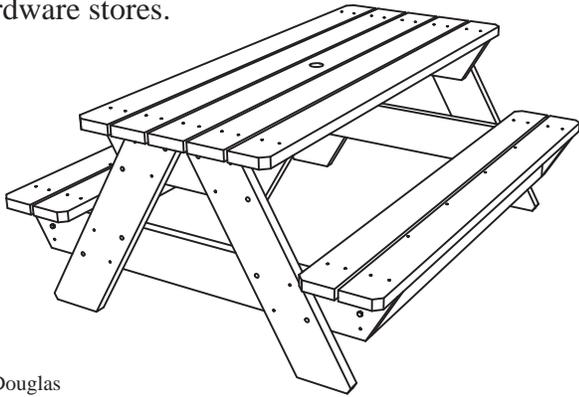


Standard Picnic Table

Plans and Assembly Instructions

A picnic table is a great place to enjoy being outside, whether for a meal, a chat, a read, or just to relax.

This picnic table is **stable, durable, simple, and elegant**. *YOU* can build this table with simple tools, and it will last a long, long time. It is made from dimensional lumber available at lumber yards or hardware stores.



©Eric Douglas

These plans will show you everything you need to build this picnic table, including

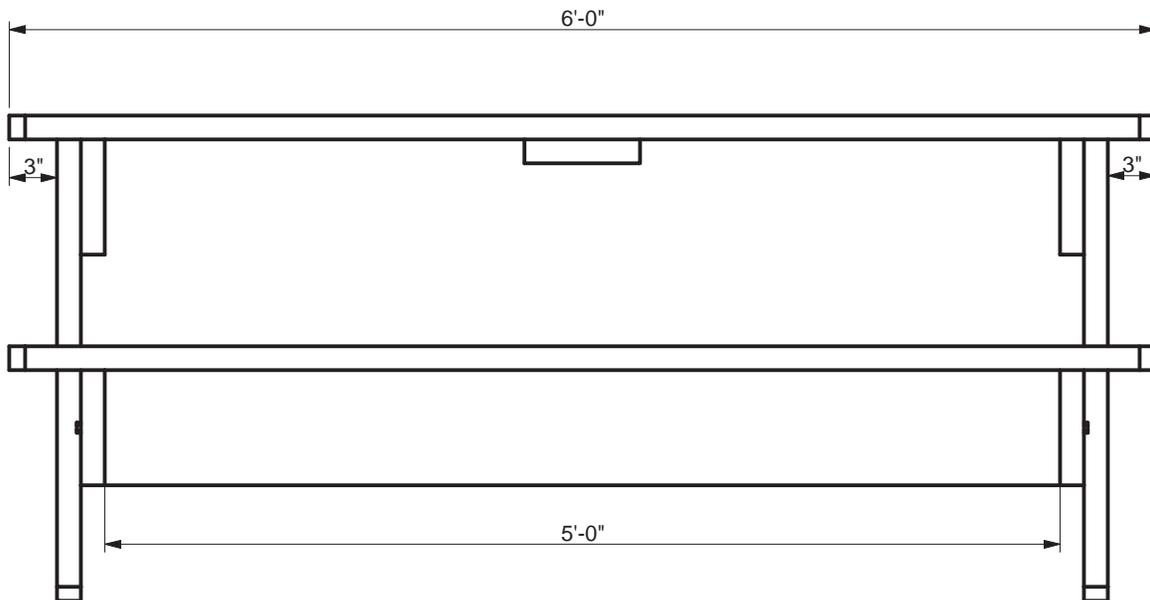
- overall dimensions
- dimensions of all pieces
- tools needed
- hardware needed
- lumber needed
- cutline layout
- step-by-step assembly instructions
- finishing suggestions
- options for other table sizes

I think you'll enjoy building this table and I hope it will become a place for many good memories.

