

This pantry had three inconvenient outswing doors. Here, the doors and an intermediate post have been removed (1). Having taken out the existing headers (2), the author screws a single 9-by-5 1/4-inch U-shaped header to the top plate (3). To accommodate the three bypass doors, the new 5 3/4-inch-wide finish jambs are wider than the existing 2x4 walls, and they are flush with the drywall on the outside of the pantry (4).

Photos by John Carroll

## Retrofitting Bypass Doors

BY JOHN CARROLL

**Pantries are great storage options** in kitchens, but they have a downside: Most pantry doors swing out. In high-traffic areas, those doors can disrupt work flow and cause mishaps, which was certainly the case in a project that I worked on recently.

The client's pantry had three doors—a double and a single. When open, the doors blocked routes to both the living room and dining room. After seeing a magazine article featuring bypass doors, which slide past each other on parallel tracks, the homeowners called me to replace the outswing doors on their pantry.

**Lay out and frame the opening.** As with any type of door, I needed to build the finished opening for the bypass doors to precise dimensions. The combined opening of the existing outswing doors was 96 inches, so I made the new finished opening 94 inches wide. This dimension worked perfectly for three 34-inch-wide door panels with the stiles overlapping fully.

I started by removing the three existing doors, the intermediate post separating the single door from the double door (1), and the existing headers (2). Then I installed a new, U-shaped single header to span the entire 8-foot opening (3). This header needed to be very stout and straight because the header portion of the jamb would be attached directly to it, without shims. (Later, I would attach the three upper tracks to the jamb material with screws that were long enough to run through the jamb and into the header framing). And even though the walls were 2x4 framing, the header had to be at least 5 1/4 inches wide to accommodate the three bypass doors (more on that below) (4).

The header also had to be sized correctly to accommodate the height of the door panels, which was determined in part by my treatment of the bottom track. To make it easier to slide items in and out of the pantry at floor level, I wanted to recess the bottom track flush with the floor (the recessed tracks would also look better). This would set the bottom face of the header jamb 82 1/2 inches above the finished floor. To achieve that height with the header attached directly to the underside of the top wall plate, I had to make the header 9 inches high.

The new 15-lite doors were heavy and they would hang from above, so I firmly anchored the center horizontal part of the upside-down U-shaped header to the double top plate of the wall with structural screws, using a long extension bit on an impact driver. After filling the space inside the “U” with solid lumber and plywood, I fit double 2x6 jacks under both ends of the header.

**Jambs wide enough for three doors.** Like pocket doors, bypass doors are suspended from overhead tracks. Three-wheeled ball-bearing hangers (two wheels on one side and one wheel on the other) fit inside the track and attach to brackets near both ends of each door panel. The track and the rollers look similar to those that I use for pocket doors, and the bypass-door hardware is actually made by the same company, L.E. Johnson Products ([johnsonhardware.com](http://johnsonhardware.com)).

But there are important differences between pocket and bypass doors. First, bypass doors require a separate overhead track for each door. This configuration allows the door panels to move past each other independently. The panels can all slide to one side of the opening and each door panel can operate without having to move the other doors.

To allow enough room for the doors to slide past each other, the jambs had to be wider than 4½ inches, the width of the existing 2x4 wall. The hardware installation instructions called for jambs at least 5¼ inches wide to accommodate the tracks for three standard 1⅜-inch-thick doors (hence the 5¼-inch-deep header). I made the finished jambs a bit wider (5¾ inches) so they would be flush with the drywall on the outside of the wall. The frame and jambs project into the pantry 1¼ inches, which isn’t visible from outside the pantry when the doors are closed.

**Guide tracks on the floor.** Another important difference between pocket doors and bypass doors is that without the wall pocket to hold the doors in line, bypass doors must be held in plane with Teflon pins that ride inside simple, U-shaped guide tracks attached to the floor.

