SECTION 099000 - PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Exposed exterior items and surfaces with low VOC coatings complying with ME DEP regulations.
 - 2. Exposed interior items and surfaces with low VOC coatings complying with ME DEP regulations.
 - 3. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.
- B. Related Sections include the following:
 - 1. Division 04 Section "Unit Masonry Assemblies" for preparation of concrete masonry.
 - 2. Division 05 Section "Structural Steel Framing" for shop priming structural steel.
 - 3. Division 05 Section "Steel Decking" for shop finish on metal deck to be field finished.
 - 4. Division 05 Section "Metal Fabrications" for shop priming ferrous metal.
 - 5. Division 06 Section "Finish Carpentry" for surface preparation of finish carpentry.
 - 6. Division 06 Section "Architectural Woodwork" for surface preparation of interior standing and running trim; and for shop finishing of architectural casework.
 - 7. Division 08 Section "Hollow Metal Doors and Frames" for factory priming steel doors and frames.
 - 8. Division 08 Section "Clad Wood Windows" for surface preparation of interior surface of windows.
 - 9. Division 09 Section "Gypsum Board Assemblies" for surface preparation of gypsum board.
 - 10. Review all sections for shop primed items requiring field painting.

1.3 DEFINITIONS

- A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
 - 1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
 - 2. Eggshell refers to low-sheen finish with a gloss range between 20 and 35 when measured at a 60-degree meter.
 - 3. Satin refers to low-sheen finish with a gloss range between 15 and 35 when measured at a 60-degree meter.
 - 4. Semigloss refers to medium-sheen finish with a gloss range between 35 and 70 when measured at a 60-degree meter.
 - 5. Full gloss refers to high-sheen finish with a gloss range more than 70 when measured at a 60-degree meter.

1.4 SUBMITTALS

- A. General: Submit in accordance with Division 01 Section "Submittal Procedures."
- B. Product Data: For each paint system indicated. Include block fillers and primers.
 - 1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - 2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
 - 3. Include printed statement of VOC content for each product.
- C. Schedule: Provide schedule of all surfaces to be coated, with prime and finish coat material listed, and manufacturer's recommended wet film thickness.
- D. Samples: For each type of exposed finish required, submit color chips, 3- by 5-inches, matching colors indicated on Finish Schedule.
- E. Manufacturer Certificates: Signed by manufacturers certifying that products with limit VOC amounts specified comply with requirements.
- F. Qualification Data: For Applicator.
- G. Color Mix Code: For all colors used for Project to include in Owner's Manual.

1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced Applicator who has completed painting system applications similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.
- B. Source Limitations: Obtain block fillers, primers and undercoat materials for each coating system from the same manufacturer as the finish coats.
- C. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample for each type of coating and substrate required. Duplicate finish of approved sample Submittals.
 - 1. Architect will select one room or surface to represent surfaces and conditions for each type of coating and substrate to be painted.
 - a. Wall Surfaces: Provide samples of at least 100 sq. ft.
 - b. Small Areas and Items: Architect will designate items or areas required.
 - 2. After permanent lighting and other environmental services have been activated, apply benchmark samples, according to requirements for the completed Work. Provide required sheen, color, and texture on each surface.
 - a. After finishes are accepted, Architect will use the room or surface to evaluate coating systems of a similar nature.
 - 3. Final approval of colors will be from benchmark samples.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
 - 1. Product name or title of material.

- 2. Product description (generic classification or binder type).
- 3. Manufacturer's stock number and date of manufacture.
- 4. Contents by volume, for pigment and vehicle constituents.
- 5. Thinning instructions.
- 6. Application instructions.
- 7. Color name and number.
- 8. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
 - 1. Protect from freezing. Keep storage area neat and orderly.
 - 2. Remove oily rags and waste daily.
 - 3. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.7 PROJECT CONDITIONS

- A. Apply paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F.
- B. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
 - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.
 - 2. Allow wet surfaces to dry thoroughly and attain temperature and conditions specified before proceeding with or continuing coating operation.

