POLY-TUFF SYSTEMS INTERNATIONAL
WATERPROOFING DIVISION

SYSTEM SPECIFICATIONS
SECTION 2.1.4

MIAMI-DADE COUNTY APPROVED

FLEXIDECK® C-WD

A 46+ mil Seamless, Water Catalyzed, Fast Curing, Pedestrian and Vehicular Deck System

1.01 DESCRIPTION

Flexideck® C-WD is a very low odor, totally seamless, joint and crack free waterproof vehicular and pedestrian deck coating system, for parking deck, balcony or breezeway, leaving the deck entirely free of any exposed joints and cracks in the deck. On balcony and breezeways, the system is made to fill ponds, rough concrete, deep patches and slope to drain decks in one application without thickness limitations. This system does not depend upon sealants for water-tightness.

The system utilizes an epoxy-polyamine primer or solvent-free urethane primer, one coats of a water induced urethane basecoat. Flexideck® C-WD is a specialized application of a polyurethane coating as a waterproof underlayment for ceramic tile and shower pan linings. The system is durable and will protect surfaces against spalling and freeze/ thaw damage. The elastomeric system is designed to expand and contract with normal structural movements. The system will not soften in heat nor become brittle in cold. Flexideck® C-WD has a wide range of application uses and, installed properly will ensure years of service. Be sure to use the right grade that complies with VOC regulations as per Federal, Statutory Bodies, County and City regulations/codes a the place of installation.

1.02 APPROVALS, CODES & TESTING

- Meets ASTM C-957
- Miami Dade Approved
- CLASS A FIRE RATED
- ASTM C-836
- PASS ACRC 10-024 WIND UPLIFT TEST
- ASTM D-412
- ASTM E-108
- ASTM D-75

1.03 FEATURES

- Waterproof
- Durable
- Solvent Free
- Non Gassing – no blisters or bubbles
- No exposed Joints or Cracks
- Does not depend on sealants alone for waterproofing
- Low Odor
- Fast Curing
- Elastomeric

1.04 TYPICAL USES

- Balconies
- Over Occupied Space
- Patios
- Roof Decks
- Sun Decks
- Vehicular Traffic Decks
- Walkways / Stairs

1.05 PRODUCTS & PACKAGING

Enviro-Grip™ EP#1

3-gallon kit: One 3.5-gallon pail containing net 2 gallons (7.57 liters)of Side-A blue liquid and 1 gallon (3.78 liters) can of Side-B yellow liquid

15-gallon kit: Two 5 gallon (18.9 liters) pails of Side-A blue liquid and 5 gallon (18.9 liters) pail of Side-B yellow liquid

Enviro-Grip™ EP#2

2-quart kit: 1 quart (0.946 liter) can of Side-A black liquid and 1 quart (0.946 liter) can of Side-B white liquid

2-gallon kit: 1 gallon (3.78 liter) can of Side-A black liquid and 1 gallon (3.78 liter) can of Side-B white liquid

10-gallon kit: 5 gallon (18.9 liter) pail of Side-A black liquid and 5 gallon (18.9 liter) pail of Side-B white liquid

Enviro-Grip™ PUR#555

2-gallon kit: 1 gallon (3.78 liters) can of Side-A blue liquid and 1 gallon (3.78 liters) can of Side-B yellow liquid

10-gallon kit: 5-gallon (18.9 liters) pail of Side-A blue liquid and 5-gallon (18.9 liters) pail of Side-B yellow liquid

P-Tuff® Classic

1 gallon (3.78 liters) can with a partial vial of catalyst

5 gallon (18.9 liters) pail with a full vial of catalyst

55 gallon drums – net fill 50 gallons (189 liters) with a 1/2 pint (0.24 liters) can of catalyst

Topshield® 5600 EF

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 PRODUCT INSTRUCTIONS

For complete information associated with the application of Flexideck® C-WD, refer to the General & Safety Guidelines of the Poly-Tuff Systems International (PSI) catalog which describes the surface preparation, job conditions, finishing details and other necessary information.

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All products/materials to be used on this system should be purchased from PSI or its distributors or approved by PSI. For details on individual product, please refer to Technical Data Sheet.

For project specific recommendations, please contact PSI. Refer to Technical Data Sheets for products referred in the System Specifications.

APPLICATION

2.01 SURFACE PREPARATION

Check area of application to ensure that it conforms to the substrate requirements, as stated in the General Guidelines and Safety section. Concrete surfaces require a medium sandpaper finish equal to or greater than an ICRI CSP #3. Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch cleaner. Peel and adhesion tests are recommended.

