



111.081

H&C®

CONCRETE STAIN

SOLID COLOR WATER BASED

FORMERLY SHIELD PLUS ULTRA CONCRETE STAIN

PRODUCT DESCRIPTION	CHARACTERISTICS	SURFACE PREPARATION																				
<p>H&C® Concrete Stain Water Based provides superior protection and beauty for both exterior and interior concrete. Fortified with sili-cone it is ideal for pool decks, patios, walkways, block and stucco walls, basements and laundry rooms. It may be applied to bare con-crete or previously painted surfaces. H&C® Concrete Stain Water Based is highly resist-ant to pool chemicals. For best results on gar-age floors use H&C® Shield Crete Garage Floor Epoxy.</p> <p>Features:</p> <ul style="list-style-type: none"> • Protects and beautifies interior and exterior surfaces • Use on concrete, masonry, and asphalt • Will not peel, flake, or fade • Resists oil, gasoline, water, and UV rays • Makes the surface easier to clean • Soap & water clean up • Ideal for high pH surfaces <p>Recommended Uses:</p> <ul style="list-style-type: none"> • Pool Decks • Stadium Supports • Bridges and Bridge Structures • Parking Garages • Athletic Courts • Asphalt Driveways • Block & Stucco Walls • Patios and Walkways • Basement Floors • CMU, Split Face, and Fluted Block • Precast, Poured-in-place, and Tilt-up Concrete. <p>For a complete color/seal system on porous substrates, apply 2 coats of H&C® Concrete Stain Water Based and a flood coat of H&C Super V™ Water Repellant.</p>	<p>Color: 8 ready mixed colors, 3 tintable bases for a variety of custom colors and clear for added durability.</p> <p>Coverage sq ft/gal</p> <table> <tr><td>Concrete floors</td><td>200-300</td></tr> <tr><td>Porous concrete</td><td>150-250</td></tr> <tr><td>Asphalt</td><td>200-250</td></tr> <tr><td>Concrete block</td><td>100-150</td></tr> <tr><td>Split faced block</td><td>75-125</td></tr> <tr><td>Fluted block</td><td>50-100</td></tr> <tr><td>Brick (clay)</td><td>100-150</td></tr> </table> <p>Drying Time, @ 77°F, 50% RH: *temperature and humidity dependent</p> <table> <tr><td>To touch:</td><td>30 minutes</td></tr> <tr><td>Light traffic and recoat:</td><td>2 hours</td></tr> <tr><td>Heavy traffic:</td><td>72-96 hours</td></tr> </table> <p>Full Cure should be reached in 7-14 days *NOTE: High humidity and /or low temperatures will affect drying time.</p> <p>Flash Point: N/A Vehicle Type: 100% Acrylic</p> <p>White 20.00121- VOC (less exempt solvents): 224 g/L; 1.87 lb/gal* Pigmented Sheen: Low Luster < 35 Volume Solids: 30 ± 2%* Weight Solids: 43 ± 2%* Weight per Gallon: 10.0 lb* * May vary by color</p> <p>Clear 20.00120- VOC (less exempt solvents): 246g/l; 2.05lb/gal Clear Sheen: Low Luster < 35 Volume Solids 19% Weight Solids 22%</p> <p>Static Coefficient of Friction: .9</p> <p>Water Vapor Transmition ASTM D1653 5.21 ± 0.12 grains/(hr ft2) Perm Rating ASTM D1653 11.2 ±.3 grains/(hr ft2 in Hg)</p>	Concrete floors	200-300	Porous concrete	150-250	Asphalt	200-250	Concrete block	100-150	Split faced block	75-125	Fluted block	50-100	Brick (clay)	100-150	To touch:	30 minutes	Light traffic and recoat:	2 hours	Heavy traffic:	72-96 hours	<p>WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and clean-up. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.</p> <p>Bare Concrete: Newly poured concrete must be at least 28 days old. All concrete must be porous, clean, dry and free of grease, oil & any other contaminants. To spot clean, use H&C® Cleaner Degreaser following label directions. If mold, mildew or fungus is present, kill and remove with a solution of one-cup household bleach to one gallon of water. All horizontal concrete surfaces MUST be etched with H&C® Etching Solution or muriatic acid, following label directions. After proper etching the surface should have the feel of 120-grit sandpaper, if not then a second etching is required. Vertical concrete surfaces should absorb water. Test various sections by spraying water directly onto the surface to be stained. If the water does not absorb rapidly, then the surface should be acid etched using the H&C® Etching Solution following label instructions or mechanically abraded. Do not apply the stain until all surfaces are porous. Allow all surfaces to dry 24 hours before <i>staining</i>. <i>Prepared concrete must have a pH level between 6 and 10.</i></p>
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SURFACE PREPARATION

