

Kool Roof Solutions™

White Reflective Membranes and Coatings



www.polyglass.us

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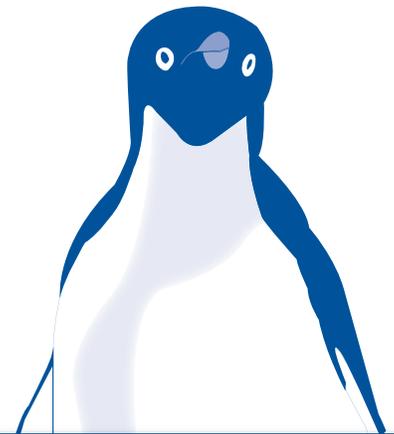
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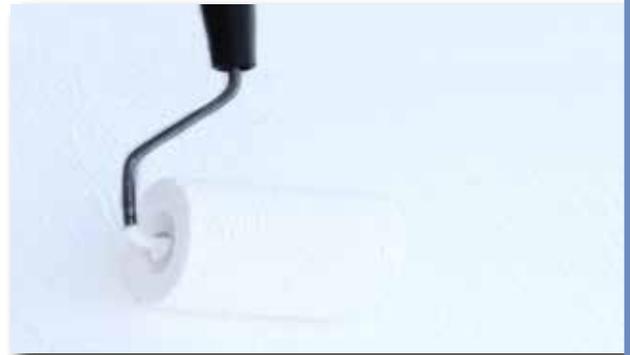


The Intelligent Choice for Premium Roof Protection



POLYGLASS® is committed to providing Kool Roof Solutions® for your cool roofing needs. Our Kool Roof Solutions are proprietary formulations developed in our state-of-the-art laboratories and manufactured with the industry's highest quality raw materials. Whether it's our modified bitumen membranes or white roof coatings, Polyglass is driven to develop advanced energy-saving roofing solutions which deliver long-term value for the building owner.

When choosing a solution to protect your roof, make the intelligent choice by using Polyglass Kool Roof Solutions.



“Cool roof technology allows the building owner to extend the useful life of the roof while decreasing the roof temperature.”



POLYGLASS' Newest Innovation



What is CURE Technology®?

CURE® Technology is a patent-pending thin film technology incorporated during the manufacturing process. The result is a modified bitumen membrane with greatly enhanced performance benefits without compromising the ease of installation and overall value expected from Polyglass products.

CURE stands for:

- **C**eramic microspheres
- **U**ltraviolet stabilizers
- **R**esins
- **E**nvironmentally-friendly

Benefits

- Vastly improved surface reflectivity and membrane emissivity
- Exceptional granule adhesion (cap sheets)
- Ultraviolet stabilizers resulting in greater durability and longevity
- Minimal scorching with torch application
- Impact, scuff and stain resistant
- Mold and fungus resistant
- Solvent-free and environmentally-friendly



Stain-Free

- Minimal staining on the surface of the cap sheet
- Significantly resists discoloration
- Maintains its color integrity and reflectivity, even over time



Reflectivity

- Maintains high membrane surface reflectivity
- Meets or exceeds ENERGY STAR® and other standards
- Initial reflectivity above industry standards



Granule Adhesion

- Superior granule adhesion
- Enhances the bond like no other
- Minimum loss of granules when exposed to foot traffic and other elements



Thin Film Technology

- Revolutionary process using minimal surface finishing while maintaining granule appearance
- Increased durability
- Improved reflectivity



POLYGLASS Self-Adhered (SA) Membranes



What is ADESO® Technology?

ADESO® Technology is a revolutionary concept of manufacturing dual-compound self-adhesive membranes using a “true” APP or SBS formulation on the top weathering side and an aggressive Self-Adhered formulation on the bottom side of the reinforcement.

ADESO Technology integrates patented features that enhance lap sealing and allows product design with a variety of customized surfaces.



