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 800TLU880-AL.

B. Inside dimensions shall be 54"W x 44"L x 52"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<75, ASTM E-84;
7. Service Temperature= -100^{0}F to +250^{0}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 46"W x 52"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 46 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 $+40^0$F with an outside temperature of -30^0F.

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 68"W x 58"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.