SECTION  – interior latex painting

This Section has been created specifically for basic interior latex paint and primer to address Gensler's Product Sustainability Standards ("GPS Standards") criteria, providing language for only the "Gensler Standard" tier of performance - the required minimum level of performance for sustainable attributes of the product. To include "Market Differentiator" level of performance or for any other questions, please contact your regional specification leader, Tim Taylor, or Kaley Blackstock.

Other, non-traditional, interior paint products and systems are specified in 09 91 23 "Interior Painting."

Insert additional paint systems if required for substrates not listed, or alternate paint systems desired.

Coordinate this Section with mechanical, electrical, and plumbing Sections which may reference this Section for painting MEP pipes and conduits.

1. GENERAL
   1. summary
      1. Section includes surface preparation and field application of traditional interior latex paint systems to exposed interior items and surfaces.
         1. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.
      2. Related Section: Refer to Section 09 91 23 – Interior Painting, for non-traditional epoxy based, and dry fall type interior paint systems, wood knot sealers and block fillers.
      3. Paint exposed surfaces, except where these Specifications indicate that the surface or material is not to be painted. If an item or a surface is not specifically mentioned, paint the item, or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Consultant will select from standard colors and finishes available.
   2. DEFINITIONS

Definitions of gloss levels below are from American Coatings Association (formerly NPCA) for traditional terms, in parenthesis. The definitions of the traditional terms allow greater range of gloss. They are included because the design and construction industry continue to use this terminology. Where ACA does not provide terminology for gloss (Levels 2, 3, and 7) common manufacturers' terms are used. However, gloss levels marketed by paint manufacturers today are as varied as the paint colors they offer.

* + 1. General: The following terms apply to this Section. Gloss level shall be determined according to ASTM D 523.

Delete gloss ranges below not required for Project.

* + - 1. Gloss Level 1(Flat, or Matte): Not more than 5 units at 60 degrees and 10 units at 85 degrees.
      2. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees.
      3. Gloss Level 3 (Eggshell): 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees.
      4. Gloss Level 4 (Satin or Low Luster): 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees.
      5. Gloss Level 5 (Semigloss): 35 to 70 units at 60 degrees.
      6. Gloss Level 6 (Gloss): 70 to 85 units at 60-degrees.
      7. Gloss Level 7 (High Gloss): More than 85 units at 60 degrees.
  1. ACTION submittals

Consider deleting product data paragraph below if paint has been selected. Deleting the paragraph below will eliminate the need for CA Phase overhead of processing the product data.

* + 1. Product Data: For each type of product. Include preparation requirements and application instructions.

Retain the following paragraph for sustainability submittals related to green building certifications.

* + 1. Sustainable Design Submittals: Refer to Division 01 Section "Sustainable Design Requirements."

It is assumed that all paint colors, including gloss, will be selected and indicated in the Finish Schedule, or Section 09 06 05 – Product and Finish Schedule.

* + 1. Samples for Verification: For each type of paint system and in each color and gloss of topcoat, with texture to simulate actual conditions.
       1. Provide stepped Samples, defining each separate coat, including primers. Use representative colors when preparing Samples for review. Resubmit until required gloss, color, and texture are achieved.
       2. Provide a list of materials and applications for each coat of each Sample. Label each Sample for location and application.
       3. Submit paint samples on actual substrate to be painted, 12 inches (305 mm) square of each color and texture required.
    2. Product List: For each product indicated, include the following:
       1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
  1. Informational Submittals

The following submittal is a part of the GPS Standards and is required for all projects. This relates to EPDs required under 'Quality Assurance' for select product types.

* + 1. Embodied Carbon Reporting: Type III Environmental Product Declarations, per ISO 14025 disclosing the Global Warming Potential of the product from Stages A1 through A3 in accordance with Section 01 81 33 "Sustainable Design Requirements - Embodied Carbon."

The following submittal is a part of the GPS Standards and is required for all projects. This relates to VOC content limit requirements listed in Part II.

