SECTION 09190
ANTI-GRAFFITI COATINGS

PART 1 - GENERAL

1.01 SUMMARY

A. **Section Includes:**
   1. Surface applied anti-graffiti coatings.
   2. Extended written warranty.

B. **Related Items:**
   1. Section 04500- Cleaning masonry
   2. Section 03500- Cleaning concrete
   3. Section 09900- Painting

1.02 SUBMITTALS

A. Comply with Section 01300, unless otherwise indicated. Substitution requests must be submitted 14 day prior to bid date.

B. **Product Data: Manufacturer's** specifications and technical data including the following:
   1. Detailed specification of construction and fabrication.
   2. Manufacturer's installation instructions.
   3. Certified test reports indicating compliance with performance requirements specified herein.

C. **Quality Control Submittals:**
   3. Field Quality Control Submittals as specified in Part 3.
   4. Manufacturer’s field reports.

1.03 QUALITY ASSURANCE

A. **Manufacturer's Qualification:** Not less than 5 years experience in the actual production of specified products.

B. **Installer's Qualifications:** Firm experienced in installation or application of systems similar in complexity to those required for this Project, plus the following:
   1. Acceptable to or licensed by manufacturer.
   2. Not less than 3 years experience with systems.
   3. Successfully completed not less than 5 comparable scale projects using this system.

C. **Product Qualifications:** The anti-graffiti coating shall meet the following requirements:
   1. Active Content: Organofluorosilane.
   2. Solvent: None, water-borne.
   3. VOC Content: less than 50 grams per liter.
   5. Breathability: ASTM D1653 greater than 95% water vapor transmission.
   6. Surface Appearance: No appreciable difference compared to non-coated surface.
   7. Excellent Ultraviolet light stability.

D. **Regulatory and Safety Requirements:** Products must have independent laboratory analysis that material does not contain any known carcinogens. Materials shall comply with State and local regulations concerning AIM (Architectural, Industrial and Maintenance) coatings regarding Volatile Organic Content (VOC). If used indoors the material must comply with the following safety requirements:
   a. Flammability, Smoke Spread and Toxic Fume Emission During Burning (BS 6853)
      i. Toxic gases below IDLH level.
      ii. Flame Propagation: Does not propagate flame
      iii. Smoke emission: No change
1.04 DELIVERY STORAGE AND HANDLING

A. Packing and Shipping: Deliver products in original unopened packaging with legible manufacturer’s identification.

B. Storage and Protection: Comply with manufacturer’s recommendations.

1.05 PROJECT CONDITIONS

A. Environmental Requirements:
   1. Maintain ambient temperature above 40 degrees F during and 24 hours after installation.
   2. Do not proceed with application on materials if ice or frost is covering the substrate.
   3. Do not proceed with application if ambient temperature of surface exceeds 100 degree F.
   4. Do not proceed with the application of materials in rainy conditions or if heavy rain is anticipated with 4 hours after application.

B. Sealer Coordination:
   1. Verify compatibility with curing compounds, patching materials, repair mortar, paints, sealants, to be used on masonry surfaces to ensure compatibility with the anti-graffiti coating.

1.06 SPECIAL WARRANTIES

A. The system manufacture shall furnish the Owner a written single source performance warranty that the Anti-Graffiti Coating System will be free of defects related to workmanship or material deficiency for a five (5) year period from the date of completion of the work provided under this section.
   1. All defective areas shall be retreated by the system manufacture as determined by the Engineer.
   2. The Anti-Graffiti manufacturer shall be responsible for providing labor and material to reseal area where coating effectiveness does not meet the specified limits.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Products of the following anti-graffiti manufacturer listed below will be acceptable for use on this project, provided that they meet the performance requirements of these specifications. Product substitution of materials or manufacturers must comply with Section 1.02.

1. Protectosil ANTIGRAFFITI®, Evonik Corporation 1-800- 828-0919.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
   1. Do not proceed until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Protection: Install coverings to protect adjacent surfaces.

B. Surface Preparation:
   1. Surfaces to receive sealer shall be cleaned of dirt, oil, graffiti, grease, laitance, and other contaminants. All other surfaces shall be cleaned by mid-pressure water (1500 psi) and commercial paint strippers. Pressure washing is the minimum cleaning that will be accepted other methods, such as blastracking, mobile power scrubbing and sandblasting may be submitted.
   2. Remove dirt, dust and materials that will interfere with the proper and effective application of the anti-graffiti coating. It is the responsibility of the Contractor to prepare the surfaces of the concrete.
as recommended by the Anti-graffiti Manufacturer and acceptable to the Engineer

3. Check the compatibility of all caulking and patching material to be used with the anti-graffiti coating.

4. Sealants, patching materials, and expansion joints shall have been installed and approved.

3.03 FIELD QUALITY CONTROL
A. Before an anti-graffiti coating will be accepted a field test evaluation will be done. The cost of the field testing will be the responsibility of the contractor. The owner’s representative will approve the test area prior to starting the project.

3.04 APPLICATION
A. Product shall be applied as per manufacturer’s application instructions and recommendations for this specific project. Provide written copy of manufacturer’s recommendations.

B. Apply at temperature and weather conditions recommended by the manufacture or written in this specification.

C. Surface residue shall be brushed out thoroughly until they completely penetrate into the surface.

D. Protect treated areas from rain and other surface water for a period of not less than four hours after application.

E. Provide adequate ventilation and follow all safety regulations for the City, County and State.

3.05 CLEANING
A. As Work Progresses: Clean spillage from adjacent surfaces using materials and methods as recommended by anti-graffiti manufacturer.

B. Remove protective coverings from adjacent surfaces when no longer needed.

3.06 COMPLETION
A. Work that does not conform to specified requirements shall be corrected and/or replaced as directed by the Owners Representative at contractor’s expense without extension of time.

END OF SECTION