

You can build a painted bookcase

Dress up the basic box with moldings and simulated panels.

By **JEFF BRANCH**

I have come to the realization that for those who like to read, there is often a need for another bookcase. This was the case with my daughter (and my wife as well - she has asked for another bookcase). I had just completed a massive bookcase for a local college professor when my wife said, "We need one just like that, only smaller - and you can paint it if that would be easier." I thought, "perfect" because a painted bookcase further adds simplicity to what is basically just a fancy box.

This project would be good for the beginning woodworker who is looking for a way to move up to a project that has a little style to it, but is still easy to build.

As you will see, this is just a box with a base, face frame, and crown molding. I did enhance the sides with simulated panels. These panels help increase visual interest and they add a little flair to what would otherwise be a simple design.

After some thought, I decided to make this bookcase six feet in height. Depending on your needs, you can easily adjust it to be taller.

All you will need to construct this project is a table saw, a plunge router, a pocket screw jig, miter saw, some pipe/bar clamps, and a drill - that's it. It is also handy to have a pneumatic brad nailer.



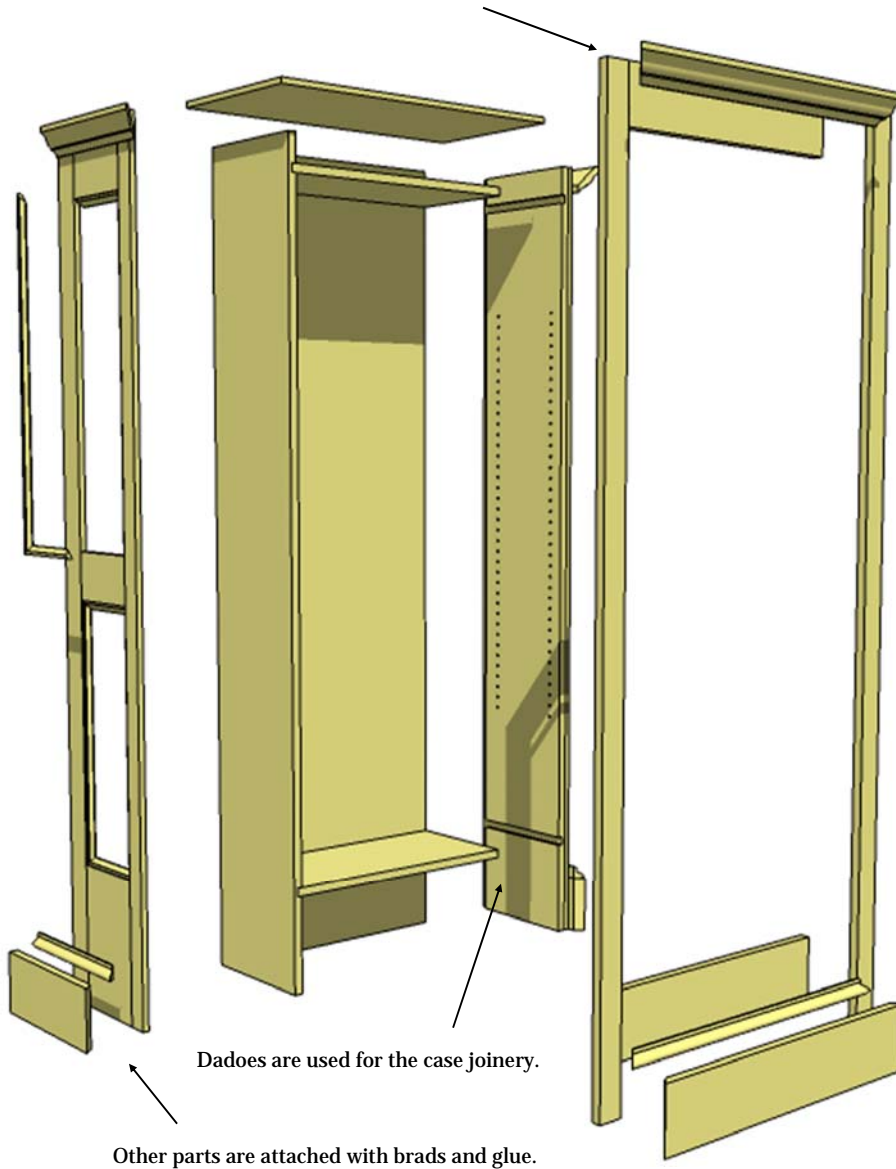
About the materials

A good material for painted projects is medium density fiberboard (MDF); a smooth and stable material. I used MDF for both the sides as well as the raised surfaces that simulate panels on the sides. I also used MDF for the back.

The face frame and shelves are poplar and all of the moldings are pine.

Exploded view

The face frame components are joined with pocket screws.



Note: the adjustable shelves have been removed for illustrative clarity.

