

Facility Operations

Painting Construction Standards

Unless noted or specified otherwise paint and finish all exposed surfaces using the combination of materials listed on Painting Schedule in part 4 of this section, as specified here in, and as needed for a complete and proper installation.

1. RELATED WORK

- Documents affecting work of this Section includes, but are not necessarily limited to, General Conditions, Supplementary Conditions, and other Sections of these Specifications.
- Priming or priming and finishing of certain surfaces may be specified to be factory-performed or installer-performed under pertinent other Sections.

2. WORK NOT INCLUDED

- Unless otherwise indicated, painting is not required on surfaces in concealed areas and inaccessible areas such as furred spaces, foundation spaces, utility tunnels, pipe spaces, and duct shafts.
- Metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze, and similar finished materials will not require painting under this Section except as may be so specified.
- Do not paint moving parts of operating units; mechanical or electrical parts such as valve operator; linkages; sensing devices; and motor shafts, unless otherwise indicated.
- Do not paint over required labels or equipment identification, performance rating, name, or nomenclature plates.
- Do not paint concrete which has been sandblasted.

3. DEFINITIONS

- “Paint,” as used herein, means coating systems materials including primers, emulsions, epoxy, enamels, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

4. SUBMITTALS

- Comply with pertinent provision of the Specification.
- Product data: The Contractor shall Submit for each paint system indicated, including:
 - Material List: An inclusive list of required coating material. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer’s catalog number and general classification.
 - Preparation instructions and recommendations.
 - Manufacturer’s information: Manufacturer’s technical information, including label analysis and instructions for handling, storing, and applying each coating material (MSDS & PDS).

5. SAMPLES

- Following the selection of colors and glosses by the Architect, submit Samples for the Architect’s review.
 - If so directed by the Architect, submit Samples during progress of the work in the form of actual application of the approved materials on actual surfaces to be painted.
- Revise and resubmit each Sample as requested until the required gloss, color, and texture are achieved. Such Samples, when approved, will become standards of color and finish for accepting or rejection the work of this section.
- The contractor shall be responsible for replacing the air filters in any new or existing air terminal affected by the construction. All filters shall be new upon completion of project. One spare filter for each one installed shall be provided upon completion of project.
- Do not commence finish painting until approved Samples are on file at the job site.

6. QUALITY ASSURANCE

- Use adequate number of skilled personnel who are thoroughly trained and experienced in the necessary craft and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- Paint coordination:
 - Provide finish coats which are compatible with the prime coats actually used.
 - Review other sections of these specifications as required, verifying the primer coats to be used and assuring compatibility of the total coating system for the various substrates.
 - Furnish information on the characteristics of the specific finish materials to assure that compatible primer coats are used.
 - Provide barrier coats over non-compatible primers, or remove the primer and re-prime as required.
 - Notify the Architect in writing of anticipated problems in using the specified coating system over prime-coatings supplied under other sections.

7. DELIVERY, STORAGE, & HANDLING

- Deliver materials to project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label.
- Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain storage containers in a clean condition, free of foreign materials and residue.

8. PROJECT CONDITIONS

- Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F (10 and 32 deg C).

- Apply solvent-thinned paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F (7 and 35 deg C).
- Do not apply paint in snow, rain, fog, or mist, or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

9. EXTRA MATERIALS

- At beginning of the job, deliver to owner one container of each type and color of paint used for drawdowns; properly labeled with color (formula for custom mixed colors). Minimum one-gallon container is required with five gallon maximum.
- Deliver to paint shop 104 Hartman Hall.
- Include room finish schedule with paint.
- Include MSDS for all materials delivered.