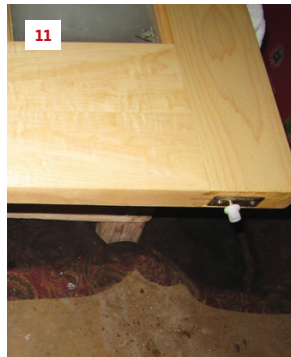
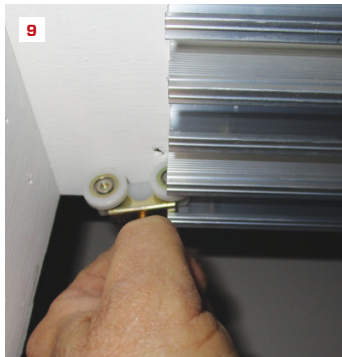
To recess the aluminum tracks flush with the surface of the finished floor, I first had to make two straight cuts to remove a 6-inch-wide strip of the existing oak floor across the entire opening. For the bulk of the straight cuts, I used an EZSmart track saw system ([eurekazone.com](http://eurekazone.com)) that I’ve used since the 1990s (5). The track saw and guide gave me a very straight cut, but I couldn’t cut all the way to the end of the door opening. To finish the ends of the cuts, I used a multi-tool, working carefully by eye (6). Then I screwed the aluminum guide tracks to the subfloor, filling in the spaces on both sides of the strip and between the three tracks with strips of oak flooring (7).

**Overhead track installation.** The installation instructions recommended that the edge of the front overhead track be installed 11/32 inch in from the face of the drywall—tolerances usually reserved for more exacting tasks than hanging doors. I took a chance and added 1/32 inch to that dimension, installing the track 3/8 inch in from the face of the wall. Next, the instructions recommended a space of 17/32 inch between the front and the middle tracks. Again, I added 1/32 inch and made that space 9/16 inch. I did the same thing with the space between the last two tracks (8).



The author uses a track saw to remove a 6-inch-wide section of flooring for the guide tracks (5), finishing up near the jambs with a multi-tool (6). Strips of flooring fill the gaps between the tracks, which are screwed to the subfloor (7). The author screwed the overhead tracks through the jambs and into the header in positions dictated by manufacturer’s instructions (8).





A gap between the ends of the overhead tracks and the side jamb allows the rollers to slide into place (9). Metal brackets screwed to the door-panel tops accept pins that hang down from the rollers (10). Plastic guides screwed to the panel bottoms ride in guide tracks on the floor (11). To hang a door panel, the author slipped the plastic guides into the floor track, and then lifted the panel one side at a time to engage the roller pins in the brackets. A nut below the rollers allows for adjustment. The head casing covers the upper tracks and the tops of the doors (12). Each door slides independently to either side of the opening with very little effort (13).

Before screwing the tracks to the header jamb, I cut them  $1\frac{3}{4}$  inches shorter than the width of the finished opening. The resulting gap at the end of the track allows the rollers to be inserted into the tracks when it is time to install the doors (9).

**Hanging the doors.** Similar to the pocket-door system, the three-wheeled part of the bypass-door hardware has a pin that extends down from the assembly. A bracket that attaches to the top of the door has a plate with a slot and a locking clip. After slipping the wheeled part into the track, the pin slips into the slot in the door plate and the locking clip keeps the pin in place (10).

To hang the doors, I first inserted a pair of the wheel assemblies into the end of each track. Per the instructions, I alternated the side that had two wheels to help balance the load of the door in the track. Next, I installed the door plates on the top edge of each door panel, keeping the assemblies  $2\frac{1}{4}$  inches from the side edges of the doors. On the bottom edges of the door panels, I installed the guide pins 2 inches from the side edges (11).

After attaching the hardware to the tops and bottoms of the door panels, I set each panel in place with its guide pins in the bottom track. Next, I rolled the two hangers for each door into position, then lifted one end of the door at a time until the roller pin lined up and slipped into the plate on the top of the door. When the roller hardware was properly engaged with the door hardware, I rotated the clip to lock the two parts together. A nut on the roller hardware allows the doors to be adjusted so that they meet the side jambs perfectly. I could push the doors open with just a finger.

The final step was casing the opening. I set the side casings at the standard reveal on the jambs, but the header casing received slightly different treatment. I kept the lower edge of the head casing down far enough to just cover the tops of the door panels, concealing the upper track at the same time (12, 13).

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