



Architectural & Protective Coatings

REFLECT•TEC® HEAT REFLECTIVE ROOF & WALL COATING

DESCRIPTION

REFLECT-TEC® is a high-performance roof and wall coating system formulated to withstand the harshest climates while offering high solar reflectivity and emissivity so that roof surfaces stay cooler. This water based Kynar Aquatec® / acrylic coating is breathable, yet offers superior resistance to UV, rain, wind, dirt, mold and mildew. REFLECT-TEC® reduces the amount of heat transfer into buildings by reflecting away the sun's infrared energy. This highly reflective coating can reduce peak cooling loads by as much as 25%, even in darker colors. Available in semi-gloss finish only.

FEATURES

- Advanced resin system.
- Offered in a wide range of heat-reflective colors.
- Mildew and dirt resistant finish.
- Resists rain, wind, ice, and snow.
- Superior fade resistance in all colors
- Flexible and breathable film.

BENEFITS

- Total Solar Reflectance (TSR) Values exceed Energy Star and Title 24 standards for steep-sloped roofs in all standard colors.

RECOMMENDED OVER

- Cement, Clay and Metal S-style roofing tiles where refinishing is necessary.
- Flat and standing seam metal roof and vertical metal wall surfaces where refinishing is necessary. Metal doors, canopies, and other ornamental metal surfaces.
- NOT intended for flat roof applications.
- NOT intended to be used for waterproofing purposes.
- NOT for use over glazed roofing tiles.

APPLICATION

Installation: TEX•COTE® REFLECT-TEC® can be applied by brush, roller, or commercial grade airless sprayer such as Graco 5900 or equal with tip size .013 to .015.

Surface Preparation: All surfaces must be sound, clean, dry, and free of contamination such as mildew, dirt, grease, oils, chalk and any other contamination that may affect adhesion prior to application of the TEX•COTE® REFLECT-TEC® system. All loose, flaking or oxidized paints shall be removed from surface by hand scraping, sanding and wire brushing and/or by use of power tool cleaning methods such as electric sanders, grinders, etc. Remove any dust, dirt, grease, oils, waxes, mildew, loose rust, mill scale, rust deposits or any other surface contaminants from surfaces by hand or power tool cleaning according to SSPC-SP2 or SSPC-SP3 standards.

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Mold, Mildew & Fungi: Surface area affected by mold, mildew and fungi should be thoroughly hand scrubbed with a soft to me-

dium bristle scrub brush and a solution of one cup Tri-Sodium Phosphate or a non-ammoniated detergent cleaner mixed with one part household bleach and three parts warm water, per gallon solution. Allow solution to stand on the affected surface areas for 10 - 20 minutes then rinse thoroughly with clean water and allow 24 - 48 hours to dry. Avoid contact with skin and eyes. Protect skin and eyes by wearing rubber gloves and eye goggles when working with bleach solution.

Priming is required on all surfaces prior to application of the REFLECT-TEC® System.

Priming: Previously Painted / Baked on Metal Finished Including Well Weathered Kynar® 500 surfaces: TCA METAL-PRIME™ Primer is recommended on hard, slick, or weathered coatings as a bonding coat. If in sound condition, apply a test area of the primer and allow to cure overnight, then test adhesion by cross-hatch method. If adhesion is poor, then mechanical abrasion such as sanding may be necessary followed by retesting the adhesion of primer. Apply at 300-400 square feet per gallon, making sure that a white, opaque primed surface is achieved.

Bare Metal: TCA METAL-PRIME™ Primer is recommended over bare galvanized, aluminum, galvalum, or cold rolled steel surfaces. All rust should be removed by sandblasting or other mechanical means. Apply at 300-400 square feet per gallon.

Cement or Clay Roofing Tiles: TCA TEX-BOND™ Primer is recommended at a spread rate of 300-350 square feet per gallon, making sure that all pores are adequately sealed and a white, opaque primed surface is achieved. Two primer coats may be required depending

upon the porosity of the surface.

REFLECT-TEC® Application Rate: Overall coverage rate will be between 175-200 square feet per gallon (4.9 to 6.0 square meters/liter). Two coats are recommended at 350-400 square feet per gallon each, depending on surface porosity to create a pin hole free finish. Deep tone colors require application in two coats at a minimum of 300-350 square feet per gallon each. Some deep tone colors may require more product depending on the color. An actual mock-up should be done prior to application to determine proper square footage per gallon for the color chosen. Apply by airless spray recommended. Back rolling be required depending on the porosity of the substrate.

