

**MATERIALS**

Because the table is painted, you could build it entirely of medium-density fiberboard (MDF), but you'd get a table that's twice as heavy as the poplar version. A lighter panel choice is plywood, but its edges are not as uniform as MDF and it requires more filling and sanding.

**POWER TOOLS**



A table saw is the fastest and most accurate tool for ripping the leg and rail pieces, but a portable circular saw with an edge guide will work. A power miter

**Materials & Tools**

saw is the tool of choice for the rail miters, and you'll use a router to trim the top flush to the rails.



**OTHER ESSENTIALS**

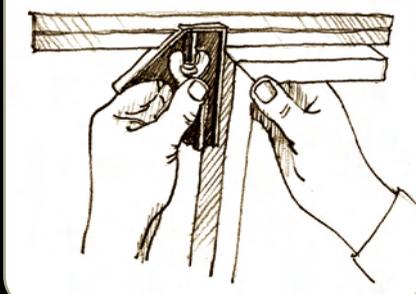
- Hammer
- Portable drill
- Random-orbit sander
- Try square

**HARDWARE AND SUPPLIES**

- 1/2-in. finishing nails
- 1 1/2-in. finishing nails
- Wood glue
- Wood filler
- 120- and 220-grit sandpaper

**MACHINING TIGHT MITERS**

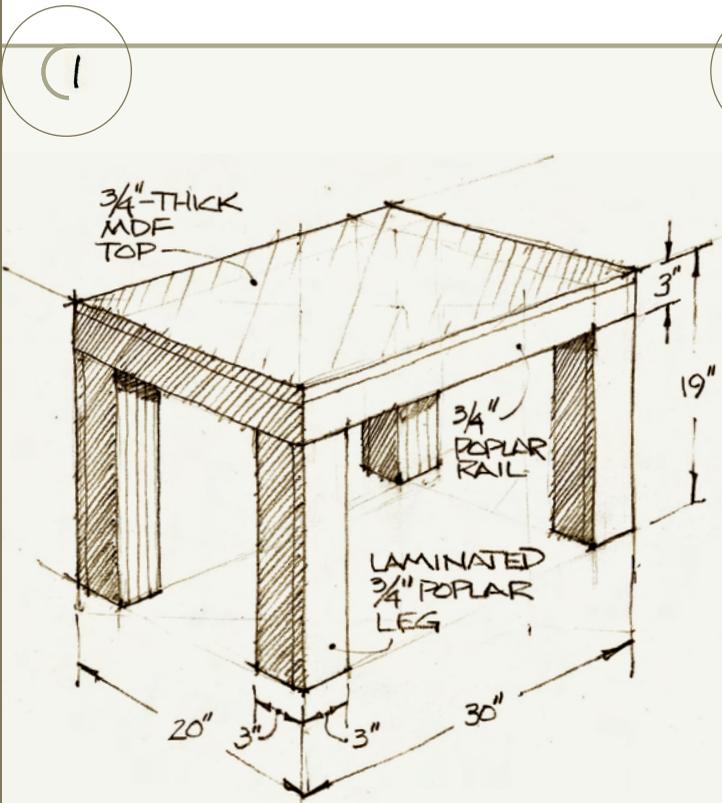
Before cutting miters with a table saw or radial-arm saw, first check for an accurate 45-degree cut. Make a test cut on a flat piece of scrap stock, then hold the two pieces together and check the angle with a square. And remember: If your stock isn't straight, your saw will never produce consistent joints.



