

**Part 1            General**

**1.1                REFERENCES**

- .1     ASTM C475/C475M-02 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
- .2     ASTM C645-04 - Specifications for Non-Structural Steel Framing Members.
- .3     ASTM C754-00 - Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board.
- .4     ASTM C840-04a - Standard Specification for Application and Finishing of Gypsum Board.
- .5     ASTM C1002-01 - Steel Self-Piercing, Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.
- .6     ASTM C1280-04 - Standard Specification for Application of Gypsum Sheathing.
- .7     ASTM C1396/C1396M-04 - Standard Specification for Gypsum Board.
- .8     ASTM D3273-00(2005) - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- .9     ASTM E90-04 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- .10    ASTM E119-00a - Method for Fire Tests of Building Construction and Materials.
- .11    GA-201 (Gypsum Association) - Gypsum Board for Walls and Ceilings.
- .12    GA-214 (Gypsum Association) - Recommended Specification: Levels of Gypsum Board Finish.
- .13    GA-216 (Gypsum Association) - Application and Finishing of Gypsum Board.
- .14    GA-801 (Gypsum Association) - Handling Gypsum Board.

**1.2                SUBMITTALS FOR REVIEW**

- .1     Section 01 33 00 – Submittal Procedures.
- .2     Product Data: Provide data on metal framing, gypsum board, joint tape.

**1.3                QUALITY ASSURANCE**

- .1     Perform Work in accordance with ASTM C840.
- .2     Perform Work in shaftwalls in accordance with ASTM C1280.
- .3     Applicator Qualifications: Company specializing in performing the work of this section with minimum 5 years documented experience.
- .4     Handling Gypsum Board: Comply with GA-801.

**Part 2 Products**

**2.1 FRAMING MATERIALS**

- .1 Studs and Tracks: ASTM C645; galvanized sheet steel, 0.792 mm (20 gauge / 30 mils) thick unless indicated otherwise, C-shape, with knurled faces.
- .2 Furring, Framing, and Accessories: ASTM C645 and GA-216.
- .3 Fasteners: ASTM C1002.
- .4 Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.

**2.2 GYPSUM BOARD MATERIALS**

- .1 Standard Gypsum Board: ASTM C1396/C1396M, thickness as indicated, maximum available length in place; ends square cut, tapered edges.
- .2 Fire Rated Gypsum Board: ASTM C1396/C1396M, fire resistive type, UL, ULC, or ITS rated; thickness as indicated, maximum available length in place; ends square cut, tapered edges.
- .3 Water-Resistant Board: ASTM C1396/C1396M, thickness as indicated, maximum available length in place; ends square cut, tapered edges.

**2.3 ACCESSORIES**

- .1 Acoustic Sealant: Butyl, to Section 07 92 00.
- .2 Corner Beads: GA-216, Metal corner bead.
- .3 Edge Trim: GA-216; Casing bead, L-bead, LK-bead, LC-bead and Control joints, as required.
- .4 Joint Materials: ASTM C475; paper reinforcing tape, joint compound, adhesive, and water. Mesh tape only where required by ULC Design.
- .5 Gypsum Board Fasteners: ASTM C1002, Type S12 screws.
- .6 Compressible Foam Gasket: sill plate gasket; polyethylene foam, minimum thickness 6 mm x full width of sill plate.
- .7 Acoustic Insulation: Conforming to requirements set out in Section 07 21 00 - Thermal Insulation.

**Part 3 Execution**

**3.1 EXAMINATION**

- .1 Section 01 71 00 – Examination and Preparation: Verification of existing conditions before starting work.

- .2 Verify that site conditions are ready to receive work and opening dimensions are as instructed by the manufacturer.

### **3.2 METAL STUD INSTALLATION**

- .1 Install studs in accordance with ASTM C754 and manufacturer's instructions.
- .2 Install sill plate gaskets to all tracks in contact with concrete, top and bottom.
- .3 Metal Stud Spacing: as indicated.
- .4 Refer to Drawings for indication of partitions extending stud framing through the ceiling to the structure above. Maintain clearance under structural building members to avoid deflection transfer to studs. Provide extended leg ceiling runners.
- .5 Door and Window Opening Framing: Install double studs at frame jambs. Install stud tracks on each side of opening, at frame head height, and between studs and adjacent studs.
- .6 Blocking: Install blocking for support of plumbing fixtures, toilet partitions, wall cabinets, wood frame opening, toilet accessories, hardware, and firestopping.

