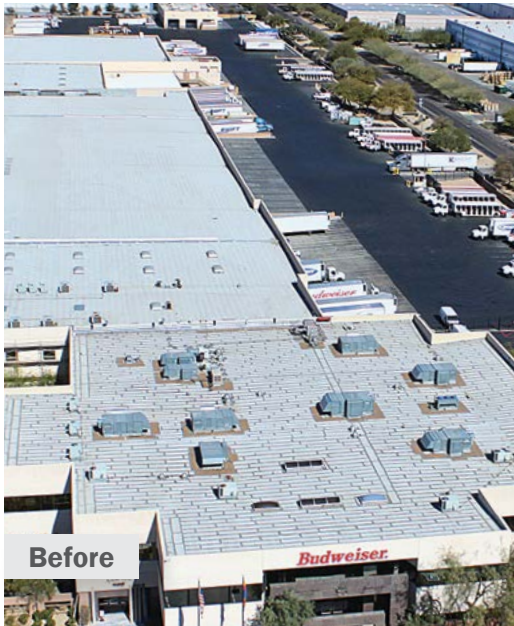




The Cool Roofing Solution & Product Guide



The Cool Roofing Solution



What is a cool roof?

A cool roof is one that reflects and releases the sun's energy away from the building below. Reflectivity refers to the ability to reject light energy before it can be absorbed as heat. Emissivity refers to the ability to release already absorbed heat. E-las-tek® Roof Coating™ white elastomeric products offer you this high reflectivity and emissivity. Most roof surfaces are too hot to touch on a warm day. Black roof temperatures can soar up to 180°F, while a white-coated roof will be only a few degrees warmer than ambient air temperature!

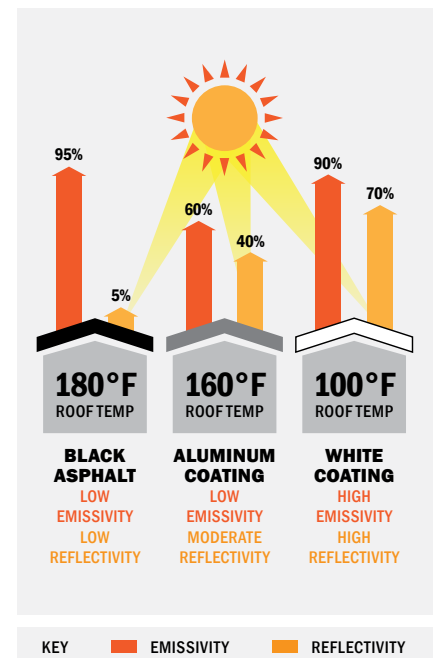
What are the advantages of cool roofing?

Because our elastomeric coating can reduce the temperature of the roof surface by up to 80° F, the amount of heat transferred into your building

is significantly lower. Considerable savings result. You'll see the benefits in the following ways:

- **Reduced cooling costs** – in some cases over 20%. This in turn minimizes the strain on both cooling equipment and the electric power grid.
- **Extended roof life** – protect existing roof systems from damaging UV rays. Minimize the dramatic expansion and contraction cycle roofs undergo daily, delaying roof replacement – sometimes indefinitely.
- **Lowered annual maintenance costs.**
- **Decreased air pollution** and greenhouse gas emissions.
- **Reduction of roofing material waste** in landfills.

It's no surprise that cool roof coatings are one of the fastest growing segments of the roofing industry.



What are the benefits of cool roof restoration as compared to roof replacement?

Restoration of an existing roof can provide many advantages over re-roofing. **The cost of replacing a roof is significantly higher than the expense of restoration.** During the life cycle of the roof, these costs only increase. The tax laws also work in favor of a restoration project.

E-las-tek® Roof Coatings offer you cost-effective, proven solutions for restoring a roof, and they are warranted up to twelve years. With regular maintenance and periodic recoating, a roof can often be preserved indefinitely. **The average cost for restoration with E-las-tek® products, including standard labor expense, is between 40 percent and 80 percent less than the cost of a roof replacement.**

Over the life of a roof, savings can be significantly greater with a coating restoration. Roof tear-off, disposal, and the ensuing disruption to building occupants during re-roofing is expensive. Delaying the need for this will lower long-term costs. An experienced technician should be called to provide regular maintenance and occasional recoating.

