



®

URETHANIZER TECHNICAL DATA

Type:	Reinforced urethane acrylic copolymer	Storage conditions:	Store between 40°F and 90°F	
Drying Time (ASTM D 1640): 75°F and 50% RH	Tack free, minutes:	42	Full Cure	7 (seven) days
	Finger tack:	48		
	Zapon tack:	75		
	Dry Hard, minutes:	110	Application temperature:	Min. +45°F to 105°F (Ambient) Min. +40°F to 130°F (Surface)
	Dry Through, minutes:	185		

PROPERTY	ASTM TEST METHOD	RESULT	ASTM D 6083 REQUIREMENT
Liquid Requirements (Table 1)			
Brookfield Viscosity @ 73.4°F, cps	D 2196	26,200	12,000 - 85,000
Viscosity @ 73.4°F, KU	D 562	109	85 - 141
Volume Solids, %	D 2697	51.5	>50
Weight Solids, %	D 1644	66.2	>60
Film Properties (Table 2)			
Initial Tensile Strength @ 73°F, psi	D 2370	304	200 min.
Initial Elongation @ 73°F, %	D 2370	185	100 min.
Permeance (20 mil dry film, 73.4°F/50% RH, Inverted), perms	D 1653	30.8	50 max.
Water Swelling, Mass %	D 471	13.9	20 max.
Wet Adhesion to galvanized metal, pli	C 794 / D 903	5.4	
Wet Adhesion to EPDM, pli	C 794 / D 903	4.6	2.0 min.
Wet Adhesion to asphalt shingles, pli	C 794 / D 903	2.9	2.0 min.
Wet Adhesion to concrete, pli	C 794 / D 903	5.2	2.0 min.
Wet Adhesion to SPUF	C 794 / D 903	3.4	2.0 min.
Tear Resistance (Die C), lbf/in	D 624	79.0	>60
Fungi Resistance, rating	G 21	0	0 max.
Film Properties after 1,000 Hrs Accelerated Weathering (Table 2)			
Elongation @ 73°F, %	D 2370	167	100 min.
Low Temperature Flex, 1/2" mandrel, -15°F	D 522	Pass	Pass
Appearance after 1,000 hrs accelerated weathering	D 4798	Pass	No Cracking or Checking

COVERAGE:

Surface	Area	1st coat	2nd coat	3rdcoat	4th coat	Total System
Metal Roofs	100 sq.ft. per gallon	16 wet mils / 8.2 dry	16 wet mils / 8.2 dry	-----	-----	32 wet mils / 16.4 dry
Wood Surfaces	100 sq.ft. per gallon	16 wet mils / 8.2 dry	16 wet mils / 8.2 dry	-----	-----	32 wet mils / 16.4 dry
Concrete Surfaces	50 sq.ft. per gallon	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	-----	-----	64 wet mils / 32.8 dry
Built-up Roofs	50 sq.ft. per gallon	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	-----	-----	64 wet mils / 32.8 dry
General Surfaces	50 sq.ft. per gallon	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	-----	-----	64 wet mils / 32.8 dry
Polyurethane Surfaces	50 sq.ft. per gallon	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	-----	-----	64 wet mils / 32.8 dry
Asphalt Shingles	50 sq.ft. per gallon	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	32 wet mils / 16.4 dry	128 wet mils / 65.6 dry

Note: In order to obtain a commercial warranty from Lanco® for the application of a Urethanizer™ roof coating system, you must first consult with Lanco® in order to have the correct roof coating system recommendation for your particular need.



®

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ELASTOMERIC URETHANE WITH CERAMIC MICROSPHERES

ECO-FRIENDLY PROFESSIONAL ROOF SEALER

URETHANIZER™



SAVES ENERGY: • 79% Sun Reflectivity / ASTM C 1549
 • 89% Heat Emissivity / ASTM C-1371

LANCO® URETHANIZER™

Is a professional high performance urethane ceramic rubberized elastomeric roof coating and sealer. Lanco Urethanizer is a fiber reinforced high build roof coating having superior adhesion and durability. The ceramic composition of Lanco Urethanizer will significantly lower the temperature of your house or building by reflecting 79% of all sun rays and by eliminating 89% of the heat received. This product will not crack, crumble or peel despite severe weather or total joint movement. It will provide a seamless, 100% water resistant and weather-proof seal adhering tightly to any surface.

