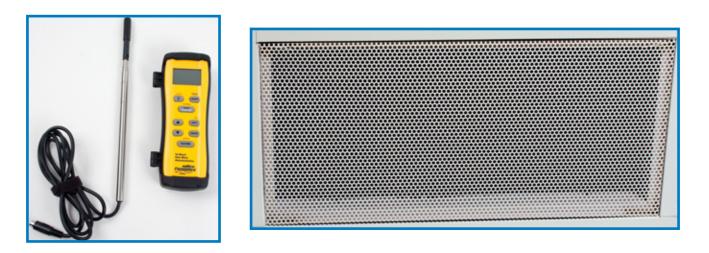


# SOP 14 - Sampling Exhaust Duct with Hot-wire Anemometer

## Introduction

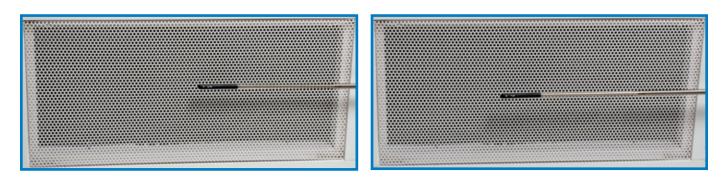
Knowing the exhaust flow of an animal room is critical to building and maintaining facility infrastructure and maximizing its potential.

The hot-wire anemometer enables simple sampling on the fly. The area of the duct determines how many samples from that duct are needed to represent the room's exhaust airflow.

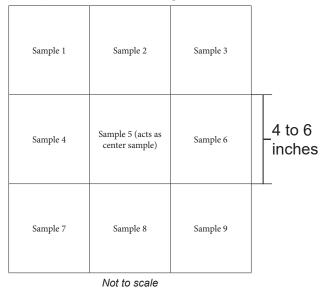


## Sampling an Exhaust Duct

- 1. After plugging in the probe and turning on the anemometer, remove the protector cap from the probe.
- 2. Place the probe's openings **parallel to the airflow** of the duct. If the probe is perpendicular, the reading will not be accurate.
- 3. For square ducts, take eight or nine readings at equal 4- to 6-inch intervals. For larger ducts, take 16 to 20 samples. The larger the duct, the more samples necessary for accurate results. Always take one reading as close to the center of the duct as possible. Consult the charts on Page 2 for additional guidance.



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#### Square Duct Configuration

**Rectangular Duct Configuration** 

Sample 1	Sample 2	Sample 3	Sample 4	
Sample 5	Sample 6	Sample 7	Sample 8	
Sample 9	Sample 10 Center	Sample Sample 11	Sample 12	_4 to 6 inches
Sample 13	Sample 14	Sample 15	Sample 16	
Sample 17	Sample 18	Sample 19	Sample 20	

Not to scale



Contact Animal Care Systems' engineering department with questions about how to interpret the sampled data and whether airflow is sufficient for specific setups.