



- Interior use only
- Easy soap-and-water cleanup
- Produces stone-like finishes
- Highly chemical resistant

H&C® SHIELD-CRETE® WATER-BASED EPOXY GARAGE FLOOR COATING



PRODUCT DESCRIPTION

H&C® SHIELD-CRETE® Water-Based Epoxy Garage Floor Coating is a two part epoxy kit that is durable as it is beautiful. H&C® SHIELD-CRETE® is the simple way to give concrete surfaces a professional-looking finish at a fraction of the cost. With easy application, this durable coating resists chemical damage caused by gasoline, brake fluid and standing water.

FEATURES & BENEFITS

- Water-Based Formulation for Easy Application and Clean-Up
- Hard, Durable Surface, Resists Wear and Peeling for Long Lasting Beauty
- Superior Adhesion, Resists Hot Tire Pick-Up
- High Gloss Epoxy with Showroom Quality Appearance
- Advanced Polymer Technology

RECOMMENDED USES

In addition to garage floors, H&C® SHIELD-CRETE® Water-Based Epoxy Garage Floor Coating can be used on all interior concrete flooring including basement floors, laundry room floors, storage areas, commercial floors and warehouse floors. It can also be applied to covered exterior concrete, such as patios and landings.

COVERAGE RATE

Single kit: 200 to 250 square feet – or a typical one-car garage – depending on the porosity of the substrate.

JOBSITE TEST SECTION

Due to the wide variety of substrates, preparation methods, and environments, it is important to test the product in an inconspicuous spot for adhesion and compatibility prior to full-scale application.

LIMITATIONS

Do not apply H&C® SHIELD-CRETE® to outdoor surfaces exposed to direct sunlight. UV exposure may cause the color to fade over time.

SURFACE PREPARATION

Bare Concrete: Allow newly poured concrete to cure for at least 28 days before applying product. Concrete surfaces should be able to absorb water. To test absorption, spray various sections of the surface to be stained with water. If the water does not absorb rapidly, then acid etch the surface using H&C™ CONCRETEREADY™ Etching Solution, following label instructions. After proper etching, the surface should feel like 120-grit sandpaper. If not, then etch again. Mechanical abrasion methods may be necessary to achieve proper profile. Do not apply SHIELD-CRETE® until all surfaces are porous. Allow all surfaces to dry at least 24 hours before applying H&C® SHIELD-CRETE® Water-Based Epoxy Garage Floor Coating. Prepared concrete must have a pH of 6 to 10. Surface must be clean, dry, and free of dirt, grease, oil and other contaminants.

Existing and Previously Painted Concrete: Applying SHIELD-CRETE® epoxy over these coatings actually causes SHIELD-CRETE® epoxy to pull the other coatings off the floor, creating an unsightly delamination. Scrape or sand off any surface debris, such as putty, paint* or oily dirt, so that the surface is smooth and even. Using a pressure washer or a hose with a high-pressure nozzle, flush the entire area with water to remove any loose dirt and debris from the surface. Older, stained, or highly polished concrete may need to be sanded or cleaned with a wire brush prior to cleaning to promote adhesion. Patch and repair any existing cracks using H&C™ CONCRETEREADY™ Quick Patch and Repair to fill low spots and spalled concrete. Please note that patching compounds will generally be visible through clear coatings.

***WARNING:** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. To avoid exposure to lead dust, wear proper protective equipment, such as a properly fitted respirator (NIOSH approved) and follow proper containment and cleanup procedures. For more information, call the National Lead Information Center at 1-800-424-LEAD (in U.S.) or contact your local health authority.

Previously Coated SHIELD-CRETE® Epoxy Floors: Make sure the SHIELD-CRETE® epoxy is firmly adhered to the floor. All loose and peeling material should be scraped or ground. Clean all bare exposed concrete areas with the cleaner/degreaser provided. Etching or grinding these exposed areas should be done to ensure proper adhesion of the new application of SHIELD-CRETE® epoxy. All remaining SHIELD-CRETE® epoxy should be cleaned with the cleaner/degreaser provided and scuff sanded using 100 grit sand paper or screen on a sanding

pole or orbital buffing equipment. Vacuum, sweep or tact mop off any sanding dust that is created, as this dust can prevent proper adhesion of the SHIELD-CRETE® coating.

Cleaning and Degreasing: Add the enclosed package of cleaner/degreaser to 2 gallons of water in a pail and mix until the powder is dissolved. Spread the solution over the area to be coated using a broom or mop and allow it to soak for 10 to 15 minutes to emulsify the oils and grease in the surface. Thoroughly scrub the entire surface with a stiff-bristle broom or a floor scrubbing machine. Take special care in vehicle traffic patterns. Vehicle tires can leach chemicals and contaminates into the floor that may prevent proper adhesion. These areas may appear as a dark brown stain and may require a more aggressive cleaning procedure. Thoroughly rinse the entire surface with clean water to remove all emulsified oil and grease and any loose dirt and debris. If surface does not appear to be clean, repeat surface preparation procedure.