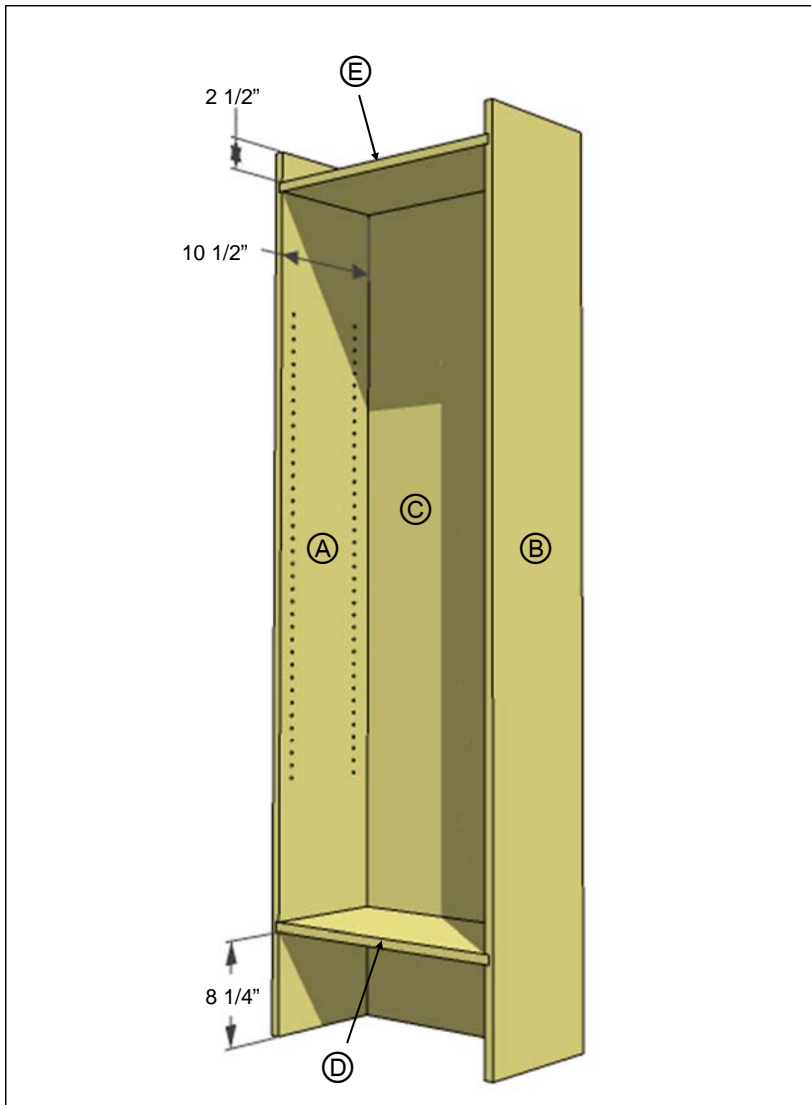
The great thing about this project: the joinery is very simple. You can see from the exploded view that the sides are joined to the lower shelf and the interior top with dadoes. The back fits into rabbets let into the rear edges of the sides. The face frame components are joined together with pocket screws. The remaining parts are attached with brads and glue.

Cut list

Qty.	Description	Length	Width	Thick	Board foot	B.F. (total)	Material
The case							
1	Left side - Ⓐ	71 1/4"	11 1/4"	3/4"	5.57	5.57	MDF
1	Right side - Ⓑ	71 1/4"	11 1/4"	3/4"	5.57	5.57	MDF
1	Back - Ⓒ	71 1/4"	22 1/4"	1/2"	11.01	11.01	MDF
1	Bottom shelf - Ⓓ	22 1/4"	10 1/2"	3/4"	1.22	1.22	MDF
1	Interior top - Ⓔ	22 1/4"	10 1/2"	3/4"	1.22	1.22	MDF
1	Top - Ⓕ	28"	14"	1/2"	1.36	1.36	MDF
4	Shelves - Ⓖ, Ⓜ, Ⓣ, Ⓝ	21 1/2"	10 1/2"	3/4"	1.18	4.72	Poplar
Face frame							
1	Face frame, top rail - Ⓚ	20"	4 1/4"	3/4"	.44	.44	Poplar
1	Face frame, bottom rail - Ⓛ	20"	5"	3/4"	.52	.52	Poplar
2	Face frame, stiles - Ⓜ, Ⓝ	71 1/4"	2"	3/4"	.74	1.48	Poplar
Simulated panels							
2	Panel, rear stiles - Ⓒ, Ⓟ	71 1/4"	2 1/2"	1/2"	.62	1.24	MDF
2	Panel, front stiles - Ⓒ, Ⓠ	71 1/4"	1 3/4"	1/2"	.43	.86	MDF
2	Panel, lower rails - Ⓢ, Ⓣ	7"	11 3/4"	1/2"	.29	.58	MDF
2	Panel, middle rails - Ⓤ, Ⓟ	7"	4"	1/2"	.1	.2	MDF
2	Panel, upper rails - Ⓡ, Ⓢ	7"	5 3/4"	1/2"	.14	.28	MDF
Moldings							
2	Base boards, sides - Ⓝ, Ⓞ	12 3/4"	5"	3/4"	.33	.66	Poplar
1	Base board, front - ⓂⓂ	25 1/2"	5"	3/4"	.66	.66	Poplar
2	Crown molding, sides - ⓅⓅ, ⓆⓆ	13 1/2"	2 1/4"	1 1/2"	.32	.64	Pine
1	Crown molding, front - ⓇⓇ	27"	2 1/4"	1 1/2"	.63	.63	Pine
2	Base cap, sides - ⓈⓈ, ⓉⓉ	12 11/16"	1 1/8"	11/16"	.07	.14	Pine
1	Base cap, front - ⓃⓃ	25 5/16"	1 1/8"	11/16"	.13	.13	Pine
Panel moldings*							
4	Upper vertical stop moldings - ⓈⓈ	28"	11/16"	3/8"	.06	.24	Pine
4	Lower vertical stop moldings - ⓉⓉ	21 3/4"	11/16"	3/8"	.05	.20	Pine
8	Horizontal stop moldings - ⓃⓃ	7"	11/16"	3/8"	.02	.16	Pine

* **Note:** In the cut list, stop moldings used in the simulated panels are grouped together. The upper simulated panel has two vertical moldings on each side. The same goes for the lower simulated panels - they have two vertical moldings for each side. Each upper and lower panel has two horizontal stop moldings.

