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TECHNICAL BULLETIN

P-TUFF™ CLASSIC

Solvent-Free, Single Component, Elastomeric, Polyurethane Waterproofing Base Membrane

DESCRIPTION

P-Tuff™ Classic is a solvent free, single component, liquid applied, water catalyzed, polyurethane elastomeric waterproofing base membrane.

FEATURES

- ❖Solvent Free
- ❖High Tensile
- ❖Proven Protection
- ❖Seamless Waterproofing Membrane
- ❖Optional Fast Cure with Added Accelerator

TYPICAL USES

- ❖Light Auto Traffic
- ❖Concrete Dusting
- ❖Pedestrian Traffic
- ❖Tank Linings and Coatings
- ❖Ship Deck Overlays
- ❖Concrete Bridges
- ❖Concrete or Plywood Decks
- ❖Most Metal, Wood, or Masonry Surfaces

COLORS

White

PACKAGING

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

5 gallon (19 liter) pail with a full vial of catalyst

55 gallon drums, net fill 50 gallons (189 liters) with a 1/2 pint can of catalyst. Contact PSI for availability of 55 gallon drums

MIXING

Before application, pre-mix P-Tuff™ Classic using a mechanical mixer (Jiffy Mixer) at slow speeds or mix for at least 5 minutes, if mixed by hand. Mix P-Tuff™ Classic thoroughly until a homogeneous mixture and color is obtained. Use care not to allow the entrapment of air into the mixture. Add P-Tuff™ Catalyst (1 vial per 5 gallon pail) and mix until a homogeneous mixture and color is obtained. Allow mixture to stand for 5 minutes, then mix again before applying to the substrate.

TECHNICAL DATA

Hardness, ASTM D-2240	60 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	170 ± 25 pli 29.5 ± 5 kNm
Tensile Strength, ASTM D-412	1200 ± 150 psi 8.27 ± 1 MPa
Ultimate Elongation, ASTM D-412	500 ± 100%
Water Absorption by weight, ASTM D-471	0.05%
Total Solids by Weight, ASTM D-2369	93 ± 2%
Total Solids by Volume, ASTM D-2697	90 ± 2%
Volatile Organic Compounds, ASTM D-2369-81	<0.7 lb/gal <84 gm/liter

JOINTS, CRACKS, AND FLASHING

Cracks over 1/16 inch (0.16cm) shall be routed before reinforcing. Prime all joints, cracks, and flashings with recommended PSI Primer. Primer is optional over new plywood.

Mix pre-accelerated P-Tuff™ Classic with water at a ratio of 4:1 (1 gallon of P-Tuff™ Classic : 1/4 gallon of water) by volume. Mix thoroughly until water is completely combined with P-Tuff™ Classic. Apply P-Tuff™ Classic mixture over all joints, cracks, and flashings. Bridge the joints, cracks, and flashings with 4" Fiberglass Straight Jacket Tape or 3" Polyester Tape, pushing it into the sealant with a trowel. Apply a thin coat of P-Tuff™ Classic paste over the reinforced tape and smooth onto adjacent surface.

APPLICATION

For best results use a squeegee or notched trowel. Airless sprayer or phenolic resin core roller may be used but extra care should be taken not to trap air which may result in bubbles.

Mix pre-accelerated P-Tuff™ Classic with water at a ratio of 4:1 (4 gallons of P-Tuff™ Classic : 1 gallon of water) by volume. Mix thoroughly until water is completely combined with P-Tuff™ Classic. Spread P-Tuff™ Classic mixture evenly over the entire deck. Application should not be stopped part way across an area. Each application should be done in one complete step. A continuous application will ensure a smooth and level coat with no lines or streaks to disfigure the deck coating. When P-Tuff™ Classic mixed material begins to gel, broadcast 14-30 mesh rubber granules into the wet membrane or allow membrane to thicken until #1 or #2 washed dry sand (20 mesh, 6.5 Moh's minimum hardness) can be broadcast without the sand sinking into the membrane. Time for thickening is dependent on atmospheric conditions especially temperature and humidity. Allow coating to cure 2-4 hours before proceeding to subsequent coats.

CURING

Allow each coat to cure (depending on environmental condition-temperature) a minimum of 2-4 hours and a maximum of 24 hours. If more than 24 hours passes between coats, re-prime the surface with recommended PSI Primer before proceeding.

P-Tuff™ Classic is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application.

Low temperature and/or low humidity extend the cure time.

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EQUIPMENT CLEANUP
Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE
P-Tuff™ Classic has a shelf life of six (6) months from date of manufacture in original, factory sealed containers when stored at 75°F.

LIMITATIONS
P-Tuff™ Classic should be used only as a base membrane. The components of P-Tuff™ Classic are not UV stable and are not designed to withstand direct wear/abrasion.

Ensure that the substrate is properly prepared prior to application. Surfaces to be coated with P-Tuff™ Classic must be dry, clean, free of foreign matter, and primed with recommended PSI Primer. Primer is optional over new plywood.

PSI recommends that an aggregate of washed, dry, rounded, crystal silica sand, 20 mesh (0.0331 in.; 0.84 mm), with 6.5+ Moh's minimum hardness or EPDM rubber granules 14-30 mesh size be used to aid in slip-resistance. Applicator should determine mesh size based on job requirements.

Any remaining material must be tightly sealed to protect it against curing in its container. Containers that have been opened must be used within 1 or 2 weeks since P-Tuff™ Classic is a moisture reactive material that begins to cure when exposed to air.

PSI does not recommend that P-Tuff™ Classic be diluted with solvent.

For complete information associated with the application of P-Tuff™ Classic, refer to System Specifications and Guidelines.

WARNING
This product contains Isocyanates.

For storage and disposal, and health precautions, please refer to product MSDS and labels.

Please read all information in the general guidelines, product data sheets, guide 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.

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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