

Part 1 GENERAL

1.1 SUMMARY

- .1 Types of items described in this Section:
 - .1 Surface preparation and the application of paint systems on the following interior substrates:
 - .1 Concrete.
 - .2 Clay masonry.
 - .3 Concrete masonry units (CMU).
 - .4 Steel.
 - .5 Galvanized metal.
 - .6 Aluminum (not anodized or otherwise coated).
 - .7 Wood.
 - .8 Gypsum board.
 - .9 Plaster.
 - .10 Spray-textured ceilings.
 - .11 Cotton or canvas insulation covering.
- .2 Types of items not described in this Section:
 - .1 Wood stains and transparent finishes.
 - .2 Shop priming of metal substrates with primers specified in this Section.
 - .3 Shop priming carpentry with primers specified in this Section.
 - .4 Factory finishing of steel doors and frames and of wood doors; where specified.
 - .5 Gypsum board spackling.
 - .6 Special-use coatings, including epoxy coatings.
 - .7 Intumescent painting.
 - .8 Surface preparation and the application of paint systems on exterior substrates.
 - .9 Surface preparation and the application of wood stains and transparent finishes on interior wood substrates.
- .3 Related Requirements:
 - .1 Section 01 33 00 - *Submittal Procedures*.
 - .2 Section 01 74 21 - *Construction/Demolition Waste Management and Disposal*.
 - .3 Section 01 78 00 - *Closeout Submittals*.
 - .4 Section 09 91 13 - *Exterior Painting* for surface preparation and the application of paint systems on exterior substrates.
- .4 Scope of Work of this Contract
 - .1 While drawings and schedules identify locations for some finishes, the scope of work entails painting all of the following interior surfaces:

- .1 All surfaces explicitly noted to be painted.
- .2 All surfaces scheduled to be covered with wall coverings.
- .3 All unfinished surfaces that are either exposed-to-view or semi-exposed-to-view and not otherwise scheduled to receive another type of finish, excluding finished hardwood; unless otherwise noted.
- .2 Specifically, do not paint any of the following surfaces:
 - .1 Grating.
 - .2 Concrete floors, unless specifically indicated.
 - .3 Stainless steel.
 - .4 Aluminum handrail and aluminum stair and ladder components.
 - .5 PVC, rubber, copper, bronze or brass surfaces.

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM D523 (2014), Standard Test Method for Specular Gloss
- .2 Department of Justice Canada (Jus)
 - .1 Canadian Environmental Protection Act (CEPA), 1999, c. 33
- .3 Environmental Protection Agency (EPA)
 - .1 EPA Test Method for Measuring Total Volatile Organic Compound Content of Consumer Products, Method 24 - 1995, (for Surface Coatings).
- .4 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .5 Master Painters Institute (MPI)
 - .1 MPI Architectural Painting Specifications Manual, 2004.
- .6 National Fire Code of Canada - 2010
- .7 Society for Protective Coatings (SSPC)
 - .1 SSPC Painting Manual, Volume Two, 8th Edition, Systems and Specifications Manual.
- .8 Transport Canada (TC)
 - .1 Transportation of Dangerous Goods Act (TDGA), 1992, c. 34 .
- .9 Underwriters Laboratories of Canada (ULC)

1.3 DEFINITIONS

- .1 Concealed Surface: A surface that cannot be seen because the view from any angle is obstructed by an immovable object.
- .2 Exposed and semi-exposed surface: Any surface that is not a concealed surface.

- .3 Finish: a final surface treatment intended to enhance the appearance of a substrate or protect it from the adverse effects of its environmental, or both, and includes but is not limited to paint, stains, coatings, laminates, tiles, fabrics and carpets.
 - .1 Primer finish is not considered a finish.
- .4 Unfinished Surface: A surface having no Finish.
- .5 Gloss Levels:
 - .1 Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
 - .2 Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
 - .3 Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
 - .4 Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
 - .5 Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
 - .6 Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
 - .7 Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.4 ACTION SUBMITTALS

- .1 Product Data: For each type of product. Include preparation requirements and application instructions.
- .2 Samples for Verification: For each type of paint system and in each colour and gloss of topcoat.
 - .1 Submit Samples on rigid backing, 200 mm square.
 - .2 Step coats on Samples to show each coat required for system.
 - .3 Label each coat of each Sample.
 - .4 Label each Sample for location and application area.
- .3 Product List: For each product indicated, include the following:
 - .1 Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
 - .2 Printout of current *MPI Approved Products List* for each product category specified in Part 2, with the proposed product highlighted.
 - .3 VOC content.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- .1 Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - .1 Paint: 5 percent, but not less than 3.8 L of each material and colour applied.

