



#127

**SOLAR ONE PLUS®
ACRYLIC ROOF COATING**

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

E-las-tek® #127 Solar One Plus is a reflective elastomeric roof coating made with 100% acrylic polymers. Applied correctly, it forms a flexible, sustainable skin that can dramatically lengthen the life of a roof by protecting it from solar damage. With its high solar reflectivity, roofs stay cooler, reducing stress on the roof system and often leading to a significant reduction in cooling costs. Because of its extreme water resistance and reflectivity, #127 Solar One Plus is a superior choice for low slope roofs and hot-weather conditions.

ADVANTAGE:

- Resistant to bacteria, fungus (including mold and algae)
- Outstanding resistance to ponding water
- Provides outstanding resistance to UV degradation
- Retains whiteness years longer
- Preserves asphalt and foam roofing materials
- Cures to a very bright, durable, low-gloss surface
- Excellent low temperature flexibility, tensile strength, elongation, and resistance to weathering
- Adheres well to a variety of substrates
- Highly resistant to dirt pickup
- Environmentally safe
- Class A Fire Rated

ACCEPTABLE ROOF TYPES FOR COATING:

Built-up asphalt (BUR), granular roll roofing, foam (SPF), and metal. Consult E-las-tek® before coating single-ply, or "rubber," roof membranes.

SURFACES NOT SUITABLE FOR COATING:

Worn-out or water-saturated roofs of any type, tile, shingles, and surfaces treated with adhesion-resistant materials such as silicone or Kynar®.

TYPICAL PROPERTIES PER ASTM D-6083

Property	Typical Value
Color	Bright White & Energy Tan
Percent Solid:	53% by Volume, 65% by Weight
Viscosity:	20,000 -25,000 cps.
Elongation:	Initial 325% Aged 225%
Tensile Strength:	Initial 257 psi Aged 420 psi
Low Temperature Flexibility	Pass @ -15°F
Permeance	7.4 perms
VOC :	26.4 g/L
Fungi Resistance	0 Rating
pH	9.5 - 10
Cure time:	8-24 hours to recoat
Water swell	4.3%
Packaged Weight	11.6 lbs per gallon
Reflectance (Bright White)	Initial 0.87, 3 Year aged 0.79
Emittance (Bright White)	Initial 0.87, 3 Year aged 0.89
SRI (Bright White)	Initial 110, 3 Year aged 99
**The shelf life for an unopened container stored at temperatures between 60°F (15.6°C) and 95°F (35°C) is 2 years from date of manufacture. Store out of direct sunlight in a cool, well-ventilated area. Avoid storing container directly on the floor or against an outside wall.	
EXTENDED SERVICE-LIFE WARRANTY AVAILABLE	

SURFACE PREPARATION:

All surfaces must be thoroughly cleaned to remove oils, gravel, granules, loose coating, chalk, dirt, rust, corrosion, mildew, efflorescence, and bond-breakers to assure coating adhesion and minimize asphalt bleed. Clean with a broom and TSP or TSP substitute/ water solution (or pressure wash); rinse well; allow to dry thoroughly. Rust/ corrosion may require wire brush, scraping, or sandblasting. Roof system must be free of moisture before coating.

Liquid Applied Roofing:

- Solar One Plus may be used as the topcoat over liquid applied roofing membranes to refurbish older roofs or establish new roof membranes. See our website for information.

Minor Repairs:

- Roof repairs must be completed before top coating. All leaks, gaps, cracks, tears and seams must be filled with E-las-tek® #103 Crack & Joint Sealant and weak areas strengthened with embedded polyester fabric. Major repairs must be referred to a roofing contractor.
- **Asphalt Roofing:** Thorough washing reduces asphalt bleed-through. Depressions that hold water more than 48 hours must be eliminated before coating.



ASTM
D-6083



APPROVALS:

- CRRC/ Energy Star Listed
- Title 24 Compliant (Table 110.8-C)
- Class A Fire Rated per UL790/ASTM E-108-07a
- FM Approved

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- **Metals:** Rusted or corroded areas must be coated with quality protective primer after cleaning. Metal fasteners should be tightened and sealed, if necessary, with Crack & Joint Sealant #103. Badly worn panels should be replaced.
- **Foam:** May be used on new or existing coated foam roofs in very good condition and with no water intrusion. Deteriorated foam, open foam, evidence of water intrusion, or poor drainage should be referred to a contractor.

APPLICATION:

- See WEATHER CONDITIONS below for ideal conditions. Wear protective clothing and eye protection. Apply by roller, spray, or brush with minimum of working. Pre-coat repairs, uncoated areas, and areas needing more protection, and allow to dry.
- A 1-1/4-inch paint roller is best for dipping coating from the pail. A 1/2-inch nap cover gives very smooth application when coating is poured onto roof surface, then spread.
- Apply coats at 90-degree-angle to ensure even coverage.
- Coatings are sensitive to moisture for up to 48 hours after application.
- Can be spray-applied by airless pump capable of 2-3000 PSI, 1-3 GPM using a 6-31 or 8-31 reversible tip.
- **DO NOT DILUTE**
- **COATING THICKNESS DETERMINES SERVICE LIFE.**
- Clean tools promptly with water.

COVERAGE:

- Coverage varies with the porosity of the substrate. Apply at 80-100 sq. ft. per gallon per coat.
- Recommend two or more topcoats, totaling 20+ mils dry for long-term durability.

APPLICATION LIMITATIONS:

- 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.
- Elastomeric coatings are not effective when roof deterioration is severe. If in doubt, consult a qualified roofing contractor.
- Contact ITW POLYMERS SEALANTS NORTH AMERICA before applying this coating to gravel roofs, single-ply roofs or shingle roofs, manufactured home roofs, roofs with cathedral ceilings below the roof.

WEATHER CONDITIONS:

Application of E-las-tek® #127 Solar One Plus top coat can be applied when the ambient temperature is a minimum 50°F and rising in weather conditions where the temperature during the cure cycle (24-48 hours) will not fall below 32°F. The acrylic top coat should not be applied when moisture is present on the roof surface. The roof surface temperature range for application should be between 40°F – 115°F. The service temperature range for the respective top coat can vary between -35°F – 180°F.

SAFETY:

Use in areas with good ventilation. Keep containers tightly closed when not in use. Keep away from children. Store in a cool, dry place. Prevent from freezing.

NOTICE TO PURCHASER:

While the information and data contained herein are presented in good faith and believed to be reliable, they do not constitute part of our terms and conditions of sales. Nothing herein shall be deemed to constitute a warranty, expressed or implied. Data provided here is based on our best knowledge at time of printing and is subject to change. E•las•tek offers coatings to fill or coat ponding areas and to handle difficult cult substrates. For most current information check our website: www.elastek.com; or contact us at info@itwsealants.com or 877-352-7835.

EXCLUSION OF WARRANTIES:

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Complete technical information is available from
ITW Polymers Sealants North America, Inc.