

MANUFACTURER

GRANTMAN INDUSTRIAL CORPORATION
 Address : 176 H Tandang Sora Ave. Quezon City,
 Philippines 1116
 Contact no.: (02) 929 3116 / 927 3086 / 621 9075
 Mobile no.: 0922 868 0806 / 0917 893 4908 Fax : 930 4142

PRODUCT NAME

FORTRESS CONCRETE STAIN

PRODUCT DESCRIPTION

FORTRESS CONCRETE STAIN is a decorative stain for concrete surfaces. It is water submersible, alkali, weather and UV light resistant. These stains require a top coat and are compatible with solvent based, water-based, single and two component products, including but not limited to urethanes, acrylics and epoxy sealer.

COVERAGE

Package Size	Total Yield*	Coverage
4 ounces	20 ounces	35-50 sq ft
1 quart	1.25 gallons	250-400 sq ft
1 gallon	5 gallons	1000-1600 sq ft
5 gallons	25 gallons	5000-8000 sq ft

*Only Deionized, Reverse Osmosis or Distilled Water should be mixed with Fortress Concrete Stain Concentrates.

SHELF LIFE

Always store in cool dry place. Fortress Concrete Stain can be usable within one (1) year.

ADVANTAGES

- ✓ Compatible with neutralized acid-based stains
- ✓ Compatible with overlays, as a topical stain and as integral color
- ✓ May be applied over previously sealed surface
- ✓ Low Odor
- ✓ Fast Air Dry

RECOMMENDED USE

A user-friendly stain for cured concrete slabs (28 days) and other porous substrates. May be applied over sealed surfaces (refer to Application Instructions).

NOT RECOMMENDED FOR

Non-porous substrates (e.g. metal, resin, fiberglass) when submerged in water or exposed to severe weather conditions.

COLOR

Assorted Colors

CAUTION

Use gloves and eye protection. Avoid contact with eyes and prolonged skin contact. If eye contact occurs, wash with clean water and consult a doctor immediately.

WARRANTY

Fortress Concrete Stain is covered from the date of purchase when used on substrate which conforms to local building codes and when installed, in accordance with the manufacturer's instruction. Fortress Concrete Stain will replace those which are determined to be defective. This warranty is limited to the original purchaser and may not be transferred to any subsequent owner. This warranty does not cover damage resulting from: settlement of the building or other wall movement, mixing with other chemicals or additives and prolonged exposure to heat and other irregular temperature. This warranty covers only manufacturing defects in Fortress Concrete Stain. It will not cover labor costs or damages obtained from removal and replacement of defective products.

TYPICAL CHEMICAL RESISTANCE

Exposure	Concentrate	Dilute (10%)
Acids	Good	Excellent
Alkalis	Excellent	Excellent
Solvent		
Aliphatic	Good	Good
Aromatic	Good	Good
Ketones	Poor	Poor
Salt	Excellent	Excellent
Water	Excellent	Excellent

APPLICATION

Area Preparation: Be sure to mask or cover all areas that are not intended to be stained including but not limited to door frames, doors, walls and windows.

Surface Preparation: Whether new or old concrete, the surface preparation phase of "Staining a Concrete Floor" should be viewed as the most important. Proper floor preparation results in the stains longevity, minimizes potential failures and creates the best environment for an aesthetically pleasing work of art. In short, the more detail and time allotted to this phase of the project will dramatically affect the appearance and durability of the finished floor.

Horizontal application:

Exterior-broom finish

- 1) Broom finishes may result in high profiles or peaks in the substrate which erodes faster than the remaining substrate. Remove these unstable sections by simply running an ice scraper or other metal object over the substrate. Extract debris from substrate. This step will enhance the longevity and durability of the install.
- 2) Apply Fortress Green Clean following the instructions for Exterior & Interior

Exterior & Interior

1) Remove paint, adhesives and loose particulates from the intended application surface.

2) Liberally apply Fortress Green Clean to a 20 x 20 foot section of the substrate with ½ inch nap roller cover.

3) Allow the gel to remain on the substrate for 20 minutes. Interiors-use of power wash is not applicable.

4) Agitate Fortress Green Clean utilizing a floor buffer (small area) or an auto-scrubber (large area) equipped with brush attachments while rinsing with clean water.