* + 1. VOC Content: Product data or laboratory reports showing compliance with VOC content limits.

The following submittal is a part of the GPS Standards and is required for all projects. This relates to TVOC emissions testing reports or certificates listed under 'Quality Assurance' for select product types.

* + 1. TVOC Emissions: Laboratory test reports or third-party certificates showing compliance with the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" version 1.2-2017.

The following submittal is a part of the GPS Standards and is required for all projects. This relates to material ingredient disclosure reports listed under 'Quality Assurance' for select product types.

* + 1. Material Ingredient Disclosure: Submit one of the following reports:
       1. Health Product Declaration.
       2. UL Product Lens.
       3. Living Building Challenge Declare Label or Living Product Challenge Label.
       4. EPEA Material Health Statement.
       5. Cradle-to-Cradle v4 Material Health Certificate or multi-attribute certificate.

The following submittal requirement has been included as part of the GPS Standards and is required for all projects.

* + 1. Sustainability Reporting: Provide the following.
       1. Biobased content.
       2. Manufacturing location.

Delete Article below for small Projects, temporary occupancies, and government-financed Projects.

* 1. 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: 1 gal. (3.8 L) of each material and color applied.
  2. QUALITY ASSURANCE
     1. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications 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.

The following requirement is a part of the GPS Standards and is required for all projects. This corresponds to the GPS Standards requiring that select products have EPDs.

* + 1. Embodied Carbon Reporting: Obtain latex paint and primer products with publicly available, third-party verified Type III Environmental Product Declaration (EPDs) in accordance with Section 01 81 33 – Sustainable Design Requirements - Embodied Carbon.

The following requirement is a part of the GPS Standards and is required for all projects. This corresponds to the GPS Standards requiring that select products have testing reports or certificates for the California Department of Public Health (CDPH) Standard Method v1.2-2017 emissions testing ("VOC emissions".

* + 1. TVOC Emissions: Obtain latex paint and primer products with publicly available reports or certificates verifying compliance with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" version 1.2-2017, following the private office scenario.

The following requirement has been included as part of the GPS Standards and is required for all projects.

* + 1. Material Ingredient Disclosure: Obtain latex paint and primer products with publicly available reports disclosing material ingredients to residuals no greater than 1000ppm.
    2. Source Limitations: Obtain block fillers and primers for each coating system from the same manufacturer as the finish coats.

Delete sample installations below if not required. Deleting the paragraph below will eliminate the need for CA Phase overhead field observation of the sample installation.

* + 1. Sample Installation: Apply sample installation of each paint system indicated and each color and finish selected 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 specified in Part 3.
          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. Approval of sample installations does not constitute approval of deviations from the Contract Documents contained in sample installations unless Consultant specifically approves such deviations in writing.
       3. Subject to compliance with requirements, approved sample installations may become part of the completed Work if undisturbed at time of Substantial Completion.
  1. FIELD CONDITIONS
     1. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
     2. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

1. products
   1. maNUfacturers
      1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

Benjamin Moore manufacturing locations: Montreal, Canada; Milford, MA; Johnstown, NY; Newark, NJ; Pell City, AL; and Mesquite, TX.

PPG manufacturing locations: Batavia, IL; Carrollton, TX; Dover, DE; Oakwood, GA; Louisville, KY; Huron, OH; Houston, TX; East Point, GA; Reno, NV. Cambridge Ontario.

SW manufacturing locations: Beltsville, MD; Baltimore, MD; Greensboro, NC; Morrow, GA; Orlando, FL; Brantford, Canada; Fort Erie, Canada; Columbus, OH; Cincinnati, OH; Jeffersonville, IN; Chicago, IL; Andover, KS; Memphis, TN; Garland, TX; Fernley, NV; Victorville, CA.

