

FAQS

Where can I purchase Concrete Sealers USA products?

Concrete Sealers USA products are not available in stores and can only be purchased directly through our online catalog at www.concretesealersusa.com or through our affiliate relationship with Amazon. The products we sell are true professional grade products. Our products are shipped direct to contractors, architects, engineers, applicators, and do-it-yourselfers. Bypassing traditional distribution channels allows us to offer our professional grade products at more competitive prices which provides our customers with greater value.

Why are Concrete Sealers USA products superior to hardware and retail store products?

Unlike hardware and retail store products which are entry level products largely formulated to reach lower price points, our products are true professional grade products that have historically only been used by contractors, architects, and engineers for military, commercial, industrial, and institutional projects. Examples of such projects include use on military bases, roads, bridges, sports stadiums, hospitals, schools, universities, shopping malls, hotels/ motels, casinos, theme parks, factories, warehouses, parking garages, airports, etc. As a result, our products are superior to those found in retail stores in terms of quality, performance, durability, and long term results.

Why should I seal my concrete, brick, and stone surfaces?

While concrete, brick, and stone surfaces are known for their strength and durability, they are inherently imperfect substances and won't last forever. These surfaces are subject to structural deterioration and degradation of appearance through traffic, UV rays, moisture, freeze/ thaw cycles, wind driven rain, chemicals, and other impurities such as oil, gas, grease, and salt. This often results in common problems such as cracking, pitting, popouts, scaling, spalling, crazing, delamination, dusting, discoloration, efflorescence, salt damage, etc. While concrete sealers do not provide a "silver bullet" solution and generally cannot overcome poor quality materials, shoddy workmanship, or inadequate curing methods, they offer excellent maintenance benefits when quality materials are used, concrete and masonry is properly placed and finished, and surfaces are properly cured. Surfaces may still erode with wear and tear and be subject to discoloring and staining even with the utmost care.

However, the protection benefits from concrete sealers can greatly reduce deterioration, extend overall life expectancy, preserve or enhance the beauty of your surfaces, and make surfaces easier to clean and maintain. Historically, most homeowners did not understand the value of sealing their concrete, brick, or stone surfaces. This was largely the result of a lack of consumer awareness as well as limited technology in the building industry. With recent technological advances and increased knowledge and awareness though, more and more homeowners are now choosing to use concrete sealers on both new and existing concrete and masonry surfaces. The downside of not sealing and appropriately caring for your concrete, brick, and stone surfaces is a significantly reduced lifespan, deterioration that can result in your surfaces becoming an "eye sore", forced repair of surfaces which are not always a significant improvement over a problem surface in terms of structural integrity or appearance, and, worst case scenario, very costly early replacement of surfaces.

What are the different types of concrete sealers that are available?

There are many different types of concrete sealers on the market today. However, there are generally only two broad classifications.....penetrating sealers and topical sealers/ coatings. Within these two main classifications, there are several subclassifications which are based on the primary chemistry being used in the sealer. Below is a summary of the main sealer types followed by a short description of each:

