SECTION 09 91 13 - EXTERIOR PAINTING *(See DIV 13 for Pool Painting)*

PART 1 - GENERAL

1.1 SUMMARY

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

1. Concrete.
2. Concrete masonry units (CMU).
3. Steel.

1.2 DEFINITIONS

A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.

B. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.

C. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.

D. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.

E. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.

F. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 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.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Paint: 2 percent, but not less than 1 gal. (3.8 L) of each material and color applied.

1.5 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. (9 sq. m).
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

2.1 MANUFACTURERS

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

2.2 PAINT, GENERAL

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.

C. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.

D. Colors: As selected by Architect from manufacturer's full range

2.3 BLOCK FILLERS

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

1. AkzoNobel: Glidden Professional Vinyl Acrylic Block Filler 3010

2. Sherwin-Williams: PrepRite Interior/Exterior Block Filler B25W00025

2.4 PRIMERS/SEALERS

A. Primer, Rust-Inhibitive, Water Based: MPI #107

1. AkzoNobel Devoe Paint Mirrolac WB Int/Ext Waterborne DTM Flat Primer and Finish DP8502

2. Benjamin Moore Super Spec High Performance Acrylic Metal Primer P04/KP04

3. Sherwin-Williams Pro Industrial Pro-Cryl Universal Primer B66W310

4. Rust-Oleum Zinsser Bulls Eye 1-2-3

B. Primer, Bonding, Water Based: MPI #17

1. Benjamin Moore: Fresh Start, 100% Acrylic Superior Primer 046

2. Coronado Paint: Pro Shield Grip & Seal Grip & Seal Latex Stain Killer116-11

3. Rust-Oleum: Zinsser Bulls Eye Zero 249019

4. Sherwin-Williams: Adhesion Primer B51W8050

2.5 METAL PRIMERS

A. Primer, Rust-Inhibitive, Water Based: MPI #107

1. AkzoNobel Devoe Paint Mirrolac WB Int/Ext Waterborne DTM Flat Primer and Finish DP8502

2. Benjamin Moore Super Spec High Performance Acrylic Metal Primer P04/KP04

3. Sherwin-Williams Pro Industrial Pro-Cryl Universal Primer B66W310

4. Rust-Oleum Zinsser Bulls Eye 1-2-3

B. Primer, Galvanized: As recommended in writing by topcoat manufacturer.

2.6 WATER-BASED PAINTS

A. Latex, Exterior Semi-Gloss (Gloss Level 5): MPI #11

1. Benjamin Moore: Ben, 100% Acrylic Exterior Semi-Gloss Finish 543/K543

2. M.A.B. Paints: Sea Shore, 100% Acrylic Latex Semi-Gloss Trim Enamel MB024150

3. Sherwin-Williams: A-100 Exterior Latex Gloss, A08W00151

4. Pratt & Lambert: ProHide Gold Exterior Latex Semi-Gloss, SOCW Z8600

2.7 STEEL FINISH

A. Water-Based Light Industrial Coating System: MPI #161

1. AkzoNobel: Devflex 4212HP High Performace WB Acrylic Eggshell 4212

2. Columbia Paint: Hi-Performance Acry-Shield Eggshell Enamel 05-265

3. PPG: WB Satin Exterior Acrylic 90-1110

2.8 FLOOR COATINGS

A. Sealer, Water Based, for Concrete Floors: MPI #99

1. Coronado PaintAqua-PlasticFinal Finish 100% Acrylic Floor Coat38-10

2. PPGPorter PaintsPlex-Seal W.B. Sealer3215

3. Sherwin-WilliamsH & CConcrete & Masonry Waterproofing Sealer50.043054

4. ValsparQuikreteWet Look High Gloss Sealer51390

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 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. Wood: 15 percent.
4. Portland Cement Plaster: 12 percent.
5. 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.

3.2 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.

3.3 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.

C. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required. Note: Back roll spray painted surfaces with roller.

3.4 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.

3.5 EXTERIOR PAINTING SCHEDULE

A. Concrete Substrates, Nontraffic Surfaces:

1. Latex System:
   a. Prime Coat: Primer, alkali resistant, water based, MPI #3
   b. Intermediate Coat: Latex, exterior, matching topcoat.

c. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4), MPI #15

B. Concrete Substrates, Traffic Surfaces:

1. Water-Based Clear Sealer System:

a. Prime Coat: Sealer, water based, for concrete floors, MPI #99
b. Intermediate Coat: Sealer, water based, for concrete floors, MPI #99
c. Topcoat: Sealer, water based, for concrete floors, MPI #99

C. 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, low sheen (Gloss Level 3-4), MPI #15

D. Steel Substrates:

1. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, alkyd, anti-corrosive for metal, MPI #79
b. Prime Coat: Shop primer specified in Section where substrate is specified.
c. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
d. Topcoat: Light industrial coating, exterior, water based (Gloss Level 3), MPI #161

E. Galvanized-Metal Substrates:

1. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, galvanized, water based, MPI #134
b. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
c. Topcoat: Light industrial coating, exterior, water based (Gloss Level 3), MPI #161

END OF SECTION 09 91 13