

SECTION 09 91 13.1 EXTERIOR PAINTING

PART 1 - GENERAL

1.01 REFERENCE STANDARDS

- A. ASTM D523 - Standard Test Method for Specular Gloss; 2014 (Reapproved 2018).

1.02 SUMMARY

- A. A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
 1. Concrete masonry units (CMU).
 2. Ferrous metal.
 3. Galvanized metal.
 4. Exterior Portland cement plaster (stucco).
 5. Exterior gypsum board.

1.03 DEFINITIONS

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D523.
- B. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.
- C. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D523.
- D. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D523.
- E. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D523.
- F. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D523.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: For each type of paint system and each color and gloss of topcoat.
- C. Product List For each product indicated. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.

1.05 QUALITY ASSURANCE

- A. Mockups: Apply mockups 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. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft.
 - b. Other Items: Architect will designate items or areas required.
 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles for the paint category indicated.

2.02 PAINT, GENERAL

- A. A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List." B. 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. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.
- C. Colors: As indicated in a color schedule.

2.03 BLOCK FILLERS

A. BLOCK FILLER, LATEX, INTERIOR/EXTERIOR: MPI #4.

1. SHERWIN-WILLIAMS: B25 SERIES/PREPRITE INTERIOR-EXTERIOR LATEX BLOCK FILLER

4.01 PRIMERS/SEALERS

- A. Primer, Alkali Resistant Water Based: MPI #3.
 - 1. Sherwin-Williams: LX02 Series/Loxon Concrete & Masonry Primer-Sealer
- B. Primer, Bonding, Water Based: MPI #17.
 - 1. Sherwin-Williams: LX02 Series/Loxon Concrete & Masonry Primer-Sealer

4.02 METAL PRIMERS

- A. Primer, Galvanized, Water Based: MPI #134.
 - 1. Sherwin-Williams: B66 Series/Pro Industrial Pro-Cryl Universal Acrylic Primer
- B. Primer, Galvanized: As recommended in writing by topcoat manufacturer.
 - 1. Sherwin-Williams: B66 Series/Pro Industrial Pro-Cryl Universal Acrylic Primer

4.03 WATER-BASED PAINTS

A. LATEX, EXTERIOR FLAT (GLOSS LEVEL 1): MPI #10.

- A. Sherwin-Williams: LX11 Series/Loxon XP Waterproofing Masonry Coating-Flat B. Latex, Exterior Semi-Gloss (Gloss Level 5): MPI #11.

1. SHERWIN-WILLIAMS: A08 SERIES/A-100 EXTERIOR LATEX GLOSS

6.01 WATERBASED MODIFIED ALKYD

- A. Sherwin-Williams: B53 Series/Pro Industrial Waterbased Alkyd Urethane Enamel Gloss

PART 3 - EXECUTION

7.01 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the 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. Portland Cement Plaster: 12 percent.
 - 4. Gypsum Board: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

7.02 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.
- B. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

7.03 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Manual."
- B. 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.

7.04 CLEANING AND PROTECTION

- A. 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.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.
 - 1. EXTERIOR PAINTING SCHEDULE A. CMU Substrates:

1. LATEX SYSTEM:

- a. Prime Coat: Block filler, latex, interior/exterior , MPI #4.
- b. Intermediate Coat: Latex, exterior, matching topcoat.
- c. Topcoat: Latex, exterior flat (Gloss Level 1) , MPI #10.
- d. Topcoat Latex, exterior, low sheen (Gloss Level 3-4) , MPI #15.
- e. Topcoat: Latex, exterior semi-gloss (Gloss Level 5) , MPI #11.

2. LATEX OVER ALKALI-RESISTANT PRIMER SYSTEM:

- a. Prime Coat: Primer, alkali resistant, water based , MPI #3.
- b. Intermediate Coat: Latex, exterior, matching topcoat.
- c. Topcoat: Latex, exterior, flat (Gloss Level 1) , MPI #10.
- d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) , MPI #15.
- e. Topcoat Latex, exterior, semi-gloss (Gloss Level 5) , MPI #11.

3. LATEX AGGREGATE SYSTEM:

- a. Prime Coat: As recommended in writing by topcoat manufacturer.
- b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
- c. Topcoat: Textured coating latex, flat , MPI #42. B. Ferrous Metal Substrates:

1. ALKYD SYSTEM:

- a. Prime Coat: Primer, alkyd, anticorrosive for metal , MPI #79.
- b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
- c. Topcoat: Alkyd, exterior, flat (Gloss Level 1) , MPI #8.
- d. Topcoat: Alkyd, exterior, semi-gloss (Gloss Level 5) , MPI #94. C. Galvanized-Metal Substrates:

1. ALKYD SYSTEM:

- a. Prime Coat: Primer, galvanized metal, as recommended in writing by topcoat manufacturer for exterior use on galvanized-metal substrates with topcoat indicated.
- b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
- c. Topcoat: Alkyd, exterior, flat (Gloss Level 5) , MPI #8.
- d. Topcoat: Alkyd, exterior, semi-gloss (Gloss Level 5) , MPI #94.

D. PORTLAND CEMENT PLASTER SUBSTRATES:

1. Latex System:
 - a. Prime Coat: Latex, exterior, matching topcoat.
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Topcoat: Latex, exterior, flat (Gloss Level 1) , MPI #10.
 - d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) , MPI #15.
 - e. Topcoat Latex, exterior, semi-gloss (Gloss Level 5) , MPI #11.
2. Latex over Alkali-Resistant Primer System:
 - a. Prime Coat: Primer, alkali resistant, water based , MPI #3.
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Topcoat: Latex, exterior, flat (Gloss Level 1) , MPI #10.
 - d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) , MPI #15.
 - e. Topcoat: Latex, exterior, semi-gloss (Gloss Level 5) , MPI #11. E. Exterior Gypsum Board Substrates:

1. LATEX SYSTEM:

- a. Prime Coat: Latex, exterior, matching topcoat.
- b. Intermediate Coat: Latex, exterior, matching topcoat.
- c. Topcoat: Latex, exterior, flat (Gloss Level 1) , MPI #10.
- d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) , MPI #15.
- e. Topcoat: Latex, exterior, semi-gloss (Gloss Level 5) , MPI #11.

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