

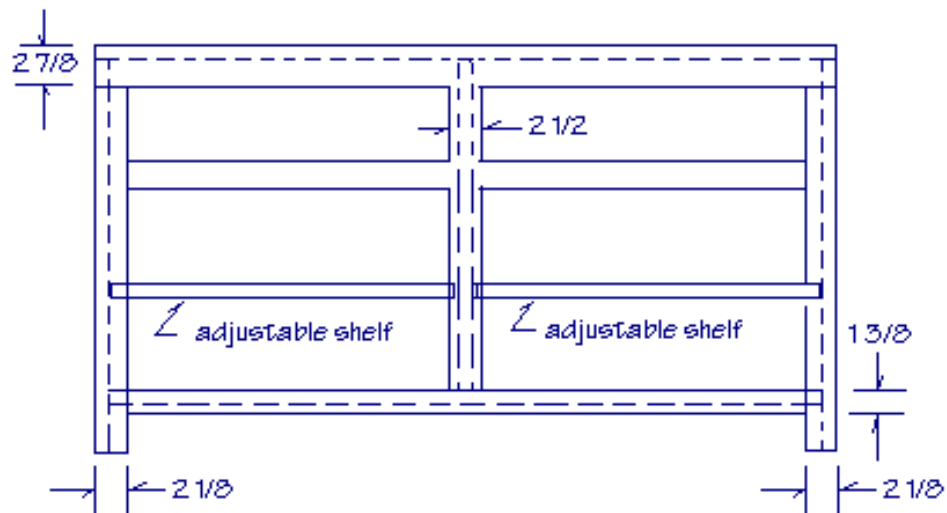
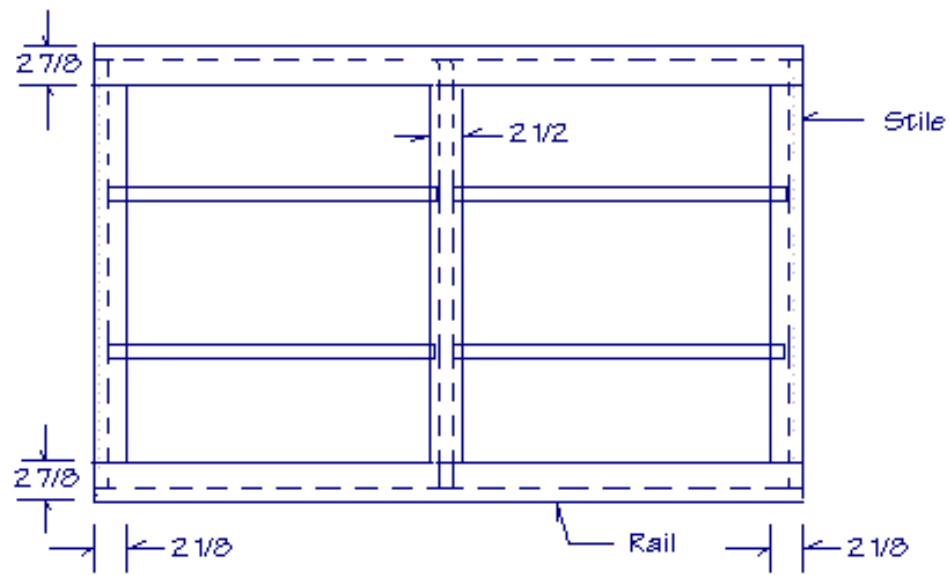
Buffet and China Cabinet Plans



