

HydroStain

Waterborne Concrete Stain



DESCRIPTION • **HydroStain** is a ready-to-use, waterborne, environmentally friendly, low VOC, deep penetrating compound designed for staining cementitious surfaces by a chemical reaction. **HydroStain** may be applied on integrally colored, color hardened, and uncolored concrete surfaces and plasters to produce coloring effects ranging from opaque to translucent. **HydroStain** is also compatible with CCC's overlays and toppings such as *TopCrete 601 Stampable Overlay* and *TopCrete 220 Micro Topping Skim Coat*. The stained surface must be sealed with CCC's waterborne A-Z Mega Sealer to look in and protect the stain. The coloring effect varies depending on the number of coats and surface conditions; a mottled and variegated effect is typical. Colors that may be produced range from pastels and earth tones to vivid and brilliant hues.

USES • **HydroStain** is a reacting compound designed for use on any porous, cementitious surface to produce mottled and variegated colors ranging in intensity from opaque to translucent. **HydroStain** is designed for use on horizontal and vertical surfaces in interior and exterior areas not subject to abrasion or heavy traffic. **HydroStain** can also be applied over surfaces color hardened with *PaveCrete 200 Color Hardener* or coated with *TopCrete 220 Micro Topping Skim Coat* to produce unique color combinations. **HydroStain** is also compatible with CCC's cementitious overlays such as *TopCrete 600 Overlayment Screed*, *TopCrete 601 Stampable Overlay*, and *LevelCrete 901 Self-Leveling Overlay*.

ADVANTAGES

- ✓ A deep-penetrating staining process that produces unique mottled coloring effects.
- ✓ A highly versatile decorative tool that produces colors ranging from opaque to translucent.
- ✓ Available in a wide range of colors ranging from pastels and earth tones to vivid hues.
- ✓ Will not chip, delaminate or discolor like ordinary paint.
- ✓ Suitable for exterior and interior applications.
- ✓ Low VOC and environmentally friendly.
- ✓ Very easy to use with quick results.

LIMITATIONS • The final appearance is unique to each surface and is dependent on the surface's mix design, porosity, age, color, and surface texture; the application technique, applicator's experience, weather conditions, and sealer coating. The final appearance can not be guaranteed or predicted. It is therefore highly recommended to apply **HydroStain** to a test section to check for color acceptability. Applying too heavy a coat of **HydroStain** will produce a paint-like effect and may lead to adhesion

failure. **HydroStain** is sold in concentrated form and must be diluted with clean potable water at a minimum ratio of four parts water to one part **HydroStain** prior to use.

HydroStain must only be applied on concrete surfaces that are placed on a well-drained subgrade and not subject to hydrostatic pressure, exposure to chemicals, continuous water submersion, high abrasion, scratching, or metal-wheeled traffic. The durability of the color produced is dependent on the abrasion resistance of the concrete surface. Concrete surfaces that are weak and aggregate-deficient may cause poor adhesion and insufficient color durability. Do not apply to surfaces over which liquid or powdered release agents have been applied, unless the liquid release has been thoroughly cleaned from the surface. All surfaces must be sealed immediately once **HydroStain** has been allowed to dry thoroughly for a period of 24-48 hours depending on temperature, humidity, and wind conditions. CCC recommends use of its waterborne *A-Z Mega Sealer Acrylic Urethane Sealer*. Use of other sealers may produce inferior results or darkened colors.

CAUTION: Never mix or use concurrently with **ChemStain** or any other acid-based staining systems. Doing so will produce dangerous chemical reactions. **HydroStain** may be applied on areas that have been chemically treated with an acid staining system only after the acid has been neutralized and the area thoroughly washed and cleaned of any traces of the acid.

COVERAGE • Exact coverage rate will depend on the method of application, age and composition of the surface, number of coats, texture and porosity of the surface and job conditions. **HydroStain** is sold in concentrated form and must be diluted prior to use at a minimum ratio of 4:1 (water to stain); 6 or 8:1 is a typical dilution ratio. The number of coats that may be applied depends on the dilution ratio, but should not exceed three coats when using low dilution ratios. **APPLY IN THIN COATS ONLY.** Allow each coat to dry before applying the following coat. Approximately 100 m² per liter per coat is a typical coverage rate.