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.

2.02 CRACKS, JOINTS AND FLASHING

A. Apply a polyurethane caulk or P-Tuff® Classic mixed material over all joints, cracks and flashing. P-Tuff® Classic mixed material is a mixture of 4 parts P-Tuff® Classic and 1 part of water by volume (4:1). Prime existing urethane coatings with Enviro-Grip™ EP#1 primer.

B. Bridge the joints and cracks and flashing with 2 3/4 to 4" (7.0 to 10.14 cm) polyester or polyurethane foam tape pushing the tape into the 20 mil (508 microns) prestripe of the basecoat. Alternatively, joints and cracks 1/16"(0.15 cm) or larger may be sealed flush with PTS E-101 concealed with 4" (10 cm) Super-Seal™ Tape (concrete must be primed first and allow to dry).

C. Over reinforcement tape, apply a stripe coat of P-Tuff® Classic mixed material and taper it onto the adjacent surface. No prestripe is necessary with the use of Super Seal™ Tape.

D. Allow the surface to cure for 1 to 2 hours.

2.03 PRIMING

A. Prime surface with Enviro-Grip™ EP#1, EP#2, or PUR#555 at a rate of 1 gallon/300 sqft (0.14 liters/sqm) or 300 sqft/gallon. Apply using a brush or phenolic-core roller. This will result in 3-5 dry mils (76-127 microns) of coating. Rough and pin-holed concrete surfaces may require more primer. Discovery of these issues is generally revealed in the mock up. See the Tech-Note Section of the PSI website.

B. Allow primer to become tack free before proceeding to Application. The point at which the primer is generally discerned as nearly tack free is when the primer passes the thumbprint test. The thumbprint test is defined by when a thumbprint is left in the primer and the primer does not transfer onto the thumb. If the primer has been allowed to remain tack free for more than 12 hours, it is necessary to solvent wipe the primed area and reprime.

2.04 BASECOAT APPLICATION

A. Apply P-Tuff® Classic mixed material to substrate at a rate of 2.5-gallons/100 sqft (1.02 liters/sqm) or 40 sqft/gallon. P-Tuff® Classic mixed material or water-catalyzed mixed P-Tuff® Classic is a properly homogeneous mixed mixture of four parts of P-Tuff Classic and one part of water by volume. Application will require more or less material depending on substrate conditions.

B. Use a notched trowel or squeegee to spread P-Tuff® Classic mixed material evenly over the entire deck resulting in a minimum 32 ± 2 dry mils (812 ± 50 microns) thick membrane.

C. While P-Tuff® Classic mixed material becomes gel, broadcast 16-30 mesh (0.595-1.19 mm) rounded, silica sand with a minimum of 6.5 Mohs hardness until refusal. Normal usage is 20 lbs of rubber granules p/100 sqft (0.98 kg/sqm).

D. When P-Tuff® Classic is stiff enough to support weight without imprinting or denting the coating or, when coating is dry (approximately 2-3 hours), remove all loose aggregate by sweeping, vacuum or by blowing excess aggregate off the deck. Make any touch up or repairs. Allow repairs to cure.

2.05 TOPCOAT APPLICATION

A. Apply desired color of Topshield® 5600 EF at a rate of 1 gallon/100 sqft (0.4 liters/sqm) or 100 sqft/gallon. This coat will result in an additional 14 ± 2 dry mils (355 ± 50 microns) thick coating. Size of aggregate will determine the precise coverage rate and should be noted at the installation of the mock up.

B. At 70°F (21°C) and 50% relative humidity allow a minimum of 16 and a maximum of 48 hours for topcoat to cure.

C. Optional second coat: It is recommended to apply a second coat of desired color of Topshield® 5600 EF at a rate of 1 gallon/100 sqft (0.4 liters/sqm) or 100 sqft/gallon. This coat will result in an additional minimum 14 + 2 dry mils (355± 50 microns) thick coating. When using rubber aggregate, a minimum of two topcoats is required.

D. Optional Fastcure Topcoat: The addition of Topshield® Accelerator will shorten cure time to 6 to 8 hours for each coat.

2.06 FINISHED SYSTEM

When applied as directed above, Flexideck® C-WD Decking System will provide minimum 46 dry mils (1168 dry microns) single topcoat or 60 mils (1523 microns) with a second topcoat. 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.