1.8 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
 - 1. Quantity: Furnish Owner with not less than 1 gal., of each material and color applied for Owner's use during move in.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.
- B. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:
 - 1. Benjamin Moore & Company (Moore).
 - 2. Devoe High Performance Coatings (DC); a division of Akzo Nobel (formerly ICI Paints).
 - 3. Glidden Professional (GP); a division of Akzo Nobel (formerly ICI Paints).
 - 4. Great Lakes Laboratories (GLL).
 - 5. Sherwin-Williams Co. (S-W).

- 6. Tnemec Company, Inc. (Tnemec).
- 7. Flame Control Coatings, LLC (Flame Control); phone: (716) 282-1399.

2.2 COATINGS MATERIALS, GENERAL

- A. Material Compatibility: Provide block fillers, primers, undercoats, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Material Quality: Provide manufacturer's best quality coating material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
 - 1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers listed in the specification schedule. Furnish manufacturer's material data and certificates of performance for proposed substitutions.
 - 2. Where schedule says no substitution, use proprietary product only. Do not propose substitution, as the products from the other manufacturers have been considered, and are not acceptable.
- C. VOC Compliance for Exterior and Interior Paints and Coatings: Provide the manufacturer's formulation for the products specified below that are VOC compliant with the State of Maine Department of Environmental Protection Regulation, "Chapter 151: Architectural and Industrial Maintenance (AIM) Coatings" and the following chemical restrictions expressed in grams per liter:
 - 1. Flat Paints and Coatings: VOC content of not more than 100 g/L.
 - 2. Non-Flat Paints and Coatings: VOC content of not more than 150 g/L.
 - 3. Non-Flat Paints and Coatings High Gloss: VOC content of not more than 250 g/L.
 - 4. Anticorrosive (Rust Preventative) Coatings: VOC content of not more than 400 g/L.
 - 5. Clear Wood Coatings:
 - a. Varnishes: VOC content of not more than 350 g/L.
 - 6. Fire Resistive Coatings: VOC content of not more than 350 g/L.
 - 7. Fire Retardant Coatings:
 - a. Clear: VOC content of not more than 650 g/L.
 - b. Opaque: VOC content of not more than 350 g/L.
 - 8. Floor Coatings: VOC content of not more than 250 g/L.
 - 9. Industrial Maintenance Coatings (IMC): VOC content of not more than 340 g/L.
 - 10. Interior Wood Clear and Semi-Transparent Stains: VOC content of not more than 550 g/L.
 - 11. Primers, Sealers, and Undercoaters: VOC content of not more than 200 g/L.
 - 12. Quick-Dry Enamels: VOC content of not more than 250 g/L.
 - 13. Quick-Dry Primers, Sealers, and Undercoaters: VOC content of not more than 200 g/L.
 - 14. Specialty Primers, Sealers, and Undercoaters: VOC content of not more than 350 g/L.
- D. Colors: Provide color selections made by the Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Applicator and drywall subcontractor present, under which painting will be performed for compliance with paint application requirements.
 - 1. Inspect walls for dents and imperfections prior to painting. Inspect walls again after primer and first coat of paint applied, with Applicator and drywall subcontractor present. Drywall subcontractor shall touch-up as follows:
 - a. Touch-up visible gypsum board imperfections before priming of walls.
 - b. Touch-up imperfections found in field of boards and joints made visible from painting after first finish coat applied.
 - 2. If unacceptable conditions are encountered, prepare written report, endorsed by Applicator, listing conditions detrimental to performance of work.
 - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 4. Application of coating indicates Applicator's acceptance of surfaces and conditions within a particular area.
 - 5. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
- B. 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 specified finish materials to ensure use of compatible primers.
 - 1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.

3.2 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
 - 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
 - 1. Provide barrier coats over incompatible primers or remove and reprime.
 - 2. Cementitious Materials: Prepare concrete unit masonry surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze.
 - a. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
 - b. 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 if moisture content exceeds that permitted in manufacturer's written instructions.

