SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes surface preparation and the application of paint systems on the following exterior substrates:

1. Concrete.
2. Concrete masonry units (CMU).
3. Steel.
4. Galvanized metal.
5. Wood.
6. Exterior portland cement (stucco).

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples: For each finish and for each color and texture required.

C. Product List: Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.

1.3 QUALITY ASSURANCE

A. MPI (Master Painters Institute) Standards:

1. Products: Complying with MPI standards indicated and listed in "MPI Approved Products List." See www.paintinfo.com.
2. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems indicated.

B. Mockups: Apply benchmark samples of each paint system indicated and each color and finish selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. University will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.

a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft..
b. Other Items: University will designate items or areas required.

2. Final approval of color selections will be based on benchmark samples.

   a. If preliminary color selections are not approved, apply additional benchmark samples of additional colors selected by University at no added cost to University.

1.4 EXTRA MATERIALS

A. Furnish extra materials described below that are from same production run (batch mix) as materials applied and that are packaged for storage and identified with labels describing contents.

1. Quantity: Furnish an additional 5 percent, but not less than 1 gal. of each material and color applied.

PART 2 - PRODUCTS

2.1 PAINT, GENERAL

A. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Colors: Match University's samples.

2.2 BLOCK FILLERS

A. Interior/Exterior Latex Block Filler: MPI #4.

2.3 PRIMERS/SEALERS

A. Alkali-Resistant Primer: MPI #3.

B. Bonding Primer (Water Based): MPI #17.

C. Wood-Knot Sealer: Sealer recommended in writing by topcoat manufacturer for use in paint system indicated.

2.4 METAL PRIMERS

A. Alkyd Anticorrosive Metal Primer: MPI #79.

B. Waterborne Galvanized-Metal Primer: MPI #134.

2.5 WOOD PRIMERS

A. Exterior Latex Wood Primer: MPI #6.

2.6 EXTERIOR LATEX PAINTS

A. Exterior Latex (Flat): MPI #10 (Gloss Level 1).

B. Exterior Latex (Semigloss): MPI #11 (Gloss Level 5).

C. Exterior Latex (Gloss): MPI #119 (Gloss Level 6, except minimum gloss of 65 units at 60 deg).

2.7 QUICK-DRYING ENAMELS

A. Quick-Drying Enamel (Semigloss): MPI #81 (Gloss Level 5).

B. Quick-Drying Enamel (High Gloss): MPI #96 (Gloss Level 7).

2.8 FLOOR COATINGS

A. Interior/Exterior Clear Concrete Floor Sealer (Water Based): MPI #99.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Concrete: 12 percent.
2. Masonry (Clay and CMU): 12 percent.
3. Wood: 15 percent.
4. Plaster: 12 percent.
5. Gypsum Board: 12 percent.

C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION AND APPLICATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Universityural Painting Specification Manual" applicable to substrates and paint systems indicated.

B. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.

C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

D. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by University, and leave in an undamaged condition.

E. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.3 EXTERIOR PAINTING SCHEDULE

A. Concrete Substrates, Nontraffic Surfaces:

1. Latex System: MPI EXT 3.1A.

a. Prime Coat: Exterior latex matching topcoat.
b. Intermediate Coat: Exterior latex matching topcoat.
c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

2. Latex Aggregate/Latex System: MPI EXT 3.1 B.

a. Prime Coat: Latex stucco and masonry textured coating.
b. Intermediate Coat: Exterior latex matching topcoat.
c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

3. Latex Over Alkali-Resistant Primer System: MPI EXT 3.1K.

    a. Prime Coat: Alkali-resistant primer.
    b. Intermediate Coat: Exterior latex matching topcoat.
    c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

B. Concrete Substrates, Traffic Surfaces:

1. Latex Floor Paint System: MPI EXT 3.2A.

    a. Prime Coat: Interior/exterior latex floor and porch paint (low gloss).
    b. Intermediate Coat: Interior/exterior latex floor and porch paint (low gloss).
    c. Topcoat: Interior/exterior latex floor and porch paint (low gloss).

