

SECTION 09 90 00**PAINTING****PART 1 - GENERAL****1.1 SECTION INCLUDES**

- A. Work includes painting and finishing of interior and exterior exposed items and surfaces scheduled for finish, including surface preparation, priming and painting of finishing. Work is in addition to shop-priming and surface treatment under other Sections.
- B. Provide labor, materials, tools, ladders, scaffolding and other equipment necessary for completion of Work.
- C. Examine specifications for other trades and become thoroughly familiar with other provisions for painting. Surfaces left unfinished by other Sections shall be painted or finished under this Section, unless otherwise indicated.
- D. Painting shall mean coating systems materials, primers, emulsions, enamels, sealers and fillers, whether used as prime, intermediate or finish coats.

1.2 REFERENCE STANDARDS

- A. ASTM E84: Surface Burning Characteristics of Building Materials.
- B. FS TT-C-535: Two Coat Epoxy Coatings for Interior Use.
- C. FS TT-C-550: Chemical Resistance.
- D. FS TT-F-1098: Surface Fillers for Porous Surfaces.
- E. FS TT-P-29: Interior Latex Base Paint.

1.3 SUBMITTALS

- A. Product data:
 - 1. Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed for use.
 - 2. Submit product performance data printed on manufacturer's technical data sheets.
- B. Samples:
 - 1. Prepare samples, of each color selected, on same materials to which respective finishes are required to be applied.

2. Prepare stained wood samples on type and quality of wood specified for use on project.
3. Make samples not less than 12" x 12".
- C. Schedule: Submit painting schedule including manufacturer's product name and substrate proposed for painting.
- D. Certificates: Furnish manufacturer's certificates indicating that materials comply with Specification requirements.
- E. Test Samples:
 1. When requested by Architect, obtain test samples from material stored at Project site or source of supply.
 2. Contractor is to retain all paint cans and lids on site until authorized to discard by Architect.
- F. Closeout submittal: Prepare samples of actual colors applied in accordance with requirements of Section 01700.

1.4 QUALITY ASSURANCE

- A. Paint materials manufacturer:
 1. Provide materials in brand and quality specified. No claims by paint applicator to unsuitability or unavailability of materials specified will be considered unless claim is submitted in writing with proposal to Contractor.
 2. Paints, varnishes, enamels, lacquers, stains, fillers and similar materials must be delivered in original containers with unbroken seals and labels intact. Retain containers with labels until reviewed by Architect.
- B. Applicator qualifications:
 1. Employ skilled mechanics to ensure highest quality workmanship. Materials to be applied by craftsmen experienced in use of specific product involved.
 2. Submit documentation of following minimum qualifications for paint applicator:
 - a. Minimum five years commercial painting experience.
 - b. Minimum three successful projects of similar scope and complexity.
 - c. List of references for completed projects.
- C. Include on label of each container:
 1. Manufacturer's name.
 2. Manufacturer's stock number.
 3. Type of paint.
 4. Color.
 5. Instructions for reducing, where applicable.
 6. Label analysis.

D. Interface:

1. Provide finish coats which are compatible with prime paints used.
2. Review other sections of Specifications in which prime paints are provided to ensure compatibility of total coatings system for various substrates.
3. Upon request from other trades, furnish information on characteristics of finish materials proposed for use to ensure compatible prime coats are used.
4. Provide barrier coats over incompatible primers or remove and reprime as required.

E. Regulatory requirements: Contractor and applicator shall comply with applicable codes, regulations, ordinances and laws regarding use and application of painting systems and volatile organic compounds (VOC's).**1.5 DELIVERY, STORAGE AND HANDLING**

- A. Deliver paint materials in sealed original labelled containers, bearing manufacturer's name, type of paint, brand name, color designation and instructions for mixing and/or reducing.
- B. Provide adequate storage facilities. Store paint materials at minimum ambient temperature of 45 degrees F. in well ventilated area.
- C. Take precautionary measures to prevent fire hazards and spontaneous combustion. Soiled or used rags, waste and trash must be removed from building daily.

