

PART 1 - GENERAL

1.01 DEFINITIONS

- A. "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.02 DESCRIPTION OF WORK

- A. Work includes surface preparation, painting and finishing of all interior and exterior exposed items and surfaces throughout project, except as otherwise indicated.
- B. Surface preparation, priming and finish coats specified are in addition to shop-priming and surface treatment specified under other Sections.
- C. Mechanical and Electrical Work:
 - 1. Painting of mechanical and electrical work is limited to those items exposed in mechanical equipment rooms and in occupied spaces, plus all exterior items exposed to the weather, including blocking and supports on roofs.
 - 2. Mechanical items to be painted include, but are not limited to, the following:
 - a. Supports.
 - b. Accessory items.
 - c. Color coding when other coding method is not provided.
 - d. Rooftop mechanical equipment.
 - e. Gas lines on roof.
 - f. All grills and trim rings in ceilings to match adjacent ceiling finish.
 - g. Ductwork exposed in lobby.
 - 3. Electrical items to be painted include, but are not limited to, the following:
 - a. Conduit.
 - b. Fittings.
 - c. Light fixture trim rings in public spaces.
- D. Exposed structures at lobby ceiling to be painted, including joists, beams, and underside of exposed roof deck.
- E. Except where a surface material is specifically indicated not to be painted or is to remain natural, paint exposed surfaces whether or not colors are designated in "Schedule"
 - 1. Where an items or surface is not specifically mentioned, paint same as similar adjacent materials or surfaces.
 - 2. If color or finish is not designated, Architect will select from standard colors or finishes available.
 - 3. Paint all fire extinguisher cabinets to match adjacent wall surface.
 - 4. Return air shafts in auditoriums – (Black).
- F. Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.

1. Prefinished items not to be painted include the following factory-finished components:
 - a. Acoustic materials.
 - b. Elevator equipment.
 - c. Finished mechanical and electrical equipment.
 - d. Light fixtures.
 - e. Switchgear.
 - f. Distribution cabinets.
2. Concealed surfaces not to be painted include wall or ceiling surfaces in the following generally inaccessible areas.
 - a. Pipe spaces.
 - b. Duct shafts (excluding return air shafts in auditoriums).
 - c. Elevator shafts.
3. Finished metal surfaces not to be painted include:
 - a. Anodized aluminum.
 - b. Stainless steel.
 - c. Kynar coated aluminum.
4. Operating parts not to be painted include moving parts of operating equipment such as the following:
 - a. Valve and damper operators.
 - b. Linkages.
 - c. Sensing devices.
 - d. Motor and fan shafts.
5. Do not paint over Underwriter's Laboratories, Factory Mutual, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

1.03 SUBMITTALS

- A. Samples for Initial Color Selection:
 1. Architect will furnish color chips for surfaces to be coated. Colors selected will be from manufacturer's standard colors, but not necessarily the manufacturer the contractor is using.
- B. Samples for Verification Purposes:
 1. Samples of the following substrates for the Architect's review of color and texture only:
 - a. Drywall: Provide two 12 b 12 inch samples of each color and finish on gypsum drywall board.

1.04 QUALITY ASSURANCE

- A. Single Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer, and use only within recommended limits.
- B. Coordination of Work:
 1. Review other Sections in which primers are provided to ensure compatibility of total systems for various substrates.
 2. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
 3. Notify Architect of problems anticipated using the materials specified.

C. Field Samples:

1. On actual wall surfaces and other exterior and interior components, duplicate finishes of prepared samples. Provide full-coat finish samples on at least 100 sq. ft of surface until required sheen, color and texture is obtained; simulate finished lighting conditions for review of in-place work.
2. Final acceptance of colors will be from job-applied samples.

1.05 DELIVERY AND STORAGE

A. Deliver materials to job site in manufacturer's original unopened packages and containers bearing manufacturer's name.

B. Materials Storage:

1. Store materials not in use in tightly containers in a well-ventilated area at minimum temperature of 45° F.
2. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
3. Protect materials from freezing where necessary.
4. Keep storage area neat and orderly. Remove oily rags and waste daily.
5. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing and application.

