# **American Society of Sanitary Engineering**PRODUCT (SEAL) LISTING PROGRAM



## ASSE STANDARD #1049 - REVISED: 2009 Individual and Branch Type Air Admittance Valves for Chemical Waste Systems

| :  |        |  |         | ! |  |
|--|--------|--|---------|---|--|
| MANUFACTURER:  |        |  |         |   |  |
| CONTACT PERSON:  |        |  | E-MAIL: |   |  |
| ADDRESS:   |        |  |         |   |  |
| LABORATORY FILE NUM  | VIBER: |  |         |   |  |
| 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:   |        |  |         |   |  |

#### 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 Board. The Seal 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. He 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 Application 1.1 Is the purpose of this device as described by the manufacturer as Yes No stated in this section? 1.2 Scope 1.2.1 Description Does the device comply with the description as stated Yes No in this standard? 1.2.2 Temperature Range What is the temperature range as stated by the manufacturer? °F to °F ( °C) 1.2.3 Did this device pass the air flow rate indicated in Table 1  $\ \square$ Yes No without exceeding a pressure drop greater than 1.0 inch (25.4 mm) of water column (See Section 3.2)? Construction 1.3.1 1.3 Air Inlet Shields Do the air inlet shields comply with the requirements of Yes □ No this section? 1.3.2 Leakage See Section 3.1 1.3.3 Interference Were end connections so constructed that the joint will Yes No not interfere with any moving parts of the device or restrict air passageways? 1.3.4 Connections Describe the type of connections for the device: State the standard(s) that these connections conform with: **SECTION II** 2.0 **Test Specimens** State the quantity of devices provided for evaluation: How many devices were utilized during the laboratory evaluation? Were drawings and other technical data provided with the test specimens? Yes □ No Were these drawings and data reviewed by the laboratory? Yes No



### **SECTION III**

3.0

| Performa<br>3.1 | nce Requirements and Compliance Testing Pressure test of Complete Device   |               |           |
|-----------------|--|---------------|-----------|
|                 | What was the length of the pipe on which the device was installed?   | inches (      | cm)       |
|                 | What was the initial pressure applied to the device?   | inches of WC( | mm of WC) |
|                 | What was the intermediate pressure applied to the device?  | inches of WC( | mm of WC) |
|                 | How long was each pressure state held?   |               | minutes   |
|                 | What was the pressure loss during the first two (2) intervals of pressure?   | inches of WC( | mm of WC) |
|                 | What was the pressure loss during the final pressure stage?  | inches of WC( | mm of WC) |
| 3.2             | When the device is installed at 15° orientation from vertical, what was the pressure loss of each of three (3) stages of pressure?  1st: | inches of WC( | mm of WC) |
|                 | How long was this pressure maintained?   |               | hours     |
|                 | At what pressure (vacuum) did the device on test open?   | inches of WC( | mm of WC) |
|                 | What was the air flow rate when the pressure (vacuum) reached -1.0 inch $\pm$ 0.05 inch (-25.4 mm $\pm$ 1.267 mm) WC?                    | CFM(          | L/s)      |
|                 | What was the temperature of the test set-up during the testing?  | °F(           | °C)       |
| 2.2             | What is the determined drainage pipe size for this device based on the airflow capacity?   | inches(       | mm)       |
| 3.3             | Endurance Test For the high temperature procedure, the device was condition  oF ( for a period of hours                                  | itioned at    |           |



|            | The device was then subjected to a vacuum o inches of WC( mm of WC)   | f           |               |          |  |
|------------|---|-------------|---------------|----------|--|
|            | for   |             |               |          |  |
|            | cycles  |             |               |          |  |
|            | Each cycle consisted of seconds open  |             |               |          |  |
|            | and seconds closed  |             |               |          |  |
|            | Retest to Section 3.1 and record the results b  | elow:       |               |          |  |
| 3.1        | Pressure test of Complete Device<br>What was the length of the pipe on which the<br>was installed?                | inches ( cm |               |          |  |
|            | What was the initial pressure applied to the device?  |             | inches of WC( | mm of WC |  |
|            | What was the intermediate pressure applied to the device?   |             | inches of WC( | mm of WC |  |
|            | How long was each pressure state held?  |             |               | minutes  |  |
|            | What was the pressure loss during the first two (2) intervals of pressure?  |             | inches of WC( | mm of WC |  |
|            | What was the pressure loss during the final pressure stage?   |             | inches of WC( | mm of WC |  |
|            | When the device is installed at 15° orientation vertical, what was the pressure loss of each ostages of pressure? |             |               |          |  |
|            |   | nm of WC)   |               |          |  |
|            |   | nm of WC)   |               |          |  |
|            | 3rd: inches of WC( n  | nm of WC)   |               |          |  |
| 3.3 (Conti | nued)   |             |               |          |  |
|            | For the low temperature procedure the device<br><u>°F ( °C)</u>   | was conditi | oned at       |          |  |
|            | for a period of hours   |             |               |          |  |
|            | The device was then subjected to a vacuum o inches of WC( mm of WC)   | f           |               |          |  |
|            | for   |             |               |          |  |
|            | cycles  |             |               |          |  |



