

Cornice Construction

Building the return is the tough part

by Bob Syvanen

All gable-roofed houses need to have a cornice of some sort. Functionally, the cornice fills the voids between roof and sidewall. It extends from the shingles to, the frieze that covers the top edge of the siding. There are two basic kinds of cornices: one includes a gutter (drawing **1A**, below); the other is a simple cornice molding (**1B**). Traditionally, each calls for a different method of roof framing. For the gutter, rafter tails are combination-cut (plumb and level) and bear on the top plates. For a cornice without the gutter, a double plate is nailed across the tops of the joists to support the rafters. There are a vast

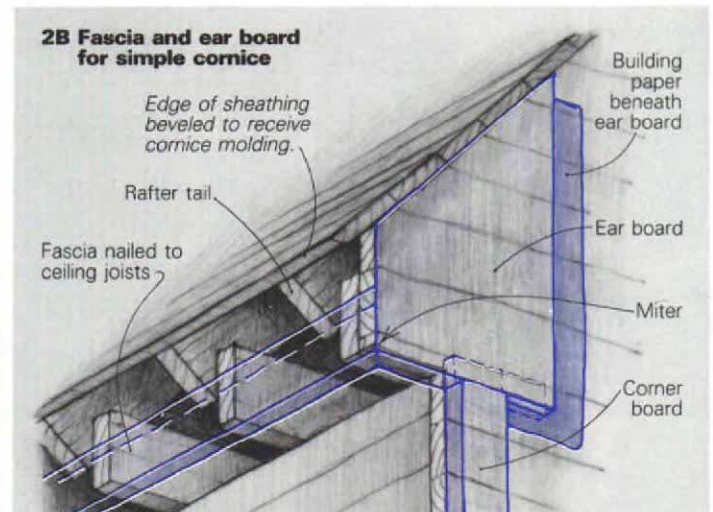
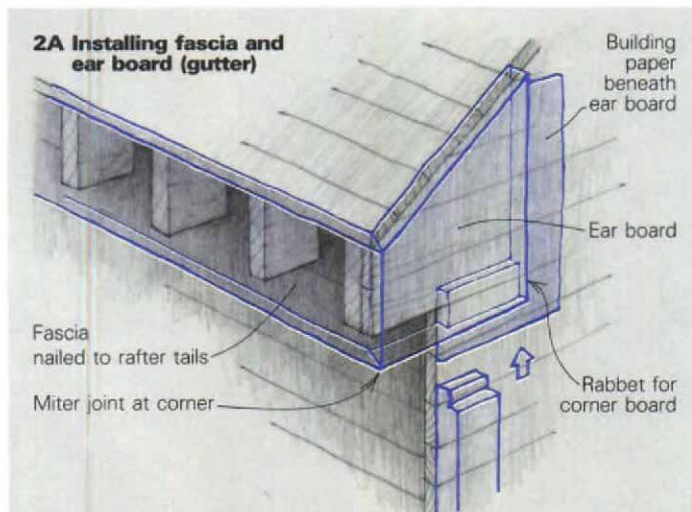
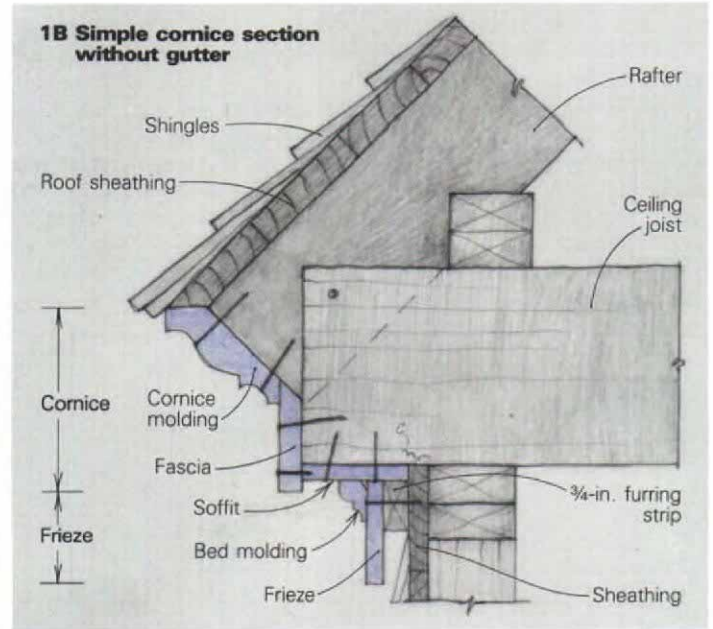
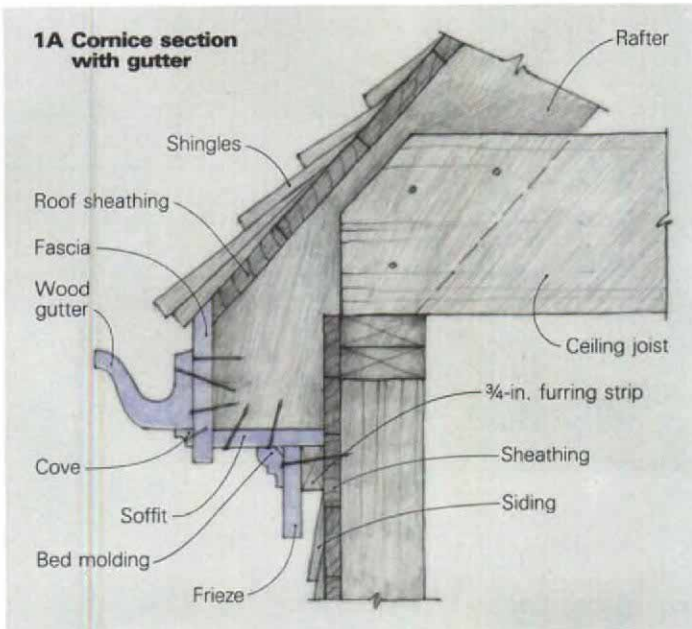
number of possibilities in cornice construction and detailing (photos, facing page), but they are all variations on the basic, step-by-step sequences shown and discussed here.