SURFACE PREPARATION • Dirt, laitance, coatings, oil, water repellants and curing compounds must be removed from the surface by water jet, sand blasting, or degreasing agents. The surface must also be free of paints, sealers, alkali, and penetrating sealers. If washing or degreasing fails to remove such coatings, the surface must be sandblasted or acid washed. Take note that acid washing may affect the color appearance; therefore,



testing on a representative area is necessary. Older and concrete surfaces with laitance may require abrading to remove weakly bonded material. The floor should then be cleaned with a rotary floor machine or pressure washer. Dense concrete surfaces may be opened up by mechanical means, such as light sand blasting or high-pressure water washing. Prior to full application, test the surface for moisture penetration by sprinkling water on the surface; if water beads on the surface, then additional cleaning, sanding and grinding will be necessary.

Do not apply **HydroStain** to surfaces over which powdered release has been applied. If liquid release was used, it must be thoroughly washed off the surface using detergents.

If the surface has been acid washed or treaded with **ChemStain** or any type of acidic stain, it must be thoroughly neutralized before application of **HydroStain**. Test with pH paper; a score of 7 or more must be obtained before application of **HydroStain** may proceed. Surface must be thoroughly rinsed with fresh water after cleaning and neutralizing. Water should be removed by a squeegee or a wet vacuum; water left to evaporate on the surface may develop efflorescence. The surface must be completely dry prior to application and not subject to any moisture.

New concrete surfaces must be allowed to cure for at least 28 days before application of **HydroStain**. Curing agents must not be used on surfaces to be stained. In the case of application over **TopCrete 600 Overlayment Screed**, **TopCrete 601 Stampable Overlay**, or **LevelCrete 901 Self-Leveling Overlay**, the surface must be allowed to cure for at least seven (7) days. In the case of application over **TopCrete 220 Micro Topping Skim Coat**, the surface must be allowed to cure for at least three (3) days.

APPLICATION • Warning: Do not mix or use with any acidic staining systems. The alkaline nature of **HydroStain** will result in dangerous chemical reactions. Make sure to wear proper protective gear including goggles and plastic gloves. All surrounding areas must be masked and protected to prevent spillage to areas outside the treated surface. Precautions should also be taken to prevent wetting of the area or water from penetrating into the concrete.

The compound must be thoroughly mixed in its original container; certain colors will experience settlement and material separation after a period of storage. When mixing take caution not to spill or splash any of the material.

Apply on calm wind days in ambient temperatures

between 10-35°C. Hot, dry, and windy weather will cause the staining liquid to evaporate quicker and may require more applications and/or more material. On extremely hot and dry days, apply the stain early in the morning when the concrete surface is still cool. Application should not be carried out on rainy, foggy, or humid days when surface condensation and the presence of moisture may affect the proper drying of the stain.

Using an airless spray or high volume, low pressure pump, **HydroStain** must be applied uniformly in a light, continuous, foggy pattern. Always overlap newly applied areas with older ones in order to maintain a wet edge. Always apply in thin coats and allow each coat to dry thoroughly before applying the following coat. Each coat should be applied in a direction perpendicular to the previous one. Up to three coats may be required to achieve the desired look, but never apply more than three coats as paint-like appearance and possible adhesion failure may result. Keep in mind that variation in color and mottling are expected and in fact desirable.

SEALING • After the surface has dried completely, the stained area **must** be sealed with **A-Z Mega Sealer**. The surface should then be inspected periodically for sealer wear and abrasion, and resealed as necessary. Refer to the relevant CCC technical data sheet for application instructions.

CLEANING • Clean all tools and equipment promptly with clean water.

STORAGE & SHELF LIFE • Do not store under direct sunlight, near sources of heat or combustible materials, or in freezing conditions. Container must be tightly sealed and stored upright at all times. Shelf life is 12 months from date of purchase.

SAFETY PRECAUTIONS • CAUSES EYE, SKIN, AND RESPIRATORY TRACK IRRITATION. KEEP AWAY FROM CHILDREN. CORROSIVE. Avoid contact with skin and eyes. Do not breathe fumes or mist. Use under adequate ventilation. Wear proper protection including vapor mask, rubber gloves, goggles, and protective clothing. **DO NOT TAKE INTERNALLY, MAY BE FATAL IF SWALLOWED. MAY CAUSE CANCER.** First aid: Eyes – do not rub eyes. Flush with water and seek medical attention immediately. Ingestions – give several glasses of water or milk and seek medical attention immediately. Contact with skin – wash affected area immediately. Inhalation – move to fresh air.

PACKAGING • 1 liter and 1 gallon containers.

Creative Concrete Concepts

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