# Tile & Stone Installation Systems Choosing the right sealer

Choosing the right product to seal your natural stone or tile is critical to the life, longevity and overall appearance of your tile surface. Selecting the wrong product can have both disastrous and costly effects, by causing irreparable damage. There are many factors to consider when choosing the right sealer. Knowing the type of surface you have, where and how it is being used, and performance expectations will help when selecting the best sealer for the job.

A good rule of thumb to follow is, if the surface is dense, use a solvent-based product such as *UltraCare*<sup>™</sup> Penetrating SB Stone, Tile & Grout Sealer or *UltraCare* Penetrating Plus SB Stone & Porcelain Tile Sealer. If the surface is porous, use a water-based product such as *UltraCare* Penetrating Plus Stone, Tile & Grout Sealer or *UltraCare* Penetrating Stone, Tile & Grout Sealer or *UltraCare* Penetrating Stone, Tile & Grout Sealer. *UltraCare* "SB" (or solvent-based) products have a smaller molecular construction than water-based products and are generally preferred for use on the denser surfaces such as polished granite, marble and porcelain tile. Water-based penetrating sealers, with their larger molecules, are preferred for use on the more porous surfaces such as brick, clay tile, grout and slate. This isn't a hard and fast rule, as both types of sealers can work on the same surfaces and the choice will sometimes come down to preference of the end user.

In years past, solvent-based products were considered superior to water-based products but, with today's technology, that is no longer the norm. Chemistry has evolved to the point where we can now formulate high-performance, water-based sealers that can outperform solvent-based products along with being safer to use and more environmentally friendly. This offers the consumer a variety of choices.

Don't be fooled because a sealer offers only standard protection against waterborne staining. Although these types of sealers may be inappropriate for use in a food service environment, they would be an excellent choice for use on an exterior brick wall, marble statue, stone fountain, paver walkway, tile or grout where oil repellency isn't needed. These sealers can last for years in the right environment, at a very reasonable cost to the consumer. However, using these types of sealers in an environment where oil repellency is needed would be a big mistake.

## **Types of sealers**

Sealers are generally classified into two categories: penetrating and topical. Both can be either water- or solvent-based. Both types can be used on a variety of stone and tile surfaces, including brick, clay tile, cement-based grouts, concrete pavers, granite, marble, limestone, onyx, porcelain tile, quarry tile, sandstone,

slate, travertine and more. Penetrating sealers leave the surface unchanged and natural in appearance after drying, although some penetrating sealers are also color-enhancing sealers. Topical coatings change the surface appearance by changing the angle of how light reflects off of the surface. Low-sheen and high-gloss finishes are popular choices available in the market.

#### Penetrating sealers

Penetrating sealers penetrate and impregnate the surface, leaving the surface unchanged in appearance. Rather than forming a film, penetrating sealers impregnate, so they will never peel or flake and do not change the coefficient of friction (COF) after application. Penetrating sealers generally offer two levels of protection – standard and premium.

Standard protection: Standard penetrating sealers protect against staining caused by beverages, dirt and soil. These sealers would be inappropriate for use in a residential kitchen or commercial food service area, as these sealers rarely offer protection from oil-based contaminants. Standard penetrating sealers are usually less expensive to purchase than high-performance, premium sealers:

- UltraCare Grout Sealer
- UltraCare Penetrating Stone, Tile & Grout Sealer

Premium protection: Premium penetrating sealers offer high performance and premium protection by offering resistance to oil-based contaminants, in addition to basic protection against beverages. Excellent for use in food preparation and service areas, these sealers usually have a higher price point than standard-type sealers:

- UltraCare Penetrating Plus Stone, Tile & Grout Sealer
- UltraCare Penetrating SB Stone, Tile & Grout Sealer
- UltraCare Penetrating Plus SB Stone & Porcelain Tile Sealer

#### Enhancing sealers

Enhancing sealers deepen and enhance the natural colors and veining of natural stone, making the stone more vibrant without producing a gloss. Some enhancers offer premium protection and resistance to oil-based contaminants. MAPEI's *UltraCare* line offers two enhancing sealers that provide premium protection:

- UltraCare Enhancing Stone Sealer
- UltraCare Enhancing Plus Stone Sealer

### Topical coatings

Topical coatings do just as the name implies: They sit on top of the surface, producing either a low-sheen or high-gloss appearance. Topical coatings are sometimes referred to as "sacrificial" coatings because they eventually wear off with pedestrian foot traffic and will require reapplication more frequently than a penetrating sealer. It usually takes more than one coat from a topical coating to adequately protect a surface:

- UltraCare High-Gloss Sealer & Finish
- UltraCare Low-Sheen Sealer & Finish

#### When to re-seal

Regardless of the surface that is being treated or the type of protection chosen, it will always be necessary to periodically reapply sealer over the life of the tile or stone in order to maintain an optimal level of protection. Reapplying sealer should become part of a regular maintenance program. The frequency of reapplying sealer should be directly related to the amount of wear and tear caused by pedestrian foot traffic, how often the sealed surface is cleaned and what cleaning agents are being used to clean the surface.

A simple water droplet test will help to determine if the surface needs resealing. Simply sprinkle a little water over the area and look for it to penetrate into the surface. If it penetrates quickly, it's probably time to reapply sealer. If the droplets penetrate slowly or not at all, reapplication isn't needed.

Always check the sealer manufacturer's label for the best application methods and maintenance recommendations. Strong chemicals can severely affect penetrating sealers and can render them ineffective after only one cleaning. It is generally recommended to use a mild, neutral-pH cleaner designed specifically to maintain sealed natural stone, tile and grout, such as *UltraCare* Concentrated Tile & Grout Cleaner. Refer to products' Technical Data Sheets for details.

