

**SECTION 9.04
METAL BRIDGE RAIL**

9.04.01--Description: This railing shall be selected from the different types of railing shown on the bridge plans and shall consist of metal pipe and fittings, structural steel shapes, castings or other material, anchor bolts, hardware fasteners, anchorages and terminal elements for connection to bridge parapets and fabricated in accordance with the dimensions and details given, and erected where shown on the plans or as ordered, in accordance with these specifications.

9.04.02--Materials: The material for the type of metal bridge rail selected for this work shall conform to the requirements of Subarticles M.06.02-1 for metal bridge rail (structural steel), M.06.02-9(d) for metal bridge rail (cast post--aluminum).

9.04.03--Construction Methods: The railing shall be accurately fabricated in accordance with the plans or as ordered.

Fabrication and erection shall be done in accordance with the requirements for steel bridges and structural steel as given hereinbefore. In the case of welded railing, after welding, all exposed joints shall be finished by grinding or filing to give a neat appearing job.

Metal railings shall be carefully adjusted prior to fixing in place to insure proper matching at abutting joints and correct alignment and cambers throughout their length. Holes for field connections to be drilled in the field shall be drilled with the railing in place in the structure and at proper grade and alignment. Welding may be substituted for rivets or bolts in field connections, with the approval of the Engineer.

Aluminum welding shall be in accordance with the AWS Structural Welding Code, Aluminum," AWS D1.2, latest issue.

Where aluminum alloys come in contact with other materials, the contacting surfaces shall be thoroughly coated with an aluminum impregnated caulking compound conforming to FS TT-C598 plaster type caulking compound, aluminum pigmented.

Aluminum Alloys shall not be placed in contact with copper, copper base alloys, lead or nickel.

Metal railing shall be painted in accordance with the painting requirements for structural steel, except that aluminum railing and aluminum posts shall not be painted.

9.04.04--Method of Measurement: This work will be measured for payment by the number of meters of metal bridge rail, of the type selected, completed and accepted.

9.04.05--Basis of Payment: This work will be paid for at the contract unit price per meter for "Metal Bridge Rail" complete in place, which price shall include all material, equipment, tools and labor incidental thereto.

Pay Item	Pay Unit
Metal Bridge Rail (Type)	m