TOOLS REQUIRED

- 3/8-inch nap roller cover; disposable nylon or polyester brush for in-cutting Paint tray and liner
- Pressure washer or regular garden hose with a high-pressure nozzle
- Stiff-bristle broom
- Bucket to mix cleaner/degreaser with water

APPLICATION INSTRUCTIONS

Install H&C® SHIELD-CRETE® when temperatures are between 60° and 95°F and the relative humidity is less than 80%. You can apply SHIELD-CRETE® as a solid color or with Deco-Flakes to produce an attractive, stone-like finish. An optional coat of H&C® SHIELD-CRETE® Acrylic Clear Glaze Coat (not included in the SHIELD-CRETE® kit) may also be applied for additional durability.

Mixing: Thoroughly mix Shield-Crete Epoxy part A and part B separately in their individual cans. Next, pour part A contents into part B container and use the included stir stick or a low-speed electric drill and a paint mixing paddle to mix the two components until completely combined. Do not use a high-speed mixer, since this will create unwanted air bubbles. Improperly mixed resins may not harden or may result in color variations when applied. Allow mixed epoxy to react and follow the Physical Properties section on this data page for proper induction and pot life times. 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.

Adding Slip- Resistant Additive: An optional slip- resistant 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. To prevent the slip- resistant additive from settling in the resin after mixing and to ensure uniform coverage, periodic stirring during application is needed.

Applying as a Solid Color: Working in sections, apply SHIELD-CRETE® evenly and consistently, back rolling to ensure color and film uniformity. Be careful to cover all areas, and do not leave streaks or apply too heavily. Commercial applications may require two coats. Allow an 8-hour minimum dry time between coats. Additional coats of SHIELD-CRETE® coating may be applied when the prior coat is dry to the touch and within five days of the initial application. If re-coating happens past the 5th day, scuff sand with 100 grit sand paper or a sanding screen.

Applying Using Deco- Flakes: If using the Deco-Flakes included in the kit, apply SHIELD-CRETE® evenly over an area that you can easily reach to disperse the flakes. Broadcast the flakes onto the wet epoxy from a height of about 3 feet. Tossing the flakes from a higher level will ensure more even coverage and prevent clumps or patches of flakes. Leave a wet edge of SHIELD-CRETE® so you can coat the next section without disturbing the flakes that have already been broadcast.

Glaze Coat: SHIELD-CRETE® Acrylic Clear Glaze Coat is an additional product that provides an even tougher, glossier finish for SHIELD-CRETE® epoxy floors. SHIELD-CRETE® Glaze should always be applied when the deco flakes are installed. Apply the Glaze Coat when the SHIELD-CRETE® coating is dry to the touch and not tacky. The glaze coat should be applied with a 1/4"-3/8" roller and may be periodically re-applied to maintain a high gloss finish. Refer to the Glaze Coat Data Page for additional application details.

For Commercial or Industrial applications of SHIELD-CRETE® Epoxy, H&C® CLEARPROTECT™ High Performance Industrial Clear or H&C® CLEARPROTECT™ Water Based Two component Polyurethane Gloss may be applied as an alternative to SHIELD-CRETE® Acrylic Clear Glaze Coat for a durable clear coat finish.

CLEANUP

Clean tools and any spills or spatters immediately using soap and warm water. Sticky resin or residue on hands can be removed with isopropyl alcohol. Fully cured H&C® SHIELD-CRETE® Coating can only be removed with industrial paint strippers or through mechanical methods, such as grinding or sanding.

MAINTENANCE

SHIELD-CRETE® Epoxy 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.

PHYSICAL PROPERTIES

Typical Physical Properties and Characteristics		
Property	Test Method	Value
Dry Time (@ 77°F, 50% RH)	Dry-to-touch	6 hours
	Light traffic (foot)	8-12 hours
	Heavy traffic	72-96 hours
Recoat		8 hours min., 5 days max.
	Full cure	14 days
Flash Point	ASTM D93, PMCC	>200°F (mixed)
VOC	EPA Method 24	115 g/L; 0.96 lb/gal*
Static Coefficient of Friction		0.74
Perm Rating	ASTM D1653	5.5 grains/(hr ft ² in Hg)
Sheen	ASTM D523	Gloss
Solids by Volume	ASTM D2832	46.5% ± 2%*
Solids by Weight		64.4% ± 2%*
Induction Time	(@ 55-69°F, 60% RH)	15 minutes
	(@ 70-79°F, 70% RH)	15 minutes
	(@ 70-79°F, 70% RH)	15 minutes
Pot Life	(@ 55-69°F, 60% RH)	2.5 hours
	(@ 70-79°F, 70% RH)	1.5 hours
	(@ 70-79°F, 70% RH)	1 hour
Shelf Life		12 months, unopened (Store at 60°-95°F)

