SECTION 09 91 00 - PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Surface preparation and the application of paint systems.

1.2 SUBMITTALS

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

B. Samples: Three factory color chips 3/4-inch by 2-inches (19-mm by 51-mm) minimum with color name and product number for each finish and for each color and texture required.

1.3 QUALITY ASSURANCE

A. Only those brands and qualities of paint listed in Part 2 shall be used. Materials must be top line as specified. “Professional” or “Economy” lines will not be acceptable.

B. The same manufacturer to be used for the finish coat as was used for the prime coat for any one area. Prime coat to be tinted to the approximate shade of the finish coat. All coats must be thoroughly dry before applying succeeding coats. When items to be painted have received a shop coat of paint, the prime coat and finish coat called for are in addition to the shop coat.

C. Exposed Structure Ceiling Test Sample (Remodels and Expansions): Apply sample of specified paint system indicated to verify compatibility of specified system with substrates and atmospheric conditions, to verify paint thickness, and to set quality standards for materials and execution.

1. Provide test sample of at least 100 sq. ft. (9 sq. m).
2. Apply test sample to area approved by Owner that includes metal deck, joists, structural steel, ductwork, piping, and conduit.
3. Apply test sample at least one week prior to installation of paint system.
4. If test sample is not approved or shows signs of delamination or flash rusting, correct conditions and apply additional test samples at no added cost to Owner until sample is approved.

1.4 PROJECT CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).

B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 PAINT, GENERAL

A. Manufacturers

1. MOR Benjamin Moore and Co.
2. PPG PPG Paints.
3. SWC Sherwin-Williams Co. (The).

B. Basis of Design: Sherwin-Williams Co. (The).

1. Paints and coatings in this specification are based on the products of the Sherwin-Williams Company. If products are provided by one of the other approved manufacturers above, submittals must be accompanied by a product comparison chart and color comparison board showing proof of equality with the Sherwin-Williams products.

C. 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.

D. Colors: As specified in Division 01 Sections “Décor Interior Finishes and Colors”

E. Sheen: Provide sheen indicated.

2.2 PRIMERS AND BLOCK FILLERS

A. **PP-1**: Acrylic Enamel (Flat)

1. SWC DTM Acrylic Primer/Finish, ...#B66W1

B. **PP-2**: Interior Masonry Block Filler

1. SWC Heavy Duty Block Filler .....#B42W46

C. **PP-3** Acrylic Primer (Interior)

1. SWC ProMar 200 Zero Interior Latex Primer B28W02600

D. **PP-4** Exterior Masonry Surfacer

1. SWC Loxon Block Surfacer A24W200

E. **PP-5** Exterior Acrylic

1. SWC Loxon Concrete & Masonry Primer.....A24W8300

2.3 FINISH PAINTS

A. **P-1**: Acrylic Enamel (Semi-gloss)

1. SWC DTM Acrylic Coating .....B66 Series
VOC: <150g/L

B. **P-2**: Acylic Latex (Satin)

1. SWC Emerald Exterior Acrylic Satin.....K48 Series

C. **P-3**: Acrylic (Flat)

1. SWC ProMar 200 Zero VOC Int Latex Flat..... B30-2600 Series

D. **P-4**: Acrylic (Eggshell)

1. SWC ProMar 200 Zero VOC Interior Latex Egg-Shell..... B20-2600 Series

E. **P-5**: Acrylic (Semi-Gloss)

1. SWC ProMar 200 Zero VOC Int Latex Semi-Gloss..... B31-2600 Series

F. **P-6**: Acrylic Traffic Marking Paint

1. SWC Pro-Park Waterborne Traffic Marking Paint.....B97 Series

G. **P-7**: Water-based Catalyzed Epoxy (Semi-gloss)

1. SWC Pro Industrial Pre-Catalyzed Waterbased Epoxy K46-150

H. **P-8**: Not Used

I. **P-9**: WaterBorne Acrylic Dryfall (Egg Shell)

1. SWC: Waterborne Acrylic Dryfall (Egg Shell) .....#B42W2

J. **P-10**: Not Used.

K. **P-11** Acrylic, Exterior (Flat)

1. SWC Loxon Acrylic Coating.....A24W300 Series

L. **P-12** Acrylic, High Performance, (Semi-gloss)

1. SWC Sher-Cryl HPA ..... B66-350 Series

M. **P-13**: Water-Based Latex Enamel Exterior Pipe Insulation Paint (Insulation paint and pipe insulation shall be of same manufacturer).

