

PVC TRIM



Fastening & Finishing PVC Trim

The best ways to get the most out of this popular material

BY JLC STAFF

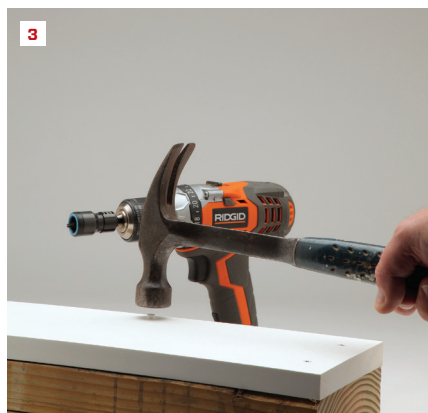
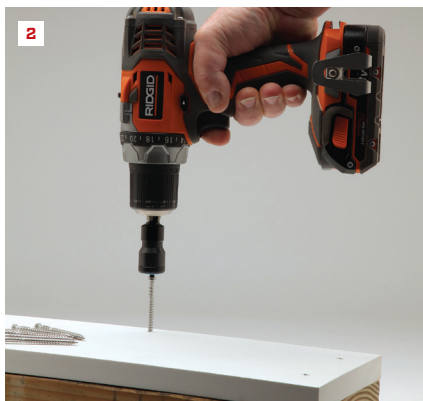
Ask five different carpenters from around the country how to frame a wall and chances are you'll get five different answers, each one with a good logical explanation behind it. In talking with our authors over the years, we noticed the same thing when they described how they install and finish PVC trim. We have taken their varied opinions on the subject and put them into this article, but we would welcome additional input from other readers who work with PVC trim.

While PVC trim is available in most parts of the country, its use is most widespread in the cold and wet Northeast. It has become the trim material of choice with many contractors who build homes in

places that are subject to harsh weather such as coastal areas. But because of its durability, low maintenance, and easy installation, use of PVC trim is bound to increase, especially as builders and subcontractors get used to working with it. Cutting and milling PVC is as easy as working with wood—maybe easier, given that PVC trim has no grain or imperfections.

FASTENING PVC TRIM LEFT UNFINISHED

Every PVC trim manufacturer states that its products do not require paint for protection—one of the major advantages that PVC has over wood. And most of the builders and remodelers we spoke



with have installed PVC trim that was left unfinished. Josh Buesking, owner of Louisville Exteriors, in Crestwood, Ky., says that he often leaves the PVC trim he installs unfinished and has had no complaints. He even left it unfinished on his own home (1). John Spier of Spier Construction, in Block Island, R.I., installs PVC trim in the harsh marine environment of the island and often leaves it unfinished. He reports that most of the failures he sees are a result of installation faults, not material defects.

Many builders fasten unfinished PVC trim using stainless steel or exterior-grade screws, driving the screwhead flush with the surface of the board. Frank Caputo, a general contractor in Cool, Calif., often uses GRK RT Composite Trim Head Screws. These screws have a reverse thread below the head that keeps the material from mushrooming out as the screw is driven. GRK offers its composite trim head screws in white to make them less visible.

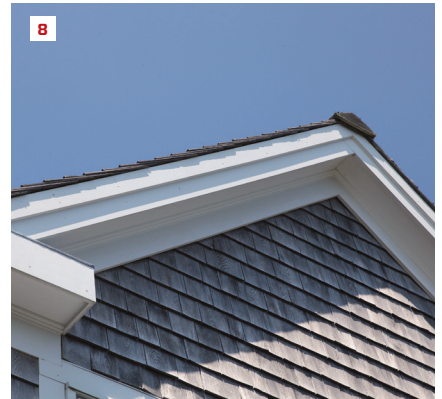
But drive the screw flush and you still see the screwhead, even if it's white. Concealed fastener systems solve that problem by using self-countersinking screws and special bits that drive the screws to a specific depth (2). As you drive the screw, it cuts a hole in the PVC that is concealed with a small cylindrical plug of the trim material that

slides into the hole and is tapped flush to the board surface with a hammer (3). These systems have been around for a while for fastening composite deck material, but they also work well for PVC trim.

