Sealed Stone Testing and Treatment

TDS 261

Determining if a stone is sealed is an important question which must be answered prior to considering the application of a new sealer treatment. Realizing if an unsealed stone surface will be able to accept a sealer is also important in determining how to move forward. There is a very simple and inexpensive test to determine if the stone, saltillo tile or cement-based grout is currently sealed, or if it even requires a sealer.

Water Test:

The quick and easy test is performed with water and can provide valuable information about the current state of the stone or grout surface.

1. Apply water in a few different areas of the stone and/or grout
2. Make each application of water approximately 1" (25mm) wide
3. Roughly measure the size of the circle of water without actually touching or disturbing the water. Make a notation as to the size of each application of water
4. Place a drinking glass over each application of water to protect from evaporation
5. Let sit undisturbed for 20 minutes
6. After 20 Min remove the glass(es) and observe the results

    A. ***No Change*** - If the water appears the same as when it was applied and the water measures the same diameter, then a sealer is present, or, the stone is very dense and does not need a sealer. In fact, a very dense stone may not accept a sealer (since absorbency is necessary for a material to accept a sealer).

    B. ***Slight Change*** - If the water is still present in a bead but appears to be absorbing into the surface then a sealer may already be present but requires resealing, or, the stone is not sealed and is slightly absorbent, to allow for the slow absorption of water

    C. ***Complete Change*** - If the water is completely absorbed into the surface and the spot appears to have grown in size then the stone is not sealed and the use of a high quality sealer (e.g. STONETECH® BulletProof® Sealer, STONETECH Heavy Duty Sealer, STONETECH Impregnator Pro® Sealer, etc…) is strongly recommended.

Benefits of Testing:

Sealers are important to provide water and oil repellency to the surface of the stone, saltillo tile or cement-based grout. Performing the water test will not only help to determine if a sealer is present or required, it can also provide good information as to how many coats of sealer may be necessary.

As stated above, if water is repelling on the substrate and is not darkening or penetrating into the stone then a sealer will most likely not be necessary. If the owner would like a non-sealed, dense stone treated with a sealer then a solvent-based impregnating sealer (e.g. STONETECH Impregnator Pro® Sealer) would be the best choice and only one coat may be necessary.

If the surface is absorbing the water, but slowly, it either means that the stone is slightly absorbent and no sealer is present, or, that a sealer is present but may require reapplication. If the owner is not aware of the presence of a previously applied sealer, then it may be necessary to perform another test. Use STONETECH KlenzAll™ Cleaner to remove existing sealers in a small inconspicuous area and perform the water test again. If the water absorbs more quickly, then it will be necessary to remove the old sealer, using STONETECH KlenzAll Cleaner, on the entire surface prior to applying the new sealer. If there is no change in the absorption of water in the test area, then a sealer was most likely not present and the sealer application can commence. This type of stone may require 2 coats of sealer but check the product data sheet of the sealer for more specific application guidelines and for compatibility for the specific surface being sealed. Please contact LATICRETE STONETECH Technical Services at 1.888.786.6343 or visit www.stonetech.com for more information.

If the water is penetrating quickly into the surface, then 2 conditions most likely exist; there is no sealer present and the surface is highly absorptive. It is strongly recommended that this stone be sealed prior to exposure water, oil or any other damaging effects. This type of stone may require 2 or more coats of sealer, so it is important to check the product data sheet of the sealer for more specific application guidelines and for compatibility for the specific surface being sealed. Please contact LATICRETE STONETECH Technical Services at 1.888.786.6343 or visit www.stonetech.com for more information.

It is important to note that not all types of natural stone and grouts have the same absorbency or physical characteristics (e.g. polished, honed, flamed, etc…). Knowing this, it is extremely important to use the correct sealer for the type of stone being sealed and for its intended use and exposure. Failing to do so, may lead to some unexpected results which can have an impact on the final appearance and performance of the stone.

