



Classic Planter & Bench

Fluted legs and a pastel color scheme bring Victorian-era charm to this patio-pleaser. Build a pair of planters and link them with a bench, as shown in the photo above or reach out with additional modules, as shown by the illustrations on the next page.

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BILL OF MATERIALS						
part		т	finish W	ed size L	Matl.	Qty.
planters						
A*	legs	21/2"	21/2"	17 7⁄16"	LC	8
В	rails	1 ½"	3 ½"	16½"	С	16
С	slats	1/2"	2"	75⁄8"	С	16
D	slats	1/2"	1 1⁄2"	75⁄8"	С	64
bench						
E	rails	1 ½"	3 ½"	41 ¹³ ⁄16 ["]	С	2
F	slats	3⁄4"	3"	16¾"	С	14
G	frame ends	1 ½"	2¾"	16"	С	2
shelves						
Η	shelves	3⁄4"	15¾"	15¾"	EP	2

*Initially cut parts oversize. Then, trim each to finished size according to the how-to instructions.

Materials Key: LC–laminated cedar, C–cedar, EP–exterior plywood.

Supplies: four 3/8" carriage bolts 31/2" long with nuts and flat washers, eight 1/4" shelf clips, 31/2" deck screws, exterior sealer or primer and paint.

Let's start with the legs

1 To form the $2\frac{1}{2}$ "-square legs (A), start by crosscutting nine pieces of 2×6 cedar stock to 18" in length. Then, rip each piece of 2×6 centered down the middle. Using an exterior adhesive, glue the 18"-long pieces face-to-face.

Note: Forming of the legs involves several setups. To eliminate ruining a leg, we used the extra leg to test the cuts before machining the eight good legs.

2 After the glue has dried, scrape off any excess, and rip each lamination to $2\frac{1}{2}$ " square. Then, trim to $17\frac{1}{2}$ " long.

3 To cut the 15° bevels across the top end of each leg (A), attach a long extension to your miter gauge, and angle it 15° from your tablesaw blade where shown on the Cutting the Beveled Top drawing on *Page 7*. Now, attach a stopblock to the miter-gauge extension where shown.

4 To prevent chipout when making the saw cuts, wrap masking tape around the end of the leg to be mitered. Then, make four miter-cuts across the top end of each leg, trimming each to its 177/16'' finished length. Remove the remaining masking tape.

5 Fit your table-mounted router with a $\frac{1}{2}$ " straight bit set to cut $\frac{3}{8}$ " deep. Now, clamp a fence to your router table, then clamp two stop-blocks to the fence where shown on the Routing the Mortises drawing on *Page 7*.

6 Mark the two inside surfaces of each leg, putting the best two surfaces *opposite* these. Rout the $\frac{1}{2}$ " mortises $\frac{3}{8}$ " deep using the fence and stopblocks for alignment. Raise the bit to cut $\frac{3}{4}$ " deep, and make a second pass to deepen the mortises to their final depth. Square the ends of the mortises with a chisel.

7 Fit your tablesaw with a $\frac{1}{4}$ " dado blade and miter-gauge extension, and cut $\frac{1}{4}$ " dadoes $\frac{1}{8}$ " deep across all four surfaces of each leg, where shown on the Cutting the Dadoes drawing on *Page 7*. The top dado is





 $1\frac{1}{16}$ " from the top end of the leg, and the bottom dado is $1\frac{3}{4}$ " from the bottom end of the leg, where shown on the Leg detail drawing *above*.

8 Switch to a $\frac{1}{4}$ " roundnose bit in your table-mounted router. Position the fence and stops, and rout a $\frac{1}{4}$ " flute $\frac{1}{8}$ " deep along one surface opposite the surfaces with the routed mortises. See the Leg detail *above* and the Routing the Flutes drawing on *Page 7* for reference. Reposition the fence, and rout a second flute along the same surfaces, but along

the opposite edge of the leg. Finally, reposition the fence again, and rout the third flute centered between the first two flutes.

9 Rout a ¹/₈" chamfer along the bottom edges of each leg. See the Leg detail for reference.

10 Position all legs (A) side by side, with one $\frac{1}{2}$ " mortise facing up, and the other mortises facing you. Using a framing square align the bottom ends of the legs. Now, use the square to measure and mark the $\frac{1}{4}$ " holes for the shelves on the top face of each leg. Using a fence on your drill press for alignment, drill a $\frac{1}{4}$ " hole $\frac{3}{8}$ " deep at each line as shown in the photo on *Page 8*.

Now, machine the top and bottom rails

1 Cut the top and bottom rails (B) to the size listed in the Bill of Materials. Rout or cut a $\frac{1}{2}$ groove $\frac{3}{4}$ deep, centered along one edge of each rail.

2 Cut rabbets along the ends of each rail to form tenons to fit snugly into



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the mortises in the legs, as dimensioned on the details shown with the Planter Exploded View drawing.