1.6 QUALITY ASSURANCE

- .1 MPI Standards:
 - .1 Products: Complying with MPI standards indicated and listed in *MPI Approved Products List*.
 - .2 Preparation and Workmanship: Comply with requirements in *MPI Architectural Painting Specification Manual* for products and paint systems indicated.
- .2 Mock-ups: While paint colours may be specifically indicated in the documents, still proceed with mock-ups. Apply benchmark samples of each paint system indicated and each colour and finish selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - .1 Departmental Representative will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
 - .1 Wall and Ceiling Surfaces: Provide samples of at least 9 sq. m.
 - .2 Other Items: Departmental Representative will designate items or areas required.
 - .2 Apply benchmark samples after permanent lighting and other environmental services have been activated.
 - .3 Final approval of colour selections will be based on benchmark samples.
 - .1 If preliminary colour selections are not approved, apply additional benchmark samples of additional colours selected by Departmental Representative at no added cost to project.

1.7 DELIVERY, STORAGE, AND HANDLING

- .1 Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 7 deg C.
 - .1 Maintain containers in clean condition, free of foreign materials and residue.
 - .2 Remove rags and waste from storage areas daily.
- .2 Fire Safety Requirements:
 - .1 Provide Type ABC fire extinguisher adjacent to storage area.
 - .2 Store oily rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.
 - .3 Handle, store, use and dispose of flammable and combustible materials in accordance with National Fire Code of Canada requirements.
- .3 Waste Management and Disposal:
 - .1 Separate waste materials for reuse in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
 - .3 Collect and separate for disposal polystyrene packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan (WMP).

- .4 Separate for recycling and place in designated containers Steel waste in accordance with Waste Management Plan (WMP).
- .5 Place materials defined as hazardous or toxic in designated containers.
- .6 Handle and dispose of hazardous materials in accordance with CEPA, regulations.
- .7 Ensure emptied containers are sealed and stored safely.
- .8 Unused coating materials must be disposed of at official hazardous material collections site as approved by Departmental Representative.
- .9 Paint, stain and wood preservative finishes and related materials (thinners, and solvents) are regarded as hazardous products and are subject to regulations for disposal. Information on these controls can be obtained from Provincial Ministries of Environment and Regional levels of Government.
- .10 Material which cannot be reused must be treated as hazardous waste and disposed of in an appropriate manner.
- .11 Place materials defined as hazardous or toxic waste, including used sealant and adhesive tubes and containers, in containers or areas designated for hazardous waste.
- .12 To reduce the amount of contaminants entering waterways, sanitary/storm drain systems or into ground follow these procedures:
 - .1 Retain cleaning water for water-based materials to allow sediments to be filtered out.
 - .2 Retain cleaners, thinners, solvents and excess paint and place in designated containers and ensure proper disposal.
 - .3 Return solvent and oil soaked rags used during painting operations for contaminant recovery, proper disposal, or appropriate cleaning and laundering.
 - .4 Dispose of contaminants in approved legal manner in accordance with hazardous waste regulations.
 - .5 Empty paint cans are to be dry prior to disposal or recycling (where available).
- .13 Where paint recycling is available, collect waste paint by type and provide for delivery to recycling or collection facility.

1.8 PROJECT CONDITIONS

- .1 Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 10 and 35 deg C.
- .2 Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 3 deg C above the dew point; or to damp or wet surfaces.

