CONSTRUCTION STANDARD SPECIFICATION

SECTION 09900

PAINTING

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PAINTING

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes: This section includes surface preparation, painting, and finishing of exposed interior and exterior items and surfaces, including touch-up painting on prefinished items. Surface preparation, priming, and finish coats specified in this section are in addition to shop-priming and surface treatment specified under other sections.

1. Painting includes field painting of exposed bare and covered pipes and ducts (including color coding), hangers, exposed steel and iron supports, and surfaces of mechanical and electrical equipment that do not have a factory finish applied.

B. Definition: The term "paint" as used herein includes emulsions, primers, enamels, stains, varnishes, sealers, cement-emulsion filler, and other coatings, whether used as prime, intermediate, or finish coat. Standard coating terms defined in ASTM D 16 apply to this section.

C. Surfaces To Be Painted

1. Paint all exposed surfaces whether or not colors are designated in articles 3.06 and 3.07, except where surface or material is specifically indicated not to be painted or to remain natural.

2. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces.

3. If color or finish is not designated, the Sandia Delegated Representative (SDR) will select from standard colors or finishes available.

4. Surfaces listed in articles 3.06, 3.07 and 3.08, other than those listed in subarticles 1.01 D and E, will receive the surface preparation, paints, and number of coats prescribed in the schedule.

5. Existing work shall be painted where specified.

6. Electrical items to be painted include conduit, fittings, cabinets, panels, enclosures, junction and pull boxes, hangers and other associated Electrical items which are in “Public Spaces” and are therefore visible to the building

occupants. Painting shall not obscure manufacturer's labels or additional nameplates, nor conduit color banding, nor other identification.

6. Electrical items to be painted include, but are not limited to:

   a. Exposed conduit and fittings, (except in E below)

   b. Exposed cabinets, enclosures, junction boxes, and pull boxes

   c. Exposed hangers

7. Mechanical items to be painted include, but are not limited to:

   a. Exposed piping, vessels and equipment rooms shall be color-coated per Part 3.

   b. Exposed piping, ductwork and hangers and supports in occupied areas shall be painted to match adjacent surfaces.

   c. Exterior piping, uninsulated ductwork, and equipment shall be painted to match the building exterior.

   d. It is preferred that exterior equipment be factory finished with a color that blends with the building colors. Provide available color samples with equipment submittals.

D. Surfaces Not Requiring Painting

1. Prefinished items including the following factory-finished components:

   a. Metal toilet enclosures, unless otherwise specified

   b. Acoustic materials

   c. Architectural woodwork and casework

   d. Finished mechanical and electrical equipment

   e. Switchgear

   f. Distribution cabinets

   g. Metal roofing

   h. Galvanized components of prefabricated metal buildings

   i. Factory painted mechanical equipment with approved finishes.

2. Concealed surfaces including wall or ceiling surfaces in unfinished spaces.

   a. Foundation spaces

   b. Duct shafts

c. Elevator shafts

3. Factory finished surfaces such as:

a. Anodized aluminum

b. Stainless steel

c. Chromium plate

d. Glass

e. Bronze and brass

4. Operating parts including moving parts of operating equipment such as the following:

a. Valve and damper operators

b. Linkages

c. Sensing devices

d. Motor and fan shafts

e. regulators, controls, instruments.

5. Electrical conduit, boxes, panels and other associated electrical equipment located in Mechanical or Electrical equipment rooms, above ceilings, in chases, in basements or in other locations where they are not normally visible to the building occupants, unless otherwise specified.

E. Surfaces For Which Painting Is Prohibited:

1. Sprinkler heads.

2. Heat and smoke detectors.

3. Pre-painted Electrical equipment in equipment rooms including Lighting Inverters, VFCs, MCCs, Switchboards, Fire Alarm and Facility Control System (FCS) panels. (Exception – to touch up existing paint damaged during installation or other construction).

4. Conduit color banding or other identification.

5. Conduit and equipment in equipment rooms, unless otherwise specified.

6. Equipment in hazardous (classified) locations.

7. Labels: Do not paint over Underwriter's Laboratories, Factory Mutual, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

8. Concealed auto-releasing sprinkler head covers (i.e.; escutcheon plates).

9. Glass, brass, or chrome plated portions of fire protection system control valves (i.e., PIVs, gate valves) hydrants and fire department connections. (Reference NFPA 13 and Section 15310, "Automatic Sprinkler and Water Based Fire Protection Systems.")