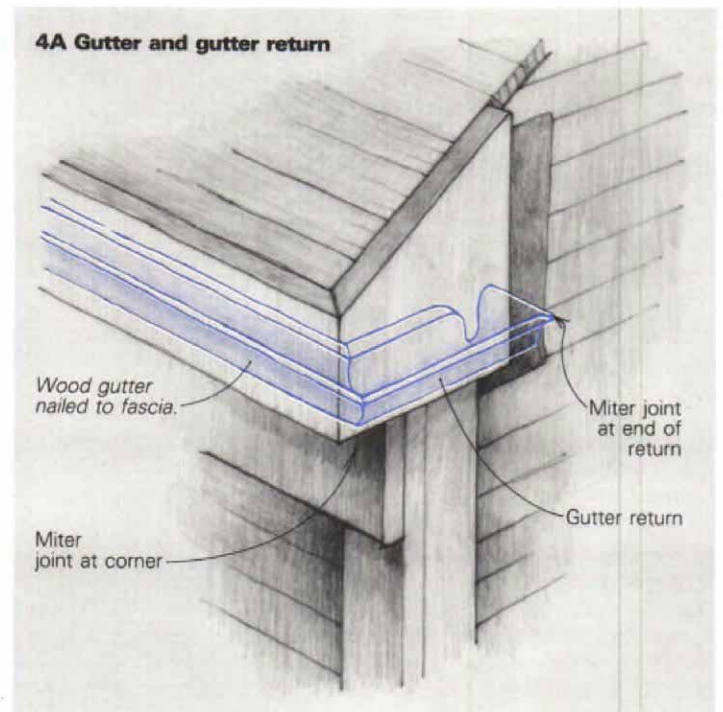
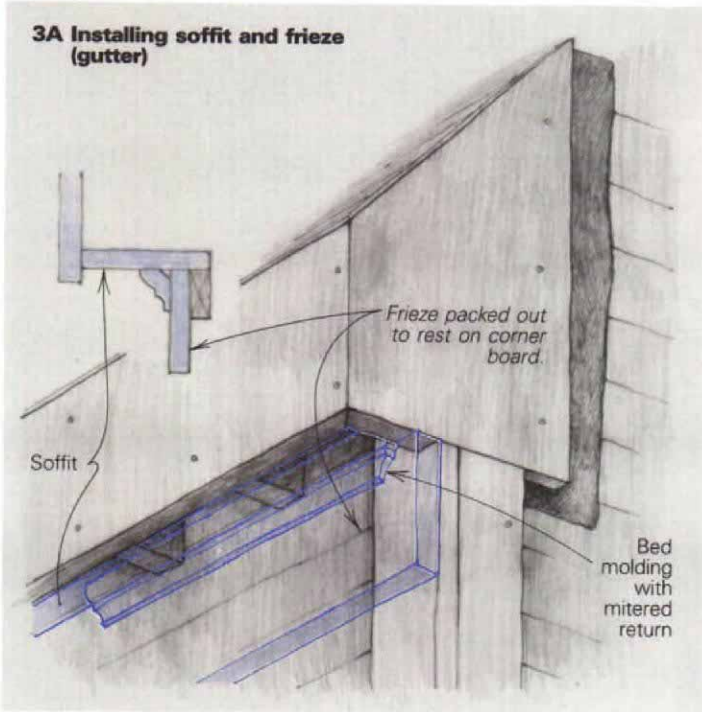
The cornice return at the juncture of eave and gable is the most noticeable and most intricate part of this architectural detail. Sometimes called a boxed return, it adds a delicate touch to the large, repetitive detail of clapboard or shingle siding.