Penetrating Concrete Sealers

Silicate Sealers--Silicates are considered a densifier and hardener. They are most commonly used on machine troweled surfaces such as warehouse, distribution center, or garage floors as a floor densifier and hardener which can greatly increase the durability, strength, and abrasion resistance of a smooth troweled concrete surface. They are also used as a polishing aid on burnished or polished concrete floors such as those commonly found in Big Box stores. They penetrate into the surface and have a chemical reaction with the alkalis and calcium hydroxide in the capillaries to form a new permanent nonsoluble chemistry. The molecules in this type of sealer are fairly small which allows for good penetration and for protection that is built from the bottom up. There are four main types of Silicate sealers that are in use today. Sodium Silicates, Potassium Silicates, Lithium Silicates, and Colloidal Silica. Sodium Silicates and Potassium Silicates are older technologies and have been around since the 1940s and 1950s. As a result, they are normally less expensive than their Lithium Silicate and Colloidal Silica counterparts and are at times more involved to apply. Lithium Silicates are the most prevalent of all the silicate sealers and have been around for the last 25 years or so. Colloidal Silicas are a newer technology and have gained a narrow following over the last 10 years or so. On very porous surfaces, multiple applications may be needed for either traditional silicates or colloidal silicas to achieve maximum benefits. Surfaces can often times offer a polished appearance by working the sealer into the surface through diamond polishing or floor burnishing equipment. In recent years, certain silicates and colloidal silicas have also started to be developed for use as concrete finishing and curing aids. Our [PS107](#) and [PS108](#) are Sodium Silicate based densifiers. Our [PS103](#) and [PS104](#) are Lithium Silicate based densifiers. Our [PS112](#) is a Colloidal Silica based densifier.

Silane Sealers--Silanes are considered a water repellent. They provide protection against water, moisture, efflorescence, freeze/thaw damage, deicing chemicals, acid rain deterioration, salt intrusion, UV damage, scaling and spalling, dirt buildup, mold and mildew, alkali attack, and corrosion of reinforcing steel. Silanes penetrate into the surface and have a chemical reaction with minerals in the capillaries of the substrate to form a cross linked silicone resin within the surface. The molecules in this type of sealer are very small which allows for very deep penetration. However, because molecules are so small, this results in low coverage rates and as such surface must be heavily saturated or sealer must be applied multiple times with a high active solid Silane in order to achieve topical protection benefits. If achieved though, Silanes offer excellent hydrophobic repellent benefits. Silanes can darken a surface with heavy application though. Silanes are typically used in sealing very dense surfaces such as high performance concrete and stone. Our [PS105](#) and [PS109](#) are Silane based sealers.

Siloxane/ Silane Sealers--Siloxane/ Silane (or generically referred to as just Siloxane) sealers are a derivative of the Silane family and considered a water repellent. They provide protection against water, moisture, efflorescence, freeze/thaw damage, deicing chemicals, acid rain deterioration, salt intrusion, UV damage, scaling and spalling, dirt buildup, mold and mildew, alkali attack, and corrosion of reinforcing steel. Siloxanes penetrate into the surface and have a chemical reaction with minerals in the capillaries of the substrate to form a cross linked silicone resin within the surface. The molecules in the Siloxane component are typically a mixture of different size particles to fill different size voids. The Silane component has a very small molecular structure and the Siloxane component has a larger molecular structure. The two components work together to achieve a good balance between penetration and coverage rates. This type of sealer is an excellent choice for porous concrete, exposed aggregate, brick, stucco, block, mortar, grout, and other masonry. Our [PS110](#) is a Siloxane/ Silane based sealer.

Siliconate Sealers--Siliconates are a derivative of the Silane family and considered a water repellent. They provide protection against water, moisture, efflorescence, freeze/thaw damage, deicing chemicals, acid rain deterioration, salt intrusion, UV damage, scaling and spalling, dirt buildup, mold and mildew, alkali attack, and corrosion of reinforcing steel. Siliconates penetrate into the surface and have a chemical reaction with minerals in the capillaries of the substrate to form a cross linked silicone resin within the surface. Because the molecules in this type of sealer are larger than that of other penetrating sealers, these sealers offer better topical protection as well

as increased coverage rates. Another common use of certain Siliconate sealers is as a cure and seal on freshly poured concrete. Siliconate sealers because of their versatility are a multipurpose sealer and can be used on both smooth and broom finished concrete surfaces. Our [PS101](#) is a Siliconate based sealer developed for all porous concrete and masonry and our [PS102](#) for all rough porous concrete and concrete block.

