SECTION 09960 – EXTERIOR PROTECTIVE COATINGS

1.00 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, and Division-1 Specification sections.

1.02 DESCRIPTION OF WORK
   A. Types of special coatings include, but are not necessarily limited to, the following:
      1. Concrete Coating System

1.03 RELATED WORK
   A. Concrete Surfaces (Tilt-up, Pre-cast and Cast-In-Place)

1.04 SYSTEM DESCRIPTION
   A. Concrete Coating System:
      1. TEX•COTE® XL-70 “W” Smooth Airless, spray-on: A high build, plasticized, epoxy acrylate, acrylic resin system specially formulated to provide a weatherproof surface applied over concrete and masonry surfaces.

1.05 SUBMITTALS
   A. Product Data: Submit manufacturer's technical information including label analysis and application instructions for each material proposed for use.
B. Wall Sample:

1. General: For each coating system specified, provide eight (8) foot by eight (8) foot wall sample for Architect's approval prior to beginning Project application of each special coating system.

C. Manufacturer's recommended application procedures which, when approved by Architect, will become the basis for accepting or rejecting actual application procedures used on the Wall.

1.06 DELIVERY AND STORAGE

A. Lids must be kept tightly sealed. Do not allow moisture to enter containers.

B. Store containers in a dry place, upright and airtight at temperatures of forty-five (45° F) degrees F. and not exceeding one hundred (100ºF) degrees F. Skins formed on surface of material must be removed prior to moving containers, mixing or using.

1.07 JOB CONDITIONS

A. Apply coating only when temperature of surfaces to be coated and surrounding air temperatures are between forty-five (45°F) degrees F and one hundred (100°F) degrees F, unless otherwise permitted by manufacturer's printed instruction.

B. Do not apply over frozen surfaces, or when rain is imminent.

C. Incompatible substrate release agents, form oils, and any foreign material are removed prior to priming and coating.

D. Roof and parapet top caps are installed and sealed against water penetration prior to priming and coating.

E. Primer shall not be exposed to ultra violet for more than four (4) weeks prior to application of coating. If exposure exceeds four (4) weeks, primer shall be re-coated, as recommended by manufacturer.

F. Material use is above grade only. Do not use below grade.
G. Paintable Joint Sealants must cure per manufacturer's recommendation. All joint sealants must be cleaned and wiped with an acetone solvent or approved cleaner prior to priming and coating.

1.08 WARRANTY

A. On completion, in accordance with manufacturer's current written specifications, provide Owner with manufacturer's written "Limited Warranty" for product replacement.

2.00 PRODUCTS

A. Textured Coatings of America, Inc.
   2422 East 15th Street
   Panama City, Florida 32405-6348
   (850) 769-0347
   4101 Ravenswood Road, Suite 218
   Fort Lauderdale, Florida 33312
   (954) 581-0771

2.02 MATERIALS

A. Tilt-Up, Pre-Cast, and Cast-In-Place Concrete Coating System:
   2. Textures: Smooth
   3. Colors: To be selected by Architect or owner.

B. Masonry, Split-Face/ Sand Finish Block, Stucco, and Other Approved Cementitious Surfaces
   1. TEX•COTE® XL-70 “W” Smooth Airless Coating
   2. Textures: Smooth
   3. Colors: To be selected by Architect or owner.

C. Patching Compounds:
   1. Fine Cracks up to 1/32": Brush or knife TEX•COTE® FLEX-PATCH® Smooth into cracks and bring to smooth and flush with concrete surface.
2. Cracks larger than 1/32": Use cementitious patching compound with acrylic bonding adhesive agent. i.e.: ARDEX, SACK-CRETE or equal. Fill cracks and bring smooth and flush with existing surfaces.

2.03 EQUIPMENT

A. TEX•COTE® XL-70 “W” Primer, XL-70 Solvent Primer:
   1. Spray Equipment: Graco 5900HD or equivalent with .015-.019 tip sizes.
   2. Suitable for application by roller with 1/4"-3/4" nap roller cover or brush.

B. TEX•COTE® XL-70 “W” Smooth Airless:
   1. Spray Equipment: Graco 5900HD or equivalent with .021-0.29 tip sizes.
   2. Suitable for application by roller with 1/4"-3/4" nap roller cover or brush.

