

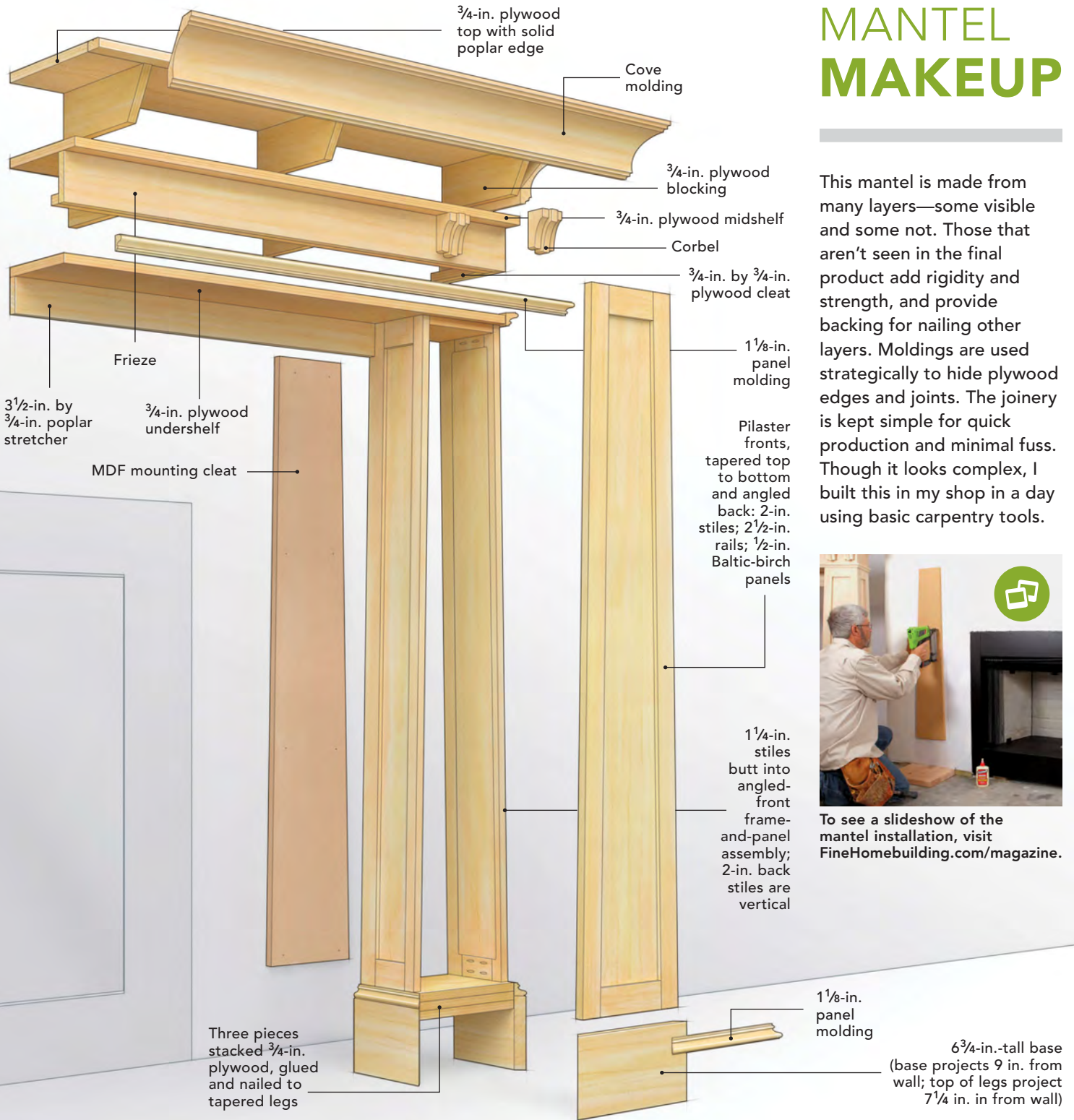
Build a Craftsman-Style Mantel

Simple joinery and layered construction
create a rock-solid, refined centerpiece

BY GARY STRIEGLER



MANTEL MAKEUP



This mantel is made from many layers—some visible and some not. Those that aren't seen in the final product add rigidity and strength, and provide backing for nailing other layers. Moldings are used strategically to hide plywood edges and joints. The joinery is kept simple for quick production and minimal fuss. Though it looks complex, I built this in my shop in a day using basic carpentry tools.



To see a slideshow of the mantel installation, visit FineHomebuilding.com/magazine.

Building mantels has always been one of my favorite finish-carpentry jobs—I'm pretty sure I've built more than 200 of them. I love highly detailed mantels, but a lot of fireplaces today have a simple timber mantel or no mantel at all. So I was thrilled when a client asked me to build what I call a craftsman-style mantel. There are some distinguishing

characteristics of this style, notably tapered columns, straight lines, and the use of stain, rather than paint, to accentuate the use of natural materials. The biggest difference between my version and the original craftsman pieces is the construction. Building with traditional joinery and solid wood is expensive and time consuming. To lower the cost and build time, I used a mix of Baltic-birch

plywood and solid poplar, and put it all together with a variety of fasteners and wood glue. The homeowner loved the finished piece, and immediately asked about adding other trimwork to the job. That is the greatest compliment a trim carpenter can receive. □

Gary Striegler is a trim carpenter in Fayetteville, Ark. Photos by Matthew Millham.

