Inside-Out Porch Columns

BY GARY STRIEGLER

Recently, I built a home that featured a 300-square-foot front porch with four support columns. The plans didn't give a lot of details for the columns, and my client definitely did not want turned posts or fluted square ones—the two standard options where I live.

Decorative covers. Treated 4x4s carried the roof load for the porch, so I just needed something decorative and not structural. For the size and height of the porch, I thought that 12-inch columns would look best **(1)**. In the past I'd made porch columns from Extira, an exterior MDF product, creating a paneled look with a frame layer over the MDF. The finished product looked amazing, but it was a lot of work and the extra layers meant more maintenance down the road. For this job, I wanted a panel look but with less work.

I decided to try an interior trim trick that I'd learned years ago. I used a Whiteside router bit to simulate a raised-panel look. Once I got set up, I knew that routing two panels in each face wouldn't take long, and skipping the frame layer would save on material and painting.

Layout. Extira comes in several different sizes, but for this job I used the standard 49-inch-by-97-inch sheets. I ripped four sheets to 12 1/4-inch widths, which let each face butt on one edge and lap on the other. I would end up with 13-inch square posts with almost no waste. To get the height right, I would add a base and a two-step capital detail.

After ripping the material to width, I laid out the panels. From the bottom, I measured up 5 inches and laid out a 29-inch-tall panel. Five inches up from that lower panel, I laid out a taller panel to within 4 inches of the top. I wanted the look of a 9-inch-wide panel with 2-inch styles on each side. Because 3/4 inch of my final width came from the lap joint, I would have to rout the panel off center by 3/4 inch and offset the layout to the same side for all four faces of each column.

Routing the panels. Similar to the process of routing hinge mortises, I mounted a bushing onto the router base to guide the cut for panels. The router bushing rode against a rectangular wooden template that I pocket-screwed together. To get the correct panel width, I oversized the templates to allow for the distance from the outside of the bushing to the router bit.

Once I had the layout right, I located the templates, using a tape measure and a Kreg multi mark **(2)**. After tacking the templates to each column face with 18-gauge brads **(3)**, I took a scrap that was the same thickness as the templates and placed it inside them to keep the router riding flat **(4)**.

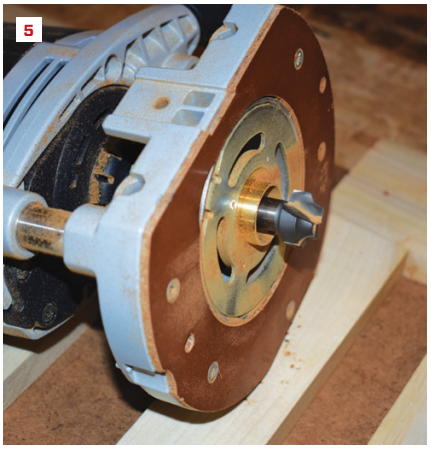
To rout the panels, I started with a plunge cut. Once the bit was at the correct depth, I focused on keeping the bushing in contact with the template, making sure that the router moved in the right direction **(6)**. If the bushing strays away from the template, the piece is ruined.

Routing MDF creates a lot of dust, so I wore a mask

The 4x4 posts that supported this porch looked spindly and out of proportion, so the author and his client decided to wrap the posts with a decorative covering that mimicked raised-panel columns. The author made the columns from exterior-grade MDF and routed the panel detail.

Photos by Gary Striegler



After ripping sheets of exterior MDF to width, the author built wooden templates, laid out their position on the column faces **(2)**, and tacked them in place with a brad nailer **(3)**. Scrap boards that fit inside the templates supported the router base **(4)**, which was fitted with a guide bushing **(5)**. After plunging the router into the material, the author routed the edge pattern into the MDF, keeping the bushing in contact with the template at all times **(6)**. Vacuuming after every cut kept the dust under control **(7)**.

and cleaned up with a shop vacuum after each panel cut **(7)**. When I finished routing each panel, I pried the template off and removed the brads.

