

SECTION 09830

ELASTOMERIC WALL COATING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Application of coating system to all exterior plaster or stucco wall surfaces, including surface preparation and application of primer coat and top coat. All work in this section must be done by the contractor currently providing the warranty for the newly installed exterior wall coating system.
- B. Alternate #1 - Application of coating system to all exterior masonry and concrete wall surfaces, including surface preparation and application of primer coat and top coat. All work in this section must be done by the contractor currently providing the warranty for the newly installed exterior wall coating system.

1.02 RELATED SECTIONS

- A. Section 04510 – Masonry Restoration
- B. Section 07920 – Sealants and Caulking
- C. Section 09790 – Exterior Cleaning

1.03 SUBMITTALS

- A. Provide submittals in accordance with Section as provided in Section 1300 and as required by the consultant.
- B. Product Data: Submit manufacturer's technical information including basic material analysis, installation instructions, Material Safety Data Sheets (MSDS), and color chart for each material specified. Identify by manufacturer's product number and general classification.
- C. Samples: Provide representative samples in selected color for review. Submit 12-inch X 12-inch samples on hardboard or The City of Houston's review of color and texture only.
- D. Field Samples: On wall surfaces, prepare samples on each substrate type. Provide 4-foot X 4-foot full-coat finish sample of surface as directed until required color, and texture is obtained. Sample to be representative of surface preparation, primer application, and exterior wall coating application to be used in the completed Work.

- E. Field Tests:
 - 1. Perform adhesion tests on installed cured sample or samples prior to beginning exterior coating installation.
 - 2. Perform adhesion testing of patching compound and sealants used to repair cracks in the existing substrate.
- F. Final acceptance of colors will be from samples applied on job. Accepted sample may not remain as part of Work.

1.04 QUALITY ASSURANCE

- A. As provided in Section 01400.
- B. Qualifications of Manufacturer
 - 1. Products used in the work included in this section shall be produced by manufacturers regularly engaged in the manufacturing of similar items and with a history of successful production and product installations.
- C. Qualifications of Installers
 - 1. Installers shall be a professional waterproofing contractor thoroughly trained and experienced in the necessary crafts. Installers shall be made familiar with any unique requirements specified for proper performance of the work in this section.
- D. Rejection
 - 1. In the acceptance or rejection of work under this section, no allowance will be made for lack of skill or specification understanding on the part of the workmen. It shall be incumbent upon the contractor to use adequate numbers of skilled installers and to instruct them in the requirements of the project specifications as well as maintaining a set of the project specifications and drawings on the roof at all times.
- E. Replacement
 - 1. In the event inadequate or improper installation is determined, contractor shall make all repairs and replacements required to render the installation compliant with the project specifications. Replacements, due to improper performance shall be at the sole cost of the contractor.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Coordinate delivery with Consultant.
- B. Material containers, mixing, and dilution:
 - 1. Containers shall be closed and sealed except when materials are being removed.
 - 2. Follow Manufacturers' instructions for mixing and stirring.
 - 3. Cements, adhesives, primers, coatings, and sealants which have been diluted or cut-back, after their manufacture shall not be incorporated into the Work.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Work shall not commence during inclement weather.
- B. Work shall not commence on a day when precipitation is imminent or probable.
- C. Work shall not proceed over damp substrates.
- D. Coatings, sealants, caulking, primers and adhesives shall not be applied when the surrounding air and surface temperature, relative humidity, or wind velocity is not within the range acceptable under the manufacturer's recommendations.
- E. Do not begin work if rain is expected within twenty-four hours of application or, if temperatures are expected to fall below 50° F, during the duration of the job.
- F. Work demolition or removal work shall not commence on a day when the chance of precipitation is 30% or higher as forecast by the National Weather Service or local forecasts.

1.07 SEQUENCING AND SCHEDULING

- A. Coordinate and schedule all phases of the Work of the Contract Documents with the City of Houston, Consultant, Subcontractors, Material Suppliers and other parties as necessary to ensure the smooth and orderly transition of separate phases, or portions, of the Work, the timely placement of components and materials, including the complete cooperation between parties and proper execution of the Work.
- B. Work shall not be performed outside of normal business hours without the prior approval of the Consultant and/or The City of Houston's representative.

1.08 WARRANTY

- A. General Warranty: Special warranties specified in this Article shall not deprive The City of Houston of other rights The City of Houston may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

- B. Special Installer's Warranty: Written warranty, signed by Installer agreeing to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.

- C. Special Manufacturer's Warranty: Written warranty, signed by elastomeric coating manufacturer agreeing to furnish elastomeric coatings to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

- D. Special warranties specified in this Article exclude deterioration or failure of elastomeric coatings from the following:
 - 1. Movement of the structure resulting in stresses on the coating exceeding coating manufacturer's written specifications for coating limitations caused by structural settlement or errors attributable to design or construction.
 - 2. Disintegration of substrates from natural causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in coating appearance caused by accumulation of dirt or other atmospheric contaminants.

1.09 ADDITIONAL STOCK

- A. Provide one gallon container of each primer and finish coat to The City of Houston.

- B. Label each container with material name and type, color, texture, and application location, in addition to manufacturer's label.