One widely available system is Cortex, made by FastenMaster, and every builder we talked to has used Cortex for attaching PVC trim. Tom Struble of Struble Siding, in West Milford, N.J., says that Cortex is his fastener of choice, although he has also used other systems with success. ProPlug, introduced this spring by Starborn Industries, is another concealed fastener system. It works in a similar way to Cortex, but one notable difference between the two systems is that ProPlug warns against using an impact driver, instead requiring a standard drill to drive and set its screws to the proper depth; Cortex, on the other hand, says that either tool can be used. Most carpenters we know use impact drivers to drive screws, something to be mindful of if you opt for the ProPlug system.

One key to success when using either of these systems is driving the screws perpendicular to the surface of the trim (4). This may not be an issue when fastening door trim with both feet on solid ground, but it may take more focus to drive a screw straight into a rake board when you're up on a ladder with your arms fully extended.

Photos: 1, Josh Buesking; 2-5, Roe Osborn



NAILING UNFINISHED PVC TRIM

Concealed fastener systems make the fasteners almost invisible, but driving the screws and plugging the holes may take more time and effort than you're willing to spend. Some contractors use nails as well as screws to fasten PVC trim. Azek, one of the best-known manufacturers of PVC trim, recommends using the same nails—either stainless or galvanized—that you use to fasten wood trim or siding. These nails should have a thin shank, a blunt point, and large head.

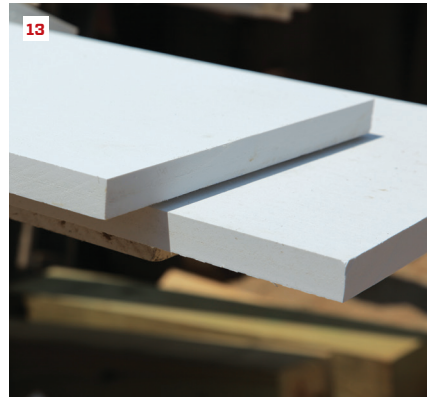
Nails can be driven by hand (5), but if using pneumatic tools (6), Azek specifies that you should use fasteners with a full round head (instead of clipped-head or finish nails), and that you should set the pressure so that the nails are set just below the surface of the board. Because of the consistency of PVC trim, it should be easier to dial in the gun pressure than when nailing into wood. John Goodrich, a project manager for Rick Roy Construction, in Harwich, Mass., cautions to always use pneumatic nails that are plastic collated. Wire collation doesn't always break off cleanly and any remaining pieces of wire can rust and discolor the trim, especially if you are leaving it unfinished (7).

But we're still talking about not painting the PVC trim, so nail

heads are as visible as the screwheads mentioned earlier. Spier says that he just tries to maintain a neat nailing pattern as he drives the nails (8). He sometimes uses nails with white heads that are less visible than nails with stainless heads. The problem with white nails is that your hammer can chip the paint off when it hits them. To get around this, John's crew uses plastic hammer caps from Maze Nails. These caps only cost a couple of bucks and each of his carpenters can run through a dozen or so on a typical house. Ironically, the better you are with a hammer, the faster you go through the caps because you always hit the nail near the center of the hammer head.

GLUE, FASTENERS, OR BOTH FOR JOINTS?

Another plus in working with PVC trim is that the PVC adhesive chemically welds the pieces together, creating a very strong bond. In contrast, most glues that join two pieces of wood together depend on a mechanical bond. But if the PVC adhesive creates such a strong bond, do you even need to use fasteners at joints? Buesking, of Louisville Exteriors, says that he usually uses one or the other, rarely both. Even with miters, if he can get a screw into the framing near the joint, he finds that the joint stays pretty tight without glue.



