

## **Curved Baseboard Corners**

Biscuit joinery and a simple jig solve a perplexing trim problem

hin-coat plaster is increasingly popular for interior walls in northern California where I work, but the variable textures and the bullnose corners of these walls can raise havoc when it's time to apply trim. I discovered this a couple of years ago when the crew I was working on started to install baseboard in a house near Santa Rosa, California. Each outside corner on these coarse-textured walls had a ¾-in. radius. Mitering the baseboard around these corners was out of the question. Square corners would look bad juxtaposed with the bullnose walls, and mitered corners would leave an awkward gap between the wall and the baseboard. Pondering paradigms led us to our current solution.

Our technique requires only a biscuit joiner, a simple jig and rounded corner stock that we have run off at a local mill shop. The back of the rounded corner pieces are concave, so they fit snugly against the radius of the plaster walls at the corner. That eliminates the triangular gap that would result if the baseboard were mitered at 45°. In this house we butted the 1x6 maple baseboard into the rounded corner pieces, so the baseboard follows the wall cleanly, even if the corner isn't exactly 90°.

## by Eric Blomberg

It took trial and error to get the technique right. We realized that rounded corner stock was part of the answer; the trick was learning how to join the baseboard and the corner pieces together cleanly. We resolved the problem with biscuit joinery, using a jig we devised. The technique is fast and effective.

**Corner pieces from a mill shop**—The comer pieces were created with a single pass through a multiple-head molder, producing 10-ft. and 12-ft. long pieces that we cut to length on the job. Because the shop grinds knives for each job, it could easily make radiused corner pieces. You can also make the pieces yourself (see sidebar facing page).

For baseboard that will be painted, grain direction in the corner pieces is irrelevant. That was the case on this job. But the mill shop we use also can produce corner pieces with the grain running horizontally, just like the base. That would be helpful if the trim were going to get stained, and the grain direction had to match.

**Corner pieces first**—We have a three-step procedure for fitting baseboard, and we start with the corner pieces. After cutting the pieces to match the height of the baseboard (drawing above), we put them in our jig and mark the locations for two #10 biscuits (biscuits come in three sizes, ranging from #0, the smallest, to #20, the largest). Using #10 biscuits with 1x6 baseboard means we can get two biscuits at each joint, and the slots aren't deep enough to break through the face of the corner pieces. (We cut the biscuit slots in the baseboard later, after all of the pieces have been cut to length.)

The trick to cutting the slots accurately is the jig; it holds the comer piece and aligns the cutter in the biscuit joiner. The jig is simply two pieces of <sup>3</sup>/<sub>4</sub>-in. scrap plywood screwed to a base. The comer piece fits between the two scrap pieces. The jig aligns the base plate of the biscuit joiner with the inside edge of the corner piece. If the corner piece is aligned correctly in the jig, the joint between the baseboard and the corner piece will be flush. It's important to cut the biscuit slots perpendicularly to the end of each corner piece; if the slots are skewed, gaps at the joints are inevitable. After marking the corner piece for slot locations, the cuts can be made on both edges. With that done, we dry-fit the corner



pieces to scrap pieces of baseboard and then use a router and a roundover bit on the top edges of the corner pieces so that they will match the top-edge profile of the baseboard. Once this profile has been cut, the corner pieces are ready for installation.

## Measuring and installing the baseboard-

The second step in the process is to set corner pieces in place temporarily and measure the straight runs of baseboard. In the Santa Rosa house, a tile floor was to be installed after the baseboard was installed, so we raised the baseboard 1½ in. off the subfloor and took our measurements for the base at this height (drawing above). To hold comer pieces in place while we measured straight runs of baseboard, we dry-fit scraps of base to corner pieces with biscuits. The assemblies could be tacked to the wall to hold corner pieces in the correct position while we took measurements.

With the straight runs of baseboard all cut, we could install all of the pieces. At each outside corner, we dry-fit both pieces of base to the corner piece to check the joints. If the fit looked good, we glued the slots, inserted the biscuits and then stuck the pieces together. If the dry fit had been perfect, we would have nailed the pieces in place right after the glue was applied.

If extra pressure were needed because one of the joints was slightly off, we let the joint set up off to one side before installing the pieces. When the glue was set, we nailed the assembly in place. It was sometimes possible, especially with shorter pieces, to assemble a three-piece comer or a five-piece U-shaped section, let the glue dry and then install it in one piece. The process may sound tedious, but it's not. Once a rhythm is established, the work flows smoothly.



## Making corner pieces on a shaper

If there's not a mill shop in your area that will make the corner pieces, you might try to make them yourself. The required tools are a table saw, a shaper and, of course, the necessary shaper knives. I wouldn't recommend a router because the bits required for the cuts would be very large.

A mill shop in my area makes all the corner stock I need. But if I were going to make my own corner stock, I'd use a three-step process on the table saw and shaper. First I'd rip the stock to the appropriate dimensions (drawing below). These cuts would establish the two faces of the corner piece that will be joined with the straight runs of baseboard.

Next, I would cut the inside curve on a shaper. The radius depends on variables like drywall or plaster thickness and the thickness of the base itself. Then I would go back to the table saw to rip the opposite (outside) corner to remove most of the waste material.

Finally, I'd use the shaper to finish up. Again, the radius required may vary. I think two passes would do it, each pass cutting half the outside radius. A little sanding will finish the job up nicely. If you try this, use material that's long enough to be machined safely. -E B.