REFLECT-TEC® Application: Over a dry, clean, properly prepared surface, apply REFLECT-TEC® Heat-Reflective Finish at the specified application rate. Application shall be at uniform film thickness over the entire roof surface. A wet edge shall be maintained during application at all times. To prevent lap marks, avoid starting and stopping midway on surfaces. Two (2) people spraying simultaneously may be required to avoid lap marks and inconsistent spray patterns.

Clean-Up:

Clean up wet material with soap and water; dried material with MEK or acetone.

BEST PERFORMANCE

- Surfaces shall be clean, dry and properly prepared.
- Do not apply material when snow, rain, or freezing conditions are imminent. Wet conditions combined with cold temperatures may cause improper curing of product.
- Protect product from freezing.

- Do not apply over damp surfaces or when rain is imminent.
- Application temperature shall be between 50°F rising, and not exceeding 100°F (10°C to 38°C).
- **DO NOT APPLY OVER WATER-PROOFING SEALANTS OR SILICONE-BASED PRODUCTS.**
- DO not apply product over pure silicone sealants.

- For sealing openings such as roof seams, flashings, and joints, use a reinforced micro sealant tape such as WebSeal from Eternabond prior to priming.
- All joints and seams should be sealed with high performance sealant like Sikaflex-15 LM. Tighten or replace all loose or corroded fasteners and seal as necessary.
- Allow sealant to dry 24 hours prior to applying any coatings.

TECHNICAL DATA

REFLECT-TEC® Applicable Standards American Society for Testing Materials (ASTM)

<u>Test Method</u>	<u>Property</u>	<u>Result</u>
AASHTO R31-09 (14)	SALT Fog and Cyclic Weathering	Passed—5000 Hours Total
ASTM B117	Salt Spray Resistance	Passed—500 Hours, Rust 9, Scribe Creep 2 mm
ASTM D714	Blistering Resistance	Passed—No Blistering, 10 Rating
ASTM D522	Flexibility—1/8 " Mandrel Bend	Passed—No Cracking or Splitting of Film
ASTM C1549-09	Total Solar Reflectance	Surface wall temperature reduced up to 40 degrees Fahrenheit depending on color and geographical location as compared to commercial acrylic paint.
ASTM E 84	Surface Burning of Building Material	Meets Class A Flame Spread Index
ASTM D 6904	Resistance to Wind Driven Rain	Passed
ASTM D3363	Pencil Hardness	6B
AAMA 2065-13 A5.1.1	T-bend Flexibility	Passed 2T
AAMA 2065-13 8.4.1	Cross Hatch Adhesion	Passed
AAMA 2065-13 8.5.1	Direct Impact Resistance	Passed
ASTM D1304	Chemical Resistance	Passed Waters, Alcohols, Oils, Detergents
ASTM G53	QUV-B Weathering	Passed 6000 Hours DE<2
ASTM G7	Florida S.45 Exposure	On going
ASTM C1371-04a (2010)e1	Emittance of Materials Near Room Temp.	Passed

Physical Properties

Solids by Weight: 40-52%
 Solids by Volume: 33-38%
 Weight per Gallon: 9.0-10.8 lbs.
 Viscosity: 100-115 KU
 VOC: < 50 grams/liter (<0.42 lbs/gal)

Additional Product Information

Resin Type: Kynar®/Acrylic
 Available Finishes: Semi-Gloss
 Application Temperature: 50 - 100°F (10 - 38°C)
 Dry Time: To touch: 1-2 hr Recoat: 4 hr
**** High humidity and cool temperature will result in longer dry, recoat and service times. ****

Overall Coverage Rate: 175-200 ft²/gal (4.3-4.9 m²/Liter)
 Film Thickness: 8-10 mils wet,
 3-4 mils dry
 Two coats application: 350-400 ft²/gal (8.6-9.8 m²/Liter) Per Coat
 Film Thickness per coat: 4-5 mils wet
 1.5-2 mils dry (Total 3-4 mils dry)
 For Deep tone color: 300-350 ft²/gal (7.4-8.6 m²/Liter) Per Coat
 Film Thickness per coat: 4.6-5.4 mils wet
 1.6-2 mils dry (Total 3-4 mils dry)
 ** Two Coats Application is required for pin hole free finish.**

VOC COMPLIANCE
 All TEX•COTE® products comply with federal and state Volatile Organic Compound (VOC) rules and regulations.

