



HIGHWAY DIVISION

POLY-TUFF SYSTEMS
INTERNATIONAL

TECHNICAL DATA SHEET

SECTION 7.6

Topshield™ Splatter

Highly Abrasive and Slip Resistant Wear and Texture Coat

1.01 DESCRIPTION

Topshield™ Splatter is a two component, TOP AND TEXTURE COAT for use in fast cure, heavy traffic systems in interior and exterior applications. Used in the Flexideck EWS system it not only waterproofs the deck but also creates a heavy highly slip resistant wear coat and ***completely quiets noise squeal from tire traffic***. Please use the correct product grade that complies with VOC regulations as per federal, state, county and city regulations/codes.

1.02 USES

- Parking Decks, Ramps, Pedestrian and Pool Decks.
- Vertical and Horizontal Structural Bonding and Patching
- Floors and Loading Docks High Wear and Heavy-Duty Slip Resistance
- Wear System for Existing or New Membranes

1.03 FEATURES

- 100% Solids
- Highly Abrasion Resistance
- Easy Dispensing
- Excellent Adhesion
- Fast Setting, High Strength, High Modulus
- Friendly 1:1 Mix Ratio
- Made in America
- Moisture Tolerant
- No Volatile Organic Compounds (VOC's)
- Waterproof

1.04 TECHNICAL DATA

Topshield™ Splatter meets the current ASTM C881 and AASHTO M235

Types I, II, IV & V Grade 3, Classes B & C specifications. It has passed 4 million cycles of simulated seismic tension test. It meets current ICC-ES AC308 for both uncracked and cracked concrete anchoring application in dry hole, damp hole, waterfilled hole, and underwater.

1.05 COLOR

Concrete Gray

1.06 PACKAGING

1-gallon kit: 1/2 gallon (1.89 liters) of Side A and 1/2 gallon (1.89 liters) of Side B

2-gallon kits: 1 gallon (3.78 liters) of Side A and 1 gallon (3.78liters) of Side B

10-gallon kits: 5 gallon (18.9 liters) of Side A and 5 gallon (18.9 liters) of Side B

1.07 COVERAGE

Please see Topshield™ Tuff-Splatter Installation section 1.08 The coverage rate is dependent up surface texture conditions of the deck. A mockup of the system is always recommended to determine the precise finish texture desired and amounts.

1.08 PREPARATION

Surface Preparation: Surfaces to be bonded must be clean and structurally sound. Remove all oil, grease, dirt, laitance, curing compounds, and any other foreign matter. Minimally Power-wash concrete

Coating Preparation:

1.09 MIXING

Tuff Splatter consists of equal parts of side A and side B. The two components should be emptied into on container and mixed from bottom to top of the pail for not less than 1 minute, add 5% xylene to the mix to extend the pot life and mix again for another minute, add 1-2 pounds of 20-30 mesh aggregate or aluminum oxide to the mix depending on the amount of slip resistance desired.

2.01 APPLICATION

Coating Basics: Prepare the final Splatter-Coat using TUFFSPLATTER, mixed with Fumed Silica filler and Monterey Sand (20-30 mesh size) available at PSI. The Splatter-Coat should be prepared in such a way that it would not self-level on splatter application (Contact PSI regarding mixture.) SplatterCoat is applied using suitable spray equipment at a coverage of 100-150 sq. ft. per gallon resulting in a semi-uniformly textured finish with an average thickness of 15-30 dry mils. Do not use silica sand. The completed

deck coating system must be allowed to cure for at least 4-6 hours prior to admitting vehicular traffic.

Spray from a hopper gun with a minimum 150CFM compressor with regulating butterfly valve at the hopper gun. TEMPERATURE CONSTRAINTS: □ Minimum application temperature is 40°F (4°C) and rising and more than 5°F above dew point. □ Contact Technical Service when substrates are over 90°F (32°C) or under 40°F (4°C). □ Avoid application when inclement weather is present or imminent. Do not apply to damp, wet, or contaminated surfaces

Apply Topshield® TUFF-SPLATTER evenly over the entire deck. For best results, an airless sprayer or phenolic-resin-core roller may be used but extra care should be taken not to cause air bubbles. Topshield® TUFF-SPLATTER may require more than one coat depending on the job specifications and requirements. When estimating material requirements, coverage rates tend to increase for subsequent coats of material. To obtain proper adhesion between coats it is imperative that recoating be done within 48 hours. Refer to individual Systems Description under System Specifications Section of the PSI catalog or website for specific coverage rates. Coverage rates and cure times will vary depending on temperature, relative humidity, surface roughness and porosity, aggregate selection, embedment, and application technique. Coverage rates provided are optimal and are not guaranteed. 2.02 CURING

At 75°F (24°C) and 50% relative humidity, allow each coat to cure a minimum of 16 hours between each coat. Cure time will vary depending on temperature and humidity. Allow 24 hours before permitting light pedestrian traffic and at least 72 hours before permitting heavy pedestrian or auto traffic onto the finished surface. If more than 48 hours passes between coats, reprime the surface with recommended PSI Primer before proceeding.

