



**S.O.A.P. – Static Outside Air Probe**

**INSPECTION & HANDLING.**

S.O.A.P.s should be carefully inspected for damage prior to installation. Report damage to your Freight Department, or contact the delivery carrier.

S.O.A.P.s may be handled while in any position. However, it is important not to drop or mishandle the stations such that damage is done to the parallel plates and sensing holes.

**WARRANTY**

Air Monitor Corporation (hereinafter referred to as "Seller") warrants that at the time of shipment, products sold pursuant to this contract will be free from defects in materials and workmanship, and will conform to the specifications furnished or approved in writing by Seller. No warranty is given that delivered products will conform to catalog sheets, data sheets, and the like, which are subject to change without notice.

Seller will repair or replace, at its option, any products listed under this warranty which is returned freight pre-paid to Seller and within the earlier of one (1) year after start-up or fifteen (15) months after shipment, prove upon test and examination by Seller to be defective within the terms of this warranty. The warranty period for any item repaired or replaced shall be for the time remaining on the warranty period for the original components. Purchaser shall notify Seller in writing of such defect within sixty (60) days of discovery of the defect.

This warranty does not extend to any product sold by Seller which has been the subject of misuse, neglect, accident, damage or malfunction caused by interconnection with equipment manufactured by others, improper installation or storage, or used in violation of instructions furnished by Seller, nor does it extend to any product which has been repaired or altered by persons not expressly approved by Seller. Nor does Seller warrant equipment against normal deterioration due to environment; nor items such as thermocouples, electrodes, and similar items subject to wear or burnout through usage. Adjustments for items or equipment not manufactured by Seller shall be made to the extent of any warranty of the manufacturer or supplier thereof.

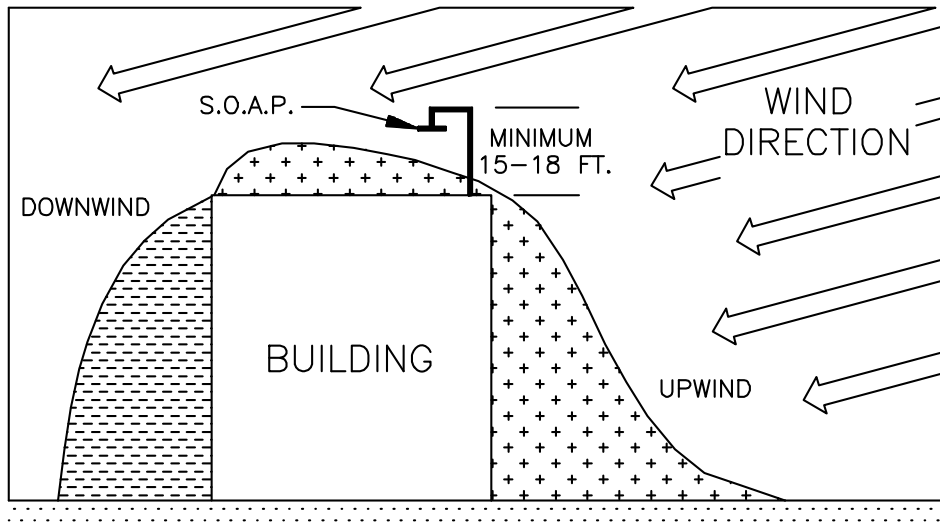
Seller shall not be liable for any special or consequential damages or for loss of damage directly or indirectly arising from the use of the products.

The warranty set forth above is in lieu of all other warranties either express or implied and constitutes the full extent of Air Monitor Corporation's liability to the customer, or any other party for breach of warranty. THERE ARE NO EXPRESS WARRANTIES EXCEPT AS SET FORTH HEREIN. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, WHICH ARE PARTICULARLY DISCLAIMED.

## S.O.A.P. – Static Outside Air Probe

### LOCATION OF PROBES.

The location of the S.O.A.P. must be outside the pressure envelope(s) developed by the effect of wind upon the building. The magnitude of the pressure envelopes upstream and downstream of wind direction is shown in Figure 1. Alternate locations would be below grade (like a parking garage) with non-forced ventilation, or a pit in an open space away from buildings (like a lawn area or parking lot).