1. Armacell WB Armaflex Finish 919-304-3846
2. RBX, Inc. RBX 374.....800-765-6475

N. **P-14**: Water-Based Latex Enamel (Flat).

1. SWC A-100 Exterior Latex Flat .....A6 Series

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.

1. Where interior traffic paint is indicated for sealed concrete, apply traffic paint prior to application of sealer.

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.

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 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. Prior to painting, protect sprinkler heads and fire alarm and data cables from paint overspray.

2. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

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.
2. Verify that metal decks have been provided "paintable" with surface films and other agents removed that may impede adhesion of paint.

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 and Clay 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. Shop-Primed Substrates: Clean field welds, connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.

I. 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.

J. Gypsum Board Substrates: Do not begin paint application until finishing compound is dry and sanded smooth.

K. Cotton or Canvas Insulation Covering Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

L. Existing Painted Surfaces:

1. In accordance with paint manufacturer's recommendations, all surfaces and absorbed contaminants (i.e., dirt, dust, grease, oil, mildew, moisture, chemical fall-out, etc.) shall be removed prior to applying any new coat of paint.

2. Removal of old painting system prior to the application of a new coat of paint shall not be required unless adhesion problems between the existing coating and the new proposed coating cannot be eliminated.

    a. New coating shall be compatible with existing coating based on previous testing of coating products for adhesion by manufacturer and installer's field experience.
    b. A test patch shall be used when previous testing does not exist or is unacceptable to the Owner.
    c. The preparation of substrates does not apply to previously coated surfaces that contain lead. These surfaces require special preparation. Refer to the recommendations of the paint manufacturer for preparation requirements.

        1) Any previously coated surfaces containing lead should be brought to the attention of the Owner immediately.

3. High pressure water clean exterior surfaces prior to repainting using pressures indicated below to ensure complete removal of loose paint, stains, dirt and other foreign matter, with such work to be carried out only by qualified tradesmen experienced in high pressure water cleaning. The use of spray equipment such as water hose cleaning will not be considered satisfactory. Allow sufficient drying time and test surfaces using an electronic moisture meter before commencing work.

    a. EIFS: 300 to 500 psi @ 6 inches
    b. Wood Soffits: 600 to 1,500 psi @ 6 inches
    c. Firm Masonry, Concrete: 1,500 to 4,000 psi @ 6 to 12 inches

3.3 APPLICATION

A. Apply paints in accordance with manufacturer's written application instructions and minimum millage (thickness) requirements.

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.

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.
4. Paint vents, electrical panels, doors and frames to match adjacent wall finish unless noted otherwise.

C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

1. Omit primer over metal surfaces that have been shop primed and touchup painted.
2. Omit primer over previously painted surfaces except as required to provide compatibility between existing coating and finish coat and as required to cover bare substrate.

D. If exposed structure painted ceiling system (metal deck, joists, metal duct, piping and conduit) is left exposed to the exterior environment 90 days prior to painting, the entire ceiling system must be reprimed as specified.

E. Painting Mechanical and Electrical Work: Paint exposed plumbing, heating, and electrical material to match the walls and ceilings of that area unless noted otherwise. This includes, but is not limited to, pipes, insulation, conduit ducts, access panels, grilles, diffusers, whether the adjacent surfaces receive paint or not. Include dampers or baffles behind grilles.

F. Surfaces and Items Not to be Painted:

1. Do not paint prefinished items, concealed surfaces, finished metal surfaces, and operating parts unless noted otherwise.
2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
3. Do not paint low voltage wiring and cabling.

G. Terminate finishes 6-inches (152-mm) behind line of sight at permanent fixtures or casework.

H. Paint to wrap returns and terminate accordingly unless noted otherwise.

I. 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.

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

(Painting Schedules follow on next page)