Part 2 PRODUCTS

2.1 PAINT, GENERAL

- .1 Material Compatibility:

- .1 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.
- .2 For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- .2 VOC Content of Field-Applied Interior Paints and Coatings: Provide products that comply with the following limits for VOC content, exclusive of colourants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24); these requirements do not apply to paints and coatings that are applied in a fabrication or finishing shop:
 - .1 Flat Paints, Coatings, and Primers: VOC content of not more than 50 g/L.
 - .2 Nonflat Paints, Coatings, and Primers: VOC content of not more than 150 g/L.
 - .3 Anti-Corrosive and Anti-Rust Paints Applied to Ferrous Metals: VOC not more than 250 g/L.
 - .4 Floor Coatings: VOC not more than 100 g/L.
 - .5 Shellacs, Clear: VOC not more than 730 g/L.
 - .6 Shellacs, Pigmented: VOC not more than 550 g/L.
 - .7 Flat Topcoat Paints: VOC content of not more than 50 g/L.
 - .8 Nonflat Topcoat Paints: VOC content of not more than 150 g/L.
 - .9 Anti-Corrosive and Anti-Rust Paints Applied to Ferrous Metals: VOC not more than 250 g/L.
 - .10 Floor Coatings: VOC not more than 100 g/L.
 - .11 Shellacs, Clear: VOC not more than 730 g/L.
 - .12 Shellacs, Pigmented: VOC not more than 550 g/L.
 - .13 Primers, Sealers, and Undercoaters: VOC content of not more than 200 g/L.
 - .14 Dry-Fog Coatings: VOC content of not more than 400 g/L.
 - .15 Zinc-Rich Industrial Maintenance Primers: VOC content of not more than 340 g/L.
 - .16 Pre-Treatment Wash Primers: VOC content of not more than 420 g/L.
- .3 Chemical Components of Field-Applied Interior Paints and Coatings: Provide topcoat paints and anti-corrosive and anti-rust paints applied to ferrous metals that comply with the following chemical restrictions; these requirements do not apply to paints and coatings that are applied in a fabrication or finishing shop:
 - .1 Aromatic Compounds: Paints and coatings shall not contain more than 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
 - .2 Restricted Components: Paints and coatings shall not contain any of the following:
 - .1 Acrolein.
 - .2 Acrylonitrile.
 - .3 Antimony.
 - .4 Benzene.

- .5 Butyl benzyl phthalate.
- .6 Cadmium.
- .7 Di (2-ethylhexyl) phthalate.
- .8 Di-n-butyl phthalate.
- .9 Di-n-octyl phthalate.
- .10 1,2-dichlorobenzene.
- .11 Diethyl phthalate.
- .12 Dimethyl phthalate.
- .13 Ethylbenzene.
- .14 Formaldehyde.
- .15 Hexavalent chromium.
- .16 Isophorone.
- .17 Lead.
- .18 Mercury.
- .19 Methyl ethyl ketone.
- .20 Methyl isobutyl ketone.
- .21 Methylene chloride.
- .22 Naphthalene.
- .23 Toluene (methylbenzene).
- .24 1,1,1-trichloroethane.
- .25 Vinyl chloride.
- .4 Colours: In not noted otherwise, then selected by Departmental Representative from full range of colours.
 - .1 M&E equipment: Assume no colour coding required unless otherwise indicated in mechanical and electrical specification sections.
- .5 Gloss Levels: As determined by Departmental Representative.

2.2 BLOCK FILLERS

- .1 Interior/Exterior Latex Block Filler: MPI #4.
 - .1 VOC Content: E Range of E3.

2.3 PRIMERS/SEALERS

- .1 Interior Latex Primer/Sealer: MPI #50.
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.
- .2 Interior Alkyd Primer/Sealer: MPI #45.
 - .1 VOC Content: E Range of E2.

- .3 Wood-Knot Sealer: Sealer recommended in writing by topcoat manufacturer for use in paint systems indicated.

