

Part 1 General

1.1 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM)
 - .1 ASTM A193/A193M-10a, Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications.
- .2 Canadian Standards Association (CSA)
 - .1 CAN/CSA-G40.20/G40.21-04(R2009), General Requirements for Rolled or Welded Structural Quality Steel.
 - .2 CAN/CSA-S16.1-09, Limit States Design of Steel Structures.
 - .3 CSA W48-06, Filler Metals and Allied Materials for Metal Arc Welding (Developed in co-operation with the Canadian Welding Bureau).
 - .4 CSA W59-03(R2008), Welded Steel Construction (Metal Arc Welding) (Imperial Version).
- .3 Canadian Institute for Steel Construction (CISC)
 - .1 CISC/CPMA Standard 2-75, A Quick-drying Primer for Use on Structural Steel.
- .4 The Society for Protective Coatings (SPC)
 - .1 SSPC-SP 7/NACE No. 4, Brush-Off Blast Cleaning.

1.2 SUBMITTALS

- .1 Upon request, complete and submit to Contract Administrator the Confirmation of Certification Status form in Appendix 'A'.
- .2 Shop Drawings
 - .1 Submit shop drawings bearing stamp and signature of qualified professional engineer registered or licensed in Province of Manitoba, Canada.
 - .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work.
 - .3 Indicate materials, core thicknesses, finishes, connections, joints, method of anchorage, number of anchors, supports, reinforcement, details, accessories, and other information necessary for completion of Work.
 - .4 Do not proceed with Work affected by submittal until review is complete.
 - .5 Allow 5 working days for Contract Administrator's review of each submission.
 - .6 Adjustments made on shop drawings by Contract Administrator are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Contract Administrator prior to proceeding with Work.
 - .7 Submit one hard or electronic copy of shop drawings for each requirement requested in specification Sections and as Contract Administrator may reasonably request.
 - .8 If upon review by Contract Administrator, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same

procedure indicated above, must be performed before fabrication and installation of Work may proceed.

- .3 Contractor's responsibility for errors and omissions in submission is not relieved by Contract Administrator's review of submittals.
- .4 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Contract Administrator review.

Part 2 Products

2.1 MATERIALS

- .1 Steel sections and plates: to CAN/CSA-G40.20/G40.21, Grade 350W.
- .2 Welding materials: to CSA W59.
- .3 Welding electrodes: to CSA W48 Series.
- .4 Bolts and anchor bolts: to ASTM A193, Grade B7.
- .5 Grout: non-shrink, non-metallic, flowable, 15 MPa at 24 hours.
 - .1 Acceptable Product: Sika Grout 212 by Sika Canada

2.2 FABRICATION

- .1 Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured.
- .2 Where possible, fit and shop assemble work, ready for erection.
- .3 Ensure exposed welds are continuous for length of each joint. File or grind exposed welds smooth and flush.

2.3 FINISHES

- .1 Shop Primer (if required): Steel receiving finish painting to have one coat of CISC/CPMA 2-75 Quick-drying shop primer.
 - .1 Surface Preparation: Steel to be cleaned in conformance with SSPC-SP 7/NACE.
- .2 Finish:
 - .1 1st Coat: Pro-Cryl Universal Acrylic Primer, B66-310 Series (2.0 - 4.0 mils dry per coat).
 - .2 2nd Coat: Waterbased Industrial Enamel, B53-300 Series (1.5 - 3.0 mils dry per coat).
 - .3 Colour by: to match existing.

Part 3 Execution

3.1 ERECTION

- .1 Do welding work in accordance with CSA W59 unless specified otherwise.

- .2 Erect metalwork square, plumb, straight, and true, accurately fitted, with tight joints and intersections.
- .3 Exposed fastening devices to match finish and be compatible with material through which they pass.
- .4 Make field connections with bolts to CAN/CSA-S16.1, or weld.
- .5 Touch-up field welds, bolts and burnt or scratched surfaces after completion of erection with primer.

3.2 CLEANING

- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION

Confirmation of Fabrication Company's Certification Status

This questionnaire is to be completed by each steel fabricator and/or erector on the project.

The questionnaire is to be submitted with the bid documents.

Please check the appropriate item:

1. Is the Company certified by the Canadian Welding Bureau? Yes _____ No _____

2. To which standard is the company certified?

CSA W47.1	Div. 1	Div. 2.1	Div. 2.2	Div. 3
CSA W47.2	Div. 1	Div. 2.1	Div. 2.2	Div. 3
CSA W186				
CSA W55.3				

3. Are all welders qualified by the CWB for the processes and positions in which they weld in accordance with the appropriate Standard?

Yes _____ No _____

4. Are all welding procedures approved by the CWB to the appropriate standard?

Yes _____ No _____

5. Please provide the following information:

(a) Name of engineer responsible for welding design:

(b) Name of engineer responsible for welding procedures:

(c) Name of the welding supervisor responsible for:

Shop: _____

Field: _____

Signed: _____

Position: _____

Company Name: _____