

- 1.1 RELATED SECTION .1 Section 02 65 00 - Aboveground Storage Tank Removal
- 1.2 REFERENCES .1 American Society for Testing and Materials International (ASTM)
- .1 ASTM A506-12, Standard Specification for Alloy and Structural Alloy Steel, Sheet and Strip, Hot-Rolled and Cold-Rolled.
- .2 ASTM A653/A653M-15, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- .2 Canadian General Standards Board (CGSB)
- .1 CAN/CGSB-1.105-M91, Quick Drying Primer.
- .3 Canadian Standards Association (CSA International)
- .1 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
- 1.3 DESIGN REQUIREMENTS .1 Roof hatch to be designed to withstand temperature range from -35 degrees C to +35 degrees C, to resist site specific roof snow loading, wind loading and wind uplift forces without damage to unit or permanent deformation to seals.
- .2 It is the responsibility of the supplier to provide a roof hatch that meets all applicable codes for the site specific conditions.
- 1.4 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 Section 01 33 00 -
Submittal Procedures, indicating VOC's
for caulking materials during
application and curing.

- .2 Shop Drawings:
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Indicate size and description of components, materials, attachment devices, description of frame and finish, required clearances and construction details.
 - .3 Submit manufacturer's printed installation instructions.

1.6 QUALITY ASSURANCE .1 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.\

- .2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

1.7 CLOSEOUT SUBMITTALS .1 Provide maintenance data for roof hatch complete with pertinent details, spare parts lists and warnings against harmful maintenance materials and practices.

1.8 WASTE MANAGEMENT AND DISPOSAL .1 Separate and recycle waste materials in accordance with project Waste Management Plan.

- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.

1.9 DELIVERY, HANDLING AND STORAGE .1 Conform to requirements of Section 01 61 00 - Common Product Requirements.

- .2 Deliver, store and handle components so as to prevent damage, distortion and corrosion.

1.10 WARRANTY

- .1 Manufacturer warrants access hatch to be free from manufacturing defects in materials and workmanship for a period of five (5) years from the date for final acceptance. Should a product fail to function in normal use within this period, manufacturer will furnish a new part at no charge to Owner.

2.1 MATERIALS

- .1 Steel sheet: regular quality alloy steel to ASTM A506.
- .2 Galvanized steel sheet: commercial quality to ASTM A653M, Z275 designation zinc coating.
- .3 Gaskets: extruded resilient neoprene with fill recovery after 50% compression.
- .4 Fasteners: screws to manufacturer's standard.
- .5 Sealants: as specified under Section 07 92 00 - Sealants.
- .6 Prime paint for steel: to CAN/CGSB-1.105.
- .7 Isolation coating: alkali resistant bituminous paint or epoxy solution.

2.2 HATCH

- .1 Access Hatch:
 - .1 Single leaf hatch with one-hand operation.
 - .2 Cover and frame 14 Ga. (2 mm) G-90 paint bond galvanized steel.
 - .3 Cover: break-formed hollow metal with 25mm concealed fiberglass insulation, 75mm beaded overlapping flange, full-welded corners and internally reinforced for 9.8 kPa live load.

- .4 Curb: 305 mm high with integral cap-flashing, 25 mm fibreboard insulation, fully welded corners and 89 mm mounting flange with holes for securing frame to roof curb.
- .5 Gasket: extruded EPDM rubber gasket permanently adhered to cover.
- .6 Hinges: heavy-duty pintle hinges with 9.5 mm Type 316 stainless steel hinge pins.
- .7 Latch: slam latch with interior and exterior turn handles and padlock hasps.
- .8 Lift assistance: compression spring operators enclosed in telescopic tubes. Automatic hold-open arm with grip handle release.
- .9 Finish: Alkyd base red oxide primer.
- .10 Hardware: compression spring tubes with electro-coated acrylic finish; other hardware zinc plated/chromate sealed.
- .11 Acceptable products:
 - .1 Bilco; size 1220 mm by 1220 mm;
 - .2 or equivalent product by other manufacturers accepted by Departmental Representative during tendering period.

2.3 ACCESSORIES

- .1 Fasteners: to manufacturer's standards; for securing curb to structure and for hatch lip frame to outer attachment.
- .2 Hinges: type recommended by roof hatch manufacturer.
- .3 Latch: positive snap with turn handles inside and out and padlock hasps inside.
- .4 Securing latch: hold open operating arm with vinyl grip handle to permit one-handed release.
- .5 Resilient gasket/seal to inner face of lid in

contact with hatch lid support frame.

2.4 FABRICATION

- .1 Fabricate components free of twists, bends or visual distortion, and insulated. Weld corners and joints.
- .2 Assemble roof hatch components as indicated.
- .3 Ensure continuity of weather-tight seals.
- .4 Design flashings and trims to collect and lead off accumulated water and condensation.
- .5 Install hardware and attachments and shop prime ready for field painting.
- .6 Fabricate frames to profiles and maximum face sizes as indicated.

3.1 EXAMINATION

- .1 Examine all existing site conditions which will affect installation. Examine completed work on which access hatch installation is dependant.

3.2 MANUFACTURER'S INSTRUCTIONS

- .1 Comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions and datasheets.

3.3 INSTALLATION

- .1 Ensure components are plumb, level and in proper alignment.
- .2 Ensure continuity of air barrier and vapour retarder systems.
- .3 Adjust and seal assembly with provision for expansion and contraction of components.
- .4 Secure prefabricated curb to wood curb.

- .5 Coat aluminium and copper elements in contact with dissimilar materials with isolation coating.
- .6 Seal and secure frame to curb.
- .7 Adjust all operating components to ensure smooth opening and closing of hatches. Adjust all operable parts for correct function.

3.4 PAINTING

- .1 Paint all exposed metal surfaces with two top coats. Preparation, application and protection to be in strict accordance with product manufacturer's installation instructions.
- .2 Top coats may be applied in shop and touched up in field upon completion of assembly and installation of components.
- .3 Top coats: Pitt-Tech industrial enamel, or approved alternate. 50 to 75 microns DFT each, 2 coats.
- .4 Paint materials to be as listed by Master Painter Institute standards.
- .5 Paint colour and gloss to be to the approval of the Departmental Representative.

3.5 CLEANING

- .1 Touch up with shop finishes damaged during installation.
- .2 Upon completion of installation, remove surplus materials. Protect work of this Section from damage by other work.