



TOPSHIELD® 5600

A Two Component, Low Odor, High Solids, Aliphatic Topcoat
Miami Dade Approved

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 (-6.7°C) and is insensitive to moisture. Please use the correct 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

- Can Be Applied At Any Thickness
- Coats Green (Vented) Concrete
- Environmentally Safe
- Good Chemical Resistance
- Meets ASTM C-957
- Meets USDA Criteria
- MIAMI DADE Approved
- Non Gassing
- Recoatable
- Seamless
- Solvent Free

1.03 USES

- Heavy Duty Vehicular Decks & Ramps
- Kennels
- Mechanical Room Floors
- Pedestrian Balcony & Breezeways

1.04 COLOR

Grey
Custom colors are also available. Minimum order of 500 gallons (945 gallons). See color chart for special provisions.

1.05 PACKAGING

4.4-gallon kit: 5 gallons (net 4 gallons, 15.1 liters) pail of Side-A and 1/2 gallon (net 0.4 gallon, 1.5 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™ PUR#555 primer for intercoat 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

TECHNICAL DATA (Based on draw down films)

Theoretical Coverage Rate	See individual Guide Specs
Dry Film Thickness, Exclusive of Aggregate, Per Coat @ 1 gallon/100 sqft (0.41 liters/sqm)	15 ± 2 mils (381 ± 50 microns)
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
Mix Ratio	A:B - 10:1
Viscosity at 75°F (24°C)	A-Side: 2500-4000 cps B-Side: 50-100 cps
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-2697	94 ± 2%
Hardness, ASTM D-2240 Shore A	85 ± 5
Tensile Strength, ASTM-D412	3200 ± 10% psi (22.1 ± 10% MPa)
Percent Elongation, ASTM D-412	450 ± 10%
Moisture Vapor Transmission, ASTM E-96	1.54 perms
Adhesive Peel Strength on Primed Concrete; ASTM D-903	40 ± 10% pli (7.0 ± 10% kNm)
Water Absorption, ASTM D-471	1.3% by weight
Tear Resistance, ASTM D-624	300 ± 20% pli 52.6 ± kNm
Volatile Organic Compounds, ASTM D-2369-81	<0.125 lbs/gal (<15 gm/liter)
U.V. Stability, Q Panel Weather-O-Meter 2000 hrs	No Cracking or Crazing; No Physical Damage

contaminants from concrete, masonry, and ferrous metal surfaces to receive the 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. Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch cleaner. Peel and adhesion tests are recommended.

Concrete:

1. Provide a surface with a smooth finish, followed by a fine-hairbroom.
2. All previous concrete patches must be sounded and inspected for acceptability prior application of the coating.
3. Unsound patches are to be replaced for acceptability prior to application of the coating.
4. Unsound patches are to be replaced. 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 SHELF LIFE AND STORAGE

Topshield® 5600 has a shelf life of 12 months from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

2.05 LIMITATIONS

- Surfaces must be dry, clean and free of foreign matter.
- May fade, chalk and discolor over time.
- Containers that have been opened must be used as soon as possible.
- Do not dilute with solvent under any circumstance.

The following conditions must not be coated with PSI deck coating systems or products:

- 1) On grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool, swimming pool decks, or areas where hydrostatic pressure is or may be present, without the use of Enviro-Grip™ 404FC primer and asphalt surfaces, asphalt overlays without the express written consent of PSI. PSI Deck Coating is not recommended over magnesite, gypsum lightweight and where chained or studded tires may be used.
- 2) Concrete must exhibit 3000 psi minimum strength. An ICRI CSP 2-3 surface or greater is required for concrete surfaces to be coated.
- 3) New concrete must be cured for 28 days unless otherwise approved by PSI in writing. New surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function. Light broom finished concrete should be power-washed before coating application.
- 4) Concrete cleaning (see General and Safety Guidelines). Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch (PE) cleaner. Peel and adhesion tests are recommended.

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.

WARNING: This product contains isocyanate.

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.