



ERSYSTEMS® ONESTEP PLUS LOW VOC MODIFIED SILANE SINGLE STEP ROOF COATING

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

ERSystems® **OneStep Plus** is a white, high solid, reflective, cool, high performance elastomeric coating. The product is a liquid applied, single component, moisture-cured modified coating. **OneStep Plus** is designed to provide superb adhesion to a variety of substrates. **OneStep Plus** Finish Coat has Superior UV Resistance and Weathering Characteristics that leads to highly durable and flexible system.

TYPICAL PROPERTIES PER ASTM D-6694

Property	Typical Value
Color	White
Percent Solid:	92% by Weight
Viscosity	10,000 cps +/- 3000 cps
Tear Strength	25.92 pli
Hardness (Shore A)	50 +/- 5A
Elongation:	275%
Tensile Strength:	306 psi
Permeance	11.9 perms (BW-Water method; Inverted)
Low Temp. Flexibility (26°C)	Pass – ½” mandrel
Adhesion to SPF	5.83pli (dry); 6.03 pli (wet)
Water Absorption	0.4121% (1-week @ 158°F/70°C)
Weight/Gallon	11.6 +/- 0.2 lbs.
VOC Content	40.7 g/l (minus exempt solvent)
Fungi Resistance	Zero Rating
Shelf Stability	9 months
Cure Time	Full cure 14 Days (@ 75F (23.9°C); 50% R.H.)
Accelerated Weathering	3000 hours min.; no cracking or checking; maintained more than 50% of initial elongation
Reflectance	Initial 0.87, Rapid Rating 0.73 (White)
Emittance	Initial 0.89, Rapid Rating 0.89 (White)
SRI (White)	Initial 110, Rapid Rating 90 (White)

APPROVALS:

- CRRC Listed
- Title 24 Compliant (Table 110.8-C)
- Meets and/or exceeds ASTM D6694 specification
- Miami Dade NOA #15-1201.10



TYPICAL USES:

ERSystems® **OneStep Plus** is a high solids coating designed to provide an economical tough coating. It has excellent adhesion to most of the roofing substrates but not limited, such as SPF (Spray Polyurethane Foam), Concrete and Single Ply. It is always recommended to test the substrate prior to application to determine what prep work shall require.

PACKAGING:

- 5 Gal. Pails

APPLICATION EQUIPMENT:

Application may be brush, notched squeegee and roller.

- **Brush, Roller or Trowel:** Also recommended for flashing and small inaccessible areas. Use a heavy nap solvent resistant roller.
- **Extrusion:** **OneStep Plus** can be airless extruded to roof surface. Recommended 4,000 p.s.i. and ½” hose. For uniform coverage, squeegee and back roll is recommended.

GENERAL APPLICATION:

- All surfaces to be coated must be clean, dry, and free of contaminants, such as dirt, oil, grease, loose coatings or debris. Power wash blasting is typically required to remove contaminants. **OneStep Plus** can be applied at 1.5 – 2.0 gallons (5.68 – 7.57 liters) per 100 square feet in 1 pass.
- In planning application of **OneStep Plus**, consider environment and weather related conditions such as rain, frost, dew, mist, condensation, humidity, and temperature must be taken into consideration prior to coating application.
- Temperature should be above 40°F (4.45°C), more than 5°F above the dew point and rising, for best application results. To finish installation and tie into cured **ERSystems® OneStep Plus**, you must rub and clean overlapped area with a 10% acetone and 90% water solution.

Over Aged BUR and Modified Bitumen

- (See Aged BUR and Modified Roof Sample Design Guideline - **ERSystems® OneStep Plus**) Follow the detailed instruction in the Guideline regarding Aged Modified Bitumen and Aged BUR surface preparation prior to applying **OneStep Plus**.
- Once the Aged Modified Bitumen or Aged BUR surface is properly prepared, apply **OneStep Plus** at 1.5 gallons (5.68 liters) per 100 square feet in 1 pass for smooth surface and 2.0 gallons (7.57 liters) per 100 square feet in 1 pass for granulated cap. Rough, irregular, and badly alligatored surfaces may require additional coating to achieve the uniform mil thickness desired.

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04/11/2017

Over Single Ply Membranes

- (See Thermoplastic or Thermoset Roof Sample Design Guideline - **ERSystems® OneStep Plus**). Follow the detailed instructions regarding single ply surface preparation prior to applying **OneStep Plus**.
- Once the single ply surface is properly prepared, apply **OneStep Plus** at 1.5 gallons (5.68 liters) per 100 square feet in 1 pass. Rough irregular single ply may require additional coating to achieve the uniform mil thickness desired.

Over Polyurethane Foam:

- (See Polyurethane Foam Insulation Sample Design Guideline – **ERSystems® OneStep Plus**). Follow the detailed instructions regarding characteristics of the Polyurethane foam required and preparation of the surface per the Guideline.
- Apply **OneStep Plus** at 2.0 gallons (7.57 liters) per 100 square feet in 1 pass. Rough irregular foam may require additional coating to achieve the uniform mil thickness desired.

Over Concrete:

- (See Concrete Roof Sample Design Guideline – **ERSystems® OneStep Plus**) Follow the detailed instructions in the Guideline regarding concrete surface preparation prior to applying **OneStep Plus**.
- Once the concrete surface is properly prepared, apply **OneStep Plus** at 2.0 gallons (7.57 liters) per 100 square feet in 1 pass. Rough irregular concrete may require additional coating to achieve the uniform mil thickness desired.

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.

TEMPERATURE CONSTRAINTS:

Cold temperatures influence viscosity and pumping/handling characteristics of **ERSystems® OneStep Plus**. Heat increases and cold decreases the flow of **OneStep Plus**. When temperatures fall below 60°F (15.6°C), **OneStep Plus** can best be applied after storage at 70°F (21.1°C) or higher for a minimum of 48 hours prior to usage. For ease of application, material temperature should be 60°F (15.6°C) minimum. If **OneStep Plus** is to be pumped at temperature below 60°F (15.6°C) insulated or heated hoses may be required. For additional cold weather application techniques and information, consult ITW POLYMERS SEALANTS NORTH AMERICA. The temperature service range is -50°F (-45.6°C) to 200°F (93.3°C). The substrate temperature range for application is 40°F (4.45°C) – 120°F (48.9°C).

LIMITATION:

ERSystems® OneStep Plus cures by reacting with air moisture. Partially used containers should not be left open and exposed to the air. Curing in the once opened container can be slowed by placing Saran Wrap directly over the surface of the coating and tightly resealing the container. If a cured film has formed on the top of the product it should be carefully cut away prior to mixing

the remainder of the product in the container. The surface film formation does not affect the performance of the remaining product. For best results, apply above 55°F (12.78°C) with relative humidity at 50% minimum. Under cold conditions and low relative humidity, product can take multiple days to cure tack-free.

CLEAN UP:

Upon completion of the application, tools, hoses and equipment must be cleaned immediately with acetone.

ATTENTION:

- Keep away from heat, sparks and open flames.
- Close container after 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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Complete technical information is available from
ITW Polymers Sealants North America, Inc.