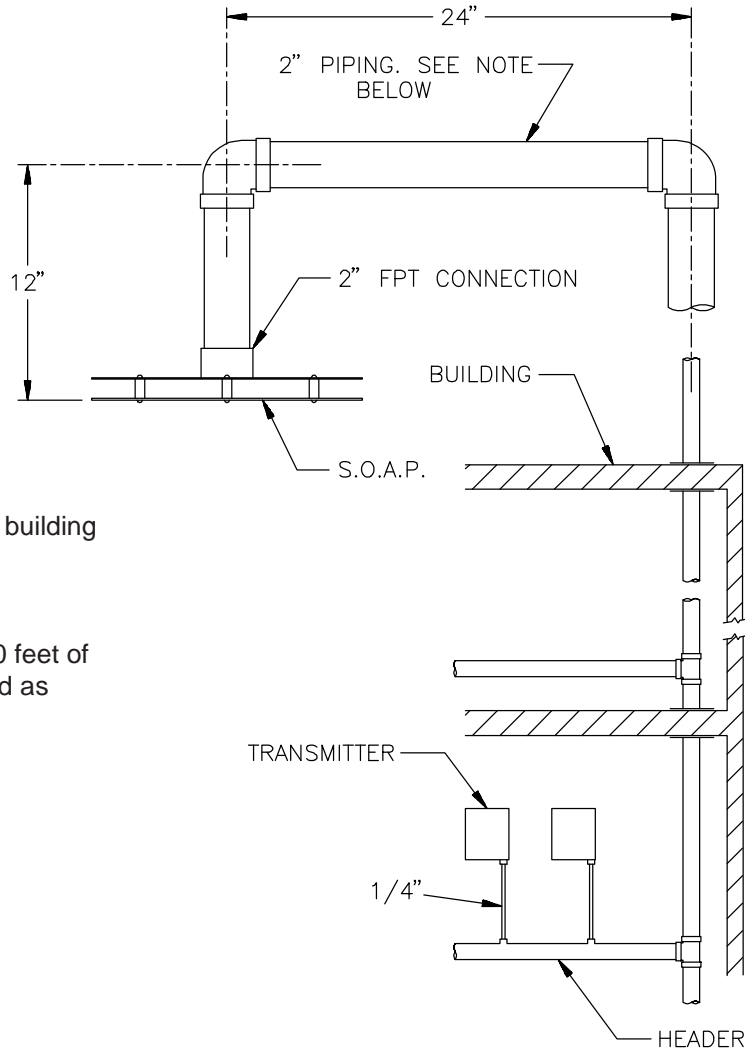
| WIND VELOCITY<br>MILES PER HOUR | UPWIND SIDE<br>INCHES W.C. | DOWNWIND SIDE<br>INCHES W.C. |
|---------------------------------|----------------------------|------------------------------|
| 10                              | 0.035                      | -0.015                       |
| 15                              | 0.088                      | -0.025                       |
| 20                              | 0.14                       | -0.050                       |
| 25                              | 0.22                       | -0.065                       |
| 30                              | 0.30                       | -0.090                       |
| 35                              | 0.42                       | -0.125                       |
| 40                              | 0.54                       | -0.180                       |
| 45                              | 0.70                       | -0.260                       |
| 50                              | 0.85                       | -0.340                       |
| 55                              | 1.06                       | -0.425                       |
| 60                              | 1.28                       | -0.540                       |
| 65                              | 1.70                       | -0.700                       |

FIGURE 1: Approximate effect of wind velocity on a building.

## S.O.A.P. – Static Outside Air Probe

### INSTALLATION OF PROBES.

The S.O.A.P. is equipped with a 2" FPT coupling for the signal connection and support of the unit. Two inch piping make-up is recommended for signal transmission to the measuring device.



Two inch piping may be run through the building to provide reference static pressure for differential pressure transmitters.

If the transmitters are located within 200 feet of the 2" headers, 1/4" tubing may be used as signal takeoffs from the header.

