

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Primers.
2. Water-based finish coatings.
3. Solvent-based finish coatings.
4. Floor sealers and paints.

B. Related Sections:

1. Section 055000 – Metal Fabrications.
2. Section 055113 – Metal Pan Stairs.
3. Section 055213 – Pipe and Tube Railings
4. Section 057300 – Decorative Metal Railings.
5. Section 062023 – Interior Finish Carpentry.
6. Section 064300 – Wood Stairs and Railings.
7. Section 081113 – Hollow Metal Doors and Frames.
8. Section 086300 – Metal Framed Skylights.
9. Section 089119 – Fixed Louvers.
10. Section 089516 – Wall Vents.
11. Section 092900 – Gypsum Board.

C. Reference and Industry Standards:

1. The following reference standards shall be applicable to this Section:
 - a. The current Enterprise Green Communities (EGC) Criteria, and the current New York City Overlay.
 - b. Local Law 1 of 2004, also known as the New York City Childhood Lead Poisoning Prevention Act of 2003.
2. Industry Standards
 - ASTM (American Society for Testing and Materials)
 - CDPH (California Department of Public Health)
 - EPA (United States Environmental Protection Agency)
 - SCAQMD (South Coast Air Quality Management District)

D. The current NYC Overlay of the current Enterprise Green Communities Criteria:

1. Mandatory Requirements: See the NYC Overlay of the EGC reference standard for full specifications.

- a. All projects must achieve compliance with the mandatory criteria measures that are applicable:
 - Criterion 6.4 Healthier Material Selection.
 - Criterion 6.10: Construction Waste Management.
2. Additionally, rehab projects are required to achieve **55** optional points. Criteria with optional points related to this Specification Section include, but may not be limited to:
 - Criterion 6.1 Ingredient Transparency of Material Health
 - Criterion 6.3 Chemical Hazard optimization
 - Criterion 6.4 Healthier Material Selection.
 - Criterion 6.10: Construction Waste Management.
3. Projects must not exceed the Volatile Organic Compound (VOC) limits from the most recent version of the rules available at time of product specification, which would supersede the limits described in Paragraph 2.1 B. below. For the latest rules see www.aqnid.gov/home/rules-compliance/rules/scaqmd-rule-book/regulation-xi.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product, including manufacturer's substrate preparation requirements and application instructions.
- B. Documentation for compliance with Enterprise Green Communities Criteria.
- C. Samples: For each type of topcoat product.

1.3 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color 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. Design-Professional-of-Record or HPD will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
 - a. Vertical and Horizontal Surfaces: paint one complete model apartment for approval by Design-Professional-of-Record or HPD, before proceeding with the work. Prior to occupancy, this apartment shall be repainted, unless directed by Design-Professional-of-Record or HPD.
 - b. Other Items: Design-Professional-of-Record or HPD will designate items or areas required.
 2. Final approval of color selection will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Design-Professional-of-Record or HPD at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 PAINT PRODUCTS, GENERAL

A. 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.

B. All interior primers and paints must be less than or equal to the following levels of Volatile Organic Compounds (VOCs), in grams per liter, based on SCAQMD Rule 1113, with VOC emissions verified as compliant with CDPH Standard Method.

1. Primers, sealers and undercoatings – 100 G/L max.
2. Coatings, flats and non-flats, and floor – 50 G/L max.
3. Rust-preventative coatings – 100 G/L max.
4. Wood coatings – 275 G/L max.
5. Stains, interior – 250 G/L max.

C. Colors: As selected by **[Design-Professional-of-Record]** **[Property Owner]** **[HPD]** from manufacturer's full range.

D. Avoid epoxy-based paints, even those that comply with VOC standards, as these contain the chemical *Bisphenol A*, which was identified by the EPA on March 20, 2010, as a “chemical of concern”.

2.2 PRIMERS

A. Interior/Exterior Latex Block Filler: Water-based, high-solids, emulsion coating formulated to bridge and fill porous surfaces of exterior concrete masonry units in preparation for specified subsequent coatings.

B. Alkali-Resistant, Water-Based Primer: Water-based primer formulated for use on alkaline surfaces, such as plaster, vertical concrete, and masonry.