2.4 METAL PRIMERS

- .1 Alkyd Anticorrosive Metal Primer: MPI #79.
 - .1 VOC Content: E Range of E2.
- .2 Quick-Drying Alkyd Metal Primer: MPI #76.
 - .1 VOC Content: E Range of E3.
- .3 Rust-Inhibitive Primer (Water Based): MPI #107.
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.
- .4 Cementitious Galvanized-Metal Primer: MPI #26.
 - .1 VOC Content: E Range of E1.
- .5 Waterborne Galvanized-Metal Primer: MPI #134.
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.
- .6 Vinyl Wash Primer: MPI #80.
 - .1 VOC Content: E Range of E3.
- .7 Quick-Drying Primer for Aluminum: MPI #95.
 - .1 VOC Content: E Range of E3.

2.5 WOOD PRIMERS

- .1 Interior Latex-Based Wood Primer: MPI #39.
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.

2.6 LATEX PAINTS

- .1 Interior Latex (Flat): MPI #53 (Gloss Level 1).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 2.5.
- .2 Interior Latex (Low Sheen): MPI #44 (Gloss Level 2).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.
- .3 Interior Latex (Eggshell): MPI #52 (Gloss Level 3).
 - .1 VOC Content: E Range of E3.

- .2 Environmental Performance Rating: EPR 3.
- .4 Interior Latex (Satin): MPI #43 (Gloss Level 4).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.5.
- .5 Interior Latex (Semigloss): MPI #54 (Gloss Level 5).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 4.
- .6 Interior Latex (Gloss): MPI #114 (Gloss Level 6, except minimum gloss of 65 units at 60 deg).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 4.
- .7 Institutional Low-Odour/VOC Latex (Flat): MPI #143 (Gloss Level 1).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 5.5.
- .8 Institutional Low-Odour/VOC Latex (Low Sheen): MPI #144 (Gloss Level 2).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 4.5.
- .9 Institutional Low-Odour/VOC Latex (Eggshell): MPI #145 (Gloss Level 3).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 4.5.
- .10 Institutional Low-Odour/VOC Latex (Semigloss): MPI #147 (Gloss Level 5).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 5.5.
- .11 High-Performance Architectural Latex (Low Sheen): MPI #138 (Gloss Level 2).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 6.
- .12 High-Performance Architectural Latex (Eggshell): MPI #139 (Gloss Level 3).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 6.
- .13 High-Performance Architectural Latex (Satin): MPI #140 (Gloss Level 4).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 6.5.
- .14 High-Performance Architectural Latex (Semigloss): MPI #141 (Gloss Level 5).
 - .1 VOC Content: E Range of E3.

- .2 Environmental Performance Rating: EPR 7.
- .15 Exterior Latex (Flat): MPI #10 (Gloss Level 1).
 - .1 VOC Content: E Range of E3.
- .16 Exterior Latex (Semigloss): MPI #11 (Gloss Level 5).
 - .1 VOC Content: E Range of E3.
- .17 Exterior Latex (Gloss): MPI #119 (Gloss Level 6, except minimum gloss of 65 units at 60 deg).
 - .1 VOC Content: E Range of E3.

2.7 ALKYD PAINTS

- .1 Interior Alkyd (Flat): MPI #49 (Gloss Level 1).
 - .1 VOC Content: E Range of E3.
- .2 Interior Alkyd (Eggshell): MPI #51 (Gloss Level 3).
 - .1 VOC Content: E Range of E2.
- .3 Interior Alkyd (Semigloss): MPI #47 (Gloss Level 5).
 - .1 VOC Content: E Range of E2.
 - .2 Environmental Performance Rating: EPR 3.
- .4 Interior Alkyd (Gloss): MPI #48 (Gloss Level 6).
 - .1 VOC Content: E Range of E2.

2.8 QUICK-DRYING ENAMELS

- .1 Quick-Drying Enamel (Semigloss): MPI #81 (Gloss Level 5).
 - .1 VOC Content: E Range of E3.
- .2 Quick-Drying Enamel (High Gloss): MPI #96 (Gloss Level 7).
 - .1 VOC Content: E Range of E3.

2.9 TEXTURED COATING

- .1 Latex Stucco and Masonry Textured Coating: MPI #42.
 - .1 VOC Content: E Range of E3.

2.10 DRY FOG/FALL COATINGS

- .1 Latex Dry Fog/Fall: MPI #118.
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.
- .2 Waterborne Dry Fall: MPI #133.

