

SU1 UNIT VENTILATOR SENSOR INSTALLATION

OVERVIEW

This document provides the instructions necessary to install the Unit Ventilator sensor probes (Figure 1) into approved unit ventilators. The sensors are installed on the outside air intake of the unit ventilator. Installation consists of marking and preparing the mounting holes and then installing and securing the sensors. For detailed sensor information, refer to the Unit Ventilator Sensor technical manual under separate cover, TM_SU1. For detailed information on transmitter set up and operation of the complete airflow measurement station, refer to the associated transmitter technical manual (under separate cover). Observe the following precautions during installation:



Figure 1. Unit Ventilator Sensor Probes

CAUTIONS/WARNINGS



Location of the sensor probe(s) is critical for proper performance of the airflow station. Probes must be installed in accordance with the engineer's plans and **EBTRON** placement guidelines for specified and approved unit ventilators.



Ensure that adequate installation/service clearance exists at the installation site to permit installation of the probe into the unit ventilator, and that the cable length for the probes is sufficient to reach the planned transmitter installation.. Refer to the mechanical details of Figure 2.



Insulation that may interfere with mounting should be temporarily removed prior to installation and replaced afterwards.

UNIT VENTILATOR SENSOR PROBE INSTALLATION

Figure 2 details unit ventilator sensor probe installation dimensions. Install the sensor probes as follows. Convenient check boxes are included to ensure that each step is completed.

1. The sensor probes are factory labeled with the specific location for which it is designed. Determine the intended location for the air flow measurement station(s) as indicated on the engineer's plans. Refer to Figure 3 for probe location and orientation.
2. Carefully open the package and inspect for damage.
3. Using Figure 3, locate and mark the exact installation points on the unit ventilator where the sensor probes will be installed.

Note:

The dimensions shown in Figure 3 reference sensor node centers, not the bracket center locations.

4. Place one sensor probe assembly at the left mounting location, oriented vertically, so that the round shroud points towards the outer sidewall of the unit ventilator and away from the round shroud of the other sensor. Ensure that the airflow arrow printed on the sensor is oriented in the direction of airflow. Fasten the mounting bracket to the duct with appropriate sheet metal screws.
5. Repeat step 4 for other sensor probe.
6. Connect the sensor probes to the transmitter supplied for the specific location. This completes probe installation. Complete the installation, wiring and set up of the associated transmitter as detailed in the separate Transmitter Installation Guide and Installation, Operation and Maintenance Technical Manual (each provided under separate cover).