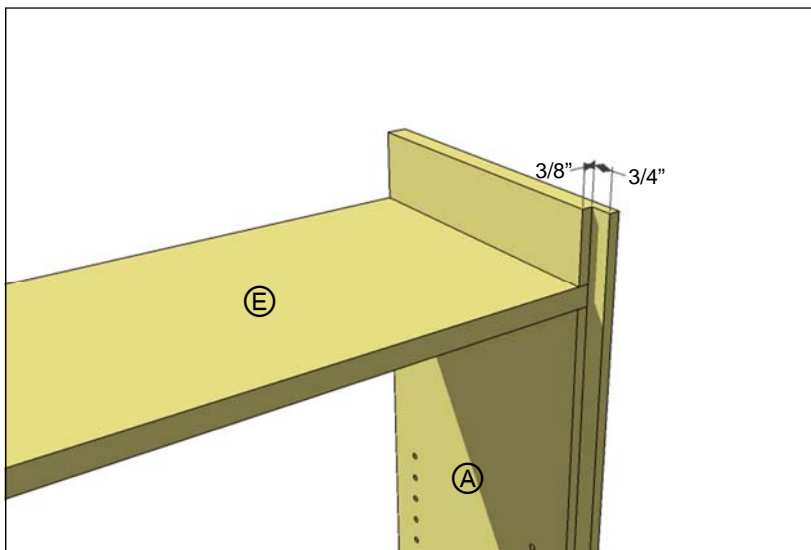
Step 1: Building the case



4a - The first steps will be to construct the case of the project. Here we see all of the components that make up the basic box of the bookcase: the sides, the lower shelf, the interior top, and the back.

Begin construction by cutting the sides to their final dimensions as shown in the cut list on page 3.

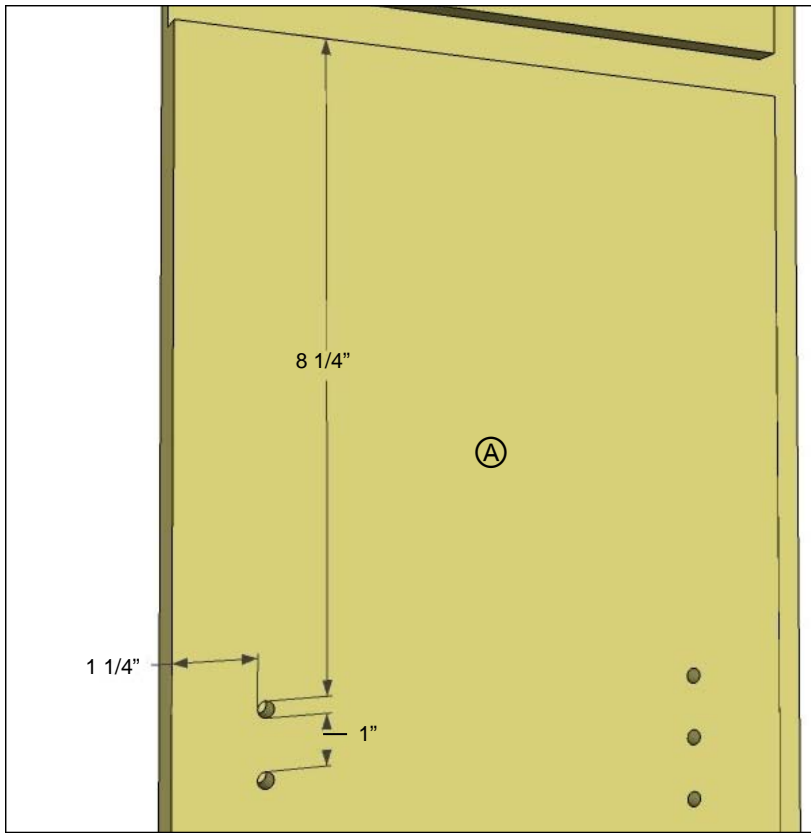
Note: I fabricated the sides from MDF which is a perfectly good material for this purpose. A good alternative to MDF is 3/4" birch plywood.



4b - Cut the necessary dados in the sides. The dados are 3/8" wide and 3/8" deep. The top dado is located 2 1/2" in from the top edge and the bottom dado is 8 1/4" up from the bottom edge.

Cut a rabbet joint along the interior back of both sides - 3/8 x 3/4" as shown.

Building the case, continued



5a - We have one more task before we begin glue-up. Holes for the shelf pins need to be cut. When looking at illustration 4a on the previous page, note that a row of holes line the front and rear edge of the sides **A** and **B**. These holes are positioned 1 1/4" in from both edges. They begin 8 1/4" down from the interior top **E** and end 11" up from the bottom self **D**. Each hole is 1/4" round and 3/8" deep.

