

Straight edges with a Router

You don't have a battleship-sized jointer? Fine! Get perfect edge joints on these long boards using a router instead.

You'll need a tablesaw, a router that accepts 1/2-in. bits, four router bits, an electric drill (a drill press is very helpful, but not absolutely necessary), a BeadLOCK doweling jig (see [Sources](#), page 77), a jig for ripping a straight edge on rough lumber, sawhorses and assorted clamps. In addition to the lumber (\$450), buy two 4x8 sheets of 3/4-in. medium density fiberboard (MDF) (\$50). One serves as a work surface and the other provides the straightedges for jointing and squaring operations (see [Fig. H](#), Photos [3](#) through [5](#) and [10](#)). You won't need a jointer. You don't have to own a planer either, because most hardwood lumberyards will mill rough lumber for you. You'll need a lathe if you want to turn your own legs. There are ready-made alternatives if you don't (\$35 to \$75 each, see [Sources](#), page 77).

CHOOSING & USING YOUR LUMBER

The top, aprons and internal support rails are made from 8-ft. long 5/4 boards, about 80 bd. ft., milled to 1-in. thickness. If you're having your lumber milled at the yard, have them also make a straight cut on one edge (called SL1E or "straightlining"). Milling and straightlining cost only about 30 cents per ft. and save you the trouble of doing it yourself ([Photo 1](#)).

If 5/4 boards aren't available, substitute 100 bd. ft. of 6/4. You

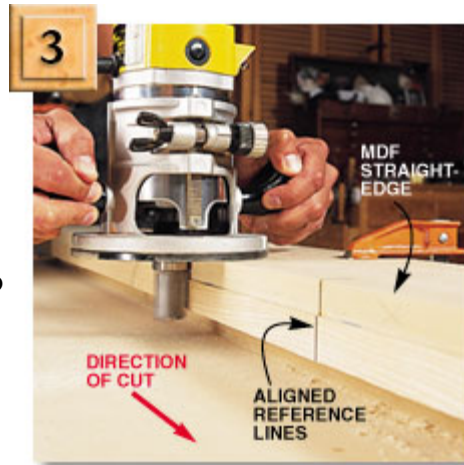


RIP STRAIGHT EDGES easily with inexpensive straightlining jigs (see [Sources](#), page 77). One thumbscrew on each jig holds the rough-edged board, the other grips an 8-ft. long by 7-in. wide MDF straightedge. After straightlining one edge, remove the board from the jig and rip the other edge parallel. (You can also have straightlining done for you at the lumberyard.)



A BIG PATTERN-CUTTING BIT works best for jointing edges. Its large cutting diameter leaves smooth, chatter-free surfaces.

could also use 4/4 stock and rework the dimensions for 3/4-in. material. A 3/4-in.-thick top will be lighter in weight and appearance (maybe too light for your taste), and the splines will have to be no wider than 3/16-in. The thinner, 6-ft.-long aprons will be more likely to sag. You'll also have to use smaller loose tenon stock and a different BeadLOCK drilling jig that requires drilling more, albeit smaller holes.

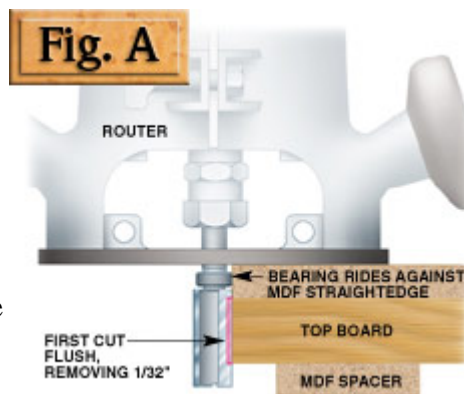


Use 8/4 stock for the legs, milled to 1-3/4-in. thickness, cut into 30-in. lengths, and glued up. You'll need about 25 bd. ft.

White ash looks similar to oak, with one noticeable difference. Its heartwood is a dark brown color that contrasts sharply with its light-colored sapwood. When choosing or ordering lumber, look or ask for pieces that are all sapwood, especially the 8/4 stock for the legs. The 5/4 stock must have one good sapwood face. Heartwood on the back side won't show, except on the edges of the top.

ROUT THE FIRST EDGE of each joint, using the pattern-cutting bit and an 8-ft.-long MDF straightedge. After laying out the boards for the top, draw a line across each joint, halfway from the end. Aligning these lines with a similar line at the midpoint of the MDF guarantees that the jointed edges will fit together.

You'll need twelve 5/4 boards that are at least 7-in. wide. Use the seven that look the best together, considering grain pattern and color, for the top (seven boards 6-in. wide after jointing will make a 42-in. wide top). The four aprons, including their add-on half-round details, require three of the remaining boards (you can get the four pieces for both short aprons from one board). Use one of the two remaining boards for the internal rails and the other for splines and test pieces.



JOINTING WITH A ROUTER

Step 1: Flush Trim Cut

THE FIRST CUT is an ordinary flush trim (Photo 3). The trick is that both edges of the joint are routed from a single straightedge set-up. That way, the two edges will mate perfectly, even if the straightedge isn't perfectly straight.

Make the top first. Don't worry about making it to exact dimensions. Just use your best-looking boards and

come as close as you can. (My top turned out to be 41-1/2-in. wide). Then adjust the size of the base, changing the lengths of the aprons to maintain the overhang of the top.