

**SAFE-T-COVER™**  
BACKFLOW PREVENTION ASSEMBLY ENCLOSURE  
SPECIFICATION

**PART 1 GENERAL**

**1.1 WORK INCLUDED**

A. Provide manufactured backflow prevention assembly enclosure.

**1.2 QUALITY ASSURANCE**

A. Qualifications: The backflow prevention assembly enclosure manufacturer shall be a company specializing in the manufacture of backflow prevention assembly enclosures with at least 5 years of successful experience designing and selling enclosures to various customers in different climatic regions.

**1.3 STORAGE AND HANDLING**

A. Store products in shipping containers and maintain in dry place until installation.

**1.4 ACCEPTABLE MANUFACTURERS**

A. **SAFE-T-COVER™** or Engineer approved equal.

**1.5 REFERENCES**

- A. ASTM B209
- B. ASSE 1060-Performance Requirements for Outdoor Enclosures for Backflow Prevention Assemblies .

**PART 2 PRODUCTS**

**2.1 MODEL NO. & SIZE**

- A. Model No. shall be 1000TLU880-AL.
  
- B. Inside dimensions shall be 64"W x 48"L x 56"H.

**2.2 MATERIALS OF FABRICATION**

- A. Material of fabrication shall be 5052-H32 marine grade aluminum (.050/18 gauge), mill finish and shall meet ASTM B209.
  
- B. Insulation shall be 1.5" (9.0 "R" value) minimum thickness polyisocyanurate foam laminated to a glass fiber reinforced facer (each side). The insulation shall have the following properties:
  - 1. Dimensional Stability-Less than 2% linear change, ASTM D-2126;
  - 2. Compressive Strength-20PSI, ASTM D-1621;
  - 3. Water Absorption-Less than 1% by volume, ASTM C-209;
  - 4. Moisture Vapor Transmission-Less than one (1) perm, ASTM E-96;
  - 5. Product Density-Nominal 2.0 lbs. per cubic foot, ASTM D-1622;
  - 6. Flame Spread=25, ASTM E-84;
  - 7. Service Temperature= -100°F to +250°F maximum.
  - 8. The insulation shall be of uniform thickness.
  
- C. Structural members shall be redwood.

### **2.3 ROOF, WALLS & PANELS**

- A. The roof, walls & panels of the enclosure shall be constructed of 5052-H32 (.050/18 gauge) marine grade aluminum, mill finish, ASTM B209 outside with insulation 1 1/2" (9.0 "R" value) thick in the walls and panels and 3" (18.0 "R" value) thick in the roof.
- B. The aluminum, insulation and redwood shall be securely bonded together to form a composite panel.
- C. The aluminum panels shall be provided with a PVC or similar exterior film to prevent damage before installation. The film shall be removed before installation.
- D. The complete assembly, including valve stems, shall be protected by being inside the enclosure.
- E. The roof shall be hinged to provide access to the number one (#1) check flange. The roof hinge shall be located on the number two (#2) check flange side of the enclosure.
- F. The lift of the hinged roof shall be assisted by gas shocks.
- G. The hinged roof shall be restrained while in the open position.
- H. All screws shall attach to redwood members.
- I. The walls of the enclosure shall be securely attached to the concrete base with inside anchoring brackets.
- J. Access panels shall be two (2) in number and each shall be 56"W x 56"H. One access panel shall contain the drain panel. One access panel shall be located to provide access for removal of the number (#2) check assembly.
- K. Access panels shall be completely removable.
- L. Access panels shall be provided with built-in pad lockable folding T-handles.
- M. The clear opening drain panel area shall be 56 1/4"W x 6 1/2"H.
- N. Drain panel shall have a stainless steel hinge and a stainless steel light strength spring as a positive means of closure so that the drain panel will not be activated by wind.
- O. Drain panel shall be designed to remain closed except during water discharge.

### **2.4 Heating Equipment (ASSE 1060 Class I-Required; ASSE 1060 Class II-Optional)**

- A. Heating equipment shall be furnished and designed by the manufacturer of the enclosure to maintain an interior temperature of +40°F with an outside temperature of -30°F.
- B. The heater shall have two electrical resistance elements completely enclosed within a solid aluminum cast platen base.

- C. The platen heater shall be designed for installation to the concrete base with mounting hardware provided.
- D. The platen heater shall be suitable for installation underneath a reduced pressure zone device and designed to sustain water spray without damage to or impeding the performance of the heater.
- E. The platen heater shall be provided with a thermostat adjustable from +40°F to +100°F. The thermostat, all conduit and wiring fittings provided shall be suitable for “water-tight” installation.

## **2.5 MOUNTING HARDWARE**

- A. Mounting hardware shall be furnished and shall be 300 series stainless steel and/or T-6 aluminum.
- B. All threaded fasteners shall be furnished and shall be 400 series stainless steel and/or Hilti type Tap-Fast w/Quickcoat™ and Flo Seal washer or equal.
- C. All masonry fasteners shall be furnished and shall be stud type Hilti Kwik Bolt II™ and/or Hilti type Hit Anchors or equal.
- D. All necessary drill bits shall be furnished.

## **PART 3 INSTALLATION**

- A. Enclosure shall be mounted on a concrete pad 78"W x 62"L x 6"Thick.
- B. Enclosure shall be assembled and mounted to concrete pad according to manufacturer's instructions.
- C. Enclosure shall be assembled and mounted to concrete pad in such a way that it will remain locked and secured to pad even if outside screws are removed.