SURESTAIN

Chemical (Reactive Acid) Stain

SURECRETE DESIGN PRODUCTS

Toll Free - 1.800.544.8488
www.SureCreteDesign.com
www.TheConcreteWhisperer.com

Technical Data

Coverage:

200 sq. ft. per coat/gallon

Mixing Ratio:

Varies from no water dilution to approx. 4:1 / water.

Colors:

8

LIMITATIONS

Apply in ambient and surface temperatures above 40ºF and rising and lower than 90ºF. Cement substitutes such as fly ash and slag will profoundly affect the color of chemical stain. The lower the cement content, the less of a reactive color will appear. For optimal performance of chemical stains on concrete, use straight portland cement with no substitutes. Slag cement can spot black when chemical stain.

If fiber is to be utilized in concrete that is to be chemically stained, use "stealth" fibers that do not stand proud of the finished floor.

Pacific Blue and ***Jade Earth Tones*** will spot black in the presence of moisture. The moisture can come from precipitation on exterior jobs, uncured concrete, hydro-static pressure from beneath slab, or allowing insufficient dry time prior to sealing.

DESCRIPTION

SureStain is not a typical stain or dye. It is made from a very mild hydrochloric or phosphoric acid solution, wetting agents, and metallic ions (salts), and specially formulated pigments. When applied on concrete or any cementitious topping the metallic ions chemically react with the free alkaline in the cement forming oxides that produce the color. Unlike dyes that produce an even color, ***SureStain*** produces the multi-hued, variegated, mottled look of natural stone.

Earth Tones perform similarly to other reactive acid stains, but with very little residue at clean-up.

SURFACE PREPARATION

Clean

Concrete must be thoroughly cleaned before chemically staining. Liquid curing agents should not be used on concrete that is to be stained. Nothing should block the metallic ions from access to the free alkaline in the cement. For premier results in cleaning concrete prior to chemical staining, use a black scrubbing pad with water on a rotational floor scrubbing machine.

Super Concrete Renovator (SCR) is recommended for every Chemical Stain project on concrete. ***SCR*** is a mildly acidic detergent that cleans concrete thoroughly. Apply diluted at the ratio of 2:1 (2 parts water to 1 part ***SCR***.) Coverage is approximately 150 sq. ft. per gallon. After spraying ***SCR*** from ***SP*** pump-up sprayer, agitate with a nylon bristle broom. Allow to stand until all foaming and bubbling has ceased. Do not allow ***SCR*** to dry on slab, rinse frequently. For interior slabs wet vacuum rinsed areas. For exterior slabs simply rinse away. The measure of profiling provided by ***SCR***, permits the colors to go deeper into the concrete.

SureClean degreaser may be required for visible oil stains. Oil, grease, and other petroleum stains that are permanent will not accept chemical stain. Chemical Stain should not be used over petroleum stains.

SCR in a lighter dilution rate 4 or 5:1 (4 or 5 parts water to 1 part ***SCR***) is recommended prior to chemically staining stamped overlay that has utilized liquid release for stamping tools. Interior stamp overlay projects where little, if any, evaporation of liquid release has occurred may require ***SureClean*** degreaser prior to staining.

Cured

Allow concrete to cure a minimum of fourteen (14) days. Cooler climates, (highs not reaching 50°F) require curing times of twenty-one (21) days or more. If applied to uncured concrete, ***SureStain*** will continue to change color until the concrete meets a complete cure. Therefore applying to cured concrete allows the contractor to identify final colors shortly after application.

PROTECTION

Surrounding areas and foliage should be protected prior to staining. Any adjoining walls should be masked. The use of plastic sheeting for masking is appropriate, as it will not absorb and hold the chemical stain. Wear a NIOSH approved acid respirator and provide adequate ventilation. Wear chemical resistance gloves and chemical splash goggles. Wear suitable protective clothing to avoid skin contact.

APPLICATION

Earth Tone

Apply first coat with ***SP*** sprayer on dry surface using caution to avoid track lines from the spray pattern. A circular motion with the wand is desired. ***Earth Tones*** may be applied full strength or diluted with water to desired rate. The first coat may be brushed or brushed into the surface. Use color-fast, acid resistant brushes or brooms. If stain is brushed, maintain a wet edge, never allow a wet broom to drag across a dry slab, as it may leave a permanent streak or brush stroke.

Areas that may call for brushing are sloped surfaces, slabs with "bird baths," stamped concrete, and overlays. Do not walk on the wet surface. Footprints will appear darker than the adjacent areas. If stepped on by accident, the footprints should be brushed out immediately. Allow the first coat to dry to the touch.

Apply second coat in the same manner as the first coat, as described above. Do **not** brush the second coat. Allow to dry overnight.

Multiple Colors

Colors may be layered or alternated as desired. For crisp, distinct, and separate color changes, a score line should be utilized. Chemical stain will bleed across traditional masking. Shielding or masking at a score line will prevent the bleeding of colors as long as the stain is not puddled heavily at score lines.

CLEAN-UP

Unlike other reactive acid stains, ***SureStain*** leaves very little residue and requires no neutralization. For ***Earth Tones*** flood the surface with water. Very lightly brush. Either wet vacuum or mop. Allow to dry thoroughly.

SEALER

For interior applications, the most durable sealers are any of the ***Dura-Kote*** line. For exterior applications requiring "breatheabilty" ***SureSeal Solvent*** is a suitable choice.

To apply with an airless sprayer, use a size 8/13 reversible tip and spray evenly onto the surface. Allow first coat to dry completely and apply the second coat in the same manner.

Decorative score lines that are to be grouted should be grouted between coats of sealer.

For interior applications ***SureFinish*** *(see specification sheet)* is recommended as an industrial floor finish that will act as a sacrificial coat to protect the sealer below and impart a measure of slip resistance. Provide slip resistance with ***SureGrip*** aluminum oxide or ***SureGrip Additive*** for exterior slabs.

Allow twenty-four (24) hours before permitting foot traffic on sealed area. Allow seventy-two (72) hours before permitting vehicle traffic on sealed area.

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