



A Carpenter's Metal Brake

by Don Pascucci

My first job in the trades was for a guy who did roofing and vinyl siding. I moved on to doing carpentry and eventually became a contractor specializing in remodeling and small additions. It has been many years since I installed any vinyl siding. But I haven't forgotten the things I learned doing it, like how to use a metal brake. It's a useful skill for anyone who does exterior finish work.

Disadvantages of Stock Flashings

Most carpenters use the standard aluminum flashings found at lumberyards. The average yard carries an assortment of drip-edge, step, and head flashing. But standard flashings won't always fit, and architectural details like oversized head casings and cornice returns require custom-bent metal anyway. Unless these areas are being clad with soldered copper, it's usually more convenient to make this stuff yourself.

When standard parts won't work, most guys get one of those small rolls of sheet metal and try to make their own.



The author bends all the flashings for the additions he builds using a refurbished second-hand brake.

Ready-made flashings have one thing going for them: They're cheap and easy to get. But the aluminum they're made from doesn't seem a whole lot thicker than the metal in beer cans. And they're usually raw stock, so they stand out like a sore thumb. Mill-finish flashings can be painted, but the paint sticks poorly unless someone takes the time to clean the oily manufacturing residue off of them.

Custom Flashings

One of the things that sets my work apart from the competition's is the flashing I use. Whenever possible, I make my own. But I don't make it from thin, mill-finish aluminum. I use thicker, colored coil stock. Doing this costs a lot less than you might think. A 2x50-foot roll costs between \$50 and \$60, and is more than enough to do all the flashing on two or three small additions.

Color Options

Builders don't normally paint step flashing or deck ledger flashing. But raw aluminum is ugly, and it looks cheap from a mile away. The supply house I buy from carries coil stock in cream, white, black, gray, and two browns. There are more colors to choose from if you're willing to special order. It's also easier to paint head flashings that are made from colored stock; they don't need to be primed, and paint sticks well to their matte surface. Custom flashings also look better because they're stiffer and flatter than ones made from thinner material.

On roof flashings, like dormer aprons, step flashings, and valleys, I try to match the roof shingle color. You hardly notice the flashings because they blend into the surrounding materials. If the job I'm doing includes installing metal gutters, I sometimes clad the fascia with aluminum that matches them. This means the fascia never needs paint-

Metal Brake Tips & Cautions

- **Keep your brake covered** when you aren't using it. Periodically clean the jaws with a soft cloth. Debris that gets in the jaws will scratch the coil stock.
- **Protect colored stock** by working on a clean surface. Unroll the coil, don't drag it across your bench.
- **To cut coil stock**, clamp it in the brake and score it a couple of times with a sharp utility knife. Bending the metal will cause it to break on the score line.
- **To avoid scoring the brake itself**, pull the knife from the edges towards the center of the stock.
- **Make sure your hands start out clean** and stay that way, especially when handling light-colored coil stock.

ing. I also try to match head flashings and deck ledger flashings to the trim or siding color. Sometimes I'll use black stock on ledger flashings to make them disappear in the shadows.

Metal Brakes

Unless you do a lot of sheet-metal work, there's no point in buying a fancy new brake. A brake designed to bend light aluminum costs around \$500. But you can get a used one for short money, especially an old-style "wedging" model. The clamping action of newer brakes is similar to that of a pair of vise-grips. But on older models, clamping force is generated by sliding a pressure bar with a bunch of wedges on it under the brake's frames. Either way, a clamping edge presses down on the sheet metal, which is folded

by lifting on a bending arm. Newer brakes let you make bends that approach 180 degrees, which means you can use them to put hems on flashings. Older models won't let you go much past 90 degrees.

Buying Used

Before you buy a used brake, check it for wear and tear. Sight the bending arm and clamping edge to make sure they're straight. Examine the hinge and areas near the clamping edge. A careless metalworker will run his utility knife off the end of the stock he's cutting. This scores the brake, causing it to leave scratch marks on the metal you're forming.

I got my brake used — I traded a guy a couple of staging planks for it. It's a wedging model that needed work, so I spent an extra \$100 on a rebuild kit. The kit included new wedges and a replacement for the plastic strip that keeps the bending arm from marring the sheet metal. My brake is 10 feet long, big enough to make just about any flashing I want in a single piece. You can also get them 8 or 12 feet long. The short ones are okay, but 12-footers are way too big for anyone who's not a professional metalworker.

Keep in mind that aluminum brakes are designed to bend aluminum. They're not beefy enough to handle heavier stock. If you have to bend copper in an aluminum brake, make sure you only do short pieces.

I like the convenience of being able to make my own flashings. It means I don't have to find someone who can do the work on schedule, and I don't have to drive somewhere to pick it up. I typically take the brake on site only when I'm making complex flashings. Otherwise, I work at home from field measurements. Once you get the hang of it, making flashings is quick and easy. ■

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