Fluorinated Sealers--Fluorinated sealers are derived from the chemical Fluorine. These sealers are uniquely hydrophobic and oleophobic and provide protection against water, moisture, dirt buildup, oil and grease, and other contaminants. They also offer protection against freeze/ thaw damage, scaling and spalling, deicing chemicals, efflorescence, and mold/ mildew. Fluorinated sealers penetrate and absorb into a substrate and chemically react with it to physically and chemically bond with the surface. The molecules in Fluorinated sealers are extremely small nanosized particles and offer excellent penetration even in very dense but yet still porous surfaces. Fluorinated materials are known for having extremely strong Carbon-Fluorine bonds which are very stable and nonreactive. These bonds are more durable, long lasting, UV resistant, and heat resistant than that of traditional water repellent sealers like Silanes, Siloxanes, and Siliconates. These sealers also offer the most stain protection out of all penetrating type sealers. The level of stain resistance is typically only surpassed by the use of topical sealers/ coatings. These sealers are most effective on dense surfaces like machine troweled concrete, porous natural stone, cement terrazzo, grout, and mortar. Our [PS099](#) and [PS100](#) are Fluorinated based sealers.

Topical Concrete Sealers/ Coatings

Acrylic Sealers--Acrylic Sealers bond to the surface being sealed with no chemical reaction with the surface like the penetrating sealers. These sealers contain an acrylic polymer resin and are either solvent or water based. This type of sealer provides durable protection, color enhancement, and a gloss appearance. The solvent based Acrylic Sealers provide better protection, superior color enhancement, and a higher gloss sheen or more of a "wet look" over the water based versions. However, the water based versions are more environmentally friendly and easier to use. The solvent based versions generally contain Volatile Organic Compounds (VOCs) and are normally flammable and/ or combustible and, as such, require greater care and caution when using. Both types of Acrylic Sealers can become brittle, delaminate with age, or often yellow. Our Acrylic Sealers are non yellowing and UV resistant. Since these sealers are topical and subject to traffic and weather, the lifespan is significantly less than penetrating sealers and generally only last about 1-3 years, with exterior applications on the lower end and interior applications on the higher end. This type of sealer is excellent for decorative concrete, pavers, and exposed aggregate. Acrylic sealers can make surfaces slippery and can reduce the traction coefficient under certain conditions. For this reason, we recommend using an anti-skid additive during the application process to improve the slip resistance of the sealed surface. Some Acrylic Sealers can also be used as a curing agent for newly placed concrete or for sealing existing concrete, brick, or stone. Our [TS200](#) and [TS201](#) are solvent based Acrylic Sealers and our [TS202](#) is a water based Acrylic Sealer. All 3 of these Acrylic Sealers can also be used as a curing agent. Acrylic Sealers are sometimes modified with other chemical compounds (ex. urethane, epoxy, methyl methacrylate, etc.) to improve durability, abrasion resistance, or chemical resistance. For example, garage floor paint available from most Big Box stores is typically an acrylic based sealer modified with epoxy.

Epoxy and Urethane Coatings--Epoxy and Urethane coatings are normally two part coating systems that bond to the surface being sealed with no chemical reaction with the surface like the penetrating sealers. The combination of a resin with an accelerator or activator creates a cross linked coating that is very durable. These systems are superior to early generation one part epoxy or urethane coatings as those coatings resulted in less durable coatings more prone to abrasion, cracking, delamination, or stains. The new two part coating systems avoid many of the issues associated with the early generation one part epoxy and urethane coatings. This type of system is ideal for applications where chemical resistance, abrasion resistance and change in appearance is required. For this type of solution, there are usually many color and decorative flake options available for changing the appearance of your surface. Epoxy and Urethane coatings can make surfaces slippery and can reduce the traction coefficient

