

SECTION 09900 - PAINTING**PART 1 GENERAL****A. RELATED DOCUMENTS**

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
2. Section 06200, Finish Carpentry.
3. Section 09270, Gypsum Board Assemblies.

B. SUMMARY

1. This Section includes surface preparation, painting, and finishing of exposed items and surfaces.
2. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.
3. Paint exposed surfaces, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
4. Painting is not required on prefinished items including cabinetry as specified as prefinished, concealed surfaces; operating parts; and labels.
5. Prime and backprime all exterior wood trim and finish work and all wood trim and finish work to be wrapped with prefinished breakmetal.
6. Labels: Do not paint over Underwriters Laboratories, Factory Mutual or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

C. SUBMITTALS

1. General: Submit the following according to Conditions of the Contract and Division 1 Specification Sections.
2. Product data for each paint system specified including primers.
 - a. Provide the manufacturer's technical information including label analysis and instructions for handling, storage, and application of each material proposed for use.
 - b. List each material and cross-reference the specific coating, finish system, and application. Identify each material by the manufacturer's catalog number and general classification.
3. Samples for color selection in the form of manufacturer's color charts.

D. QUALITY ASSURANCE

1. Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.

E. DELIVERY, STORAGE, AND HANDLING

1. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.

F. JOB CONDITIONS

1. Apply paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F (10 deg C) and 90 deg F (32 deg C).

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

G. EXTRA MATERIAL

1. Provide a minimum of one gallon of each color of finish paint for every ten gallons used to complete the work.

PART 2 PRODUCTS

A. PAINT MATERIALS, GENERAL

1. Material Compatibility: Provide primers, finish coat materials, and related materials that are compatible with one another, existing conditions and the substrates indicated under conditions of service and application, as demonstrated by the manufacturer based on testing and field experience. Contractor is responsible for the verification of existing substrates in the field prior to ordering material.
2. Material Quality: Provide the manufacturer's best-quality trade sale paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.
 - a. Colors: Provide color selections made by the Architect from the manufacturer's full range of standard and deep hue colors. Architect will select up to four different wall colors, and four different trim colors. Corridor walls will receive three different colors.

B. PRODUCTS

1. Number of coats listed is a minimum, apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance.
2. Manufacturer: Subject to compliance with requirements, provide products of one of the listed Manufacturers.
 - a. California
 - b. ICI (Including all represented brands)
 - c. Benjamin Moore (BM)
 - d. Pratt & Lambert (PL)
 - e. Sherwin Williams (SW)
 - f. Where only one manufacturer is indicated, products by the other listed manufacturers that meet the performance characteristics of the listed product will be acceptable.
3. Exterior Painting:
 - a. Exterior Ferrous Metal: Semi-gloss enamel finish: two coats over primer with total dry film thickness not less than 2.5 mils. Primer is not required on shop primed items.
 - (1) Synthetic rust-inhibiting Primer:
 - (a) ICI/Devoe: Devshield 4130, Metal Primer.
 - (b) BM: IronClad Retardo Rust-Inhibitive Paint #163.
 - (c) SW: Kem Kromik Universal Metal Primer, Series B50.
 - (d) Color: Use a primer color that is compatible with finish color.
 - (2) Gloss alkyd enamel:
 - (a) ICI/Devoe: Devshield 4328 Interior/Exterior Alkyd-Urethane Gloss Enamel.
 - (b) BM: Impervo High-Gloss Enamel #133.
 - (c) SW: Industrial Enamel, Series B54.
 - b. Exterior Paint Wood Trim: Alkyd based exterior paint: primer as needed for unprimed surfaces only, and 2 coats of finish paint.
 - (1) Primer:
 - (a) SW: A-100 Exterior Wood Primer, 2.2.mils dry.
 - (2) Paint:
 - (a) SW: SWP Exterior gloss, oil-base paint, Series A2.
4. Interior Painting: No-Voc's (typ.)

