

ALUMAGUARD®

Flexible Weather-Proofing Jacket



Alumaguard® (formerly *Alumaguard® 60*) weather-proofing cladding from **Polyguard** products is the original, flexible self-healing membrane used world-wide on exterior ductwork, refrigeration and chilled water piping, tanks, vessels and equipment.

- Proven: With millions of square feet sold over the last 12 years, **Alumaguard** has the track-record engineer's favor. It replaces labor-intensive rigid aluminum and fabric/mastic systems at like or less installed cost.
- True **Zero Perm** Performance
- Self-Healing: the rubberized bituminous membrane seals small cuts punctures; is UV stable; and expands and contracts with the underlying substrate.
- Excellent emissivity and sound attenuation properties.
- Available in a matte white finish, **Alumaguard® Cool Wrap** meets the typical solar reflectance and thermal emittance requirements met by Cool Roofing membranes.

Description

Alumaguard is a composite membrane consisting of a multiply embossed UV-resistant aluminum foil/polymer laminate to which is applied a layer or rubberized asphalt specially formulated for use on insulated duct and piping applications. The rubberized asphalt acts as the substrate adhesive and provides the self-healing characteristics necessary to seal around punctures. Protecting the rubberized asphalt is an easily removed plastic release liner which gives **Alumaguard** its peel and stick functionality.

Uses

Alumaguard is designed to be used outdoors to weather-proof exterior insulated ductwork, piping or other insulated tanks, vessels and equipment. **Alumaguard** resists moisture, air and vapor intrusion.

Alumaguard(or Alumaguard All-Weather) is not for use indoors or in return air plenum applications. In these applications Alumaguard Lite is recommended.

Installation

All roof-top ductwork to which Alumaguard is to be applied must be designed with adequate slope (watershed) to prevent ponding water. Ponding water is defined as water that stays in place for greater than 24 hours.

Notes: Prior to the installation of Alumaguard®, ducts must be sealed in accordance with SMACNA HVAC Duct Construction Standards Metal and Flexible, 3rd Edition (2005), Seal Class A.

Alumaguard is typically applied to faced fiberglass board, rigid isocyanurate foam board with facing, or unfaced extruded polystyrene foam board.

Alumaguard products are most commonly applied over rigid insulation on outdoor piping and ductwork systems. However, **Alumaguard** products may be applied to clean and dry bare metal ducts. Care must be taken at terminations and where ducts attach to supports to make sure water entry is not allowed. All published application recommendations must be followed.

Applying Alumaguard to light density duct wrap is not recommended. Round or oval duct should be insulated with 3# or 6# pipe and tank wrap with appropriate facing.

Alumaguard is a "peel and stick" product which must be applied to a properly prepared substrate. In duct applications, **Alumaguard® Lite** must be used for the underside of the duct to eliminate the need for pinning. Complete installation instructions are available on our website, www.Polyguard.com.

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This information is based on our best knowledge, but POLYGUARD cannot guarantee the results to be obtained.

www.polyguardproducts.com/mechanical

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Packaging

Alumaguard is available in 4" and 36" x 50' LF rolls. Other widths are available subject to special pricing; minimum order quantities and extended lead times apply. Packaged 12 and 1 to a carton respectively.

Limited Warranty

Polyguard Products warrants material to be free from leaks caused by defects in materials or manufacturing for a period of ten (10) years from the date of installation when material is applied according to installation instructions in effect at time of installation. Contact **Polyguard** for complete details on the Limited Warranty.

Limitations

Alumaguard® should be installed on a properly prepared, clean and dry substrate. **Alumaguard** must be protected from damaging chemicals including petroleum and/or coal tar solvents.



Alumaguard should not be adhered directly to commercial roofing membranes. For specific information regarding **Alumaguard** and commercial roofing, refer to Technical Bulletin, 2011-1.

Alumaguard should not be handled on the asphalt side during installation; handle edges with the release liner still attached, pull the release liner off as you press it onto the substrate.

Alumaguard should be stored in a clean dry area with boxes laid horizontally and not on end. Alumaguard has a recommended shelf life of 12 months.

Note: Before installing Alumaguard®, please obtain a full set of our most current installation instructions on our website, or call Polyguard at 800-541-4994.

Alumaguard® Technical Properties and Testing		
Membrane Property	Test Method	Results
Product Thickness (without liner)	Micrometer	54 mils 57 mils (Cool Wrap)
Product Weight	Scale	0.3 lbs/sf
Water Vapor Transmission (grains/hr-ft ²)	ASTM E96-00	0.00
Permeance (US Perms)	ASTM E96-00	0.00
Peel Adhesion (to primed steel)	ASTM D1000	>12 lbs/in
Low Temperature Pliability	ASTM D146	No Cracks@-15°F
Tensile Strength (film only)	ASTM D882	35 lbs/in (MD) 45 lbs/in (XD)
Elongation (film only)	ASTM D882	18% (MD) 40% (XD)
Puncture Resistance (film only)	ASTM D1000	15 Lbf
Mold Resistance	ASTM C1338	Pass
Upper Temperature Limit	LAB	160°F
Emissivity	ASTM C1371	.030
Fire Performance	ASTM E 84	FSI=0 SDI=10 Classification: A
Alumaguard® Cool Wrap Properties and Test Results		Initial Three Year
Solar Reflectance (ASTM C1549)	0.86	0.82
Thermal Emittance (ASTM C1371)	0.82	0.86
California Title 24	Exceeds 0.75	Exceeds 0.75