



#114 THE SHIELD ACRYLIC ELASTOMERIC POLYMER

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

E-las-tek® #114 The Shield is a reflective elastomeric roof coating made with 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. #114 The Shield is a durable and cost effective choice for positive-draining roofs and hot-weather conditions.

ADVANTAGE:

- Blend of styrenated-acrylic and acrylic polymers of exceptional durability
- Forms durable membrane that reflects most of the sun's heat —provides outstanding resistance to UV degradation, preserves asphalt-based roofing materials
- Expands and contracts with thermal changes to keep the roof surface sealed over time
- Adheres well on a wide variety of substrates
- Environmentally safe

TYPICAL USES:

The SHIELD is ideal for top coating previously coated foam roofs, pitched roofs and most low-slope roofs. May be used on:

- Use on aged galvanized steel, aged asphalt composition, and aluminum-coated roofs
- Resistant to asphalt staining
- Ideal for all low-pitch roofs
- Moderate resistance to ponding water
- Long-lasting
- Easy-to-apply with brush, spray, or roller
- Environmentally safe

TYPICAL PROPERTIES:

Property	Typical Value
Percent Solid:	61% by weight; 50% by volume
Viscosity:	19,000-24,000 cps
Elongation:	Initial average elongation 305% at 75°F
Tensile Strength:	Initial average tensile 195 psi
VOC :	43.1 g/l
Shelf Stability	24 months
Packaged Weight	11.5 lbs. per gallon
Cure Time	8-24 hours to recoat
Reflectance	Initial 85%, 3 Year aged 68%
Emittance	Initial 0.89, 3 Year aged 0.89
SRI	Initial 107, 3 Year aged 83



APPROVALS:

- CRRC/ Energy Star Listed
- Title 24 Compliant (Table 110.8-C)

COLOR:

Bright White and Energy Tan

SURFACE PREPARATION:

All surfaces must be thoroughly cleaned to remove oils, gravel, granules, loose coating, chalk, dirt, rust, corrosion, mildew 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, or scraping. Roof system must be free of moisture before coating. Prime asphalt surfaces with Elastek #121 High-Tek Basecoat prior to coating application.

Minor Repairs:

- Roof repairs must be completed before top coating. All leaks, gaps, cracks, tears, bird holes, 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.
 - Metals:** Rusted or corroded areas must be coated with protective primer after cleaning. Metal fasteners should be tightened and sealed, if necessary, with E-las-tek® #103 Crack & Joint Sealant.
 - Foam:** May be used on 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.

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®.

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 ½-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, manufactured home roofs, roofs with cathedral ceilings below the roof.

WEATHER CONDITIONS:

Application E-las-tek® #114 The Shield 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 cool, dry place. Prevent from freezing.

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