Q&A

Extractive Bleeding on Cedar Siding

Q. *I recently installed 20,000 square feet of 1/2x4-inch cedar siding, rough side out, on a project in Connecticut. The exterior wall construction was 6-inch metal steel studs sheathed with 5/8-inch exterior plywood and covered with building wrap. Inside, there is 6-inch batt insulation, a 6-mil poly vapor barrier, and 5/8-inch drywall. The siding was prefinished with a clear sealer at the factory.*

We are now experiencing "extractive bleeding" in over 20% of the siding's surface area. The supplier and manufacturers of the sealer and siding claim that this is a natural occurrence due to excess moisture. The owner wants the stains removed.

What should I have done to prevent this from happening? Would putting an air space behind the siding have helped?

A. *Paul Fisette, a wood technologist at the University of Massachusetts, responds:* The heartwood of western red cedar (and other species like redwood and cypress) contains dark-colored water-soluble chemical extractives. When the heartwood gets wet, these extractives dissolve, and the solution can run onto the surface of the siding. When the water evaporates, the face of the siding is left stained with brown streaks — extractive bleed.

To avoid this, you have to prevent moisture from reaching the heartwood. The best way to minimize the effect is to pretreat all surfaces of the siding with a water repellent before installation, then treat the face with a semitransparent stain.

It's a common mistake to skip the back-priming step. Water gets driven behind siding by wind and is drawn behind siding by capillary suction. Joints, overlaps, and penetrations provide pathways for water to the back of the siding. When the unprotected back gets soaked, extractives can bleed onto the face of the siding below. If you've back-primed, the repellent will shed the water before it can soak the siding and bring the extractives to the surface.

Not all clear sealers are good water repellents. Check that the product you used is in fact working to repel water. Spray water onto the surface to see if it beads up. In general, I think using a clear product on siding is a bad idea. Even the best treatments lose potency through UV degradation in less than a year. Pigmented products are much more durable.

Condensation from excessive interior water vapor can also cause extractive bleed. You have installed a vapor barrier, but air leakage can transport high levels of water vapor into wall cavities. You might consider air-sealing improvements as an option.

Providing a vented space behind siding is a good overall rain management strategy and can minimize the amount of moisture that reaches the back of the siding. It also allows siding to dry more easily. It's a bit late for that in the project you've already built. You might try cleaning: Extractive stains often come off with a mild detergent if you clean the wood soon after the problem develops. Consider applying a high-quality semitransparent stain like TWP, made by Amteco Products (800/297-7325, www.woodsealants.com) or Ready Seal (972/434-2028, www.readyseal.com) to your walls once they're clean. These products have fine pigments that help overall durability.

Photo Documentation Tools

Q. *I'm involved in historic restoration and annually shoot a couple of hundred images. I'm looking for a simple (and inexpensive) software that will allow me to take the photos and do markups for comparison. What do you recommend?*

A. *Contributing editor Joe Stoddard responds:* For most Windows users, I recommend (and use) Paint Shop Pro. It does everything you need to do and costs only around $100. Some useful features are a thumbnail browser, advanced screen capture, easy resizing, easy text markup, touch-up tools, and good compression filters that make it easy to get images ready for the web. As a bonus, most Adobe Photoshop plug-ins will work with Paint Shop Pro, so you're really not giving up much by choosing it over Photoshop (around $600). With your savings, you can buy a digital camera.

The only situation I can think of where Photoshop would be necessary is if you're doing advanced color-matching or separations for commercial printing. Most contractors aren't going to do that in house anyway, and since Paint Shop Pro can save files in the various formats a graphic arts house would use (.eps, .tif, etc.), you're covered.

