

SECTION 09 90 00

PAINTING

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. This section covers painting of exposed elements of the project, interior and exterior, Sealing and backpriming of wood in the field. Surfaces that are left unfinished by requirements of other sections shall be finished as part of this section.

1.02 SECTION EXCLUDES:

- A. Control panels and control systems.
- B. Fabric connections to fans.
- C. Flexible conduit connections to equipment, miscellaneous name plates, stamping and instruction labels and manufacturer's data.
- D. Equipment and products having a complete factory finish, except as specified or noted on drawings.
- E. Flag, floodlight, parking light poles and loudspeaker poles furnished with a factory finish.
- F. The following items if specified or furnished with galvanized finish shall not be painted: Metal shelving, chain link fencing, areaway and catch basin gratings and frames.
- G. Brass, bronze, lead, stainless steel, and chrome or nickel-plated elements.
- H. Non-metallic walking surfaces unless specifically shown or specified to be painted.
- I. Fire rating labels at fire doors and frames.
- J. Cement masonry units at exterior.

1.03 RELATED SECTIONS:

- A. Section 05500 - Metal Fabrications.
- B. Section 06200 - Finish Carpentry.
- C. Section 07600 – Flashing and Sheet Metal
- D. Section 08100 – Hollow Metal Doors and Frames.
- E. Section 08210 - Wood Doors.
- F. Section 08310 – Access Panels.
- G. Section 09210 – Gypsum Plaster.
- H. Section 09220 – Portland Cement Plaster.
- I. Section 09250 – Gypsum Board System.

#### 1.04 QUALITY ASSURANCE

- A. Certification of Materials: With every delivery of paint materials, the manufacturer shall certify on the manufacturer's letterhead that materials comply with the requirements of this section.
- B. Paint materials shall comply with the Food and Drug Administration's (F.D.A.) Lead Law and the current rules and regulations of local, state and federal agencies governing the use of paint materials.
- C. Coats: The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as are necessary to produce the required finish.
- D. Employ coats and undercoats for all types of finishes in strict accordance with the recommendations of the paint manufacturer and approved by Architect.

#### 1.04 SUBMITTALS

- A. Submittals shall be made in accordance with Section 01300.
- B. List of Paint Materials: Prior to submittal of samples, submit a complete list of proposed paint materials, identifying each material by manufacturer's name, product name and number, including primers, thinners, and coloring agents, together with manufacturers' catalog data fully describing each material as to contents, recommended usage, and preparation and application methods. Identify surfaces to receive various paint materials. Do not deviate from approved list.
- C. Submit manufacturer's standard color samples for each type of paint used. Once colors have been selected, submit 3 samples of each color selected for each type of paint, on standard 8-1/2 x 11 inch spray-out panel with substrate textures demonstrated.
- D. For transparent and stained finishes, prepare samples on same species and quality of wood to be installed on the project, showing system used.
- E. An MSDS sheet will be included with each individual submittal.

#### 1.05 DELIVERY, STORAGE AND HANDLING

- A. Materials shall be delivered to the project site in original unbroken containers bearing manufacturer's name, brand number and batch number corresponding to description on list of materials as approved.
- B. Open and mix ingredients on the premises in the presence of the District Inspector. Immediately remove rejected materials from the premises.
- C. Storage and Mixing of Materials: Store materials and mix only in spaces designated for the purpose by the District Inspector. Keep such spaces clean and take necessary precautions to prevent fire. Hang out oily rags flat and singly in the open air. Stack paint containers so that manufacturer's labels are clearly displayed.

#### 1.06 ENVIRONMENTAL CONDITIONS

- A. Temperature: Do not apply exterior paint in damp, rainy or foggy weather or until the surface has thoroughly dried from the effects of such weather. Do not apply paint, interior or exterior, when the temperature is below 50 or above 90 degrees F., or dust conditions are unfavorable to proper workmanship.

## 1.07 GUARANTEE

- A. Materials and workmanship guarantee shall be in accordance with the requirements of the Contract Documents, except that guarantee shall be furnished jointly by the Contractor and the materials manufacturer.

