

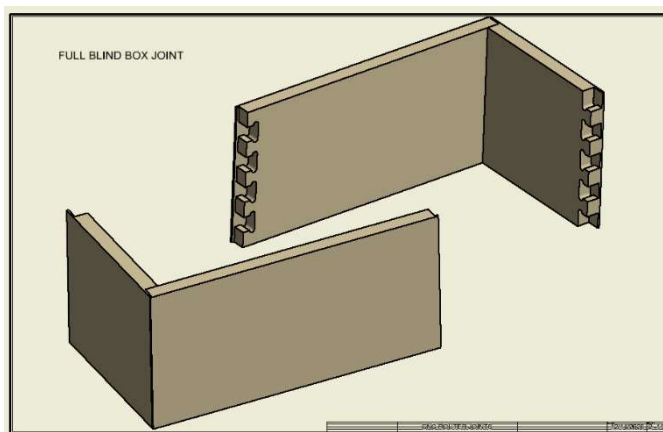
INSTRUCTIONS FOR MID-CENTURY CREDENZA

A fun and lively looking project the mid-century credenza was designed for $\frac{3}{4}$ " (18mm) Baltic Birch plywood, which is typically an actual .71" thick. If you use a plywood of differing thickness the joints will need to be modified in your CAM software. The back and doors are set up for $\frac{1}{4}$ " (6mm) Baltic Birch which is an actual .236" thick. The legs are $1\frac{1}{2}$ " solid wood. The front edging is .125" solid wood, or you could use veneer tape which would work well.

If you have a desktop (2' x2') you can make this project. You will need to tile the top, bottom, back, and legs. The back and legs are easily made with conventional workshop tools as well.



1. Let's begin with the carcass which consists of a top, bottom, sides, vertical divider and back. The sides are identical. The top and bottom look identical but the grooves for the doors are deeper in the top so that the doors can be lifted in and out of the carcass.
2. Set up the cutting file for the top. Cut the grooves for the doors $\frac{3}{8}$ " deep. The groove for the back is .25" deep as is the groove for the vertical divider. The box joints are cut .61" deep for Baltic Birch plywood leaving a .1 thick coverlet of wood. As drawn the blind box joints have .002" of end and side clearance. Complex joinery like this requires a bit of room for everything to come together during glue-up. A straight bit or a down cut will work well for the joinery, grooves and profile cut. Cut out the top.



3. Set up the cutting file for the bottom. The grooves for the doors are $\frac{1}{8}$ " deep but all else is the same. Cut out the bottom.
4. The sides should be made next. They are identical. The groove for the back is .25" deep. The box joints are cut to a depth of .61 leaving a layer of wood .1 thick. There is no "tab" of material left on the sides as was on the top and bottom. I

used a depth of .74" and tabs to set up the profile cut. Don't forget the shelf pin holes. Set these up for .25" holes cut .375 deep.

5. The center divider and the shelf are all cut from Baltic Birch plywood as well. The shelf is just a simple square. The center divider has a notch allowing it to extend beyond the grooves in the top and bottom that house it. The shelf pins are cut all the way through the plywood.
6. The back of the carcass is ¼" (6mm) Baltic Birch plywood. If you have a table saw you may want to use that. If not, create a profile cutting file and cut out the back.
7. Now, this is important, test fit sides, top and bottom, vertical divider and back. Make sure that the shelf pin holes line up. Check the fit of the joinery. If everything seems OK then get out the glue and clamps and assemble the carcass.
8. Once the carcass is out of the clamps it is time to add the front edging. I used 1/8" thick edging cut to just a little wider than the plywood. Veneer edge banding tape is a good option. Either way miter the corners, apply with wood glue and use painters tape applied every 6 inches to hold the edging in place until the glue dries.
9. When the glue is dry remove the tape and level out the edging with a scraper and sandpaper.
10. The legs of the credenza are made of 1 ½" solid wood. I used walnut to contrast with the birch. The legs are set up with a profile cut and a dog bone relief cut in the corner that supports the carcass. This is a deep cut so use an upcut bit and clear the chips every pass with a vacuum or compressed air. Once the legs are cut clean up the tabs and then route a .125" round over on the edges except where the leg will contact the carcass.
11. Thoroughly sand the carcass and legs.
12. Attach the legs with three screws using the holes that you CNC router cut into the sides. The legs are set back .75" from the front and back face.
13. Now it is time for the doors. The doors are made from .25 (6mm) plywood with a 2" hole cut out for the finger pull. Cut the doors out with your CNC router or conventional tools. Check the fit of each door – you may need to plane the outside edges to make sure they contact the sides evenly with no gaps.
14. Making the finger pulls is a fun challenge as it involves two-sided cutting. Begin by preparing stock at .375 thick. (You can always use you CNC router and set up a pocket cut to prepare .373 stock from thicker wood.) The first cut is for the front of the pull and forms the recess. This cut is .1875" deep. You will also need to set up two .25" registration holes that are laid out equidistant from the center of the pull along the x axis. These holes will be the registration

holes allowing you to flip the finger pull blank over for the second cut. Once the first cut is done flip the blank over and using .25 dowels position the part and secure it with hold downs. The second cut creates a rim by cutting down .25" deep and then a profile cut with tabs to form the outer rim. Once you are done cutting the finger pull separate it from the parent stock and sand it smooth. Test fit it into the hole of the doors and glue in place.

15. Give everything a final sand and apply clear finish.

16. Add lava lamp and LP collection.