# A Crown-Mold Concrete Mantel

## A stock crown profile and quarter-round form the mold for an inexpensive and unique fireplace surround

BY CHARLES MILLER

I had three goals in mind when I started designing our living room's fireplace surround. First, it had to reflect the other trim details in the room; second, it had to be affordable; and third, it had to be unmistakably fireproof. Concrete seemed like the clear choice, giving me a good excuse to put together a small-scale concrete pour. I really like this kind of low-anxiety concrete project. It's devoid of the handwringing scenarios that often accompany a visit by the transit-mix truck, and you can't beat the price tag. The mantel and both pilasters cost less than $30 in materials.

### Fastening the surround to the wall

I used long screws to secure both the mantel and the pilasters to the wall framing. As shown in the section drawing (facing page), the mantel hangs from the chimney-shaped framing by way of two 6-in. TimberLok screws. The pilasters are screwed to blocking in the walls. The screw heads are concealed by spray-painted wooden caps that look like carriage-bolt heads. Although the pilasters appear to be supporting the mantel, there is actually a 1/16-in. gap between them.





Drawings: Dan Thornton

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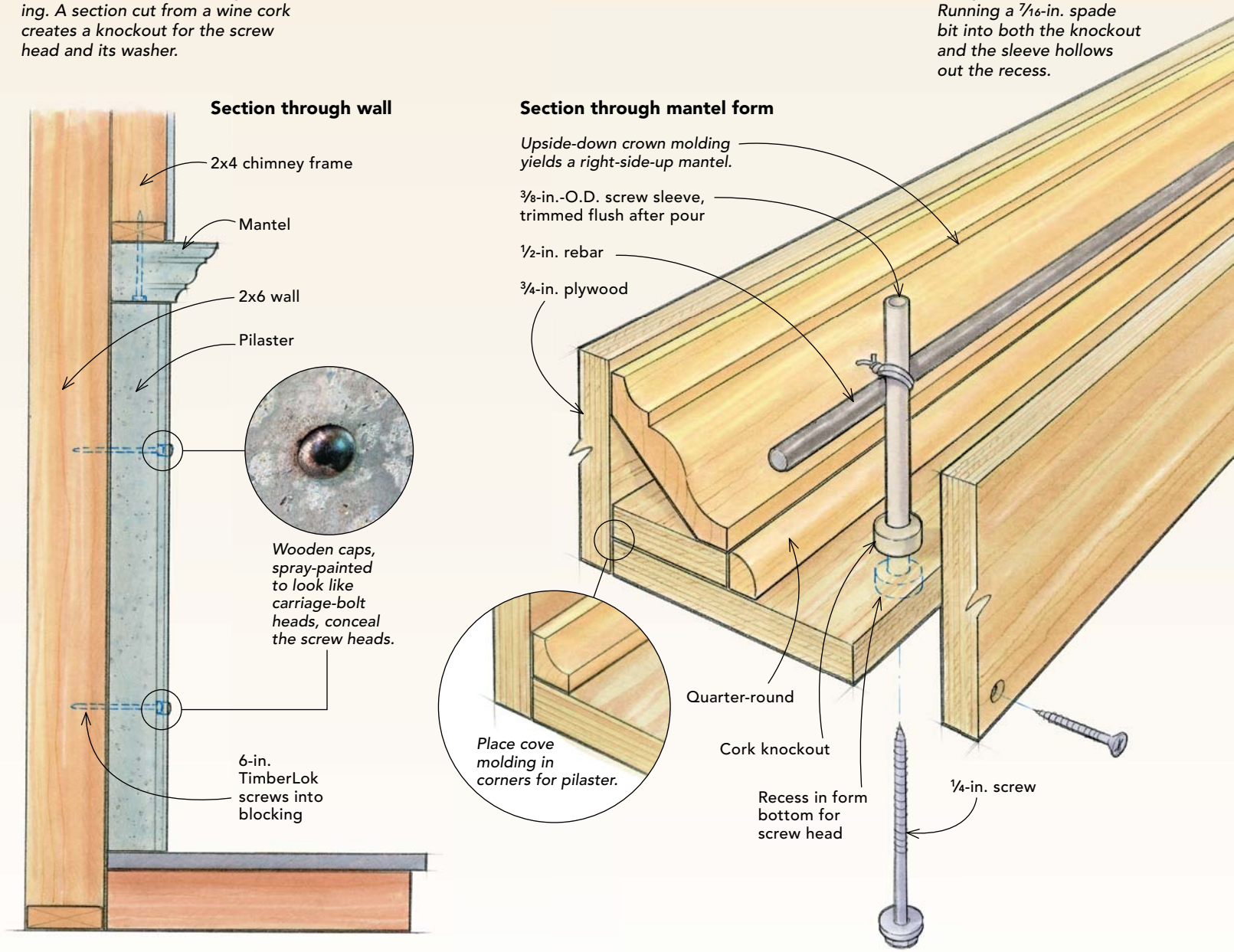
***Inside the mantel form.*** *A ¼-in.-dia. screw at each end of the form positions sleeves cut from ⅜-in.-O.D. plastic water-supply tubing. Screws that run through these sleeves hang the mantel from the chimney framing. A section cut from a wine cork creates a knockout for the screw head and its washer.*

***Taped for easy release.*** *Lining the mantel form with housewrap tape makes dismantling the form easy. Blue masking tape works equally well.*

***Recessed for screw head.*** *Prying out the cork makes room for the heads of the screws. The pilasters conceal these connections.*

***Holes for pilaster screw caps.*** *A short knockout of ½-in.-O.D. plastic tubing pressed onto the ⅜-in.-O.D. sleeves creates a cavity for the screw heads. Running a 7/16-in. spade bit into both the knockout and the sleeve hollows out the recess.*



***Pilaster posts and crown-molding beam.*** *Trim profiles used throughout the room found their way into the edge treatments of this concrete fireplace surround. Red slate and a band of green glass edging cover the space between the mantel and the fireplace.*

Visit **FineHomebuilding.com** to see a "There's a Better Way" video about this concrete-mantel project.

After making the molds for both the mantel and the pilasters out of ¾-in. plywood, I lined them with moldings that relate to the trim in the rest of the room (photos and drawings, p. 55). For easy disassembly, I applied some slippery polypropylene housewrap tape to all the surfaces that would come in contact with the wet concrete. When I unscrewed the form, the pieces just fell away from the mantel. The resulting surface was a little too shiny for my taste, so I wire-brushed the green concrete to give it a matte finish.

I lined the pilaster form with good ol' blue masking tape, and it worked just as well as the slippery red stuff. To vibrate the wet concrete into the nooks and crannies of the form, I held the foot of a bladeless reciprocating saw to the sides of the form. (A video in the "There's a Better Way" series at FineHomebuilding.com shows how to do this step.) The concrete is garden-variety ready mix, with no additives.

I covered the filled forms with plastic sheeting, and then kept them covered for five days before unscrewing them. I made sure they were nice and wet by spraying them with water every day. This helped the concrete to cure properly so that it would achieve full strength and minimize cracks. □

Charles Miller is special-issues editor. Photos by the author.