* + - 1. Benjamin Moore Family of Products (Benjamin Moore, Coronado, Corotech, Insl-x, LenMar).
      2. PPG Paints (PPG).
      3. Sherwin-Williams Co. (SW).
  1. PAINT, GENERAL (PT##)
     1. Material Compatibility: Provide materials for use within each paint system that are compatible with one another and with the substrates indicated, under conditions of service and application, as demonstrated by manufacturer based on testing and field experience. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

The following requirement is a part of the GPS Standards and is required for all projects.

* + 1. VOC Content: Interior latex paints and primers shall comply with the more stringent VOC content limits of Federal, State, or local authorities having jurisdiction, including California Air Resources Board (CARB), South Coast air Quality Management District Rule 1113 (effective date January 1, 2019).
    2. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
       1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed substitutions.
    3. Colors and Gloss: As indicated in **[Section 09 06 05 – Product and Finish Schedule.] [Finish Schedule on Drawings.]** Reference to a particular manufacturer's number or color name is used only as a convenience for the Consultant to establish the Project color and gloss requirements. These references are not intended to describe the required generic paint systems. For generic paint system requirements, refer to the "Interior Paint Schedule" at the end of Part 3, as applicable to the respective conditions of use.

The Gensler standard for material designations includes a requirement to use the prefix PT## for interior, exterior, and intumescent paints. Coordinate finish schedule with other specification Sections that include paints.

* + - 1. The selection of paint colors and gloss are indicated by manufacturer and color type; designated as "PT##."
      2. Furnish the same lots, batches, etc. within the same contiguous areas of the building (i.e., corridors on the same floors, common rooms which adjoin each other, etc.).
  1. preparatory coats
     1. Concrete Unit Masonry Block Filler: Refer to Section 09 91 23 "Interior Painting."

Retain the following paragraph for gypsum board walls and ceilings, rubber base, and insulation-covering substrates with latex paint.

* + 1. Primer Sealer, Latex, Interior:
       1. Benjamin Moore; Ultra Spec 500 Interior Latex Primer (N534).
       2. PPG; Speedhide Zero Interior Latex Sealer Quick-Drying (6-4900).
       3. SW; ProMar 200 Zero VOC Interior Latex Primer (B28W02600).

Retain the following paragraph for concrete walls, and plaster walls and ceilings with latex paints.

* + 1. Primer, Alkali Resistant, Water Based: Refer to Section 09 91 23 – Interior Painting.

Retain the following paragraph for wood substrates with latex paints.

* + 1. Primer, Latex, for Interior Wood: Refer to Section 09 91 23 – Interior Painting.

Retain the following paragraph for rubber base with latex paint.

* + 1. Primer, Bonding, Water Based: Refer to Section 09 91 23 – Interior Painting.
    2. Primer, Acrylic: Refer to Section 09 91 23 – Interior Painting.
    3. Where manufacturer does not recommend a separate primer formulation on substrate indicated, use paint specified for finish coat.
  1. INTERIOR LATEX PAINT FINISH COATS

Edit this Article after editing "Interior Paint Schedule" at the end of Part 3. Delete systems not required.

Retain finish-coat materials below for a flat acrylic finish over interior concrete, stucco, masonry, concrete masonry units, mineral-fiber-reinforced cement panels, gypsum board, plaster, acoustic plaster, and ferrous and zinc-coated metal.

* + 1. Latex, Interior, Gloss Level 1 (Flat): Factory-formulated flat acrylic-emulsion latex paint for interior application.
       1. Benjamin Moore; Ultra Spec 500 Interior Flat (N536).
       2. PPG; SPEEDHIDE zero Interior Zero-VOC Latex Flat (6-4110XI).
       3. SW; ProMar 200 Zero VOC Interior Latex Flat (B30-2600 Series).

Retain finish-coat materials below for a flat latex-emulsion size over an all-service jacket insulation covering. If plastic jackets are used as covering over insulation, consult manufacturers to determine that products specified are suitable; if not, insert suitable products in and add plastic jackets to the Interior Paint Schedule.

