

SECTION 09900 PAINTING

09900.0100 GENERAL

1. The work under this section is subject to all applicable provisions of the "Bidding Requirements", the "Conditions of the Contract", "Contract Forms" and Division 1 - "General Requirements", which form a part hereof whether attached hereto or not.

09900.0200 WORK INCLUDED

1. Include all labor, materials and appliances and perform all operations in connection with painting and finishing and all related work, complete, in strict accordance with the Contract Drawings, the Schedule of Finishes and as specified herein.
2. Examine the Specifications and Drawings for the various other trades. Let it be understood that all surfaces normally requiring painting or colored finish that are left unfinished by the requirements of other Specifications shall be painted or finished as part of this Section.
3. All exposed surfaces, interior and exterior, of every description except glass and not designated in the contract drawings to be finished with a special coating as specified herein or to be factory finished or pre-finished, shall be finished as part of the work of this Section, all as required for a complete job or as specified herein including, but not limited to the following:
 - a. Painting of all exterior metal work excepting aluminum, copper and other non-ferrous metals unless otherwise noted on the drawings.
 - b. Painting of all interior metal work, trims, hollow metal work not factory finished as part of this contract and all exposed miscellaneous metal, etc., excepting non-ferrous metals.
 - c. Interior painting and/or finishing of all gypsum board, doors, miscellaneous trim, door frames, moulding, concrete block walls, etc.
 - d. Exterior wood trim, fascias, soffits, wood siding, doors, etc., to be finished as hereinafter specified and as noted on drawings.
 - e. Painting of all ferrous metal access panels, ducts, registers and grilles and convactor enclosures, piping, conduit and component parts, etc., not factory finished. The inside of all ducts at register and grille openings shall be painted black.
 - f. Paint colors, textures, finishes, etc., shall be as selected by the Architect.

1. Painting and finishing products for use in work shall be standard best or top brands produced for each particular kind of material required, as manufactured by Pittsburgh Plate Glass Co., Pratt and Lambert, Benjamin Moore & Co. or Sherwin Williams. All materials shall bear original manufacturer's identifying label on each container.
 - a. Each kind of coating for the several types of paint finish shall be factory mixed to match samples and colors and consistencies for immediate application to the surface involved.
2. Materials for succeeding coats on any one surface shall be products of same manufacturer furnishing first or primer-sealer coat for that particular surface, except where red lead paint or other metal primer is used. Compatibility with finish coats must be verified before application of finish.
3. Raw linseed oil: ASTM D-234
4. Boiled linseed oil: ASTM D-260
5. Turpentine: ASTM D-13
6. Shellac: Pure, white or orange gum, cut in pure denatured alcohol, using 5 pounds of gum to gallon. Orange shellac shall be used for painting over knots, sap and resinous woods.
7. Spackling Compound: Finely ground, grit-free; when dry shall set easily and take any finish.
8. Putty: ASTM D-219, Class "B", white lead whiting putty.
9. Patching Plaster: White, non-shrinking, containing no lime; uniform in set and quality.
10. Tinting colors: Where required for oil paint shall be ground in pure linseed oil. Colors shall be non-fading and shall be as recommended by manufacturer of tinting coating.
11. Required Samples and Colors:
 - a. Colors: As selected by the Architect. Obtain approval before starting work. Color shall include up to three (3) colors per area to allow for accent walls & soffits, etc.
 - b. Following approval of manufacturers, submit samples of materials described

- herein in one pint containers. Approval of samples will be based upon information from paint manufacturers certifying that products proposed for use are standard, best or top brands produced by them for purpose intended and are readily obtainable as such in "over the counter" sales to consumer market. Do not proceed with work until samples are approved.
- c. Before placing orders for materials, submit name or names of paint manufacturers and brands for approval. Such submission to be made within 30 days after approval.
 - d. Do not construe approval of advanced samples as total guarantee of acceptance of materials as they will be subjected to field inspection, from time to time, as work progresses.
 - e. Where directed, prepare a Schedule of Colors as selected by the Architect. Prepare sample panels in accordance with the Schedule of Colors to be approved before work proceeds. panels will be considered standard for workmanship throughout.

