

Troubleshooting

BY GLENN MATHEWSON







The Case of the Sobbing Siding

Working as a municipal building inspector and having a passion for construction can often be a tease. Every day I see a variety of construction projects built by a wide assortment of tradesmen—both professional and amateur—and even by homeowners. I'll admit that I get satisfaction from the feeling that I'm part of the team, but building inspectors don't typically get thanked for their contribution—quite the opposite, in fact. So while "call backs" are not generally viewed as positive experiences, one in particular was quite memorable and educational both for the contractor and for me.

Let me provide some background, as a confession and as an inadequate excuse for my missing the problem during the initial inspection. In 2008 when the call came in, my jurisdiction had just suffered through a major Colorado Front Range windstorm, followed by a severe hailstorm, which precipitated an uptick in roof repairs and permits for new roofs. With the Great Recession getting a tight grip on the economy, I couldn't count on any new hires to help with the thousands of permits being issued. Delays for roof inspections quickly grew from weeks to months, and I was getting in great shape climbing ladders all day. Perhaps this was part of the reason why I failed to notice the problem that prompted this particular call.

The citizen was upset and went straight to the inspector who had passed the new roof installation: me. She wanted to know why—after getting a brand new roof—the lap siding on her garage had suddenly begun "crying" after every rain. I was, of course, intrigued by her comment, but based on my experience handling obscure calls from homeowners, which often have little validity, I was also skeptical. Nonetheless, I scheduled a courtesy











inspection the next day to do a call back on my previously passed inspection.

After I greeted the homeowner, she took me to the side of her garage at the front of her house and showed me the staining—evidence that water had indeed been dripping from her siding (1). This was going to be interesting.

Not seeing anything unusual in the siding or in the roof, fascia, gutter, or soffit above the leaking wall, I went to take a look from inside the garage. Fortunately, there was no wall or ceiling covering, and the roof had been framed using raised-heel trusses. The exterior wall sheathing ran up the heel but stopped below the 2x4 truss tail. This space allowed me to see inside the soffit (2).

Peering inside the soffit with a flashlight revealed more water staining and more clues (3). Granules that had sloughed off the new shingles lay on the inside surface of the soffit, a clear sign that wherever this water was coming from, it had first run down the shingles.

Right about then I realized that the problem was indeed an issue caused by the new roof; the very roof that I had inspected

and passed. I could already smell the humble pie cooking for me!

Looking both ways down the length of the soffit, I could see which direction the water was coming from. Working my way toward the source, it seemed that the water originated where the garage soffit intersected with the roof plane of the house, about 10 feet from the site of the staining (4). Now it was time to get out of the garage and back onto the roof.

Once I got on the roof and down on my knees to take a good look at where the soffit intersected the adjacent roof, it was clear what was happening. The fascia had been cut at a long angle to match the roof plane and was held up the proper distance from the shingles. The gutter had also been cut to the same angle, with the idea that water would drain from the gutter onto the roof shingles and then down to the house gutter—unorthodox, but it still should have worked, except that there was no flashing under the gutter.

Still, these factors alone didn't create the problem. The soffit material had been run tight to the shingles (5) and past the angled edge of the fascia. This combination created a scoop that allowed water to flow under the fascia and on top of the soffit (6). From there the water made its way down the soffit and finally behind the siding. I thought, "Look on the bright side: At least the water-resistive barrier behind the siding did its job well!"

At this point, my work was complete, except for the apologies. I called the project contractor and told him what I'd found. In light of missing the problem the first time, and knowing that it could be fixed with a single piece of step flashing (7 & 8), I agreed to meet the contractor on site the next day. I showed him the issue and he fixed it in a matter of minutes. The siding would weep no more.

The experience was a great lesson in humility for the contractor and for me, and the homeowner was wonderfully patient. In the end, the three of us worked as a team to handle and resolve the problem—a little whipped cream to sweeten that humble pie.

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