



Four-piece Federal

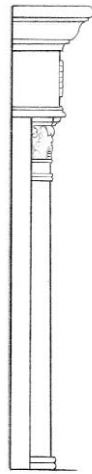


3 Fireplace Mantels

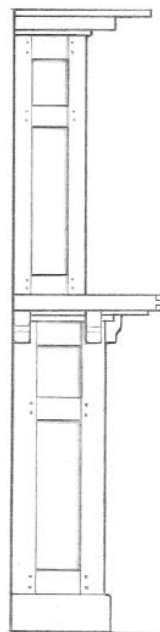
Different designs,
different materials,
and different techniques
all yield great results



Classic eclectic



Custom Craftsman



Let's face it; fireplaces are a vestige, of no more use than your appendix. Furnaces and electric ranges have long since usurped the role once played by an open flame. But while the need for a fireplace may have vanished, the desire still burns.

Even if logs have morphed into a ceramic manifold with gas jets, nothing seems to diminish our abiding affection for watching flames dance. We all still crave a fireplace. And as with the photographs we'll display there, we also want a decorative frame to go around it.

But houses vary, as do budgets and tastes. No one fireplace mantel will suit every situation. So we decided to present examples built by three of our long-time contributors. Each mantel combines traditional architectural styles with modern materials and innovative techniques. Gary M. Katz's Federal-period mantel is made of medium-density fiberboard (MDF) and built in four pieces for easy transport. Gary Striegler rips stock porch columns on a tablesaw and uses the two halves to imitate the look of turned pilasters on his classic mantel. And on Sebastian Egger's Craftsman mantel, white-oak rails and stiles are shaped with a router and joined with biscuits.

1 Four-Piece Federal

BY GARY M. KATZ



Made from paint-grade materials, this mantel can be built anywhere and installed in four parts



I can't build a fireplace mantel without thinking of the classical orders of architecture because most mantels are based on these orders. An order is an architectural form made up of a pair of columns with a beam across the top. (For more on classical orders, see "Drawing Board," p. 134.) This Federal mantel is a perfect example of orders in contemporary architecture, with the pilasters representing the columns, and the frieze, cornice, and shelf representing the beam.

End blocks and modern codes

During the Federal period (c.1790-1830), mantels were simple and followed the classical orders with only two slight differences. The first is that Federal mantels have end blocks. On some mantels you'll notice that the pilasters support the frieze. But on a Federal mantel, the pilasters extend up to the cornice to create the effect of end blocks on both sides of the frieze. I use a series of moldings to give the end blocks the appearance of a capital.

The other difference between a mantel designed today and one designed during the Federal period is modern building codes. While the minimum distance from the top of a firebox to the nearest combustible material is almost always 12 in., clearances on the firebox sides can differ. You can build an authentic-looking mantel, but you must research local codes and know the clearances.

Because this mantel will be painted, I built it with MDF. However, for the top of the shelf, I used a preprimed finger-joint board from Windsor One (www.windsormill.com) for greater durability. If I can't build the mantel in place, I screw together the pilasters and frieze temporarily and lean the mantel against a wall to add the moldings and the shelf. Then I break it into four pieces for easy transport. □

Gary M. Katz is a carpenter and contributing editor to *FHB* living in Reseda, Calif. Photos by Brian Pontolilo, except where noted.

PERFECTLY MITERED MOLDINGS



A jig makes miters easy. Instead of trying to line up the miters in place, the author uses a right-angle jig to ensure accurate joints. Spring clamps hold the glued-up moldings as the author nails them together.

**2 PILASTERS,
1 FRIEZE,
1 MANTEL SHELF**

The detail that defines the Federal style of this mantel is the end blocks created by extending the pilasters all the way up to the mantel shelf. The four pieces are screwed together temporarily to align the moldings and to check the fit of the shelf.

For extra durability, the top of the mantel shelf is made of pine.

Before the two-piece mantel shelf is glued and screwed together, it is placed on top of the mantel to check the size and proportions.

The frieze and pilasters are made of ¾-in. MDF with mitered corners.

Blocking strengthens the hollow boxes and keeps them square.

2¼-in. crown molding

Reed and ribbon cloverleaf

Picture molding

Rope molding

Four different moldings accentuate the end blocks and create the look of a capital.