Building the cornice itself is simple; building its return is a bit more challenging. Let's start with the eave corner, assuming that you've already framed and sheathed it. The

rafter ends and ceiling joists should still be exposed, and the first step is to nail up the fascia board. For the guttered cornice (**2A**), the fascia will go against the rafter tails; otherwise, nail it to the ends of the ceiling joists (**2B**). For the fascia, I use #2 pine boards ripped to width on a table saw. The top edge of the fascia usually needs to be beveled for a tight fit.

At the corner of the house, the fascia meets the ear board—the broad, flat backing board at the gable base that holds the cornice return. The joint between the fascia and the ear board has to be mitered, and unless the fit is





tight, it's a good idea to use a weatherproof adhesive caulk. Phenoseal (made by Gloucester Co., Box 428, Franklin, Mass. 02038) and other marine adhesives work well in this type of joint. I also staple a piece of building paper behind the ear board.

If you want the ear board to be flush with the corner board, which is installed before the siding is nailed up, the ear board needs to be rabbeted at its bottom edge so that the siding and a tongue at the top of the corner board can be tucked up underneath it. The ear board should also cover the gable edge of the roof sheathing if you're not planning to use

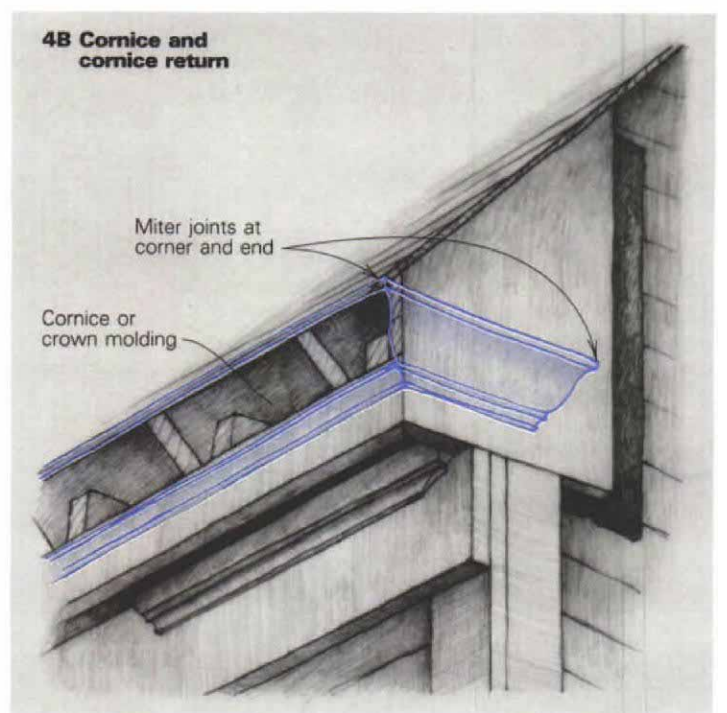
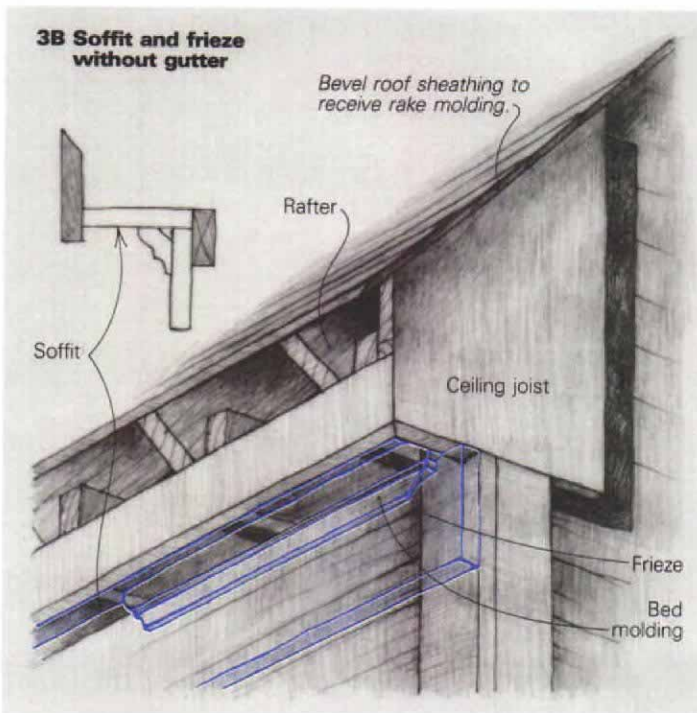
rake molding, which is shown in the inset drawing **6B**.

