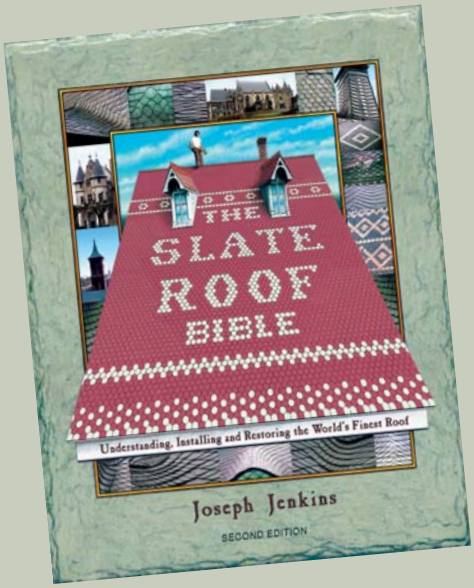
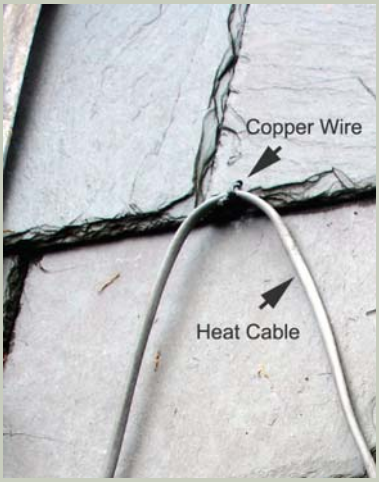
READERS WRITE



HEAT CABLE INSTALLATION: As there is an ice buildup at the edge of my roof, I just installed a heating electrical wire running over the slate tiles and back in the gutter to prevent the backflow water dripping through the roof that happened last year. I wonder if you would have any recommendation on the matter, and especially if you think my installation might somewhat ruin the slates.



TR: *When installing heat cable, we drill a 3/16" hole in the bottom corner of the slates, then run a copper or stainless wire through the hole to tie the heat cable to the roof (see photo at right). This enables you to attach heat cable without puncturing the roof and causing leakage. Otherwise, oversized bib flashings installed throughout the ice dam prone area will often solve the problem. Please read the article about ice dams in this issue.*

AUSTRALIA: Just like to show some of our work in Perth Western Australia. 1st 3 of St. Georges Cathedral in the city and the other one is of a copper hip fixed with stainless stiffeners so no fixings are visable. Picture 3 is of me on the roof at the Cathedral. All slates are Burlington from the Lake District in England. *Nigel Carter, Carter Roofing and Slating Pty Ltd, Australia; carterroofing.com.au*

SCOTLAND: Your website and Traditional Roofing Magazine have been a tremendous source of information and inspiration. My house is the ONLY one in the street that retains its original features; slate roof, coronets, sash windows, chimney pots and stacks, wooden fascia... 90% of people in the town doing building work on old properties are having some or all of these removed. After reading your articles I realized that it was possible for me to do a restoration job in the traditional diminishing or graduated style and I will be starting ASAP. My father found an old book at a church sale "The Technical & Instructor" by William McQuhae published 1892. It has a short section on slating and is a genuine snapshot into a bygone age. It may be of interest to your readers? Alistair James, Argyll, Scotland

TR: *See excerpt from "The Technical and Instructor" on the next page.*

STAGING FOR STEP FLASHING: I will be helping on a new construction slate roof. One question I had was installing the copper step flashing. My problem is that the stucco or siding crews will have to go over the flashings against the wall. I know the slates can not be walked on. What is the best way to approach this situation? Should I Install ladder hooks so the siders can come in after we are done?

TR: *You can stage alongside dormer walls either by using hook ladders (easiest, if*

there is a horizontal ridge above) or installing roof jacks and planks with ladders sitting on them. It depends on the configuration of your roof. There is a video clip showing the use of roof jacks at SlateRoofCentral.com/videos.html. Roof jacks (roof brackets) and ladder hooks are available at SlateRoofWarehouse.com.

SNOW APRONS AND PEEL-AND-STICK: I live in Vermont and have a slate roof. The house was built in the 1930s. We're having a roofer install a snow/ice belt along the edge of the roof where we've had leaking. He says he'll put "paper" under the slate, not the Ice Shield. Do you know whether the ice shield is better than paper? He says the slates stick to the ice shield and, if/when you have to replace the slates, they'll break because they stick to the ice shield.

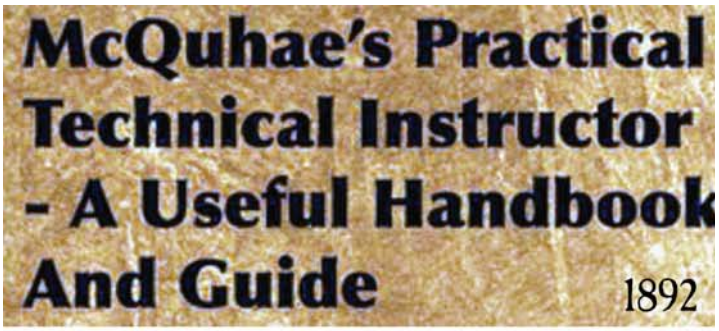
TR: *There is no reason to install ice and water underlayment under a metal snow apron, unless you're expecting the snow apron to leak. However, metal snow aprons benefit from red rosin paper installed underneath, as this makes it easier for the metal to expand and contract. We typically use 30 lb. felt underlayment, then rosin paper over that when installing a metal snow apron. Self-adhering ice shield is unnecessary and your roofer is correct — it makes long term maintenance of the roof more difficult. See the article about snow aprons on page 23.*

CAN'T GET THE SOLDER IRON HOT ENOUGH: I can't get my solder iron hot enough to get a smooth joint. I switched propane tanks. I waited for a warmer day (sunny and 45 here) and I've cleaned everything I could. Help!!! I've got 4,000 square feet of roof in front of me!

