

Side Table

A compact table with a generous drawer on top and a wide-open shelf on the bottom.

This handsome table is a truly versatile piece of furniture. Because of its compact size, you can use it as an end table for a sofa or chair and even as a night stand alongside your bed. But its sturdy design and appealing lines make it work equally well as a console table in the hallway or an occasional table in the kitchen or bath.

Its utility, however, is only part of the story. Though not as complicated as the rocker or bookcase in our guide, this piece is nonetheless a challenging bit of woodworking. From the mortise-and-tenon joinery that holds the case together to the sliding dovetails that join the drawer face to the drawer sides, much depends on working carefully and precisely. But the rewards of a job well done are well worth the effort. And the skills that you develop—or refine—when building it will help prepare you for any other table projects that may come your way.

Stock preparation

Like the rocker and bookcase, the material used in this table is quarter- sawn white oak. The legs are cut from 8/4 solid stock, the top from 5/4 material and the rest from 4/4 lumber. For the drawer sides, you will have to either plane 4/4 stock to 1/2-in. thickness or have your lumber dealer plane the lumber to the finished size. The same holds true for the drawer guides, which are 5/8 in. thick.

The panels for the bottom shelf and tabletop are glued up from narrow boards. Cut stock slightly longer and a bit wider than required to yield the finished panel. Edge-joint each piece, then lay out the locations of the No. 20 joining plate slots every 6 to 8 in. along the mating edges. Keep the end slots about 3 in. from the finished ends of the panels.

Use the plate joiner to cut the slots, registering the cuts against a flat work surface. Then apply glue to the slots, plates and edges and assemble the panels. Use clamps to pull the joints tight, then let the glue set for about 20 minutes. After the glue fully cures, rip and crosscut the panels to finished dimension.

Joinery

Rip and crosscut the remaining parts for the table base to finished dimension. Then, lay out the mortise in the table legs. Use a router with an edge guide and 1/2-in.-dia. up-



1--Use a router with an up-cut spiral bit and an edge guide to cut the rail mortises in the table legs. Make several passes.



2--When the routing is done, carefully square the ends and flatten the sides of each mortise with a sharp chisel.

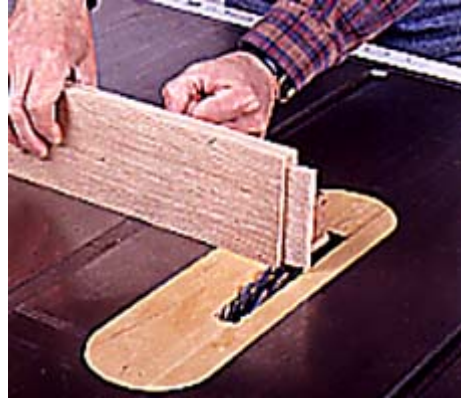


Joinery

Rip and crosscut the remaining parts for the table base to finished dimension. Then, lay out the mortise in the table legs. Use a router with an edge guide and 1/2-in.-dia. up-cut spiral bit to make these cuts (Photo 1). Use a sharp chisel to square the ends of each mortise (Photo 2).

Use a dado blade in your table saw to cut the tenons on the side and back rails. Since the tenons are 7/8 in. long, you will have to make two passes for each tenon cheek. Readjust the blade height to cut the shoulders at the top and bottom edges of the tenons (Photo 3). Check the fit of each tenon in its matching mortise.

Mark the locations of the slat mortises in the side rails. Clamp a tall fence to the drill-press table to help locate the rails, then bore overlapping 3/8-in.-dia. holes to remove most of the waste (Photo 4). Complete the mortises by smoothing the walls and squaring the ends with a sharp chisel.



3--Use a dado blade in a table saw to cut the rail tenons. First cut the cheeks, then readjust the saw to cut the shoulders.



4--Cut the slat mortises in the rails using a drill press to remove most of the waste and a sharp chisel to finish the cuts.

Lay out the joining plate slots on the bottom shelf and side rails. Use the plate joiner to cut the slots in the shelf ends, registering the cut on a flat workbench or on the top of your table saw (Photo 5). To cut the slots in the side rails, you must use a spacer block under the plate joiner to yield the proper slot position (Photo 6).

Before beginning to assemble the base, sand all the parts with 120- and 220-grit sandpaper, then dust off the pieces thoroughly. It is much easier to do a good job of sanding at this stage than it is once the base is together.

Base assembly

Position the side slats in their mortises in one bottom side rail (Photo 7). If the parts fit properly, you need not apply glue to these joints, since the slats will be held captive between the rails. Place the top side rail over the slat ends, then clamp the assembly temporarily to be sure that the slats are completely seated in the mortises.



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Apply glue to the rail tenons and leg mortises, then assemble the table side. Clamp the joints tight, then compare opposite diagonal measurements to be sure that the assembly is square (Photo 8). Follow the same procedure for the other side. Apply glue to the joining plate slots, mortises, tenons and plates for assembling the shelf and back rail to the sides. Join the rail and shelf to one side (Photo 9), then place the opposite side over the shelf and rail ends. Stand the base on a flat work surface and clamp the joints tight (Photo 10). Check for square.

Use a router with an edge guide to cut a 1/4-in.-deep x 3/4-in.-wide dado in each drawer guide (Photo 11). Bore and countersink pilot holes for mounting screws in the guides, then sand the guides with 220-grit sandpaper before fastening them to the table legs (Photo 12).



6--Clamp the bottom rails to your table saw fence. Then use a plate joiner to cut joining slots in one side of both rails.



7--Test fit the side slats in the rail mortises. Sand or trim the joints, if necessary, to achieve a tight fit for each slat.



