

# GRAFFITI SHIELD®

## MASTER GUIDE SPECIFICATION

### SECTION 009800

#### Specialty Coating Systems

## Clear Graffiti Resistant Coating and Cleaner System

### PRODUCT DESCRIPTION

#### PART 1 – GENERAL

##### 1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Precast Concrete: Section 03400
- B. Membrane Waterproofing: Section 07110
- C. Sealants: Section 07900
- D. Moisture Protection: Section 07180
- E. Painting: Section 09900

##### 1.02 QUALITY ASSURANCE

- A. Qualifications of Applicator: Graffiti resistant coating system shall be applied by a Manufacturer-approved Applicator with basic knowledge of the material and application procedures.
- B. Jobsite Mock-Up: After initial samples have been approved, apply complete graffiti resistant coating system to one (1) side of the mock-up wall located at the jobsite. Graffiti resistant coating system shall be of the same type and sheen that will be used on the actual building. Application procedures and absorption rates shall be as hereinafter specified, unless otherwise recommended by the Manufacturer, in writing, to achieve uniformity of sheen and to effectively resist graffiti staining of the substrate.
  - 1. Approval by the Architect or Owner shall serve as a standard of comparison with respect to sheen and overall appearance on the remainder of the project.
  - 2. General application to actual surfaces on the building shall not proceed until the jobsite mock-up has been approved in writing by the Architect or Owner.

##### 1.03 SUBMITTALS

- A. Submit Manufacturer's literature, certificates and samples to the Architect or Owner in accordance with requirements specified in General Conditions and Division 1, General Requirements.
- B. Manufacturer's literature shall be submitted for review before work is started. Literature shall show material specifications, physical properties (including ASTM test methods utilized), Manufacturer's estimated application rates for the graffiti resistant coating system, current Manufacturer's application instructions and Material Safety Data Sheets.

*Modify above paragraph to meet project submittal requirements.*

#### **1.04 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Deliver materials in original sealed containers, clearly marked with the Manufacturer's name, brand name, type of material, batch number and date of manufacture.
- B. Store materials in an area where temperatures will not be less than 50°F (10°C) or higher than 90°F (32°C), and in accordance with OSHA & local code requirements.

#### **1.05 JOB CONDITIONS**

- A. Temperature and relative humidity conditions at time of application shall be per Manufacturer's application instructions. Do not apply material under rainy conditions or within three (3) days after surfaces become wet from rainfall or other moisture. Do not apply when weather is foggy or overcast, or if rain is anticipated within 2 hours of application.
- B. Take precautions to ensure that workmen and work areas are adequately protected from health hazards resulting from handling, mixing and application of material.
- C. Furnish all scaffolding and the necessary equipment to complete the work. Scaffolding shall comply with all local, state and federal requirements as to safety.
- D. Provide drop cloths and other forms of protection necessary to protect all adjoining surfaces, rendering them completely free from overspray and splashes. Any surfaces that have been damaged or splattered shall be cleaned, restored or replaced to the satisfaction of the Architect or Owner.
- E. Provide ventilation or forced air circulation during and after interior application of graffiti resistant coating until fumes are no longer evident.

*Delete paragraph E for exterior applications only. Ventilation Systems to Meet OSHA requirements.*

### **PART 2 – PRODUCTS**

#### **2.01 DESCRIPTION**

A two part, water-based, clear polyurethane coating that allows for the easy removal of graffiti and other stains. Coating system shall also provide excellent ultraviolet resistance, alkali and pollution resistance, and water repellency. For use over most vertical or horizontal, above-grade surfaces.

#### **2.02 MATERIAL**

Grffiti resistant coating shall be UNITED COATINGS' "GRAFFITI SHIELD", or prior approved equal, meeting the following minimum requirements:

- A. Graffiti Resistance: 200 scrubs with MEK with no effect [ASTM D 6578]
- B. Solids by volume: Maximum 31% (+/-2) [ASTM D 2697]
- C. Weight per Gallon: Minimum 8.6 lbs. (+/-2) (3.99 kg) [ASTM D 1475]
- D. Dry Time: 1 hour @ 75°F (24°C), 50% R.H. [ASTM D 1640]
- E. Cure Time: 48 hours @ 75°F (24°C), 50% R.H. [ASTM D 1640]
- F. Sheen (Angular Reflectance): 40 @ 60°Gardner [ASTM D 523]
- G. Temperature Limits for Service Conditions: From -30°F to 150°F (-34°C to 66°C).

### **PART 3 – EXECUTION**

#### **3.01 PREPARATION OF SURFACES**

Surfaces to receive clear, graffiti resistant coating shall be structurally sound, clean, dry, fully cured, and free from dust, efflorescence, scale or other foreign materials. Methods and materials used for cleaning of substrate shall be as recommended by the Manufacturer of the clear, graffiti resistant coating. Materials such as curing agents, form release agents, bond breakers and other concrete production materials shall be completely removed in accordance with the particular manufacturer's printed instructions for removal prior to coating application.