2. Water-Based Clear Sealer System: MPI EXT 3.2H.

    a. Prime Coat: Interior/exterior clear concrete floor sealer (water based).
    b. Intermediate Coat: Interior/exterior clear concrete floor sealer (water based).
    c. Topcoat: Interior/exterior clear concrete floor sealer (water based).

C. CMU Substrates:

1. Latex System: MPI EXT 4.2A.

    a. Prime Coat: Interior/exterior latex block filler.
    b. Intermediate Coat: Exterior latex matching topcoat.
    c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

2. Latex Over Alkali-Resistant Primer System: MPI EXT 4.2L.

    a. Prime Coat: Alkali-resistant primer.
    b. Intermediate Coat: Exterior latex matching topcoat.
    c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

3. High-Build Latex System: MPI EXT 4.2K, applied to form dry film thickness of not less than 10 mils.

    a. Prime Coat: As recommended in writing by topcoat manufacturer.
    b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
    c. Topcoat: High-build latex (exterior).

D. Steel Substrates:

1. Quick-Drying Enamel System: MPI EXT 5.1A.

    a. Prime Coat: Quick-drying alkyd metal primer.
    b. Intermediate Coat: Quick-drying enamel matching topcoat.
    c. Topcoat: Quick-drying enamel [**(semigloss)**] [**(high gloss)**].

E. Galvanized-Metal Substrates:

1. Latex System: MPI EXT 5.3A.

   a. Prime Coat: Cementitious galvanized-metal primer.
   b. Intermediate Coat: Exterior latex matching topcoat.
   c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

2. Latex Over Water-Based Primer System: MPI EXT 5.3H.

   a. Prime Coat: Waterborne galvanized-metal primer.
   b. Intermediate Coat: Exterior latex matching topcoat.
   c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

F. Glue-Laminated Beam and Column Substrates:

1. Latex System: MPI EXT 6.1L.

   a. Prime Coat: Exterior latex wood primer.
   b. Intermediate Coat: Exterior latex matching topcoat.
   c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

G. Dressed Lumber Substrates: Including [**architectural woodwork**] [**doors**] <**Insert description**>.

1. Latex System: MPI EXT 6.3L.

   a. Prime Coat: Exterior latex wood primer.
   b. Intermediate Coat: Exterior latex matching topcoat.
   c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

H. Wood Panel Substrates: Including [**plywood siding**] [**fascias**] [**soffits**] <**Insert description**>.

1. Latex System: MPI EXT 6.4K.

   a. Prime Coat: Exterior latex wood primer.
   b. Intermediate Coat: Exterior latex matching topcoat.
   c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

I. Wood Shingle and Shake Substrates (Excluding Roofs):

1. Latex System: MPI EXT 6.6E.

   a. Prime Coat: Exterior latex wood primer.
   b. Intermediate Coat: Exterior latex matching topcoat.
   c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

J. Dimension Lumber Substrates, Nontraffic Surfaces: Including [**board siding**] [**fencing**] [**undersides of decking**] <**Insert description**>.

1. Latex System: MPI EXT 6.2M.

a. Prime Coat: Exterior latex wood primer.
b. Intermediate Coat: Exterior latex matching topcoat.
c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

K. Dimension Lumber Substrates, Traffic Surfaces: Including [**lumber decking**] [**stairs**] <**Insert description**>.

1. Latex System: MPI EXT 6.5E.

a. Prime Coat: Exterior latex wood primer.
b. Intermediate Coat: Interior/exterior latex floor and porch (low gloss).
c. Topcoat: Interior/exterior latex floor and porch (low gloss).

1) With additive to increase skid resistance of painted surface.

L. Stucco Substrates:

1. Latex System: MPI EXT 9.1A.

a. Prime Coat: Exterior latex matching topcoat.
b. Intermediate Coat: Exterior latex matching topcoat.
c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

2. Latex Over Alkali-Resistant Primer System: MPI EXT 9.1J.

a. Prime Coat: Alkali-resistant primer.
b. Intermediate Coat: Exterior latex matching topcoat.
c. Topcoat: Exterior latex [**(flat)**] [**(semigloss)**] [**(gloss)**].

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