SECTION 099123 - INTERIOR PAINTING

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
	* + 1. SUMMARY
				1. Section includes surface preparation and the application of paint systems on [**interior substrates.**] [**the following interior substrates:**]

Concrete.

Cement board.

Clay masonry.

Concrete masonry units (CMUs).

Steel and iron.

Galvanized metal.

Aluminum (not anodized or otherwise coated).

Copper.

Stainless steel.

Wood.

Fiberglass.

Plastic.

Gypsum board.

Plaster.

Acoustic panels and tiles.

Spray-textured ceilings.

Cotton or canvas insulation covering.

ASJ insulation covering.

Bituminous-coated surfaces.

* + - * 1. Work under this Contract shall also include, but not necessarily be limited to:

Labor, materials, tools and other equipment, services and supervision required to complete all interior painting and decorating work as indicated on Finish Schedules and to the full extent of the drawings and specifications.

Moisture testing of substrates.

Surface preparation of substrates as required for acceptance of paint, including cleaning, small crack repair, patching, caulking, and making good surfaces and areas to the limits defined under MPI Architectural Painting Manual preparation requirements.

Specific pre-treatments noted herein or specified in the MPI Architectural Painting Manual.

Sealing / priming surfaces for painting in accordance with MPI Architectural Painting Manual requirements.

Provision of safe and adequate ventilation as required over and above temporary ventilation supplied by others, where toxic and/or volatile / flammable materials are being used.

* + - * 1. Related Requirements:

Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

Primers in other Sections must be coordinated for compatibility with finish coats specified in this Section. Review other Sections for shop-primed products, and insert references to this Section to establish primer requirements.

[**Section 051200 "Structural Steel Framing"**] [**Section 051213 "Architecturally Exposed Structural Steel Framing"**] for shop priming structural steel.

Section 055000 "Metal Fabrications" for shop priming metal fabrications.

Section 055113 "Metal Pan Stairs" for shop priming metal pan stairs.

Section 055116 "Metal Floor Plate Stairs" for shop priming metal floor plate stairs.

Section 055119 "Metal Grating Stairs" for shop priming metal grating stairs.

Section 055213 "Pipe and Tube Railings" for shop [**priming**] [**painting**] pipe and tube railings.

Section 099600 "High-Performance Coatings" for tile-like coatings.

Section 099300 "Staining and Transparent Finishing" for surface preparation and the application of wood stains and transparent finishes on interior wood substrates.

* + - * 1. Refer to drawings and schedules (e.g., Finish Schedule) for type, location and extent of interior painting required.
			1. REFERENCES
				1. Master Painters Institute Inc., MPI Architectural Painting Manual. www.specifypaint.us.
			2. DEFINITIONS

Retain this article if paints are specified by manufacturers' trade names rather than by MPI paint numbers. Definitions of MPI Gloss Levels below are from "MPI Architectural Painting Specification Manual" (hereafter, "MPI Manual").

Retain terms that remain after this Section has been edited for a project.

* + - * 1. MPI Gloss Level 1 (Matte or Flat): Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D523.
				2. MPI Gloss Level 2 (Velvet): Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.
				3. MPI Gloss Level 3 (Eggshell): 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.
				4. MPI Gloss Level 4 (Satin): 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D523.
				5. MPI Gloss Level 5 (Semi-Gloss): 35 to 70 units at 60 degrees, according to ASTM D523.
				6. MPI Gloss Level 6 (Gloss): 70 to 85 units at 60 degrees, according to ASTM D523.
				7. MPI Gloss Level 7 (High Gloss): More than 85 units at 60 degrees, according to ASTM D523.
			1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Painting Schedule: Cross-referenced Painting Schedule listing all interior substrates to be painted and specified finish paint type designation; product name and manufacturer, recommended primers and product numbers, and finish paint color designation for each substrate to be painted.

Designate interior substrates by building name and number, floor, room name and number, and surface to be painted.

* + - * 1. Product Data: For each type of product. Include preparation requirements and application instructions.

See "Writing Guide" Article in the Evaluations for discussion of first subparagraph below.

Include Printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.

Indicate VOC content.

Manufacturer’s standard colors in the form of actual fan decks.

* + - * 1. Sustainable Design Submittals:
				2. Samples for Initial Selection: For each type of topcoat product.

Delete "Samples for Initial Selection" paragraph above if colors and other characteristics are preselected and specified or scheduled. Retain "Samples for Verification" paragraph below with or without above.

* + - * 1. Samples for Verification: For each type of paint system and in each color and gloss of topcoat.

Color and gloss of Samples change as they age; seven-day old Samples appear different from freshly dried Samples.

Submit Samples on rigid backing, 8 inches square.

Apply coats on Samples in steps to show each coat required for system.

Label each coat of each Sample.

Label each Sample for location and application area.

* + - * 1. Contractor’s Qualifications: Submit documentation demonstrating compliance with requirements in Quality Assurance Article.
				2. Certification of Volatile Organic Compounds: Submit certified list demonstrating compliance requirements in Quality Assurance Article.
			1. QUALITY ASSURANCE
				1. Volatile Organic Compounds (VOCs) Regulatory Requirements: Chapter III of Title 6 of the official compilation of Codes, Rules and Regulations of the State of New York (Title 6 NYCRR), Part 205 Architectural Surface Coatings.

Certificate of Compliance: List of each paint product to be delivered and installed. List shall include written certification stating that each paint product listed complies with the VOC regulatory requirements in effect at the time of job site delivery and installation.

* + - * 1. Contractor shall have a minimum of five (5) years proven satisfactory experience and shall show proof before commencement of work that he will maintain a qualified crew of painters throughout the duration of the work. When requested by the Director’s Representative, Contractor shall provide a list of the last three comparable repainting jobs including, name, location, specifying authority / project manager, start / completion dates and value of the work.
				2. All materials, preparation and workmanship shall conform to the standards contained in the latest edition of the Master Painters Institute (MPI) Architectural Painting Manual (herein referred to as the MPI Manual).
				3. The painting contractor shall receive written confirmation of the specific surface preparation procedures and primers used for all fabricated steel items from the fabricator / supplier to ascertain appropriate and manufacturer compatible finish coat materials to be used before painting such work.
				4. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

Director’s Representative will select one surface to represent surfaces and conditions for application of each paint system.

Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft..

Other Items: Director’s Representative will designate items or areas required.

Final approval of color selections will be based on mockups.

If preliminary color selections are not approved, apply additional mockups of additional colors selected by Director’s Representative at no added cost to the State.

Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Director’s Representative specifically approves such deviations in writing.

Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

* + - * 1. Compatibility of Paint Materials: Primers and intermediate paints shall be products manufactured or recommended by the finish paint manufacturer.
			1. REGULATORY REQUIREMENTS
				1. Conform to work place safety regulations for storage, mixing, application and disposal of all paint related materials to requirements of those authorities having jurisdiction.
				2. To reduce the amount of contaminants entering waterways, sanitary / storm drain systems or into the ground the following procedures shall be strictly adhered to:

Retain cleaning water for water based materials to allow sediments to be filtered out. In no case shall equipment be cleaned using free draining water.

Retain cleaners, thinners, solvents and excess paint and place in designated containers and ensure proper disposal.

Return solvent and oil-soaked rags used during painting operations for contaminant recovery, proper disposal, or appropriate cleaning and laundering.

Dispose of contaminants in an approved legal manner in accordance with hazardous waste regulations.

Empty paint cans are to be dry prior to disposal or recycling (where available).

Close and seal tightly partly used cans of materials including sealant and adhesive containers and store protected in well ventilated fire safe area at moderate temperature.

* + - 1. DELIVERY, STORAGE, AND HANDLING
				1. Deliver painting materials in sealed, original labeled containers bearing manufacturer's name, brand name, type of paint or coating and color designation, standard compliance, materials content as well as mixing and/or reducing and application requirements.
				2. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.

Maintain containers in clean condition, free of foreign materials and residue.

Remove rags and waste from storage areas daily.

* + - * 1. Where toxic and/or volatile / explosive / flammable materials are being used, provide adequate fireproof storage lockers and take necessary precautions and post adequate warnings (e.g. no smoking) as required.
				2. Take necessary precautionary and safety measures to prevent fire hazards and spontaneous combustion and to protect the environment from hazard spills. Materials that constitute a fire hazard (paints, solvents, drop clothes, etc.) to be stored in suitable closed and rated containers or removed from the site on a daily basis.
				3. Comply with requirements of authorities having jurisdiction, in regard to the use, handling, storage and disposal of hazardous materials.

If necessary, insert special requirements for fire protection, heating, ventilation, and other conditions for storage areas on-site.

* + - 1. FIELD CONDITIONS
				1. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
				2. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
				3. Perform no painting work unless a minimum lighting level of 323 Lux (30-foot candles) is provided on surfaces to be repainted.
				4. Apply paint only to dry, clean, and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.
				5. The following items are not to be painted unless otherwise specified, noted or directed:

Exposed stainless steel, chrome, copper, bronze, brass, and aluminum.

Steel to be encased in cast-in-place concrete.

Top flanges of structural beams and girders in composite concrete-steel construction.

Factory prefinished items.

Exposed structural wood floor joists, subflooring, rafters, roof sheathing and other framing lumber.

Galvanized items not exposed in finished spaces.

* + - 1. MAINTENANCE MATERIALS
				1. Except as noted below, provide a minimum of 1 gallon of each type and color of paint from same production run (batch mix) used in unopened cans, properly labeled and identified. Store where directed.

Paint Type IAL-1: Four gallons, each type.

Paint Types IAL-2: Two gallons, each type.

Other Paint Types: One gallon, each type.

1. PRODUCTS

Manufacturers and products listed in SpecAgent and MasterWorks Paragraph Builder are neither recommended nor endorsed by the AIA or Deltek. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications.

* + - 1. PAINT MATERIALS, GENERAL
				1. MPI Standards: Provide products complying with MPI standards indicated and listed in its "MPI Approved Products List."

Generally, retain "Material Compatibility" paragraph below.

* + - * 1. Material Compatibility:

Systems could fail if paints used for individual coats are incompatible. MPI's paint systems match primers and topcoats and take compatibility into consideration.

Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.

For each coat in a paint system, provide products recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

* + - * 1. Colors: [**As selected by Director’s Representative from manufacturer's full range**] [**Match Director’s Representative's samples**] [**As indicated in a color schedule**].

[**10**] [**20**] [**30**] percent of surface area will be painted with deep tones.

* + - * 1. Mechanical, Electrical, and Plumbing Components Colors: Provide paint colors shown on contract drawings or to be selected by the Director from finish paint manufacturers available color selections.

Approved finish paint manufacturers to match designated colors of other manufacturers where colors are shown on contract documents.

Safety Colors: Industry Standard ANSI Safety Colors.

Fire Protection Systems: Paint exposed piping, and handles of valves serving the system as specified below:

Sprinkler Systems: Red piping, and green valve handles.

Standpipe Systems: Red piping, and red valve handles.

Combination Sprinkler/Standpipe Systems: Red piping, and yellow valve handles.

Do not paint equipment with factory finish paint.

Color Coding: Apply exposed insulated and uninsulated piping finish paints in the following colors when piping is located in the following applicable rooms or spaces:

Applicable Rooms and Spaces: Mechanical Equipment Rooms, Steam Service Rooms, Refrigeration Machine Rooms, Boiler Rooms, Penthouse Mechanical Equipment Rooms and Power Houses.

Color code as follows:

Air, Compressed: Safety Green.

Air, Control: Safety Green.

Air, Medical: Safety yellow.

Ammonia, Gas and Liquid: Safety Yellow.

Brine: Safety Green.

Carbon Dioxide: Safety Red.

Dangerous Materials: Safety Yellow.

Engine Exhausts: Safety Yellow.

Flue Gases: Safety Yellow.

Gas, Natural and Manufactured: Safety Yellow.

Gasoline: Safety Yellow.

Glycol and Glycol/Water Mixtures: Safety Yellow.

Nitrous Oxide: Safety Blue.

Oils, Fuel and Lubrications: Safety Yellow.

Oxygen: Safety Green.

Pneumatic Tube System s: Safety Green.

Refrigerants: Safety Yellow.

Sewers, Storm and Sanitary: Safety Yellow.