MVACC-Multiple Variable

- Allows application of two distinct compounds on opposite sides of reinforcement



SBS Dual-Compound

- Allows application of SBS compound on the weathering surface and a self adhesive compound on the bottom surface of the reinforcement



APP Dual-Compound

- Allows application of APP compound on the weathering surface and a self adhesive compound on the bottom surface of the reinforcement



MSS - Multiple Surface Solutions

- Facilitates application of a variety of customized surfaces, to provide a wide array of roofing solutions
- End lap selvage protected by removable film



FASTLap - Granule-Free End Lap

- Patented process through which granulated sheets are manufactured with granule-free roll ends
- End lap selvage protected by removable film



SEALLap Factory-Applied Adhesive Treatment

- Unique factory-applied treatment at the membrane overlap sections to enhance sealability



POLYFRESKO® G

Performance

Polyfresko® G is a premium APP modified bitumen roofing membrane specifically designed for torch applications. Polyfresko G has a highly-reflective granular surface and features patent-pending CURE Technology® - a thin film that is applied during the manufacturing process resulting in a roof surface resistant to granule loss and discoloration. Bright white, Polyfresko G membrane has shown after accelerated weathering that it maintains its reflectivity and white appearance. Polyfresko G is also constructed with a high performance polyester reinforcement providing exceptional tensile strength and dimensional stability. For best results, treat lap areas, details and repairs with Polyglass Detail & Repair Finish featuring CURE Technology.

Uses

- Designed for heat-welded applications
- For applications directly over acceptable substrates and/or part of multi-ply systems
- Ideal for new roofing, reroofing and flashing details

Features

- Patent-pending CURE Technology
- Proprietary All Season APP compound suitable for many types of installation methods
- UL Class A Fire Rating
- California Title 24 compliant



Benefits

- Maintains bright white appearance over time
- Highly reflective white surface
- Exceptional granule retention
- Stain resistant

	Solar Reflectance	Initial	Weathered
	Thermal Emittance	0.74	Pending
	Solar Reflectance Index (SRI)	0.85	Pending
		90	Pending
	Rated Product ID Number	0616-0011	
	Licensed Seller ID Number	0616	
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.</small>			



POLYFRESKO® G SA

Performance

Polyfresko® G SA is a highly reflective granular surfaced APP modified bitumen roofing membrane meant for self-adhering applications. Polyfresko G SA is manufactured using patented ADESO® dual-compound self-adhesive technology. Polyfresko G SA also features patented FASTLap® for granule free roll ends, as well as SEALLap®, a factory-applied adhesive treatment at the membrane overlap for easy installation. Polyfresko G SA has a highly-reflective granular surface and features patent-pending CURE Technology® - a thin film that is applied during the manufacturing process resulting in a roof surface resistant to granule loss and discoloration.

Bright white, Polyfresko G SA membrane has shown after accelerated weathering that it maintains its reflectivity and white appearance. Polyfresko G SA membrane is also constructed with a high performance polyester reinforcement providing exceptional tensile strength and dimensional stability. For best results, treat lap areas, details and repairs with Polyglass Detail & Repair Finish featuring CURE Technology.

Uses

- Designed for self-adhering applications
- For applications directly over acceptable substrates and/or part of multi-ply systems
- Ideal for new roofing, reroofing and flashing details

 <p>CRRC COOL ROOF RATING COUNCIL</p>	Solar Reflectance	Initial	0.74	Weathered	Pending
	Thermal Emittance		0.85		Pending
	Solar Reflectance Index (SRI)		90		Pending
	Rated Product ID Number		0616-0011		
	Licensed Seller ID Number		0616		

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.



Features

- Patent-pending CURE Technology
- Patented ADESO Technology
- Patented FASTLap granule-free roll ends
- UL Class A Fire Rating
- California Title 24 compliant

Benefits

- Maintains bright white appearance over time
- Highly reflective white surface
- Exceptional granule retention
- Stain resistant
- ADESO self-adhering technology provides ease of installation and no fumes



POLYFRESKO® G SBS

Performance

Polyfresko G SBS is a premium modified bitumen roofing membrane available with a sanded back for mop or cold adhesive applications, or a polyolefin film for torch applications. Polyfresko G has a highly-reflective granular surface and features patent-pending CURE Technology® - a thin film that is applied during the manufacturing process resulting in a roof surface resistant to granule loss and discoloration. Bright white, Polyfresko G membrane has shown after accelerated weathering that it maintains its reflectivity and white appearance.

