

MUD ROOM BENCH PROJECT 7



BY DAVE GRIESMANN

When I was shopping at my local home center for the material for this project I had three words in mind. “No gluing up!” So with that I set out to find 11"-wide lumber for the seat and legs. As luck would have it, they carried lumber 12"-wide × 96", so I was set.

This simple Shaker-inspired bench is a great project because it requires only

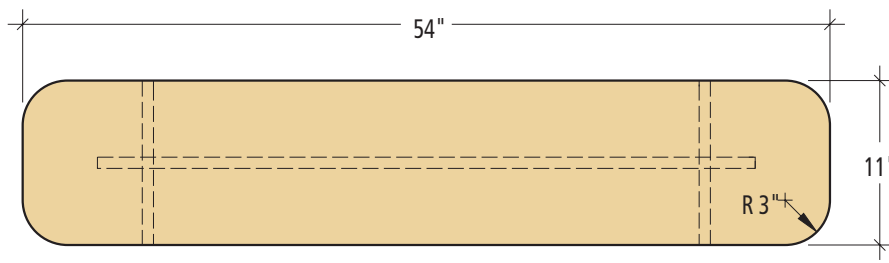
four pieces of wood, but still provides a terrific place to stop and remove muddy shoes before entering the house. The top and two legs all come out of the 12" × 96" board, but I needed another board 3"-wide × 48"-long for the stretcher. I also needed a 3/8" oak dowel to make some plugs to hide screws.

The first thing is to cut the 12" wide board into three pieces using the miter saw. Cut two pieces at 15 1/4" in length for

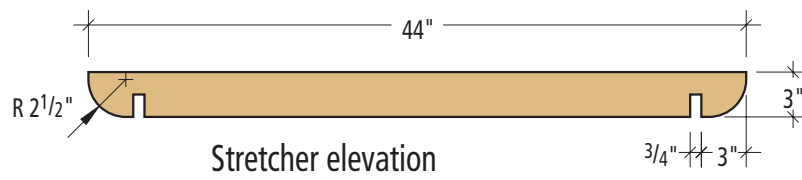
the legs and the other at 54" for the seat. Then cut your 3"-wide board to a length of 44" for your stretcher.

Twelve inches was wider than I needed for the legs and seat (and more often than not the factory edge on a board from the store can use a little help), so I ripped the three 12" pieces down to 11" in width. You can use a circular saw or jigsaw (see “Rules for using the tools”).

