SECTION  – painting

1. GENERAL
   1. SUMMARY

SPEC NOTE: THIS SECTION IS FOR CORE AND SHELL PROJECTS ONLY. Section 09 91 23 Interior Painting is for Interior Projects ONLY.

SPEC NOTE: Edit the following paragraph to reflect if the project has exterior and/or interior work.

* + 1. Section includes surface preparation and the application of paint systems on the following exterior [and interior] substrates:

SPEC NOTE: Edit the following to reflect what is required on the Project. Delete paragraphs that are not required on this Project.

* + - 1. Concrete.
      2. Concrete masonry units (CMU).
      3. Steel and iron.
      4. Galvanized metal.
      5. Aluminum.
      6. Wood.
      7. Wood doors and frames.
      8. Gypsum board.
      9. Cotton or canvas insulation covering.
  1. DEFINITIONS
     1. MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D523.
     2. MPI Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.
     3. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.
     4. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D523.
     5. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D523.
     6. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D523.
     7. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D523.
     8. Gloss Values: Generally, provide paints and coatings having the following sheens when installed on the following substrates:
        1. Walls: Eggshell (G3) or Satin (G4) as selected by Consultant at a later date.
        2. Trim and Doors: Semi-gloss (G5).
        3. Ceilings: Flat (G1).
  2. SUBMITTALS
     1. Provide submittals as indicated in Section 01 33 00 – Submittal Procedures.
     2. Product Data: For each type of product. Include preparation requirements and application instructions.
        1. Include Printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
        2. Indicate VOC content.
     3. Samples for Initial Selection: For each type of topcoat product.
     4. Samples for Verification: For each type of paint system and in each colour and gloss of topcoat.
        1. Submit Samples on rigid backing, 8” (200 mm) square.
        2. Apply coats on Samples in steps to show each coat required for system.
        3. Label each coat of each Sample.
        4. Label each Sample for location and application area.
     5. Product List:
        1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
        2. Include colour designations and VOC content.
  3. MAINTENANCE MATERIAL SUBMITTALS
     1. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
        1. Paint: 5 percent, but not less than 1 gal. (3.8 L) of each material and colour applied.
  4. QUALITY ASSURANCE
     1. Conform to the standards contained in the latest edition of the MPI Manual.
     2. Applicator Qualifications: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance, and as follows:
        1. Have a minimum of five (5) years proven satisfactory experience and shall show proof before commencement of work that he will maintain a qualified crew of painters throughout the duration of the work.
        2. When requested provide a list of the last three comparable jobs including, name and location, specifying authority, start and completion dates and cost amount of the painting work.
        3. Apprentices may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations.
     3. Source Limitations: Obtain block fillers and primers for each coating system from the same manufacturer as the finish coats and as follows:
        1. Use only paint manufacturers and products as listed under the Approved Products section of the MPI Manual Architectural Painting Specification Manual.
  5. mockups
     1. Mockups: Apply mockups of each paint system indicated and each colour and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
        1. Consultant will select one surface to represent surfaces and conditions for application of each paint system.
           1. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
           2. Other Items: Consultant will designate items or areas required.
        2. Final approval of colour selections will be based on mockups.
           1. If preliminary colour selections are not approved, apply additional mockups of additional colours selected by Consultant at no added cost to Owner.
        3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Consultant specifically approves such deviations in writing.
        4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
  6. DELIVERY, STORAGE, AND HANDLING
     1. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 7 deg C (45 deg F).
        1. Maintain containers in clean condition, free of foreign materials and residue.
        2. Remove rags and waste from storage areas daily.
  7. FIELD CONDITIONS
     1. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 10 and 35 deg C (50 and 95 deg F).
     2. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 3 deg C (5 deg F) above the dew point; or to damp or wet surfaces.
  8. warranty
     1. Provide upon completion of the work, a Warranty Certificate, in the name of the Owner, stating that the work of this section was performed in accordance with these specifications and the MPI manual (latest edition), and is warranted against defects in material or installation, for a period of two (2) years from Date of Substantial Performance.

