A Pair of Built-in Hutches

Faced with spaces that weren't close to square, this carpenter judiciously applied trim and careful scribing to hide the worst of it

BY KEVIN LUDDY

Some magic needed here. The wall in one of the alcoves was out of plumb almost ⅜ in. over the height of the lower cabinets.

One thing I've learned from working as a carpenter for 20 years is that homeowners are uncharted waters. When I met with the owners of this house about building a pair of hutches, two things became apparent. First, even though they wanted to keep the price down, they wanted a quality job. This was good.

But the second thing was that these hutches had to fit into two alcoves that flanked an existing fireplace, and these alcoves were ridiculously out of square. And although they were nominally the same size, the two spaces were over 2 in. different in both height and width, a fact that threatened thing number one. Another threat to the economics of the project was that the widths of "about 4 ft." (as I had been told on the phone) were actually 49 in. and 52 in., not great for efficient use of sheet goods.

A dry run in the shop

Each of the paint-grade hutches would consist of a base section with cabinet doors and a countertop, and an upper section with open, adjustable shelves (photo above). The

cases and shelves would be ¾-in. birch veneer-core plywood, and the doors and moldings would be solid wood. To save material, I planned to use the existing walls in the two alcoves as the backs of the hutches.

I prefabricated all the parts for the hutches in my shop. I also made the raised-panel doors for the bases and the trim pieces that would hide the variations in the walls and ceiling. I preassembled the bases and shelf units in the shop to make sure everything would go together easily, and then the parts were sanded and given a good coat of primer.

Lots of shims and scribing

When I arrived at the site, a finished house, the first things I unpacked were drop cloths. I reacquainted myself with the site dimensions and peculiarities (inset photo, facing page) and then located the framing behind the drywall for attaching the case sides.

With the existing walls acting as the backs of the cases, the first pieces I installed were the sides of the lower cabinets. At the shop, I'd notched each side for the toekick. The floor in one of the alcoves was fairly level, so I plumbed the sides in place and scribed them to the back wall, keeping the top edges level (more on scribing later). When I was satisfied with the fit, I glued and nailed the bottom shelf to the two sides (top photo). Then I centered the assembly in the opening, shimmed each side plumb and shot nails to hold each side in place (center photo).

The floor of the other alcove was not level, so before scribing the back edges, I had to shim the lower of the two sides up from the floor. The height differences were to be hidden by a custom-fit toekick installed later. Next, I screwed a cleat to the back wall on each side to support the back edge of the countertops (photo bottom left).

When fitting the countertops, I slightly undercut the back 12 in. on both sides of each top (which would be hidden under the upper cases) to allow for easier fitting. The tops were then scribe-fitted to the back wall and nailed in place. Before going any further, I glued and nailed the rails under the countertops to give them added strength during construction (photo bottom right).

Fitting the top pieces is a grind

Before fitting the sides for the upper-shelf sections, I tacked shims to the drywall, using a level against a straightedge to keep the shims in a plumb line (photo left, p. 82). The sides were the toughest pieces to fit because they were captured on three sides by the ceiling, the back wall and the countertop, and all these joints were visible. Starting with the

ASSEMBLING THE LOWER CABINETS

Bottom shelf is glued to the sides first. After the sides of the lower cabinets had been fit to the back wall, the bottom shelf was glued and nailed to cleats on the sides.

Plumbed in place. With the existing drywall forming the back wall of the new hutch, the sides with the bottom shelf attached are centered in the opening and shimmed plumb.

Cleat supports the back of the countertop. After the lower-cabinet sides and shelves are put in, a 1x cleat is installed to support the back edge of the countertop.

Rail beefs up the front edge. Before continuing with the construction, the author installs rails under the front edges of the countertops for added strength.

Shims set before the sides go in. Using a straightedge and a level, the author tacks shims to the wall to create a plumb line before the sides are fit.

Scribing with a pencil. To scribe variations of less than ⅛ in., the author lets a pencil ride on the wall, its point recording the scribe line.