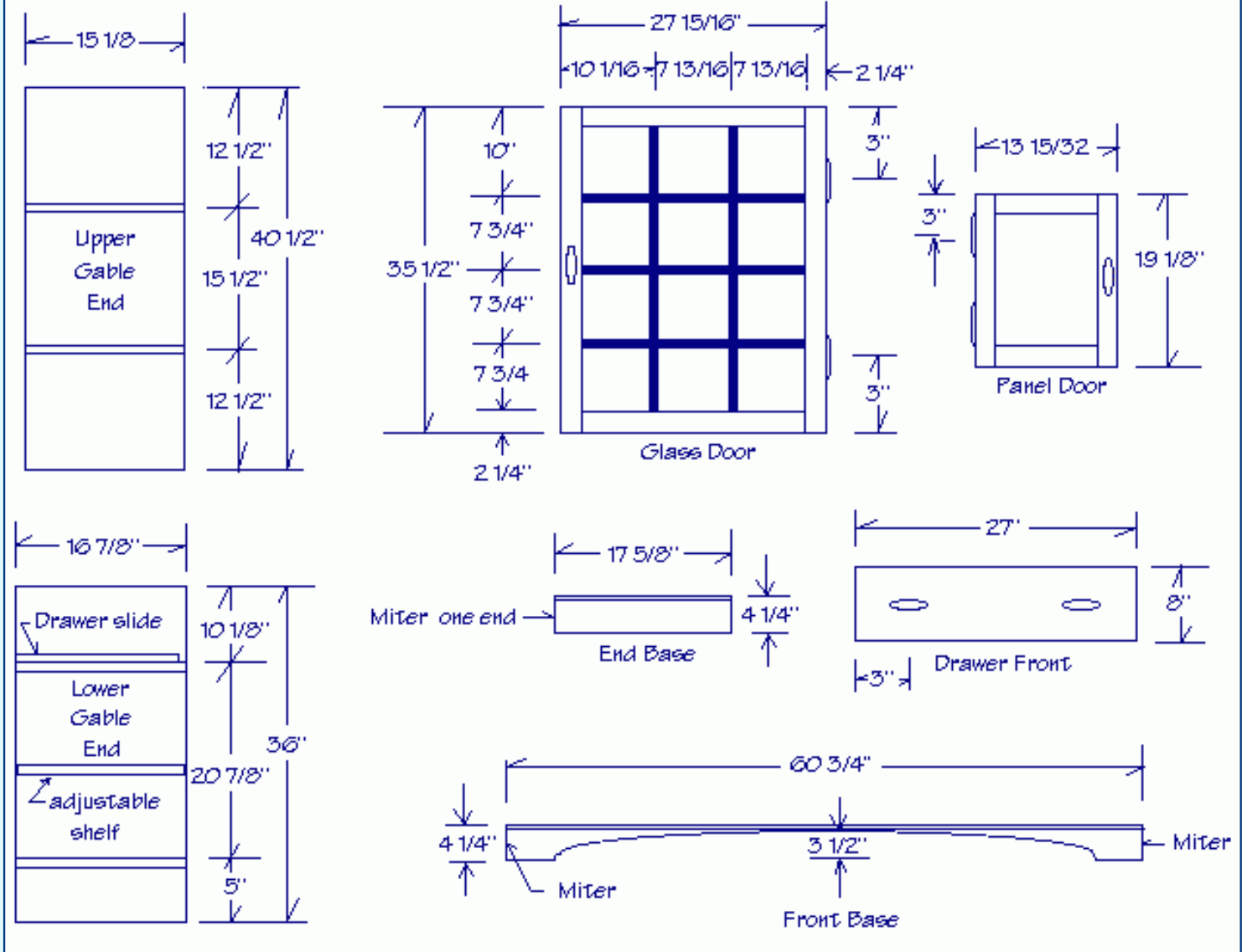
Front and Side Elevation



Face Frame



Parts



Materials Needed

- 1 - 4x8x1/4" Oak G1S plywood for upper back
- 1 - 4x8x1/4" Oak G2S plywood for lower back and door panels
- 4 - 4x8x3/4" Oak G2S plywood for gables shelves, drawer fronts, tops and bottoms
- 1 - 4x8x1/2" Oak or G1S plywood for drawers
- 3 pieces 1x6x5' Oak S4S for face frame and doors
- 11 pieces 1x6x6' Oak S4S
- 1 piece crown molding 3 1/4"x 6'
- 1 piece crown molding 3 1/4"x 7'
- 2 pieces 3 mil glass cut to fit (approximately 28x35)
- 2 pairs bottom mount 16" drawer slides (Blum)
- 1 box flathead wood screws # 6x5/8" for slides
- 6 pairs 3/8" overlap self closing cabinet hinges (Amerock)

- 10 door and drawer pulls
- 2 lbs 1 1/2" bright finish nails
- 1 pint carpenter's yellow wood glue

Instructions

Rip the plywood to the sizes in the following cutting list.

Cutting List

Upper Cabinet:

- 2 end gables at 14 3/8 x 39 1/2
- 1 center gable at 14 1/8 x 39 1/2
- 4 shelves at 14 1/8 x 29 15/16
- 2 pieces for the top and bottom at 14 3/8 x 61 1/8

Lower Cabinet:

- 2 gable ends at 16 1/8 x 35 1/2
- 1 center gable at 15 7/8 x 30 3/4
- 2 shelves at 15 7/8 x 28 7/16
- 1 top at 16 1/8 x 59 1/4
- 1 bottom at 16 1/8 x 58 1/4

