

Steel Reinforcing Bars and Steel Dowel Bars – 21

SCOPE:

This subpart provides procedures for being included on the Qualified Manufacturer List (QML) as a Fabricator of steel reinforcing bars and dowel bars for CDOT projects. CDOT will only accept steel reinforcing bars and dowel bars from a Fabricator on the QML.

CDOT will only accept steel reinforcing bar suppliers who have both participated in AASHTO's NTPEP (National Transportation Product Evaluation Program) audit program of steel rebar. A copy of the NTPEP Audit Report as well as any applicable documentation from the audit reports are required. CDOT may request additional information if necessary and may decertify a supplier for failing to meet CDOT expectations.

1. REFERENCED DOCUMENTS

Where applicable, the latest edition of the following standards shall be considered a part of these requirements.

1.1 CDOT Standard Specifications for Road and Bridge Construction:

Section 412.13 – Joints
Section 602 – Reinforcing Steel
Section 709.01 – Reinforcing Steel
Section 709.03 – Dowel Bars and Tie Bars

1.2 AASHTO Standards:

AASHTO M 31 – Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement

AASHTO R 38 – Standard Practice for Quality Assurance of Standard Manufactured Materials

AASHTO T 244 – Standard Method of Test for Mechanical Testing of Steel Products

AASHTO M 55 – Standard Method of Test for Steel Welded Wire Reinforcement, Plain, for Concrete

AASHTO M 221 – Standard Method of Test for Steel Welded Wire Reinforcement, Deformed, for Concrete

1.3 ASTM Standards:

ASTM A 184 – Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement

ASTM A 370 – Standard Test Methods and Definitions for Mechanical Testing of Steel Products

ASTM A 615 – Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement

ASTM A 706 – Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement

ASTM A 996 – Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement

ASTM D 3665 – Standard Practice for Random Sampling of Construction Material

1.4 NTPEP Documents:

Reinforcing Steel and Welded Wire Reinforcement Audit Program

http://www.ntpep.org/Pages/REBAR_WWR.aspx

NTPEP Committee Work Plan for Evaluation of Reinforcing Steel Manufacturers; REBAR 01-15

http://www.ntpep.org/Documents/Technical_Committee/REBAR_WWR/Documents/Rebar_WWR%20Work%20Plan.pdf

2. TERMINOLOGY

2.1 See AASHTO M 31 and ASTM A 370 for terminology related to steel reinforcing bars and dowel bars.

2.2 Coating Application Plant – The one who produces a protective coated steel reinforcing bar and a protective coated dowel bar.

2.3 Deformed bar – Steel bar with protrusions; a bar that is intended for use as reinforcement in reinforced-concrete construction.

2.4 Fabricator – The Company, which cuts and bends steel reinforcing bars either coated or uncoated and/or assembles dowel bar baskets. The company may also provide uncut lengths of steel bars to the construction project site. Each plant constitutes a separate company.

2.5 Plain bar – Steel bar without protrusions; a bar that is intended for use as a dowel bar in transverse joints of concrete pavement construction.

2.6 Supplier – In this sub-part supplier shall be defined as one who produces or mills uncoated deformed steel reinforcing bars and steel plain bars used by the Fabricator.

2.7 Uncoated bar – Steel bar without protective coating.

3. SIGNIFICANCE AND USE

3.1 This Standard specifies requirements that shall be followed by the Supplier to be included on CDOT's QML.

3.2 This Standard specifies requirements and procedures for a certification system that shall apply to all Suppliers providing steel reinforcing bars and dowel bars.

3.2.1 This Standard covers the responsibilities of the Supplier from point of delivery of steel reinforcing bars and dowel bars to the Fabricators plant, construction project site, and/or Coating Application Plant.

4. Deleted

5. Deleted

6. SUPPLIER REQUIREMENTS

6.1 Uncoated bar Suppliers shall be on CDOT's Qualified Manufacturers List (QML) before use by the Fabricator. The QML can be found at the following web address:

<https://www.codot.gov/content/apl/SteelReinforcingBarsAndSteelDowelBars.pdf>.

7. CERTIFICATION

7.1 This section details the required documentation to be submitted to the CDOT by the Supplier requesting to be added to the QML.

7.2 The most recent NTPEP audit report shall be submitted to the PEC at least 6 months before the steel product being incorporated onto a CDOT project. The NTPEP audit report may not be more than 2 years old.

7.3 Shall provide documentation that the supplier is scheduled for an audit, or has been audited in the current calendar year.

8. DECERTIFICATION

8.1 CDOT may decertify the Fabricator when conditions exist as specified on page 2 of CP 11 (Section 5 – Decertification).

Note 2: The term Supplier and Fabricator are interchangeable when reading Section 5 – Decertification on page 2.

8.2 CDOT may decertify a supplier when they fail to comply with the requirements of the NTPEP audit or have not participated in an audit in the past two years following certification.

9. Deleted

10. CDOT EVALUATION PROCEDURE

10.1 Suppliers producing steel reinforcing bars and dowel bars shall meet the minimum industry standards.

10.2 Suppliers shall submit the required documentation described in Section 7.

- 10.3 Within two months after submitting all required information, CDOT will notify the Supplier whether or not the manufacturing facility's application for the Qualified Manufacturer List has been granted.
- 10.4 CDOT may perform quality assurance testing.
- 10.5 CDOT will post the Fabricator's name and approved plant on CDOT's Qualified Manufacturer List (QML) in the web site at:
<https://www.codot.gov/content/apl/SteelReinforcingBarsAndSteelDowelBars.pdf>.
- 10.6 Failure in one or more Sections or Sub-sections listed in this Standard may result in decertification of the plant and the plant will be removed from the QML. The Supplier may apply for reinstatement on the QML.

11. Deleted

12. REQUIREMENTS FOR SHIPPING STEEL REINFORCING BARS AND DOWEL BARS BY AN APPROVED FABRICATOR

- 12.1 The steel reinforcing bars and dowel bars Supplier's QSM as approved by CDOT shall be implemented.
- 12.2 Each shipment shall be accompanied by two copies of the bill of lading, which shall include:
- 12.2.1 The name and location of the steel reinforcing bars and dowel bars Fabricator and the Supplier producing the steel reinforcing bars and dowel bars,
- 12.2.2 The size and grade of steel reinforcing bars and dowel bars conforming to the specified specification,
- 12.2.3 Bars shall be separated and tagged with the Supplier's heat identification number,
- 12.2.4 The quantity of material shipped,
- 12.2.5 The date of shipment,
- 12.2.6 A copy of the mill test reports.
- 12.3 If the specification compliance test results do not conform to Subsection 709.01 and 709.03 of the CDOT Standard Specifications, the Fabricator shall remove the non-compliant material from the shipping queue.