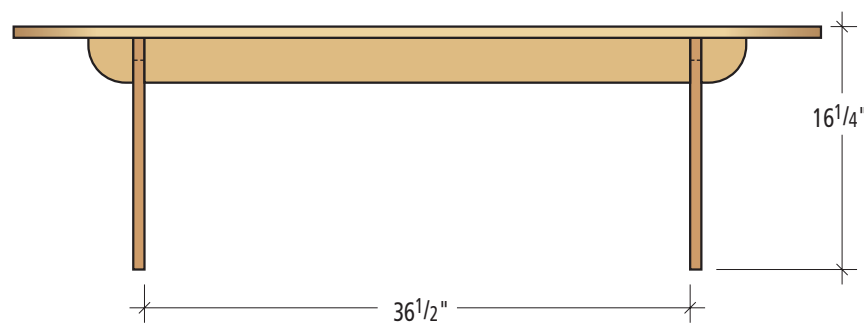
Once you have the pieces cut to size



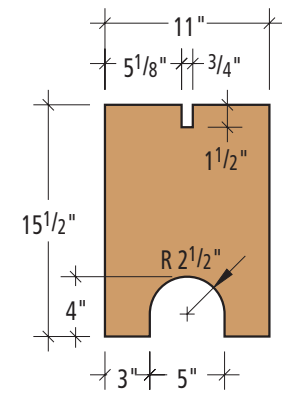
Plan



Stretcher elevation



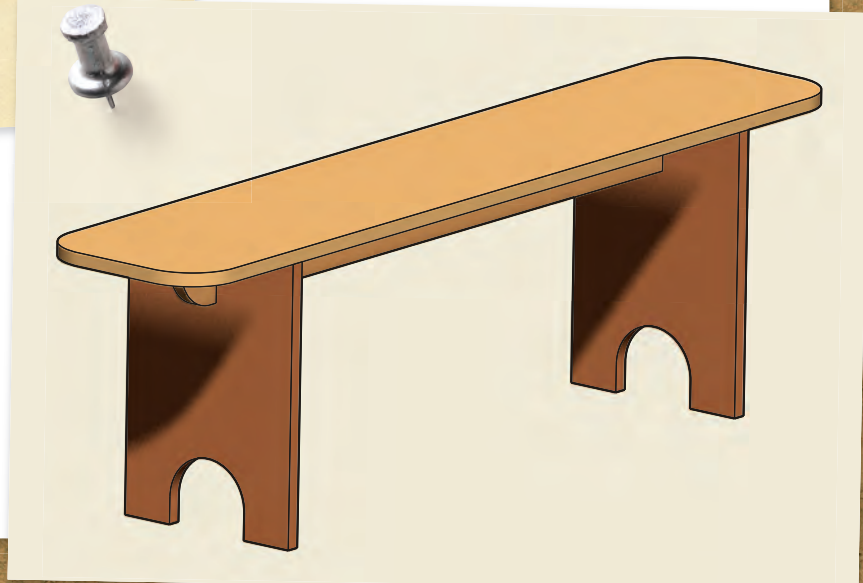
Elevation



Leg Elevation

PARTS LIST

NO.	PART	STOCK	THICKNESS X WIDTH X LENGTH	
			INCHES	MILLIMETERS
1	seat	oak	3/4 x 11 x 54	19 x 279 x 1372
2	legs	oak	3/4 x 11 x 15 1/2	19 x 279 x 394
1	stretcher	oak	3/4 x 3 x 44	19 x 76 x 1118



you are able to lay out the location and sizes for the radii on the the corners of the seat and on the bottom edge of the stretcher, as well as the cutout in the legs that give the bench a more elegant look (and make it easier for the bench to sit level on the floor). Last of all are the notches in the stretcher and legs to lock those pieces together. Start with the round shapes. You can use a circle template or compass to lay out a 2½" radius on the bottom corners of the stretcher. Then lay out a 3" radius on all four corners of the seat. If these aren't tools that you have in your shop, you can use any convenient round shape in your shop to mark out an attractive shape.

Now turn your attention to the legs. Using a combination square, draw a line 4" up from the middle of the bottom of the board. This is to mark the highest part of your circle cutout. Using a drafting compass lay out a 2½" radius circle with the top of the circle at the end of the 4" line you just drew. To complete this layout, draw a line from each side of the circle down to the bottom of the board. Once you have this arch layout complete, repeat the process on the other leg.

Using your jig saw cut out the arches and radii, making sure to cut on the waste side, leaving your line. Once that is completed use your palm sander and finish the cuts by sanding to the line.



If you don't have a drafting compass or circle template, don't hesitate to substitute the bottom of a coffee can or a spool of fishing line. As long as it looks good to your eye, it works!



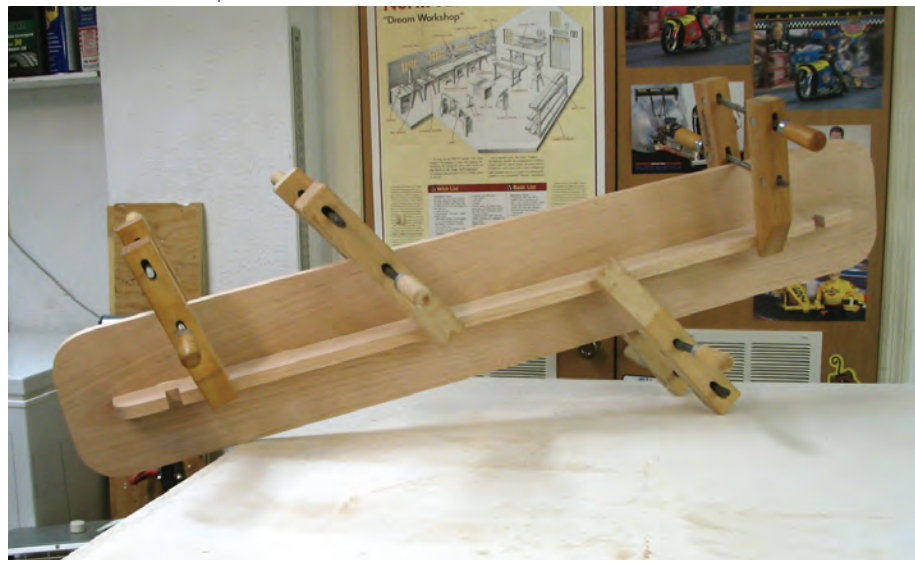
After marking the 5"-diameter circle and extending the marks down to the bottom of the legs, use your jigsaw to cut out the arches on both legs. Take your time in the curve. It's easy to cut outside your line.



