

PART 1 - GENERAL

<u>Includes</u>	.1	Surface preparation of substrates as required for acceptance of paint, including cleaning, small crack repair, patching, caulking, and making good surfaces and areas to limits defined under MPI Painting Maintenance Manual requirements.
	.2	Specific pre-treatments noted herein or specified in the MPI Painting Maintenance Manual.
	.3	Sealing/touch-up, spot priming, and/or full priming surfaces for repainting in accordance with MPI Painting Maintenance Manual requirements.
<u>1.1 Related Sections</u>	.1	Section 01 33 00 - SUBMITTAL PROCEDURES.
	.2	Section 01 74 22 - CONSTRUCTION/DEMOLITION WASTE MANAGEMENT And DISPOSAL.
	.3	Section 01 61 00 - COMMON PRODUCT REQUIREMENTS.
	.4	Section 01 78 00 - CLOSEOUT SUBMITTALS. DOORS
<u>1.2 References</u>	.1	Maintenance Repainting Manual by the Master Painters Institute (MPI), including Identifiers, Evaluation, Systems, Preparation and Approved Product List.
	.2	Test Method for Measuring Total Volatile Organic Compound Content of Consumer Products, Method 24 (for Surface Coatings) of the Environmental Protection Agency (EPA).
	.3	National Fire Code of Canada.
<u>1.3 Quality Assurance</u>	.1	Conform to latest MPI requirements for interior painting work including cleaning, preparation and priming.

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| <u>1.4 Environmental
Performance
Requirements</u> | .1 | Provide paint products meeting MPI
"Environmentally Friendly" E2 (minimum) ratings
based on VOC (EPA Method 24) content levels. |
| <u>1.5 Inspection
Requirements</u> | .1 | Interior painting work shall be inspected by
the Departmental Representative. |
| | .2 | Interior surfaces requiring painting shall be
inspected by both painting contractor and
Departmental Representative who shall notify
the General Contractor in writing of defects
or problems, prior to commencing painting
work, or after surface preparation if unseen
substrate damage is discovered. |
| <u>1.6 Scheduling of
Work</u> | .1 | Schedule painting of occupied areas and of
large areas for which the type of paint used
will emit strong odours to be carried out
during the Facility's non-operational off-hour
periods and as directed by Departmental
Representative. |
| <u>1.7 Submittals</u> | .1 | Submit product data and manufacturer's
installation/application instructions for each
paint and coating product to be used in
accordance with the requirements of Section
01 33 00 - Submittal Procedures. |
| | .2 | Submit WHMIS MSDS - Material Safety Data
Sheets for paint and coating materials. |
| | .3 | Upon completion, submit records of products
used. List products in relation to finish
system and include the following:
.1 Product name, type and use (i.e.
materials and location).
.2 Manufacturer's product number.
.3 Colour code numbers.
.4 MPI Environmentally Friendly
classification system rating.
.5 Manufacturer's Material Safety Data
Sheets (MSDS). |
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| 1.8 Delivery,
Handling and
Storage | <ul style="list-style-type: none">.1 Deliver, store and handle materials in accordance with Section 01 61 00 - COMMON PRODUCT REQUIREMENTS..2 Deliver and store materials in original containers, sealed, with labels intact..3 Labels shall clearly indicate:<ul style="list-style-type: none">.1 Manufacturer's name and address..2 Type of paint or coating..3 Compliance with applicable standard..4 Colour number in accordance with established colour schedule..4 Fire Safety Requirements:<ul style="list-style-type: none">.1 Store rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis..2 Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada. |
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| 1.9 Site
Requirements | <ul style="list-style-type: none">.1 Heating, Ventilation and Lighting:<ul style="list-style-type: none">.1 Perform no repainting work unless sufficient heating facilities are in place to maintain ambient air and substrate temperatures above 10° C for 24 hours before, during and after paint application and until paint has cured sufficiently..2 Provide continuous ventilation for seven days after completion of application of paint..3 Coordinate use of existing ventilation system with Departmental Representative and General Contractor and ensure its operation during and after application of paint as required..4 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. The use of gas-fired appliances is not permitted. |
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1.10 Waste
Management and
Disposal

- .1 Separate and recycle waste materials in accordance with Section 01 74 22 - CONSTRUCTION/DEMOLITION WASTE MANAGEMENT And DISPOSAL.
 - .2 Paint, stain and wood preservative finishes and related materials (thinners, solvents, etc.) are 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 Materials that cannot be reused must be treated as hazardous waste and disposed of in an appropriate manner.
 - .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 the ground the following procedures shall be strictly adhered to:
 - .1 Retain cleaning water for water-based materials to allow sediments to be filtered out. In no case shall equipment be cleaned using free draining water.
 - .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.
 - .5 Empty paint cans are to be dry prior to disposal or recycling (where available).
 - .6 Close and seal tightly partly used cans of materials including sealant and adhesive containers and store protected in well ventilated fire-safe area at moderate temperature.
 - .6 Where paint recycling is available, collect waste materials by type and provide for delivery to recycling or collection facility.
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PART 2 - PRODUCTS

