



## **B**asic Patio Chair

*This patio chair is a real success story. Not only is it extremely inexpensive to make, but it's good-looking and incredibly comfortable. This one is made from pressure-treated 2 x 4 and 1 x 6 lumber, but you could also make it using redwood. Use waterproof glue if you plan to leave the finished chair exposed to the elements.*



### **Special Tools and Techniques**

- Miter
- Bevels

### **Materials & Supplies:**

24 linear feet of 2 x 4 treated lumber

- 12 linear feet of 1 x 6 treated lumber

### **Hardware**

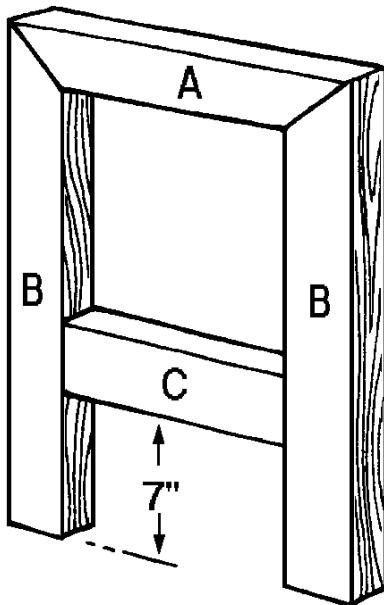
- 50 #6 x 1-1/4" galvanized flathead wood screws
- 10 #8 x 2-1/2" galvanized flathead wood screws
- 25 #12 x 4-1/2" galvanized flathead wood screws

## **Cutting List**

| Code | Description  | Qty. | Material             | Dimensions   |
|------|--------------|------|----------------------|--------------|
| A    | Arm          | 2    | 2 x 4 treated lumber | 21" long     |
| B    | Leg          | 4    | 2 x 4 treated lumber | 28" long     |
| C    | Side Support | 2    | 2 x 4 treated lumber | 14" long     |
| D    | Seat Front   | 1    | 2 x 4 treated lumber | 18-1/2" long |
| E    | Seat Side    | 2    | 2 x 4 treated lumber | 19-1/2" long |
| F    | Seat Back    | 1    | 2 x 4 treated lumber | 15-1/2" long |
| G    | Slat         | 4    | 1 x 6 treated lumber | 18-1/2" long |
| H    | Back Support | 2    | 2 x 4 treated lumber | 14-1/2" long |
| I    | Back Slat    | 3    | 1 x 6 treated lumber | 18-1/2" long |

## ***Constructing the Sides***

1. From 2 x 4 treated lumber, cut one 21"-long chair arm (A), two chair legs (B), each 28" long, and one 14"-long side support (C).
2. Setting the chair arm (A) on its face, miter both ends at a 45-degree angle as shown in *Figure 1*.



*Figure 1*

3. Setting each chair leg (B) on its face, miter just one end at a 45-degree angle (also shown in *Figure 1*).
4. To assemble one chair side, place the side support (C) between the chair legs (B), and the chair arm (A) between the two mitered ends of the two chair legs (B). (This is illustrated in *Figure 1*). Glue and screw them in place using one 4-1/2" screw for each end of the arm, screwing through the edge of the chair arm (A) into the mitered end of the adjacent chair leg (B). Then, with another 4-1/2" screw for each leg, screw through the edge of the chair leg (B) into the mitered end of the chair arm (A).
5. Repeat Steps 1 through 4 to assemble a second chair side.

## Constructing the Seat

1. From 2 x 4 treated lumber, cut one 18-1/2"-long seat front (D), two seat sides (E), each 19-1/2" long, and one 15-1/2" long seat back (F).
2. Assemble the seat according to the illustration in *Figure 2*. Use two 2-1/2" screws on each end of the overlapping boards. Note that the front (D) extends over the ends of the sides (E), and the back (F) fits between the sides (E).

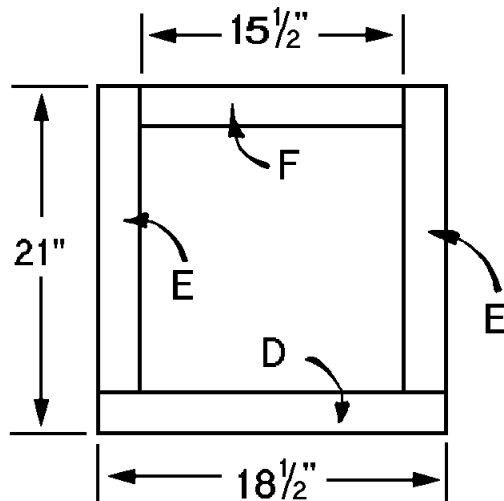
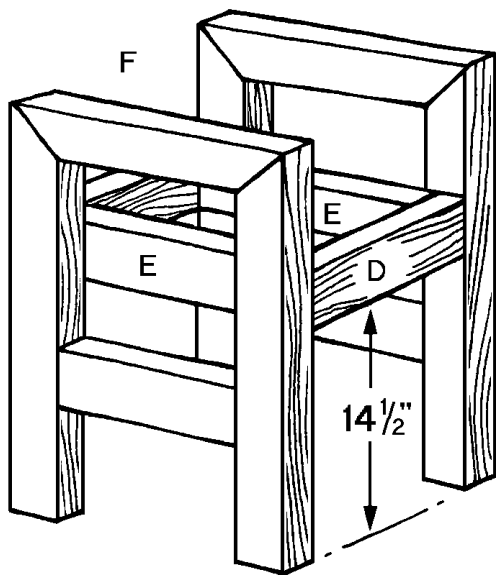