1. PRODUCTS
   1. PAINT, GENERAL
      1. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products Lists".
      2. Material Compatibility:
         1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
         2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
      3. VOC Content: For field applications, paints and coatings shall comply with VOC content limits of authorities having jurisdiction and the following VOC content limits:
         1. Flat Paints and Coatings: 50 g/L.
         2. Nonflat Paints and Coatings: 50 g/L.
         3. Dry-Fog Coatings: 150 g/L.
         4. Primers, Sealers, and Undercoaters: 100 g/L.
         5. Rust-Preventive Coatings: 100 g/L.
         6. Zinc-Rich Industrial Maintenance Primers: 100 g/L.
         7. Pretreatment Wash Primers: 420 g/L.
         8. Shellacs, Clear: 730 g/L.
         9. Shellacs, Pigmented: 550 g/L.

SPEC NOTE: Edit the following (PT#’s) to reflect what is listed in the Product and Finish Schedule.

* + 1. Colours (PT-# to PT-#): As indicated in Section 09 06 05 – Product and Finish Schedule.

1. EXECUTION
   1. EXAMINATION
      1. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
      2. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
         1. Concrete: 12 percent.
         2. Fiber-Cement Board: 12 percent.
         3. Masonry (Clay and Concrete Masonry Units): 12 percent.
         4. Wood: 15 percent.
         5. Portland Cement Plaster: 12 percent.
      3. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
      4. Spray-Textured Ceiling Substrates: Verify that surfaces are dry.
      5. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
      6. Proceed with coating application only after unsatisfactory conditions have been corrected.
         1. Application of coating indicates acceptance of surfaces and conditions.
   2. PREPARATION
      1. Comply with manufacturer's written instructions and recommendations in "MPI Painting Specification Manual" applicable to substrates and paint systems indicated.
      2. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
         1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
      3. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
         1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
      4. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
         1. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
      5. CMU / Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
      6. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer, but not less than the following:

SPEC NOTE: Usually, retain one of first two subparagraphs below. SSPC-SP 2 and SSPC-SP 3 remove loose rust, mill scale, and paint. SSPC-SP 2 is minimum surface preparation accepted by AISC for painted steel.

* + - 1. SSPC-SP 2.
      2. SSPC-SP 3.

SPEC NOTE: SSPC-SP 7/NACE No. 4 permits tight residues of rust, mill scale, and coatings to remain. Blast cleaning methods specified in SSPC-SP 6/NACE No. 3 may be impractical for use at Project site and may not be allowed by authorities having jurisdiction.

* + - 1. SSPC-SP 7/NACE No. 4.

SPEC NOTE: SSPC-SP 11 requires complete removal of rust, mill scale, and paint by power tools. SSPC-SP 11 uses nonabrasive methods and is more thorough than SSPC-SP 2, SSPC-SP 3, and SSPC-SP 7/NACE No. 4.

* + - 1. SSPC-SP 11.

SPEC NOTE: Retain "Shop-Primed Steel Substrates" Paragraph below if primers are shop applied and are not removed in the field.

