

Installing Baseboard

There's a tad more to it than coping the joints

by Bob Syvanen

Baseboard installation is often done badly. Why? Probably because it comes at the end of the job, after the crowns and casings, and carpenters are anxious to wind things up so they can get on to new projects. Or it may be because it's uncomfortable work done on hands and knees, with a lot of getting up and kneeling down. But maybe it's just because a lot of carpenters don't know how to do it right.

Shapes and styles—Baseboards are used to cover any gaps that occur at the juncture of walls and floors, and they also protect the lower wall from dings and scrapes. Visually they give weight, definition and presence to the wall, working with the crown molding and corners to "frame the wall." Baseboards are usually made of the same wood that's used for trim elsewhere in the house, and they can be either hardwood or softwood. The central part of the back face of baseboard stock is plowed away, like casings, to help it lie better against the wall. Baseboards, however, are usually thinner than casing stock. This is because casing frequently has a rounded outside edge, and a somewhat thinner baseboard can be butted against this edge without looking awkward (for more about door casing, see *FHB* #30, pp. 55-57).

Standard baseboard comes in a variety of shapes and sizes, and custom shapes can be made in the shop with a table saw, router or

shaper. Another way of getting a unique baseboard profile is to assemble it from combinations of standard moldings, as shown in the drawing below. There's really no end to the shapes that can be achieved when two or three-piece combination baseboards are used.

Coping the joint—Many of the techniques for cutting, fitting, nailing and finishing baseboard are similar to those required for casing. But the miter joint used so frequently for casing tends to open up on the inside corners of baseboards. A much better baseboard joint for inside corners is the coped joint.

A coped joint requires a different cut on each of the two boards to be joined. It involves some miter cutting, so a backsaw and miter box or a power miter box are required. Though I've cut miters by hand for years, I like the power miter box because it's fast, but doesn't sacrifice quality. You'll also need a coping saw. This small tool with a spring-steel frame looks like a C-clamp with a wood handle, and has a slender, fine-tooth blade stretched across the mouth of the C.

Cutting the first board in a coped joint is easy—just cut it square so it fits tight into the corner of the wall. The second board is coped. To begin a coped joint, miter the board vertically, as if you were going to make an inside mitered corner. When you're done, look closely at the front edge of the cut—it will reveal the baseboard's profile, and will serve as a guideline for making the second cut on the board. I rub the edge of the cut with the edge of a pencil lead to make it more visible.

To complete the cope, support the board, front face up, so that the end to be cut hangs just beyond some solid support—a workbench, sawhorse or cricket (a cricket is a portable step turned mini-workbench). Then, with the saw blade nearly perpendicular to the bottom edge of the board, cut along the pencil line, following whatever curve is indicated (drawing, facing page, left). While cutting, incline the saw slightly to put an angle on the cut. The angle should slope away from the front surface of the board, and will help the lead edge to make good con-

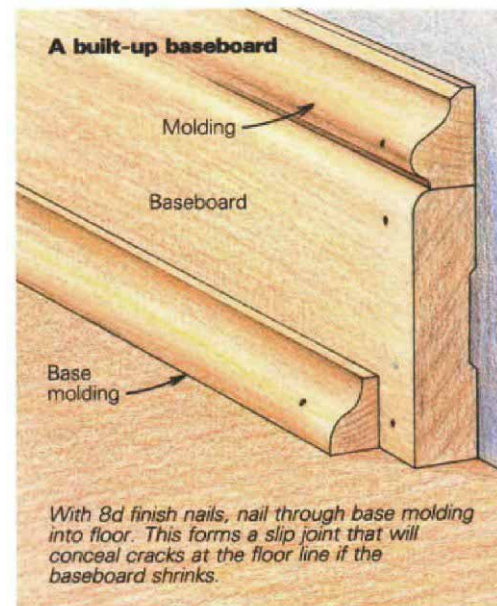
tact with the square-cut board when the two are brought together. If the baseboard has a flat top edge (like the one in the drawing), this edge should be square cut—an angle would show as a gap. If you've made the cut correctly, the end of the coped baseboard will slip right over the square-cut end of the one you installed earlier. This technique will work on just about any baseboard, and can also be used to fit ceiling molding. It sometimes requires a little adjustment with a sharp chisel or utility knife.

Installing standard baseboard—If there's a simple choice between a long, unbroken wall and a short one, I start the installation with the long one. It's easier to get a good fit with a long piece of baseboard than with a short one, and you'll see why in a moment. I also try to minimize any possibility that people will see a poorly fitted corner joint (if one happens to slip into the job). To do this, I like to install the first length of baseboard on the side of a room that's opposite the door. The baseboard on the adjacent wall will conceal the imperfect joint so that it won't be visible when someone first enters.

