

Shield MX

Division 3: Concrete

A penetrating, silane/siloxane water repellent for both vertical and horizontal surfaces that complies with all existing VOC regulations.

SECTION 030130 – MAINTENANCE OF CAST IN PLACE CONCRETE

PART 1 GENERAL

1.1 SUMMARY

Provide labor, materials, equipment and supervision necessary to complete the application of waterproofing material.

1.2 SYSTEM DESCRIPTION

The products shall meet or exceed the following performance requirements:

Physical state and appearance		Milky white liquid
Solvent system		Aqueous
pH		9
Solids by weight		11 percent
Volatile organic content – VOC	ASTM D3960	Less than 50 grams per liter
Density of liquid coatings	ASTM D1475	8.4 pounds per gallon
Active ingredients		Siloxane based
Water vapor transmission	ASTM E96	100 percent
Water penetration and leakage	ASTM E514	100 percent reduction, no staining or leakage
Accelerated weathering – QUV	ASTM G154	2000 hours UV-B cycled with condensation – no effect
Resistance to salt spray	ASTM B117	Pass – no effect
Moisture absorption	ASTM C140	Reduction compared to control 94 percent
NCHRP 244 Series II		82 percent
Reduction in chloride ion intrusion		

1.3 SUBMITTALS

- A. Manufacturer’s current product data bulletin.
- B. The trained applicator shall prepare a test area on the structure as a submittal for approval of proper application and adhesion.
- C. The trained applicator shall submit to the specifier a list of five projects that he has completed within the last five years, exhibiting the applicator’s skills. The list shall include project name, location, and description of work and completion date.

1.4 QUALITY ASSURANCE

Products shall be installed by a trained applicator with a minimum of five years’ experience and meet the requirements of the specifier.

1.5 DELIVERY, STORAGE & HANDLING

- A. Deliver all products and all accessories in original labeled, sealed, and undamaged containers.
- B. Store all products in accordance with manufacturer's printed instructions.
- C. Handle products in accordance with manufacturer's printed instructions.

1.6 PROJECT/SITE CONDITIONS

All products shall be applied at substrate and ambient temperatures of 40 degrees F or above. A minimum temperature of 40 degrees F shall be maintained for 1 hour after completion of work. Protect products from weather and other damage, including traffic for a period of 8 hours after installation. Do not apply products to frozen surfaces.

1.7 SCHEDULING

The work requires close coordination with related sections and trades.

PART 2 PRODUCTS

2.1 MANUFACTURERS

The following manufacturers are approved for the project.
Conproco

2.2 MATERIALS

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PART 3 EXECUTION

3.1 EXAMINATION

- A. Installation shall be performed strictly in accordance with manufacturer's current product data bulletin.
- B. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
- C. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas and landscaping from contact due to mixing, handling, and application of materials.

3.2 SURFACE PREPARATION

- A. Surfaces to be treated must be clean, completely dry and free of frost, loose debris, coatings, dirt, mildew, oils and grease, or any other substance that would interfere with penetration.
- B. Inspect flashing around all openings, caulking, expansion joints and roof components to determine condition and for evidence of water entry. Material will not prevent water entry through cracks or voids.
- C. Repoint loose or deteriorating mortar and fill all voids and cracks in mortar.

3.3 APPLICATION

A. Mixing

1. Mix until homogeneous.

B. Application

1. Apply Conpro Shield MX by low-pressure sprayer with a fan tip for best results.
2. For vertical application, start at the bottom of the wall, slowly working up to generate a 4 to 6 inch rundown.
3. On horizontal surfaces, start at one edge and work backwards towards the opposite edge, applying enough material to saturate the surface.
4. Do not let product pond. If ponding occurs, excess material must be brushed or broomed out.
5. The surfaces must be permitted to dry after treatment for proper cure to take place. Refer to data sheet for additional application instructions.
6. Always apply a sample to determine coverage and ensure there is no discoloration from contaminants, excess moisture in the substrate or from previously applied treatments.
7. A single coat is usually sufficient, but on very porous surfaces, a second coat may be needed. Refer to the Data Sheet for additional application instructions.

C. Curing

1. Protect from moisture and traffic for eight hours. Material is fully cured in fourteen days.

3.4 CLEANING

- A. Material left over at the job site by the approved applicator shall be removed.
- B. All adjacent surfaces and materials shall be cleaned immediately.
- C. Clean glass with glass cleaner before material can dry. Cured material must be removed mechanically.

END OF SECTION 030130