



# SLIDING-DOOR SHOP CABINET





# SLIDING-DOOR SHOP CABINET

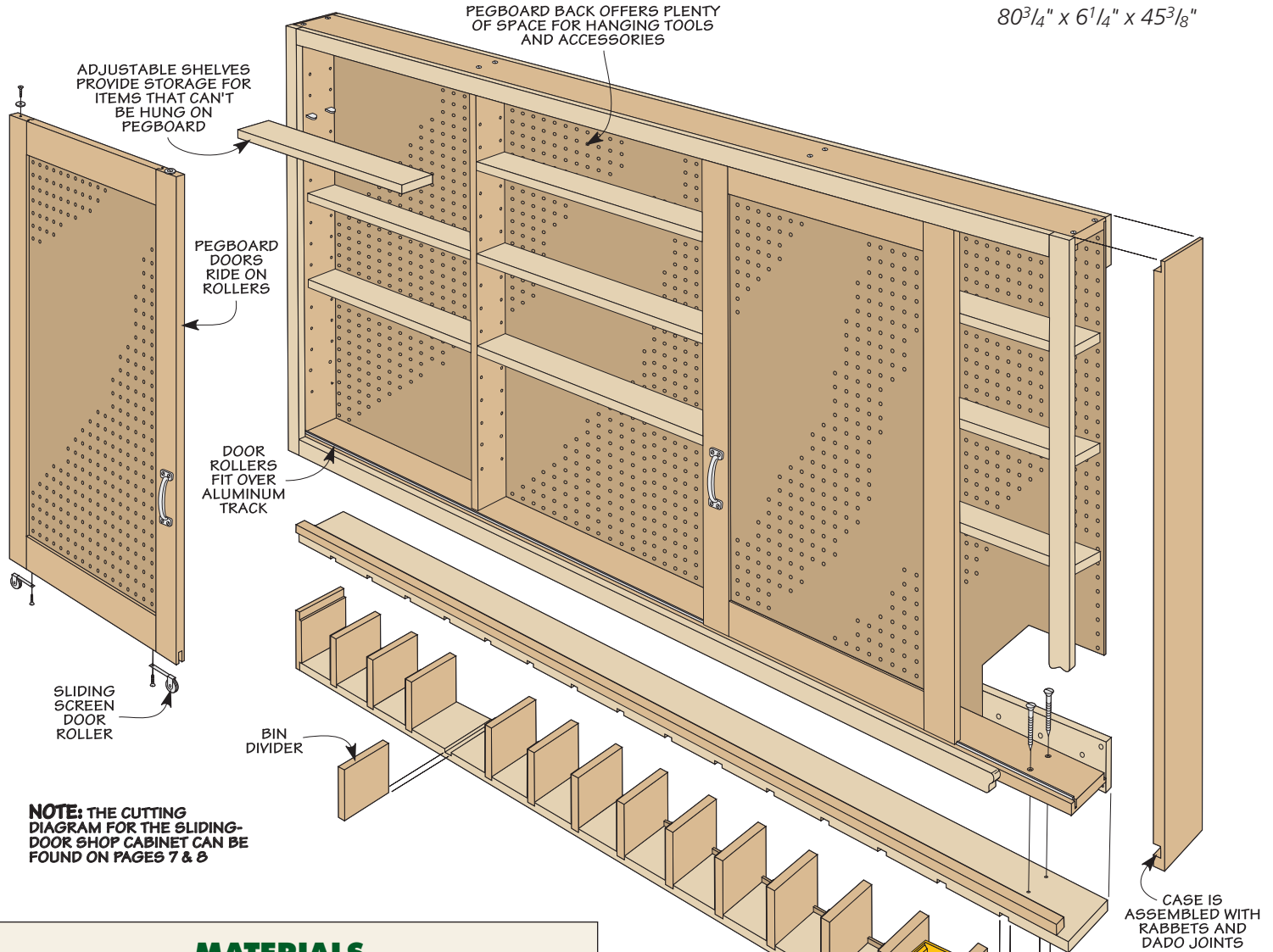
*Sliding doors and a flexible design allow you to pack a lot of tools into little space.*





# Construction Details

Overall Dimensions:  
80<sup>3</sup>/<sub>4</sub>" x 61<sup>1</sup>/<sub>4</sub>" x 45<sup>3</sup>/<sub>8</sub>"