ADVANTAGES THAT OTHER ELASTOMERIC COATINGS WILL NOT GIVE YOU

- Urethane ceramic technology
- Fiber reinforced
- High UV rays reflectance
- High ozone resistance
- Insulates and provides a cool roof
- Excellent wind uplift resistance
- Salt spray resistant
- Good vapor permeability allowing the substrate to breathe
- Low VOC roof coating
- Excellent dirt pick up resistance
- Ultra fast dry technology
- Water-ponding resistant
- Excellent mildew and algae resistant film
- Applies blue, dries ultra white
- In most cases, no primer needed

ELASTOMERIC COATING WITH MANY USES

- As a flat or sloped roof waterproofing coating for metal, polyurethane, concrete, EPDM, asphalt, tile or wood roof
- As an energy efficient roof coating
- As a roof sealer to extend the life of your roof
- To insulate and reduce internal temperatures



URETHANIZER ADHERES BETTER TO ROOF AND WALL SURFACES

Laboratory tests certify that Urethanizer's adhesion-in-peel exceeds all specifications (ASTM C 794)¹ to a wide variety of surfaces, guaranteeing you many years of solid protection on surfaces such as:

- Polyurethane foam
- Concrete
- E.P.D.M.
- Hypalon
- Asphalt
- Stucco
- Wood
- P.V.C.
- Metal
- Brick
- Tiles

Property	ASTM Test Method	Result	ASTM D 6083 Requirement
Film Properties (Table 2)			
Wet Adhesion to galvanized metal, pli	C 794/D 903	5.4	
Wet Adhesion to EPDM, pli	C 794/D 903	4.6	2.0 min
Wet Adhesion to asphalt shingles, pli	C 794/D 903	2.9	2.0 min
Wet Adhesion to concrete, pli	C 794/D 903	5.2	2.0 min
Wet Adhesion to SPUF	C 794/D 903	3.4	2.0 min

URETHANIZER STARTS WHITER AND STAYS CLEANER LONGER



After 3 years of service, side by side comparison shows the superiority of Lanco Urethanizer as a whiter reflective coating (left exposure) to other acrylic or acrylic copolymer elastomeric coatings (right exposure). Urethanizer starts with a tough, high build, monolithic membrane based on a new and revolutionary technology of ultra small particle sized molecules tightly bonded together which prevent dirt to hold on to the surface, plus a high content of highly reflective pigments. Given its high content of highly reflective pigments, it will initially reflect 79%² of all sun rays and eliminates 89%³ of all the heat it receives. This revolutionary technology allows the finish to stay whiter than other products, maintaining an average solar reflectance of 82%⁷ three years after its application (as independently tested, ASTM C 1549). This ensures a long-term advantage versus other elastomeric coatings available in the market.

Material ID	ASTM Test Method	Result, Solar Reflectance, Air Mass = 1.5				
Specimen No.		1	2	3	Avg.	95% CI
RC-994	C 1549	0.780	0.778	0.775	0.79	0.003, 0.006

Material ID	ASTM Test Method	Emittance, ε				
Specimen No.		1	2	3	Avg.	95% CI
RC-994	C 1371	0.89	0.89	0.90	0.89	0.006, 0.014

BRIGHT FINISH THAT WILL STAY BRIGHTER

One of the main reasons for the deterioration of reflective coatings is the presence of mildew, fungi and dirt on the film. Lanco Urethanizer's film will stay brighter for a longer period of time than other coatings due to its excellent mildew and fungi resistance film properties, which have been certified in laboratory tests. Its fungi resistance rating is 0 as per ASTM G 21⁴.

Property	ASTM Test Method	Result	ASTM D 6083 Requirement
Film Properties (Table 2)			
Fungi Resistance, rating	G 21	0	0 max

This will guarantee you a longer period of service as an effective heat reflective coating, while maintaining a whiter finish on the applied structure.

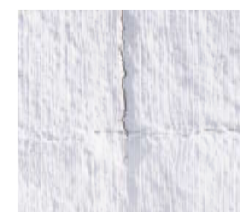
PROVEN HIGH FLEXIBILITY THAT RESISTS ROOF MOVEMENTS AND BRIDGES CRACKS

Roofs at any given moment are subject to structural movements. In addition, even the highest quality roofing substrates have small hairline cracks. Lanco® Urethanizer, with a proven initial elongation up to 185% (ASTM D 2370)⁵ and a tensile strength of 304 PSI (ASTM D 2370)⁵, will perfectly accommodate for these movements and additionally will bridge these cracks long after application by covering them completely with just two, properly applied coats and, if required, primed.

Property	ASTM Test Method	Result	ASTM D 6083 Requirement
Film Properties (Table 2)			
Initial Tensile Strength @ 73°F, psi	D 2370	304	200 min
Initial Elongation @ 73°F, %	D 2370	185	100 min

Urethanizer will expand and contract close to its original dimensions along with the surface to prevent the coating from wrinkling or breaking. The coating's film will even stay flexible in freezing weather (per lab results ASTM D 522, as low as -15°F)⁶ without losing its flexibility.

