



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

PRODUCT DESCRIPTION

H&C® SHIELD-CRETE® WATER-BASED EPOXY GARAGE FLOOR COATING is a 2-Part epoxy that penetrates deeply into the concrete, creating a hard, durable surface that resists peeling and hot tire pickup for long-lasting beauty.

FEATURES & BENEFITS

- Water-Based formulation for easy application and cleanup
- Hard, durable surface, resists wear and peeling
- Superior adhesion, resists hot tire pick-up
- Fights oil and chemical stains
- Tintable to over 1,000 Sherwin-Williams colors
- Interior use only

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.

COVERAGE RATES

Single Kit: Up to 200-250 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, application methods and environments, it is important to create a test sample.

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. **WARNING** surface can become slippery when wet. To reduce the risk of slippage please add H&C® SHARKGRIP® SLIP-RESISTANT ADDITIVE for additional protection.

TINTING

Tint Part A with CCE colorants at 100% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

SURFACE PREPARATION

Bare Concrete: Newly poured concrete should cure at least 28 days. Surface must be clean, dry and free of grease, oil and other contaminants. Concrete surfaces require porosity and profile. To test absorption, spray various sections of the concrete to be coated with water. If the water does not absorb within 10 seconds, the concrete is not porous. Mechanical profiling or acid etching the surface using H&C® CONCRETEREADY® Etching solution following label instructions is required. After proper profiling the surface should feel 120-grit sandpaper or rougher. If not, profile again. For best performance, grind the surface to the porosity of 120-grit sandpaper. Do not apply Shield-Crete until all surfaces are porous. Allow all surfaces to dry at least 24 hours before applying your H&C Shield-Crete system. Prepared concrete must have a pH of 6-10.

Existing and Previously Painted Concrete: It is not recommended to apply H&C SHIELD-CRETE over an existing or previously coated surface. If the existing coating is in sound condition, clean surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply H&C SHIELD-CRETE to a test area, allowing it to dry one week before testing adhesion. Test adhesion in accordance with ASTM D 3359, standard test methods for measuring adhesion by tape test. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest for adhesion. If the coating is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

***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 SHIELD-CRETE epoxy is firmly adhered to the floor. All loose and peeling material should be scrapped or ground. Clean all bare, exposed concrete areas with the cleaner degreaser provided. Etching or grinding these bare areas should be done to assure proper adhesion of H&C SHIELD-CRETE epoxy. All remaining SHIELD-CRETE epoxy should be cleaned with the cleaner degreaser provided and scuff sanded with 60-80 grit sandpaper or screened on a sanding pole or orbital buffing equipment. Vacuum, sweep or mop off all sanding dust that is created, as this dust can prevent proper adhesion of the SHIELD-CRETE system.

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 contaminate 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

- High quality 3/8-inch nap roller cover; nylon/polyester brush for cutting-in
- Extension pole and roller frame
- 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
- Eye Protection
- Respiratory Protection
- Gloves

APPLICATION INSTRUCTIONS

Install H&C SHIELD-CRETE when temperatures are between 50° and 90°F and the relative humidity is less than 80%. You can apply SHIELD-CRETE as a solid color or with Deco-Flakes (sold separately) to produce an attractive, stone-like finish. An optional coat of H&C SHIELD-CRETE CLEAR COAT KIT (sold separately) may also be applied for additional durability and shine.

Mixing: Thoroughly mix Shield-Crete Epoxy part A and part B separately in their individual cans. Next, pour part B contents into part A container. Thoroughly mix the two components together. If mixing with a stir stick, mix for 3-4 minutes. If mixing using a low speed drill, mix for 2-3 minutes. 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. 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.

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 60-80 grit sand paper or a sanding screen.

Applying Using Deco- Flakes (sold separately): If using the Deco-Flakes, apply SHIELD-CRETE evenly over an area that you can easily reach to disperse the flakes. Broadcast the flakes in an "up and out" manner onto the wet epoxy from a height of about 3 feet. The "up and out" manner is similar to spreading grass seed and is needed in order to ensure even distribution of flakes. Do not throw downward as this may result in unsightly clumping of flakes. 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.

Clear Coat Kit (sold separately): SHIELD-CRETE Clear Coat Kit is an additional product that provides an evenly uniform, gloss finish for SHIELD-CRETE epoxy floors. SHIELD-CRETE Clear Coat should always be applied when the deco flakes are installed. Apply the Clear Coat when the SHIELD-CRETE coating is dry to the touch and not tacky. The glaze coat should be applied with a 1/4 inch -3/8-inch nap roller and may be periodically re-applied to maintain a high gloss finish. Product will appear milky white when being applied, then dry clear. Refer to the Clear Coat Kit 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 2-Part Polyurethane Satin or Gloss may be applied as an alternative to SHIELD-CRETE Clear Coat Kit 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

Clean light- to medium-soiled surfaces with a 50/50 solution of H&C CONCRETEREADY Cleaner Degreaser and water or a good-quality neutral- based cleaner/degreaser, following the manufacturer’s directions for use. Use H&C CONCRETEREADY Cleaner Degreaser full strength for heavily soiled areas, such as oil and grease stains.

