

**STATE OF OHIO
DEPARTMENT OF TRANSPORTATION**

SUPPLEMENTAL SPECIFICATION 885

PAINTING OF STRUCTURAL STEEL WITH WARRANTY

July 20, 2007

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885.01 Description. This item consists of furnishing all necessary labor, materials, and equipment to clean, prepare and paint all structural steel surfaces, as specified in Item 514 of the most current version of the Construction and Material Specifications, or as amended, and also unconditionally warrant the paint system applied to the structural steel to be free of defects as defined in section 885.03. Acceptance by the Engineer of any portion of the work during the original cleaning and painting will not relieve the Contractor of the requirements of the warranty.

885.02 Warranty Maintenance Bond. Provide the Department with the performance and payment bonds specified in 103.05, or as amended, and furnish a three (3) year warranty maintenance bond equal to 60 percent of the total price for each item “885 Painting of Structural Steel, With Warranty.

The Surety that underwrites the maintenance bond is required to have an A.M. best rating of “A-” or better. Include the cost of the maintenance bond in each item “885 Painting of Structural Steel, With Warranty”. The effective date of the maintenance bond is the date the Department’s Form C-85 is issued for all paint items on the project. After the C-85 is issued, the Department will notify the Surety of the official start date for the warranty bond and the project will be finalized using standard procedures. The maintenance bond expires after three (3) years from the issuance of the C-85 if no corrective work is required or after completion of the Contractor’s corrective work and approval by the Department.

The Contractor maintains the liability insurance specified in 107.12, or as amended, covering any Contractor or Contractor authorized operations, persons, and equipment while any corrective work, or any warranty inspection is being performed.

885.03 Warranty Items Coverage. Warrant the entirety of the structural steel paint system and surface preparation against the following defects for the duration of the warranty period.

1. The occurrence of visible rust or rust breakthrough, paint blistering, peeling, scaling or un-removed slivers.
2. Paint applied over dirt, debris, blasting debris, or rust products not removed during blast cleaning.
3. Material deficiencies, application deficiencies, incomplete coatings, or coating thicknesses outside the thickness limits specified in the paint system specifications.
4. Damage to the coating system caused by the Contractor while removing scaffolding, forms, or performing other work.

The defects will initially be determined by visual inspection. If the visual inspection reveals a defective condition, destructive and non-destructive testing may be utilized to determine the extent of the defect.

Meeting the minimum requirements and guidelines of the applicable specification are not to be construed as a warranty, expressed or implied, as to the materials properties and workmanship efforts required to meet the performance criteria. The intent of this contract is for the Contractor to provide a maintenance free structural steel paint system.

Exclusions to the warranty will be damage to the coating resulting from vehicle damage, fire, or other damage not caused by the Contractor or subcontractor.

885.04 Traffic Control. Provide traffic control for all inspections and corrective work. The Contractor's traffic control plan for performing any work required by this specification during the warranty period shall be in accordance with current Department policy and the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways. Submit this traffic control plan to the District Construction Engineer (DCE) for approval before any work is performed.

885.05 Annual Warranty and Final Warranty Inspections. The Department will perform two (2) Annual Inspections of the warranted items beginning no later than 1 year after the issuance of the C-85 for all structural steel paint system and surface preparation items on the project. The Department will then perform the Final Warranty Inspection during the month before the end of the specified warranty period.

For each Annual Warranty Inspection and the Final Warranty Inspection, the Engineer will inspect the bridge thoroughly for the structural steel paint system defect conditions listed. The inspections will be performed jointly by ODOT personnel and the Contractor. Furnish OSHA approved, vehicle-mounted inspection equipment for all warranty inspections suitable to provide access to all areas of the structure. The Engineer will determine defective areas for repair as per section 885.03 and define those areas.

885.06 Remedial Action. Repair all defective areas identified at anytime by the Engineer during the warranty period in accordance with the repair procedures contained in Item 514 of the most current version of the Construction and Material Specifications, or as amended. Submit a progress schedule and remedial action plan in writing to the Engineer prior to any corrective work. Identify the means and methods, materials, and timeline for the remedial action. Warrant the remedial action work for the remainder of the warranty period. Obtain the Engineer's acceptance of the plan, schedule, and all materials prior to performing remedial action work.