**CAUTION:** After signal piping is completed, signal lines must be leak tested prior to operation.

**NOTE:** A copy of the S.O.A.P. submittal sheet which includes a pictorial representation of the probe is on Page 4.

## S.O.A.P. – Static Outside Air Probe

### SUBMITTAL SHEET.

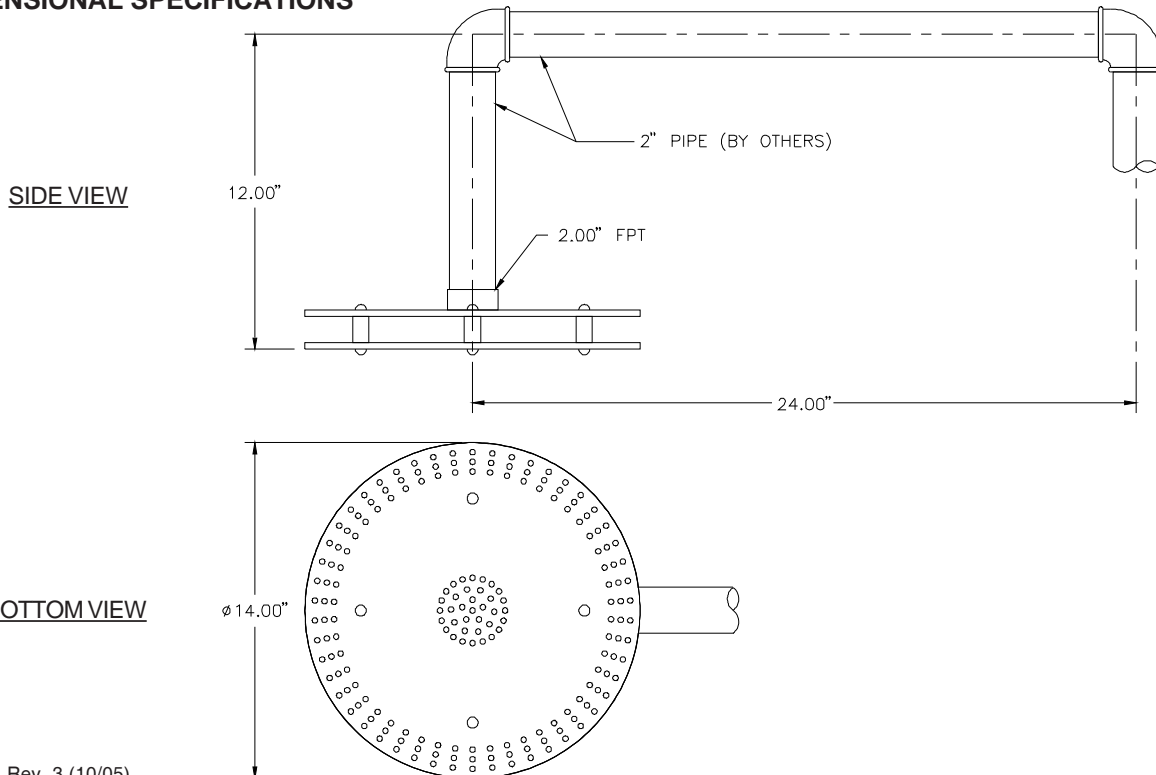
#### STANDARD CONSTRUCTION

|                            |                           |
|----------------------------|---------------------------|
| <b>Casing.</b>             | Type 316 stainless steel. |
| <b>Mounting.</b>           | Via 2" pipe nipple.       |
| <b>Connection Fitting.</b> | 2" FPT stainless steel.   |

#### PERFORMANCE SPECIFICATIONS

|                  |   |
|------------------|---|
| <b>Accuracy.</b> | Within 1% of actual outside atmospheric air pressure. |
|------------------|---|

#### DIMENSIONAL SPECIFICATIONS



SUB-J009, Rev. 3 (10/05)

#### **CUSTOMER SERVICE.** Air Monitor Corporation provides in-house technical support for all our products:

Monday through Friday, 7 am to 5 pm (pst)  
Phone: 707-544-2706 or 1-800-AIRFLOW / Fax: 707-526-2825

If after contacting the Customer Service Department it is determined that equipment will require return to Air Monitor Corporation for further repair, a Return Authorization number will be issued. A Confirmation of Return Authorization with shipping instructions will be sent via facsimile. Equipment to be returned to Air Monitor should be returned in its original shipping container if possible. If this is not possible, ensure equipment is packaged sufficiently to protect it during shipment.

**Caution: All damage occurring during transit is the Customer's responsibility.**

List the Return Authorization (R/A) number on the packing list and clearly mark this number on the outside of each shipping container. Costs associated with the return of equipment to Air Monitor Corporation are the customer's responsibility regardless whether the repair/return is under warranty. Once the Customer Service Department determines that the equipment repair is under warranty, the item will be repaired and returned to the customer at no charge. If the equipment is not under warranty, customer will need to approve a repair quote which will be invoiced along with return shipping charges.