under certain conditions. For this reason, we recommend using an anti skid during the application process to improve the slip resistance of the sealed surface. Since these solutions are topical and subject to traffic and weather, the lifespan is normally less than that of penetrating sealers. DIY systems from Big Box stores typically have a high failure rate and only a relatively short lifespan of 1-3 years. Professionally installed systems can generally last 5-7 years or more but are normally very expensive at a cost of \$5 per sq. ft. or more. Epoxy and Urethane systems generally are not UV resistant. However, some systems come with a UV resistant agent. Our [TS210](#) is a state of the art two part, water based acrylic modified polyurethane that can be applied to most minimally provided surfaces. It offers excellent 24 hour oil repellence, stain resistance, and cleanability. It is also UV resistant. It is a more cost effective solution than most other topical coatings (epoxies and urethanes), is a more durable coating than traditional acrylic sealers, and has a far less chance of failing than that of most DIY coating systems offered at Big Box stores.

How do I know what type of concrete sealer to use?

The choice of what concrete sealer to use requires consideration on what type of surface is being sealed (ex. concrete, brick, stone, etc.), what type of benefit are you looking for (ex. densifying/ hardening, combat freeze/ thaw, resistance against stains, protection against salt/ oil/ grease, etc.), what type of appearance are you expecting to see after sealer is applied (ex. no change in appearance, color change, high gloss vs, low gloss, etc.), and what is the life span you are expecting for the sealed area prior to having to reseal. Answering these questions will aid you in selecting the appropriate sealer for your application. Please consult product label and technical data sheet for specific details on the product you are considering.

Are concrete sealers dangerous or harmful?

Most sealers we sell are water based and are not considered dangerous or harmful. These sealers are both user and environmentally friendly. They do not contain any solvents and have zero or very low Volatile Organic Compounds (VOC). These sealers are not hazardous, flammable, or combustible. Solvent based sealers on the other hand may be considered hazardous. These sealers usually contain Volatile Organic Compounds (VOC), although within accepted regulatory standards, and may be flammable and/ or combustible. These sealers are still safe to use but care and caution should be used and it is recommended that Safety Data Sheet (SDS) be consulted prior to the sealer being used and the directions on product label and technical data sheet should be followed exactly. Solvent based sealers should be kept away from heat, sparks, and open flames. Containers should be kept closed and in protected storage prior to use. Only use solvent based sealer with adequate ventilation. To prevent vapor build up and possible explosion, open doors and windows and provide cross ventilation. Smoking is prohibited when using. Solvent vapors can cause respiratory irritation. Contact may cause skin or eye irritation with all types of sealers. As a result, it is always recommended to use with adequate air ventilation, eye protection, and the use of gloves. Containers for solvent based sealers should not be reused without commercial cleaning and should be disposed of in accordance with federal, state, and local regulations. Please consult product label, technical data sheet, and Safety Data Sheet (SDS) for specific details on the product you are considering.

How long is it necessary to wait before applying concrete sealers once concrete has been placed?

Several of our penetrating and topical sealers like our [PS102](#), [PS111](#), [TS200](#), [TS201](#), and [TS202](#) can also be used as curing agent and can be applied after all bleed water is gone, finishing is complete, and the concrete will withstand the weight of a person and not be marred. However, for many of our sealers though like our [PS099](#), [PS100](#), [PS101](#), [PS103](#), [PS104](#), [PS105](#), [PS107](#), [PS108](#), [PS109](#), [PS110](#), [PS112](#), and [TS210](#), the surfaces must ideally be a minimum of 28 days old and/ or fully cured prior to applying but in some cases can be applied sooner. To receive maximum benefits such as preservation, protection, strengthening, etc., it is recommended to apply a concrete sealer as soon as is allowable while surface is still clean and free of any deterioration. Please consult product label and technical data sheet for specific details on the product you are considering.

What is the life expectancy of concrete sealers once applied?

