

Frequently Asked Questions

● **Why should I coat my floor?** Good question, but a better one is “Why not coat your garage floor?” Not only does SHIELD-CRETE make your floor look like a showroom, but it also protects the concrete from stains and makes cleaning the floor very easy, but most importantly, SHIELD-CRETE makes your garage a part of your home that can be utilized as additional space when needed. Imagine what your garage could be!

● **My concrete is relatively new. Do I still need to clean the floor before applying SHIELD-CRETE ?** Yes. Construction dust, dry wall paste and paint splatters can affect the bond. Scrape foreign substances off the floor and then clean the floor with the degreaser/cleaner. Wire brushing or sanding may be needed for severe contamination.

● **How long do I have to wait to apply SHIELD-CRETE to freshly poured concrete?** Because SHIELD-CRETE is a waterborne epoxy, it can be applied 28 days after the concrete is poured, however, the longer you can wait to let the concrete cure, the better your results will be.

● **Will SHIELD-CRETE work on old concrete?** Absolutely. Of course, how well it works depends upon how well you prepare your concrete (see below).

● **Do I have to remove old coatings or paint before I apply SHIELD-CRETE ?** Yes. The SHIELD-CRETE epoxy may form a bond on these surfaces that is stronger than the bond of the paint or old coating on the concrete surface. This could cause the old coating to pull away from the concrete, leaving an uncoated area. Also, SHIELD-CRETE is a waterborne product that breathes. The old coatings probably are not. Leaving them on could cause failure due to entrapment of moisture vapor in the concrete.

● **I have parked in my garage for some time. Do these areas have to receive special treatment before coating?** Yes. Tires contain chemicals that leach into the concrete over time. If too much of these foreign substances are trapped in the concrete, SHIELD-CRETE will adhere to them and will not stick to the concrete. These areas should be scrubbed with a wire brush and the degreaser/cleaner, rinsed thoroughly and sanded with a rough sanding pad.

● **Other products recommend acid etching the concrete. Do you?** More experienced installers may choose to use a light mixture of muriatic acid and water or an industrial cleaning agent on problem areas. Special safety precautions must be followed when using the muriatic acid or any chemical treatment. However, SHIELD-CRETE does not require acid etching, so we recommend simply scrubbing with the enclosed detergent / degreaser unless special conditions are present, such as stained or highly-polished concrete.

● **I may have a clear sealer on my floor. How can I determine if I need extra surface preparation?** The easiest test is to sprinkle water on the questionable areas of your floor. If the water beads, you have a foreign substance that must be removed. See **Special Conditions**.

● **A storm was brewing and I had to park on my new SHIELD-CRETE floor one day after it was finished. My tires were dirty and they left stains and some of the coating came off the floor. How can I fix these areas?** Unfortunately, you parked on the floor before it was fully cured and the stains may have been dried into the coatings. First try to clean the areas with a mild soap, water and a scrub brush. If this does not remove the stains satisfactorily, you will

need to sand the affected areas and apply a new coat of SHIELD-CRETE, flakes and glaze coat to these areas.

● **Can I apply multiple coats of SHIELD-CRETE over a period of time?** Yes. Special surface preparation is not needed if the additional coats are applied within five days. If it has been a longer period, the area should be sanded lightly to dull the finish and create a rougher surface to which the SHIELD-CRETE can adhere. In most cases, one coat of SHIELD-CRETE is sufficient to produce great coverage and a rich finish. In some cases, where the concrete is exceptionally rough or old, two coats will provide a stronger, deeper finish. We always recommend two coats for dark colors, such as red or blue. Second coats can be applied as soon as the surface is dry to the touch and not tacky.

● **Do I really need to include the anti-slip aggregate in the SHIELD-CRETE or Glaze Coat?** Any coated surface, especially a high quality, smooth surface like SHIELD-CRETE's, is slippery when wet. The anti-slip aggregate is a safety feature that we highly recommend for the final coat of SHIELD-CRETE or Glaze Coat. Your floor will still be easy to clean.

● **I am going to apply the decorative flakes. Should I apply a coat of Glaze Coat over the flakes?** We highly recommend the use of Glaze Coat over all floors. This not only adds to the shine and life of the floor, it also makes cleaning even easier and protects the decorative flakes.

