

Trimming the Roofline

Clean lines and durable details depend on careful framing and a systematic installation sequence

BY JOHN SPIER

I once took a prospective client to see two almost identical houses, one with economically minimalist trim and the other dressed up a bit with larger overhangs, elegant returns, and other exterior-trim details. I had to show her the plans and take out my tape measure to convince her that she wasn't looking at two very different houses. Needless to say, she invested more of her limited budget in exterior trim, and that decision paid off in an attractive small house.

The detached garage shown here is a similar example. No one will live in or even live next door to this utilitarian structure, but it sits in a beautiful neighborhood and doesn't deserve to be ugly. I dressed up the rooflines with simple, inexpensive 1x and 5/4 trim stock, Azek (www.azek.com) in this case (sidebar p. 57).

Exterior trim isn't quite as fussy as interior finish work, but on the other hand, it has to withstand weather extremes, shed water, and look good. Success is a combination of good design and attention to detail.

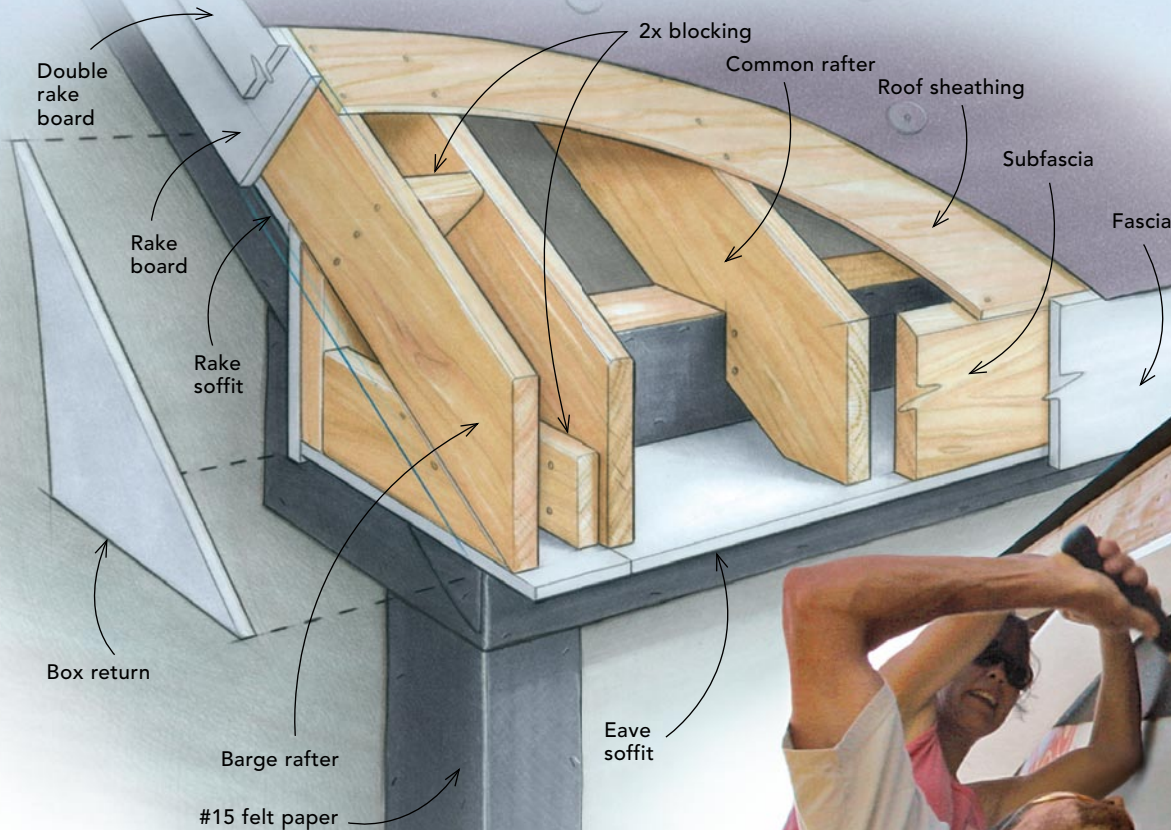
Good roof trim starts with the framing behind it