The illustration shows one inch spacing between the holes. This can vary based on your preference.

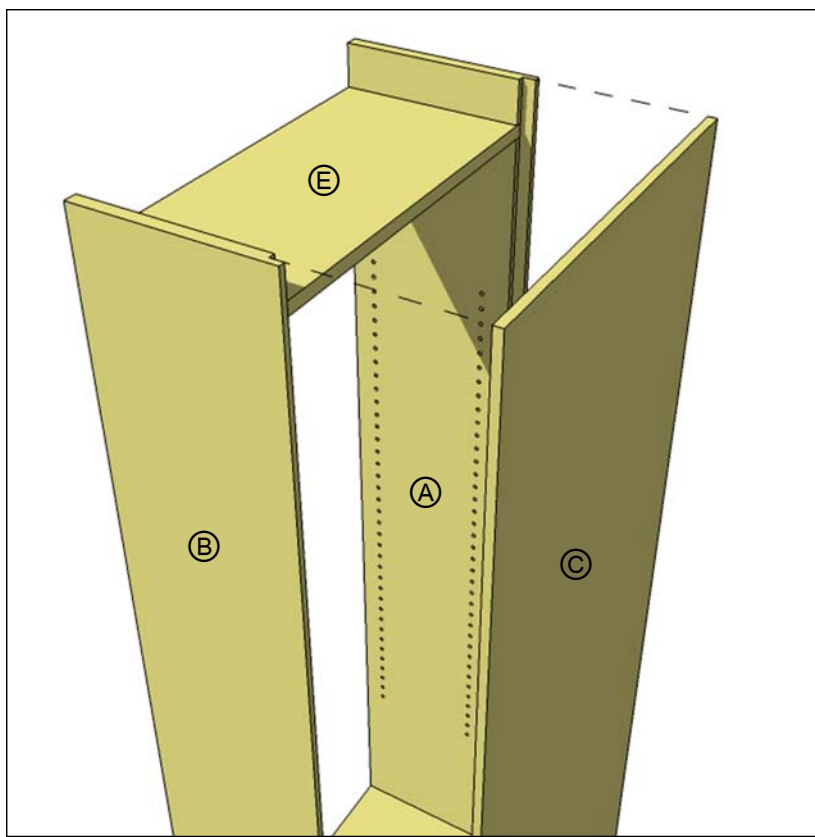


5b - These holes are cut using a router with a collar attached to the base. This collar fits into a home made jig and I then plunge a 1/4" straight bit into the sides (this is one of the few photos I have of this project).

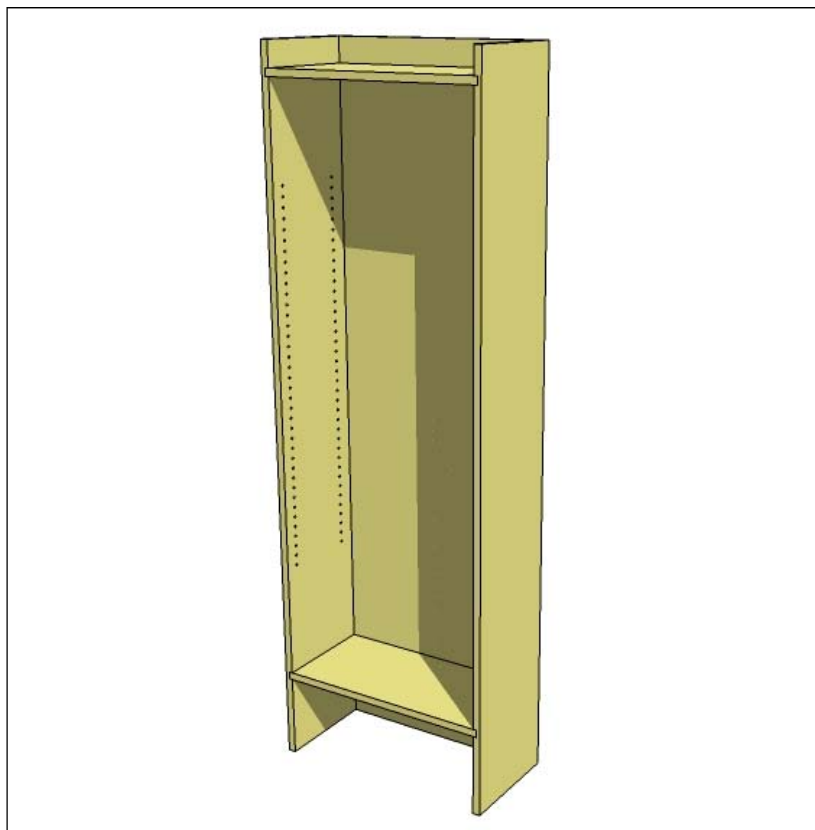
Once this is completed, I flip the jig side to side and cut holes along the opposite edge.

A good alternative to this method is the KREG Shelf Pin Drilling Jig.

