

## Chapter 24. Picnic Table Construction

### 24.1 CUTTING PICNIC TABLE COMPONENTS

### 24.2 ASSEMBLING PICNIC TABLE

### 24.3 FINISHING TOUCH

### 24.4 MATERIALS SHEET

#### Tools needed by volunteers:

Pencil  
Tape Measure

#### Materials needed:

2x6 treated lumber (Component A, D &E)  
2x4 treated lumber (Component B, C, F, G)  
5/16" x 3 1/2" Carriage bolts  
5/16" Flat washers  
5/16"-18 UNC nuts  
3" Galvanized deck screws  
2 1/2" Galvanized deck screws  
Scrap 2x lumber

#### Tools and equipment needed:

Extension cords  
Chop saw  
Drill w/1/8" and 1 1/32" wood bits  
Driver with #2 bit  
Tape Measure  
1/2" or adjustable wrench  
Clamps  
Framing square  
Hammer  
Pencil  
Black Permanent Marker

#### Personal Protection Equipment:

Safety glasses (required)

**Safety First! Review the Safety Checklist before performing tasks in this chapter.**

## 24.1. CUTTING PICNIC TABLE COMPONENTS

1. Cut all pieces required per the cut sheet dimensions (see Figure 24-1).

**NOTE:** Lumber does not always come with square ends; cut the ends square, if necessary.

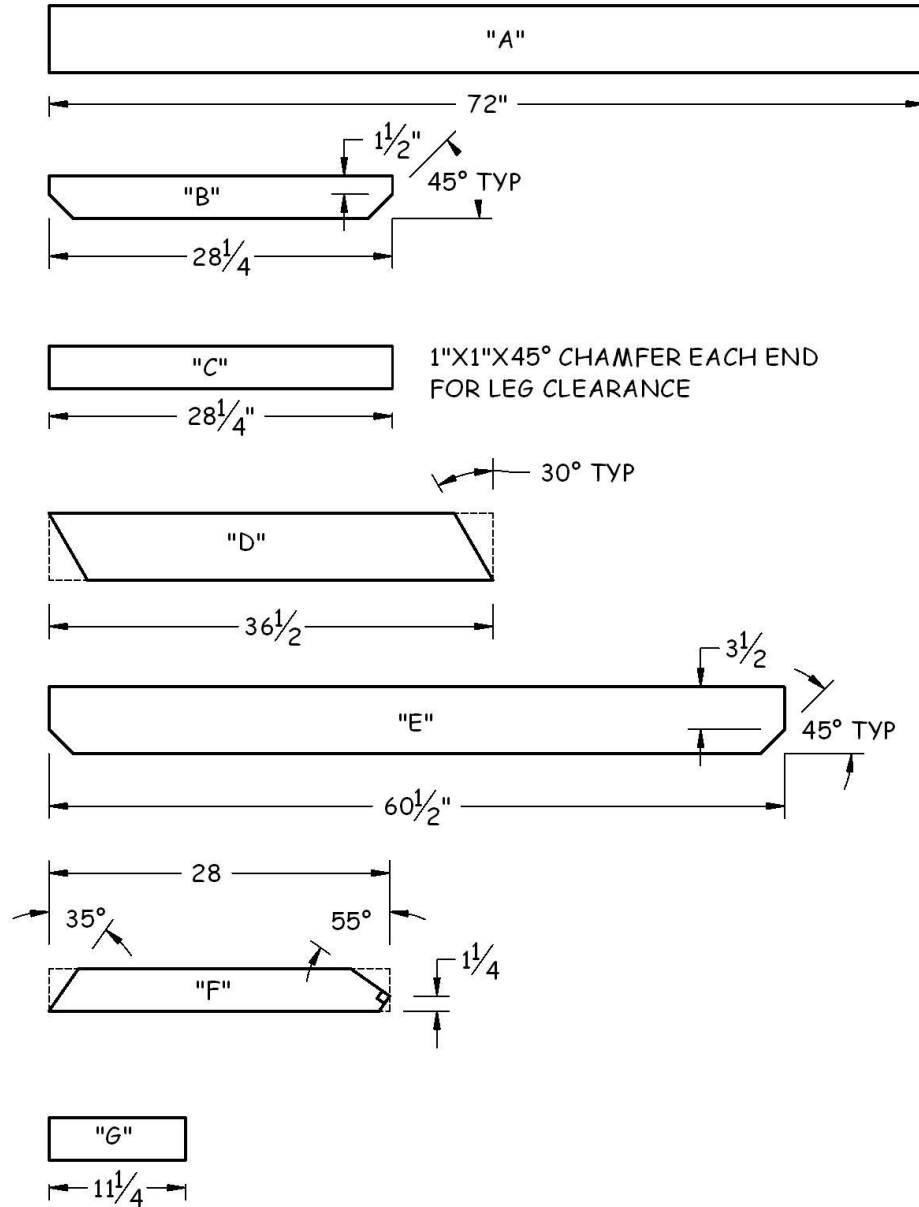


Figure 24-1. Picnic Table Cut Sheet.

