

SECTION 09 91 13
EXTERIOR PAINTING

PART 1 GENERAL

1.1 STIPULATIONS

- A. The specifications sections "General Conditions to the Construction Contract", "Special Conditions" and "Division 01 - General Requirements" form a part of this Section by this reference thereto, and shall have the same force and effect as if printed herewith in full.

1.2 SECTION INCLUDES

- A. Surface preparation.
- B. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
 - 1. Exterior metal doors and frames.
 - 2. Exterior metal guards and handrails.
 - 3. All plumbing vent penetrations through the roof.
- C. Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
 - 5. Stainless steel, anodized aluminum, bronze, terne coated stainless steel, copper, zinc, and lead, unless otherwise indicated.
 - 6. Brick, glass unit masonry, architectural concrete, cast stone, integrally colored plaster and stucco.
 - 7. Glass.
- D. Do not include painting that is specified under another Section.

1.3 RELATED REQUIREMENTS

- A. Section 05 50 00 - Metal Fabrications: Shop-primed items.
- B. Section 09 91 23 - Interior Painting.

1.4 DEFINITIONS

- A. Comply with ASTM D16 for interpretation of terms used in this section.

1.5 REFERENCE STANDARDS

- A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications 2019.
- B. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.

1.6 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
 - 3. Manufacturer's installation instructions.
- C. Certification: By manufacturer that paints and finishes comply with VOC limits specified.
- D. Manufacturer's Instructions: Indicate special surface preparation procedures and substrate conditions requiring special attention.
- E. Maintenance Data: Submit coating maintenance manual including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.
- F. Extra Stock: Upon completion of the work of this Section, deliver to the Client Agency extra stock of paint finishes as follows:

Type of Paint:	Quantity of Paint:
Exterior steel door and trim paint:	1 gallon each color
Any miscellaneous paint not listed above:	1 quart each color

- 1. Packaging: Extra stock shall be delivered in tightly sealed containers labeled with the manufacturers name, manufacturers stock number, paint type and gloss, application and thinning instructions, and locations used.

1.7 QUALITY ASSURANCE

- A. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years experience.
- B. In acceptance or rejection of the work of this Section, the Architect will make no allowance for lack of skill on the part of workmen.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.
- D. In the event of damage, immediately make all replacements necessary to the approval of the Architect and at no additional cost to the Client Agency.

1.9 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the paint product manufacturer's temperature ranges.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply exterior paint and finishes during fog, rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.
- D. Do not apply solvent-thinned paints when the temperature of surfaces to be painted and the surrounding air temperatures are below 45 degrees F, unless otherwise permitted by the manufacturer's printed instruction.
- E. Minimum Application Temperatures for Latex Paints: 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- F. Provide lighting level of 80 ft candles measured mid-height at substrate surface.
- G. Refer to the Client Agency's Environmental Report for conditions in the existing structure that may contain Lead Based Paint. Follow regulatory requirements for protection, containment and disposal.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Provide paints and finishes from the same manufacturer to the greatest extent possible.
 - 1. If a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.
- B. Paints:
 - 1. Behr Process Corporation: www.behr.com/#sle.
 - 2. PPG Paints: www.ppgpaints.com/#sle.
 - 3. **Basis of Design:** Sherwin-Williams Company: www.sherwin-williams.com/#sle.

- C. Primer Sealers: Same manufacturer as top coats.
- D. Substitutions: See Section 01 25 00 - Substitution Procedures.

2.2 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready-mixed, unless required to be a field-catalyzed paint.
 - 1. Provide paints of durable and washable quality. Do not use paint materials that will not withstand normal washing as required to remove pencil marks, ink, ordinary soil, and similar materials without showing discoloration, loss of gloss, staining, or other damage.
 - 2. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 3. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - a. Review other Sections of these Specifications as required to determine the various substrates to be finished.
 - b. Provide barrier coats over non-compatible primers, or remove the primer and reprime as required.
 - c. Upon request, furnish information on the characteristics of the specific finish materials to ensure that compatible prime coats are used.
 - d. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime coating supplied under other Sections.
 - e. Insofar as practicable, use undercoat, finish coat, and thinner material as parts of a unified system of paint finish.
 - 4. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is described explicitly in manufacturer's product instructions.
 - a. Use only the thinners recommended by the paint manufacturer, and use only to the recommended limits.
- B. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line. The Architect will be the sole judge of acceptability of the various sheens obtained from materials proposed to be used by the Contractor.
- C. Colors: To be selected from manufacturer's full range of available colors.
 - 1. Selection to be made by Architect after award of contract.
 - 2. Allow for up to two colors for exterior doors, at no additional cost.

