

PART 1 - GENERAL**1.1 RELATED REQUIREMENTS**

- .1 Section 01 74 19 – Waste management and disposal.
- .2 Section 04 20 00.08 – Masonry for minor works.
- .3 Section 05 50 00 – Metal fabrications.
- .4 Section 09 21 99 – Partitions for minor works.

1.2 REFERENCE STANDARDS

- .1 Green Seal Environmental Standards (GS)
 - .1 GS-11-2008, 2nd Edition, Paints and Coatings.
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .3 The Master Painters Institute (MPI)
 - .1 Architectural Painting Specification Manual - current edition.
 - .2 Maintenance Repainting Manual - current edition.
- .4 National Research Council Canada (NRC)
 - .1 National Building Code of Canada 2015 (NBC).
- .5 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
 - .1 SCAQMD Rule 1113-A2007, Architectural Coatings.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for paint and coating products and include product characteristics, performance criteria, physical size, finish and limitations. Identify each product in relation to the system in which it is used and provide the following information:
 - .1 The paint system designation.
 - .2 The product type and application its used for.
 - .3 The number of the relevant CGSB standard.
 - .4 Manufacturer's product number.
 - .5 The number (s) of the color (s).
 - .6 Manufacturer's Material Safety Data Sheets.
 - .7 The maximum VOC accepted: 0 (interior painting only)
 - .2 Submit 2 copies of WHMIS MSDS in accordance with Section 01 35 29.06 - Health and Safety Requirements.
- .3 Samples:
 - .1 Submit for review and acceptance of each unit.
 - .2 Samples will be returned for inclusion into work.

- .3 Submit duplicate 200 x 300 mm sample panels of each paint with specified paint or coating in colours, gloss/sheen and textures required to MPI Painting Specification Manual standards.
 - .1 Use a 3 mm steel plate for paints applied to metal substrates. Use a 10mm plywood panel, beautiful on one side, for paints applied to wood, and a 50mm concrete block for paints applied to concrete or concrete masonry. Use 12.7 mm gypsum board for paints applied to drywall and other smooth surfaces.
- .4 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .5 Regional Materials: submit evidence that project incorporates required percentage 10 of regional materials and products, showing their cost, distance from project to furthest site of extraction or manufacture, and total cost of materials for project.
- .6 Low-Emitting Materials:
 - .1 Submit listing of paints and coatings used in building, comply with VOC and chemical component limits or restriction requirements.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Provide and maintain dry, temperature controlled, secure storage.
 - .2 Store painting materials and supplies away from heat generating devices.
 - .3 Store materials and equipment in well ventilated area within temperature as recommended by manufacturer.
 - .4 The storage temperature must never be lower than the minimum temperature recommended by the manufacturer.
- .4 Fire Safety Requirements:
 - .1 Supply 9 kg 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 (NFC) requirements.
- .5 Waste Management and Disposal:
 - .1 Waste Management and Disposal
 - .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.

- .2 Packaging Waste Management: remove for reuse of pallets, crates, padding, and packaging materials in accordance with Section 01 74 19 - Waste Management and Disposal.

1.5 REPLACEMENT MATERIAL

- .1 Provide the following replacement materials:
 - .1 Provide a four-liter container of each type and color of primer, primer paint and finishing paint. Identify the color and type of paint according to the color list and paint system.
- .2 Deliver spare equipment and store it at the location indicated by the Departmental Representative.

1.6 PAINT MANUFACTURER

- .1 The Departmental Representative will present his color choices from one or more manufacturers of his choice. The Contractor shall therefore, if the manufacturer chosen by the Departmental Representative is not the same as that submitted by the Contractor (insofar as the products submitted are approved by the Departmental Representative), custom manufacture the colors chosen by the Departmental Representative and submit samples for approval by the Departmental Representative, including the finish chosen by the latter.

1.7 COLORS AND SHINE CHOICE

- .1 All colors and gloss choices of paint, stain and varnish will be made by the Departmental Representative for all painted, stained or varnished elements of the project. The quantities, locations and color cuts will be entirely at the discretion of the Departmental Representative. A list of colors choice and location will be issued during the work by the latter.
- .2 The Contractor must take into account that each room may be painted in four (3) different colors (base color and accent colors) for the walls, the ceiling may also be a different color from those of the walls and doors and frames of a different color.
- .3 In 3-coat paint systems, the second coat should be tinted slightly lighter than the last, so that the different coats can be distinguished.

