

## **SECTION 099113 - EXTERIOR PAINTING**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes paint removal, surface preparation, pre-treatment and the application of paint systems on the following exterior substrates:
  - 1. Wood window sash and associated exterior wood trim
- B. This Section includes exposed exterior items and surfaces with low VOC coatings complying with ME DEP regulations.
- C. Related Sections include the following:
  - 1. Division 06 "Finish Carpentry" for Pre-Treatment Application required prior to Priming and Painting.

#### **1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples for Initial Selection: For each type of topcoat product.
- C. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
  - 1. Submit Samples on rigid backing, 8 inches square.
  - 2. Step coats on Samples to show each coat required for system.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area.
- D. Product List: For each product indicated, include the following:
  - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.

2. VOC content.

#### 1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

#### 1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced Applicator who has completed painting system applications 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.
- B. Source Limitations: Obtain primers and undercoat materials for each coating system from the same manufacturer as the finish coats.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  1. Maintain containers in clean condition, free of foreign materials and residue.
  2. Remove rags and waste from storage areas daily.

#### 1.7 PROJECT CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

### **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  1. Benjamin Moore & Co.

2. California Paints.
3. PPG Architectural Finishes, Inc. (Pittsburgh Paints, Glidden Professional, Flood Stains)
4. Samuel Cabot, Inc. (Cabot).
5. Sherwin-Williams Company (The).
6. Tnemec Company, Inc. (Tnemec).
7. American Building Restoration Products, Inc.

## 2.2 PAINT, GENERAL

### A. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

### B. VOC Compliance for Exterior Paints and Coatings: Provide the manufacturer's formulation for the products specified below that are VOC compliant with the State of Maine Department of Environmental Protection Regulation, "Chapter 151: Architectural and Industrial Maintenance (AIM) Coatings" and the following chemical restrictions expressed in grams per liter:

1. Flat Paints and Coatings: VOC content of not more than 100 g/L.
2. Non-Flat Paints and Coatings: VOC content of not more than 150 g/L.
3. Non-Flat Paints and Coatings - High Gloss: VOC content of not more than 250 g/L.
4. Anticorrosive (Rust Preventative) Coatings: VOC content of not more than 400 g/L.
5. Fire Resistant Coatings: VOC content of not more than 350 g/L.
6. Industrial Maintenance Coatings (IMC): VOC content of not more than 340 g/L.
7. Primers, Sealers, and Undercoaters: VOC content of not more than 200 g/L.
8. Quick-Dry Enamels: VOC content of not more than 250 g/L.
9. Quick-Dry Primers, Sealers, and Undercoaters: VOC content of not more than 200 g/L.
10. Specialty Primers, Sealers, and Undercoaters: VOC content of not more than 350 g/L.
11. Wood Preservatives: VOC content of not more than 350 g/L.

## 2.3 PAINT REMOVER

### A. American Building Restoration Products, Inc. Paint Removal System:

1. ABR Citrus Paint Remover Paste
2. ABR Citrus Paint Remover Gel
3. ABR Citrus Paint Remover Liquid

## 2.4 WOOD PRE-TREATMENT

### A. American Building Restoration Products, Inc. Wood Pre-treatment System:

1. ABR X-100 Natural Seal Pre Finish Coating

## 2.5 WOOD PRIMERS

- A. Exterior Alkyd Wood Primer: Factory-formulated acrylic wood primer for exterior application.
  - 1. Cal: Trouble-Shooter 100% Alkyd/Linseed Oil Wood Primer.
  - 2. Glidden Professional; Alkyd Stain Stomper Exterior Primer. (100g/L)
  - 3. Ben Moore; Fresh Start Premium Exterior Primer (024).
  - 4. Pittsburgh Paints; Bar-Ox Exterior Alkyd Primer. (89 g/L)
  - 5. S-W: A-100 Exterior Stain Blocking Alkyd Wood Primer. (87 g/L)
  
- B. Wood-Knot Sealer: Sealer recommended in writing by topcoat manufacturer for use in paint system indicated.