First layout the gables for each unit. Cabinet plywood is considered G2S (good 2 sides), but one side is usually a bit better than the other. Always rip the best side up on a table saw and the best side down with a circular saw. Use a sharp blade with the highest number of teeth for finishing. Lay the best sides of the gables away from each other, they will be on the outside of the cabinet. Lay out the gables for where the shelves and top and bottoms will go. We want to dado these pieces in. Either use a dado blade with the table saw (preferred) or use a router and jig. See article: Dado Jig for the Router <http://www.daveosborne.com/dave/articles/routerjig.php>

For all dados cut in 1/4" deep the full thickness of the board. The Face Frame drawing shows which piece overlaps and which piece comes to the other. The hatched line shows the gables and tops and bottoms. Refer to the Cutting List, these are exact sizes, the more accurate you are here the better the cabinet will turn out. Remember to dado out for the back of each unit with 1/4" plywood.

The shelf in the middle of the lower unit is adjustable, so no dado here. Just two holes on each side for the shelf brackets. Get them first before drilling the holes. I prefer the chrome, or better still, the brass metal shelf brackets which need a 1/4" hole 3/8" deep. You can drill a couple of extra holes above and below your initial choice. Space them about 1 1/4" apart, about 1" in from the edges. Since this is your project, you can mount them after the finish is applied with the advice of the china collector herself.

Assemble the pieces with glue and nails. Turn each unit over, in turn, and install the 1/4" plywood back, this should keep it square. Nail and glue the back into the fixed shelves, too.

The shelves are fixed in the upper unit so they will match the position of the muttin bars. This, of course, is your option if you want to have these shelves adjustable or even made from 1/4" plate glass.

The face frame is made up of vertical pieces called stiles and horizontal pieces called rails. These are ripped, from the 1x6 stock, according to the sizes shown in the face frame drawing and cut to length by holding the piece against the frame and marking in place. These should be face nailed to the box with glue. Set the nails with a nail set just below the surface if not using an air nailer.

On the lower cabinet gables layout the position of the drawer slides. The slides come in matched pairs, with one for the drawer and one for the gable. They are marked LH and RH for left and right hand. The drawer mounts install on the bottom of the drawer with the roller at the back. We'll get to the drawers later.

The gable mount slide is shown in this drawing. The end with the roller goes to the front and is flush with the outside of the face frame and resting on top of the rail. Screw these in position using # 6 x 5/8" screws, 3 per slide. Make sure they are installed square across the gable. Since the gables are not flush with the stiles, pack out the gable with a ripping to bring it out flush and install the drawer slide onto the strip.

Put the cabinets away for now, while we make up the doors.

Rip the 1x6 stock for the stiles and rails for the doors at 2 1/4" wide. Cut their lengths as shown on the Parts drawing, allow for the overlap when cutting the

length of the rails. An easy way to figure this length is to place the two stiles together, edge to edge. Put your tape measure on the right side edge at the measurement wanted, say 13 15/32 and read off on the opposite edge what the measurement will be, as shown on the drawing.

These four pieces of the door frame should be glued and assembled with biscuits. If a biscuit cutter isn't on your tool list, dado the edge of each matching piece and insert a spline made from 1/4" hardwood, use the rippings you have left over. Make the spline about 3/4" wide x 1/4" thick. The dados should be a loose fit, to allow for glue and run right out the end of the frame. The splines are trimmed off after the glue dries. Clamp the doors overnight for the glue to dry. Pony clamps work best for this. If not on the tool list, nail a temporary frame on a piece of plywood, close to the size of the door frame and use feather wedges to tighten up the door frame.

Depending on your tools available, rabbet around the inside, back side of the door frame to accept the glass, either before or after assembly. I have my router installed on a table with the bit sticking through the face of the table. I use a 1x2 for a fence, screwed to the table top and make a rabbet with the router. When routing on the inside of the frame a fence won't work, just use a rabbeting bit with guide roller. The rabbet should be just the thickness of the glass and about 3/8" wide. Just enough for the glass to lay in the rabbet and be flush with the back of the door. The glass is held in place by small turnstiles, as shown. Don't install the glass or turnstiles yet.

