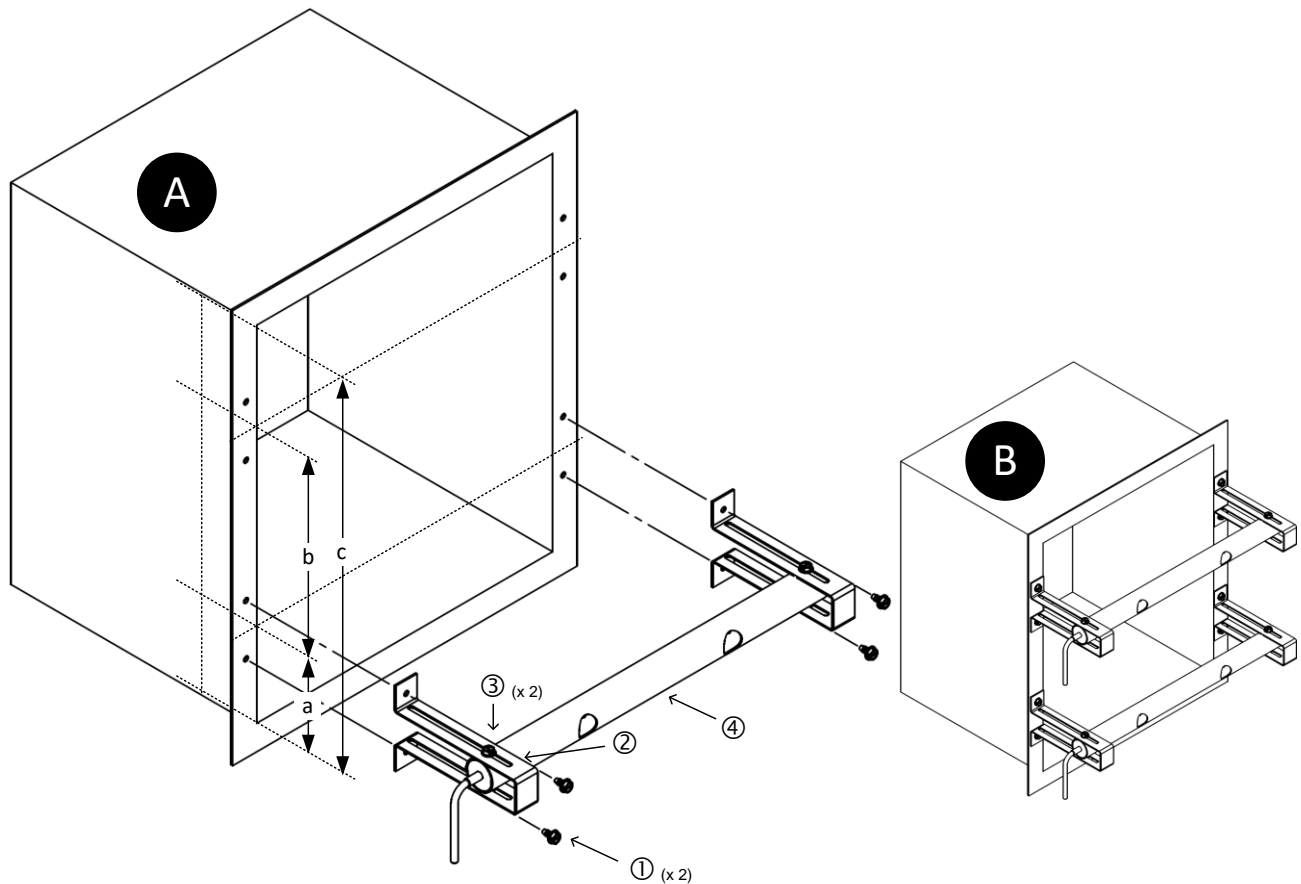


O&M MANUAL

Appendix B-1: -P Probe Installation (Standoff Mounting - Rectangular Ducts)



Standoff probes may be mounted immediately upstream of an outdoor air intake damper in applications where placement limitations prevent the installation of an extension sleeve before the damper.