● **I have some unsightly cracks in my floor. Should I fill these before applying SHIELD-CRETE ?** Filling the cracks may yield a smoother, more beautiful floor. A paintable caulk is appropriate for filling cracks. Be certain the caulk is fully cured before you apply the SHIELD-CRETE. Use only enough caulk to fill the crack. Remove excess caulk.

● **Will SHIELD-CRETE keep my floor from cracking in the future?** No, SHIELD-CRETE does not prevent cracking, however, the decorative flakes do a good job of camouflaging minor cracks and imperfections in the concrete.

● **Can I apply SHIELD-CRETE on wood? SHIELD-CRETE** was designed for concrete and metal surfaces, but it will adhere to wood, much like a very good outdoor paint. Keep in mind, if the wood cracks, SHIELD-CRETE will crack with it.

● **Can I use SHIELD-CRETE on my patio, too? SHIELD-CRETE** can stand up to the heat of summer, the freezing in winter and rain year 'round, however, one of the characteristics of epoxy is that it “chalks” in UV light. This means that the coating loses some of its luster due to direct sunlight. Apply SHIELD-CRETE outdoors with this in mind. Application of SHIELD-CRETE Clear Glaze will reduce the effects of chalking, but the color will continue to fade or slightly yellow. Always use the anti-slip aggregate in outdoor settings that are likely to become wet.

● **Can SHIELD-CRETE be applied to vertical surfaces, such as basement walls?** Absolutely. SHIELD-CRETE will not sag, so basements, storm shelters, wine vaults, etc. are ideal application areas. It is more stain resistant and much easier to clean than paint.

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Installation Instructions

Read Completely Before Proceeding with Installation

To obtain best performance, install SHIELD-CRETE systems at temperatures between 60°F and 95°F and when relative humidity is 80% or less. Material should never be allowed to freeze. It should be stored in a dry area at temperatures between 60°F and 95°F. Material and concrete should be above 60°F for installation. Install only in areas with proper ventilation. Wear safety glasses, protective clothing and rubber gloves for the duration of preparation and application of all SHIELD-CRETE systems. Read and follow all warnings on individual components.

1. Special Conditions

Typically, clean concrete provides an acceptable substrate for Shield-Crete. However, concrete that has been treated, overly polished or that has been in service for any period of time may have conditions that can hinder the bond. These conditions require additional preparation.

Previously coated concrete is the easiest to identify. Any previously applied coating has a weaker bond than Shield-Crete. Applying Shield-Crete over these coatings actually causes Shield-Crete to pull the other coatings off the floor, creating an unsightly delamination. Previously applied coatings should be removed through scraping, grinding or stripping and then the surface should be prepared in the normal fashion.

Sealed concrete is harder to recognize, particularly if the sealer is clear. To test for the presence of a sealer, sprinkle water onto the floor. If the water beads up and is not readily absorbed into the concrete, it is likely that a sealer is present. In this circumstance, sand, grind or chemically strip the floor to remove the sealer and then follow normal surface preparation procedures.

Burnished or over-troweled concrete has a high gloss or discolored finish. This condition may create a surface that is too smooth and that does not allow the Shield-Crete to properly penetrate the surface. If you suspect this condition, perform the water test. If the water beads or does not readily penetrate the surface, sand, grind or chemically etch the area to create a more porous surface and then follow normal preparation procedures.

Contaminated concrete can be the most difficult to determine and is usually caused by car tires. In severe cases, you will see dark brown stains caused by the chemicals from the tires and entrapped debris. In many cases, however, the clear wax components and other chemicals used in tire manufacturing have leached into the concrete and are not visible. If a car has been driven on or parked on the surface for any period of time, the tire lanes and patches where the tires rest are probably contaminated. Applying Shield-Crete over these conditions may

cause delamination when the Shield-Crete actually pulls the wax and contaminants from the floor. Scrub these areas with a wire brush and the Shield-Crete cleaner/degreaser and rinse thoroughly. Then hand sand these areas with a medium grit sand paper to break away the remaining wax and impurities and proceed with normal preparation procedures. Hand sanding is recommended for this process to avoid heating the wax and causing it to further penetrate the concrete. This wax cannot be adequately removed by scrubbing, power washing or etching.

Helpful Hint - If you are unsure about the surface of your concrete, it is always safe to sand the surface or call the help line at 1-800-867-8246 before applying Shield-Crete. When sanding by hand, use a drywall sanding pad and extension pole to simplify the process.