#### **3.02 MIXING**

Grffiti resistant coating components shall be thoroughly mixed in accordance with Manufacturer's instructions. Pour pre-measured unit of activator into short-filled container of GRAFFITI SHIELD. Power mix for a minimum of two minutes (five minutes if mixing by hand) to thoroughly disperse the activator. Allow blended material to activate 15 minutes prior to application. Once activated, useable pot life is approximately 4 hours at 75°F (24°C). Materials applied after the 4-hour pot life will not develop sufficient physical properties to resist graffiti removal, and must be discarded. Do not thin the material.

### 3.03 APPLICATION

- A. Graffiti resistant coating may be applied using brush or roller, as well as conventional or airless spray equipment, in strict accordance with the Manufacturer's printed application instructions and precautions, copies of which shall be at the jobsite. Applicators shall be required to wear chemical respirators in accordance with OSHA requirements during application.
- B. Applicator shall apply a field test on a small, inconspicuous area of the actual building surface to determine the best absorption rate to achieve sheen uniformity, as well as to determine suitability of the application technique.
- C. Material shall be applied at the following approximate rate:
  1. Porous or Unsealed Surfaces: Apply a single seal coat of UNITED COATINGS' Acrysheen at the rate of 200 to 250 square feet per gallon (4.9 to 6.1 m<sup>2</sup>/l) prior to clear, graffiti resistant coating application. After the seal coat has cured for 24 hours, apply two (2) coats of clear, graffiti resistant coating at the rate of 200 to 250 square feet per gallon (4.9 to 6.1 m<sup>2</sup>/l).
  2. Sealed or Painted Surfaces: Apply two (2) coats of clear, graffiti resistant coating at the rate of 200 to 250 square feet per gallon (4.9 to 6.1 m<sup>2</sup>/l).

*Insert the following paragraph where a higher surface sheen and/or increased graffiti resistance are desired.*

3. Additional Gloss and/or Graffiti Resistance: Apply an additional coat of clear, graffiti resistant coating at the rate of 200 to 250 square feet per gallon (4.9 to 6.1 m<sup>2</sup>/l) within 24 hours of application of the last coat of graffiti resistant coating.
- D. It is the applicator's responsibility to assure that all surfaces receive a uniform coat of clear, graffiti resistant coating at a minimum dry film thickness of 2 to 2.5 mils (51 to 64 microns) at any location. Coverage rate to achieve a consistent coating film and even visual appearance will vary depending on the surface texture and porosity of the substrate. When using the clear, graffiti resistant coating over coarse or textured surfaces, additional material will be necessary to achieve a uniform sheen and coating film.

*NOTE: While **GRAFFITI SHIELD** will increase the water-repellent properties of the substrate, it is NOT designed to WATERPROOF concrete block or other porous substrates.*

- E. When two (2) coats are applied, the first coat shall be applied in a uniform horizontal direction, followed by a second coat applied in a uniform overlapping vertical direction. This will ensure an even film and a uniform sheen. Work shall be scheduled so that the stopping point prior to each shutdown occurs at an opening, column or corner.
- F. Any surfaces that extend below-grade must be sealed with a waterproof membrane specifically designed for such purpose in order to prevent ground moisture from wicking up the masonry surface.

### 3.04 CLEANUP

Clean up any overspray from adjacent surfaces with cleaner that will not damage surfaces, as recommended by the stain Manufacturer.

### 3.05 FIELD QUALITY CONTROL

Graffiti resistant coating material containers shall not be removed from the jobsite until final completion or until so authorized in writing by the Architect or Owner.

### 3.06 GRAFFITI AND STAIN REMOVAL

- A. Effective graffiti removal is dependent upon the type of graffiti material used, length of time that stain has been on the substrate, and other environmental conditions. Always wear personal protective equipment (PPE) when using graffiti removal cleaners. Use cleaners only in well-ventilated areas. When using UNITED COATINGS' **GRAFFITI SHIELD Cleaner**, shake container well for 1 minute prior to use. Hold spray can and tip approximately 4 inches (10 cm) away from area to be cleaned, and evenly apply **GRAFFITI SHIELD Cleaner** approximately 1" (2.5 cm) above the stain, allowing cleaner to run down over the affected area.
- B. Apply a generous, even coat of **GRAFFITI SHIELD Cleaner** to a small manageable area. Let the cleaner penetrate the stain for 30 seconds to 1 minute prior to wiping the stain from the surface using a clean rag. Avoid runs and drips beyond the area to be cleaned. Depending on the type of stain being removed, several applications may be necessary. Textured surfaces may require the use of a solvent resistant scrub brush to agitate and loosen the stain prior to wiping from the surface.
- C. UNITED COATINGS' **GRAFFITI SHIELD Cleaner** contains FLAMMABLE SOLVENTS. Dispose of used rags and clothes in an approved, airtight container to prevent spontaneous combustion.



2810 S. 18th Place • Phoenix, AZ 85034  
1-480-754-8900 1-800-541-4383  
www.questconstructionproducts.com