C. Interior Latex Primer Sealer: Water-based latex sealer used on new interior plaster, concrete, and gypsum wallboard surfaces.

D. Interior Latex Primer for Wood: Waterborne-emulsion primer formulated for resistance to extractive bleeding, mold, and microbials; for hiding stains; and for use on interior wood subject to extractive bleeding.

- E. Water-Based Rust-Inhibitive Primer: Corrosion-resistant, water-based-emulsion primer formulated for resistance to flash rusting when applied to cleaned, interior ferrous metals subject to mildly corrosive environments.
- F. Surface-Tolerant Metal Primer: Corrosion-resistant, solvent-based metal primer formulated for use on structural steel and metal fabrications that have been minimally prepared.
- G. Cementitious Galvanized Primer: Solvent-based primer composed of linseed oil/alkyd resin and Portland cement for cleaned galvanized metal prior to finish coating.
- H. Water-Based Galvanized-Metal Primer: Corrosion-resistant, acrylic primer; formulated for use on cleaned/etched, exterior, galvanized metal to prepare it for subsequent water-based coatings.
- I. Quick-Drying Aluminum Primer: Corrosion-resistant, solvent-based, alkyd or modified-alkyd primer formulated for quick-drying capabilities and for use on prepared exterior aluminum.
- J. Vinyl Wash Primer: Two-component, vinyl butyral/phosphoric acid, wash primer formulated for use over cleaned metal surfaces and zinc-rich primers as a tie coat for subsequent corrosion-resistant primers or finish coatings.
- K. Water-Based Bonding Primer: Water-based-emulsion primer formulated to promote adhesion of subsequent specified coatings.
- L. Solvent-Based Bonding Primer: Solvent-based primer formulated to seal substrates and promote adhesion of specified subsequent coatings.

2.3 WATER-BASED FINISH COATS

- A. Interior, Latex, Flat: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
 - 1. Gloss and Sheen Level: [**Manufacturer's standard flat finish**] [**Maximum gloss of five units at 60 degrees and maximum sheen of 10 units at 85 degrees when tested in accordance with ASTM D523**] <Insert requirements>.
- B. Interior, Latex, Low Sheen: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
 - 1. Gloss and Sheen Level: [**Manufacturer's standard low-sheen finish**] [**Maximum gloss of 10 units at 60 degrees and sheen of 10 to 35 units at 85 degrees when tested in accordance with ASTM D523**] <Insert requirements>.
- C. Interior, Latex, Eggshell: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
 - 1. Gloss and Sheen Level: [**Manufacturer's standard eggshell finish**] [**Gloss of 10 to 25 units at 60 degrees and sheen of 10 to 35 units at 85 degrees when tested in accordance with ASTM D523**] <Insert requirements>.
- D. Interior, Latex, Satin: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.

1. Gloss and Sheen Level: **[Manufacturer's standard low-sheen finish] [Gloss of 20 to 35 units at 60 degrees and minimum sheen of 35 units at 85 degrees when tested in accordance with ASTM D523] <Insert requirements>.**
 - E. Interior, Latex, Semigloss: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
 1. Gloss Level: **[Manufacturer's standard semigloss finish] [Gloss of 35 to 70 units at 60 degrees when tested in accordance with ASTM D523] <Insert requirements>.**
 - F. Interior, Latex, Gloss: Pigmented, water-based paint for use on primed/sealed interior plaster and gypsum board, and on primed wood and metals.
 1. Gloss Level: **[Manufacturer's standard gloss finish] [Gloss of 70 to 85 units at 60 degrees when tested in accordance with ASTM D523] <Insert requirements>.**
 - G. Textured Latex Coating, Flat: Pigmented, water-based coating, containing a coarse or medium-sized sand or other hard aggregate, for use on exterior masonry, concrete, and concrete block.
 1. Gloss and Sheen Level: **[Manufacturer's standard flat finish] [Maximum gloss of 5 units at 60 degrees and maximum sheen of 10 units at 85 degrees when tested in accordance with ASTM D523] <Insert requirements>.**
 2. Aggregate Size: **[Manufacturer's standard] [Fine] [Medium] [Coarse] <Insert requirements>.**
 - H. Textured Latex Coating, Non-flat: Pigmented, water-based coating, containing a coarse or medium-sized sand or other hard aggregate, for use on exterior masonry, concrete, and concrete block.
 1. Gloss and Sheen Level: **[Manufacturer's standard low-sheen finish] [Gloss of 5 to 25 units at 60 degrees and sheen of 10 to 35 units at 85 degrees when tested in accordance with ASTM D523] <Insert requirements>.**
 2. Aggregate Size: **[Manufacturer's standard] [Fine] [Medium] [Coarse] <Insert requirements>.**
 - I. Antimicrobial (Microbicidal) Interior Latex: An EPA-registered interior latex paint with the power to kill certain bacteria on painted surfaces within two (2) hours of exposure.
- 2.4 FLOOR SEALERS AND PAINTS
- A. Interior Concrete Stain: Penetrating semitransparent stain specifically manufactured for interior and exterior concrete horizontal and vertical surfaces.
 - B. Latex Floor Paint, Low Gloss: Water-based, pigmented coating formulated to hide stains, for alkali and incidental water resistance, and for use on concrete and primed-wood surfaces subject to low to medium foot traffic.
 1. Gloss and Sheen Level: **[Manufacturer's standard low-gloss finish] [Maximum gloss of 25 units at 60 degrees and sheen of 10 to 35 units at 85 degrees when tested in accordance with ASTM D523] <Insert requirements>.**
 2. Slip-Resistant Aggregate: **[Manufacturer's standard additive] <Insert requirements>.**

