue to the ends of one

rail. Insert the rail into one of the stiles. Next, install the mullions in a similar fashion, followed by the second rail.









To position the mullions correctly, cut spacer blocks to the appropriate size and set them in the openings where you'll install the glass panels later.



Place a clamp underneath each rail and apply adequate pressure. Use another clamp to press the vertical mullions snugly into the rails and horizontal mullion.



**Tip:** Larger doors may require more clamps. Use as many clamps as necessary to achieve tight-fitting joints.

### **Door Part Legend**

