## Building a Picnic Table



A picnic table is a project you can buy all the material for and build in a day. Relatively simple and straight forward you can build a table that will last for decades. The table I will describe here is a large one, 28" wide (table top) and 8 ft long. It has benches attached to the table and is stable and strong. Certainly you can modify these plans to meet your needs. I have one that has a top that is 4 ft square based on the same design.

Choice of lumber is up to you. I think pressure treated pine works fine, but if you want you can use redwood (and pay the premium).


The top I recommend is made of $82 \times 4$ 's. You can substitute $52 \times 6$ 's for this, but I like the smaller width boards since they cup less. Always nail the seat board and top boards with the grain as shown in figure 2. This will ensure they cup with the concave face down, if they cup at all.


End Grain Orientation

You will need the following materials:

- 12-2x4's 8 ft long
- 4-2x6's 8 ft long (if you can bring home 10ft boards buy 110 footer and 2 8's)
- 2-2x10's 8 ft long.
- $16-3^{\prime \prime} \times 3 / 8^{\prime \prime}$ carriage bolts (galvanized) plus washers and nuts for each.
- 1-box of 16 d galvanized twist nails

Tools:

- Tape measure
- Hammer
- Drill (and $3 / 8$ " bit, and $3 / 4$ " spade bit)
- Saw (not too much cutting)


## Build the top:

Cut a $2 \times 4$ into three pieces each 26 inches long for the cross boards.
Nail the 8 top boards to these three cross boards leaving an inch of overhang on each side. One cross board goes in the middle (the 4 ft mark) and the outer two in 4 inches from the ends.


$3 \times 3 / 8$ " Carriage Bolt

## Cut the legs:

The four legs are cut identically from two of the $2 \times 6$ 's.
They should have an angle cut on them of 60 degrees at the top and bottom and be 33.5 inches long on each side. To get a 60 degree angle you can use a square and mark a $2: 1$ rise to run.

Next cut the remaining $2 x 6$ 's to 5 ft long each for the seat stretchers.(this is where you can just cut the 10 footer in half if you bought one).

## Putting this together...

Flip the top upside down. Mount the legs to the outer cross boards. The legs go on the inside of the cross boards, $31 / 2$ inches in from the outside of the top. Drill and bolt them to the cross boards with 2 bolts per leg.

Countersink the holes for the nuts and washers with the $3 / 4$ inch bit, then drill the rest of the way through with the $3 / 8$ inch bit. The nuts should go on the inside (On the inside of the legs) The bolts are only as wide as the wood so there will be no bolt sticking through to ever hit with your knee.

After all four legs are attached to the top, attach the seat stretchers. They should go such that the seat will sit on them 17 inches off the ground. That is measure down from the bottoms of the feet 17 inches and this is where the stretchers top will be. (just look at the picture, sometimes I just have a heck of a time describing something...) Bolt the stretchers to the legs again using 2 bolts per leg and countersinking the nuts/washers on the inside.



## Finally

While it is upside down, attach the diagonal braces. These should be cut from a $2 x 4$. They should be cut with a $\sim 17$ degree angle roughly 44 inches per side. These should be cut to fit. Make sure the legs are square with the top, the braces will hold them square. Set these offset from each other so you can nail into each of them from opposite sides of the center cross board. Nail them into the seat stretchers as well, when you are sure the length will hold the legs square.

Now flip the table right side up and nail two $2 \times 4$ 's between the seat stretchers. Finally nail the two $2 \times 10$ seats in place on top of the seat stretchers and the $2 \times 4$ seat supports.Before nailing these in place, measure the distances between the stretchers so again you are ensuring the table is square.

Finishing
You can leave the table with no finish and it will weather a light grey, or you can apply a sealer a stain or paint.