Cleaning up the cuts on the radii is fairly easy with a random orbit sander. Make sure you keep the pad perpendicular to the face of the board or you'll round over the edges. The sander won't work on the inside of the arches. You'll have to resort to a rasp and file to clean up those cuts.



Depending on your comfort level with the jigsaw, cutting the mating notches for a tight fit can be tricky. You may want to cut the second notch by hand (I'm using a coping saw in the photo above). This allows you to sneak up on a tight fit.



Even though a long-grain to long-grain glue joint is strong, a handful of biscuits help reinforce the joint where the stretcher attaches to the seat (left). With the biscuit slots cut, add some glue and clamp the stretcher in place (above). If you've never tried wooden hand screws, you might be surprised at the amazing number of applications they have in your shop.

The next step is to lay out and cut the interlocking notches in the stretcher and legs. Layout a $\frac{3}{4}$ " \times $1\frac{1}{2}$ " notch centered in the top of each leg. Then measure and mark out a $\frac{3}{4}$ " \times $1\frac{1}{2}$ " notch 3" in from each side of the bottom of your stretcher.

Again using your jigsaw cut out the sides of each notch and cut a few straight relief cuts. A coping saw can help you finish cutting these notches and improve the fit. Use your palm sander and appropriate files to finish shaping the arch and the notches.

The next step is to attach the stretcher to the seat. I know I said no glue, but this is one place where it's a good idea. I also used biscuits to reinforce the glue joint. Line up

the stretcher to the seat and mark several locations for biscuits. Make sure you stay away from the ends of the stretchers or the biscuit could show through at the radius. Once you have the biscuit slots cut, glue and clamp the stretcher into position.

When the glue dries, position the legs in place in the stretcher notches and turn the bench upright.

Because the legs and seat came from the same board and the grain is oriented in the same direction, we can use screws to attach the legs to the seat without any worry of wood movement causing splitting.

Use a $\frac{3}{8}$ " countersink bit from the top of the bench to make the screw holes to attach the bench to the legs. Next cut

four plugs from a $\frac{3}{8}$ " oak dowel to glue and cover each screw hole. Once the glue dries, use a saw to cut the dowel plugs close to flush with the bench.

Using 150- and 180-grit sand paper on your palm sander; sand the entire bench. Take a rag soaked with water and wipe the bench down. This will raise the grain on the bench. When the bench is dry, sand it again using 180-grit sandpaper.

From here you're ready to finish however you wish. I finished my bench using an all-in-one mahogany stain from Minwax and then applied a few coats of wipe on poly.



I use a one-piece bit and countersink (lying on the bench) to make the clearance and countersink hole for both the screws and the plugs in one step. Just make sure you drill deep enough to allow the plug to seat $\frac{1}{4}$ " below the surface.



The coping saw isn't my first choice for cutting the plugs flush to the top (it leaves more dowel than I'd prefer), but rather than go out and buy a flush-cut saw, I made do. Just a little more time spent on sanding and no one is the wiser.

