

**SECTION 716 -- STEEL RAILINGS**

**716.01 -- Description**

- 1. This work shall consist of furnishing and placing steel handrail, bridge rail, rail elements, rail posts, barrier rail, pedestrian railing, and all connecting bolts and anchors in accordance with the requirements of these *Specifications* and the plans.
- 2. The plans shall be supplemented by working drawings submitted in accordance with the requirements of Subsection 105.02.

**716.02 -- Material Requirements**

- 1. The materials shall conform to the requirements in Table 716.01.

**Table 716.01**

<b>Material Requirements</b>	
<b><u>Applicable Materials</u></b>	<b><u>Section</u></b>
Structural Steel .....	1045
Structural Threaded Fasteners .....	1057, 1058
Steel Pipe for Rails and Posts .....	ASTM A 53, Grade B
Chain Link Fence and Hardware .....	1064
Steel Tubing .....	ASTM A 500, Grade B

- 2. Anchor bolts shall meet the requirements of Section 1058 unless otherwise specified in the plans or special provisions. The bolt projection shall be galvanized.

**716.03 -- Construction Methods**

- 1. a. The Contractor shall build railing to the lines, grades, and vertical and horizontal curves shown in the plans.  
b. The Contractor shall set rail posts plumb. Concrete areas upon which railing posts are to be set shall be dressed to provide even bearing.
- 2. The Contractor shall paint all exposed metal except galvanized and weathering grade steel as prescribed in Section 709.
- 3. The Contractor shall repair galvanized coating which has been scarred, burned, or otherwise damaged in accordance with Section 1061.

**716.04 -- Method of Measurement**

1. a. Structural steel for handrails and bridge rails is measured by the pound.  
b. Pedestrian barrier rail, pedestrian handrail, and pedestrian railing (chain link type) shall be measured by the foot. The quantity to be paid for will be the distance in feet between centers of end posts, with no allowance for splices, joints, overhangs, or end sections.
2. The Department computes plan quantities from end post to end post, measured horizontally, with no adjustments made for changes in elevation.

**716.05 -- Basis of Payment**

- |    |                                      |                  |
|----|--------------------------------------|------------------|
| 1. | <u>Pay Items</u>                     | <u>Pay Unit</u>  |
|    | Structural Steel for Handrail        | Pound (lb)       |
|    | Structural Steel for Bridge Rail     | Pound (lb)       |
|    | Pedestrian Barrier Rail              | Linear Foot (LF) |
|    | Pedestrian Railing (Chain Link Type) | Linear Foot (LF) |
|    | Pedestrian Handrail                  | Linear Foot (LF) |
2. Fabrication, erection, transportation, painting, and galvanizing are subsidiary to this Section's pay items.
  3. Payment is full compensation for all work prescribed in this Section.