

READERS WRITE

Thanks for the latest issue of "Traditional Roofing." I'm a geologist and love stone or rocks of any flavor. I especially enjoyed the article on senior slaters. I, too, am one. At 63, I tried my hand at it, building a truck port/covered patio with a slate roof with a copper ridge. I very much enjoyed doing it. G.L., Denver, CO



VALLEY REPLACEMENT — *I am having repair work done on a slate roof that is about 59 years old. The problem is that the copper valley flashing, original to the house needs to be repaired. One roofer suggests replacing the copper with aluminum flashing, while the other roofer suggests applying a membrane to the existing flashing so as to not have to take up the delicate slate. One roofer says the slate is in good condition with perhaps 25 more years useful life in it. My question is — is it better to go with replacing the flashing or go with a membrane applied over the existing? Replacing the flashing and other incidental work (replacing lost shingles, painting a tin roof, and sealing roof peaks) comes to about \$4,450.00, while the membrane method and incidentals is set at \$2,000.00.*

TR — Replace the flashing. Don't use membrane. If the roofer is recommending membrane, he doesn't know what he's doing. Valley replacement is routine work for an experienced slater. It should cost, *roughly*, about \$60/running foot to install 20 ounce copper.

EARTHQUAKES — *We are re-roofing our home and would like to use slate for aesthetic, durability and fire resistant reasons. However, we are concerned about how it will hold up in the (inevitable) event of a medium to major scale earthquake. We are within a stone's throw of a fault line in the hills north of Berkely, CA. Has there been any testing of slate under the stress and impact of seismic events? I am concerned that the shock of the event would cause the slates to shatter at the nailing points or shatter on impact with each other, sending slates raining down in a lethal (or at very least expensive) wave of debris.*

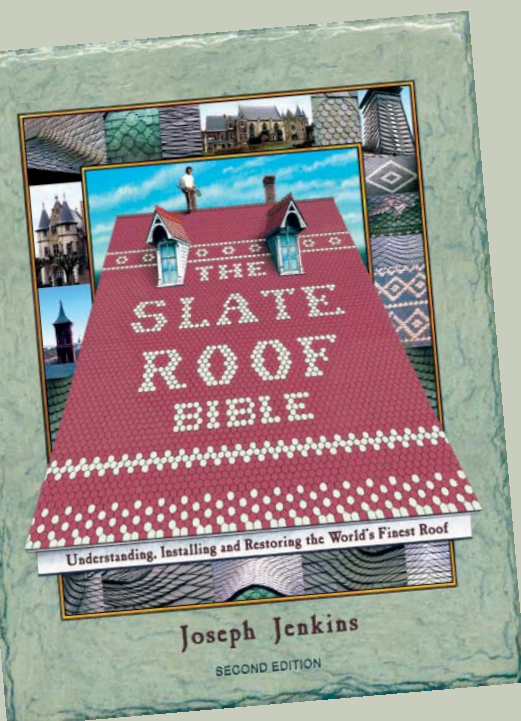
TR — A tornado ripped the roof off a local garage/apartment and dropped it on the ground nearby. The slates remained intact and we removed them and recycled them onto the new garage after it was built. There is a photo of it in the Slate Roof Bible, 2nd edition, page 206. I was on another slate roof on an old two-story farmhouse when an earthquake hit nearby (a very rare event here in Pennsylvania). I was at the epicenter sitting on the ridge of the roof when there was a loud rumbling and the house started to shake like rubber. Just as I was looking for a place on the lawn to leap (thinking the house was about to collapse), it passed. There was no damage to the slate roof. Of course, this was only about a 4 on the Richter scale. Both of these situations indicate that a slate roof can be flexible under duress.