1.8 FACTORY-APPLIED FINISHED ELEMENTS

- .1 Unless otherwise specified on the job site or in the drawings and / or in the finish list, do not paint elements whose existing finish has been applied at the factory, such as exterior windows, aluminum entrances, lighting fixtures, stainless steel elements, pre-painted elements, pre-painted steel furniture, etc.

1.9 QUALITY ASSURANCE

- .1 Keep purchase contract, invoices, and other documents used to prove that the products and materials used for the execution of the work under the contract comply with the requirements of this section. These documents must be produced at the request of the Departmental Representative.
 - .2 The products used, either primers products, paints, coatings, varnishes, stains, lacquers, fillers, thinners, solvents, and others, must appear on the latest version of the MPI List of Approved Products, and all products composing the chosen paint system must come from the same manufacturer.
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- .3 Comply with the most recent MPI requirements for interior paint coating repair work, including cleaning and preparation of surfaces as well as the application of primer paint.
- .4 Quality standard: the surfaces examined must, under the final lighting provided, meet the following requirements.
 - .1 Walls: no defect should be visible from a distance of 1000 mm, at an angle of 90° to the surface.
 - .2 Ceilings: no defect should be visible from the floor when viewing the ceiling from an angle of 45°, with lighting provided by the final light source.
 - .3 The color and gloss of the last coat must be uniform over the entire surface.

1.10 SITE CONDITIONS

- .1 Heating, Ventilation and Lighting:
 - .1 Ventilate enclosed spaces in accordance with Section 01 51 00 - Temporary Utilities.
 - .2 Co-ordinate use of existing ventilation system with Departmental Representative and ensure its operation during and after application of paint as required.
 - .3 Provide minimum lighting level of 323 Lux on surfaces to be painted.
- .2 Temperature, Humidity and Substrate Moisture Content Levels:
 - .1 Apply paint finishes when ambient air and substrate temperatures at location of installation can be satisfactorily maintained during application and drying process, within MPI and paint manufacturer's prescribed limits.
 - .2 Test concrete, masonry and plaster surfaces for alkalinity as required.
 - .3 Apply paint to adequately prepared surfaces, when moisture content is below paint manufacturer's prescribed limits.
- .3 Additional application requirements:
 - .1 Apply paint finish 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 in occupied facilities during silent hours only. Schedule operations to approval of Departmental Representative such that painted surfaces will have dried and cured sufficiently before occupants are affected.
- .4 Interior application :
 - .1 Apply paint only if the ambient temperature can be maintained within limits recommended by the manufacturer.
 - .2 The temperature of the substrate and the ambient temperature must be within the limits prescribed in the relevant standard and by the manufacturer, to the satisfaction of the Departmental Representative.
 - .3 The substrate temperature and the ambient temperature must be at least 5°C in the case of paints with alkyd resins, and at least 7°C in the case of emulsion paints (latex). The relative humidity must not exceed 85%.
 - .4 Use temporary heating when there are no permanent means to maintain the minimum recommended temperature.
 - .5 Paint only in areas where the ambient air is free from suspended particles generated by construction work and likely to alter painted surfaces.
 - .6 Apply paint only to dry, sufficiently hardened, and properly prepared surfaces.
 - .7 Surfaces to be painted must be illuminated with at least 270 lx.
 - .8 Protect against stains and splashes all fixtures, equipment, furniture, plumbing fixtures and piping having a permanent finish: glass surface, enameled cast iron, polished brass, nickel, copper, aluminum or stainless steel. Remove, during painting, the switch and outlet plates and all surface applied hardware is installed.