- 3. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
 - a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer.
 - b. Prime, stain, or seal wood to be painted immediately on delivery. Prime edges, ends, faces, undersides, and back sides of wood.
 - c. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
 - d. If transparent (clear or stained) finish is required, backprime with spar varnish.
- 4. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC's standards.
 - a. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
 - b. Touch up bare areas and shop-applied prime coats that have been damaged. Clean with solvents recommended by paint manufacturer and SSPC SP2; and touch up with same primer as the shop coat.
- 5. Galvanized Surfaces: Uniformly abrade galvanized surfaces with a palm sander and 60 grit aluminum oxide so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
 - a. Clean field welds with nonpetroleum-based solvents complying with SSPC's standards so surface is free of oil and surface contaminants.
- 6. PVC Trim and Decorative Components: Clean surfaces of dirt, oil, and other foreign substances with mixture of water and mild detergent as recommended by manufacturer. Remove blemishes on surfaces exposed to view by sanding smooth and dust off.
- D. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
 - 1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 - 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 - 3. Use only thinners approved by paint manufacturer and only within recommended limits.

3.3 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
 - 1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
 - 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 - 3. Provide finish coats that are compatible with primers used.
 - 4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
 - 5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

- 6. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
- 7. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
- 8. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.
- 9. Sand lightly between each succeeding enamel or varnish coat.
- B. 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.
 - 1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 - 2. Omit primer over metal surfaces that have been shop primed and touchup painted.
 - 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
 - 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.
- C. Paint all exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
 - 1. Painting includes field painting of exposed bare and covered pipes and ducts (including color-coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment at all locations except mechanical and electrical rooms.
- D. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
 - 1. Labels: Do not paint over Underwriters Laboratories (UL), Factory Mutual (FM), or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
- E. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions. Walls shall have roller finish.
 - 1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
 - 2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
 - 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.
- F. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

- G. Mechanical and Electrical Work: Painting of mechanical, plumbing, fire protection, and electrical work is limited to items exposed in occupied spaces (outside mechanical and electrical rooms).
- H. Mechanical, plumbing, and fire protection items to be painted include, but are not limited to, the following:
 - 1. Piping, pipe hangers and supports.
 - 2. Heat exchangers.
 - 3. Tanks.
 - 4. Ductwork, including interior of ductwork visible through air devices.
 - 5. Exposed rooftop units.
 - 6. Accessory items.
- I. Electrical items to be painted include, but are not limited to, the following:
 - 1. Conduit and fittings.
 - 2. Switchgear.
 - 3. Panelboards.
- J. Block Fillers: Apply block fillers to concrete masonry units at a rate to ensure complete coverage with pores filled.
- K. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- L. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary 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.
- M. Transparent (Clear or Stained) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.
 - 1. Provide satin finish for final coats, unless otherwise noted.
- N. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.
- O. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.
- P. Exterior Ferrous Metal Items to Be Painted Include, but Are Not Limited To, the Following:
 - 1. Steel doors and frames.
 - 2. Bollards.
 - 3. Metal fabrications; see Division 05 Section "Metal Fabrications."
 - 4. Miscellaneous metal items, including galvanized steel.
- Q. Interior Ferrous Metal Items to Be Painted Include, but Are Not Limited To, the Following:
 - 1. Steel doors and frames.
 - 2. Steel stairs, including risers and stringers.
 - 3. Handrails and guardrails.

- 4. Exposed construction, including metal deck.
- 5. Wood door glass lite kits.
- 6. Access panels (both sides).
- 7. Metal fabrications; see Division 05 Section "Metal Fabrications."
- 8. Miscellaneous metal items.

3.4 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the Project site.
 - 1. 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.

3.5 **PROTECTION**

1.

- A. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
 - 1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINT SCHEDULE