3 Rout $\frac{3}{8}$ " round-overs along the top edges and $\frac{1}{8}$ " chamfers along the bottom edges of the eight rails (B) that you'll install as the top rails. Rout or saw a $\frac{1}{4}$ " decorative groove $\frac{1}{8}$ " deep next to the round-overs on both sides of each top rail, where shown on the Top Rail detail.

4 Rout $\frac{1}{8}$ " chamfers along all edges of the bottom rails (B), where shown on the Bottom Rail detail accompanying the Planter Exploded View drawing.

Cut the slats, and secure them between the rails

1Resaw or plane stock to $\frac{1}{2}$ " thick for the slats (C, D). Then, rip them to the widths listed in the Bill of Materials and shown on the Planter Exploded View on *Page 9*.

2 Rout $\frac{1}{8}$ " chamfers along both edges (not the ends) of each $\frac{1}{2}$ "-thick slat (C, D).

3 With a wide slat (C) on each end, fit the slats (no glue necessary) into the groove in the bottom rail. Then, fit the top rail onto the top ends of the slats. Clamp and check for square.

4 Check the fit of the rail/slat assemblies between the legs. Glue and clamp a rail/slat assembly between two legs as shown in the photo *right*, *bottom*. Check for square. Repeat for the three remaining end panels.

5 Glue and clamp the remaining slat assemblies between the planter end panels (A, B, C, D).

Add the bench assembly

1 Cut the bench rails (E) to size. Then, rout the round-overs and chamfers, and cut the grooves in the rails where shown on the Planter Exploded View drawing and accompanying details.

2 Cut the bench slats (F) to size. Then, cut rabbets across the ends of the slats to fit into the $\frac{3}{8}$ " groove on the inside face of the rails (E). Next, rout $\frac{1}{8}$ " round-overs along the edges, but not the ends, of the slats.

advice from our shop

A series of holes in the inner face of each leg lets you quickly adjust the plant shelf's height to accommodate different size pots. To raise or lower the shelf, just lift it out and move the shelf clips to a different level.



Drill $\frac{1}{4}$ " holes where marked on each leg for the shelf pins. A fence on your drill press ensures alignment.



When assembling the planter end frames, be sure to square them as you tighten the clamps. The slats float in the frame.





3 Cut the bench-frame ends (G) to fit between the rails (E). Cut rabbets across the ends to fit between the legs (A) of the assembled planters, where shown on the Exploded View drawing and accompanying Notch detail.

4 Dry-clamp (no glue) the bench assembly (E, F, G) together. Cut notches on the slats (F) at each end of the bench assembly, where shown on the Exploded View drawing on *Page 3*. Now, check the fit of the clamped-up bench between the planters, and adjust if necessary. Remove the clamps and separate the pieces.

5 Drill a pair of 3/8" mounting holes through each frame end (G), where shown on the Bench detail *below*.

6 Clamp a bench-frame end (G) to one of the planter assemblies so the bottom edge of the end (G) is flush with the bottom edge of the top rail (B) where shown on the Mounting Bolt detail drawing *below*. Use the previously drilled holes in the end (G) as guides to drill the same-size holes through the rail. Repeat for the other frame end and remaining planter.

Let's assemble the bench

1Fit the slats (F) into place between the rails (E), using ¹/₁₆" strips as spacers between the slats to test the fit and check for equal gaps. Trim if necessary. Then, glue and clamp the slats in place, wiping off any excess glue immediately. (We used a ¹/₄" acid brush to apply the glue to the grooves in the rails.) Now, glue and clamp the end rails (G) in place. Check the bench assembly for square.

2 Drill a pair of counterbored mounting holes at each end of the bench rails (E) and into the ends of the mating rails (G). Drive deck screws to secure each joint.

3 Cut ³/₈" plugs ³/₈" long, and glue them into the counterbores over the deck screws. Sand the plugs flush.

4 Cut the planter shelves (H) to shape using the Shelf Part View drawing for reference. Now, drill five ³/₄" drain holes in each shelf. You can either set your pots

directly on the shelves in the planter boxes, or cut holes into the shelves to fit your particular pots. To extend the life of the planters, put potted plants in the planter boxes on the shelves. We do not recommend filling the planter boxes directly with soil.

Finish and enjoy

1 Completely seal the project with a clear exterior finish, or prime and paint the planters and bench as desired. Pay particular attention to sealing the bottoms of the legs (A). (We used True Value's Tru-Test colors from their Exterior Historical Collection of Victorian Era Colours. We used sedge for the main color, seahurst for the panels and post caps, and cameo rose for the top of the rails and flutes.)

2 Bolt the seat assembly between the planters. Determine the shelf height, and add the shelf pins and shelves. Finally, add the potted plants and have a seat.



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