



DIY PICNIC TABLE

BUILD PLAN

Here are the tools, materials, cut list, and build steps you'll need to construct your own picnic table.



Picnic Table



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TOOLS

- Miter saw
- Table saw
- Drill/driver and ½ in. drill bit
- 2 ⅛ in. hole saw
- Pocket hole jig
- Allen wrench
- Tape measure
- L square or T square
- Pencil
- 120-grit sandpaper
- 80-grit sandpaper
- Clamps
- Eye and ear protection
- Foam brushes
- Fine sanding block

MATERIALS

Picnic Table

- (2) 1 in. x 4 in. x 8 ft. boards
- (5) 2 in. x 4 in. x 8 ft. boards
- (4) 2 in. x 8 in. x 8 ft. boards
- (2) 2 in. x 6 in. x 8 ft. boards
- (2) 4 in. x 4 in. x 8 ft. boards
- 2 ½ in. pocket hole screws
- 1 ¾ in. deck screws
- (8) 5/16 in. x 3 in. bolts
- (8) 5/16 in. washers
- (8) 5/16 in. wood anchors
- Pre-conditioner
- Stain
- Exterior spar varnish

Dining Bench*

- (4) 2 in. x 6 in. x 8 ft. boards
- (6) 2 in. x 4 in. x 8 ft. boards
- (2) 4 in. x 4 in. x 8 ft. boards
- 2 ½ in. pocket hole screws
- Pre-conditioner
- Stain
- Exterior spar varnish

*Materials are doubled to accommodate for two benches



CUT LIST

Picnic Table

Take the (2) 1 in. x 4 in. x 8 ft. boards and make the following cuts:

- (4) 1 in. x 4 in. x 20 $\frac{3}{4}$ in. boards
- (4) 1 in. x 4 in. x 8 $\frac{3}{4}$ in. boards
- (2) 1 in. x 4 in. x 16 in. boards

Take the (5) 2 in. x 4 in. x 8 ft. boards and make the following cuts:

- (2) 2 in. x 4 in. x 66 $\frac{3}{4}$ in. boards
- (4) 2 in. x 4 in. x 20 $\frac{3}{4}$ in. boards
- (4) 2 in. x 4 in. x 8 in. boards
- (4) 2 in. x 4 in. x 34 $\frac{1}{4}$ in. boards
- (2) 2 in. x 4 in. x 31 in. boards

Take the (4) 2 in. x 8 in. x 8 ft. boards and make the following cuts:

- (2) 2 in. x 8 in. x 61 $\frac{5}{8}$ in. boards
- (2) 2 in. x 8 in. x 26 in. boards
- (2) 2 in. x 8 in. x 76 $\frac{1}{8}$ in. boards
- (1) 2 in. x 8 in. x 11 $\frac{5}{16}$ in. board

Take the (2) 2 in. x 6 in. x 8 ft. boards and make the following cuts:

- (4) 2 in. x 6 in. x 24 in. boards
- (2) 2 in. x 6 in. x 11 $\frac{5}{16}$ in. boards

Take the (2) 4 in. x 4 in. x 8 ft. boards and make the following cuts:

- (4) 4 in. x 4 in. x 28 $\frac{1}{2}$ in. boards



Dining Bench

Take the (4) 2 in. x 6 in. x 8 ft. boards and make the following cuts:

(4) 1 ½ in. x 6 in. x 64 in. outside seat boards

Take the (6) 2 in. x 4 in. x 8 ft. boards and make the following cuts:

(2) 1 ½ in. x 4 in. x 64 in. middle seat boards

(4) 1 ½ in. x 4 in. x 55 in. long skirt boards

(4) 1 ½ in. x 4 in. x 9 ¾ in. short skirt boards

(4) 1 ½ in. x 4 in. x 6 ¾ in. support boards

Take the (2) 4 in. x 4 in. x 8 ft. board and make the following cuts:

(8) 3 ½ in. x 4 in. x 16 in. leg boards

PICNIC TABLE BUILD STEPS

1. Build the Icebox Supports

- a. Cut the 1 in. x 4 in. boards according to the cut list (with four pieces at 20 $\frac{3}{4}$ in. long and four at 8 $\frac{3}{4}$ in. long).
- b. Sandwich two 8 $\frac{3}{4}$ in. pieces between two 20 $\frac{3}{4}$ in. pieces, ensuring all the corners and edges are flush.
- c. Pre-drill holes in 20 $\frac{3}{4}$ in. pieces. Drill through outside of 20 $\frac{3}{4}$ in. pieces, securing to 8 $\frac{3}{4}$ in. pieces.
- d. Repeat steps 1a through 1c for the second icebox support.
- e. Sand all rough edges, corners, and sides.