2.03 EQUIPMENT CLEANUP

Equipment should be cleaned immediately after use with an environmentally-safe solvent, as permitted under local regulations.

2.04 SHELF LIFE AND STORAGE

Topshield® TUFF-SPLATTER has a shelf life of 12 months from date of manufacture in original, factory-sealed containers when stored indoors at a

Please read all information in the General & Safety Guidelines,

Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. PSI Products are for “Professional Use Only” and preferably applied by professionals who have prior experience with PSI Products or have undergone training in application of PSI Products.

Published technical data and instructions are subject to change

without notice. Contact your local PSI representative or visit our website for current technical data, instructions, and project specific recommendations.

1.15 PROPERTIES	
Viscosity	Gel/Paste
Gel Time 60 gram Mass (ASTM C881)	23 Minutes
CURED PROPERTIES	
Initial Cure Time (73°F or 23°C)	2 to 3 hours
Final Cure (73°F or 23°C)	24 hr
Compressive Strength (ASTM D-695)	10,520 psi (72.3 MPa)
Compressive Modulus (ASTM D-695)	591,000 psi (4078 MPa)
Bond Strength at 2 Day (ASTM C882)	2,850 psi (19.7 MPa)
Bond Strength at 14 Days (ASTM C882)	3,220 psi (22 Mpa)
Elongation (ASTM D-638)	1.58%
Water Absorption (ASTM D-570)	0.1%
Heat Deflection (ASTM D-648)	143°F (61.7°C)
Viscosity	1/4" (0.65 cm) no-sag gel
Tensile Strength	7,559 psi (51.7 MPa)
Tensile Elongation	1.59%
Shear Strength (ASTM D732)	2,800 psi (19.3 MPa)
Shrinkage on Cure (ASTM D2566)	0.001
Thermal Compatibility (ASTM C884)	Pass

2.07 CLEAN UP

Uncured Topshield™ Splatter can be removed from tools and equipment with PSI's Xylene, Xylol or Isopropyl alcohol, xylene, or mineral spirits.

2.08 STORAGE AND SHELF LIFE

The material should be stored between 40–95°F (4–35°C) in a cool, dry area away from direct sunlight. Shelf life of properly stored, unopened containers is 24 months.

Excessive temperature differential and/ or high humidity can shorten the shelf life expectancy.

2.09 LIMITATIONS

Minimum substrate temperature is 40°F (5°C). Precondition TUFF-SPLATTER™ Topshield Splatter to 45– 95°F (18–35°C) for easy-dispersing. Always test a small amount of TUFF-

SPLATTER™ Topshield Splatter to verify that the product has been thoroughly mixed.

2.10 CAUTION

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize the exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymer, sanding, etc.) may cause high vapor concentrations. Do not weld on, burn or torch the TUFF-SPLATTER™ Topshield Splatter or any epoxy material. Hazardous vapor is released when an epoxy is burned. Avoid skin or eye contact. Wash skin with soap and water if contact occurs. If eye contact occurs flush with water for 15 minutes and obtain medical attention. Read and understand all caution on can labels and safety data sheets (SDS) before using this material.

DO NOT EXPOSE TO OR APPLY NEAR FIRE OR FLAMES. FOR WELL VENTILATED OR EXTERIOR USE ONLY!

READ SDS PRIOR TO USING PRODUCT. KEEP OUT OF THE REACH OF CHILDREN.

Please read all information in the General & Safety Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. PSI Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with the PSI Products or have undergone training in application of PSI Products. Published technical data and instructions are subject to change without notice. Contact your local PSI representative or visit our website for current technical data, instructions, and project specific recommendations.

LIMITED WARRANTY

PSI warrants its products to be free of manufacturing defects and that they will meet PSI current published physical and chemical properties. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by PSI of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. PSI shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. PSI shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. PSI reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and PSI makes no claim that these tests or any other tests, accurately represent all environments.