- .9 In particular, protect prefinished metal decks before applying paint to underlying structural elements.
 - .10 Concrete block walls and concrete slabs must have cured at least twenty-eight (28) days by the time the paint is applied.
 - .11 Install protective sheets and cover the work that needs to be protected to prevent the paint from falling or damaging any surface that is likely to be soiled by the paint work.
- .5 Exterior application :
- .1 Apply paint only when favorable weather conditions are expected, for the entire period of paint application, in accordance with the manufacturer's recommendations.
 - .2 If the surface that is to be painted is not protected, do not apply paint under the following conditions:
 - .1 The substrate temperature and the ambient temperature are below 5°C in the case of paints with alkyd resins, and below 7°C in the case of emulsion (latex) paints, or when the temperature is expected to drop to 0°C before the paint has had time to dry completely.
 - .2 The temperature of the substrate and the ambient temperature are expected to be outside the limits prescribed in the relevant standard and by the manufacturer.
 - .3 The surface temperature is above 50°C, unless the paint is designed for high temperature application.
 - .4 Snow or rain is expected before the paint has time to dry completely; fog, drizzle, rain or snow conditions prevail on the site; the relative humidity is above 85%.
 - .5 The surface to be painted is damp, wet or frosted.
 - .6 The previous coat is not dry.
 - .6 Provide shelter when paint is applied in cold or wet weather, and maintain as required. Heat the substrates and ambient air to meet the temperature and humidity conditions recommended by the manufacturer. Protect surfaces until paint is dry or weather conditions are suitable.
 - .7 Paint only in areas where the ambient air is free from suspended particles generated by construction work or blown by the wind and likely to alter painted surfaces.
 - .8 Organize work so that painting of surfaces exposed to direct sunlight is completed early in the morning.
 - .9 Remove paint from areas that have been exposed to freezing, excessive humidity, rain, snow or condensation. Prepare these surfaces again and repaint them.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 All products composing the chosen paint system must come from the same manufacturer among SHERWIN WILLIAMS, BENJAMIN MOORE & CO and SICO.
 - .2 Comply with the most recent MPI requirements for paint coatings, including those for surface preparation and application of primer or paint.
 - .3 The products used must appear on the List of approved products presented in the MPI - Architectural Painting Specification Manual.
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- .4 Mixing and tinting:
 - .1 Perform colour tinting operations prior to delivery of paint to site, in accordance with manufacturer's written recommendations. Obtain written approval from Departmental Representative for tinting of painting materials.
 - .2 Use and add thinner in accordance with paint manufacturer's recommendations.
 - .1 Do not use kerosene or similar organic solvents to thin water-based paints.
 - .3 Thin paint for spraying in accordance with paint manufacturer's written recommendations.
 - .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.

PART 3 - EXECUTION

3.1 GENERAL

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheets.
- .2 Perform preparation and operations for interior painting in accordance with MPI - Architectural Painting Specifications Manual and MPI - Maintenance Repainting Manual except where specified otherwise.

3.2 EXAMINATION

- .1 Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Report to Departmental Representative damages, defects, unsatisfactory or unfavourable conditions before proceeding with work.
- .2 Conduct moisture testing of surfaces to be painted using properly calibrated electronic moisture meter, except test concrete floors for moisture using simple "cover patch test". Do not proceed with work until conditions fall within acceptable range as recommended by manufacturer.

3.3 PREPARATION

- .1 Protection of in-place conditions:
 - .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 surfaces as directed by Departmental Representative. If the surfaces in question are damaged, clean and repair them according to the instructions of the Departmental Representative.
 - .2 Protect items that are permanently attached such as Fire Labels on doors and frames.
 - .3 Protect factory finished products and equipment.
- .2 Surface Preparation:
 - .1 Any existing damaged surface must be repaired before being painted; any surface should be free of foreign material, loose paint, dirt, stains, grease or any material that does not offer a perfect bond with the paint. **Wash and lightly sand all existing surfaces to be painted. Remove the trademarks still in place on the materials.** Clean all writes on the surfaces of ducts, ducts or other paint surfaces.