This will provide opportunity to inspect your roof and assess its condition. Any small repairs can be taken care of before they become big repairs.

A roof replacement is recognized by the federal government as a capital expense, which must be depreciated over a period of 39 years – the expected working life of the roof. On the other hand, a roof restoration is considered a maintenance cost and can be immediately expensed in the year it is incurred – **providing a substantial savings at tax time.*** In addition, depending on your location, tax credits and other incentives may be available for improving energy efficiency of the building.

At E-las-tek®, we care about the success of your restoration project and provide excellent comprehensive support throughout the process. We have trained technical field representatives available to team up with you from the first look at the roof until the signing of your service life warranty.

Have your local E-las-tek® representative contact you about using E-las-tek® products on your next project. Call 1-866-ELASTEK.








40,000 SQ/FT COST ANALYSIS		
YR	RE-ROOF	RESTORATION
1	\$160,000 NEW ROOF	\$160,000 NEW ROOF
5	\$2,000 REPAIR & MAINTENANCE	\$2,000 REPAIR & MAINTENANCE
10	\$5,000 REPAIR & MAINTENANCE	\$5,000 REPAIR & MAINTENANCE
15	\$240,000 RE-ROOF	\$80,000 RESTORATION
20	\$2,000 REPAIR & MAINTENANCE	\$2,000 REPAIR & MAINTENANCE
T	\$409,000 TOTAL COST	\$249,000 TOTAL COST

A federal study was conducted by the Lawrence Berkeley National Laboratory† in 2001 which measured the reduction in peak energy demand associated with the reflectivity of a cool roof's surface. The existing roofing membrane on the Texas retail building studied was black rubber. The cool roof restoration** delivered an average decreased surface temperature of 43 degrees F. The decrease in total air conditioning energy consumption was 11% with a 14% drop in peak hour demand. The average daily summer temperature on the black roof was 168°F; the white reflective surface measured only 125°F. Without additional considerations of tax benefit or other utility charges, annual energy expenditures were reduced by \$7,200 with the same insulation and HVAC systems in place.