12. Other materials as hereinafter specified:

- a. All materials used shall be in compliance with current Federal Regulations concerning use of lead in paint.
- b. All paints, stains and coatings applied shall be in conformance with current Federal and/or local regulations regarding hydrocarbon emissions. (air pollution, etc.)

09900.0400 RELATED WORK SPECIFIED ELSEWHERE

- 1. Priming, backpainting, factory finishing, painting of concealed work as described under various Divisions of the Contract.
- 2. Finishes - Division 9.

09900.0500 GENERAL REQUIREMENTS

- 1. Order materials in advance, in large enough quantities. Deliver in unopened containers in ample time to facilitate work.
- 2. Store materials on premises where directed. Keep storage space clean and accessible. Remove oil, paint soaked rags, waste, overall and the like at close of each day's work. Take every precaution to avoid damage by fire.
- 3. Provide suitable coverings, clean drop cloths and the like to protect work of this

Section, adjacent surfaces, equipment, objects such as adjacent woodwork, glass and metal work and the like.

4. Upon completion of work, remove from premises surplus materials, protective coverings, empty containers, rags, dirt, other debris resulting from work of this Section. Retouch finished work where ever necessary, as directed. Remove daubs, paint spatters and the like from walls, floors, glass, metal and other surfaces.
5. The Contractor shall take every precaution he deems necessary to prevent damage by fire. In addition, keep two (2) fire extinguishers, 5 pounds, CO2 or dry chemical type, Underwriters' approved, in paint storage room at all times, prominently located one near entrance to room, another near windows. Keep not less than three (3) buckets of sand near materials at all times. Buckets shall have round bottoms, shall be prominently located and painted bright red and shall have the word "FIRE" stencilled thereon in large, white letters. All other precautions and requirements as required by the institution and other authorities having jurisdiction shall be adhered to.
6. Rooms or spaces assigned for the storage and mixing of paint shall be kept locked. At least one key of each room or space shall be deposited with the Owner's field representative or custodial service so as to provide access thereto during non-working hours.

09900.0600 PREPARATION OF SURFACES

1. General: Properly prepare surfaces required to receive paint and other finishes. Broom clean rooms and spaces before painting is started. Surfaces to be painted shall be perfectly dry.
2. Sandpaper woodwork required to be painted or finished. Remove roughness; brush and remove dust. Wash off grease, dirt with approved cleaner. Give knots and sappy streaks, two thin coats of orange shellac. Cracks, nail holes and surface defects shall be filled with putty after priming coat, filler or shellac has been applied. Putty shall be brought up flush with surface.
3. Plaster Surfaces: Clean thoroughly of grit, grease, dirt, loose material, etc. Cut off, fill with patching plaster of affected surfaces. Give patched portions coat of primer-sealer in addition to other specified coats.
 - a. The priming coat on plaster shall be tinted to the approximate shade of the final coat. All suction sports or "hot spots" in plaster or cement after the application of the first coat, shall be touched up before applying the second coat, to product an even result in the finished coat. Obtain color schedules for rooms before priming walls.
4. Thoroughly clean bare metal surfaces required to be painted of foreign matter such as

grease, rust, scale and dirt, before applying priming coat. Where solder flux has been used, clean with benzine before applying paint. Clean shop coated metal surfaces of foreign materials; touch up spots where marred. Remove rough surfaces by sandpapering.

5. Galvanized metal surfaces scheduled to be painted shall be thoroughly cleaned with solvent until they are completely free from dirt, oil and grease. Thoroughly treat the cleaned surface with phosphoric acid etch. Remove all excess etching solution and allow to dry completely before application of paint.
6. Dents, cracks and the like, hollow places, open joints and other irregularities in metal work to be painted shall be filled with approved metal filler suitable for purpose. After setting, sand to smooth hard finish.