**NOTE: THE CUTTING DIAGRAM FOR THE SLIDING-DOOR SHOP CABINET CAN BE FOUND ON PAGES 7 & 8**

## MATERIALS

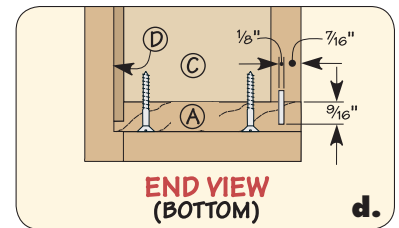
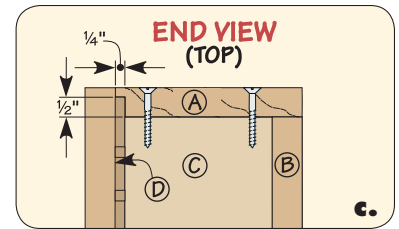
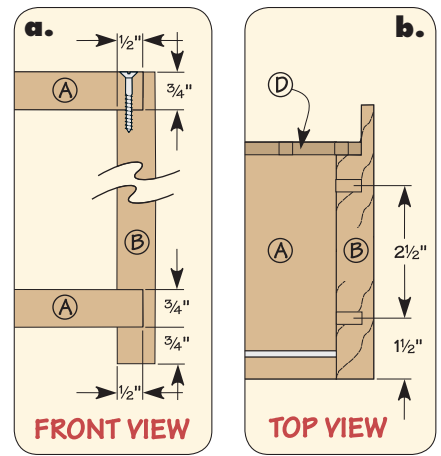
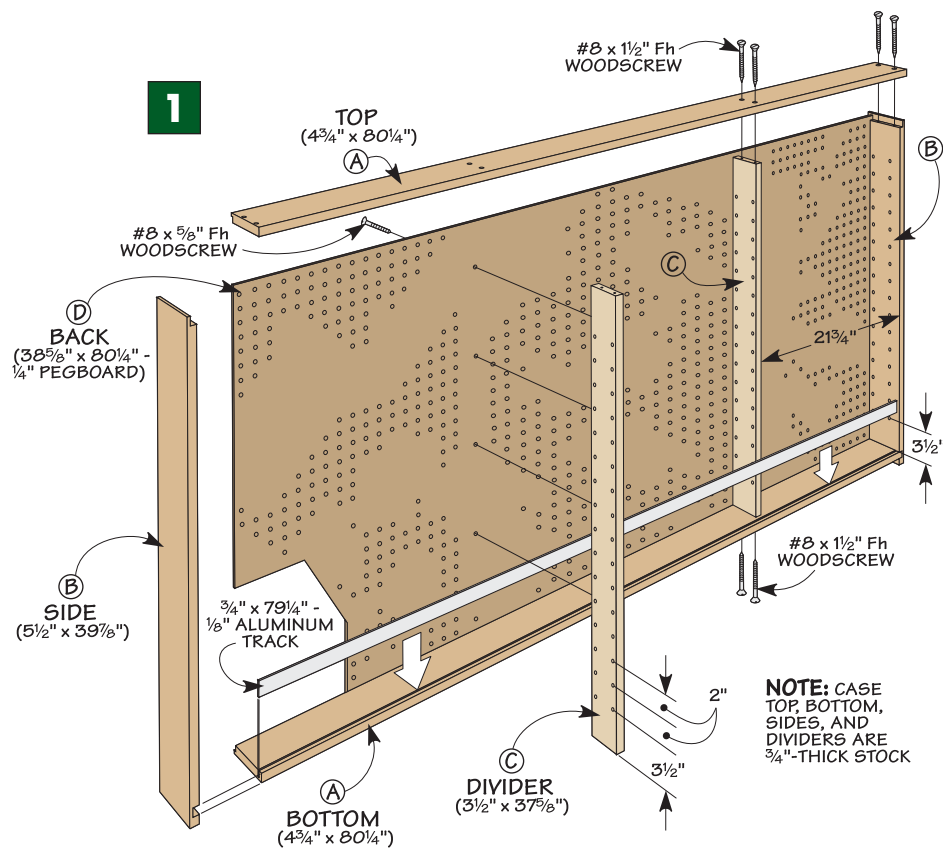
<b>A</b> Top/Bottom (2)	3/4 x 4 <sup>3</sup> / <sub>4</sub> - 80 <sup>1</sup> / <sub>4</sub>
<b>B</b> Sides (2)	3/4 x 5 <sup>1</sup> / <sub>2</sub> - 39 <sup>7</sup> / <sub>8</sub>
<b>C</b> Dividers (2)	3/4 x 3 <sup>1</sup> / <sub>2</sub> - 37 <sup>5</sup> / <sub>8</sub>
<b>D</b> Case Back (1)	38 <sup>5</sup> / <sub>8</sub> x 80 <sup>1</sup> / <sub>4</sub> - 1/4 pgbd.
<b>E</b> Back Cleats (2)	3/4 x 3 <sup>1</sup> / <sub>2</sub> - 80 <sup>1</sup> / <sub>4</sub>
<b>F</b> Face Frame Rails (2)	3/4 x 1 <sup>1</sup> / <sub>2</sub> - 77 <sup>3</sup> / <sub>4</sub>
<b>G</b> Face Frame Stiles (2)	3/4 x 1 <sup>1</sup> / <sub>2</sub> - 39 <sup>7</sup> / <sub>8</sub>
<b>H</b> Side Shelves (6)	3/4 x 3 <sup>1</sup> / <sub>2</sub> - 21 <sup>3</sup> / <sub>4</sub>
<b>I</b> Center Shelves (3)	3/4 x 3 <sup>1</sup> / <sub>2</sub> - 34 <sup>1</sup> / <sub>4</sub>
<b>J</b> Door Stiles (4)	3/4 x 2 <sup>1</sup> / <sub>2</sub> - 37
<b>K</b> Door Rails (4)	3/4 x 2 <sup>3</sup> / <sub>4</sub> - 18
<b>L</b> Door Panels (2)	18 x 32 - 1/4 pgbd.
<b>M</b> Side Door Stops (2)	3/4 x 3/4 - 21 <sup>3</sup> / <sub>4</sub>
<b>N</b> Center Door Stop (1)	3/4 x 3/4 - 34 <sup>1</sup> / <sub>4</sub>
<b>O</b> Top/Bottom (2)	3/4 x 5 <sup>1</sup> / <sub>2</sub> - 79 <sup>3</sup> / <sub>4</sub>
<b>P</b> Ends (2)	3/4 x 5 <sup>1</sup> / <sub>2</sub> - 5 <sup>1</sup> / <sub>2</sub>
<b>Q</b> Dividers (15)	3/4 x 5 <sup>1</sup> / <sub>2</sub> - 4 <sup>1</sup> / <sub>2</sub>
<b>R</b> Stops (16)	1/2 x 4 <sup>1</sup> / <sub>4</sub> - 1/4 pgbd.
<b>S</b> Spacer (1)	3/4 x 1 - 79 <sup>1</sup> / <sub>4</sub>