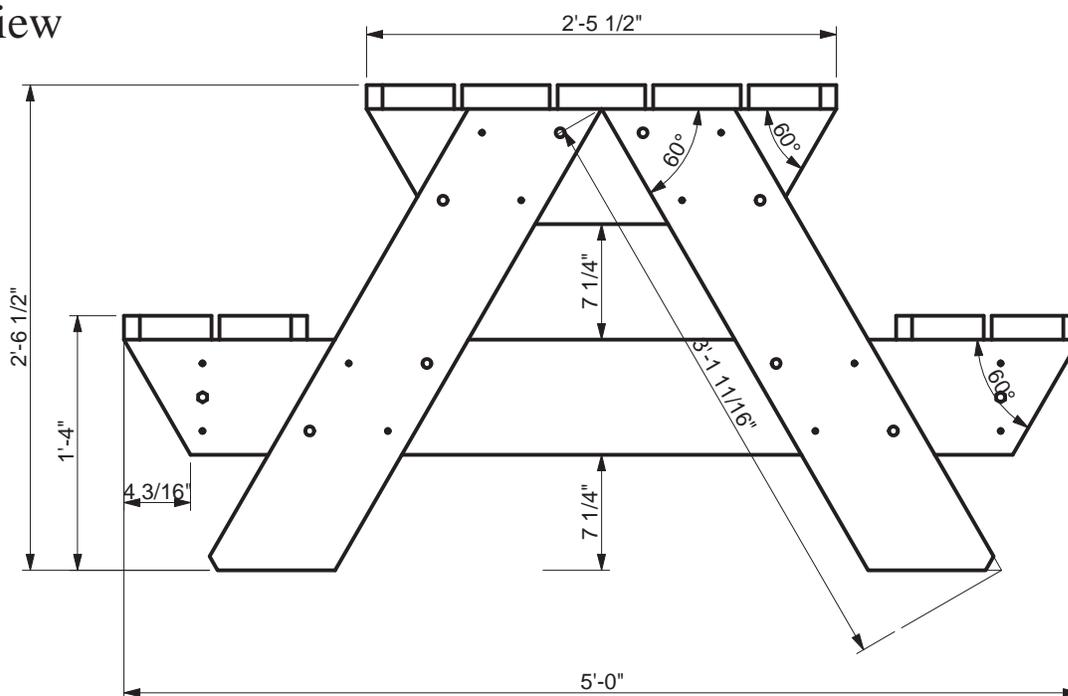
Eric Douglas



Side view



End view



Needed

- a pencil
- a tape measure
- a square
- a saw
- a hammer
- a wrench
- a corded drill w/ bits & driver
- a file or coarse sand paper



Helpful

- a power saw w/ext. cord & safety glasses
- a cordless drill
- a cordless impact driver
- a socket set



Hardware

- 24 @ 2-1/2" Zinc wood screws for end assemblies and center brace (alternate, nails)
- 52 @ 3-1/2" Zinc wood screws for braces, top & seats (alternate, nails)
- 16 @ 3/8" x 3-1/2" galvanized carriage bolts
- 16 @ 3/8" galvanized carriage bolt nuts
- 16 @ 3/8" galvanized lock washers
- 22 @ 3/8" galvanized flat washers
- 4 @ 3/8" x 3-1/2" galvanized lag bolts

