FLEXIDECK® P-PDEF
A 50 Dry Mils, Fast Curing, Seamless, Vehicular Traffic Coating for Concrete

1.01 DESCRIPTION
Flexideck® P-PDEF is a liquid applied, fast cure, high solids, water-catalyzed polyurethane, waterproof Vehicular Traffic Deck System. The system utilizes a primer, one coat of a water catalyzed, urethane basecoat, one coat of an aliphatic urethane topcoat for medium traffic, a second coat of an aliphatic topcoat for heavy traffic areas, and an additional aliphatic urethane topcoat on ramps and turn radii.

Flexideck® P-PD can be applied to protect surfaces against spalling, freeze-thaw damage, and chemicals commonly encountered on these surfaces. It is an elastomeric system designed to expand and contract with normal structural movements. It will not soften in heat nor become brittle in cold. Flexideck® P-PDEF is a proven waterproofing system primarily used on plywood, concrete and metal surfaces. Flexideck® P-PDEF Vehicular Traffic Deck System will ensure years of service. 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
• Seamless
• Elastomeric
• Non gassing
• Meets California VOC and SCAQMD Requirements

1.03 TYPICAL USES
• Parking Decks
• Over Occupied Space
• Sun Decks

1.04 APPROVALS
• Meets ASTM C-957
• Miami Dade Approved
• CLASS A FIRE RATED
• ASTM E-108
• ASTM C-836
• PASS ACRC 10-024 WIND UPLIFT TEST

1.05 PRODUCTS & PACKAGING

<table>
<thead>
<tr>
<th>Kit Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-gallon kit</td>
<td>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</td>
</tr>
<tr>
<td>15-gallon kit</td>
<td>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)</td>
</tr>
<tr>
<td>2-quart kit</td>
<td>One quart (0.946 liter) can of Side-A black liquid, and one quart (0.946 liter) can of Side-B white liquid</td>
</tr>
<tr>
<td>2-gallon kit</td>
<td>One gallon (3.78 liter) can of Side-A black liquid, and one gallon (3.78 liter) can of Side-B white liquid</td>
</tr>
<tr>
<td>10-gallon kit</td>
<td>One 5 gallon (18.9 liters) pail of Side-A black liquid and one 5 gallon (18.9 liters) pail of Side-B white liquid</td>
</tr>
<tr>
<td>4.4-gallon kit</td>
<td>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</td>
</tr>
</tbody>
</table>

1.06 PRODUCT INSTRUCTION

A. For complete information associated with the application of Flexideck® P-PDEF, 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 recom-
manded.

B. Install a 100-200 sq ft (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, CRACKS, JOINTS & FLASHING

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) Polyes-
ter tape pushing it into the 30 mil pre-stripe of base coat. Alter-
atively, 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 P-Tuff®
Classic material and taper it onto the adjacent surface. Alter-
atively, 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, EP#2, or EBF-LV at a rate
of 1 gallon/200-400 sq ft (0.1-0.2 liters/m²) or 200-400
sqft/gallon per project specifications. Apply using a brush or
phenolic-core roller on spray apparatus. This will result in 3 dry
mils (76 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. Do not allow primer to puddle, dry roll excess
primer with a dry nap roller to pick up excess primer in puddles
and overlaps.

2.04 COATING APPLICATION

A. Apply P-Tuff® Classic mixed material to substrate at a rate
of 2 gallons/100 sqft (0.80 liters/m²) or 50 sq/ft/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 24 ± 2 dry mils (610 ± 50 microns) thick mem-
brane.

C. When P-Tuff® Classic mixed material begins to gel, approx-
imately 15 minutes after placement, broadcast 14-30
mesh rubber granules into the wet membrane to refusal.
Normal usage is 20 lbs of rubber granules /100 sqft (0.98
kg/m²). Two top coats are required when utilizing rubber
aggregates. Each top coat should be applied at a
minimum of 100 sqft /gallon.