PLASTIC BIN CAN BE ORDERED FROM AKRO-MILLS.COM (30210)

## HARDWARE

- (46) No. 8 x 1<sup>1</sup>/<sub>2</sub>" Fh Woodscrews
- (16) No. 8 x 5/8" Fh Woodscrews
- (4) Sliding Screen Door Rollers w/Screws
- (1) 1/8" x 3/4" Aluminum Bar (79<sup>1</sup>/<sub>4</sub>" long)
- (2) 4" Drawer Pulls w/Screws
- (36) Shelf pins
- (4) No. 8 x 1" Rh Woodscrews
- (4) 1"-dia. Fender Washers
- (10) No. 8 x 2" Fh Woodscrews
- (16) 4<sup>1</sup>/<sub>8</sub>" x 5<sup>3</sup>/<sub>8</sub>" Plastic Storage Bins



## Building the Case

One of the objections to pegboard that I hear over and over again is that it doesn't hold very many tools for the amount of wall space that it takes up. But this pegboard storage project is different. Instead of just a flat pegboard panel mounted to the wall, this project is a shallow cabinet. The back of the cabinet is made with pegboard for hanging tools. But in front of this are shelves and

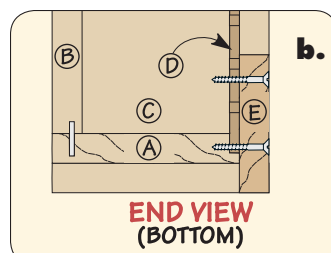
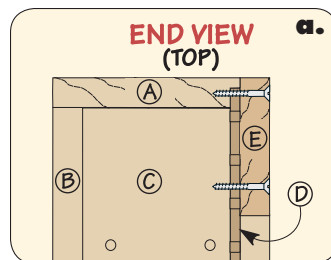
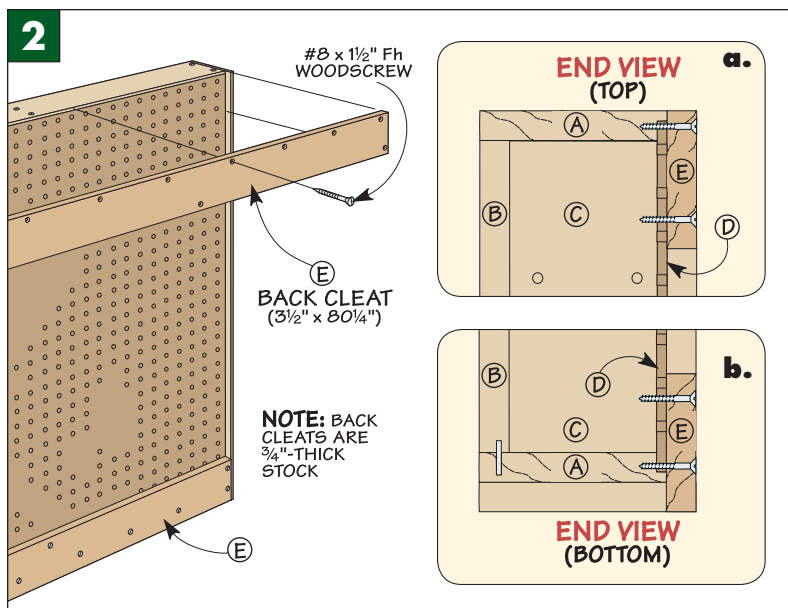
a couple of sliding pegboard doors. So you end up with nearly double the amount of storage area without taking up any additional wall space.

**CASE.** To build the cabinet, I started with the case. The main parts of the case — the top, bottom, and sides — are all cut from 1x6's. If you take a look at Figure 1b, you'll notice that the sides are wider than the top and bottom of the case. This has to do

with how the pegboard back and cleats are attached to the case. (I'll explain more about that later.) For now, just cut the pieces to the dimensions shown. Then you can cut the rabbets and dadoes in the sides that will hold the top and bottom of the case (Figures 1 and 1a).

