

Build Our Mahogany Cigar Humidor



If you enjoy a fine cigar, and the fragrant smoke that comes only from a fresh one, you should make this attractive humidor -- it keeps your cigars in peak condition. Not only is it a pleasure to build, it's a pleasure to use. Every time you open it, you'll be greeted by the inviting aroma of fresh tobacco stored at the correct humidity.

It's constructed of solid mahogany and ribbon-stripe mahogany veneer. Dimensioned to hold 50 cigars, it's fitted with a humidifier to provide relative humidity of about 70 percent. It's also fitted with a dial hygrometer that indicates the percentage of humidity present in the humidor.

If you're not a cigar smoker, you might want to consider this project anyway. Its high-luster finish, fine brass hardware and elegant construction make it an attractive case in which to store coins, stamps, jewelry or cutlery.



Construction

Begin by thickness planing stock to 1/2 in. for the box and 1/4 in. for the tray. You can also order material of this thickness from Constantine's, 2050 Eastchester Rd., Bronx, NY 10461. The company also carries veneer.



1 -- Cut the miters on the sides and ends, using an auxiliary fence and a 45 degree miter stopblock clamped in place.

Rip and crosscut the stock for the sides and ends slightly overlength. Next, miter one end of each piece. Make a stopblock with a 45 degree end and clamp the block to the miter gauge fence with the miter face down. Then, gently butt each mitered workpiece against the mitered stopblock and make the cut (Photo 1).



2 -- Test fit the sides and ends. Tape the pieces together and remove the sharp corners by hand sanding.

Tape the pieces together and check their fit. Dull the fragile outside corners by hand sanding (Photo 2).



3 -- Use a sliding jig and slotting cutter in the router table to cut the spline slot. Make a test cut first.

The sides and ends are held in a 45 degree jig as they are moved over the slot-cutting bit in the router table (Photo 3). Next, cut the panel rabbets slightly overdepth to allow the rabbet to be trimmed flush to the panel.

The splines are cut from 1/8-in.-thick plywood shaved to 5/64 in. thick. To do this, cut a strip of plywood 5/16 in. wide and 24 in. long. Its face grain should run across its width. Attach this strip to the edge of a 3/4-in.-thick board using artist's rubber cement, not contact cement. Apply the cement to one surface only. Adjust the table saw fence to shave 3/64 in. off the strip. Carefully peel off the spline stock and rub off any residual cement.



4 -- Apply glue sparingly and evenly in the spline slots. Use a hair-colorant squeeze bottle with a fine nozzle.

The humidor is assembled with waterproof glue. We used Franklin's Titebond II, a rapid-setting type. Spread it sparingly in each slot and on the miters, using a hair-colorant squeeze bottle (Photo 4).



5 -- Make two L-shaped subassemblies, each comprised of a side and an end. Press the subassemblies together.

Make two L-shaped subassemblies and apply pressure with six bar clamps (Photo 5 and 6).



6 -- The waterproof glue sets quickly, so six clamps and cauls must be ready. Position the clamps and cauls as shown.



7 -- Make a cardboard template of the top panel. Test it in the rabbet-it should fit in the space snugly.

The top panel must fit precisely, so cut a template out of cardboard, test fit it (Photo 7) and use it to adjust the table saw fence.



8 -- Evenly apply contact cement to the veneer and the plywood panels, using a small bristle brush.

Cut the pieces of panel veneer oversize by 1 in. in width and length, and apply contact cement (Photo 8). When one coat dries, apply a second. Bond each veneer sheet to the panel with a roller.



9 -- Use a sharp knife to trim off the excess veneer. Cut from both ends toward the panel's center to prevent tearout.

Use a utility knife to trim the overhanging veneer (Photo 9). Make the end cuts first, and work from the corners to the panel's center to prevent splitting out the veneer. Veneer the panel's second side in the same way, and finish sand the inside face with 220-grit paper.