Step 1a



Step 1c



2. Build Interior Icebox Frames

- a. Cut the 2 in. x 4 in. boards according to the cut list (with four pieces at 20 $\frac{3}{4}$ in. long and four at 34 $\frac{1}{4}$ in. long)
- b. Drill two pocket holes in each end of the 20 $\frac{3}{4}$ in. boards and 34 $\frac{1}{4}$ in. boards, roughly centered.
- c. Stand the 20 $\frac{3}{4}$ in. boards on their side, running parallel to each other and spaced 10 $\frac{1}{4}$ in. apart. Make sure that the sides with pocket holes are facing opposite each other.
- d. Take the 34 $\frac{1}{4}$ in. boards and sandwich the 20 $\frac{3}{4}$ in. boards between them, running perpendicularly and centered so that there's 10 $\frac{1}{2}$ in. of board running between the 20 $\frac{3}{4}$ in. boards and ends of the 34 $\frac{1}{4}$ in. boards. Make sure that sides with pocket holes are facing opposite each other. (Note: Use icebox support as a template to dry fit pieces before attaching them together).
- e. Drill pocket holes and attach the outside boards with 2 $\frac{1}{2}$ in. pocket hole screws.
- f. If used as template, remove the icebox support from the middle (loosen screws if it doesn't remove easily).
- g. Drill pocket holes along a side of the 34 $\frac{1}{4}$ in. boards to attach to the tabletop later.
- h. Sand down all pieces.

Step 2c



Step 2d



Step 2e



3. Attach the Icebox Support

- a. Take your icebox support and work it back into the frame, leaving it offset from the edge of the frame by approx. 1 in. so that your planter or icebox lays flush with the top of the table.*
- b. Secure the icebox support to the frame with 1 ¾ in. deck screws.
- c. Repeat steps 3a and 3b for the second icebox support frame.

**NOTE: The support must be offset, so that when a planter box is resting on the support the top of the planter is flush with the support frame.*

