

1. GENERAL

1.1 Section Includes

- .1 Structural steel work in this section includes structural sections indicated on drawings.

1.2 References

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA G40.20/G40.21 General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
 - .2 CAN/CSA G164, Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CAN/CSA S16, Limit States Design of Steel Structures.
 - .4 CSA W47.1, Certification of Companies for Fusion Welding of Steel Structures.
 - .5 CSA W48, Filler Metals and Allied Materials for Metal Arc Welding.
 - .6 CSA W55.3, Resistance Welding Qualification Code for Fabricators of Structural Members Used in Buildings.
 - .7 CSA W59, Welded Steel Construction (Metal Arc Welding).
- .2 American Society for Testing and Materials International, (ASTM)
 - .1 ASTM A36/A36M, Specification for Structural Steel.
 - .2 ASTM A193/A193M, Specification for Alloy Steel and Stainless Steel Bolting Materials for High Temperature Service.
 - .3 ASTM A307, Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
 - .4 ASTM A325, Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
 - .5 ASTM A325M, Specification for High Strength Bolts for Structural Steel Joints.
 - .6 ASTM A490M, Specification for High Strength Steel Bolts, Classes 10.9 and 10.9.3, for Structural Steel Joints (Metric).
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB 85.10 [99], Protective Coatings for Metals.
- .4 Canadian Institute of Steel Construction (CISC)/Canadian Paint Manufacturer's Association (CPMA).
 - .1 CISC/CPMA 1 73b, Quick Drying, One Coat Paint for Use on Structural Steel.
 - .2 CISC/CPMA 2 75, Quick Drying, Primer for use on Structural Steel.
- .5 Master Painters Institute
 - .1 MPI INT 5.1, Structural Steel and Metal Fabrications.
 - .2 MPI EXT 5.1, Structural Steel and Metal Fabrications.
- .6 The Society for Protective Coatings (SSPC)
 - .1 SSPC SP 6/NACE No. 3, Commercial Blast Cleaning.

1.3 Measurement Procedures

- .1 No measurement will be made for work under this section.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings including fabrication and erection documents and materials list in accordance with Section 01 33 00 Submittal Procedures.
- .2 Erection drawings: indicate details and information necessary for assembly and erection purposes including:
 - .1 Description of methods.
 - .2 Sequence of erection.

- .3 Type of equipment used in erection.
- .4 Temporary bracings.

2. PRODUCTS

2.1 Materials

- .1 Structural steel: to CAN/CSA G40.20/G40.21 Grade 300W.
- .2 Bolts, nuts and washers: to ASTM A307.
- .3 Welding materials: to CSA W59 and certified by Canadian Welding Bureau.
- .4 Shop paint primer: to CISC/CPMA.
- .5 Hot dip galvanizing: galvanize steel to CAN/CSA G164, minimum zinc coating of 600 g/m².
- .6 Shear studs: to CSA W59, Appendix H.

2.2 FABRICATION

- .1 Fabricate structural steel in accordance with CAN/CSA S16 and in accordance with reviewed shop drawings.
- .2 Install Nelson studs in accordance with CSA W59.
- .3 Continuously seal members by continuous welds where indicated. Grind smooth.

3. EXECUTION

3.1 GENERAL

- .1 Structural steel work: in accordance with CAN/CSA S16.
- .2 Welding: in accordance with CSA W59.
- .3 Companies to be certified under Division 1 or 2.1 of CSA W47.1 for fusion welding of steel structures and/or CSA W55.3 for resistance welding of structural components.

3.2 CONNECTION TO EXISTING WORK

- .1 Verify dimensions and condition of existing work, report discrepancies and potential problem areas to Contract Administrator for direction before commencing fabrication.

3.3 MARKING

- .1 Mark materials in accordance with CAN/CSA G40.20/G40.21. Do not use die stamping. If steel is to be left in unpainted condition, place marking at locations not visible from exterior after erection.

END OF SECTION