- .1 VOC Content: E Range of E3.
- .2 Environmental Performance Rating: EPR 3.
- .3 Interior Alkyd Dry Fog/Fall: MPI #55.

- .1 VOC Content: E Range of E3.

2.11 ALUMINUM PAINT

- .1 Aluminum Paint: MPI #1.
- .1 VOC Content: E Range of E3.

2.12 FLOOR COATINGS

- .1 Interior Concrete Floor Stain: MPI #58.
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 2.
- .2 Interior/Exterior Clear Concrete Floor Sealer (Water Based): MPI #99.
 - .1 VOC Content: E Range of E3.
- .3 Interior/Exterior Clear Concrete Floor Sealer (Solvent Based): MPI #104.
 - .1 VOC Content: E Range of E2.
- .4 Interior/Exterior Latex Floor and Porch Paint (Low Gloss): MPI #60 (maximum Gloss Level 3).
 - .1 VOC Content: E Range of E3.
 - .2 Environmental Performance Rating: EPR 3.
- .5 Exterior/Interior Alkyd Floor Enamel (Gloss): MPI #27 (Gloss Level 6).
 - .1 VOC Content: E Range of E2.
 - .2 Additives: Manufacturer's standard additive to increase skid resistance of painted surface.

Part 3 EXECUTION

3.1 EXAMINATION

- .1 Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.
- .2 Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - .1 Concrete: 12 percent.
 - .2 Masonry (CMU): 12 percent.
 - .3 Wood: 15 percent.

- .4 Gypsum Board: 12 percent.
- .3 Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- .4 Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
- .1 Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

- .1 Comply with manufacturer's written instructions and recommendations in MPI Architectural Painting Specification Manual applicable to substrates indicated.
- .2 Remove plates, machined surfaces, and similar items already in place that 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.
 - .1 After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
 - .2 Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- .3 Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.
 - .1 Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- .4 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.
- .5 Concrete Masonry Substrates: Remove 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.
- .6 Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer.
 - .1 SSPC-SP 11, "Power Tool Cleaning to Bare Metal."
- .7 Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- .8 Aluminum Substrates: Remove surface oxidation.
- .9 Wood Substrates:
 - .1 Scrape and clean knots, and apply coat of knot sealer before applying primer.

- .2 Sand surfaces that will be exposed to view, and dust off.
- .3 Prime edges, ends, faces, undersides, and backsides of wood.
- .4 After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- .10 Gypsum Board Substrates: Do not begin paint application until finishing compound is dry and sanded smooth.
- .11 Cotton or Canvas Insulation Covering Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

3.3 APPLICATION

- .1 Apply paints according to manufacturer's written instructions.
 - .1 Use applicators and techniques suited for paint and substrate indicated.
 - .2 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.
 - .3 Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
- .2 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 colour of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- .3 If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, colour, and appearance.
- .4 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 colour breaks.
- .5 Painting Electrical Work: Paint items exposed in equipment rooms and occupied spaces including, but not limited to, the following:
 - .1 Electrical Work:
 - .1 Galvanized and steel conduits.
 - .2 Electrical equipment that is indicated to have a factory-primed finish for field painting.

3.4 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 Departmental 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.