### **3.3 WALL FURRING INSTALLATION**

- .1 Erect furring for direct attachment to concrete masonry and concrete walls.
- .2 Erect furring channels; space maximum 400 mm (16 inches) on centre, not more than 100 mm (4 inches) from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 600 mm (24 inches) on centre.

### **3.4 FURRING FOR FIRE RATINGS**

- .1 Install furring as required for fire resistance ratings indicated.

### **3.5 CEILING FRAMING INSTALLATION**

- .1 Install in accordance with ASTM C754 and manufacturer's instructions.
- .2 Coordinate location of hangers with other work.
- .3 Install ceiling framing independent of walls, columns, and above ceiling work.
- .4 Reinforce openings in ceiling suspension system which interrupt main carrying channels or furring channels, with lateral channel bracing. Extend bracing minimum 600 mm (24 inches) past each end of openings.
- .5 Laterally brace entire suspension system.

### **3.6 ACCESSORIES INSTALLATION**

- .1 Install access panels to locations required for access.
- .2 Install resilient channels at maximum 600 mm (24 inches) on centre. Locate joints over framing members.

- .3 Place acoustic insulation in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.
- .4 Install acoustic sealant at gypsum board perimeter at:
  - .1 Metal Framing: Two beads.
  - .2 Base Layer.
  - .3 Face Layer.
  - .4 Caulk all penetrations of partitions by conduit, pipe, duct work, rough-in boxes.

### **3.7 GYPSUM BOARD INSTALLATION**

- .1 Install gypsum board in accordance with manufacturer's written instructions.
- .2 Erect single layer standard board in most economical direction, with ends and edges occurring over firm bearing.
- .3 Erect single layer fire rated gypsum board vertically, with edges and ends occurring over firm bearing.
- .4 Use screws when fastening gypsum board to metal furring or framing.
- .5 Double Layer Applications: Secure second layer to first with fasteners. Offset joints of second layer from joints of first layer.
- .6 Treat cut edges and holes in moisture resistant gypsum board with sealant.
- .7 Place control joints consistent with lines of building spaces or as directed.
- .8 Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.

### **3.8 JOINT TREATMENT**

- .1 Finish in accordance with GA-214 Level 5.
- .2 Feather coats on to adjoining surfaces so that camber is maximum 0.8 mm (1/32 inch).
- .3 Taping, filling, and sanding is not required at surfaces behind adhesive applied ceramic tile.

### **3.9 TOLERANCES**

- .1 Maximum Variation of Finished Gypsum Board Surface from True Flatness: 3 mm in 3 m (1/8 inch in 10 feet) in any direction.

**END OF SECTION**

**Part 1            General**

**1.1                REFERENCES**

- .1     ASTM C635 - Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- .2     ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- .3     ASTM E1264 – 98 Classification of Acoustical Ceiling Products.
- .4     CAN/CGSB-92.1-M92 Sound Absorptive Prefabricated Acoustical Panels.

**1.2                SUBMITTALS FOR REVIEW**

- .1     Section 01 33 00 - Submittal Procedures.
- .2     Product Data: Provide data on metal grid system components, and acoustic units.
- .3     Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

**1.3                QUALITY ASSURANCE**

- .1     Refer to Section 01 45 00 - Quality Control.

**1.4                ENVIRONMENTAL REQUIREMENTS**

- .1     Maintain uniform temperature of minimum 16 degrees C (60 degrees F) and maximum humidity of 40 percent prior to, during, and after acoustic unit installation.

**1.5                PROJECT CONDITIONS**

- .1     Sequence work to ensure acoustic ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- .2     Install acoustic units after interior wet work is dry.

**Part 2            Products**

**2.1                CEILING PANELS**

- .1     Acoustical Tiles: New Ceilings and Replacement of existing to match existing fissured tiles in composition and thickness.

**2.2                SUSPENSION SYSTEM**

- .1     Suspension system: Non-fire rated, intermediate duty system to ASTM C 635, commercial quality hot dipped galvanized rolled steel.

- .2 Accessories: Stabilizer bars, clips, splices, perimeter mouldings, hold down clips, required for suspended grid system.
- .3 Support Channels and Hangers: Galvanized steel; size and type to suit application and ceiling system flatness requirement specified.
- .4 All supplied materials shall match existing whenever possible. Alternates to be reviewed during construction as they are deemed necessary.