Polyfresko G SBS is constructed with a high performance polyester reinforcement which provides for a roofing membrane with exceptional tensile strength and dimensional stability. For best results, treat lap areas, details and repairs with Polyglass Detail & Repair Finish featuring CURE Technology.

Uses

- Sand back designed for hot mop or cold adhesive applications
- Film back designed for torch applications
- For application directly over acceptable substrates and/or part of multi-ply systems
- Ideal for new roofing, re roofing, and for flashing details

Features

- California Title 24 compliant
- Premium membrane construction for exceptional durability and puncture resistance
- Exceptional granule retention



Benefits

- Maintains bright white appearance over time
- Highly reflective white surface
- Exceptional granule retention
- Stain resistant

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance	0.74	Pending
	Thermal Emittance	0.85	Pending
	Solar Reflectance Index (SRI)	90	Pending
	Rated Product ID Number	0616-0011	
	Licensed Seller ID Number	0616	
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.</small>			





Performance

Polykool® membrane is a premium, fire-rated, modified bitumen APP cap sheet meant for self-adhering installations. Polykool membrane is manufactured using patented ADESO® dual-compound self-adhesive technology and features patented SEALLap®, a factory applied adhesive treatment at the membrane overlap for easy installation. ENERGY STAR® certified Polykool self-adhered membrane is finished with a patent-pending PVDF (Polyvinylidene Fluoride) bright white and highly-reflective film laminate weathering surface, and features a high performance reinforced polyester mat providing excellent dimensional stability. When installed as a system with Polykool Tape, Polykool membrane delivers superior watertight performance and a highly reflective, durable roofing surface.

Uses

- Designed for self-adhering applications
- For applications directly over acceptable substrates and/or part of multi-ply systems
- Ideal for new roofing, reroofing and flashing details

Features

- Patented ADESO Technology
- SEALLap® – a patented, factory-applied adhesive side lap
- Can be used as flashing membrane in all applicable specifications
- UL Class A Fire Rating
- California Title 24 compliant
- ENERGY STAR approved



Benefits

- White, reflective roof reduces building energy costs and heat island effect
- ADESO self-adhering technology provides ease of installation and no fumes
- Impervious to grease, oil and stains
- Self-cleaning surface

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance	0.76	0.70
	Thermal Emittance	0.80	0.91
	Solar Reflectance Index (SRI)	92	86
	Rated Product ID Number	0616-0001a	
	Licensed Seller ID Number	0616	

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POLYKool



BEFORE



AFTER



POLYBRITE 70

POLYBRITE® 70

Performance

Polybrite® 70 is a premium-grade, water-based elastomeric coating which cures to form a seamless membrane when applied over the entire roof area. Polybrite 70 has higher TiO₂ levels and other premium filling agents and conforms to ASTM D-6083. Polybrite 70 offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet rays and other weather exposures. Polybrite 70 is available in bright white and grey.

Uses

- Suitable for use on various BUR and polymer modified roof membranes with smooth and mineral surfaces, most metal roof systems, Thermoplastic and Thermoset single-ply membranes, concrete, exterior-grade plywood, rigid coverboards such as Dens-Deck® and Securock®
- Suitable for use on cementitious stucco, EIFS and other masonry surfaces

Features

- UL Class A fire rating
- High tensile strength and elongation
- Low VOC, non-flammable and presents minimal hazard to the environment
- California Title 24 Compliant (white color only)



Benefits

- Extends the life cycle of new and existing roof systems
- Excellent resistance to extended exposure to solar ultraviolet energy
- Resistant to dirt pick-up
- Fungal and algae resistant

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance	0.87*	0.75*
	Thermal Emittance	0.90*	0.90*
	Solar Reflectance Index (SRI)	110*	93*
	Rated Product ID Number	0616-0006	
	Licensed Seller ID Number	0616	

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.

