Storage Bench page 82

DESIGNER: **BILL LAHAY**

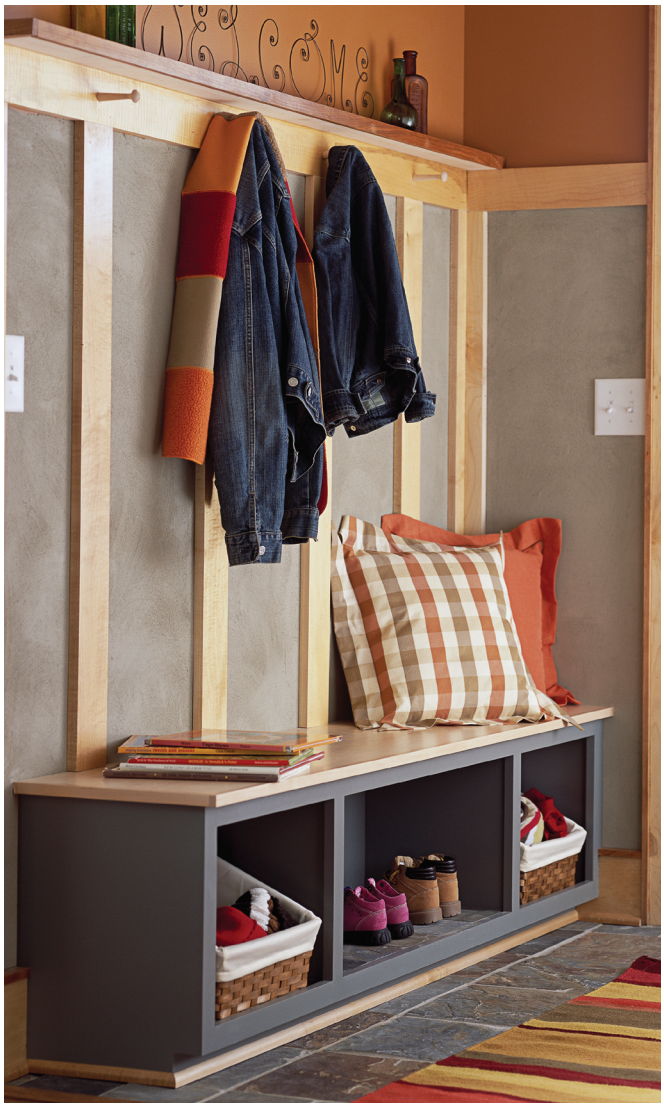
Skill level:-Beginning/ intermediate woodworker
Time to complete:-2 weekends, including painting
Estimated cost: $200–$250 for one bench

Get Going

Use the circular saw to cut the main parts (A through D) for the bench base.

Use a table saw with a dado blade (or a router with a ¾-inch straight bit) to cut the dadoes and rabbets, which make it easier to assemble the base. (Note that opposing panels are oriented as mirror images to each other, and refer to the illustrations on the next page for specific joint dimensions and placement.)

Starting with the floorboard (B) and an end panel, assemble the dado joint as shown and secure with glue and 6d finishing nails. Make sure the rabbeted edge on the floorboard is along the back and is facing up. Repeat for the other end panel, then glue and nail the seat support (C) into the rabbets at the top of each end panel. Make sure the support is oriented correctly, with the rabbet and dadoes on the inside face. Set the assembly on its rear edges, apply glue inside the dadoes on the floorboard and support, then slide the dividers (D) into place. Secure by driving 6d



☑ materials

- ☐ One sheet (48×96 inches) of ¾-inch birch plywood (for parts A,B,C,D)
- ☐ One sheet (48×96 inches) of ¼-inch birch plywood (for part E)
- ☐ One piece of 1×3 (nominal) poplar, 6 feet long (for part F)
- ☐ Two pieces of 1×2 (nominal) poplar, 8 feet long (for parts G,H,J)
- ☐ Three pieces of 1×4 (nominal) maple, 6 feet long (for part K)
- ☐ One piece of 1×6 (nominal) maple, 6 feet long (for part K)
- ☐ Wood glue
- ☐ One package 6d finishing nails
- ☐ One package No. 6×1¼-inch drywall screws
- ☐ Wood filler
- ☐ One quart clear wood finish (varnish, polyurethane, or wipe-on oil finish)
- ☐ One quart each latex primer and latex semigloss enamel paint

