

MP 688.02.20  
ORIGINAL ISSUANCE: JANUARY 1979  
1ST REVISION: SEPTEMBER 1988  
2ND REVISION: AUGUST 1994  
REISSUED: JANUARY 1995  
FORMERLY: MP 615.06.20  
PAGE 1 OF 3

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
MATERIALS CONTROL, SOILS AND TESTING DIVISION

MATERIALS PROCEDURE

---

GUIDE FOR CONTRACTOR'S AND FABRICATOR'S  
QUALITY CONTROL PLAN FOR PAINTING STRUCTURAL STEEL

---

- 1.0 PURPOSE
- 1.1 This procedure is a guide for designing a Contractor's or fabricator's Quality Control Plan for the surface preparation of the metal, application of the paint, and inspection of the applied film.
- 2.0 SCOPE
- 2.1 This procedure is applicable for structures that are being fabricated, erected, or repainted.
- 3.0 APPLICABLE DOCUMENT
- 3.1 MP 708.40.00
- 4.0 REQUIREMENTS AND GUIDELINES
- 4.1 General Requirements
- 4.1.1 The Contractor or fabricator shall provide and maintain a Quality Control System that will give reasonable assurance that the paints have been applied in accordance with the specification requirements.
- 4.1.2 The Contractor or fabricator shall conduct or have conducted inspections and tests required to substantiate that the paints have been applied in accordance with the specification requirements.

4.1.3 The Contractor's or fabricator's Quality Control inspections and testing shall be documented and made available for review by the Engineer for the life of the contract.

4.2 Quality Control Plan

As stated in the Specifications (Sections 688.2.1 and 688.3.1), a Quality Control Plan shall be designed by the Contractor or fabricator and submitted to the Engineer. The plan shall clearly describe the methods by which the Quality Control Program will be conducted. As a minimum, an acceptable plan should include the following:

4.2.1 Name of the company official responsible for Quality Control and for liaison with Division personnel.

4.2.2 Name of person(s) conducting the inspection.

4.2.3 Type of paint, name and address of the paint supplier, and the type and amount of thinner, if necessary, to thin or adjust the solvent balance of the paint as recommended by the manufacturer. Include a product data sheet for each item listed.

4.2.4 Surface Preparation

Appearance of the surface after blast cleaning shall correspond with the pictorial standards as specified in the contract. Specify the instrument used for determining the height of the profile of the anchor pattern produced on the surface.

4.2.5 Weather Conditions

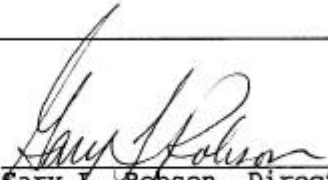
4.2.5.1 Specify the methods for determining the relative humidity, ambient temperature, temperature of the steel, and dew point.

4.2.6 Applied Coatings

4.2.6.1 Measure the wet film thickness on each coat of paint when applicable. These measurements need not be recorded.

- 4.2.6.2 Visually inspect the applied film for runs, sags, and other flaws.
- 4.2.6.3 Inspect for bubbles and pinholes by eight power magnification.
- 4.2.6.4 Measure the dry film thickness of each coat of paint and the accumulate total dry film thickness of the paint system. These measurements shall be taken and documented in accordance with MP 708.40.00. Specify the method to be used.
- 4.2.6.5 The sampling and testing program shall detail the sampling plan and technique to be used.
- 4.2.6.6 The method by which the Contractor shall document test results shall be described.
- 4.2.6.7 A detailed plan of action regarding correction of flaws in the painted surface shall be included.
- 5.0 ENVIRONMENTAL CONDITIONS
- 5.1 The field Contractor shall submit to the Engineer his procedure for equipment cleanup, as well as his plan of action for any cleanup in the event of paint spillage.
- 6.0 FORMAT
- 6.1 The Quality Control Plan for Painting shall be submitted in the same format shown in Attachment #1.

---

  
Gary L. Robson, Director  
Materials Control, Soils  
and Testing Division

QUALITY CONTROL PLAN FOR PAINTING

Name and Address of Company: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Federal Project: \_\_\_\_\_ State Project: \_\_\_\_\_

Bridge Number: \_\_\_\_\_ Bridge Name: \_\_\_\_\_

County: \_\_\_\_\_

Official responsible for Quality Control and for liaison with Division  
of Highways personnel: \_\_\_\_\_

Person(s) conducting the inspection: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and address of paint supplier: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Estimated quantity of material (in gallons) for each type of paint:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Type and amount of thinner for each type of paint:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

---

Areas being painted and inspected \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Documentation that material has been approved by the Division of  
Highways: \_\_\_\_\_

Appearance of surface after blast cleaning: \_\_\_\_\_

Instrument for measuring the height of the profile of the anchor pattern:  
\_\_\_\_\_

Method for determining relative humidity: \_\_\_\_\_  
ambient temperature: \_\_\_\_\_  
temperature of the steel: \_\_\_\_\_  
dew point: \_\_\_\_\_

Included in visual inspection: \_\_\_\_\_  
\_\_\_\_\_

Magnification inspection: \_\_\_\_\_  
\_\_\_\_\_

Wet film thickness gauge: \_\_\_\_\_  
\_\_\_\_\_

Dry film thickness gauge: \_\_\_\_\_

Dry film thickness measurement documentation:  
\_\_\_\_\_  
\_\_\_\_\_

Action regarding correction of coating flaws:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MP 688.02.20  
ORIGINAL ISSUANCE: JANUARY 1979  
1ST REVISION: SEPTEMBER 1988  
2ND REVISION: AUGUST 1994  
REISSUED: JANUARY 1995  
ATTACHMENT #1  
PAGE 3 OF 3

---

Procedure for equipment cleanup: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Procedure for spillage cleanup: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_