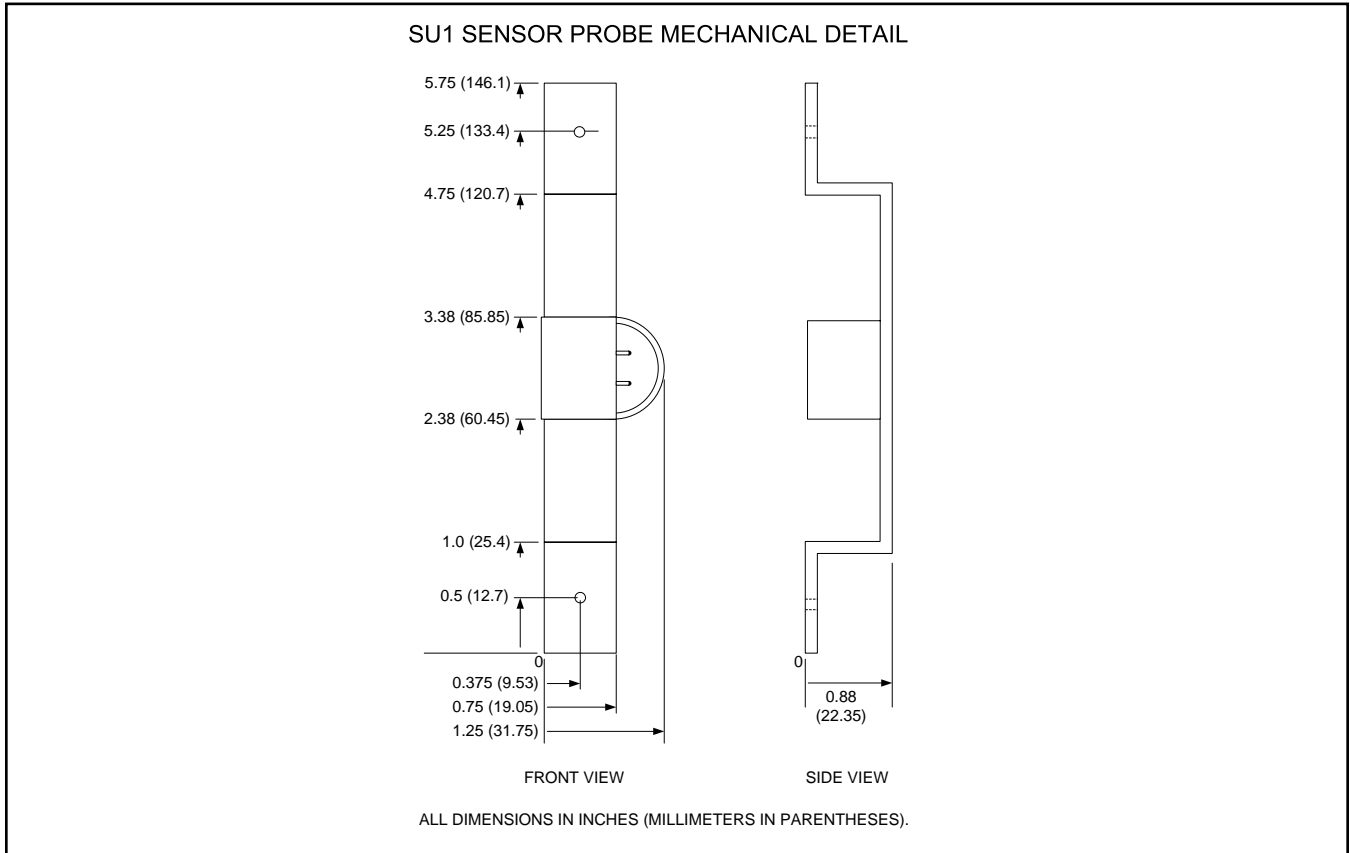


Figure 2. SU1 Sensor Probe Mechanical Dimensions

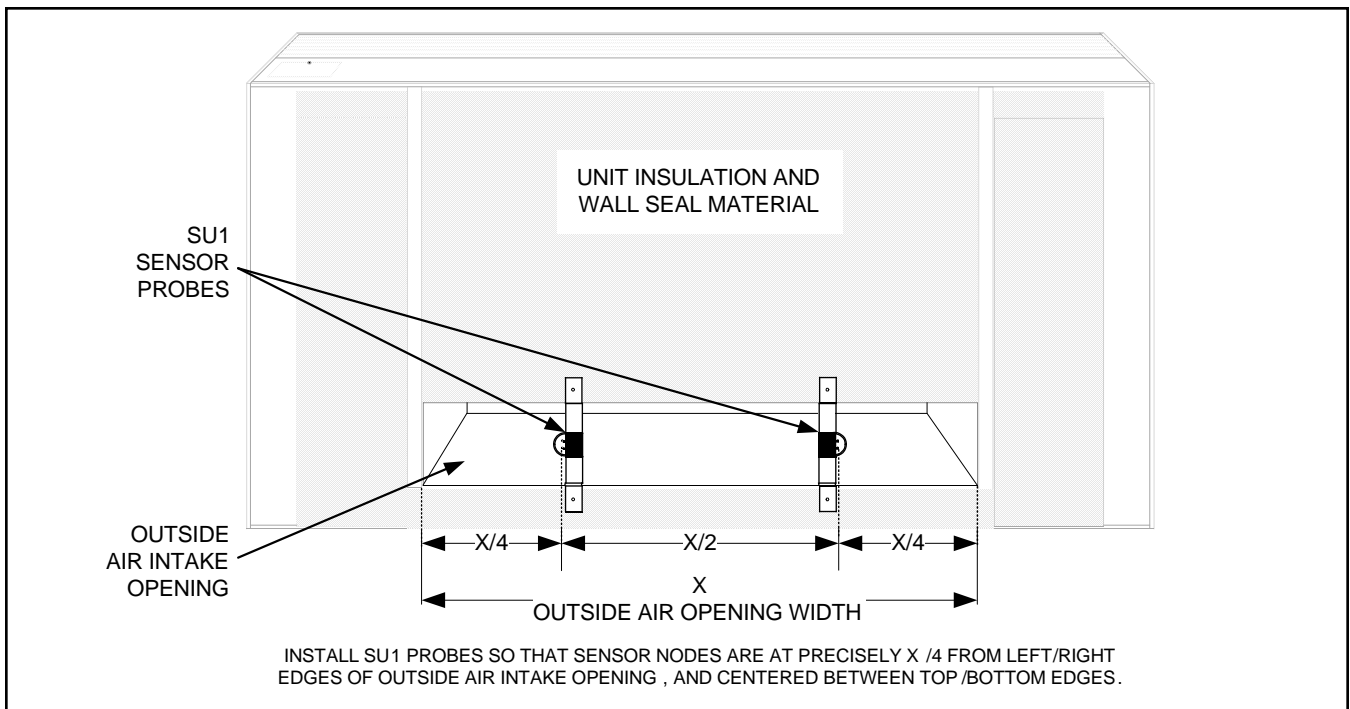


Figure 3. SU1 Sensor Probe Installation and Mounting Detail