Part 1 General

1.01 SUMMARY

.1 Section Includes:

.1 Material and installation of site applied paint finishes to new interior and exterior surfaces, including site painting of shop primed surfaces.

.2 Surface preparation of substrates as required for acceptance of painting, including cleaning, small crack repair, patching, caulking, and making good surfaces and areas.

.3 Priming, except where pre-primed as specified under other Sections of work and painting of structural steel, miscellaneous metal, ornamental metal and primed steel equipment.

1.02 RELATED SECTIONS

.1 Section 05 50 00 - Metal Fabrications.

.2 Section 06 20 00 - Finish Carpentry.

.3 Section 09 06 00 - Room Finish Schedule.

.4 Section 09 21 16 - Gypsum Board Assemblies.

1.03 REFERENCES

.1 ASTM American Society for Testing and Materials International, (ASTM).

.1 ASTM C309-11. Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

.2 ASTM C1315-11. Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.

.2 Master Painters Institute (MPI).

.1 MPI Architectural Painting Specifications Manual, 2016.

.3 National Fire Code of Canada 2015.

1.04 QUALITY ASSURANCE

.1 Contractor shall have a minimum of five years proven satisfactory experience. When requested, provide Consultant a list of last three comparable jobs including, job name and location, specifying authority, and project manager.

.2 Engage only qualified journeymen who have a "Tradesman Qualification Certificate of Proficiency" in painting work. Apprentices may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations.

.3 Conform to latest MPI requirements for painting including preparation and priming.

.4 Materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, thinners, solvents, etc.) shall be in accordance with MPI Painting Specification Manual "Approved Product" listing and shall be from a single manufacturer for each system.

.5 Other paint materials such as linseed oil, shellac, turpentine, etc. shall be the highest quality product of an approved manufacturer listed in MPI Painting Specification Manual and shall be compatible with other coating materials as required.

.6 Retain purchase orders, invoices and other documents to prove that all products and materials conform to MPI requirements.

.7 Convene pre-installation meeting one week prior to beginning work of this Section or any on-site preparation or application. Painting contractor and Consultant will review the following:

.1 Verify project requirements.

.2 Submission of samples and colour chart.

.3 Review installation and substrate conditions.

.4 Co-ordination with other building sub-trades.

.5 Review manufacturer's installation instructions and warranty requirements.

.6 Preparation of Mock-Ups.

.8 Where “special” painting, coating or decorating system applications such as non-MPI listed products or systems are to be used, the coating manufacturer shall provide, certification of all surfaces and conditions for specific paint or coating system application as well as on site supervision, inspection and approval of their paint or coating system application as required.

1.05 MOCK-UPS

.1 Construct Mock-Ups in accordance with Section 01 45 00 - Quality Control.

.2 Construct a Mock-Up of one completed wall for each Paint Finish System. Mock-Up to include floors, walls and ceilings as appropriate and demonstrate application of each paint / stain or finish. Minimum size: 10 square meters minimum for each wall, ceiling or floor surface for each Finish system specified.

.1 Prepare and paint designated surfaces, areas, room or item (in each colour scheme), with specified paint or coating showing selected colours, gloss/sheen, textures and workmanship.

.3 Locate Mock-Ups where directed by Consultant. Allow Consultant 72 hours for inspection and review of Mock-Up before proceeding with work.

.4 Mock-Up will be used:

.1 To judge workmanship, substrate preparation and material application and workmanship to MPI Architectural Painting Specification Manual standards.

.2 When accepted, Mock-Up will demonstrate acceptable standard of finish quality and workmanship for all subsequent on-site work. Approved Mock-Up may remain part of finished work.

.5 Standard of Acceptance: Mock-Ups will be evaluated and approved as specified under Field Quality Control.

1.06 SCHEDULING OF WORK

.1 Submit work schedule for various stages of painting to Consultant for approval. Submit schedule minimum of 48 hours in advance of proposed operations. Obtain written authorization from Consultant for any changes in work schedule.

.2 Schedule painting operations to prevent disruption of other Contractors in and about the building.

1.07 SUBMITTALS

.1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

.2 Submit product data sheets for each paint and coating product to be used.

.3 Submit manufacturer's installation / application instructions for each paint and coating product to be used.

.4 Submit 2 copies of WHMIS MSDS - Material Safety Data Sheets.