10. PRODUCTS

- **Manufacturers**
 - Retain "Fire-Resistance-Rated Assemblies" paragraph below where gypsum board is part of fire-resistance-rated assemblies. Indicate design designations of specific assemblies on drawings.
 - Acceptable Manufacturer: PPG Architectural Finishes Inc., One PPG Place, Pittsburgh, PA 15272. ASD Tel: (888) 774-7732. Fax: (888) 434-3127. Email: ppgspec@ppg.com, Website: www.pittsburghpaints.com
 - Substitutions: Equal products of other manufactures approved in advance by the Architect and owner.
 - OWNER WILL PROVIDE PAINT MATERIALS. PAINT MATERIALS LISTED ARE FOR REFERENCE TO THE PREP WORK AND NUMBER OF COATS REQUIRED. Painter is responsible for materials needed for prep, application and cleanup.

- **Paint Materials - General**

- **Materials Compatibility:** Provide block fillers, primers, and finish-coat materials 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.
- **VOC Classification:** Provide high-performance coating materials, including primers, undercoats, and finish coat materials that have a VOC classification of 450 g/l or less.

- **Color Schedules**

- The Architect will prepare a color schedule with samples selected from the buildings color scheme for guidance in painting.

- **Application Equipment**

- For application of the approved paint, use only such equipment as is recommended for application of the particular paint by the manufacturer of the particular paint, and as approved by the Architect.
- Prior to use of application equipment, verify that the proposed equipment is actually compatible with the materials to be applied, and that integrity of the finish will not be jeopardized by use of the proposed equipment.

- **Other Materials**

- Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.
- Some projects may require special finishes as directed by architect and owner.

11. EXECUTION

- **Examination**

- Do not begin installation until substrates have been properly prepared.
- If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
- **Coordination of Work**: Review other sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
 - Notify Architect in writing about anticipated problems when using the materials specified over substrates primed by others.
 - If a potential incompatibility of primers applied by others exists, obtain the following from the primer applicator before proceeding:
 - Confirmation of primer's suitability for expected service conditions.
 - Confirmation of primer's ability to be top coated with materials specified.

- **Preparation**

- **General**

- Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.

- **Cleaning**

- Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
- After completing painting operation in each space or area, reinstall items removed using workers skilled in the trades involved.

➤ Surface Preparation

- Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
- Provide barrier coats over incompatible primers or remove and re-prime.
- Provide barrier coats over incompatible primers or remove primers and re-prime substrate.
- Cementitious Substrates: Prepare concrete, brick, concrete masonry block, and cement plaster surfaces to be coated. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods to prepare surfaces.
 - Use abrasive blast-cleaning methods if recommended by coating manufacturer.
 - Determine alkalinity and moisture content of surfaces by performing appropriate test. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not coat surfaces if moisture content exceeds that permitted in manufacturer's written instructions.

➤ Wood Substrates

- Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Smoothly sand surfaces exposed to view and dust off.
- Scrape and clean small, dry seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer, before applying primer.
- Immediately on delivery, prime edges, ends, faces, undersides, and backsides of wood to be coated.
- After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- Unless specifically approved by Architect, do not proceed with painting of wood surfaces until moisture content of the wood is 12% or less as measured by a moisture meter approved by the Architect.

➤ **Ferrous-Metal Substrates**

- Clean un-galvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC recommendations.
- Blast-clean steel surfaces as recommended by coating manufacturer and according to SSPC-SP 10.
- Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
- Touch up bare areas and shop-applied prime coats that have been damaged. Wire brush, solvent clean, and touch up with same primer as the shop coat.

➤ **Nonferrous Metal Substrates**

- Clean nonferrous and galvanized surfaces according to manufacturer's written instruction for the type of service, metal substrate, and application required.
 - Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

➤ **Material Preparation**

- Carefully mix and prepare coating materials according to manufacturer's written instructions.
- Maintain containers used in mixing and applying coating in a clean condition, free of foreign materials and residue.
- Stir material before applying to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into the material. Remove film and, if necessary, strain coating material before using.
- Use only the type of thinners approved by manufacturer and only within recommended limits.
- Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

12. APPLICATION

- **General**

- Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
- Touch up on applied prime coats which have been damaged, and touch up bare areas prior to start of finish coats application.
- Slightly vary the color of succeeding coats.
 - Do not apply additional coats until the completed coat has been inspected and approved.
 - Only the inspected and approved coats of paint will be considered in determining the number of coats applied.
- Sand and dust between coats to remove defects visible to the unaided eye from a distance of five feet.
- On removable panels and hinged panels, paint the back sides to match the exposed sides.
- Apply high-performance coating according to manufacturer's written instructions.
- Use applicators and techniques best suited for the material being applied.
- Do not apply high-performance coatings over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable coating film.
- Coating surface treatments and finishes are indicated in the coating system descriptions.
- Provide finish coats compatible with primers used.
- The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convactor cover, grilles, covers for finned-tub radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.