* + 1. Interior Flat Latex-Emulsion Size: Factory-formulated flat latex-based interior paint.
       1. Benjamin Moore; Ultra Spec 500 (536) Interior Flat Finish: Applied at a dry film thickness of not less than 1.3 mils (33 microns).
       2. PPG Paints; PPG SPEEDHIDE zero VOC Latex Flat 6-4110 Series: Applied at a dry film thickness of not less than 1.3 mils (33 microns).
       3. Sherwin-Williams; ProMar 200 Zero VOC Flat B30-2600 Series: Applied at a dry film thickness of not less than 1.5 mils (38 microns).

Retain finish-coat materials below for a low-luster acrylic finish over interior concrete, stucco, masonry, concrete masonry units, gypsum board, plaster, wood, hardboard, and ferrous and zinc-coated metal.

* + 1. Latex, Interior, Gloss Level 3 (Eggshell). Factory-formulated eggshell acrylic-latex interior enamel.
       1. Benjamin Moore; Ultra Spec 500 Interior Eggshell (N538).
       2. PPG; SPEEDHIDE zero Interior Zero-VOC Latex Eggshell (6-4310XI).
       3. SW; ProMar 200 Zero Interior VOC Latex Eg-Shel (B20-2600 Series).

Retain finish-coat materials below for a semigloss acrylic finish over interior concrete, stucco, masonry, concrete masonry units, gypsum board, plaster, wood, hardboard, and ferrous and zinc-coated metal.

* + 1. Latex, Interior, Gloss Level 5 (Semigloss): Factory-formulated semigloss acrylic-latex enamel for interior application.
       1. Benjamin Moore; Ultra Spec 500 Interior Semi-Gloss (N539).
       2. PPG; SPEEDHIDE zero Interior Zero-VOC Latex Semi-Gloss (6-4510XI).
       3. SW; ProMar 200 Zero VOC Latex Semi-Gloss (B31-2600 Series).
    2. Waterborne Acrylic Epoxies, Interior, Industrial Maintenance Coatings, Gloss Level 3 (Eggshell): Refer to Section 09 91 23 – Interior Painting.
    3. Waterborne Acrylic Epoxies, Interior, Industrial Maintenance Coatings, Gloss Level 5 (Semigloss): Refer to Section 09 91 23 – Interior Painting.
  1. DRY FALL COATINGS
     1. Refer to Section 09 91 23 – Interior Painting.

1. execution
   1. examination
      1. Examine substrates, areas, and conditions, with Applicator present, for compliance with manufacturer's requirements for paint application. Comply with procedures specified in PCA P4.
         1. Proceed with paint application only after unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
   2. preparation
      1. Remove hardware and hardware accessories, cover plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible, provide surface-applied protection before surface preparation and painting.
      2. Before applying paint or other surface treatments, clean substrates of substances that could impair bond of paints. Remove oil and grease before cleaning.
         1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
      3. Clean and prepare surfaces to be painted according to manufacturer's written instructions for each substrate condition and as specified. Provide barrier coats over incompatible primers or remove and reprime.

Delete subparagraphs below if surfaces are not to be painted or revise to suit Project.

* + - 1. Concrete Substrates: Remove release agents, curing compounds, hardeners, sealers, efflorescence, dust, dirt, grease, oils and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
         1. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
      2. CMU Substrates: Remove efflorescence, dust, dirt, grease, oils and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application.
      3. Gypsum Wallboard: Repair all surfaces in gypsum wallboard with wallboard joint finishing compound or spackling compound, filled out flush and sanded smooth. Clean all surfaces and taped joints of dust, dirt and other contaminants and be sure they are thoroughly dry before applying paint.
      4. Plaster Substrates: Remove effloresce and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
      5. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances in accordance with SSPC SP 1 for Solvent Cleaning. After solvent cleaning prepare any bare metal surfaces by removing all stratified rust (rust scale), all loose mill scale, all loose or non-adherent rust and detrimental welding deposits by methods specified in SSPC SP-3 for "Power Tool Cleaning."
         1. Touch up bare areas, heads of bolts, welded surfaces which are unpainted, and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with same primer as the shop coat.
      6. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents in accordance with SSPC SP-1 for "Solvent Cleaning” and pretreat in accordance with the recommendations of SSPC Good Painting Practice, Vol. 1, Chapter 22.