I frame the buildings that I trim, so the only person I can blame for a poor framing job is me. To help the trim installation run smoothly, I cut rafter tails care-



SMOOTH TRIM starts with good framing

I take the time to check the framing for problems and to correct anything bowed or out of square before installing trim. I also like to incorporate felt paper or peel-and-stick flashing to protect the structure anywhere that water could get through the trim or siding. This is especially important at the peaks behind corner boards and at the places where walls meet soffits. I also like to start the trim installation at the eave soffits, moving from one return to the other, then up the rake soffits toward the ridge so that each trim element sheds water over the previous one.



Why I nail by hand

There are a number of problems with using nail guns to install exterior trim. Smooth-shank nails don't have the holding power to keep exterior trim stable, and **I have yet to find any gun that consistently sets ring-shank nails flush in clear or unpainted trim.** If you adjust the gun to set nails in paint-grade trim, it sets most of them too deep, which reduces holding power, makes the painter's job much more difficult, and leaves the trim vulnerable to water damage. Also, both plastic-collated and wire-collated nails often leave protruding bits even when the nail heads are set; these little pieces of shrapnel provide another path for water intrusion as well as a laceration hazard for the fingers of the person puttying and sanding. Finally, in most cases, **hand-nailing with 2-in. 6d nails gives me better control when fastening joints and miters** and otherwise pulling things together. The exception to all this is when I'm assembling trim built up with multiple parts, where many of the fasteners are covered and the small profiles are best nailed pneumatically. Whether you're driving nails by hand or by air, be organized about nail placement; it looks better and makes work easier for the painter.



Edge joints



The only time I use butt joints on exterior trim is when piecing together eave soffits. PVC doesn't get putty and paint, so I chamfer the edges with a block plane to soften any potential shadowlines from a joint that isn't perfectly matched. To help shed water, fascias are pieced together with scarf joints (drawing right), and the rakes are oriented so that the upper piece laps over the lower one. Leave the outer bevel just a whisker long; then force the joint in place.

45° scarf joint on rake board

Reveals



To help keep the reveal on the fascias and returns consistent, I rip a 3/8-in. gauge block that I keep in my tool belt throughout the installation. I use it as a reference when measuring the height of the rake boards and again as a guide when assembling the fascias and returns.

fully, add blocking where necessary, and use solid, straight material when framing subfascias and barge rafters. Finish carpenters who show up long after a subpar framing job is complete aren't as lucky. It's tough to make trim look good when the framing is bowed or twisted. Even though I've framed the building, I still check for problems and correct anything bowed or out of square before installing trim. I also like to incorporate extra waterproofing anywhere that water could get behind the trim or siding.

Set up shop, and get organized

Before I start trimming the roof, I set up my tools close to the pile of trim stock but far enough out of the way to give me space to slide and swing long boards. My favorite places to set up are in an upstairs with no interior walls or in a large attached garage, but outside is fine, too. For basic trim, I need only a sliding miter saw, a tablesaw, and a few handheld power tools. For staging, it's nice to have planks at a good working height below the eaves; on tall gable ends, pump jacks or house brackets are good options. On a small building such as this one, an assortment of ladders is just as quick and easy. The ideal trim crew is three people, one to cut and two to measure and install. If speed isn't crucial, two can do it, and I've hung plenty of trim alone, using simple site-built jigs to support the long end of the boards.

Work from the bottom up

Old-timers love to say "Think like a raindrop," and I do this by starting at the bottom and working up so that each trim element sheds water over the previous one. I trim the eave soffits first, working from one return to the other, then moving up the rake soffits. Next, I install rake boards and finally fascias. I always make the hard cuts and hang the longest pieces first, then cut and fit the shorter pieces.

This garage didn't need roof vents, so the eaves have soffits made with

full-width 1x10 stock; typically, they would be done with two rips and a vent strip. Either way, keep the outer edge straight, the corners square, and all the boards either flush with or slightly proud of the framing.