Materials

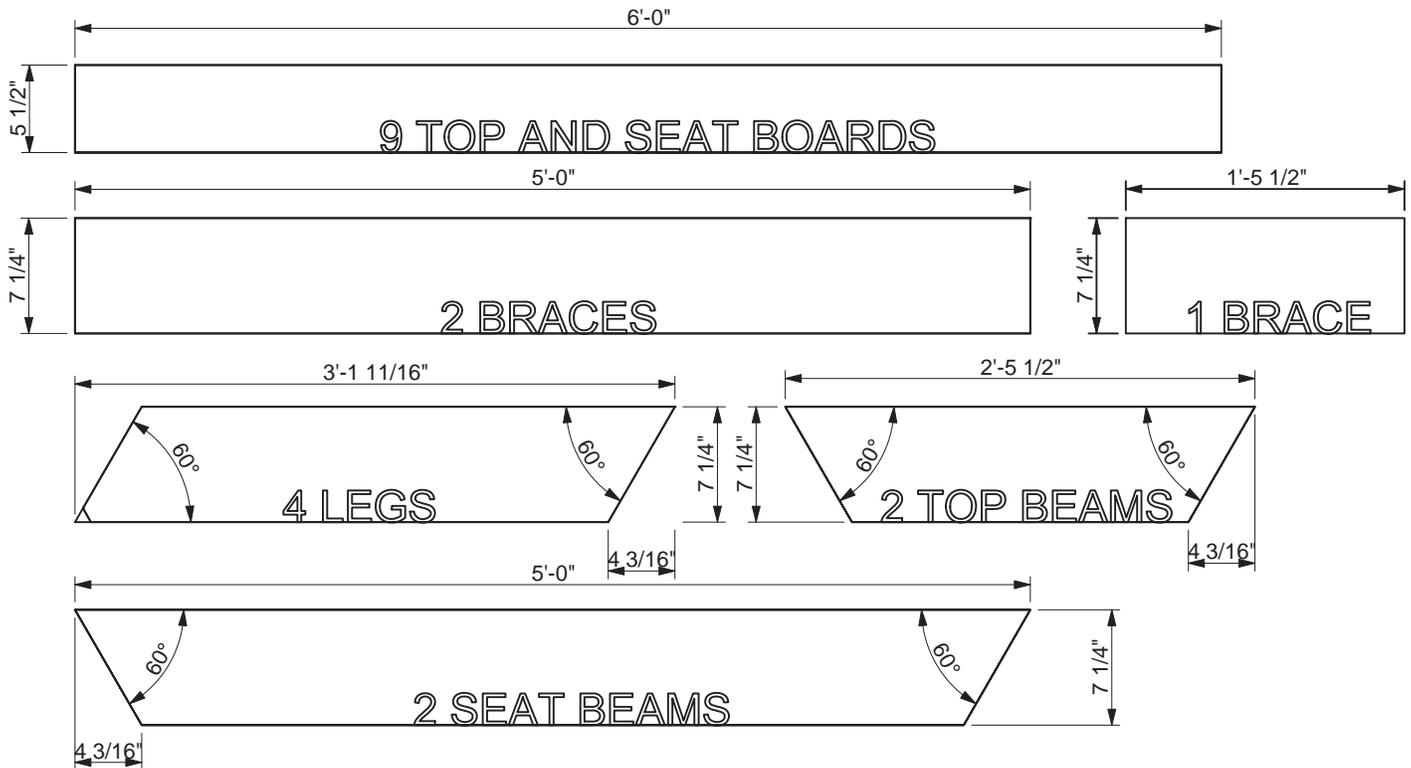
Lumber

Select dimensional construction grade lumber, free and clear of structural defects.
Cedar or equivalent rot-resistant species preferred, but Douglas Fir or equivalent suitable.
Listed stock is nominal dimension for thickness and width and actual size for length.

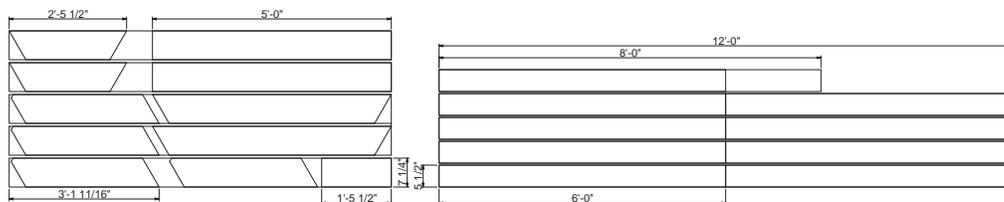
- 5 @ 2x8, 8' in length
- 4 @ 2x6, 12' in length
- 1 @ 2x6, 8' in length

Step 1 Cut Pieces

Confirm stock--These are the pieces you will need. All 2x stock (1-1/2" thick).