* + - 1. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
    1. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
    2. Aluminum Substrates: Remove loose surface oxidation.
    3. Wood Substrates:
       1. Scrape and clean knots and apply coat of knot sealer before applying primer.
       2. Sand surfaces that will be exposed to view, and dust off.
       3. Prime edges, ends, faces, undersides, and backsides of wood.
       4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
    4. Cotton or Canvas Insulation Covering Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.
    5. Plastic Trim Fabrication Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.
    6. Mix and prepare paint materials according to manufacturer's written instructions.
       1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
       2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
       3. Use only thinners approved by paint manufacturer and only within recommended limits.
  1. APPLICATION
     1. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
        1. Use applicators and techniques suited for paint and substrate indicated.
        2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
        3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
        4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
        5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
     2. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match colour of topcoat but provide sufficient difference in shade of undercoats to distinguish each separate coat.
     3. Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
        1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
           1. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
           2. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
           3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
        2. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.
     4. Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
        1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
        2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
        3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.
     5. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and colour breaks.
     6. Apply block fillers to CMU at a rate to ensure complete coverage with pores filled.
     7. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
        1. Paint the following work where exposed in equipment rooms and where exposed in occupied spaces:
           1. Equipment, including panel boards.
           2. Uninsulated metal piping.
           3. Uninsulated plastic piping.
           4. Pipe hangers and supports.
           5. Metal conduit.
           6. Plastic conduit.
           7. Tanks that do not have factory-applied final finishes.
           8. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
           9. Other items as directed by Consultant.
        2. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.
           1. Colour: Flat (gloss level 1), non-specular, black.
  2. FIELD QUALITY CONTROL
     1. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
        1. Contractor shall touch up and restore painted surfaces damaged by testing.
        2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.
  3. CLEANING AND PROTECTION
     1. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
        1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
        2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
        3. Allow empty paint cans to dry before disposal.
        4. Collect waste paint by type and deliver to recycling or collection facility.
     2. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
     3. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Consultant, and leave in an undamaged condition.
     4. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

SPEC NOTE: Edit the following paragraphs to reflect the surfaces that require painting on this project.

SPEC NOTE: The following listing of substrates are only a small fraction of the MPI manual, therefore if you require a substrate not indicated below, please consult with the Spec Leader to provide additional options for the Project.

* 1. EXTERIOR PAINTING SCHEDULE

SPEC NOTE: Paint systems in this article are for new construction. For renovation or maintenance projects where repainting is required, revise paint systems accordingly.

SPEC NOTE: If necessary, insert drawing designations. Use these designations on Drawings to identify locations of each ceiling.

SPEC NOTE: Retain "Intermediate Coat" subparagraphs for high-quality systems; delete if not required.

* + 1. Concrete Substrates, Nontraffic Surfaces (Vertical):
       1. Latex System MPI EXT 3.1B:
          1. Prime Coat: Exterior, alkali-resistant, water-based primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    2. Concrete Substrates, Traffic Surfaces (Horizontal):
       1. Latex Floor Paint System MPI EXT 3.2A:
          1. Prime Coat: Matching topcoat.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Latex floor paint, low gloss.
    3. Concrete Masonry Unit Substrates:
       1. Latex System MPI EXT 4.2A:
          1. Prime Coat: Exterior, latex block filler.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
       2. Latex over Alkali-Resistant Primer System MPI EXT 4.2L:
          1. Prime Coat: Exterior, alkali-resistant, water-based primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    4. Structural Steel Substrates:
       1. Water-Based, Light Industrial Coating System MPI EXT 5.1B:
          1. Prime Coat: Zinc-rich, inorganic primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior, water-based, light industrial coating, **[low sheen] [semigloss] [gloss].**
       2. Water-Based, Light Industrial Coating System MPI EXT 5.1C:
          1. Prime Coat: Alkyd metal primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior, water-based, light industrial coating, **[low sheen] [semigloss] [gloss].**
       3. Water-Based, Light Industrial Coating over Epoxy System:
          1. Prime Coat: Epoxy metal primer MPI EXT 5.1N.
          2. Intermediate Coat: High-build epoxy paint, low gloss.
          3. Topcoat: Exterior, water-based, light industrial coating, **[low sheen] [semigloss][gloss].**
       4. Alkyd System MPI EXT 5.1D:
          1. Prime Coat: Alkyd metal primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior alkyd enamel, **[flat] [semigloss] [gloss]**.
       5. Quick-Drying Enamel System MPI EXT 5.1A:
          1. Prime Coat: Quick-drying, alkyd metal primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Quick-drying alkyd enamel, **[semigloss] [gloss]**.
    5. Galvanized-Metal Substrates:

SPEC NOTE: Use the following for LOW CONTACT AREAS only. Not for use on flat finish doors.

