

ITEM 18570.8615 M MAINTENANCE PAINTING URETHANE FINISH COAT
ITEM 18570.8616 M MAINTENANCE PAINTING URETHANE FINISH COAT (SPRAY PROHIBITED)

DESCRIPTION

This work shall consist of painting one full coat of finish paint to all in-service steel where indicated by the Contract documents, and which has been previously painted the intermediate coat.

MATERIAL

- 1. Paint and Thinner.** Finish paint and thinner shall be selected from the Department's Approved List, "PAINTS FOR STRUCTURAL STEEL, C. FINISH PAINT AND THINNERS." No substitutions will be allowed.

All coats of paint used on any one structure shall be produced by the same manufacturer.

The color of the finish paint shall be as specified in the Contract Documents. If no color is specified the Regional Director shall designate the finish color.

- 2. Basis of Acceptance.** Acceptance of finish paint and thinner material will be based on the appearance of the manufacturer's name, and the product name, on the Department's Approved List.

Only finish paint and thinner arriving at the work site in new, unopened containers shall be used.

Containers of paint shall be labeled with the manufacturer's name, product name, component part, batch number, date of manufacture and shelf life date. Paint in containers having expired shelf life dates shall be immediately removed from the work site and not used.

Containers of thinner shall be labeled with the manufacturer's name and the product name. If an approved generic thinner is supplied it shall be clearly identified as reagent grade.

CONSTRUCTION DETAILS

The requirements of Standard Specification Section 570-3.03 shall apply with the following modifications:

- 1. Manufacturer's Instructions.** At least 5 working days prior to the start of work the Contractor shall provide the Engineer with one copy of the paint manufacturer's current technical data sheets for the paint furnished. Instructions, suggestions and precautions contained in the data sheets shall be followed to the extent that they do not contradict the provisions of this specification.
- 2. Atmospheric Conditions.** No paint application shall be performed unless all the following

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conditions are met:

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- a. The receiving surface shall be clean and absolutely dry.
 - b. The receiving surface temperature and ambient air temperature shall be as recommended by the paint manufacturer, except that in no case shall painting work be performed when surface and ambient temperatures are less than 4.5°C or greater than 38°C.
 - c. The temperature of the paint shall be as recommended by the paint manufacturer, except that in no case shall paint be applied when the paint material temperature is less than 4.5°C.
 - d. The receiving surface temperature shall be at least 3°C above the dew point.
 - e. The relative humidity shall be less than 85%.
3. **Cleaning.** At the time of paint application the receiving surface shall be free of all contaminants such as petroleum products, abrasive blasting aggregates and other debris generated by the cleaning operations, dirt, dust, bird excrements and moisture. Should an exudate haze form on the receiving surface it shall be washed off with mineral spirits or detergent and water. All cleaning required on the receiving surface to remove these or other contaminants shall be done to the satisfaction of the Engineer.
4. **Mixing.** Paint shall be proportioned and thoroughly mixed with mechanical mixers in accordance with the paint manufacturer's recommendations.
5. **Thinning.** Paint may be thinned only if recommended by the manufacturer, done in strict compliance with the manufacturer's instructions, approved by the Engineer and mixed in the presence of the Engineer.
6. **Paint Application.** Paint may be applied using brush, roller or spray methods, unless spray painting is prohibited by the Contract Documents.

When spray painting is prohibited paint shall be applied using brushes or rollers only.

Complete protection from paint spatter, spillage, overspray, wind blown paint, or similar releases of paint shall be provided. Covers, tarps, mesh, and similar materials shall be placed around the work area to protect public and private property, pedestrian, vehicle, marine or other traffic, all portions of the bridge, highway appurtenances, waterways, and similar surrounding areas and property, upon, beneath, or adjacent to the structure.

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7. **Film Thickness.** Finish paint shall be applied in sufficient quantity so as to produce a minimum dry film thickness of 75 µm.
- The dry film thickness shall be determined in accordance with SSPC-PA2, Paint Application Specification No. 2 - Measurement of Dry Film Thickness with Magnetic Gages, using Type 2 fixed probe magnetic gages equipped with a digital readout display. Dry film thickness shall be measured by fixed probe magnetic gages. The Contractor shall supply all the equipment required by Standard Specification §740-01, as well as two fixed probe magnetic gages. No work shall be done until the required equipment is supplied.
8. **Recoating and Overcoating.** Areas failing to meet the specified minimum dry film thickness shall be overcoated with the same type of finish paint to produce at least the total dry film thickness required. Paint applied containing unauthorized thinners, paint applied to contaminated surfaces, and paint applied contrary to this specification shall result in the recleaning and repainting the surface. The work of recleaning, repainting or overcoating, if required, shall be done by the Contractor to the satisfaction of the Engineer at no additional cost to the State.
9. **Schedule.** The finish paint shall be applied to the receiving surface within 30 days of application of the previous coating or within the manufacturers recoat or topcoat schedule recommendation whichever is less.
10. **Material Storage.** Paint in storage shall be protected from damage and maintained between 4.5°C and 32°C. Paint not used before the expiration date shown on the containers shall be immediately removed from the project site.

METHOD OF MEASUREMENT

Payment shall be made at the lump sum price bid.

BASIS OF PAYMENT

The lump sum price bid shall include the cost of all labor, materials and equipment necessary to complete the work. The cost of providing protection against damage during paint application shall be included in the bid price. Progress payments will be made based on the percent of the structure painted the finish coat in accordance with this specification. The percentage will be computed as the ratio of the length of the structure to the total length of the structure painted under this item.

Payment will be made under:

<u>Item No</u>	<u>Item</u>	<u>Pay Unit</u>
		EI 93-20 (12/2/93) 11/28/94 M

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18570.8615 M	Maintenance Painting Urethane Finish Coat	Lump Sum (for each Structure)
18570.8616 M	Maintenance Painting Urethane Finish Coat (Spray Prohibited)	Lump Sum (for each Structure)

Note: nn denotes serialized pay item. See §101-53.

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