



# COOLGUARD™ Roof RC-3700

## 100% Acrylic Urethane Insulating Roof Membrane

### Description:

COOLGUARD™ Roof is a powerful, high performance roof sealer, made from a thick and single component acrylic urethane that is 100% elastomeric and will waterproof roofs and walls. It will provide a single monolithic layer that waterproofs and insulates the surface. It significantly reduces the interior temperature of your house in two ways:

1. It will reflect 79% of all the sun rays, eliminating 89% of all the heat it received to the roof surface.
2. It uses Thermaguard Technology, a tiny insulating micro-spheres.

### Meets Requirements for:

ASTM D 6083:	Yes
CRRC (Cool Roof) :	Yes
Miami-Dade County:	N/A
VOC Compliant (<50 g/L):	Yes
SCAQMD:	Passes
AIM & OTC:	Passes

### Product Advantages:

- Primer + Coating + Elastomeric + Insulation
- Low V.O.C. and low odor
- High resistance to mildew and dirt
- 79% of solar reflectance
- 89% of heat reduction
- Seal and bridge cracks
- Can be used with base membranes
- May be reinforced with Lanco® mesh
- Prevents heat from being absorbed

### Performance:

Tensile Strength ASTM D 2370	244 psi@73°F
Elongation ASTM D 2370	187% @ 73°F
Reflectivity ASTM 1549	.87 initial .73 aged
Emissivity ASTM C 1371	.90 initial .88 aged
Solar Reflectance Index SRI: ASTM E 1980	111

### Uses:

COOLGUARD™ Roof is ideal for roof areas where a high build elastomeric coating and insulation is needed. Design for water-proofing and protecting a wide assortment of roofing substrates that are structurally sound, such as; conventional bituminous built-up roofs, polyurethane foam, concrete, metal, aged galvanized metal, wood, modified asphalt membranes and asphalt shingles.

### Technical Data:

Product Type:	100% Acrylic/Urethane
Finish:	Flat (1° - 3°) *Geometry 60°
Solids (%):	62 ± 2% by weight 59 ± 2% by volume
Weight/Gallon:	9.28 ± 0.05 lbs. (4.21 ± 0.02 kg.)
Colors:	White and tinting bases
Drying Time:	To touch: 60 - 80 min. To re-coat: 18 - 24 hrs.
Coverage:	
On Concrete:	50 ft. <sup>2</sup> /gal. (5.57 m <sup>2</sup> /gal.) @ 19 dry mils, 32 wet mils
On Metal:	100 ft. <sup>2</sup> /gal. (9.3 m <sup>2</sup> /gal.) @ 9.5 dry mils, 16 wet mils
Sizes:	5 gallons 1 gallon
Thinning:	Is not recommended.
Flash Point:	Non-flammable
Viscosity:	115 - 110 KU's
Percent Pigment by Weight:	32 ± 2%
VOC:	<50 g/L

Notice: The technical data contained herein are true and accurate to the best of our knowledge. Published technical data and instructions are subject to change without prior notice.

S.D.S.: Available upon request.

### Surface Preparation:

Make certain the roof substrate is thoroughly clean and dry. Remove all debris and old loose coatings by means of high-pressure water blasting, scraping or wire brushing. Any existing mildew on the surface must be completely killed and removed prior to the application of this product. Scrub mildewed surface with a mixture of 1 quart of household bleach with 3 quarts of warm water. Rinse completely and let dry. Surface should not accumulate water for more than 48 hours. Coat entire roof deck with Acrylic Primer Sealer AS-210, at a rate of 250 ft.<sup>2</sup>/gal., if necessary. This surface primer is specially designed to penetrate concrete, seal surface porosity and waterproof roof decks.

### Surface Application Recommendations:

When used as a stand-alone product, apply the first coat by pouring COOLGUARD™ Roof RC-3700 onto roof and spreading it at a rate of 50 ft.<sup>2</sup>/gal. Avoid going twice over the same area. Allow 24 hours before applying subsequent coats.

When used in combination with Polyester Fabric Mesh FM-222 a base coat of Aqua-Proof MD-863 base membrane must be applied to embed the polyester fabric. Please consult technical data sheet of base membrane for procedures.

### Coverage:

Metal Roofs	100 ft. <sup>2</sup> /gal. (9.3m <sup>2</sup> /gal.) 16 wet mils/ 9.5 dry mils per coat (19 total dry mils)
Wood Surfaces	100 ft. <sup>2</sup> /gal. (9.3m <sup>2</sup> /gal.) 16 wet mils/ 9.5 dry mils per coat (19 total dry mils)
Concrete Roofs	50 ft. <sup>2</sup> /gal. (5.57m <sup>2</sup> /gal.) 32 wet mils/ 19 dry mils per coat (38 total dry mils)
Asphalt Roofs	50 ft. <sup>2</sup> /gal. (5.57m <sup>2</sup> /gal.) 32 wet mils/ 19 dry mils per coat (38 total dry mils)
Polyurethane	50 ft. <sup>2</sup> /gal. (5.57m <sup>2</sup> /gal.) 32 wet mils/ 19 dry mils per coat (38 total dry mils)

Coverages on this table may vary for commercial Roofing System to be used. Consult the Roofing & Waterproofing Solutions/Specifications Manual for details.

