Technical Data Sheet

PIP 2800

PROTECTIVE INDUSTRIAL POLYMERS

7875 Bliss Parkway North Ridgeville, OH 44039 [TEL] 440-327-0015 [FAX] 440-353-0549

Solvent-Free, Crack-Bridging, Elastomeric Polyurethane Base Coat

DESCRIPTION:

PIP 2800 is a two-component, solvent free aromatic, elastomeric polyurethane basecoat/membrane used as a waterproofing and crack bridging basecoat beneath polymer coating systems and overlays in pedestrian and vehicular traffic bearing applications

USES:

- Parking decks
- Bridges and walkways
- Mechanical rooms
- Mezzanines
- Stadiums and arena
- Chemical containment areas

CHARACTERISTICS / ADVANTAGES:

- Excellent crack-bridging properties
- •High Flexibility and elongation
- Low odor
- Quick return to service or re-coat
- Good low temperature cure
- Resistant to water and de-icing salts

STORAGE:

Materials should be stored in un-opened containers between 65°F (18°C) and 90°F (32°C) and at or below 50% RH.

SHELF LIFE:

1 year from date of manufacture (un-opened).

Appearance / Color:

Clear (may be pigmented with optional color pack)

PACKAGING KITS/ PART NUMBERS: 5 gallons PIP 2800 (80 SF @ 20 mils)

PIP 2800-A/5SF (4 Gal)
PIP 2800-B/1 (1 gal)
Optional color pack CPU-xxx/P (1 pint)

Volume Mix Ratio: 4A:1B

LIMITATIONS:

- Do not thin with solvents.
- •Low temperatures and low humidity will slow down the cure, and high temperatures and high humidity will accelerate it.
- Relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- PIP 2800 is not UV stable and must be top coated or protected by a separate coating.
- PIP 2800 must be kept clean and recoated within 24 hours. If this window is exceeded.
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °C); maximum is 90 °F (32 °C).
- Keep storage out of sunlight and below 80F for best handling properties.
- Concrete should be at least 28 days old before application.
- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Material must be kept dry for a minimum of 12 hours after application.

- Do not subject to continuous immersion.
- Structural cracks that occur after the system is installed will not be bridged and must be separately repaired.

CURED PROPERTIES*:

Properties	Test Method	Results
Shore A Hardness	ASTM D-2240	80
Tensile Strength	ASTM D-412	2500 psi
Elongation	ASTM D-412	800%
Tear Strength	ASTM D-624	300 pli

*Properties and results are based on laboratory testing at 72°F (22°C) %50 RH, theoretical calculations and estimates. Typical properties, as stated, are to be considered as representative of current production and should not be treated as specifications.

INSPECTION AND APPLICATION:

Caution! Follow all precautions and instructions prior to installation.

SUBSTRATE: The substrate must be free of curing membranes, silicate surface hardener, paint, or sealer and be structurally sound. If you suspect concrete has been treated or sealed, proceed with complete removal process. Consult your PIP representative for further instruction if silicate hardeners or membranes have been utilized.

MOISTURE: Moisture and moisture vapor transmission rates are dynamic in nature and may change over time. Initial testing does not guarantee future results.

VAPOR/CONTAMINATION: Testing for MVT does not guarantee against future problems. If there is no known vapor barrier or the vapor barrier is inadequate, there is an elevated risk of bond failure. Other factors including the migration of oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) from the concrete from may also elevate the risk of adhesion difficulties. <u>Consult your PIP representative for approved mitigation treatments.</u>

TEMPERATURE AND HUMIDITY: During the application and cure of the coating, the substrate temperature, material temperature and room conditions must be maintained between 40°F (4°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30-80%. DO NOT apply coatings unless the surface temperature is more than five degrees over the dew point.

SUBSTRATE PREPARATION:

Surface dirt, grease, oil and contaminates must be removed by detergent scrubbing and rinsing with clean (clear) water.

Mechanical Preparation: Shot Blasting or grinding the surface is the preferred method of concrete preparation. The success of industrial diamond grinding as a concrete preparation method will

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vary depending on technique and the hardness of the concrete. Concrete should have a minimum CSP 3-4.

Joints: For cracks less than 1/16" width: Apply a 20-25 mils extending 2" on either side and centered over the crack.

For cracks 1/16" width or greater and less than 1" width: rout to at least χ " by χ ", and seal with PIP JF epoxy or JF Polyurea and then apply 20-25 mils PIP-2800 extending 2" on either side and centered over the crack.