1.06 JOB CONDITIONS

- A. Apply water-base paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50°F and 90°F unless specifically permitted otherwise by paint manufacturer's printed instructions.
- B. Apply solvent-thinned paints only when temperatures of surfaces to be painted and the surrounding air temperatures are between 45°F and 95°F unless specifically permitted otherwise by paint manufacturer's printed instructions.
- C. Do not apply paint in snow, rain, fog or mist when the relative humidity exceeds 85%, at temperatures less than 5°F above dew point, or to damp or wet surfaces unless specifically permitted otherwise by paint manufacturer's printed instructions.
- D. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Provide products of one of the following:
 1. Pittsburgh Paint.
 2. ICI (Devoe and Glidden).
 3. MAB Paints, Inc.
 4. Benjamin Moore.
 5. Sherwin-Williams Company.

2.02 MATERIALS

- A. Color Pigments: Pure, non-fading, applicable types to suite substrates and service indicated.
 - 1. Lead content in pigment, if any, is limited to contain not more than 0.06% lead, as lead metal based on the total non-volatile (dry film) of paint by weight.
 - 2. This limitation is extended to interior surfaces and those exterior surfaces, such as stairs, decks, porches, railings, windows and doors which are readily accessible to children under seven years of age.

PART 3 – EXECUTION

3.01 INSPECTION

- A. Examine substrates and conditions under which painting will be performed for compliance with requirements for application of paint. Do not begin paint application until unsatisfactory conditions have been corrected.
- B. Starting of painting work will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

3.02 PREPARATION

- A. Removed Accessories: Remove hardware and hardware accessories, machined surfaces, electrical outlet and switch plates, lighting fixtures, registers and similar items in place that are not to be painted, or provide surface-applied protection prior to surface preparation and painting.
 - 1. Remove those items if necessary for complete painting of the items and adjacent surfaces.
 - 2. Following completion of painting operations in each space or area, removed items shall be re-installed by workers skilled in the trades involved.
- B. Pre-Cleaning: Clean surfaces before applying paint or surface treatments.
- C. Surface Preparation: Clean and prepare surfaces to be painted in accordance with paint manufacturer's instructions for each particular substrate condition and as specified.
- D. Incompatible Coatings: Provide barrier coats over incompatible primers or remove and reprime. Notify Architect in writing of problems anticipated with using the specified finish-coat material with substrates primed by others.
- E. Gypsum Wall Board:
 - 1. Inspect taped and finished wallboard joints for imperfections, irregularities, defects. Do not proceed with first coat of paint until wallboard finish is accepted by paint installer.

F. Wood:

1. Clean wood surfaces to be painted of dirt, oil and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
2. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer before application of primer.
3. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood-filler. Sand smooth when dried.

G. Ferrous Metal:

1. Clean ferrous-metal surfaces that are not galvanized or shop-coated, remove oil, grease, dirt, loose mill scale and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of Steel Structures Painting Council.
2. Touch-up base areas and shop-applied prime coats that have been damaged. Wire-brush, with solvents recommended by the paint manufacturer, and touch-up with same primer as shop coat.

H. Galvanized Surfaces: Clean galvanized with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pre-treatment from galvanized sheet metal fabricated from coil stock, by mechanical methods.

I. Cementitious Materials: Prepare concrete, concrete masonry block, cement plaster, and mineral-fiber-reinforced cement panel surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.

1. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
2. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's written instructions.
3. Clean concrete floors to be painted with a 5 percent solution of muriatic acid or other etching cleaner. Flush the floor with clean water to remove acid, neutralize with ammonia, rinse, allow to dry, and vacuum before painting.

J. Materials Preparation:

1. Carefully mix and prepare paint materials in accordance with manufacturer's directions.
2. Use only thinners approved by the paint manufacturer, and only within recommended limits.