The expected life of concrete sealers once applied varies based on the type of sealer and conditions that the surface is subject to in terms of traffic, UV rays, moisture, freeze/ thaw cycles, wind driven rain, chemicals, and other impurities such as oil, gas, grease, and salt. Generally, penetrating sealers can last longer than topical sealers. Since penetrating sealers penetrate into the concrete and form a new solid chemistry, these sealers typically do not wear away until the surface or substrate itself wears away and, as a consequence, have longer life expectancies. Topical sealers on the other hand do not penetrate into the surface or form a chemical reaction with the surface. Instead, they merely lay on top of the surface subjecting them to more wear and tear through physical abrasion and exposure to weather thus resulting in shorter life expectancies. Penetrating sealers like our [PS099](#), [PS100](#), [PS101](#), [PS102](#), [PS103](#), [PS104](#), [PS105](#), [PS107](#), [PS108](#), [PS109](#), [PS110](#), [PS111](#), and [PS112](#) can last up to 5-7 years or more for the water repellent penetrating sealers and 10 years or more for the densifiers and hardeners, all depending on interior vs. exterior, wear, weathering, etc.. Topical sealers like our [TS200](#), [TS201](#), and [TS202](#) can last up to 1-3 years and our [TS210](#) up to 5 years, all depending on interior vs. exterior, wear, weathering, etc.. To maintain and/ or extend the life of most penetrating sealers, one can apply light maintenance applications, as necessary. This can be done as long as additional product can be fully absorbed into a surface. Care and caution should be exercised though when applying maintenance applications of a penetrating sealer. If subsequent applications do not fully absorb into a surface, any excess should be dispersed within 10-15 minutes. Excessive application through unnecessary additional applications may change the appearance of a surface by darkening it, leaving a white residue, or creating a blotchy look.

What is required for cleaning and preparation prior to applying concrete sealers to a surface?

For best results, surfaces must be clean and porous enough to allow penetration into and/ or adhesion to the surface. Surfaces should be clean and free of surface laitance, dust, dirt, debris, mildew, oil, grease, previous sealers, curing agents, paint or other surface coatings, and other contaminants. With topical sealers, it is highly recommended that any surface defects, cracks, voids, and joints be properly sealed or filled. If an acid like muriatic or phosphoric acid or other cleaning compounds are used for cleaning or etching a surface, surface should be completely neutralized or rinsed before application of a sealer. Please consult product label and technical data sheet for specific details on the product you are considering.

Why should I test a surface prior to applying a concrete sealer?

While our sealers are proven and tested and have been used for many years in a multitude of applications, it is always recommended to conduct a test in small area of the surface to be sealed in order to determine the suitability of the sealer for your specific use or application. Different factors to consider for testing are absorption, porosity, adhesion, and appearance. We cannot guarantee that our sealers will work for every application or use and in all conditions. We especially recommend conducting a test in a small area when appearance changes are likely. This is particularly true when topical sealers or color tints are used as these items can change the sheen or color of the surface and the success of appearance changes is generally a subjective assessment based on individual tastes and preferences.

Can concrete sealers damage or harm non-concrete surfaces?

Yes, both penetrating and topical sealers can damage or harm non-concrete surfaces. This usually comes in the form of etching, staining, or leaving unwanted residue. Precautions should be taken to avoid contact with vegetation, glass, vinyl, plastic, wood, and metal. Please consult product label and technical data sheet for specific details on the product you are considering.

Can concrete sealers be used to repair cracks?

It is generally not recommended to use topical or penetrating sealers to repair cracks, in particular cracks greater than 1/16". Sealers are intended as a sealing product and are not fillers or patching materials. For cracks greater than 1/16", we recommend that cracks should be repaired with appropriate crack repair materials prior to applying

concrete sealers to a surface. Not filling cracks can undermine the benefits and effectiveness of the sealers.

What are the ideal environmental conditions for applying concrete sealers?