START WITH THE LEGS

The tapered portions of each leg are made from three butt-jointed frame-and-panel sections. After assembling each section's frame, undercut its bottom to match the slope of the taper to cleanly meet the backing for the vertical base.



DRAW THE LEGS Make full-scale drawings of the tapered legs on 1/4-in. plywood to determine the cut angles needed for the rails—in this case, 2°.



GLUE AND SCREW Drill two pocket holes into the back of each rail, apply glue to the ends, and secure them to the rails with pocket screws.



ROUT A RABBET Set the router depth to the thickness of the panel and rout a rabbet around the interior of the back of each assembled frame-and-panel section.



SET THE FRONT PANELS Clip the corners of the plywood to fit in the rabbet, then apply a bead of glue around the panel edge, set it in place, and secure it with 5/8-in.-long crown staples.



ATTACH THE PIECES Apply glue to the side stiles and tack the front assembly to the sides with headless pins.



CLAMP IT UP Make sure to undercut each frame-and-panel section before assembling them into legs. Leave the panels out of the side sections until after glue-up to make space for clamps.



ADD A CAP

Fit a piece of 3/4-in. plywood into the top of each leg assembly, and secure with 1 1/2-in. 18-ga. brad nails.



ADD THE BASE

Glue and nail the base to the plywood backers with 2-in. brad nails.



MAKE THE TRANSITION Add three layers of 3/4-in. plywood to the bottom of each leg, flush all around, for solid attachment of the base detail and panel molding.



COVER THE JOINT Apply 1 1/8-in. panel molding so it just covers the joint between the bottom rail and the first plywood backer.



MARK AND PLUMB

Mark the center of the tapered columns top and bottom, then use a level and shims to plumb them up.



CHECK YOUR WORK

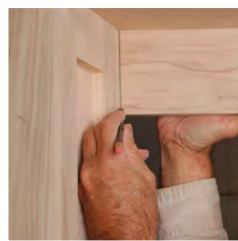
Space the legs apart according to your planned mantel dimensions, and use a level to make sure the legs are in plane, shimming as necessary.

TOP IT OFF WITH THE SHELF

The mantel shelf is built in layers, using moldings to cover the edges of the plywood and joints, and blocking to add strength and backing for nails. Rather than use a tape, I measure and mark everything in place.



JOIN THE LEGS Rip a piece of $\frac{3}{4}$ -in. plywood to match the depth of the legs, cut it to length, and nail it flush with the outside edges of the legs using 2-in. 18-ga. brad nails.



MARK THE STRETCHER Cut one end of the stretcher to match the angle of the tapered legs, then mark the other end in place, cut it to length, and drill pocket holes in each end.



GLUE, NAIL, SCREW

Apply glue to the top and ends of the stretcher, tack it in place with brad nails through the undershelf, and pocket-screw it to the legs.



USE CLEATS Glue and nail cleats of $\frac{3}{4}$ -in. plywood to provide a place to attach the plywood frieze. Mark the frieze in place, miter the corners, and attach it with 2-in. 18-ga. brad nails.



BUTTRESS AND CAP Pocket-screw blocks of $\frac{3}{4}$ -in. plywood roughly every 16 in. into the undershelf behind the frieze to add support for the plywood midshelf. Panel molding attached with headless pins covers the joint and the edge of the plywood.



ADD THE CORBELS Attach the corbels using headless pins through the bottom face of the lower steps and down through the top of the midshelf. The midshelf projects $\frac{1}{2}$ in. from each side and $2\frac{1}{4}$ in. from the frieze to extend $\frac{1}{8}$ in. beyond the corbels.



See how it's done

For a slideshow of the corbel-making process, visit FineHomebuilding.com/magazine.



RIP THE COVE Change the spring angle of standard cove to make it sit more vertical by ripping a steeper angle on the back bottom edge. I cut this to 60°.



ATTACH THE COVE If working alone, tack a support block to the underside of the midshelf to support the cove at one end, align the other end to the corner of the midshelf, and attach the cove with 1³/₈-in. or longer headless pins along its length.



FIT AND FASTEN Assemble the cove's miters with glue and headless pins before fastening the cove's returns to the midshelf. When fitting pieces like this cove, mark them in place to get their lengths spot on. Cut the miter at one end to start, then mark the other end in place—both for the long front piece and the shorter side pieces.



ASSEMBLE THE SHELF This top shelf is 3/4-in. plywood edged with 1 1/2-in.-wide shop-made poplar molding glued and pocket-screwed to hide the exposed edges.



SAND AND DETAIL A couple of sawkerfs add some detail without a lot of fuss. The sawkerf at the edge of the molding also obscures the joint between molding and plywood.



ADD BLOCKING AND SHELF Cut blocking at an angle to match the angle of the cove to provide additional attachment points for the cove as well as support and nailing for the top shelf. Finish by pinning the cove to the top shelf.