

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

• Primer	PolySpec Primer @ 5–7 mils (concrete) or PolySpec TITE M-50 @ 4–5 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	Variety of topcoats available

PERFORMANCE DATA

Compressive Strength (ASTM C-579)	10,000 psi
Tensile Strength (ASTM D-412)	2,000 psi
Elongation (ASTM D-412)	96%
Bond Strength (ASTM D-4541)	Concrete Failure
VOC	0.00 lb/gal; 0.00 gm/L
Volume Solids	100%

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 months
Pot Life, @ 77°F	25 minutes
Set Time, @ 77°F	16 hours

Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

CONSIDERATIONS & LIMITATIONS

1. For best results, work area should be humidity and temperature controlled.
2. Do not thin with solvents unless advised to do so by PolySpec.
3. Confirm product performance in specific chemical environment prior to use.
4. Prepare substrate according to “Surface Preparation” portion of this document.
5. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
6. 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.
7. For industrial/commercial use. Installation by trained personnel only.

PermaRez[®] 345M

TECHNICAL DATA SHEET

Crack-Bridging Lining— Membrane, Chemical Resistant

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

COVERAGE

50 ft² / gallon @ 30 mils

30 ft² / gallon @ 50 mils

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

1. Prime surface with PolySpec 300EX (concrete) or PolySpec TITE M-50 (steel) Primer. See data sheet for application details.
2. 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.
3. Apply with a notched squeegee, notched trowel or roller at a rate to obtain a 30–50 mil thickness.
4. 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.
5. For best results, clean tools and equipment with PolySpec® All Purpose Cleaner, a nonflammable and non-evaporating cleaner. Always wear gloves when using this product.

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