The pegboard panel that will serve as the back of the case fits into a rabbeted opening. But in order to create some clearance behind the pegboard for the pegboard hooks, the back is set in about 3/4" from the wall. To do this, you'll need to make the rabbets on the sides of the case wider than the rabbets on the case top and bottom. Take a look at Figures 1b, 1c, and 1d to see what I'm talking about.

Before you can assemble the case, there are a few details to take care of. First, I drilled some holes on the inside face of the case sides for some shelf pins. Then I cut a kerf near the front edge of the case bottom for a piece of aluminum that will be added later (Figure 1d). This will serve as the "track" for the sliding door.





3

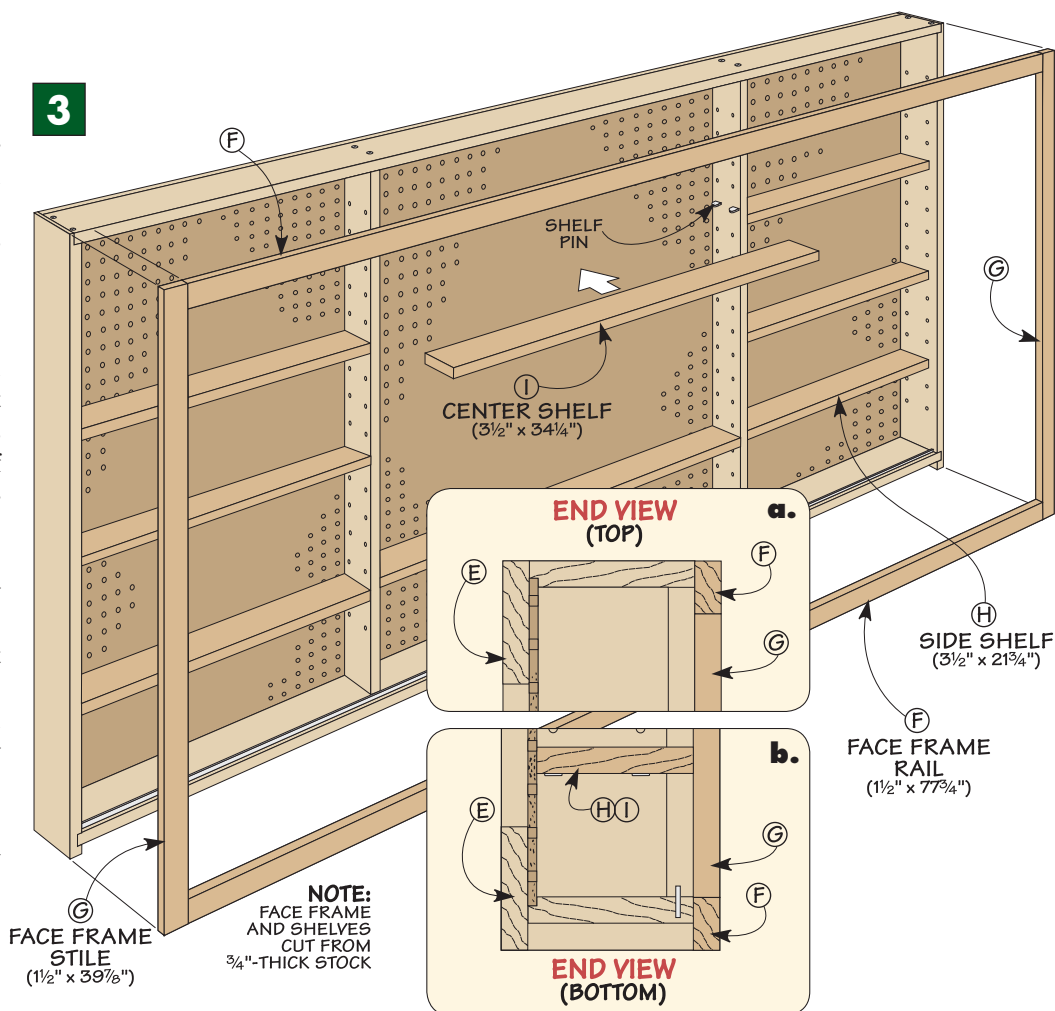
Finally, I drilled some countersunk screw holes in the case top and bottom for the screws that will be used to attach the sides and dividers of the case. It's easier to drill these holes on a drill press now, before assembling the case.

**ASSEMBLY.** The case is assembled with glue and some screws. Just make sure to keep the front edges of the top, bottom, and sides of the case flush as you clamp everything together.

**DIVIDERS.** With the outer frame of the case complete, you can now add a couple of dividers. These are ripped to width and then cut to fit between the top and bottom of the case. But before they're glued and screwed into place, a double row of shelf pin holes is drilled in each divider, as you see in Figure 1.

**BACK & CLEATS.** The back is just a piece of  $\frac{1}{4}$ " pegboard cut to fit in the rabbeted opening in the back of the frame (Figure 2). It gets held in place with a few screws. Then a pair of cleats are screwed to the back of the case over the pegboard — one at the top and one at the bottom. These help strengthen the cabinet as well as provide support when screwing it to the wall.