D. When broadcasting silica sand, allow membrane to
thicken to a firm and sticky surface (approximately 30-45
min) when the sand will adhere but not sink into the base
coat. The aggregate should be dry, washed, and rounded
silica sand in the 12-20 (0.84-1.62mm), 16-30
(0.595-1.19mm) or 20-40 (0.84-1.62mm) mesh size (as
required by customer specifications or as specified in
systems specifications) and a 6.5 Mohs scale minimum
hardness. Time for thickening to a firm sticky condition is
dependent on atmospheric environments especially
temperature and humidity. Allow coating to cure 2-4 hours
before proceeding to subsequent coats.

E. When P-Tuff® Classic mixed material is stiff enough to
support weight without imprinting or denting the coating
or, when coating is dry (approximately 2-3 hours 70°F
(21°C). Remove all loose aggregate by sweeping, vacuum
or blowing the excess sand off the deck. Make any touch
up or repairs. Allow repairs to cure.

2.05 TOPCOAT APPLICATION

A. Apply desired color of Topshield® 5600EF at a rate of 1 2/3
gallons/100 sqft (0.68 liters/m²) or 60 sq/ft/gallon. This
coat will result in an additional 24 ± 2 dry mils (610 ± 50
microns) thick coating. Refer to the chart at the end of this
System Description for coverage rates. Broadcast addition-
al aggregate as needed via the "rain method" to cover any bare or insufficient aggregate placement.

B. Check that no pinholing has occurred from concrete outgassing.

C. For a heavy-duty traffic system, apply an additional coat of desired color of Topshield® 5600EF at a rate of 1 gallon/100 sqft (0.41 liters/m²) or 100 sq/ft/gallon. This coat will result in an additional 14±2 dry mils (356 ± 50 microns) thick coating.

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

2.06 RAMPS, TURN RADII APPLICATION

A. Over ramps, turn radii, and other heavy traffic areas only, apply desired color of Topshield® 5600EF at a rate of 1 gallon/100 sqft (0.41 liters/m²) or 100 sq/ft/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.

B. At 70°F (21°C) and 50% relative humidity allow a minimum of 24 hours for topcoat to cure before subjecting to vehicular traffic.

2.07 FINISHED SYSTEM

A. When applied as directed above, Flexideck® P-PDEF Vehicular Traffic Deck System will provide minimum 50 ± 5 dry mils (1270 ± 125 dry microns) with single topcoat, exclusive of aggregate, of superior waterproofing protection. A heavy duty traffic system, with a second coat of topcoat will result in 64 ± 5 dry mils (1625 ± 50 microns). A third coat of topcoat on ramps, turn radii will result in 78 ± 5 dry mils (1982 ± 50 microns). 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, scaling, 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.

2.08 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 magnesium, 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
1.01 DESCRIPTION

- PASS ACRC 1024 WIND UPLIFT TEST
- CLASS A FIRE RATED

1.03 TYPICAL USES

- Meets California VOC and SCAQMD Requirements
- Non gassing
- Fast curing
- Seamless
- Recoatable

1.02 FEATURES

- B. Check that no pinholing has occurred from concrete out

1.05 PRODUCTS & PACKAGING

- 3-gallon kit: One 3.5 gallon pail containing net 2 gallons (7.57
- county and city regulations/codes at the place of installation of product.

2.01 SURFACE PREPARATION

- D. Refer to Products Data Sheets for products referred in the

2.09 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.

WARNING: The products in this system contain solvent,
isocyanates, Epoxy Resin, and curatives.

<table>
<thead>
<tr>
<th>Primer:</th>
<th>Basecoat:</th>
<th>Topcoat:</th>
<th>Ramps, Turn Radii:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primers: Epoxy, EEY-10, or EF-LV</td>
<td>P-Tuff® Classic</td>
<td>Topshield® 5600EF</td>
<td>Topshield® 5600EF</td>
</tr>
<tr>
<td>1 gallon/200-400 sqft (0.2-0.1 liters/m²)</td>
<td>2 gallons/100 sqft (0.82 liters/m²)</td>
<td>2/3 gallons/100 sqft (0.51 liters/m²)</td>
<td>2 gallons/100 sqft (0.51 liters/m²)</td>
</tr>
<tr>
<td>50 sqft/gallon</td>
<td>Heavy Duty (100 sqft/gallon)</td>
<td>2 gallons/100 sqft (0.51 liters/m²)</td>
<td>2nd coat at 1 gallon/100 sqft/gallon</td>
</tr>
</tbody>
</table>

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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