Behind both pilasters and the frieze, a ¾-in. piece of MDF is screwed to the walls when the mantel is installed. The mantel pieces slip over the wall-mounted MDF and are nailed in place.

The pilasters are twice as deep as the frieze.

7½ in.

14 in.

57½ in.

42 in.

4 in.

6½ in.

5 in.

Base moldings are installed on site so that they can be scribed to the floor.



Don't glue the inside corners. The author attaches the moldings to the pilasters and frieze separately but doesn't fasten the inside corners until installation. This way, the mantel can be broken down for transportation.

2 Classic Eclectic

BY GARY STRIEGLER



A porch post becomes pilasters for this mantel built in place

For years I collected photos of traditional mantels to use for inspiration. Although some of my favorite designs included turned columns and carved moldings, they were always the first to get passed up when it came time to build a mantel. I knew that I could buy carvings to use for the capitals, but I also knew that I'm not very good on a lathe. Then one day I realized that one half of a porch post would work as a mantel pilaster. As it turns out, ripping the post was no problem, and this mantel has become one of my favorites.

Perfect fit for a tight spot

When there is not a lot of wall space around a fireplace, building codes can make it difficult to squeeze in a mantel. This design works well in a tight spot because it requires only 20 in. of wall space on each side of the firebox: 8 in. of clearance as required by local building codes, 8 in. for the pilasters, and 4 in. for the crown-molding return.

The turned pilasters add character to the mantel and support a tall frieze that becomes a backdrop for the carvings. The carvings I used on this mantel came from White River (www.mouldings.com). Most of the mantel is made of plywood, so even with the cost of the carvings, the mantel isn't too expensive. Carvings add a timeless look and are always a hit with my customers. And this mantel comes with a bonus. Someone is bound to ask, "How did you turn those columns?" □

Gary Striegler is a custom-home builder in Fayetteville, Ark. Photos by James Kidd.



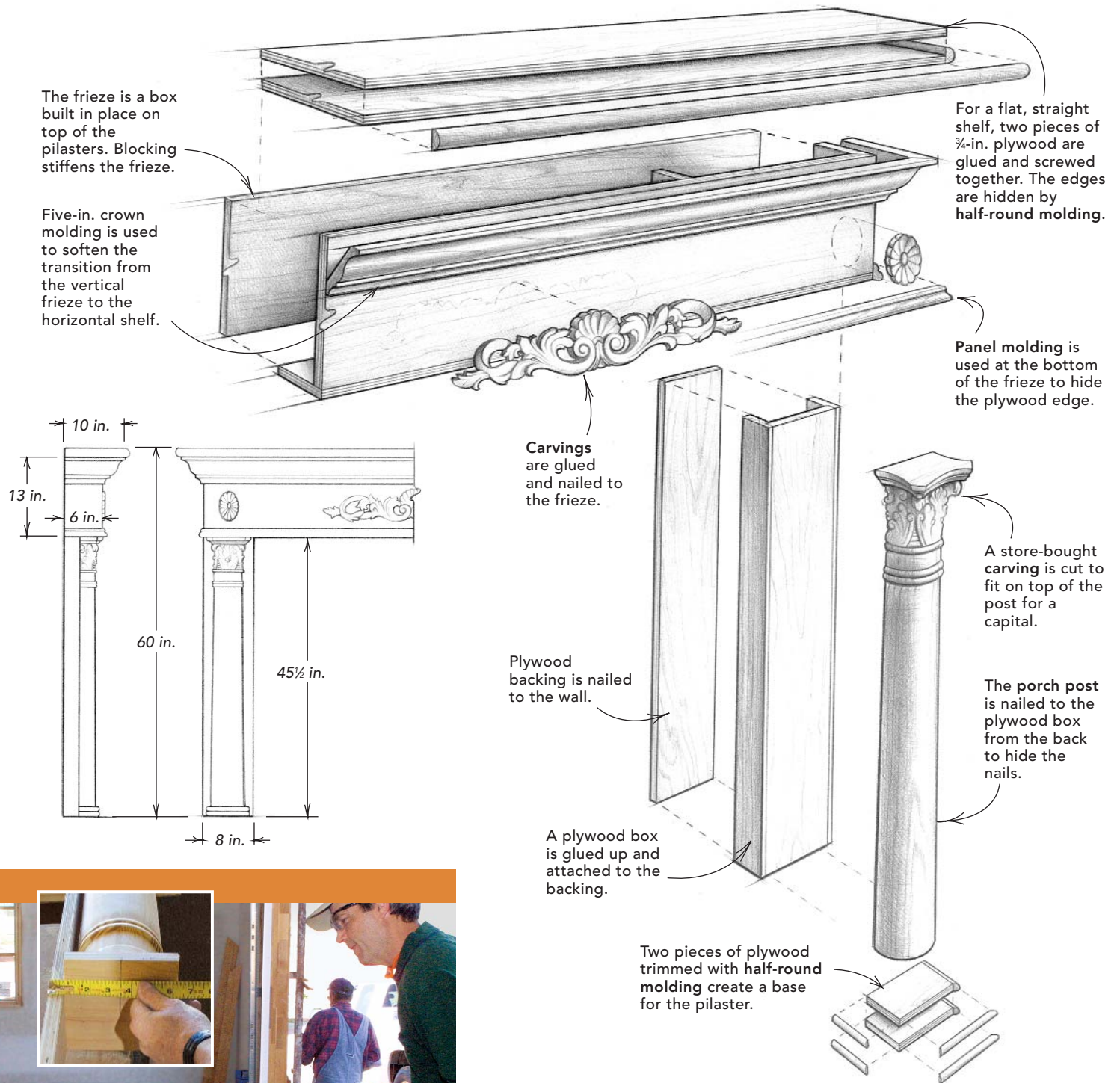
YEAH, BUT HOW DO YOU RIP A COLUMN IN HALF?

