Architectural & Protective Coatings

REFLECT-TEC® Heat-Reflective Roof & Wall Coating

PRODUCT PROFILE

DESCRIPTION

REFECT-TEC® is a high-performance roof and wall coating system formulated to withstand the harshest climates while offering high solar reflectivity and emissivity keeping roofs and walls cooler. This water-based KYNAR Aquatec® acrylic coating offers superior resistance to UV, rain, wind, dirt, mold, and mildew. This highly reflective coating can reduce peak cooling loads by as much as 25% even in darker colors. Available in a semi-gloss finish.

FEATURES

- · Advanced Resin System
- Offered in a Wide Range of Heat-Reflective Colors Superior Fade Resistance in All Colors
- Mildew and Dirt-Resistant Finish
- Resists Rain, Wind, Ice, and Snow
- Flexible and Breathable Film

BENEFITS

- Total Solar Reflectance (TSR) Values Exceed Title 24 Standards for Steep-Sloped Roofs
- Reduces the Amount of Heat Transfer Into the Building Reflecting Away the Sun's Infrared Eneray

RECOMMENDED PRIMERS/SUBSTRATES

- Cementitious, Clay, and Metal S-Style Roofing Tiles where refinishing is necessary.
- Sloped Standing Seam Metal Roof and Vertical Metal Wall Surfaces where refinishing is necessary. Metal doors, canopies and ornamental metal surfaces.
- · Masonry Vertical Wall Surfaces when applied over approved primers.
- · Vinyl and Cement Board Siding.
- NOT intended for Flat Roof Applications
- NOT intended to be used for waterproofing.
- NOT for use over Glazed Roofing Tiles.

PRODUCT APPLICATION: ROOFS

INSTALLATION

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

SURFACE PREPARATION: **ROOF SURFACES**

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 the 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 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 medium 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: PREVIOUSLY PAINTED/BAKED-ON **METAL FINISH**

TEX-COTE® 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 72 hours, 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 the primer. Apply at 300-400 square feet per gallon, making sure that a white opaque primed surface is achieved.

PRIMING: BARE METAL

TEX-COTE® METAL-PRIME™ Primer is recommended over bare galvanized, aluminum, or cold rolled steel surfaces. All rust should be removed by abrasive blasting or other mechanical means. Apply at 300-400 square feet per gallon.

PRIMING: CEMENTITIOUS OR CLAY ROOFING TILES

TEX-COTE® TEX-BOND™ Primer is recommended at a coverage rate of 300-350 square feet per gallon, making sure that all pores are adequately sealed and a contiguous white, opaque primed surface is achieved. Two primer coats may be required depending upon the porosity of the surface.

PRODUCT APPLICATION: WALLS

INSTALLATION

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

SURFACE PREPARATION: MASONRY

All surfaces must be sound, clean, and dry prior to application of TEX-COTE® REFLECT-TEC®. All loose, flaking, or oxidized paint shall be removed from the surface by abrasive blasting, water blasting, wire brushing, or scraping. Large cracks, holes, and voids must be filled in with cement patching compound. Texture of patch shall match existing surface. Cracks less than 1/32" shall be filled with FLEX-PATCH® compound; larger cracks should be patched with cementitious patching component.

All surfaces must be primed with HI-REFLECTIVE Primer (Smooth), HI-REFLECTIVE Textured Primer, or other manufacturer-approved primers for masonry surfaces. See Technical Data for HI-REFLECTIVE (Smooth) and HI-REFLECTIVE Textured Primers.

SURFACE PREPARATION: VINYL

All vinyl siding, vinyl window surfaces, garage doors, flashing, and other vertical vinyal surfaces should be primed with TEX-BOND $^{\text{TM}}$ Primer. See Technical Data for TEX-COTE $^{\text{B}}$ TEX-BOND $^{\text{TM}}$ Primer.

SURFACE PREPARATION: BARE METAL

TEX-COTE® METAL-PRIME™ Primer is recommended over bare galvanized, aluminum, galvalume, or cold-rolled steel surfaces. All rust should be removed by abrasive blasting or other mechanical means. Apply at 300-400 square feet per gallon.

SURFACE PREPARATION: PRE-PAINTED METAL

All surfaces must be sound, clean, and dry prior to the application of TEX-COTE® METAL-PRIME™. All loose, flaking, or chalking paint should be removed by abrasive blasting or other mechanical means. Apply at 300-400 square feet per gallon.

APPLICATION RATE OF FINISH COATS

Coverage rates will be between 175-225 square feet per gallon (4.3 to 5.5 square meters/liter). Two coats are recommended at 350-450 square feet per gallon per coat, depending on surface porosity and texture. Deep-tone colors may 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 spray/back-rolling is recommended depending on the texture and porosity of the substrate.

APPLICATION

Over a dry, clean, properly prepared surface, apply the REFLECT-TEC® at the specified application rate. Application shall have uniform film thickness over the entire wall. A wet edge shall be maintained during spraying (brushing or rolling) at all times. To prevent lap marks, avoid starting and stopping midway on walls. On large areas, multiple applicators may be needed, spraying in vertical strokes initially, then cross roll for even film, ending with vertical strokes. To prevent lap marks, proceed as above and continue to a "natural break" such as panel edge, seam, or corner.

DRYING/CURING TIMES

- To Touch: Two (2) Hours Approximately
- Hardness: 24 Hours Minimum

NOTE: After 24 hours, residual matters in the film will continue to cure with additional days of drying. Times are based on ideal weather conditions.