- .2 Gypsum surfaces finish must be primed and painted in accordance with GA-214-96, "Recommended Levels of Gypsum Board Finish" in effect.
 - .1 Level 4 (matt paint and eggshell): No marks or ridges. Ready to receive a primer followed by wall covering, matt or velvety paint.
 - .1 Joints and interior angles: Two separate coats of compound on a level 2 finish. Tape embedded in compound and any excess removed immediately so as to leave a thin layer of compound on the tape.
 - .2 Accessories and fasteners: Three separate layers of compound.
 - .3 Surface: Joints filled and smoothed again. Apply primer before painting.
 - .2 Level 5 (satin, semi-gloss, gloss paint): Surface completely coated with a thin layer of joint compound, resulting in a smooth surface ready to receive a primer before painting
 - .1 Joints and interior angles: Two separate coats of compound on a level 2 finish. Tape embedded in compound and any excess removed immediately so as to leave a thin layer of compound on the tape.
 - .2 Accessories and fixings: Three separate layers of compound.
 - .3 Surface: Surface completely coated with a thin layer of joint compound, resulting in a smooth surface ready to receive a primer before painting
- .3 Remove electrical cover plates, light fixtures, surface hardware on doors, bath accessories and other surface mounted equipment, fittings and fastenings prior to undertaking painting operations. Identify and store items in secure location and re-installed after painting is completed.
- .4 Move and cover furniture and portable equipment as necessary to carry out painting operations. Replace as painting operations progress.
- .5 Place "WET PAINT" signs in occupied areas as painting operations progress. Signs to approval of Departmental Representative.
- .6 Clean and prepare surfaces in accordance with MPI - Architectural Painting Specification Manual and MPI - Maintenance Repainting Manual specific requirements and coating manufacturer's recommendations and in accordance to the following standards:
 - .1 Touch-up factory primed surfaces on structural steel with a product conforming to CAN / CGSB-1.40-M89, according to CGSB 85-GP-14M.
 - .2 Prepare galvanized and zinc-plated steel surfaces in accordance with CGSB 85-GP-16M.
 - .3 Prepare masonry, stucco and concrete surfaces in accordance with CGSB 85-GP-31M.
 - .4 Prepare concrete floors in accordance with CGSB 85-GP-32M. Treat new concrete floors with muriatic acid; rinse with clean water and allow to dry completely.
 - .5 Prepare pipes and fittings in accordance with CGSB 85-GP-20M.
 - .6 Prepare plaster and plaster and gypsum board surfaces in accordance with CGSB 85-GP-33M. Fill small cracks with a leveling product.
- .7 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.
- .8 Where possible, prime non-exposed surfaces of new wood surfaces before installation. Use same primers as specified for exposed surfaces.
 - .1 Apply vinyl sealer to MPI #36 over knots, pitch, sap and resinous areas.
 - .2 Apply wood filler to nail holes and cracks.
 - .3 Tint filler to match stains for stained woodwork.
- .9 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.
- .10 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.

- .11 Touch up of shop primers with primer as specified.

3.4 APPLICATION

- .1 Paint only after prepared surfaces has been accepted by Departmental Representative.
 - .2 Use method of application approved by Departmental Representative.
 - .1 Conform to manufacturer's application recommendations.
 - .3 Apply coats of paint in continuous film of uniform thickness.
 - .1 Repaint thin spots or bare areas before next coat of paint is applied.
 - .4 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.
 - .5 Sand and dust between coats to remove visible defects.
 - .6 Walls and ceilings paint can be applied with a roller, but cutting with a brush will be required everywhere. The paint for exposed steel and concrete framework ceilings may be applied with a gun after having protected all adjacent structures. Perfectly tape out changes in colors or paint finishes.
 - .7 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.
 - .8 Finish inside of cupboards and cabinets as specified for outside surfaces.
 - .9 Finish closets and alcoves as specified for adjoining rooms.
 - .10 Finish top, bottom, edges and cutouts of doors after fitting as specified for door surfaces.
 - .11 All materials must be applied adequately following the manufacturer's directions for use as printed on the container; any dilution required should be made as prescribed and only with the type of diluent recommended by the manufacturer.
 - .12 All materials must be carefully applied and cut so as to dry evenly and give the specified color and finish, free from drips, shiny spots, irregularities or brush marks.
 - .13 Adequate ventilation must be provided at all times so that humidity cannot rise above the dew point on the coldest wall. The contractor is responsible for maintaining temperatures, ventilation and ambient conditions.
 - .14 After inspection by the Departmental Representative, repaint without any additional cost the works whose quality has been judged by the latter to be unsatisfactory.
 - .15 Provide enough material for a minimum application of three coats of paint on each surface. Regardless of the number of coats specified, apply as many coats as needed for full coverage and uniform appearance. Apply additional coats of paint, until the shade and intensity of the color requested and approved as a sample is obtained. Each coat must be dry before applying the subsequent coat.
 - .16 Thoroughly protect adjacent surfaces against splashes, etc., with polyethylene, masking tape or other suitable materials.
 - .17 Make sure that no door sound damper strip are already attached to the jamb or cross member of the frame; remove them and put them back in place after painting.
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- .18 Procedures to be followed for painting and / or staining and / or varnishing doors and frames coordinated with section 08 00 01 - List of doors and frames. The contractor-painter must follow the following steps for doors and frames:
- .1 The hardware installer hangs door in frame using hinges.
 - .2 The painter applies the primer and the first coat of finish on the doors and frames while protecting the visible parts of the hinges.
 - .3 The hardware installer completes the hardware installation prescribed for every door as well as their adjustment and operation.
 - .4 The painter applies his final coat of finish to the doors and frames after covering the hardware.
 - .5 The painter must pay particular attention not to apply paint on the hardware nor on the sound damper strips of the frames.

