



ERSYSTEMS® ONESTEP

LOW VOC MODIFIED SILANE

SINGLE STEP ROOF COATING

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

ERSystems® OneStep is a white, low VOC reflective, cool, high performance elastomeric coating. The product is a liquid applied, single component, moisture-cured modified silane. OneStep is designed to provide superb adhesion to a variety of substrates. OneStep Finish Coat is a "tough" coating and provides superior UV stability and weathering characteristics.

TYPICAL PROPERTIES:

Property	Typical Value
Percent Solid:	97%
Viscosity (HA):	11,000 cps
Elongation:	150%
Tensile Strength:	288 psi
Moisture Vapor Performance	Pending
Weight/Gallon	12.2 lbs.
VOC Content	40.7 g/l
Fungi Resistance	Zero Rating
Shelf Stability	9 months
Cure Time	Full cure 21 Days
Reflectance	Initial .81% , 3 Year pending
Emittance	Initial 0.89, 3 Year Pending
SRI	Initial .101 , 3 Year Pending

APPROVALS:

- CRRC Listed

TYPICAL USES:

ERSystems® OneStep is a high solids coating designed to provide an economical tough coating. It has excellent adhesion to asphalt, single ply, spray polyurethane foam and concrete



COLOR:

Standard color is White. Note: White color changes to off-white after sun exposure and fades to brighter white over time.

PACKAGING:

- 5 Gal. Pails

APPLICATION EQUIPMENT:

Application may be brush, notched squeegee, roller or airless spray.

- **Brush, Roller or Trowel:** Recommended for flashing, small inaccessible areas or where over spray may be a problem. Use a heavy nap solvent resistant roller.
- **Airless Spray Equipment:** Cold temperatures influence viscosity and pumping/handling characteristics of ERSystems® OneStep. Consult a ITW POLYMERS SEALANTS Technical Sales representative for further recommendations. Airless spray equipment should be capable of 3 gallon per minute capacity at 3500 psi. 3500 psi at the spray gun is essential to produce the desired pattern. OneStep is designated a "medium elastomeric coating" with high viscosity for pump purposes. 3/4" 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 .028" - .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 condition.

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 can be applied at 1.0 – 2.0 gallons per square in 1 pass.

In planning application of OneStep, consider environment and weather related conditions such as frost, dew, mist, condensation, humidity, and temperature. Temperature should be above 40°F, more than 5°F. above the dew point and rising, for best application results. To finish installation and tie into cured ERSystems® OneStep, 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) Follow the detailed instruction in the Guideline regarding Aged Modified Bitumen and Aged BUR surface preparation prior to applying OneStep.
- Once the Aged Modified Bitumen or Aged BUR surface is properly prepared, apply OneStep at 1.0 – 1.5 gallons per square in 1 pass for smooth surface and 1.0 – 2.0 gallons per square in 1 pass for granulated cap. Rough, irregular, and badly alligatored surfaces may require additional coating to achieve the uniform mil thickness desired.

Over Single Ply Membranes

- (See Thermoplastic or Thermoset Roof Sample Design Guideline - ERSystems® OneStep). Follow the detailed instructions regarding single ply surface preparation prior to applying OneStep.
- Once the single ply surface is properly prepared, apply OneStep at 1.0 – 1.5 gallons per square 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). Follow the detailed instructions regarding characteristics of the Polyurethane foam required and preparation of the surface per the Guideline.
- Apply OneStep at 1.5 – 2.0 gallons per square 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) Follow the detailed instructions in the Guideline regarding concrete surface preparation prior to applying OneStep.
- Once the concrete surface is properly prepared, apply OneStep at 1.5 – 2.0 gallons per square 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. Heat increases and cold decreases the flow of OneStep. When temperatures fall below 60°F, OneStep can best be applied after storage at 70°F. or higher for a minimum of 48 hours prior to usage. For ease of application, material temperature should be 60°F. minimum. If OneStep is to be pumped at temperature below 60°F. 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 to 200°F. The substrate temperature range for application is 40°F – 120°F.

LIMITATION:

ERSystems® OneStep 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 plastic 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.

CLEAN UP:

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

CAUTION:

Consult SDS

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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ITW Polymers Sealants North America, Inc.