10 -- Using a 3/16-in.-rad. corner-rounding bit in the router, make the crossgrain end cuts before cutting with the grain.

Glue and clamp the panels to the box body. Use a router with a flush-cutting bit to trim the rabbets flush to the panel, and cut the curve on the edges using a 3/16-in.-rad. corner-rounding bit (Photo 10).



11 -- Cut the lid off the box on the table saw. Tape in a spacer strip to support the lid after making each cut.

Now cut the lid off on the table saw. Raise the blade so it projects about 5/8 in. above the table. Tape a spacer strip into each kerf after it is cut. Keep in mind that the thickness of the spacer strips should equal the width of the saw kerf. Cut the ends first, then the sides (Photo 11).

Before moving on to cut the hardware mortises, note that the mortise dimensions and placements are based on the hardware we used: The lid hinge is Stanley No. 73A70B, and it's available from Constantine's. The Brusso lid support is No. 62166, and is available from The Woodworker's Store, 21801 Industrial Blvd., Rogers, MN 55374. The jig dimensions are based on routers with 5 3/4-in.-dia. bases.



12 -- Use a ruler, square and knife to lay out and mark location of lid-support hole. Measure from the hinge pin's center.

Clamp the hinge mortising jig to the box body, and cut the mortises. Next, temporarily attach the hinges to the lid and the humidor box. Note that the hole in the lid and the mortise for the lid support are positioned from the hinge pin's center. Use a ruler, square and knife to mark the hole 1 in. from the pin's center (Photo 12).



13 -- Cut the mortise for the lid support using a router and jig. Try the cut on a scrap piece first.

Making The Liner And Tray

Rip and crosscut the liner pieces, and cut miters on their ends. Cut their curved edges using a 3/8-in.-rad. corner-rounding bit. Adjust it so it leaves a small flat area on the top edges.

Temporarily install the liner pieces in the box and check the lid's fit on them. Hand sand high areas.

Apply a 1-in.-wide strip of glue along the sides and ends of the box about 1 in. from the top edge. Press the end liner pieces in place and slide in the front and back pieces. After the glue has set, attach the tray supports with glue and brads.

Rip and crosscut the tray pieces. Finish sand their inner surfaces with 220-grit sandpaper, then glue and clamp the assembly. Cut the plywood tray panel, and apply veneer to its top. Finish sand the panel, bore the vent holes through it and glue it to the tray.



14 -- Cut the curve and notch in the handle pieces, then sand the taper on them, using a disc sander.

Next, rip and crosscut one long piece for the tray handles and notch it by running it over the table saw with a dado blade tilted at 30 degrees. Saw the curved outline on each handle. Sand a bevel on each of the handles by taping it to a scrap block and pressing it against a disc sander (Photo 14).



15 -- After the tray is sanded, apply glue on the handles and hold them in place with masking tape until the glue sets.

Glue and tape the handles to the tray (Photo 15).



16 -- Bore the holes in the instrument block using a Forstner bit. Enlarge the hole for the humidifier with a drum sander.

Instrument Block

Rip and crosscut the instrument block to size, then bore the holes through it with a Forstner bit on the drill press (Photo 16). Note that the holes have different diameters. We had to enlarge the hole for the humidifier to 1 3/16 in., using a sanding drum on the drill press.

The humidifier is a clay disc set in an aluminum cup, which attaches to the lid with a Velcro strip. It's available from Atmos Products, 39 Central Ave., Harrison, NJ 07029. The humidifier costs about \$3, shipping included. The hygrometer is available through Forecaster Wind and Weather Shop, 8 Front St., Greenport, NY 11944. It costs about \$12.50, shipping included. Be sure to specify gold or silver finish when you order. To improve the appearance of the humidifier and to provide a grip to lift it out, we made a brass ring adapted from a cylinder lock collar. The lock collar has a 1 7/8 in. outside diameter and a 1 1/4 in. inside diameter. It costs about \$1, and you can find them at locksmith shops and at hardware stores that do lock work.



