Why in the world would anyone do that to a masterpiece slate roof? What idiot did this?

These pictures don’t illustrate my best slate roofing moments. Just look closely and ask, “Should you tar or should you not tar?” Slate roof installers use various adhesives that have been produced and promoted by suppliers, designers, and architects. I’ve installed slate using silicone and red tar, all recommend by architects. Now, however, my company, Slate Affair Inc., has stopped this practice because of staining and running issues on our masterpiece “wild slate roof.” I’ve taken the time to observe and think this through, and now I understand how to use simple knowledge, architecture, and fasteners when installing slate roofs. This allows me to do away with the need to use any adhesives.

Various adhesives are used by builders, general contractors, and architects to provide, for example, a hurricane-proof slate roof perimeter. Typical commercial adhesives are silicone, Bull Dog Roofing Cement, liquid nails, and Geocel, to name a few. These adhesives, and others not listed, will not last as long as a correctly installed slate roof. While working as a young slater with different companies, I became introduced to the use of adhesives in the installation of slate roofs, even though most old slate roofs required no adhesives at all. Our typical applications would include silicone on the bottom corners of the slates in valleys, drip edges, eaves, hips, and any other potential penetration points.

I became familiar with Red Roofing Cement while working in Massachusetts. You can see this product in the photo. When using this cement, a lot of problems can happen, from dropping a small drip of it or knocking a can off the staging onto the slate and surrounding materials. Repairing slate that has this stuff on it is not a lot of fun. You start by sliding your slate ripper under the slate to be repaired, only to pull out a red slate ripper. It’s like you’re one of King Arthur’s knights stabbing an infidel with your broadsword and pulling it out bloody. You end up with red cement all over the place: your clothes, hair, face, and arms. Yes, that’s right, you forgot to look at your feet and you just put a nice big red tar stain all over the floor of your company truck. It’s not fun working with red roof cement — it’s messy stuff, applied with a trowel.

When left with a mess, you learn the dos and don’ts of cleaning red tar stains from a slate roof — the roof doesn’t clean itself. After about four days hanging out of a basket lift or stuck on ladders, our roof was finally cleaned of all the tar stains. One thing is sure, a slate is best cleaned as soon as it falls on a piece of slate rather than waiting till the end of the day. The best methods for cleaning the tar seem to be scraping, scrubbing with a citrus cleaning solution, or use of a pressure washer with a lot of hose. It’s mostly time and patience until all the stain has been removed. With the scraping, I used a variety of tools — chisels, paint scrapers, razors, and the slate hammer. The hammer seems to be the quickest and best tool for removing a variety of stains. Its downfall is the groove made in the slate by the scraping action, so I only use it higher on the roof where it is less likely to be visible. Scrubbing with a brush and citrus cleaner is time consuming and is best used on lower roofs where people can see the roof from windows or from the ground below. The citrus cleaner works best when left on the slate for long periods then rinsed with a pressure washer to remove the tar. Be careful with the use of pressure washer on any slate roof; it’s a great tool for removal of a stain, but only when set to a low setting and used with a citrus cleaner and brush. The pressure washer can cause the slate to flake apart.

How do I provide a long-lasting, wind-proof slate roof without using adhesives? Most slate roofs we install need no adhesive protection at the perimeters. Adhesives may be justified in areas prone to high winds such as a hurricane area or along the coast where wind damage may be common. Traditionally, there was nothing extra done to slate roofs for wind protection; typically it was left to an architect to design the roof with the wind in mind, among other things. A correct design for a slate roof included a steep roof slope and one-inch thick decking for fastener connection. The way we build houses today has changed and so has the correct application of available building materials. The use of slate on low slopes makes it easier for wind lift to damage the roof.

There are some design considerations you can incorporate into a slate roof, without using adhesives, to alleviate wind uplift problems. One is to “dog ear” or clip the outside bottom corner of the slates running up a rake. As you can see in my pictures, all my slates are round, lessening the wind lift not only on the rakes, but on the roof as a whole.

Another way to avoid using adhesives involves nail placement. I have found that when nailing in wind-prone areas that a diagonal nailing pattern works better to keep the slate in a long-lasting position. Also, it is recommended to take the extra time to install thicker and nicer pieces of slate in the wind exposed areas. This will create an overall heavier weight on the roof’s perimeter, thereby helping with wind issues and minimizing future repair problems. For wind protection and snow problems, instead of adhesives, there are other fasteners that can be used. Slate hooks, for example, are used in this way. Hooking the bottom of your slate helps to prevent wind lift. Others include copper wire and stainless steel hurricane clips (similar to slate hooks) to name a few.

I’m not trying to convince you to do anything. I’m just another slate roofer with photos to show you why not to use adhesives on a slate roof. What it comes down to is this: how easy was it when you did your first slate repair on a house when no adhesives were used? Or did you find the repair difficult and time consuming because adhesives were holding down the slate? No. It was a nice, easy slate repair without the adhesives, and when it was completed, the end product was a beautiful slate roof. That’s why slate shingles should be installed without tar, glue, silicon or other adhesives in order to provide a beautiful, rugged, long lasting, and easy to repair stone roof.

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