2. Surface Preparation

The most critical step to assure the performance of the SHIELD-CRETE system is to apply the product to a clean, well-prepared surface. The surface must be free of debris, dirt, oil, curing compounds, sealers, paint and tire residue. Even new concrete surfaces must be cleaned to remove dirt, dust and salts that form as the concrete cures.

Step One - Perform the Water Test. Sprinkle water onto the surface of the floor. If the water beads up and is not readily absorbed into the concrete, it is likely that a sealer is present or that the concrete is so highly polished that special steps are needed to prepare the surface. Refer to the **Special Conditions** sections before proceeding.

Step Two - Remove Foreign Substances. Scrape off any surface debris, such as putty, paint or oily dirt, so that the surface is smooth and even. Use running water or a pressure washer to flush the entire area to remove dirt and debris from the surface. **See Special Conditions.**

Step Three - Clean and Degrease. Add the Cleaner/Degreaser to two gallons of hot water in a pail and mix until the powder is dissolved. Vigorously spread the solution over the area to be coated with the aid of a broom or mop and allow it to soak for 10-15 minutes.

After the solution has been allowed to soak and emulsify the oils and grease in the surface for 10-15 minutes, thoroughly scrub the entire surface again with a stiff bristle broom or a floor-scrubbing machine. Thoroughly rinse the entire surface with plenty of fresh, clean water to remove all spent Cleaner/Degreaser, emulsified oils and grease, and loose dirt and debris.

Helpful Hint - Broom off any puddles of water with a clean broom prior to beginning the installation. After removing the standing water, the floor should be clean. If it does not appear to be clean or appears to be saturated with oils, you must repeat the surface preparation procedures. Use additional Cleaner/Degreaser or a strong solution of dishwasher detergent to remove grease and oil. A wire brush may be needed for extreme areas. Begin installation when the concrete surface is clean and dry to the touch.

See the Back Page for Tips To Aid Installation!

3. Mixing

SHIELD-CRETE is a two-component epoxy resin. It requires the thorough combining of the Part "A" and Part "B" components for the material to properly harden. Mixing can be accomplished using the mixing stick provided in the SHIELD-CRETE kit or it can be enhanced through the use of a low speed electric drill and a paint-mixing paddle, available at most hardware stores. **High speed mixing or shaking must be avoided, so that air bubbles are not captured in the material.**

Step One - Open the Part "A" and Part "B" containers and stir each with a mixing stick.

Step Two - Pour the contents from Part "A" into the larger Part "B" container. Do not mix Glaze Coat with Epoxy. Be certain to empty all the material from the Part "A" container. Vigorously mix the two components together for at least three minutes. Be sure to scrape the sides and bottom of the containers to assure that all material is properly mixed. Improperly mixed resins may leave soft spots or may cause color variation when applied.

Step Three - For enhanced safety, an optional, non-skid additive is provided in the SHIELD-CRETE kit. This material should be added to the mixed resins in the final coat to reduce the risk of slipping on finished floors that may be exposed to wet conditions. Slowly pour these contents into the mixed resins and stir thoroughly to suspend throughout the material.

Helpful Hint: The non-skid additive will settle while mixed in the resin, therefore, periodic stirring during the application is needed to assure uniform application of color and the non-skid component.

After the SHIELD-CRETE components are mixed together, you have approximately two hours of working time to apply the material at 75°F. Work diligently and quickly, avoiding unnecessary interruptions. Higher temperatures may shorten working time.

4. Application

SHIELD-CRETE may be installed as a solid color or with decorative flakes to provide an attractive, stone-like finish. An optional clear Glaze Coat, not provided in the standard SHIELD-CRETE kit, may also be applied to provide additional durability and shine.

Option One - Solid Color Application. Appropriate tools reduce effort and help produce a professional finish. A small, disposable paintbrush should be used to coat edges, corners and any hard-to-reach areas. Larger areas should be coated using a 3/8" non-shedding nap roller on a heavy-duty 9" roller frame and sturdy extension pole, and a standard paint tray.

Hard-to-reach areas should be coated first using the small paintbrush. Larger areas should be coated with the roller. Apply SHIELD-CRETE evenly and consistently to the entire area being coated. Be careful to cover all areas and do not leave light streaks or heavy areas. After initially applying the SHIELD-CRETE to a small area, it is best to back roll (roll over) the area being coated to create a smooth, more consistent surface and

thickness. Upon completion, the surface should look uniform in color without streaks or heavy accumulations.