3.5 MECHANICAL/ELECTRICAL EQUIPMENT:

- .1 Paint conduits, piping, hangers, ductwork and other mechanical and electrical equipment exposed in finished areas, to match adjacent surfaces, except as indicated.
- .2 Do not paint over nameplates.
- .3 Keep sprinkler heads free of paint.
- .4 Before installing, paint both sides and edges of mounting plywood panels, intended to receive wall mounted pieces of equipment.
- .5 Paint fire protection piping red.
- .6 Paint disconnect switches for fire alarm system and exit light systems in red enamel.
- .7 Paint natural gas piping [yellow].
- .8 Paint both sides and edges of backboards for telephone and electrical equipment before installation.
 - .1 Leave equipment in original finish except for touch-up as required, and paint conduits, mounting accessories and other unfinished items.
- .9 Do not paint the interior of mechanical equipment cabinets.

3.6 FINISH

- .1 System 1: Paint all wall and gypsum wall details as follows:
 - .1 New surface:
 - .1 1 coat of interior latex primer sealer: zero VOC formula.
 - .2 2 coats of Sherwin-Williams Promar 200HP Series B20-1900 100% acrylic interior eggshell, zero VOC latex paint or equivalent approved by Departmental Representative.
 - .2 Existing painted surface:
 - .1 Wash and sand lightly, apply 1 coat of interior latex-based primer sealer.
 - .2 2 coats of matte finish, zero VOC latex paint such as Sherwin-Williams Promar 400 B30W4651 or equivalent approved by Departmental Representative.

