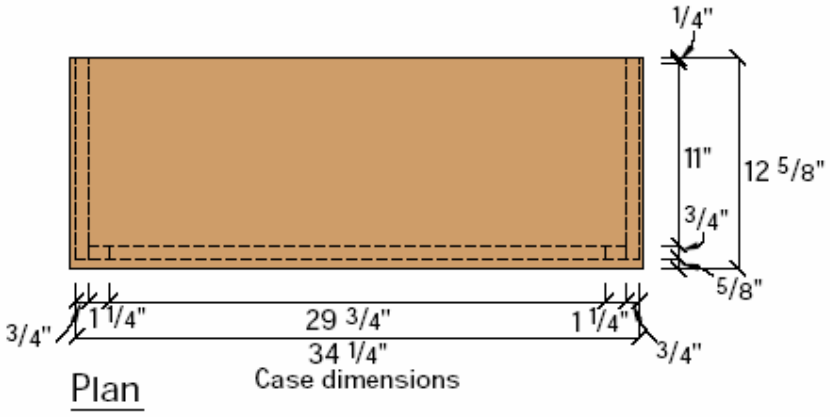
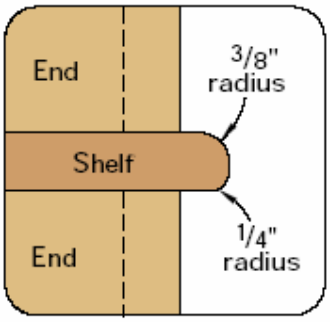
152

