

ROOF MATE LP

ADVANCED ACRYLIC BASECOAT FOR BITUMEN SUBSTRATES

Technical Data & Application Instructions

PRODUCT DESCRIPTION

ROOF MATE LP is a unique water-based elastomeric coating specifically designed to achieve optimum adhesion over new or existing smooth modified bitumen or other asphaltic roof substrates. In combination with a topcoat of standard **Roof Mate**, **Roof Mate HT** or **Roofshield**, **ROOF MATE LP** effectively extends the life of the roof. It provides a waterproof barrier with excellent resistance to blistering under prolonged ponded water exposure, while blocking bleed-through of asphaltic oils. **ROOF MATE LP** has approximately five times the adhesion of typical elastomeric acrylic coatings over asphalt-based roofing.

ROOF MATE LP combines acrylic polymers with reinforcing lamina pigments and non-migrating fire retardants for superior physical properties, durability, and weatherproofing. The fire retardant chemicals are permanently locked into the cured coating and will not leach out upon extended weathering. **ROOF MATE LP** is a "breathable" coating, allowing moisture vapor to pass through the film while remaining impervious to mass water penetration.

BASIC USES

The **ROOF MATE** System was developed to extend the life of conventional built-up, modified bitumen and composite shingle roofs. Once coated, the substrate is protected from further degradation caused by normal weathering, aging and ponded water conditions. **ROOF MATE LP** forms a waterproof elastomeric seal, uniformly covering the textured profile of the surface and forming a permanently flexible buffer between the substrate and topcoat.

COLORS

ROOF MATE LP is available in standard White and Light Gray.

TYPICAL PROPERTIES

- Solids by Weight:**
62% (± 2) [ASTM D1644]
- Solids by Volume:**
52% (± 2) [ASTM D2697]
- Dry Time for Foot Traffic Resistance:***
2 hours - Light Gray @ 16 mils wet (406 microns)
5 hours - White @ 16 mils wet (406 microns)
@ 70°F (21°C), 50% R.H. [ASTM D1640]
*Dry times will increase with higher humidity or lower temperature
- Ultimate Tensile Strength:**
70 psi (± 10) (0.5 MPa) @ 70°F (21°C)
[ASTM D412]
- Elongation at Break:**
700% (± 50) @ 70°F (21°C) [ASTM D412]
- Hardness:**
55 to 65 Shore A [ASTM D626]
- Bond Strength:**
Passes ASTM D6083 on smooth SBS modified bitumen and BUR, and exceeds adhesion requirements for APP modified bitumen [ASTM C794]
- Permeance:**
3.0 U.S. Perms @ 20 mils (508 microns)
[ASTM D1653]
- High Temperature Stability:**
No age hardening or slump when heated to 250°F (121°C)
- Cold Temperature Flexibility:**
Passes 180° mandrel bend at 30°F (-1°C)
[Federal Test Method No. 141a-6221]
- Volatile Organic Content (VOC):**
40 grams/liter (calculated)
- Temperature Limits for Normal Service Conditions:**
-30°F to 200°F (-35°C to 93°C)

WARRANTY

UNITED'S Standard Warranty, issued to the Building Owner, is available for 5-year, 10-year and 15-year periods at no cost. **ROOF MATE LP**, in combination with an approved **Roof Mate** Topcoat, also qualifies for UNITED'S System Warranties, available for 5-year, 10-year and 15-year periods. The System Warranties require fees as well as a final inspection. Refer to Application Instructions and individual Warranty Explanation Forms for additional details.

PACKAGING & MIXING

ROOF MATE LP is a single-component, ready-to-use material available in 5-gallon (19 liter) pails and 55-gallon (208 liter) drums. **ROOF MATE LP** may appear well mixed, but upon extended standing will settle into a two-stage suspension. Use a mixer with a blade capable of uniformly blending the entire container. Once properly mixed, **ROOF MATE LP** is easily pumped and sprayed at material temperatures of 60°F (16°C) or greater. Thinning or reducing the product is not recommended.