Steam; Supply, Condensate Return and Exhaust: Safety Yellow.

Vacuum: Safety Green.

Vent, Atmospheric: Safety Green.

Water, Up to 140 Degrees Fahrenheit: Safety Green.

Water, 141 Degrees and Above: Safety Yellow.

Other Colors:

Exposed Ductwork: Gray.

Insulated and Uninsulated Equipment: Gray.

* + - 1. PAINT MATERIAL MANUFACTURERS

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=11177) Subject to compliance with requirements, provide products by the following:

Behr Paint

Benjamin Moore & Co.

Cloverdale Paint.

Dunn-Edwards

Pratt & Lambert.

PPG Architectural.

Sherwin-Williams.

Or equal.

Retain "Products" paragraph below and insert lists of manufacturers and products in Interior Painting Schedule to require specific products or a comparable product from other manufacturers.

See lists of products currently approved by MPI in its "MPI Approved Products Lists." See "Writing Guide" Article in the Evaluations for further discussion.

* + - * 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in the Interior Painting Schedule for the paint category indicated.
			1. PAINT MATERIALS

Manufacturers' names and product designations can be inserted in paragraphs in this article. Paints in these paragraphs are specified by referencing MPI paint categories and optional MPI numbers. Note that each paint category below is unique within this Section and is identical to that used in the maintenance repainting schedules at the end of Part 3.

If retaining paragraphs below, first revise the maintenance repainting schedules; then retain, delete, and insert appropriate paint products in paragraphs to correspond with paint systems specified in the maintenance repainting schedules.

* + - * 1. Primers and Sealers:

Primer, Alkali Resistant, Water Based: A water based, alkali resistant pigmented primer used on alkaline surfaces such as plaster, vertical concrete and masonry surfaces. Paint systems using this coating will be primarily for new and repainting work in residential, commercial and light industrial applications. Surface preparation methods can include hand and power tool cleaning and pressure washing. Finish coatings include conventional latex and alkyd paints.

Type ARP: Primer, alkali resistant, water based, MPI #3. Provide one of the following:

Benjamin Moore: Ultra Spec Masonry Int/Ext 100 Acylic Sealer.

PPG Architectural: Perma-Crete Interior/Exterior Alkali Resistant Primer.

Sherwin-Williams: PrepRite ProBlock Interior/Exterior Latex Primer/Sealer.

Or equal.

Block filler, latex: A water based, high solids, emulsion type pigmented coating with bridging and filling properties for concrete masonry units, for the purpose of filling the surface for subsequent applications of paint.

Type LBF: Block filler, latex, interior/exterior, MPI #4. Provide one of the following:

Benjamin Moore: Ultra Spec Hi-Build Masonry Block Filler.

PPG Architectural: Speedhide Int./Ext. Masonry Hi Fill Latex Block Filler.

Sherwin-Williams: Pro Industrial Heavy Duty Block Filler.

Or equal.

Textured coating, latex, flat: A pigmented water based coating, containing a coarse or medium sized sand or other hard aggregate.  Primarily used on exterior masonry, concrete and concrete block.   Coatings complying with this standard are available in a variety of textures.  Manufacturers should be consulted and test areas completed to aid in the selection of the individual product.

Type TCL: Textured coating, latex, flat, MPI #42. Provide one of the following:

Benjamin Moore: Coronado Texcrete Waterborne Medium Texture Waterproofer.

PPG Architectural: Perma-Crete Textured Coating.

Sherwin-Williams: ConFlex Flexible Waterproofer-Textured.

Or equal.

Sealer, water based, for concrete floors: A water based, acrylic co-polymer emulsion type, clear sealer for interior and exterior horizontal concrete floors, decks and exposed aggregate driveways and walkways. Specified for use in residential and light to moderate traffic commercial locations. Oil, gasoline, alkali and water resistant.

Type CFS: Sealer, water based, for concrete floors, MPI #99. Provide one of the following:

Behr Paint: Behr Premium Floor Coatings Wet-Look Sealer High Gloss.

PPG Architectural: Perma-Crete Plex-Seal WB Interior/Exterior Clear Sealer.

Sherwin-Williams: H & C Clarishield Water-Based Wet-Look Sealer.

Or equal.

Primer Sealer, Latex, Interior: A white, pigmented, water based latex sealer used on new interior plaster, concrete and gypsum wallboard surfaces that are subsequently painted with latex or alkyd finish coat(s). Its purpose is to reduce the porosity of the substrate for finish coats. Not intended for use on wood or previously painted surfaces.

Type IAL-P: Primer Sealer, Latex, Interior MPI #50. Provide one of the following:

Benjamin Moore & Co.: Super Hide Zero VOC Latex Primer.

PPG Architectural: Speedhide Zero Interior VOC Latex Sealer.

Sherwin-Williams: ProMar 200 Zero Interior Latex Primer.

Or equal.

Primer, Latex, for Interior Wood: A latex based primer for use on interior surfaces such as doors, casings, and trim where odor or VOC concerns may not permit the use of solvent based products. Primers complying with this standard must contain "tannin blocking" materials, which effectively prevent staining on woods such as cedar and redwood.

Type IAL-PW: Primer, Latex, for Interior Wood MPI #39. Provide one of the following:

Benjamin Moore & Co.: Multi-Purpose Primer.

PPG Architectural: Seal Grip Interior/Exterior Acrylic Universal Primer/Sealer.

Sherwin-Williams: Multi-Purpose Latex Primer/Sealer.

Or equal.

Primer, Stain Blocking, Water Based: A water based, pigmented primer designed for use on interior wood and on gypsum wallboard as a stain sealer. This product may be used for new and repainting work in residential, commercial and light industrial areas. Finish coats used over this primer will include latex and alkyd based paints.

Type IAL-SB: Primer, Stain Blocking, Water Based:  MPI #137. Provide one of the following:

Benjamin Moore & Co.: Fresh Start High-Hiding All Purpose Primer.

PPG Architectural: Spectrum Paint Rhino-Grip 8000 Int/Ext Universal Primer.

Sherwin-Williams: Multi-Purpose Latex Primer/Sealer.

Or equal.

