

SECTION 09900

PAINTING

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope:

1. This Section includes the surface preparation and application of painting and related work in locations indicated on the Drawings and specified herein.
 - a. Review all work to be accomplished with project representative to prevent misunderstandings.
 - b. Furnish all services, tools and equipment as needed.
 - c. Furnish and install all materials and labor necessary to paint the surfaces as specified herein.
 - d. Submit a "Partial Waiver of Lien" from the paint supplier prior to each draw and a full "Waiver of Lien" prior to final payment to render the project free of any liens.
 - e. Do not sub-contract or assign any portion of this work without Owner's prior written approval.
 - f. Work in general includes surface preparation, surface repair, caulking, sealants, patching and application of the paint coating to the substrates and systems outlined in this specification.
2. All paint products shall be provided by a single manufacturer.
3. Provide sample wall representative of proposed painting system(s) for Architect's and/or Owner's review and approval. Approved sample wall shall become the basis of comparison for all painting work.

1.02 RELATED WORK

- A. CONCRETE UNIT MASONRY: Section 04810.
- B. METAL FABRICATIONS: Section 05500.
- C. FINISH CARPENTRY AND MILLWORK: Section 06200.
- D. JOINT SEALANTS: Section 07900.
- E. STEEL DOORS & FRAMES: Section 08110.
- F. PORTLAND CEMENT PLASTER (STUCCO): Section 09220.
- G. GYPSUM WALLBOARD: Section 09250.
- H. TILE WORK: Section 09300.
- I. TEX-COTE EXTERIOR COATINGS: Section 09960

1.03 QUALITY ASSURANCE

- A. All surfaces of fabricated items that are left unfinished by the requirements of other Sections shall be painted under this Section. All work specified in this Section shall be in addition to shop and mill coats, priming and field coats which are specified in other Sections.
- B. Perform all touching up of shop coats and field coats of paint on structural steel and miscellaneous steel or iron as required and/or specified.
- C. Aluminum, steel, stainless steel, copper, bronze, chromium plating, nickel, monel metal, lead, lead coated copper and other surfaces with factory finishes shall not be painted or finished, except as otherwise specified.
- D. Remove and re-finish or otherwise correct in a manner approved by the Architect all work under this Section which peels, crazes, blisters, fails to adhere or otherwise fails to properly serve its intended purpose at no additional cost to the Owner.
- E. Paint only in dry weather when the temperature is 50 degrees Fahrenheit or higher. Stop exterior work early to permit paint film to set up before condensation caused by night temperature drops occur. Do not begin painting until the surfaces are moisture free.
- F. Do not varnish or enamel in direct sunlight.
- G. Keep the paint at room temperature.
- H. Sweep dust, dirt, and debris away before painting.
- I. Execute work in accordance with label directions. Coating applications shall be made in strict conformance to this specification and to the manufacturer's paint instructions on the labels and product data sheets.
- J. Paint only dry wood (less than 15% moisture). Cementitious substrates' moisture content shall not exceed 25% prior to coating application.
- K. All work shall be accomplished by skilled workmen familiar with and trained to do this type of work; moreover, they shall be qualified to operate or use the equipment and rigging needed to accomplish this work.
- L. All equipment shall be in sound working condition and must meet all OSHA Safety Standards. All workmen shall be aware of and trained in the operation of all safety equipment required for this Project.
- M. Materials shall be applied evenly and free of runs, sags, pinholes, or lap marks.
- N. Only the manufacturer's thinners may be used to thin the respective products and, in the amounts prescribed.
- O. All application tools and equipment shall be in good working order and suitable for proper application.
- P. All shrubbery and sprinkler systems shall be fully protected against damage during each stage of the painting project.
- Q. All exterior substrates designated not to receive paint coatings shall be kept free of paint residue. e.g. windows, doors, foliage etc...

- R. Normal safety signs, necessary lighting and temporary fencing around work areas shall be installed and maintained in accordance with OSHA requirements while the work is in progress.
- S. Advise the Contractor and Owner of those areas in which painting work is to be performed sufficiently in advance of the work schedule to permit the Contractor and Owner to prepare for the work, advise employees, move vehicles, etc.
- T. Only licensed contractors holding a valid license issued in their own name by the appropriate county licensing board are qualified to bid on this project.
- U. The contractor shall provide insurance certificates and maintain insurance coverages, i.e. workmen's compensation, bodily injury, property damage and automotive damage, for this project.
- V. The contractor shall comply with all fire and safety regulations.
- W. Painting contractor agrees not to sub-contract or assign any portion of this work without Owner's prior written approval.