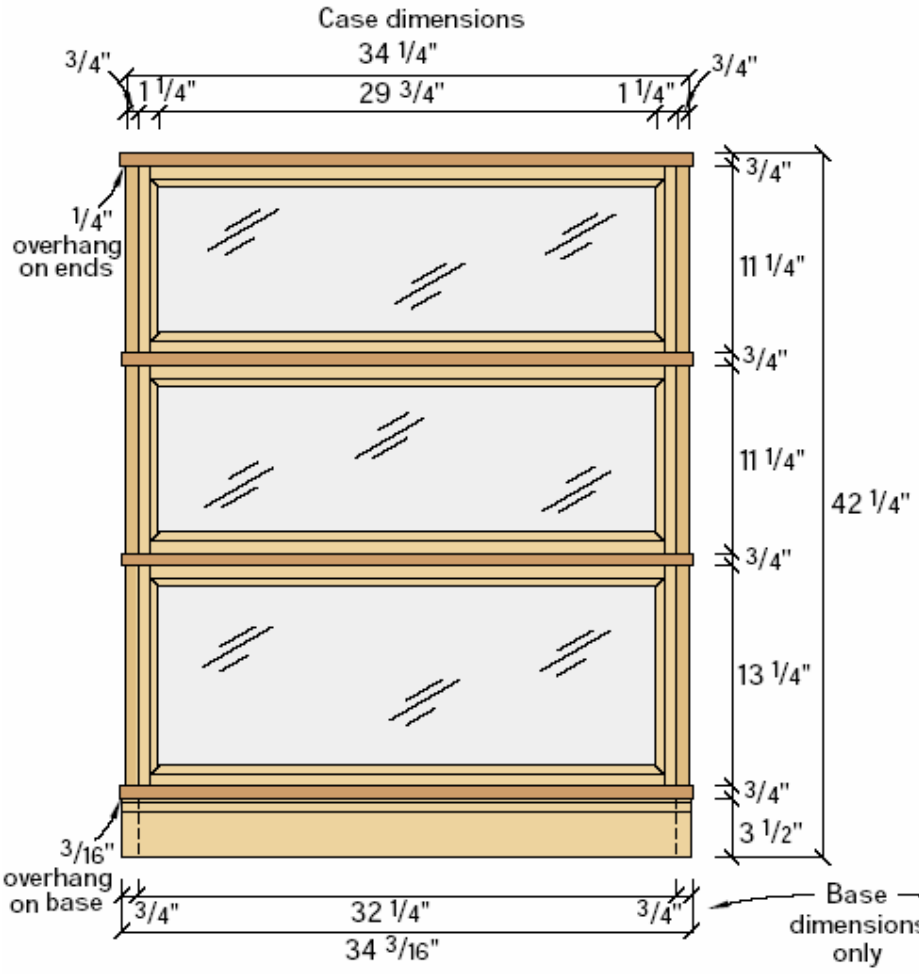
BARRISTER BOOKCASES



Plan

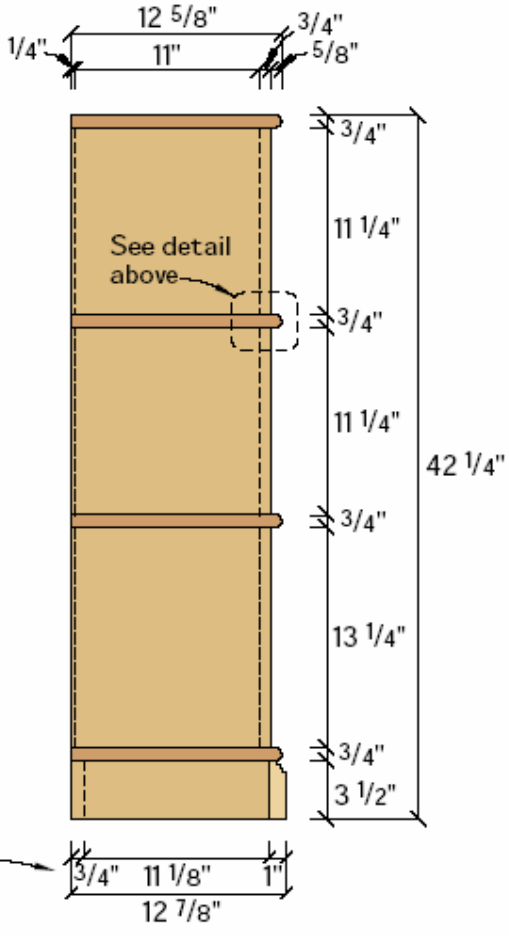


Detail of shelf edge radius



Elevation

Base dimensions only



Profile

Not too far from our workshop here in Cincinnati, Globe Furniture made thousands of these so-called "barristers bookcases" for lawyers and bureaucrats across the nation. Many were made of oak, but the company also made them from other species of wood and even made a steel version.

Though this style of bookcase was first used exclusively by attorneys and government-types, the stackable units are now extremely popular (and pricey) in antique stores. And no wonder. You can use them to store just about anything anywhere. While most people use them for books or their favorite collectibles, I know one person who uses them in her bathroom to keep her toiletries.

I designed these bookcases so you can make any number of units that can be stacked on one another and stacked side-by-side as well. And there's a complete economy of material use because the top of one also serves as bottom of the case above it. In constructing the three cases shown, I used two different heights for the boxes. The shorter one accommodates books that are 9" tall or less; the larger case accepts books up to 13" tall.

Other than the extra time and the expense of more material, it makes a lot of sense to make several boxes because the set-ups to build the boxes are perfect for the "short production run" approach to building. That means setting up the machine -- in this case a router in a table and a drill press -- then running the parts. Because it can take longer to accurately set up the machine than run a part or two, running a few more parts makes real sense. Remember that accuracy is the key to the project because each unit has to be able to mate with all the other units.

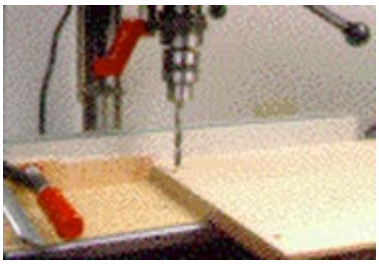
After you've determined the quantity and size of the cases you want to build, prepare enough wood to glue into the panels you need. Glue up your panels, then sand the joints flush, making sure to keep all the panels the same thickness. Cut the panels to the finished sizes indicated in the Schedule of Materials.

Mill the Cases • The joinery for the cases is straightforward. The plywood back is captured in a rabbet made on the sides and bottom (although the bottom rabbet is stopped 1/2" from both ends so you can't see it from the outside). Then the bottom is biscuited to the sides. The cases stack on one another using dowels in the tops of each case and holes on the bottom. Begin construction by chucking a straight bit in a router mounted to a table and make the 1/2" x 1/2" rabbets in the sides and bottoms.

Now it's time to do some additional routing to make the mechanism for the door slides and some hole drilling. While you can purchase special slides for barrister bookcases, my homemade method is cheaper, works just as well and is almost as easy as installing slides. Each of these steps requires real accuracy, and you must pay attention to which parts are for the right and left sides, fronts and backs, tops and bottoms. The best way to keep this straight is to organize your parts by kind, then stack them so they are oriented the way you want them. Marking them with a pencil adds another measure of insurance.

