

# Q. Do Fiber-Cement Butt Joints Have to Be Caulked?

The clients on an upcoming project are interested in installing fiber-cement siding, but they're concerned about how the butt joints will look. While they don't expect the tight-fitting seams characteristic of wooden clapboards, they also don't like the look of wide caulked joints. Is there a better way to detail these joints?

Mark Parlee, a general contractor in Des Moines, Iowa, responds: In my experience, water that gets trapped against fiber-cement siding can be absorbed by the material, causing joints to swell and shrink during freeze/thaw cycles.

On our jobs, we don't leave gaps for caulk at butt joints, because I think that this detail contributes to the problem. Instead, we snug the joints up tight and protect the seams with a piece of metal flashing installed behind each joint (see photos).

This metal spline laps over the siding course below, so any water that penetrates the joint gets channeled out. The splines wouldn't be hard to make on site, but our local lumberyard stocks painted 6-inch-by-12-inch painted aluminum flashing (white on one side, brown on the other) that's perfect for this application.

We try to use factory edges with all our butt joints, though sometimes they're a little rough. We've found that we can tighten up these joints and make them less visible by scraping away

excess material on the back of the factory edge with a utility knife.

When we do have to use a cut edge in the field, we make it a point to prime the edge first to minimize water absorption. Keep in mind that we're talking about fiber-cement siding here, not cedar clapboards: It shrinks and swells, and so do the gaps at the joints. But by eliminating the caulk and giving water a quick route out, we can make the butt joints look pretty good.



Caulk is usually used with fibercement siding to prevent water intrusion at the butt joints (above). An alternative method, installing metal splines (above right), also prevents water intrusion and results in tighter, less noticeable joints (right).





## Q. Paint Over Stain?

Is it okay to use an exterior latex house paint over stained wood siding?

Bill Feist, a former wood-finishes researcher with the Forest Products Laboratory in Madison, Wis., and coauthor of Finishes for Exterior Wood, responds: That should work fine, as long as the substrate is properly nailed and in good condition and there are no obvious moisture problems.

Treat the old finish the way you would any coat of paint: Remove loose

and peeling finish, then sand the surface, taking care to feather sharp edges left over from scraping. Any bare wood should be sanded, too. And if the old surface is shiny or glossy, sand it or treat it with a deglosser so the new paint will adhere.

As usual, the siding must be cleaned to remove chalking, oils, mildew, and other contaminants. The best approach — though labor-intensive — is to scrub all of the siding with a detergent-and-water mixture and then rinse it thoroughly. Simple power washing can also be effective, but if there is a mildew-and-dirt problem, spray first with detergent and rinse, then spray with mildew cleaner (usually a bleach) and rinse again.

After everything has dried, the surface

can be recoated. Use an all-acrylic paint. If the old finish is an opaque oil-based stain, apply a coat of alkyd (oil-based) primer to ensure good adhesion and provide a base for the top coat (two coats are preferable).

If the original finish is a solid-color latex stain that adheres firmly to the wood, it probably isn't necessary to prime the finish before painting, though all of the prep work is still important.

One caution: Some semitransparent and transparent penetrating-oil finishes contain water repellent that can interfere with the adhesion of the new top coat (whether paint or opaque stain). These finishes should be thoroughly cleaned with a strong detergent, and then rinsed and dried.

In really troublesome cases, the old stain may have to be removed (stain removers are available from a number of deck-stain manufacturers). If you have to do this, I'd recommend using two coats of an alkyd primer to provide a good base for future paint.

# Q. Insulating a Block Wall

I'm renovating an uninsulated cape built with concrete-block walls. The plans call for gutting and reframing the interior and installing shingle siding on the exterior. Because the building needs to be insulated to comply with local (Long Island, N.Y.) code, I was considering adding a layer of foam insulation on the outside, then covering that with plywood as a nailing base for the shingles. Is there a better way?

Paul Fisette, director of Building Materials and Wood Technology at the University of Massachusetts Amherst and a JLC contributing editor, responds: In a warm climate, it would make sense to use impermeable rigid foam to insulate the exterior of the building, because it would place the vapor barrier in the right position and make the mass of the block wall available to help modulate internal heat gain.

But in a cold climate such as yours, the most economical approach would be to insulate on the inside, particularly since you're reframing anyway. It would be a good idea to apply masonry dampproofing to the inside surface of the block. Then space a 2x3 wall away from the inside of the masonry wall by 3 inches (more or less depending on your insulation and thermal goals; R-19 would be a good target in your climate).

The best option would be to install blown-in-place fiberglass or cellulose insulation so that the fiber completely fills the void between the block and frame walls as well as the stud bays. This application will reduce thermal bridging through the studs and increase the overall performance of the walls.

But the job could certainly be done with fiberglass batts, too, with the first layer oriented horizontally between the framing and the block wall, and the second layer conventionally installed in the stud bays.

### Q&A

Check the insulation specs to ensure that the density and depth of the insulation you choose achieve your target R-value, and be sure to install the vapor barrier on the warm side as usual.

On the exterior, an efficient low-cost option — which would eliminate the expense of layers of foam and sheathing — would be to install horizontal strapping on the outside surface of the wall in such a way that the on-center spacing matches the required nailing pattern of the shingles. You will have to calculate the exposure for each course of shingles and then install the strapping accordingly; window and door openings will have to be strapped out around their

perimeters to receive trim.

Next, cover the walls with felt paper or housewrap, positioning the wrap on top of the strapping and extending coverage into the door and window openings. (Windows and doors will need to be either replaced or reinstalled to match the newly established exterior plane of the wall.)

As with any type of wall, good water management is essential, so pay attention to the details as you install the felt paper (or housewrap) and flash door and window openings. (For more on watermanaged wall assemblies, see "Detailing Rain-Screen Siding," 3/06, and "Water-Managed Wall Systems," 3/03.)

Installing the strapping horizontally rather than vertically shouldn't cause problems. If the wrap is installed and flashed properly over the strapping, very little liquid water should get behind the wrap. Any water exposure that does occur would be occasional and the wall design as described should easily dry toward the outside.

#### **GOT A QUESTION?**

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