A granulated roof system before and after restoration

Coating Guide by Substrate

		SURFACE PREP	REPAIR & SEAL	PRIME	TOPCOAT
BUR (BUILT-UP ROOF)		<ul style="list-style-type: none"> Wash with TSP substitute and water; rinse or power wash Remove loose granules Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Fill ponding areas with 505 Puddle Plaster Coat flashing seams with 103 Crack & Joint Sealant and Polytek Fabric as needed Repair ply sheets, leaks, seams and drains as needed Optional: Coat with 500 Asphalt Emulsion to seal and strengthen 	<ul style="list-style-type: none"> 505 Puddle Plaster, 500 Emulsion or exposed asphalt coating needs to be primed with 121 HI-TEK Basecoat 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty
MODIFIED BITUMEN		<ul style="list-style-type: none"> Ensure that new modified bitumen roofs have fully cured before attempting to coat. Curing may take 30-180 days, depending on type and manufacturer Wash with TSP substitute and water; rinse or power wash Remove loose granules Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Fill ponding areas with 505 Puddle Plaster Coat flashing seams with 103 Crack & Joint Sealant and Polytek Fabric as needed Repair ply sheets, leaks, seams and drains as needed Optional: Coat with 500 Asphalt Emulsion to seal and strengthen 	<ul style="list-style-type: none"> 505 Puddle Plaster, 500 Emulsion or exposed asphalt coating needs to be primed with 121 HI-TEK Basecoat 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty
SPRAY URETHANE FOAM		<ul style="list-style-type: none"> Repair damaged and exposed foam prior to introducing water Wash with TSP substitute and water; rinse Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Carefully remove any damaged foam and repair to ensure a sound substrate for coating Seal around penetrations & small holes with 103 Crack & Joint Sealant; reinforce with Polytek Fabric as needed 	<ul style="list-style-type: none"> No priming required 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty
EPDM (ETHYLENE PROPYLENE DIENE MONOMER)		<ul style="list-style-type: none"> Carefully power wash to remove dirt, debris, and contaminants that could impede adhesion Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Repair seams as needed Seal around penetrations and small holes with 103 Crack and Joint Sealant Reinforce with PolyTek Fabric as needed 	<ul style="list-style-type: none"> Prepare surface by detergent scrub followed by power wash, test for adhesion 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply two coats for durability Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty
TPO (THERMOPLASTICOLEFIN)		<ul style="list-style-type: none"> Carefully power wash to remove dirt, debris, and contaminants that could impede adhesion Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Repair seams as needed Seal around penetrations and small holes with 103 Crack and Joint Sealant Reinforce with PolyTek Fabric as needed 	<ul style="list-style-type: none"> Prepare surface by detergent scrub followed by power wash, test for adhesion 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply two coats for durability Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty
PVC (POLYVINYL CHLORIDE)		<ul style="list-style-type: none"> Wash with TSP substitute and water; rinse Power wash with clean water Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Repair seams as needed Seal around penetrations and small holes with 103 Crack and Joint Sealant Reinforce with PolyTek Fabric as needed 	<ul style="list-style-type: none"> Prepare surface by detergent scrub followed by power wash, test for adhesion 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply two coats for durability Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty
METAL		<ul style="list-style-type: none"> Wash with TSP substitute and water; rinse or power wash Remove rust and corrosion with wire brush, apply quality rust inhibiting primer Roof system must be clean and dry with surface temperature below 120°F at time of application All underlying materials must be fully cured 	<ul style="list-style-type: none"> Replace missing fasteners Tighten all fasteners, seal fasteners and seams with ERSysystems® HER Sealant and Polytek Fabric as needed Seal problem seams with HER, 103 Crack & Joint Sealant or 105 Super Seal and Polytek Fabric 	<ul style="list-style-type: none"> Apply ERSysystems® Metal Rust Primer as needed 	<ul style="list-style-type: none"> Apply 2-3 coats of appropriate Elastek topcoat Apply with 1/2" or 1-1/4" nap roller or airless spray Minimum two coats (20 Mils DFT total) for service life warranty

This Coating Guide is for general informational purposes. For complete application instructions, please refer to the product packaging or the Product Data Sheet available at www.holcimelastek.com

Product Guide



ACRYLIC COATING

127



SOLAR ONE PLUS —

Is a state-of-the-art, specified-performance elastomeric **FINISH COAT** with excellent low temperature flexibility, elongation, and tensile strength. Adheres great to a variety of roofing substrates.

COMPLIANCE: ENERGY STAR, CRRC LISTED, ASTM 6083, TITLE 24, FIRE RATED (UL, FM, ASTM E-108)

COLOR: 5 GAL, 55 GAL, 275 GAL

129



POLYTEK PRO —

Is a high-performance elastomeric **FINISH COAT** formulated for use on new foam roofing and most other roof surfaces. Excellent resistance to UV degradation.

COMPLIANCE: ENERGY STAR, CRRC LISTED, ASTM E-108 CLASS A FIRE RATED, TITLE 24, UL 790 CLASS A FIRE RATED

COLOR: 5 GAL, 55 GAL, 275 GAL

109



SOLAR MAGIC —

Is an excellent elastomeric **FINISH COAT**. Provides good durability and strong adhesion.

COMPLIANCE: ENERGY STAR, CRRC LISTED, TITLE 24

COLOR: 5 GAL, 55 GAL, 275 GAL

121



HI-TEK BASECOAT —

Is a excellent **BASE COAT** saturant for PolyTek roofing fabric, saving an existing roof with some remaining service life from tear-off. Can be used as a primer. Requires a topcoat.

COLOR: 5 GAL

103



CRACK & JOINT SEALANT —

Is a quality **SEALANT** for filling seams, repairing cracks, and smoothing rough surfaces. Use also around pipes and penetrations. Outperforms plastic roof cement.