## PART 2 - PRODUCTS

### 2.01 PAINT MATERIALS

- A. Use the paint products of one Paint manufacturer unless otherwise specified or approved. In any case, primers, intermediate and finish coats in each painting system must all be the products of the same manufacturer, including thinners and coloring agents, except for materials furnished with shop prime coat by other trades. To the maximum extent feasible, factory mix paint materials to correct color, gloss, and consistency for application. EVR-Gard Coatings products are specified herein except as otherwise noted, to establish types and qualities. The following Paints are District standard colors for all schools except as noted in the drawings:
  - 1. Exterior Walls: Scotch (Evr-Gard) Dusty Taupe
  - 2. Exterior Trim: Scotch (Evr-Gard) Horizon Blue
  - 3. Interior Walls: Scotch (Evr-Gard) Pearl White #70
  - 4. Other Scotch (Evr-Gard) colors as designed for a particular school and as specified in the drawings, with prior approval by Administrator/Facilities Planning, Development and Support Operations.

## PART 3 - EXECUTION

### 3.01 PREPARATION

- A. Inspect surfaces to receive paint finish for surface blemishes and repair as required. Surfaces that are not properly prepared or sandpapered or cleaned or which are not in condition to receive the specified finish, shall be corrected, before priming is done. Wash and rinse walls and trim with T.P.S. before applying any primer. No priming shall be done until District IOR or the Owner's representative approves the surfaces.
- B. Protect floors and all adjacent surfaces from paint smears, spatters, and accidental droppings. Cover fixtures and remove hardware not to be painted. Mask off areas where necessary. Any accidental spills, over-painting or spatters shall be cleaned up immediately before additional work proceeds.

Hardware: Insure that hardware is removed before painting is started and replaced only when paint finishes are thoroughly dry.

- 1. Removal and reinstallation of hardware is specified in Section 06200--Finish Carpentry and Millwork.
- 2. Items to be removed include, without limitation: Signs and graphics; switch and receptacle plates; escutcheons and plates; all surface-mounted equipment; free-standing equipment blocking access; grilles and louvers at ducts opening into finished spaces; all tape on doors, walls or other District property; and other items as required and directed.
- C. Woodwork shall be thoroughly cleaned, hand sandpapered parallel to the grain, and dusted off. Nail holes, cracks or defects in all work shall be carefully puttied. Caulk all woodwork joints with specified caulking. Wash and rinse trim with T.S.P. both before applying any primer. On stained woodwork the putty shall be colored to match the stain. Puttying shall be done after the first coat of paint, shellac or varnish has been applied.
- D. Gypsum board: Remove all foreign matter. Fill all pits flush and smooth with spackle. Wash and rinse Gypsum board walls with T.S.P. before applying any primer.

- E. Plaster surfaces shall be allowed to dry at least 3 weeks before painting, or plaster shall be allowed to dry sufficiently to receive paint as determined by moisture meter tests. Clean off dirt, dust, excess mortar, encrustation and foreign matter. Fill holes, pits and other imperfections flush and smooth. Wash and rinse Plaster walls with T.S.P. before applying primer.
- F. Concrete Surfaces shall be dry, cleaned of dirt and foreign materials and in proper condition to receive paint. Neutralize spots showing effects of alkali.
- G. Metal surfaces to be painted shall be thoroughly cleaned of rust, corrosion, oil, foreign materials, blisters, and loose paint removed to bright metal. Apply the metal paint preparation coating recommended by the paint manufacturer prior to applying the primer. All shop and field painted metal shall follow these procedures.
- H. Surfaces Not Mentioned: Prepare surfaces according to recommendations of the paint manufacturer and as approved by the Architect or the Owner.
- I. Do not apply painting materials to wet, damp, dusty, dirty, fingermarked, rough, unfinished, or defective surfaces.
- J. Bond breakers and curing agents must be removed and the surface cleaned, as specified in section 3.01-A above, before primers, sealers or finish paints are applied.