Property	ASTM Test Method	Result	ASTM D 6083 Requirement
Film Properties after 1000 Hrs Accelerated Weathering (Table 2)			
Low Temperature Flex, 1/2" mandrel, -15°F	D 522	Pass	Pass



Side by side comparison shows the superiority of Lanco Urethanizer to other elastomeric coatings as roof sealer for roofs with movement and cracks. After two months, the other roof coating applied to the top half of the crack failed completely. In contrast, Urethanizer, which was applied to the bottom half, remained intact after a full year of exposure with temperatures ranging from -15°F to 100°F.



CERTIFIED EFFECTIVE ENERGY SAVING COATING



Lanco Urethanizer is an Energy Star certified roof coating that will provide you many years of an energy efficient structure, dramatically lowering internal temperature, which require less energy consumption. Test results performed in three major US cities show that Urethanizer will provide an initial solar reflectance of 79%*, with a maintained average reflectance after 3 years of 82% (ASTM C 1549)⁷ and the elimination of 89% (ASTM C 1371)³ of all the heat received.

Material ID	ASTM Test Method	Result, Solar Reflectance, (r) Air Mass = 1.5				
Specimen No. Coating, Job No., Location		1	2	3	Avg.	95% CI
RC-994-1 Orlando	C 1549	0.795	0.792	0.804	0.80	0.006, 0.016
RC-994-2 Orlando	C 1549	0.812	0.806	0.810	0.81	0.003, 0.008
RC-994-3 Orlando	C 1549	0.797	0.814	0.810	0.81	0.009, 0.022
RC-994-1 Miami	C 1549	0.819	0.825	0.824	0.82	0.003, 0.008
RC-994-2 Miami	C 1549	0.831	0.826	0.830	0.83	0.003, 0.007
RC-994-3 Miami	C 1549	0.840	0.839	0.843	0.84	0.002, 0.005

*Initial reflectance values are shown lower than the maintained value due to the fact that the coating is blue at moment of application, turning ultra white after 7 days of exposure to sunlight.

CERTIFIED AS HIGH PERFORMANCE ELASTOMERIC COATING

Lanco Urethanizer surpasses all liquid and physical film properties required by the strict Miami-Dade County requirements. By applying Urethanizer, Lanco guarantees that you are using the very best high performance elastomeric roof sealer.



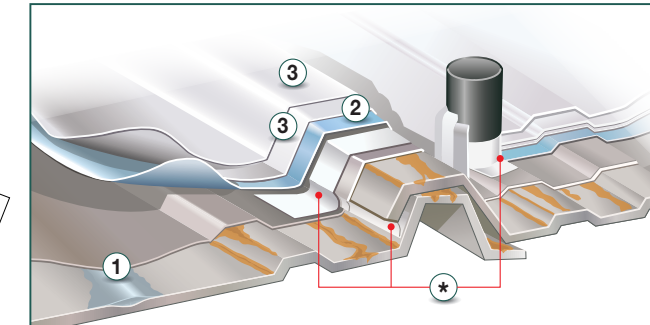
VERSATILE ROOF COATING SYSTEM

Lanco Urethanizer is ideal for all kinds of waterproofing applications over many types of roofs and walls such as metal, concrete, asphalt, stucco, tiles, wood, EPDM, hypalon, brick and PVC surfaces. Urethanizer comes in an ultra white finish and numerous factory made colors made to order.

A 1,2,3 PROFESSIONAL SYSTEM

Lanco Urethanizer is an easy to apply system:

1. Easy to apply, trowable mastic to level off water ponding areas (if required)
*If needed apply elastomeric crack filler mastic
2. Easy to apply blue primer
+ polyester membrane (if required)
3. Ultra white reflective top coat



EASY TO APPLY

Lanco Urethanizer waterproofing system comes in a soft, silky, non stick liquid that spreads freely and smoothly at the recommended spreading rate, using an airless sprayer or roller.



MEETS 100% OF FEDERAL SPECIFICATION TT-C-555B AS AN EFFECTIVE WATERPROOFING COATING

- Lanco Urethanizer will effectively seal and waterproof your roofs and walls, eliminating any leaks or humidity completely from your roof.
- In laboratory tests performed on resistance to wind driven rain, Urethanizer did not allow the substrate to gain any weight at all (TT-C-555B)⁸.
- This will guarantee a coating that will protect your structure for many years against leaks and humidity.

Property	Federal Test Method	Result	TT-C-555B: Section 4.4.7 Requirement
Resistance to Wind Driven Rain	TT-C-555B	Pass	Pass
Weight gain of block, lb	TT-C-555B	0	<0.2