1.02 REFERENCES

A. American Society of Testing and Materials (ASTM)

1. D 16 Standard Terminology for Paint, Related Coatings, Materials, and Applications

B. National Fire Protection Association (NFPA)

1. 13 Standard for the Installation of Sprinkler Systems

C. Code of Federal Regulations (CFR)

1. Title 29 Part 1910 Labor - Occupational Safety and Health Standards

2. Title 29 Part 1926 Safety and Health Regulations for Construction

D. Green Seal (GS)

1. GS-11 Paints

1.03 SUBMITTALS

A. The following shall be submitted in accordance with Section 01330, “Submittal Procedures":

1. Product Data: Manufacturer's catalog data, label analysis, volatile organic compound (VOC) content, and application instructions for each material proposed for use.

a. List the VOC content of each product.

b. List each material and cross-reference the specific coating and finish system and application. Identify each material by the manufacturer's catalog number and general classification.

c. Samples for initial color selection shall be in the form of manufacturer's color charts.

2. Qualification Data: For applicator.

3. Samples: For each color specified, apply a complete liquid glaze coating system to representative samples of the actual substrate to be used in the work and submit for approval. The approved sample panels will be used for quality control in applying the glaze coating system.

a. Provide a list of material and application for each coat of each sample. Label each sample as to location and application.

b. Submit samples on the following substrates for the SDR's review of color and texture only:

(1) Concrete: Provide two 4 inch x 4 inch samples for each color and finish.

(2) Concrete Masonry: Provide two 4 inch x 8 inch samples of masonry, with mortar joint in the center, for each color and finish.

(3) Gypsum Board: Provide one 6 inch x 6 inch sample of each color and finish.

(4) Painted Wood: Provide two 6 inch x 6 inch samples of each color and material on hardboard.

(5) Stained or Natural Wood: Provide two 4 inch x 8 inch samples of natural and stained wood finish on the actual wood surfaces.

(6) Ferrous Metal: Provide two 4 inch x 4 inch samples of flat metal and two 8 inch long samples of solid metal for each color and finish.

1.04 QUALITY ASSURANCE

A. Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer of the finish coats.

B. Coordination of Work: Review other sections in which primers are provided to ensure compatibility of the total coating systems for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.

1. Notify the SDR of problems anticipated using the materials specified.

C. Material Quality: Provide the manufacturer's best quality trade sale paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification are not acceptable.

1. Proprietary names used to designate colors or materials are not intended to imply that products named are required, or to exclude equal products of other manufacturers.

D. Applicator Qualification: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this project, whose work has resulted in applications with a record of successful in-service performance.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name, label, and the following information:

1. Product name or title of material

2. Product description (generic classification or binder type)

3. Manufacturer's stock number and date of manufacture

4. Contents by volume, for pigment and vehicle constituents

5. Thinning instructions

6. Application instructions

7. Color name and number

8. VOC content

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45°F . Store all flammable materials not in use in Underwriter's Laboratories, Inc., NFPA or other approved flammable storage cabinet. Reference OSHA 29 CFR 1926 if storage of combustible or flammable liquids exceeds 25 gallons . Maintain containers and cabinets used for storage in a clean condition, free of foreign materials and residue.

1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.06 PROJECT CONDITIONS

A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50°F and 90°F .

B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45°F and 95°F .

C. Do not apply paint in snow, rain, fog, or mist, when the relative humidity exceeds 85 percent, at temperatures less than 5°F above the dew point, or to damp or wet surfaces.

1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature and humidity limits specified by the manufacturer during application and drying periods.

