



# TOPSHIELD® 5600

A Two Component, 100% Solids, Solvent Free, Rapidly Curing Aliphatic Topcoat

### 1.01 DESCRIPTION

Topshield® 5600 is a two-component, fast-setting, rapid-curing, solvent-free, 100% solids, hybrid aliphatic topcoat. Topshield® 5600 can be applied to properly prepared interior or exterior concrete, plywood and metal surfaces. It is suitable for single or multiple applications, in temperatures as low as 20°F (-6.6°C) and is insensitive to moisture. Be sure to use the right product grade that complies with VOC regulations as per federal, state, statutory bodies, county and city regulations/codes at the place of installation of product.

### 1.02 FEATURES

- Non Gassing
- Solvent Free
- Environmentally Safe
- Meets USDA Criteria
- Can Be Applied At Any Thickness
- Coats Green (Vented) Concrete
- Seamless
- Recoatable
- Good Chemical Resistance

### 1.03 TYPICAL USES

- Heavy Duty Vehicular Decks
- Pedestrian Decks
- Mechanical Room Floors
- Kennels

### 1.04 COLORS

Gray.

Custom colors are also available. Minimum order of 500 gallons. See color chart for special provisions.

### 1.05 PACKAGING

4.4-gallon kit: One 5 gallon (net 4 gallons, 15.1 liters) pail of Side-A and one 1/2 gallon (net 0.4 gallon, 1.50 liters) jar of Side-B.

### 1.06 SURFACE PREPARATION

- Install a 100-200 sqft (9.30-18.58 sqm) mock up of the system to be installed and approve for aesthetics, color, texture, actual coverage rates and functionality before proceeding. Use Enviro-Grip™ #555 primer for inter-coat adhesion between existing urethane coatings.
- Surfaces shall be broomed clean, dry, sound and free of voids, bugholes, rockpockets, honeycombs, protrusions, excessive roughness, foreign matter, frost, ice and other contaminants which may inhibit application or performance of the waterproof coating system.
- Use suitable abrasive methods, remove residue of form release, curing compounds, chemical retarders, and other surface treatments, mortar smear, saw-cutting residue, mill scale, rust, loose material and other contaminants from concrete, masonry, and ferrous metal surfaces to receive the

## TECHNICAL DATA

(Based on draw down film).

Dry Film Thickness, Exclusive of aggregate,	15 ± 2 mils
Per Coat @ 1 gal/100sqft	381 ± 50 microns
Mix Ratio	A:B - 10:1
Pot Life at 75°F (24°C) at 50% RH	30 ± 10 minutes
Cure Time at 75°F (24°C) at 50% RH	2-4 hours
Viscosity at 75°F (24°C)	A-Side: 2500-4000 B-Side: 50-100
Specific Gravity	A-Side: 1.09 ± 0.1 B-Side: 0.94 ± 0.1
Solids by Weight ASTM D-2369	94 ± 2%
Solids by Volume ASTM D-2369	94 ± 2%
Hardness, ASTM D-2240 Shore A	85 ± 5
Tensile Strength, ASTM-D412	3200 ± 10% psi
Percent Elongation, ASTM D-412	450 ± 10%
Adhesive Peel Strength on Primed Concrete;	
ASTM D-903	40 ± 10% pli (7.0 ± 10% kNm)
Moisture Vapor Transmission, ASTM E-96	1.54 perms
Water Absorption, ASTM D-471	1.3% by weight
Tear Resistance, ASTM D-624	300 ± 20 pli (52.6 ± 7.0 kNm)
Volatile Organic Compounds, ASTM D-2369-81	<0.125 lbs/gal <15 gm/liter
U.V. Stability, Q Panel Weather-O-Meter	2000 Hours (No Cracking or Crazing; No Physical Damage)

work in this section. Depending on the condition of the deck a minimum of 3,500 to 5000 psi powerwash may be acceptable or shotblasting. Contact Poly-Tuff Systems International (PSI) for project specific recommendations.

## D. CONCRETE:

1. Provide a surface with a smooth finish, followed by a fine-hair broom.
2. All previous concrete patches must be sounded and inspected for acceptability prior application of Topshield® 5600.
3. Unsound patches are to be replaced for acceptability prior to application of the coating.
4. Concrete surfaces require a medium sandpaper finish equal to or greater than an ICRI CSP #3.
5. Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch cleaner. Peel and adhesion tests are recommended.

### 1.07 MIXING

Before application, pre-mix Side-A of Topshield® 5600 using a mechanical mixer at slow speed. Add Side-B of Topshield® 5600 and continue mixing until a homogeneous mixture and color is obtained. Use caution not to whip air into the material as this may result in pinhole blisters and/or shorter pot life. Box the last gallon(s) of the last used batch numbers with the new batch number to prevent hue or shading variation.

## APPLICATION

### 2.01 APPLICATION BASICS

Apply Topshield® 5600 evenly, over the entire deck using a 10:1 ratio machine or hand mixed material. Apply by notched squeegee or notched trowel over the entire deck.

Requires a continuous coating application to minimize lines and/or streaking. To obtain proper adhesion between coats, it is imperative that recoating be completed within 24 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 and embedment, and application technique. Coverage rates provided are optimal and are not guaranteed.

### 2.02 CURING

At 70°F (21°C) and 50% relative humidity, allow each coat to cure a minimum of 2-4 hours. If more than 24 hours passes between coats, reprime the surface with PSI Primer before proceeding.

At 70°F (21°C) and 50% relative humidity, allow a minimum 48 hours before permitting light pedestrian traffic and at least 72 hours before permitting heavy pedestrian or vehicular traffic on the finished surface.

Topshield® 5600 is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes. Do not use Topshield® Accelerator with Topshield® 5600, an already fast curing material.

### 2.03 EQUIPMENT CLEANUP

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

### 2.04 STORAGE

Topshield® 5600 has a shelf life of one year from date of manufacture when stored indoors at a temperature between 60°F to 95°F (15°C to 35°C) in original, factory sealed containers.

### 2.05 LIMITATIONS

- Surfaces must be dry, clean and free of foreign matter.
- May chalk, fade and discolor over time.
- Containers that have been opened must be used as soon as possible.
- Do not dilute under any circumstance.
- The following conditions must not be coated with PSI deck coating systems: On grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pans, suspended pool decks, swimming pools, magnesite, light weight concrete, asphalt, surfaces and asphalt overlays.

### **WARNING: This product contains isocyanates.**

This product is considered Dangerous Goods. DOT regulations classify it as Side-B: UN 1760, Corrosive Liquid, N.O.S. (Contains Amine), Class 8, PG III.

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 properties. PSI warrants that its products, when properly installed by a state licensed waterproofing contractor according to PSI guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of 12 months. 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 users 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.

POLY-TUFF SYSTEMS INTERNATIONAL CORPORATION MARCH 2017