09900.0700 MIXING

1. Mix materials thoroughly. Strain if necessary before using. Addition of thinners, such as linseed oil or turpentine shall be added to ready mixed materials only in accordance with paint manufacturers' printed instructions. If no printed instructions appears on containers, obtain this information in writing from paint manufacturer.

09900.0800 WORKMANSHIP

1. General

Use only qualified painters for the mixing and application of paint on exposed surfaces. In the acceptance or rejection of installed painting, no allowance will be made for lack of skill on the part of painters. All paint shall be applied in accordance with the materials manufacturer's instructions.

2. Environment

- a. Do no painting or finishing when air is dust laden nor where weather or temperature conditions are suitable. Temperature within building shall be maintained at a minimum of 60 degrees F. during painting and drying period.
- b. Plaster, mortar, brick, concrete or any masonry related surfaces shall not be painted if its moisture content exceeds 12% -- an alkali resistant primer is to be used in place of scheduled primer if moisture content is between 8% and 12%.
- c. Exterior wood shall not be painted if moisture content exceeds 15%.
- d. When necessary, an approved moisture meter will be used to determine moisture conditions.

3. Operating Units

When painting operating units, do not apply paint to sliding contact surfaces, where bare metal is necessary for proper operation.

4. Undercoats shall approximate shade of finish coat.
5. Exposed Duct Covering: Painted top, bottom, sides and ends, except where these surfaces are inaccessible.
6. Number of Coats: Except as otherwise specified under paragraph SCHEDULE, paint coats described herein are in addition to prime coats applied under this and other Sections: unless otherwise specified.
7. Mechanics: All work shall be executed by skilled mechanics in conformance with the requirements of the specifications.
8. Conditions for Painting: Surfaces shall be clean, dry and free from frost. Atmosphere must be free from dust and dirt, preventing the lodgement of foreign material on fresh paint. Floors must be broom swept clean before painting is started.
9. Sanding: Except for final coat, each coat on metal shall be thoroughly and uniformly sanded with No. 00 sandpaper, or other equal abrasive, removing all surface defects and providing a smooth, even surface for subsequent coats.
10. Puttying: Putty-stop nail holes, imperfections and defacements after priming coat of paint, filler or shellac has been applied. Putty stopping shall be brought flush with finished surface in a neat and workmanlike manner. Defacement about interior metal work shall be corrected. Open joints, broken surfaces by unused holes, screws; bolts and the like shall be closed and smoothed, producing a finished piece of work.
11. Fixture Removals: Hardware, lighting fixtures, switch and receptacle plates, etc., shall be removed wherever practicable before painting and replaced after completion of painting, or these items which are in place shall be adequately protected during painting operations.

Plumbing or heating equipment adjacent to surfaces which are to be painted shall be disconnected and removed if necessary to complete all of painting required by these Specifications and shall be replaced upon completion of painting, the removal and replacement of fixtures and equipment shall be done by the trades responsible for the installation thereof.
12. All work where a coat of material has been applied must be inspected and approved by the Architect before the application of the succeeding specified coat, otherwise no

credit for the coat applied will be given and the Contractor automatically assumes the responsibility to recoat the work in question. The Contractor shall furnish the Architect a report of the particular coat applied when completed for inspection and approval to comply with the above.

13. If this Contractor finds problems arising in connection with the successful application of the paint, stain or coating to a surface so as to prevent a good, workmanlike job, work on that area should be stopped at once. The Architect, paint supplier to be contacted directly to see what must be done to rectify the condition.

Failure to do so by the subcontractor shall be construed as acceptance of the surface and conditions with the full responsibility thereof to produce a satisfactory job.

14. Protection: Provide, install and maintain over entire period of painting work all drop cloths, barricades and other forms of protection as may be necessary to safeguard and keep clean such adjoining work of others as will not be painted and as required to preserve painted work free from damages of every nature. Freshly painted surfaces shall be legibly posted as such immediately following their completion.

