


Small Rail & Stile Set

Ogee
Bead
Classic

16J68.91
16J68.92
16J68.93

Suitable for stock $\frac{5}{8}$ " to $\frac{7}{8}$ " thick, they cut a panel slot $\frac{3}{16}$ " wide by $\frac{3}{8}$ " deep. The pilot bearings allow use on curved work with a template.

 For better safety, use these bits in a router table only – **not free hand**.

1. Cut all stock for the frame members longer than needed. Cut extra pieces to be used for router set-up. All pieces must be flat and of consistent thickness. The final length of the rails and mullions is $\frac{3}{4}$ " **longer** than the visible length.

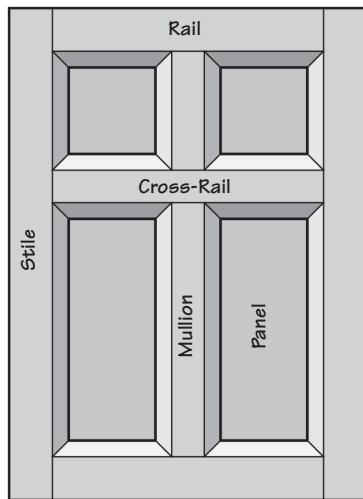


Figure 1: Door parts.

2. Install the sticking bit in a table-mounted router and adjust the height so that a small shoulder will be cut on the inner face of the frame pieces (see **Figure 2**). Set the router table fence flush with the pilot bearing. Rout the inner side of all the frame pieces (stiles and rails) and both long edges of the mullions and cross-rails.

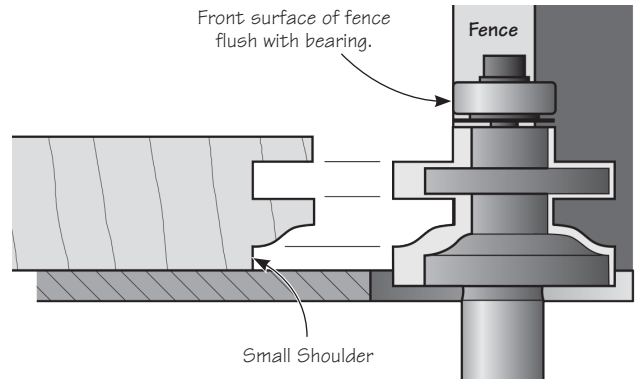


Figure 2: Set-up for sticking cut.

3. Cut the rail and mullion pieces to the required length.

Note: The length for the rails and mullions is $\frac{3}{4}$ " longer than the visible length.

4. Install the coping bit in the router. Adjust the bit height using a routed frame piece as a guide, as shown in **Figure 3**.

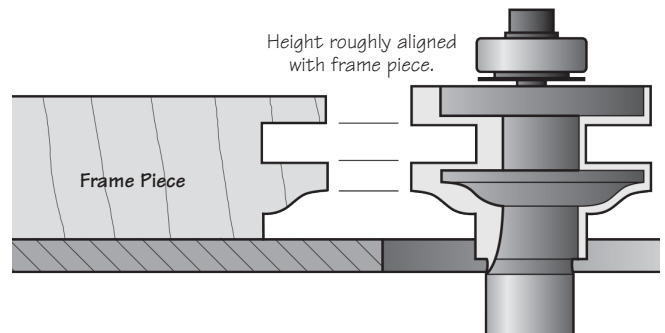


Figure 3: Set-up for coping bit.

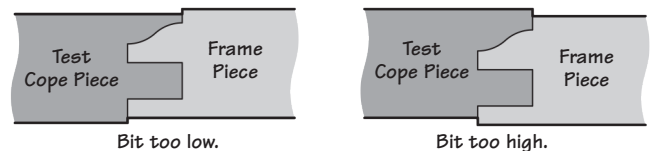


Figure 4: Checking the bit height.

5. Use a right-angle fixture to guide the ends of the rails and mullions through the router (see **Figure 5**). Use a scrap piece of stock with a coping cut along its length to support the rails and mullions to prevent tear-out.

Note: The coping cut on the scrap stock used to prevent tear-out must be cut **after** the bit height has been perfected.

6. Dry assemble the frame and panel, and check for proper panel fit. The panel width should be $\frac{1}{8}$ " less than the rail length to allow for seasonal movement. Glue up the frame, but **do not** glue the panel to the frame.

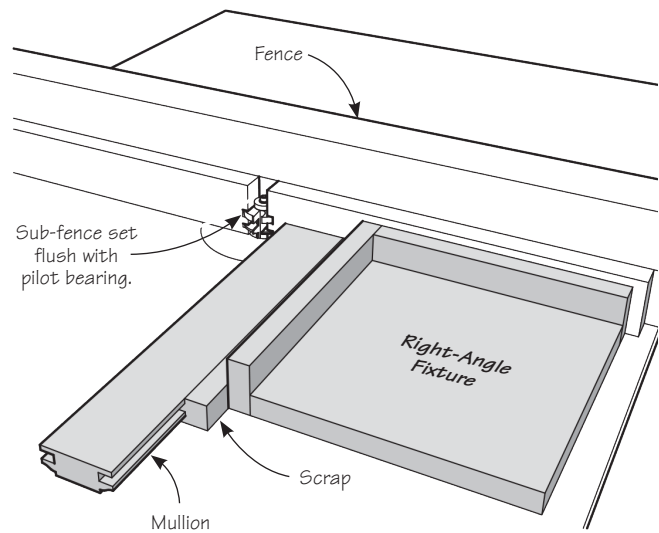


Figure 5: Using a right-angle fixture.