

MOBILE CUTOFF BIN



A person wearing a blue long-sleeved shirt, a green apron, and jeans is standing next to a mobile cutoff bin. They are placing a piece of wood into the bin. The bin is made of plywood and has several metal rods (EMT conduit) running through it to hold the wood in place. The bin is on wheels and is filled with various pieces of wood and plywood. The background is a workshop with wooden walls.

storage
solutions

mobile Cutoff Bin

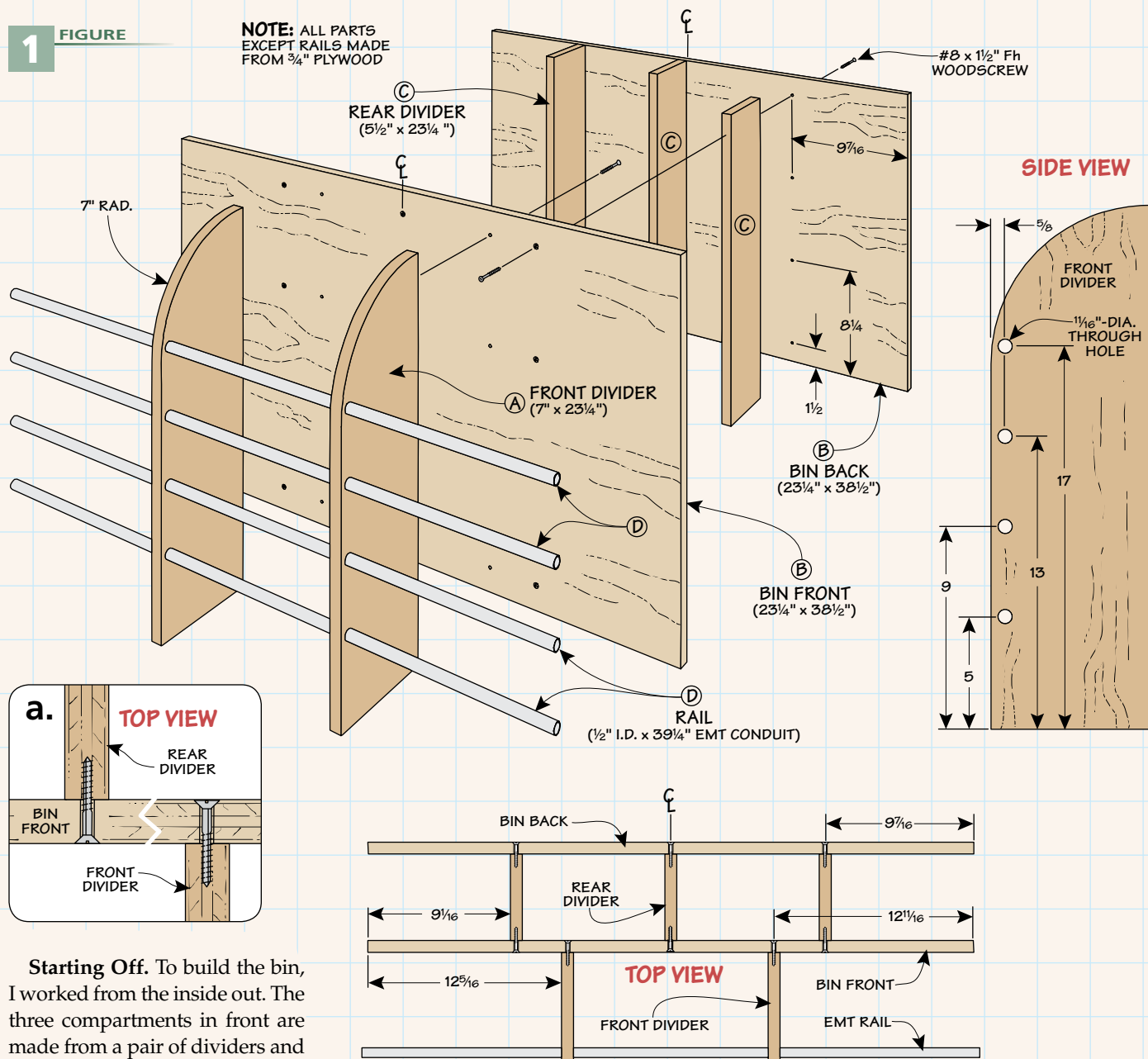
This handy cart provides a home for all those cutoffs that are too good to throw away.

When I'm in the middle of a project and using the table saw heavily, having a place to toss the cutoffs is pretty important. The mobile bin you see above is the perfect solution. It's home is usually right next to my table saw. But it can be rolled wherever I need a handy place to save useable cutoffs.