- **Application Procedures**

- Apply coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
- The number of coats and film thickness required is the same regardless of application method.
- Block filler on new concrete masonry units is to be applied by roller and not spray applied for proper coverage. Insure all pours are filled before finish coat is applied.

- **Drying**

- Allow sufficient drying time between coats, modifying the period as recommended by the material manufacturer to suit adverse weather conditions.
- Consider oil-base and oleo-resinous solvent-type paint as dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb, and when the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.

- **Brush Applications**

- Brush out and work the brush coats into the surface to an even film.
- Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, and other surface imperfections will note be acceptable.

- **Spray Applications**

- Except as specifically otherwise approved by the Architect, confine spray application to metal framework and similar surfaces where brush work would be inferior.
- Where spray application is used, apply each coat to provide the hiding equivalent of brush coats.
- Do not double back with spray equipment to build up film thickness of two coats in one pass.

- **Completed Work**

- Match the approved Samples as to texture, color, and coverage. Remove, refinish, or repaint, work not in compliance with the specified requirements.

- **Miscellaneous Surfaces and Procedures**

- **Exposed Mechanical Items**

- Finish electric panels, access doors, conduits, pipes, ducts, grilles, registers, vents, and items of similar nature to match the adjacent wall and ceiling surfaces, or as directed by the Architect.

- **Interior**

- Use “smooth” finish where enamel is specified.

- **Exposed Vents**

- Apply two coats of heat-resistant paint approved by the Architect.

13. FIELD QUALITY CONTROL

- Owner reserves the right to invoke the following test procedure at any time and as often as owner deems necessary during the period when paint is being applied:
 - Owner will engage a qualified independent testing agency to sample paint material being used. Samples of material delivered to project will be taken, identified, sealed, and certified in the presence of Contractor.
 - Owner may direct Contractor to stop painting if test results show material being used does not comply with specified requirements. Contractor shall remove non-complying paint from project site, pay for testing, and repaint surfaces previously coated with the non-complying paint. If necessary, contractor may be required to remove non-complying paint from previously painted surfaces if, on repainting with specified paint, the two coating are incompatible.

14. CLEAN-UP

- At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
- Upon completion of painting, clean glass and paint spattered surfaces. Remove spattered paint by washing, scraping or other proper methods, and using care not to scratch or damage adjacent finished surfaces.
- Correct damaged by cleaning, repairing or replacing, and repainting, as acceptable to Architect.

15. PROTECTION

- Protect work of other trades, whether to be painted or not, against damage from painting.
- 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.

16. COATING SYSTEMS

- **Interior Paint Systems**

- **Concrete and Masonry (Other Than Concrete Unit Masonry)**

- Provide the following paint systems over interior concrete and brick masonry substrates:
 - Two Finish Coats Over a Primer.
 - Preparation: Allow concrete and masonry to cure for thirty (30) days under normal drying conditions. Remove all dirt, dust, grime, loose mortar and all other forms of contamination.
 - Primer: 4-603 Pittsburgh Paints; Interior/Exterior Alkali Resistant primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi-gloss acrylic enamel. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-411 Pittsburg Paint; Speed Hide interior Enamel Latex Eggshell. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

➤ **Existing Concrete and Masonry (Prefinished) (Other Than Concrete Unit Masonry)**

- Provide the following paint systems over interior concrete and brick masonry substrates:
 - Two finish coats over a primer.
 - Preparation: Lightly sand existing paint to a dull finish. Remove all dirt, dust, grime, loose mortar and all other forms of contamination.
 - Primer: 17-921 Pittsburg Paints; Seal Grip Interior/Exterior Acrylic primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi-gloss acrylic enamel: Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-411 Pittsburg Paint; Speed Hide interior Enamel Latex Eggshell. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