Step 3a

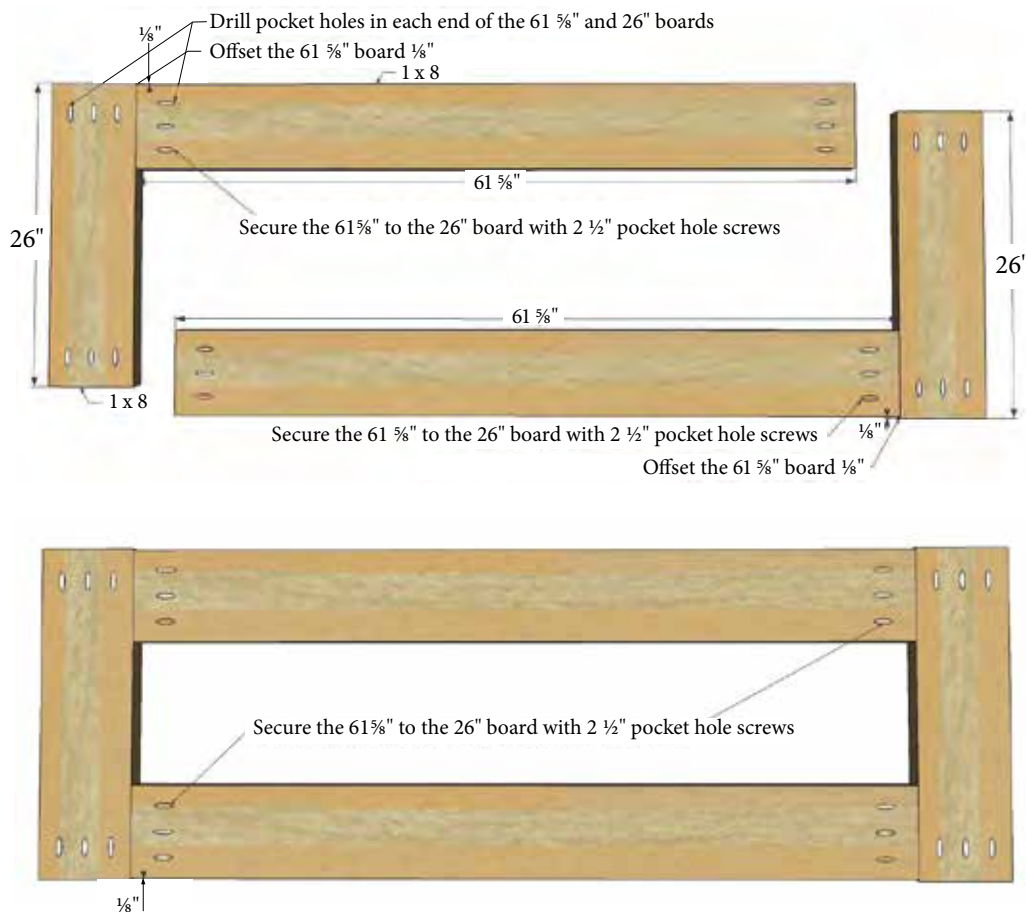


Step 3b



4. Build the Tabletop

- Cut the 61 $\frac{5}{8}$ in. and 26 in. pieces of 2 in. x 8 in., according to cut list above. Lay the pieces out as shown, with the nicer side facing down (this will become the tabletop) and label the side facing up as “bottom”.
- Drill three pocket holes in the end of each board.
- Make sure the 61 $\frac{5}{8}$ in. boards are offset from the end of the 26 in. boards by $\frac{1}{8}$ in. for expansion. Join all the boards together and secure with 2 $\frac{1}{2}$ in. pocket hole screws.
- Join the boards together with 2 $\frac{1}{2}$ in. screws until you have a rectangular frame.
- Sand and stain the inner and outside edges.





4. Build the Tabletop (Cont.)

- f. Measure the length of assembled tabletop. Cut two pieces of 2 in. x 8 in. board to match the length of the 76 1/8 in. table.
- g. Sand the two long lengths of the now 76 1/8 in. long boards and apply stain to the inside edge.
- h. Lay the 76 1/8 in. boards flush along the sides of the assembled tabletop, making sure the ends are flush with the outside of the 26 in. boards. Join pieces together through the pocket holes in the 26 in. boards with 2 1/2 in. screws.

Step 4f



Step 4h



5. Complete the Tabletop

- a. Line up the table underbody with the tabletop to ensure everything is aligned.
- b. Measure the remaining gaps in the tabletop and cut two more pieces of 2 in. x 6 in. at $11 \frac{5}{16}$ in. long.
- c. Drill pocket holes and install these last two tabletop pieces, using $2 \frac{1}{2}$ in. screws.
- d. Sand the entire tabletop, using 80-grit sandpaper to remove manufacturer's markings and 120-grit to smooth any rough spots.

Step 5b



Step 5c



6. Add Skirting to the Icebox Frames

- a. Using the 2 in. x 4 in. boards, cut two pieces at 66 $\frac{3}{4}$ in. long. Line up the two icebox supports next to each other, with the 34 $\frac{1}{4}$ in. boards running parallel. Center the 66 $\frac{3}{4}$ in. boards on each side.
- b. Along one end of the 66 $\frac{3}{4}$ in. boards, use a pencil to mark the location of seven pocket holes used to attach the support structure to the table. Drill pocket holes.
- c. Attach the 34 $\frac{1}{4}$ in. boards to the 66 $\frac{3}{4}$ in. skirt boards using 2 $\frac{1}{2}$ in. screws and the pocket holes on 34 $\frac{1}{4}$ in. boards.

