

SECTION 099113 - EXTERIOR PAINTING

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 surface preparation and the application of paint systems on the following exterior substrates:
 - 1. Concrete.
 - 2. Steel.
 - 3. Wall Panels.
 - 4. Galvanized metal.
 - 5. Aluminum (not anodized or otherwise coated).
 - 6. Wood.
 - 7. EIFS
 - 8. Exterior gypsum board.
- B. Related Sections include the following:
 - 1. Division 5, Division 6, Division 8, & Division 9 for factory priming, field priming, surface preparation, and application of paint systems as specified in related sections.

1.3 SUBMITTALS

- A. General: Submit in accordance with Section 013300.
- B. See Section 013310 for Submittal Schedule.

1.4 QUALITY ASSURANCE

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

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.6 PROJECT CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F. Or as manufacturer indicates.

- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

1.7 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 gallon of each material and color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Sherwin-Williams Company (The).
 - 2. Benjamin Moore & Co.
 - 3. Dunn-Edwards Corporation.
 - 4. ICI Paints.
 - 5. Kelly-Moore Paints.
 - 6. PPG Architectural Finishes, Inc.
- B. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles for the paint category indicated.

2.2 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 colors as indicated in a color schedule.

2.3 BLOCK FILLERS (CMU & Brick)

- A. Interior/Exterior Latex Block Filler: MPI #4.
 - 1. Sherwin-Williams Loxon Block Surfacers A24W200

2.4 PRIMERS/ SEALERS

- A. Bonding Primer (Water Based): MPI #17.
 - 1. Sherwin-Williams Adhesion Primer B51W8050
- B. Acrylic Poured Concrete Primer:
 - 1. Sherwin-Williams Interior/ Exterior Loxon Concrete & Masonry Primer
- C. Wood-Knot Sealer: Sealer recommended in writing by topcoat manufacturer for use in paint system indicated.

2.5 METAL PRIMERS

- A. Oil-Based Anti-Corrosive Metal Primer: MPI #79
 - 1. Sherwin-Williams Kem Bond HS B50WZ4
 - a. As permitted by local VOC requirements.
- B. Rust Inhibitive Primer (water-based): MPI #107.
 - 1. Sherwin-Williams Pro Industrial Pro-Cryl Primer B66W310
- C. Waterborne Galvanized-Metal Primer: MPI #134.
 - 1. Sherwin-Williams Pro Industrial Pro-Cryl Primer B66W310
- D. Quick-Drying Primer for Aluminum: MPI #95.
 - 1. Sherwin-Williams Pro Industrial Pro-Cryl Primer B66W310
 - a. As permitted by local VOC requirements.

2.6 WOOD PRIMERS

- A. Exterior Latex Wood Primer: MPI #6.
 - 1. Sherwin-Williams Exterior Latex Wood Primer A24W8041
- B. Exterior Wood Primer: MPI #5.
 - 1. Sherwin-Williams Exterior Oil Based Wood Primer Y24W8020

2.7 EXTERIOR LATEX PAINTS

- A. Exterior Latex (Semi-gloss): MPI #11 (Gloss Level 5).
 - 1. Sherwin-Williams A-100 Semi-gloss
- B. Exterior Latex (Gloss): MPI #119 (Gloss Level 6, except minimum gloss of 65 units at 60 deg).
 - 1. Sherwin-Williams Pro Industrial DTM Acrylic Gloss

2.8 EXTERIOR ENAMELS

- A. Oil Based Exterior Enamel (Gloss): MPI #9 (Gloss Level 6).
 - 1. Sherwin-Williams Seaguard 1000 N41W620
- B. Exterior W.B. Light Industrial Coating (Semi-Gloss): MPI #163 (Gloss Level 5)
 - 1. Sherwin-Williams Pro Industrial DTM Semi-gloss

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. Wood: 15 percent.
 - 3. Plaster: 12 percent.
 - 4. 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

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
 - 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- C. 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.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.
- F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- G. Aluminum Substrates: Remove surface oxidation.
- H. Wood Substrates:
 - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
 - 2. Sand surfaces that will be exposed to view, and dust off.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- I. Plaster Substrates: Do not begin paint application until plaster is fully cured and dry.
- J. Exterior Gypsum Board Substrates: Do not begin paint application until finishing compound is dry and sanded smooth.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
- B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

- 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.

3.4 FIELD QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:
 - 1. Owner will engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
 - 2. Testing agency will perform tests for compliance of paint materials with product requirements.
 - 3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. 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 Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Nontraffic Surfaces:
 - 1. Latex System: MPI EXT 3.1A.
 - a. Prime Coat: Exterior Bonding Primer (water-based).
 - b. Intermediate Coat: Exterior latex matching topcoat.
 - c. Topcoat: Exterior latex (semi-gloss).
- B. 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 (semi-gloss).
 - 2. Oil Based System: MPI EXT 5.1D.
 - a. Prime Coat: Anti-corrosive metal primer.
 - b. Intermediate Coat: Exterior enamel matching topcoat.
 - c. Topcoat: Exterior enamel (semi-gloss).

3. W.B. Light Industrial Coating System: MPI EXT 5.1M
 - a. Prime Coat: Rust Inhibitive metal primer (water-based).
 - b. Intermediate Coat: Exterior W.B. Light Industrial Coating matching topcoat.
 - c. Topcoat: Exterior W.B. Light Industrial Coating (semi-gloss).
- C. Galvanized-Metal Substrates:
 1. Alkyd System: MPI EXT 5.3B.
 - a. Prime Coat: Cementitious galvanized-metal primer.
 - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
 - c. Topcoat: Exterior alkyd enamel (semi-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 (semi-gloss).
- D. Aluminum Substrates:
 1. Latex System: MPI EXT 5.4H.
 - a. Prime Coat: Quick-drying primer for aluminum.
 - b. Intermediate Coat: Exterior latex matching topcoat.
 - c. Topcoat: Exterior latex (semi-gloss).
- E. Wood Panel Substrates: Including plywood siding, fascias and soffits.
 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 (semi-gloss).
 2. Latex Over Oil Based Primer System: MPI EXT 6.4G.
 - a. Prime Coat: Exterior oil based wood primer.
 - b. Intermediate Coat: Exterior latex matching topcoat.
 - c. Topcoat: Exterior latex (semi-gloss).
- F. Stucco Substrates:
 1. Latex System: MPI EXT 9.1A.
 - a. Prime Coat: Exterior Bonding Primer (water-based).
 - b. Intermediate Coat: Exterior latex matching topcoat.
 - c. Topcoat: Exterior latex (semi-gloss).
- G. Exterior Gypsum Board Substrates:
 1. Latex System: MPI EXT 9.2A.
 - a. Prime Coat: Exterior Bonding Primer (water-based).
 - b. Intermediate Coat: Exterior latex matching topcoat.
 - c. Topcoat: Exterior latex (semi-gloss).

END OF SECTION 099113