➤ **Concrete Unit Masonry**

- Provide the following finish systems over interior concrete masonry:
 - Two finish coats over block filler and a prime coat.
 - Preparation: Allow mortar to cure for thirty (30) days under normal drying conditions. Remove all dirt, dust, grime, loose mortar and all other forms of contamination.
 - Block Filler: 6-15 Pittsburgh Paints; Speed Hide interior/exterior Masonry latex Block Filler. Applied at a dry film thickness of not less than 6.0 to 12.5 mils (0.152 to 0.318 mm). To be applied by roller only not sprayed and back rolled. Insure all pours are filled before applying primer coat.
 - Primer: 4-603 Pittsburgh Paints; Interior/Exterior Alkali Resistant primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).

- Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi-gloss acrylic enamel. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-411 Pittsburg Paint; Speed Hide interior Enamel Latex Eggshell. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm)

➤ **Existing Concrete Unit Masonry (Prefinished)**

- Provide the following finish systems over interior concrete masonry:
 - Two finish coats over a primer.
 - Preparation: Lightly sand existing paint to a dull finish. Remove all dirt, dust, grime, loose mortar and all other forms of contamination.
 - Primer: 17-921 Pittsburgh Paints; Seal Grip Interior/Exterior Acrylic primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi gloss acrylic enamel. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

➤ **Gypsum Board**

- Provide the following finish systems over interior gypsum board surfaces:
 - Two finish coats over a primer.
 - Preparation: Remove all dirt, grime and all other forms of contamination.
 - Primer: 6-2 Pittsburg Paints; Speed Hide interior Quick-Drying latex sealer. Applied at a dry film thickness of not less than 1.0 mil (1.025 mm).

OR

- Primer: 6-1 Pittsburgh Paints; Speed Hide Interior Quick-Drying latex sealer. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

- Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi-gloss acrylic enamel. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-1110 Pittsburgh Paints; interior semi-gloss alkyd enamel finish. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

OR

- Finish: 6-411 Pittsburg Paint; Speed Hide interior Enamel Latex Eggshell. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm)

➤ **Existing Gypsum Board**

- Provide the following finish system over interior gypsum board surfaces:
 - Two finish coats over a primer.
 - Preparation: Lightly sand existing paint to a dull finish. Remove all dirt, grime and all other forms of contamination.
 - Primer: 17-921 Pittsburgh Paints; Seal Grip Interior/Exterior Acrylic primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi-gloss acrylic enamel. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-411 Pittsburgh Paints; Speed Hide interior Enamel Latex Eggshell. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-1110 Pittsburgh Paints; interior semi-gloss alkyd enamel finish. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

➤ **Plaster**

- Provide the following finish system over new interior plaster surfaces:
 - Two finish coats over a primer.
 - Preparation: Make necessary repairs with appropriate material and remove all dirt, grime, loose mortar and all forms of contamination.
 - Primer: 4-603 Pittsburgh Paints; Interior/Exterior Alkali Resistant primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: 6-8510 Pittsburgh Paints; Speed Hide Interior high luster semi-gloss acrylic enamel. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-411 Pittsburgh Paints; Speed Hide interior Enamel Latex Eggshell. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

OR

- Finish: 6-1110 Pittsburgh Paints; interior semi-gloss alkyd enamel finish. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

➤ **Existing and New, Wood and Hardboard**

- Provide the following paint finish systems over new interior wood surfaces with less than 12% moisture content as measured by a moisture meter approved by the Architect:
 - Two finish coats over a primer.
 - Preparation: Lightly sand with the grain of the wood, appropriately seal all knots and sap streaks, repair cracks and defects with the appropriate patching compounds.
 - Primer: 17-931 Pittsburg Paints; Seal Grip Stain Killing primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).