.5 Indicate VOC for each product used. Indicate VOC's during application and curing,

.6 Submit certified test reports for all products from approved independent testing laboratories, indicating compliance with specifications for specified performance characteristics and physical properties.

.1 Lead, cadmium and chromium: presence of and amounts.

.2 Mercury: presence of and amounts.

.3 Organochlorines and PCBs: presence of and amounts.

.7 Submit certificates signed by manufacturer certifying that materials comply with specified performance characteristics and physical properties.

.8 Upon completion, submit records of products used. List products in relation to finish system and include the following:

.1 Product name, type and use.

.2 Manufacturer's product number.

.3 Colour number.

.4 MPI Environmentally Friendly classification system rating.

.5 Manufacturer's Material Safety Data Sheets (MSDS).

.9 Submit full range colour sample chips. Indicate where colour availability is restricted.

.10 Submit duplicate 200 x 300 mm sample panels of each paint, stain, clear coating and special finish with specified paint or coating in colours, gloss/sheen and textures required to MPI Painting Specification Manual standards. Submit on following substrate materials:

.1 3 mm plate steel for finishes over metal surfaces.

.2 13 mm birch plywood for finishes over wood surfaces.

.3 50 mm concrete block for finishes over concrete or concrete masonry surfaces.

.4 13 mm gypsum board for finishes over gypsum board, plaster and other smooth surfaces.

.5 10 mm hardwood plywood for finishes over wood surfaces.

.11 Retain reviewed samples on-site to demonstrate acceptable standard of quality for appropriate on-site surface.

.12 Closeout Submittals: Provide maintenance data for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.08 EXTRA MATERIALS

.1 Submit maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.

.2 Submit one - one litre can of each type and colour of primer and finish coating. Identify colour and paint / stain type in relation to established colour schedule and finish system.

.3 Extra materials one piece and from same production run as installed materials.

.4 Deliver to Consultant and store where directed.

1.09 DELIVERY, HANDLING AND STORAGE

.1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.

.2 Identify products and materials with labels indicating:

.1 Manufacturer's name and address. Type of paint / stain or coating.

.2 Compliance with applicable standard.

.3 Colour number in accordance with established colour schedule.

.3 Remove damaged, opened and rejected materials from site.

.4 Provide and maintain dry, temperature controlled, secure storage. Observe manufacturer's recommendations for storage and handling.

.5 Store materials and supplies away from heat generating devices.

.6 Store materials and equipment in a well ventilated area with temperature range 7 to 30 degree C. Store temperature sensitive products above minimum temperature as recommended by manufacturer.

.7 Keep areas used for storage, cleaning and preparation, clean and orderly to approval of Consultant. After completion of operations, return areas to clean condition to approval of Consultant.

.8 Remove paint materials from storage only in quantities required for same day use.

.9 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling storage, and disposal of hazardous materials.

.10 Fire Safety Requirements:

.1 Provide one 9 kg Type ABC dry chemical 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 the National Fire Code of Canada.

1.010 SITE REQUIREMENTS

.1 Heating, Ventilation and Lighting:

.1 Ventilate enclosed spaces in accordance with Section 01 00 10 - General Instructions.

.2 Perform no painting work unless adequate and continuous ventilation and sufficient heating facilities are in place to maintain ambient air and substrate temperatures above 10 degrees C for 24 hours before, during and after paint application until paint has cured sufficiently.

.3 Where required, provide continuous ventilation for seven days after completion of application of paint.

.4 Coordinate use of existing ventilation system with Consultant and ensure its operation during and after application of paint as required.

.5 Provide temporary ventilating and heating equipment where permanent facilities are not available or supplemental ventilating and heating equipment if ventilation and heating from existing system is inadequate to meet minimum requirements.

.6 Perform no painting work unless a minimum lighting level of 400 Lux is provided on surfaces to be painted.

.2 Temperature, Humidity and Substrate Moisture Content Levels:

.1 Unless specifically pre-approved by the specifying body, and the applied product manufacturer, perform no painting work when:

.1 Ambient air and substrate temperatures are below 10 degrees C.

.2 Substrate temperature is over 32 degrees C unless paint is specifically formulated for application at high temperatures.

.3 Substrate and ambient air temperatures are expected to fall outside MPI or paint manufacturer's prescribed limits.