Primer Sealer, Interior, Institutional Low Odor/VOC: A white pigmented, water based primer sealer with low odor characteristics and a VOC of less than 10 grams per liter. These products are for use on new interior plaster, concrete and on gypsum wallboard surfaces that are subsequently to be painted with latex finish coats. Not intended for wood or previously painted surfaces.

Type IAL-P-LO: Primer Sealer, Interior, Institutional Low Odor/VOC. MPI #149. Provide one of the following:

Benjamin Moore & Co.: Ultra Spec 500; Waterborne Interior Primer.

PPG Architectural: Speedhide Zero Interior Zero VOC Latex Sealer.

Sherwin-Williams: ProMar 200 Zero; Interior Latex Primer.

Or equal.

Sealer, Water Based, for Concrete Floors: A water based, acrylic co-polymer emulsion type, clear sealer for interior and exterior horizontal concrete floors, decks and exposed aggregate driveways and walkways. Specified for use in residential and light to moderate traffic commercial locations. Oil, gasoline, alkali and water resistant.

Type CFS: Sealer, water based, for concrete floors, MPI #99. Provide one of the following:

Behr Paint: Behr Premium Floor Coatings Wet-Look Sealer High Gloss.

PPG Architectural: Perma-Crete Plex-Seal WB Interior/Exterior Clear Sealer.

Sherwin-Williams: H & C Clarishield Water-Based Wet-Look Sealer.

Or equal.

* + - * 1. Water-Based Paints:

Latex, Interior, Flat, (Gloss Level 1): A white, or colored, water based latex paint with a flat finish. Used on primed/sealed interior wall surfaces such as plaster, gypsum and on primed wood and metal. Not intended for use on unprimed wood surfaces.

Use paint Type IAL-1 below for walls and ceilings in inhabitable spaces with low lighting levels and minimal maintenance needs. Use paint Type IAL-2 for metal doors and trim on IAL-1 walls and ceilings. Use paint Type IAL-1 for ceilings in habitable spaces with IAL-2 walls for a more durable wall finish with greater reflectance and less need for cleaning.

Type IAL-1: Latex, Interior, Flat, (Gloss Level 1) MPI #53. Provide one of the following:

Benjamin Moore & Co.: Super Hide Zero VOC Interior Flat.

PPG Architectural: Speedhide Pro EV Zero VOC Latex Flat.

Sherwin-Williams: SuperPaint Interior Latex Flat.

Or equal.

Latex, Interior, (Gloss Level 3): A white, or colored, water based latex-based paint with a finish between a high side sheen flat and a ‘satin-like’ finish or a low semi-gloss. Used on primed/sealed interior plaster and gypsum board, and on primed wood and metals.

Use paint Type IAL-2 below on walls with paint Type IAL-1 ceilings in moderate to medium occupancy rooms with low to medium light reflectance and cleaning needs. Use paint Type IAL-2 on both walls and ceilings in medium occupancy rooms requiring greater light reflectance and less need for cleaning. Use paint Type IAL-3 for metal doors and trim with paint Type IAL-2 walls.

Type IAL-2: Latex, Interior, (Gloss Level 3) MPI #52. Provide one of the following:

Benjamin Moore & Co.: Super Hide Zero VOC Interior Low Eggshell.

PPG Architectural: Speedhide Zero Interior Satin.

Sherwin-Williams: ProMar 200 Zero VOC Interior Latex Eg-Shel.

Or equal.

Latex, Interior, Semigloss, (Gloss Level 5): A white, or colored, water based latex-based paint with a semi-gloss finish. Used on primed/sealed interior wood and metal trim and doors, and on plaster and gypsum wallboard (particularly kitchens and bathrooms) where washability is required.

Use paint Type IAL-3 below on walls in medium to high use rooms with IAL-2 ceilings and need for walls with greater light reflectance and lower cleaning maintenance needs. Use paint Type IAL-3 for both walls and ceilings in high use rooms and spaces needing greater light reflectance. Use paint Type IAL-4 for metal doors, frames and trim with paint Type IAL-3 walls.

Type IAL-3: Latex, Interior, Semigloss, (Gloss Level 5).  MPI #54. Provide one of the following:

Benjamin Moore & Co.: Ultra Spec 500 Interior Semi-Gloss.

PPG Architectural: Speedhide Zero Interior Semi-Gloss.

Sherwin-Williams: ProMar 200 Zero VOC Interior Latex Semi-Gloss.

Or equal.

Latex, Interior, Gloss (Gloss Level 6): A water based, acrylic co-polymer emulsion type, pigmented, gloss coating for interior primed wood, plaster, masonry, concrete, trim and wall surfaces. Application methods will include using brushes, rollers, and airless, HVLP and conventional spray equipment.

Use paint Type IAL-4 below on walls in frequently used rooms with IAL-3 ceilings for high light reflectance and durable easy-to-clean surfaces. Use paint Type IAL-4 on both ceilings and walls for greater light reflectance and less maintenance.

Type IAL-4: Latex, Interior, Gloss, (Gloss Level 6, except Minimum Gloss of 65 Units at 60 Degrees) MPI #114. Provide one of the following:

Benjamin Moore & Co.: Ultra Spec HP D.T.M. Acrylic Gloss Enamel.

PPG Architectural: Advantage 900 Int/Ext Trim & Door Gloss.

Sherwin-Williams: Pro Industrial DTM Acrylic Gloss.

Or equal.

Latex, Interior, Institutional Low Odor/VOC, Flat (Gloss Level 1): A white or colored flat latex paint with low odor characteristics and a VOC of less than 10 grams per liter. For use in areas such as hospitals and other occupied buildings where the odor and VOC levels of conventional latex products would preclude their use. It is intended for use on new or previously painted interior wall and ceiling surfaces including gypsum board, plaster, concrete or primed metal and wood surfaces.

Use paint Type IAL-1-LO below for walls and ceilings in inhabitable spaces with low lighting levels and minimal maintenance needs. Use paint Type IAL-2-LO for metal doors and trim on IAL-1-LO walls and ceilings. Use paint Type IAL-1-LO for ceilings in habitable spaces with IAL-2-LO walls for a more durable wall finish with greater reflectance and less need for cleaning.

Type IAL-1-LO: Latex, Interior, Institutional Low Odor/VOC, Flat (Gloss Level 1) MPI #143. Provide one of the following:

Benjamin Moore & Co.: Eco Spec WB Interior Latex Flat Finish.