09900.0900 COATS AND COLORS

1. The number of coats herein specified are the minimum to be applied over exposed surfaces or shop coats as designated. Each coat shall be of proper ground color for each succeeding coat and shall appreciably differ in tint. Colors shall be as selected by the Architect.
2. Unless otherwise specified, paint designation refers to the "Pittsburgh Paints". Products of equal quality as manufactured by other manufacturers may be used, as approved by the Architect.
3. Color in general will be limited to:
 - a. There shall be up to two (2) deep tone accent colors used in each space.
 - b. Colors in general will be soft pastel colors.

09900.1000 SCHEDULE

All references to products of PPG Industries (Pittsburgh Paints)

1. Exterior Ferrous Metal:

1 Coat PPG Speedhide Inhibitive Primer, 7-858; 2 coats PPG Speedhide

Exterior/Interior Alkyd Enamel, 7-814 series.

2. Exterior Galvanized Metal:

1 coat PPG Speedhide Galvanized Steel Primer, 9-712; 2 coats PPG Speedhide Exterior/Interior or Alkyd enamel, 7-814 series.

3. Wood (not specified or noted elsewhere):

1 coat PPG Speedhide 6-855 Enamel Primer
2 coats PPG 7-814 Series Alkyd Gloss Enamel

4. Interior Ferrous Metal

- a. Prime with PPG Speedhide Interior Primer, 7-858 (red) or 6-208 (red) or 6-212 (white).
- b. Finish coat: 1 coat PPG Speedhide Alkyd enamel, semi-gloss 7-814 series or gloss, 6-250 series. (As designated by Architect).

5. Interior Galvanized Steel

Same as ferrous metal except that primer shall be PPG Speedhide Galvanized Steel Primer, 90-712.

6. Interior Dry Wall

- a. Ceilings: 1 coat PPG Speedhide Latex Sealer/Primer, 6-2; 2 coat PPG Speedhide Alkyd flat, 6-51 series.
- b. Walls: 1 coat PPG Speedhide Latex Sealer/Primer, 6-2; 2 coat PPG Speedhide Alkyd flat, 6-70 series.

7. Interior Conc. Block Walls

- a. 1 coat PPG Maestro-prime quick drying primer & Sealer 6-12 3.6 mils per coat.
- b. 2 coats PPG fast dry Alkyd Industrial Gloss Enamel 7-814 lines series. MWF 3.6 mils per coat. Color as selected by Architect.

8. Insulated Pipes, Conduits, Etc.

1 Coat PPG Speedhide Latex Sealer, 6-2

2 Coats to match adjacent wall/ceiling finish.

9. Uncovered Piping (Ducts)

PPG Speedhide Inhibitive Metal Primer (white) 6-70.

PPG Speedhide LoSheen Alkyd Enamel, 6-70 series.

10. Other items (requiring finishing as shown by the drawings, details or finish schedule).

09900.1100 CLEANING

1. When so directed by the Architect, the Contractor shall go over all of the building where he has worked, retouch where necessary, restore where damaged or defaced and clean off all paint spots from floors, walls, finish hardware, glass and other unpainted surfaces and shall leave all painted surfaces clean and in a satisfactory condition.
2. At the end of each working day and upon completion of all work, all surplus materials, empty packages and/or containers and all debris shall be removed from the site.

09900.1200 GUARANTEE

1. All work under this Section of the Specifications shall be guaranteed against checking, cracking, peeling, chalking, discoloration or other defects due to improper materials or workmanship, due to improper preparation of the surface, or due to the painting, varnishing, etc. of surfaces which were not in proper condition to receive, paint, varnish or other painters' materials and such unsatisfactory work shall be refinished at no additional cost to the Owner.

09900.1300 PAINT MANUFACTURER'S REPRESENTATIVE

1. Notify and permit representatives of paint manufacturers, whose materials are used, access to the premises for the purpose of inspecting materials and proper use thereof.

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