Current as of 1/2017	
SCAQMD	YES
CARB 2007 SCM	YES
CARB 2000 SCM	YES
OTC / LADCO	YES
OTC Phase II	YES
CANADA	YES

REFLECT-TEC® High Performance Coating Standard Colors

TSR = Total Solar Reflectance SRI = Solar Reflectance Index

Color	TSR	SRI
Bright White	0.89	113
Florida White	0.83	104
Golden Wheat	0.73	90
Chalk Beige	0.73	90
Wheat Field	0.68	83
Flint Gray	0.61	73
Island Sand	0.58	69
Clay Tone	0.55	65
Castle Gray	0.49	57
Terracotta	0.47	54
Lark Green	0.44	50
Cliff Brown	0.42	48
Dynamic Blue	0.40	45
Rich Red	0.38	42

Over 573 cool colors available upon request



Estimated increase in Total Solar Reflectance (TSR)

Light Colors >30%
 Medium Colors >100%
 Dark Colors >200%

Percentage increased as compared to conventional acrylic paints.

Estimated Reductions in Peak Cooling Load **

Light Colors: 20-30% Savings (KWh)
 Medium Colors: 15-25% Savings (KWh)
 Darker Colors: 10-20% Savings (KWh)

This data is generated from the Oak Ridge National Laboratory computer simulation. These numbers are theoretical only and are based on a single family one-story residence South Florida.

ORDER INFORMATION

Packaging:
 Available in 1, 5, and 55 gallon containers.

Colors:
 Over 570 heat reflective colors. Deep tones colors incur an additional charge.

Application Rate:
 Coverage rates will be between 175– 200 square feet per gallon (4.3 to 4.9 square meters/liter). Two coats are recommended

at 350-400 square feet per gallon (8.6 to 9.8 square meters/liter) each, depending on surface porosity and texture. Deep tone colors require application in two coats at a minimum of 300-350 square feet per gallon (7.4 to 8.6 square meters/liter) each. Some deep tone colors may require more product depending on the color. An actual mock-up should be done prior to application to determine proper coverage rate for the color chosen.

Shelf Life:
 12 month shelf life, based on the following:

- Containers stored upright and airtight in a cool, dry place at temperature between 45°F rising to 100°F (7°C-38°C).
- AVOID FREEZING.
- Skins formed on surface of product shall be removed prior to mixing, moving or using.

SAFETY

Do not breathe spray mist or dust. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

First Aid: In case of eye contact, flush immediately with large quantities of water for at least 15 minutes. Seek medical attention if blurring or redness continues.

In Case of Spill: Absorb with inert material and place into a suitable container for disposal. Dispose in accordance to the EPA and/or state and local guidelines.

WARRANTY

Upon completion of application of coating in accordance with the manufacturer's recommendations, Textured Coatings of America, Inc. will extend its limited commercial warranty for product replacement as a result of defect in the material. The manufacturer must be notified prior to the application of the coating and the application must be in compliance with the manufacturer's recommendations for installation. Textured Coatings of America, Inc. shall have no obligation to contribute to or otherwise participate in labor or cost associated with effecting repairs. Specimen copy of material warranty is available upon request.



TEX•COTE® REFLECT-TEC®
 Heat-Reflective Roof & Wall

TEX•COTE®
 TEXTURED COATINGS OF AMERICA, INC.

CORPORATE OFFICES & EASTERN PLANT
 2422 East 15th Street Panama City, Florida 32405
 Tel: (850) 769-0347 Fax: (850) 913-8619

COMMERCIAL SALES OFFICE
 4101 Ravenswood Road, Suite 218,
 Ft. Lauderdale, Florida 33312
 Tel: (954) 581-0771 Fax: (954) 581-9516

WESTERN PLANT
 5950 S. Avalon Blvd.
 Los Angeles, California 90003
 Tel: (323) 233-3111 Fax: (323) 232-1071

TCA shall in no event have any liability for personal injury or damages caused by any person walking on any roof surface coated with TCA products.

**Percentage of peak cooling reductions are based on models generated from the "Roof Savings Calculator" Beta Release V 0.92 Oak Ridge and Lawrence Berkeley National Laboratories. Cooling costs savings, percentage of peak cooling load and surface temperature reductions will vary based on color chosen, geographical location, climate condition and substrate type. In some climates, there may be a heating penalty. For more information, see www.texcote.com.