

**SECTION 32 31 19.10**  
**RENOVATION OF EXISTING STEEL FENCE**

**PART 1 GENERAL**

**1.01 REFERENCE STANDARDS**

- A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2024.
- B. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

**1.02 1.01 SECTION INCLUDES**

- A. A. Renovation of existing steel fence (including louver fence) panels and supporting posts.
- B. C. Surface preparation.
- C. D. Field application of paints.
- D. E. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- E. F. Do Not Paint or Finish the Following Items:
  - 1. 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
  - 2. 2. Items indicated to receive other finishes.
  - 3. 3. Items indicated to remain unfinished.
  - 4. 4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.

**1.03 1.02 DEFINITIONS**

- A. A. Conform to ASTM D16 for interpretation of terms used in this section.

**1.04 1.03 REFERENCE STANDARDS**

- A. A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2012.
- B. B. MPI (APSM)- Master Painters Institute Architectural Painting Specification Manual; current edition, [www.paintinfo.com](http://www.paintinfo.com).
- C. C. Section 09 91 13, Exterior Painting, in these specifications.

**1.05 1.04 SUBMITTALS**

- A. A. See 01 33 00 – Submittal Procedures, for submittal procedures.
- B. B. Product Data: Provide complete list of products to be used, with the following information for each:
  - 1. 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
  - 2. 2. MPI product number (e.g. MPI #47).
  - 3. 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

**1.06 1.05 FIELD CONDITIONS**

- A. A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

## **PART 2 RENOVATING AND REPAINTING**

### **2.01 2.01 RENOVATING AND REPAINTING OF EXISTING STEEL FENCE PANELS**

- A. A. Steel Bar fence panels or Louver Steel fence panels may be reused if the panels are in undamaged condition, meet the Specification for "Steel Bar Fence" (with or without gates) or "Louver Steel Fence", conform to the Details for the appropriate fence and are suitable for the proposed locations in terms of the relationship to final grade in both slope and height. Panels that meet these criteria may be carefully removed, properly prepared, repainted and installed according to the Drawings, Specifications and Details. In the event that the number of existing renovated steel panels is insufficient to accomplish the design intent, a suitable amount of new steel fence panels shall be fabricated to fulfill the design. All proposed Gates (double and single) shall be newly fabricated and installed.
- B. B. MATERIALS
  - 1. 1. Primer for steel fence panels shall be Benjamin Moore Super Spec Z06-70 (color - grey) Alkyd Metal Primer 2 mils per coat) or approved equal.
  - 2. 2. Paint for steel fence panels shall be Benjamin Moore Super Spec DTM Low Lustre enamel, Z-163 2 mils per coat) or approved equal. The color of the finish coat shall be Black #80, unless otherwise indicated on the Drawings or Specifications.
  - 3. 3. All paint and primer shall have a low VOC content to comply with current New York State VOC Regulations.
  - 4. 4. For Benjamin Moore Products, contact John Powers, Industrial Sales Representative at 1.800.344.0400 extension 1880.

### **2.02 2.02 REPAINTING OF EXISTING STEEL BAR FENCE**

- A. A. All existing steel fence components and posts shall be scraped and wired brushed (only in areas that require this procedure to remove loose paint and loose rust), a coat of primer applied to these areas and then the entire structure field painted with (1) one coat of paint, applied as per the manufacturer's recommendations. All surfaces must be clean and free of dust or loose material. All greasy and oily residues must be removed from the fence with appropriate solvent prior to paint application.
  - 1. 1. Primer for steel shall be Benjamin Moore Super Spec Z06-70 (color - grey) Alkyd Metal Primer 2 mils per coat) or approved equal.
  - 2. 2. Paint for steel shall be Benjamin Moore's Super Spec DTM Low Lustre Enamel #Z-163 or approved equal. The color shall be Black #80. All paint shall have a low VOC content to comply with current New York State VOC Regulations.

### **2.03 2.03 PAINTS AND FINISHES - GENERAL**

- A. A. Paints and Finishes: Ready mixed, unless required to be a field-catalyzed paint.
  - 1. 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
  - 2. 2. Supply each paint material in quantity required to complete entire project's work from a single production run.
  - 3. 3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

## **PART 3 EXECUTION**

### **3.01 3.01 PREPARATION**

- A. A. Clean surfaces thoroughly and correct defects prior to application.
- B. B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.
- D. D. Seal surfaces that might cause bleed through or staining of topcoat.

- E. E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

### **3.02 3.02 APPLICATION**

#### **A. A. RENOVATING AND REPAINTING OF EXISTING STEEL FENCE PANELS**

1. 1. All existing steel fence panels to be reused may be: 1) taken to an off-site facility; sandblasted down to bare steel and shall be painted with a shop coat of primer and two shop coats of paint or 2) taken to an off-site facility, scraped and wire brushed to remove loose paint and minor rust, and cleaned. The wire brushed areas shall receive spot priming and the entire fence panel shall receive a single shop coat of paint. Apply material as per the manufacturer's recommendation. Any alternate method of application must be approved by the manufacturer for proper chemical modification when ordering. Do not thin or add any chemicals without the direction of the manufacturer.
2. 2. All surfaces to be primed and painted must be clean and free of all dust, dirt and rust. All greasy and oily residues must be removed from the metal with appropriate solvent. Repeat cleaning procedure as often as necessary to remove contaminants completely. The thorough surface preparation of ferrous metal is critical for the durability of the paint.
3. 3. After primer has dried, (drying time as per manufacturer's recommendation) apply finish coat(s) of appropriate paint. Any drips, runs, sags or wrinkling is unacceptable. Proper application procedures shall be implemented to avoid such defects.
4. 4. After installation of painted materials, all chips, scrapes, and blemishes on the structure shall be touched up in the field with the appropriate paint. No paint shall be applied during damp weather or when the temperature is below freezing. During field application, all concrete work, paving, etc. shall be fully protected from stains. Any paint spots that may occur shall be removed immediately with an approved paint remover.
5. 5. The New York City Housing Authority reserves the right to inspect the painting facility and to test for chemical composition and film thickness of the material.

#### **B. B. REPAINTING OF EXISITING STEEL FENCE (on site in situ)**

1. 1. The entire framework (panels, posts, angle and bolt) of the steel fence shall be painted. No primer or paint shall be applied during damp weather or when the temperature is below freezing. Prior to painting, any and all loose paint, rust and dirt shall be completely removed in an appropriate manner and the specified primer applied. Thorough surface preparation is critical for the durability of the paint. After portions of the existing steel fence and posts are properly prepared and after the primer has dried (drying time as per manufacturer's recommendations), the entire surface shall receive (1) one field coat of paint. During painting, all adjacent concrete work, paving, etc. shall be fully protected from paint splatter and stains. Any paint spots that may occur shall be removed immediately with an approved paint or stain remover. Any drips, runs, sags or wrinkling is unacceptable. Proper application procedures shall be implemented to avoid such defects.

### **3.03 3.03 APPLICATION - IN GENERAL FOR ALL**

- A. A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied. Do not transport painted material until paint had dried completely.
- C. C. Apply each coat to uniform appearance.

### **3.04 3.04 CLEANING**

- A. A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

### **3.05 3.05 PROTECTION**

- A. A. Protect finishes until completion of project.
- B. B. Touch-up damaged finishes after Substantial Completion.

**END OF SECTION 32 31 19.10**