.4 The relative humidity is above 85 % or when the dew point is less than 3 degrees C variance between the air/surface temperature.

.5 Rain or snow are forecast to occur before paint has thoroughly cured or when it is foggy, misty, raining or snowing at site.

.6 Surface to be painted is wet, damp or frosted.

.2 Perform no painting work when the maximum moisture content of the substrate exceeds:

.1 12 % for concrete and brick masonry.

.2 15 % for wood.

.3 12 % for plaster and gypsum board.

.3 Conduct moisture tests using a properly calibrated electronic Moisture Meter, except test concrete floors for moisture using a simple "cover patch test".

.4 Test concrete, masonry and plaster surfaces for alkalinity as required.

.3 Surface and Environmental Conditions:

.1 Apply paint finish only in areas where dust is no longer being generated by related construction operations or when wind or ventilation conditions are such that airborne particles will not affect quality of finished surface.

.2 Apply paint only to adequately prepared surfaces and to surfaces within moisture limits noted herein.

.3 Apply paint only when previous coat of paint is dry or adequately cured.

.4 Schedule repainting operations such that surfaces exposed to direct, intense sunlight are scheduled for completion during early morning.

.5 Provide and maintain cover when paint must be applied in damp or cold weather. Heat substrates and surrounding air to comply with temperature and humidity conditions specified by manufacturer. Protect until paint is dry or until weather conditions are suitable.

.6 Remove paint from areas which have been exposed to freezing, excess humidity, rain, snow or condensation. Prepare surface again and repaint.

.4 Additional Interior Application Requirements:

.1 Apply paint finishes only when temperature at location of installation can be satisfactorily maintained within manufacturer's recommendations.

.2 Schedule operations to approval of Consultant such that painted surfaces will have dried and cured sufficiently before other contractors are affected.

1.011 WASTE MANAGEMENT AND DISPOSAL

.1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction / Demolition Waste Management.

.2 Paint, stain and wood preservative finishes and related materials such as thinners, solvents, etc. 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.

.3 Material which cannot be reused must be treated as hazardous waste and disposed of in an appropriate manner. Dispose of all hazardous materials at Hazardous waste site as approved by Consultant.

.4 Place materials defined as hazardous or toxic waste, including used sealant and adhesive tubes and containers, in containers or areas designated for hazardous waste.

.5 To reduce the amount of contaminants entering waterways, sanitary/storm drain systems or into ground the following procedures shall be strictly adhered to:

.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 an approved legal manner in accordance with hazardous waste regulations.

.6 Where paint recycling is available, collect waste paint by type and provide for delivery to recycling or collection facility. Set aside and protect surplus and uncontaminated finish materials. Deliver to or arrange collection by organizations for verifiable re-use or re-manufacturing.

.7 Close and seal tightly partly used containers and store protected in well ventilated, fire-safe area at moderate temperature.

.8 Ensure emptied containers are sealed and stored safely. Empty paint cans are to be dry prior to disposal or recycling.

Part 2 Products

2.01 MATERIALS

.1 Only paint materials listed in the MPI Approved Products List (APL) are acceptable for use on this project.

.2 Only qualified paint products meeting MPI "Environmentally Friendly" E2 or E3 ratings based on VOC content levels are acceptable for use on this project.

.3 Water-borne paints, stains and other water-borne surface coatings must meet a minimum E2 rating.

.4 Linseed oil, shellac, and turpentine: highest quality product from approved manufacturer listed in MPI Architectural Painting Specification Manual, compatible with other coating materials as required.

.5 Paint materials for paint systems shall be products of a single manufacturer.

.6 All paint materials must demonstrate good flowing and brushing properties and must dry or cure free of blemishes, sags and air entrapment.

2.02 EQUIPMENT

.1 Provide painting and decorating equipment meeting best trade standards for type of product and application.

.2 Supply spray painting equipment of ample capacity, suited to the type and consistency of paint or coating being applied and kept clean and in good working order at all times.

2.03 COLOURS

.1 Consultant will provide Colour Schedule after Contract award.

.2 Colour Schedule will be based upon the selection of multiple interior base colours and multiple interior accent colours including a number of deep accent colours.

.3 Selection of colours will be from manufacturer's full and custom range of colours including deep accent colours.

