

## **Part 1      General**

### **1.1      REFERENCES**

- .1 American Society for Testing and Materials International, (ASTM)
  - .1 ASTM A123 / A123M - 09 Standard Specification for Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products
  - .2 ASTM A153 / A153M - 09 Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware
  - .3 ASTM A307, Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
  - .4 ASTM F2329 - 11 Standard Specification for Zinc Coating, Hot Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners
- .2 Canadian Standards Association (CSA International)
  - .1 CAN/CSA-G164-M, Galvanisation à chaud des objets de forme irrégulière.
- .3 Canadian Institute of Steel Construction
  - .1 Handbook of steel construction

### **1.2      SHOP DRAWINGS**

- .1 Submit shop drawings and materials list.

### **1.3      QUALITY CONTROL**

- .1 Independent Inspection/Testing Agencies will be engaged by Departmental Representative for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Departmental Representative.
- .2 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .3 Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress
- .4 If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Departmental Representative at no cost to Departmental Representative. Pay costs for retesting and reinspection.

### **1.4      QUALITY ASSURANCE**

- .1 Submit 2 copies of mill test.
  - .1 Mill test reports to show chemical and physical properties and other details of steel to be used.

- .2 Provide structural steel Fabricator's affidavit stating that materials and products used in fabrication conform to applicable material and products standards specified and indicated.

## **1.5 TRANSPORTING, STORING AND HANDLING**

- .1 Packing, Shipping, Handling and Unloading:
  - .1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 – Basic Product Requirements.
  - .2 Handle steel pieces so as to avoid permanent deformations.
  - .3 Handle with care steel pieces that have received a special coating.
- .2 Storage and Protection:
  - .1 Cover exposed stainless steel surfaces with pressure sensitive heavy protection paper or apply strippable plastic coating, before shipping to job site.
  - .2 Leave protective covering in place until final cleaning of building. Provide instructions for removal of protective covering.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Mechanical bolts, Lag screw, Drift bolt: to ASTM A307, as indicated
- .2 Nuts and washers: following asked bolts, to develop full strength. Lubricated in accordance with ASTM A563.
- .3 Washers to be of best cast iron quality.
- .4 Hot dip galvanizing: galvanize steel, where indicated, to CAN/CSA-G164, minimum zinc coating of 600 g/m<sup>2</sup> or ASTM A153 / A153M - 09 Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware.

**END OF SECTION**