PART 2 – PRODUCTS

2.01 MATERIALS

A. The following compounds shall not be used in paints or primers on any SNL projects:

1. Prohibited organic compounds

a.	Methylene chloride	k.	Di-n-butyl phthalate
b.	1,1,1-Trichloroethane	l.	Di-noctyl phthalate

c.	Benzene	m.	Diethyl phthalate
d.	Toluene (methylbenzene)	n.	Dimethyl phthalate
e.	Ethylbenzene	o.	Isophorone
f.	Vinyl chloride	p.	Formaldehyde
g.	Naphthalene	q.	Methyl ethyl ketone
h.	1,2-Dichlorobenzene	r.	Methyl isobutyl ketone
i.	Di (2-ethylhexyl) phthalate	s.	Acrolein
j.	Butyl benzyl phthalate	t.	Acrylonitrile

2. Prohibited metals (including their oxides)

a.	Antimony	d.	Lead
b.	Cadmium	e.	Mercury
c.	Hexavalent chromium		

2.02 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the work include, but are not limited to, the following:

1. Wellborn, A Dunn Edwards Company (W)

2. Benjamin Moore and Co. (BM)

3. Sherwin-Williams Company (S-W)

4. Visions Recycling, Inc. (VRI)

5. Kwal Paint (KW)

2.03 MASONRY BLOCK FILLER

A. High-Performance Latex Block Filler: Heavy-duty latex block fillers used for filling open, textured interior and exterior concrete masonry block before application of top coats.

B. Block filler used under high-performance polyamide epoxy coatings.

2.04 PRIMERS/SEALERS

A. Interior Latex Enamel: To be used as under-coat for smooth cementitious surfaces and bare wood.

1. VOC content shall comply with GS-11, or not exceed 150 grams per liter (g/L)

B. Interior Latex-Based White Primer: Latex-based primer coating to be used on interior gypsum drywall under a flat latex paint or a semi-gloss latex enamel.

C. Exterior Primer Coating: Exterior alkyd wood primer used for priming wood under alkyd enamels.

D. Rust-Inhibiting Primer: Quick-drying, rust-inhibiting primer used for priming ferrous metal on the exterior under high-gloss enamel and on the interior under enamel.

E. Galvanized Metal Primer: Primer used to prime interior and exterior zinc-coated (galvanized) metal surfaces.

F. Pigmented Sealer: Pigmented sealers over concrete used under high performance polyamide epoxy coatings.

2.05 EXTERIOR FINISH PAINT MATERIAL

A. Exterior Acrylic: Quick-drying, flat, acrylic paint used on the exterior over concrete, stucco, and masonry (including concrete masonry block).

1. VOC content shall comply with GS-11, or not exceed 100 g/L.

B. Alkyd Enamel: Weather-resistant, air-drying, semi-gloss enamel used on the exterior over prime-coated wood, and over primed ferrous metal surfaces.

1. VOC content shall comply with GS-11, or not exceed 200 g/L.

2.06 INTERIOR FINISH PAINT MATERIAL

A. Interior Semi-Gloss Latex Enamel: Semi-gloss, latex enamel used over a primer on concrete, masonry (including concrete masonry block), wood and hardboard, ferrous and zinc-coated (galvanized) metal surfaces, and over a primer on gypsum drywall.

1. VOC content shall comply with GS-11, or not exceed 150 g/L.

B. Latex-Based, Interior Flat Paint: Ready-mixed, latex-based paint used as a "size" on cotton or canvas covering over insulation.

1. VOC content shall comply with GS-11, or not exceed 50 g/L.

C. High-Performance Polyamide Epoxy Coating: High-gloss coating used over concrete and concrete masonry.

1. VOC content shall comply with GS-11, or not exceed 200 g/L.

2.07 MISCELLANEOUS WOOD FINISHING MATERIALS

A. Solvent Thinned Interior Wood Stain: Slow-penetrating solvent thinned wood stain for general use on interior wood surfaces under clear finishes.

B. Sanding Sealer: Manufacturer’s recommended sanding sealer, compatible with catalyzed polyurethane finish coat.

Sand Paper: 220 grit.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which painting will be performed for compliance with requirements for application of paint. Do not begin paint application until unsatisfactory conditions have been corrected. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

3.02 PREPARATION

A. General Procedures: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items in places that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items if necessary for complete painting of the items and adjacent surfaces. Clean surfaces before applying paint or surface treatments. Remove oil and grease prior to cleaning. Schedule cleaning and painting so that dust and other contaminants from the cleaning process will not fall on wet, newly-painted surfaces. Following completion of painting operations in each space or area, items shall be reinstalled in the same manner that they were removed.