3.4 EXTERIOR PAINTING SCHEDULE

Area	Prime Coat (1 Coat)	Finish Coat (1 Coat unless otherwise noted)
Concrete and Asphalt Paving:		
Parking stripes	-	P-6
Sidewalk edges uses as curbs as indicated on drawings, bascart ramp edges Stair risers.	-	P-6
Masonry:		
Concrete Masonry Unit Walls (New construction or existing unpainted) • Integral color block and brick and standard gray block, for whole walls and graphics.	PP-4	P-10
Concrete Masonry Unit Walls (Previously painted)	PP-5	P-11
Clay Brick and Cast Stone Walls (New construction or existing unpainted) • Painted graphics and other wall areas designated on Drawings.	PP-5	P-2
Plastic: PVC		
PVC plastic piping	PP-1	P-1
Steel:		
Miscellaneous steel including ladders, railings, lintels, structural steel door frames, canopy steel, equipment supports, pipe supports, and any other exterior non-galvanized metal. (Spot prime shop primed surfaces as required)	PP-1	P-12
Miscellaneous galvanized steel items as indicated on drawings including miscellaneous flashings, sheet metal vents, flues & ductwork above roof. (Spot prime shop primed surfaces as required)	PP-1	P-12
Hollow metal doors and frames on exterior face and edges. (Spot prime shop primed surfaces as required)	PP-1	P-12
Exposed steel and iron piping and other bare metal. (Spot prime shop primed surfaces as required)	PP-1	P-12 (2 coats)
Exterior fire protection piping (including P.I.V. fire dept connections and sprinkler drains)(Spot prime shop primed surfaces as required)	PP-1	P-12 (2 coats)
Aluminum		
Aluminum storefront, including doors, structure and flashing, other prefinished aluminum.	DO NOT PAINT	DO NOT PAINT
Prefinished aluminum vents and flues above roof	DO NOT PAINT	DO NOT PAINT
Primed aluminum metal trim around main entrance feature (Typically on Kroger Marketplace)	DO NOT PAINT	P-2
EFIS, Synthetic Stucco		
(New) Exterior insulation & finish system, synthetic stucco	DO NOT PAINT	DO NOT PAINT
(Existing) Exterior insulation & finish system, synthetic stucco	P-14	P-14

3.5 INTERIOR PAINTING SCHEDULE

Area	Prime Coat (1 Coat)	Finish Coat (1 Coat)
Concrete		
Fire exit lanes.	-	P-6
Inspection stripe. (see floor covering plan)	-	P-6
Masonry (CMU):		
Cleaning center & prep area.	PP-2	P-7 (1 coat)
Cart Wash-down Area	PP-2	P-7 (1 coat)
Waste Compactor trash chute door surround (8' X 8' area)	PP-2	P-7 (1 coat)
Breakroom, Office, Meeting Rooms, etc.	PP-2	P-5 (1 coat)
Metal:		
Concealed structural steel, metal deck, piping, ductwork, etc.	DO NOT PAINT	DO NOT PAINT
All exposed steel members on storefront. (Spot prime shop primed surfaces as required)	PP-1	P-1
Office mezzanine stair hand railings, backroom ladders, handrails, and stairs. (Spot prime shop primed surfaces as required)	PP-1	P-1
Steel supports for dock lights. (Spot prime shop primed surfaces as required)	PP-1	P-1
Steel angles at dock levelers, interior pipe bollards and bent plate end wall cap at the cleaning center (when required) to a height of 8-feet (2.4-m). (Spot prime shop primed surfaces as required)	PP-1	P-1
Case Top Valance (Galvanized steel stud runner)	PP-1	P-1
Exposed galvanized metal	DO NOT PAINT	DO NOT PAINT
Hollow metal doors and frames, factory primed	-	P-1 (2 coats)
Vents, electrical panels, factory primed	-	P-1 (2 coats)
Metal, Exposed Structure Ceiling Area		
New Construction: Exposed structure ceiling structural steel and columns, joists, and deck and piping and ductwork in ceiling area.	DO NOT PAINT	DO NOT PAINT
Remodels: Exposed structure ceiling structural steel and columns, joists, and deck and piping and ductwork in ceiling area.	P-9	P-9

Area	Prime Coat (1 Coat)	Finish Coat (1 Coat)
Repriming of rusty or abraded exposed structure ceiling structural steel, joists, and deck in ceiling area.	Match shop primer	-
Aluminum		
Aluminum or vinyl clad storefront system	DO NOT PAINT	DO NOT PAINT
Wood, Semi-Gloss		
Wood décor trim	Prefinished	P-5
Misc. Trim, unfinished	PP-3	P-5
Plywood walls	DO NOT PAINT	DO NOT PAINT
Gypsum board ceilings		
Exposed gypsum board ceilings, where indicated	PP-3	P-3 (1 coat)
Gypsum board walls		
Exposed gypsum board walls, unless otherwise indicated	PP-3	P-4 (1 coat)
Décor stenciling on exposed gypsum board walls,	-	P-3 (2 coats)
Other		
Aluminum interior window frames	DO NOT PAINT	DO NOT PAINT
Cooler and freezer walls and doors	DO NOT PAINT	DO NOT PAINT

END OF SECTION 09 91 00