All the rake boards, fascias, and returns need to have a consistent reveal below the soffits. I find that a 1/4-in. reveal is unforgiving and a 1/2-in. reveal looks clunky; to me, 3/8 in. seems just right.

The easiest way to mark and cut a rake board is first to cut and fit the board at the peak, then to hold the board in place and mark the bottom end plumb cut at the edge of the subfascia. I align my saw to the compound bevel and follow the marked line on the back of the rake board. If there is any doubt about the angle of the plumb cut, fine-tune it at the ridge using a couple of test pieces; as long as you don't change the saw setting between cuts, the same angle at the eave will be plumb.

Because they are square at both ends, the fascia boards are easy to measure and fit. If you've made the soffit and return corners square and proud, and you've cut the fascias just a hair long and the miters at 46°, then the joints will look like they belong on a piece of cabinetry.

Finally, I add a 1x4 member on the rakes to soften the look of the trim, to add a shadowline, and to provide extra drip protection.

Box returns dress up the trim

For this garage, I built basic box returns just a bit wider than the corner boards. I prettied them up by using what I call the "Rubbermaid radius," traced from the rim of a job-site garbage can, but a simple plumb cut or an angled cut can look good, too. Cornice returns (see "Master Carpenter," *FHB* #185 and online at FineHomebuilding.com) are a classier approach, but they involve flashing and other needless complications for a garage like this. □

John Spier is a builder on Block Island, R.I. Photos by Justin Fink.

BOX RETURNS dress up the corners

For this job, I installed a dressier version of ordinary box returns by replacing the standard plumb cut with a sweeping curve. I call this variation a "Rubbermaid return" because after I mark an oversize piece of trim to locate the plumb portion of the soffit, I trace the curve using the top of a job-site trash can. A fine-tooth jigsaw blade works well for cutting this curve in wood trim, but on PVC trim, it does more melting than cutting. A coarse-tooth jigsaw blade is best for PVC because it creates bigger chips that don't melt and a wider kerf that doesn't clog.



Flush fascias

The fascia boards should never project higher than the plane of the roof. Depending on the roof pitch and the width of the trim board, you might be able to drop the trim a bit, tuck the top under the roof's drip edge, and still manage to get the right reveal on the soffit. In this case, I had to bevel the top edge of the fascia.



Tight miter joints

I leave the rake boards a bit long, hold them in position, and mark them for a more accurate cut. I keep this cut plumb (photo above left), even if the framing underneath isn't perfect. If the rake board isn't plumb, the miter won't come together correctly. The real key to miters that stay tight over the long haul is to allow for framing movement. To do this, I cut miters at 46°, fasten together the two halves of the miter joint (photo above right), and nail into the edges of the underlying soffit boards. I never nail directly into the framing on either side of the joint. This way, the corners can float as the framing moves.



Double rake detail



To hide any irregularities in the rake boards, such as gaps caused by rafter crown, I install a double member. I measure up from the bottom edge of the rake boards and snap a chalkline to guide the installation. If I know there will never be a gutter, I use a beveled double member on the fascias as well. If you use this detail, remember to allow visually for the coverage of the drip edge when sizing it.

PVC trim has its place

As a carpenter, I'll never love PVC as I do wood, but for some jobs, it just makes sense. Close up, it looks like what it is—plastic—but on the plus side, the trim on this little detached garage will never need to see a painter or a scraper, or require rot repair. Some carpenters have become real artists with synthetic materials, calculating their joints based on ambient temperature, using adhesive at every seam, and assembling details that rival the best of the Victorian Era. There's nothing wrong with that, but here, I've essentially treated it just like wood. I adjusted my thinking and techniques only slightly to accommodate the fact that PVC expands and contracts lengthwise rather than crossways. Remember, if you do install wood trim, don't forget to prime or seal every side, edge, cut, and joint before installation.

I fasten the returns by nailing into the edges of the other pieces of trim, but not into the framing. The top edge of the return should be nailed carefully to avoid splitting. Finally, I use the bottom edge of the return as a gauge to cut off the overhang of the rake board (photo right), then ease all the adjoining edges with a block plane.

Returns