- A. VOC Compliance, General: Provide the manufacturers' formulations for the products specified below that comply with the VOC requirements for the State of Maine Department of Environmental Protection in paragraph 2.02.C of this Section.
- B. Wood Siding and Trim, Opaque Finish (Sheds): Provide the following finish systems over smooth wood siding and other smooth, exterior wood surfaces:
 - Low-Luster Acrylic Finish, Sheds: 2 finish coats over a primer.
 - a. Primer, Repairs and New: 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 indicated for product.
 - 1) Moore: Fresh Start Moorwhite Exterior Wood Primer No. 100; 2.1 mils DFT.
 - 2) GP: 6001-XXXX Hydrosealer Primer Sealer; 1.6 mils DFT.
 - 3) S-W: A-100 Exterior Latex Wood Primer B42W41; 1.4 mils DFT.
 - b. First and Second Coats: Low-sheen (eggshell or satin), exterior, latex paint applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Moorgard 100% Acrylic Low Lustre House Paint No. N103; 4.0 mils DFT.
 - 2) GP: 2402-XXXXV, Fortis 350 Exterior Satin Paint; 3.0 mils DFT.
 - 3) S-W: SuperPaint Exterior Latex Satin A89 Series; 3.0 mils DFT.

- 2. Semigloss, Acrylic-Enamel Finish (Doors at Sheds): 2 finish coats over a primer.
 - a. 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 indicated for product.
 - 1) Moore: Fresh Start Moorwhite Exterior Wood Primer No. 100; 2.1 mils DFT.
 - 2) GP: 6001-XXXX Hydrosealer Primer Sealer; 1.6 mils DFT.
 - 3) S-W: A-100 Exterior Latex Wood Primer B42W41; 1.4 mils DFT.
 - b. First and Second Coats: Semigloss, waterborne, exterior, acrylic enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Moorglo 100% Acrylic Soft Gloss House Paint No. N096; 3.2 mils DFT.
 - 2) GP: 4206-XXXXV, Fortis 350 Exterior Semi-gloss Paint; 3.0 mils DFT; 3.0 mils DFT.
 - 3) S-W: SuperPaint Exterior Gloss Latex A84 Series; 3.0 mils DFT.
- C. PVC Trim and Decorative Components: Provide the following finish systems over all exterior PVC trim and decorative components substrates:
 - 1. Low-Luster Acrylic Finish: 2 finish coats.
 - a. First and Second Coats: Low-sheen (eggshell or satin), exterior, acrylic-emulsion paint applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Moorgard 100% Acrylic Low Lustre House Paint No. N103; 4.0 mils DFT.
 - 2) GP: 2402-XXXXV, Fortis 350 Exterior Satin Paint; 3.0 mils DFT.
 - 3) S-W: SuperPaint Exterior Latex Satin A89 Series; 3.0 mils DFT.
- D. Ferrous Metal: Provide the following finish systems over exterior ferrous metal. Primer is not required on shop-primed items, except steel doors and frames, which require a primer under this specification.
 - 1. Semigloss, Acrylic-Modified Alkyd Enamel Finish: 2 IMC finish coats over a corrosion resistant primer.
 - a. Primer: Quick-drying, corrosion resistant, single component, acrylic-modified alkyd metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product. Moore and S-W do not have exterior products meeting requirements.
 - 1) DC: IMC 4020-XXXX Devflex DTM Flat Interior/Exterior Waterborne Primer & Finish; 3.0 mils DFT.
 - b. First and Second Coats: Semigloss, exterior, single component, acrylic-modified alkyd enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product. Moore and S-W do not have exterior products meeting requirements.
 - 1) DC: IMC 4216-XXXXL, Devflex 4216HP High Performance Waterborne Acrylic Semi-Gloss Enamel; 8.0 mils DFT.
- E. Zinc-Coated Metal: Provide the following finish systems over exterior zinc-coated (galvanized) metal surfaces: Primer is not required on shop-primed items, except new zinc-coated (galvanized) steel doors and frames, which require a primer under this specification.
 - 1. Semigloss, Acrylic-Modified Alkyd Enamel Finish: 2 IMC finish coats over a primer.

