Messy sealing of travertine

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I used a Dumont sealer to seal our travertine and it left a dull finish with brush marks. Not happy at all. Come to find out I should not have used Lowes sealiing products. Do I need to strip the old sealer off before applying a better sealer? Thanks so much. Dyanne

Dear Dyanne:

I assume that you meant a DuPont sealer â€“ not Dumont, right?

Regardless, what I need to know is if it is some sort of topical floor finish or if it is an impregnating sealer.

For the sake of the argument, and considering that, A) all too many people confuse an impregnator with a sealer and that, B) all too many people do not read the directions printed in the back of the bottle, I will assume that you're dealing with an impregnator and that you applied to your stone as if it were a sealer. There's nothing wrong with that product, and there's no such a thing like a â€œbetter sealerâ€•. There's no such a thing like a sealer, period.

Since after having read the above I would be as confused as you probably are, allow me to explain to you what a sealer for stone is about.

DEFINITION OF SEALER FOR STONE

For starters, when referred to stone the word sealer is wrong. Well, technically it is not, but the reason why I said that's wrong is because sealers for stone are totally different from any other sealer that most people are familiar with. A sealer is perceived like a topical coating of sorts that's meant to protect the surface of the sealed object from traffic and spills, to produce a finish (polished, or matt, or satin) and to fill all little nicks, fissures and other surface imperfections.

A sealer for stone is none of that â€“ **None!**

And that is why I said that the word sealer is wrong when referred to sealers for stone. The right word is **impregnator**.

An impregnator is a below-the-surface (of the stone) sort of sealer. It's a product made of two major components: a resin of sorts that could be silicone, siloxane, silane, ester epoxy, alphatic fluorochemicals, acrylics, etc., plus a carrier, that could be a petroleum-based solvent or simply water. The resin is dissolved by and within the carrier.

What does an impregnator do, and how does it work?

The only thing that an impregnator does is reducing dramatically the natural absorbency rate of the stone by somehow filling the spaces between the single molecules of minerals composing the stone, which are known as **pores** - End of the list of performances. This reduction of absorbency rate (or porosity) of the stone will make so that possible staining agents that may get spilled on the stone will be kept at bay on the surface of the stone for a period of time much longer than if the stone was not sealed.

The way it works is that the solution goes inside the stone, the carrier (solvent or water) evaporates and the resin stays in and cures, thus partially clogging the pores of the stone.

The most important phase of the application of an impregnator is the total and thorough removal of its residue that was not absorbed by stone from its surface, before it has a chance to dry, so that at the end of the sealing job the surface of the stone is as bare as it were before the sealing procedure was started.

The immediate, obvious consequence of that is we're not talking about a *coating*, but rather an *application*.

Next, the question is: how does an impregnator go inside the stone?

Quite simply, by being absorbed by it.

So far we've learned a couple of important things: 1. That a sealer for stone only helps preventing deeply imbedded stains by delivering a reaction time, which is how much time you'll have to blot the staining agent off of the stone surface before it begins to sink in. (The better the quality of the impregnator in relation to the stone to be sealed, the longer the reaction time will be.) 2. That because of the way it was designed and works **it cannot â€“ and in fact does not â€“ offer any protection or improvement whatsoever to the stone surface**.

Next, we have now to talk about the natural absorbency of stone.

This side of single-crystal rocks (i.e.: gemstones), every multi-mineral stone is somehow porous. However, while there are stones that absorb liquids like sponges, there are stones that are naturally so dense that no liquid is thin enough to be absorbed by them. The latter types of stones â€“ which are quite a few â€“ can't be technically sealed, because no impregnator will ever stand a chance of being absorbed by them. On the other hand, since they won't absorb any liquid, it is pretty intuitive that they will never get stained. In other words they are already naturally stain-resistant stones.

What is interesting noticing is that while certain stones have an absorbency rate that indicates their ability to absorb liquids (above 0.2%), in fact they don't absorb anything due to their dramatically increased surface tension once polished. For example, travertine is rated at 0.4% to 1.0%. In its rough form it does absorb liquids, though slowly; but if you polish it, it effectively will not absorb a single drop of anything. In fact, nobody ever reported any stain on a polished piece of travertine. (In its hone-finished form, however, travertine may â€“ and just *may* â€“ absorb something. Most of the time it does not, even when hone-finished.)

In conclusion, only a certain number of stones can be sealed and, more importantly, the performance of an impregnator is only limited to the reduction of the stone natural absorbency rate if it is â€“ even when polished â€“ above the 0.2% cut off point.

How does the average consumer know if their stone could be possibly sealed without that kind of information? It is quite simple and down to earth: spill some water in a couple of spots of the stone to be tested, let it dwell for 10 minutes or so, wipe it dry and observe if the areas under which the water has been sitting have become (temporarily) any darker than the rest. If so, *if* the stone is installed in an environment where staining spills are likely (i.e.: a kitchen) the application of a good-quality impregnator is recommended. If not, or if the stone is to be installed where the likelihood of spillage is minimal or nil altogether, it would be a totally useless exercise that will only help to put the kids of the impregnator's maker and its distributors through college.

If you're still with me, you now know that A) your travertine most-likely didn't need to be â€œsealedâ€• at all to begin with and. B) that you have a huge mess on your floor with no easy solution.

How to strip it now?

I honestly don't know. Impregnator's residues are extremely tough to remove and apparently you have a massive dose of the stuff dried on your floor. I can anticipate to you that a wax stripper will not work. Unless DuPont has a special remover of their own impregnator (I suggest you to contact their customer service to find out), you're in for the heck of a chore! The only thing that could work for sure would be a potent paint stripper based on Methylene Chloride (available at any paint store), but if you resort at using that stuff, let me know so that I can move out of the country for a couple of days! We're talking some major chemical here, to be applied with all sorts of protective gears, with all windows open and everybody (including pets) out of the house. I sure hope that you can find a different solution.

Now remember, it's never too early to think about the proper maintenance of your stone. ***The issue of what you'll be doing day in and day out to your stone is â€“ as it should be intuitive â€“ vastly more important than its sealing*** (if and when possible and/or advisable) and it's all too often neglected. As you can tell by reading many of this site's postings, you're not likely to get good information about routine care from your dealer or installer. Don't become another statistic! By logging into the Helpful Hints section of our website at: _ http://www.mbstone.com/HH_promo/helpful_hints.htm , you will be able to get the short version of our maintenance guidelines at no charge. The full version of it â€“ a 7-page document considered by many as an industry benchmark â€“ is available in pay-per-download format in our Educational Literature section at: _ http://www.mbstone.com/literature/literature.htm .

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