Garage Floors: For best results use H&C® Shield-Crete Garage Floor Epoxy.

Driveways: Proper surface preparation is crucial when using this product on garage floors and driveways. For best results us H&C® Concrete Sealer Solvent Based.

Asphalt: Asphalt surfaces must be free of grease, oil, dirt, wax, etc. Scrub with a **solvent free cleaner** following label directions. DO NOT ETCH ASPHALT. Not recommended if asphalt has been freshly sealed.

Previously Painted: All old, peeling, flaking paint must be removed. Areas with firm adhesion must be clean and free of dirt, oil, grease, etc. Clean with H&C® Cleaner Degreaser, following label directions. Rinse thoroughly and allow to dry. Remaining paint should be rough sanded in a circular motion to ensure adhesion of H&C® Concrete Stain. Rinse away sanding dust. DO NOT ETCH PREVIOUSLY PAINTED SURFACES.

Repair: For the best waterproofing protection on vertical and horizontal concrete and masonry surfaces, patch and repair cracks with H&C® Quick Patch and Repair. Patching compounds will generally be visible through clear coatings.

APPLICATION

When to Apply: H&C® Concrete Stain Water Based should be applied on to a dry surface where moisture content should not exceed 3lbs/1000 sq. ft. of surface (ASTM F710). **Air, surface and material** temperature 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® Concrete Stain Water Based if rain is expected in 12 hours following the application. Stir stain thoroughly before and during application. A minimum two coats is required. Apply with brush, roller or spray. When using more than one container, **intermix** all containers together to ensure color uniformity. Prior to applying your first coat, dry-sweep the concrete with a stiff broom or shop vacuum to remove all surface latent.

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

Second Coat: Apply second coat cross-wise to the first coat. Two coats of H&C® Concrete Stain Water Based are usually sufficient. However, extremely porous surfaces may require a third coat for a uniform appearance. If more than two coats are applied on a horizontal surface, consider using H&C® SharkGrip Slip-Resistant Additive. Allow 2 hours dry time between coats. Allow 72 to 96 hours drying conditions before using the surface for heavy traffic.

APPLICATION

Brush—Use a nylon/polyester brush

Roller—Use a 3/8" woven nap cover

Spray—**Airless**

Pressure 1500 psi

Tip013" - .017"

Spray—**Conventional**

Air Pressure 30 - 50 psi

Fluid pressure 15 - 20 psi

Cap/Tip 704/FX or equivalent

HVLP

Cap/Needle Titan #3 or equivalent

Backrolling recommended after spraying

Slip Resistance: Some surfaces may require a slip-resistant additive for safety. Add H&C® SharkGrip Slip Resistant Additive to the final coat, following label directions. H&C® SharkGrip Slip Resistant Additive should not be used in place of a non-skid finish.

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water.

PERFORMANCE DATA

Accelerated Weathering

ASTM G154 3000 hrs, no effect

Color Change: Delta E = 0.35

Color & Gloss Retention

ASTM G90

Color: Less than .30 Change

Sheen: .5 difference @ 60o

Chloride Ion Penetration

AASHTO T 259/T 260

Reduction of 54 % @ 0.0625"-0.5" penetration, 83 % @ 0.5"-1.0"penetration, and 36 % @1.0"-1.5"penetration