Building the case, continued

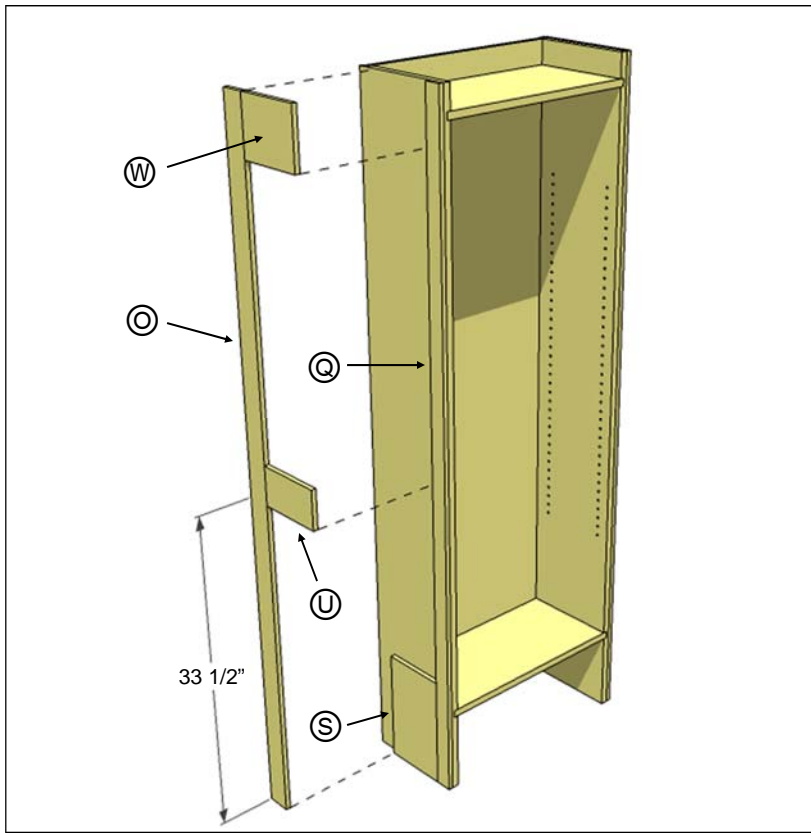


6a - Assemble the case by gluing the interior top **E** and bottom shelf **D** into the dadoes in sides **A** and **B**. Once the glue has dried, add the back **C** by inserting it into the rabbets on the sides. Attach with glue and brads.



6b - With the back in place the basic structure of this project - a big box, is completed.

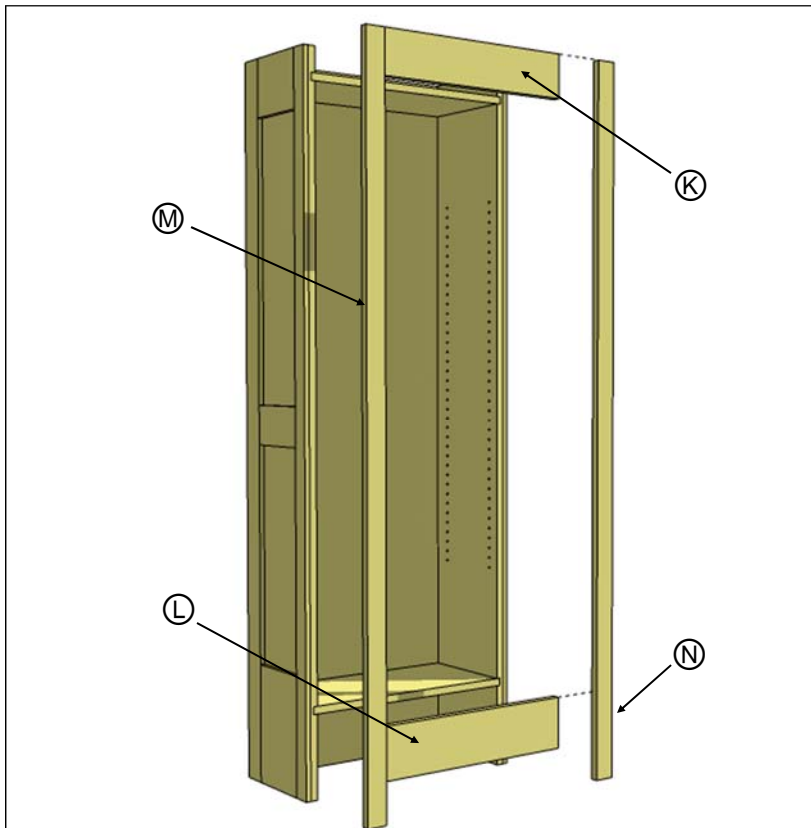
Step 2: Adding the face frame



7a - Before we can add the face frame, we need to add the simulated panels to both sides of the case. This will give us our final outside width.

Note the components at left - you can find their sizes on the cut list shown on page 3. All are attached to the case side with brads and glue. The middle stile **U** is attached 33 1/2" up from the bottom.

Repeat these steps for the opposite side.

