

M3P and M3P-X

Division 9: Finishes

A completely inorganic mineral silicate system providing opaque and semi-transparent finishes, long-term protection and enhanced aesthetics to structures.

SECTION 099113 – EXTERIOR PAINTING

PART 1 GENERAL

1.1 SUMMARY

Provide labor, materials, equipment and supervision necessary to complete the application of repair mortar to vertical and overhead surfaces.

1.2 SYSTEM DESCRIPTION

The products shall meet or exceed the following performance requirements:

Physical State & Appearance		Thick liquid emulsion, natural
Base		Aqueous
pH		11.2
Percent solids by weight		31 percent
Viscosity	ASTM D562	65 to 69 KU – paint paddle
Density of liquid coatings	ASTM D1475	9.4 pounds per gallon
Drying time		1 hour at 65 degrees F – dry to touch
Fungus resistance	Fed. Spec. TT-P-19D	Pass – no growth
Water vapor transmission – B	ASTME96	75 Perms
Water Vapor transmission	ASTM D6490	96% WVT
Accelerated weathering – QUV	ASTM G154	2000 hours – UV-B cycled with condensation- no effect
Water penetration and leakage	ASTM E514	100 percent reduction
Heat stability	ASTM C932	Pass – 2 weeks at 120 degrees F

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 or bundles.
- 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 45 degrees F or above. A minimum temperature of 45 degrees F shall be maintained 24 hours after completion of work. Protect products from weather and other damage for a period of 24 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

- A. M3P is a completely inorganic mineral silicate opaque finish that provides long-term protection and enhanced aesthetics to structures
- B. In most cases M3P will be applied without dilution. However, the opacity of M3P can be altered to meet the aesthetic requirements of the project by adding M3P-X. Dilute M3P with M3P-X at predetermined addition rates to create semi-transparent stain if desired.
- C. Color _____ Dilution ratio _____ (if applicable)

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. Prior to application of products, inspect the substrate for proper cleaning and treatment of structural cracks, texture differences, damage, etc. Work shall not proceed until unsatisfactory conditions are corrected.

- B. All substrates must be sound and free from loose debris, oils, paints, sealers, form treatments or any substances that would interfere with proper penetration.
- C. Typical preparation method is high pressure water blasting. Chemical cleaners may be used to remove stains and surface contaminants. If chemical cleaners are used, the surface must be neutralized prior to application of M3P.
- D. Allow surface to dry completely. New concrete must be cured 7 days before application. A dry surface is necessary to allow maximum penetration.
- E. Adjacent surfaces should be protected from spatter or over spray (use masking tape and polyethylene film).
- F. Do not apply M3P to horizontal surfaces.

3.3 APPLICATION

- A. Priming
 - 1. M3P is a self-priming two coat system.
- B. Mixing
 - 1. Mix until homogeneous. Do not use high-speed mixers or over mix as this will entrain excess air.
- C. Application
 - 1. Apply M3P with roller, brush or spray. Spray applications must be back rolled while wet.
 - 2. Do not cut in. Work to pre-determined break points in the structure.
 - 3. Maintain a wet edge while working to each architectural break point.
 - 4. The second coat of M3P can be applied as soon as the first application is dry to touch.
 - 5. A test application is strongly recommended to determine coverage and final appearance.
 - 6. Protect all surfaces against wet or damp weather conditions for at least 24 hours after application.
 - 7. In most cases M3P will be applied without dilution. However, the opacity of M3P can be altered to meet the aesthetic requirements of the project by adding M3P-X.
- D. Curing
 - Protect from moisture for 24 hours.

3.4 CLEANING

- A. Material left over at the job site by the approved applicator shall be removed.
- B. Clean tools, equipment and adjacent areas with soap and water before material dries. M3P and M3P-X are highly alkaline.
- C. Clean all metal and glass surfaces immediately to prevent permanent discoloration.
- D. Any foreign material resulting from the work of the approved applicator shall be removed.

END OF SECTION 099113