*May vary depending on color

KIT CONTENTS

- Part A Epoxy-27 FL OZ (1.6 U.S. Pt) / 798mL
- Part B Color Hardener-88.2 FL OZ (2.7 U.S. Qt) / 2.6 L
- Cleaner/Degreaser -3.2 OZ / 90.7 g
- Slip-Resistant Additive- 2.4 OZ / 60 g
- Deco-Flakes- 1lb / 453 g
- Stir Stick
- Instructions

ORDERING INFORMATION

Pewter **Part Number/SMIS**
Single kit 20.102100-99/6507-11617

Beige **Part Number/SMIS**
Single kit 20.102200-99/6507-11625

Fire Brick Red **Part Number/SMIS**
Single kit 20.102300-99/6507-11658

Ivory **Part Number/SMIS**
Single kit 20.102400-99/6507-11666

Night Sky **Part Number/SMIS**
Single kit 20.102500-99/6507-11674

DECO-FLAKES ORDERING INFORMATION

Color Blend	Part Number/SMIS
Pewter	20.104100-14/6507-11716
Beige/Ivory	20.104200-14/6507-11724
Red	20.104300-14/6507-11732

CAUTIONS

H&C® SHIELD-CRETE® Garage Floor Epoxy Kits- (Pewter- 21.102100, Beige -21.102200, Firebrick Red- 21.102300, Ivory -21.102400, Night Sky- 21.102500)

DANGER! COMBUSTIBLE. VAPOR HARMFUL. HARMFUL IF INHALED OR ABSORBED THROUGH THE SKIN. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTIONS. CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS. This kit contains the following chemicals that may be harmful if misused: **AMINE, EPOXY RESIN, VOLATILE ORGANIC COMPOUNDS, TRISODIUM PHOSPHATE DEDECAHYDRATE.** **READ CAUTIONS ON INDIVIDUAL CONTAINERS CAREFULLY. KEEP OUR OF REACH OF CHILDREN. WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

PART A EPOXY-21.103100

CAUTION! Contents are **COMBUSTIBLE.** Keep away from heat and open flame. **VAPOR HARMFUL.** Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. This product must be mixed with other components before use. Before opening the packages, **READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

PART B COLOR HARDENER

(Pewter- 21.103200, Beige -21.103300, Firebrick Red- 21.103400, Ivory -21.103500, Night Sky- 21.103600)

CAUTION! CONTAINS AMINE. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, do not induce vomiting. Call Poison Control Center, hospital emergency room, or physician immediately. This product must be mixed with other components before use. Before opening the packages, **READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

CLEANER/DEGREASER- 21.102700

DANGER! CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY IRRITATION. CAUTIONS CONTAINS TRISODIUM PHOSPHATE DEDECAHYDRATE. Avoid contact with eyes and skin. Avoid breathing dust. Use protective clothing and a **NIOSH** approved respirator Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed when not in use. Do not transfer contents to other containers for storage. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, do not induce vomiting. Call Poison Control Center, hospital emergency room, or physician immediately. Before opening the packages, **READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

DECO-FLAKES-

(Pewter- 21.102100, Beige -21.102200, Firebrick Red- 21.102300, Ivory -21.102400, Night Sky- 21.102500)

CAUTION! MAY CAUSE EYE, SKIN, AND RESPIRATORY IRRITATION. Use only with adequate ventilation. Avoid breathing dust or wear respiratory protection (**NIOSH** approved). Avoid contact with eyes and prolonged or repeated contact with skin. Wash thoroughly after handling. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

SLIP-RESISTANT ADDITIVE- 21.102600

CAUTION! CAUSES EYE IRRITATION. CAUSES SKIN IRRITATION. RESPIRATORY IRRITANT. DUST MAY CAUSE EYE AND RESPIRATORY IRRITATION. DUST MAY FORM EXPLOSIVE MIXTURE IN AIR. Avoid breathing dust. Avoid contact with eyes and prolonged or repeated contact with skin. Use protective clothing and a **NIOSH** approved respirator. Do not use near sparks or open flame or any type of ignition source. Wash thoroughly after handling.

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. **FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

LIMITED WARRANTY

Seller's and manufacturer's only obligations shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential; arising from the applicator's inability to use the product for his/her intended use. The user assumes all risk and liability.

TECHNICAL SERVICES

The information and recommendations set forth in this product data sheet are based on tests conducted by or on behalf of H&C® Products Group and The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your H&C® or Sherwin-Williams representative to obtain the most recent product data sheet.

For technical assistance, call 1-800-867-8246 or visit www.hcconcrete.com.