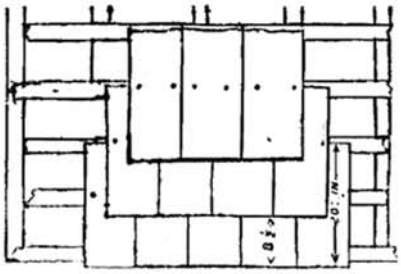
TR: *Check to make sure the iron & regulator are running at full blast with no obstructions in the orifices or hoses. Use a tank that was filled when it's cold outside to avoid pressure discrepancies. Keep the tank & torch warm when not soldering (i.e. inside heated space at night). Slow way down and get a good molten solder puddle to allow the iron to conduct more heat. Make sure there is no water or moisture in the underlayment, and that the copper is isolated from stone and masonry as these conditions will rapidly wick heat away from the joint. Make sure to use 50/50 solder. If the above doesn't do the trick, get a Sievert torch, it just pumps out the heat and the tips have much greater mass. Above being said, even the Sievert propane soldering iron struggled to put out enough heat to do a lap seam when it was 25 degrees F on a 15 mph windy day, seven stories high.*

THANKS FROM A GRATEFUL READER: "I want to thank you a lot for instilling confidence in me, and other DIY roofers that want to learn the skills of quality roofing, by providing the abundance of slating information you have. I spent the weekend replacing some hideous green asphalt junk on a section of my 125 year old roof with some decorative fish-scale slate I got from a local salvage man. Not only did I cut the fish scales myself, but I installed them as well with the help of a friend who's had experience with modern roofing techniques, but never slate. I had to correct him on some things I learned from your website and book, such as decking material, nailing techniques and use of drip edges. I inadvertently learned how to properly remove and install shake siding too because I had to remove 3 layers to remove the rusty, pitted flashing. This winter will tell if we did a good job or not, but even if we messed up somewhere, I at least have the confidence to repair my own mistakes now. I wish there were more websites & books like yours..."

TR: *Thank YOU for the feedback!*



Slating.—**slate** is the material most in use for the covering o roofs. In many parts of the country the slating is done by th bricklayer, for as a rule, there is not sufficient work in small town to keep a slater exclusively for the business. The best slates ar usually brought from Cumberland, Westmoreland, Wales, an Devonshire. Cumberland or Westmoreland green slates **make** th best and most durable roof. The Welsh slates are also well adapte in the form of slabs for making of rain-water cisterns, not only fo the cleanliness of its surface, but its ability to resist corrosiv action, and the ease with which it can be cleaned from adherin dirt. Welsh **slate** is also used for the making of chimney pieces polished in the usual way, or subject to the patented process b which its surface is enamelled. For roofing it is light, neat, an being easily obtained, plentiful and low in price, it is more in us than Cumberland or Westmoreland. It is usual to find some o the slates thicker than others, and these are sorted out and use for the bottom courses. The slates are dressed, the edges ar trimmed, gauged, and the holes are made; the holes are made o a **slate** holing machine, with which a sharp boy is able to hol from 500 to 600 per hour.



Each **slate** to have two nails, and about one inch from each side Sometimes the roof which is to be covered is wider at one end tha the other, from eave to ridge, and when this is so, supposing it t be 4 inches in 10 feet, or 16 courses of **slate**, if 20 × 10 inch slates with 3 inches lap,—fix your laths 8⅝ inches at the wide end, and 8 inches at the narrow end. By doing it is this way you get over th difficulty, and the difference is never observed. The size of **slat** laths should be 2 × ⅝ inches, and nailed on to the rafters with 2 in galvanized nails.

Copper or zinc nails 1½ to 2 inches long, should be used in goo work for the **slates**. Galvanized iron nails are used for cheap work Common iron nails should be discarded, as they are liable to rust and so become of no use.

Slates are variously named according to size, as shown in the following table, in which the size and gauge of each kind is shown, (the lap or cover of **slate** being 3 inches), the number required to cover a square, which is 100 feet superficial, and the weight per 1,000, or in reality 1,110, for **slates** are always reckoned at 120 to the 100. English **slates** are sold by weight of 22 cwt. to the ton.

The blade of the **slate** rip is pushed under the slates, and the head of the nail caught in one of the notches, and then by giving the "rip" a sudden pull downwards the nail is pulled out; if the nail will not give way, a sharp tap or two on the handle will draw it; as you are unable to nail the new **slate**, a strip of lead or zinc ¾-inch broad is laid up over the joint, and nailed to the boarding or lath, allowing it long enough to turn over the bottom edge of new **slate**, the **slate** is then pushed into position, and the metal slip bent over the bottom edge of the **slate**.