Moisture in Post-and-Beam Home

Q. *The owners of a post-and-beam we've just completed are having a condensation problem on the inside of the windows. The colder it gets, the more ice develops on the glass, to the point the windows won't open. We used good-quality windows. The temperature downstairs is 72°F; upstairs it's 62°F. Could the house be too airtight?*

A. *Paul Fisette responds:* The problem is that the inside surface of the window is below the dew point temperature of the air that comes in contact with it. This means either that you

have too much moisture in the house or that the window is not insulative enough, so that its inside surface is too cold. You might have both conditions. The indoor relative humidity (RH) should be around 35%, but it should not go above 50%. Monitor the RH for a week with a device that records high and low readings. You can purchase these at stores like Radio Shack for about $20. If you learn that the humidity in the home is too high, figure out why and lower it.

A good place to start is by investigating exhaust fans in bathrooms, kitchens, and other high-moisture areas. Be sure that the fans are working correctly and are being used. If you find that the RH is okay, I would suspect that either the window is not as energy efficient as you think or it leaks air. Air may be leaking through the window seals, around the weatherstripping, or around the rough opening. This might be cooling the inside surface of the window below dew point temperature.

Another issue to consider is that post-and-beam houses are built with timbers that often have a high moisture content. Typically, the timbers are installed green, because it's expensive to kiln-dry such large pieces of lumber. This may raise moisture levels inside the house for a year or two. Because the window units are typically installed within a timber framework involving headers, sills, and side members that are wet, each window has a local moisture source. Get a moisture meter and check the moisture content of the timbers. Eventually, they will stabilize at a moisture content of 8%. Even if the inside surface of timbers (the side facing the living space) is dry, the surfaces within the wall cavity are most likely wet. If wet timbers are the problem, you can raise the indoor temperature, circulate warm air toward the windows, and use a dehumidifier for the short term.

Competing in a Small Market

Q. *I'm a general contractor in a small town where there are many licensed contractors, which makes competition fierce. Some local contractors seem to think the way to do business is to give their materials away at cost and to charge $25 per hour for labor, thus creating a bare-bones time-and-materials environment. Do you have any suggestions that will help us compete and still make a decent profit?*

A. *Les Deal, a remodeler in Cedar Rapids, Iowa, responds:* You've identified your problem: The word that's killing you is "competition." I work from the premise that competition is not relevant.

The reality is, if you want to be a contractor, you must make a profit. Therefore, the first part of the answer is simple: Raise your prices to create a decent company profit. So now you say, "Thanks a lot — how do I get work?" I'll offer another simple answer: Make an active decision to specialize in the work you love, based on the skills you love to use. If you don't emphasize enjoyment of your work as the top priority, you won't have the drive to continually learn and better yourself.

The result of doing what you love is that you will become more creative, more efficient, and a better contractor. You will be driven by sheer pleasure to hone your skills and will automatically feed on your own love for your work.

Isn't that exactly who many customers are looking for? These developed skills will make your higher prices seem like a bargain to the customer. Plus, a contractor working in his niche exudes excitement and confidence, which will help you win jobs.

My own niche has been challenging remodeling jobs, jobs that look like a quagmire of problems and that call for unique, cost-effective solutions. Thirty years of that mindset has created a path of great diversity in the kinds of work that come my way, and I still love it.

It doesn't matter what part of contracting you enjoy. Decide what it is and focus on that kind of work. Think back to the projects you really enjoyed, and try to figure out why. That should lead you in the right direction.

Eaves Vents With No Soffits

Q. *I'm reroofing and residing a small home with no soffits. The customer wants to add attic ventilation. I have no problem adding the ridge vents, but there is no soffit overhang to put the eaves vents in. In fact, to have enough space for the vinyl J-channel, I'm having to add an extra 2x4 fascia. How can I get air flow into the attic?*

A. *Editor Don Jackson responds:* If you're reroofing anyway, you might try Air Vent's vented drip-edge (800/247-8368, www.airvent.com). This product extends farther than standard drip-edge and has vent intakes in the underside of its horizontal projection. If you drop the fascia an inch or so below the top of the rafter plumb cuts, you may be able to sneak some air into the attic.

Got a question?

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