5) Extract material utilizing a wet/dry vacuum or lower the squeegee uptake bar in the auto-scrubber. Continue to flush and agitate the substrate.

Areas that can be pressure washed:

6) Remove Fortress Green Clean Cleaning from the surface using a power washer* with overlapping line patterns.

7) Allow the area to dry adequately before performing a Tape Test. Upon the completion of a successful Test begin the application of Fortress Concrete Stain.

If additional profile is desired, reapply Fortress Green Clean following the previous directions.

Grinding:

1) 1 st Pass= 40 grit metal bonded diamonds (or comparable) if the surface requires (e.g.adhesives, profile irregularities)

2) 2 nd pass= 150 grit metal bonded diamonds (or comparable)

3) Inspect the substrate for scratch patterns created by the grinding process. If a scratch pattern exists, continue the grinding process by increasing the grit of the diamond. Wet grinding must be used with resin bonded diamonds to avoid transfer of the resin to substrate.

MANUFACTURER

Dry Grinding:

3) Remove excess dust with vacuum.

4) Remove remaining dust and particulate with micro-fiber pad. A minimum of 3-4 passes over the substrate with a new / clean micro-fiber mop per pass will remove residual dust. The use of an auto-scrubber with brush attachment in conjunction with clean water can also be used to extract particulate. Continue to clean substrate until extracted water is clear.

Wet Grinding:

3) Remove slurry from floor via wet vacuum or autoscrubber with brush attachment in conjunction with clean water.

4) Continue to clean substrate until extracted water is clear.

Application Instructions

Tape Test

A tape test will help determine the effectiveness of the cleaning process. After the floor has been thoroughly scrubbed, rinsed and allowed to dry; apply several 1 foot strips of high quality 2" packaging tape to various locations on the floor. Aggressively press the tape onto the floor with the heel of your hand. Fold one end of the tape into itself and pull it off of the floor as vigorously as possible. Examine the adhesive layer in a bright light looking for residue that was pulled from the floor. Little to no dust or other foreign particles should be visible. Areas with visible foreign material need to be scrubbed and rinsed again until the surface is free of these contaminants.

Dilution / Mixing

Fortress Concrete Stain is supplied as a concentrate. The recommended dilution ratio for base colors applied to concrete is 1 part concentrate to 2 parts Fortress Base Boost to 2 parts distilled, deionized, or reverse osmosis water. For application of highlight colors, overlay systems or previously coated substrates utilize 1 part concentrate to 4 parts distilled, deionized or reverse osmosis water. Concentrate will result in ready to use stain by simply stirring mixture.

Thinning

The recommended dilution ratio for Fortress Concrete Stain can be found in Dilution / Mixing section. Increased transparency as well as lighter color shade can be achieved by increasing the dilution ratio (amount of water to concentrate). The dilution ratio should not surpass 1 part concentrate to 8 parts distilled, deionized or reverse osmosis water.

Application Method

To achieve a natural variegate appearance, Fortress Concrete Stain should be applied by creating a mist via an airless sprayer, High Volume Low Pressure (HVLP) sprayer, production gun, pump sprayer or trigger spray bottle. The variegation is the result of the specific gravities of the pigments as well as the absorption rate of the application surface. Roller application methods force absorption resulting in mechanical lines.

Brush / Sea Sponge Application

For application areas where coverage and product control is warranted, apply Fortress Concrete Stain with a sea sponge or traditional bristle brush (e.g. corners and walls). Using this method of application may result in the appearance of mechanical lines.

Secondary / Highlight Color

To achieve increase color depth or mottled appearance. A secondary or highlight coat can be applied as soon as initial Fortress Concrete Stain color is dry to the touch (approximately 15 minutes).

Previously Sealed Surfaces

After cleaning the previously sealed surface, apply Fortress Concrete Stain via an airless sprayer or HVLP (this application will atomize the stain) to a small, out of the way test section of the sealed surface. Allow the stain to dry (15-20 minutes). Test for adhesion by running your hand over the stained surface. If you are unable to rub the stain off, the stain has achieved adhesion. Apply Fortress Concrete Stain to the remaining areas. Allow a 24 hour drying period before applying a clear sealer over Fortress Concrete Stain.

Clean Up

Immediately clean up work area and tools with water while stains are still wet.

Floor Protection

Use paper and/or cardboard to protect stained and sealed floor from other trades or during a move.

PACKAGING

