1.0 GENERAL

1.1 Related UBC Guidelines

.1 Section 09 00 10 Finishes – General Requirements
.2 Section 09 67 00 Fluid Applied Flooring, 2.1.1.2 for floor finishes in mechanical and electrical rooms.
.3 Division 27 (Section 27 05 08 Cable Infrastructure Overview, 3.4.10; Section 27 05 05 Communication Rooms Design Guidelines, 2.3)
.4 UBC LEED Implementation Guide

1.2 Co-ordination Requirements

.1 Coordinate with Consultants - Structural, Mechanical, Electrical and/or Landscape.
.2 Coordinate with UBC Building Operations, Paint Shop for work carried out by UBC’s own forces through the UBC Project Manager.
.3 Coordinate with the Architect and Facilities Transition Team for any variance requests.
.4 UBC Information Technology (IT). Some server rooms are on a special keying system, can be high security.

1.3 Description

.1 Exterior and Interior Painting.

1.4 Performance Standards

.1 Master Painters Institute (MPI) published Manuals as follows:
   .2 Existing surfaces shall use MPI Maintenance Repainting Manual.

1.5 Quality Control and Assurance

.1 Submittals
   .1 Before Start of Work
      .1 List of all proposed paint materials for review; color samples for selection; color samples for final approval.
      .2 MSDS Material Data Sheets for review and posting at jobsite.
      .3 Certification reports for Eco-Logo and VOC content.
   .2 During Work
      .1 Use MPI Accredited Assurance Association (A.Q.A.) inspector reports, or preferably MPI fully certified Architectural Coatings Inspector.
      .2 Manufacturer Inspectors’ reports when required.
   .3 At Completion
      .1 Maintenance data: itemized list c/w manufacturer/distributor name, paint type, color formulation to be provided in the O&M manual.
      .2 Maintenance material shall be minimum four (4) unopened 1 liter cans of each product/color, labeled including Project Name and Number, to be handed over to UBC Project Manager (obtain receipt) at Project site, for storage within the Project site (i.e. designated Janitor Room).
.2 Quality Assurance
   .1 Trade Contractor shall be a member of Master Painters and Decorators Association (MPDA). Refer to www.mpda.net.
   .2 Follow MPI Quality Assurance Program including the MPDA Inspection and Guarantee Program.

.3 Quality Control
   .1 All work to be inspected by an MPI approved/appointed Inspection Agency, acceptable to the Consultant and the MPDA Accredited Assurance Association (A.Q.A.), and paid by the Trade Contractor; MPDA SSI Inspection to be carried out irrespective of type of Guarantee. (Note: on a Consultant-designed project when work of this Section is carried out by UBC’s own forces, (generally smaller renovation projects), UBC will arrange and pay for MPI’s inspection services only if required).
   .2 When "special" non-MPI products or systems are to be used, the manufacturer to also carry out inspections and certify the work, following the same procedures as set out in the MPI Manual, and paid by the Trade Contractor.
   .3 Inspection to include inspection of surfaces prior to start of work, moisture tests, preparation for painting, primer, completed work, and during and at end of Warranty including expediting correction of defects.

.4 Warranties
   .1 2-Year MPDA Accredited Quality Assurance Association's 2-year guarantee, or a 100% 2-Year maintenance bond issued by a surety licensed in British Columbia warranting also that painting work has been performed to MPI Manual requirements. The A.Q.A. association's guarantee shall NOT exclude any of the work carried out under this section.

2.0 MATERIALS

2.1 Performance Requirements
   .1 General
      .1 Use products that are listed in MPI Manual Current Approved Product List.
      .2 Material such as linseed oil, shellac, turpentine, etc. not specifically listed by brand name shall use highest quality product.
      .3 All products for each paint system applied shall be from same manufacturer for compatibility.
      .4 Primers on steelwork shall provide MPI approved primers suitable for paint systems noted, and suitable for subsequent work carried out by this Section. Coordinate with Section 05 00 00 Metals and Section 05 50 00 Metal Fabrications.
      .5 All paint systems shall be MPI "premium grade" except as noted.
   .2 Environmental
      .1 Source
         .1 Preference shall be ISO 9001 2008 registered manufacturers.
      .2 Manufacture
         .1 Select lowest range VOC products from each MPI product category number listed in the MPI Manual current approved product list, preferably "Three-Tree" and Eco-Logo certified.
.3 Performance
  .1 Durability
    .1 Minimize tinting to maintain durability.

  .2 Life Cycle Costing
    .1 Exterior expectancy shall be minimum 8 years using standard coatings. Expectancy for High Performance Coatings shall be a minimum 15 years, and whenever possible financially, contractors are to use high performance coatings. Approximately 60-year for silicate-based paints, especially on cementitious-finished heritage buildings.

    .2 Interior expectancy is 5-10 years.

.3 Disposal
  .1 Refer Section 01 74 19 Construction Waste Management and Disposal.

2.2 Prescriptive Requirements

  .1 Materials
    .1 Use MPI approved products except where noted.

    .2 Use paint with reduced volatile and preservative content formulated for minimum VOC emissions, especially where rooms are continuously occupied.