Grinding to the line. An electric grinder creates a bit of dust, but the grinder is easy to control and allows a feather edge to the scribe line.

A shelf guides the final shims. To make the sides perfectly parallel, a shelf is set in place, and the shims are adjusted to the shelf.

tallest side (so that I could use it in a shorter spot if I screwed up), I scribed each side piece to the textured ceiling first.

Then I set each piece in place at a slight angle because of the tight top-to-bottom fit and pencil-scribed each piece to the back wall (photo top center). For this scribe of less than ⅛ in., I held a short pencil to the wall and let the point ride on the piece to be fit.

I've seen many different tools for cutting scribe lines: jigsaws, hand planes, rasps. For most scribes, though, I prefer a small electric grinder (photo top right). It may create a little more dust, but I think a grinder is easier to control and to feather to the line.

The side pieces were then tacked in place. To keep them parallel while they were being nailed, I rested a shelf on its supports between the sides and shimmed as needed (photo bottom right).

Hiding a multitude of shims

I'd now reached the magic portion of the show, installing the molding and face frames to finish the piece and to camouflage all the differences in height and width. I started at the top with the crown molding and the backer board installed underneath.

Much to my amazement and luck, the ceiling above the left-hand hutch was level (all the error was in the floor). So the crown backer and molding went in quickly and easily (top photo, facing page).The installation gave me a reveal of about 1¾ in. of backer board below the crown. My luck ran short on the right side, where I needed to make up al-

most ½ in. in 4 ft. I decided to hide this difference in degrees. First, I applied the backer board 3/16 in. out of level and then nailed the bottom edge of the crown, varying the reveal from 1¾ in. to 1⅞ in. To hide the last ⅛ in. or so, I twisted the crown into position, making it slightly taller on one side than the other. When I stepped back from the hutch, I was impressed by how even the detail looked after all that fussing.

My bad luck continued for the upper face-frame stiles. I thought a 1⅜-in. width would give me plenty of stock to scribe to the wall and extend beyond the shelf sides by at least ⅜ in. But because I had to shim the ¾-in. thick sides off the wall by as much as ½ in., the face frames barely covered the sides. I would have to make new face frames.

At my urging, the homeowners had decided on fluted stiles for the lower cabinets. The walls on the left side had little taper, so the fluted stiles went in with little tweaking. I biscuited the tops of the stiles into the rail and then glued and nailed them to the case sides and bottom.

I had made wider stiles for the right-hand cabinet, and I needed every bit to make up for over ⅜-in. taper in the walls. Scribing these stiles took a bit more care so that I would be left with the exact finished opening for the doors when I was done. I made a couple of test fits and then biscuited, glued and nailed the stiles in place. After fitting the doors, I called it a day.

Face frames stabilize the shelf sides

The next day, I returned with the wider upper face-frame stiles. Increasing their width to 1¾ in. allowed me to scribe them to the wall (photo bottom left) with plenty of extra to hide the ends of the shelves. To scribe a taper of this magnitude, I grabbed my 99¢ compass-style dividers. I glued and nailed the stiles in place and put construction adhesive on the wall edge of the stiles to help stabilize the sides (photo bottom right). I then gave the doors a final adjustment, filled the nail holes and touched up the primer.

After the painter put on the finishing touches, I got a call from the clients saying that they loved the way the hutches turned out. The scribing had hidden the worst of the variations, and the trim details pull the eye away from the rest. The homeowners had picked out knobs for the doors, and I promised to put them in next time I was in the neighborhood. □

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INSTALLING THE TRIM

Crown hides ceiling discrepancies. The first trim to be installed is the crown backer and molding, which is adjusted to disguise a ceiling that is out of level.

Compass scribes handle larger differences. For big irregularities such as the ones here, inexpensive but invaluable compass-style dividers transfer the wall's contour to the piece being fitted.

Face frames are glued to the walls. To help stabilize the sides of the shelf sections, the face-frame edges are coated with construction adhesive before being nailed to the shelf sides.