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FLEXIDECK® P-TW

ICC-ES #4789

*Tile-Underlayment
Waterproofing System*

SYSTEM DESCRIPTION

1.01 Flexideck® P-TW is a solvent free, liquid applied, high solids, Underlayment Waterproofing System for ceramic tile, pavers and shower pan linings.

A. The system utilizes an epoxy-polyamine primer or solvent-free urethane primer, two coats of a water induced urethane basecoat . Flexideck® P-TW 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® P-TW has a wide range of application uses and, installed properly will ensure years of service.

1.02 APPROVALS, CODES & TESTING

- ❖ ICC-ES Report No. ER-4789
- ❖ LA City Report No. RR-25171
- ❖ LA City Report No. M-060012
- ❖ ASTM D-751
- ❖ ASTM D-752
- ❖ ASTM D-1204
- ❖ ASTM D-4068
- ❖ ASTM C-482
- ❖ ASTM C-836

1.03 FEATURES

- ❖ Waterproof
- ❖ Durable
- ❖ Solvent Free
- ❖ For use in SCAQMD areas, use Enviro-Grip® EP#2(SC), P-Tuff® Classic or Flex
- ❖ Elastomeric
- ❖ Economical
- ❖ Low Odor

1.04 TYPICAL USES

- ❖ Saunas
- ❖ Kitchens
- ❖ Restrooms
- ❖ Steam Rooms
- ❖ Shower Pans

1.05 PRODUCT INSTRUCTIONS

A. For complete information associated with the application of Flexideck® P-TW, refer to the general guidelines section of the 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 Poly-Tuff Systems International (PSI) or its distributors or approved by PSI. For details on individual product, please refer to Product Technical Data Sheet.

APPLICATION

2.01 Inspection

A. Check area of application to ensure that it conforms to the substrate requirements, as stated in the general guidelines section.

2.02 Repairs

A. Apply a polyurethane caulking or P-Tuff® mixed material over all joints, cracks and flashing. **P-Tuff® mixed material is a mixture of 4 part P-Tuff® Classic or Flex and 1 part of water by volume.**

B. Bridge the joints, cracks, and flashings with 4" (10 cm) Straight Jacket tape pushing it into the polyurethane caulking or P-Tuff® mixed material with a trowel.

NOTE: Using P-Tuff® Classic mixed material as a caulking compound will

shorten the curing time appreciably over conventional polyurethane caulks.

Conventional polyurethane caulks must be allowed to dry and/or out-gas before proceeding with a membrane system.

C. Over reinforcement tape, apply a stripe coat of P-Tuff® Classic and taper it onto the adjacent surface.

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

2.03 Priming

A. Prime surface with Enviro-Grip® EP#1 at a rate of 1 gallon (mixture of Part-A & Part-B) per 300 sq. ft. (0.14 liters/m²). Apply using a brush or phenolic core roller. This will result in 3 dry mils (76 microns) of coating.

B. Allow primer to become tack free before proceeding to Coating 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 re-prime.

C. Primer is optional on new plywood.

D. Metal flashings should only be primed with Enviro-Grip® EP#2. All metal flashing should be 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.

2.04 First Coating Application

A. Apply mixed P-Tuff® Classic to substrate at a rate of 2½ gallons/100 sq. ft. (1.02 liters/m²). Application will require more or less material depending on substrate requirements. Use a notched trowel or squeegee to spread P-Tuff® Classic evenly over the entire deck resulting in a minimum 35 ± 2 dry mils (888 ± 50 microns) thick membrane.

B. Allow P-Tuff® Classic to cure a minimum of 4 to 8 hours or until firm enough to support the weight of the installer without damaging the product.

2.05 Second Coating Application

A. Apply a second coat of P-Tuff® Classic at a rate of 1 gallon/100 sq. ft. (0.41 liters/m²).

B. Immediately broadcast aggregate into the wet coating until refusal. Use dry, clean angular crystal sand, 16 grit or larger.

C. This coat will result in a min. 14 ± 2 dry mils (355 ± 50 microns) thick membrane, exclusive of aggregate.

D. Allow the membrane to cure a minimum of 12 to 16 hours, remove the excess aggregate, and apply thin set or mortar when ready for tile installation.

E. When utilizing a mortar bed over the Flexideck® P-TW, allow the completed membrane to cure a minimum of 6-8 hours prior to installation of the float. A water test can be conducted after 24 hours.

2.06 FINISHED SYSTEM

When applied as directed above, Flexideck® P-TW will provide 49 ± 2 dry mils (1243 ± 50 microns), exclusive of aggregate, of superior waterproofing protection.

2.07 LIMITATIONS

A. Concrete:

- 1) 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 decks, swimming pools, magnesite, lightweight concrete gypsum, asphalt surfaces, asphalt overlays and where chained or studded tires may be used.
- 2) Concrete must exhibit 3000-psi minimum strength. Concrete 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.
- 3) New concrete must be cured for 28 days.
- 4) Concrete cleaning (see general guidelines).

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 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. Proper coating application techniques 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.

2.08 Job Completion

A. Equipment should be cleaned with an 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 Isocyanates, Solvent, Epoxy Resin and Curatives.

Please read all information in the general guidelines, product data sheets, system specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local PSI representative or visit our website for current technical data and instructions.

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.