PART 2 – PRODUCTS

2.01 ELASTOMERIC COATING

- A. Elastomeric Coating: For overhead soffit surfaces, waterproof elastomeric coating formulated from acrylic polymers and designed to retain its elasticity and flexibility on above-grade exterior surfaces; smooth texture. Colors shall be approved by the Owner.
- B. Acceptable Products:
 - 1. Colorflex by Sonneborn or approved equal.

2.02 PRIMER

- A. Primer: Primer suitable for previously painted or chalky substrates, compatible with exterior wall and elastomeric coating.
- B. Acceptable Products: Chalky Surface Primer by or as recommended by coating manufacturer for specific substrate conditions.

2.03 PATCHING COMPOUND

- A. Patching compound, knife grade and brush-grade, as required to suit application.
- B. Acceptable Products: Patching compound (Knife-Grade) and Patching Compound 750 (Brush-Grade) by or as recommended by coating manufacturer.

2.04 RELATED MATERIALS

- A. Sealant: Urethane sealant, compatible with elastomeric coating; Sololastic NP1 by Sonneborn or product as recommended by coating manufacturer.

PART 3 – EXECUTION

3.01 PROTECTION

- A. Protect work of other trades, whether to be coated or not, against damage.
- B. Protect or remove existing signage on building, monument sign as directed by The City of Houston. Re-install signage at completion of work.
- C. Protect adjacent surfaces including windows, window frames, light fixtures, doors, door frames, and ventilation grilles.

3.02 PREPARATION

- A. Pressure wash (2,100 psi) surfaces to receive new coating to remove oil, grease, laitance, caulk, mold, dirt, mildew, loose particles, and blistered or delaminated existing coating. Allow substrate to dry for a minimum of twenty-four hours.
- B. Repair loose or spalled masonry or texturing with repair material.
 - 1. Existing masonry surfaces shall be clean and sound.
 - 2. Mix repair material in accordance with manufacturer's written instructions.
 - 3. Apply repair material in multiple lifts until flush with adjacent surfaces.
 - 4. Finish repair surface with sponge, trowel, brush, or broom to match adjacent plaster surfaces.
- C. Apply primer after cleaning and proper surface preparation.
- D. Crack Preparation and Repair:
 - 1. Grind off or cut out existing coating along crack to be repaired to expose sound substrate material.
 - 2. Cracks less than 1/16-inch wide: Patch with textured knife-grade or brush-grade patching compound in accordance with coating manufacturer's written instructions.
 - 3. Cracks 1/16-inch or greater width:
 - a. Grind or rout cracks to 1/4 inch X 1/4 inch and remove dust.
 - b. Fill cracks until flush with surface with patching compound or Sealant in accordance with coating manufacturer's recommendations.
 - 4. Apply light coat of sand to patching compound or sealant before repair material cures if necessary to match texture of adjacent substrate. Sand to match size, texture, and appearance of adjacent substrate.
 - 5. Prepare substrate area to be coated in accordance with coating manufacturer's recommendations.
- E. Mask over all sealant cove joints, control joints, and expansion joints in areas to receive new coating.

3.04 INSTALLATION

- A. Prime Coats:
 - 1. Before application of finish coats, apply prime coat in a thin roll or brush coat to surface to be coated.
 - 2. Re-coat primed and sealed substrates where there is evidence of suction spots or unsealed areas in first coat to assure a finish coat with no burn-through or other defects due to insufficient sealing.
- B. Apply detail coat of coating over concrete patch areas, plaster patch areas and crack repair areas.
- C. Apply coating by brush, roller, or other application method in accordance with coating manufacturer's directions. Use brushes best suited for type of material being applied. Use rollers as recommended by manufacturer for material and texture required.
- D. Apply coating system with a minimum of three coats, or more if required, to prevent bleed through of substrate color. Apply additional coats when topcoats or other conditions show through final coat until cured film is of uniform finish, color, and appearance. Apply finish in pinhole free, continuous membrane.
- E. Minimum Coating Application Rates:
 - 1. 1st Coat: Base Coat shall be applied at the rate of 60 to 80 square feet per gallon.
 - 2. 2nd Coat: Base Coat shall be applied at the rate of 60 to 80 square feet per gallon.
 - 3. 3rd Coat: Base Coat shall be applied at the rate of 75 to 100 square feet per gallon.
 - 4. Contractor shall apply additional material as required to provide complete and even coverage.
- F. Brush Applications:
 - 1. Brush-out and work brush coats onto surfaces in an even film.
 - 2. Eliminate cloudiness, spotting, pin holes, laps, brush marks, runs, sags, ropiness, or other surface imperfections.
 - 3. Neatly draw lines and color breaks.

- G. Roller Applications: Backroll to eliminate pinholing. Do not dry roll.
- H. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or re-coat work not in compliance with specified requirements.
- I. Remove masking over sealant joints immediately after completion of coating work.

3.05 CLEANING

- A. During progress of work, remove discarded materials, rubbish, cans, and rags resulting from work from project site daily.
- B. Furnish and lay drop cloths in areas where coating and finishing is being done. Protect thru-wall penetrations, doors, walls, roof, and other surfaces from dripping materials. Where it becomes necessary to remove temporary coverings protecting material in place in order to proceed with work, replace or provide other satisfactory means of protection.

END OF SECTION