1.04 PRODUCT DELIVERY AND STORAGE

- A. All materials shall be delivered to the Site in manufacturers' sealed packages, with labels intact.
- B. Confine all apparatus, materials storage, and operations of workmen to limits indicated by Contractor. All materials used on the job shall be stored in a single place designated by the Contractor. Such storage shall be kept clean and assume liability for damage to surrounding areas.
- C. Inflammable material and/or fire hazard waste shall be stored, handled and used in an approved manner and shall be removed from the site daily.

1.05 SUBMITTALS

- A. Samples:
 - 1. Submit full color chip line for each type of paint specified, for color selection(s) by the Architect.
 - 2. Supply draw-downs for each color selected.
- B. Product Data:
 - 1. Submit manufacturer's product data for each type of product used.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Products – Basis of Design: Provide paint products indicated on Drawings as manufactured by Sherwin-Williams Company.
- B. Ready-mixed paints, both exterior and interior, varnish, stains, coatings, and waxes shall be first-line (best quality grade) retail products.
- C. Thinners and additives shall be of types recommended by the paint manufacturer.
- D. The use of lead-containing paint is not permitted.
- E. The paints specified herein are known to be suitable and will be enforced as the required standards of quality of this work.

PART 3 - EXECUTION

3.01 INSPECTION, SAMPLES AND PROJECT STANDARDS

- A. Examine the areas and conditions under which painting is to be applied. Do not proceed with painting work until unsatisfactory conditions have been corrected.
- B. A sample area showing each phase of work shall be applied in a "stepped-out" fashion and checked by the Architect and/or Owner. Upon acceptance this will serve as the job standard for the remainder of that phase of work. This will also prevent misunderstanding as to interpretation of this specification's standards.
- C. Advise the Contractor, Architect and/or Owner with enough lead time prior to beginning each phase of work for their inspection to not cause a delay of work.
- D. Use a wet film thickness gauge to check application thickness as work proceeds. This method checked against the volume solids and coverage rates is the best guide in determining what the dry film thickness will be.

3.02 COLORS

- A. Colors shall be as indicated on Drawings
- B. Pigmented prime coats may be tinted to approximate shade of the final coat; some contrast is required.

3.03 STORAGE AND USE OF PREMISES

- A. The painting contractor shall confine his apparatus, materials storage, and operations of his workmen to limits indicated by project representative. All materials used on the job shall be stored in a single place designated by the Project Representative. Such storage shall be kept clean and the painting contractor shall be liable for damage to surrounding areas.
- B. Inflammable material and/or fire hazard waste shall be stored, handled, and used in an approved manner and shall be removed from the site daily.

3.04 PREPARATION

- A. Each surface shall be cleaned and prepared as specified. Should any surface be found unsuitable to produce a proper paint or sealant finish, the project representative shall be notified in writing and no material shall be applied until the unsuitable surfaces have been made satisfactory.
- B. Surfaces to be painted shall be clean, smooth, free from scratches and dust and thoroughly dry. Wood surfaces shall be well sanded before painting work is started.
- C. Concrete surfaces shall be cleaned, grouted, rubbed and pointed, water flushed clean and free of all dust, oily grease and laitance, and allowed to dry prior to painting.
- D. Steel and Iron shall be free from grease, rust, scale and dust. Touch up any chipped or abraded places on items that have been shop coated. Where steel and iron have heavy coating of scale, it shall be removed by wire brush or sand blasting necessary to produce a satisfactory surface for painting.

3.05 CONCEALED CONDITIONS

- A. Occasionally, cleaning techniques may develop or reveal unforeseen conditions which require

additional labor and materials. Notify the General Contractor, Architect and/or Owner to properly correcting the condition.

3.06 CLEANING AND MILDEW CONTROL

- A. All exterior surfaces to be painted shall be pressure cleaned to remove dirt, mildew, chalked paint and any foreign materials deterrent to the new finish.
- B. All exterior surfaces to be painted shall be water blasted at 2500 PSI or more depending upon substrate's condition (see C. below) with the following solution to remove mildew, mildew spores, and other surface contaminants.
- C. If a Dry-vit type system is present a lower pressure shall be used so as not to damage the exterior wall face.