GALVANIZED NAILS AND COPPER GUTTERS — *My contractor used galvanized nails to secure the copper gutter fascia hangers. I complained to him that this would result in galvanic corrosion (if it weren't for your book, I wouldn't know about that). He stated that since he used galvanized nails with a spiral shaft, they cannot be pulled out. I am now stuck with either (a) living with the galvanized nails that will corrode over time, or (b) have the contractor cut every nail head off and possibly damage the copper gutter in the process. He would then replace the nails with stainless steel screws. If complete destruction of the galvanized nails through galvanic corrosion will take a long time to occur (50+ years), I might be willing to live with it. What should I do?*

TR — The contractor should have used stainless or brass screws. The galvanized nails will last quite some time, however, especially if they don't get wet. I don't know that they'll last 50 years, however.

DIY VS ROOFERS — *In the "Readers Writes" (TR5) you are questioned on 'cretin and ex convict' descriptions. "Liars...inept,...drunks" is further noted as part of your description of*

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THE SLATE ROOF BIBLE

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WRITERS DIGEST: "The author's obvious love for the subject comes through in all aspects of the book, from the text's dense information to the scores of wonderful photos throughout the book. The craftsmanship of the book itself is very professional. All in all, a very good read."

MIDWEST BOOK REVIEW: "...a not-to-be-missed specialized reference. Packed with over three hundred color photos, the Slate Roof Bible is the core reference of the slate roof industry, covering everything to know about installing, restoring and maintaining a slate roof. Highly recommended."

WRITERS NOTES BOOK AWARDS: "The Slate Roof Bible was the first book to grab our attention and hold it. It's more than just a handbook. It's a great read and a thorough reference volume in one, a rare combination of fact and experience that creates learning and appreciation — a reference book that becomes literature."

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ROOF CONSULTANTS INSTITUTE INTERFACE JOURNAL: "Rarely does one read a book expressing such personal enthusiasm and technical knowledge as that written by Mr. Jenkins. Jenkins has provided the roofing community with a definitive, single-source manual for slate roofing."

those in the roofing trade. In your rebuttal, which falls far short of an apology, you go on about how "...when any Tom Dick or Harry can pick up a hammer and call himself a roofer "...it gets (your) hackles up." In perfect contradiction you, in the same magazine, glorify a "Tom Dick or Harry" do it yourselfer who purchased your "Slate Book Bible." Something's not right.

TR — The difference between the lay-person and the ex-con roofing contractor is that the lay-person may actually educate himself before undertaking a slate roof installation, unlike some roofing contractors, many of whom already "know it all" and proceed to screw up the slate roofs they install. It's easy to insert "slate roofs" into Google, hit "I'm feeling lucky," and find all kinds of information about slate roof installation. It's not a matter of whether one is a roofer or not, it's a matter of whether one is informed and determined to correctly install a slate roof. An educated non-roofer can easily do a better job of it than a non-educated roofing contractor. In Traditional Roofing #5, all the installation mistakes shown were caused by roofing contractors, some of whom fit my unflattering descriptions perfectly. It's a shame that so many new slate roofs are going into litigation. We've been installing slate roofs here in the United States for 150 years and many of the century-old roofs are still functioning quite well today. We already know how to install these simple roof systems, so why are so many of them being screwed up? My article about the sexagenarians illustrates the point that slate roofs are not difficult to install and could be properly installed by even roofing contractors if they cared enough about their trade to educate themselves beforehand.

NUMNUTS? — *One of your readers was upset that you denigrate unqualified roofers. As an unqualified roofer, but with many years of historic work behind me, I offer the following: several years ago I was asked to look at the roof on a 100+ year old church. The roof had originally been slate, but a local roofer not many years prior had installed asphalt shingles. The asphalt roof not even 10 years old was obviously wearing out. It had been installed over the slate — not one slate had been removed and the asphalt shingles were power nailed through the slate and through the deck boards. When I tapped the underside of the slate it rang clear, an indication that they had a good slate roof to start with — only now it had a lot of extra holes in it. The church had, in effect, taken a repairable 100 year roof and at considerable expense turned it into a 15 year roof... that is, if they would be so lucky for the asphalt shingles to survive that long. Last I heard they wanted to use plastic slate for their next experiment. Now... my question is what exactly do we call the numnuts that sold the church on an asphalt shingle roof installed in this manner?*

TR — I think the term "numnuts" is grammatically correct.

