

GUIDE SPECIFICATION TEX:COTE® REFLECT-TEC® FOR TILE ROOFS RENOVATION/RETROFIT

DIVISION 09 96 00 – EXTERIOR HEAT REFLECTIVE COATING

Part 1 General
1.01 SUMMARY
TEX•COTE® REFLECT-TEC® COATING SYSTEM

1.02 DESCRIPTION

TEX•COTE® REFLECT-TEC® COATING SYSTEM is a Kynar Aquatec® based PVDF coating featuring increased Total Solar Reflectance (TSR) and heat reflectivity for previous painted surfaces as indicated on the drawings, as scheduled, or specified.

1.03 SUBMITTALS

- A. Furnish manufacturer's Technical data Sheets and MSDS and drawdowns.
- B. Samples: Submit 8"x 10" drawdown samples for each color selected.

1.04 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Not less than 10 years successful experience in supplying materials of the types equivalent to those required for this project.
- B. Coats: The number of coats specified is the minimum acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as necessary to produce the required finish.
- C. Employ coats and undercoats for all finishes pursuant to the paint manufacturer's instructions.
- D. Regulatory Agency Requirements:
 - 1. Comply with state and local regulations governing use of paint materials
 - 2. Comply with OSHA guidelines for protective clothing, glasses, gloves, and respirators as required for project conditions.

1.05 FIELD SAMPLES

- A. Submit Mock-Up sample panel on jobsite building or surface as selected by Architect/ Owner/General Contractor. Provide a 10'x 10' sample for each separate substrate using the actual substrate materials.
- B. Obtain approval of color prior to proceeding.

1.06 **JOB CONDITIONS**

- A. Environmental Requirements:
 - a. Environmental conditions can be modified only if such requirements are a part of the manufacturer's application instructions or if the manufacturer supplies a letter amending the environmental conditions.
 - b. Ambient Air temperature: At least 45° F degrees but not exceeding 100° F degrees during application.
 - c. Precipitation: Do not apply primer and coating materials during precipitation and when precipitation is imminent or anticipated.



- d. Apply coating to surfaces that are free of surface moisture.
- e. Ultraviolet Light: Do not allow primer to be exposed to ultraviolet light for more than four weeks prior to application of coating. If exposure exceeds the four week limit, apply additional coat of primer.
- f. Do not apply coating in areas with airborne dust or where dust can be generated.
- B. Cementitious or clay tiles shall be installed and any gaps or openings around flashings should be sealed against water intrusion prior to coating using manufacturer approved sealants and tapes. This should be performed by a certified roofing contractor.
- C. Coatings shall not be applied over silicone or wax-based water proofing sealers as this can interfere with adhesion. Adhesion of primer should be tested over any new or existing tiles.
- D. Ensure that retaining walls, planter boxes and below grade surfaces are waterproofed on the side against the earth prior to application of finish to exposed surfaces.

1.07 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Packaging: Delivery materials to job site in manufacturer's original unopened containers, with labels intact and readable, listing manufacturer coating type, product name and batch.
- B. Manufacture's Instructions: Comply with manufacturer's instructions for storage and handling, including cautions on product data safety sheets.

1.08 WARRANTY

- A. Upon completion of application of coating in accordance with the manufacturer's recommendations, Textured Coatings of America, Inc. will extend its manufacturer's commercial warranty for product replacement as a result of defect in the material.
- B. The manufacturer must be notified prior to the application of the coating and the applications must be in compliance with them manufacturer's recommendation 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.
- C. Specimen copy of material warranty available upon request.
- D. Warranty Inspection required by Manufacturers
 - a. Surface preparation installation
 - b. Installation of primer
 - c. Final inspection of coating



RENOVATION/RETROFIT

Part 2 Products

2.01 MATERIALS

- A. Primer TEX·COTE® REFLECT-TEC® TEX-BOND™ Primer
- B. TEX•COTE® REFLECT-TEC® Finish

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	Class A Fire Rating	Passed		
ASTM D 6904	Resistance to Wind Driven Rain	Passed		

Table 2 Physical Properties		Additional Product Info		
Test Property	Typical			
Result		Resin Type	Kynar/	Acrylic
Solids by weight	40-52%	Available Finishes – Semi-Gloss/ Satin		
Solids by Volume	33-37%	Dry Time - To Touch: 1-2 hrs		ich: 1-2 hrs
Weight per Gallon	9.3-10.8lbs	Recoat: 4 hrs		
VOC	< 50 grams/liter			
	< 0.42 lb/gal	Overall Film Thic	ckness -	8-10 mils wet

2.02 APLICATION EQUIPMENT

Application for TEX-BOND™ Primer and REFLECT-TEC® Finish should be done with commercial grade airless sprayer such as Graco 5900 or equal.