### **Part 3 Execution**

#### **3.1 EXAMINATION**

- .1 Verify that layout of hangers will not interfere with other work.

#### **3.2 INSTALLATION - LAY-IN GRID SUSPENSION SYSTEM**

- .1 Install suspension system in accordance with ASTM C636 and manufacturer's written instructions and as supplemented in this section.
- .2 Install system capable of supporting imposed loads to a deflection of 1/360 maximum.
- .3 Locate system according to reflected plan.
- .4 Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
- .5 Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- .6 Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- .7 Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located within 150 mm (6 inches) of each corner; or support components independently.
- .8 Do not eccentrically load system, or produce rotation of runners.
- .9 Perimeter Moulding:
  - .1 Install edge moulding at intersection of ceiling and vertical surfaces into bed of acoustic sealant with continuous gasket.
  - .2 Use longest practical lengths.
  - .3 Overlap and rivet corners.
  - .4 Provide at junctions with other interruptions.
- .10 Form expansion joints to accommodate plus or minus 25 mm (1 inch) movement. Maintain visual closure.

**3.3            INSTALLATION - ACOUSTIC UNITS**

- .1        Install acoustic units in accordance with manufacturer's instructions.
- .2        Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.
- .3        Install units after above ceiling work is complete.
- .4        Install acoustic units level, in uniform plane, and free from twist, warp, and dents.
- .5        Cutting Acoustic Units:
  - .1            Cut to fit irregular grid and perimeter edge trim.
  - .2            Cut square reveal edges to field cut units.
- .6        Install hold-down clips to retain panels tight to grid system within 6 m (20 ft) of an exterior door.

**3.4            ERECTION TOLERANCES**

- .1        Maximum Variation from Flat and Level Surface: 3 mm in 3 m (1/8 inch in 10 feet).
- .2        Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

**END OF SECTION**

**Part 1            General**

**1.1                REFERENCES**

- .1            American Society for Testing and Materials (ASTM)
  - .1            ASTM F 1861-02, Standard Specification for Resilient Wall Base.

**1.2                SUBMITTALS**

- .1            Section 01 33 00 - Submittal Procedures.
- .2            Product Data: Provide data on specified products, describing physical and performance characteristics; sizes and colours available.

**1.3                ENVIRONMENTAL REQUIREMENTS**

- .1            Store materials for three days prior to installation in area of installation to achieve temperature stability.
- .2            Maintain ambient temperature required by adhesive manufacturer three days prior to, during, and 24 hours after installation of materials.

**Part 2            Products**

**2.1                WALL BASE**

- .1            Base: ASTM F1861, thermoplastic rubber; top set covered:
  - .1            Height: 100 mm (4 inch).
  - .2            Thickness: 3 mm (1/8 inch) thick.
  - .3            Length: Roll.
  - .4            Colour: Selection by Departmental Representative.

**2.2                ACCESSORIES**

- .1            Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.

**Part 3            Execution**

**3.1                WALL BASE INSTALLATION**

- .1            Clean substrate and prime with one coat of adhesive.
- .2            Apply wall base to walls, cabinetwork, columns, and other permanent fixtures in areas where base is required and as scheduled. Install in lengths as long as practical. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.
- .3            Scribe and fit to door frames and other obstructions. Provide V-shaped notch on back of base and continuously wrap inside and outside corners. Fit all base before applying adhesive. Install without discolouration at bends.

- .4 Install base on solid backing. Bond tight to wall and floor surfaces.

**3.2 CLEANING**

- .1 Refer to Section 01 74 11 - Cleaning.

**END OF SECTION**

**Part 1      General**

**1.1      RELATED DOCUMENTS**

- .1 Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

**1.2      SUMMARY**

- .1 Definitions: Resinous floor system includes a two-component, general service epoxy coating and a selected, graded aggregate.
- .2 Related Work:
  - .1 07 92 00 - Joint Sealants.

**1.3      SUBMITTALS**

- .1 Product Data: Submit manufacturer's technical data, installation instructions, and general recommendations for each resinous flooring material required. Include certification indicating compliance of materials with requirements.
- .2 Samples: Submit, for verification purposes, 4-inch square samples of each type of resinous flooring required, applied to a rigid backing, in color and finish indicated.
  - .1 For initial selection of colors and finishes, submit manufacturer's color charts showing full range of colors and finishes available.

