

AIR-IQ INSERTION MOUNT PROBE INSTALLATION

OVERVIEW

This document provides the instructions necessary to install AIR-IQ insertion mount probes as shown in Figure 1. AIR-IQ insertion mount probes are installed externally through the sidewall of the damper sleeve or flange wall. Installation consists of installing and securing the probes. For detailed probe information, refer to the Duct/Plenum Probe technical manual TM_GP1 under separate cover. 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).

AIR-IQ INSERTION MOUNTING

Figure 2 provides AIR-IQ Insertion Mount probe installation details. Install probes as follows. Convenient check boxes are included at each step.



Figure 1. AIR-IQ Insertion Mount Probe

1. Each probe package is factory labeled for the specific location and damper sleeve size for which it is designed. Orders for locations requiring multiple probes at a specific location are typically banded and packaged together.
2. Carefully open the probe packaging and inspect for damage.
3. Remove Insertion mount bracket from the probe end that does not have a cable attached to it as shown in Figure 2, but **DO NOT REMOVE THE BRACKET SCREWS FROM THE END OF THE PROBE WITH THE CABLE!** The non cable end of the probe will be inserted into the hole prepared in the damper sleeve. To remove the non-cable end bracket, carefully remove the two probe-bracket screws that secure the probe to the bracket on the non-cable exit side of the probe shown in Figure 2 and set them aside for later reinstallation.
4. Insert the probe assembly through the prepared hole in the damper sleeve insertion side, making sure that the arrow labels on the probe and/or bracket is oriented in the same direction as airflow.

NOTE:

If the airflow direction labels are not visible on the probe or bracket, orient the probe so that the SET SCREWS (two per sensor insert) face the DOWNSTREAM airflow direction. (Setscrews are only on the downstream side).

5. Fasten the non-cable end mount bracket to probe, using original mounting hardware removed in step 3.

CAUTION:

When reassembling the bracket to the probe, do not over-tighten the probe to bracket mounting screws. Carefully thread and tighten them to prevent stripping the threads in the glass-filled nylon insert material.

6. Fasten the cable end mounting bracket to the damper sleeve with appropriate field supplied fasteners, making sure that the printed airflow arrow on the bracket is in the actual direction of air flow and that the top of the bracket plate is parallel to the edge of the damper sleeve.

7. □ Align the non-cable end mounting bracket using the pre-drilled mounting holes and fasten the bracket to the damper sleeve with appropriate field supplied fasteners.
8. □ Connect all sensor probes to the transmitter. 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).

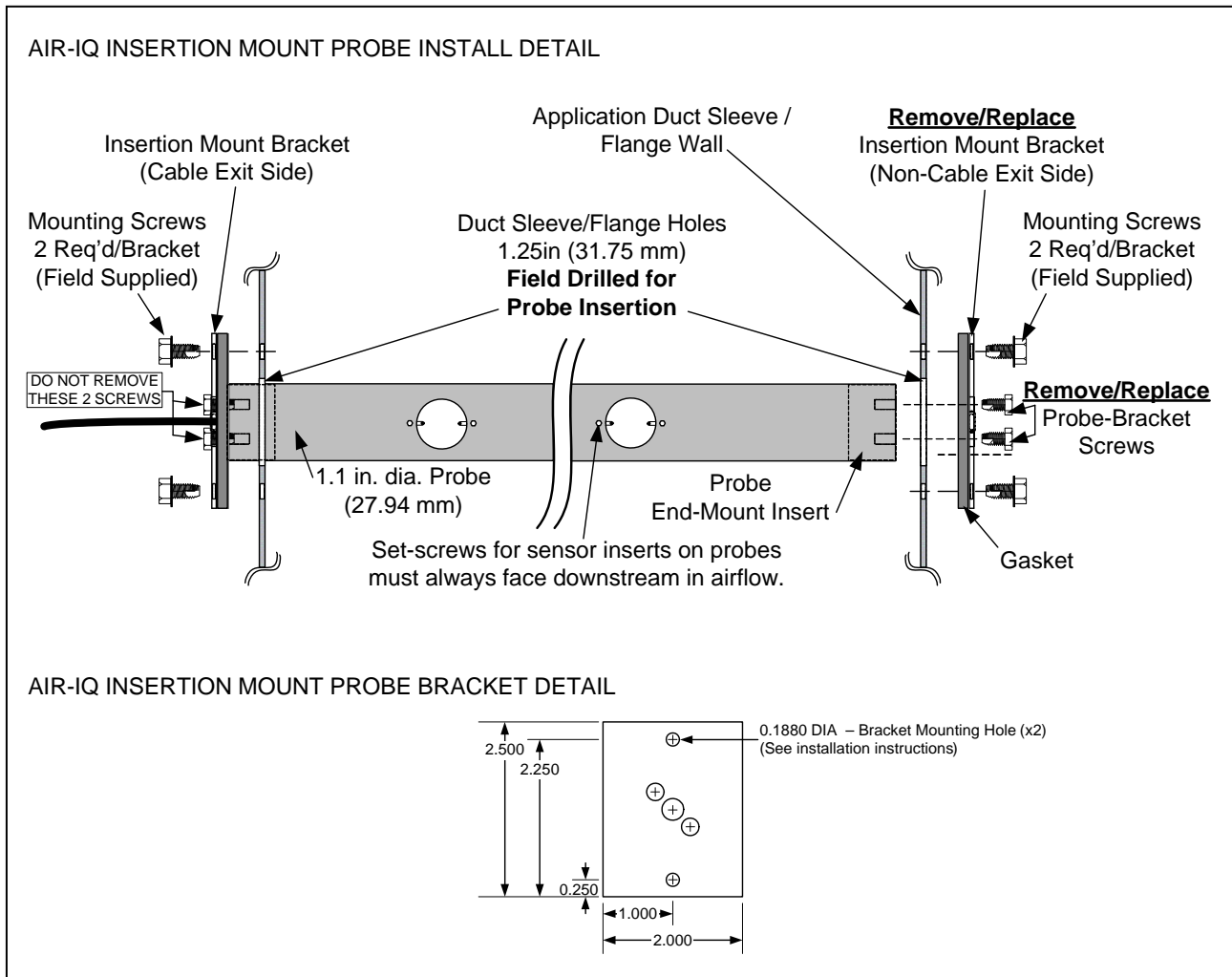


Figure 2. Air-IQ Insertion Mount Probe Mechanical Detail