Perform all corrective work for structural steel paint system and surface preparation during the same season as the inspection unless the seasonal limitations of Item 514 in the most current version of the Construction and Material Specifications, or as amended, prevents the completion that season. If corrective work cannot be completed in the same season due to seasonal limitations, immediately perform the corrective work during the permitted period in the following season. Repair any additional defective areas that appear between the time of inspection and the actual performance of the corrective work. Notify the Engineer at least two weeks before beginning the corrective work and allow full inspection of all operations as per Item 514 of the most current version of the Construction and Material Specifications, or as amended.

885.07 Appeal Process. The Contractor may appeal the findings of the Department. Submit any appeal to the DCE, in writing, within fifteen (15) calendar days after the Engineer has given the written results to the Contractor. The DCE will evaluate the Contractor's appeal. Within forty-five (45) calendar days after receiving the Contractor's appeal, the DCE will inform the Contractor, in writing, of the Department's determination.

If the Contractor disagrees with the Department's determination, the Contractor may appeal the determination at Step 3 of the most current version of Proposal Note 109 entitled Dispute Resolution and Administrative Claims Process, or as amended.

885.08 Method of Measurement. The Department will measure Surface Preparation of Existing Structural Steel, Field Painting of Existing Structural Steel Prime Coat, Field Painting Structural Steel, Intermediate Coat and Field Painting Structural Steel, Finish Coat by the number of square feet (square meters) of structural steel painted or on a lump sum basis.

For steel rolled beam and steel girder bridges, the Department will determine the surface area by taking a nominal measurement of the beams (i.e., two times the beam depth plus three times the flange width). In addition to this nominal measurement, the Department will add a percentage to account for incidentals such as cross frames, bearing assemblies, stiffeners, expansion joints, scuppers, etc. It is not necessary for the Engineer or Inspector to field measure every detail of the bridge to verify quantities. If there is a quantity dispute, exact field measurements of all painted surfaces and calculations will govern over the above percentage to account for incidentals.

For extremely complex bridges, such as trusses, the Department will pay for painting on a lump sum basis.

The Department will measure grinding fins, tears, slivers on existing structural steel by the number of man hours expended by the workers actually doing the grinding and will include the

time when the workers are performing grinding and repairing prime coat and not limited to only the actual grinding duration (i.e., the Department will include all hours of the workers when assigned to grinding regardless of actual grinding time). The Department will not measure grinding fins, tears, and slivers on new steel but will consider it incidental to unit price for the new steel.

885.09 Basis of Payment. The Department will pay for accepted quantities at the Contract prices as follows:

The Department may consider paint as eligible for payment for material on-hand as specified in 109.10, however, only paint that the Contractor can prove to the Engineer will be used during the construction season is eligible for payment. The Contractor will provide the Engineer calculations indicating the total square feet (square meter) of steel to be painted during the construction season. The Contractor will also provide calculations showing the total number of gallons (liters) required.

If the Contractor causes damage or injury to public or private property, the Department will not pay for restoring the property to its original condition.

The Department will not pay for repairing adjacent coatings damaged during the blasting operation.

The Department will not pay for removing and replacing an area of coating because a spot or maximum average thickness exceeds the maximum spot thickness.

The Department will not pay for additional testing required by any hauler, treatment facility, disposal facility or landfill.

The Department will pay for caulking under Field Painting Structural Steel, Intermediate Coat.

The Department will pay for final inspection access, test area preparation and test area repair at each selected area under Final Inspection Repair. The Department will not pay for accessing, inspecting, and repairing areas that are found to be in non-conformance with the specifications and pertinent contract documents.

Include all costs associated with providing the painting of structural steel with warranty complete, in-place for each item.

All other requirements of this specification are considered incidental to the work.

Item	Unit	Description
885	Square Foot (Square Meter) Lump Sum	Surface Preparation of Existing Structural Steel, with Warranty
885	Square Foot (Square Meter) Lump Sum	Field Painting of Existing Structural Steel, Prime Coat, with Warranty

885	Square Foot (Square Meter) Lump Sum, Pound (Kilogram)	Field Painting Structural Steel, Intermediate Coat, with Warranty
885	Square Foot (Square Meter) Lump Sum, Pound (Kilogram)	Field Painting Structural Steel, Finish Coat, with Warranty
885	Man Hour	Grinding Fins, Tears, Slivers on Existing Structural Steel
885	Each	Final Inspection Repair

Designer Note:

Use this specification on all projects that have a Primary Work Category entitled “Bridge Painting”. Contact the District for designation of the project Primary Work Category.

For use of this specification on other projects, contact Central Office, Office of Construction Administration.