Delete subparagraph and associated subparagraphs below if wood surfaces are not to be painted or revise to suit Project.

* + - 1. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
         1. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
         2. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately on delivery.
      2. Rubber: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates. Abrade surface to promote adhesion of subsequently applied paints, if necessary.
    1. 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.
    2. Tinting: Tint each undercoat a lighter shade to facilitate identification of each coat when multiple coats of same material are applied. Tint undercoats to match the color of the topcoat but provide sufficient difference in shade of undercoats to distinguish each separate coat.
  1. application

Delete paragraph below if not required.

* + 1. Apply block fillers to CMU at a rate to ensure complete coverage with pores filled.
    2. Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

Revise paragraphs below to suit Project. Add special restrictions on application methods if required.

* + - 1. Paint colors, surface treatments, and finishes are indicated in [Section 09 06 00 "Schedule of Finishes."] [Finish Schedule on Drawings.]
      2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
      3. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
      4. Provide finish coats that are compatible with primers used.
      5. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
      6. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
      7. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
      8. Paint back sides of access panels and removable or hinged covers to match exposed surfaces. Access panels, electrical panels, air diffusing outlets, supply and exhaust grilles, louvers, exposed conduit, primed hardware items, primed outlet covers, primed wall and ceiling plates and other items in painted areas shall be painted to match the areas in which they occur unless otherwise directed by the Architect.
    1. Scheduling Painting: 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.

Insert restrictions or limits on using spray equipment if necessary to suit Project.

* + - 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.

Revise first paragraph and subparagraphs below if the use of spray equipment for paint application is limited or restricted. Some owners prohibit or restrict the use of spray on their projects. Spray application of paints can damage sensitive electronic operating equipment and might cause problems for personnel in occupied buildings.

* + 1. 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.
    2. 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 color breaks.
    3. Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

First paragraph below is an example of painting requirements for mechanical and electrical work. Revise to suit Project.

* + 1. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and occupied spaces.
       1. Mechanical items to be painted include, but are not limited to, the following:

List below contains mechanical items that are usually field painted. Add other items to suit Project.

* + - * 1. Uninsulated metal piping.
        2. Uninsulated plastic piping.
        3. Pipe hangers and supports.
        4. Tanks that do not have factory-applied final finishes.
        5. Visible portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets.
        6. Duct, equipment, and pipe insulation having "all-service jacket" or other paintable jacket material.
        7. Mechanical equipment that is indicated to have a factory-primed finish for field painting.
      1. Electrical items to be painted include, but are not limited to, the following:

List below contains electrical items that are usually field painted. Add other items to suit Project.

* + - * 1. Conduits and fittings.
        2. Switchgear.
        3. Panelboards.
        4. Electrical equipment that is indicated to have a factory-primed finish for field painting.
    1. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.
    2. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. 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.
    3. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
    4. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.
    5. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.
  1. MARKING AND IDENTIFICATION

Retain paragraph below for projects governed by the International Building Code. Refer to IBC for the code language. Verify with Canadian codes if required.

* + 1. Mark fire-rated and smoke-rated partitions required to have protective openings or penetrations.
       1. Locate markings in accessible concealed floor, floor-ceiling, or attic spaces.
       2. Provide markings within 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144 mm) measured horizontally along the partition.
       3. Marking shall include stenciled lettering not less than 3 inches (76 mm) in height with a minimum 3/8-inch (9.5 mm) stroke.
       4. Apply markings in a contrasting color with the suggested wording "FIRE AND/OR SMOKE BARRIER---PROTECT ALL OPENINGS", or other wording as approved by the Authority Having Jurisdiction.

