



## Architectural & Protective Coatings

# TEX•COTE REFLECT•TEC™ HEAT REFLECTIVE ROOF COATING

### DESCRIPTION

REFLECT-TEC™ is a high-performance roof coating system formulated to withstand the harshest climates while offering high solar reflectivity and emissivity so that roof surfaces stay cooler. This water based fluoropolymer / 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 both satin and semi-gloss finishes

### 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 Values (TSR) 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
- Flat and standing seam metal roofing where refinishing is necessary.
- Recommended for sloped roofs only. NOT intended for flat roof applications.

### APPLICATION

#### Installation

TEX•COTE® REFLECT-TEC™ can be applied by brush, roller, or commercial grade airless. Commercial grade airless tip size .017 to .019.

#### 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 paint shall be removed from surface by sand blasting, water blasting, wire brushing or scraping. Mold, mildew, and fungi must be completely and thoroughly removed using a commercial grade mildew wash prior to applying any coatings. Priming is required on all surfaces prior to application of REFLECT-TEC™ Roof Coating.

#### Priming

Previously Finished Metal: TCA TEX-BOND™ 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 350-400 square feet per gallon, making sure that a white, opaque primed surface is achieved.

Bare Metal: TCA METAL-PRIME™ Corrosion Resistant 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.

S Style Roofing Tiles: TCA TEX-BOND™ Primer is recommended at a spread rate of 250-350 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

Coverage rates will be between 175-225 square feet per gallon (4.9 to 6.0 square meters/liter). Two coats are recommended at 400 square feet per gallon,

depending on surface porosity and texture. 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™ Roof Coating 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.

#### Drying/Curing Times

To touch: 2 hrs. approximately  
Hardness: 24 hrs.

### BEST PERFORMANCE

- Do not apply material when snow, rain, or freezing conditions are imminent. Wet conditions combined with cold temperatures may cause improper curing of product.
- Application temperature shall be between 45°F rising to 100°F (7°C to 38°C).

- Do not apply if rain is imminent.
- AVOID FREEZING.
- Surfaces shall be clean, dry and properly prepared.
- Formulated for use over TEX•COTE® approved primers only.
- Products shall be handled and stored as indicated herein.
- Trim areas, metals and other substrates

may require another TCA primer. Consult manufacturer or representative for recommendations.

- TCA does not promote or recommend coating the sealant joints, nor is the sealant compound an approved substance.

## TECHNICAL DATA

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

Test Method	Property	Result
ASTM 4587-11	Accelerated Weathering	Passed—3000 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 D4803-97	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 Characteristics	Test Pending

#### Physical Properties

Test Property	Ranges
Solids by Weight	40-52%
Solids by Volume	33-37%
Weight per Gallon	9.3-10.8 lbs.
VOC	< 50 grams/liter < 0.42 lb/gal

\*Specific properties based on base used for chosen color and STD

#### Additional Product Information

Resin Type	Kynar®/Acrylic
Available Finishes	Semi-Gloss/Satin
Dry Time	To touch: 1-2 hr Recoat:: 4 hr
Film Thickness	8-10 mils wet
Spread Rate:	300-400 ft <sup>2</sup> /gal

#### REFLECT-TEC™ High Performance Roof Coating Standard Colors

TSR = Total Solar Reflectance SRI = Solar Reflectance Index

Color	TSR	SRI*
Wheat Field	68.0%	0.83
Prominent Gray	62.6%	0.76
Island Sand	55.6%	0.66
Clay Tone	50.9%	0.60
Castle Gray	48.6%	0.57
Lark Green	44.4%	0.51
Terracotta	41.2%	0.47
Dynamic Blue	35.1%	0.39
Rich Red	33.0%	0.36
Truffle Brown	31.4%	0.34

\* SRI values are calculated using a theoretical emissivity of 0.90

Over 573 cool colors available upon request

#### Total Solar Reflectance (TSR) Increase Color Ranges by %

Light Colors	25% - 35%
Medium Colors	55% - 65%
Dark Colors	100% or greater

Percentage increased as compared to conventional acrylic paints.

#### Examples of Reductions in Peak Cooling Loads \*\*

Light Colors with TSR 0.60 or greater:	29% Savings (KWh)
Darker Colors with TSR 0.30—0.60	18% 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 – 225 square feet per gallon ( 4.9 to 6.0 square meters/liter ). Two coats are rec-

ommended at 350-450 square feet per gallon or one coat at 175-225 square feet per gallon, depending on surface porosity and texture. 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.

### 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

Contains hydrocarbon solvents. Use with adequate ventilation. Do not breathe spray mist or dust. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

### First Aid:

If you experience difficulty in breathing, leave area to obtain fresh air. If difficulty continues, seek medical attention. 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.

## VOC COMPLIANCE

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

## 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™



### 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](http://www.texcote.com).