The ideal conditions for applying concrete sealers are on a dry surface for proper penetration and/ or adhesion. A surface that is wet or has moisture in it can compromise application of the sealer. With topical sealers, moisture can result in poor adhesion and cause "blushing" which is a whitening of the sealer. With penetrating sealers, moisture can block a penetrating sealer from fully penetrating into the surface. If a penetrating sealer does not achieve full absorption and is left on the surface and not dispersed, this could result in a white residue, darkening, or discoloration on the surface. It is also recommended that sealers not be applied in extreme temperatures, generally not below 40F or above 95F for penetrating sealers and not below 50F or above 85F for topical sealers. Please consult product label and technical data sheet for specific details on the product you are considering.

What is the typical coverage rate for concrete sealers?

The coverage rate per gallon for a concrete sealer depends on the porosity and absorption level of the surface being sealed and the type of sealer being used. As a general rule, coverage rates are normally greater for topical sealers than penetrating sealers because the degree of absorption into a surface is less. Please consult product label and technical data sheet for specific details on the product you are considering.

What tools are needed to apply concrete sealers?

Most penetrating or topical concrete sealers can be easily applied with a standard roller, low pressure sprayer, broom, microfiber pad, squeegee, or brush. Some densifying sealers like our [PS103](#), [PS104](#), [PS107](#), and [PS108](#) penetrating sealers may require floor scrubber or high speed polisher to obtain best results. Please consult product label and technical data sheet for specific details on the product you are considering.

How long does it take for concrete sealers to dry once they are applied?

Most concrete sealers dry fairly quickly and usually dry to touch within 1-3 hours. This is true of both penetrating and topical sealers. Penetrating sealers usually fully dry for traffic in less than 24 hours with topical sealers generally taking up to 48 hours to fully dry for traffic. Actual drying time is based on temperature, humidity, and air flow. Please consult product label and technical data sheet for specific details on the product you are considering.

What is involved in the cleanup after applying concrete sealers?

It depends on the type of sealer. Generally, with most sealers, cleanup is simple and straightforward. With water based sealers, cleanup of tools and application materials can be easily accomplished with soap and warm water. With solvent based sealers, cleanup is best accomplished through common cleaning compounds such as soy gel, mineral spirits, or mild cleaning solvents. Accidental contact with non concrete surfaces should be cleaned immediately to minimize damage or harm. Please consult product label and technical data sheet for specific details on the product you are considering.

Can topical concrete sealers (ex. acrylics, epoxies, urethanes, etc.) be applied over penetrating sealers?

Yes, topical sealers can sometimes be applied over penetrating sealers especially densifiers or hardeners. Depending on the circumstances, topical sealers may even be able to be applied over certain water repellent penetrating sealers. Penetrating sealers generally do not form a membrane, film, or barrier that would normally prevent the topical sealers from adhering to the surface. For certain topical sealers that require a certain amount of absorption into a surface in order to gain adhesion, water repellent penetrating sealers may interfere with the ability of the topical sealer to properly adhere though. Please note though that many topical sealers/ coatings require a surface to have sufficient profile before applying. This is true whether or not a penetrating sealer is applied before the topical sealer/ coating. Surfaces are normally profiled for a topical sealer/ coating through acid etching, grinding, sand blasting, shot blasting, etc. Please consult product label and technical data sheet for specific details on the products you are considering.

Can penetrating concrete sealers be applied over topical sealers?

No, topical sealers create a membrane, film, or barrier that prevents the penetrating sealers from absorbing into the surface. If intention is to apply a penetrating sealer to a surface, then it will be necessary to properly remove the topical sealer from the surface prior to application of the penetrating sealer. Removal may be accomplished through scraping, grinding, sand blasting, shot blasting, pressure washing, chemical stripping, or other accepted methods.

Can concrete sealers make surfaces slippery?

Most penetrating sealers do not make surfaces slippery after application and surface has sufficiently dried. They have no impact or minimal impact on changing the traction coefficient. Topical sealers however can make surfaces slippery and can reduce the traction coefficient under certain conditions. For topical sealers, we recommend using an anti skid during the application process to improve the slip resistance of the sealed surface. Please consult product label and technical data sheet for specific details on the product you are considering.