- Finish: 6-1110 Pittsburgh Paints; interior semi-gloss alkyd enamel finish. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

➤ **New Trim, Cabinets, or Wooden Doors With Clear Finish**

- Provide the following finish systems over new interior wood trim with less than 12% moisture content as measured by a moisture meter approved by the Architect:
 - Two finish coats over one stain and one sealer.
 - Preparation: Lightly sand with the grain of the wood using progressing grits of sandpaper until a smooth surface free of defects is achieved. Stir thoroughly, but do not shake. Sand lightly with fine sandpaper between coats to insure a smooth finish. Do not use steel wool.
 - Apply one coat of Min Wax stain to color selected by Architect.
 - Sealer: Apply one coat Olympic; Premium Interior Oil Base Sanding Sealer #41060.
 - Finish: Apply two coats Olympic; Premium Interior Fast Dry Varnish Gloss # 43888 or Satin 43887.

➤ **Ferrous Metal**

- Provide the following finish system over ferrous metal:
 - Two finish coats over primer.
 - Preparation: Remove all loose mill scale, rust and corrosion deposits and any other forms of contamination.
 - Primer: 6-208 (red) or 6-212 (white) Pittsburgh Paints; Speed Hide Interior/Exterior Rust Inhibitive Steel primer. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

- Finish: Coronado Rust Scat 31 Line gloss or 651 Line Satin. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

OR

- Primer: Pittsburgh Paint (spot prime exposed bare metal); 97-145 Series Pitt-guard DTR Epoxy Mastic. Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).
- Finish: Pittsburgh Paints; 95-812 Series Pitthane Ultra Gloss Urethane Enamel. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).

➤ **Existing Ferrous Metal**

- Provide the following finish systems over ferrous metal:
 - Two finish coats over primer.
 - Preparation: Lightly sand existing paint to a dull finish. Spot prime bare metal. Remove all dirt, dust, grime and all other forms of contamination.
 - Primer: 6-208 (red) or 6-212 (white) Pittsburgh Paints; Speed Hide Interior/Exterior Rust Inhibitive Steel primer. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm) or owner's choice. Owner reserves the right to substitute materials that are available.
 - Finish: Coronado Rust Scat 31 Line gloss or 651 Line Satin. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

OR

- Primer: 97-680 Series; Multi Prime, Low VOC Quick Dry Universal Primer. Applied at a dry film thickness of 3.0 to 4.0 mils.
- Finish: 97-812 Series; Pitthane Ultra Gloss Urethane Enamel. Applied at a dry film thickness of not less than 20 mils (0.051 mm).

➤ **Zinc-Coated Metal**

- Provide the following finish systems over interior Zinc-coated metal surfaces:
 - Two finish coats over primer.
 - Preparation: Remove grease and oils with a quality pre-paint cleaning solution. If any oxidation has formed, thoroughly sand and remove all forms of contamination.
 - Primer: 6-204 Pittsburgh paints; Speed Hide Interior/Exterior Zinc Chromate Metal primer. Applied at a dry film thickness of not less than 1.5 mils (0.050 mm).
 - Finish: Coronado Rust Scat 31; Line gloss or 651 Line Satin. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

➤ **Existing Zinc-Coated Metal (Prefinished)**

- Provide the following finish systems over interior zinc-coated metal surfaces:
 - Two finish coats over primer.
 - Preparation: Lightly sand existing paint to a dull finish. Spot prime bare metal. Remove all dirt, dust, grime and all other forms of contamination.
 - Primer: 17-931 Pittsburg Paints; Seal Grip Stain Killing primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: Coronado Rust Scat 31 Line gloss or 651 Line Satin: Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

- **Exterior Paint Systems**

- **Existing and New Concrete, Stucco, and Masonry (Other Than Concrete Unit Masonry)**

- Provide the following finish systems over exterior concrete, stucco, and brick masonry substrates:

- Two finish coats over a primer.
- Primer: 4-603 Pittsburgh Paints; Interior/Exterior Alkali Resistant primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
- Finish: Exterior low-luster acrylic finish; Pittsburgh Paints; 76-45 Series Sun proof Exterior House & Trim Satin – Acrylic Latex. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm).