Mark cut lines--Use a tape measure and a square to mark all of your cuts on the lumber. Remember that the blade on a circular saw has a 1/8" thickness (kerf), so leave that thickness in between the pieces when you mark the layout (a handsaw also has a kerf, but it's pretty thin).



Confirm cut lines--Check your marks. Check them again.

Confirm safe cutting environment--Look around. Make sure you have a safe and stable place to cut. Get someone to help stabilize your stock.

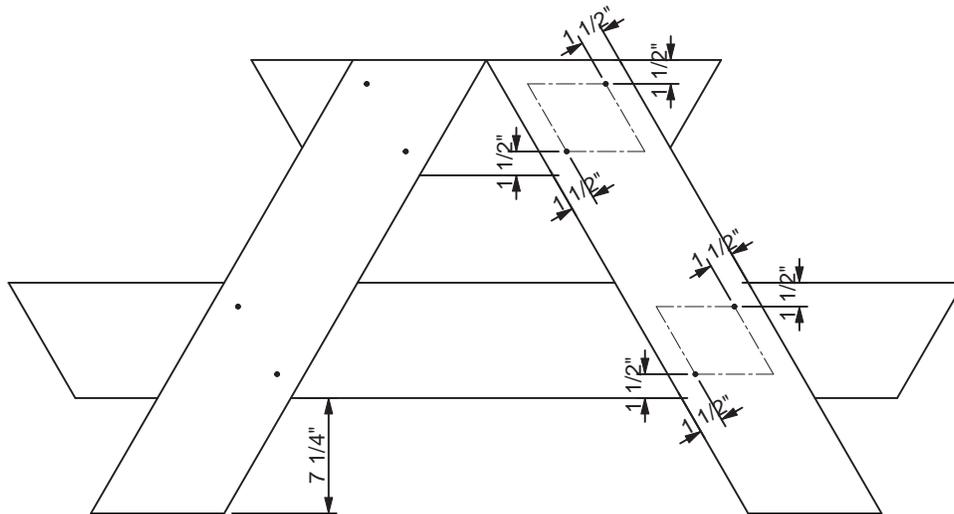
Cut pieces--If you're cutting a board exactly in half, cut on the line. Otherwise, cut on the waste side of the line and leave the line. Even though you've already marked your cut lines, you may wish to cut one each of the angled pieces and use them to mark the matching piece so the pairs will be identical.

Step 2

Assemble Ends

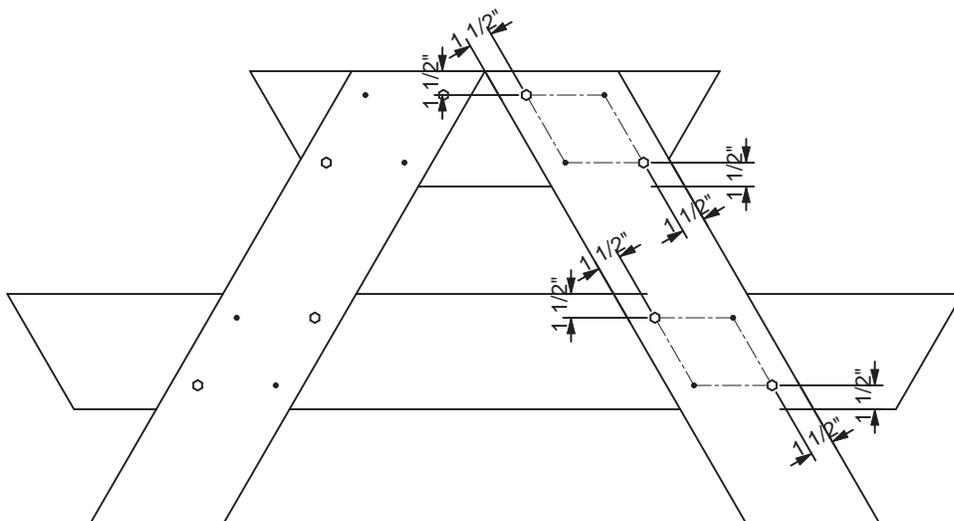
Align pieces & attach with screws (or nails)--

Make sure the top of the beams and the ends of the legs are all parallel. Make sure the beams are centered on the legs and the lower (seat) beam is 7-1/4" clear from the bottom of the legs. (It may be helpful to use the other beams as spacers (since they are 7-1/4" wide).) Attach eight (8) 2-1/2" screws as shown, 1-1/2" from the edges of both adjoining pieces. Drill pilot holes through the legs to allow the screws to easily pass through the legs and sink into the beams. You can use galvanized nails instead of screws, but screws are stronger. Construct one end, then use it as a template to position the other end.