The construction couldn't be easier — it's made from plywood with butt joints reinforced with screws. And the front rails are made from $\frac{1}{2}$ " EMT conduit you'll find at a home center or hardware store. It's a quick build that's sure to go a long way toward keeping your shop neat and clutter-free.

1 FIGURE

NOTE: ALL PARTS EXCEPT RAILS MADE FROM $\frac{3}{4}$ " PLYWOOD



Starting Off. To build the bin, I worked from the inside out. The three compartments in front are made from a pair of dividers and metal conduit. Two large panels form the front and back of the four compartments in the middle of the bin. The drawings above show the details.

Curved Dividers. Begin by cutting the two front dividers to size. Lay out the curves, and then use a band saw or jig saw to cut them to shape, sanding them smooth afterward.

To make the conduit easier to install, it's important to keep the holes in the front dividers aligned. To do this, I stacked the parts together before drilling the holes at the drill press.

Front & Back. Set the dividers aside for now to cut the front and

back of the compartments to size. You'll need to drill several countersunk screw holes that will be used when installing the dividers. The Top View drawing above will help in laying out the spacing and location of the screws.

Rear Dividers. The rear dividers are the last things to cut to finish up the inside compartments. They're simply cut to size before you start the assembly process.

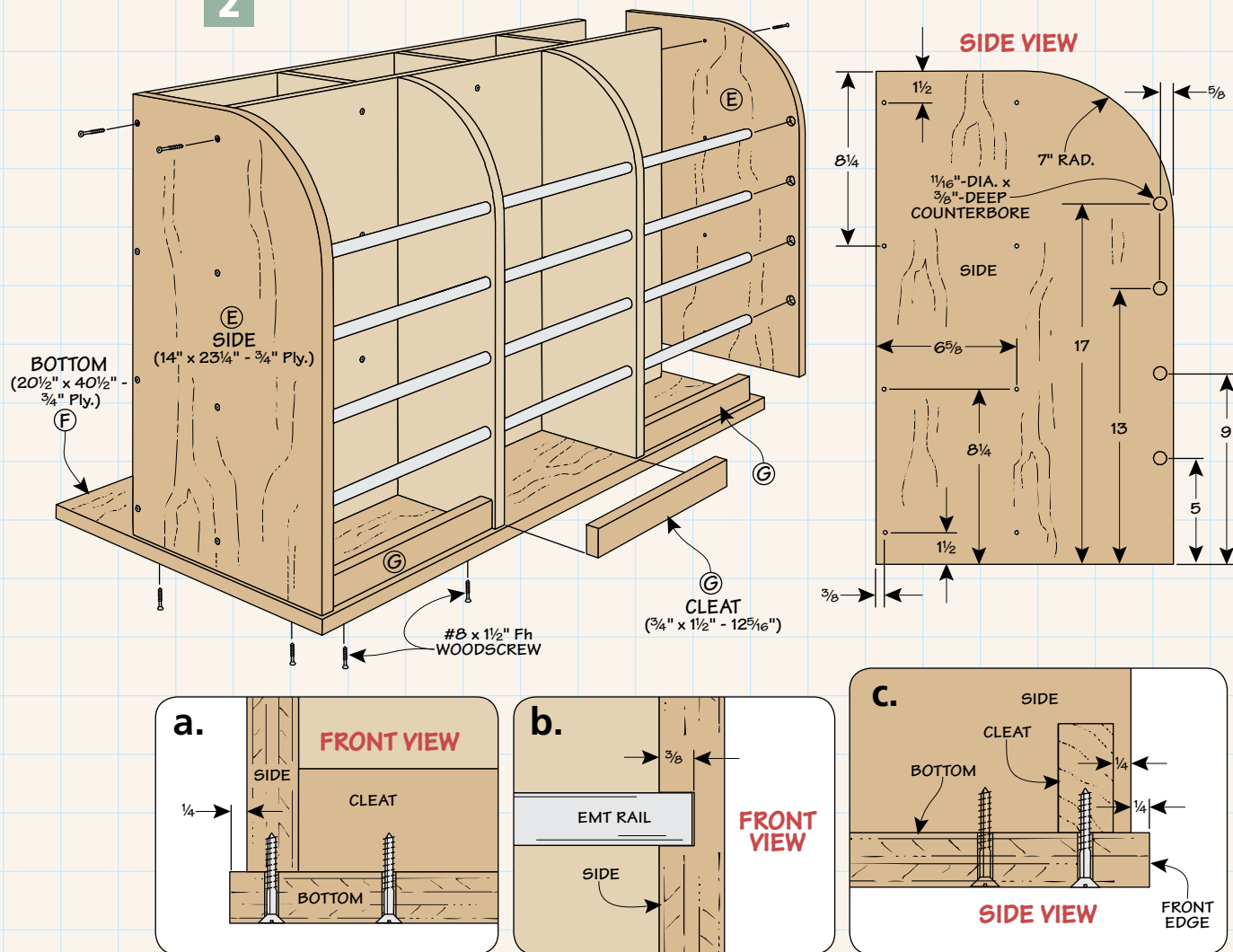
Assembly. Putting all the parts together involves clamping the parts in place, drilling pilot holes, and then driving in the screws.

