

ON SITE WITH POLYMER MOLDINGS

For complex profiles, this lightweight foam trim can be a cost-effective alternative to wood or plaster

by Peter Schrader



STYLE-MARK

Contractors are used to working with wood, so when they first hear the term “polymer moldings,” they’re often skeptical. But my company has been selling and installing polymer moldings for more than 11 years. We’ve found the material to be easy to work with *and* reliable.

Polymer moldings are manufactured from a high-density polyurethane foam that is cast in a silicone-lined mold. As the castings cure, a smooth outer skin forms. The cured molding receives two coats of factory-applied latex primer. The final product has an impact resistance similar to that of white pine, but is much lighter in weight, with a density ranging from 12 to 20 pounds per cubic foot. The moldings can be used for interior and exterior applications and are available in nearly 100 profiles of running trim. Door and window pediments, decorative brackets, louvered vents, decorative panels, wall niches, and ceiling medallions are also available, depending on the manufacturer.

Better Than Wood?

Polymer moldings offer certain advantages over wood. They won’t rot, and changes in humidity do not cause the swelling and shrinkage that often creates the most visible problems with wood trim.

Using polymer moldings also saves on labor. Unlike ornate wood moldings, which are often built up using smaller pieces of trim, polymer trim is manufactured as one piece. The installer needs to cut, fit, and fasten only one piece of trim instead of many. When the installed cost of polymer molding is compared with carved wooden moldings or ornamental plaster trim, there’s just no contest — polymer molding can be installed at a significantly lower cost. Depending on



One-piece polymer molding offers huge labor savings over ornate plaster or built-up wood trim.



Polymer moldings cut easily with a hand-saw, though the author prefers a 15-inch chop saw.

the situation and the complexity of the molding profile, the savings can range between 10% and 50%.

Choosing a Supplier

There are a number of manufacturers of polymer moldings, and while there is little difference in their respective manufacturing processes, lead times and reliability can vary widely from one supplier to the next. For running trim, we've had good success using Focal Point. We seldom have to wait more than a week to ten days for an order to be delivered, and our distributor keeps a wide range of molding profiles in stock. (For a list of suppliers, see next page.)

For us, deciding what lengths of trim to use is easy, since the majority of the moldings we use are only available in 12-foot lengths. Some profiles are also available in 8-foot and 10-foot lengths,

and a few are available in 16-foot lengths.

To calculate quantities of running trim, I make a sketch of the areas to be trimmed, and note the required length for each run of trim. By combining appropriate lengths, I can optimize the yield from a 12-foot length of molding. Depending on the width and pattern of the molding, I'll add 6 to 12 inches to the noted lengths for each miter cut or pattern-matching butt joint. The moldings can vary up to 2 inches in length, so we're careful not to rely on every piece being a full 12 feet long.

Working With Polymer Moldings

Working with polymer molding isn't at all difficult, but it is a little different from working with wood. We use the same tools as when we work with wood moldings. The molding can be cut using

a fine-toothed handsaw, but we prefer to use a 15-inch Makita chop saw equipped with a standard trim blade. To save time, we fasten the trim using pneumatic finish nailers, but a hammer and finish nails can also be used.

No grain, no pain. We use a hand plane to quickly remove material from the edges of the molding or fine-tune a miter cut. The first time carpenters take a plane to the polyurethane core, they're surprised to find that the feel is similar to wood (although it requires much less effort to remove material). Since there is no grain, the molding can be planed from any direction.

Power planes and jointers can also be used to work the trim, and we often use a belt sander to remove material when scribing a piece of trim to an irregular surface or adjusting a miter cut. The 80-grit belts we use take an aggressive bite, though, so the belt sander must be fed into the workpiece carefully.

Joints and attachments. The most significant difference in working with polymer molding is the way the pieces are joined together and fastened to the wall. Adhesive, not nails, is used to bond splices and miters together, and to secure the molding to walls, ceilings, and soffits. Most manufacturers supply a proprietary adhesive for this purpose that is applied with a caulking gun. The Focal Point adhesive that we use is about the same consistency as any cartridge adhesive, but it has such good bonding characteristics that our installers have been using it for most other applications where a general-purpose adhesive is needed.

