



With a porous stone like bluestone, the process of spalling (also called “thermalling” or “flaming”) can be used to rough up smooth-cut surfaces. After thoroughly wetting the stone **(1)**, the mason applies heat with an acetylene torch **(2)**. The heat turns the water to steam. The rapid expansion of the water causes the outer layer of stone to pop off **(3)**. He repeats the wetting and heating process until the desired amount of spalling is achieved.

Q How do you give the cut edges of stone a cleft look?

A Peter Chappelow, who owns Half Moon Stone Works with his brother, Thomas, in western Vermont, responds: In the article “Stone Veneer on a Foundation” (Aug/19), my brother and I mentioned that the project designer opted for a bluestone cap for the top of the veneer after we had begun applying the veneer. Then, once we had installed the cap, a further decision was made to spall the cut ends of the cap to give it a rougher appearance, more like the face of the cap.

Usually considered a defect or problem in brick or concrete that needs to be repaired, spalling occurs when water enters the porous surface of the masonry and

causes the outer layers to flake or pop off, leaving the rough interior surface of the masonry exposed. Freeze-thaw cycles can exacerbate spalling. In this case, we needed to force the spalling, and we didn’t have the time that it takes Mother Nature to create natural spalling.

First, we soaked the areas to be spalled—in this case, the ends of the cap—with water. Bluestone is a very porous stone, so we held a wet rag over the cut end of the cap for a few minutes to let the water soak into the stone **(1)**.

While the stone was still wet, we blasted it with an acetylene torch **(2)**. Heat from a torch rapidly turns the water beneath the surface of the stone into steam, which makes the surface layer pop off. We repeated the wetting and heating technique as many times as necessary until we had

achieved the amount of spalling for the desired rough look **(3)**.

Spalling (also called “thermalling” or “flaming”) is a dangerous process because the flakes of stone can come off the surface with a lot of force. Safety glasses should be worn at all times—by the person with the torch and by anyone else helping or working nearby. And because we did the spalling after the cap was installed, we also needed to protect the adjacent trim surfaces. While one of us worked the torch, the other held a steel trowel against the trim to protect it from the heat, rewetting the end of the cap as needed.

For nonporous stone such as granite, a wide chisel can be used to flake off the outside layer of stone. This process—known as “pitching”—is more delicate and can be performed on a wider variety of stone.

I've noticed that wood fascia trim at the juncture between dormer eaves and the main roof is often subject to premature decay. Is there a good way to protect this joint from water damage and rot?

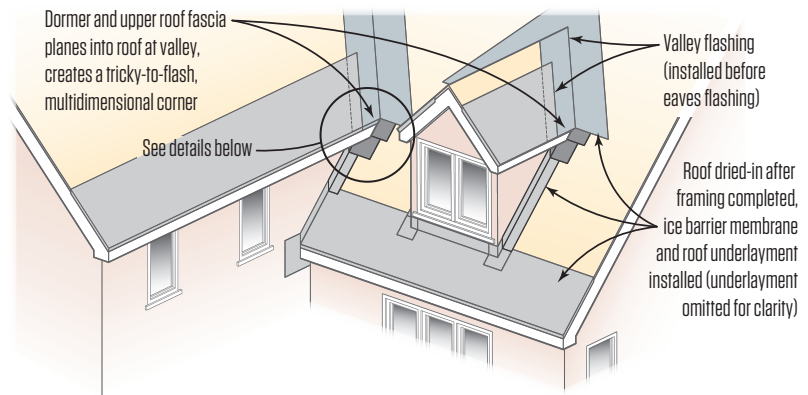
A Doug Horgan, vice president for best practices at BOWA, responds: This is a complex area, and implementing a workable detail is tricky when the roofers and carpenters are different crews. One way to make this area better is to use solid blocking at the rafter tails (assuming there's an overhang) and apply ice-and-water membrane over the blocking. That at least protects the framing.

Protecting the fascia board itself is another story, however. One way to install the fascia is to have the board touching the roofing material, or nearly so. This looks neat and clean, but it makes it impossible to paint the end of the board, where the end-grain cut will soak up water very effectively. So our company has started generally holding wood products off the roof by a fairly substantial margin. The Western Red Cedar Lumber Association (WRCLA) follows the fiber-cement and stucco industries in recommending a 2-inch clearance from roofs for siding and trim. This is our normal standard, and it allows the end to be painted down the road.

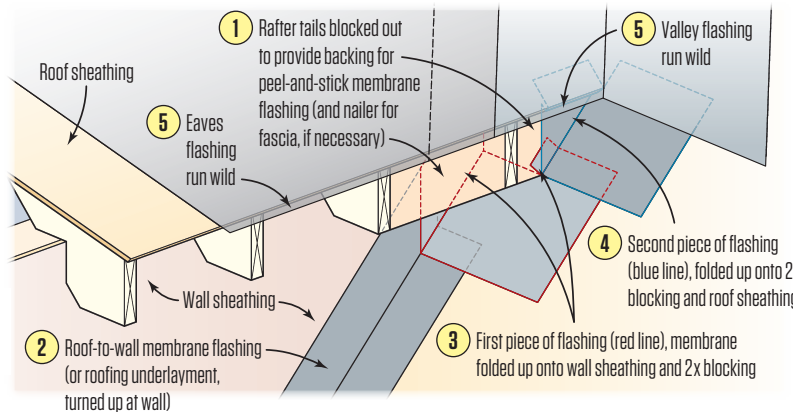
Not all clients and architects are OK with this look, though. So we often borrow a detail from the excellent Hardie best practices manual and fill in the 2-inch space with bent flashing—or, more frequently, with a piece of synthetic trim such as PVC or Boral, as they have no clearance requirements.

Having said all that, we've had so many issues with wood trim of all types that we most often use synthetic trim materials these days. In that case, clearance and rot are not issues anymore. Even so, if I'm applying synthetic trim, I still prefer installing solid blocking at the eaves first. This provides a nice framed box for all the roofing and flashing to terminate to and allows a full ice-dam wrap of a vulnerable area.

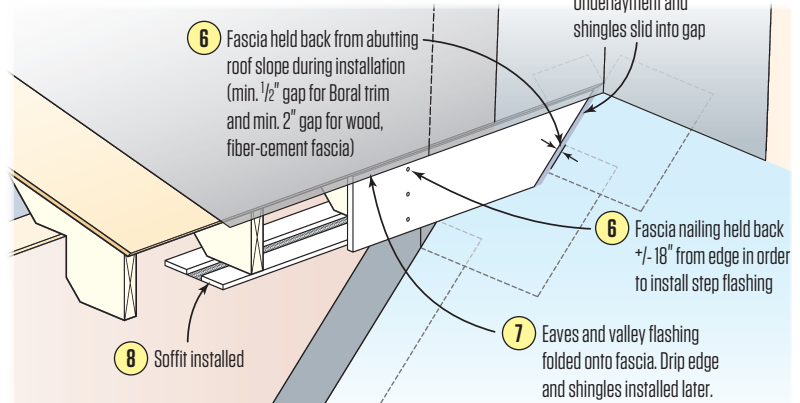
Fascia Flashing Detail



Blocking and Two-Piece Flashing



Fascia and Soffit Install



To protect this vulnerable juncture from water intrusion and rot, install solid blocking at the eaves to provide a substrate for peel-and-stick flashing, then install the flashing shingle-fashion to protect against water, ice, and snow. When installing trim, provide sufficient clearance as shown, or use a moisture-tolerant material such as PVC or Boral.

Illustration: Tim Healey