### 3.02 APPLICATION

- A. General: Employ experienced painters supervised by a foreman with a minimum of 5 years' experience in public works projects, thoroughly familiar with code requirements, and the best recommendations of the painting materials manufacturer. Utilize the following methods and procedures:
  - 1. Apply material evenly, free from sags, runs, crawls, holidays or defects. Mix to proper consistency, brush out smooth, leaving minimum of brush marks, enamel uniformly flowed on. Sand between enamel coats.
  - 2. Apply paint by brushes, rollers or spray except rollers shall not be used on wood surfaces or on wood floors. If rollers are used on other surfaces, then all surfaces shall be brushed out by hand. Spraying is not permitted on wood floors. Paint wood floors by using a hand brush, applying the paint at the specified application rate as recommended by the manufacturer. Apply in thin coats allowing proper drying time between coats. The use of two ventilation fans is required in each room to accelerate the drying of the floors. One fan in the door pushing air into the room and one fan in a window exhausting air out of the room. Keep fans running until all paint fume smells and non-existence in the rooms.
  - 3. Tint all pigmented undercoats to approximately same shade as final coat. Perceptibly increase the depth of shade in successive coats.
  - 4. Allow each coat to thoroughly dry before succeeding coat application, a minimum of 24 hours. Sand between enamel coats.
  - 5. Finish all four edges of doors with the same number and kind of coatings as specified for their main surfaces on all new or reused doors. Where opening into rooms have different finishes, finish door edges to match the side into which it swings. The top of all doors that open to the outside shall have a continuous painted top coating to prevent moisture from penetrating the door material.
  - 6. Finish mill or shop primed items with materials compatible with prime coat.
  - 7. Mechanical and electrical work shall be cleaned, pretreated and painted with 3 coats or as noted:

- a. Paint that portion of ductwork or plenum spaces, the interior of which is visible through the grilles: they shall be pretreated and painted with 2 coats of flat black paint.
  - b. Shop primed metal surface of all mechanical and electrical equipment shall receive two finish coats of paint to match adjoining wall or ceiling surfaces. Prime coat, in addition to above, on all unprimed surfaces.
  - c. All other mechanical and electrical equipment exposed to view, such as covered and uncovered piping and ductwork, supports for piping and ductwork, pumps compressors, air conditioning equipment, tanks, etc., shall be painted as specified herein, where not supplied finished under other sections.
8. Miscellaneous painting: Surfaces to be painted and not specifically described herein shall be painted with a product specifically manufactured or prepared for the material and surface; prime coat and two finish coats and subjected to all the conditions previously mentioned above governing painting.
- B. Back-painting: Immediately upon delivery to the building, exterior finish lumber and millwork shall be back-painted on surfaces that will be concealed after installation. Items to be painted shall be back-painted with the priming coat specified under "Priming".
- C. Priming: Wood and metal surfaces specified to receive paint finish shall be primed as specified in section 3.01. Surfaces of miscellaneous metal and steel not embedded in concrete, and surfaces of unprimed plain sheet metal work shall be primed immediately upon delivery to the project. Galvanized metal work, and interior and exterior woodwork shall be primed immediately after erection. Priming of surfaces and priming coat shall be as follows and as specified in schedule:
1. Knots, Pitch and Sap Pockets: Shellac, or approved equivalent, before priming.
  2. Exterior Woodwork: Prime with one coat of exterior water borne emulsion wood primer.
  3. Interior Woodwork: Where indicated to be painted, prime with one coat of water borne wood primer.
  4. Stain: Woodwork indicated to receive a stain and varnish finish shall be stained to an even color with water borne stain. On open-grained hardwood, mix stain with paste filler and completely fill pores in wood.
  5. Galvanized Metal Work: Clean oil, grease and other foreign materials from surfaces. Apply the recommended muratic acid etching solution and thoroughly wash metal. Apply pretreatment coating and follow manufacturer's instructions for drying time, and then prime with one coat of metal primer as specified in section 3.01.
  6. Unprimed Iron, Steel, and Other Uncoated Metals: Where specified to be painted, prime with one coat of metal primer as specified in section 3.01..
  7. Shop Primed Metal Items: Metal shall be primed as specified in section 3.01 and touch up bare and abraded areas with metal primer prior to application of second and third coats.
- D. The number of paint coats specified to be applied are the minimum required. Apply additional coats if required to obtain complete coverage and approved results. Ensure acceptable paint finishes of uniform color, free from cloudy or mottled areas and evident thinness on arises. "Spot" or undercoat surfaces as necessary to produce such results. Conform to the approved Samples. Obtain approval of each coat before applying next coat. If this inspection step is missed, apply an additional coat over entire surface involved at no additional contract cost.

- E. Each coat of painted woodwork and metal, except the last coat, shall be sandpapered smooth when dry. Texture-coated gypsum board shall be sanded lightly to remove surface imperfections after first coat of paint has been applied.
- F. Each coat of paint or enamel shall be a slightly different shade as directed. The District Inspector will inspect each coat of paint, enamel, stain, shellac, and varnish before the next coat is applied. Notify the District Inspector that such work is ready for inspection. If this inspection step is missed, apply an additional coat over entire surface involved at no additional contract cost.
- G. Do not "paint-out" underwriters' labels, fusible links, sliding surfaces and identification stamps on any new or existing materials, equipment, or structures.
- H. Damaged shop prime coat shall be touched-up with metal primer prior to application of second and third coats.
- I. Apply each coat of material to the manufacturers recommended dry film thickness and spread rate.