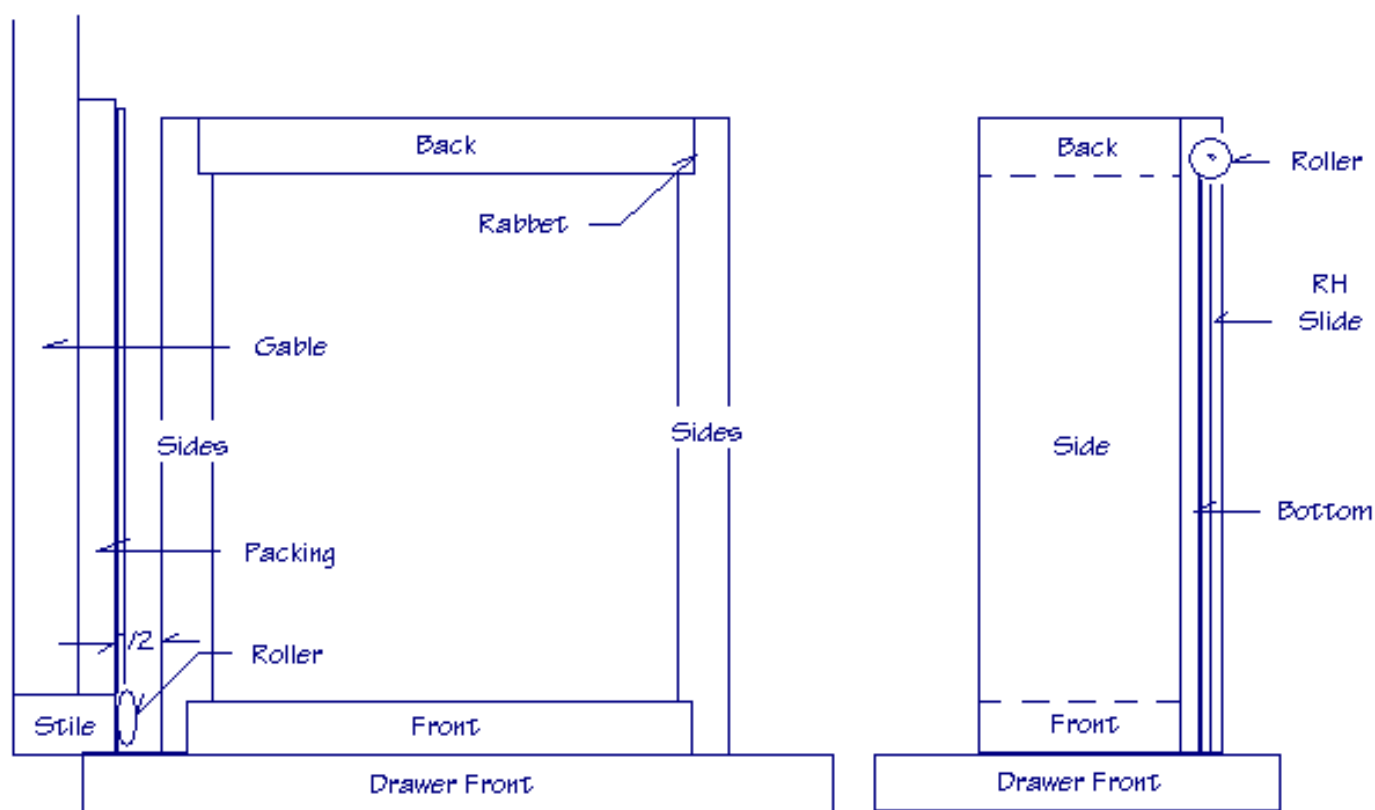
Tip: When using a router always try the setup on a scrap piece of identical material to be sure it is correct before trying it on the actual piece.

The muttin bars for the doors are made from solid oak. Rip them 3/4 wide x 3/8 thick. Cut them to length as shown on the Parts drawing. Two ways to do this, either half the joint and overlap the intersections, which is very tiddly work. I just butt them with some glue between the joints, but make them a tight fit. The bottom of the bars are flush with the top of the rabbet, in other words, they are against the glass. After the bars are left overnight to dry, very carefully put a decorative edge on them using the router. They aren't very thick so you won't get a high profile, just something to take the square edge off. Use a portable router for this, careful, though, not much surface area for the glue to hold the

bars together. While you are at it, may as well put an edge profile on the doors, too. Also a profile on the inside front against the panel. Try different pieces of scrap before the actual door. Cut the drawer fronts out of plywood. Put a separate molding profile on the drawer fronts. If made of plywood, the edge shows the grain, a no-no in finishing. Better to pre-plan a profile made from 3/4" solid oak or purchase a molding similar to the profile on the doors. Allow for the molding on the door edge by ripping the drawer front down accordingly. Nail and glue the profile onto the drawer front, miter the corners.

Let's make the drawer boxes.