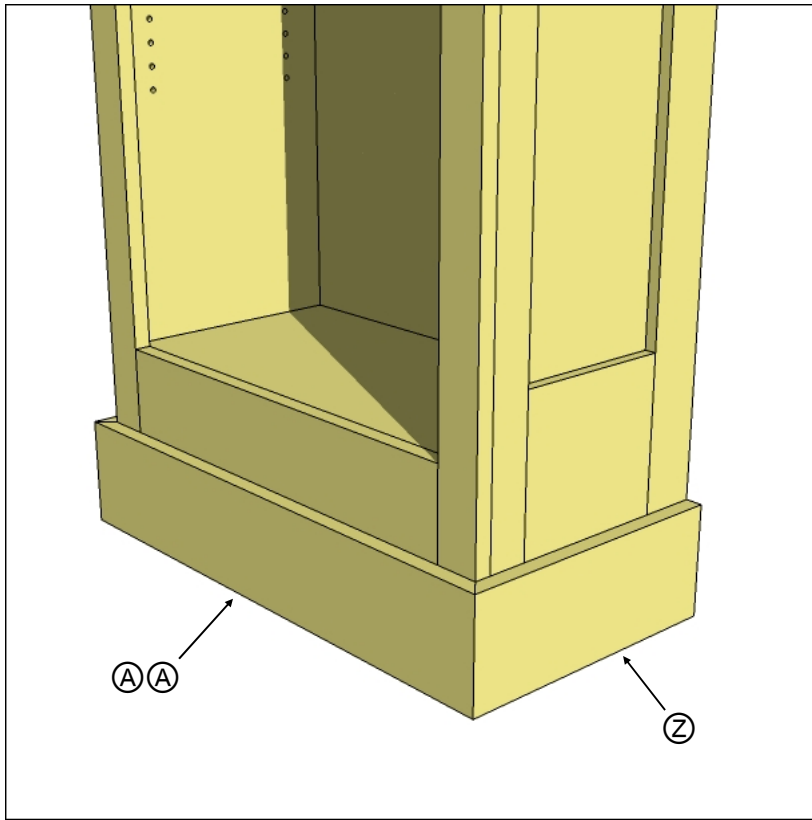


7b - Cut the face frame components to size, then attach the rails and stiles to each other with pocket screws and glue.

Note: the bottom stile **L** is attached four inches up from the bottom.

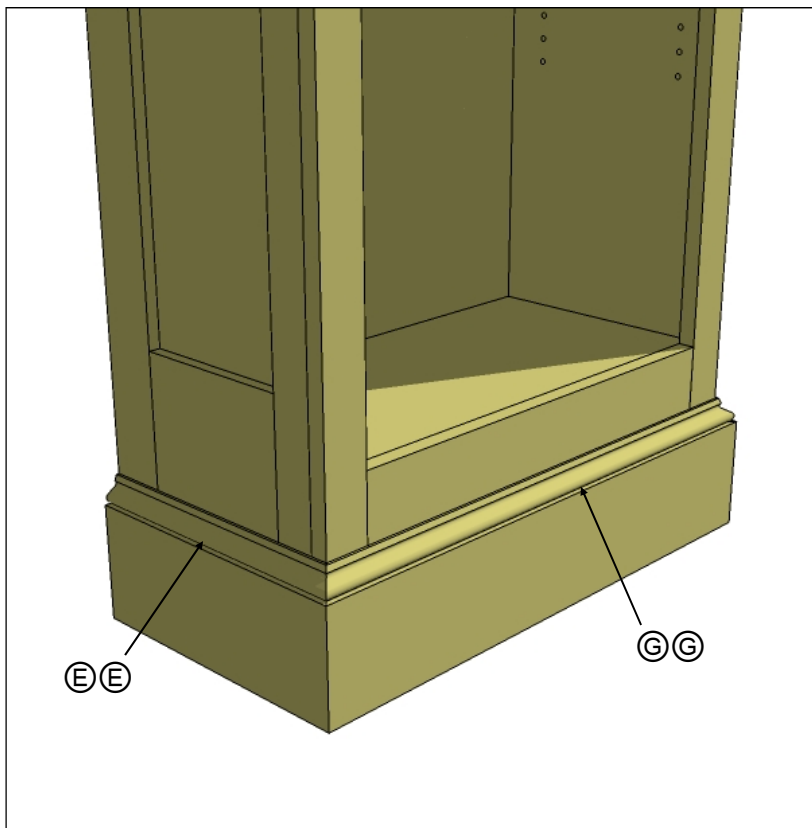
Attach the completed face frame to the case with brads, glue and clamps. I like to make my face frame about 1/8" wider than the case. Attach it to the case and then cut away the excess with a trim bit in a router.

Step 3: Adding base molding



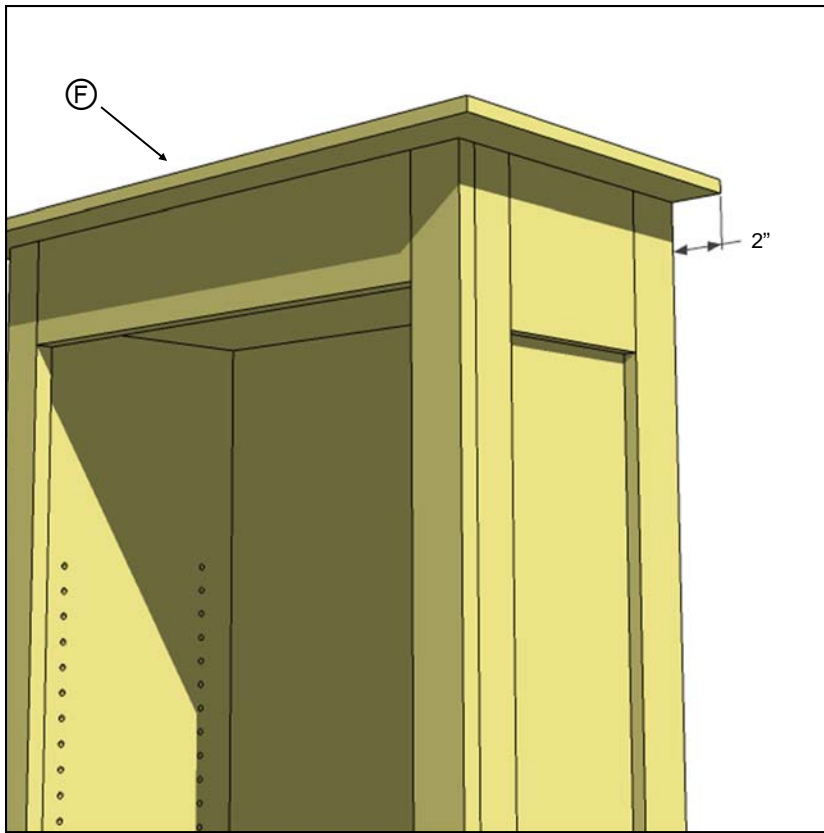
8a - I always look towards the point in a project where moldings are added. Such things add style to a piece making it look distinctive and unique.