## 24.2. ASSEMBLING PICNIC TABLE

### 24.2.1. Leg Assembly

1. On each Component "B", measure in 6" from each end along the non-beveled edge (top of piece) and draw a horizontal line along the top edge of the component, square to the face.
2. On each Component "E", measure in 15" from each end along the non-beveled edge (top of piece) and draw a horizontal line along the top edge of the component, square to the face .
3. On each Component "D", measure up 19" from the base of the leg and draw a horizontal line along the outside edge of the component, square to the face.

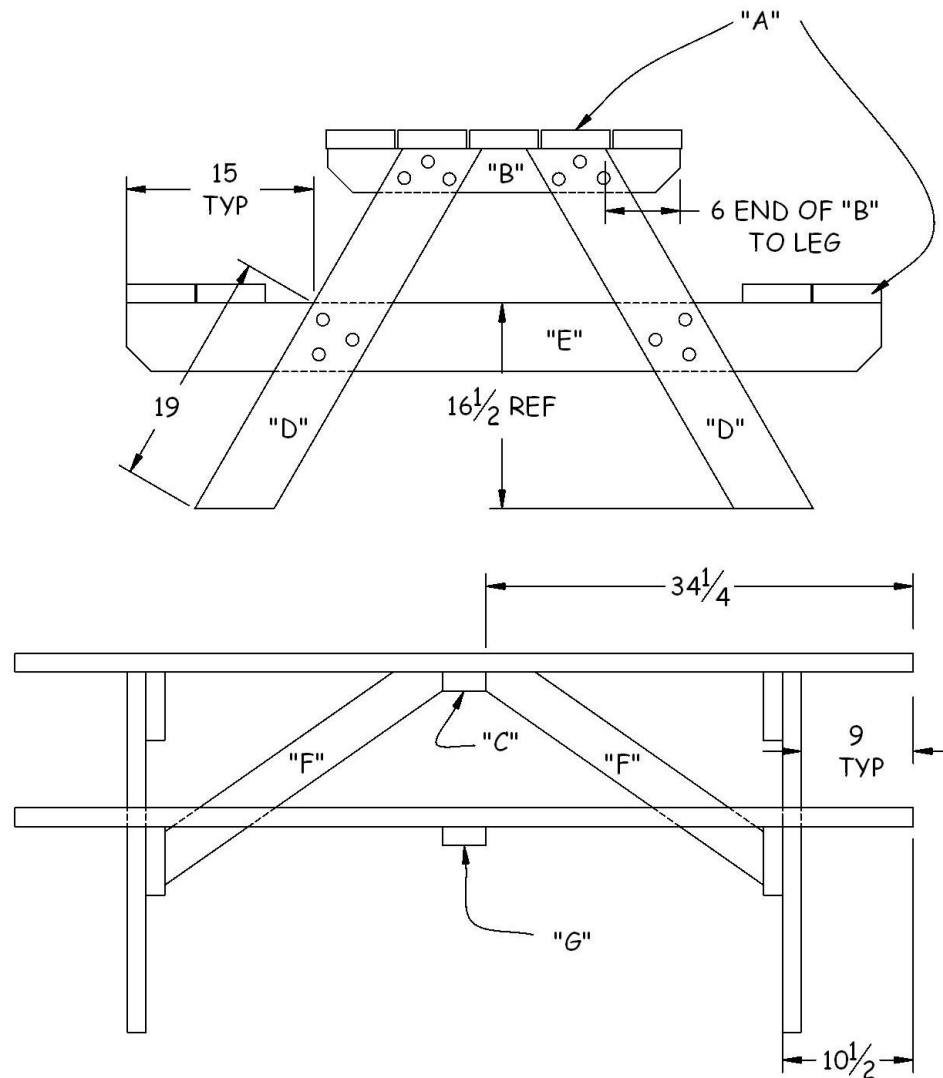


Figure 24-2. Picnic Table Assembly.