B. Surface Preparation: Clean and prepare surfaces to be painted in accordance with the manufacturer's instructions for each particular substrate condition and as specified. Provide barrier coats over incompatible primers or remove and reprime. Notify SDR in writing when problems are anticipated in using the specified finish-coat material with substrates primed by others.

C. Cementitious Materials: Prepare concrete, concrete masonry block, and stucco to be painted. 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 of surface preparation.

1. Use abrasive blast-cleaning methods if recommended by the paint manufacturer.

2. Determine alkalinity and moisture content of surfaces by performing appropriate tests. Pay special attention to concrete masonry unit mortar joints and patched concrete surfaces. If surfaces are sufficiently alkaline to cause blistering and burning of finish paint, correct this condition before application. Do not paint surfaces where moisture content of surface to be painted exceeds that permitted in manufacturer's printed directions.

3. Clean concrete floors to be painted with a 5 percent solution of muriatic acid or other etching cleaner. Flush the floor with clean water to remove acid, neutralize with ammonia, and rinse; allow to dry and vacuum before painting.

D. Wood Materials: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper. Sand smooth surfaces exposed to view 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 application of primer.

2. Prime, stain, or seal wood to be painted immediately upon delivery. Prime edges, ends, faces, undersides, and backsides of wood, including cabinets, counters, cases, and paneling. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.

3. When transparent finish is required, back prime with spar varnish.

4. Back prime paneling on interior partitions where masonry, plaster, or other wet wall construction occurs on backside.

5. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately upon delivery to jobsite.

E. Ferrous Metals: Clean non-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 recommendations of the Steel Structures Painting Council.

1. Treat bare and sand-blasted or pickled clean metal with a metal treatment wash coat before priming.

2. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.

F. Galvanized Surfaces: Clean galvanized surfaces with non-petroleum-based solvents so that the surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

G. Gypsum Board: Surfaces shall be dry and shall have all loose dirt and dust removed by brushing with a soft brush, rubbing with a dry cloth, or vacuum-cleaning prior to application of first-coat material. Repair blemishes, irregularities and damaged surfaces.

H. Material Preparation: Carefully mix and prepare paint materials in accordance with the manufacturer's directions.

1. Maintain containers used in mixing and application of 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. Remove film and, if necessary, strain material before using.

3. Use only thinners approved by the paint manufacturer, and only within recommended limits. Use odorless thinner with alkyd enamel.

3.03 APPLICATION

A. General

1. Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied. Spray applications will require prior approval from the SDR.

2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.

3. Surface treatments and finishes shall be as indicated in articles 3.06, 3.07 and 3.08 or as selected by SDR.

4. Provide finish coats that are compatible with primers used.

5. The number of coats and film thickness required is the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce an even, smooth surface in accordance with the manufacturer's directions.

6. Apply additional coats when undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

7. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned tube radiation, grilles, and similar components are in place. Extend coatings in these areas as required to maintain the system integrity and provide desired protection.

8. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture with prime coat only before final installation of equipment.

9. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non-specular black paint.

10. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.

11. Finish exterior doors on tops, bottoms, and side edges same as exterior faces.

12. Sand lightly between each succeeding enamel or varnish coat.

13. Omit primer on metal surfaces that have been shop-primed and touch up painted.

B. 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. Allow time between successive coats to permit proper drying per manufacturer's recommendations.

C. Minimum Coating Thickness: Apply materials at not less than the manufacturer's recommended spreading rate. Provide a total dry film thickness of the entire system as recommended by the manufacturer or as specified, whichever is greater.

D. Mixing and Thinning: Unless otherwise recommended by the manufacturer, paints may be thinned immediately prior to application with an approved manufacturer's thinner and used only within recommended limits when necessary to suit conditions of surface temperature, weather and application methods. The use of thinner shall not relieve the Contractor from obtaining complete hiding, full film thickness, or required gloss. Paints of different manufacturers shall not be mixed.

E. Mechanical Work: Color-coding of mechanical piping systems is limited to those items exposed in mechanical equipment rooms and as noted on drawings. Paint shall be applied directly to the insulation and pipe on systems which are not insulated. Label pipe systems appropriately after painting. Painting of other mechanical items is limited to those exposed in mechanical equipment rooms and occupied spaces except as otherwise indicated. Use paint and color specified or other manufacturer's equivalent.