PPG Architectural: Speedhide Zero Interior Zero VOC Latex Flat.

Sherwin-Williams: ProMar 200 Zero VOC Interior Latex Flat.

Or equal.

Latex, Interior, Institutional Low Odor/VOC (Gloss Level 3): A white or colored latex paint with low odor characteristics and a VOC of less than 10 grams per liter. For use in areas such as hospitals and other occupied buildings where the odor and VOC levels of conventional latex products would preclude their use. It is intended for use on new or previously painted interior wall and ceiling surfaces including gypsum board, plaster, concrete or primed metal and wood surfaces.

Use paint Type IAL-2-LO below on walls with paint Type IAL-1-LO ceilings in moderate to medium occupancy rooms with low to medium light reflectance and cleaning needs. Use paint Type IAL-2-LO on both walls and ceilings in medium occupancy rooms requiring greater light reflectance and less need for cleaning. Use paint Type IAL-3-LO for metal doors and trim with paint Type IAL-2-LO walls.

Type IAL-2-LO: Latex, Interior, Institutional Low Odor/VOC (Gloss Level 3).  MPI #145. Provide one of the following:

Benjamin Moore & Co.: Super Hide Zero VOC Interior Low Eggshell.

PPG Architectural: Manor Hall Interior 100% Acrylic Satin.

Sherwin-Williams: ProMar 200 HP Zero VOC Interior Acrylic Eg-Shel.

Or equal.

Latex, Interior, Institutional Low Odor/VOC, Semigloss (Gloss Level 5): A white or colored latex paint with low odor characteristics and a VOC of less than 10 grams per liter. For use in areas such as hospitals and other occupied buildings where the odor and VOC levels of conventional latex products would preclude their use.

Use paint Type IAL-3-LO below on walls in medium to high use rooms with IAL-2-LO ceilings and need for walls with greater light reflectance and lower cleaning maintenance needs. Use paint Type IAL-3-LO for both walls and ceilings in high use rooms and spaces needing greater light reflectance. Use paint Type IAL-4-LO for metal doors, frames and trim with paint Type IAL-3-LO walls.

Type IAL-3-LO: Latex, Interior, Institutional Low Odor/VOC, Semigloss (Gloss Level 5).  MPI #147. Provide one of the following:

Benjamin Moore & Co.: Ultra Spec 500 Interior Semi-Gloss.

PPG Architectural: Speedhide Zero Interior Semi-Gloss.

Sherwin-Williams: Pro Industrial Acrylic Semi-Gloss Coating.

Or equal.

Latex, Interior, Institutional Low Odor/VOC, Gloss (Gloss Level 6): A white or colored latex paint with low odor characteristics and a VOC of less than 10 grams per liter. For use in areas such as hospitals and other occupied buildings where the odor and VOC levels of conventional latex products would preclude their use.

Use paint Type IAL-4-LO below on walls in frequently used rooms with IAL-3-LO ceilings for high light reflectance and durable easy-to-clean surfaces. Use paint Type IAL-4-LO on both ceilings and walls for greater light reflectance and less maintenance.

Type IAL-4-LO: Latex, Interior, Institutional Low Odor/VOC, Gloss (Gloss Level 6) MPI #148. Provide one of the following:

Dunn-Edwards: ENDURACOAT Interior/Exterior Gloss Industrial Maintenance Coating.

Pratt & Lambert: Krylon Industrial Waterborne Acrylic Enamel Gloss White Base.

Sherwin-Williams: Pro Industrial Acrylic Gloss Coating.

Or equal.

Dry Fall, Latex: A water based, emulsion-type, fast-drying coating used on interior plaster, concrete, gypsum board, primed wood and metal ceilings. Overspray will dry to a sweepable powder over a short distance for easier clean up.

Type DFL-1: Dry Fall, Latex, Flat. MPI #118. Provide one of the following:

Benjamin Moore & Co.: Latex Dry Fall Flat.

PPG Architectural: Speedhide Super Tech WB Interior Dry Fog Flat Latex.

Sherwin-Williams: Pro Industrial Waterborne Acrylic Dryfall.

Or equal.

Type DFL-2: Dry Fall, Latex, (MPI Gloss Level 3). MPI #155. Provide one of the following:

Benjamin Moore & Co.: Latex Dry Fall Eggshell.

PPG Architectural: Speedhide Super Tech WB Interior Eggshell 100% Acrylic Dry-Fog.

Sherwin-Williams: Pro Industrial Waterborne Dryfall Eg-Shel.

Or equal.

Type DFL-3: Dry Fall, Latex, Semi-Gloss (MPI Gloss Level 5). MPI #226. Provide one of the following:

Benjamin Moore & Co.: Latex Dry Fall Semi-Gloss.

PPG Architectural: Speedhide Super Tech WB Interior Semi-Gloss 100% Acrylic Dry Fog Latex.

Sherwin-Williams: Pro Industrial Waterborne Acrylic Dryfall Semi-Gloss.

Or equal.

* + - * 1. Solvent-Based Paints:

Alkyd, Interior, Gloss (Gloss Level 6): A solvent based, gloss alkyd paint for primed new, or previously sealed, interior wood and metal surfaces. Primarily used on trim, doors and frames.

Type EAP: Alkyd, Interior, Gloss (Gloss Level 6)  MPI #48. Provide one of the following:

Benjamin Moore & Co.: Super Spec HP Urethane Alkyd Gloss Enamel.

PPG Architectural: Protective & Marine Coatings Industrial Alkyd Gloss.

Sherwin-Williams: Industrial Enamel HS.

Or equal.

* + - * 1. Floor Coatings:

Floor Paint, Latex, Low Gloss (Maximum Gloss Level 3): An abrasion-resistant, latex type, pigmented paint for new interior and exterior horizontal concrete and primed wood surfaces not prone to water permeation from below. Coating must be alkali and water resistant to incidental splash and spillage. Primarily specified for use in low to medium traffic, residential and commercial locations. Surface preparation requires removal of all previous sealers and water retaining materials applied to the surface. Smooth concrete must be acid etched. Designed to be used with or without non-slip aggregate.

Type EPE: Floor Paint, Latex, Low Gloss (Maximum Gloss Level 3):  MPI #60.