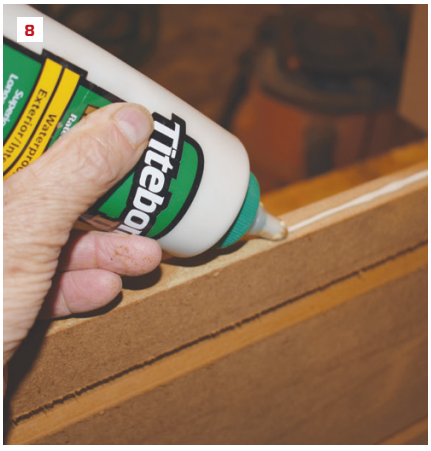
Once I'd routed several column faces, I started gluing them together in pairs using Titebond 3 glue **(8)**. First, I tacked the joint in place using 18-gauge brads **(9)**. To ensure tight joints, I then clamped the boards every 6 to 8 inches **(10)**. After an hour or so, I pulled the clamps and belt-sanded the joint. By alternating the routing and clamping, I was able to rout and mate up all the pairs with no downtime, and I was ready to move everything to the jobsite.

Installing the columns. On site, I had a simple method for installing the columns. First, I created a plumb surface on the posts, using a level to add shims as needed **(11)**. I then attached the first half of the column with galvanized finish nails **(12)**, using a short section of 2x4 to support the assembly while I nailed it in place **(13)**.

Next, I nailed pairs of 2x4 spacers to the top, bottom, and middle of the 4x4 posts to brace the second half of each column **(14)**. I ran a bead of glue **(15)**, then used 18-gauge brads to keep the sides lined up until I could clamp the joint **(16)**. Clamping takes a little more time, but it's the best way to get a good joint. When the glue has set, I pulled the clamps and sanded the two new joints **(17)**.

To keep the trim details simple, I used the same Whiteside 1801 router bit to shape all the edges of the bases and capitals. After routing the material, I mitered 12-inch-tall base pieces to fit around the column, squaring off the edge of the columns to keep the base pieces level **(18)**. After scribing them to the concrete floor, I glued and nailed the bases in place **(19)**. For the capitals, I installed a 4-inch-wide layer of MDF 1 1/2 inches from the top of each column **(20)**, then added a 3 1/2-inch strip with the same edge profile above that **(21)**. A simple square-edge MDF cap seals the top of the hollow column.

Gary Striegler owns Craftsman Builders, in Fayetteville, Ark., and teaches workshops at the Marc Adams School of Woodworking. His website is craftsmanbuildersnwa.com.



Each face of the column butts on one side and laps over the other. After routing the panel pattern into a few sides, the author assembled them in pairs, running a bead of glue down the edge of one side **(8)**. To hold the two adjacent sides in alignment, he tacked them together with brads **(9)**, then he fully clamped the assembly and moved on to the next pair of panels while waiting for the glue to set **(10)**. After removing the clamps, the author cleaned up the joints with a belt sander.

On site, the author began assembling the columns by adding shims to create a plumb surface on each post **(11)**. He fastened the first half of the column to the post with galvanized finish nails **(12)**, holding it at the proper height with a 2x4 spacer block **(13)**. Then he nailed pairs of horizontal 2x4 spacers to the top, middle, and bottom of the post for attaching the second half of the column **(14)**.

Before setting the second half of the column in place, the author ran beads of glue along the edges **(15)**. He tacked the halves together to align them, then nailed the second half of the column to the horizontal 2x4 blocks he had installed earlier. With the sides joined together with glue and nails, he clamped the assembly together **(16)**. After allowing the glue to set, the author removed the clamps and used a belt sander to smooth the edges **(17)**.

After marking a level reference line across the bottom of the column **(18)**, the author scribed the base pieces to the sloped concrete porch floor. The base pieces have mitered corners and are fastened together with glue and nails **(19)**. The bases and capitals at the top of the columns were profiled with the same router bit used for the panel design on the column faces. After fastening the first layer of the capital to the column with glue and nails **(20)**, the author applied a second band over the first **(21)**, sealing the top of the hollow columns with a simple square-edge cap.