SLATE OVERHANG AT DRIP EDGE — *I'm working on a job where half-round copper gutters were installed on a house with a new slate roof. There is a very small overhang (1/4" to 1/2") on the slate roof and some water drips down the fascia board and behind the half round gutter. Is there a standard amount of overhang for the slate roof? How far below the edge of the slate should the gutter be installed? Should flashing have been installed below the slate to "direct" water in to gutter?*

TR — Slate typically overhangs 1.5" at the drip edge. Gutters should be low enough that the plane of the roof will shoot over the top outer edge of the gutter. Metal drip edge along the fascia is not usually necessary. The correct slate overhang at the eaves (1.5") prevents water from running down the fascia.

WIDELY VARYING ESTIMATES — *I had a reputable roofer give me an estimate. He said the slates were very high quality and in good condition and could last another 50 years. However, he said that the slating nails were not copper nails and had rusted through and this necessitated the removal of all slates, placing an underlayment and reroofing the slates with copper nails. This process would cost about \$37,000.00. As I suffered from sticker shock, I did some research on the internet, discovered your site and contacted some slate roof experts who came out to do an estimate and who told me that several slates needed to be replaced and gave me an estimate of roughly \$3,500.00, a difference of more than \$33,000.00. I am now quite confused. I am wondering how I should proceed.*

TR — The first estimate is unrealistic. I have never seen a situation where an entire American slate roof needed removed and reroofed because of nail failure. If the slates are still good enough to reuse, then the nails are probably also still generally good. I discuss this issue in my book, the Slate Roof Bible and even show photos of very old, but still good, non-copper slating nails. When a contractor gives that sort of advice, it's immediately a red flag, strongly indicating they don't know what they're talking about. If you allowed them to remove your roof and reslate it, you'd probably end up with a bum job and be worse off than you are now, and a lot poorer. Unfortunately, there are lots of contractors out there who know little about slate roof restoration, which is a specialty trade that requires years of experience, and instead they routinely condemn good slate roofs and convince the owners that the roofs have to be completely removed and replaced. At least some property owners, like yourself, are now getting online and doing some homework before being hood-winked. The second estimate is probably correct.

LEAKING CHIMNEY — *I have your book, the Slate Roof Bible, and it is great. However, I have a leak in my slate roof around the chimney. To date, I have paid three different people to re-flash the chimney and I STILL have the leak. The damage is mounting and 7 different roofers (who ostensibly "do" slate) can't find the leak. I am at wit's end.*

TR — Are you sure the chimney is leaking and not simply condensing moisture inside? If the flashing is leaking, the moisture will show up when it's raining and it will only be seen on the leaking side. You can verify this by going up inside the roof during a rain and looking for water entry. If the chimney is condensing, it will show up primarily in the winter or whenever the chimney is being used. Water may be seen on all four sides, or even on a lower floor. Condensation inside old chimneys is a common phenomenon. It occurs during cold weather when warm flue gasses cool and condense near the top of the chimney. Flue gasses can be high in water content and the water will soak the inside of the chimney, eventually finding its way through the bricks and into the building, appearing to be a leak. This sort of leak can be solved with a chimney liner.

HANGING GUTTERS — *I never had gutters and have lived in my 3-story house for 36 years. Since I've been having more and more problems with water in my basement, I figured gutters may help. My question is, should there be a special way the contractor installs gutters since the roof is slate? I just had an estimate and the contractor said he doesn't believe there is a difference in the installation and I have a bad feeling about this so, before I sign the contract, I'm trying to do some research on this.*

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TR — Smart to do the research. One of the ways slate roofs are damaged is by gutter installers nailing strap hangers through the slates. It's fast and easy for them, so they don't care if they put hundreds of holes in your slate roof and they assume you'll never know. At least not until the caulk wears off and your eaves start leaking. That's when you will pay a lot more money to have the slates along the eaves repaired than you would have paid if they had hung the gutters correctly in the first place. Use fascia hangers for your gutters, or install the strap hangers underneath the slates.