Step 6a



Step 6c





7. Attach Underbody to Tabletop

- a. Lay the joined icebox support frames on the assembled tabletop, making sure both $66 \frac{3}{4}$ in. pieces are $1 \frac{5}{8}$ in. from the longer edges of the tabletop.
- b. Secure the icebox support frames to the tabletop using $1 \frac{3}{4}$ in. screws.

Step 7a

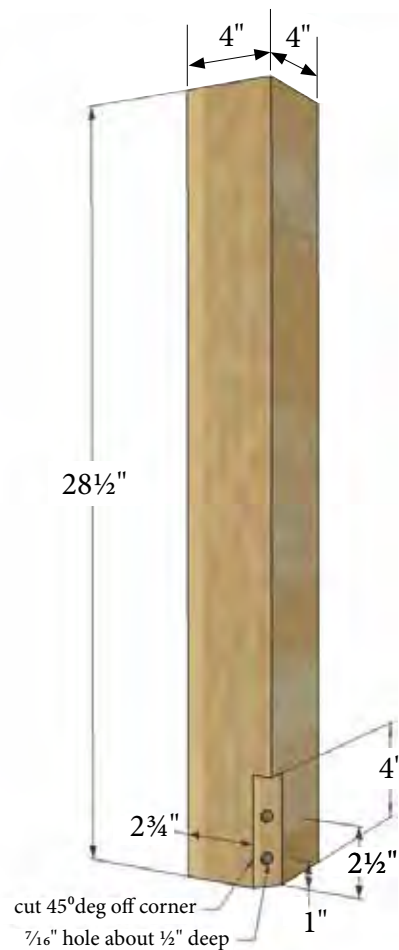


Step 7b



8. Cut and Prepare Table Legs

- a. Take the 4 in. x 4 in. boards and cut to 28 ½ in. long.
- b. Create the flat surface on the leg post to align with a support bracket under the table. When making the cuts, angle your table saw blade to 45° and set up the fence at 2 ¾ in.
- c. Make a pencil mark 4 in. from the end of the post to determine how far to cut. Double check measurements and make the 4 in.-long cut.
- d. In the center of the new 45° angle “flat,” mark a line at 1 in. and 2 ½ in. from the post end. Drill 7/16 in. holes about 1 ½ in. deep at the two marks.
- e. Install a 5/16 in. wood anchor insert in each hole using a 3/8 in. Allen wrench.
- f. Repeat steps 8a through 8e for other three legs.



9. Install Table Legs and Side Skirts

- a. Cut two shorter skirt pieces from the 2 in. x 4 in. boards to 31 in. long. Drill five pocket holes in each piece.
- b. Center the piece on the end of the tabletop and attach it 1 ½ in. off the edge of the table using 1 ¾ in. pocket hole screws.
- c. Repeat on other side of table using second 31 in. board.
- d. Create diagonal supports to attach to the skirting. Cut the four 2 in. x 4 in. boards to 8 in. long, with a 45° angle on each end.
- e. Mark the center of the pieces at 1 in. and up from the bottom at 2 ½ in. on all four pieces. Drill ½ in. thru holes at those marks, so that they match with the wood anchors on the legs.
- f. Attach corner brackets to the skirts with 1 ¾ in. deck screws.
- g. Install 5/16 in. washer on each bolt and secure the legs to the table using 5/16 in. x 3 in. bolts.
- h. Repeat steps 9f and 9g three more times for other three corners.

