



H&C® HEAVY SHIELD™ WATER-BASED SOLID COLOR CONCRETE & DRIVEWAY ENAMEL / STAIN



PRODUCT DESCRIPTION

HEAVY SHIELD™ is our best solid color concrete stain for withstanding vehicular traffic, tire marking, and hot-tire pick up on high-traffic surfaces.

FEATURES & BENEFITS

- Provides a durable finish for excellent abrasion resistance that extends the life of concrete and masonry surfaces
- Withstands vehicular traffic, tire marking, and hot-tire pick up
- Highly resistant to garage, household, and pool chemicals for long-lasting beauty and protection
- Water-based formulation allows for easier application and clean up
- Can be applied to previously painted surfaces with proper preparation
- Available in hundreds of tintable colors

RECOMMENDED USES

H&C® HEAVY SHIELD™ is formulated for use on concrete and masonry. Recommended uses include Concrete Driveways, Patios, Lanais, Walkways, Concrete, Block or Brick, Mechanical Rooms, Pool Decks, Athletic Courts, and Other High-Traffic Areas.

COVERAGE RATE

Substrate*	sq ft/gal
Concrete floors	200-300
Porous concrete	150-250
Concrete block	100-150
Split-faced block	75-125
Fluted block	50-100
Brick (clay)	100-150

*Coverage will vary depending on the porosity and texture of the substrate.

JOBSITE TEST SECTION

Due to the wide variety of substrates, preparation methods, application 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 use on wood surfaces.

SURFACE PREPARATION

New Concrete: Allow new concrete to cure at least 28 days. 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 the stain until all surfaces are porous. Allow all surfaces to dry at least 24 hours before staining. Prepared concrete must have a pH of 6 to 10.

Existing and Previously Painted Concrete: All concrete must be porous, clean, dry and free of grease, oil and other contaminants. To spot clean, use H&C™ CONCRETEREADY® Cleaner Degreaser, following label directions. If mold, mildew, or fungus is present, kill and remove with a solution of 1 cup household bleach to 1 gallon of water. If surface has been previously painted, remove all old, peeling, flaking paint by rough sanding to ensure adhesion of H&C® HEAVY SHIELD™. Rinse away sanding dust before stain application.* **DO NOT ETCH PREVIOUSLY PAINTED SURFACES.**

***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.

Driveways and concrete surfaces with vehicular traffic: Proper surface preparation is crucial for driveways and concrete surfaces that will take vehicular traffic.

Repair: For the best repair on vertical and horizontal concrete and masonry surfaces, use H&C™ CONCRETEREADY® Quick Patch and Repair to fill low spots and spalling concrete. Please note that patching compounds will generally be visible through clear coatings.

TOOLS REQUIRED

Brush: Use nylon or polyester paint brushes.

Roller: Use a solvent-resistant soft woven roller (3/8- to 1/2-inch nap).

Airless sprayer: Pressure 1500 psi; tip .013 to .017 inch.

Conventional sprayer: Air pressure 30-50 psi; fluid pressure 15-20 psi; cap/tip 704/FX or equivalent.

HVLP: Cap/needle Titan #3 or equivalent.

NOTE: Back rolling is recommended after spraying.

APPLICATION INSTRUCTIONS

Apply H&C® HEAVY SHIELD™ onto dry surfaces only. Moisture content should not exceed 3 lbs/1,000 sq. ft. of surface (ASTM F710). Air, surface and material temperatures must be between 50° and 90° F and at least 5° F above the dew point during and for 24 hours after application. Do not apply H&C® HEAVY SHIELD™ Water-Based if rain is expected within 12 hours following application. A minimum of two coats are required.

How to Apply: Apply with a brush, roller, or sprayer. Stir product thoroughly before and during application. When using more than one container, intermix all containers together to ensure color uniformity. Prior to applying the first coat, dry sweep the concrete with a stiff broom or shop vacuum to remove all loose surface contaminants.

First Coat: Apply first coat evenly, working in one direction. Allow to dry at least 2 hours before applying the second coat.

Second Coat: If using a second coat, apply the second coat perpendicular to the first coat. Two coats of H&C® HEAVY SHIELD™ are usually sufficient. However, extremely porous surfaces may require a third coat for a uniform appearance. Allow 2 hours of dry time between coats.

SLIP RESISTANCE

Some surfaces such as inclined driveways, garage floors, steps and patios may require a slip-resistant additive for safety. Add H&C® SHARKGRIP® Slip-Resistant Additive to the final coat, following label directions. This product should not be used in place of a nonskid finish.

CLEANUP

Clean tools and any spills or spatters immediately using soap and warm water.

DISPOSAL

Follow your state or local regulations for disposal methods.

MAINTENANCE

Surfaces treated with H&C® HEAVY SHIELD™ are easily cleaned using 3 parts water to 1 part H&C™ CONCRETEREADY® Cleaner Degreaser.

PHYSICAL PROPERTIES

Property	Test Method	Value
Dry Time (@ 77°F, 50% RH)	Dry-to-touch	30 minutes
	Light traffic (foot)	2 hours
	Heavy traffic	48 hours
	Recoat	2 hours
	Full cure	7-14 days
VOC	Calculated	<100 g/L
Static Coefficient of Friction	ASTM D1894	0.57
Water-Vapor Transmission	Method A	6.869 ± 0.162 grains/sq ft/hr
Perm Rating	ASTM D1653	16.56 ± 0.39 grains/(hr ft2 in Hg)
Chemical Resistance	Brake Fluid Gasoline Motor Oil Anti-Freeze Transmission Fluid	No softening or color change
Scrub-Resistance Testing	ASTM D2486	1,000 cycles, no failure
Adhesion Testing	ASTM D4541	328.86 psi
Sheen (pigmented)	60° Gloss	38
Volume Solids EW Base: Solids by Weight Solids by Volume	Calculated	41.14%
		31.34%
		Volume Solids Deep Base: Solids by Weight Solids by Volume
32.58%		
Volume Solids Ultradeep Base: Solids by Weight Solids by Volume		37.01%
		31.66%
Weight per Gallon	ASTM D1475	9.52 lbs/gal

CUSTOM TINTING

TINT LOAD

Extra White Base

1's 0-3 oz

Deep Base

1's 3-6 oz

ORDERING INFORMATION

Extra White	Part Number/SMIS
1 gallon	35.100214-16/650990146
5 gallons	35.100215-20/650990260

Deep Base	Part Number/SMIS
1 gallon	35.100314-16/650990757
5 gallons	35.100315-20/650990781

Ultra Deep	Part Number/SMIS
1 gallon	35.100414-16/650990807
5 gallons	35.100415-20/650990815

LIMITED WARRANTY

Seller's and manufacturers 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.

CAUTION

CAUTIONS: CONTAINS CRYSTALLINE SILICA. 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. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. 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. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately.

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.

Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure.

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.**