Metacrylics® TPO Primer

Technical Data Sheet

Pond Armor™

NOTICES

Metacrylics® products must be applied and installed according to written specifications from the manufacturer. Metacrylics® assumes no liability for failures of this roof/deck system resulting from deviation from manufacturer's written specification, poor workmanship, or delamination of an existing underlying roof/deck membrane. The manufacturer makes no warranty of any kind, express or implied, concerning this roof/deck system, if it is not used according to manufacturer's specifications.

SOURCES

Presented Above Are: ASTM and FTMS performed by Underwriters Laboratories, Inc., Cal Coast Laboratories, Inc., Harlan Associates, Inc., State of Calif. Dept. of Transportation (Division of Structures and Engineering Services) Office of Transportation Laboratory, Sacramento, CA; State of Calif. Air Resources Board, Sacramento, CA; State of Calif. Dept. of Health; State of Calif. Bay Area Air Pollution Control Dist.; field experience of construction contractors and California Builder & Engineer. Metacrylics® is not responsible for any changes in the above data due to discovered data or changes in the above tests.

MANUFACTURER

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SPECIFICATIONS

DESCRIPTION Metacrylics™ TPO Primer is an all-acrylic polymer designed for use in pigmented elastomeric roof coating basecoats to provide adhesion to weathered Thermoplastic PolyOlefin (TPO) roofing membranes. When applied to a suitably cleaned, weathered TPO roof, and topcoated with a durable acrylic elastomeric topcoat, Metacrylics TPO Primer basecoat can extend the life of the existing roof. Coatings based on Metacrylics TPO Primer are ideal for use over TPO roofing membranes that have been weathered at least four years. The technology used in Metacrylics TPO Primer enables Metacrylics coatings to have very good adhesion and resistance to blistering when applied to weathered TPO.

BENEFITS For optimal adhesion and water resistance, Metacrylics™ TPO Primer should be applied to a TPO roof that has been pressure washed at 3,000 PSI. When properly applied, Metacrylics TPO Primer polymer offer the following features:

- Adhesion to weathered Thermoplastic PolyOlefin (TPO) Roofing Membrane
- Resistance to blistering under extended moisture conditions
- Flexibility at temperatures as low as -15 °F (-26 °C)
- 50 g/L VOC (Volatile Organic Content) formulations
- Compatibility with Metacrylics commercial roof coating topcoat formulations: Metacrylics Contractor Grade White, Acrylic White, and High Tensile White.
- User friendly, soap and water cleanup
- Application by brush, roller or spray

COATING ID (3100 RX)	APPLICATION TESTING	ASTM D-6083 REQUIREMENT
Viscosity, KU, initial	127	85-141 KU
pH	10	
Density #/gal	11.83	
Weight Solids, %	66.2%	>60%
Volume Solids, %	52.0%	>50%
MECHANICAL PROPERTIES 75°F, INITIAL, X-HEAD SPEED=1.0"/MIN		
Tensile Strength, max, psi	147	200 psi min.
Elongation@break, %	227%	100% min.
MECHANICAL PROPERTIES 75°F, 1000HR. WEATHERED, X-HEAD SPEED=1.0" MIN.		
Tensile Strength, max, psi	237	
Elongation@break, %	181%	100% min.
TEAR RESISTANCE LBF/IN	79	>60lbf/in.
ADHESION		
Aged TPO, Dry, PLI	2.5A	NA
Aged TPO, Wet, PLI	1.5F	2.0 pli min.
APP Mod-bit, Dry, PLI	1.1A	NA
APP Mod-bit, Wet, PLI	1.4 A/F	2.0 pli min.
PUF, Dry, PLI	10.1 F/A	NA
PUF, Wet, PLI	2.3 F	2.0 pli min.
Cement, Dry, PLI	5.5 F	NA
Cement, Wet, PLI	1.3 F	2.0 pli min.
Galv. Steel, Dry, PLI	5.3 F	NA
Galv. Steel, Wet, PLI	1.6 F	20. pli min.
Aluminum, Dry, PLI	6.4 F	NA
Akuminum, Wet, PLI	1.6 F	2.0 pli min.
PERMEANCE, PERMS		
Face Down	7.0	50 perms max.
WATER SWELLING		
After 7 Days	10%	20% max.
LOW TEMPERATURE FLEX, -15°F ON 1/5" MANDREL. 1000 HR. WEATHERED		
	Pass	Pass

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FORMULATION Zinc oxide, zinc-containing ingredients and recycled rinse water from zinc-containing fomulations are not used in the manufacture of Metacrylics TPO Primer for environmental reasons.

Low-oil-absorption, large particle size extenders are used for compounding high solids formulations with Metacrylics TPO Primer. High oil absorption pigments or small particle size extenders are not used in the formulation of Metacrylics TPO Primer.

Thickeners such as hydroxyethyl cellulose are recommended for use with Metacrylics TPO Primer. HASE (hydrophobic alkali soluble emulsion) thickeners are not used because they increase water sensitivity.

APPLICATION

METACRYLICS TPO PRIMER SHOULD NOT BE APPLIED:

- When temps. fall below 5˚C (40˚F) or are expected to fall below 5˚C (40˚F)
- When temps. are expected to fall below dew point within 6hrs of application
- At very high (>90%) relative humidity or when rain is expected
- On roofs collecting ponded water. The National Roofing Contractors Association considers ponding water on any type of roof unacceptable (see the NRCA Roofing and Waterproofing Manual)

CLEAN-UP Weathered TPO surfaces accumulate dirt over time and must be cleaned prior to coating with TPO Primer basecoat. It is particularly important to effectively clean ponded water areas where greater accumulations of dirt can occur. Water alone is insufficient to clean weathered TPO membrane properly. Suitable liquid cleaners such as Metacrylics EPDM Rinse and Trisodium Phosphate (TSP) solutions in water can be spray applied over the entire surface followed by a thorough powerwashing with water at a minimum powerwasher pressure of 3000 psi with a wide fan tip. All residual cleaning agents must be removed; otherwise, they will interfere in the adhesion of TPO Primer. When using liquid cleaning solutions, please refer to the specific product label and MSDS for safe handling information and proper use instructions.

DISCLAIMER

IMPORTANT APPLICATION INFORMATION

DO NOT APPLY if rain or freezing weather is imminent within 24 hours following application, or during fog or drizzle. This product is water-primer and could wash off if not fully cured.

KEEP AWAY FROM CHILDREN.

DO NOT APPLY when temperatures are consistently below 40° F. The Acrylic Primer dries slowly when temperatures are below 55° F. Areas shaded from sunlight dry very slowly. Seventy-two hours or more may be required for proper curing.

DO NOT THIN or add solvents.

PROTECT MATERIALS from freezing and extreme heat.

CAUTION! Wet acrylic is extremely slippery when stepped on. Use a safety rope around you on sloped surfaces.

ALWAYS STIR the Metacrylics® Primer before any application.