Figure 2

3. As shown in *Figure 3*, attach the assembled seat between the two chair sides 14-1/2" from the bottom ends of the chair legs (B). Use two 4-1/2"-long screws driven through the face of each leg to secure the seat.
4. Cut four slats (G) from 1 x 6 treated lumber, each 18-1/2" long. Place them side by side on top of the seat assembly, with their ends facing the chair sides (See *Figure 4*). The slats should overhang both the front and back of the chair by about 1/4 inch. Secure the four slats by gluing and screwing them to the seat assembly with 1-1/4"-long screws. (TIP: It looks much nicer if you draw a line on the slats from the front of the chair to the back – about 1 inch from the slat ends—and place all of your screws on that line.) Put two screws on each end of a slat, and space them uniformly on all of the slats.

## Adding the Chair Back

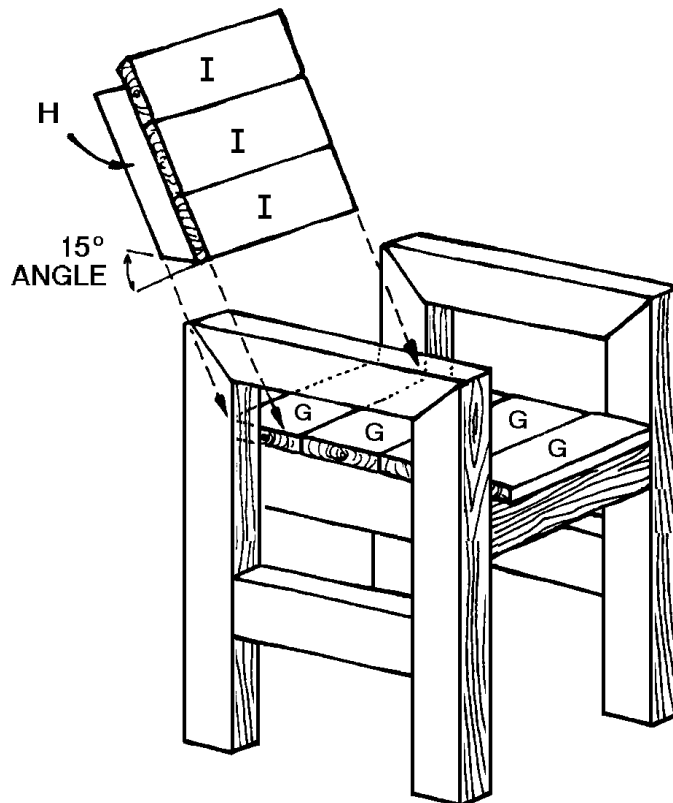
1. Cut two back supports (H) from 2 x 4 treated lumber, each 14-1/2" long. Then set your saw blade to cut 15 degrees off vertical, and bevel one end of each support to allow the assembled back to lean slightly backwards. (If you're unsure about how to make a bevel cut, refer to the *Tips and Techniques* located on the home page.)
2. Cut three back slats (I) from 1 x 6 treated lumber, each 18-1/2" long.
3. Assemble the chair back by attaching the three back slats (I) to the two back supports (H). The ends of the back slats (I) should be flush with the faces of the two back supports (H). As shown in *Figure 4*, the slats should be flush at the beveled end and extend approximately 1-1/2" over the other end of the back support (H). Again, draw a line to guide your screw placement, and use two 1-1/4" long screws on each end of each slat.



4. Fit the assembled back between the chair sides so that the beveled ends of the back supports (H) rest on the rear chair slat (G). Attach the back of the chair by screwing through the chair sides into the back support (H). Use two or three 4-1/2"-long screws through each side.

### ***Finishing***

1. Sand the completed chair carefully (splinters on a chair can prove to be most uncomfortable).
2. Stain or paint the chair the color of your choice using exterior-grade finishing materials.



*Figure 4*