

PART 1 - GENERAL

1.1 RELATED
SECTIONS

- .1 Section 09 91 23 - Painting.

1.2 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM)
.1 ASTM A 53/A 53M-12, Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
.2 ASTM A 480/A 48M, Specification for General requirements for flat-rolled Stainless Steel and heat resistant steel plate, sheet and strip.
.3 ASTM F593, Specification for Stainless steel bolts, hex cap screws and studs, 60,000 PSI Tensile Strength.
- .2 Canadian General Standards Board (CGSB)
.1 CAN/CGSB-1.40-97, Anti-corrosive Structural Steel Alkyd Primer.
.2 CAN/CGSB-1.181-92, Ready-Mixed, Organic Zinc-Rich Coating.
- .3 Canadian Standards Association (CSA International)
.1 CAN/CSA-G40.20/G40.21-04, General Requirements for Rolled or Welded Structural Quality Steel.
.2 CSA W48-06(R2011), Filler Metals and Allied Materials for Metal Arc Welding (Developed in co-operation with the Canadian Welding Bureau).
.3 CSA W59-03(R2008), Welded Steel Construction (Metal Arc Welding) (Imperial Version).

1.3 SUBMITTALS

- .1 Product Data:
.1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures.
.2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with
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1.3 SUBMITTALS
(Cont'd)

- .1 Product Data:(Cont'd)
 - .2 (Cont'd)
Section 01 33 00 - Submittal Procedures.
Indicate VOC's:
 - .1 For finishes, coatings, primers and paints.
- .2 Shop Drawings
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Indicate construction details, sizes of steel sections and thickness of steel sheet, finishes, connections, joints, method of anchorage, number of anchors, supports, reinforcement, details and accessories.
- .3 Submit shop drawing bearing stamp of a qualified professional engineer registered in Province of Nova Scotia.
- .4 Provide written documentation currently dated from the Canadian Welding Bureau confirming the current qualifications of the steel contractor to perform the work requirements of CSA W47.1. This letter to be signed by an authorized representative of the Canadian Welding Bureau and countersigned by an authorized representative of the steel contractor.
- .5 Supply and install mock-up for 1 door at each building location. 3 in total. Upon review by departmental representative, mock-up may remain in place and be part of the work provided that it functions as intended.

1.4 QUALITY
ASSURANCE

- .1 Fabricator: Company specializing in welded structural building components with 10 years documented experience and approved under CSA W47 and CSA W55.3.

1.5 COORDINATION

- .1 Coordinate installation with Departmental representative.
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1.6 DELIVERY,
STORAGE, AND
HANDLING

- .1 Packing, Shipping, Handling and Unloading:
 - .1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 - Common Product Requirements.
 - .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.
 - .3 General contractor is responsible for the storage of construction tools and parts. The storage device shall be made of metal and lockable with a secure padlock. An area will be available in each building, coordinate location with departmental representative.

1.7 site
requirements

- .1 .1 Provide continuous exhaust and ventilation during welding work by means of portable units. Exhaust to the exterior of the building. Coordinate the use of existing ventilation system with departmental representative and general contractor to ensure a safe environment during and after the welding work is completed.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Steel sections and plates: ASTM A240, Grade 304, Specification for chromium and chromium-nickel stainless steel plate, sheet, and strip.
- .2 Welding materials: to CSA W59.
- .3 Welding electrodes: to CSA W48 Series.
- .4 Bolts and anchor bolts: to ASTM A 307.

- 2.2 FABRICATION
- .1 Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured.
 - .2 Use tamperproof flat, round headed screws on items requiring assembly by screws or as indicated.
 - .3 Where possible, fit and shop assemble work, ready for erection.
 - .4 Ensure exposed welds are continuous for length of each joint. File or grind exposed welds smooth and flush.
 - .5 Supply components required for anchorage of metal fabrications.

- 2.3 FINISHES
- .1 Brushed stainless steel finish.

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 Touch-up rivets, field welds, bolts and burnt or scratched surfaces after completion of erection with primer.
 - .5 Touch-up doors and frames after completion of work.

- 3.2 CLEANING
- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
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3.2 CLEANING .2 Upon completion of installation, remove
(Cont'd) surplus materials, rubbish, tools and
equipment barriers.