



SECTION 09 97 23
 Concrete and Masonry Special 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:
1. StarSeal HBC [Smooth] [Textured] Emulsion water based high-build 100% acrylic masonry [smooth] or [texture] paint and waterproof coating for exterior vertical/wall concrete and masonry surfaces.

Specifier note: Delete Sections not applicable.

- B. Related Sections:
1. Section 03 30 00 – Cast-in-Place Concrete
 2. Section 03 41 00 – Precast Structural Concrete
 3. Section 03 45 00 – Precast Architectural Concrete
 4. Section 03 47 00 – Site-Cast Concrete
 5. Section 04 21 00 – Clay Unit Masonry
 6. Section 04 22 00 – Concrete Unit Masonry
 7. Section 09 24 00 – Cement Plastering

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. LEED: Submit manufacturer's LEED Certification
- F. Warranty: Submit manufacturer's standard warranty.

- G. Applicator Qualifications: Submit list of projects referenced as documented in this specification under Quality Assurance Section.
- H. 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 8 feet by 8 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 45°F (7° 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. Keep from freezing.
 6. Do not apply in rain or when rain is expected within 24 hours.
 7. Do not apply above 90°F (32°C) or below 40°F (4°C).
 8. 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 shall remain adhere to the surface without cracking or peeling and will provide resistance to molds, fungi, and water penetration from date of application 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 water based high build 100% acrylic waterproof coating.
 - 1. Product as basis of design: StarSeal HBC [Smooth] [Textured] Emulsion by Vexcon Chemicals.
 - 2. Texture: As indicated on drawings or selected by owner.
 - 3. Color(s): To be selected by architect or owner.
- B. Performance Criteria: Coating shall have the following minimum performance properties:
 - 1. Federal Specification TT-C-555B: Meets requirements
 - (a) Wind-Driven Rain (100 mph) Test: Pass
 - (b) Accelerated Weathering: Pass
 - (c) Moisture Resistance: Pass
 - (d) Breathability, perms 1.5
 - (e) Flexibility: Pass
 - (f) Impact Resistance: Pass
 - 2. Federal Specification TTP-1411: Meets requirements

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 manufacturers 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.
- F. Apply to clean and sound surface StarSeal Block Fill Emulsion prime coat in accordance with manufacturer's instructions.

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 color and texture.

3.4 PROTECTION

- A. Protect applied coating from damage during construction

END OF SECTION