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- .2 System 2: Paint all gypsum ceilings and ceiling details as follows:
- .1 New surface:
 - .1 1 coat of interior latex primer sealer: zero VOC formula.
 - .2 2 coats of matte finish, zero VOC latex paint such as Sherwin-Williams Promar 400 B30W4651 or equivalent approved by Departmental Representative.
 - .3 2 coats of Sherwin-Williams Promar 200HP Series B20-1900 100% acrylic interior eggshell, zero VOC latex paint or equivalent approved by Departmental Representative.
 - .2 Existing painted surface:
 - .1 Wash and sand lightly, apply 1 coat of interior latex-based primer sealer.
 - .2 2 coats of 100% acrylic interior latex paint, zero VOC eggshell such as, Sherwin-Williams Promar 200HP B20-1900 series or equivalent approved by Departmental Representative.
- .3 System 3: Paint rigid ventilation ducts and surface electrical ducts as follows:
- .1 Step 1 (SSPC-SP1): Clean, degrease and decontaminate with a manufacturer recommended cleaner and rinse well. Repeat the process as needed, until a sound, clean surface is obtained that is free of all contaminants
 - .2 1 coat of galvanized metal latex primer: low VOC primer.
 - .3 2 coats of 100% acrylic latex paint, semi-gloss finish, zero VOC Sherwin-Williams PROIndustrial DTM B66W1251 or equivalent approved by Departmental Representative.
- .4 System 4: Paint interior zinc-plated metal surfaces as follows:
- .1 Step 1 (SSPC-SP1): Clean, degrease and decontaminate with a manufacturer recommended cleaner and rinse well. Repeat the process as needed, until a sound, clean surface is obtained that is free of all contaminants
 - .2 1 coat of interior / exterior industrial primer-sealer : low VOC primer.
 - .3 2 coats of semi-gloss finish enamel paint, ACRYLIC URETHANE water based, zero VOC Sherwin-Williams PROIndustrial urethane alkyd water-based B53-1051 or equivalent approved by Departmental Representative
- .5 System 5: Paint copper pipes and fittings as follows:
- .1 Preparation: in accordance with CGSB 85-GP-20M.
 - .2 2 coats of 100% acrylic latex finish semi-gloss, zero VOC Sherwin-Williams PROIndustrial DTM B66W1151 certified GreenGuard Gold-LEED V4.1 or equivalent approved by Departmental Representative.
- .6 System 6: Paint the concrete blocks and / or poured concrete walls as follows:
- .1 New surface:
 - .1 1 Step 1 (SSPC-SP13): The concrete and / or mortar must have cured for a minimum of 28 days before the application of the finish coating. Dry blast cleaning, wet blast cleaning, vacuum assisted blasting, as described in ASTM D 4259-18, to remove contaminants, laitance and brittle concrete, exposing voids below the surface and producing a sound concrete surface with adequate profile and porosity. Fill bubbling, air pockets and other voids with cement patch compound. Rinse well to reach a final pH between 6.0 and 9.0. Allow to dry completely before painting.
 - .2 Apply a coat of pore sealant primer.
 - .3 2 coats of 100% acrylic latex paint, eggshell, zero VOC formula such as Sherwin-Williams PROIndustrial acrylic B66-650 or equivalent approved by Departmental Representative.
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- .2 Existing painted surface:
 - .1 1 Step 1 (SSPC-SP13): The concrete and / or mortar must have cured for a minimum of 28 days before the application of the finish coating. Dry blast cleaning, wet blast cleaning, vacuum assisted blasting, as described in ASTM D 4259-18, to remove contaminants, laitance and brittle concrete, exposing voids below the surface and producing a sound concrete surface with adequate profile and porosity. Fill bubbling, air pockets and other voids with cement patch compound. Rinse well to reach a final pH between 6.0 and 9.0. Allow to dry completely before painting.
 - .2 1 coat of interior based primer sealer (stain block and undercoat) such as Sherwin-Williams PrepRite ProBlock B51-600 or equivalent approved by Departmental Representative.
 - .3 2 coats of epoxy pre-catalyzed single-copy latex paint, eggshell such as Sherwin-Williams PROIndustrial Pre-Catalyzed K46-1150 or equivalent approved by Departmental Representative.

3.7 TOUCH-UPS AND CLEANING

- .1 Remove from the building, every evening, all impregnated linens and waste; it will be forbidden to allow them to accumulate.
- .2 When work is finished, remove stains and spills from glass and surfaces that do not need to be painted, floors, walls, hardware, equipment, accessories and others.
- .3 Clean the site and leave it in a perfectly clean state.
- .4 Remove the masking papers.

3.8 EXISTING CONDITIONS

- .1 Examine existing substrates to determine if their condition may compromise the preparation of surfaces to be painted. Prior to commencing work, report to Departmental Representative, if applicable, any unsatisfactory or adverse damages, defects or conditions found.
- .2 Control moisture content of surfaces to be painted and report results to Departmental Representative. Do not start work until surface conditions are acceptable, as recommended by the manufacturer.
- .3 Maximum permissible humidity level:
 - .1 Plaster and drywall: 12%.
 - .2 Masonry / concrete: 12%.
 - .3 Concrete blocks / bricks: 12%.

3.9 APPLICATION ON EXISTING PAINTED SURFACES

- .1 Paint all walls, columns, doors, door frames and windows, and any other items already painted, as follows, unless otherwise specified:
 - .1 Wash and sand lightly, apply 1 coat of interior solvent-based primer sealer.
 - .2 1 to 2 coats of finishing paint according to the systems described above.

3.10 MIXING AND TINTING:

- .1 Re-mix paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity.
- .2 Paint applied by spray gun to be thinned according to manufacturer's instructions. If there are no instructions on the container, obtain written instructions from the manufacturer and give a copy to the Departmental Representative.
- .3 Do not use kerosene or similar organic solvents to thin water-based paints.

3.11 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 00 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 00 - Cleaning.
- .3 Place paint and primer defined as hazardous or toxic waste, including tubes and containers, in containers or areas designated for hazardous waste.

END OF SECTION
