



FINISH COAT ALUMINUM

ALUMINUM PIGMENTED POLYURETHANE ROOF COATING

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

ERSystems® Finish Coat Aluminum is a single component, moisture cure, aluminum pigmented, polyurethane elastomeric coating. It produces a cured film which is flexible, elastic and tough.

TYPICAL PROPERTIES:

Property	Typical Value
Percent Solid:	70%
Viscosity:	2500-7500 cps
Ultimate Elongation:	400%
Tensile Strength:	500-600 psi
Moisture Vapor Transmission ASTM E-96 66 Procedure	(a) 15 mil (0.015") Dry Film 3.7 Perm ± 0.6 (b) 30 mil (0.30") Dry Film 2.4 Perm ± 0.4 Cured 7 Days @ 77°F (25°C) 50% RH
Weight/Gallon	10.4 lbs.
VOC Content	242 g/l
Hardness ASTM D-2240	56
Water Absorption ASTM D-471	Approximately 1% BY WEIGHT
Cure Time	15-hours to recoat (75°F/23.9°C) @ 45% RH)
Shelf Stability	6 months
Reflectivity	Initial 79%, 3 Year Aged 72%
Emittance	Initial 0.90, 3 Year Aged 0.90

TYPICAL USES:

Properly applied, Finish Coat Aluminum provides ultimate protection from UV, heat, weathering and ozone. Finish Coat Aluminum in combination with Polyurethane Metal Rust Primer and HER, provide a guaranteed watertight metal roof restoration system. Finish Coat Aluminum over Finish Coat White or Gray, produces an excellent film combination to protect polyurethane foam roofs, concrete decks, and restored single ply membranes.

COLOR:

- Metallic Gray

PACKAGING:

- 5 Gal. Pail

APPLICATION EQUIPMENT:

Application may be by brush, roller or airless spray.

- **Brush or Roller:** Recommended for flashing, small inaccessible areas or where over spray may be a problem. Use a paint brush or a standard medium or coarse nap roller.

- **Airless Spray Equipment:** Airless spray equipment should be capable of 1 gallon per minute capacity at 3000 psi. Finish Coat Aluminum is designated a "medium elastomeric coating" with medium viscosity for pump purposes. 1/2" high pressure hoses perform well. The airless spray gun should be equipped with a ball-bearing swivel for ease of handling. Recommended orifice size is .025" to .035" diameter, wide-angle fan pattern. A reverse-a-clean nozzle is recommended. Exact orifice size will vary with temperature of the material and weather conditions.

APPLICATION:

Over Polyurethane Foam

- (See Polyurethane Foam Insulation Roof Guideline – Polyurethane) Follow the detailed instructions regarding characteristics of the polyurethane foam required and preparation of the foam surface. Finish Coat Aluminum may be applied as a finish coat over Polyurethane 300Aromatic Base Coat-Gray. Apply Finish Coat Aluminum at a minimum rate of 2 gallons (7.57 liters) per 100 square feet for UV and weather protection. Roofing granules may be embedded into a final tack coat of ½ gallon (1.89 liters) per 100 square feet of Finish Coat Aluminum.

Over Metal:

- (See Metal Roof Restoration Guideline – MRR-Urethane) Finish Coat Aluminum is applied as a finish coat to metal roofs which have been properly prepared, primed to protect the metal from rust, and sealed with HER to waterproof. Finish Coat Aluminum is applied at a minimum rate of 1 gallon (3.79 liters) per 100 square feet of flat, smooth surface area.

Over other substrates:

- Finish Coat Aluminum may be used to waterproof, seal, and protect a variety of substrates such as concrete, plywood, and board stock roof insulation and aged modified bitumen and aged BUR.

Adhesion of Finish Coat Aluminum should always be checked. Apply 6-12" square of Finish Coat Aluminum and embed a piece of polyester fabric into the coating, leaving a tail of the fabric exposed.

Allow 2-3 days for the Finish Coat Aluminum to cure and perform a 90° pull test of the fabric tail to test adhesion of the coating to the substrate.

TEMPERATURE CONSTRAINTS:

- Do not apply Finish Coat Aluminum below 35°F (1.7°C) or in weather conditions where the temperature will fall below 35°F (1.7°C) during the cure cycle. Minimum material temperature at time of spraying should be 55° F (12.8°C). For cold weather application techniques and information consult ITWPSNA. The substrate temperature range for application is 40°F (4.45°C) – 120°F (48.9°C).

APPLICATION LIMITATION:

- Prior to the application of any top coat over new or freshly applied asphalt based product consult with the asphalt product manufacturer or NRCA guidelines for necessary asphalt cure times prior to coating.
- Substrate must be clean, smooth and free of dirt, rust and/or moisture. Power washing of substrate is recommended. Application of materials with power spray equipment will require some masking and possible erection of wind screens to prevent over spray damage to surrounding structures, building surfaces, vehicles or other property or persons.

CLEAN UP:

- Upon completion of the application, tools, hoses and equipment must be cleaned immediately with xylene (xylol) solvent.

CAUTION:

- Finish Coat Aluminum spray mist represents risk of inhalation. Always provide positive fresh air ventilation. Respiratory protection should always be used when applying Finish Coat Aluminum. An air mask is recommended for spray applications. On contact with the skin, uncured material can be removed with soap and water. Finish Coat Aluminum that cures on the skin will be very difficult to remove. However, washing with soap and water remains the best method. Do not use solvents to remove Finish Coat Aluminum, since they can be absorbed or may cause further skin irritation. Finish Coat Aluminum is red label material and should be handled and stored as such. The solvents used in this urethane coating are volatile, combustible and in some cases, irritating to the eyes and skin. Keep containers tightly closed and away from heat, sparks and open flame. Finish Coat Aluminum contains chemically active isocyanate groups that react with water, alcohols and amines. Avoid breathing of vapors and contact with the skin. In confined areas, adequate ventilation or fresh air supplied hoods must be provided during application. These coatings are not intended for non-industrial use. Keep out of reach of children.

- The flow of material through pump and system could create static electricity. When pumping flammable materials, all equipment must be properly grounded to prevent static discharge and sparking, which could cause fire or explosions. Use only conductive or grounded air and material hoses, and be sure that your compressor and pump are properly grounded per manufacturer's recommendation.

PRIOR TO USE OF THIS MATERIAL,
READ ALL APPROPRIATE SAFETY DATA SHEETS

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