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A close look at how concrete deck sealers differ, and which one is right for your customers

Seal of Approval

In today's pool market, more money is being spent on decks and waterfeatures than ever before.

But a deck must be protected. Thus, millions of gallons of sealers are sold annually to keep them looking new. These products give service technicians a chance to enhance the look of their customers' backyards, while also boosting their own bottom lines.

Before beginning, you need to know about the two types of sealers: topical and penetrating.

Topical sealers

The most common topical sealer is acrylic, which forms a film over the surface. It attaches itself to the concrete by mechanical bond, much like paint. Such sealers can be applied to new or old concrete and most tile applications by spraying or rolling them onto the surface.

To determine if a specific surface can receive a sealer, a simple water test can be conducted. If the surface won't allow water to be absorbed, the sealer cannot penetrate or adhere to it.

In the past, topical sealers were not used on pool decks because they became slick when wet. Today's technology has solved this problem. Non-slip products made from finely ground polymers can be added to topical sealers, increasing their coefficient of friction. The acceptable static coefficient of friction established by ASTM C 1028 for a wet surface is $\geq .60$ pounds-force. A surface with a topical sealer and nonslip additive applied can achieve a wet coefficient of $\geq .85$ pounds-force.

Decorative concrete decks are becoming increasingly popular and must be sealed. Acrylics work well for this type of surface, which is why they are often the sealer of choice. Acrylic sealers are transparent and give the concrete a "wet look" or sheen.

In addition to enhancing the look of the deck and protecting it from the weather, topical sealers reduce staining. Liquids such as wines, sodas, juices and sports drinks can be easily wiped up without staining the surface. The deck also is shielded from fallen leaf stains, furniture rust and other items that can be spilled or dropped on it.

A good topical sealer should function as an anti-spalling agent, too. This is critical for concrete in climates that experience freeze-thaw cycles. It does not allow water to penetrate the concrete, so the liquid cannot freeze and expand below the surface. If it

did, it would cause the top layer of concrete to pop off and ruin the finished surface.

Penetrating sealers

A sealer does not form a film over the surface. Instead, it penetrates into the pores. Through a chemical reaction, it seals the pores, not unlike "Scotchgarding" a surface. These types of sealers usually are made from silane, siloxane or a blend of the two.

Penetrating sealers do not change the appearance of the surface. They can be used on concrete, pavers, stucco, stone, brick and tile. These types of sealers can be applied by spraying, rolling or brushing.

Besides acting as a stain and spall-resistant material, these sealers also aid in stopping effervescence. Penetrating sealers are commonly applied to natural stone waterfeatures to help stop water loss and the bleeding of the stone. Such sealers can be identified as water repellents, but are not a waterproofing material because they are unable to bridge a crack.

Which to choose?

In most cases, the determination of which kind of sealer to use is a matter of preference. If an enhanced look is desired, a topical sealer should be used. If it's a natural look you want, choose a penetrating type of sealer.

Make sure you discuss each one ahead of time with your client. ■



PHOTOS COURTESY DECK-O-SEAL



On deck: Topical sealers can be applied to new or old concrete, and most tile, by spraying or rolling the product onto the surface.