Add bolts--

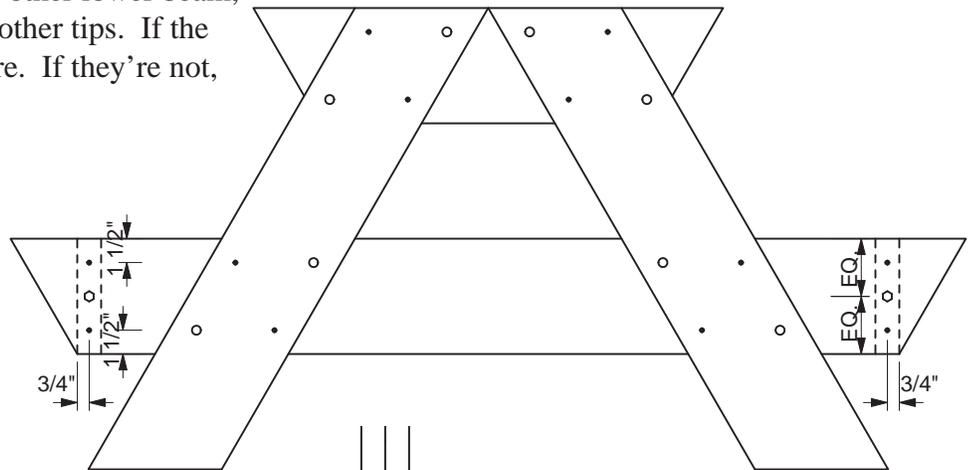
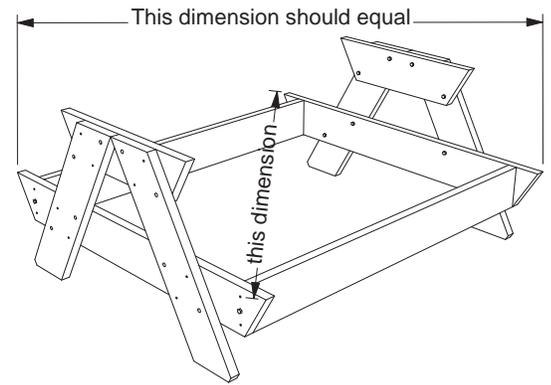
When the assembly is secure, drill through holes for the carriage bolts. Place a scrap piece of wood under the place where the drill bit will come out to avoid blowing out the wood at the exit hole. For each carriage bolt, place it through the hole and seat it gently with a hammer. On the other side, place a flat washer, then a lock washer, and finally a nut. Secure the nut until the flat washer begins to sink into the wood.