The base molding is comprised of two parts, the first of which is solid boards that wrap around the base. Cut these components to size and attach them with brads and glue.



8b - Cut and attach base cap molding to the top of the base boards as shown, using brads and glue.

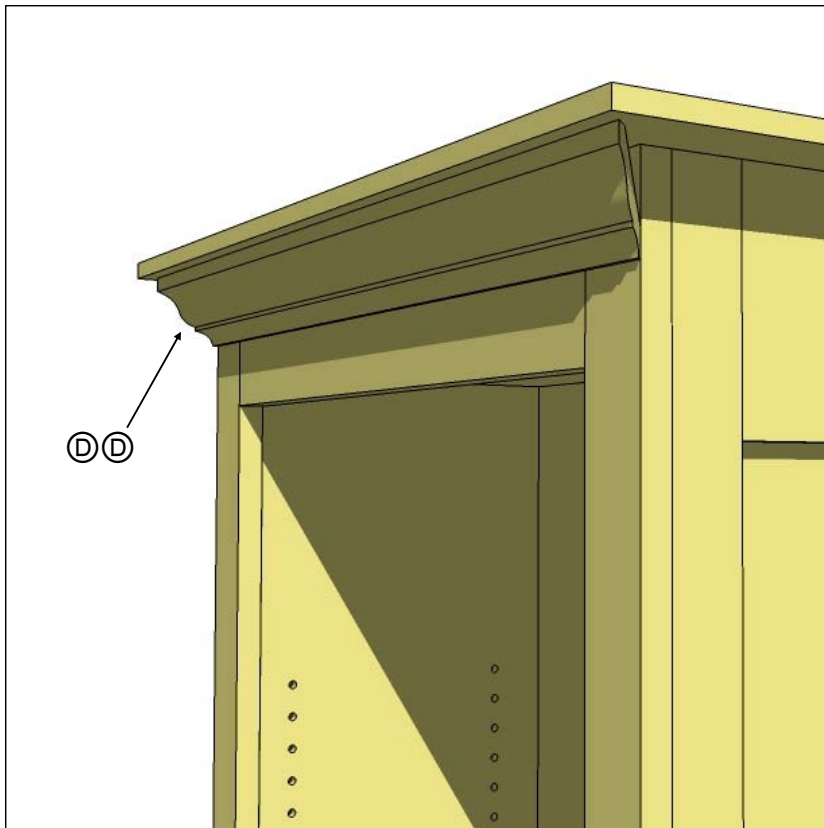
Step 4: Adding the top and crown molding



9a - Before we can add the crown molding, we will need to attach the top. Cut the top **F** to size, pre-drill counter sink holes and attach the top to the sides with screws. Fill the holes and sand flush.

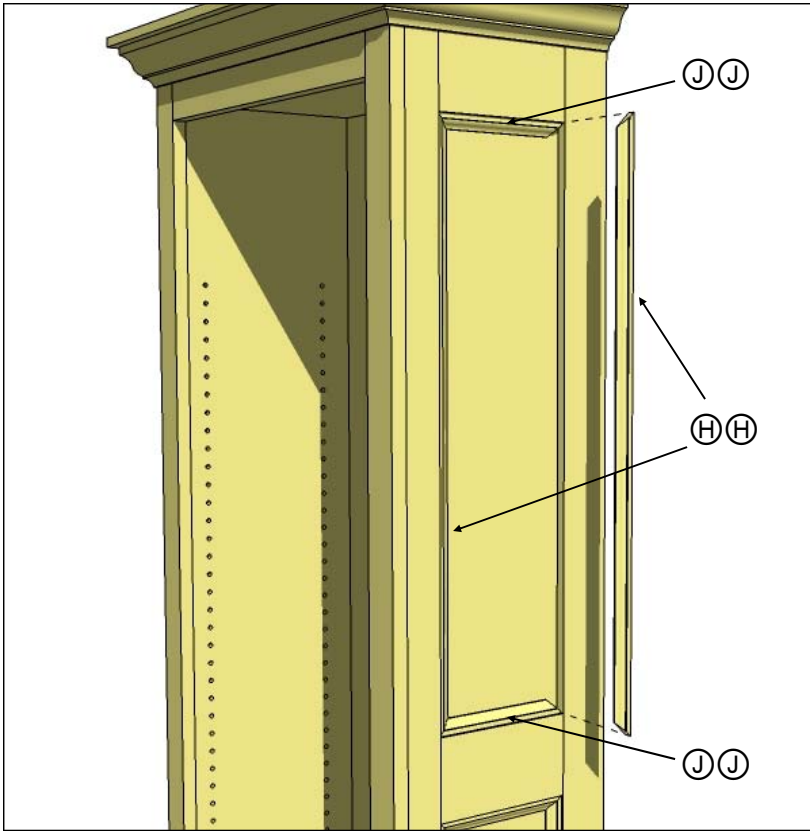
Note that the edge of the top extends beyond the sides and front of the bookcase by two inches.

