On the Job

Installing a Split Column

by Judson Bryant

During a recent remodeling project in Houston, we demolished a structurally defective balcony that had been supporting the corner of a roof. In its place we installed an 18½-foot-long 4x4 steel post that extends from the soffit down to ground level. We created a brick pedestal to cover the lower part of the post **(1)**, then concealed its upper portion with a 10-foot fiberglass column.

While columns can be split on site, most manufacturers will do it for you. Split columns can't be used in load-bearing applications, and some manufacturers caution that they need to be installed as soon as possible after being cut to reduce the chance that stresses released during the splitting process will distort the column halves. In this case, we used a Turncraft column (800/423-3311, turncraft.com); the local distributor split the fiberglass column, the PVC base, and the polyurethane foam capital in its shop just before I picked up the parts and brought them to the site **(2, 3)**.


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We fastened the first half of the column to the masonry base and the boxed-out soffit with L-clips, then — using construction adhesive and countersunk screws — installed pairs of 2-by splice blocks. This step wasn't recommended by the manufacturer and in retrospect was probably unnecessary, but at the time the added blocking seemed like a good way to increase the bonding area between the column halves **(4, 5)**.

To glue the column halves back together, we used PC-7 (800/220-2103, pcepoxy.com), a two-part paste epoxy with a minimum working time of 45 minutes. (The manufacturer recommends using Bondo, but I was concerned it would set

up too quickly for us to accurately reassemble the column, given the column's location and the need to work off scaffolding.) We applied a generous coat of epoxy to the edges of the installed half-column and a thin coat to the edges of the other half. We then hoisted the second half in place, aligning it with witness marks we'd made on the assembled column when it was on the ground. As we tightened our ratchet straps, a few areas deflected under the pressure and didn't line up properly, but wood shims underneath the straps corrected the problem. To keep the strap tails from flapping in the breeze, we taped them to the column **(6)**.

After the epoxy had cured for several days, we removed the straps and sanded the joints smooth with 80-grit paper. Some areas needed a little filler, so we applied Bondo and sanded those areas smooth, then finished the column up with 120-grit paper.

At the top, the column is finished with a polyurethane foam capital, which we screwed to the soffit and glued together and to the column with PL-400 construction adhesive **(7)**. A pair of splice plates glued to the split PVC base with a quick-setting two-part epoxy helped us align the two halves **(8)**. Finally, we painted the column to match the trim **(9)**.

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