|            |     | Each cycle o                                  |              | of<br>conds ope | en             |         |              |            |        |       |       |       |
|------------|-----|---|--------------|-----------------|----------------|---------|--------------|------------|--------|-------|-------|-------|
|            |     | and   | sec          | onds close      | <u>-</u><br>∌d |         |              |            |        |       |       |       |
|            |     | Retest to Se                                  | ction 3.1    | and reco        | rd the resul   | Its bel | ow:          |            |        |       |       |       |
|            | 3.1 | Pressure tes<br>What was the<br>was installed | ne length    |                 |                | n the o | device       |            | inch   | nes ( |       | cm)   |
|            |     | What was the device?                          | ne initial p | oressure a      | pplied to th   | ne      |              | inches o   | of WC( |       | mm of | WC)   |
|            |     | What was the to the devic                     |              | ediate pre      | ssure appli    | ed      |              | inches o   | of WC( |       | mm of | · WC) |
|            |     | How long w                                    | as each p    | ressure st      | tate held?     |         |              |            |        |       | mi    | nutes |
|            |     | What was the two (2) inte                     | -            |                 | ring the firs  | st      |              | inches o   | of WC( |       | mm of | · WC) |
|            |     | What was the pressure sta                     | -            | re loss du      | ring the fin   | ıal     |              | inches o   | of WC( |       | mm of | · WC) |
|            |     | When the devertical, who                      | at was th    |                 |                |         |              |            |        |       |       |       |
|            |     | 1st:  | coourc:      | inches          | of WC(         | mı      | m of WC)     |            |        |       |       |       |
|            |     | 2nd:  |              | inches          |                |         | m of WC)     |            |        |       |       |       |
|            |     | 3rd:  |              | inches          | of WC(         | mı      | m of WC)     |            |        |       |       |       |
|            |     | Was the dev                                   |              | -               | ompliance v    | with a  | all the perf | ormance    |        | Yes   |       | No    |
| Section IV |     |   |              |                 |                |         |              |            |        |       |       |       |
| 4.0        | 4.1 | equirements<br>Materials<br>List the met      | allic parts  | used in t       | he constru     | ction   | of this dev  | /ice:      |        |       |       |       |
|            |     | Were the mo                                   |              |                 | on the elec    | etromo  | otive scale  | so as to   |        | Yes   |       | No    |
|            |     | Were internated to Stainless                  |              | -               | a corrosion    | resis   | tance at le  | east equal |        | Yes   |       | No    |
|            |     | List the AST<br>material mal                  |              |                 |                |         |              | hich the   |        |       |       |       |



| 4.2 | Instructions for Marking and Installation List the markings shown on the device:  |                   |                |
|-----|---|-------------------|----------------|
|     | How were these markings applied?  |                   |                |
|     | Did the packaging contain:  a) name of manufacturer or trademark?  b) model number or description of the device?  c) drainage pipe size and capacity?   | Yes<br>Yes<br>Yes | No<br>No<br>No |
|     | Were installation instructions provided with the device?  | Yes               | No             |
|     | Did the installation instructions include: <ul> <li>a) installation limitations?</li> <li>b) proper venting methods?</li> <li>c) a statement regarding the device is not a substitute for all conventional venting situations?</li> <li>d) sizing of the device?</li> </ul> | Yes<br>Yes<br>Yes | No<br>No<br>No |
|     | Did these instructions include requirements for air movement, installation orientations, a open stack vent and the prohibition of using this device to relieve positive pressure?   | Yes               | No             |



| TESTING AGENCY:   |  |
|---|--|
| ADDRESS:  |  |
| PHONE:  | FAX:                                     |
| TEST ENGINEERS:   |  |
| We Certify that the evaluations are based on our best judgement accurate record of the performance of the device on test. | es and that the test data recorded is an |
| SIGNATURE OF THE OFFICIAL OF THE AGENCY:  |  |
| TITLE OF THE OFFICIAL:  | DATE:                                    |
| SIGNATURE AND SEAL OF THE REGISTERED PROFESSIONAL ENGINEER SUPERVISING THE LABORATORY EVALUATION:                         |  |
| SIGNATURE:  | PE SEAL                                  |

\*To insert images into document (PE seal and signatures)

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#### **COMMENTS:**