



FLEXIDECK® P-PDR

A 83 Dry Mil Low VOC, Water Catalyzed Pedestrian and Vehicular Traffic Deck System

1.01 DESCRIPTION

Flexideck® E-PDR is a seamless, joint and crack-free system that is liquid applied, high solids, low VOC, water catalyzed, heavy-duty polyurethane, waterproof Pedestrian and Parking Deck System. The system completely hides joints and cracks in severely-cracked Pedestrian and Parking Deck to yield a totally seamless, monolithic appearance. This system is capable of filling low areas, ponds and sloping to drain as desired and is an economical but functional equivalent alternative to the PMMA and MMA systems.

The system utilizes a primer, two coats of a water catalyzed, urethane basecoat, and one or two coats of an aromatic/aliphatic urethane topcoat. Flexideck® E-PDR can be applied to protect surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on these surfaces. It is designed to expand and contract with normal structural movements. It will not soften in heat nor become brittle in cold. Flexideck® E-PDR is a proven elastomeric water proofing system primarily used on plywood, concrete parking garages, balconies and metal surfaces. Installed and maintained properly, Flexideck® E-PDR Decking System will ensure years of service.

Ensure to use the right Product Grade which comply with VOC regulations as per Federal, State, Statutory Bodies, County and City Regulations/Codes at the place of installation of Products.

1.02 FEATURES

- Seamless (joint & crack-free)
- Low odor
- Non gassing
- Recoatable
- Patching or Filling of Concrete
- Meets California VOC and SCAQMD Requirements
- Elastomeric
- Pond free
- Fast curing
- Good weatherability

1.03 TYPICAL USES

- Parking Decks
- Over Occupied Space
- Heavy Traffic Decks
- Mechanical Rooms
- Interior Parking Garages
- Roof Decks

1.04 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 gallons (3.78 liters) can of Side-B yellow liquid

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

Enviro-Grip™ EP#2

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

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

10-gallon kit: one 5 gallon (18.9 liter) pail of Side-A black liquid, and one 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: 1 5-gallon (18.9 liters) pail of Side-A blue liquid and 1 5-gallon (18.9 liters) pail of Side-B yellow liquid

E-Tuff® 80 or 100

1 gallon (3.78 liters) can with a partial vial of catalyst
5 gallon (18.9 liters) pail with a full vial of catalyst

Topshield® 5600EF

4.4-gallon kit: One 5 gallons (net 4 gallons, 15.1 liters) pail of Side-A and one 1/2 gallon (net 0.4 gallon, 1.5 liters) jar of Side-B

1.05 PRODUCT INSTRUCTIONS

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

B. 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 Product Data Sheet.

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

APPLICATION

2.01 SURFACE PREPARATION

- A. Check area of application to ensure that it conforms to the substrate requirements, as stated in the general guidelines 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.
- B. 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.
- C. For project specific recommendations, please contact PSI.

2.02 REPAIRS

- A. Apply a single or two component non-gassing polyurethane sealant over all joints, cracks and flashing.
- B. Bridge the joints, cracks, and flashings with 4" (10 cm) Polyester tape pushing it into the 30 mil pre-stripe of base coat. Alternatively, joints and cracks 1/16" 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 pre-stripe coat of E-Tuff® 80 or 100 material and taper it onto the adjacent surface. Alternatively, no crack chasing or pre-stripe is necessary with the use of Super Seal Tape over a primed surface (see Super Seal Tape Data Sheet).
- D. Allow the surface to cure for 1 to 2 hours.

2.03 PRIMING

- A. Prime surface with Enviro-Grip™ EP#1, #2 or PUR#555 at a rate of 1 gallon/300 sqft (0.14 liters/m²) or 300 sqft/gallon. Apply using a brush or phenolic-core roller. This will result in 3-5 dry mils (76-126 microns) of coating.
- B. Allow PSI Primers to become thumbprint tacky before proceeding to Coating Application.

- C. Primer is optional on new plywood.
- D. Metal flashings should be sealed with PSI Super Seal Tape prior to the coating application. Metal flashings can also be primed with Enviro-Grip™ EP#2 after they have been mechanically abraded with an angle grinder and wire brush cup, followed by a rag with xylene solvent wipe to remove loose particles or oil film.
- E. All railing posts perimeters are to be sealed with PTS E-101 or PTS E-102 Sealant prior to application of the deck coating.