3.07 CLEANING SOLUTION

- A. Mix 1 part bleach to 3 parts water - mix thoroughly. Let solution remain on surface 15 - 20 minutes and then thoroughly rinse with potable water. If dirt remains, wash with a non-sudsing detergent (i.e. Soilax). Rinse thoroughly with potable water and allow the surface to dry before painting.
- B. All loose and scaling paint not removed by pressure washing shall be removed by wire brushing or other suitable power tool cleaning.

3.08 MASONRY SUBSTRATES

- A. Prior to any masonry patching all cracks shall be sounded out, cut out and sealed with the specified bonding sealer.
- B. Minor cracks (hairline) in stucco, Dry-vit type system, exposed block, or poured concrete shall be patched with Elastomeric Patching Compound. Finished patches shall be closely matched to existing stucco surface.
 - 1. A hairline crack is defined as any visible crack no wider than 1/8 inch.
- C. Masonry cracks repaired using Elastomeric Patching Compound shall result in a minimum 1/8" build-up over the cracked areas. These areas shall then be feathered and textured to match adjacent surfaces.
- D. All masonry cracks of more than 1/8 inch in width shall be cut out, cleaned, primed, neoprene rope installed and then filled with One Part Polyurethane Sealant to meet federal specifications TT-S-00230C, Type II, Class A, USDA and FDA Approved.
- E. After the sealant has completely cured, apply Elastomeric Patching Compound with a minimum 1/8-inch build-up of material over the cracked areas to match adjacent surfaces in texture and uniformity.
- F. Remove all tape, patching compound, caulking or sealant in any previously patched areas that have lost adhesion to the substrate. Repatch and repaint as specified. (All silicone caulking or sealant shall be removed.)
- G. Unforeseen conditions can arise while doing the normal masonry crack repair. Should any area(s) be discovered indicating loose, disbonding or hollow sounding masonry, notify the Contractor, Architect and/or Owner immediately.

3.09 WOOD SUBSTRATES

- A. Painted wood surfaces shall be carefully inspected for evidence of deterioration or surface

imperfections. Sandpaper any hard, glossy surface to ensure proper adhesion. Fill nail holes, imperfections, and cracks with putty. Edges, corners and raised grain shall be eased by sanding.

1. Wood Substrates with Ferrous Fasteners:

- a. All rusty nail heads shall be treated with a phosphoric acid-based solution counter-sunk and puttied with an oil-based putty or spot primed to prevent further bleed

3.10 FERROUS METAL SUBSTRATES

- A. Metals showing signs of rust degradation shall be power tool cleaned per SSPC-SP 3, treated with a phosphoric acid based cleaner and pre-paint conditioner that leaves the surface chemically clean and corrosion free and primed with a rust inhibitive primer.

3.11 PROTECTION

- A. Adjacent fixtures and hardware shall be removed during the painting application.
- B. Particular care shall be taken using clean drop cloths, masking and other suitable means, to protect adjoining surfaces, fixtures, and materials of all kinds. The painting applicator shall be held responsible for, and shall repair, all damage resulting from the painting operation.
- C. All ceiling and soffit overhead painting shall be applied only while the floor is completely and continuously covered with drop cloths.

3.12 APPLICATION

- A. Paints shall be applied in the colors and minimum number of coats scheduled herein and at the square foot coverage as stated in the paint manufacturer's printed specifications. It is intended that paint so applied shall cover to the satisfaction of the Architect or additional coats shall be applied until approval is obtained.
- B. Paints shall not be applied to surfaces which show a moisture content greater than 15 percent as determined by an electronic moisture meter.
- C. Paints shall not be applied when the temperature falls below 45 degrees F., in damp, rainy weather, or when the relative humidity exceeds 85 percent.
- D. Paint shall be evenly spread and well distributed. The finish coats shall be free from any noticeable laps, brush marks, streaks, runs, sags, wrinkles, and shiners.
- E. All wood surfaces shall be thoroughly sanded between coats as required for a flaw-free finish.
- F. Follow instructions for metal primer (see 3.16 P. below).

3.13 BACK PRIMING

- A. All wood backs to be placed against concrete or masonry (except pressure treated wood) shall be painted with a sealer coat of paint or clear varnish before installation

3.14 DESTROYING WASTE

- A. At the end of each day, all cloths and waste materials which have been used in preparation and application of inflammable paint materials shall be destroyed or placed in closed metal containers. Under no circumstances shall any waste be emptied into plumbing fixtures, drains, or clean-outs of the plumbing systems of the building. Waste shall not be allowed to accumulate on the Site.