It's important to spread a generous bead of adhesive over the entire mating surface of both parts. There should be ample squeeze-out as the joint is drawn together; excess adhesive can be removed with a putty knife before it cures. The surface cleans up with mineral spirits. A small amount of adhesive will continue to squeeze out of the joint after assembly, and it's often necessary to double back with the mineral spirits.

The adhesive cures in 24 hours at room temperature and it can be used at temperatures as low as 10°F. Below room tem-



One-piece moldings are mitered, not coped, at inside corners. Nail and screw holes are filled with a spackling or glazing compound. Properly finished joints are invisible after painting.

perature curing slows, and it may take three days or more to reach full strength.

Just before installing a piece of molding, we apply a bead of adhesive along both edges of the molding where it will come into contact with the wall, ceiling, or soffit. We press the molding in place, and use our finish nailers to fasten the molding along both edges. It's the adhesive that we rely on for the long-term connection, however: After the adhesive cures, the nails are just along for the ride. We also use the finish nailer to pull and hold outside miters together as the adhesive cures.

No Need to Cope

When working with wood moldings, inside corners are generally coped, and long runs of trim are spliced using scarf joints. With polymer moldings, however, we use a butt joint to splice running trim, and all inside corners are mitered, not coped. (The smooth outer "skin" that forms over the urethane foam core does not lend itself well to feathered edges.) We cut our running trim $\frac{1}{8}$ to $\frac{1}{4}$ inch long and "spring" it into place. This ensures that ample pressure is applied at the joints as the adhesive sets. Joints that are assembled

properly will not open up over time. In fact, I've returned to many past jobs and have not been able to locate any seams.

Filling gaps. After the adhesive has set (we usually let it cure overnight), we fill any gaps, hammer dents, or imperfections with either DAP vinyl spackling compound or joint compound. The smooth texture of joint compound is ideal for filling shallow depressions and small gaps. We use spackling compound for large gaps or areas that need to be built up, and we also apply a coating of spackling compound to any areas of the foam core that become exposed during tooling.

DAP glazing compound works best for filling nail holes — the material doesn't shrink, and the filled holes don't require sanding or spot priming before painting. We use a good-quality paintable latex caulk to fill any gaps at walls, ceilings, or soffits.

Painting and Staining

The polymer molding is primed at the factory with a vinyl primer that will accept latex or oil-based finish coats. The factory prime coat is first-rate and can easily be mistaken for a finish coat of paint. We spot-prime all joints and any areas where spackle has been applied to ensure that the finish coat will dry evenly and display a uniform sheen.

A simulated wood grain finish can be produced by applying stain over a beige primer coat (factory-applied beige primer can be specified at no extra cost). Proper staining technique requires a little practice, but can be picked up quickly by a painter with average skill. Some molding styles can be ordered with a factory-applied wood grain finish.

A dramatic faux marble finish is also possible, but you'll need to find a finisher experienced in this technique. Each painter will have his or her own marblizing style, and preparing a few sample pieces for the customer to approve is always a good idea. ■

Peter Schrader is president of Schrader and Company in Burnt Hills, N.Y. Peter and his shop manager, Robert Page, have been installing polymer moldings since 1985.

Sources of Supply

Flex Trim Industries, Inc.

11479 Sixth St.

Rancho Cucamonga, CA 91730

800/356-9060

Focal Point

P.O. Box 93327

Atlanta, GA 30377-0327

800/662-5550

Fypon, Inc.

22 W. Pennsylvania Ave.

Stewartstown, PA 17363

800/537-5349

Nu-Wood

P.O. Box 489

Goshen, IN 46526

800/526-1278

Outwater Plastics

4 Passaic St.

Woodridge, NJ 07075

800/789-5322

RAS Industries

12 Eighty Four Dr.

Eighty Four, PA 15330

800/367-1076

Style-Mark, Inc.

960 W. Barre Rd.

Archbold, OH 43502

800/446-3040