- C. Water-Based Concrete Floor Sealer: Clear, water-based, acrylic-copolymer-emulsion sealer formulated for oil, gasoline, alkali, and water resistance and for use on concrete traffic surfaces.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- B. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations applicable to substrates and paint systems indicated.
- B. 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.
- C. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

3.3 INSTALLATION

- A. Apply paints according to manufacturer's written instructions.
- B. 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.
- C. Painting Fire-Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
 - 1. Paint the following work where exposed in equipment rooms:
 - a. Equipment, including panelboards [**and switch gear**].
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Tanks that do not have factory-applied final finishes.
 - h. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
 - i. **<Insert mechanical items to be painted>**.

2. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

3.4 CLEANING AND PROTECTION

- A. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- B. 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 the [**Design-Professional-of-Record**] [**HPD**], and leave in an undamaged condition.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 INTERIOR PAINTING SCHEDULE

A. Concrete Substrates, Non-traffic Surfaces:

1. Latex System:
 - a. Prime Coat: [**Alkali-resistant, water-based primer**] [**Matching topcoat**].
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior latex paint, [**flat**] [**low sheen**] [**eggshell**] [**satin**] [**semigloss**] [**gloss**].
2. Latex over Latex Aggregate System:
 - a. Prime Coat: Textured latex coating, flat.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior latex paint, [**flat**] [**low sheen**] [**eggshell**] [**satin**] [**semigloss**] [**gloss**].
3. Latex Aggregate System:
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Textured latex coating, [**flat**] [**non-flat**].
4. Alkyd System:
 - a. Prime Coat: Alkali-resistant, water-based primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior alkyd, [**flat**] [**eggshell**] [**semigloss**] [**gloss**].
5. Concrete Stain System:
 - a. First Coat: Matching topcoat.

- b. Topcoat: Interior concrete stain.

B. Cement Board Substrates:

- 1. Latex System:
 - a. Prime Coat: Alkali-resistant, water-based primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
- 2. Alkyd System:
 - a. Prime Coat: Alkali-resistant, water-based primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.

C. Clay Masonry Substrates:

- 1. Latex System:
 - a. Prime Coat: Alkali-resistant, water-based primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
- 2. Latex Aggregate System:
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Textured latex coating, **[flat]** **[non-flat]**.
- 3. Alkyd System:
 - a. Prime Coat: Alkali-resistant, water-based primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**.

D. Concrete Masonry Units (CMU) Substrates:

- 1. Latex System:
 - a. Block Filler: Interior/exterior latex block filler.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
- 2. Latex Aggregate System:
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: Matching topcoat.