Step 9b-9c



Step 9d



Step 9f

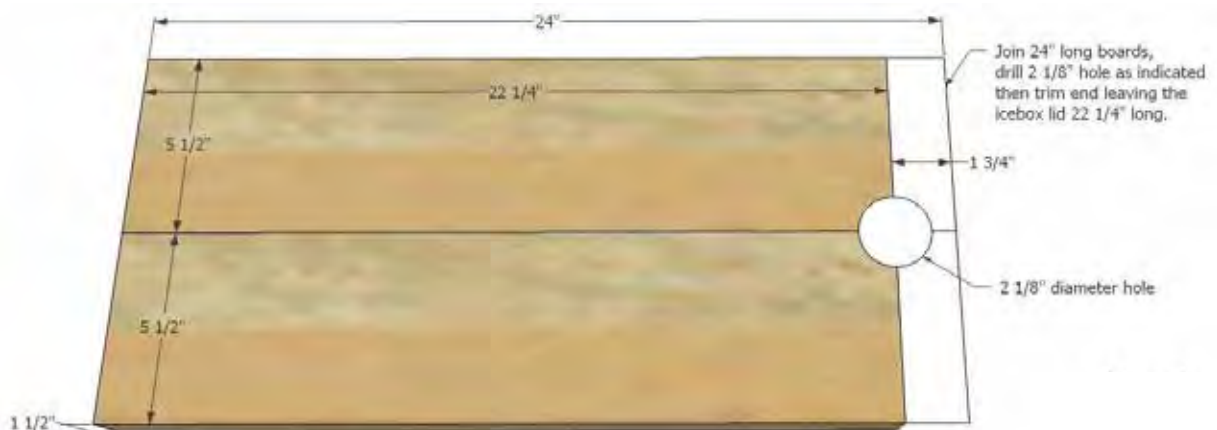


Step 9g



10. Build Icebox Lids

- a. Cut four pieces from the 2 in. x 6 in. boards that are 24 in. long and two pieces of the 1 in. x 4 in. boards at 16 in. long. Stain inside edges.
- b. Pre-drill holes in the 16 in. boards. Join two of the 24 in. boards with the 16 in. board and secure with 1 ¾ in. screws. The 16 in. board will be centered along the joint of the two 24 in. boards and 3 ⅛ in. from one end. See diagram below for reference.
- c. Measure 22 ¼ in. from the end and in the center of the two 24 in. boards. Drill a 2 ⅞ in. hole.
- d. Cut the lid to 22 ¼ in. length, slicing the newly drilled hole in half.
- e. Sand down the outside edges and the half circle.
- f. Repeat steps 10a through 10e for other lid.



Step 10b



Step 10c



11. Finish Table

- a. Sand table until smooth with 120-grit sandpaper, in the direction of the grain.
- b. Apply wood conditioner and stain with a foam brush.
- c. Apply up to 3 coats of exterior spar varnish.



DINING BENCH BUILD STEPS

1. Build Outside Seat Boards

- a. Cut boards according to cut list. Drill pocket holes in each end of the bench skirt short and bench support boards. Drill two pocket holes on both ends of the bench skirt long, with six more spaced evenly between them.
- b. On the 64 in. outside seat board, mark 1 in. from the edge and 4 ½ in. from the end. Attach a 55 in. skirt board to the outside bench board with 2 ½ in. pocket hole screws, making sure to line up the edges with the marks.
- c. Repeat steps 1a and 1b for the other half of the bench top.
- d. Lay the two assembled parts parallel to each other, so that the sides of the long skirt boards with pocket holes are facing inward.

Step 1a



Step 1b



2. Build Bench Legs

- a. Center the short skirt board between two of the 16 in. leg boards, making sure the pocket holes are oriented to attach to the seat later and the end of the board is flush with the end of the legs. Secure with 2 ½ in. pocket hole screws.
- b. Repeat step 2a for the other pair of legs.

Step 2a



Step 2a



3. Assemble the Bench

- a. Place the middle seat board between the outside seat boards assembled in step 1. Push all three pieces together flush, making sure the ends are even.
- b. Place assembled legs on either end of the long skirts, making sure pocket holes are facing inward. Center the legs and attach to the long skirt with 2 ½ in. screws.
- c. Center the two 9 ¾ in. short skirt boards perpendicularly along the long skirt boards at 18 ½ in. and 37 in., making sure the pocket holes are oriented to attach the bench seat. Secure short skirt boards to the long skirt boards with 2 ½ in. pocket hole screws.

Step 3a



Steps 3b



Step 3c





4. Finish Bench

- a. Sand bench until smooth with 120-grit sandpaper, in the direction of the grain.
- b. Apply wood conditioner and stain with a foam brush.
- c. Apply up to 3 coats of exterior spar varnish.

5. Repeat steps 1 through 4 for second bench.