CLEAN UP

- For Dry Material: Use Xylol, Acetone, or Methyl Ethyl Ketone (MEK)
- For Wet Material: Use Water to Clean-Up

BEST PERFORMANCE

IMPORTANT STEPS

- 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 the product.
- Protect product from freezing.
- Do NOT apply over damp surfaces or when rain is imminent.
- Application surface temperature shall be between 50°F rising, and not exceeding 100°F (10°C to 38°C) 5°F above dew point.
- DO NOT APPLY OVER WATERPROOFING 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 a high-performance sealant like Sikaflex-15LM.
 Tighten or replace all loose or corroded fasteners and seal as necessary.
- Allow sealant to dry 24 hours prior to applying and coatings.

TECHNICAL DATA

REFLECT-TEC® Applicable Standards | American Society for Testing Materials

TEST METHOD	PROPERTY	RESULT
AASHTO R31-09 (14)	SALT Fog and Cyclic Weathering	5,000 Hours - PASSED
ASTM B117	Salt Spray Resistance	500 Hours, Rust 9, Scribe Creep 2mm - PASSED
ASTM D714	Blistering Resistance	No Blistering, 10 Rating - PASSED
ASTM D522	Flexibility - 1/8" Mandrel Bend	No Cracking or Splitting of Film - PASSED
ASTM C1549-09	Total Solar Reflectance	Surface wall temperature reduced up to 40°F depending on the 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 D6904	Wind-Driven Rain Resistance	PASSED
ASTM D3363	Pencil Hardness	6B
ASTM 2065-13 A5.1.1	T-bend Flexibility	2T - PASSED
ASTM 2065-13 8.4.1	Cross Hatch Adhesion	PASSED
ASTM 2065-13 8.5.1	Direct Impact Resistance	PASSED
ASTM D1304	Chemical Resistance	Waters, Alcohols, Oils, Detergents - PASSED
ASTM G53	QUV-B Weathering	6000 Hours DE<2 - PASSED
ASTM G7	Florida S.45 Exposure	Ongoing
ASTM C1371-04a (2010) e1	Emittance of Materials Near Room Temperature	PASSED

APPLICATION	Wet Mils (Microns μ)	Dry Mils (Microns μ)	Ft²/Gal (m²/Liter)
Overall Coverage Rates: **2 Coats	7-9 mils Wet (178-229 μ)	3-4 mils dry (76-101 μ)	175-225 ft²/gallon
Minimum Per Coat	3.5 mils Wet (89 μ)	1.52 mils dry (38.6 μ)	450 ft²/gallon per Coat @4.5
Maximum Per Coat	4.5 mils Wet (1.14 μ)	2.0 mils dry (50.8 μ)	350 ft²/gallon per Coat
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^{**}High humidity and cool temperatures will result in longer dry, recoat, and service times.

PHYSICAL PROPERTY	RANGES
Volume Percent	33 - 38%
Weight Percent	40 - 52%
VOC (grams/liters minus water)	<50 grams/liter
Weight/Gallon (pounds)	9.0 - 10.8 lbs
Viscosity, 77°F (28°C)	100-115 Kreb units

ADDITIONAL PRODUCT INFORMATION

Applications Temperature	50 - 100°F (10 - 37.7°C)
Available Finishes	Semi-Gloss
Resin Type	Kynar/Acrylic
Dry Time - To Touch	One (2) to Two (2) Hours
Dry Time - Recoat	Four (4) Hours

TECHNICAL DATA

REFLECT-TEC® High-Performance Coating Standard Colors

TSR = Total Solar Reflectance SRI = Solar Reflectance Index

COLOR	TSR	SRI
Bright White Florida White Golden Wheat Chalk Beige Wheat Field Flint Gray Island Sand Clay Tone Castle Gray Terracotta Lark Green Cliff Brown Dynamic Blue Rich Red	0.89 0.83 0.73 0.73 0.68 0.61 0.58 0.55 0.48 0.47 0.44 0.42	113 104 89 90 84 73 69 66 54 50 48 45

OVER 573 Colors Available Upon Request!

Estimated Reductions in Peak Cooling Load **

Light Colors	20% - 30% Savings (KWh)
Medium Colors	15% - 25% Savings (KWh)
Dark 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 in South Florida.

The REFLECT-TEC® Systems Total Solar Reflectance (TSR) values exceed Title 24 Standards for steep-sloped roofs in all standard colors and has been rated by the Cool Roof Rating Council (CRRC).

VOC Compliance

All TEX-COTE® products comply with federal Volatile Organic Compound (VOC) rules and regulations. Please contact your nearest TEX-COTE LLC office for assistance on the local and state VOC compliance in the area of intended use.

ORDER INFORMATION

PACKAGING

COLORS

Available in one (1), five (5) and fifty-five (55) gallon containers.

Over 570 heat-reflective colors. Deep-tone colors incur an additional charge.

SHELF LIFE

12-Month Shelf Life under proper conditions:

- Containers stored upright and airtight in a cool, dry place at temperature between 45°F rising to 100°F (7°C-37.7°C).
- AVOID PLACING CONTAINERS IN DIRECT SUNLIGHT.
- Skins formed on surface of product shall be removed prior to mixing moving, or using.

SAFETY

WARNING

- 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 amounts 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.

WARRANTY

Upon completion of the application of the coating in accordance with the manufacturer's recommendations, TEX-COTE LLC will extend its limited commercial warranty for product replacement as a result of a 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. TEX-COTE LLC 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.

Corporate HQ & East Coast Facility

2422 E. 15th St., Panama City, FL 32405 | 800-454-0340 | 850-769-0347 | Fax 850-913-8619

South Florida Sales Office

7000 W. Palmetto Park Rd., Ste 210-W14, Boca Raton, FL 33433 | 954-581-0771 | Fax 954-581-9516

West Coast Facility

417 E. Weber Ave., Compton, CA 90222 | 323-233-3111 | Fax 310-438-2873

