
PART 1 - GENERAL

1.1 REFERENCE STANDARDS

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

1.2 SHOP DRAWINGS

- .1 Submit shop drawings for stainless steel handrail assembly.
- .2 Clearly indicate materials, core thicknesses, finishes, connections, joints, method of anchorage, number of anchors, supports, reinforcement, details, and accessories.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Welding Materials : to CSA W59.
- .2 Bolts and Anchor Bolts : to ASTM A307-82a, stainless steel.
- .3 Miscellaneous Metal items include, but are not limited to the following :
 - Anchor Bolts, stainless steel
 - Stainless steel handrail support posts and stainless steel handrail brackets
 - Stainless steel handrails and guardrails
 - Corners at guardrails, elbow and mitred
 - Corners at rails, elbow and radius
 - Stainless steel base plates
- .4 Stainless Steel Posts and Rails : Type 316, Finish #4, Schedule 5 Tubing; 38 mm OD tubing, 4.2 mm (0.166) wall thickness.
- .5 Premanufactured elbows welded to straight lengths to make turns are accepted.
- .6 Rail support brackets solid S/S stock, 12.5 mm diameter.

2.2 FABRICATION

- .1 Build work square, true, straight, and accurate to required size, with joints closely fitted and properly secured.

METAL FABRICATIONS

- .2 Fabricate items from stainless steel unless otherwise noted.
- .3 Use self-tapping, shake-proof, countersunk, flat headed screws on items requiring assembly by screws or as indicated.
- .4 Where possible, fit and shop assemble work, ready for erection.
- .5 Ensure exposed welds are continuous for length of each joint. File or grind exposed welds smooth and flush.

2.3 **STAIRS / RAMPS**

- .1 Fabricate stair rails, posts, and guards to suit site conditions. All new work in stainless steel.
- .2 Grind welds smooth.
- .3 Handrail surface to consist of polished stainless steel tubular handrails fabricated for mounting to posts as detailed.
- .4 Secure handrail to stainless steel bracket where noted; provide smooth, fitted cuts and welds at juncture of rails, at turns and transition points. Polish exposed edges. Remove burrs and any sharp projections.
- .5 Polish all welds, connections, and fastenings to provide a smooth finish.
- .6 Ramp : Mounting Rail Assembly to Concrete
Provide 6.0 mm thick x 50 mm wide continuous S/S flat bar, welded to each post. Provide holes in flat bar for 2 - 12.5 mm S/S anchor bolts. Anchor at each post location.
- .7 Stairs : Mounting Rail Assembly to Concrete
Provide 6.0 mm thick x 50 mm wide x 100 mm long S/S plates welded to each post. Provide holes in plate for 2 - 12.5 mm S/S anchor bolts. Chem set or expansion shield anchors into concrete minimum 65 mm.
- .8 Ensure all posts, rails, and guards are well secured to stairs and will resist lateral pressures of 113 kg.

PART 3 - EXECUTION

3.1

ERECTION

- .1 Erect metal work square, plumb. Straight, and true, accurately fitted with tight joints and intersections.
- .2 Make field connections with high tensile bolts, or weld to CSA S16-01 and CSA S16SI-05.
- .3 Polish rails, welds, connections to #4 finish.

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