4. To build one leg assembly, place one Component “B” and one Component “E” parallel to each other on a flat surface. Lay a pair of legs (Component “D”) on top of the first two components so they approximate the arrangement in Figure 24-2. Place scrap 2x support blocks under the four intersection points.

**NOTE:** The scrap is needed to protect the drill bit from being damaged when drilling through the components.

5. Position the legs so they are inside the 6” marks on Component “B” and the cut angles of the legs are flush with the top of Component “B” (see Figure 24-2). Drill three 11/32” holes through each Component “D” into Component “B” at least 1” from the edges (to avoid component failure). Insert one 3½” carriage bolt into each of the six holes (to anchor the three pieces into position).
6. Position Component “E” under the two legs so that each 15” mark on its top edge aligns with the 19” mark on the the corresponding Component “D”. Drill three 11/32” holes through each Component “D” into Component “E” at least 1” from the edges (to avoid component failure). Insert one 3½” carriage bolt into each of the six holes (to anchor the three pieces into position).
7. Raise the assembly into an upright position, tap all 12 all twelve bolts completely into the assembly, and secure them with flat washers and nuts.
8. Repeat process for the second leg assembly.

### **24.2.2. Seat Bench Assembly**

1. Make marks along the outside edge of a seat (Component “A”), square to the face and located 10½” in from each end of the seat.
2. Set both leg assemblies on a flat surface in an upright position (as in final assembly), oriented so the heads of the bolts are on the outside of the assembly. Place the seat (Component “A”) on top of the two bench supports (Component “E”) so the outside edges of the bench supports are aligned with the marks on the seat.

**NOTE:** It is critical that both leg assemblies remain perpendicular to the ground when the bench pieces are being attached.

3. Drill two ⅛” pilot holes through the seat into each bench support, about 1” in from each edge of the seat. Attach the seat to the bench supports using 2½” deck screws at each anchor point (see Figure 24-2).
4. Position a second seat (Component “A”) on the bench support spaced ⅛” from the first seat and with ends aligned with those of the previously installed seat. Attach it to the bench supports using 2½” deck screws at each anchor point, as in Step 3 above.

**NOTE:** The 1/8” spacing is typically maintained by inserting several 8d nails between the two seats.

5. Repeat assembly process for the second seat bench.

### **24.2.3. Build Tabletop**

1. Position the tabletop pieces (Component “A”) centered on top the bench leg assemblies so that each end of a tabletop piece is 9” from the outside face of its associated Component “D”. Space the pieces 1/8” apart (use 8d nails) so the gaps between the boards are equal and the table top is evenly distributed across the top of the Component “B” pieces (see Figure 24-2).
2. Starting with an outside tabletop piece, drill two 1/8” pilot holes through the piece into one Component “B”, about 1” in from each edge of the tabletop piece. Attach the tabletop piece to Component “B” using 2 1/2” deck screws at each anchor point.
3. At the opposite leg assembly, position a framing square vertically under the tabletop piece just attached in Step 2 above, placing the long leg of the square against Component E and the short leg under the table top. Square the assembly and attach the tabletop piece to Component “B” corresponding to this leg assembly as in Step 2 above.
4. Attach the remaining tabletop pieces to the Component “B” pieces using 2 1/2” deck screws at each anchor point as in Step 2 above.

### **24.2.4. Add Supports**

1. Carefully flip the table over so it is resting on its top.
2. Attach bench supports (Component “G”) centered between the leg assemblies of each bench. Use two 2 1/2” screws in each bench board.
3. Attach tabletop support (Component “C”) centered between the leg assemblies. Use two 2 1/2” screws in each top piece (Component “A”).
4. Attach two angle supports (Component “F”) in the center of the table with two 3” screws at each end. Make sure the double-notched end is positioned up and located in the center of the table. See Figure 24-2 for proper location of pieces.

## **24.3. FINISHING TOUCH**

1. Using the permanent marker, have all participants sign the tabletop. Scripture, poems, and drawings are welcome additions.

## 24.4. MATERIALS SHEET

1. To build one picnic table, the build site must be supplied with seven pieces of 2x6x12' treated lumber and two pieces of 2x4x8' treated lumber, distributed among the seven components listed in Table 24-1. See also Figure 24-1 for cut specifications.

**NOTE:** This leaves one 2x6 drop of 6' that can be used on another picnic table.

**Table 24-1. Picnic Table Materials Sheet.**

Component	Quantity	Description
A	9	2 x 6 x 72"
B,C	3	2 x 4 x 28¼"
D	4	2 x 6 x 33½"
E	2	2 x 6 x 60½"
F	2	2 x 4 x 27½"
G	2	2 x 4 x 11½"