- a. Interior - Painted Ferrous Metal: Acrylic enamel, two coats over primer after surface preparation as recommended by manufacturer.
 - (1) Primer Coat; metal primer:
 - (a) ICI/Devoe: Devflex 4020, acrylic Metal Primer, white.
 - (b) SW: DTM Acrylic primer/finish
 - (2) Interior, semigloss, odorless, acrylic enamel:
 - (a) ICI/Devoe: Devflex 4206, Semi-gloss acrylic enamel.
 - (b) SW: ProClassic Waterborne Semi-gloss.
- b. Interior Painted Woodwork and Moulded Doors - Semigloss Enamel Finish: two coats over primer.
 - (1) Interior undercoat.
 - (a) ICI: Ultra-Hide Aquacrylic GRIPPER, acrylic primer-sealer.
 - (b) BM: Moore's Alkyd Enamel Underbody #217.
 - (c) PL: Interior Trim Primer.
 - (2) Interior, semigloss, odorless, alkyd enamel second and third coats.
 - (a) ICI: Ultra-Hide Alkyd Semi-gloss Enamel.
 - (b) BM: Moore's Satin Impervo Enamel #235.
 - (c) PL: Cellu-Tone Alkyd Satin Enamel.
- c. Painted Wallboard, - Low lustre, latex-based, two coats over primer.
 - (1) Primer Coat; Neutral color primer-sealer:
 - (a) ICI: Ultra-Hide, 1030 PVA Latex general purpose primer.
 - (b) BM: Moore's Latex Quick-Dry Prime Seal #201.
 - (c) PL: Latex Wall Primer Z30001.
 - (2) Finish Coats: Latex Semi-Gloss at walls, Flat finish at ceilings.
 - (a) ICI: Ultra-Hide, 1414 Latex low-lustre enamel wall paint.
 - (b) BM: Moore's Regal Aquaglo #333.
 - (c) PL: Accolade Interior Semi-gloss Latex.

PART 3 EXECUTION

A. EXAMINATION

1. Examine substrates and conditions under which painting will be performed for compliance with paint application requirements. Surfaces receiving paint must be thoroughly dry before paint is applied.
 - a. All surfaces to receive paint to be smooth and free of any defects. All nails and screws, and any dents, tool marks or blemishes to be filled and sanded smooth. All welds to be ground smooth.
 - b. Do not begin to apply paint until unsatisfactory conditions have been corrected. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.
2. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers. Notify the Architect about anticipated problems using the materials specified over substrates primed by others.

B. PREPARATION

1. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items, if necessary, to completely paint the items and adjacent surfaces. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.
2. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease prior to cleaning.
 - a. Surface Preparation: Clean and prepare surfaces to be painted according to the manufacturer's instructions for each particular substrate condition and as specified. Provide barrier coats over

incompatible primers or remove and reprime. Notify Owner in writing about anticipated problems using the specified finish-coat material with substrates primed by others.

3. Ferrous Metals: Clean ungalvanized ferrous metal surfaces that have not been shop primed; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council (SSPC).
 - a. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.
4. Materials Preparation: Carefully mix and prepare paint materials according to manufacturer's directions.
 - a. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 - b. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film that forms into material. Remove any film and, if necessary, strain material before using.
 - c. Use only thinners approved by the paint manufacturer and only within recommended limits.

C. APPLICATION

1. General: Apply paint according to manufacturer's directions and recommendations. Use applicators and techniques best suited for substrate and type of material being applied.
2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film. Provide finish coats that are compatible with primers used.
3. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer.
4. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
5. Sand lightly between each succeeding enamel coat.
6. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
 - a. Do not re-coat until previous coat has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.
7. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to the manufacturer's directions.
 - a. Brushes: Use brushes best suited for the material applied.
 - b. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 - c. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
8. Minimum Coating Thickness: Apply materials no thinner than the manufacturer's recommended spreading rate.
9. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime-coated by others. Re-coat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
10. Pigmented (Opaque) Finishes: Completely cover to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

D. CLEANING

1. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.
 2. After paint has thoroughly dried, reinstall trim items and components removed to facilitate finishing operations.
- E. PROTECTION
1. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Owner.
 2. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION 09900