With the back in place, I cut a strip of aluminum to fit in the kerf in the bottom of the case. My strip



fit snug in the kerf; if yours is a little loose, you may want to use some epoxy to hold it in place.

**FACE FRAME.** The last two steps to complete the case are to add the face frame and shelves. These are both about as straightforward as

could be. The rails and stiles for the face frame are simply cut to size and glued in place to the front edges of the case. Then the shelves are cut to width and length. If you take a look at Figure 3, you'll notice that there are two different shelf lengths.



▲ **Shelf Pins.** Removable shelf pins are used to support the adjustable shelves inside the storage cabinet.

## HOW-TO: BUYING PEGBOARD

Pegboard (also called perfbord) is really nothing more than hardboard with holes drilled in it. But all pegboard isn't created equal. (Something you'll quickly discover when you start shopping for it.)

**THICKNESS.** You can find pegboard in  $\frac{1}{8}$ ",  $\frac{3}{16}$ ", and  $\frac{1}{4}$ " thicknesses. Both the  $\frac{3}{16}$ " and  $\frac{1}{4}$ " pegboard have  $\frac{1}{4}$ "-dia. holes, but the thicker pegboard will be much stronger, making it a better choice for shop projects like the storage cabinet.

In addition to different thicknesses, there are also different

grades of pegboard. I prefer service-tempered pegboard because it's harder and more durable than standard pegboard. The only trouble can be finding it — you may have to go to a lumberyard or have it ordered.

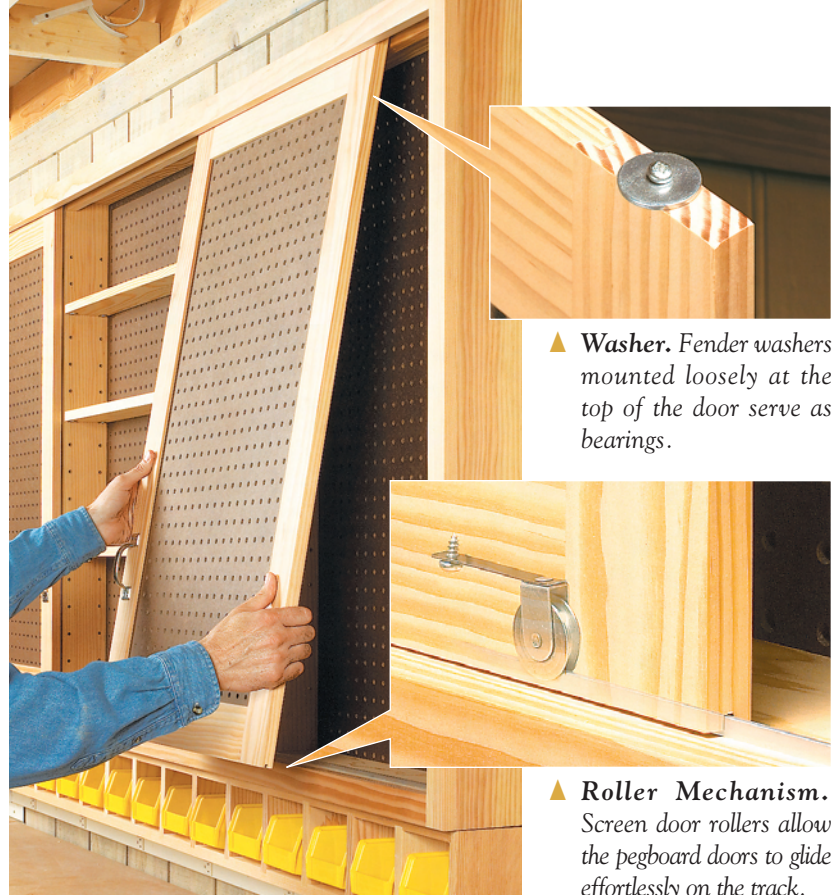
## Sliding Doors

The sliding doors are what really make this cabinet special. Instead of simply sliding in a groove, these doors glide on roller mechanisms. Mounted into the bottom edge of each door are two sliding screen door rollers (see lower inset photo at right). These rollers work so smoothly that you can roll the doors along the track with one finger, even when they're loaded up with tools.

Each door is a wood frame with a pegboard panel. So I started by cutting the door rails and stiles to size.

The rollers fit into a deep groove that is cut in the bottom edge of the lower door rail before the door is assembled (Figure 4b). You'll also need to cut a shallow groove in the end of each door stile to allow the door to clear the aluminum track, as well as a groove for the pegboard panel. Then you can glue up the doors and install the rollers.