# PARSONS TABLE

PLEASE CUT HERE

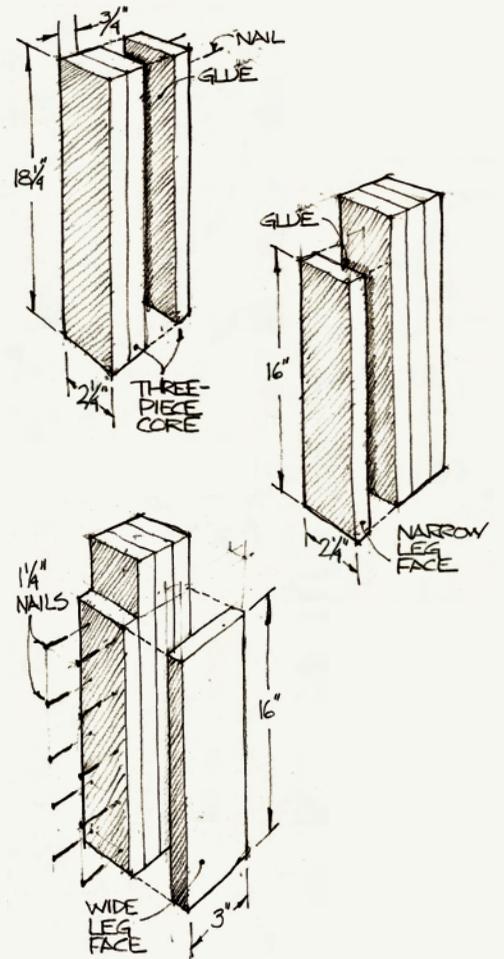
Popular Mechanics



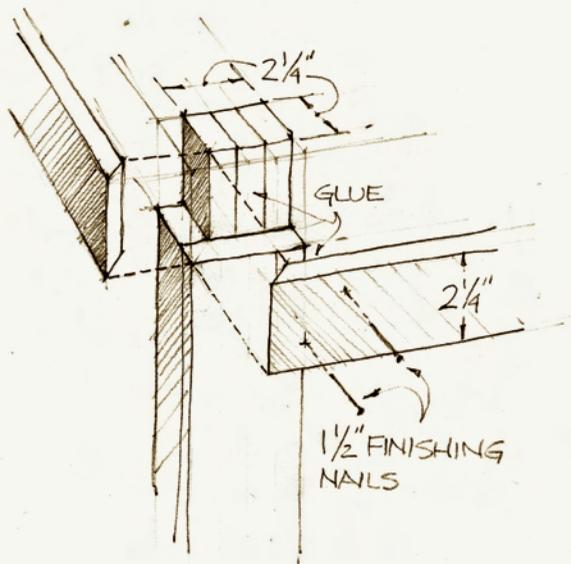
Parsons tables have square, parallel-sided legs that support a thick top. We created the illusion of a heavy top by setting its edges flush with the 3/4-in.-thick rails. Poplar is a good choice for the legs and rails because it's easy to work and takes paint well. Solid wood on the top, though, would create problems as it shrank and expanded with humidity changes, so we switched to stable medium-density fiberboard (MDF).

2

The legs are laminated with glue and nails. Before applying glue to adjoining pieces, stack them so they're aligned and drive a nail at each end so the points just poke through the top piece. Then, apply a light coat of glue, use the nail points to align the pieces and drive the nails. Add additional nails to bring each joint tight. After making a three-piece core for each leg, add the shorter leg-face pieces that create the notches for the rails.



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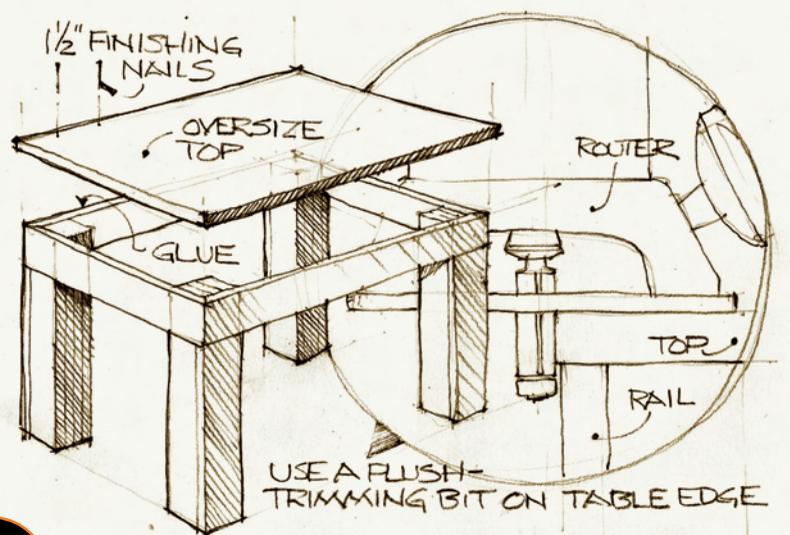


Rip stock to 2 1/4 in. wide for the rails. Miter the ends and be sure that opposite rails are exactly the same length. If you don't have power equipment for cutting accurate miters, you can do it by hand, or simply cut the pieces squarely to length and use butt joints. Glue and nail each short rail to two legs, and double-check that the legs are square to the rails. When the glue has set, add the long rails. If necessary, tack a diagonal strip across the top to keep things in place while the glue sets.

**Quick Tip**

The edge texture of medium-density fiberboard is uniform, but it's more porous than the face. Prime the edge with at least two coats. For a smooth finish coat, use a short-nap roller.

4



Cut the top about 1/2 in. longer and wider than the table frame, and glue and nail it in place so there's a uniform overhang at the edges. Because MDF is so hard, you'll have to bore pilot holes for the nails. Then, use a flush-trimming bit to rout the top edges flush with the rails. When the glue has dried, set all the nails and fill the nail holes and any other surface imperfections with wood filler. Sand the table with 120- and 220-grit paper, then prime and paint the table.