

**DIVISION 05 - METALS**

Includes the following sections:

- 05 12 00        Structural Steel Framing
- 05 50 00        Metal Fabrications

**DESIGN CRITERIA**

Galvanizing: All metal exposed to view or moisture shall be non-ferrous or heavy hot-dipped galvanized.

Paint shall be avoided at exterior handrails.

Steel sleeves used in concrete for steel handrails shall be hot dip galvanized after fabrication.

Painting

1. Shop Priming
  - a. Galvanized metal: touch up with Galv-Weld, or equal (*second mfr must be named*).
  - b. Other metal: paint one coat approved metal primer.
  - c. Paint concealed areas before assembly.
2. Remove rust, scale, grease and oil after fabrication and before shop priming. (Refer to Section 09 90 00 for additional information)
3. Field Painting: At all galvanized metal surfaces, the following procedure should be followed.
  - a. Acid etch all surfaces with muriatic acid.
  - b. Prime with an oil-based primer specifically intended for galvanized surfaces.
  - c. Two (2) finish coats (minimum) of specified paint to be applied.

**STRUCTURAL STEEL FRAMING** **05 12 00**

All metal exposed to view or moisture shall be non-ferrous or heavy hot-dipped galvanized conforming to ASTM Specification A153-60. Dissimilar metals shall not touch.

**METAL FABRICATIONS** **05 50 00**

All metal exposed to view or moisture shall be non-ferrous or heavy hot-dipped galvanized, conforming to ASTM Specification A153-60. Dissimilar metals shall not touch.

Exterior Metal Ironwork

1. All exterior metal ironwork shall be heavy hot-dip galvanized after fabrication. No field welding.

Exterior Handrails

1. Where joints are required, due to lengths too long to transport or hot-dip galvanize, provide joints which allow for expansion and contraction (slip joints) and which do not require field welding or work which will disturb the hot-dip galvanization.
2. See UCSC standard detail 05.5-20