

COHILLS[®] PRO SERIES CHEMICAL STAIN

Cohills Pro Series Chemical Stains create a unique look giving concrete visual character which cannot be achieved by using a conventional polymer or pigment type stain. When placed on a cementitious surface, the single component coloring solution of acidic metallic ion particles (acid stain), chemically react with the particles in the cement (free alkali) to form oxides. Typical paint or coating stains cover up the concrete, while chemical stains infuse the color into the surface to become a permanent part of the substrate which will not crack, chip, fade or peel. The resulting effect creates a translucent, variegated effect, showcasing the character of the substrate. Depending upon the cement content, age, porosity and manner in which hydration took place, the chemical stain will react differently every time. These variables cause broad drifts in color and mottled surface effects which are not considered defects, they are the reason for it's inherent beauty.

Typical Uses and Benefits

- Cohills Pro Series Chemical Stains may be used in both interior and exterior environments, on almost any cementitious surface. Walkways, driveways, patios, pool decks and more, can benefit by the use of Pro Series Chemical Stains, whether it is a new or existing substrate.
- Stain may be applied over colored concrete as well as gray concrete. This can produce enhanced, rich effects to the already colored concrete. It may be used as an entire surface colorant or just as an accent border or detail. Cohills Pro Series Chemical Stain is available in eight standard colors, however, the application of another stain will expand the color possibilities.
- Restaurants, bars, hotels and casino's, retail stores and malls, movie theatres, museums, automobile showrooms and residential flooring are typical areas for the use of Cohills Pro Series Chemical Stain as well as anywhere architectural concrete is desired. These stains may also be used on other cementitious materials, such as, micro-toppings, overlays, gunite, stucco, faux stone, terrazzo or cement plaster. Some projects are application specific and a mock up is suggested prior to starting any project.
- Artistic and graphic effects are limitless with Cohills Pro Series Chemical Stain and depending on your application technique, multiple colors can be used for more interesting effects. Application of the stain in a more intense or subdued color offers new areas of profit and value.

Limitations

- If a **uniform, monolithic** color is desired, Cohills Pro Series Chemical Stain is **not** recommended. The reaction of the stain with the substrate, may produce variations, dependant upon job site conditions, concrete mix designs, age and condition of existing slabs, surface permeability, curing methods or finishing practices.
- Cracks will not be hidden and the concrete surface will not be "covered up," however, the stain will work with the surface to add character and provide an "Old World" surface effect.
- Cohills Pro Series Chemical Stain color chart shows colors applied to uncolored (gray) concrete. Product literature photos do provide an approximate representation of the color palette, however, based upon the many variables which are unique to each individual surface, the actual colors achieved may be significantly different.
- Atomic Blue, Palm Green and Aged Bronze stains should only be used in interior applications, as they may continue to react with water and darken or blacken when exposed to excessive moisture. The sub-grade must be well-drained and not subject to high moisture vapor emissions when these colors are used. Consult your sales representative for more information.

Prior to Product Application

- Concrete must be fully cured according to ACI standards before applying Cohills Pro Series Chemical Stain. A minimum of 28 days is recommended for optimal results. Applying stain to concrete which is not fully cured may cause undesirable results.
- Use of a curing compound is not recommended for freshly placed concrete that is to be stained. If a curing compound is necessary, contact your local Cohills representative for information on non sodium silicate curing compounds.
- The concrete surface must be clean - free of dirt and residues - TSP may be used to scrub the surface if needed, however, it must be thoroughly rinsed. The concrete should be structurally sound, dry and cured to a uniform, light color (free from all dark moisture and alkali spotting).
- **DO NOT** acid etch prior to applying stain. Protect all areas which are not designated for stain including stainless steel.
- It is strongly recommended that a small out-of-the way section of the concrete be tested first to see if a proper reaction occurs. If the stain does not "take", you have concrete that is dirty, sealed, or is too heavily aged to have reactive materials available. Cleaning, stripping of the sealer, or sanding would be necessary.

Product Application

- Cohills Pro Series Chemical stain may be applied full strength or diluted with water. It is best applied using a garden-type (Hudson) sprayer, which must be plastic or stainless steel. A stiff nylon brush may also be used to massage the stain into the concrete - when using this technique always move brush in a circular motion.
- Using the sprayer, the stain should be sprayed evenly and continuously over the surface, taking care not to puddle the stain. If a puddle should occur, do not attempt to correct it.
- Various degrees of acidic reactions may occur, such as foaming or fizzing. These reactions signify that the surface is accepting the stain.
- A minimum of two or more coats of stain is recommended. The second coat may be applied after the first coat has dried completely (approximately 5 hours). **DO NOT** rinse stain in between coats. Again do not attempt to correct any puddling which may occur.
- **AFTER** final coat is completely dry (10 hours is the recommended minimum dry time for most surfaces), the surface must be cleaned. A powdery residue is formed from the reaction of the Pro Series Stain and this **must be removed**. Scrub off the residue using a long handled medium stiff bristle brush and a mixture of water and ammonia. (1 pint of ammonia to 5 gallons of water) Remove the water/ammonia and residue mixture from the floor by mop squeegee or (preferably) a wet vacuum. Repeat the process with clean water only until all residue is removed. Allow the floor to dry completely.
- For a brighter, wet-look and for lasting protection of your stained surface, apply a Cohills recommended sealer. **DO NOT** use either wax or sealer around pools or shower floors.

- ♦ **Coverage Rates** : Approximately 200-400 sq ft per gallon per coat @ full strength. Actual coverage may vary depending upon the texture and porosity of the concrete surface or other undetermined conditions.
- ♦ **Hardness & Impact Resistance** : Stain is a penetrative product, so its hardness and impact resistance is reliant on the substrate it is applied over.
- ♦ **Thermal Shock** : (ASTM D-1211) Good
- ♦ **Sheen**: Sheen is dependent upon the type of sealer used over the stain. Cohills recommended sealers are available in Gloss, Satin or Matte finish.

- ♦ **Shelf Life** : Cohills' Pro Series Chemical Stains have a one year shelf life. Stain must be kept at a minimum temperature of 40° F.

- ♦ **Installation and Product Handling** :For Cohills' Pro Series Chemical Stain application procedures refer to technical application specifications. Prior to use or handling of material, consult the corresponding Material Safety Data Sheet.

- ♦ **Warranty**: The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither the seller nor manufacturer has any knowledge or control concerning the purchaser's use of this product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product which is proved to be defective and must be received in writing within (1) year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss or damage resulting from use of this product.

AVAILABLE COLORS

FS-420 Rustic Brown	FS-480 English Leather
FS-408 Terra Cotta Clay	FS-385 Palm Green
FS-320 Toasted Almond	FS-570 Atomic Blue
FS-355 Aged Bronze	FS-800 Black

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