TECHNICAL DATA SHEET

Urethanizer™ RC-994

100% Acrylic-Urethane Ceramic Rubber Top Membrane

Description:

Urethanizer™ is a 100% acrylic + urethane blend of high performance components, urethane ceramic rubberized elastomeric roof and wall membrane sealer. A highly durable, fiber reinforced roof coating with superior adhesion properties. The ceramic composition of this product will significantly lower interior temperature of structures by reflecting 79% of the suns' rays and reducing heat by 89%. Urethanizer™ will not crack, crumble or peel off, withstanding severe weather and total joint movements. It will provide a seamless, waterproof and weather protective seal tightly adhered to the roof surface.

Meets Requirements for

ASTM D 6083:	Yes
Energy Star:	Yes
Miami-Dade County:	Yes
VOC Compliant (<100 g/L):	Yes
SCAQMD:	Passes
AIM & OTC:	Passes

Product Advantages:

- 100% Acrylic + Urethane + Ceramics
- Fibers reinforced for a high tensile strength
- Energy Star® certified for cool roofs
- Miami Dade County approved
- Excellent wind uplift resistance
- Excellent dirt pick-up resistance
- Low V.O.C.,volatile organic compound, and non-flammable

Performance:

Tensile Strength ASTM D 2370	304 PSI
Elongation ASTM D 2370	185%
Elongation ASTM D 2330	N/A
Water Permeability ASTM D 1653	30.8 perms
Solar Reflectance ASTM C 1549	82%

Uses:

Urethanizer™ has proven its outstanding properties during adhesion-in-peel testing, exceeding every standard as per ASTM C794 specifications over a variety of substrates like modified asphalt membranes, built-up roofs, polyurethane foam, concrete surfaces, aged galvanized metal, bonded tar and granulated shingles.

Technical Data:

Product Type:	100% Acrylic and Urethane
Finish:	Flat (5° - 10°) *Geometry 60°
Solids (%):	65 ± 2% by weight 54 ± 2% by volume
Weight/Gallon:	11.49 ± 0.05lbs. (5.22 ± 0.02kg.)
Color:	Applies blue and dries Ultra White
Drying Time: ASTM D1640	To touch: 60 min To recoat: 24 hrs
Coverage:	
Theorical:	866 ft.2/gal, 79 m2/gal
On Concrete:	75 ft.^{2}/gal. (7 m^2/gal.) @ 17 dry mils, 21 wet mils
On Metal:	150 ft.^{2}/gal. (14 m^2/gal.) @ 8.6 dry mils, 11 wet mils
Can Sizes:	5 gallons 1 gallon
Thinning:	Is not recommended
Flash Point:	Non-flammable
Viscosity:	120 - 125 KU
Percent Pigment by Weight:	38 ± 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.

F.D.S.: Available upon request.

Energy Saving:

Urethanizer™ is an Energy Star certified roof coating that will provide an energy efficient structure for many years, dramatically lowering internal temperature, thus requiring less energy consumption for cooling. Test results in three major US cities show that Urethanizer™ will provide an initial solar reflectance of 79% with maintained average reflectance after 3 years of 82% (ASTM C 1549) and the elimination of 89% (ASTM C 1371) of all heat received.
After 3 years of service, side by side comparison shows the superiority of Urethanizer™, as a white reflective coating, over other acrylic copolymer or elastomeric coatings.

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 Dry Coat Surface Cleaner. Rinse completely and let dry. Surface should not accumulate water for more than 48 hours. Coat entire roof deck with Acry Primer Seal AS-211, at a rate of 250 ft.^{2}/gal., if necessary. This surface primer is specially designed to penetrate concrete, seal surface porosity and waterproof roof decks.

Coverage:

Metal Roofs 11 wet mils/ 8.6 dry mils per coat (17.2 total dry mils)	93 ft.^{2}/gallon (8.6 m^2/gal.)
Wood Surfaces 11 wet mils/ 8.6 dry mils per coat (17.2 total dry mils)	93 ft.^{2}/gallon (8.6 m^2/gal.)
Concrete Roofs 21 wet mils/ 17 dry mils per coat (34 total dry mils)	55 ft.^{2}/gallon (5.1 m^2/gal.)
Asphalt Roofs 21 wet mils/ 17 dry mils per coat (34 total dry mils)	55 ft.^{2}/gallon (5.1 m^2/gal.)
Polyurethane 21 wet mils/ 17 dry mils per coat (34 total dry mils)	55 ft.^{2}/gallon (5.1 m^2/gal.)

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

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Surface Application Recommendations:

When used as a stand-alone product, apply the first coat by pouring liquid Urethanizer™ RC-994 onto roof and spreading it at a rate of 75 ft.2/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.

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 cement mix with Lanco® Concrete Admix-ture CB-9000. 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 applica-tion 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™. 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 Urethanizer 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 75 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.

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.