2.04 COATING APPLICATION

- A. Apply E-Tuff® 80 or 100 mixed material to substrate at rate of 2 gallons/100 sqft (0.82 liters/m²) or 50 sqft/gallon according to specification or PSI recommendations. Refer to the chart at the end of this System Description for coverage rates. Application will require more or less material depending on substrate conditions.

E-Tuff® 80 or 100 mixed material in a properly homogenous mixture of four parts of E-Tuff 80 or 100 and one part of water by volume plus catalyst as required. Refer to product data sheet for E-Tuff® 80 or 100 for details.

- B. Use a notched trowel or squeegee to spread E-Tuff® 80 or 100 mixed material evenly over the entire deck and backroll with a 3/8" (0.96 cm) nap roller to provide an even coating application. This will result in a 24 ± 2 dry mils (610 ± 50 microns) thick coating.

2.05 FABRIC REINFORCEMENT

- A. While base coat is wet, fully reinforce the basecoat with Tie-Tex T-325 or T-326 Fabric brooming the fabric into the wet basecoat leaving a wrinkle free and void free surface on the fabric.

2.06 INTERMEDIATE COAT APPLICATION

- A. Apply E-Tuff® 80 or 100 mixed material to substrate at a rate of 2 gallons/100 sqft (0.82 liters/m²) or 50 sqft/gallon as an intermediate coat where covering and hiding the fabric. Refer to the chart at the end of this System Description for coverage rates. Application will require more or less material depending on substrate conditions.
- B. Use a notched trowel or squeegee to spread E-Tuff® 80 or



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100 mixed material evenly over the entire deck and backroll with a 3/8" (0.96 cm) nap roller. This coat will result in a 24 ± 2 dry mils (610 ± 50 microns) thick coating exclusive of aggregate.

- C. When E-Tuff® 80 or 100 mixed material begins to slightly gel, broadcast clean, washed, dry 12-20 mesh (0.841-1.68 mm) or 16-30 mesh (0.595-1.19 mm) silica sand per product specifications with a minimum of 6.5 Mohs hardness. The amount of sand used will vary. This is approximately 30-45 minutes, when sand will adhere and will not sink. Normal usage is 20-30 lbs sand/100 sqft ($0.98-1.46$ kg/m²). Aggregate size and amounts should be determined at the mock up. Larger sizes will require more topcoat.
- D. When the E-Tuff® 80 or 100 or intermediate coat is stiff enough to support the weight of the installer without damaging the coating, or when coating is dry (approximately 2-3 hours), remove loose aggregate by sweeping, vacuuming and/or blowing the excess aggregate off the deck.

2.07 TOPCOAT APPLICATION

- A. Apply desired color of Topshield® 5600EF at a rate of 1 1/4 gallons/100 sqft (0.51 liters/m²) or 80 sqft/gallon. This coat will result in an additional 18 ± 2 dry mils (457 ± 50 microns) thick coating for each application. Broadcast additional aggregate as needed to cover any bare or insufficient aggregate placement.
- B. A second top coat may be applied of desired color of Topshield® 5600EF at a rate of 1 gallon/100 sqft (0.41 liters/m²) or 100 sqft/gallon. This coat will result in an additional 14 ± 2 dry mils (356 ± 50 microns) thick coating. Refer to the chart at the end of this System Description for coverage rates. Broadcast additional aggregate as needed to cover any bare or insufficient aggregate placement. Always save 1 gallon (3.78 liters) or more and mix into the next pail to prevent color variation. Likewise, with pre-tinted topcoats, mix the last gallon or two from the previous batch into the new batch number. Box the last gallons of the last used batch numbers with the new batch number to prevent hue or shading variation.
- C. At 70°F (21°C) and 50% relative humidity allow a

minimum of 16 and a maximum of 48 hours for topcoat to cure.

2.08 FINISHED SYSTEM

- A. When applied as directed above, Flexideck® E-PDR Decking System will provide minimum of 83 dry mils (2102 microns) with double topcoat, exclusive of aggregate or fabric, of superior waterproofing protection. Flexideck may be applied in two applications after primer for a completed system in 1 day. 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.
- B. 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.