.4 Where specific products are available in a restricted range of colours, selection will be based on the limited range.

.5 Second coat in a three coat system to be tinted slightly lighter colour than top coat to show visible difference between coats.

2.04 MIXING AND TINTING

.1 Perform colour tinting operations prior to delivery of paint to site. On-site tinting of painting materials is not allowed.

.2 Where thinner is used, addition shall not exceed paint manufacturer's recommendations. Do not use kerosene or any such organic solvents to thin water-based paints.

.3 Thin paint for spraying according in strict accordance with paint manufacturer's instructions. If directions are not on container, obtain instructions in writing from manufacturer and provide copy of instructions to Consultant.

.4 Re-mix paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and colour and gloss uniformity.

2.05 GLOSS/SHEEN RATINGS

.1 Paint gloss is defined as the sheen rating of applied paint, in accordance with the following values:

	Gloss Level Category	Units @ 60 degrees	Units @ 85 degrees.
.2	G1 - matte finish	0 to 5	max. 10.
.3	G2 - velvet finish	0 to 10	10 to 35.
.4	G3 - eggshell finish	10 to 25	10 to 35.
.5	G4 - satin finish	20 to 35	min. 35.
.6	G5 - semi-gloss finish	35 to 70.	
.7	G6 - traditional gloss	70 to 85.	
.8	G7 - High gloss	more than 85.	

.2 Gloss level ratings of painted surfaces shall be as specified herein Generally, the following will apply:

.1 Ceilings: G1 - Matte.

.2 Walls: Offices: G2 - Velvet.

.3 Walls: Corridors and Public areas: G3 - Eggshell.

.4 Walls: Non public, maintenance, utility areas: G4 - Satin.

.5 Walls, Ceilings, Cornices, Baseboards, Dados and Trim: refer to Paint Schedule.

.6 Walls: Washrooms: G3.

.7 Finish Carpentry: G3 except as noted otherwise in Paint Schedule.

.8 Doors: Painted Wood: G4.

.9 Ladders: G6.

2.06 INTERIOR PAINTING SYSTEMS

.1 Apply all paint systems in accordance with MPI Premium grade. Apply one primer coat and a minimum of two finish coats.

.2 Concrete Masonry Units: smooth faced concrete block and concrete brick.

.1 INT 4.2D. High performance architectural latex.

.3 Structural Steel and Metal Fabrications: columns, beams, joists, etc.

.1 INT 5.1N. Waterborne light industrial coating (over epoxy primer).

.4 Steel - High Heat: boilers, furnaces, heat exchangers, breeching, pipes, flues, stacks, etc., with temperature range as noted.

.1 INT 5.2D. High heat resistant coating, maximum 593 degrees C.

.5 Overhead metal decking.

.1 INT 5.3H. Water based Dry Fall finish. Gloss: G1.

.6 Galvanized Metal: steel doors, steel door frames, miscellaneous steel, pipes, ducts.

.1 INT 5.3M. High performance architectural latex.

.7 Dressed Lumber: doors, door frames, door casings, door moldings.

.1 CLEAR Finish: INT 6.3K. Oil modified polyurethane varnish.

.2 PAINTED Finish. INT 6.3A. High performance architectural latex.

.3 STAINED Finish: INT 6.3E. Oil modified polyurethane varnish over semi-transparent stain.

.8 Wood Paneling and Casework: partitions, wood wall paneling, dadoes, shelving, millwork.

.1 CLEAR: INT 6.4J. Polyurethane varnish.

.2 PAINTED: INT 6.4S. High performance architectural latex.

.3 STAINED Finish: INT 6.4E. Oil modified polyurethane varnish over semi-transparent stain.

.9 Plaster and Gypsum Board: gypsum wallboard, drywall type material, new plaster and repaired plaster.

.1 CEILINGS. INT 9.2B. High performance architectural latex. Gloss level: G1.

.2 WALLS. INT 9.2B. High performance architectural latex.

2.07 EXTERIOR PAINTING SYSTEMS

.1 Asphalt Surfaces: zone / traffic marking for drive and parking areas.

.1 EXT 2.1A. Latex zone / traffic marking finish.

.2 Structural Steel and Metal Fabrications:

.1 EXT 5.1J. Polyurethane, pigmented finish (over high build epoxy).

