SECTION 09 67 23-RESINOUS FLOORING

PROPOXY MB (Moisture Block), Moisture Mitigation Primer Underneath Resilient Flooring

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section includes the following:
   1. Resinous flooring system as shown on the drawings and in schedules.
B. Related sections include the following:
   1. Cast-in-Place Concrete, section 03 30 00
   2. Concrete Curing, section 03 39 00

1.3 SYSTEM DESCRIPTION

A. The work shall consist of preparation of the substrate, the furnishing and application of an epoxy moisture mitigating primer beneath resilient flooring systems.
B. The system shall be applied to the prepared area(s) as defined in the plans strictly in accordance with the manufacturer's recommendations.
C. ProPoxy MB is compatible with many different Adhesives and underlayment. Insure that the manufacturer of the product to be applied over the ProPoxy MB is contacted before the project is started to ensure compatibility. A second application of ProPoxy MB broadcast with 20 mesh sand will create a “mechanical tooth” in the event of compatibility issues.

1.4 SUBMITTALS

A. Product Data: Latest edition of Manufacturer’s literature including performance data and installation procedures.
B. Manufacturer’s Safety Data Sheet (SDS) for each product being used.
C. Samples: A 3 x 4 inch sample of the proposed system. Color, texture, and thickness shall be representative of overall appearance of finished system.
D. LEED Submittals:
   1. Product data for Credit EQ 4.2: For flooring system, documentation including VOC content and chemical composition.
   2. MR Credit 2.1, 2.2: Construction waste management, packaging can be recycled.

1.5 QUALITY ASSURANCE

A. The Manufacturer shall have a minimum of 5 years' experience in the production, sales, and technical support of epoxy and urethane industrial flooring and related materials.
B. The Applicator shall have been approved by the flooring system manufacturer in all phases of surface preparation and application of the product specified.
C. No requests for substitutions shall be considered that would change the generic type of the specified System.
D. System shall be in compliance with requirements of United States Department of Agriculture (USDA), Food & Drug Administration (FDA), and local Health Department.
E. A pre-installation conference shall be held between Applicator, General Contractor and the Owner for review and clarification of this specification, application procedure, quality control, inspection and acceptance criteria as well as production schedule.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Packaging and Shipping
   1. All components of the system shall be delivered to the site in the Manufacturer's packaging, clearly identified with the product type and batch number.
B. Storage and Protection
   1. The Applicator shall be provided with a storage area for all components. The area shall be between 60°F and 85°F, dry, out of direct sunlight and in accordance with the Manufacturer's recommendations and relevant health and safety regulations.
   2. Copies of Safety Data Sheets (SDS) for all components shall be kept on site for review by the Engineer or other personnel.
C. Waste Disposal
   1. The Applicator shall be provided with adequate disposal facilities for non-hazardous waste during installation of the system.

1.7 PROJECT CONDITIONS

A. Site Requirements
   1. Application may proceed while air, material and substrate temperatures are between 60°F and 85°F provided the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall be consulted.
   2. The relative humidity in the specific location of the application shall be less than 85% but not less than 30% and the surface temperature shall be at least 5°F above the dew point.
   3. The Applicator shall ensure that adequate ventilation is available for the work area.
   4. The Applicator shall be supplied with adequate lighting equal to the final lighting level during the preparation and installation of the system.
B. Conditions of New Concrete to Receive Coating
   1. Concrete shall be moisture cured for a minimum of 5 days pending moisture tests.
   2. Concrete shall have a flat rubbed finish, float or light steel trowel finish (a hard steel trowel is neither necessary nor desirable).
   3. Sealers and curing agents should not to be used.
   4. Concrete surfaces on grade shall have been constructed with a vapor barrier to protect against the effects of moisture vapor transmission and possible delamination of the system.

C. Safety Requirements
   1. All open flames and spark-producing equipment shall be removed from the work area prior to commencement of application.
   2. “No Smoking” signs shall be posted at the entrances to the work area.
   3. The Owner shall be responsible for the removal of foodstuffs from the work area.
   4. Non-related personnel in the work area shall be kept to a minimum.

1.8 WARRANTY

A. ProREZ Performance Resins & Coatings warrants that material shipped to buyers at the time of shipment be substantially free from material defects and will perform substantially to ProREZ Performance Resins & Coatings published literature if used in accordance with the latest prescribed procedures and prior to the expiration date.
B. ProREZ Performance Resins & Coatings liability with respect to this warranty is strictly limited to the value of the material purchase.
C. ProREZ Performance Resins & Coatings has no responsibility for the application and processing of products and is under no circumstances liable to any third party whatsoever.