Retain paragraph below for projects with sound-rated partitions. While not required by code, this measure may be desired by clients who are safeguarding protected or private conversations.

* + 1. Mark sound-rated partitions as follows:
       1. Locate markings in accessible concealed floor, floor-ceiling, or attic spaces.
       2. Provide markings within 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144 mm) measured horizontally along the partition.
       3. Marking shall include stenciled lettering not less than 3 inches (76 mm) in height with a minimum 3/8-inch (9.5 mm) stroke.
       4. Apply markings in a contrasting color with the suggested wording "**[STC 45] [STC 50] [<insert STC rating>]** PARTITION---PROTECT ALL OPENINGS", or other wording as approved by the Owner.
  1. cleaning
     1. At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.
     2. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping without scratching or damaging adjacent finished surfaces.
     3. After completing painting operations in each space or area, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection, if any.
  2. protection
     1. Protect work of other trades, whether being painted or not, against damage from paint application. Correct damage to work of other trades by cleaning, repairing or replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
     2. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PCA P1.
  3. INTERIOR PAINTING SCHEDULE

Use schedule below as a guide only. Below includes examples of paint systems for different interior substrates. Retain only substrates and paint systems suitable for Project.

Note that this section only covers traditional latex paint and primer. Some applications may require epoxy coatings or specialty primers which are specified in Section 09 91 23 – Interior Painting.

* + 1. Concrete and Masonry (Other Than Concrete Unit Masonry): Provide the following paint systems over interior concrete and brick masonry substrates:
       1. Flat Acrylic Finish: Two finish coats over a primer **[, only where indicated]**.
          1. Primer: Interior concrete and masonry primer.
          2. Finish Coats: Interior flat acrylic paint.
       2. Low-Luster Acrylic-Enamel Finish: Two finish coats over a primer **[, only where indicated]**.
          1. Primer: Interior concrete and masonry primer.
          2. Finish Coats: Interior low-luster acrylic enamel.
       3. Semigloss Acrylic-Enamel Finish: Two finish coats over a primer **[; typical finish]**.
          1. Primer: Interior concrete and masonry primer.
          2. Finish Coats: Interior semigloss acrylic enamel.
    2. Concrete Unit Masonry: Provide the following finish systems over interior concrete masonry:
       1. Flat Acrylic Finish: Two finish coats over a block filler **[, only where indicated]**.
          1. Block Filler: Concrete unit masonry block filler.
          2. Finish Coats: Interior flat acrylic paint.
       2. Low-Luster Acrylic-Enamel Finish: Two finish coats over a block filler **[, only where indicated]**.
          1. Block Filler: Concrete unit masonry block filler.
          2. Finish Coats: Interior low-luster acrylic enamel.
       3. Semigloss Acrylic-Enamel Finish: Two finish coats over a block filler **[; typical finish]**.
          1. Block Filler: Concrete unit masonry block filler.
          2. Finish Coats: Interior semigloss acrylic enamel.
    3. Gypsum Board: Provide the following finish systems over interior gypsum board surfaces:

Select and edit the options below to suit the project requirements.

* + - 1. Flat Acrylic Finish: Two finish coats over a primer **[ at ceilings and soffits, and where indicated]**.
         1. Primer: Interior gypsum board primer.
         2. Finish Coats: Interior flat acrylic paint.
      2. Low-Luster Acrylic-Enamel Finish: Two finish coats over a primer **[; typical for wall surfaces] [; at panels exposed to view, unless otherwise indicated]**.
         1. Primer: Interior gypsum board primer.
         2. Finish Coats: Interior low-luster acrylic enamel.
      3. Semigloss Acrylic-Enamel Finish: Two finish coats over a primer **[, only where indicated]**.
         1. Primer: Interior gypsum board primer.
         2. Finish Coats: Interior semigloss acrylic enamel.
      4. Plaster: Provide the following finish systems over new interior plaster surfaces:

Paint systems below assume new construction. All manufacturers recommend allowing new plaster to cure for at least 30 days before coating. Consult manufacturers for system recommendations if plaster will cure substantially longer or for previously coated plaster.