Cloverdale Paint: Porch & Floor Enamel

PPG Architectural: Floor & Porch Enamel

Sherwin Williams: ArmorSeal Tread-Plex.

Or equal.

* + - * 1. Epoxy Coatings:

Epoxy, Gloss: A solvent based, gloss, two component, epoxy coating specified for wall and floor surfaces in moderate to heavy traffic commercial and moderate industrial environments. Must be resistant to incidental splash and spillage of dilute (5%) sulfuric acid, (15%) hydrochloric acid, (20%) sodium hydroxide, gasoline and heavy duty cleaners and detergents. Used as a self-priming material on smooth, low porosity concrete, masonry and wood surfaces. This epoxy shall be able to be applied at temperatures ranging from 15° to 40° C and a maximum relative humidity of 80%.

Type EP: Epoxy, Gloss:  MPI #77. Provide one of the following:

Cloverdale Paint: ClovaCoat 300.

Sherwin-Williams: Protective & Marine Tile-Clad HS Epoxy.

Or equal.

Epoxy, High-Build, Low Gloss: A two component epoxy, high solids, low gloss coating for use on interior or exterior concrete, masonry and primed metal surfaces. Metal surfaces may be primed with conventional epoxy primers, epoxy zinc rich primers or inorganic zinc rich primers. For increased durability, this product may be top coated with epoxy or polyurethane enamels.

Type EPHB: Epoxy, High-Build, Low Gloss MPI #108. Provide one of the following:

Benjamin Moore & Co.: Corotech Polyamide Epoxy Gloss.

PPG Architectural: Protective & Marine Coatings Aquapon High Build Epoxy.

Sherwin-Williams: Macropoxy 646 Fast Cure Epoxy.

Or equal.

* + - * 1. Polyurethane Coatings:

Polyurethane, Two-Component, Pigmented, Gloss (Gloss Level 6): A solvent based, two component polyurethane, pigmented coating with a gloss finish for interior or exterior brick, block, concrete, plaster, wood and metal surfaces, where abrasion, weathering, chemical and solvent resistance is required.

Paint Type AU: Polyurethane, Two-Component, Pigmented, Gloss (Gloss Level 6) MPI #72. Provide one of the following:

Benjamin Moore & Co.: Corotech Aliphatic Acrylic Urethane Gloss.

PPG Architectural: Protective & Marine Coatings Pitthane Ultra Gloss 95-812 Series.

Sherwin-Williams: Protective & Marine Acrolon 218 HS.

Or equal.

* + - 1. SOURCE QUALITY CONTROL

Retain this article for large projects or critical coatings where additional control is needed. Delete if tests are not required.

* + - * 1. Testing of Paint Materials: The Director’s Representative reserves the right to invoke the following procedure:

The Director’s Representative will engage the services of a qualified testing agency to sample paint materials. Contractor will be notified in advance and may be present when samples are taken. If paint materials have already been delivered to Project site, samples may be taken at Project site. Samples will be identified, sealed, and certified by testing agency.

Testing agency will perform tests for compliance with product requirements.

The Director’s Representative may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

1. EXECUTION
	* + 1. EXAMINATION
				1. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
				2. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

Percentages in six subparagraphs below are based on "MPI Manual."

Concrete: 12 percent.

Fiber-Cement Board: 12 percent.

Masonry (Clay and CMUs): 12 percent.

Wood: 15 percent.

Gypsum Board: 12 percent.

Plaster: 12 percent.

* + - * 1. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
				2. Plaster Substrates: Verify that plaster is fully cured.
				3. Spray-Textured Ceiling Substrates: Verify that surfaces are dry.
				4. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
				5. Proceed with coating application only after unsatisfactory conditions have been corrected.

Application of coating indicates acceptance of surfaces and conditions.

* + - 1. PREPARATION

For renovation projects, consult "MPI Maintenance Repainting Manual" and revise first paragraph below and paint systems specified in the Interior Painting Schedule.

* + - * 1. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
				2. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

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

* + - * 1. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

Coordination of shop-applied prime coats with topcoats is critical.

Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

* + - * 1. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
				2. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.

Retain "Steel Substrates" paragraph below if steel is not shop primed or if shop primer is removed in the field.

* + - * 1. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer[**.**] [**but not less than the following:**]

Usually retain one of first two subparagraphs below. SSPC-SP 2 and SSPC-SP 3 remove loose rust, mill scale, and paint. SSPC-SP 2 is minimum surface preparation accepted by AISC for painted steel.

SSPC-SP 2.

SSPC-SP 3.

SSPC-SP 7/NACE No. 4 permits tight residues of rust, mill scale, and coatings to remain. Be aware that blast cleaning methods may not be practical for use at Project site and may not be allowed by authorities having jurisdiction.

SSPC-SP 7/NACE No. 4.

SSPC-SP 11 requires complete removal of rust, mill scale, and paint by power tools. SSPC-SP 11 uses nonabrasive methods and is more thorough than SSPC-SP 2, SSPC-SP 3, and SSPC-SP 7/NACE No. 4.

SSPC-SP 11.

Retain "Shop-Primed Steel Substrates" paragraph below if primers are shop applied and are not removed in the field.

* + - * 1. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
				2. Wood Substrates:

Scrape and clean knots, and apply coat of knot sealer before applying primer.

Sand surfaces that will be exposed to view, and dust off.

Prime edges, ends, faces, undersides, and backsides of wood.

After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

* + - 1. APPLICATION
				1. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."

If Project requires restricted application method (e.g., using only spray or rollers), revise first subparagraph below accordingly.

Use applicators and techniques suited for paint and substrate indicated.

Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.

Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.

Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.

If tinting is not required, delete first paragraph below. Different tints show through as topcoat erodes.

* + - * 1. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
				2. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
				3. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
				4. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:

Paint the following work where exposed in equipment rooms:

List below contains items that are often field painted, plus others that are often not. Revise list to suit Project.

Equipment, including panelboards[**and switch gear**].

Uninsulated metal piping.

Uninsulated plastic piping.

Pipe hangers and supports.

Metal conduit.

Plastic conduit.

Tanks that do not have factory-applied final finishes.

Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.

<**Insert mechanical items to be painted**>.