**1.4      QUALITY ASSURANCE**

- .1 Single Source Responsibility: Obtain primary resinous flooring materials including primers, resins, hardening agents, finish or sealing coats from a single manufacturer with not less than 10 years of successful experience in manufacturing and installing principal materials described in this section. Contractor shall have completed at least five projects of similar size and complexity. Provide secondary materials only of type and from source recommended by manufacturer of primary materials.
- .2 Pre-Installation Conference
  - .1 General contractor shall arrange a meeting not less than thirty days prior to starting work.
  - .2 Attendance
    - a. General Contractor
    - b. Departmental Representative
    - c. Manufacturer/Installer's Representative
- .3 ISO 9002: All materials, including primers, resins, curing agents, finish coats, aggregates and sealants are manufactured and tested under an ISO 9002 registered quality system.

**1.5      DELIVERY, STORAGE AND HANDLING**

- .1 Material shall be delivered to job site and checked by flooring contractor for completeness and shipping damage prior to job start.

- .2 All materials used shall be factory pre-weighed and pre-packaged in single, easy to manage batches to eliminate on site mixing errors. No on site weighing or volumetric measurements allowed.
- .3 Material shall be stored in a dry, enclosed area protected from exposure to moisture. Temperature of storage area shall be maintained between 60 and 85°F/16 and 30°C.

## **1.6 PROJECT CONDITIONS**

- .1 Concrete substrate shall be properly cured for a minimum of 30 days. A vapor barrier must be present for concrete subfloors on or below grade. Otherwise, an osmotic pressure resistant grout must be installed prior to the resinous flooring.
- .2 Utilities, including electric, water, heat (air temperature between 60 and 85°F/16 and 30°C) and finished lighting to be supplied by General Contractor.
- .3 Job area to be free of other trades during, and for a period of 24 hours, after floor installation.
- .4 Protection of finished floor from damage by subsequent trades shall be the responsibility of the General Contractor.

## **1.7 WARRANTY**

- .1 Manufacturer shall furnish a single, written warranty covering both material and workmanship against delamination for a period of one (1) full year from date of installation.

## **Part 2 Products**

### **2.1 COLORS**

- .1 Colors: As selected by Departmental Representative from manufacturer's standard colors.

### **2.2 EPOXY COATING**

- .1 Material
  - .1 Physical Properties: Provide flooring system in which physical properties of topping including aggregate, when tested in accordance with standards or procedures referenced below, are as follows:

Hardness.....	85-90
(ASTM D-2240/Shore D Durometer)	
Bond Strength.....	>400 psi
(ASTM D-4541)	(100% concrete failure)
Abrasion Resistance.....	0.081 gm max. weight loss
(ASTM D-4060, Taber Abrader CS-17 wheel)	
Coefficient of Friction .....	0.75
(ASTM D-2047/Neoprene-Dry)	
Flammability .....	Self Extinguishing
(ASTM D-635)	Extent of burning 0.25 inches max.
Heat Resistance Limitation .....	140°F/60°C
	(for continuous exposure)
	..... 200°F/93°C
	(for intermittent spills)
Cure Rate allow .....	8 hours for foot traffic
(at 77°F/25°C)	24 hours for normal operations

### 2.3 JOINT SEALANT MATERIALS

- .1 Type produced by manufacturer of resinous flooring system for type of service and joint condition indicated.

## Part 3 Execution

### 3.1 PREPARATION

- .1 Substrate: Concrete preparation shall be by mechanical means and include use of a scabbler, scarifier or shot blast machine for removal of bond inhibiting materials such as curing compounds or laitance.

### 3.2 APPLICATION

- .1 General: Apply each component of resinous flooring system in compliance with manufacturer's directions to produce a uniform monolithic wearing surface of thickness indicated, uninterrupted except at divider strips, sawn joints or other types of joints (if any), indicated or required.
- .2 Coating/Texture: Remove any surface imperfections by lightly abrading and vacuuming the floor surface. Mix coating and texture according to manufacturer's recommended procedures. Squeegee apply and backroll textured coating with strict adherence to manufacturer's installation procedures and coverage rates.