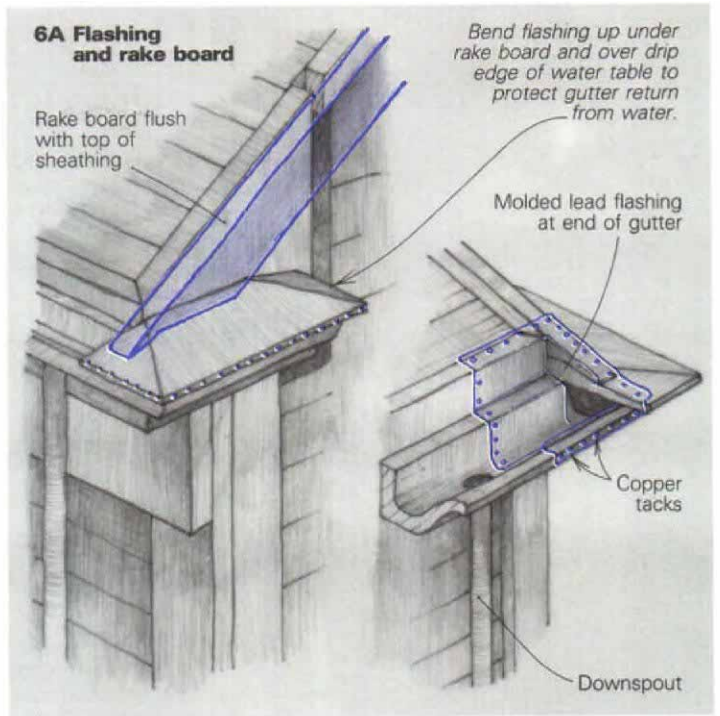
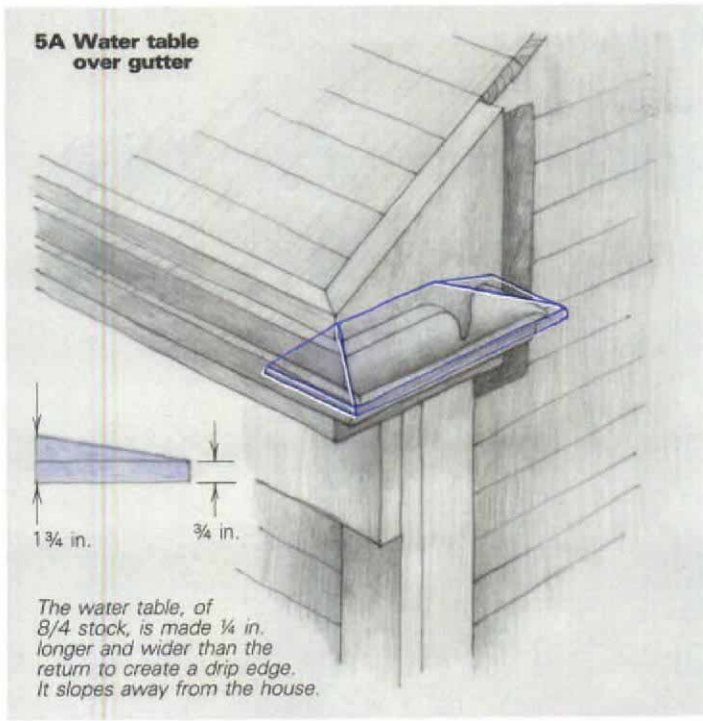
Now install the soffit, frieze and bed molding, in that order. I cut the soffit and frieze boards from pine or fir, and fur out the frieze a full $\frac{3}{4}$ in. so that the siding will fit underneath it. Cut the frieze to extend over the corner board, as shown in **3A** and **3B**. You can use something fancier than bed molding to cover the joint between soffit and frieze, or simply leave this juncture plain.

The return—The next piece to go on is the cornice (crown) molding (**4B**), or the wood

gutter that replaces it on a guttered cornice (**4A**). Here again, the corner is mitered to make the return. In fitting the return, I like to tack a temporary guide strip to the ear board, on a level line where the bottom of the cornice molding or gutter will fit. This makes test-fitting, trimming, and retesting the miter a bit faster.

A good tight joint here is important. Corners are seldom perfectly square, and you can either adjust the cut in the miter box or just keep fitting and trimming with a chisel or block plane. The small triangular piece at the end of the return is delicate, and I usually cut





and fit it on the ground after the corner miter is done.

What you have now is the mitered return with an opening on top. This opening must be covered with a water table (5A, 5B), which is a piece of 8/4 pine, beveled away from the side of the house to shed water. You can cut a single bevel, or bevel the board downward on all open sides for a fancier look. Size the board a little longer and wider than the return to create a drip edge. The water table for the simple cornice return has to be trimmed to fit beneath the roof sheathing (inset, 5B).

Once you've nailed the water table in place,

flash it before installing the rake board along the corner between the roof and the gable wall. The flashing has to extend up beneath the rake board, so if you're working on an old house, pry the rake board up, tuck the flashing underneath it, and then re-nail the rake. If you are going to use rake molding (6B), nail the rake board to the gable end, furring it out away from the sheathing at least 3/4 in. so that the siding can be fitted underneath. To provide good bearing for the rake molding, bevel the gable-end sheathing. If you don't use a rake molding, leave the sheathing square-cut so that the rake board and its furring strip

(6A) can be nailed to it. In either system, the rake board and molding die onto the water table, and must be scribed accordingly.

If you're building a guttered return, there's one final, important step: sealing off the corner. Water that gets into the return side of the gutter will soon rot the wood. Lead is the best flashing material because it can be formed to the gutter contours more readily than copper or zinc. Use the end of your hammer handle to form the lead flashing so that it covers the corner and fits over the water table, rake board, and roof sheathing. Then nail it down with copper tacks in a bed of caulking. □