3.15 PAINTING OF PIPING AND FIRE RATED PARTITIONS FOR IDENTIFICATION

- A. Exposed piping, piping concealed in accessible pipe spaces and piping behind access panels shall be identified to designate service.
- B. Legend shall be stencil applied (painted on) at 40 feet spacing on straight runs where pipes pass through walls or floors and regulators, strainers, and clean-outs (except valves and fittings on plumbing fixtures and equipment).
- C. Legend shall give name in full or abbreviations. Size of stenciled identity lettering shall vary with the diameter of pipe covering as follows:
 - 1. Up to 1" 1/2" high letters.
 - 2. Above 1" 3/4" high letters.
- D. Fire rated walls, fire rated partitions and smoke partitions shall be identified by 3/4" high red lettering which identifies type and rating. Identifying marks shall be spaced 20'-0" on center maximum. Identifying marks are required above suspended ceilings in "dressed" areas and at 8'-0" to 10'-0" above floor in "back of house" or non-finished areas. Such identifying marks are not required in inaccessible spaces above hard ceilings in any "dressed" areas.

3.16 PAINTING SCHEDULE: INTERIOR FINISH SCHEDULE:

Interior Finishes

Drywall Showroom & Office Areas

Primer: B28W02600 - ProMar® 200 Zero VOC Interior Latex Primer White

2 Coats: B20W12651 - ProMar® 200 Zero VOC Interior Latex Eg-Shel

Drywall Service Areas

Primer: B70W00710 - Dura Pox Water Based Epoxy Primer Off White

2 Coats: B62W00811 - Epolon II Multi-Mil Epoxy Coating

Galvanized Metal Deck

2 Coats: B42W00002 - Waterborne Acrylic Dry Fall Eg-Shel White

Steel Deck

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B42W00002 - Waterborne Acrylic Dry Fall Eg-Shel White

Ductwork (exposed)

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Steel/Ferrous Metal Support Members

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Hollow Metal Doors & Frames (painted)

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Wood - Interior Stained

First Coat: 725000000 - MW PERFORMANCE SERIES

2 Coats: 014444000 - Minwax® Polycrylic® Water-Based Protective Finish Semi-Gloss Clear

Concrete Floors Clear Sealer

2 Coats: 50.100204 - CLRSHLD WBCLRSLR WLK

Plaster Walls

Primer: B28W02600 - ProMar® 200 Zero VOC Interior Latex Primer White

2 Coats: A86W02151 - SPR INT FLAT

Concrete Floors Striping

Finish: B97YD2467 - Pro-Park Waterborne Traffic Marking Paint Yellow

Stucco

Primer: LX02W0050 - LXN C&M PRIMER WH

2 Coats: B20W12651 - ProMar® 200 Zero VOC Interior Latex Eg-Shel

PAINTING SCHEDULE: EXTERIOR FINISH SCHEDULE

Exterior Finishes

Precast Concrete Tilt Walls (or Tex Cote)

Primer: LX02W0050 - LXN C&M PRIMER WH

Second Coat: CF17W0811 - CNFLX WB MEDIUM

Finish: A89W02151 - SPR EXT SATIN

Ferrous Metal & Non-Ferrous Metals

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B53W02151 - PI WB ALK UR SG

Hollow Metal Doors & Frames (painted)

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Ferrous Metal on Roof

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Aluminum (Gutters, Downspouts, and Dumpster Gates as required)

Primer: B71Y00001 - DTM Wash Primer Yellow-Green Yellow-Green

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Steel/Ferrous Metal Bollards

Primer: B66W01310 - PI PROCRYL PR OF W

2 Coats: B66W00651 - Pro Industrial High Performance Acrylic - Semi-Gloss

Plaster

Primer: LX02W0050 - LXN C&M PRIMER WH

2 Coats: A80W02151 - SPR EXT FLAT

Pavement Striped

Finish: B97YD2467 - Pro-Park Waterborne Traffic Marking Paint White.

Block (Cinder and Concrete)

Primer: B25W00025 - PrepRite® Interior/Exterior Latex Block Filler White

2 Coats: A89W02151 - SPR EXT SATIN

END OF SECTION 09900