COLOR: 1 GAL, 2 GAL, 5 GAL

133



EXTREME CRACK & JOINT —

Is a high performance **SEALANT** for filling seams, repairing cracks, and smoothing rough surfaces. Does not need a top coat. Outperforms plastic roof cement.

COMPLIANCE: ENERGY STAR

COLOR: 2 GAL

105



SUPER SEAL — Is a quality

SEALANT for covering larger areas quickly. Common uses include: Filling seams and cracks, Installing polyester or fiberglass fabric, and smoothing rough surfaces.

COLOR: 5 GAL

500



SEALER EMULSION —

Is a black emulsion **SEALANT** used to seal, strengthen, and renew roof surfaces. Requires topcoat.

COLOR: 5 GAL

505

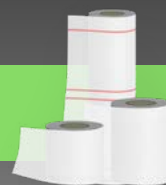


PUDDLE PLASTER —

Is a thick, black emulsion **SEALANT** for filling low roof areas that pond water. Promotes positive drainage. Requires topcoat.

COLOR: 5 GAL

POLYTEK FABRIC



POLYTEK ROOFING FABRIC —

Is a strong fabric used to reinforce repairs made with 103, 105, and 133. Conforms to irregular surfaces, making application easy.

COLOR: 4", 6", 40", BY THE ROLL

ACRYLIC METAL RUST PRIMER



ACRYLIC METAL RUST PRIMER —

Is a grey colored, air dry, great adhesion and excellent corrosion resistant **PRIMER**. It shows superior re-coat ability, exterior durability and UV screening capabilities.

COLOR: 5 GAL, 55 GAL

Product Guide



POLYURETHANE COATING

PU 300 ALIPHATIC FC



POLYURETHANE 300 ALIPHATIC FINISH COAT — Is a reflective, cool, high performance elastomeric polyurethane **ROOF COATING**.

COMPLIANCE: CRRG LISTED

COLOR:

5 GAL

PU 300 AROMATIC BC



POLYURETHANE 300 AROMATIC BASE COAT — Designed to provide a combination of superb adhesion to a variety of substrates, the **BASE COAT** is a balance of high elongation and high tensile strength.

COLOR:

5 GAL

PU METAL RUST PRIMER



POLYURETHANE METAL RUST PRIMER — Is a single component, aluminum pigmented, moisture-cure urethane **PRIMER** for rusty surfaces.

COLOR:

5 GAL

H.E.R.



H.E.R. — Is a flashing grade single component moisture-cure polyurethane repair **SEALANT**. A tough, seamless elastomeric roofing membrane that has excellent adhesion to a wide variety of substrates.

COLOR: 10.1 OZ, 20 OZ, 1 GAL, 2.5 GAL, 5 GAL

QUICKET



QUICKET — Is a two component liquid applied *self-leveling* polyurethane **SEALANT** designed for building crickets as well as a pourable sealant for roof systems.

COLOR:

2 GAL

2100 MS ADH SEALANT



2100 MS ADHESIVE SEALANT — Is a high performance reactive silyl-modified adhesive **SEALANT**. Permanently flexible. Cures to a tough, durable, elastic consistency with excellent cut and tear resistance.

COLOR:

10 OZ, 20 OZ, 2.5 GAL

SM7120 PU



SM7120 PU — Is a single component, gun-grade, non-sag, moisturecure polyurethane **SEALANT** designed to skin and cure rapidly.

COMPLIANCE: TT-S-00230 C (TYPE II) CLASS A, NON-SAG ONE-COMPONENT, ASTM C 920 TYPE S GRADE NS CLASS 25 USE-NT A M G AND O, COMM ITEM SPEC A-A-1556A, AAMA 808.3

COLOR:

10 OZ, 20 OZ

Visit www.holcimelastek.com or call us at 1-866-ELASTEK for a complete printed copy of this warranty or more information.

Elastek is a Holcim Solutions and Products US, LLC, brand

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