



## MSU Type GSL Aluminum Safety Platforms

### Part 1- General

#### 1.1 Standards

- .1 Conform to CAN3-S157 -M83 Strength Design in Aluminum.
- .2 Conform to CSA W59.2 -M191 Welded Aluminum Construction and CSA W47.2-M1987 Certification of Companies for Fusion Welding of Aluminum.
- .3 Occupational Health and Safety Act Section 89.
- .4 Safety Platforms shall be MSU Mississauga Type GSL as manufactured by MSU Mississauga Ltd. 2222 S. Sheridan Way, Mississauga, Ontario L5J 2M4, 1-800-268-5336, [www.msumississauga.com](http://www.msumississauga.com), [sales@msumississauga.com](mailto:sales@msumississauga.com).

#### 1.2 Quality Assurance

- .1 Welding shall only be undertaken by a company Certified by the Canadian Welding Bureau to the requirements of CSA Standard W47.2-M1987, Certification of Companies for the Fusion Welding of Aluminum.

#### 1.3 Shop Drawings

- .1 Submit shop drawings in accordance with Section 01300 - Submittals.
- .2 Indicate design criteria, structural loadings, materials, thicknesses, weld symbols, reinforcement, connections, details and accessories.
- .3 Manufacturer shall supply installation drawings and instructions.
- .4 Shop drawings to be stamped by a professional engineer registered in the Province of Ontario.

### Part 2- Products

#### 2.1 Materials

- .1 Aluminum Extruded Shapes: to CSA HA.5-M1980, Alloys 6061, 6063 or 6351 in Temper 6.
- .2 Fasteners in 304 stainless steel.
- .3 Concrete to be minimum 3000 psi.

#### 2.2 Fabrication

- .1 Fabricate square, true, and accurate to required size, with joints closely fitted. Remove all burrs and sharp edges.



## **2.2 Fabrication (continued)**

- .2 Grating shall be Borden type B completely banded on all edges. Grating to safely carry a superimposed uniform live load of 14.4 kN/m<sup>2</sup> with a deflection of less than 6mm or 1/300 of span. Grating sections accessing ladders and pumps shall have be equipped with self locking hinged panelsl.
- .3 Main structural supports shall be C channels or I beams which shall attach to concrete walls with MSU type ADCS adjustable stainless steel channel support wall brackets.
- .4 Platform perimeter to have rolled angle wall support bracket wedge anchored to concrete at 300mm centers.
- .5 All open areas of platforms and edges of platforms shall have guard railings. Guard railings shall be 40mm sch 40 pipe supplied complete with MSU type ADRBR adjustable railing brackets.
- .6 Support angles and channel brackets will bolt to walls with wedge anchor assemblies as manufactured by Hilti. Railing brackets shall bolt to walls with wedge anchor assemblies as manufactured by Hilti.
- .7 Alluminum surfaces coming in contact with concrete shall be isolated with 1.58mm thick 80 durometer neoprene isolation pads or be painted with 2 coats of bituminous paint.

## **2.3 Aluminum Safety Platforms**

- .1 Provide the appropriate safety platforms complete with all necessary attachment brackets to the dimensions on the Contract Drawings. Ensure all safety platforms and railings are:
  - .a assembled using GMAW or GTAW welding methods and welded by certified welders to CSA W47.2, and
  - .b MSU type GSL.

## **Part 3 - Execution**

### **3.1 Installation**

- .1 Install safety platforms where indicated on the drawings.