☑ tools

- ☐ Tape rule
- ☐ Angle square
- ☐ Portable circular saw with straightedge guide
- ☐ Table saw (with standard and dado blades)
- ☐ Bar clamps (18-inch or larger)
- ☐ Drill
- ☐ Drill bits (1/16, 3/16 with countersink
- ☐ No. 2 Phillips screwdriver (or driver bit for drill)
- ☐ Hammer
- ☐ Nail set
- ☐ Putty knife
- ☐ Sanding block with 150-grit sandpaper
- ☐ Paintbrushes
- ☐ Optional: Router with ¾-inch straight bit, ¼-inch rabbeting bit

PARTS	[A] End Panels	[B] Floorboard	[C] Support	[D] Dividers	[E] Rear Panel	[F] Toe-kick	[G] Stiles	[H] Rails	[J] Struts	[K] Top
THICKNESS	¾	¾	¾	¾	¼	¾	¾	¾	¾	¾
WIDTH	15-¼	14-½	14-½	14	14	2	1-½	1-½	1-½	16
LENGTH	17	65	65	14-¼	65	66	15	63	12	68
QUANTITY	2	1	1	2	1	1	2	2	2	1

NOTE: All dimensions are in inches.

finishing nails through the floorboard and support into the edges of the dividers.

Cut the rear panel (E) from the 1/4-inch plywood, then set the base assembly upright and secure the panel with glue and nails. Reposition the assembly onto its rear face/edges.

Attach Trim

Use the table saw to rip the 1×3 poplar to 2 inches wide for the toe-kick (F). Cut it to length and apply glue to its upper edge and to the front edge of the toe-kick notch in each end panel. Attach the toe-kick with 6d nails; drill 1/16-inch pilot holes, nail at the ends and also through the floorboard into the top edge of the toe-kick.

Cut the 1×2 poplar stock to length for parts G, H, and J. Glue and nail the stiles (G) to the front edges of the end panels as shown, flush at the outside faces. Then glue and nail the lower and upper rails (H) in place, flush with the outside faces of the floorboard and the seat support. Attach the struts (J) to the front edges of the dividers with glue and nails; center each strut on the divider edge, leaving a 3/8-inch overhang on each side.

Glue Up the Top

Gather the 1×4 and 1×6 maple boards for the bench top (K) and arrange them edge to edge until you have a grain pattern you like. (Tip: Make a light pencil mark across the top faces so you can realign the boards.) Apply glue to the mating edges and clamp the boards together until you get uniform glue squeeze-out along the joints. Check that the board faces are flush at the joints and that the top stays flat when the clamps are tightened, then set the assembly aside for a few hours. Later, remove the clamps and scrape off the beads of excess glue with a putty knife. Let set overnight, then trim the ends square with the circular saw. Use a sanding block to sand the joints and round off sharp corners and edges.

Finish and Assemble

For the maple bench top, apply two coats of clear wood finish on all surfaces. Set aside to dry.

Use a nail set to countersink the nails in the bench base, then fill the holes with wood filler. Sand filler flush and apply a coat of latex primer to the entire base assembly. Let dry, then apply one or two coats of latex semigloss enamel. Let dry.

To complete assembly, drill a half-dozen or more 3/16-inch holes through the seat support. Set the maple bench top in place, flush with the base at the back edge and with an inch overhang at each end. Drive 1 1/4-inch drywall screws up through the seat support and into the underside of the maple bench top. (Note: If the bench will be positioned against an irregular wall surface or corner, scribe the maple top to fit.)

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Fasten 1/4-inch cement tile-backer board to the center floorboard, then install slate tile. The tile provides a durable surface for boots and shoes.