Paint the following work where exposed in occupied spaces:

List below contains items that are usually field painted. Revise list to suit Project.

Equipment, including panelboards.

Uninsulated metal piping.

Uninsulated plastic piping.

Pipe hangers and supports.

Metal conduit.

Plastic conduit.

Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.

Other items as directed by Director’s Representative.

<**Insert mechanical items to be painted**>.

Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

* + - 1. FIELD QUALITY CONTROL
				1. Dry Film Thickness Testing: The Director’s Representative may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.

Contractor shall touch up and restore painted surfaces damaged by testing.

If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.

* + - 1. CLEANING AND PROTECTION
				1. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
				2. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
				3. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Director’s Representative, and leave in an undamaged condition.
				4. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

This Section may be edited using Deltek's SpecBuilder and the MPI Architectural Painting Decision Tree.

* + - 1. SURFACES, GENERAL

Edit paragraph and subparagraphs below by deleting surfaces and substrates not to be painted and adding other unlisted substrates and paint types for specific project requirements. The following may be deleted where paint type locations are shown on the drawings or room finish schedule.

* + - * 1. Surfaces: Unless otherwise specified or shown on the drawings, paint surfaces as follows:

In occupied buildings use paint types that are Low Odor (LO). Retain the second option and delete the first option in the below paragraphs.

Interior Surfaces:

Ceilings: Paint [**Type IAL-1**] [**Type IAL-1-LO**] except as noted below:

Living Units: Paint [**Type IAL-2**] [**Type IAL-2-LO**].

Toilets, Kitchens, Shower Rooms, Janitor Closets and Other Wet Areas: Paint [**Type IAL-3**] [**Type IAL-3-LO**].

Food Preparation and Clean Room Areas: Paint [**Type IAL-4**] [**Type IAL-3-LO**].

Walls: Paint [**Type IAL-2**] [**Type IAL-2-LO**] except as noted below:

Living Units: Paint [**Type IAL-3**] [**Type IAL-3-LO**].

Toilets and Kitchens: Paint [**Type IAL-3**] [**Type IAL-3-LO**].

Shower Rooms, Janitor Closets and Other Wet Areas Paint [**Type IAL-4**] [**Type IAL-4-LO**].

Doors, Windows, Frames and Trim: Paint [**Type IAL-3**][**Type IAL-3-LO**] except as noted below:

Use Paint [**Type IAL-4**][**Type IAL-4-LO**] where walls are Paint [**Type IAL-3**][**Type IAL-3-LO**].

Unless otherwise noted, paint interior unremovable and exposed wall and ceiling air supply and return grilles; plumbing pipes; electrical panel and fuse boxes, raceways and conduits; heating convector cabinets, radiators, radiator cabinets, unit heaters, and similar existing and installed devices and equipment by other trades.

Paint to match adjacent wall or ceiling surfaces.

Paint exposed surfaces when any part of the surface is on or within 8 inches of ceiling or wall surface to be painted.

Paint visible interior surfaces behind grilles, guards and screens.

Doors and Frames: Unless otherwise noted, paint doors and frames the same color in the next highest gloss as adjacent wall surfaces.

Where walls are not the same color on both sides of a door frame, change color at the inside corner of the frame stop.

Prime and finish paint door faces and edges before installation.

Paint door edges the same paint type color as the exterior side of the door.

Do not paint door components which are clearly not intended to be painted such as non-ferrous hardware, frame mutes, and weather stripping.

Do not allow doors and frames to touch until paint is thoroughly dry on both surfaces.

Window Frames and Sash: Unless otherwise noted, paint window frames and sash the same color as adjacent wall surfaces.

Where interior walls are not the same color on both sides, change paint color along the inside concealed corner of door frame stops.

Do not paint window components which are clearly not intended to be painted such as prefinished frames, sliding metal or plastic contacts, weatherstripping, and non-ferrous hardware.

Do not allow operable doors, windows and frames to touch until paint is thoroughly dry on both surfaces.

Ferrous Metal Door and Window Hardware: Unless otherwise noted, prime and paint to match adjacent doors, windows and frames.

Case Work: Paint factory unfinished exposed and semiexposed surfaces when doors and drawers are either open or closed including:

Both faces and edges of cabinet doors, shelving, dividers including interior side, rear, and bottom panel surfaces.

Both faces and edges of drawer face, side, rear, and bottom panels.

Exposed bottom or underside of case work more than 4 feet above the floor.

Do not paint plastic laminate surfaces, special countertop materials, glazing, factory finished surfaces, finish hardware and similar items clearly not intended to be painted.

* + - 1. INTERIOR PAINTING SCHEDULE

Paint systems in this article are based on "MPI Architectural Painting Specification Manual." For renovation projects, consult "MPI Maintenance Repainting Manual" and revise paint systems accordingly.

* + - * 1. Concrete Substrates, Nontraffic Surfaces:

Latex System [**MPI INT 3.1A**] [**MPI INT 3.1E**]:

Retain one of two "Prime Coat" subparagraphs below. First corresponds to MPI INT 3.1A; second corresponds to MPI INT 3.1E.

Prime Coat: Primer, alkali resistant, water based, MPI #3. Type ARP.

Prime Coat: Latex, interior, matching topcoat.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL4.

Latex over Latex Aggregate System MPI INT 3.1B:

Prime Coat: Textured coating, latex, flat, MPI #42. Type TCL.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Institutional Low-Odor/VOC Latex System MPI INT 3.1M:

Prime Coat: Primer sealer, interior, institutional low odor/VOC, MPI #149. IAL-P-LO.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

"High-Performance Architectural Latex System" subparagraph below is recommended for high-traffic and high-contact areas (e.g., public corridors in institutional buildings).

* + - * 1. Concrete Substrates, Traffic Surfaces:

Latex Floor Enamel System MPI INT 3.2A:

Prime Coat: Floor paint, latex, matching topcoat.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Floor paint, latex, matching topcoat.

Topcoat: Floor paint, latex, low gloss (maximum MPI Gloss Level 3), MPI #60. Type EPE.

Water-Based Concrete Floor Sealer System MPI INT 3.2G:

For a Budget Grade system, "MPI Manual" requires first coat; "MPI Manual" does not include a Premium Grade system.

