# Access Hatches - Type MSU M CL-625

# Part 1- General

#### 1.1 Standards

- .1 Conform to CAN3-S157 -M83 Strength Design in Aluminum.
- .2 Conform to CSA W59.2 -R2008 Welded Aluminum Construction and CSA W47.2-R2008 Certification of Companies for Fusion Welding of Aluminum.
- .3 Hatch is designed with a CL-625-ONT Wheel Load per clause 3.8.4.3(a) of CAN/CSA-S6-06 and includes an impact factor of 15% for an off highway location not regulated by code.

## 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-R2008, 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 materials, thicknesses, weld symbols, reinforcement, details and accessories.
- .3 Manufacturer shall supply installation drawings and instructions.
- .4 Manufacturer shall supply engineer's calculations proving reinforcement is adequate to meet CL-625 wheel loading.

# Part 2- Products

#### 2.1 Materials

- .1 Aluminum Extruded Shapes: to CSA HA.5-M1980, Alloy 6061, 6063 or 6351-T6.
- .2 Aluminum Tread Plate to CSA HA.5-M1980 Alloy 6061-T6.
- .3 Fasteners, gas spring, slam lock and hold open arm in 316 stainless steel.
- .4 Hinges in 304 stainless steel.

#### 2.2 Fabrication

- .1 Fabricate square, true, and accurate to required size, with joints closely fitted. Remove all burrs and sharp edges.
- .2 Ensure hinges are vandal proof secure bolts with nylon insert lock nuts.

## 2.2 Fabrication (continued)

.3 Countersink all fasteners - ensure hatch is flush.

.4 Paint all surfaces coming in contact with concrete with one thick coat of bituminous paint.

#### 2.3 Access Hatches

- .1 Provide the appropriate frames and covers to the dimensions on the Contract Drawings. Ensure all covers are:
  - .a hinged with 304SS continuous piano hinges,
  - .b framed with a drain channel complete with perimeter anchor flange, 1 1/2" drainage coupling and neoprene sealing gasket,
  - .c provided with a 316SS slam lock, sealing plug and removable opening handle,
  - .d equipped a retractable lifting handle,
  - .e equipped with a 316SS gas spring for easy operation,
  - .f equipped with a 316SS hold open arm to restrain an open hatch in a vertical position,
  - .g equipped with 316SS tamper proof fasteners,
  - .h equipped with door leaf made of 9.5mm thick slip resistant diamond pattern plate, and
  - i hatch is designed with a cl-625 wheel load per clause 3.8.4.3 (a) of Can/CSA S6-06, and includes an impact factor of 15% for an off highway Location not regulated by code.

# Part 3- Execution

### 3.1 Installation

- .1 Install access hatches where indicated on the drawings.
- .2 Build wood frame for casting hatch into concrete according to manufacturer's instructions.