

LIBRARY IN A CLOSET

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Recently I was asked to convert a client's bedroom closet into a cherry mini-library. The bedroom was to be the new home office. The closet opening was 5 feet wide, 30 inches deep, and the client removed the header and wall above it, so that the new unit could go all the way to the ceiling. The only unique thing was that the right wall was at an angle, such that the rear wall was straight for a little less than 4 feet (as many California ranch home closets do). The client wanted adjustable shelving, fairly deep, but set back into the unit so there would be some open counter top space over the base cabinets. We resolved the angled wall issue by making the right-most one foot of the unit a shallow (one foot deep) display section with glass shelving. The whole unit was to be fitted with 3 small halogen lights mounted in the ceiling panel.

This was a pretty straightforward project, except that the upper section was a rather large, cumbersome bookcase, 4 feet wide, 29 inches deep, and 7 feet tall, which had to be mounted on top of the base cabinets with the adjacent one foot wide by one foot deep, 7 foot high display section. Remembering prior lessons learned, I allowed plenty of shim space on all sides. With my basic design in hand I went to a panel processor to have my plywood cut. He forced the design into Cabinet Vision to drive the NC router, which was fine, except that some aspects of this project didn't fit the software conventions. For example, the set back adjustable shelving put the system holes out of the standard location, which the software could not accommodate. I thus had to drill these in my shop. However, in general it worked out okay – receiving the cut pieces ready for assembly is a boon for a one man operation.

Meanwhile I built the solid cherry face frame for the base cabinets, and when the cabinets were assembled I proceeded to the installation phase at the site.



Phase 1 of Installation



Bookcase ready for transport

Next, the bookcase was assembled – pretty simple – 3 sides, no top or bottom. Obviously I needed some help installing this thing – after some height adjustment to clear that 4 inch section near the ceiling, we got it in place. This was a lesson to learn – I allowed about one inch clearance, which was not sufficient for the arc generated by leaning the 29 inch deep unit into place – I had to cut an additional 1 ½ inches from the top with a saber saw (this didn't affect the end result unit, since the ceiling panel is lower by a few inches and hides these cut edges). Once the bookcase and the display sections were in place, the next issue was encountered. The room wall on the right side of the unit was so far out of plum, there was a significant mismatch with the perfectly square NC routed sides of both sections – more than could be adjusted with a hand plane. Both sections had to be dismantled, disassembled and the sides brought back to the shop for custom angle cuts (about one inch difference at the top). This was quite a time killer – a pricey lesson learned. Also I had ordered the 5 glass shelves early (too early) – 3 of them had to be re-cut to fit into the upper portion as well.

It's kind of a subtle thing – I had noted that the upper left corner was not quite square and the wall was “a little out of plum”, but had not quantified it, and the NC router did a great job on squareness. What should have been done was to measure top and bottom depths, then custom cut the side panels instead of routing them. This much out of plum in this situation can't be accommodated with shimming. The facia panel across the top required the front edges of both sections to be co-planar with the wall at the top, and the bottom had to mate up with the face frame and trim molding edges.

Once past that issue, everything went smoothly, and the client is very happy with the unit.

