

KYMAX

KYNAR® MODIFIED ROOF COATING

Technical Data & Application Instructions

PRODUCT DESCRIPTION

KYMAX is a low-build elastomeric coating that provides the ultimate in reflectivity, color stability and weather resistance over new or existing roof surfaces. Although it is highly flexible, it exhibits a tough, enamel-like finish that resists abrasion, biological growth, dirt, oil and all types of weather extremes.

BASIC USES

KYMAX is typically applied at the rate of 3 to 4 dry mils (76 to 102 microns). It is designed as a finish coat over a standard elastomeric acrylic basecoat, such as UNITED'S **Roof Mate**, **Roof Mate Basecoat**, **Roofshield** or **Acrycryl** Systems. KYMAX can also be applied directly over approved substrates such as PVC, to provide increased dirt pick-up resistance and reflectivity.

Typical substrates include standing seam and corrugated metal roofs, sprayed-in-place polyurethane foam, modified bitumen, PVC, TPO, Hypalon and EPDM. KYMAX is recommended whenever exceptional weatherability and/or reflectivity are required, whether the environmental threat is algae, mildew, dirt or industrial fallout. It also provides additional UV and color stability, even in bright colors. KYMAX is an excellent barrier to plasticizer migration, and is also effective in preventing asphalt bleed-through. The natural fire retardancy of the film provides long-term protection, eliminating the need for additional additives that eventually migrate from the film.

APPLICATION

All surfaces must be sound, dry, clean, and free of dirt, oils, curing agents, latence and grease. Use **United Cleaning Concentrate (UCC)** with appropriate pressure-washing techniques. Refer to additional information under the Surface Preparation section of the base coat technical data sheet. The base coat must be compatible with the underlying substrate as well as the KYMAX finish. Consult individual product data sheets for information on appropriate primers and base coats for individual substrates. Apply a single coat of KYMAX at the rate of 200 to 250 sq. ft./gallon (4.9 to 6.4 m²/l). Contact UNITED'S Technical Service Department for additional information and requirements for specific product warranties.

TYPICAL PROPERTIES

1. **Cure Time:** Approximately 6 hours @ 75°F (24°C) at 4 wet mils (100 microns)
2. **Density:** 10.37 lbs/gal
3. **Flash Point:** None
4. **VOC EPA24:** 191 g/l (coating)

— ASTM D6083 Properties —

5. **Viscosity** – ASTM D2196: 2368 cps
6. **Weight Solids** – ASTM D1644 : 45% (±2%)
7. **Volume Solids** – ASTM D2697: 31% (±2%)
8. **Elongation** – ASTM D2370: 148% (±50%)
9. **Tensile Strength** – ASTM D2370: 828 psi (±150) (11.0 Mpa)
10. **Aged Elongation** after 1,000 hours accelerated Weathering – ASTM D2370: >100% = Pass
11. **Permeance** – ASTM D1653: <3 @ 2 mils Dry Film Thickness
12. **Water Swelling** – ASTM D471: <3%
13. **Accelerated Weathering** – ASTM D4798: 1,000 hours = Pass
14. **Wet Adhesion** – ASTM D903: >2.0 pli (350 N/m)
15. **Fungi Resistance** – ASTM G21: Zero Rating
16. **Tear Resistance** – ASTM D624: >250 lbf/in (87.5kN/m)
17. **Flexibility** – ASTM D522 @ -15°F (-26°C): Passes 3/8" (1 cm) Mandrel Bend

— Other performance measures —

18. **Hail resistance:** Passes FMRC moderate hail
19. **Abrasion Resistance** – ASTM D968: 30 l/mil (25 microns) Falling Sand Test
20. **Extended Accelerated Weathering** – ASTM D4798/G155 or G154 UVB-313: 4,000 hours = Pass
21. **Florida Weathering G7 – 1 year:** Gloss retention per ASTM D523: >80%; Fade per ASTM D2244: ΔE<3.0 CIE units; Chalking per ASTM D4214: 9 minimum; Adhesion per ASTM D3359: 100%

SAFETY INFORMATION

Consult Material Safety Data Sheet for precautions. Product is water-based but may not comply with all state and regional VOC restrictions. NIOSH approved respirator, eye & skin protection should be used by applicator and those in the vicinity.

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