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<p>Resistance to Wind Driven Rain Rilem Tube Method #11.4 Zero water Penetration over 60 minutes exposure</p> <p>Resistance to Salt Spray ASTM B117 No film defect after 500hrs exposure</p> <p>Resistant to Sulfide Staining ASTM D1712 No change after 15mins</p> <p>Chemical Resistance 10% Sodium Hydroxide No softening or color change</p> <p>10% Ammonium Hydroxide No softening or color change</p> <p>Mineral Spirits KB value 38 No softening or color change</p> <p>Reflectance of White (20.00121-) 86% +/-3%</p> <p>Impact Resistance Fed Std 141A Method 2051 ASTM D 2794 6 inch-pounds direct impact Results: No film chipping</p> <p>Flexibility ASTM D522 Method B 1-inch diameter mandrel Results: No cracking, breaking, etc</p> <p>Scrub Resistance Testing 1200 cycles, no failure</p> <p>Adhesion Testing ASTM 3359 Method A X-Cut Tape Test Results: No film loss Classification 5A</p> <p>Method B Cross-Cut Tape Test Results: Less than 5% removed Classification: 4B</p> <p>Abrasion Resistance ASTM D968 Results: >2000 Liters of Sand</p>	<table border="0"> <tr> <td>Clear</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001204/163-2702</td> </tr> <tr> <td>Five</td> <td>20.001205/163-2710</td> </tr> <tr> <td>Extra White</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001214/163-1753</td> </tr> <tr> <td>Five</td> <td>20.001215/163-1746</td> </tr> <tr> <td>Deep Base</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.002214/163-1738</td> </tr> <tr> <td>Five</td> <td>20.002215/163-1720</td> </tr> <tr> <td>Ultra Deep</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.003214/163-1712</td> </tr> <tr> <td>Five</td> <td>20.003215/163-1704</td> </tr> <tr> <td>Bombay</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001254/163-1787</td> </tr> <tr> <td>Five</td> <td>20.001255/163-1795</td> </tr> <tr> <td>Sandstone</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001324/163-1852</td> </tr> <tr> <td>Five</td> <td>20.001325/163-1845</td> </tr> <tr> <td>Tile Red</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001364/163-1902</td> </tr> <tr> <td>Five</td> <td>20.001365/163-1910</td> </tr> <tr> <td>Terra Cotta</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001354/163-1886</td> </tr> <tr> <td>Five</td> <td>20.001255/163-1894</td> </tr> <tr> <td>Pearl Gray</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001314/163-1837</td> </tr> <tr> <td>Five</td> <td>20.001314/163-1829</td> </tr> <tr> <td>Gull Gray</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001284/163-1803</td> </tr> <tr> <td>Five</td> <td>20.001285/163-1811</td> </tr> <tr> <td>Silver Gray</td> <td>Part Number/SMIS</td> </tr> <tr> <td>Gallon</td> <td>20.001344/163-1878</td> </tr> <tr> <td>Five</td> <td>20.001345/163-1860</td> </tr> </table>	Clear	Part Number/SMIS	Gallon	20.001204/163-2702	Five	20.001205/163-2710	Extra White	Part Number/SMIS	Gallon	20.001214/163-1753	Five	20.001215/163-1746	Deep Base	Part Number/SMIS	Gallon	20.002214/163-1738	Five	20.002215/163-1720	Ultra Deep	Part Number/SMIS	Gallon	20.003214/163-1712	Five	20.003215/163-1704	Bombay	Part Number/SMIS	Gallon	20.001254/163-1787	Five	20.001255/163-1795	Sandstone	Part Number/SMIS	Gallon	20.001324/163-1852	Five	20.001325/163-1845	Tile Red	Part Number/SMIS	Gallon	20.001364/163-1902	Five	20.001365/163-1910	Terra Cotta	Part Number/SMIS	Gallon	20.001354/163-1886	Five	20.001255/163-1894	Pearl Gray	Part Number/SMIS	Gallon	20.001314/163-1837	Five	20.001314/163-1829	Gull Gray	Part Number/SMIS	Gallon	20.001284/163-1803	Five	20.001285/163-1811	Silver Gray	Part Number/SMIS	Gallon	20.001344/163-1878	Five	20.001345/163-1860	<p>Do not use on wood surfaces. Non-photochemically reactive.</p> <p>Label Caution CAUTION 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. LCE 12/02/2002 20.001214 01 00</p> <p><u>TECHNICAL SERVICES</u></p> <p>The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of H&C concrete coatings 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.</p>
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