.3 Galvanized Metal: (not chromate passivated). For high contact / high traffic areas: doors, frames, railings, misc. steel.

.1 EXT 5.3D. Polyurethane, pigmented finish over vinyl wash and epoxy primer.

.4 Ladders LD-M and LD-N: Paint system applied over Hot-dip galvanized coating.

.1 EXT 5.3D. Polyurethane, pigmented finish over vinyl wash primer and epoxy primer. Premium grade.

.1 Primer: two component, vinyl butyral/phosphoric acid wash primer. MPI product No. 80.

.2 Intermediate Primer: solvent based, two component, epoxy - polyamide type anticorrosive primer. MPI product No. 101.

.3 Top coat: solvent based, two component polyurethane, pigmented. MPI product No. 72. Gloss: G6.

2.08 SPECIAL SYSTEMS

.1 Concrete Vertical Surfaces: exposed concrete walls, columns beams: Concrete sealer as follows:

.1 Sealer to ASTM C309, Type 1, Class A and B. Water based acrylic curing and sealing compound incorporating acrylic polymers in a water based carrier. Dries clear to provide a transparent low sheen finish. Resists yellowing from ultraviolet exposure and provides a durable, long lasting finish that improves resistance to chemicals, petroleum, and abrasives.

.1 Coverage rate: freshly placed concrete: 5.0 square meters per litre. Sealing existing concrete: 7.5 - 10.0 square meters per litre.

.2 U/V resistance: meet Class A requirements for light degradation/yellowing classification in accordance with ASTM C1315, Section 6.4.

.3 VOC Content: 20 grams per litre.

.4 Sheen: Low sheen to approval of Consultant.

.2 Acceptable Material: VOCOMP -20 by W.R. Meadows.

Part 3 Execution

3.01 GENERAL

.1 Perform preparation and operations for interior and exterior painting in accordance with MPI Painting Specifications Manual except where specified otherwise.

.2 Apply paint materials in accordance with paint manufacturer's written application instructions.

3.02 EXISTING CONDITIONS

.1 Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Report in writing to Consultant any damages, defects, unsatisfactory or unfavourable conditions before proceeding with work.

.2 Do not commence any painting work until all adverse conditions and defects have been corrected and surfaces and conditions are acceptable to the Painting Subcontractor.

.3 Conduct moisture testing of surfaces to be painted using a properly calibrated electronic moisture meter, except test concrete floors for moisture using a simple "cover patch test" and report findings to Consultant. Do not proceed with work until conditions fall within acceptable range as recommended by manufacturer.

.4 Maximum moisture content as follows:

.1 Plaster and Gypsum Board: 12 %.

.2 Concrete: 12 %. Clay and Concrete Block/Brick: 12 %.

.3 Wood: 15 %.

3.03 PROTECTION

.1 Protect existing building surfaces and adjacent structures from paint spatters, markings and other damage by suitable non-staining covers or masking. If damaged, clean and restore such surfaces as directed by Consultant.

.2 Protect items that are permanently attached such as Fire Labels on doors and frames.

.3 Protect factory finished products and equipment.

.4 Protect passing pedestrians, other contractors and general public about the building.

.5 Remove electrical cover plates, light fixtures, surface hardware on doors, bath accessories and other surface mounted equipment, fittings and fastenings prior to undertaking any painting operations. Store items securely and re-install after painting is completed.

.6 Move and cover portable equipment as necessary to carry out painting operations. Replace as painting operations progress.

.7 As painting operations progress, place "WET PAINT" signs in occupied areas to approval of Consultant.

3.04 CLEANING AND PREPARATION

.1 Clean and prepare surfaces in accordance with MPI Painting Specification Manual requirements. Refer to MPI Manual in regard to specific requirements and as follows:

.1 Remove dust, dirt, and other surface debris by vacuuming, wiping with dry, clean cloths or compressed air.

.2 Sand, clean, dry, etch, neutralize and test all surfaces under adequate illumination, ventilation and temperature requirements.

.3 Wash surfaces with a biodegradable detergent and bleach where applicable and clean warm water using a stiff bristle brush to remove dirt, oil and other surface contaminants. Rinse scrubbed surfaces with clean water until foreign matter is flushed from surface.

.4 Make repairs and sand substrate defects ready for painting after the first coat of paint. Start of finish painting of defective surfaces indicates acceptance of substrate. No touch-up painting will be permitted.