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| <u>2.1 Materials</u> | .1 | Paint materials listed in the latest edition of the MPI Approved Product List (APL) are acceptable for use on this project. |
| | .2 | Paint materials for paint systems shall be products of a single manufacturer. |
| | .3 | Provide paint products meeting MPI "Environmentally Friendly" minimum ratings of E2 or higher based on VOC content levels in accordance with EPA Method 24. |
| | .4 | Where several products meet the environmental rating specified herein, use one which has highest environmental characteristics but that does compromise quality and performance of coating. |
| <u>2.2 Colours</u> | .1 | Match existing door and frame colours. |
| <u>2.3 Mixing and Tinting</u> | .1 | Perform colour tinting operations prior to delivery of paint to site. On-site tinting of painting materials will not be allowed. |
| | .2 | Paste, powder or catalyzed paint mixes shall be mixed in strict accordance with manufacturer's written instructions. |
| | .3 | Where thinner is used, addition shall not exceed paint manufacturer's recommendations. Do not use kerosene or such organic solvents to thin water-based paints. |
| <u>2.4 Interior Painting Systems</u> | .1 | INT 5.3M - Galvanized Metal: (High Contact/High Traffic Areas (Doors, Frames, etc.).
.1 High Performance Architectural Latex G5. (1 coat full prime coat MPI # 134 and 2 coats MPI # 141 - semigloss). |
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2.4 Interior
Painting Systems
(Cont'd)

- .2 Painting of existing surfaces: application of spot primer in lieu of full primer coat is acceptable for previously painted surfaces provided that:
- .1 Existing paint type is same or compatible with new paint;
 - .2 Existing surfaces are adequate to receive finish paint coats without need of a primer as approved by manufacturer;
 - .3 Paint manufacturer's recommendations are followed for surface preparation to achieve adequate bond between existing and new coats;
 - .4 Final paint finish is uniform in colour and appearance and previous paint colour has been fully hidden.
 - .5 See also clause 3.4 below on patching and surface preparation.

PART 3 - EXECUTION

3.1 General

- .1 Perform preparation and operations for interior painting in accordance with MPI Maintenance Repainting Manual requirements except where otherwise specified.
- .2 Apply paint materials in accordance with paint manufacturer's written application instructions.

3.2 Protection

- .1 Protect existing surfaces and adjacent fixtures and furnishings from paint spatters, markings and other damage by suitable non-staining covers or masking. If damaged, clean and restore such surfaces as directed by. Departmental Representative.
- .2 Protect items that are permanently attached such as Fire Labels on doors and frames.
- .3 Protect factory finished products and equipment.

- 3.3 Cleaning and Preparation
- .1 Clean and prepare interior surfaces to be painted in accordance with MPI Maintenance Painting Manual requirements. Refer to MPI Manual in regard to specific requirements and as follows:
 - .2 Clean metal surfaces to be repainted by removing rust, dirt, oil, grease and foreign substances in accordance with MPI requirements. Remove such contaminants from surfaces, pockets and corners to be repainted by brushing with clean brushes, blowing with clean dry compressed air, or brushing/vacuum cleaning as required.

- 3.4 Application
- .1 Apply paint by method that is best suited for substrate being repainted using brush roller. Conform to manufacturer's application instructions unless specified otherwise. Methods of application shall be as pre-approved by Departmental Representative before commencing the work.
 - .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 Departmental Representative.
 - .5 Remove runs, sags and brush marks from finished work and repaint.
 - .3 Sand and dust between coats to remove visible defects.

- 3.5 Field Quality Control
- .1 Departmental Representative will inspect and approve finish painted surfaces.
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- 3.6 Clean-Up
- .1 Remove paint where spilled, splashed, splattered or sprayed as work progresses using means and materials that are not detrimental to affected surfaces.
 - .2 Keep work area free from an unnecessary accumulation of tools, equipment, surplus materials and debris.
 - .3 Remove combustible rubbish materials and empty paint cans each day and safely dispose of same in accordance with requirements of authorities having jurisdiction.
 - .4 Clean equipment and dispose of wash water used for water borne materials, solvents used for oil based materials as well as other cleaning and protective materials (e.g. rags, drop cloths, masking papers, etc.), paints, thinners, paint removers/strippers in accordance with the safety requirements of authorities having jurisdiction and as noted herein.
 - .5 Painting equipment shall be cleaned in leak-proof containers that will permit particulate matter to settle out and be collected. Sediment remaining from cleaning operations shall be recycled or disposed of in a manner acceptable to authorities having jurisdiction.
 - .6 Paint and coatings in excess of repainting requirements shall be recycled as noted herein.
- 3.7 Restoration
- .1 Clean and re-install hardware items removed before undertaken painting operations.
 - .2 Remove protective coverings and warning signs as soon as practical after operations cease.
 - .3 Remove paint splashings on affected exposed surfaces. Remove smears and spatter immediately as operations progress, using compatible solvent.
 - .4 Protect freshly completed surfaces from paint droppings and dust to approval of Departmental Representative. Avoid scuffing newly applied paint.
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3.7 Restoration	.5	Restore areas used for storage, cleaning,
(Cont'd)		mixing and handling of paint to clean
		condition as approved by Departmental
		Representative.