



TECHNICAL DATA SHEET – PERMAREZ® 345M

Revised: 2/2017

DESCRIPTION

PermaRez 345M Membrane is a durable elastomeric coating used as an underlayment/coating to bridge cracks in concrete. Used with PermaRez 345S Saturant and Fiberglass reinforcement, it provides a tough, stress relieving lining system to which chemical resistant coatings are applied.

TYPICAL APPLICATION

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| PRIMER | PolySpec Primer @ 5-7 mils (concrete) or American Safety MS11CZLT Primer @ 4-6 mils (steel) |
| MEMBRANE | PermaRez 345M @ 30-50 mils |
| REINFORCEMENT SYSTEM | Receiving Coat: PermaRez 345S @ 20 mils Fabric: Type M (1.5 oz mat) Saturant: PermaRez 345S @ 15-20 mils |
| TOPCOAT | FlakeRez or NovoRez Top Coats are compatible. |

PERFORMANCE DATA

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| COMPRESSIVE STRENGTH (ASTM C - 579) | 10,000 psi |
| TENSILE STRENGTH (ASTM C - 412) | 2,000 psi |
| ELONGATION (ASTM D - 412) | 96% |
| BOND STRENGTH (ASTM D - 4541) | Concrete failure |
| OPERATING TEMPERATURE, MAXIMUM, DRY: WET: | 150°F Dependent on chemical exposure |
| VOC | 0.00 lb/gal; 0.00 gm/L |
| VOLUME SOLIDS | 100% |

BENEFITS

- Bridges moving & non-moving concrete cracks
- Chemical resistance exceeds typical flexible membranes
- High point load strength; supports vehicular and foot traffic-bearing surface
- Used with PermaRez 345 Saturant and Fiberglass, provides tough stress relieving membrane on which chemical resistant coating systems are applied

RECOMMENDED USES

- Chemical processing floor areas
- Drum storage pads
- Secondary containment
- Trenches and sumps
- Truck loading/unloading areas
- Concrete clarifiers

GENERIC DESCRIPTION: Epoxy Urethane

STANDARD COLORS: Gray

PACKAGING: 4-Gallon Unit

MIX RATIO: 1 R : 1 H

COVERAGE:

- 50 ft² / gallon @ 30 mils
- 30 ft² / gallon @ 50 mils

PERMAREZ® 345M
CRACK-BRIDGING LINING
MEMBRANE, CHEMICAL RESISTANT

STORAGE & INSTALLATION

| | |
|------------------------------------|-----------------------------|
| STORAGE ENVIRONMENT | Dry area, 65–80°F |
| APPLICATION TEMPERATURE, AMBIENT | 50–95°F |
| APPLICATION TEMPERATURE, SUBSTRATE | Minimum 5°F above dew point |
| SHELF LIFE | 6 month |
| POT LIFE, @ 77°F | 25 minutes |
| SET TIME, @ 77°F | 16 hours |

CONSIDERATIONS & LIMITATIONS

- For best results, work area should be humidity and temperature controlled.
- Do not thin with solvents unless advised to do so by ITW Engineered Polymers.
- Confirm product performance in specific chemical environment prior to use.
- Prepare substrate according to “Surface Preparation” portion of this document.
- Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
- Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
- For industrial/commercial use. Installation by trained personnel only.

SURFACE PREPARATION

CONCRETE: Apply only to clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants.

- New concrete should be cured a minimum of 28 days.
- Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.
- Remove any laitance or weak surface layers.
- Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.
- Surface profile shall be CSP-3 to CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, producing a profile equal to 60-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.
- Moisture vapor transmission should be 3 pounds or less per 1,000 square feet over a 24 hour time period, as confirmed through a calcium chloride test, as per ASTM E-1907. Quantitative relative humidity (RH) testing, ASTM F-2170, should confirm concrete RH results <75%.
- All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application.
- Outgassing may occur due to the porosity of some concrete surfaces. To reduce the effect of outgassing, the primer and coating should be applied when the temperature of the concrete substrate is dropping. This usually occurs in the evening; however, the concrete substrate temperature should be measured with a surface thermometer for verification. Double priming will greatly reduce the effects of outgassing by additionally filling the pores in the concrete.

STEEL: For steel surfaces, a “Near White Metal” ultra high-pressure wash or abrasive blast with anchor profile of 2–4 mils in accordance with Steel Structures Painting Council Specification SP-10 or NACE No. 2 is required. Refer to PolySpec Surface Preparation Guidelines for more details.

INSTALLATION STEPS

- Prime surface with PolySpec 100EX (concrete) or American Safety MS11CZLT (steel) Primer. See data sheet for application details.
- Pour Component B Hardener into Component A Resin. Mix thoroughly using a jiffy-type mixer operated at low speed until a uniform blend is attained. Scrape the sides of the pail to ensure the product has been properly mixed; any unmixed material left on the side of the pail will not cure.
- Apply with a notched squeegee, notched trowel or roller at a rate to obtain a 30–50 mil thickness.
- Subsequent lining should be applied after a minimum of 16 hours of cure time has elapsed.
NOTE: If the next coat is not applied within 96 hours, a solvent wipe or a light sanding may be necessary.
- Always wear gloves when using this product.

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