

**Part 1 General**

**1.1 REFERENCES**

- .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
  - .1 Material Safety Data Sheets (MSDS)
- .2 The Master Painters Institute (MPI)
  - .1 Architectural Painting Specification Manual
  - .2 Maintenance Repainting Manual
- .3 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
  - .1 SCAQMD Rule 1113, Architectural Coatings

**1.2 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.
  - .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 Submit duplicate 300 x 300 mm sample panels of each finish with specified paint or coating in colours, gloss/sheen and textures required to MPI Painting Specification Manual standards.
- .4 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

**1.3 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 Fire Safety Requirements:
  - .1 Supply 1 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.
- .5 Waste Management: in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

#### **1.4 SITE CONDITIONS**

- .1 Temperature, Humidity and Substrate Moisture Content Levels:
  - .1 Apply water repellents 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 Apply water repellents to adequately prepared surfaces, when moisture content is below paint manufacturer's prescribed limits.
- .2 Additional application requirements:
  - .1 Apply water repellents when dust is no longer being generated by related construction operations or when wind conditions are such that airborne particles will not affect quality of finished surface.
  - .2 Protect plants and vegetation which might be damaged by water repellents.
  - .3 Protect surfaces not intended to have application of water repellents.

#### **Part 2 MATERIALS**

- .1 Water base protector oil repellent and damp-proof for porous surfaces; high performance impregnation:
  - .1 Transparent;
  - .2 Serves as graffiti resistant protection and against surfaces soiled by aqueous, oil or grease based substances;
  - .3 Can be used on types of vertical surfaces, inclined, horizontal, smooth or porous of stone masonry;
  - .4 Does not modify treated surfaces capability to evaporate humidity;
  - .5 Is not reversible and represents a permanent anti-graffiti system.

**Part 3 Execution**

**3.1 GENERAL**

- .1 Compliance: comply with requirements, recommendations and manufacturer's written data, including product technical bulletins, instructions for handling, storage and installation of products and indications datasheets.

**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 using properly calibrated electronic moisture meter. Do not proceed with work until conditions fall within acceptable range as recommended by manufacturer.

**3.3 PREPARATION**

- .1 Clean and prepare exterior surfaces in accordance with MPI Maintenance Repainting Manual requirements.
- .2 Apply water repellents in accordance with paint manufacturer's written application instructions.
- .3 Refer to MPI Manual in regard to specific requirements and as follows:
  - .1 The surface must be clean, free from dirt and oil stains. Sand rough spots.
  - .2 Remove dust, dirt, and surface debris by brushing, wiping with dry, clean cloths or compressed air.
  - .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 surface contaminants.
  - .4 Rinse scrubbed surfaces with clean water until foreign matter is flushed from surface.
  - .5 Use trigger operated spray nozzles for water hoses.
  - .6 Allow surfaces to drain completely and to dry thoroughly.
- .4 Where required, pressure wash exterior surfaces in accordance with MPI standards for type of surfaces. This work to be carried out by qualified tradesman experienced in pressure water cleaning. Allow sufficient drying time and test surfaces using an electronic moisture meter before commencing work.
- .5 Prevent contamination of cleaned surfaces by salts, acids, alkalis, corrosive chemicals, grease, oil and solvents. Touch-up, and apply product as soon as possible after cleaning and before deterioration occurs.
- .6 Do not apply water repellent until prepared surfaces have been accepted by the Ministry Representative.
- .7 Sand and dust between coats as required to provide adequate adhesion for next coat and to remove defects (e.g. runs, sags, etc.) that are visible from a distance up to 1000 mm.

- .8 Protection of existing structures
  - .1 Protect the building surfaces and the neighbouring structures that are not coated against specking, markings and other damages with the use of blanketing or dirty-proof protectors. If the surfaces in question are damaged, they must be cleaned and reconditioned to their prior state in accordance with the instructions given by the Departmental Representative.
  - .2 Protect the materials and the factory finish-coated components .
- .9 Surface Preparation:
  - .1 Removal of light fixtures, surface hardware on doors, and surface mounted equipment, fittings and fastenings shall be done prior to undertaking painting operations by General Contractor. Items shall be securely stored and re-installed after painting is completed by General Contractor.
  - .2 Move and cover exterior furniture and portable equipment as necessary to carry out painting operations. Replace as painting operations progress.
  - .3 As painting operations progress, place "WET PAINT" signs in pedestrian and vehicle traffic areas to approval of the Ministry Representative.

### **3.4 APPLICATION**

- .1 Use method of application approved by Departmental Representative.
  - .1 Conform to manufacturer's application recommendations.
- .2 Apply coats of water repellent in continuous film of uniform thickness.
  - .1 Repaint thin spots or bare areas before next coat is applied.
- .3 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.
- .4 Finish inside of cupboards and cabinets as specified for outside surfaces.
- .5 Finish closets and alcoves as specified for adjoining rooms.
- .6 Finish top, bottom, edges and cutouts of doors after fitting as specified for door surfaces.

### **3.5 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - 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 11 - Cleaning.
- .3 Waste Management: separate waste materials for reuse or recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
  - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.
- .4 Place covering and products defined as hazardous or toxic waste, including tubes and containers, in containers or areas designated for hazardous waste.

**END OF SECTION**