1.6 ENVIRONMENTAL CONDITIONS

- A. Comply with manufacturer's recommendations for environmental conditions under which systems can be applied.
- B. Do not apply finish in areas where dust is being generated.
- C. Apply water-base paints only when temperature of surface to be painted and surrounding air temperatures are between 50 degrees F. and 90 degrees F.
- D. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F. and 90 degrees F.
- E. Do not apply paint in snow, rain, fog, mist or when relative humidity exceeds 85%, or to damp or wet surfaces.
- F. Painting may be continued during inclement weather if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.
- G. Provide adequate continuous ventilation and sufficient heating facilities to maintain temperatures above 50 degrees F. for 24 hours before, during and 48 hours after application of finishes.

- H. Provide minimum 25 foot candles of lighting on surfaces to be finished.
- I. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture contents of surfaces are below following maximums:
 - 1. Veneer plaster and gypsum wallboard: 12%.
 - 2. Masonry, concrete and concrete block: 12%.
 - 3. Interior located wood: 15%.

1.7 PROTECTION

- A. Adequately protect other surfaces from paint and damage. Repair damage as a result of inadequate or unsuitable protection.
- B. Furnish sufficient drop cloths, shields and protective equipment to prevent spray or droppings from fouling surfaces not being painted and in particular, surfaces within storage and preparation area.
- C. Remove electrical plates, surface hardware, fittings and fastenings, prior to painting operations. These items to be carefully stored, cleaned and replaced on completion of work in each area. Do not use solvent to clean hardware that may remove permanent lacquer finish.

PART 2 - PRODUCT

2.1 MANUFACTURERS

- A. Acceptable manufacturers:
 - 1. Kelly-Moore.

2.2 MATERIALS

- A. Provide best quality grade of paint regularly manufactured by manufacturer.
- B. Materials selected for coating systems for each type surface shall be product of single Manufacturer.
- C. Paint materials to be ready-mixed except field catalyzed coatings. Pigments fully ground maintaining soft paste consistency, capable of being readily and uniformly dispersed to complete homogeneous mixture.
- D. Paint accessory materials (linseed oil, shellac, turpentine and other materials not specifically indicated herein but required to achieve finishes specified) to be of best and highest quality and grade and be approved by paint manufacturer.

2.3 COLORS AND FINISHES

- A. Prior to beginning work, District will furnish color chips of surfaces to be painted selected from Contractor submittals.
- B. Use representative colors when preparing samples for review.
- C. Final acceptance of colors will be from samples applied on job.
- D. Acceptable products: Paint system numbers specified in this Section represent acceptable paint system products manufactured by Pratt & Lambert or Tnemac Company, Inc., and establish acceptable standard for paint systems.

2.4 MIXING AND TINTING

- A. Deliver paints ready-mixed to job site.
- B. Accomplish job mixing and job tinting only when acceptable to Architect. Use only thinners approved by paint manufacturer and use only within recommended limits.
- C. Mix only in mixing pails placed in suitably sized nonferrous or oxide resistant metal pans.
- D. Use tinting colors recommended by manufacturer for specific type of finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Thoroughly examine surfaces scheduled to be painted prior to commencement of work.
 - 1. Report in writing to Architect any surface condition that cannot be put in proper condition by cleaning, sanding and puttying operations that may potentially affect proper application.
 - 2. Do not commence until such defects have been corrected.
- B. Do not proceed with finishing until surface is acceptable. Application of paint or finish to surface constitutes acceptance of surface.

3.2 GENERAL PREPARATION

- A. Cover or otherwise protect finished work of other trades and surfaces not being painted concurrently or not to be painted.
- B. Furnish sufficient drop cloths, shields and protective equipment to prevent spray and droppings from fouling surfaces not being painted and in particular, surfaces within storage and preparation area.

- C. Place cotton waste, cloths and material which may constitute fire hazard in closed metal containers and remove daily from site.
- D. Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions for each particular substrate condition.
- E. Mildew, efflorescence and foreign material shall be removed from surfaces by appropriate methods.
- F. Clean surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Program cleaning and painting so that contaminants from cleaning processes will not fall onto wet, newly-painted surfaces.
- G. Remove hardware, hardware accessories, machined surfaces, plates, and other items not to be painted, or provide protection prior to surface preparation and painting operations.
- H. Do not paint moving parts of operating units, mechanical and electrical parts including valve and damper operators, linkages, sinkages, sensing devices, motor and fan shafts, and sprinkler heads unless otherwise noted. Provide covering and tape in place during spray paint operations.
- I. Sand and featheredge abraded or damaged areas of shop coats of paint before touch-up painting.