The standard size of crown moldings may vary from one home center to another. Prior to cutting the top, confirm that two inches is adequate for your crown molding.

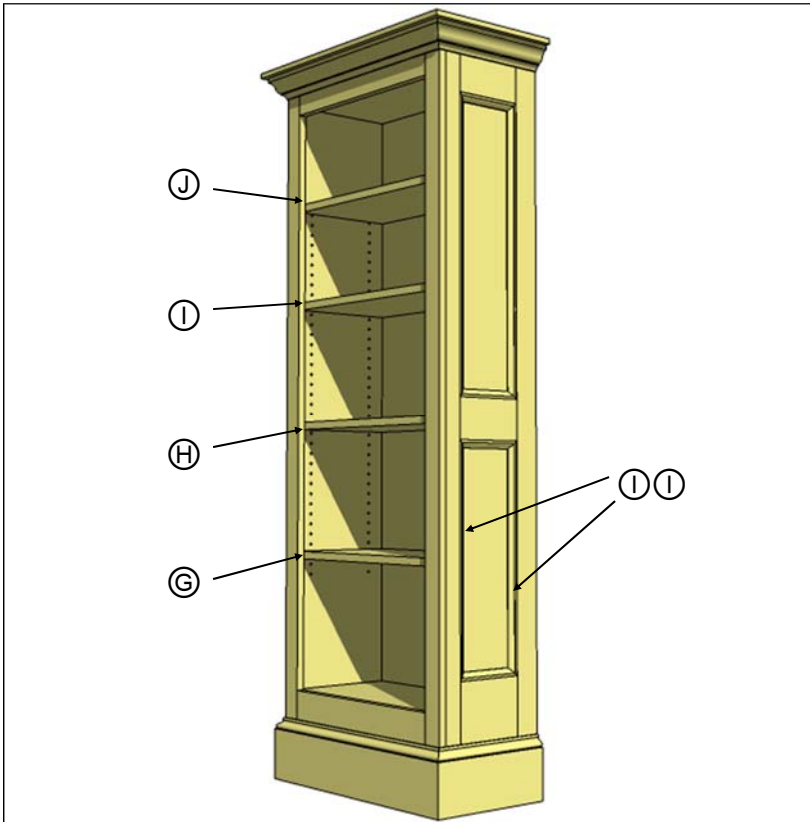


9b - Using a compound miter saw, cut the front and side crown moldings to size and attach with brads and glue.

Step 5: Adding the panel molding



10a - The panel moldings are next. This is actually called “stop molding” at my local home center. Note their sizes on the cut list. Attach them to the sides with brads and glue.



10b - Finally, cut shelves **G**, **H**, **I**, and **J** to size and position them as you see fit using 1/4” shelf pins.

Cover nail holes with filler and sand everything smooth. Take a tack cloth and wipe the whole project down removing any sanding dust and get ready to apply the primer and paint of your choice.

The bookcase is finished!

Step 5: Applying paint

My wife and I did some negotiating on this bookcase. I was hoping to move on to another project, but she was very persistent that it be built. I agreed to make it when my wife offered up the painted finish. A painted finish *should* be easier than a stained finish.

Such a finish means that I don't have to fuss as much with stuff. I can fill the nail holes with any color filler I care to buy. Any knots or minor defects in the wood can easily be patched and covered with paint. And I have the ability to mix lumber with MDF however I see fit. Perfect, I thought. I had just come off of an exhaustive project and I wanted something easy to build.

I knew from previous projects that a simple paint job can be disappointing. After all, during this build I worked with a variety of materials becoming accustomed to seeing it colored in various neutral shades. And that's just it - the color varied somewhat. After admiring it in all its natural splendor, a sudden solid color can be a let down. Even MDF can seem cheated by a coat of solid paint. So, I decided to jazz up the paint job by applying a faux paint treatment.

It had been a while since I tackled anything like this and what I didn't remember was that faux painting can be a royal pain in the neck.

After applying primer, I brushed on a coat of



Multi-colored. Note the hint of red on the crown molding and the darker and slightly lighter brown tones on the face frame.

medium red latex paint - sort of shocking. After that dried, I followed with a coat of medium brown, dabbing paper towels into the paint hoping to reveal some of the red from underneath. I then brushed on some golden brown and used the same paper towel treatment.

It was very difficult getting a even look, especially the interior corners. Finally in frustration, I got an old rag, wet it and started wiping the bookcase down. To my surprise, the paint which was mostly dry, started to come off revealing subtle shades of all three colors. It looked great!

Paint your bookcase any way you see fit; there are a number of different directions you can go with a painted finish. Just beware that fancy paint jobs can be a lot of work.