3.5 INTERIOR PAINTING SCHEDULE

- .1 Propose paint system for any surfaces not listed. Propose paint system consisting of a minimum of a prime coat, intermediate coat, and topcoat.
- .2 Concrete Substrates, Nontraffic Surfaces:
 - .1 High-Performance Architectural Latex System: MPI INT 3.1C.
 - .1 Prime Coat: Interior latex primer/sealer.
 - .2 Intermediate Coat: High-performance Architectural latex matching topcoat.
 - .3 Topcoat: High-performance Architectural latex.
- .3 Concrete Substrates, Traffic Surfaces:
 - .1 Alkyd Floor Enamel System: MPI INT 3.2B.
 - .1 Prime Coat: Exterior/interior alkyd floor enamel.
 - .2 Intermediate Coat: Exterior/interior alkyd floor enamel.
 - .3 Topcoat: Exterior/interior alkyd floor enamel.
- .4 CMU Substrates:
 - .1 High-Performance Architectural Latex System: MPI INT 4.2D.
 - .1 Prime Coat: Interior/exterior latex block filler.
 - .2 Intermediate Coat: High-performance Architectural latex matching topcoat.
 - .3 Topcoat: High-performance Architectural latex .
- .5 Steel Pipes filled with liquids, including but not limited to sprinkler pipes:
 - .1 Alkyd System: MPI INT 5.1E.
 - .1 Prime Coat: Alkyd anticorrosive metal primer.
 - .2 Intermediate Coat: Interior alkyd matching topcoat.
 - .3 Topcoat: Interior alkyd
- .6 Galvanized Metal Pipes filled with liquids, including but not limited to sprinkler pipes:
 - .1 Alkyd System: MPI INT 5.3C.
 - .1 Prime Coat: Cementitious galvanized-metal primer.
 - .2 Intermediate Coat: Interior alkyd matching topcoat.
 - .3 Topcoat: Interior alkyd
- .7 Steel Substrates:

- .1 High-Performance Architectural Latex System: MPI INT 5.1R.
 - .1 Prime Coat: Alkyd anticorrosive metal primer.
 - .2 Intermediate Coat: High-performance Architectural latex matching top-coat.
 - .3 Topcoat: High-performance Architectural latex.
- .8 Galvanized-Metal Substrates:
 - .1 High-Performance Architectural Latex System: MPI INT 5.3M.
 - .1 Prime Coat: Waterborne galvanized-metal primer.
 - .2 Intermediate Coat: High-performance Architectural latex matching top-coat.
 - .3 Topcoat: High-performance Architectural latex .
- .9 Aluminum (Not Anodized or Otherwise Coated) Substrates:
 - .1 High-Performance Architectural Latex System: MPI INT 5.4F.
 - .1 Prime Coat: Quick-drying primer for aluminum.
 - .2 Intermediate Coat: High-performance Architectural latex matching top-coat.
 - .3 Topcoat: High-performance Architectural latex.
- .10 Dressed Lumber Substrates: Including Architectural woodwork and doors.
 - .1 High-Performance Architectural Latex System: MPI INT 6.3A.
 - .1 Prime Coat: Interior latex-based wood primer.
 - .2 Intermediate Coat: High-performance Architectural latex matching top-coat.
 - .3 Topcoat: High-performance Architectural latex.
- .11 Wood Panel Substrates: Including painted plywood, medium-density fiberboard, and hardboard.
 - .1 High-Performance Architectural Latex System: MPI INT 6.4S.
 - .1 Prime Coat: Interior latex-based wood primer.
 - .2 Intermediate Coat: High-performance Architectural latex matching top-coat.
 - .3 Topcoat: High-performance Architectural latex.
- .12 Dimension Lumber Substrates, Nontraffic Surfaces: Including exposed joists and exposed beams.
 - .1 High-Performance Architectural Latex System: MPI INT 6.2B.
 - .1 Prime Coat: Interior alkyd primer/sealer.
 - .2 Intermediate Coat: High-performance Architectural latex matching top-coat.
 - .3 Topcoat: High-performance Architectural latex.
- .13 Wood Substrates, Traffic Surfaces:

- .1 Latex Floor Paint System: MPI INT 6.5G.
 - .1 Prime Coat: Interior alkyd primer/sealer.
 - .2 Intermediate Coat: Interior/exterior latex floor and porch paint.
 - .3 Topcoat: Interior/exterior latex floor and porch paint.
- .14 Gypsum Board Substrates:
 - .1 High-Performance Architectural Latex System: MPI INT 9.2B.
 - .1 Prime Coat: Interior latex primer/sealer.
 - .2 Intermediate Coat: High-performance Architectural latex matching topcoat.
 - .3 Topcoat: High-performance Architectural latex.
- .15 Cotton or Canvas Insulation-Covering Substrates: Including pipe and duct coverings.
 - .1 Latex System: MPI INT 10.1A.
 - .1 Prime Coat: Interior latex matching topcoat.
 - .2 Intermediate Coat: Interior latex matching topcoat.
 - .3 Topcoat: Interior latex.

END OF SECTION