

## SECTION 099123 - INTERIOR 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 interior substrates:
  - 1. Concrete.
  - 2. Steel.
  - 3. Galvanized metal.
  - 4. Aluminum (not anodized or otherwise coated).
  - 5. Wood.
  - 6. 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.
- 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. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
    - a. Wall and Ceiling Surfaces: Provide samples of at least 100 sq. ft.
    - b. Other Items: Architect will designate items or areas required.
  - 2. Apply benchmark samples after permanent lighting and other environmental services have been activated.
  - 3. 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 Architect at no added cost to Owner.

**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.
- B. Do not apply paints 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.
  - 7. Other products listed in other Part 2 articles for the category listed.

**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.
    - a. Chemical Components of Field-Applied Interior Paints and Coatings: Provide products that comply with local requirements for VOC content.
- B. Colors: Match colors as indicated in color schedule on drawings.

**2.3 BLOCK FILLERS**

- A. Interior/Exterior Latex Block Filler: MPI #4.
  - 1. Sherwin-Williams Loxon Block Surfacers A24W200 E2

**2.4 PRIMERS/SEALERS**

- A. Interior Latex Primer/Sealer: MPI #50.
  - 1. Sherwin-Williams ProMar 200 Zero VOC Primer B28W2600
- B. Acrylic Poured Concrete Primer:
  - 1. Sherwin-Williams Interior/ Exterior Loxon Concrete & Masonry Primer
- C. Interior Alkyd Primer/Sealer: MPI #45.
  - 1. Sherwin-Williams ProBlock Interior Oil Based Primer B79W8810

**2.5 METAL PRIMERS (if not shop primed)**

- A. Alkyd Anticorrosive Metal Primer: MPI #79.
  - 1. Sherwin-Williams Kem Bond HS B50WZ4
- B. Quick-Drying Alkyd Metal Primer: MPI #76.
  - 1. Sherwin-Williams Kem Bond HS Primer B50WZ4 E3
- C. Rust-Inhibitive Primer (Water Based): MPI #107.
  - 1. Sherwin-Williams Pro Industrial Pro-Cryl Primer B66W310 E3 EPR3

**2.6 WOOD PRIMERS**

- A. Interior Latex-Based Wood Primer: MPI #39.
  - 1. Sherwin-Williams Multi-purpose Latex Primer B51W8020 E2 EPR2

**2.7 LATEX PAINTS**

- A. Interior Latex (Flat): MPI #53 (Gloss Level 1).
  - 1. Sherwin-Williams ProMar 200 Zero VOC Flat B30 Series
- B. Interior Latex (Low Sheen): MPI #44 (Gloss Level 2).
  - 1. Sherwin-Williams ProMar 200 Zero VOC Eg-Shel B20 Series
- C. Interior Latex (Semi-gloss): MPI #54 (Gloss Level 5).
  - 1. Sherwin-Williams ProMar 200 Zero VOC Semi-Gloss
- D. Interior W.B. Light Industrial Coating (semi-gloss): MPI #153 (Gloss Level 5)
  - 1. Sherwin-Williams Pro Industrial Pre-Catalyzed Epoxy K46W151 E2 EPR2

**2.8 ALKYD PAINTS**

- A. Interior Alkyd (Semi-gloss): MPI #47 (Gloss Level 5).
  - 1. Sherwin-Williams ProMar 200 Alkyd Semi-Gloss B34 Series
- B. Interior Alkyd (Gloss): MPI #48 (Gloss Level 6).
  - 1. Sherwin-Williams ProMar 200 Alkyd Gloss B35W251

**2.9 DRY FOG/FALL COATINGS**

- A. Latex Dry Fog/Fall: MPI #118.
  - 1. Sherwin-Williams Waterborne Acrylic Dryfall Flat B42W1 (

## **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. Gypsum Board: 12 percent.
  - 5. Plaster: 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 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. Concrete Masonry Substrates: Remove 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.
- F. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.
- G. 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.

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. 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 equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.

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.

D. Painting Mechanical and Electrical Work: Paint only items exposed in equipment rooms and occupied spaces as noted on Construction Documents.

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 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 INTERIOR PAINTING SCHEDULE

#### A. Concrete Substrates, Nontraffic Surfaces:

- 1. Latex System: MPI INT 3.1E.
  - a. Prime Coat: Interior latex matching topcoat.
  - b. Intermediate Coat: Interior latex matching topcoat.
  - c. Topcoat: Interior latex (semi-gloss).
- 2. Latex Over Sealer System: MPI INT 3.1A.
  - a. Prime Coat: Bonding Primer (water-based).
  - b. Intermediate Coat: Interior latex matching topcoat.
  - c. Topcoat: Interior latex (semi-gloss).

#### B. Steel Substrates:

- 1. W.B. Light Industrial Coating: MPI INT 5.1B
  - a. Prime Coat: Rust Inhibitive primer (water-based).
  - b. Intermediate Coat: Interior Light Industrial Coating matching topcoat.
  - c. Topcoat: Interior Light Industrial Coating (semi-gloss).
- 2. Alkyd System: MPI INT 5.1E.
  - a. Prime Coat: Alkyd anticorrosive or Quick-drying alkyd metal primer.
  - b. Intermediate Coat: Interior alkyd matching topcoat.
  - c. Topcoat: Interior alkyd (semi-gloss).

#### C. Galvanized-Metal Substrates:

- 1. Water-Based Dry-Fall System: MPI INT 5.3H.
  - a. Prime Coat: Waterborne dry fall.
  - b. Topcoat: Waterborne dry fall.
- 2. Latex System: MPI INT 5.3A.
  - a. Prime Coat: Waterborne galvanized-metal primer.
  - b. Intermediate Coat: Interior latex matching topcoat.
  - c. Topcoat: Interior latex (flat).

#### D. Aluminum (Not Anodized or Otherwise Coated) Substrates:

- 1. Latex System: MPI INT 5.4H.
  - a. Prime Coat: Quick-drying primer for aluminum.
  - b. Intermediate Coat: Interior latex matching topcoat.
  - c. Topcoat: Interior latex (low sheen) or (semi-gloss), see drawings.

#### E. Dressed Lumber Substrates: Including doors.

- 1. Latex System: MPI INT 6.3T.
  - a. Prime Coat: Interior latex-based wood primer.

- b. Intermediate Coat: Interior latex matching topcoat.
    - c. Topcoat: Interior latex (semi-gloss).
  - 2. Alkyd System: MPI INT 6.3B.
    - a. Prime Coat: Interior alkyd primer/sealer.
    - b. Intermediate Coat: Interior alkyd matching topcoat.
    - c. Topcoat: Interior alkyd (semi-gloss).
- F. Gypsum Board Substrates:
- 1. Latex System: MPI INT 9.2A.
    - a. Prime Coat: Interior latex primer/sealer.
    - b. Intermediate Coat: Interior latex matching topcoat.
    - c. Topcoat: Interior latex (flat) or (low sheen), see drawings.

**END OF SECTION 099123**