COFFEE TABLE

PROJECT 8



BY GLEN HUEY

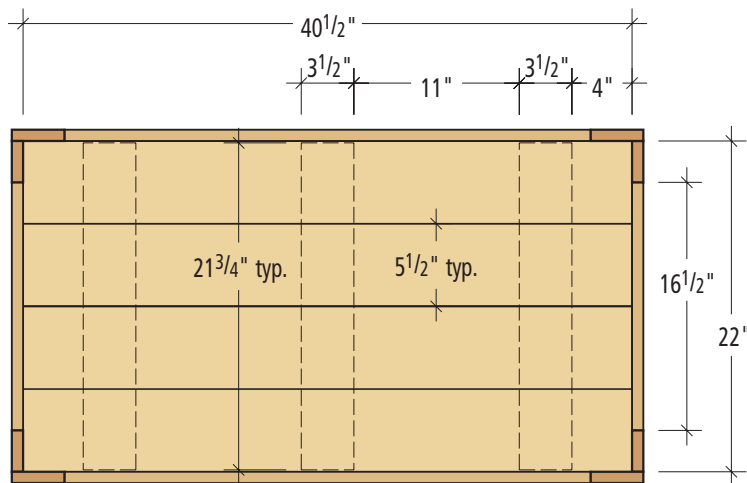
A coffee table is generally the focus of the living room. Sure the couch is the big comfortable sitting place, but the coffee table is the heart of the area. Where else do you prop up your feet? Where are the important magazines stored, to be pulled out when needed? The answer is your coffee table.

This particular table caught my eye because of the overall design. It is not too Country or Arts & Crafts and it will fit into either design quite well. It will also look proper within a contemporary setting.

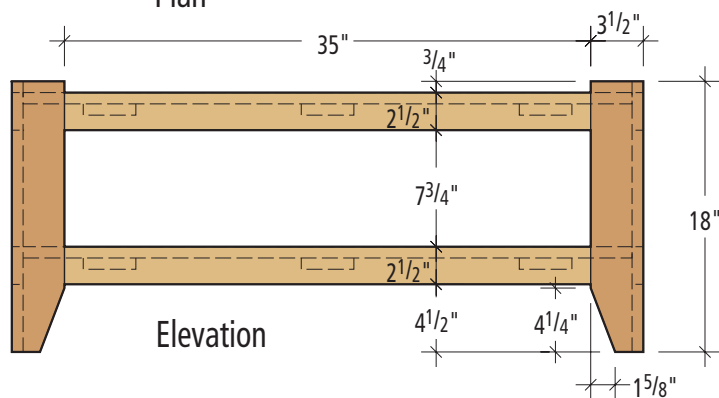
The construction of this piece is uncomplicated. The top and shelf units are made of four individual pieces of lumber, which will help limit the total amount of wood movement versus using one solid glued

panel. The legs are comprised of two pieces each and are attached to the top and shelf with screws. Add in the pieces that put the finishing touches on the sides and ends and this coffee table is ready for a finish.

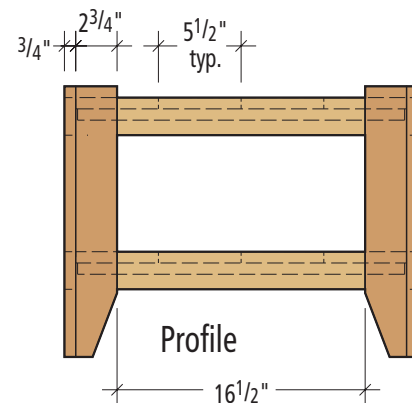
And the finish could not be any easier to complete if it were painted, which would also be a nice look if you chose not to use the red oak as shown, but first things first.



Plan



Elevation



Profile

PARTS LIST

THICKNESS X WIDTH X LENGTH

REF. NO.	PART	STOCK	INCHES	MILLIMETERS
A	8 top & shelf slats	oak	3/4 x 5 1/2 x 40 1/2	19 x 140 x 1029
B	6 battens	oak	3/4 x 2 1/2 x 21 3/4	19 x 64 x 552
C	8 leg sides	oak	3/4 x 3 1/2 x 18 3/4	19 x 89 x 476
D	4 end rails	oak	3/4 x 2 1/2 x 16 1/2	19 x 64 x 419
D	4 side rails	oak	3/4 x 2 1/2 x 35	19 x 64 x 889
Screws	40 No. 8 x 1 1/4"			
	16 No. 6 x 1 1/4" pocket screws			
Nails	24 3d finish nails			