**DOOR STOPS.** Before you can install the doors in the case, there are a couple of details to take care of. To support the top of each door, I added some door stops to the inside of the



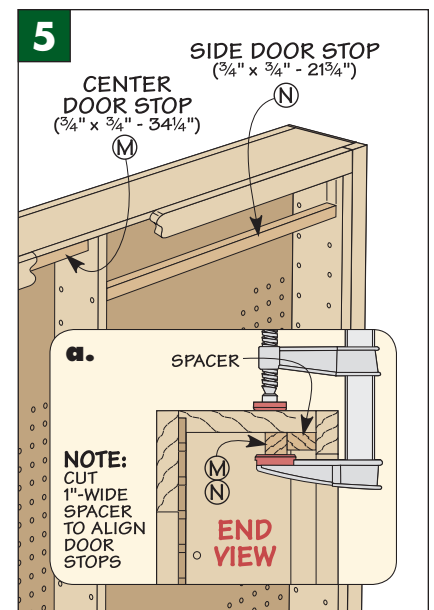
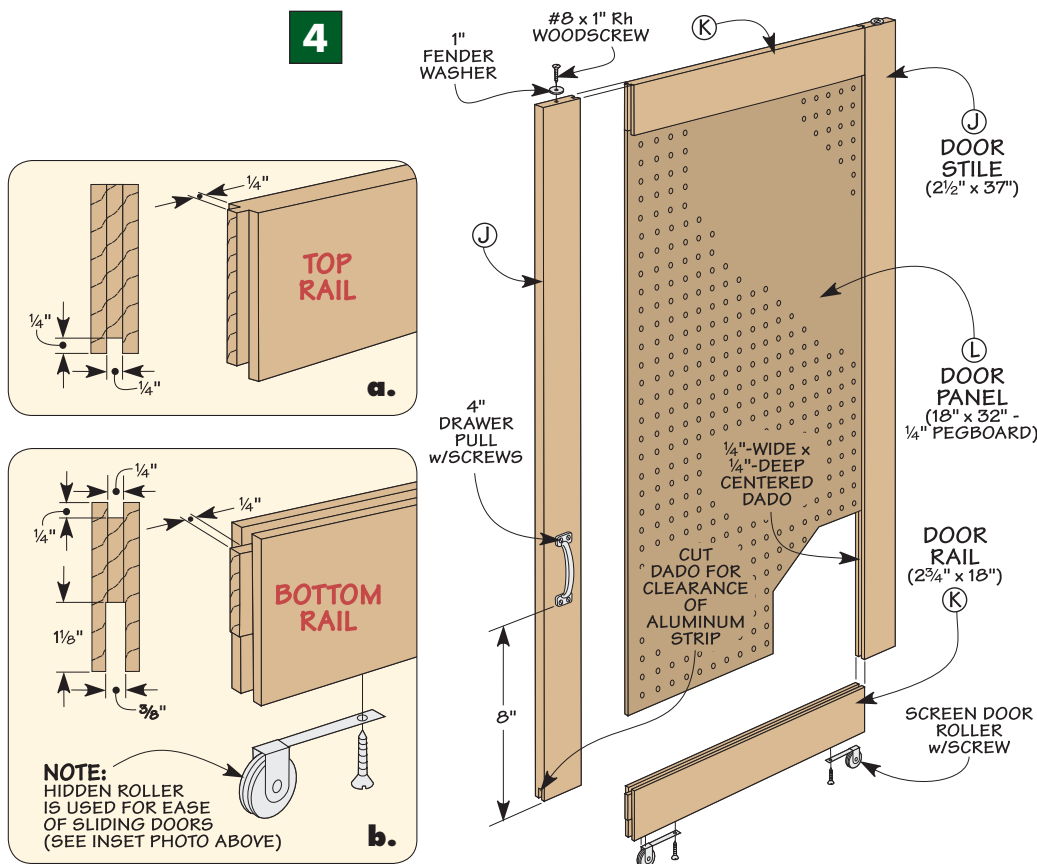
▲ **Washer.** Fender washers mounted loosely at the top of the door serve as bearings.

▲ **Roller Mechanism.** Screen door rollers allow the pegboard doors to glide effortlessly on the track.

case (Figure 5). To make sure that the doors would have plenty of clearance, I positioned the stops 1" away from the face frame. This creates a channel to help guide the door.

**WASHERS.** To keep the doors from rattling inside the case, I attached a couple of 1"-dia. fender washers to the top edge of each door, like you see in the top inset photo above. But I didn't tighten the screws all the way down. This allows the washers to spin freely, so they act as roller bearings inside the channel.

After adding a handle to each door, all you have to do is slip the doors into the channel and over the aluminum track, see photo above.