**Surface Application Recommendations:**

**Weather:** Select a warm clear day for installation. Consult weather bureau if needed to ensure there is no forecast of rain. Do not apply product after 4:00PM. Product must be kept rain free for at least 6 hours after application.

**Water ponding areas:** Areas where water may accumulate for more than 48 hours must be corrected by using roof drains or other means available. If surface level corrections must be made, use Lanco® Ultra Level™ UL-221 self-leveling underlayment or a cement mix with Lanco® Concrete Admixture CB-9000. See Ultra Level™ UL-221 product specifications.

Important: If used on roofs with slope less than 1/2 inch per foot, warranty will be void if not re-coated annually with one coat of Urethanizer™.

**Repair joints, cracks and seams:** Make sure joints, cracks, seams and flashing are clean and dry. With a putty knife, apply Siliconizer™ Crack Filler and a polyester weave over cracks, seams, flashing and around any standing objects about 2 inches to both sides, and let dry thoroughly 24 hours. Lanco Polyflex one-part urethane should be used instead.

**Concrete roofs:** Repair holes or any weakened areas of concrete surface with good quality masonry cement mix using Lanco® CB9000 or CB4000 Admixture, or Lanco® Bonding Agent CB-950 as per product data application instructions and let dry. Apply concrete mix and let to cure.

**Metal roofs:** Remove rust and prime non-galvanized metals with Lanco® Metal Master Primer™. For galvanized metals, use Lanco® Super Galvanized Primer™ SG-664. Replace loose fasteners. Old fasteners must be covered with Lanco® Siliconizer Elastomeric Crack Filler™ RC-230 or Lanco® Polyflex one-part urethane, and let to dry for 24 hours.

**Polyurethane foam roofs:** Make sure surface is in good conditions, free of holes and cracks. If it's in optimum conditions proceed with application. Do not use over other 100% Silicone coatings.

**Asphalt membrane and built-up roofs:** Remove all loose mineral gravel and clean roof thoroughly. Repair cracks or joints with Lanco® Siliconizer Elastomeric Crack Filler™ RC-230 and Lanco® Polyester Weave MP-997, apply one coat of Lanco® Aqua-Proof™ MD-863 to the entire roof and let dry 24 hours to proceed, apply 2 coats of Coolguard to the entire area. Do not use on pebbles gravel roofs.

**Asphalt shingles:** Roof must be clean and completely dry. Apply 2 coats of Lanco® Aqua-Proof™ MD-863 at a rate of 60 sq. ft per gallon. Let dry 24 hours between coats. Be sure all tabs are completely sealed. If not, apply Lanco® Siliconizer Elastomeric Crack Filler™ RC-230 and Lanco® High Strength Polyester Weave MP-997 on tab joint and let dry 24 hours to proceed, apply 2 coats of Coolguard to the entire area.

**Method of Application:**

Apply with a Lanco® 3/4" Nap Rough Surface Roller PA-568 or airless spray. Wait 24 hours between coats. Apply only when temperature is above 50°F (10°C). Do not apply if temperature is expected to drop below 50°F (10°C) before the coating has completely dried. Two full coats are generally needed for proper sealing. Always apply coats in different directions. Never thin or dilute from full strength.

**Recommended equipment:** Use an airless pump with pressure of 1,500 to 2,000 psi. A fluid delivery of 1 to 2 gallons per minute with a spray tip of 0.026 to 0.035 will be adequate. Wait 24 hours between coats. The hoses should be at least 3/8" inside diameter and of the high-pressure rate type. If the hose length is more than fifty feet, a larger inside diameter will be required.

**Cleanup:** Clean roller and equipment after use with warm soapy water.

**Drying time:** Approximately 60 minutes to touch. Cure time is controlled by thickness of the applied coating, relative humidity and temperature. Allow 24 hours between coats.

**Limited warranty:** The manufacturers liability in connection with the sale of this product extends only to the replacement price if it should fail to comply with quality standards or specifications. Protect from freezing.

**Warning!** Do not allow product to freeze. Do not store in temperatures above 105°F. Protective clothing and eyewear should be used during application of this product. Ensure that lid is tight and pail is upright and secure before transporting. Do not allow pail to roll as this may cause lid to loosen and allow leakage to occur. Transport product placed on top of a protective cloth in cargo area of vehicle to prevent damage from accidental spills.

**Cautions:** Contains styrene butadiene and acrylic resin. In case of eye contact, flush thoroughly with water. Do not rub eyes. In case of skin contact, flush area immediately with clean water. If swallowed, do not induce vomiting. Consult a physician immediately. Use only with adequate ventilation. Keep out of reach of children.