First, cut the post to length. Because the porch column is tapered, the author cuts it to the correct length before ripping it (photo right). Then, to rip the post on a tablesaw, the post is centered on square pieces of plywood, and a straight-edge is attached (inset). It takes two passes to cut the thick post, so the author cuts in one direction, then flips the post and cuts the other side in the opposite direction (photo facing page).



STORE-BOUGHT CARVINGS DRESS UP A PLYWOOD MANTEL

Carvings and a porch post decorate this mantel. You would never know the rest of the mantel is made of birch-veneer plywood because the exposed plywood edges are hidden by the moldings.



3 Custom Craftsman

BY SEBASTIAN EGGERT

Quartersawn white oak gives a weighty presence to a Greene and Greene inspired mantel

In the early 1900s, the Greene brothers designed homes and furniture in Southern California that would come to define the Craftsman movement. So when I was asked to design a mantel to complement a collection of Craftsman furniture, I knew where to turn for inspiration. The mantel has a traditional Craftsman look, balancing simple lines with bold features and celebrating joinery. Coincidentally, my assistant, Joshua Greene, built the mantel. But as far as we know, there's no relation.

Authentic look, artificial fireplace

The mantel uses the same aesthetic devices that the Greene brothers used, including hierarchy in the details. For instance, the stiles on the outside of the mantel differ in thickness and width from the stiles in the center. Also, the rails are routed in the traditional cloud-lift shape, and ebony pegs sit proud of the rails to dress up the screw holes. Because the mantel is in a tall room, we added an overmantel. A mirror on the overmantel distracts attention from the overall size of the piece.

The mantel surrounds an artificial fireplace, so the code clearances are only 6 in. Handmade tiles (www.ravenstonetiles.com) line the fireplace opening for an authentic Craftsman look. We selected quartersawn white oak with strong grain patterns for the rails and stiles, and for the panels we used quartersawn white-oak-veneer plywood. □

Sebastian Eggert owns the Maizefield Company (www.maizefield.com), an architectural millwork shop in Port Townsend, Wash. Photos by Charles Bickford.



SHAPING AND JOINING SMALL PARTS

To create cloud lifts, the builder uses a pattern and a bearing-guided cutter to shape the rails. A jig that holds the stock on top of the pattern allows him to shape the small parts safely, keeping his hands clear of the blade (photo right). The curved rails are joined to the stiles with biscuits, but the frame is screwed to the plywood panels. Chamfered ebony pegs hide the screws (photo facing page).



BISCUITS ARE THE JOINERY YOU DON'T SEE

The panel frames, corbel blocks, and base moldings are screwed to $\frac{3}{4}$ -in. white-oak-veneer plywood from the front and back. The square pegs, a customary Craftsman detail, hide the screws. What you don't see are the biscuits that hold the frames together.

