United Coatings™ Roof Mate™ Top Coat Technical Data Sheet

Updated: 12/16



Quality You Can Trust...From North America's Largest Roofing Manufacturer!™







PRODUCT DESCRIPTION

United Coatings[™] Roof Mate[™] Top Coat is a waterbased, acrylic elastomeric top coat that is part of the Roof Mate[™] Coating System. Roof Mate[™] Top Coat is designed to be applied over Roof Mate[™] Base Coat. Roof Mate[™] Top Coat forms a waterproof elastomeric seal, uniformly covering the substrate to form a monolithic coating that helps provide protection from normal weathering, aging, and ultraviolet exposure. It is made with premium-quality acrylic resins, which are combined with an effective biocide package and non-migrating fire retardants, resulting in superior durability, weatherproofing, ultraviolet resistance, algae/ mildew resistance, and fire retardancy. **Roof Mate[™] Top** Coat is a highly reflective, permanently flexible "breathable" membrane, allowing moisture vapor from the substrate or building interior to slowly escape while remaining impervious to mass water penetration from the exterior. It is also effective in sealing and encapsulating galvanized metal roofs, helping to prevent residual zinc run-off.

PACKAGING & SHELF LIFE

1-gallon (3.8 liter) bucket 5-gallon (18.9 liter) pail 55-gallon (208 liter) drum

Shelf Life: 18 months from date of manufacture in unopened containers, if stored properly in a clean and well-ventilated area at $40^{\circ}F - 90^{\circ}F$ (4°C - 32.2°C). Storage outside this temperature range may shorten shelf life. Keep containers covered when not in use. Do not allow coating to freeze.

GAF Liquid-Applied

December 2016, supercedes January 2016

BASIC USES & ADVANTAGES

United Coatings" Roof Mate" Top Coat is designed to be used with Roof Mate" Base Coat on existing metal, concrete, TPO, PVC, and most asphaltic membrane roofs. New metal and concrete roofs should be weathered for at least 30 days. New asphaltic, TPO, and PVC roofs should be weathered for at least 90 days.

Note: For use on EPDM or smooth APP membranes, see gaf.com for more details. Do **NOT** use on gravel-surfaced roofs or shingle roofs.

If a faster-drying white top coat is desired, **Roof Mate**[™] **Coating** is available in a quick-set version (**Roof Mate**[™] **QS Coating**). **Roof Mate[™] Coating** is also available in a high-tensile version (**Roof Mate[™] HT Coating**).

PHYSICAL PROPERTIES

UNITED COATINGS™ ROOF MATE™ TOP COAT		
Solids by Weight	66% (±2) [ASTM D1644]	
Solids by Volume	53% (±2) [ASTM D2697]	
Weight per Gallon	11.8 lb. (±0.2) (1.41 kg/l) [ASTM D1475]	
Ultimate Tensile Strength	284 psi (±20) (1.95 MPa) @ 75°F (24°C) [ASTM D2370]	
Elongation at Break	258% (±30) @ 75°F (24°C) [ASTM D2370] *Roof Mate™ Top Coat is unique in that it maintains its elongation values at freezing temperatures, as well as after extended weathering.	
Hardness	55-65 Shore A [ASTM D2240]	
Permeance	5.7 U.S. perms (3.76 metric perms) @ 20 mils (0.51 mm) [ASTM D1653]	
Bond Strength	Exceeds cohesive strength of coating	

Advantages:

- Versatile... Can be applied by sprayer, roller, or brush
- Water-based and low VOC... Conforms to all federal and state air pollution standards and VOC regulations
- Resistant to foot traffic
- Helps save energy costs by reflecting heat away from building

VOC	<50 g/L
Dry Time for Water Resistance*	3 hours @ 70°F (21°C), 50% R.H. White @ 16 wet mils (406 microns) *Required time will increase at higher humidity and/or lower temperatures
Ultraviolet Resistance	No deleterious effects after 5,000 hours [ASTM D822, ASTM G23]
Weather Resistance	No deleterious effects after 5,000 hours [ASTM D822, ASTM G23]
High-Temperature Stability	No age hardening up to 250°F (121°C) [ASTM D794]
Resistance to Wind-Driven Rain	0.3% moisture result [Federal Specification TTC-555B]
Surface Temperature Limits for Service Conditions	-30°F to 180°F (-35°C to 82°C)

APPLICATION INSTRUCTIONS

Substrate Preparation: All surfaces must be clean, dry, and free of any dirt, dust, oil, surface chemicals, or other contaminants that may interfere with optimum adhesion. Any unsound areas in the roof must be repaired or replaced prior to application. Deteriorated or badly corroded metal must be replaced prior to application. TPO & PVC roofs must be primed before applying **United Coatings**[™] **Roof Mate[™] Base Coat**.

