

**470.1 DESCRIPTION**

This work consists of fabricating and constructing railings.

**470.2 MATERIALS**

Materials shall conform to the following sections:

**Structural Steel:** Section 970. Unless otherwise specified on the plans, structural steel for railing shall conform to ASTM A709/A709M, Grade 36 (250) except that tubular members shall conform to ASTM A500, Grade B.

**Anchor Bolts:** Section 972. Shall be as specified on the plans.

**Paint:** Section 411.

**470.3 CONSTRUCTION REQUIREMENTS**

Railing shall be fabricated and erected in accordance with Section 410.3 and the following:

Unless otherwise specified on the plans, the fabricator shall initially submit two copies of the shop plans to the Office of Bridge Design for review. Shop plans shall be submitted a minimum of 15 days prior to start of fabrication. One reviewed copy will be sent back to the fabricator who will then make the necessary changes and then send six final copies to the Office of Bridge Design for approval and distribution.

Railing shall be constructed in accordance with the details shown and the shop drawings and shall be adjusted prior to bolting or welding the connections to insure proper matching at abutting joints and correct alignment throughout the length.

Unless otherwise specified on the plans, rail posts shall be built vertical.

Shop and field welding, and welding inspection shall conform to the requirements in the latest edition of ANSI/AWS D1.1 Structural Welding Code. Welders shall be qualified in accordance with Section 410.3.D.

The painting of railing shall conform to the requirements of Section 411.

**470.4 METHOD OF MEASUREMENT**

Measurement for railing will not be made. Plans quantity will be used for payment.

**470.5 BASIS OF PAYMENT**

The accepted quantities of railing will be paid for as detailed on the plans and, unless otherwise specified on the plans, shall include the cost of structural steel, anchor bolts, painting, galvanizing, welding, weld inspection, labor, equipment and all other items incidental to fabricating and constructing the railing.