3. The following items will be painted to match adjacent materials. Each item could have a different color. These colors are in addition to the number of colors indicated above:
plumbing vent penetrations through the roof, exposed metal pipes, PVC trim/panels
4. Extend colors to surface edges; colors may change at any edge as directed by Architect.

2.3 PAINT SYSTEMS - EXTERIOR

A. Paint E-OP - Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including PVC.

1. Two top coats and one coat primer.
2. Top Coat(s): Exterior Latex.
 - a. Use for PVC pipes.
 - b. Products:
 - 1) Sherwin-Williams Pro Industrial Acrylic Coating, Eg-Shel, B66-660 Series.
 - (a) Primer for wood: Sherwin-Williams Exterior Latex Wood Primer, B42W08041.
 - (b) Primer: Sherwin-Williams Extreme Bond Primer, B51-150 Series.
 - 2) Substitutions: See Section 01 25 00 - Substitution Procedures.
3. Top Coat(s): Exterior Latex
 - a. Use for PVC trim.
 - b. Products:
 - 1) Sherwin-Williams SuperPaint Exterior Acrylic Latex, Satin, with VinylSafe Color Technology, A89 Series.
 - (a) Primer: NO primer. Two top coats applied directly to substrate.
4. Top Coat(s): Exterior Light Industrial Coating, Water Based.
 - a. Use for steel doors/frames (galvanized) and steel utility pipes/conduits.
 - b. Ensure compatibility of primer with door manufacturer's warranty.
 - c. Products:
 - 1) Sherwin-Williams SHER-CRYL HPA High Performance Acrylic Coating, Semi-Gloss, B66-350 Series.
 - (a) Primer: Sherwin-Williams Pro Industrial Pro-Cryl Universal Acrylic Primer, B66-310 Series.
 - 2) Sherwin-Williams SHER-CRYL HPA High Performance Acrylic Coating, Gloss, B66-300 Series.

- (a) Primer: Sherwin-Williams Pro Industrial Pro-Cryl Universal Acrylic Primer, B66-310 Series.

3) Substitutions: See Section 01 25 00 - Substitution Procedures.

2.4 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.
- D. Patching Material for Metals: Two-part polyester filler (Bondo).
- E. Nail Hole Filler: Wood putty, colored to match wood or stain.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- E. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.
- F. Test shop-applied primer for compatibility with subsequent cover materials.

3.2 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or repair existing paints or finishes that exhibit surface defects.
- D. Dull glossy surfaces.
- E. Remove surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing. Mask items that are not removable.
- F. Seal surfaces that might cause bleed through or staining of topcoat.
- G. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

- H. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.
- I. Paint shall not be applied to any surfaces found to be unsatisfactory. Application of paint shall constitute approval of surface conditions by the Painting Contractor.

3.3 MATERIALS PREPARATION

- A. Mix and prepare painting materials in strict accordance with the manufacturer's recommendations.
- B. Store materials not in actual use in tightly covered containers.
- C. Maintain containers used in storage, mixing, and application of paint in a clean condition, free from foreign materials and residue.
- D. Stir all materials before application to produce a mixture of uniform density, and as required during the application of materials. Do not stir into the material any film that may form on the surface. Remove the film and, if necessary, strain the material before using.

3.4 APPLICATION

- A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. Use brushes, rollers, spray equipment, or any combination of equipment as is recommended for application of the particular paint by the manufacturer of the particular paint, and that gives results satisfactory to the Architect. Rate of application shall not exceed that recommended by paint manufacturer for the surface involved.
- C. Keep brushes, rollers and spray equipment clean and free from contaminates and suitable for the finish required.
- D. Finish coat shall be smooth, free from brush marks, streaks, runs, laps, and skipped or missed areas. If spray application is used, finish coat shall be rolled with a paint roller immediately after spraying, to achieve a "paint roller" texture.
- E. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
 - 1. Oil base and oleo-resinous solvent type paints shall be considered dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb, and the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- F. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- G. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply additional coats until complete hide is achieved.
- H. If the indicated number of coats is not adequate for proper coverage, additional coats will be required as directed by the Architect, at no additional cost to the Client Agency.
- I. Sand metal surfaces lightly between coats to achieve required finish. Remove all defects visible to the unaided eye from a distance of five feet.

- J. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- K. Reinstall surface appurtenances, including electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing by using workmen skilled in the necessary trades.
- L. Completed work shall match the approved samples of color, texture and coverage. Remove, refinish or repaint all work not in compliance with specified requirements.

3.5 CLEANING

- A. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall onto wet newly painted surfaces.
- B. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.6 TOUCHING UP

- A. For patch work, paint entire wall surface to nearest intersection or break, as indicated, or as approved by the Architect. Touch-up areas are not acceptable.

3.7 PROTECTION

- A. Protect finishes until completion of project.

END OF SECTION