Retain paint system below for a flat acrylic finish over interior plaster surfaces subject to normal use and moderate environments.

* + - * 1. Flat Acrylic Finish: Two finish coats over a primer **[; at ceilings and soffits, and where indicated]**.

Primer: Interior plaster primer.

Finish Coats: Interior flat acrylic paint.

* + - * 1. Low-Luster Acrylic-Enamel Finish: Two finish coats over a primer **[; typical for wall surfaces] [; at surfaces exposed to view, unless otherwise indicated]**.

Primer: Interior plaster primer.

Finish Coats: Interior low-luster acrylic enamel.

* + - * 1. Semigloss Acrylic-Enamel Finish: Two finish coats over a primer **[, only where indicated]**.

Primer: Interior plaster primer.

Finish Coats: Interior semigloss acrylic enamel.

* + - 1. Wood and Hardboard: Provide the following paint finish systems over new interior wood surfaces:
         1. Low-Luster Acrylic-Enamel Finish: Two finish coats over a primer **[, only where indicated]**.

Primer: Interior wood primer for acrylic-enamel finishes.

Finish Coats: Interior low-luster acrylic enamel.

* + - * 1. Semigloss Acrylic-Enamel Finish: Two finish coats over a wood undercoater **[; typical finish]**.

Primer: Interior wood primer for acrylic-enamel finishes.

Finish Coats: Interior semigloss acrylic enamel.

* + - 1. Ferrous Metal: Provide the following finish systems over ferrous metal:
         1. Flat Acrylic Finish: Two finish coats over a primer **[, only where indicated]**.

Primer: Interior ferrous-metal primer.

Finish Coats: Interior flat acrylic paint.

* + - * 1. Low-Luster Acrylic-Enamel Finish: Two finish coats over a primer **[, only where indicated]**.

Primer: Interior ferrous-metal primer.

Finish Coats: Interior low-luster acrylic enamel.

* + - * 1. Semigloss Acrylic-Enamel Finish: Two finish coats over a primer **[; typical finish]**.

Primer: Interior ferrous-metal primer.

Finish Coats: Interior semigloss acrylic enamel.

* + - 1. Zinc-Coated Metal: Provide the following finish systems over interior zinc-coated metal surfaces:
         1. Flat Acrylic Finish: Two finish coats over a primer **[, only where indicated]**.

Primer: Interior zinc-coated metal primer.

Finish Coats: Interior flat acrylic paint.

* + - * 1. Low-Luster Acrylic-Enamel Finish: Two finish coats over a **primer [, only where indicated]**.

Primer: Interior zinc-coated metal primer.

Finish Coats: Interior low-luster acrylic enamel.

* + - * 1. Semigloss Acrylic-Enamel Finish: Two finish coats over a primer **[; typical finish]**.

Primer: Interior zinc-coated metal primer.

Finish Coats: Interior semigloss acrylic enamel.

Retain the following paragraph for painting over rubber base.

* + - 1. Rubber Substrates:
         1. Latex System:

Primer: Acrylic bonding primer or universal acrylic primer.

Intermediate Coat: Latex, interior, matching topcoat.

Topcoat: Latex, interior (gloss as indicated in Finish Schedule).

Retain the following paragraph for painting over exposed insulated-wrapped pipes and ducts where desired.

* + - 1. **[Cotton or Canvas] [and] [ASJ]** Insulation-Covering Substrates**: [Including pipe and duct coverings.]** Provide fungicidal agent to render fabric mildew-proof.
         1. Latex System:

Primer: Interior Flat Latex-Emulsion Size

Intermediate Coat: Interior flat acrylic paint

Topcoat: Interior flat acrylic paint.

end of section