*Values are applicable to White color only.



PG 700

Performance

PG 700 is a high quality, water-based acrylic latex elastomeric coating which cures to form a seamless membrane when applied over the entire roof area. PG 700 offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet rays and other weather exposures. PG 700 conforms to ASTM D-6083 and is available in bright white and grey.

Uses

- Suitable for use on various BUR and polymer modified roof membranes with smooth and mineral surfaces, most metal roof systems, Thermoplastic and Thermoset single-ply membranes, concrete, exterior-grade plywood, rigid coverboards such as Dens-Deck® and Securock®
- Suitable for use on cementitious stucco, EIFS and other masonry surfaces

Features

- High tensile strength and elongation
- Low VOC, non-flammable and presents minimal hazard to applicator or the environment
- CA Title 24 Compliant (white color only)



Benefits

- Extends the useful life of the roof
- Protects from ultraviolet rays and other weather exposures
- Resists dirt pick-up

		<u>Initial</u>	<u>Weathered</u>
	Solar Reflectance	0.87*	0.75*
	Thermal Emittance	0.90*	0.90*
	Solar Reflectance Index (SRI)	110*	93*
	Rated Product ID Number	0616-0007	
	Licensed Seller ID Number	0616	

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.

*Values are applicable to White color only.



PG 700

POLYBRITE® 24

Performance

Polybrite® 24 is a water-based acrylic latex elastomeric coating which cures to form a seamless membrane when applied over the entire roof area. Polybrite 24 offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet rays and other weather exposures. Polybrite 24 is available in bright white and grey.

Uses

- Suitable for use on various BUR and polymer modified roof membranes with smooth and mineral surfaces, most metal roof systems, Thermoplastic and Thermoset single-ply membranes, concrete, exterior-grade plywood, rigid coverboards such as Dens-Deck® and Securock®
- Suitable for use on cementitious stucco, EIFS and other masonry surfaces

Features

- Low VOC, non-flammable and presents minimal hazard to the environment
- California Title 24 Compliant (white color only)



Benefits

- Extends the useful life of the roof
- Excellent resistance to extended exposure to solar ultraviolet energy
- Resists dirt pick-up
- Fungal and algae resistant

	Solar Reflectance	Initial	Weathered
	Thermal Emittance	0.83*	0.70*
	Solar Reflectance Index (SRI)	0.88*	0.88*
		104*	85*
	Rated Product ID Number	0616-0012	
	Licensed Seller ID Number	0616	
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.</small>			

*Values are applicable to White color only.





POLYBRITE® 72

- Premium-grade white water-based elastomeric mastic which cures to form a seamless membrane
- Designed for use at various flashing and detail conditions when installing Polyglass' elastomeric coating systems



POLYBRITE® 74

- Water-based industrial rust inhibitive primer manufactured with a light blue color to easily determine coverage
- Designed to inhibit further oxidation resulting in rust degradation and to prevent bleed-through when using elastomeric coatings



POLYBRITE® 76

- Premium, specially formulated water-based elastomeric base coat specifically designed to serve as a stain-blocking coating
- Offers enhanced resistance to areas subject to standing water conditions
- Cures to form a seamless membrane when applied over the entire roof area



POLYBRITE® 90

Performance

Polybrite® 90 is a premium grade high solids, single component, moisture cure, fluid applied silicone coating available in white or as tinted, which cures to form a seamless membrane when applied over the entire roof area. Polybrite® 90 offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet sun and other weather exposures.