First Coat: Sealer, water based, for concrete floors, matching topcoat.

Topcoat: Sealer, water based, for concrete floors, MPI #99. Type CFS.

* + - * 1. Clay Masonry Substrates:

Latex System MPI INT 4.1A:

Prime Coat: Primer, alkali resistant, water based, MPI #3. Type ARP.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Latex Aggregate System MPI INT 4.1B:

"MPI Manual" states that application procedures and products used in this system vary; therefore, it relies on manufacturer's written recommendations for primers and number of coats for a Premium Grade system and does not include a Budget Grade system.

Prime Coat: Primer for textured coating, latex, flat, as recommended in writing by topcoat manufacturer.

Intermediate Coat: Intermediate coat for textured coating, latex, flat, as recommended in writing by topcoat manufacturer.

Topcoat: Textured coating, latex, flat, MPI #42. Type TCL.

Institutional Low-Odor/VOC Latex System MPI INT 4.1M:

Prime Coat: Primer sealer, interior, institutional low odor/VOC, MPI #149. IAL-P-LO.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. IAL-4-LO.

* + - * 1. CMU Substrates:

Latex System MPI INT 4.2A:

Block Filler: Block filler, latex, interior/exterior, MPI #4. Type LBF.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Latex Aggregate System MPI INT 4.2B:

"MPI Manual" states that application procedures and products used in this system vary; therefore, it relies on manufacturer's written recommendations for primers and number of coats for a Premium Grade system and does not include a Budget Grade system.

Prime Coat: Primer for textured coating, latex, flat, as recommended in writing by topcoat manufacturer.

Intermediate Coat: Intermediate coat for textured coating, latex, flat, as recommended in writing by topcoat manufacturer.

Topcoat: Textured coating, latex, flat, MPI #42. Type TCL.

Institutional Low-Odor/VOC Latex System MPI INT 4.2E:

Block Filler: Block filler, latex, interior/exterior, MPI #4. Type LBF.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

* + - * 1. Steel Substrates:

Latex System, Alkyd Primer [**MPI INT 5.1Q**] [**MPI INT 5.1QQ**]:

Prime Coat: Shop primer specified in Section where substrate is specified.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Institutional Low-Odor/VOC Latex System MPI INT 5.1S: Type ISP-3.

Prime Coat: Primer, rust inhibitive, water based MPI #107.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

Water-Based Dry-Fall System:

For a Budget Grade system, "MPI Manual" requires prime coat and topcoat; "MPI Manual" does not include a Premium Grade system.

Prime Coat: Shop primer specified in Section where substrate is specified.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Dry fall, latex, flat, MPI #118. Type DFL-1.

Topcoat: Dry fall, latex (MPI Gloss Level 3), MPI #155. Type DFL-2.

Topcoat: Dry fall, latex (MPI Gloss Level 5), MPI #226. Type DFL-3.

* + - * 1. Wood Substrates: Glued-laminated construction.

Latex over Latex Primer System MPI INT 6.1M:

Prime Coat: Primer, latex, for interior wood, MPI #39. Type IAL-PW.

For a Premium Grade system, "MPI Manual" requires intermediate coat; "MPI Manual" does not include a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Institutional Low-Odor/VOC Latex System MPI INT 6.1Q:

Prime Coat: Primer, latex, for interior wood, MPI #39. Type IAL-PW.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

* + - * 1. Wood Substrates: Exposed framing.

Latex over Latex Primer System MPI INT 6.2D:

Prime Coat: Primer, latex, for interior wood, MPI #39. Type IAL-PW.

For a Premium Grade system, "MPI Manual" requires intermediate coat; "MPI Manual" does not include a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Institutional Low-Odor/VOC Latex System MPI INT 6.2L:

Prime Coat: Primer, latex, for interior wood, MPI #39. Type IAL-PW.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

* + - * 1. Wood Substrates: [**Wood trim**] [**Architectural woodwork**] [**Doors**] [**Windows**] [**and**] [**wood board paneling**].

Latex over Latex Primer System MPI INT 6.3T:

Prime Coat: Primer, latex, for interior wood, MPI #39. Type IAL-PW.

For a Premium Grade system, "MPI Manual" requires intermediate coat; "MPI Manual" does not include a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Institutional Low-Odor/VOC Latex System MPI INT 6.3V:

Prime Coat: Primer, latex, for interior wood, MPI #39. Type IAL-PW.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

* + - * 1. Spray-Textured Ceiling Substrates:

Latex System MPI INT 9.1E: Spray applied.

Prime Coat: Latex, interior, matching topcoat.

For Budget and Premium Grade systems, "MPI Manual" requires intermediate coat.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

* + - * 1. [**Gypsum Board**] [**and**] [**Plaster**] Substrates:

Latex over Latex Sealer System MPI INT 9.2A:

Retain one of two "Prime Coat" subparagraphs below. Retain first for a Premium Grade system.

Prime Coat: Primer sealer, latex, interior, MPI #50. Type IAL-P.

Prime Coat: Latex, interior, matching topcoat.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, flat (MPI Gloss Level 1), MPI #53. Type IAL-1.

Topcoat: Latex, interior (MPI Gloss Level 3), MPI #52. Type IAL-2.

Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5), MPI #54. Type IAL-3.

Topcoat: Latex, interior, gloss (MPI Gloss Level 6, except minimum gloss of 65 units at 60 degrees), MPI #114. Type IAL-4.

Institutional Low-Odor/VOC Latex System MPI INT 9.2M:

Prime Coat: Primer sealer, interior, institutional low odor/VOC[**, MPI**#149]. Type IAL-P-LO.

For a Premium Grade system, "MPI Manual" requires intermediate coat; delete first "Intermediate Coat" subparagraph below for a Budget Grade system.

Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.

Retain one or more "Topcoat" subparagraphs below.

Topcoat: Latex, interior, institutional low odor/VOC, flat (MPI Gloss Level 1), MPI #143. Type IAL-1-LO.

Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3), MPI #145. Type IAL-2-LO.

Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (MPI Gloss Level 5), MPI #147. Type IAL-3-LO.

Topcoat: Latex, interior, institutional low odor/VOC, gloss (MPI Gloss Level 6), MPI #148. Type IAL-4-LO.

END OF SECTION 099123