- a. Primer: Quick-drying, corrosion resistant, single component, acrylic-modified alkyd metal primer applied to galvanized metals not previously shop-primed applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product. Moore and S-W do not have exterior products meeting requirements.
 - 1) DC: 4020-XXXX Devflex DTM Flat Interior/Exterior Waterborne Primer & Finish; 2.5 mils DFT.
- First and Second Coats: Semigloss, exterior, single component, acrylic-modified alkyd enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product. Moore and S-W do not have exterior products meeting requirements

3.7 LOW VOC INTERIOR COATINGS

- A. VOC Compliance, General: Provide the manufacturers' formulations for the products specified below that comply with the VOC requirements for the State of Maine Department of Environmental Protection in paragraph 2.02.C of this Section.
- B. Concrete Masonry Units: Provide the following finish systems over interior concrete masonry block units:
 - 1. Low-Luster, Acrylic-Enamel Finish, Walls: 2 finish coats over a block filler.
 - a. 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 indicated for product.
 - 1) Moore: Latex Block Filler No. M88; 8.0 mils DFT.
 - 2) DC: Bloxfil 4000-1000 Interior/Exterior Heavy Duty Acrylic Block Filler; 7.0 mils DFT.
 - 3) S-W: PrepRite Block Filler Interior/Exterior Latex B25W25; 8.0 mils DFT.
 - b. First and Second Coats: Low-luster (eggshell or satin), acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Ben Premium Interior Latex Eggshell No. W626; 2.6 mils DFT.
 - 2) GP: 1412-XXXV Ultrahide 150 Interior Eggshell Paint; 2.8 mils DFT.
 - 3) S-W: ProGreen 200 Interior Latex Eg-Shel B20-600; 3.4 mils DFT.
- C. Gypsum Board: Provide the following finish systems over interior gypsum board:
 - 1. Flat Acrylic Finish, GPDW Soffits and Ceilings: 2 finish coats over a primer.
 - a. Primer: Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Ben Premium Interior Latex Primer No. W624; 1.2 mils DFT.
 - 2) GP: 1000-1200, Prep & Prime Hi-Hide Wall Interior Water-Based Primer Sealer; 1.9 mils DFT.
 - 3) S-W: ProGreen 200 Low VOC Interior Latex Primer, B28W02600 Series; 1.5 mils DFT.
 - b. First and Second Coats: Flat, acrylic-latex-based, interior paint applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.

¹⁾ DC: IMC 4216-XXXXL, Devflex 4216HP High Performance Waterborne Acrylic Semi-Gloss Enamel; 8.0 mils DFT.

- 1) Moore: Ben Premium Interior Latex Flat No. W625; 2.4 mils DFT.
- 2) GP: 1210-XXXX, Ultrahide Latex Flat Interior Wall Paint; 2.6mils DFT.
- 3) S-W: ProGreen 200 Low VOC Interior Latex Flat, B30-2600 Series; 3.2 mils DFT.
- 2. Walls for Vinyl Wall Coverings: Prime walls designated to receive vinyl wall coverings with the following:
 - a. Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Ben Premium Interior Latex Primer No. W624; 1.2 mils DFT.
 - 2) GP: 1030-1200, Ultra-Hide PVA Interior Primer-Sealer General Purpose Wall Primer; 1.5 mils DFT.
 - 3) S-W: ProGreen 200 Low VOC Interior Latex Primer, B28W02600 Series; 1.5 mils DFT.
- 3. Low-Luster (Eggshell), Acrylic-Enamel Finish, Walls: 2 finish coats over a primer.
 - a. Primer: Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Ben Premium Interior Latex Primer No. W624; 1.2 mils DFT.
 - 2) GP: 1000-1200, Prep & Prime Hi-Hide Wall Interior Water-Based Primer Sealer; 1.9 mils DFT.
 - 3) S-W: ProGreen 200 Low VOC Interior Latex Primer, B28W02600 Series; 1.5 mils DFT.
 - b. First and Second Coats: Low-luster (eggshell or satin), acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Ben Premium Interior Latex Eggshell No. W626; 2.6 mils DFT.
 - 2) GP: 1412-XXXV Ultrahide 150 Interior Eggshell Paint; 2.8 mils DFT.
 - 3) S-W: ProGreen 200 Low VOC Interior Latex Eg-Shel, B20-600 Series; 3.4 mils DFT.
- D. Stained Woodwork: Provide the following stained finishes over new, interior woodwork:
 1. Waterborne, Satin Polyurethane Finish: 3 finish coats of a waterborne, clear-satin varnish over a stain coat.
 - a. Stain Coat: Penetrating, interior wood stain. VOC compliant, applied at spreading rate recommended by the manufacturer. Stain colors WS1 to match finish applied to flush wood doors.
 - 1) Moore: Benwood Interior Wood Finishes Waterborne Stain 205.
 - 2) GP: 1700V Wood Pride Water-Based Wood Finishing Stain.
 - 3) S-W: Minwax Wood Finish VOC Formula.
 - b. First, Second and Third Finish Coats: Waterborne, varnish finish applied at spreading rate recommended by the manufacturer.
 - 1) Moore: Benwood Stays Clear Acrylic Polyurethane No. 423.
 - 2) GP: 1802-0000 Wood Pride Professional Wood Finish.
 - 3) S-W: Minwax Polycrylic.
- E. Wood Trim and FRP Column Surrounds, Opaque Finish (Note: Interior frames and sash of clad wood windows are factory finished) : Provide the following paint finish systems over new, interior wood surfaces:

- 1. Semigloss, Acrylic-Enamel Finish (Opaque Trim): 2 finish coats over a wood undercoater/primer.
 - a. Primer: Stain-blocking, acrylic-latex-based, interior wood undercoater, 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 indicated for product.
 - 1) Moore: Fresh Start All-Purpose 100% Acrylic Primer No. 023; 1.3 mils DFT.
 - 2) GP: 3210-1200 Prep & Prime Gripper Multi-Purpose Interior/Exterior Water-Based Primer Sealer; 1.5 mils DFT.
 - 3) S-W: Premium Wall & Wood Primer B28W8111 Series; 1.8 mils DFT.
 - b. First and Second Coats: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Ben Premium Interior Latex Semi-Gloss No. W627; 3.0 mils DFT.
 - 2) GP: 1416-XXXX Ultrahide Interior Latex Semi-Gloss Wall & Trim Enamel; 2.8 mils DFT.
 - 3) S-W: ProGreen 200 Low VOC Interior Latex Semi-Gloss B31-600 Series; 3.2 mils DFT.
- F. Ferrous Metal: Provide the following finish systems over ferrous metal. Primer is not required on shop-primed items, except steel doors and frames, which require a primer under this specification. Prime bare spots of ferrous metals. Paint for mesh inserts shall be spray-applied.
 - 1. Semigloss, Water Based Alkyd Enamel Finish, All Surfaces Except Handrails: 2 finish coats over a primer.
 - a. Primer: Quick-drying, corrosion resistant, single component, acrylic-modified alkyd primer or self cross-linking acrylic 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 indicated for product.
 - 1) Moore: Advance Waterborne Interior Alkyd Primer No. 790; 1.6 mils DFT.
 - 2) DC: 4020-1000 Devflex 4020PF Direct to Metal Primer & Flat Finish; 3.0 mils DFT.
 - 3) S-W: Pro Industrial Pro-Cryl Universal Primer B66-310 Series; 3.0 mils DFT.
 - b. First and Second Coats: Semigloss, single component, acrylic-modified alkyd interior enamel or single-component, pre-catalyzed waterborne acrylic epoxy applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Advance Waterborne Interior Alkyd Gloss No. 794; 3.2 mils DFT.
 - 2) GP: 1506-XXXX Dulux Advanced Oil Interior/Exterior Semi-Gloss Wall & Trim Enamel; 4.0 mils DFT.
 - 3) S-W: Pro Industrial Pre-Catalyzed Waterbased Epoxy K45-150 Series; 3.0 mils DFT.
 - 2. Semigloss, Water Based Epoxy Enamel Finish, Handrails: 2 finish coats over shop applied primer.