Uses

- Protect and waterproof a variety of roof surfaces
- Suitable for use on sprayed polyurethane foam, most metal roof systems, concrete, Thermoplastic and Thermoset single-ply membranes (primer may be required)
- Suitable for use over various conventional BUR and polymer modified roof membranes with smooth and mineral surfacing when primed with Polybrite 97X Epoxy Primer

Features

- Excellent resistance to weathering including: UV radiation, extreme temperatures, as well as rain, ice and snow
- VOC Compliant



Benefits

- Extends the useful life of the roof
- Can reduce energy costs by decreasing roof surface temperature
- Offers high tensile strength and elongation
- Fungal and algae resistant

	Solar Reflectance	Initial	Weathered
	Thermal Emittance	0.87*	0.70*
	Solar Reflectance Index (SRI)	0.89*	0.90*
		110*	86*
	Rated Product ID Number	0616-0013	
	Licensed Seller ID Number	0616	
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.</small>			

*Values are applicable to White color only.



POLYBRITE® 95

Performance

Polybrite® 95 is a ready-to-use, single component, solvent borne, moisture cure silicone roof coating available in white or as tinted, which cures to form a seamless membrane when applied over the entire roof area. Polybrite® 95 offers the unique ability to extend the life cycle of new and existing roof systems, in addition to keeping the surface cool, providing protection from ultraviolet sun and other weather exposures.

Uses

- Protect and waterproof a variety of roof surfaces.
- Suitable for use on sprayed polyurethane foam, most metal roof systems, concrete, Thermoplastic and Thermoset single-ply membranes (primer may be required)
- Suitable for use over various conventional BUR and polymer modified roof membranes with smooth and mineral surfacing when primed with Polybrite 97X Epoxy Primer.

Features

- Excellent resistance to weathering including: UV radiation, extreme temperatures, as well as rain, ice and snow



Benefits

- Extends the useful life of the roof
- Can reduce energy costs by decreasing roof surface temperature
- Offers high tensile strength and elongation.
- Fungal and algae resistant

	Solar Reflectance	Initial	Weathered
	Thermal Emittance	0.85*	0.66*
	Solar Reflectance Index (SRI)	0.895	0.90*
	Rated Product ID Number	106*	80*
	Licensed Seller ID Number	0616-0014	0616
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Council procedures.</small>			

*Values are applicable to White color only.



POLYBRITE 95





POLYBRITE® 97x

Performance

Polybrite® 97X is a two component, 1 to 1 ratio, water-based epoxy primer which enhances adhesion to a variety of porous and non-porous substrates.

Uses

- Adheres well to most metals, organic polymers, wood, masonry and vitreous surfaces
- Promotes enhanced adhesion of elastomeric silicone materials
- Excellent Alkali resistance

Features

- Versatile primer for a wide variety of substrate conditions
- Cures to form a hard lusterless coating

Benefits

- Low VOC
- Non-flammable



POLYBRITE® 78

Performance

Polybrite® 78 Rinseable EPDM Primer is a low viscosity sprayable liquid used to pre-treat an EPDM rubber roof membrane prior to power washing and application of the roof coating. Promotes adhesion of the elastomeric coating applied to the EPDM surface.

Uses

- Improves adhesion to EPDM for longer roof protection

Features

- User friendly, neutral pH formulation

Benefits

- Non-corrosive
- No special handling requirements



POLYBRITE® FMT

Performance

Polybrite FMT Field Mix Thickener is a high-tensile polyethylene fiber for use in the field by the applicator in order to modify thickness thereby enhancing sag resistance properties as well as application of high build applications when used with Polybrite silicone roof coatings.

Uses

- When added to Polyglass silicone roof coatings, the resulting compound (depending on quantity used) is suitable for use as a light brush-grade to mastic-grade compound for fabrication of cants, to seal joints, seams, through roof penetrations, fastener heads, flashings and miscellaneous details on various roof surfaces and substrates

Features

- When mixed with Polybrite silicone roof coatings, the resulting compound can increase the coating's tear strength which allows for excellent vertical hold for most surfaces and various roofing types



Benefits

- Applicator can quickly and easily mix this product into Polybrite silicone roof coatings using hand tools
- Applicator can determine desired level of thickness by volume (recommended 20%-50% by volume)



POLYBRITE FMT



Kool Roof Solutions™

White Reflective Membranes and Coatings



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ROOFING AND WATERPROOFING SYSTEMS



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