There are a lot of screws, but I still glued all of the joints.

To help align and position the parts evenly while clamping them, I used scrap pieces of plywood as spacers. A spacer at the top and bottom of the dividers will help keep them square and parallel to each other until the screws are installed.

Conduit Rails. The four conduit rails are easy to cut with a hack saw. I took some time to file the rough edges smooth to make it easier to slide the rails through the holes in the front dividers.

2 FIGURE



final Details

Finishing up the cutoff bin involves adding the sides plus a shelf and back that form a pocket for storing plywood cut-offs. You'll also add a bottom and casters to make the bin mobile.

Sides. The pair of sides start out as rectangular blanks. Figure 2 shows how they're curved to match the curve you cut on the two front dividers.

The holes in the sides that accept the conduit rails aren't through holes, so I couldn't stack the sides together to drill the counterbored holes. Here, some careful layout and temporarily

placing the sides on the bin assembly will help ensure these holes are in the correct location. Then drill the countersunk screw holes and attach the sides.

Base. Making the plywood bottom follows along the same lines as the front and back you made earlier. It's cut to size and then predrilled for screws used to attach it to the cart assembly.

I turned the assembly upside down on the shop floor to attach the bottom. I centered the bottom left-to-right and left a $\frac{1}{4}$ " overhang on the front. Drive the screws to fasten it down before flipping the assembly over to add the cleats along the front.

Cleats. The three cleats you see above keep cutoffs from slipping out of the bins. They're pieces

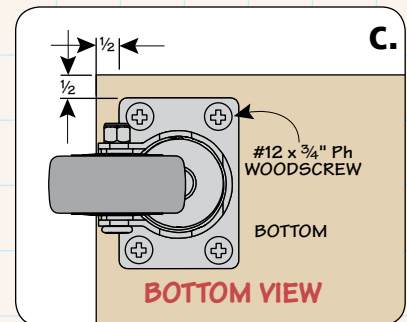
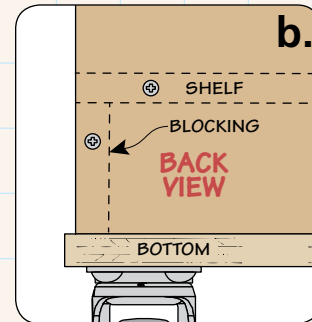
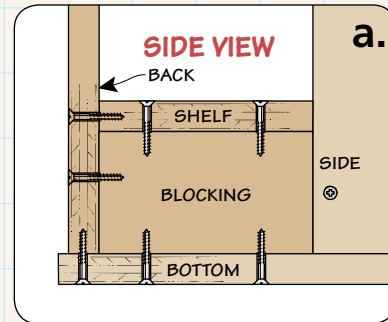
of hardwood cut to size and installed with a pair of screws through the bottom.

Rear Storage. You'll turn your attention now to the rear of the cart. Blocking creates an elevated shelf for holding plywood cutoffs and strengthens the back to keep the cutoffs contained.

You can start by cutting $\frac{3}{4}$ " plywood to size to make the blocking shown in Figure 3. These pieces provide a secure connection for the back and serve to elevate the shelf. I installed the blocking with a few screws through the bottom.

Adding the shelf is just a matter of cutting it to size and installing it with screws on top of the blocking. Then the back panel can be cut to size.

3



The last thing to do is find a convenient spot to place the cutoff bin. You'll want to keep it within reach near your table saw or miter saw. It's a handy place to keep cutoffs that are too big to throw away. Who knows when you just might need those pieces for a special project?

A	Front Dividers (2)	7 x 23 1/4 - 3/4 Ply.
B	Bin Front/Back (2)	23 1/4 x 38 1/2 - 3/4 Ply.
C	Rear Dividers (3)	5 1/2 x 23 1/4 - 3/4 Ply.
D	Rails (4)	1/2-dia. x 39 1/4 EMT Conduit
E	Sides (2)	14 x 23 1/4 - 3/4 Ply.
F	Bottom (1)	20 1/2 x 40 1/2 - 3/4 Ply.
G	Cleats (3)	3/4 x 1 1/2 - 12 5/16
H	Blocking (4)	3 x 5 1/4 - 3/4 Ply.