2.09 LIMITATIONS

- A. **Concrete:**

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

 1. Concrete must exhibit 3000 psi minimum strength. An ICRI CSP 3 surface or greater is required for concrete surfaces to be coated.
 2. 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.

3. Concrete cleaning see General & Safety Guidelines.

4. Surface preparation may be completed by shotblasting or the use of Poly-Tuff Profile and Etch 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).

C. PSI Decking Systems will not withstand rising water tables or hydrostatic pressure on slab-on-grade decks.

D. Uncured materials are sensitive to heat and moisture.

E. A continuous coating application should ensure a deck with no lines or streaks.

F. The substrate must be structurally sound and sloped for proper drainage.

G. PSI assumes no liability for substrate defects.

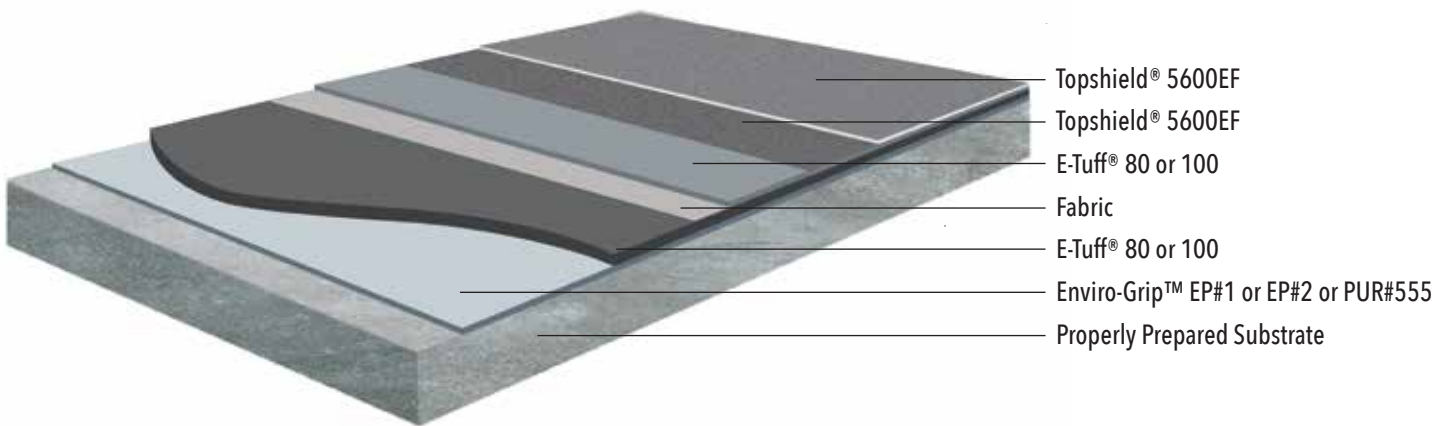
2.10 JOB COMPLETION

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

B. 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.

COVERAGE RATE CHART

| Primer: Enviro-Grip™ EP#1, #2, PUR#555 | Basecoat: E-Tuff® 80 or 100 | Intermediate: E-Tuff® 80 or 100 | Topcoat: Topshield® 5600EF |
|---|--|--|--|
| 1 gallon/300 sqft (0.14 liters/m ²) | 2 gallons/100 sqft (0.82 liters/m ²) | 2 gallons/100 sqft (0.82 liters/m ²) | 1st: 1 1/4 gallons/100 sqft (0.51 liters/m ²) |
| 300 sqft/gallon | 50 sqft/gallon | 50 sqft/gallon | 80 sqft/gallon |
| | | | 2nd: 1 gallons/100 sqft (0.41 liters/m ²) |
| | | | 100 sqft/gallon |



- Topshield® 5600EF
- Topshield® 5600EF
- E-Tuff® 80 or 100
- Fabric
- E-Tuff® 80 or 100
- Enviro-Grip™ EP#1 or EP#2 or PUR#555
- Properly Prepared Substrate



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Please read all information in the General & Safety Guidelines, Product 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.

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