

Sure-Tough ST 4700

APPLIED POLYMER SOLUTIONS, LLC

PRODUCT PROFILE

GENERIC DESCRIPTION **HEAVY DUTY TEXTURED NON-SLIP EPOXY COATING** - ST 4700 is a 98% solids heavy duty non-slip coating for applications in slippery or wet areas to prevent slips and falls from pedestrian and rolling equipment traffic. This product was developed for use in industrial environments and incorporates epoxy resins modified with Kevlar to provide toughness, excellent chemical resistance, wear, corrosion resistance and excellent slip resistance performance.

RECOMMENDED USAGE Recommended for skidproofing industrial areas or docks in pedestrian or light rolling equipment areas. Also ideal for use in institutional and recreational areas.

COLORS Medium Gray and Tile Red

CHARACTERISTICS/FINISHES

SURFACE Abrasive. Non-skid media is used to provide texture.

PRIMERS A primer is optional but recommended. Suggested primers are ST 3105 or ST 3246 as low odor options.

TOPCOATS/FINISHES None required; however, many epoxies and urethanes are compatible. Contact your sales representative for proper topcoat system selections. Multiple coats are required when topcoating over mortar.

TECHNICAL SPECIFICATIONS

SOLIDS BY WEIGHT 98% (+/-1%)

THICKNESS 50-60 mils

VOLATILE ORGANICS .17 lbs per gallon

MIX RATIO COLORS: Part A: 9.5 lbs / Part B: 1.95 lbs

APPLICATION TEMP 55°F - 90°F (12°C - 32°C)

CURE SCHEDULE

Cure State	70°F (21°C)
Pot Life	50-80 minutes
Light Traffic/Recoat	6-8 hours
Full Cure/Heavy Traffic	24 hours

STORAGE TEMP 65°F - 85°F (18°C - 30°C) in a dry area. Avoid excessive heat and freezing.

SHELF LIFE 1 years in an unopened container

PACKAGING All kits are premeasured, ready for blending and application

Size	Part A	Part B	Coverage (1,604/DFT) x gallons
1 gallon kit	.9 gallon	.9 quart	35 sq. ft.
Additional Sizes Possible			

**Liquids only packaging available*

Published technical data and instructions may be modified at any time without prior notice. Please contact your Applied Polymer Solutions representative with any questions.

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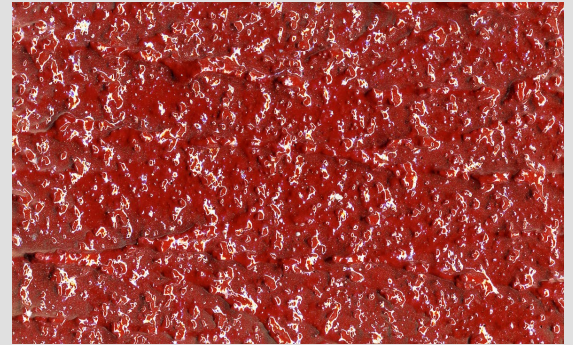
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TECHNICAL SPECIFICATIONS (CONTINUED)

COMPRESSIVE STRENGTH	>10,000 psi @ ASTM D695
FLEXURAL STRENGTH	10,600 psi @ ASTM D790
TENSILE STRENGTH	>5,000 psi @ ASTM D638
BOND STRENGTH	410 psi (concrete failure)
GARDNER VARIABLE IMPACTOR	50 in/lbs direct - Passed
COEFFICIENT OF FRICTION	Excellent - ASTM F609
ULTIMATE ELONGATION	1.5%
HARDNESS	Shore D = 80-90
VISCOSITY	1,500-2,200 cps (mixed)
WEATHERING	Excellent

ST 4700 Texture



SURFACE PREPARATION

- SURFACE** All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate.
- MOISTURE** Allow concrete to cure for 28 to 45 days. Verify dryness by testing for moisture with a “plastic film” test; this can be done at room temperature by placing a 4’ x 4’ plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. Should moisture be present, perform Moisture Vapor Emission Rate testing using Anhydrous Calcium Chloride (ASTM F1869). Moisture content should not be in excess of 3 lbs. per 1,000 sq. ft. for coatings (5 lbs. for resurfacers) in a 24 hour period.
- MOST SURFACES** Aggressively shot-blast or mechanically prepare the substrate to properly profile the substrate and remove hardeners, curing compounds, sealers, laitance and other contaminants. All edges and around columns or beams should be mechanically scarified. All termination points should not be feather edged, but should be saw cut with the termination ending at the sawcut.
- FILLING & PATCHING** Voids, cavities, nail and bug holes should be filled with a recommended epoxy filler. All large cracks should be V cut and filled with an appropriate semi-rigid epoxy crack filler.
- JOINTS** All expansion joints should be filled with an appropriate joint filler. When overlaying an expansion joint, a single saw cut through the epoxy overlay will prevent random fracturing.

APPLICATION

- MIXING** This product has a mix ratio of 9.50 pounds part A to 1.95 pounds part B by weight for standard colors. Standard packages are in pre-measured kits and should be mixed as supplied. We recommend that the kits not be broken down unless suitable weighing equipment is available. Before the two components are mixed together, mix the part A and part B separately to insure they are uniform before they are combined. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Continue mixing for another couple of minutes to insure a homogeneous mixture that is properly mixed. Make sure you scrape the bottom and sides of the pail thoroughly while mixing. This material has a high viscosity – mix well. Improper mixing may result in product failure.
- THICKNESS** 50-60 mils. Make certain that the primer where the product is to be applied, is clean, sound and free of all laitance, dirt, dust, oil, grease, water or foreign contaminants, and sufficiently cured to accept topcoats. Apply the mixed skidproof coating by using a phenolic core roller so as to spread out the material in a uniform manner. It is equally important to roll the entire surface area in one direction to align the peaks and valleys generated from the phenolic core to insure a uniform look throughout the application area. Pour a ribbon on the surface approximately 6 inches wide. Pull material toward you with a moderate amount of pressure, but do not over-roll too many times or press down too heavily.

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APPLICATION (CONTINUED)

RECOAT/TOPCOAT Although this product can be topcoated, it will not be easy to perform a topcoat application due to the rough texture of the surface. Accordingly, this product was developed for use without a topcoat. Product has only moderate UV and color stability. UV stable aliphatic urethanes are compatible for use as a topcoat only when properly applied so as not to diminish the slip resistance. If you topcoat, make sure the skidproof coat has tacked off before recoating.

CLEAN UP Citrus based cleaners or water compatible solvents such as PM solvent.

**Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.*

LIMITATIONS

FLOOR CLEANING Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

*Color stability may be affected by environmental conditions such as high humidity or chemical exposure.

* Product is not UV color stable and may discolor if exposed to lighting such as sodium vapor lights.

* Colors may vary from batch to batch due to variations in the silica filler.

* Mortar colors are not from our standard color chart.

* Substrate temperature must be 5 degrees F above dew point.

* For chemical exposure areas, we recommend a suitable topcoat to reduce porosity and chemical migration.

* Test data based on neat resin.

*This product is not intended for use as a decorative coating or where color stability or visual appearance is of any significant importance. Its sole purpose is as a protective coating.

*If a topcoat of a different color is to be used, multiple coats will be necessary to prevent bleed-through (discoloration)

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