

PART 1 - GENERAL

- 1.1 Reference Standards
- .1 ASTM A123/A123M-15, Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
  - .2 ASTM A307-14, Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile.
  - .3 CAN/CSA-G40.21-13, Structural Quality Steels.
  - .4 CAN/CGSB-1.181-1999, Ready-Mixed Organic Zinc-Rich Coating.
  - .5 CAN/CSA-S16.1-14, Limit States Design of Steel Structures.
  - .6 CSA W59-13, Welded Steel Construction (Metal Arc Welding).
- 1.2 Related Work
- .1 Refer to other Specification Sections for related information.
  - .2 Refer to Section 01 33 00 for Shop Drawings/Submissions requirements.
- 1.3 Shop Drawings
- .1 Shop Drawings:
    - .1 Clearly indicate the following items:
      - .1 General arrangements, dimensions, clearance locations and directions of assemblies as installed on structures.
      - .2 Locations, sizes and installation tolerances of anchor bolts, eye bolts and embedded parts.
      - .3 Types of materials used, finishes and core thickness.
      - .4 All other pertinent details and accessories.
  - .2 Test Results:
    - .1 Provide test results for the galvanized items.
  - .3 Submissions
    - .1 Provide submissions in accordance with Section 01 33 00.

PART 2 - PRODUCTS

2.1 Materials

- .1 Steel Sections: to CAN-G40.21, Grade 350W.
- .2 Steel rod, plate and angles: to CAN-G40.21, Grade 300W.
- .3 Welding materials: to CSA W59.
- .4 Bolts and anchor bolts: to ASTM A307.
- .5 Galvanizing: hot dipped galvanizing with zinc coating 600 g/m<sup>2</sup> to ASTM A123/A123M.
- .6 Zinc primer: Zinc rich, ready mix to CGSB 1-GP-181.

2.2 Fabrication

- .1 Build work square, true, straight and accurate to required size, with joints closely fitted and properly secured.
- .2 Fabricate items from steel unless otherwise noted.
- .3 Where possible, fit and shop assemble work, ready for installation.
- .4 Confirm exposed welds are continuous for length.

2.3 Miscellaneous  
Metal Work Items

- .1 Miscellaneous anchors, bolts and inserts:
  - .1 Where size, spacing and the like are not indicated, provide as necessary for the purpose.
  - .2 Hot-dip galvanize all miscellaneous anchors, bolts and inserts.
- .2 Miscellaneous Steel:
  - .1 Provide miscellaneous steel as required to the shape, size and details required.
  - .2 Hot-dip galvanize all miscellaneous steel.

PART 3 - EXECUTION

3.1 Erection

- .1 Install metalwork square, plumb, straight and true, accurately fitted with tight joints and intersections.
- .2 Make field connections with bolts to CSA S16.1, or weld.
- .3 Touch-up bolts and scratched surfaces after

completion of erection with zinc primer.

**END OF SECTION**