dull, white, hazy film on outdoor granite table

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Hi, I have an outdoor granite table that I bought at costco. They said it was sealed so we didn't use any additional sealer. It now has a white, hazy color on the whole table. I have tried polishing it and using cleaners made for Granite, but nothing has worked. It is a speckled brown granite color top. Can you tell me what this is and how to restore it and if I can do it myself? Thank you, Jennifer Mueller

Dear Jennifer:

Let's start by saying that there are over 2700 (no, it's not a typo) stones traded as granite on the market (and counting). Approximately a couple of dozens of them are true geological granite. Another three or four do zens could be classified as next of kin. All the remaining 2700 plus stones are related to granite and to each other like a cat to a cow. Many are as good as granite, many are even better, but some are a disgrace.

Q.: *â€œButâ€¦ isn't that illegal?...â€•*

A.: *â€œYes, it is. It's consumer fraud big time! Welcome to the stone industry!â€•*

Having said all that, which â€œgraniteâ€• do you have? I don't care about the fancy name they call it with: I want to know the actual mineralogy of that stone. Do you have the information? Does the merchant that sold it to you have the information?

That said for to set the record straight about the stone, let's now set the record straight about the sealer.

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 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.: certain 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.

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.)

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.

Having said all that and thus having gained some stone intelligence, we have a couple of possibilities: A) your â€œgraniteâ€• is a stone sensitive to the weather (true geological granite is not) and, yes you can have it restored

professionally by a proficient stone restoration contractor (stone is polished mechanically, by abrasion and friction, not by slapping a sealer onto it), but then you will have to make sure that your table is going to be protected from the weather from now on. B) that the stone that you have is dense to the point that it could not be technically sealed and the sealer they applied anyway was never completely removed. In such case it could be the invisible film of impregnator that had no business being there that could be reacting to the weather and it will need to be removed. Even in this case, your best bet is to hire a reputable stone restoration professional, because stripping an impregnator residue is no easy task.

May I ask you now to please read and e-sign our Statement of Purpose at: http://www.marblecleaning.org/purpose.htm?

Ciao and good luck,

Mauri zio Bertoli

www.marblecleaning.org â€“ The ***Only*** Consumers' Portal to the Stone Industry Establishment!