Begin by routing the stopped dado in the case sides that makes up part of the sliding door mechanism (the other part of the mechanism

DOOR SLIDE • With a 1/2" straight bit set in a router and mounted in a router table, set the height of the cutter to make a 3/8" deep cut. Now set up a fence on the router table to so that the cut starts 5/8" from the edge (see diagram detail). Now set a stop on the fence so that the cut you make stops 3/8" from the front edge of the sides. (Remember that you will have to change the stop when switching from right to left sides.) Because the peg used is 1/2" thick, you'll need to create a very slight amount of clearance, say 1/32", so that the peg moves easily through the dado. Do this by adjusting the fence away from the cutter. Then rerun the parts.



THESE HOLES HOLD IT TOGETHER • If you want your cases to mate correctly, accuracy is key. Use stop blocks on your drill press when drilling the bottom and a doweling jig on the sides.

BISCUITS ARE A GOOD FIT • After cutting my slots for my biscuits, I assembled the cases. By the way, I used polyurethane glue. While not necessary, it does provide a stronger joint in this situation because of its ability to provide some glue strength to the end grain/cross grain joint where the sides join the bottom (see related story in this issue about polyurethane glues).

is simply a peg inserted into the edge of the door).

Now drill the holes in the case bottoms. These holes are used to receive the indexing pins that are inserted in the tops of the sides. This interlocking quality keeps the cases from sliding while stacked atop one another and holds the sides in position. Remember that the holes are drilled in the bottom piece and line up with each case's sides. Set up the drill press with a 3/8" diameter bit, using the fence and a stop block, and drill the holes as indicated in the diagram detail to a depth of 3/8". Bear in mind that the holes are a different distance from the front and back edge so the fence set-up must change accordingly.

Make Perfect Holes • Now drill the corresponding holes in the top edges of the sides, again to a depth of 3/8". These holes are for the dowel pins. Again, accuracy is key. I used a self-centering doweling jig for drilling these holes. Mark the drilling locations carefully, a combination square will provide a consistent marking gauge. Refer to the diagram detail for drilling locations.

Biscuit the Sides • Next cut the biscuit slots for joining the sides to the bottom. I used three biscuits in each side, a #20 size in the middle and back, and a #10 in the front. I used the #10 so the slot didn't interfere with the hole drilled in the bottom. The three biscuits provided a very sound joint. The last thing to do before final assembly is to run a roundover detail on the front edge of the bottom. To make my profile, I used a 1/2"-radius bit on the top edge and a 1/4"-radius bit on the bottom edge. Again, use the router table and fence for the cut, even if you have router bits with guide bearings on them. You can rely on the bearing for the first cut. But on the second cut the bearing would ride on the previously cut radius, which sweeps away from the edge.

Assemble and glue the sides to the bottoms. I set the case backs in place to help keep them square during the glue-up. Here's how I glued these up: Put glue on the mating parts and set them in place. Then set the back in and clamp across the back and sides. Next, while making sure the back edge of the side was flush to the back edge of the bottom, clamp the side and bottom from top to bottom. With all the clamps in place, check for square and adjust as needed. Do not attach the backs until after finishing the piece.

Next I made the base of the bookcases. Rout the ogee profile on the top edge of the front piece only before biscuiting and gluing the base together. The sides simply butt to the back side of the front piece, and the plywood back piece butts into the sides. The back piece is narrower than the sides and front to leave some space at the floor for any base moulding on your floors. So attach the back piece flush to the top of the base assembly. I also elected not to attach to base permanently to one of the cases. Instead I screwed indexing blocks to the case bottom that allow the lower case to nest into the base. This allows you to level the base when you install it and then simply stack the cases on top.

Frame and Panel Doors • The frames for the glass doors were the last chore to tackle before moving on to sanding and finishing. Because I wanted the relatively small doors to have a delicate appearance, I made my stiles and rails just 11/4" wide. For a strong corner joint and a pretty detail on the inside edge of the frame, I used a matched stile-and-rail router bit set normally used for frame-and-panel doors. The bit I used echoed the detail on the

ROUTING THE DOORS • First run the ogee detail on the inside edges of both the stiles and rails. Set the height of the cutter so that it leaves just a slight bead on the face of the parts, say 1/32". After running the parts, switch to the "coping" cutter and cut the matching opposite detail on the ends of the rails only. Make sure you use a back up block, also called a coping block, to stabilize the narrow part while running it through the router bit.

base and complemented the rounded front edge of the case bottoms.