3.00 EXECUTION

3.01 INSPECTION

A. Applicator must examine areas and conditions under which special coating work is to be applied and notify Contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until satisfactory conditions have been corrected in a manner acceptable to applicator.

3.02 SURFACE PREPARATION

A. General: Perform preparation and cleaning procedures in accordance with coating system manufacturer's instructions and as herein specified, for each particular substrate and coating condition.

   1. Remove hardware accessories, machined surfaces, plates, lighting fixtures and similar items in place and not to be finish-coated or provide surface applied protection prior to surface preparation and coating operations. Remove, of necessary, for complete coatings of items and adjacent surfaces. Following completion of coating of each area, reinstall removed items.

   2. All surfaces shall be sound and clean prior to application of primer and coatings. Such surface contaminants as dust, dirt, mildew, form oils, release agents, loose substrate, etc., shall be removed by water-blasting. Excessive form oils, release agents and curing
compounds may require light sandblasting. Waster-blasting/ power-washing of all surfaces to be coated is required.


4. Caulked Panel Joints must cure per manufacturer's recommendation. All joint sealants must be cleaned and wiped with an acetone solvent or approved cleaner prior to priming and coating. TEX•COTE® TEX-TITE™ Caulk Primer shall be applied to all joint sealants prior to application of coating.

3.03 MATERIALS PREPARATION

A. Mix and prepare coating materials in accordance with manufacturer's directions.

B. Store materials not in actual use in tightly covered containers. Maintain containers used in storage, mixing and application of coatings in a clean condition, free of foreign materials and residue.

C. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film, and if necessary, strain material before using.

3.04 APPLICATION

A. Apply coating in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

B. Tilt-Up, Pre-Cast, and Cast-In-Place Concrete Finish Coating System:

1. Primer Coat – Typical Tilt-Up or Pre-Cast concrete does not require the use of a primer prior to the application of TEX•COTE® XL-70 “W” Smooth Airless. When a primer coat is desired, apply TEX•COTE® XL-70 “W” Primer at a rate of 250-350 square feet per gallon. For concrete surfaces that exhibit chalking, calcium hydroxide, efflorescence, or other problems that may inhibit adhesion, apply TEX•COTE® XL-70 Solvent Primer at a rate of 175-300 square feet per gallon.

2. Finish Smooth Coat - Apply TEX•COTE® XL-70 “W” Smooth Airless at a rate of 80-100 square feet per gallon. Must achieve 7-10 mils DFT. Depending on porosity of cementitious surface, second coat may be necessary to achieve appropriate coverage.

3. A wet edge shall be maintained to prevent lap-marks.

C. Masonry, Split-Face/ Sand Finish Block, Stucco, and Other Approved Cementitious Surfaces Coating System:
Guide Specification

1. Finish Smooth Coat – Apply first coat of TEX•COTE® XL-70 “W” Smooth Airless at a rate of 80-100 square feet per gallon with spray equipment and back-roll to ensure adequate coverage. Apply second coat of TEX•COTE® XL-70 “W” Smooth Airless at a rate of 80-100 square feet per gallon with spray equipment only. Back-rolling should not be necessary for second coat. Must achieve minimum 14 mils DFT.

D. Avoid starting and stopping midway on wall. Continue to a natural break such as a panel edge or corner.

3.05 CLEANING AND PROTECTION

A. General:

1. Clean-up: During progress of work, remove from site discarded coating materials, rubbish, cans and rags at end of each work day.

2. Upon completion of coating work, clean window glass and 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 Architect.

3. Provide "wet paint" signs as required protecting newly-coated finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of coating operations.

4. At the completion of work of other trades, touch-up and restore all damaged or defaced surfaces.

4.00 PERFORMANCE CRITERIA

A. TEX•COTE® XL-70 “W” Smooth Airless Coating

1. ASTM B117-95 – Operating Salt Spray (Fog) Apparatus, 2000 Hours – Pass
4. Mississippi Highway Department Freeze/Thaw Method, 378 Cycles – Pass
5. ASTM D4141-95 – Standard Practice for Conducting Accelerated Outdoor Exposure Tests of Coatings, 10,000 Hours – Pass