## Optional Hardware Bin Rack

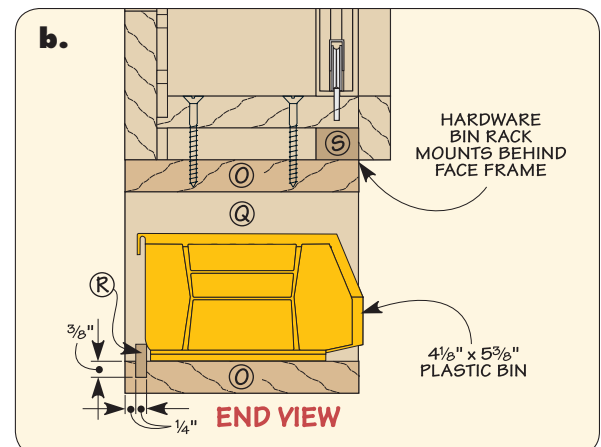
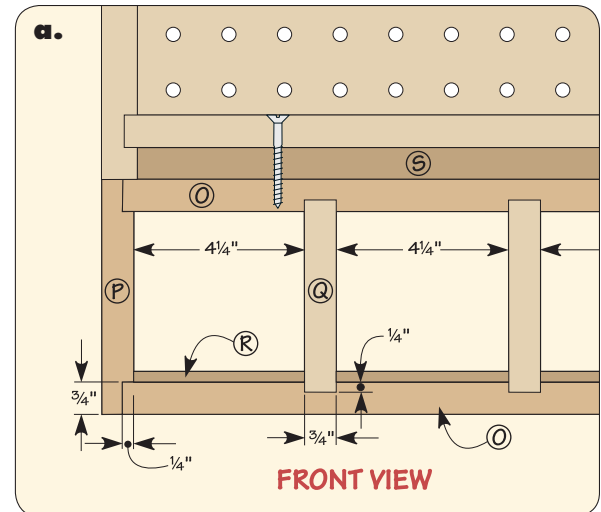
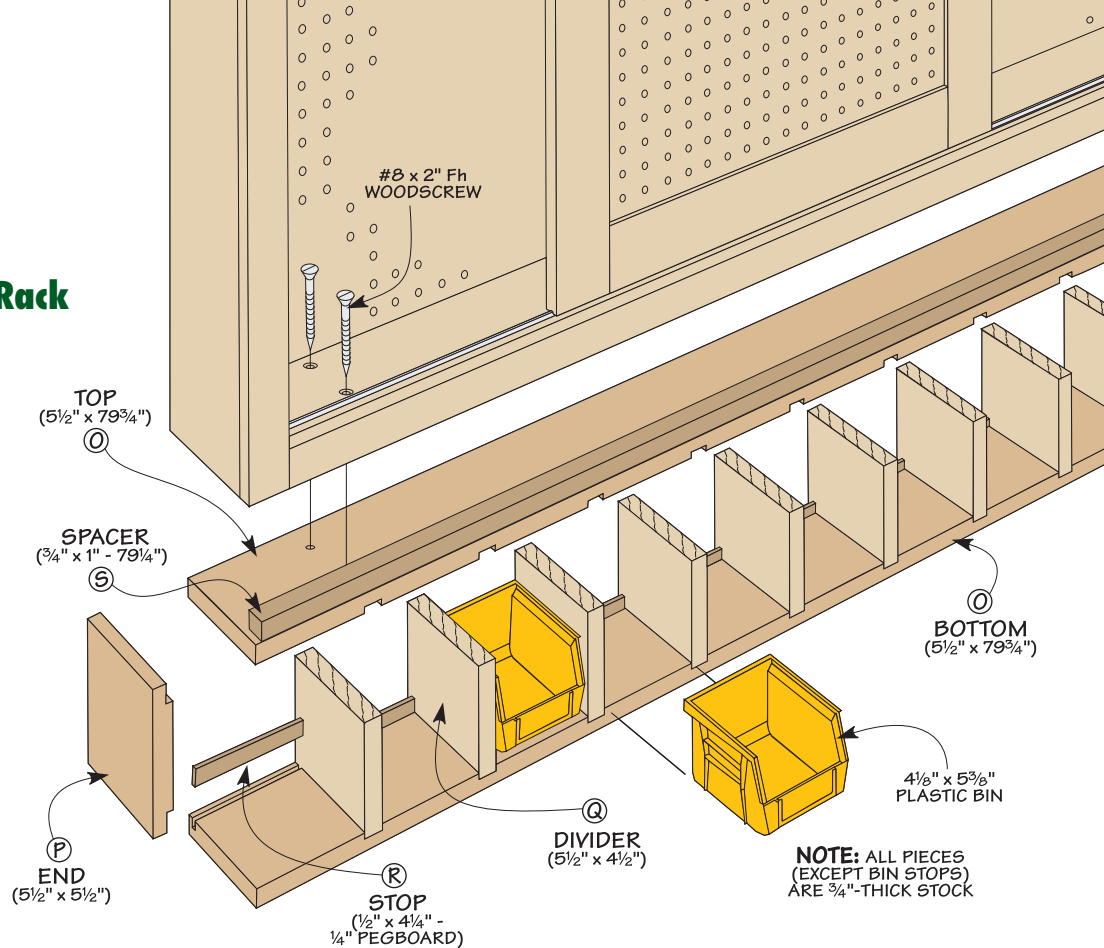
The pegboard storage cabinet is great for tools and supplies. But if you want to get even more use out of the cabinet, you can build this optional hardware bin. Mounted to the underside of the cabinet, the bin rack is just a series of cubby holes that are sized to hold plastic storage bins.

To make the bin rack, start by cutting the top and bottom to size. Then cut a series of evenly spaced dadoes on the inside face of each piece to hold the dividers (see detail 'a'). The ends of the bin rack are rabbeted to hold the top and bottom. And the dividers are cut to fit in the dadoes.

Before assembling the rack, I cut a kerf near the back edge of the bottom for some hardboard stops that will be added later. (The location of this kerf will depend on the size of the plastic storage bins that you're going to be using.)

**STOPS.** Once the bin rack is assembled, you can cut some bin stops out of  $\frac{1}{4}$ " pegboard and glue them into the kerf all along the back of the rack.

