

The ultimate picnic table

For the intermediate woodworker, a patio table that's rugged and refined



Some decks are built like furniture, but here's a picnic table that's built like an elegant deck. I wanted no nails or screws to mar the surface of the alternating 1-by-3s and 1-by-4s that pattern the tabletop, so I secured the top boards from below with screws running through a supporting ledger. The only hint of metal connectors is a circle of copper that shows near each end of the 2-by-4s that frame the top. They're actually flush-mounted copper-pipe end caps masking the lag screws that join the perimeter frame.

The table shown above measures 36 inches wide by $75\frac{3}{8}$ inches long and comfortably seats eight people. I built the picnic table with redwood, but you can substitute fir, cedar, teak, or mahogany. My materials cost about \$230.

Notes: All connections are simple butt joints. The wood is standard-dimension lumber. Only the 2-by-6s used for the base connecting the legs were ripped down to $4\frac{1}{4}$ inches wide. (If you don't have a table saw, have the lumberyard cut the two boards for you.) All other cuts are square and can be made with a handsaw or a circular saw.

MATERIALS

- *Six 6-foot 1-by-3s
- *Six 6-foot 1-by-4s
- *Two 10-foot 2-by-2s
- *Two 10-foot 2-by-4s
- *Two 8-foot 2-by-6s
- *One 10-foot 4-by-4
- *One sheet 1/16-inch cardboard
- *Two dozen 2 1/2-inch deck screws
- *100 1 3/4-inch deck screws
- *Wood glue
- *One dozen 5/16- by 4-inch hex bolts
- *One dozen 5/16-inch hex nuts
- *Two dozen 5/16-inch washers
- *Four 1/4- by 3-inch lag screws
- *Four 1/4-inch washers
- *Eight 1-inch copper-pipe end caps
- *Epoxy
- *1 quart satin-finish water-base sealer

TOOLS

- *Tape measure and pencil
- *Circular saw
- *Matte knife
- *Combination square
- *Framing square
- *Bar clamp
- *Two socket wrench sets
- *Electric drill
- *1/8- and 3/8-inch drill bits
- *1-inch paddle bit
- *Electric sander
- *Medium-grit sandpaper
- *2-inch paintbrush

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DIRECTIONS

The table has three parts: a top, a frame, and a base. You build the top upside down and use its finished inside dimensions to determine the size of the base. First, cut 11 33-inch lengths from the 1-by-3s, 12 from the 1-by-4s, and one from each of the 2-by-4s. Then cut four 29 1/2-inch-long 4-by-4 legs. Also, trim cardboard into 1-inch squares to space the tabletop boards.

1. Lay the two 33-inch 2-by-4s on edge and alternate 12 1-



by-4s and 11 1-by-3s flat between them. Insert cardboard spacers between boards to determine the tabletop's length.

2. Butt each remaining 2-by-4 against one end of the



assembled boards, and on the 2-by-4's inside face, mark both the thickness of the 1-by-4s and 1-by-3s and the overall length of the tabletop.

Cut side 2-by-4s to the length marked.

3. Measure distance between 2-by-4 end pieces and cut two 2-by-2 ledgers to measure 1/4 inch less. Center and align each 2-by-2 on line marking tabletop's thickness on each 2-by-4 side piece; secure with five 2 1/2-inch deck screws.



5. Carefully lower frame over the 1-by-4s and 1-by-3s with cardboard spacers still in place. It should be a tight fit. Add a pair of spacers between frame and first board at each end.



4. Butt 2-by-4 side pieces over 2-by-4 end pieces. Center and drill pilot holes through sides into ends with 1/8-inch drill bit. Switch to 1-inch paddle bit and drill 7/8-inch-deep holes into sides. Assemble frame using glue and lag screws with washers.



6. Draw a line down the center of each 2-by-2 ledger. Using line as a guide, position and drill two 1 3/4-inch deck screws through 2-by-2 and into back of each top board, keeping screws about 1/4 inch in from sides of top boards.



7. Cut two 2-by-2 end ledgers to fit snugly between side ledgers, and screw to inside



faces of the end 2-by-4s with three 2 1/2-inch screws. Measure width and length between the end and side ledgers, then subtract 1/4 inch from each for dimensions of base. Cut frame sides and ends from ripped-down 2-by-6s.

9. Repeat steps for base sides, aligning sides flush with leg tops and outside faces



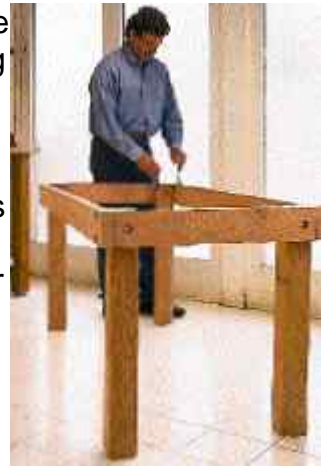
of the end boards before drilling a pair of holes centered over leg and 3/4 inch from edges of each side board. Loosely assemble base upside down with glue, hex bolts, nuts, and washers.

8. Overlay one end piece flush with tops and sides of a pair of legs. Center and,



using a 3/8-inch bit, drill holes through the end piece and each leg. Switch to 1-inch paddle bit (shown in photo) and use these holes as guides to drill a 7/8-inch-deep hole in each leg back and in the outside face of the end piece. Repeat for opposite end.

10. Use framing square to check corners and legs for squareness, then tighten nuts



and bolts with socket wrenches and let glue dry overnight.

11. Lower top onto base to check fit, then remove and sand and seal each



part separately. Lightly sand after each of three coats of sealer.

12. Attach top to base with 2 1/2-inch screws running through inside faces of base



sides and into tabletop side ledgers. Epoxy copper caps in exposed holes.