3.3 SURFACE PREPARATION

- A. Ferrous metal surfaces:
 - 1. Prepare unprimed surface in accordance with recommendations or directions of metal manufacturer or rust-inhibitive primer.
 - 2. Clean primed surfaces as recommended by primer manufacturer.
 - 3. Feather edges of sound paint by grinding if necessary.
- B. Repainting Previously Coated Surfaces:
 - 1. Remove all surface contamination such as oil, grease, loose paint, mill scale, dirt, foreign matter, rust, mold, mildew, efflorescence and sealers.
 - 2. Existing glossy surfaces of paint films should be thoroughly washed with abrasive cleaner to clean and dull surface, or wash thoroughly and sand.
 - 3. Remove sanding dust.
 - 4. Spot prime bare spots with appropriate primer for new finish.
 - 5. When applying new coatings to existing painted surface, check for compatibility by applying 3 square feet of test patch of new coating over prepared and cleaned existing surface. Allow to dry and verify adhesion.

3.4 PAINT APPLICATION

A. General requirements:

1. Do not apply initial coating until moisture content of surface is within limitations recommended by paint manufacturer.
2. Apply paint with suitable brushes, rollers or spraying equipment.
3. Rate of application shall not exceed rate recommended by paint manufacturer for surface involved.
4. Keep brushes, rollers and spraying equipment clean, dry, free from contaminants and suitable for required finish.
5. Comply with recommendation of product manufacturer for drying time between successive coats.
6. Vary slightly color of successive coats.
7. Sand and dust between each coat to remove defects visible from distance of 5'-0".
8. Provide light sand texture finish coats, free of brush marks, streaks, laps, or pile up of paints and skipped or missed areas.
9. Leave parts of moldings and trim clear and true to details with no undue amount of paint in corners or depressions.
10. Make edges of paint adjoining other materials or colors clean and sharp with no overlapping.
11. Refinish whole wall where portion of finish has been damaged or is not acceptable.
12. Latex paint may be spot retouched if acceptable to Architect.
13. Runs on faces not permitted.
14. Provide temporary signs required to protect wet finishes.

B. Examination:

1. Do not apply additional coats until completed coat has been reviewed by Architect.
2. Only reviewed coats of paint will be considered in determining number of coats applied.

3.5 FIELD QUALITY CONTROL

- A. Applicator shall apply materials in accordance with manufacturer's recommendations and to minimum dry film thickness specified.
- B. Applicator shall initiate and maintain for duration of Project field quality control program to ensure application in conformance with Project requirements.

3.6 CLEANING

- A. Touch up and restore finish where damaged.
- B. Remove spilled, splashed or splattered paint from surfaces.
- C. Do not mark surface finish of item being cleaned.
- D. Leave storage space clean and in condition required for equivalent spaces in Project.

3.7 MAINTENANCE STOCK

- A. Provide five unopened gallon cans of each type and color paint used.
- B. Each can to be tightly closed and clearly labeled to contents.
- C. Maintenance stock shall be delivered to Owner's Maintenance Building at 220 South 2nd Ave., Midlothian, Texas 76065 at a time scheduled with Owner. Midlothian I.S.D. representative must be present to accept and sign for stock, indicating on transmittal form location of stock for reference in Project Closeout documents (refer to 01 70 00).

3.8 PAINTING SCHEDULE

A. Ferrous Metal:	
Type	Alkyd Enamel.
Finish	Per Owner.
Location	Exterior Exposed.
System:	
Touch-Up	Touch up abraded surfaces of shop coat with same primer.
Primer	One coat Tnamec Series 10-99 (DFT 2.0-2.5 mils). (Omit on shop-primed surfaces).
2nd, 3rd Coats	Two coats Tnemec Series 23 (Min. DFT 2.0 Mils each coat).
B. Plaster or Gypsum:	
Type	Latex.
Finish	Match existing.
Location	Interior exposed locations, as indicated on drawings, vertical and horizontal surfaces.
System:	
1st, 2nd Coats	Two coats Pratt & Lambert Latex House and Trim Finish. (Min. DFT 1.2 Mils each coat).

END OF SECTION