- **Concrete Unit Masonry**

- Provide the following finish systems over exterior concrete unit masonry:

- Acrylic Finish: Two finish coats over block filler.
- Preparation: Allow mortar to cure for thirty (30) days under normal drying conditions. Remove all dirt, dust, grime, loose mortar and all other forms of contamination.
- Block Filler: 6-15 Pittsburgh Paints; Speed Hide interior/exterior masonry latex block filler. Applied at a dry film thickness of not less than 6.0 to 12.5 mils (0.152 to 0.318 mm). Rolled only not sprayed and back rolled.
- Primer: 4-603 Pittsburgh Paints; Interior/Exterior Alkali Resistant primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
- Finish: Exterior low-luster acrylic finish; Pittsburgh Paints; 76-45 Series Sun proof Exterior House & Trim Satin – Acrylic Latex. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

➤ **Exterior Concrete Unit Masonry**

- Provide the following finish systems over exterior concrete unit masonry:
 - Acrylic Finish: Two finish coats over block filler.
 - Preparation: Allow mortar to cure for thirty (30) days under normal drying conditions. Remove all dirt, dust, grime, loose mortar and all other forms of contamination.
 - Block Filler: 6 -15 Pittsburgh Paints; Speed Hide interior/exterior masonry latex block filler. Applied at a dry film thickness of not less than 6.0 to 12.5 mils (0.152 to 0.318 mm). Rolled only not sprayed and back rolled.
 - Primer: 4-603 Pittsburgh Paints; Interior/Exterior Alkali Resistant primer. Applied at a dry film thickness of not less than 1.2 mils (0.030 mm).
 - Finish: Exterior low-luster acrylic finish; Pittsburgh Paints; 76-45 Series Sun proof Exterior House & Trim Satin – Acrylic Latex. Applied at a dry film thickness of not less than 1.0 mil (0.025 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

➤ **Ferrous Metal**

- Provide the following finish systems over exterior ferrous metal. Primer is not required on shop-primed items.
 - Two finish coats over a rust-inhibitive primer.
 - Primer: 6-208 (red) or 6-212 (white) Pittsburgh Paints; Speed Hide Interior/Exterior Rust Inhibitive Steel primer. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
 - Finish: Coronado Rust Scat 31; Line gloss or 651 Line Satin. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

OR

- Primer: Pittsburgh Paint (spot prime exposed bare metal); 97-145 Series Pitt-guard DTR Epoxy Mastic. Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).
- Finish: Pittsburgh Paints; 95-812 Series; Pitthane Ultra Gloss Urethane Enamel. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).

➤ **Existing Ferrous Metal**

- Provide the following finish systems over exterior ferrous metal:
 - Two finish coats over a rust-inhibitive primer.
 - Primer: 6-208 (red) or 6-212 (white) Pittsburgh Paints; Speed Hide Interior/Exterior Rust Inhibitive Steel primer. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).
 - Finish: Coronado Rust Scat 31; Line gloss or 651 Line Satin. Applied at a dry film thickness of not less than 1.4 mil (0.036 mm) or owner's choice. Owner reserves the right to substitute materials that are available.

OR

- Primer: Pittsburgh Paint (spot prime exposed bare metal); 97-145 Series Pitt-guard DTR Epoxy Mastic. Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).
- Finish: Pittsburgh Paints 95-812 Series; Pitthane Ultra Gloss Urethane Enamel. Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).

17. SHOP DRAWINGS

- **Information to be included**

After project is completed, deliver to and go over with, the supervisor of the paint shop.

- **Copy of Room Finish Schedule of Paint Actually Used**

- Include Manufacturer's name for each paint used.
- Manufacturer's Product number for each paint used.
- Color name and number for each paint used.
- Formulas for custom mixed colors.
- Location where paint was used.
- Include MSDS for each product used.
- One new unopened gallon of each paint used and labeled.

Special paints may be required for certain projects as selected by PSU or architect. PSU and architect will choose which products and colors to be used.

Owner reserves the right to substitute materials that are available.