F. Items to be painted and color-coded include the following:

1. Chilled Water Systems: Piping, pumps, chillers, air separators and expansion tank. Wellborn #Q13-64U, Dark Blue.

2. Tower Water System: Piping and pumps. Wellborn #Q13-12T, Light Blue.

3. Steam and Condensate: Piping, flash tank, condensate pump. Wellborn #Q6-23T, Yellow.

4. Heating Hot Water System: Piping, pumps, air separator, heat exchanger and expansion tank. Wellborn #Q3-66U, Orange.

5. Compressed Air System: Piping and receiver tank. Wellborn #Q14-57T, Gray.

6. Fire Protection System: Piping, valves, alarms and drains. "Fire Protection Red" (refer to article 3.08 A and B).

7. Natural Gas: Wellborn #Q6-23T, Yellow.

8. Domestic Cold Water: Wellborn #Q10-66U, Dark Green.

9. Domestic Hot Water: Piping, pumps and heat exchanger. Wellborn #Q9-21P, Light Green.

10. Non-Potable Water: Wellborn #Q3-66U, Orange.

F. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled. Apply at a dry film thickness of not less than that recommended by the manufacturer.

G. Prime Coats: Before application of finish coats, apply a prime coat of material as recommended by the manufacturer to material that is required to be painted or finished and 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 assure a finish coat with no burn-through or other defects due to insufficient sealing.

H. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections are not acceptable.

I. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections. Provide satin finish for final coats.

J. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not in compliance with specified requirements.

3.04 CLEANING

A. Cleanup: At the end of each work day, completely remove empty cans, rags, tools, rubbish, and other discarded paint materials from the project site.

B. Do not clean tools, brushes, applicators, and equipment at the project site unless specifically authorized by the SDR. Do not use sinks in restrooms, janitors' closets, or in locations where food is prepared.

C. Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping, using care not to scratch or damage adjacent finished surfaces.

3.05 PROTECTION

A. Protect work of other trades, whether to be painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to the SDR.

B. Provide "wet paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.06 EXTERIOR PAINT SCHEDULE

A. Provide the following paint systems for the various substrates indicated.

1. No primer or block filler is required on previously painted surfaces, unless specified on Contract documents or where alkaline, moisture or freeze-thaw cycles have caused blistering or peeling.

B. Concrete, Stucco, and Masonry (other than concrete masonry units):

1. Lusterless (Flat) Acrylic Finish: Two (2) coats with total dry film thickness per manufacturer's recommendations.

a. First Coat: Exterior Acrylic

b. Second Coat: Exterior Acrylic

C. Concrete Masonry Units

1. Lusterless (Flat) Acrylic Finish: Two (2) coats over block filler with total dry film thickness (filler excluded) per manufacturer's recommendations.

a. Block Filler: Latex Block Filler

b. First Coat: Exterior Acrylic

c. Second Coat: Exterior Acrylic

D. Wood

1. Alkyd Finish: Two (2) finish coats over primer with total dry film thickness per manufacturer's recommendations.

a. Primer: Exterior Primer Coating

b. First Coat: Alkyd Enamel

c. Second Coat: Alkyd Enamel

E. Ferrous Metal: Primer is not required on shop-primed items.

1. Alkyd Enamel: Two (2) finish coats over primer.

a. Primer: Rust-Inhibiting Primer

b. First Coat: Alkyd Enamel

c. Second Coat: Alkyd Enamel

F. Galvanized Metal

1. Alkyd Enamel: Two (2) finish coats over primer.

a. Primer: Galvanized Metal Primer

b. First Coat: Alkyd Enamel

c. Second Coat: Alkyd Enamel

3.07 INTERIOR PAINT SCHEDULE

A. General: Provide the following paint systems for the various substrates, as indicated.

1. No primer or block filler is required on previously painted surfaces.

B. Concrete and Masonry (other than concrete masonry units):

1. Semi-Gloss Enamel Finish: Three (3) coats with total dry film thickness per manufacturer's recommendations.

a. Primer: Interior Latex Enamel

b. Undercoat: Interior Semi-Gloss Latex Enamel

c. Finish Coat: Interior Semi-Gloss Latex Enamel

2. Polyamide Epoxy Coating: Two (2) coats of polyamide epoxy coating over pigmented sealer.

a. Sealer Coat: Manufacturer's recommended pigmented sealer

b. Intermediate Coat: Polyamide Epoxy

c. Finish Coat: Polyamide Epoxy

C. Concrete Masonry Units

1. Semi-Gloss Alkyd Enamel Finish: Two (2) coats over filled surface with total dry film thickness (filler excluded) per manufacturer's recommendations.