17 -- To sand off the center flange, the lock collar is secured to a scrap block with adhesive mounting squares.

To make the ring, bore a 1 5/8-in.-dia. hole in a 3/4-in.-thick scrap block that's about 2 1/2 in. long on each face. Secure the ring to the block with 3M Heavy-Duty Mounting Squares. Press the collar against the center of a disc sander (Photo 17). Hold it in place until the center flange of the collar drops off. Then, use a drum sander to remove the sharp edge left on the flange by the disc sander.



18 -- Seal the flange with epoxy and let it set. Then, tape the flange to the humidifier and fasten it with epoxy.

Finishing

To duplicate the finish we used, proceed as follows: Add one part Behlen Solar Lux Retarder (Part No. 99P12.01) to 10 parts Behlen Medium Red Mahogany Stain (Part No. 99P03.04). The retarder prevents lap marks. Apply the stain with a brush and let it dry overnight.

Next, apply Medium Red Mahogany Paste Wood Filler (Part 99P10.03) to the humidior's outside. Apply the filler with a rag. When its shine has dulled, wipe across the grain using a coarse cloth then wipe with the grain using a smooth cloth. Allow the filler to dry for 24 hours. The stain, retarder and filler are available from Garrett Wade, 161 Avenue of the Americas, New York, NY 10013.

We used Deft Semi Gloss Clear Wood Finish on the interior and the gloss version of this product on the exterior. Apply two coats to the inside of the humidor and the tray. Apply four coats to the outside. Level and smooth the first and second coats, if they need it, using 320-grit wet/dry sandpaper on a rubber sanding block. Smooth the third coat with 400-grit wet/dry paper lubricated with water. Rub out the last coat with 600-grit wet/dry paper and water. Allow each coat to dry for at least 4 hours before rubbing it out.

Rub down the humidor's outside with rottenstone (which is also available from Garrett Wade) and water, using a felt pad. Wax and buff the humidor's outside, and glue the instrument block to the lid.

The humidor is reasonably heavy when filled with cigars, so we suggest you apply felt to its base. We used self-stick green felt from JBA International. Its products are sold in catalogs and home centers. To locate a distributor, contact JBA International, 114 Old Country Rd., Mineola, NY 11501; (800) 741-0005.

MATERIALS LIST—CIGAR HUMIDOR		
Key	No.	Size and description (use)
A1	2	1/2 x 1 5/8 x 14" mahogany (lid side)
A2	2	1/2 x 3 3/8 x 14" mahogany (box side)
B1	2	1/2 x 1 5/8 x 9 7/8" mahogany (lid end)
B2	2	1/2 x 3 3/8 x 9 7/8" mahogany (box end)
C	4	5/64 x 5/16 x 4 5/8" plywood (spline)
D1	1	1/4 x 9 3/8 x 13 1/2" plywood (top panel)
D2	1	1/4 x 9 3/8 x 13 1/2" plywood (bottom panel)
E	2	1/4 x 3 1/2 x 13" mahogany (insert side)
F	2	1/4 x 3 1/2 x 8 7/8" mahogany (insert end)
G	2	1/4 x 3/8 x 8 3/8" mahogany (support)
H	2	1/4 x 1 3/4 x 12 3/8 mahogany (tray side)
I	2	1/4 x 1 3/4 x 8" mahogany (tray end)
J	1	1/4 x 1 1/2 x 8" mahogany (divider)
K	1	1/4 x 8 x 12 1/8" plywood (tray bottom)
L	2	1/2 x 7/8 x 3 1/2" mahogany (handle)
M	1	5/16 x 2 3/8 x 7" mahogany (device block)
N	1	hygrometer
O	1	humidifier
P	1	humidifier ring
Q	2	lid support

R	2	hinge
Misc: Ribbon-stripe veneer, contact cement, rubber cement, waterproof glue, epoxy.		