Step 1. Select a location in the duct or plenum opening that meets or exceeds EBTRON's recommended placement guidelines.



If the location does not meet or exceed placement guidelines the installed accuracy may be compromised and field adjustment may be necessary.

REFER TO FIGURE "A" WHEN COMPLETING STEPS 2 TO 11.

Step 2. Probes are ordered and labeled *Probe Length x Adjacent Side Length*. Probes are installed on the *Adjacent Side* dimension, 'c', of the duct. Verify that the opening size matches the size ordered.



If the probe length ordered is incorrect, the sensors will not be located in the proper location, thus affecting the installed accuracy. Contact EBTRON customer service for more information.



If the actual size of the duct is not equal to the size ordered, the AREA parameter must be changed in the transmitter to display the proper airflow rate in CFM [l/s].



Do not cut the probe! Cutting the probe will void warranty.

Step 3. Vertically mounted probes subject to water condensation or accumulation should be mounted so that the cable side of the probe is at the top of the duct.



Standoff probes are manufactured 2 inches [50.8mm] larger than the opening size.

Step 4. Mark a point on both sides of the opening where each probe will be mounted using the spacing guidelines indicated in Table 1. If more than two probes are provided, continue spacing additional probes at the “b” interval from the previous probe.

Number of Probes	a	b
1	$c/2$	
2	$c/4$	$c/2$
3	$c/6$	$c/3$
4	$c/8$	$c/4$



If the probes were ordered for a duct with internal insulation, use the internal dimension of the duct for ‘c’ to calculate ‘a’ and ‘b’

Step 5. Standoff probes are shipped to be mounted with the direction of airflow into the duct or opening. If the probes are to be mounted so that the airflow is in the opposite direction, continue to Step 6, otherwise skip to Step 9.



Never mount the probes downstream of a modulating damper!

Step 6. Loosen the two probe mounting screws [③] on each mounting bracket [②] by turning each screw one full turn counter-clockwise.



Do not remove the probe mounting screws [③]!

Step 7. Rotate the bracket 90° and feed the cable through the bracket on the cable side of the probe.

Step 8. Tighten the two probe mounting screws [③] on each mounting bracket [②] so that the brackets are perpendicular to the probe (as shown in figure “A”).



The sensor node hex screws should be on the downstream side of the probe.

Step 9. Position the probe tube [④] so it is centered over the location for the first probe marked in Step 4. Position the cable side and opposite end mounting brackets [②] so that they are equidistant from each side of the opening. Mark the location of the two standoff mounting bracket screws [①] that secure each mounting bracket [②]. Repeat this step for each additional probe location, if more than one probe is provided.

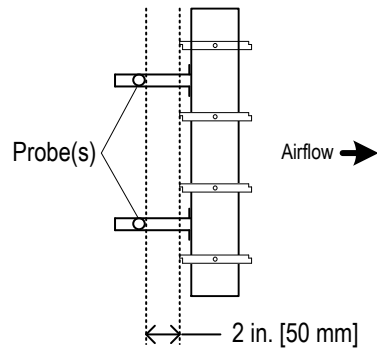
Step 10. Drill appropriately sized pilot holes for each standoff mounting bracket screw location (screws not provided) marked in Step 9.

Step 11. Secure each probe on both sides of the duct.



Probes are labeled Probe X of Y, where Y is the total number of probes provided for a location. It is recommended (not required) that probes are installed sequentially by probe number top to bottom, left to right or vice versa.

Step 12. If the probe(s) are located upstream of a modulating outdoor air intake damper, position the downstream edge of the probe approximately 2 inches [50 mm] upstream of the imaginary plane created by the leading edges of the fully open intake damper blades as shown in the figure below.



Step 13. Probe installation is complete! Figure “B” shows a completed two probe installation.