a. Block Filler: Latex Block Filler

b. Intermediate Coat: Interior Semi-Gloss Latex Enamel

c. Finish Coat: Interior Semi-Gloss Latex Enamel

2. Polyamide Epoxy Coating: Two (2) coats of polyamide epoxy coating over concrete masonry block filler.

a. Primer Coat: Latex Block Filler

b. Intermediate Coat: Polyamide Epoxy

c. Finish Coat: Polyamide Epoxy

D. Gypsum Drywall Systems

1. Semi-Gloss Latex Enamel Finish: Three (3) coats (drywall decoration primer excluded) with total dry film thickness per manufacturer's recommendations.

a. Primer: Interior Latex-Based White Primer

b. Intermediate Coat: Interior Semi-Gloss Latex Enamel

c. Finish Coat: Interior Semi-Gloss Latex Enamel

E. Woodwork and Hardboard

1. Semi-Gloss Enamel Finish: Three (3) coats.

a. Primer: Interior Latex Enamel

b. Intermediate Coat: Interior Semi-Gloss Latex Enamel

c. Finish Coat: Interior Semi-Gloss Latex Enamel

F. Stained Woodwork

1. Stained, Polyurethane Finish: Premium grade, two (2) coats over stain on open-grain wood.

a. Sanding: Sand (220 Grit)

b. Stain Coat: Solvent Thinned Interior Wood Stain

c. First Coat: Manufacturer's Recommended Sanding Sealer

d. Second Coat: Catalyzed Polyurethane

G. Natural-Finish Woodwork

1. Polyurethane Finish: Premium grade, two (2) finish coats on open-grain wood.

a. Sanding: Sand (220 Grit)

b. First Coat: Manufacturer's Recommended Sanding Sealer

c. Second Coat: Catalyzed Polyurethane

H. Ferrous Metal

1. Semi-Gloss Enamel Finish: Two (2) coats over primer with total dry film thickness per manufacturer's recommendations.

a. Primer: Rust-Inhibiting Primer

b. Intermediate Coat: Interior Semi-Gloss Latex Enamel

c. Finish Coat: Interior Semi-Gloss Latex Enamel

I. Zinc-Coated Metal

1. Semi-Gloss Finish: Two (2) coats over primer, with total dry film thickness not less than 2.5 mils (0.064 mm).

a. Primer: Galvanized Metal Primer

b. Intermediate Coat: Interior Semi-Gloss Latex Enamel

c. Finish Coat: Interior Semi-Gloss Latex Enamel

J. Cotton or Canvas Covering over Insulation

1. First Coat: Exterior Semi-Gloss Latex Enamel

2. Second Coat: Exterior Semi-Gloss Latex Enamel

3.08 FIRE PROTECTION PAINTING

A. Contractor shall paint those portions of fire protection as required by Sandia National Laboratories (SNL) as follows, except as required in Section 1.01, E.1-5:

B. Color Coding of Outdoor Water-Based Fire Protection System

1. Hydrants: All fire hydrants shall be painted "Traffic Yellow." The top portion (bonnet) shall be reflective (glass beaded) paint.

2. Post Indicator Valves: Sprinkler controlled post indicator valves shall be painted "Fire Protection Red." Water distribution system division post indicator valves shall be painted "Traffic Yellow."

3. Water Motor Alarms: All water motor alarms, gongs and sprinkler system drains through walls shall be painted "Fire Protection Red."

4. Sprinkler Piping: All sprinkler piping which is exposed to exterior surface corrosion shall be painted "Fire Protection Red." Reference OSHA 29 CFR 1910 159(C).6.

- END OF SECTION -