Joints greater than 1"in width should be treated as expansion joints and brought up through the system. For additional information contact PIP.

Fabric Reinforcement: An optional fiberglass cloth or stranded mat may be used as reinforcement in conjunction with PIP 2800.

PRIMING:

Consult PIP for appropriate primer for specific application and substrate.

MIXING:

Premix Part A using a Jiffy mix paddle and drill at slow speed making sure to scrape the bottom and sides of the pail. Add optional color pack and mix until a uniform color exists in the Part A. Pour part B into Part A slowly and for 2-3 minutes. Minimize air entrapment of the mixture by keeping mix paddle submersed.

APPLICATION:

Apply at 20-25 mils using a notched squeegee or trowel, and back roll using a phenolic resin core roller. Extend base coat over entire area including previously detailed cracks and joints. Allow coating to cure a minimum of 3–4 hours at 70 °F and 50 % R.H. or until tack fee before top coating.

Pot Life is 10-15 minutes at 75F.

TECHNICAL SUPPORT: For application questions, please contact your salesman or PIP technical service at 440-327-0015.

READ SDS (SAFETY DATA SHEET) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

WARRANTY AND CONDITIONS OF USAGE

WARRANTY AND LIMITATION OF LIABILITY: Protective Industrial Polymers Inc. ("PIP") warrants that its products shall conform to the manufacturer's written specifications and shall be free from defects for one (1) year from the date of purchase. PIP MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES AND DISCLAIMS THE SAME, INCLUDING, WITHOUT LIMITATION, FAILURE OF THE PRODUCT DUE TO ACTS OF GOD, FLOODING, EXTREME OR ABNORMAL TEMPERATURES, HUMIDITY AND MOSITURE, STRUCTURAL CONDITIONS, SITE PREPARATION AND CONDITIONS, ACCIDENTS, DAMAGE CAUSED BY INSTALLATION OF MACHINERY, EQUIPMENT OR FIXTURES WITHOUT ADEQUATE FLOOR PROTECTION OR WITHOUT ADEQUATE TIME FOR CURING, FAILURE TO COMPLY WITH CONDITIONS OF USAGE (SPECIFIED BELOW), VANDALISM, NEGLIGENT OR INTENTIONAL ACTS OF THIRD PARTIES OR OTHER CASUALTIES. If any PIP product fails to conform to this warranty, PIP shall either replace the product at no cost to Buyer or refund the cost of the product, in PIP's sole discretion. Replacement of any product or a refund of the cost of any product shall be the sole and exclusive remedy available to buyer, and buyer shall have no claim for incidental, special or consequential damages, including, without limitation, business interruption damages. Any warranty claim must be made within one (1) year from the date of delivery of products. PIP does not authorize anyone on its behalf to make any written or oral statements which in any way alter PIP's warranty or installation and storage information or instructions in its product literature or on its packaging labels. Any installation of PIP products which fails to conform to such installation information or instructions or the "Conditions of Usage" (specified below) shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of PIP's products for the Buyer's intended purposes.

CONDITIONS OF USAGE: Installation of all products purchased must be by professional installers periodically published by PIP or otherwise approved by PIP in writing. Modification to any of PIP's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PIP reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full. Moisture Vapor Transmission (MVT) and ASR (Alkali Silica Reaction) Disclaimer and Exclusion: Although rare, some floors at or below grade level are sometimes subjected to saturation by moisture from beneath the concrete floor slab. This moisture can travel through the concrete and collect between floor toppings creating the potential for delaminating from hydrostatic pressure and or ASR. Conditions contributing to this include heavy rainfall, broken pipes, excess hydration within fresh concrete, and other factors or defective and old concrete. These factors are difficult, if not impossible to predict. PIP recommends testing for MVT and/or the presence of ASR in the concrete substrate prior to applying any polymer floor topping. The recommended test method for MVT is ASTM F 2170-11. ASR can be predicted by a higher than normal pH within the concrete. If high pH should be detected, it is recommended a lab test for ASR. If and when delamination of the floor occurs because of a moisture condition that exists beneath or in the concrete slab beyond the capacity of the individual product installed or failure of the concrete due to ASR. this Limited Warranty does not extend to such delaminating or topping failure. This writing constitutes the sole and only agreement of warranty relating to PIP products.