### 3.3 FIELD QUALITY CONTROL

- .1 The right is reserved to invoke the following material testing procedure at any time, and any number of times during period of flooring application.
- .2 The Departmental Representative will engage service of an independent testing laboratory to sample materials being used on the job site. Samples of material will be taken, identified and sealed, and certified in presence of Contractor.

- .3 Testing laboratory will perform tests for any of characteristics specified, using applicable testing procedures referenced herein, or if none referenced, in manufacturer's product data.
- .4 If test results show materials being used do not comply with specified requirements, Contractor may be directed by Departmental Representative to stop work; remove non-complying materials; pay for testing; reapply flooring materials to properly prepared surfaces which had previously been coated with unacceptable materials.

### **3.4 CURING, PROTECTION AND CLEANING**

- .1 Cure resinous flooring materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of application and prior to completion of curing process. Close area of application for a minimum of 24 hours.
- .2 Protect resinous flooring materials from damage and wear during construction operation. Where temporary covering is required for this purpose, comply with manufacturer's recommendations for protective materials and method of application. General Contractor is responsible for protection and cleaning of surfaces after final coats.
- .3 Cleaning: Remove temporary covering and clean resinous flooring just prior to final inspection. Use cleaning materials and procedures recommended by resinous flooring manufacturer.

**END OF SECTION**

**Part 1            General**

**1.1                REFERENCES**

- .1 Master Painters Institute (MPI)
  - .1 MPI Architectural Painting Specifications Manual, 2014.

**1.2                QUALITY ASSURANCE**

- .1 Refer to Section 01 45 00 - Quality Control.

**1.3                SUBMITTALS**

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit product data and instructions for each paint and coating product to be used.
- .3 Samples: Submit full range colour sample chips to indicate where colour availability is restricted.

**1.4                DELIVERY, STORAGE AND HANDLING**

- .1 Packing, Shipping, Handling and Unloading: in accordance with manufacturer's written instructions.
- .2 Remove damaged, opened and rejected materials from site.
- .3 Storage and Protection:
  - .1 Provide and maintain dry, temperature controlled, secure storage.
  - .2 Store materials and supplies away from heat generating devices.
  - .3 Store materials and equipment in well ventilated area with temperature range 7°C to 30°C.

**1.5                SITE CONDITIONS**

- .1 Heating, Ventilation and Lighting:
  - .1 Provide heating facilities to maintain ambient air and substrate temperatures above 10°C for 24 hours before, during and after paint application until paint has cured sufficiently.
  - .2 Provide continuous ventilation for seven days after completion of application of paint.
  - .3 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.
- .2 Surface and Environmental Conditions:
  - .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 to adequately prepared surfaces and to surfaces within moisture limits.

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

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Paint materials listed in the current MPI Approved Products List (APL) are acceptable for use on this project.
- .2 All interior paint materials selected from the MPI APL must meet the MPI Green Performance Standard (GPS) where available, unless otherwise directed by the Departmental Representative.
- .3 Provide paint materials for paint systems from single manufacturer.
- .4 Conform to latest MPI requirements for interior and exterior painting work including preparation and priming.

### **2.2 COLOURS**

- .1 Departmental Representative will provide Colour Schedule after Contract award. Preliminary colour selection is indicated on Finish Schedule.
- .2 Selection of colours from manufacturer's full range of colours.
- .3 Second coat in three coat system to be tinted slightly lighter colour than top coat to show visible difference between coats.

### **2.3 MIXING AND TINTING**

- .1 Perform colour tinting operations prior to delivery of paint to site.
- .2 Use and add thinner in accordance with paint manufacturer's recommendations. Do not use kerosene or similar organic solvents to thin water-based paints.
- .3 Thin paint for spraying in accordance with paint manufacturer's instructions.

### **2.4 GLOSS/SHEEN RATINGS**

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

<u>Gloss Level Category</u>	<u>Units @ 60°</u>	<u>Units @ 85°</u>
G1 - matte	0 to 5	max. 10
G2 - velvet	0 to 10	10 to 35
G3 - eggshell	10 to 25	10 to 35
G4 - satin	20 to 35	min. 35
G5 - semi-gloss	35 to 70	
G6 - gloss	70 to 85	
G7 - high gloss	> 85	

- .2 Gloss level ratings of painted surfaces shall be selected by Departmental Representative after Contract Award, unless noted otherwise.