Again, make sure you cut your stiles and rails to the exact length needed using a stop block. This will help ensure you make a frame that's square. Because the router bits are intended to be used with fixed panels, and the glass needs to be removable, it's necessary to cut away part of the edge detail on the back, changing it from a groove to a rabbet. Using a table saw, it's a simple procedure for the rails because you can run the part all the way through. For the stiles, however, you need to make a stopped cut because the piece you leave at the ends is part of the "mortise" joint made by the matching router profiles. Mark the stiles from the ends where you want to stop the cut (it can vary slightly depending on the cutters you use), then mark the table saw's fence at the point where the blade projects above the table when it is set to the correct height for the cut you're making. While holding the part firmly to the fence, slowly lower it onto the blade with the motor running, then cut the part to the matching lines on both the part and the saw fence.

Now you can glue up the stile and rail assembly, making sure you check for square and adjust as needed. When dry, chisel out the corner of the back of the stile where the waste piece remained from the stop cut you just made. Lastly, cut and fit the strips that will hold the glass in place on the back side of the frames.

Critical Dowel • Check the fit of the doors. You should have a 1/16" gap on the sides and bottom and a 1/8" gap left for the top (this allows the door to pivot up without touching the piece above it). If the fit is good, drill a 1/2" hole in the door's edge that's 1/2" deep. Locate the hole in the center of the edge so that the hole centers 5/8" down from the top edge. Use your combination square as a marking gauge and a doweling jig for accurate drilling. Drill these holes on both edges of each door. Insert a 7/8" length of dowel or other 1/2" rod into the door edge. Place the doors in the grooves in the sides of the case (this is easily done with the top open). Bring the doors forward and gently lower them down into position.

The last bit of fussing with the doors is setting the pin below the groove where the doors slide in their grooves. Carefully positioning the pin provides not only the spot where the door rest when open, but also coaxes it into the proper location at the top when closed.

Next sand your parts with 120 and 150 grit paper using a random orbit sander. Also make sure no glue was left behind that would interfere with making a nice finish. For the final finish, I tried something I'd never done before. I added a slight amount of oil-base stain to boiled linseed oil. Linseed oil on cherry brings out the grain of the wood more than does a film finish like varnish, shellac or lacquer. The wee bit of color added (I used about a thimbleful of stain to 10 ounces of oil) gave the new cherry a bit of "maturity" that the new wood always lacks. I tend to think that new cherry without any color added looks anemic. But too much color causes cherry to blotch if you don't apply a wash coat first or use a stain controller.

If you choose to use an oil-only finish, apply a couple more coats of boiled linseed oil making sure you thoroughly wipe off all excess oil after applying. For my bookcases, I allowed the oil to dry for several days then sprayed the pieces with clear lacquer. Brushing on varnish, shellac or polyurethane will work as well. Finally, put your doors back

into the cases and screw the backs into the sides and bottom.

When it comes time to set up your barrister bookcases, their modular construction and variety of arrangements should prove a real asset. That is, unless you can't agree with your "significant other" just how they should go. In that case, you might just need a barrister to settle the bookcase dispute.

Schedule of Materials: Barrister Bookcases, tall unit

No.	Item	Dimensions	Material
1	Top or bottom	3/4" x 12 5/8" x 34 1/4"	Cherry
2	Sides	3/4" x 12" x 13 1/4"*	Cherry
1	Back	1/2" x 33 1/4" x 13 3/4"*	Cherry ply
2	Door rails	3/4" x 1 1/4" x 30 3/8"	Cherry
2	Door stiles	3/4" x 1 1/4" x 13 1/16"*	Cherry
1	Base front	1" x 3 1/2" x 34 3/16"	Cherry
2	Base sides	3/4" x 3 1/2" x 11 7/8"	Cherry
1	Base back	3/4" x 3" x 32 11/16"	Cherry
1	Glass	1/8" x 12 1/4" x 30 5/16"	
	Glass stops	3/8" x 7/16" x 8 ft.	Cherry

* Subtract 2" from these dimensions for a shorter unit.