.5 Allow surfaces to drain completely and allow to dry thoroughly.

.6 Prepare surfaces for water-based painting. Use water-based cleaners in place of organic solvents where possible.

.7 Use trigger operated spray nozzles for water hoses.

.2 Prevent contamination of cleaned surfaces by salts, acids, alkalis, other corrosive chemicals, grease, oil and solvents before prime coat is applied and between applications of remaining coats. Apply primer, paint, or pretreatment as soon as possible after cleaning and before deterioration occurs.

.3 Where possible, prime surfaces of new wood surfaces before installation. Use same primers as specified for exposed surfaces.

.1 Apply vinyl sealer to MPI Number 36 over knots, pitch, sap and resinous areas.

.2 Apply wood filler to nail holes and cracks.Tint filler to match stains for stained woodwork.

.4 Sand and dust between coats as required to provide adequate adhesion for next coat and to remove defects visible from a distance up to 1000 mm.

.5 Clean metal surfaces to be painted by removing rust, loose mill scale, welding slag, dirt, oil, grease and other foreign substances in accordance with MPI requirements. Remove traces of blast products from surfaces, pockets and corners to be painted by brushing with clean brushes, blowing with clean dry compressed air or vacuum cleaning.

.6 Touch up of shop primers with primer as specified in applicable section. Major touch-up including cleaning and painting of field connections, welds, rivets, nuts, washers, bolts, and damaged or defective paint and rusted areas, shall be by supplier of fabricated material.

.7 Do not apply paint until prepared surfaces have been accepted by Consultant.

3.05 APPLICATION

.1 Method of application to be as approved by Consultant. Apply paint by brush, roller, air sprayer or airless sprayer. Conform to manufacturer's application instructions unless specified otherwise.

.2 Brush and Roller Application:

.1 Apply paint in a uniform layer using brush and/or roller of types suitable for application.

.2 Work paint into cracks, crevices and corners.

.3 Paint surfaces and corners not accessible to brush using spray, daubers and/or sheepskins. Paint surfaces and corners not accessible to roller using brush, daubers or sheepskins.

.4 Brush and/or roll out runs and sags, and over-lap marks. Rolled surfaces shall be free of roller tracking and heavy stipple unless approved by Consultant.

.5 Remove runs, sags and brush marks from finished work and repaint.

.3 Spray application:

.1 Provide and maintain equipment that is suitable for intended purpose, capable of properly atomizing paint to be applied, and equipped with suitable pressure regulators and gauges.

.2 Keep paint ingredients properly mixed in containers during paint application either by continuous mechanical agitation or by intermittent agitation as frequently as necessary.

.3 Apply paint in a uniform layer, with overlapping at edges of spray pattern.

.4 Brush out immediately all runs and sags.

.5 Use brushes to work paint into cracks, crevices and places which are not adequately painted by spray.

.4 Use dipping, sheepskins or daubers only when no other method is practical in places of difficult access and only when specifically authorized by Consultant.

.5 Apply coats of paint as a continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint is applied.

.6 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.

.7 Sand and dust between coats to remove visible defects.

3.06 PAINTING - GENERAL APPLICATION

.1 Finish surfaces both above and below sight lines as specified for surrounding surfaces, including such surfaces as tops of interior cupboards and cabinets and projecting ledges.

.2 Finish inside of cupboards and cabinets as specified for outside surfaces.

.3 Finish closets and alcoves as specified for adjoining rooms.

.4 Finish top, bottom, edges and cutouts of doors after fitting as specified for door surfaces.

.5 Paint the inside of light valances gloss white.

.6 Interior colors and/or patterns shall be consistent throughout each room. Unless otherwise noted or scheduled, walls shall be painted the same color within a given area.

.7 Where doors are painted they shall be painted a different color than door frames and trim with walls a different color than either, unless otherwise indicated in the Door and Frame Schedule. Paint doors, frames and trim a different color than walls.

.8 Paint window frames (unless pre-finished) including trim and sills a different color than walls.

.9 Paint access doors, prime coated butts and other prime painted hardware, registers, radiators and covers, exposed piping and electrical panels to match adjacent surfaces. i.e. same color, texture and sheen, unless otherwise noted or where pre-finished.