PHYSICAL PROPERTIES

| Typical Physical Properties and Characteristics | | |
|---|------------------|--|
| Property | Test Method | Value |
| Dry Time (@ 77°F, 50% RH) | Dry-to-touch | 45 minutes |
| | Foot traffic | 18 hours |
| | Heavy traffic | 72 hours |
| | Recoat | 6 hours min., 72 hours max. |
| | Full cure | 7 days |
| Flash Point | ASTM D3828 | >230°F (110°C), Mixed |
| VOC | EPA Method 24 | <50 g/L* |
| Perm Rating | ASTM D1653 | 2 grains (hr. ft ² in Hg) |
| Sheen | ASTM D523 | Gloss |
| Solids by Volume | NVV | 41% ± 2%*, mixed |
| Solids by Weight | ASTM D2369-04 | 50% ± 2%*, mixed |
| | (@ 50°F, 50% RH) | None |
| Induction Time | (@ 77°F, 50% RH) | None |
| | (@ 50°F, 50% RH) | 8 hours |
| Pot Life | (@ 77°F, 50% RH) | 5.5 hours |
| Shelf Life (unopened) | | Part A: 24 months Part B: 36 months |

*May vary depending on color

KIT CONTENTS

- Part A Epoxy (104100, 104200, 104300 MUST be tinted)
- Part B Hardener
- Cleaner/Degreaser
- Stir Stick
- Instructions

ORDERING INFORMATION

| Description | SKU# | UPC# | SMIS# |
|-----------------------------------|--------------|--------------|-----------|
| Shield-Crete Extra White Base Kit | 20.113000-99 | 035777913239 | 651114746 |
| Shield-Crete Deep Base Kit | 20.114000-99 | 035777913246 | 651114753 |
| Shield-Crete Ultra Deep Base Kit | 20.115000-99 | 035777913253 | 651114761 |
| Shield-Crete Concrete Gray Kit | 20.116000-99 | 035777913260 | 651114779 |

DECO-FLAKES ORDERING INFORMATION

| Description | SKU# | UPC# | SMIS# |
|--|--------------|--------------|-----------|
| Shield-Crete Deco-Flakes Blue Chip Creek | 20.105100-99 | 035777914649 | 651118176 |
| Shield-Crete Deco-Flakes Salt & Pepper | 20.105200-99 | 035777914656 | 651118184 |
| Shield-Crete Deco-Flakes Earthy Mosaic | 20.105300-99 | 035777914663 | 651118192 |
| Shield-Crete Deco-Flakes Pebble Beach | 20.105400-99 | 035777914670 | 651118200 |
| Shield-Crete Deco-Flakes 25 Lb Bag Salt & Pepper | 20.105500-99 | 035777914687 | 651118218 |
| Shield-Crete Deco-Flakes 25 Lb Bag Pebble Beach | 20.105600-99 | 035777914694 | 651118226 |

CAUTIONS

H&C SHIELD-CRETE® GARAGE FLOOR EPOXY KIT- (20.113000/20.114000/20.115000/20.116000)

DANGER! THIS KIT CONTAINS THE FOLLOWING CHEMICALS THAT MAY BE HARMFUL IF MISUSED: AMINES, EPOXY RESIN AND TRISODIUM PHOSPHATE DODECAHYDRATE. READ CAUTIONS ON INDIVIDUAL CONTAINERS CAREFULLY. KEEP OUT OF REACH OF CHILDREN.

Part A EPOXY COATING – (21.104100/21.104200/21.104300/21.104400/21.104500)

WARNING! CONTAINS EPOXY RESIN. KEEP OUT OF THE REACH OF CHILDREN. Causes eye, skin, nose and throat irritation. May cause allergic skin reaction. Harmful if swallowed. **USE ONLY WITH ADEQUATE VENTILATION.** Avoid breathing vapors, spray mist, or sanding dust. If painting indoors, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness, or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer’s directions for respirator use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Close container after each use. **DO NOT TAKE INTERNALLY. WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **FIRST AID:** In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. * Wash clothing before reuse. Thoroughly clean contaminated shoes. **IF INHALED:** If affected by vapor or spray mist, move to fresh air. If breathing difficulty continues, get medical attention. * **IF SWALLOWED:** Do not induce vomiting. Get medical attention immediately. * Call poison control center, hospital emergency room or physician immediately

Part B EPOXY COATING HARDENER – (21.104600)

DANGER! CONTAINS AMINES. KEEP OUT OF THE REACH OF CHILDREN. Causes eye and skin burns. May cause allergic skin reaction. Causes nose and throat irritation. Harmful if swallowed. **USE ONLY WITH ADEQUATE VENTILATION.** Avoid breathing vapors, spray mist, or sanding dust. If painting indoors, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness, or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. **DO NOT GET IN EYES, ON SKIN OR CLOTHING.** Wash thoroughly after handling. Close container after each use. **DO NOT TAKE INTERNALLY. WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **FIRST AID:** In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. * Wash clothing before reuse. Thoroughly clean contaminated shoes. **IF INHALED:** If affected by vapor or spray mist, move to fresh air. If breathing difficulty continues, get medical attention. * **IF SWALLOWED:** Do not induce vomiting. Get medical attention immediately. *Call poison control center, hospital emergency room or physician immediately.

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 – (SOLD SEPARATELY)

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.**

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.