* + - 1. Latex System MPI EXT.5.3H:
         1. Prime Coat: Water-based, galvanized-metal primer.
         2. Intermediate Coat: Matching topcoat.
         3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.

SPEC NOTE: Use the following for LOW CONTACT AREAS only. Not for use on flat finish doors.

* + - 1. Water-Based, Light Industrial Coating System MPI EXT.5.3G:
         1. Prime Coat: Water-based, galvanized-metal primer.
         2. Intermediate Coat: Matching topcoat.
         3. Topcoat: Exterior, water-based, light industrial coating, **[low sheen] [semigloss] [gloss]**.

SPEC NOTE: Use the following for HIGH CONTACT / HIGH TRAFFIC AREAS.

* + - 1. Polyurethane Pigmented System MPI EXT.5.3L:
         1. Prime Coat: Epoxy metal primer.
         2. Intermediate Coat: Matching topcoat.
         3. Topcoat: Exterior, polyurethane, pigmented finish coating, **[low sheen] [semigloss] [gloss]**.
    1. Aluminum Substrates:
       1. Latex System MPI EXT.5.4H:
          1. Prime Coat: Quick-drying aluminum primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    2. Dressed-Lumber Substrates: **[Trim] [Architectural woodwork] [Doors] [Windows] [Board siding] [Railings] [Fences]**.

SPEC NOTE: Not for use on flat finish doors.

* + - 1. Latex over Latex Primer System MPI EXT.6.3L:
         1. Prime Coat: Exterior, latex wood primer.
         2. Intermediate Coat: Matching topcoat.
         3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.

SPEC NOTE: For doors and Frames only.

* + - 1. Water-Based Light Industrial Coating System MPI EXT.6.3J:
         1. Prime Coat: Exterior, latex wood primer.
         2. Intermediate Coat: Matching topcoat.
         3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    1. Wood-Based Panel Substrates (Plywood siding, fascia, soffits, ect.):
       1. Latex over Latex Primer System MPI EXT.6.4K:
          1. Prime Coat: Exterior, latex wood primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    2. Plastic-Trim-Fabrication Substrates:
       1. Latex System MPI EXT.6.8A:
          1. Prime Coat: **[Solvent] [Water]**-based bonding primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    3. Portland Cement Plaster Substrates:
       1. Latex System MPI EXT.9.1J:
          1. Prime Coat: Exterior, alkali-resistant, water-based primer.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    4. Exterior Gypsum Board Substrates:
       1. Latex System:
          1. Prime Coat: Exterior, latex wood primer, reduced in accordance with manufacturer's written instructions for substrate and topcoat.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
    5. Exterior Canvas Substrates:
       1. Latex System MPI EXT.10.1A:
          1. Prime Coat: Matching topcoat.
          2. Intermediate Coat: Matching topcoat.
          3. Topcoat: Exterior latex paint, **[flat] [low sheen] [semigloss] [gloss]**.
  1. INTERIOR PAINTING SCHEDULE
     1. Concrete Substrates:
        1. Latex System MPI INT 3.1A:
           1. Primer: Alkali resistant, water based.
           2. Intermediate Coat: Latex, interior, matching topcoat.
           3. Topcoat: Latex, interior (gloss as indicated in Finish Schedule).
        2. High-Performance Architectural Latex System MPI INT 3.1C:
           1. Primer: Alkali resistant, water based.
           2. Intermediate Coat: Latex, interior, high performance architectural; matching topcoat.
           3. Topcoat: Latex, interior, high performance architectural (gloss as indicated in Finish Schedule).
     2. CMU Substrates:
        1. Latex System MPI INT 4.2A:
           1. Primer: CMU block filler.
           2. Intermediate Coat: Latex, interior, matching topcoat.
           3. Topcoat: Latex, interior (gloss as indicated in Finish Schedule).
        2. High-Performance Architectural Latex System MPI INT 4.2D:
           1. Primer: CMU block filler.
           2. Intermediate Coat: Latex, interior, high performance architectural; matching topcoat.
           3. Topcoat: Latex, interior, high performance architectural (gloss as indicated in Finish Schedule).
     3. Structural Steel Substrates:
        1. Water-Based Dry Fall Finish MPI INT 5.1C
        2. High-Performance Architectural Latex System MPI INT 5.1R:
           1. Primer: Acrylic.
           2. Intermediate Coat: Latex, interior, high performance architectural; matching topcoat.
           3. Topcoat: Latex, interior, high performance architectural (gloss as indicated in Finish Schedule).