    .3 In keeping with 2.2.1.2 above and for low-VOC paint systems, interior alkyd systems can be replaced with a Water-Based Light Industrial, High Performance Architectural Latex, or a Latex system. These systems would be acceptable for UBC’s institutional environment. Specific paint systems should be chosen to reflect the intended use of the space.

    .4 Paint shall not contain mercury, lead, hexavalent chromium, or cadmium compounds.

    .5 Use alkyd paints only at high impact areas, or with special approval. (See note .6 next).

    .6 Use an alkyd water-based paint for handrails, door frames and doors where hand oils could cause paint breakdown.

    .7 Mechanical, Electrical, and similar Service Rooms or enclosed spaces, and concealed spaces: Services in these areas, including equipment, piping, pipe insulation, coils, ductwork, conduit, electrical and control panels, access panels, etc. are NOT to be painted, except for pre-finishing carried out by manufacturers and any make-good work.

  .2 Paint Systems, Components, Sheen, and Use

    .1 Exterior New Work
      .1 EXT 5.1B / Inorganic Zinc Primer + High Performance Acrylic / Gloss / Exposed Structural Steel.

      .2 EXT 5.1 C / W.B. Light Industrial Coating / Gloss / Miscellaneous Metal including railings, guardrails, bollards.
.3 EXT 5.1G / Zinc Rich Primer + 2-Component Aliphatic Polyurethane / shop finished exposed structural steel; detailing of steelwork carefully coordinated to minimize fieldwork touch-up.

.4 EXT 5.3 J / W.B. Light Industrial Coating / Gloss / galvanised hollow metal doors and pressed steel frames; roof-top ducting, vents and piping, exterior galvanized metal generally.

.5 Strong consideration should be given to using Potassium Silicate-based paints on cementitious surfaces. Silicate-based paints must be completely unaffected by UV, static dirt-repelling, completely breathable, inorganic/sustainable, must bond chemically with the cementitious substrate and have a life-expectancy of more than 60 years.

.2 Exterior Renovation Work
.1 REX 5.1K or L / Water Based Light Industrial Coating / semi-gloss / painted doors and frames.

.2 Strong consideration should be given to using Potassium Silicate-based paints on cementitious surfaces. Silicate-based paints must be completely unaffected by UV, static dirt-repelling, completely breathable, inorganic/sustainable, must bond chemically with the cementitious substrate and have a life-expectancy of more than 60 years.

.3 Interior New Work
.1 INT 3.1A / Latex / Custom / Eggshell / Mechanical, Electrical Rooms, and Service Rooms.

.2 INT 3.1C / High Performance Acrylic / Eggshell / typical concrete surfaces.

.3 INT 3.1C / High Performance Acrylic / semi-gloss / concrete in washroom, janitor, and similar rooms.

.4 INT 3.2H / Latex Zone & Traffic Markings / nosing at stairs, conforming to BC Building Code for the visually impaired; other safety markings required by BC Building Code, authorities having jurisdiction and Worksafe BC.

.5 INT 4.2A / Latex / Custom / Eggshell / Mechanical, Electrical rooms, and service rooms.

.6 INT 4.2K / High Performance Acrylic / Eggshell / typical concrete block surfaces.

.7 INT 4.2D / High Performance Acrylic / semi-gloss / concrete block in washroom, janitor and similar rooms.

.8 INT 5.1B / High Performance Acrylic / Gloss / Structural Steel.

.9 INT 5.1E(modified) / W.B. Alkyd / Gloss / Metal Fabrications at contact surfaces such as stairs, railings, trench gratings, trench covers and frames, access doors/panels, elevator doors and frames.

.10 INT 5.3 L (modified) / W.B. Alkyd / Gloss / galvanized hollow metal doors, door and window frames; galvanized metal fabrications.

.11 INT 5.3 H / W.B. Dryfall / flat / steel deck.
.12 INT 6.4 BB / W.B. Alkyd / Gloss / wood trim.

.13 INT 9.2A / Latex / Custom Grade / Eggshell / gypsum board in Mechanical, Electrical Rooms, and service rooms.


.15 INT 9.2CC / W.B. Alkyd / semi-gloss / gypsum board in washroom, janitor and similar rooms.

.16 INT 9.2A Latex (over latex primer/sealer) Gloss Level 4/5 (satin/semi-gloss) in mechanical rooms.

.4 Interior Renovation Work

.1 RIN 5.3B / Water Based Light Industrial Coating / semi-gloss / painted hollow metal doors and pressed steel frames.

.2 RIN 6.3P / Water Based Light Industrial Coating / semi-gloss / painted wood doors and frames.

.3 Metal Fabrications at or near ground level.

.1 Sherwin Williams colour SW 7062 – Rock Bottom (UBC Gray) is mandatory for all exterior metal fabrications on campus, such as handrails, stairs, railings, and light standards and other similar fittings and components on the Site.

.4 Electrical panels, fire hose cabinets, access panels: match color of adjoining surfaces except as otherwise required by Building and/or Fire Codes.

3.0 OTHER

.1 Cleaning

.1 Remove paint spots from both existing and new surfaces regardless of who caused them.

.2 Communications cables must not be painted. They must be masked and protected from paint overspray or direct painting.

.3 Wall-mounted plywood back-boards inside all Communications Rooms must be painted. See Section 27 05 05 Communication Rooms Design Guidelines, 2.3.

***END OF SECTION***