## 2.6 EXTERIOR LATEX PAINTS

- A. Semi-Gloss Acrylic Latex Paint:
  - 1. Cal: 100% Acrylic Latex House & Trim Paint, Satin Gloss 40200.
  - 2. Glidden Professional: 2416-XXXXV, Ultrahide 150 Exterior Semi-Gloss Paint. (50 g/L)
  - 3. Moore: Super Spec Latex House & Trim Paint #170.
  - 4. PPG: Speedhide Exterior Semi-Gloss Latex, 6-900XI Series. (<50 g/L)
  - 5. S-W: SuperPaint Exterior Latex Gloss, A84 Series. (132 g/L)
  
- B. Exterior Semi-Gloss Acrylic Enamel: Factory-formulated semi-gloss acrylic enamel for exterior application.
  - 1. Benjamin Moore; DTM Acrylic Semi-Gloss Enamel M29: Applied at a dry film thickness of not less than 2.0 mils.
  - 2. California Paints: Rust Stop DTM 100% Acrylic Semi-Gloss, 10XX.
  - 3. Devco Coatings; 4216-XXXX, High Performance Waterborne Acrylic Semi-Gloss Enamel.
  - 4. Pittsburgh Paints: 6-900XI Speedhide Exterior Semi-Gloss Latex: Applied at a dry film thickness of not less than 1.5 mils.
  - 5. Sherwin-Williams; IMC DTM Acrylic Coating Semi-Gloss (Waterborne) B66W200 Series. (250 g/L)

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.
  
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Wood: 15 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Test old paints for lead before beginning any work.
1. Contact local, State and Federal agencies to ensure compliance with regulations governing the removal and disposal of stripping product along with coatings and finishes that are removed.
  2. At areas with lead paint, take all necessary precautions to ensure safety of all persons, engaged in removing lead-based paint, and dispose of all residues generated from stripping in legal manner without contamination of building or environment.
- C. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
  2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- D. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.
1. Remove incompatible primers and re-prime substrate with compatible primers as required to produce paint systems indicated.
- E. Wood Substrates:
1. Strip paint according to paint remover manufacturer's written instruction.
  2. Sand surfaces that will be exposed to view, and dust off. Note that no grinding or aggressive machine tools will be permitted.
  3. Apply Natural Wood Protective Coating pre-treatment.
  4. Prime edges, ends, faces, undersides, and backsides of wood new wood.
  5. Prime all exposed surfaces of existing wood surfaces to remain in place.

6. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

### 3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
  1. Use applicators and techniques suited for paint and substrate indicated.
  2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
  3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
  4. Paint entire exposed surface of window frames and sashes.
  5. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
  6. Apply an additional coat of primer on metal surfaces that have been shop primed.
- B. Tinting: Tint primer of colors such as reds, yellows, and oranges with a gray basecoat system designed to help provide color coverage.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces. When using colors such as red, yellow or orange, an extra coat of finish may be necessary. Notify Architect when additional coats do not fix the problem.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

### 3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 EXTERIOR PAINTING SCHEDULE

- A. VOC Compliance, General: Provide the manufacturers' formulations for the products specified below that comply with the VOC requirements for the State of Maine Department of Environmental Protection in paragraph 2.02.C of this Section.
- B. All exposed surfaces: Provide the following paint removal system:
  - 1. Citrus Paint Removers Paste, Gel and or Liquid
- C. All new wood surfaces and all exposed existing wood surfaces: Provide the following pre-treatment system:
  - 1. Oil based Wood Protective Coating Pre-Treatment
- D. Wood trim and window window sash. Provide the following paint finish systems over new wood surfaces:
  - 1. Latex System:
    - a. Prime Coat: Exterior alkyd wood primer.
    - b. Intermediate Coat: Acrylic latex matching topcoat.
    - c. Topcoat: Semi-gloss acrylic latex paint.

**END OF SECTION 099113**