Let's assume that you've chosen to start on an unbroken wall that can be fitted with a single length of baseboard. Begin by measuring the wall, making sure to take your measurements at the floor level. Walls aren't usually in perfect plumb, so the measurement will vary depending



When baseboard must be fit to door casing, a measuring block (photo left) makes it easy to mark the baseboard to length. Built from scrap wood to fit the particular baseboard being installed, it is placed against the outside edge of the casing and over the baseboard, and a cut line is then scribed on the baseboard.



on where you take it. Select a straight length of baseboard and clean up one end by cutting it square. Use the wall measure you took to find the other end and cut it square also. The cut should allow a snug fit, particularly at its top edge where it will be visible. Test the fit on the wall, trim off a tad if necessary and nail the piece in place. If you have to splice lengths of baseboard on long walls, a vertical scarf joint (overlapping 45° miters) is the best to use.

Nail through the baseboard and into the studs, using 8d finish nails top and bottom. Use as many nails as necessary to get the baseboard to pull tight to the wall. Studs can be located before setting the base in place by probing with a nail driven through the finished wall (the baseboard will cover the holes). Mark the locations above where the top edge of the baseboard will be with a light pencil mark so they won't be obscured when you set the baseboard in place.

With this done, you can begin work on the adjacent length of baseboard. This one gets a coped cut at one end and a square cut at the other (this same combination of cuts is used when a baseboard has to be fit between a door casing and another baseboard). First, cope the end that will butt against the board you just nailed in place, and check it for a good fit. Then measure to locate the square cut at the other end. The fit should be snug, but not so tight that it cracks the plaster or drywall when you nail it in place.

To get just the right amount of snugness on long boards, cut them a tad long so that the middle of the board will be bowed out from the wall when you put it in place. The amount of bow depends on the length of the baseboard you're installing, but it's usually about a finger's width, measured midway between the ends. But you shouldn't have to force it—a gentle push and the baseboard should snap into place as it nears the wall. Take particular care when you're fitting baseboard to the casing of a door. As you spring the baseboard into place you don't want to push the casing out of position. If the fit looks good at both ends, nail it in place. Keep work-

ing your way around the room until all the baseboard is in place. There may be times when you have to fit a baseboard between baseboards on opposite walls. If you do, just cope both ends and snap it into place.

For fitting baseboard to door casing, I use an L-shaped block (photo facing page) to help me mark an accurate cutline. By holding the top of the block against the edge of the casing and marking down the leg onto the baseboard, I get a precise measurement. With one end coped, slip the baseboard into place, allowing it to run slightly long past the casing on the other end. Place the block against the outside edge of the casing and over the baseboard, and mark a vertical line for the square cut. A cut made a tad outside this line will give you just enough extra length to spring the board into place.

Other joints—Coping doesn't work on all baseboard profiles. Simple rectangular baseboard, the kind with a rounded upper corner, just doesn't look good with coped joints because the abrupt curve makes for a very fragile overlap on the adjacent baseboard. Instead, I use a combination butt and miter joint for inside corners (drawing, below right).

The trick here is to make a mitered lap joint at the top edge of butting baseboards. Begin with a square cut at the end of one baseboard. Miter the top edge with a finish saw, cutting to the point where the rounded corner ends, and follow this with a cut at 90° to the first. This will release a triangular piece of wood. At the end of the second baseboard, make a miter cut that corresponds to the first, again just to the bottom of the rounded edge. Then turn the baseboard over. Working from the bottom edge, make a square cut that's angled just a tad away from the front of the workpiece. This cut should be stopped at a line scribed off the baseboard already in place, because there isn't much room for adjusting this joint. This is a much better-looking joint than a butt joint or a coped joint, though a butt joint can be okay when molding is used on top of it.

Outside corners—Outside corners on baseboard are always mitered. Since walls rarely make a perfect corner, I always make trial cuts to find the right angle for the miter. For a good fit, the angle cut on both pieces should be the same. I make my first cut a little long and then gradually trim it to perfection using the miter box or a block plane. Minor adjustments using the miter box are made by shimming between the backside of the baseboard and the miter-box fence (see *FHB* #30, p. 56 for more on this technique). Outside corners are cross-nailed to lock the joint in place.

More tips on nailing—Occasionally you will be faced with a situation where the baseboard has to be pulled in against the wall, but there isn't any stud to nail into behind it. As an alternative, drive a 16d finish nail through the baseboard, angling it down and out so that it catches the 2x4 bottom plate in the wall. When the nail is set, the baseboard will be pulled snug against the wall.

In similar situations at inside corners and door openings, 16d finish nails again come to the rescue. Just angle the nail until you hit something solid. Keep it a few inches from the end of the baseboard and predrill the hole before you nail to prevent splitting. If you are framing up a new house, it's a good idea to install short lengths of 2x4 baseboard blocking (offcuts or scrap pieces) at all inside corners and at each side of door openings.

If you're installing a two or three-piece baseboard, the lower molding should be nailed to the floor, not to the baseboard. If it isn't, any shrinkage of the baseboard will pull the molding away from the floor and expose an unsightly crack. When it's nailed to the floor, molding serves as a slip joint, concealing any shrinkage cracks. Paint the baseboard before installing this molding so an unpainted strip won't show up after the baseboard has shrunk. □

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