SECTION [07 19 00] [09 93 00] [09 97 23]
[Water Repellents] [Staining and Transparent Finishing] [Concrete and Masonry Coatings]

Specifier note: The purpose of this guide specification is to assist the Specifier in developing a project specification for the use of Vexcon Construction products. Edit guide specification in accordance with project requirements. Delete, modify, or add text as required. Coordinate with other sections for general requirements and related work. Obtain current copies of manufacturer’s technical data sheet and other product literature before editing.

PART 1 – GENERAL

1.1 SUMMARY

A. Section includes:

Specifier note: Delete Sections not applicable.

B. Related Sections:
   1. Section 03 30 00 – Cast-in-Place Concrete
   2. Section 03 45 00 – Precast Architectural Concrete
   3. Section 03 47 00 – Site-Cast Concrete
   4. Section 03 41 00 – Precast Structural Concrete
   5. Section 04 20 00 – Unit Masonry

1.2 SUBMITTALS

A. Comply with Section [01 33 00] [___ __].

B. Product Data: Submit manufacturer’s product data include generic description, surface preparation, and application instructions.

C. MSD Sheet indicating VOC content and safety precautions.

D. Manufacturer’s Quality Assurance: Submit manufacturer’s certification that coating complies with specified requirements and is suitable for intended application.

E. Warranty: Submit manufacturer’s standard warranty.

F. Applicator Qualifications: Submit list of projects referenced as documented in this Specification under Quality Assurance Section.

G. Quality Control Submittals:
   1. Provide protection plan of surrounding areas and non-work surfaces.
1.3 QUALITY ASSURANCE

A. Comply with Sections [01400] [__ __ __].

B. Manufacturer Qualifications: Manufacturer shall demonstrate that they have manufactured specified products for a minimum of ten years.

C. Applicator Qualifications: Company shall have a minimum of five years experience in the application of specified products on projects of similar size and scope and is acceptable to the product manufacturer.

D. Field Test Sample:
   1. Install at project site an area for field sample, minimum 6 feet by 6 feet using specified material.
   2. Apply material in accordance with manufacturer’s written application instructions.
   3. Manufacturer’s representative or designated representative will review technical aspects; surface preparation, repair, and workmanship.
   4. Field sample will be standard for judging workmanship on remainder of project and will become the basis for accepting or rejecting actual application procedures used on the wall.
   5. Maintain field sample during construction for workmanship comparison.
   6. Do not alter, move, or destroy field sample until work is completed and approved by Architect.
   7. Obtain Architect’s written approval of field sample before start of material application, including approval of aesthetics, color, texture, and appearance.
   8. Perform adhesion test in accordance with ASTM D3359.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Comply with Section [01 60 00].

B. Deliver materials in manufacturer’s original, unopened, sealed containers with all label identification intact.

C. Store materials in unopened containers in dry, clean area between 35°F (2° C) and 90°F (32° C).
1.5 PROJECT CONDITIONS

A. Environmental Requirements:
   1. In accordance with manufacturer’s recommendations substrate and ambient temperature shall be 45°F (7° C) and rising at installation time. Contact manufacturer for application instructions when below 45°F.
   2. Do not apply if frost is present on the substrate.
   3. Weather Conditions: In accordance with manufacturer’s instruction, do not apply coating in snow, rain, or mist or when such conditions are expected. Allow surface to attain temperature ranges and conditions recommended by manufacturer before proceeding with installation.
   4. Do not apply on windy days.
   5. Do not apply in rain or when rain is expected within 24 hours.
   6. Do not apply above 85°F (29°C) or below 20°F (-6°C).
   7. Compliance: Follow manufacturer’s instructions with regard to safety, health, and state and local environmental regulations.

B. Protection:
   1. Wear protective goggles, gloves, and clothing during the application of the material.
   2. Warn personnel against breathing vapors and contact of materials with skin or eyes.

1.6 WARRANTY

A. Provide manufacturer’s limited warranty, co-signed by contractor and applicator, under provisions of section (01700), (01740). Warranty should state that structurally sound coated surfaces shows water penetration through structurally sound areas, or if spalling of the concrete occurs from chloride salt damage or freeze/thaw damage from date of application. Comply with manufacturer’s warranty registration procedures.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. Vexcon Chemicals
   7240 State Road
   Philadelphia, PA 19135
   Phone: 215.332.7709
   Fax: 215.332.9997
   Email: techservice@vexcon.com
   www.vexcon.com

B. Substitutions: Comply with Section [01 60 00].
2.2 MATERIAL

A. Coating System: Decorative breathable high solid acrylic/silane waterproof coating.
   1. Product as basis of design: Certi-Vex CACS by Vexcon Chemicals.
   2. Color(s): To be selected by architect or owner.

B. Performance Criteria: Coating shall have the following minimum performance properties:
   1. NCHRP 244 Series IV: Complies
   2. ASTM C-309, Type 1 Class A and B: Complies
   3. ASTM C-1315, Type 1 Class A: Complies
   4. ASTM D-5095 Solids 40% Minimum

PART 3 – EXECUTION

3.1 EXAMINATION

A. Applicator to verify substrate conditions are acceptable for coating system installation in accordance with manufacturer’s instructions. Do not proceed with work until any unsatisfactory conditions are corrected.

3.2 SURFACE PREPERATION

A. Protect adjacent work areas and finished surfaces.
B. Prepare surfaces in accordance with manufacturer’s instructions.
C. Clean surface to be treated of all dirt, oil, grease, efflorescence, laitance, dust, and other contaminants according to manufacturer’s instructions.
D. Repair small cracks and voids with Certi-Vex Patch RTU.
E. Repair larger damaged areas with repair materials approved by coating manufacturer.

3.3 APPLICATION

A. Mix and prepare coating in accordance with manufacturer’s instructions.
B. Material should be agitated before and during application.
C. Apply coating as a 2 coat system.
D. Maintain proper uniform wet film thickness during application to ensure performance characteristics desired.
E. Apply coating using consistent application techniques to achieve uniform appearance.

3.4 PROTECTION

A. Protect applied coating from damage during construction.

END OF SECTION