SURFACE PREPARATION

All surfaces must be clean and dry, free of any dirt, dust, oil, surface chemicals, or other contaminants that may interfere with adhesion. Loose gravel, if present, shall be removed by power sweeping and/or vacuuming. Remaining gravel shall be spudded to achieve the smoothest surface possible. Any unsound areas in the roof, such as blisters, delamination, deterioration, moisture saturation, sharp projections or ridges, shall be repaired or replaced.

Low areas that pond excessively must be brought into conformance by installing additional drains or adding slope to existing drains. Excessive ponding exists in any area that holds more than ½" (1.27 cm) of water as measured 24 hours after a rainfall.

Surfaces that are contaminated with oil, grease, embedded dirt, loose paint or coating shall be cleaned using **United Cleaning Concentrate (UCC)** biodegradable chemical cleaner and water. High-pressure washing or mechanical scrubbing may be necessary to remove tightly adhered contaminants. Rinse thoroughly with clean water to remove all traces of the **UCC** cleaner. If roof does not require chemical cleaning, thoroughly sweep, vacuum, or blow down roof to remove any dirt, dust or other loose contaminants.

Refer to separate **Roof Mate** Master Guide Specifications for complete surface preparation procedures on the type of substrate being coated.

COATING APPLICATION

Prior to applying **ROOF MATE LP** to the roof surface, complete all detail work on seams, splits, protrusions, drains and flashings utilizing **Roof Mate Butter Grade**, and **Roof Mate Fabric** or **Mesh**. Should any primer be necessary on metal protrusions, ducts, flashings, etc., it should be applied and allowed to dry prior to commencing with coating application.

ROOF MATE LP may be applied by conventional or airless spray equipment. Brush or roller should be used for touch-up and edge work, or for areas that are not practical for spray application. Airless spray is best suited for field application. Use a pump with a minimum one gallon per minute (3.8 l/minute) output and 2,000 psi (13,790 kPa) pressure capability. Use a reversible, self-cleaning tip with an orifice size of .027" to .039" (.69 to .99 mm).

ROOF MATE LP is designed for use as an adhesion-enhancing basecoat over asphaltic substrates, and should be topcoated with an approved **ROOF MATE** finish coat. It must be applied in one or more separate coats to a total of 1.5 to 2.0 gallons per 100 sq. ft. (.6 to .8 l/m²). **ROOF MATE LP** applied at the rate of one gallon per 100 sq. ft. (.4 l/m²) will theoretically yield 8.3 dry mils (211 microns).

Each coat of **ROOF MATE LP** shall be applied in a direction perpendicular to the previous coat. Edges of flat roof areas shall be pre-coated in a "picture frame" configuration. **ROOF MATE LP** must extend up and over all roof substrates on vent pipes, walls, parapets and other protrusions to terminate a minimum of 3" (7.6 cm) above the substrate, creating a self-terminating flashing. Extend coating up and under all counter-flashings where utilized.

All surfaces must be uniformly coated and free of voids, pinholes or blisters. Initial cure or dry time to achieve resistance to rain or overnight dew will normally require several hours. Total cure to achieve long term resistance to ponded water will usually take 24 to 72 hours depending on ambient conditions.

Consult **Roof Mate** Master Guide Specifications on Built-Up and Modified Bitumen roof substrates for detailed application instructions as well as specific film thickness requirements for UNITED'S Standard and System Warranties.

Use water and **UCC** or other similar detergent to flush equipment. Purge water from the system using Mineral Spirits.

LIMITATIONS & PRECAUTIONS

ROOF MATE LP will freeze and become unusable below 32°F (0°C), or when temperatures fall below 32°F (0°C) within a 24-hour period after application. Do not apply if weather conditions will not permit complete cure before rain, dew, fog or freezing temperatures occur.

Avoid breathing of vapor or spray mist. For exterior applications, approved (MSHA/NIOSH) chemical cartridge respirator must be worn by applicator and personnel in vicinity of application. If used indoors, provide mechanical exhaust ventilation and air line masks or positive pressure hose masks. Avoid contact with eyes and contact with skin.

For specific information on safety requirements. Refer to OSHA guidelines and **ROOF MATE LP** Material Safety Data Sheet.



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