### 3.03 CLEANING

- A. Remove rubbish, waste and surplus material and clean woodwork, hardware, floors and other adjacent work.
- B. Remove paint, varnish and brush marks from glazing material and, upon completion of the painting work, wash and polish the glazing material both sides. Glazing material that is damaged shall be removed and replaced with new material at no cost to the District.
- C. Clean hardware and other unpainted metal surfaces with manufacturer's approved cleaner. Do not use abrasives or edged tools.
- D. Leave paint storage spaces clean and in condition required for equivalent spaces in the project. Specified shelf stock shall consist of new unopened paint containers and shall be turned over to the District per the contract documents.

### 3.04 SCHEDULE – Refer to District to provide Trim colors by site. All base bids shall include SCOTCH – (EVR-GARD) paint as the District Standard.

- A. Exterior.
  - 1. Concrete, Plaster.  
Scotch – (EV) 7509 water base with semi-gloss EV 700 walls;
  - 2. Ferrous metal.  
Scotch – Ellis 4482 (oil base); Ellis 7962 (waterborne)  
First coat: Scotch – Ellis 4482 Rust Inhibitor primer  
Second Coat: Ellis 7962 Primer All  
Third coat: Scotch - EV 700
  - 3. Galvanized metal.  
Pretreat: Ellis 688 Galva-Etch and Prep  
First Coat: Ellis 1262 Primer All  
Second coat: Ellis 1262 Primer All  
Third Coat (gloss): Scotch – EV 8000
  - 4. Wood (pigmented)  
Scotch - EVcoatings:

First coat: EV 300  
Second and third coats (gloss): EV 700, EV8000

B. Interior.

1. Gypsum drywall.

Scotch – EV coatings:  
First coat: EV 78 Sealer  
Second and third coats: EV 500; EV 700

2. Wood Doors.

Scotch - EVR-GARD coatings:  
First coat: EV 78  
Second and third coats (semi-gloss): EV700

3. Door Frames.

Scotch – EV coatings:  
First coat: Ellis 4482  
Second coat: EV 599  
Third coat: EV 8000

4. Metal Trim:

Scotch – EV coatings:  
First coat: EV 688 Galva etch  
Second coat: Ellis 1262 primer  
Third coat: EV 8000

5. Wood Trim:

First coat: EV 78  
Second coat: EV500  
Third coat: EV 8000

6. Wood Floors:

Scotch - Coatings: Consult Burbank Paints Representative

7. Cement Masonry Units:

Scotch –EV coatings:  
First coat: EV 7509  
Second coat: EV 500  
Third and Fourth coats: EV 8000

8. Mechanical and Electrical Work:

- a. Except where interior mechanical and electrical work to be painted is specified to receive another paint finish, work occurring in finished rooms and spaces shall be cleaned, pre-treated and painted with 3 coats. Items to be painted include, but are not limited to: steel and copper piping, pipes, vents, fittings, ducts, plenums, miscellaneous supports and hangers, electrical conduit, fittings, pull boxes, outlet boxes, unfinished surfaces of plumbing fixtures, miscellaneous metal cabinets, panels and access doors and panels.

First: As specified under Priming.

Second and Third: Interior enamel, semi-gloss or gloss to match adjacent wall or ceiling finish.

b. Insulation and Taping on Pipes and Ducts: 3 coats.

1. Finished Rooms:

First: Interior water borne primer.

Second and Third: Interior semi-gloss or gloss enamel to match adjoining wall or ceiling finish.

2. On Building Exterior:

First Exterior water borne primer.

Second and Third: Exterior gloss enamel.

c. Inside surfaces of ducts, vents, dampers and louvers as far back as visible from room in which they open shall be painted with 2 coats of flat black paint.

9. Anti-Graffiti Coating:

a. Shall be Life-Deck, 4001 Clear Gloss, from Burbank Paints.

b. Waterborne: A solids sealer, water soluble, should conform to Scotch-Evr-Gard from Burbank Paints.

END OF SECTION