Helpful Hint: To maintain a consistent color and non-skid additive application, stir the contents of the paint tray frequently during application. Be certain to stir mixed materials in the mixing can before pouring them into the paint tray. This will help keep the non-skid additive material and color pigments evenly suspended in the SHIELD-CRETE throughout application. Also, when back rolling, always roll and finish in the same direction to avoid heavy areas and to assure consistent color.

Option Two - Deco Flakes. When installing Deco Flakes, the SHIELD-CRETE resin is applied in the same fashion as noted for the Solid Color Application; however, it is done in segments as noted below.

Apply the SHIELD-CRETE Solid Color evenly and consistently with complete coverage to an area that you can easily reach across to disperse the Deco Flakes, usually a width of about three feet.

Immediately after applying the SHIELD-CRETE Solid Color to a three-foot segment, apply the SHIELD-CRETE Deco Flakes by carefully sprinkling them from a height of approximately three feet and allowing them to randomly "rain down" onto the wet surface. Be careful not to over apply the amount of flakes in any one area. The flakes should be applied so that the surface is uniform in amount and random in color, covering approximately 25% of the area. Leave a wet edge of the SHIELD-CRETE Solid Color where you can start coating your next area without disturbing the Deco Flakes that have been applied. Continue this process until the entire area is completed with a uniform appearance.

Helpful Hint: You can practice applying the flakes by sprinkling some over a dry area or a plastic sheet and then recover the flakes for reuse.

Option Three - Glaze Coat. SHIELD-CRETE Acrylic Clear Glaze Coat is an additional product that provides an even tougher, more glossy finish for SHIELD-CRETE floors. Application is suggested, though not required, for Deco Flake floors in high traffic or dirty areas. The Glaze Coat is applied over fully cured SHIELD-CRETE surfaces. A non-skid additive is included.

The glaze coat should be applied with a 1/4" roller and may be periodically re-applied to maintain a high gloss finish.

5. Clean Up

SHIELD-CRETE can be cleaned off hands and other surfaces with warm, soapy water before the material begins to harden. Sticky resin residue on hands can be removed with isopropyl alcohol. Fully cured SHIELD-CRETE can only be removed with industrial paint strippers or through mechanical methods, such as grinding or sanding. Any leftover mixed SHIELD-CRETE, paintbrushes and roller covers will harden once the material cures and should be discarded according to local area regulations.



Clean & Rinse



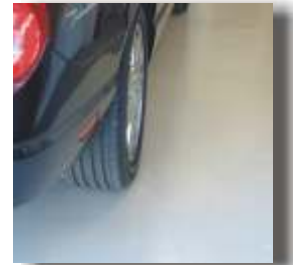
Mixing



Roll



Application Options



Finished!

Safety & First Aid

SAFETY: As with any chemical, avoid contact with skin, avoid inhalation and wear protective clothing, rubber gloves & eyewear during the preparation and installation. Apply only in well ventilated areas.

FIRST AID: For skin contact, wash thoroughly with soap and warm, fresh water. In case of contact with eyes, flush with warm water and immediately contact a physician. If swallowed, do not induce vomiting. Contact a physician and the Poison Control Center.

Read all safety precautions on each component before mixing and applying the product.

Coverage

Coverage: When properly applied to a typical smooth concrete surface, this kit covers approximately 250 square feet. Second coats cover additional area.

Contents: This kit contains: one package of Cleaner/Degreaser; SHIELD-CRETE Part "A" and Part "B" resins; one stir stick; one package of Deco Flakes; and one package of non-skid additive.

Return To Service

At 75°F, SHIELD-CRETE surfaces should cure for at least: 12 hours before opening the area to foot traffic; 48 hours before driving across and; 72 hours before parking vehicles on the surface. Extreme temperatures and humidity levels can dramatically impact cure times. If the SHIELD-CRETE surface is not "rock hard" after seventy-two (72) hours at 75°F, do not return to service and call 800-867-8246 for professional assistance. **Additional coats of SHIELD-CRETE may be applied when the prior coat is dry to the touch and within five days of the initial application.**

Maintenance

SHIELD-CRETE surfaces are easy to maintain through periodic mopping with a household detergent solution and rinsing with clear water. Harsh cleaners (especially those containing ammonia) should not be used. Do not use wax strippers as this may damage your floor.

Questions?
800.867.8246

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