- (69) #8 x 1 1/2" Fh Woodscrews
- (2) 4"-dia. Locking Swivel Casters
- (2) 4"-dia. Swivel Casters
- (16) #12 x 3/4" Ph Woodscrews

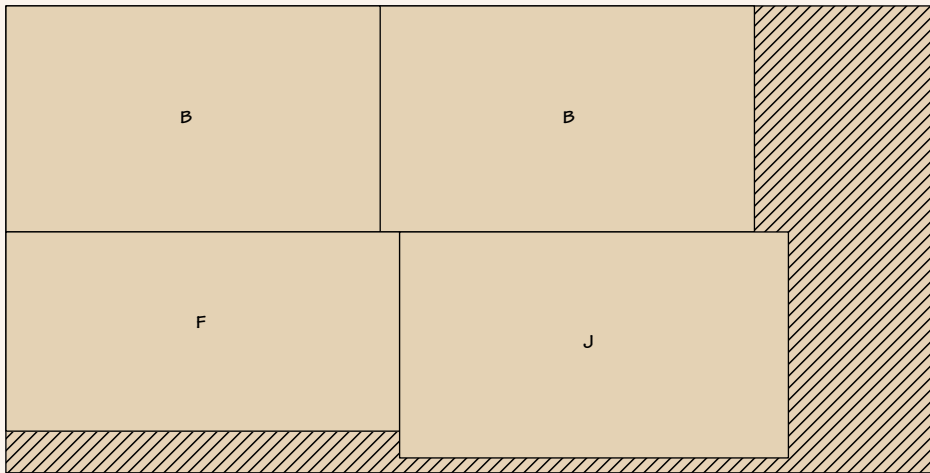
Mobile Cutoff Bin

Materials List

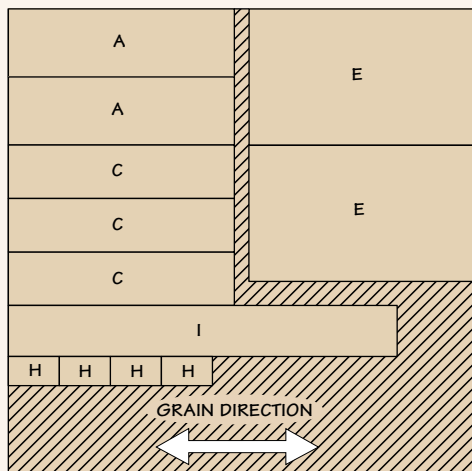
A	Front Dividers (2)	7 x 23 $\frac{1}{4}$ - $\frac{3}{4}$ Ply.	I	Shelf (1)	5 $\frac{1}{4}$ x 40 - $\frac{3}{4}$ Ply.
B	Bin Front/Back (2)	23 $\frac{1}{4}$ x 38 $\frac{1}{2}$ - $\frac{3}{4}$ Ply.	J	Back (1)	23 $\frac{1}{4}$ x 40 - $\frac{3}{4}$ Ply.
C	Rear Dividers (3)	5 $\frac{1}{2}$ x 23 $\frac{1}{4}$ - $\frac{3}{4}$ Ply.			
D	Rails (4)	$\frac{1}{2}$ -dia. x 39 $\frac{1}{4}$ EMT Conduit			
E	Sides (2)	14 x 23 $\frac{1}{4}$ - $\frac{3}{4}$ Ply.			
F	Bottom (1)	20 $\frac{1}{2}$ x 40 $\frac{1}{2}$ - $\frac{3}{4}$ Ply.			
G	Cleats (3)	$\frac{3}{4}$ x 1 $\frac{1}{2}$ - 12 $\frac{5}{16}$			
H	Blocking (4)	3 x 5 $\frac{1}{4}$ - $\frac{3}{4}$ Ply.			
					<ul style="list-style-type: none"> • (69) #8 x 1$\frac{1}{2}$" Fh Woodscrews • (2) 4"-dia. Locking Swivel Casters • (2) 4"-dia. Swivel Casters • (16) #12 x $\frac{3}{4}$" Ph Woodscrews

Cutting Diagram

48" x 96" - $\frac{3}{4}$ " PLYWOOD



48" x 48" - $\frac{3}{4}$ " PLYWOOD



$\frac{3}{4}$ " x 3 $\frac{1}{2}$ " - 48" HARDWOOD (1.2 Bd. Ft.)