Drawer Detail



The drawer boxes can be made of 1/2" plywood or 5/8" melamine. The sides are rabbeted to receive the front and backs, which are the same size. The outside width of the drawer must be 1" less than the opening between the stiles, to allow for the drawer slides. You'll notice that one slide mounted on the drawer is flat on top and the other side has a rounded top which grabs the roller. There is a bit of adjustment with this design, better to be a bit too wide on the 1/2" gap rather than too tight. I'm talking a maximum of 1/16". At 1/2" on each side the drawer will slide nicely. The bottom is simply screwed to the sides, back and

front since the slides supports the bottom, anyway. For melamine, since glue won't hold too well, except at the raw edges, I prefer to screw the box together. I use # 6 x 1 1/2" drywall screws. With plywood, glue and nails work well. Don't fasten the drawer front onto the drawer box yet, wait for this step later.

Place the upper cabinet on top of the lower one to see how it fits. At this point we will fasten the molding profiles at the junction of the two cabinets as shown on the elevation drawing. You can purchase molding for this purpose or use a router to make your own. I allowed for enough material in the Material List to make your own. Rip the solid oak into 3/4 x 3/4 strips. Cut them to the approximate length adding extra for the miters. The profile is best done with the router under mounted to a table, as described above.

Purchase the crown molding as on the list and install it. Come down 3/4" from the top of the upper cabinet for the bottom of the crown. Face nail and glue the crown in position, careful to make a nice fit at the two front mitered corners.

Rip the base for the bottom unit and router a profile on the top of it. The two front joints are again mitered. Fasten in place with glue and face nails.

The shelves should have a 1/4" thick edging installed at this point. Rip this from the solid oak stock. Glue and face nail the edging on. Another option is oak wood edging tape which is fastened to the plywood edge by heating with an iron and trimming the excess off. The melamine edges on the top of the drawers, if melamine was your choice, may be finished with a melamine tape in a similar way.

Time to sand and apply the finish to your project. Fill all nail holes with a putty pre-stained to your liking. Plywood and lumber has a mill glaze on its surfaces when purchased. This has to come off before applying a stain or clear finish. Use about a 100 grit sandpaper for the first pass. It doesn't take too much to remove this. Don't sand any finer than 150 grit before the application of stain. I've had people wonder why stain won't grab the wood when they sand with 400 or 600 paper. They sealed it off by trying to do a perfect sanding job. Don't sand too much of the veneer off the plywood, it is very thin. Remove any saw or router marks on the edges of the solid oak. Remember to sand the drawer fronts and doors and set them aside for the finishing process before installing them on the drawers or face frame.

For a choice of finish, I prefer a satin or semi-gloss clear Polyurethane product.

Varathane is such a product. I use the Varathane Professional Clear Finish which can accept a number of coats in a day, yet is oil based. If stain is your choice, it goes on before the final finish. I prefer a gelled stain applied with a lint free rag. Rub it on and wipe it off. Allow the stain to dry overnight before applying the finish. In my opinion, stay away from the stain and finish applications in one step. If the stain is not to your liking, after it dries, that's it. By pre-staining you have the option to sand it lightly to lighten the color or add a bit more to darken it. Apply at least two coats of the clear finish.

Finally install the glass in the doors and install them onto the respective cabinet. Keep the margins the same on the edge and between the doors. It should be 1 3/4". Overlap hinges are easy to install, just compress them to get the true fit. Screw in only the top screw in each hinge at first until the final adjustment is made. Then screw in the final screws. Notice the centers marked on the Parts drawing.

Tip: Don't install doors on a floor standing cabinet, until the cabinet is placed in its final resting place. And attached to the wall.

With the drawer fronts, line them up with the doors below. Insert the drawer box into the slides. Tip the drawer down to engage the roller and lift up again and slide the box in, Start by drilling 3/16" holes through the front of the drawer box in the center of the front and near the sides. Clamp the drawer front into place with the drawer open with the use of spring clamps or c-clamps. Don't mar the surface. From the inside of the box, screw through the two holes into the front. Careful with the length of screws, you don't want to go through the face of the front. Remove the clamps and slide the door in. When happy with the position, install the pulls by drilling with the same bit through the face of the front as well as the box front to match the spacing of the holes in the pulls. Most times the pulls come with a 3/4" machine screw as well as a longer one. You may have to cut off the screw to fit the length of going through the two pieces or buy a longer screw to fit.

Tip: When cutting a machine screw to length, thread on a proper size nut first, cut the screw and back off the nut which cleans the threads in the process.

Drill and attach the pulls onto the doors.

Tip: When drilling through a finished frame, as when installing door pulls, hold a scrap block of plywood on the inside to prevent the drill from chipping the wood as it penetrates the frame.

Wow! Nice job.

This is a project for a person who has done some wood working before. If not, don't get overwhelmed, just take one step at a time. Practice on scrap pieces until happy with the result. For any questions just email me 24/7 and I'll get back to you as soon as I can.