Chapter 4

Construction Details

Section 75 Miscellaneous Metal

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Section 75 Miscellaneous Metal

4-7501 General

This section provides guidelines for inspecting the installation of miscellaneous metal materials on the project. Miscellaneous metal materials include miscellaneous iron and steel, miscellaneous bridge metal, and metal work for pumping plants.

For information about concrete anchorage devices and high-strength bolts, refer to Bridge Construction Memo 55-1.03, "Steel Structures—General—Construction," and Section 75, "Miscellaneous Metal," in Structure Construction's *Bridge Construction Records and Procedures Manual, Vol. 2*, in at:

https://dot.ca.gov/programs/engineering-services/manuals

4-7502 Before Work Begins

Before the start of work, review the contract plans and note all the miscellaneous metal materials to be installed on the project. Review these items sufficiently in advance to help prevent scheduling conflicts and errors in ordering materials. During the preliminary review and inspections, the assistant resident engineer should also do the following:

- Verify that Form DOT CEM-3101, "Notice of Materials to Be Used," includes miscellaneous metal materials. Refer to Section 6-202, "Responsibilities for Acceptance of Manufactured or Fabricated Materials and Products" of this manual for additional information.
- Refer to Section 6-1.04C, "Steel and Iron Materials," of the Standard Specifications, and Sections 3-604, "Buy America," and 6-202, "Responsibilities for Acceptance of Manufactured or Fabricated Materials and Products," of this manual, which cover the use of foreign steel and iron.

4-7503 During the Course of Work

During work operations, the assistant resident engineer should do the following:

- Make sure that any welding of miscellaneous metal materials conforms to D1.1, "Structural Welding Code—Steel," of the American Welding Society. Refer to Section 4-11, "Welding," of this manual for additional information.
- METS inspects miscellaneous iron and steel, and miscellaneous bridge metal at the fabrication plant. When these miscellaneous metal items arrive at the job site, verify that they have been inspected and released by METS. Refer to Section 6-2, "Acceptance of Manufactured or Fabricated Materials and Products," of this manual for additional information.
- Make sure that pairs of frames and grates, and pairs of frames and covers, are match marked.

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- Verify that any minor damage to galvanizing or coatings is repaired as specified in Section 75-1.02B, "Galvanizing," of the *Standard Specifications*.
- Check that deck drains and other grating openings are covered until final cleanup of the deck.
- Require testing of deck drains as specified.

4-7504 Quality Control

While specific levels of quality control sampling and testing for miscellaneous metal are not included in Section 75, "Miscellaneous Metal," of the *Standard Specifications*, the contractor is responsible for providing quality control under Sections 5-1.01, "General"; 6-2.02, "Quality Control"; and 11, "Welding," of the *Standard Specifications*.

4-7505 **Payment**

Require scale weights for miscellaneous metal materials that are paid by weight unless quantities are designated as final pay quantities. Make the specified deductions when materials are inspected or tested at the source, in accordance with Section 6-2.01E, "Material Source Inspection and Testing," of the *Standard Specifications*.

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