

**ASSE International  
Product (Seal) Listing Program**

**ASSE 1060-2017  
Outdoor Enclosures for Fluid Conveying Components**

**Manufacturer:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Laboratory:** \_\_\_\_\_ **Laboratory File Number:** \_\_\_\_\_

**Model # Tested:** \_\_\_\_\_

**Model Size:** \_\_\_\_\_

**Additional models report applies to:** \_\_\_\_\_

**Additional Model Information (i.e. orientation, series, end connections, shut-off valves)**

\_\_\_\_\_

**Date models received by laboratory:** \_\_\_\_\_ **Date testing began:** \_\_\_\_\_

**Date testing was completed** \_\_\_\_\_

**If models were damaged during shipment, describe damages:**

\_\_\_\_\_

**Prototype or production sample?** \_\_\_\_\_

**Were all tests performed at the selected laboratory?**  Yes  No

**If offsite, identify location:** \_\_\_\_\_

**General information and instructions for the testing engineer:**

*The results within this report apply only to the models listed above.*

There may be items for which the judgment of the test engineer will be involved. Should there be a question of compliance with that provision of the standard, a conference with the manufacturer should be arranged to enable a satisfactory solution of the question.

Should disagreement persist and compliance remain in question by the test agency, the agency shall, if the product is in compliance with all other requirements of the standard, file a complete report on the questionable items together with the test report, for evaluation by the ASSE Seal Control Board. The Seal Control Board will then review and rule on the question of compliance with the intent of the standard then involved.

Documentation of material compliance must be furnished by the manufacturer. The manufacturer shall furnish to the testing agency, a bill of material which clearly identifies the material of each part included in the product construction. This identification must include any standards which relate thereto.

## Section I

### 1.0 General

1.1 Is the purpose of the device, as stated by the manufacturer, in compliance with this section?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

### 1.2 Scope

1.2.1 Does the device conform to the product described in this section?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

#### 1.2.2 Classes

Does the enclosure have a minimum thermal resistance value of R8?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

Is the enclosure heated?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

Is the enclosure designed for components that generate positive and/or negative air pressure?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

Manufacturer claims that the enclosure has a classification of:

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| <input type="checkbox"/> Class I   | <input type="checkbox"/> Class I-V   |
| <input type="checkbox"/> Class II  | <input type="checkbox"/> Class II-V  |
| <input type="checkbox"/> Class III | <input type="checkbox"/> Class III-V |

#### 1.2.3 Heat Sources (Class I and I-V)

The heater shall be listed by an independent third-party certification body for use in damp or wet locations.

Certification body: \_\_\_\_\_

Certificate number: \_\_\_\_\_

Date of expiration: \_\_\_\_\_

Attach a copy of the certificate to this report.

Are the heat sources constructed and installed so that water or other liquids will not enter and/or accumulate in or on the live wired sections or electrical components or wiring?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

Were instructions for heater mounting and location included?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

Is the heater in compliance?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

## Section II

### 2.0 Test Specimens

#### 2.1 Samples submitted for Test

State the overall dimensions of the enclosure

Length: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Width: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Height: \_\_\_\_\_ in \_\_\_\_\_ (cm)

(Internal volume, if known): \_\_\_\_\_ ft<sup>3</sup> \_\_\_\_\_ (m<sup>3</sup>)

If Class I or I-V, state the heater power: \_\_\_\_\_ BTU/hr \_\_\_\_\_ (W)

If enclosure is vented, state the claimed vent capacity: \_\_\_\_\_ ft<sup>3</sup>/min \_\_\_\_\_ (m<sup>3</sup>/min)

Briefly summarize the design of the enclosure:

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#### 2.2 Drawings and Technical data

Were assembly and installation drawings provided?

Yes  No

If enclosure is vented, drain opening area per manufacturer: \_\_\_\_\_ in<sup>2</sup> \_\_\_\_\_ (cm<sup>2</sup>)

Were literature on the insulation, wall, and roof materials, thermal resistance (R) value calculations, and other design data submitted?

Yes  No  Questionable

If no or questionable, explain \_\_\_\_\_

### Section III

#### 3.0 Performance Requirements and Compliance Testing

##### 3.1 Air Vent Requirement (Class I-V, II-V, and III-V only)

Free area of vent as found by drawing review: \_\_\_\_\_ in<sup>2</sup> \_\_\_\_\_ (cm<sup>2</sup>)

Claimed vent capacity from section 2.1: 
$$\frac{\frac{ft^3}{min}}{500 \frac{ft}{min}} \times 12 \frac{in}{ft} = \text{_____ in}^2$$

Is the vent in compliance?

Yes       No       Questionable

If no or questionable, explain \_\_\_\_\_

##### 3.2 Structural Test (All Classes)

###### Item 1

Place sand bags on the top of the entire enclosure.

Weight of sand bags \_\_\_\_\_ lbs \_\_\_\_\_ (N)

Was there any damage or permanent deformation that restricts access to the components inside or prevents the enclosure from complying with the rest of the standard?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

###### Item 2, if the height of the enclosure is <36in (<914mm) in height

Place vertical load on enclosure.

Weight of vertical load \_\_\_\_\_ lbs \_\_\_\_\_ (N)

Dimensions of area that vertical load occupies on enclosure:

Length: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Width: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Area: \_\_\_\_\_ ft<sup>2</sup> \_\_\_\_\_ (m<sup>2</sup>)

Was there any damage or permanent deformation that restricts access to the components inside or prevents the enclosure from complying with the rest of the standard?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

Repeat item 2 on a second sample if item 2 was required.