Mixing: Thoroughly mix using a power mixer for a minimum of 5 minutes prior to application. For 5-gallon (18.9 L) pails, use a 3" (76 mm) minimum diameter mixing blade. For 55-gallon (208 L) drums, use a 6" (152 mm) minimum diameter blade.

Application: Apply one coat of Roof Mate[™] Base Coat and a minimum of one coat of United Coatings[™] Roof Mate[™] Top Coat with a brush, roller, or sprayer. Roof Mate[™] Top Coat can be applied over Roof Mate[™] Base Coat once the base coat is dry enough to walk on. Dry times will vary based on temperature and humidity. Apply both base and top coats at a rate of 1.0 – 1.5 gallons/100 feet² (4.1 – 6.1 L/10 m²). Apply each subsequent coat perpendicular to the previous coat to ensure proper coverage. Total system should use minimum of 2.0 – 3.0 gallons/100 feet² (8.2 – 12.2 L/10 m²).

Coverage rate will vary depending upon the substrate, its surface profile, and porosity. Rough substrates will require additional coating. Total finished dry film thickness must be at least 17.5 mils.

Spray Application: Apply product with an airless sprayer, covering the surface at an even rate. Use an airless





APPLICATION INSTRUCTIONS, CONT'D.

APPROVALS

ASTM D6083	Tested and approved	
California Title 24	Rated by the Cool Roof Rating Council (CRRC) for use in Title 24 Projects	
CRRC (Cool Roof Rating Council) coolroofs.org	Roof Mate™ White Initial Solar Reflectance 0.83 Initial Thermal Emittance 0.92 Initial SRI 105 Product ID 0614-0004a Roof Mate™ Light Tan Initial Solar Reflectance 0.71 Initial Thermal Emittance 0.93 Initial SRI 88 Product ID 0614-0016a	
Department of Energy, ENERGY STAR [®] Certified (U.S. only)	ENERGY STAR® Certified (U.S. Only)	
UL 790 Class A	UL Listed	
FM 4470	FM Approved	
Miami-Dade County NOA miamidade.gov	12-0521.05 Exp 04/01/19	
ICC-ES for Fluid- Applied Roofing	ICC-ES Listing ESL-1014	
APPROVED		

APPROVED

spray pump with a 1 gallon-per-minute (3.8 L/minute) output and 2,000 psi (13,790 kPa) pressure capability. Use a reversible, self-cleaning tip with orifice size 0.027" - 0.039" (0.69 – 0.99 mm) and a fan angle of 40° to 50°. Filter screens should be 30 mesh or larger. For lengths up to 75 ft. (23 m) from pump, use a 3/8" (9.5 mm) minimum inside diameter, nylon high pressure-type hose. For lengths of 75 ft. – 200 ft. (23 – 61 m) from pump, use 1/2" (12.7 mm) inside diameter hose added to pump side of existing 3/8" (9.5 mm) hose to maintain pressure and delivery. For lengths over 200 ft. (61 m) from pump, use 5/8" to 3/4" (16 to 19 mm) inside diameter hose added to pump side of existing hose. For Application Questions: Contact GAF Technical Services at 1-800-766-3411 or visit gaf.com.

Applicable Standards: ASTM D1644, ASTM D2697, ASTM D1475, ASTM D6083, ASTM D2370, ASTM D2240, ASTM G23

SAFETY & HANDLING

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet (SDS). Do not apply on wet substrates or in temperatures below 50°F (10°C). Do not apply if rain, dew, fog, or freezing temperatures are in the 24-hour forecast. Do not apply in the late afternoon if heavy moisture condensation may appear during the night. Do not apply on substrates that exceed 105°F (40°C).

CLEAN-UP

Clean equipment and overspray with water before curing. If coating has hardened, clean with mineral spirits or biodegradable turpentine solvent. Clean hands with soap and water or waterless hand cleaner.