# Project 17123EZ: Wall Shelf with Pegs

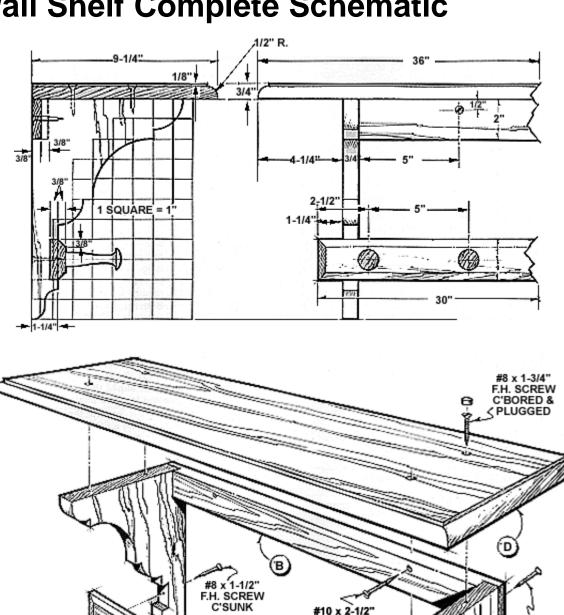


Pine, cherry, oak, or walnut: no matter what wood you choose, a small wall shelf such as this makes a useful addition to just about any room in the house.

### **Wall Shelf Materials List**

| Part | Description | Size                | Number Required |
|------|-------------|---------------------|-----------------|
| А    | Side        | 3/4" x 7-1/2" x 11" | 2               |
| В    | Stretcher   | 3/4" x 2" x 27-1/2" | 1               |
| С    | Pegboard    | 3/4" x 2" x 30"     | 1               |
| D    | Shelf       | 3/4" x 9-1/4" x 36" | 1               |
| Е    | Peg         | see Figure 1        | 6               |

### **Wall Shelf Complete Schematic**



#10 x 2-1/2" F.H. SCREW C'SUNK

\*#8 x 1" F.H. SCREW C'SUNK

### **Wall Shelf Instructions**

#### Step 1: Make the Sides (A)

- 1. Cut two pieces of 3/4" stock to 8" wide by 12" long. **NOTE: The width and length dimensions allow extra stock.**
- 2. Mark the curved profile from the grid pattern shown in the schematic to **just** one of the sides (A).
- 3. Use a band saw or jigsaw to make the curved profile cut, **staying slightly** on the waste side of the line.
- 4. Sand the edge of the completed cut smooth.
- 5. Use the completed side piece (A) profile to trace the contour on the remaining side (A).
- 6. Repeat substeps 3 and 4 for the remaining side (A).

## Step 2: Make the Notches in the Sides (A) to Accept the Stretcher (B) and Pegboard (C)

- 1. Layout and mark the location of the 3/8" deep X 2" long notches on the sides (A) that accept the stretcher (B) and the pegboard (C).
- 2. Cut the stretcher notch by using a fine-toothed hand backsaw **OR** a table saw in conjunction with a dado-head set to make a 3/8" cut and miter gauge to pass the stock, on edge, through the cutter. NOTE: If you use the table saw method, you will need to make three or four passes to establish the 2" length.
- 3. Use a chisel and mallet to cut the pegboard notch.

#### Step 3: Make the Stretcher (B)

- 1. Cut the stretcher (B) to the correct length and width (see the materials list).
- 2. Use the table saw and dado head to cut the 3/8" deep by 3/4" wide rabbets on each end of the stretcher (B).
- 3. Bore 3/16" diameter shank holes at each rabbet.
- 4. Bore 3/16" diameter shank holes at a point 5-3/4" from each end (see schematic).
- 5. Counter sink the holes cut in substeps 3 and 4 to accept the flathead wood screws.

#### Step 4: Make the Pegboard (C)

- 1. Rip the pegboard (C) to a width that will fit snugly in the notches.
- 2. Cut the pegboard (C) to a length of 30".
- 3. Cut the bevel for each of the four edges using the table saw with the blade set at 45 degrees.
- 4. Lay out and mark the location of the six peg holes.
- 5. Use a drill press to bore out the peg holes.
- 6. Turn the pegs according to the profile shown in **Figure 1**, or purchase pre-

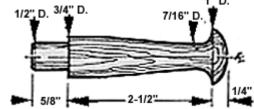


Figure 1. Peg Dimensions

# made pegs with these dimensions. Step 5: Make the Shelf (D)

- 1. Use a 36" length of 1" x 10" (which will measure 3/4" thick x 9-1/4" wide) stock to make the shelf (D).
- 2. Use a router equipped with an edge-guide and a 1/2" radius bearing-guided round-over bit to cut the molded edge of the front and side edges of the shelf (D).

### Step 6: Sand, Assemble, and Finish

- 1. Final sand all parts
- 2. Glue the six pegs in place.
- 3. Apply two coats of Minwax's Colonial Maple.
- 4. Follow with three applications of Watco Danish Oil.
- 5. Space the mounting screws 16" apart to permit the shelf to be secured to wall studs.
- 6. Use 2-1/2" x #10 screws placed 16" apart to secure the shelf to wall studs. NOTE: The 2-1/2" screw length allows for the 3/4" stretcher thickness plus 1/2" thick dry wall.

These plans were originally published in Volume 11, Issue 6 of *The Woodworker's Journal* (Nov./Dec. 1987, pages 52-53).