Material mil thickness rates are calculated on the theoretical coverage for smooth substrate and do not account for the actual texture or substrate conditions in the field or at the time of application. Sample mock ups on the projects are recommended to determine the exact coverage rates necessary to waterproof the deck and acceptable standards. Imperfections, spalling, scalling, rough surfaces, potholes, slope correction and other irregular textured surfaces may be filled in with P-Tuff® Classic Sand or Rubber Slurry and are estimated outside the stated minimum coverage rates reflected on Product Data Sheets.

2.07 JOB COMPLETION

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

Field visits by PSI personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the job site.

2.07 LIMITATIONS

- Uncured materials are sensitive to heat and moisture.
- PSI assumes no liability for substrate defects.
- A continuous coating application should ensure a deck with no lines or streaks.
- The substrate must be structurally sound and sloped for proper drainage.
- PSI Decking Systems will not withstand rising water or hydrostatic pressure from on-grade concrete without the use of Enviro-Grip™ 404FC Primer (see Enviro-Grip™ 404FC Technical Data sheet).

A. Concrete:

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 P-Tuff® Profile and Etch (PE) cleaner. Peel and adhesion tests are recommended.

B. Plywood:

1. The only acceptable grade of plywood is APA rated exterior grade or better.

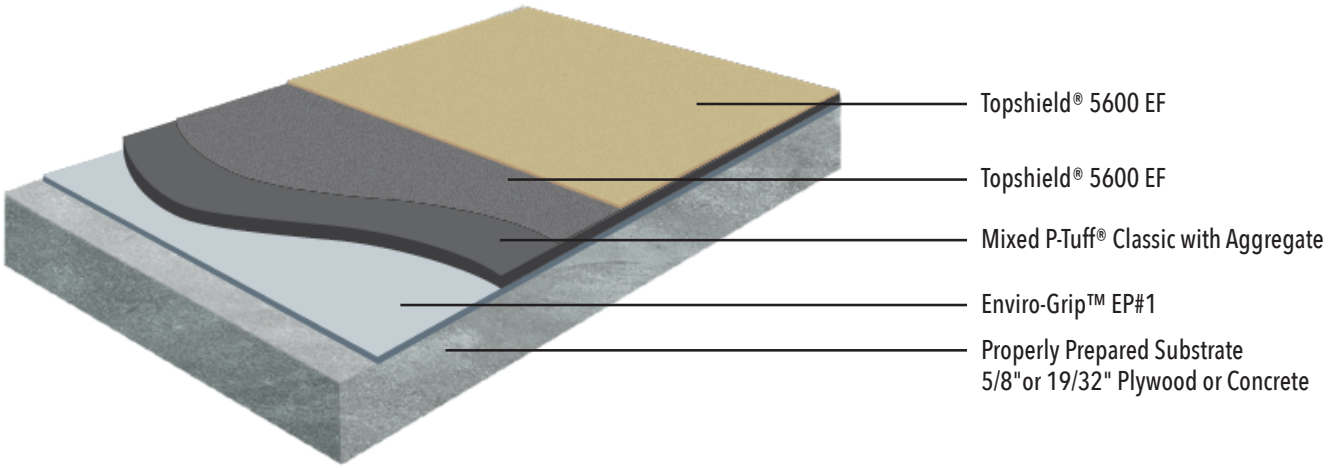
2. The appearance characteristics of the panel grade should be considered.

3. Plywood should be new or cleaned and sanded (see General & Safety Guidelines).

WARNING: The products in this system contain isocyanates, solvent, epoxy resin and curatives.

COVERAGE RATE CHART		
PRIMER: Enviro-Grip™ EP#1, EP #2 PUR#555	**BASECOAT: mixed P-Tuff® Classic**	**TOPCOAT**
1 gallon/300 sqft (0.14 liters/sqm) or 300 sqft/gallon	2 1/2 gallons/100 sqft (1.02 liters/sqm) or 40 sqft/gallon	**1st**: Topshield® 5600EF 1 gallons/100 sqft (0.41 liters/sqm) or 80 sqft/gallon
*Primer is optional on plywood	3 Gallons/100 sqft on Plywood	**2nd Required for rubber aggregate:** Topshield® 5600EF 1 gallons/100 sqft (0.41 liters/sqm) or 100 sqft/gallon
	30 sqft/gallon vehicular Decks	Minimum of 25 sqft/gallon in park Lanes and 50 sqft/gallon in drive and turn lanes

FLEXIDECK® C-WD



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.

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.