

## HOW TO MAKE A QUICK COFFIN USING SCREWS (See page 5 for the no-metal variation)

1x8 and 1x10 are the numbers you give a lumber yard, but they actually measure  $\frac{3}{4}$ "x7 $\frac{1}{4}$ " and  $\frac{3}{4}$ "x9 $\frac{1}{4}$ ," so keep that in mind when figuring materials.

The photos in this plan were taken while making a prototype measuring 45"x14  $\frac{1}{2}$ "x9  $\frac{1}{4}$ ", so that's why your assembly will look a little different.

### Tools:

Saw to cut boards to length – sliding miter saw, circular saw, handsaw

Saw to cut a few boards to width – table saw, circular saw

Drill. With Fin-Trim screws use  $\frac{1}{8}$ " drill bit for pilot holes and T-10 driver bit.

**Materials to make a coffin with inside measurements of 74"x 22"x13". For other sizes see adjustments below.** I used #2 pine for all the material except the corner pieces and the handle supports, which I made from spruce. Two options for the corner pieces: if you can cut a  $\frac{3}{4}$ "x $\frac{3}{4}$ " groove in the length of the corner pieces (I used a table saw) the result is a cleaner look with fewer visible screws. You can also use 1 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " spruce, but screws and end-grain will be visible. The corner board options are shown on the next page.

- 4 1x8x74" (coffin sides)
  - 4 1x8x25" (coffin ends)
  - 4 1 $\frac{1}{2}$ "x2  $\frac{1}{4}$ "x14 $\frac{1}{2}$ " or 1 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " x 14 $\frac{1}{2}$ " (spruce corner board pieces)
  - 4  $\frac{3}{4}$ "x  $\frac{3}{4}$ "x74" (bottom cleats)
  - 15 1x6x21  $\frac{7}{8}$ " tongue-and-groove pine (coffin bottom boards)
  - 4 1 $\frac{1}{2}$ "x1 $\frac{1}{2}$ "x6" (handle supports)
  - 2  $\frac{3}{4}$ "x2"x76 $\frac{1}{2}$ " (handles) Rope works, too. (Use 21" of  $\frac{3}{8}$ " sisal for each handle)
  - 3 1x10x76 $\frac{1}{2}$ " (coffin top pieces) Cut one piece to 8" wide.
  - 3  $\frac{3}{4}$ "x2"x 21  $\frac{7}{8}$ " (cleats to hold top together)
- 2" and 1  $\frac{1}{4}$ " screws. Fin-Trim screws are less visible and the brass color looks good.

### For different size coffins use these adjustments to determine cut length:

Sides: inside length of coffin

Ends: inside width + 3 ", if using square corner boards 4  $\frac{1}{2}$ "

Corner boards: inside depth + 1 $\frac{1}{2}$ "

Bottom cleats: Inside length

Bottom boards: Inside width minus  $\frac{1}{8}$ "

Handles: Inside length + 2 $\frac{1}{2}$ "

Top: Inside length + 2 $\frac{1}{2}$ "

Top cleats: Inside width minus  $\frac{1}{8}$ "

If you don't have access to a table saw, you can make this coffin any width or depth by choosing different width boards. For example, an inside depth of 13" works for most, which means two 1x8s work fine ( $7\frac{1}{4}"$  times two equals  $14\frac{1}{2}"$  minus  $1\frac{1}{2}"$  for the coffin bottom equals 13").



Cut corner boards to inside depth plus  $1\frac{1}{2}"$ , then cut a  $\frac{3}{4}" \times \frac{3}{4}"$  groove  $\frac{1}{2}"$  in from the long edge using table saw or router.

Option: Cut  $1\frac{1}{2}" \times 1\frac{1}{2}"$  boards to inside depth plus  $1\frac{1}{2}"$



Insert edge of end boards into groove. If you are using the square spruce pieces, see the photo below.



Option: Screw end boards to  $1\frac{1}{2}" \times 1\frac{1}{2}"$  aligning the end of the boards and the edge of the corner board.



Attach end to corner with 2" Fin-Trim screws driven in at an angle. Assemble both end pieces.



Stand end assembly upright with the wide side of corner board showing on the inside, set side boards on corner boards and screw into place with 1 1/4" screws.



Attach 3/4"x3/4" cleat along bottom edge, spacing 1 1/4" screws every 8" (pre-drill 1/8" holes for screws in the cleat). Flip coffin over and attach other side and cleat.



Turn coffin right side up. Place bottom boards on cleat, fitting tongue into groove as you go.



You will probably have to cut the last board to fit into place. Then put the other 74" cleats on top of the bottom boards and screw the cleats to the coffin side.



Cut an angle off two corners of the handle supports. Put two of them on the side of the coffin so that they span any joint between side boards and are spaced evenly between the ends. Outline the location with a pencil, drill screw holes, then attach the supports with 2" screws driven from the inside of the coffin.



Round the edges of the handle boards so the coffin may be carried comfortably. Screw handles to corner boards and supports using 2" screws.

Alternatively, use 21" of 3/8" natural-fiber rope and drill 1/2" holes six inches apart. Three handles per side, one centered, others 12" from each end.



Line up the top boards (under side up), then screw the top cleats to the boards. The cleat is centered between the side edges and about 1 5/16" from the end of the boards. Screw the third cleat in the middle of the coffin top.



The assembled prototype. Questions? Contact Chuck at 207-873-7854 or [crlakin@colby.edu](mailto:crlakin@colby.edu)

**To make this coffin with no metal in it:**

Every where one piece of wood is fastened to another, spread glue on both meeting surfaces, then assemble the parts with screws as above. After the glue has had the chance to set for an hour or more, back the screws out and drill a  $19/64$ " hole in the same location. Cut a 2" long  $5/16$ " dowel, sand a bevel around one end to make it easier to get the dowel started in the hole, coat the dowel with glue and drive it into the hole. Trim any protruding dowel off and sand the board smooth.