HOOKED ON SLATE — *I bought some slate this fall to put on the roof of my stone*

oven. I've forwarded a picture of the completed oven. The copper work on the chimney was done by a friend of mine, I think it could have looked a little better, but it seems to function quite well (at least for now). I added a copper ridge cap after the picture was taken. I just love the roof, it turned out nicer than I expected. The whole project was very enjoyable. I put it on myself and it took most of 3 days. I'm hooked on slate, I think it's a great product. I think I'll build a wood shed next summer.



LEAKING BOX GUTTERS — *Our house was built in 1913 and has copper gutters and downspouts which are in terrific shape. On the third level the gutters are more flat and not half circle in design and have joints that seem to have been repaired. A painter suggested that the gutters be painted to seal the joints instead of simply repairing the joints themselves. What is your opinion with painting gutters rather than repairing the joints?*

TR — If the joints are bad and the copper is still good and clean (no tar or paint), then it's possible to resolder them, but difficult due to a number of reasons, mostly years of dirt and oxidation. The seams usually break due to a lack of expansion joints in the system, in which case, even if you do resolder them, the joints can break again. Paint will not seal leaks. You can seal the joints with trowel grade roof cement and fiberglass membrane, but having done that, there will be no way to resolder them. You can retroactively install expansion joints in box gutters, and resolder bad joints, but it's professional work.

BURNING YOUR HOUSE DOWN SOLDERING — *I did my first lock-seam copper roof this summer. I did all the soldering nervously with a propane torch, and next summer they want me to do the same thing*

on the front porch roof, but I really think something of that size will give me too much opportunity to start a fire. So what I am asking is this: what size soldering Iron do you recommend for soldering flat lock copper roofs?

TR — Open-flame soldering torches are notorious for catching houses on fire. Most people find out the hard way when they're soldering metal and the underlayment starts to smoulder. Of course, they don't see it because it's under the metal, so they'll wake up at 4 am to the smell of smoke in the house. If they do realize that they caught the underlayment on fire, they can't put it out without first ripping out the metal flashing in an insane frenzy. The solution is to use a closed-flame torch such as the Express, Sievert or Johnson (see page 7). Both the 300 and 550 watt American Beauty electric irons are quite nice, too.

FAKE SLATE — *It may interest you to know the series of events that lead me to a slate roof. My house was designed to have a natural color stainless steel shingled roof but during the two years of construction the price went from \$300/square to \$600/square. I then found a composite slate shingle which looks good, it's fire-proof, is guaranteed for 50 years and comes in all the colors we wanted and we were back to \$300 a square with a more natural look. It is listed as a top historical renovation shingle. I was a SUCKER! I have \$20,000 of garbage "shingles" sitting at my shop. The composite concrete shingles are already showing hair-line cracks and deterioration. After a little more research I found hundreds of lawsuits on this fake slate shingle. I have now joined many others in filing suit and will do everything I can to shut down that whole industry. My silver lining is that now I have real slate (at about the same price!) and I didn't install that garbage and find out 5 years from now.*

TR — A class action suit has been certified and the court has granted final approval to a Settlement for \$18.6 million with defendants, Re-Con Building Products, Inc., related to the manufacture and sale of roofing tiles and panels which are approximately 2/3 Portland cement and 1/3 wood cellulose fiber commonly known as FireFree Tiles and Quantum Panels. These products were marketed under the brand names, FireFree® Rustic Shake, FireFree® Quarry Slate, FireFree® Colonial Shingle, Quantum Shake, and Quantum Shake Panels, (collectively, "FireFree Tiles"). For more information, log into the web site at <http://www.firefreeclaims.com>.

LAST BUT NOT LEAST — *I was on a roof yesterday, and took this picture. The owner told me that he had a leak, and put in an insurance claim. The insurance company chose the contractor, a local fire and water damage company. This is their work! Nice! The owner admitted that it still leaked. B.B. Michigan*



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