The biggest drawback to PVC trim is that it expands and contracts with temperature changes, and allowing for this movement can have a bearing on how joints are assembled. Rick Roy Construction's Goodrich says that for long lengths of fascia, he and his crew always use a scarf joint or "weather cut," but that they leave the joint unglued (9). This angled cut allows the board to expand and contract without visually opening up. Also, on north-facing sides of the building that don't get prolonged sun exposure, Goodrich's crews fasten PVC fascia directly to the rafter tails, but on southern exposures, they install a wood subfascia or blocks between the rafter tails to keep the fascia more stable (10).

Spier uses both fasteners and glue on most joints. He doesn't glue butt joints in soffits and he also leaves the lap joints in long lengths unglued. He says that he sometimes uses plastic biscuits to help align the pieces on some joints.

Every PVC trim manufacturer sells its own PVC adhesive, but there are also many professional-grade PVC adhesives available. Most trim manufacturers have a list of adhesives that they recommend for gluing their trim, so make sure that the glue you're using has been approved for the trim you're installing. Adhesives such as

Bond & Fill's Quick+Easy are thick and can fill gaps as well. These adhesives are also sandable and paintable.

When gluing PVC trim, you should apply adhesive to only one surface and then hold the pieces together for the recommended setting time. Trim manufacturer Versatex says that using glue on both surfaces prevents the cells from fusing in a molecular bond.

TREATING UNFINISHED EDGES

Goodrich showed us houses with unfinished PVC trim that his company had built more than 10 years ago (11). The trim looked great, with the exception of some cut edges, which showed a bit of discoloration (12). He said that the reason the discoloration occurs is because when you rip PVC trim, you expose the open interior cells (13). Moisture then gets into the open cells, which allows mold and mildew to develop over time.

In a 2012 article in *ThisIsCarpentry*, John Pace, the president of Versatex, says to take care not to damage the surface of the board. "To seal cut edges or clean a cut edge that has gotten dirty, sand them with 320-grit sandpaper, then wipe the edges with acetone—this will help to re-seal the cells." But the jury seems still to be out

Photos: 11-14, Roe Osborn; 15, Carter Silva



on sanding PVC trim. Spier says that a better alternative is using a sharp hand plane to smooth cut edges. Either way, wiping the cut edge with acetone will reseal the cells. Also, installing any type of trim, such as around windows, requires using sealants. With PVC trim, always use a polymer-based sealant; every PVC trim manufacturer cautions against using silicone-based products.

PAINTING PVC TRIM

Although it's fine to leave PVC unfinished, many contractors like the added protection of paint. And if you want a color other than white, painting is your only alternative. Struble, of Struble Siding, says that more than half of the PVC trim he installs gets painted.

Painting PVC also helps to hide the fasteners. A concealed fastener system such as Cortex works fine, but if the surface will be painted, there are other ways to fill the fastener holes that are quicker and easier. The painters on Goodrich's crew use automotive Bondo to fill both screw and nail holes, applying it to each hole, then sanding it flush after it cures (14). Struble uses an exterior spackle to fill holes before painting, but Caputo in California says that in his experience, the spackle tends to crack and break down more quickly.

Manny Silva of Silva Lightning Builders, in Andover, Mass., always paints the PVC trim he installs because most of his clients want colored trim. Silva has a unique way of dealing with the fasteners. He drills countersunk screw holes for all of his screws using a W.L. Fuller countersink bit. After driving stainless screws, he fills the holes with PVC plugs that he makes himself during downtime (15). He adds a dab of PVC adhesive to each plug before tapping it into place (16). When all the plugs are in, he saws them flush with a Japanese saw (17), and sands everything before painting.

Scott Burt who owns Topcoat Finishes, a painting company in northern Vermont, uses exterior grade vinyl spackle to fill fastener holes (18). Before the spackle sets, Burt wipes around each filled hole with a damp rag to remove residue that can be visible when painted (19). After sanding, he paints the trim with a high-quality self-priming 100% acrylic paint (20).

When painting PVC trim, always choose a color with a high light reflective value (LRV). The lighter the color, the higher the LRV number and the less light (and heat) it absorbs. Because PVC trim can expand and distort as it absorbs heat, manufacturers all recommend using paint with an LRV of 55 or greater.