SPEC NOTE: Retain the following paragraph for steel substrates factory-primed with universal primer, including steel (hollow metal) doors and frames, steel railings, stair stringers and risers. Coordinate with other Sections where products are specified.

SPEC NOTE: Surface preparation and priming described in Division 05 must be suitable - commonly SSPC-SP 6 and a corrosion-resistant primer that is part of the following system. The best way to assure that steel arrives at the jobsite properly blasted and coated is for the Owner to hire an inspector to be present at the fabricating shop during prep and priming or check the condition of the steel when it arrives on site, and reject it before it is unloaded if it does not comply with requirements.

* + 1. Steel (Factory-Primed) Substrates:
       1. High-Performance Architectural Latex System:
          1. Primer: Acrylic (applied over factory primer).
          2. Intermediate Coat: Latex, interior, high performance architectural; matching topcoat.
          3. Topcoat: Latex, interior, high performance architectural (gloss as indicated in Finish Schedule).
    2. Galvanized-Metal Substrates:
       1. High-Performance Architectural Latex System MPI INT 5.3M:
          1. Prime Coat: Primer, galvanized, water based.
          2. Intermediate Coat: Latex, interior, high performance Architectural, matching topcoat.
          3. Topcoat: Latex, interior, high performance Architectural, semi-gloss (MPI Gloss Level 5).
    3. Wood Substrates: Wood trim, doors, and frames.
       1. High-Performance Architectural Latex System MPI INT 6.3A:
          1. Prime Coat: Primer, latex, for interior wood.
          2. Intermediate Coat: Latex, interior, high performance Architectural, matching topcoat.
          3. Topcoat: Latex, interior, high performance Architectural, semi-gloss (MPI Gloss Level 5).
    4. Wood Substrates: Wood paneling and casework.
       1. Latex over Alkyd Sealer System MPI INT 6.4A:
          1. Prime Coat: Primer sealer, alkyd, interior.
          2. Intermediate Coat: Latex, interior, matching topcoat.
          3. Topcoat: Latex, interior, semi-gloss (MPI Gloss Level 5.
    5. Gypsum Board Substrates:
       1. Latex System MPI INT 9.2A:
          1. Primer: Sealer, latex, interior.
          2. Intermediate Coat: Latex, interior, matching topcoat.
          3. Topcoat: Latex, interior (gloss as indicated in Finish Schedule).
       2. High-Performance Architectural Latex System MPI INT 9.2B:
          1. Primer: Sealer, latex, interior.
          2. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
          3. Topcoat: Latex, interior, high performance architectural (gloss as indicated in Finish Schedule).
       3. Institutional Low-Odor/VOC Latex System MPI INT 9.2M:
          1. Prime Coat: Primer sealer, interior, institutional low odor/VOC.
          2. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
          3. Topcoat: Latex, interior, institutional low odor/VOC (MPI Gloss Level 3).
    6. Cotton or Canvas Insulation-Covering Substrates: Including pipe and duct coverings.
       1. Latex System MPI INT 10.1A:
          1. Prime Coat: Primer sealer, latex, interior.
          2. Topcoat: Latex, interior, flat (MPI Gloss Level 1).

end of section