- c. Topcoat: Textured latex coating, **[flat]** **[non-flat]**.
- 3. Alkyd System:
 - a. Block Filler: Interior/exterior latex block filler.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**.
- E. Steel Substrates:
 - 1. Latex System, Alkyd Primer:
 - a. Prime Coat: **[Alkyd quick-dry primer for metal]** **[Alkyd anticorrosive primer]** **[Shop primer specified in Section where substrate is specified]**.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
 - 2. Latex over Shop-Applied Quick-Drying Shop Primer System:
 - a. Prime Coat: Quick-dry primer for shop application.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
 - 3. Alkyd System:
 - a. Prime Coat: **[Alkyd quick-dry primer for metal]** **[Alkyd anticorrosive primer]** **[Shop primer specified in Section where substrate is specified]**.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**.
 - 4. Alkyd over Surface-Tolerant Primer System:
 - a. Prime Coat: Surface-tolerant metal primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**.
 - 5. Quick-Dry Enamel System:
 - a. Prime Coat: Alkyd quick-dry primer for metal.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**.
 - 6. Aluminum Paint System:
 - a. Prime Coat: **[Alkyd quick-dry primer for metal]** **[Alkyd anticorrosive primer]** **[Shop primer specified in Section where substrate is specified]**.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Aluminum paint.

F. Galvanized-Metal Substrates:

1. Latex System:
 - a. Prime Coat: [**Cementitious galvanized primer**] [**Water-based galvanized primer**].
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, [**flat**] [**low sheen**] [**eggshell**] [**satin**] [**semigloss**] [**gloss**].
2. Alkyd over Cementitious Primer System:
 - a. Prime Coat: Cementitious galvanized primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, [**flat**] [**eggshell**] [**semigloss**] [**gloss**].
3. Aluminum Paint System:
 - a. Prime Coat: Cementitious galvanized primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Aluminum paint.

G. Aluminum (Not Anodized or Otherwise Coated) Substrates:

1. Latex System:
 - a. Prime Coat: Quick-dry primer for aluminum.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, [**flat**] [**low sheen**] [**eggshell**] [**satin**] [**semigloss**] [**gloss**].
2. Alkyd System:
 - a. Prime Coat: Primer, [**Vinyl wash primer**] [**Quick-dry primer for aluminum**].
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, [**flat**] [**eggshell**] [**semigloss**] [**gloss**].

H. Exposed Wood Framing:

1. Latex over Latex Primer System:
 - a. Prime Coat: Interior latex primer for wood.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, [**flat**] [**low sheen**] [**eggshell**] [**satin**] [**semigloss**] [**gloss**].
2. Latex over Alkyd Primer System:
 - a. Prime Coat: Interior alkyd primer sealer.
 - b. Intermediate Coat: Matching topcoat.

- c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
 - 3. Alkyd System:
 - a. Prime Coat: Interior alkyd primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**.
- I. Finish Carpentry: Flush and Solid-Core Wood Doors; Baseboards, window stools and aprons.
 - 1. Latex over Latex Primer System:
 - a. Prime Coat: Interior latex primer for wood.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
 - 2. Latex over Alkyd Primer System:
 - a. Prime Coat: Interior alkyd primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
 - 3. Water-Based Alkyd System:
 - a. Prime Coat: Interior latex primer for wood.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Water-based alkyd, **[gloss]** **[high gloss]**.
 - 4. Alkyd System:
 - a. Prime Coat: Interior alkyd primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, **[flat]** **[eggshell]** **[semigloss]** **[gloss]**
- J. Gypsum Board and Plaster Substrates:
 - 1. Latex over Latex Sealer System:
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.
 - 2. Latex over Alkyd Primer System (for Plaster Only):
 - a. Prime Coat: Interior alkyd primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, **[flat]** **[low sheen]** **[eggshell]** **[satin]** **[semigloss]** **[gloss]**.

3. Alkyd over Latex Sealer System:
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, [flat] [eggshell] [semigloss] [gloss].
4. Latex over Latex

K. Insulation-Covering Substrates: Including pipe and duct coverings:

1. Latex System:
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, [flat] [low sheen] [eggshell] [satin] [semigloss] [gloss].
2. Alkyd System :
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, alkyd, [flat] [eggshell] [semigloss] [gloss].
3. Aluminum Paint System:
 - a. Prime Coat: Interior latex primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Aluminum paint.

END OF SECTION 099123