8--Apply glue to the mortises and tenons, then clamp the parts. Check for square by comparing diagonal measurements.



9--To join the sides to the back rail and bottom shelf, apply glue to the slots and plates, and to the mortises and tenons.



10--Clamp the side assemblies to the back rail and shelf and check the parts for square. Readjust the clamps if necessary.

Mark the locations of the tabletop fasteners on the top edge of the side and back rails. Use a 3/4-in. Forstner or multispur bit to bore the 1/8-in.-deep recess for the fasteners. Bore a pilot hole for each, then attach the fasteners with 1-in.-long No. 8 fh screws.

Drawers

Cut stock to finished size for the drawer sides and back, and rip stock for the drawer face, but don't cut it to length yet. Instead, leave the drawer face blank about 12 in. long. The drawer sides are joined to the face with sliding dovetails. These joints are not difficult to cut, and they provide a nice compromise when you do not want to invest the time required for traditional dovetail corner joints. In order to cut these stopped dovetail slots, construct a U-shaped jig to guide the router. You can build this jig by screwing together three strips of scrap lumber or plywood. The dimensions of these pieces are not critical. But it is important that the three pieces are assembled square to each other.



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Set the dovetail bit—we used a Bosch No. 85240—to cut $7/16$ in. deep, then make an indexing cut into the fence of your jig to make locating your cut easy. Mark the position of the two slots—along with an end mark for each slot—on the inside surface of the drawer face, centered on the length of the face blank. Clamp the face to the routing jig with the indexing cut centered on one mark. Slide the router bit into the slot, turn on the motor and guide the tool along the jig to the end mark of the slot (Photo 13). Turn off the router and slide the bit back to the indexing cut to remove it. Repeat for the other slot. Cut the face to finished length.

Use the same dovetail bit in the router table to cut the dovetail shape on the ends of the drawer sides (Photo 14). For the joint with the drawer back, use a dado blade in the table saw to cut a simple dado. Then use a $1/4$ -in.-dia. straight bit in the router, and an edge guide, to cut the grooves for the drawer bottom in the face and drawer sides (Photo 15). Note that the groove in the face runs only between the dovetail slots.

Use a small backsaw to cut the shoulder at the top of the dovetail on each drawer side. Then dry assemble the drawer box to be sure that all joints fit properly. If all the joints are correct, sand all drawer parts, then apply glue and reassemble the drawer (Photo 16). Use brads to reinforce the glue joints between the back and drawer sides. Then clamp the drawer parts together. Check that the assembly is square.

Cut the drawer bottom from $1/4$ -in.-thick plywood, then slide it into place, and fasten it to the bottom edge of the drawer back with screws. You can remove the bottom later to make finishing the drawer easier.

Cut the drawer hanger strips to size, then bore and countersink pilot holes for attaching them to the drawer sides. Clamp the strips to the drawer sides, then fasten them with screws (Photo 17). Finish the drawer assembly by marking the locations of mounting screws for the drawer pull. Bore pilot holes and attach the pull.



14--Use the same dovetail bit in a router table to cut both sides of the dovetails on the ends of each drawer side.



15--Cut a dado between the dovetail slots on the drawer face for the bottom panel. Cut matching dados in the drawer sides.



16--Apply glue to all the drawer joints, then clamp the box together. Reinforce the side-to-back joints with brads.



17--Slide the drawer bottom in place and attach it to the back with screws. Also, screw the guide strips to the sides.



18--Center the base over the top and mark the fastener holes. Then bore pilot holes in the top and attach the base.

Assembly

Sand the tabletop smooth with 220-grit sandpaper, then place it upside down on a padded surface. Invert the base on the top and adjust it for an even reveal on all sides. Next, mark the locations of the screwholes for the tabletop fasteners (Photo 18). Use a clamp to maintain the proper spacing between the front table legs.

Remove the base from the top and bore pilot holes for the tabletop fastener screws. Then, replace the base and install the screws. You'll need a screwdriver with a magnetic tip to start the screws between the drawer guides and side rails. Apply the same stain and finish that's described in "Rocking Chair."

Key	No.	Size and description (use)
A	4	1 3/4 x 1 3/4 x 25" oak (leg)

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B	2	13/16 x 4 x 16 1/4" oak (rail)
C	1	13/16 x 4 x 20 1/4" oak (rail)
D	2	13/16 x 2 x 16 1/4" oak (rail)
E	10	3/8 x 1 x 15 1/8" oak (slat)
F	1	13/16 x 8 x 19 7/8" oak (shelf)
G	2	5/8 x 4 x 15 7/8" oak (drawer guide)
H	1	1 x 20 x 24" oak (top)
I	1	13/16 x 3 15/16 x 18 3/8" oak (drawer face)
J	2	1/2 x 3 1/2 x 16 1/4" oak (drawer side)
K	1	1/2 x 3 x 16 3/4" oak (drawer back)
L	1	1/4 x 15 1/16 x 16 3/4" oak plywood (drawer bottom)
M	2	1/4 x 3/4 x 15 13/16" oak (drawer guide strip)
N	8	Knape & Vogt No. 1547STL tabletop fastener
O	1	Whitechapel No. 106STH2 drawer pull
P	8	1 1/4" No. 8 fh screws
Q	8	1" No. 8 fh screws
R	8	5/8" No. 8 fh screws
S	8	1/2" No. 6 fh screws
T	3	5/8" No. 6 rh screws
U	8	3/4" x 16-ga. brads
V	16	No. 20 joining plates
Misc: Yellow glue, 120- and 220-grit sandpaper, 0000 steel wool, aniline stain, tung oil varnish, paste wax.		

SIDE TABLE 20" DEEP X 24" WIDE X 26" HIGH

