
Part 1 General

1.1 Related Work

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .3 Section 01 78 00 - Closeout Submittals.

1.2 References

- .1 Aluminum Association, Inc. (AA)
 - .1 Designation System for Aluminum Finishes -[1997].
- .2 American Society for Testing and Materials (ASTM)
 - .1 ASTM A653/A653M-[01a], Standard Specification for Steel Sheet, Zinc-Coated, (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .2 ASTM B32-[00], Standard Specification for Solder Metal.
 - .3 ASTM B456-[95], Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.81-[M90], Air Drying and Baking Alkyd Primer for Vehicles and Equipment.
 - .2 CAN/CGSB-1.88-[92], Gloss Alkyd Enamel, Air Drying and Baking.
 - .3 CGSB 31-GP-107Ma-[90], Non-Inhibited Phosphoric Acid Base Metal Conditioner and Rust Remover.
 - .4 CGSB 41-GP-6M-[1983], Sheets, Thermosetting Polyester Plastics, Glass Fibre Reinforced. Reaffirmation of September 1976.
- .4 Canadian Standards Association (CSA)
 - .1 CAN/CSA-G164-M92(R1998), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .2 CSAW47.2-M1987(R1998), Certification of Companies for Fusion Welding of Aluminum.
 - .3 CSA W59-M1989(R2001), Welded Steel Construction (Metal Arc Welding) (Imperial Version).
 - .4 CSA W59.2-M1991(R1998), Welded Aluminum Construction.
- .5 Canadian Sheet Steel Building Institute (CSSBI)
 - .1 Sheet Steel Facts # 6, Metallic Coated Sheet Steel for Structural Building Products-July 1995.
- .6 The Master Painters Institute (MPI)
 - .1 Architectural Painting Specification Manual - March 1998.

1.3 Shop Drawings

- .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Indicate materials, thicknesses, sizes, finishes, colours, construction details, removable and interchangeable components, mounting methods, and schedule of signs.
- .3 Submit full size templates for individually fabricated or incised lettering indicating word and letter spacing.

1.4 Samples

- .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit representative sample of signage, and mounting method.

1.5 Quality Assurance

- .1 Welding Certification in accordance with CSA W47.2.

1.6 Waste Management and Disposal

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene and corrugated cardboard packaging material for recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .4 Place materials defined as hazardous or toxic in designated containers.
- .5 Divert unused metal materials from landfill to metal recycling facility as approved by Contract Administrator.
- .6 Unused paint or coating material must be disposed of at an official hazardous material collections site as approved by Contract Administrator.
- .7 Fold up metal banding, flatten and place in designated area for recycling.
- .8 Do not dispose of unused paint material into sewer system, into streams, lakes, onto ground or in any other location where it will pose health or environmental hazard.

1.7 Maintenance Data

- .1 Provide maintenance data for illuminated signs for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

Part 2 Products

2.1 Materials

- .1 Sheet aluminum: anodizing quality.
- .2 Prefinished sheet aluminum: embossed utility sheet with manufacturer applied baked enamel on face and back.
- .3 Welding materials: to CSA W59.
- .4 Solder: to ASTM B32, Type [Sn50].
- .5 Adhesives, paints, sealants and solvents for sheet: type recommended by sheet manufacturer for applicable condition.
- .6 Acrylic top-coat: clear, non-yellowing, exterior grade, satin finish, acrylic polyester resin protective coating, compatible with [metal] surface of type recommended by sheet manufacturer.
- .7 Bituminous paint: to MPI [EXT 5.4D].

2.2 Cut-Out Letters

- .1 Cut letters from plain, aluminum sheet.
- .2 Optima typeface, upper case; sizes and thicknesses as indicated.
- .3 After fabrication finish aluminum with anodizing – Colour to be selected by Contract Administrator.
 - .1 Submit samples including, but not limited to: Clear anodized and/or Bronze anodized.
 - .2 Style: Optima, typeface, Upper Case,
 - .3 Height: As per Elevation Drawing (A-4):
 - .1 400mm high lettering to read: VALOUR COMMUNITY CENTRE
 - .2 250mm high lettering to read: ISAAC BROCK SITE and 715 TELFER STREET NORTH
 - .4 Locations as per elevation drawing A-4 and as selected by Contract Administrator
 - .5 Material: Aluminium Sheet
 - .6 Material Thickness: 6mm
 - .7 Finish: Anodized finish. To be approved by Contract Administrator.
 - .8 Mounting Method: concealed fasteners

2.3 Fabrication

- .1 Fabricate signs in accordance with details, specifications and shop drawings.
- .2 Allow for thermal movement without distortion of components.
- .3 Exposed fasteners permitted only where indicated or approved by [Contract Administrator] and to be inconspicuous and same finish and colour as base material, or as noted.

- .4 Apply bituminous paint to aluminum in contact with dissimilar metals, concrete or masonry.
- .5 Manufacturer's nameplates on sign surface locations visible in completed work not acceptable.

2.4 Finishes

- .1 Anodized aluminum:
 - .1 Clear finish: to designation AA-DAF in uncoloured anodized finish..
 - .2 Colour finish: to designation AA-DAF to Contract Administrator's approval.
- .2 Galvanized finish: on irregular shaped articles, 381 g/m² zinc coating to CAN/CSA G164.

2.5 Door Plates

- .1 Fabricate sign faces of anodized aluminum. Size 150mm x 150mm x 2mm mm thick.
- .2 Sign graphics: apply by self-stick vinyl letters.
- .3 Fixed mounting: use self-stick foam tape.
- .4 Washroom pictographs: cut-out figures without backgrounds.

Part 3 Execution

3.1 Installation

- .1 Erect and secure signs plumb and level at elevations indicated and as directed by Contract Administrator.
- .2 Comply with sign manufacturer's installation instructions and approved shop drawings.
- .3 Mechanical attachment:
 - .1 To concrete or solid masonry use lag screws and expansion bolts or screws and fibre plugs, as appropriate for stresses involved.
 - .2 To hollow masonry use toggle bolts or equivalent.
 - .3 To steel: use bolts with nut and lock washers, self-tapping screws.
 - .4 To wood: use screws.
 - .5 Secure into framing members behind stud walls or above ceilings.
 - .6 Mechanical fasteners on exterior to be non-staining, non-ferrous type.
 - .7 Fabricate special fasteners as required for installation conditions.
 - .8 Mechanical fasteners and methods of attachment subject to Contract Administrator's approval. Obtain Contract Administrator's approval before fixing to structural steel.

3.2 Cleaning

- .1 Leave signs clean.

- .2 Touch up any damaged finishes.

END OF SECTION