- a. First and Second Coats: Semigloss, waterborne epoxy or polyamine epoxy finish applied at spreading rate recommended by the manufacturer to achieve a total dry mill thickness of not less than indicated for product.
 - 1) Moore: Waterborne Polyamide Epoxy Gloss Coating No. P42; 6.0 mils DFT.
 - 2) DC: 4426-XXXX Tru-Glaze-WB 4426 Waterborne Epoxy Semi-Gloss Coating; 7.0 mils DFT.
 - 3) S-W: Pro Industrial Pre-Catalyzed Waterbased Epoxy K45-150 Series; 3.0 mils DFT.
- G. Zinc-Coated Metal: Provide the following finish systems over zinc-coated metal. Primer is not required on shop-primed items, except steel doors and frames, which require a primer under this specification. Prime bare spots of ferrous metals.
 - 1. Semigloss, Water Based Alkyd Enamel Finish: 2 finish coats over a primer.
 - a. Primer: Quick-drying, corrosion resistant, single component, acrylic-modified alkyd primer or self cross-linking acrylic 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 indicated for product.
 - 1) Moore: Advance Waterborne Interior Alkyd Primer No. 790; 1.6 mils DFT.
 - 2) DC: 4020-1000 Devflex 4020PF Direct to Metal Primer & Flat Finish; 3.0 mils DFT.
 - 3) S-W: Pro Industrial Pro-Cryl Universal Primer B66-310 Series; 3.0 mils DFT.
 - b. First and Second Coats: Semigloss, single component, acrylic-modified alkyd interior enamel or single-component, pre-catalyzed waterborne acrylic epoxy applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: Advance Waterborne Interior Alkyd Gloss No. 794; 3.2 mils DFT.
 - 2) GP: 1506-XXXX Dulux Advanced Oil Interior/Exterior Semi-Gloss Wall & Trim Enamel; 4.0 mils DFT.
 - 3) S-W: Pro Industrial Pre-Catalyzed Waterbased Epoxy K45-150 Series; 3.0 mils DFT.
 - H. Overhead Exposed Construction, Including Metal Deck, Steel Joists, Galvanized Duct Work, Conduit and Piping: Provide the following finish system.
 - 1. Flat, Modified Alkyd Rust-Inhibitive Primer: Quick-drying, corrosion resistant, primer/finish over prepaint surface cleaner.
 - a. Prepaint Surface Cleaner: Concentrated alkaline detergent blend for cleaning overhead construction without needing to rinse prior to coating, applied at spreading rate recommended by the manufacturer.
 - 1) GLL: No Rinse Prepaint Cleaner.
 - b. Primer/Finish: Quick-drying, corrosion resistant, 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 indicated for product.
 - 1) Tnemec: Series 115, Uni-Bond DF; no substitution.
 - I. Telecommunication, Data and Electrical Backboards: Provide the following finish over plywood:

- 1. Flat Intumescent Finish: Two finish coats over a primer.
 - a. Primer: Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - 1) Moore: EcoSpec WB Interior Latex Primer Sealer No. 372; 1.2 mils DFT.
 - 2) SW: Preprite Problock Interior/Exterior Latex Primer\Sealer; 1.4 mils DFT.
 - b. First and Second Coats: Intumescent-type, fire-retardant paint applied at spreading rate recommended by manufacturer to achieve a total dry film thickness of not less than 4 mils; white color for telecommunication and black for electrical.
 - 1) Moore: M59 220 Latex Fire-Retardant Coating.
 - 2) FlameControl: 20-20A Flat Latex Intumescent Coating.
- J. Fire-Rating and Smoke Identification: Identify all 1, 2 and 3-hour fire-rated walls and partitions by stenciling rating on each side of rated walls above ceiling line with 4 inch high letters in red or orange semigloss paint; each rated wall shall be identified at least once and at a spacing not greater than 12 feet o.c. and not more than 5 feet from each end of the wall. Identify all smoke barriers and partitions by stenciling "SMOKE" on each side of walls above ceiling line with 4 inch high letters in bright green semigloss paint; each rated wall shall be identified at least once and at a spacing not greater than 12 feet o.c. and not more than 5 feet from each each each end of the wall.
 - 1. First Coat: Semigloss, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than indicated for product.
 - a. Moore: Ben Premium Interior Latex Semi-Gloss No. W627; 1.5 mils DFT.
 - b. GP: 1416-XXXX Ultrahide Interior Latex Semi-Gloss Wall & Trim Enamel; 1.5 mils DFT.
 - c. S-W: ProGreen 200 Low VOC Interior Latex Semi-Gloss B31-600 Series; 1.6 mils DFT.

END OF SECTION 099000