**Part 3 Execution**

**3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheet.

**3.2 GENERAL**

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

**3.3 PREPARATION**

- .1 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 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.
  - .4 Protect passing pedestrians, building occupants and general public in and about the building.
- .2 Clean and prepare surfaces in accordance with MPI Architectural Painting Specification Manual requirements.
- .3 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.

**3.4 APPLICATION**

- .1 Conform to manufacturer's application instructions unless specified otherwise.
- .2 Apply coats of paint continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint 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 Sand and dust between coats to remove visible defects.
- .5 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.
- .6 Finish top, bottom, edges and cut-outs of doors after fitting as specified for door surfaces.

**3.5 INTERIOR PAINT AND COATING SYSTEMS**

- .1 Interior painting systems to be based on MPI Custom grade unless noted otherwise.

- .2 Concrete horizontal surfaces: floors and stairs:
  - .1 INT 3.2C - Epoxy finish: Two coats epoxy finish.
- .3 Concrete Masonry Units:
  - .1 INT 4.2D - High performance architectural latex finish: one coat MPI #4 latex block filler, two finish coats latex.
  - .2 INT 4.2G - Epoxy (tile-like) finish for wet environments and as scheduled: one coat MPI #116 epoxy block filler, two finish coats epoxy.
- .4 Structural Steel: overhead and structural members; columns, beams, joists, etc. and adjacent fabrications.
  - .1 INT 5.1C - Waterborne Dry Fall Finish: one coat alkyd metal primer, one finish coat waterborne dry fall (MPI Custom grade).
- .5 Galvanized Metal: doors and frames.
  - .1 INT 5.3L - Alkyd Finish: One coat non-cementitious primer, two finish coats alkyd (to MPI Premium Grade).
- .6 Dressed lumber: including door frames, casings, mouldings:
  - .1 INT 6.3E - Polyurethane Varnish Finish (over stain): one coat stain, minimum two coats polyurethane finish.
- .7 Hardboard: Pre-primed doors and frames:
  - .1 INT 6.3T - Latex Finish (over factory primer): two coats latex.
- .8 Plywood Mounting Boards: electrical room.
  - .1 INT 6.4P - Pigmented Fire Retardant finish: apply to ULC approved procedures.
- .9 Gypsum Board:
  - .1 INT 9.2A - Latex (over latex sealer): one coat primer/sealer MPI#50, two finish coats latex (to MPI Premium Grade).
- .10 Canvas and Cotton Coverings.
  - .1 INT 10.1A - Latex: two finish coats latex; alternatively use INT 5.1C.

### **3.6 EXTERIOR PAINT COATING SYSTEMS**

- .1 Asphalt Surfaces: zone/traffic marking for drive and parking areas, etc.
  - .1 EXT 2.1B - Alkyd Zone/Traffic Marking Finish: minimum dry film thickness 7 mil.
- .2 Galvanized Metal: fabrications, gates, bollards, doors and frames.
  - .1 EXT 5.3B - Alkyd Finish: One coat non-cementitious primer, two finish coats alkyd (to MPI Premium Grade).

### **3.7 MECHANICAL AND ELECTRICAL EQUIPMENT**

- .1 Paint finished area exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment with colour and finish to match adjacent surfaces, except as indicated.
- .2 Other unfinished areas: leave exposed conduits, piping, hangers, ductwork and other mechanical and electrical equipment in original finish and touch up scratches and marks.

- .3 Touch up scratches and marks on factory painted finishes and equipment with paint as supplied by manufacturer of equipment.
- .4 Boiler room, mechanical and electrical rooms: paint exposed conduits, canvas wrapped piping, ductwork and other mechanical to match existing system color scheme.
- .5 Do not paint over nameplates.
- .6 Keep sprinkler heads free of paint.

### **3.8 SITE TOLERANCES**

- .1 Walls: no defects visible from a distance of 1000 mm at 90 degrees to surface.
- .2 Ceilings: no defects visible from floor at 45 degrees to surface when viewed using final lighting source.
- .3 Final coat to exhibit uniformity of colour and uniformity of sheen across full surface area.

### **3.9 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 exposed surfaces that were not painted. Remove smears and spatter immediately as operations progress, using compatible solvent.
- .4 Protect freshly completed surfaces from paint droppings and dust. Avoid scuffing newly applied paint.

**END OF SECTION**