.10 Paint parking bays lines with 100 mm wide white or yellow painted lines with each bay consecutively numbered with 50 mm wide white or yellow painted numbers in accordance with approved parking layout.

.11 Paint low headroom areas with minimum a 100 mm wide yellow band on leading edge marked "CAUTION - LOW CLEARANCE" in 50 mm high black letters at suitable intervals.

3.07 MECHANICAL/ELECTRICAL EQUIPMENT

.1 Finished and un-finished areas: Unless otherwise specified, paint all unfinished exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment with colour and finish to match adjacent surfaces.

.2 Pre-finished Mechanical and electrical equipment are to remain in original finish. Touch up scratches and marks on factory painted finishes and equipment with paint as supplied by manufacturer of equipment.

.3 Do not paint over nameplates.

.4 Paint inside of ductwork where visible behind louvers, grilles, registers and diffusers for a minimum of 460 mm or beyond sight line, whichever is greater. Apply coat of primer and one coat of matt black (non-reflecting) paint.

.1 Colour: Sherwin Wiliiams SW6988 Bohemian Black or equivalent approved by Consultant. Gloss level : G1.

.5 Paint fire protection conduit red. Paint disconnect switches for fire alarm system and exit light systems in red enamel.

.6 Paint red or band all fire protection piping and sprinkler lines in accordance with mechanical specification requirements. Keep sprinkler heads free of paint.

.7 Paint yellow or band all natural gas piping in accordance with mechanical specification requirements.

.8 Paint both sides and edges of backboards for telephone and electrical equipment before installation. Finish in Grey semi-gloss. Leave equipment in original finish except for touch-up as required Paint conduits, mounting accessories and other unfinished items.

.9 Do not paint interior or exterior transformers and substation equipment.

3.08 APPLICATION: CONCRETE SEALERS

.1 Apply sealer to vertical concrete surfaces in accordance with Manufacturer’s written instructions. Application of sealers is in addition to normal application of Cure/Seal products as specified in Division 03.

.2 Apply single coat at specified rate to obtain low sheen appearance to approval of Consultant. Final coat to provide consistent coverage and uniform appearance across entire area.

3.09 FIELD QUALITY CONTROL

.1 Advise Consultant when surfaces and applied coating is ready for inspection. Do not proceed with subsequent coats until previous coat has been approved. Co-operate and provide access to areas of work.

.2 All surfaces, preparation and paint applications shall be inspected.

.3 Painted surfaces shall be considered unacceptable if any of the following defects are apparent:

.1 Brush / roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, and foreign materials in paint coatings.

.2 Surfaces lack uniformity of colour or sheen across the entire surface

.3 Evidence of poor coverage at rivet heads, edges, lap joints, crevices, pockets, corners and re-entrant angles.

.4 Damage due to touching before paint is sufficiently dry or any other cause.

.5 Damage due to application on moist surfaces or caused by inadequate protection from the weather.

.6 Damage or contamination of paint due to blown contaminants.

.7 Insufficient dry film thickness of paint.

.4 Painted surfaces shall be considered unacceptable if any of the following are evident under natural lighting source for exterior surfaces and final lighting source including daylight, for interior surfaces:

.1 Visible defects are evident on vertical surfaces when viewed at normal viewing angles from a distance of 1000 mm.

.2 Visible defects are evident on horizontal surfaces when viewed at normal viewing angles from a distance of 1000 mm.

.3 Visible defects are evident on ceiling, soffit and other overhead surfaces when viewed at normal viewing angles.

.4 When the final coat on any surface exhibits a lack of uniformity of color, sheen, texture, and hiding across full surface area.

.5 Repaint all surfaces rejected. Small affected areas may be touched up. Completely repaint any large areas. Remove all runs, sags or damaged paint by scraper or by sanding prior to application of paint.

3.010 RESTORATION

.1 Clean and re-install all hardware items removed before undertaken painting operations. Remove protective coverings and warning signs as soon as practical after operations cease.

.2 Remove paint splashings on exposed surfaces that were not painted. Remove smears and spatter immediately as operations progress, using compatible solvent.

.3 Protect freshly completed surfaces from paint droppings and dust to approval of Consultant. Avoid scuffing newly applied paint.

.4 Restore areas used for storage, cleaning, mixing and handling of paint to clean condition as approved by Consultant.

END OF SECTION