2.03 MANUFACTURER

Textured Coatings of America, Inc. - Contact one of the offices for the local representative in your area:

Corporate Offices & Eastern Plant National Sales Office

2422 East 15th Street

Panama City, FL 32405-6348
T: 850-769-0347 F: 850-913-8619

4101 Ravenswood Road, Suite 218
Ft. Lauderdale, FL 33312-5371
T: 954-581-0771 F: 954-581-9516

2.04 COLORS

As indicated in drawings/color schedule or selected by Owner/Architect.



RENOVATION/RETROFIT

Part 3 EXECUTION

3.01 INSPECTION

Examine tile roofing surfaces scheduled to receive coating system for conditions that may adversely affect the work. Do not proceed with the work of this Section until unsatisfactory conditions have been corrected. Notify the Owner, Architect or Engineer in writing of any unsatisfactory conditions. Application for cementitious or clay roofing tiles in sound condition. All broken or defective tiles should be replaced before application.

3.02 PREPARATION

A. GENERAL

- a. Surface 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.
- b. All loose, flaking or oxidized paint must be removed from surface by water blasting, wire brushing, grinding or scraping. High and low points should be smoothed out to prevent peaks and valleys from being visible after coating. Excessive layers may require sand blasting.
- c. Mold, mildew, and fungi must be completely and thoroughly removed using commercial grade mildew wash prior to applying any coatings. This should be followed by pressure washing to remove unwanted contaminants. Allow surfaces to completely dry before application of coatings.
- d. Manufacturer's Representative to inspect surfaces prior to application of coating.

3.03 MATERIAL PREPARATION

- A. Remove skins formed on surface of material before moving containers, missing material, or applying material.
- B. Store material not in actual use in tightly covered containers. Maintain containers used in storage, mixing and application of coating in a clean condition, free of foreign materials and residue
- C. Do not store in sunlight. Do not allow freezing. Material should be maintained between 45°F and 95°F for best application properties.

3.04 APPLICATION

A. APPLICATION CRITERIA

- 1. TEX·COTE® TEX-BONDTM bonding primer should be applied over entire surface to be coated 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 250-350 square feet per gallon, making sure that all pores are adequately sealed and a white, opaque primed surface is achieved. Two coats of primer may be required depending on porosity of surface.
- 2. TEX·COTE® REFLECT-TEC® finish should be applied in two coats at a rate of 400 square feet per coat. Second coat can be applied as soon as first coat is dry to the touch.
- 3. Maintain a wet edge to prevent lap marks.
- 4. Do not apply material below grade or in contact with earth.



3.05 APPLICATION CRITERIA

A. APPLICATION/INSTALLATION CRITERIA

- 1. Completed coating system must provide a continuous pinhole free film.
- 2. Completed coating system shall match the accepted Mock-Up sample.

B. FINAL INSPECTION

- 1. Notify manufacturer's Rep to conduct final inspection of TEX·COTE® REFLECT-TEC® System upon completion of job.
- 2. Unacceptable finishes will be corrected at the expense of the Contractor.
- 3. Contractor to provide Manufacturer with completed application for Warranty.
- 4. Upon successful completion of job in accordance with the Manufacturer's instructions and this specification, Manufacturer to issue Owner MANUFACTURER'S WARRANTY.

3.06 CLEAN AND PROTECTION

- A. During course of work, remove discarded coating material, rubbish, cans, rags and similar construction waste from the site at the end of each workday.
- B. Upon completion of the coating work, clean window glass or other coating splattered surfaces. Protect work of other trades, whether to be coated or not, against damage by coating and finishing work. Correct any damage by cleaning, repairing or replacing and recoating, as acceptable to the Architect/Owner/Engineer.