Was there any damage or permanent deformation that restricts access to the components inside or prevents the enclosure from complying with the rest of the standard?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

##### 3.3 Access for Testing and Maintenance (All Classes)

What type of access does the enclosure design use?

Lift-off       Access Panel       Full Entry       Other

If other, describe: \_\_\_\_\_

If design uses an access panel, does it comply with sections 3.3.2 and 3.3.3?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

3.4 Hinged Access Panels Restrains Test (All Classes)

If design uses a hinged panel, can it be securely restrained in the open and closed positions?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

Measure the force to gain access into the enclosure. \_\_\_\_\_ lbs \_\_\_\_\_ (N)

Is the enclosure in compliance with this section?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

3.5 Drainage Performance Test (All Classes)

Maximum backflow preventer size as claimed by manufacturer: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Required minimum discharge rate per ASSE 1060-2017: \_\_\_\_\_ GPM \_\_\_\_\_ (L/s)

Water at discharge rate injected into enclosure for \_\_\_\_\_ min

Maximum water height inside enclosure: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Final water height inside enclosure: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Is the enclosure in compliance with this section?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

3.6 Freeze Protection Capability Test (Class I and I-V)

Minimum temperature of controlled atmosphere chamber/room: \_\_\_\_\_ °F \_\_\_\_\_ (°C)

What type of heat source does the enclosure use (electric heater, heating cables, etc.)

\_\_\_\_\_

Height of thermocouples on pipe from concrete pad: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Distance of pipe from interior wall of enclosure: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Nominal diameter of pipe: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Length of pipe: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Chamber/room temperature cooled to: \_\_\_\_\_ °F ± \_\_\_\_\_ (°F), \_\_\_\_\_ (°C) ± \_\_\_\_\_ (°C)

Average temperature of both thermocouples every hour:

Hour	°F	(°C)	Hour	°F	(°C)	Hour	°F	(°C)
1			9			17		
2			10			18		
3			11			19		
4			12			20		
5			13			21		
6			14			22		
7			15			23		
8			16			24		

Average chamber/room temperature over 24hrs: \_\_\_\_\_ °F \_\_\_\_\_ (°C)

Minimum reading over 24hrs: \_\_\_\_\_ °F \_\_\_\_\_ (°C)

Is the enclosure in compliance with this section?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

3.7 Security/Locking Mechanism Test

Weight of free-falling mass: \_\_\_\_\_ lbf \_\_\_\_\_ (N)

Drop height of free-falling mass: \_\_\_\_\_ in \_\_\_\_\_ (cm)

Is the enclosure in compliance with this section?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

## Section IV

### 4.0 Detailed Requirements

#### 4.1 Materials

4.1.1 Materials used in the construction of exterior surfaces are:

- Aluminum GR 3003-H14 and GR 5052-H32, per ASTM B209
  - Galvannealed steel or prepainted galvanized steel, per ASTMA653/A653M
  - High-density polyethylene (HDPE)
  - ANSI type 300 series stainless steel
  - Natural stone
  - Fiberglass reinforced plastic with a UV resistant gel coat
  - None of the above:
- 

4.1.2 Materials used in the construction of interior surfaces are:

- Aluminum GR 3003-H14 and GR 5052-H32, per ASTM B209
  - Galvannealed steel or prepainted galvanized steel, per ASTMA653/A653M
  - High-density polyethylene (HDPE)
  - ANSI type 300 series stainless steel
  - Natural stone
  - Fiberglass reinforced plastic with a UV resistant gel coat
  - Cedar
  - Redwood
  - Closed cell foam insulation (1% maximum water absorption by weight)
  - Glass fiber reinforced facers
  - None of the above:
- 

4.1.3 Fasteners and hardware materials

- Aluminum GR 3003-H14 and GR 5052-H32, per ASTM B209
  - Galvannealed steel or prepainted galvanized steel, per ASTMA653/A653M
  - High-density polyethylene (HDPE)
  - ANSI type 300 series stainless steel
  - Natural stone
  - Fiberglass reinforced plastic with a UV resistant gel coat
  - Aluminum
  - Stainless steel
  - Plastics
  - Zinc coated steel
  - Brass
  - Die cast aluminum and zinc
  - None of the above:
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4.1.4 Elastomers used, which are exposed to ultraviolet light:

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Is the enclosure in compliance with this section?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

4.2 The following markings are present on the enclosure and visible after installation:

\_\_\_\_\_ Name of manufacturer or trademark;

\_\_\_\_\_ Model number;

\_\_\_\_\_ Date code or serial number;

\_\_\_\_\_ Class designation

Are markings cast, etched, stamped, or engraved on the enclosure or on a corrosion resistant plate securely attached to the enclosure using an enclosure resistant material?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

Is the enclosure in compliance with this section?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

4.3 Installation Instructions

Were installation instructions provided?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

If the enclosure requires electrical components, do the installation instructions state that they shall be protected by a ground-fault circuit interrupter?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_

If there are any special tools required, were they supplied?

Yes       No       N/A       Questionable

If no or questionable, explain \_\_\_\_\_



LISTED LABORATORY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

TEST ENGINEER(S): \_\_\_\_\_

If applicable:

OUTSOURCED LABORATORY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

TEST ENGINEER(S): \_\_\_\_\_

Scope of outsourced testing: \_\_\_\_\_

We certify that the evaluations are based on our best judgments and that the test data recorded is an accurate record of the performance of the device on test.

Signature of the official of the listed laboratory: \_\_\_\_\_

Signature

Title of the official: \_\_\_\_\_ Date: \_\_\_\_\_