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- 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.