Please note that porcelain and glazed ceramic tile are impervious and will not accept a sealer. However, stone, porcelain and ceramic tile do require cleaning so please visit www.stonetech.com for more information of STONETECH cleaners.

Recommendations for Sealer Removal:

To get the maximum benefits of the STONETECH® sealer, it is important that the stone or grout absorb all of the components of the sealers. If pre-existing sealers are present then the successful transfer of all ingredients of the sealer into the surface will be inhibited, which can lead to some issues with the stain-resisting capabilities of the sealer.

If testing has determined that the stone may have an existing sealer present, then it will be necessary to remove them prior to application of a new sealer.

1. If the existing sealer is a *penetrating* type (e.g. STONETECH Impregnator Pro® or STONETECH BulletProof®) then use STONETECH KlenzAll™ Cleaner at its strongest solution of 1 part STONETECH KLENZALL to 2 parts warm water (1:2). Please read and understand the directions for use prior to using as directed.

Dilute concentrated cleaner with warm water according to the following mixing chart:

Use	KLENZALL	Warm Water
Heavy duty	1 part	2 parts
Spray refill	1 part	4 parts
Light duty	1 part	8 parts
Acid neutralizer	1 part	32 parts

1. Apply mixed solution with a mop, sponge or sprayer. Avoid applying cleaner on unintended surfaces.
2. Lightly rub with a scrub brush or floor machine as needed.
3. Remove solution using a sponge, wet/dry vacuum or damp mop.
4. Rinse area well with clean water.
5. Reseal cleaned area with the appropriate STONETECH sealer for your stone and application.

2. If the existing sealer is a *topical* type (e.g. STONETECH Semi Gloss Finish & Sealer or STONETECH High Gloss Finish & Sealer) it is recommended to use STONETECH Epoxy Grout Haze & Coating Stripper. Please read and understand the directions for use prior to using as directed.
    1. SHAKE WELL BEFORE USING. Do not dilute before applying.
    2. Wear rubber gloves and eye protection during handling and application to prevent skin and eye contact.
    3. Liberally apply an even coat over the required area with a paint brush, mop or paint pad. DO NOT APPLY PRODUCT WITH A SPRAYER. Immediately remove product from unintended surfaces with a wet cloth to prevent potential damage to those surfaces.
    4. Let STONETECH® Epoxy Grout Haze & Coating Stripper dwell as follows:

Haze / Coating	Surface Type	Age of Haze/Coating		
		24 Hour	**7 Days**	**> 7 Days**
Epoxy Grout Haze	Tile	1 – 3 minutes	3 – 5 minutes	10 minutes
Epoxy Grout Haze	Natural Stone & Masonry	1 – 3 minutes	3 – 5 minutes	10 minutes
Coatings *	Tile	1 – 5 minutes		
Coatings *	Natural Stone & Masonry	1 – 5 minutes		10 minutes

5. Do not let STONETECH® Epoxy Grout Haze & Coating Stripper dry on the surface. If product starts to dry, add more to keep surface wet.
6. Agitate surface with a nylon scrub brush or pad after testing a small area first to make sure that brush or pad will not scratch stone. Surface can be wet with water to enable easier removal of coating.
7. Wipe up residual coating with clean, dry cloths. A wet/dry vacuum can be used for a larger area.
8. Rinse surface well with clean water.
9. More than one application may be required, repeat steps 1 through 8 when necessary.
10. Surface traffic may begin 2 hours or when surface is dry.

Application time may vary depending on the surface texture and age/thickness of haze.
* Coatings such as varnish, lacquer, sealer, wax, paint, polyurethane, acrylic, and stain.

The proper use and application of a high quality STONETECH Sealer will provide excellent protection for your stone application and keep your surface looking and performing like you want it to. Please note that reapplication may be necessary from time to time and some maintenance (e.g. cleaning, polishing, etc…) may be required. Sealers are great for preventing absorption of water and oils but will not prevent etching by acidic materials on acid sensitive stone such as polished marble, travertine and others.

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