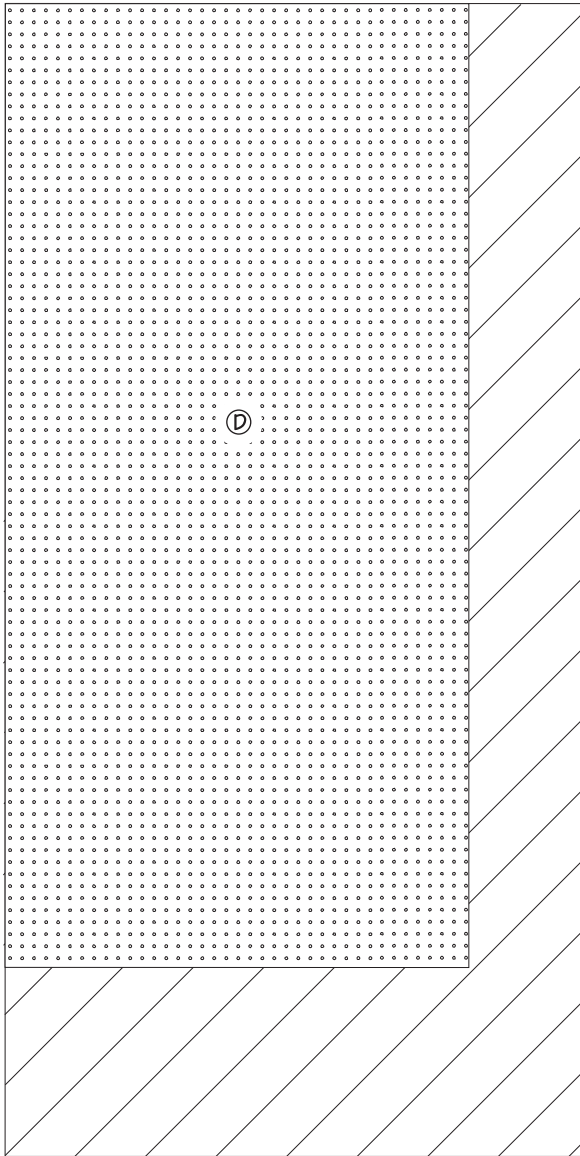
Before you can mount the bin rack to the storage cabinet, you'll need to add a strip of wood to the top of the rack to act as a spacer between the rack and the recessed bottom of the cabinet. Once this is done, the rack can be attached to the cabinet with woodscrews.



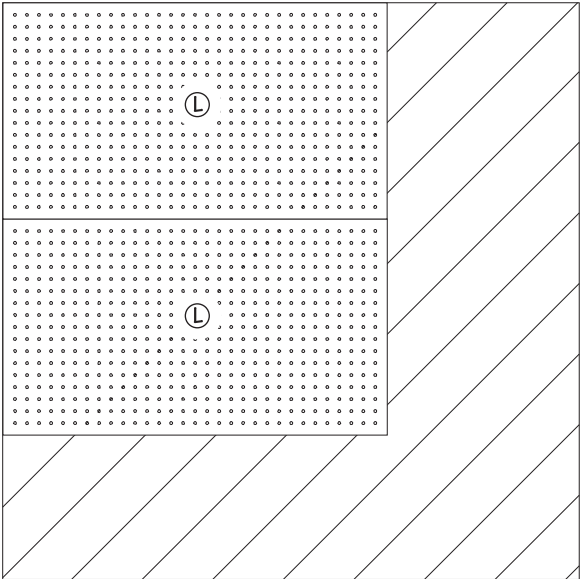
**Hardware Storage.** This optional storage unit mounts to the bottom of the cabinet and holds up to sixteen plastic hardware storage bins.

# CUTTING DIAGRAM

48" x 96" - 1/4" PEGBOARD



48" x 48" - 1/4" PEGBOARD



**NOTE:**  
CUT (16)  
BIN STOPS®  
FROM LEFTOVER  
PEGBOARD



1" x 6" - 96" TWO BOARDS



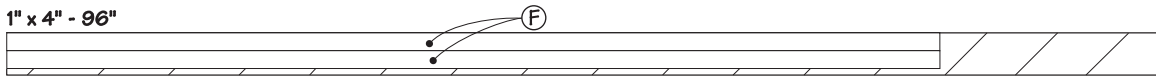
1" x 6" - 96"



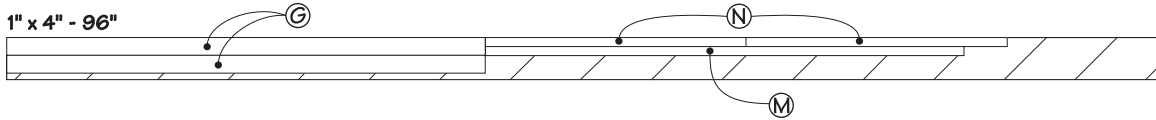
1" x 4" - 96"



1" x 4" - 96"



1" x 4" - 96"



1" x 6" - 96" TWO BOARDS



1" x 6" - 96" TWO BOARDS



1" x 6" - 96" TWO BOARDS



1" x 4" - 96" THREE BOARDS



1" x 4" - 96"