3.03 APPLICATION

A. General:

1. Apply paint in accordance with manufacturer's directions. 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 otherwise detrimental to formation of durable paint film.
3. Provide finish coats which are compatible with primers used.
4. The number of coats and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce an even smooth surface in accordance with the manufacturer's directions.
5. Apply additional coats when undercoats, stains or other conditions show through the final coat of paint until paint film is of uniform finish, color and appearance. Give special attention to insure that surfaces, including edges, corners, crevices, welds and exposed fasteners receive a dry-film thickness equivalent to that of flat surface.
6. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convactor covers, covers for finned tube radiation, grilles, and similar components are in place. Extend coatings in these areas as required to maintain the system integrity, and provide desired protection.
7. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Paint surfaces behind permanently-fixed equipment and furniture with prime coat only, before final installation of equipment.
8. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non-specular black paint.
9. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
10. Finish exterior doors on tops, bottoms and side edges same as exterior faces.
11. Sand lightly between each succeeding enamel and varnish coat.
12. Omit primer on metal surfaces that have been shop-primed and touch-up painted.

B. Prime Coats:

1. Before application of finish coats, apply prime coat to surfaces that are required to be painted or finished and which have not been prime coated by others.
2. Re-coat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.

C. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, run sags, ropiness or other surface imperfections will not be acceptable.

D. Transparent (Clear) Finishes:

1. Use multiple coats to produce glass-smooth surface film or even luster.

2. Provide finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes or other surface imperfections.
 3. Provide satin finish for final coats, unless otherwise indicated.
- E. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.

3.04 CLEANING, PROTECTION AND REPAIR

- A. Protection:
1. Protect work of other trades, whether to be painted or not, against damage by painting work. Correct all damage by cleaning, repairing or replacing and repainting, as acceptable to Architect.
 2. Provide "Wet Paint" signs to protect newly-painted finishes.
 3. Remove temporary protective wrapping provided by others for protection of their work, after completion of painting operations.
- B. At completion of construction activities of other trades, touch up and restore all damaged and defaced painted surfaces.

3.05 EXTERIOR PAINT SCHEDULE

- A. See Section 2.01A for acceptable manufacturers. Listed below are two examples of manufacturer's products for each finish in order to establish the quality level.
- B. Exterior Ferrous Metal:
1. Semi-Gloss Latex Enamel: 2 finish coats over primer.
 2. Prime Coat: Red oxide or comparable pigmented primer. Primer is not required on items delivered shop primed.
 - a. Devoe: 41820 Bar-Ox Red Oxide Metal Primer.
 - b. MAB: Rust-O-Lastic Check Rust Primer.
 3. First and Second Finish Coats: Semi-Gloss Latex Enamel.
 - a. Devoe: 70XX Mirrolac Latex Gloss Enamel.
 - b. MAB: Rust-O-Lastic Gloss Enamel.
- C. Zinc-Coated Exterior Metal:
1. Semi-Gloss Enamel: 2 finish coats over primer.
 2. Prime Coat: Galvanized metal primer.
 - a. Devoe: Mirrolac Galvanized Metal Primer.
 - b. MAB: Rust-O-Lastic Exterior Galvanized Primer.
 3. First and Second Finish Coats: Semi-Gloss Alkyd Enamel.
 - a. Devoe: 70XX Mirrolac Interior/Exterior Alkyd Gloss Enamel.
 - b. MAB: Rust-O-Lastic Gloss Enamel.
- D. Smooth Wood: Provide the following finish systems over smooth wood siding and other smooth exterior wood surfaces.
1. Low-Luster Acrylic Finish: 2 finish coats over a primer.
 2. Primer: Exterior, alkyd or latex, wood primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended

by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils (0.038 mm).

- a. Devoe: 1102 All-Weather Exterior Alkyd House Paint Primer.
 - b. MAB:
3. First and Second Coats: Low-sheen eggshell exterior, latex paint applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.3 mils (0.058 mm).
 - a. Devoe: 16XX Wonder-Shield Exterior Acrylic Latex Satin House and Trim Paint.
 - b. MAB:

3.06 INTERIOR SCHEDULE

- A. See Section 2.01A for acceptable manufacturers. Listed below are two examples of manufacturer's products for each finish in order to establish the quality level. NOTE: Standard paint finish to be semi-gloss finish except on painted gypsum board.
- B. Painted Interior Woodwork and Hardboard:
 1. Semi-Gloss Enamel Finish: 3 coats.
 2. First Coat: Interior Enamel Undercoat.
 - a. Devoe: 8801 Velour Alkyd Enamel Undercoat.
 - b. MAB: Rich Lux Alkyd Primer Undercoat.
 3. Second and Third Coats: Odorless Interior Semi-Gloss Enamel.
 - a. Devoe: 26XX Velour Alkyd Semi-Gloss Enamel.
 - b. MAB: Rich Lux Low-Lustre Alkyd Enamel.
- C. Gypsum Board: Provide the following finish systems over interior gypsum board surfaces:
 1. Low-Luster, Acrylic-Enamel Finish: 2 finish coats over a primer.
 2. Primer: Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils (0.031 mm).
 - a. Devoe: 50801 Wonder-Tones Interior Vinyl Primer-Sealer.
 - b. MAB: Rich Lux Primer.
 3. First and Second coats: Low-luster eggshell, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.8 mils (0.071 mm).
 - a. Devoe: 34XX Wonder-Tones Interior Latex Eggshell Enamel.
 - b. MAB: Rich Lux low luster latex enamel.
- D. Interior Ferrous Metal:
 1. Semi-Gloss Enamel Finish: 2 coats over primer, with total dry film thickness not less than 2.5 mils.
 2. Prime Coat: Red oxide Base or Comparable Primer. Prime coat is not required on items delivered shop primed.
 - a. Devoe: 41820 Bar-Ox Red Oxide Metal Primer.
 - b. MAB: Rust-O-Lastic Check Rust Primer.
 3. First Coat: Interior Enamel Undercoat.
 - a. Devoe: 8801 Velour Alkyd Enamel Undercoat.
 - b. MAB: Rich Lux Alkyd Primer Undercoat.
 4. Second Coat: Odorless Interior Semi-Gloss Enamel.

- a. Devoe: 25XX Velour Alkyd Semi-Gloss Enamel.
 - b. MAB: Rich Lux Low-Lustre Alkyd Enamel.
- E. Interior Zinc-Coated Metal:
 - 1. Semi-Gloss Finish: 2 coats over primer, with total dry film thickness not less than 2.5 mils.
 - 2. Prime Coat: Galvanized metal primer.
 - a. Devoe: Mirrolac Galvanized Metal Primer.
 - b. MAB: Rust-O-Lastic Exterior Galvanized Primer.
 - 3. Second Coat: Interior Enamel Undercoat of First of Two Finish Coats.
 - a. Devoe: 8801 Velour Alkyd Enamel Undercoat.
 - b. MAB: Rich Lux Alkyd Primer Undercoat.
 - 4. Third Coat: Odorless Interior Alkyd Semi-Gloss Enamel.
 - a. Devoe: 26XX Velour Alkyd Semi-Gloss Enamel.
 - b. MAB: Rich Lux Low-Luster Alkyd Enamel.
- F. Interior Hollow Metal Doors:
 - 1. Semi-gloss Finish: 2 coats over primer, with total dry film thickness no less than 2.5 mils.
- G. Interior Solid Core Wood Doors:
 - 1. Semi-Gloss finish: 3 coats.
 - 2. First coat: Interior Enamel Undercoat.
 - a. Devoe: 8801 Velour Alkyd Enamel Undercoat.
 - b. MAB: Rich Lux Alkyd Enamel Undercoat.
 - 3. Second and Third Coats: Odorless Interior Semi-Gloss.
 - a. Devoe: 26XX Velour Alkyd Semi-Gloss Enamel.
 - b. MAB: Rich Lux Low-Lustre Alkyd Enamel.
- H. Concrete Masonry Units: Provide the following paint systems over interior concrete masonry block units:
 - 1. Low-Luster, Acrylic-Enamel Finish: 2 finish coats over a block filler.
 - 2. Block Filler: High performance, latex based, block filler applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 5.0 mils (0.13 mm).
 - a. Devoe: 52902 Bloxfil 200 Interior/Exterior Latex block filler.
 - b. MAB:
 - 3. First and Second Coats: Low-luster eggshell, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.8 mils (0.071 mm).
 - a. Devoe: 34XX Wonder-Tones Interior Latex Eggshell Enamel.
 - b. MAB:
- I. Concrete Floors (Scheduled as painted):
 - 1. One coat epoxy primer.
 - 2. Two coats epoxy enamel (slip resistant finish).

3.07 EXTRA MATERIALS

- A. Provide to project site one (1) gallon of each paint color properly labeled with color, type and room location(s); mark "Extra Stock".

END OF SECTION