Step 3 Assemble Table

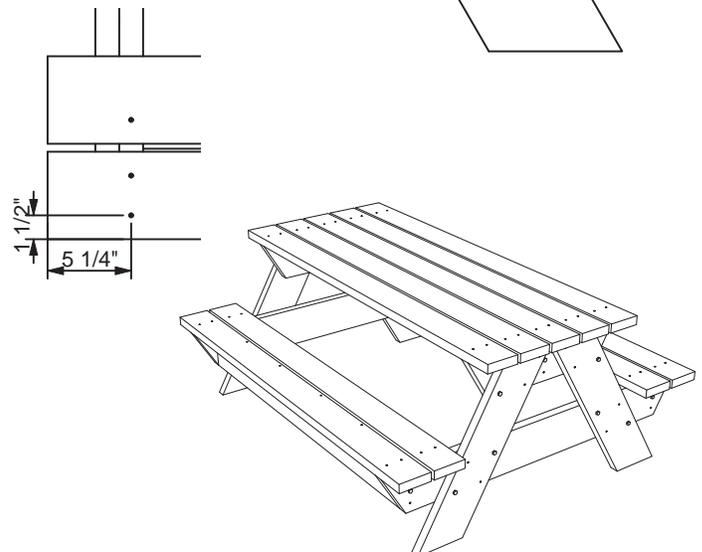
Attach braces--

Attach one end of one of the braces to one of the end assemblies with two 3-1/2" screws. Install screws 1-1/2" from edges of mating piece (see diagram below). Install other end of the beam to other end assembly with screws. Then, install the other brace with screws. (You may want to have either a helper or something to help prop up the braces.) With the braces screwed into place, mark the locations for the lag bolts. Drill a pilot hole to the depth of the bolt (use a drill bit the same diameter as the shank of the bolt where the threads are) and then drill a through hole through the beams only (use a drill bit the same diameter as the shank of the top of the bolt). Install the lag bolts with a flat washer. Use a wrench, a socket set, or an impact driver. Finally, make sure the table is square by checking the diagonals this way: measure the distance from the tip of one lower beam to the opposite tip of the other lower beam, then check the distance between the other tips. If the distances are equal, the table is square. If they're not, tweak the table until they are.



Attach top & seats--

To attach the boards, mark and drill through holes 1-1/2" from the sides and 5-1/4" from the ends (first confirm that this will truly align with the center of the beams). Set the two outer top boards first, then set the center top board, then set the remaining top boards so that all gaps are even. Then, set the outer seat boards. Then set the inner seat boards so that the gaps in the seat match those in the top. Use 3-1/2" screws. Finally, set four equally-spaced screws in each board that sits on a brace, into the center of the braces, to attach the boards to the braces.



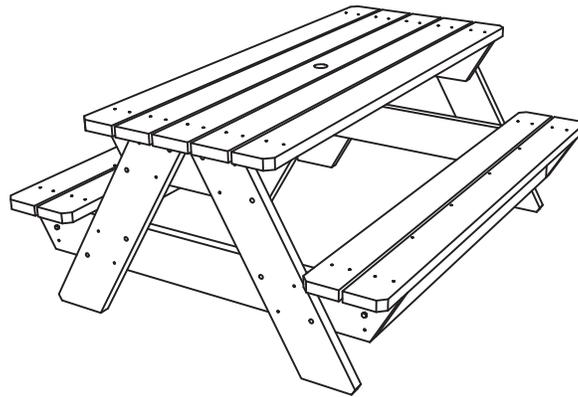
Step 4

Finish Table

Chamfer edges--

Finally, mark 1-1/2" in from each side at the corners of the top and seats and at the ends of the legs and cut off the corners. Use a file or rough sandpaper (or a block plane or a router) to round over all cut edges.

If you want to cut an umbrella hole, attach the 1'-5 1/2" brace centered on the underside of the table top and cut the hole in the center of the table. You can do this easily with a hole saw, or with a little more effort by marking the hole and drilling several smaller holes around the circumference. Finish with a chisel.



Stain/paint/decorate--

If you use a rot-resistant wood (like Cedar), then you don't have to treat it. The wood will darken over time, but it will be structurally stable for many years. If you coat it with deck sealer, it will look bright longer, but may need re-coating to maintain its appearance.

If you use a non-rot-resistant wood (like Fir), you can still leave it untreated, but it won't last as long as a rot-resistant wood. You may want to coat it with deck sealer or exterior paint. Be aware of the toxicity of any product you apply and what implications this may have for any users (like toddlers) of the table.

Whatever wood you use, it won't be hurt to have some paint or decoration on it. Feel free to make it look interesting.

Enjoy!--

A picnic table is a great venue to enjoy a nice day outside, sit and watch people go by, and invite your neighbor to sit and chat for awhile. Maybe you'll get together at the picnic table for a potluck. Communities get stronger when neighbors get to know each other, and a great way for that to happen is to have a nice place to get together.