PART 2 – PRODUCTS

2.1 FLOORING- ProREZ Performance Resins & Coatings: 16 Mil Moisture

1. System Materials:
   a. Primer (Pigmented): ProREZ Performance Resins & Coatings, ProPoxy MB (S or F) moisture mitigating primer. See data sheet.
   b. Shallow /Cracks, Control Joints (if Non Dynamic) Deep Fill and Patching: Use ProPoxy MB resin and hardener with ProThickener or clean dry silica sand suitable for troweling.

2.2 MANUFACTURER

A. ProREZ Performance Resins & Coatings, 47 Inwood Road, Cromwell, CT 06416-0153.
B. Manufacturer of Approved System shall be single source and made in the USA.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas and conditions, with Applicator present, for compliance with requirements for maximum moisture content, installation tolerances and other conditions affecting flooring performance.
   1. Verify that substrates and conditions are satisfactory for flooring installation and comply with requirements specified.

3.2 PREPARATION

A. General

1. New and existing concrete surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, dirt, and bituminous products.
2. Moisture Testing: Perform anhydrous calcium chloride test ASTM F 1869-98.
   a. Perform three tests for the first 1,000 sf and then one test per 1,000 sf after that.
   b. If the vapor drive exceeds 5 lbs/1,000 sf/24 hrs then the Owner and/or Engineer shall be notified and advised of additional cost for the possible installation of the ProPoxy MB moisture vapor mitigation system that has been approved by the manufacturer or other means to lower the value to the acceptable limit.
3. There shall be no visible moisture present on the surface at the time of application of the system. Compressed oil-free air and/or a light passing of a propane torch may be used to dry the substrate.
4. Mechanical surface preparation
   a. Shot blast all surfaces to receive flooring system with a mobile steel shot, dust recycling machine (Blastrac or equal). All surface and embedded accumulations of paint, toppings hardened concrete layers, laitance, power trowel finishes and other similar surface characteristics shall be completely removed leaving a bare concrete surface having a minimum profile of CSP 3-4 as described by the International Concrete Repair Institute.
   b. Floor areas inaccessible to the mobile blast machines shall be mechanically abraded to the same degree of cleanliness, soundness and profile using diamond grinders, needle guns, bush hammers, or other suitable equipment.
   c. Where the perimeter of the substrate to be coated is not adjacent to a wall or curb, a minimum 1/4 inch key cut shall be made to properly seat the system, providing a smooth transition between areas. The detail cut shall also apply to drain perimeters and expansion joint edges.
   d. Cracks and joints (non-moving) greater than 1/8 inch wide are to be chiseled or chipped-out and repaired per manufacturer's recommendations.
5. Patching
   a. Shallow, Cracks, Control Joints (if non-dynamic), and Deep Fill Patching: Use ProPoxy S Resin and Hardener or ProPoxy MB Resin and Hardener with ProThickener or clean dry silica sand suitable for troweling deeper fill patches.

3.3 APPLICATION

A. General

1. The primer shall comprise of 2 components, resin and hardener as supplied by the Manufacturer. *(mix ratio = 2 parts resin to 1 part hardener)*
2. The hardener shall be added to the resin and thoroughly mixed by suitably approved low speed drill mixer.
3. The primer shall be applied over horizontal surfaces using a v-notch, 15-20 WFT mils squeegee and 3/8" Roller using a flat squeegee as approved by the Manufacturer. (average coverage rate = 100 sq ft per gal).

4. Always check with manufacturer of material that will be applied after the application of the ProPoxy MB for compatibility. In the event of not being able to confirm compatibility a second coat of ProPoxy MB can be applied at 200-250 sq ft per gal.
5. Immediately broadcast clean, dry, fresh water washed and dried #20 silica sand (0.5 to 1.0 mm) to the uncured material at a rate of .2-.3 lb/sq ft.

3.4 FIELD QUALITY CONTROL

A. Tests, Inspection
   1. The following tests shall be conducted by the Applicator:
      a. Temperature
         1. Air, substrate temperatures and, if applicable, dew point.
      b. Coverage Rates
         1. Rates for all layers shall be monitored by checking quantity of material used against the area covered.

3.5 CLEANING AND PROTECTION

A. Cure flooring material in compliance with manufacturer's directions, taking care to prevent their contamination during stages of application and prior to completion of the curing process.
B. Remove masking. Perform detail cleaning at floor termination, to leave cleanable surface for subsequent work of other sections.