Find the airflow in FPM if 1,000 CFM is passing through an 18 inch by 18 inch duct.

Find the airflow in FPM if 1,000 CFM is passing through a round duct with an 18 inch diameter.

If you have a velocity of 444 FPM through a 18” square duct at sea level, find the velocity pressure.

If you have a velocity of 566 FPM through a 18” diameter round duct at sea level, find the velocity pressure.

The loss coefficient for a fitting was calculated at 1.3 and the velocity pressure is 0.02. What is the loss item or total pressure drop across the fitting?

The loss coefficient for a fitting was calculated at 0.001 and the velocity pressure is 0.0123. What is the loss item or total pressure drop across the fitting?

What is the loss item or total pressure drop across a 10 foot long duct with a friction rate per 100ft of 0.045?

What is the loss item or total pressure drop across a 200 foot long duct with a friction rate per 100ft of 0.03?

Field Notes:

Technicians should be able to identify imbalances in exhaust and makeup air by simply verifying airflow directions. Technicians can use a piece of tissue or a smoke pencil to identify airflow paths and the relative building pressures they indicate. Most commercial buildings have an airflow related problem somewhere within their walls. Understanding how the systems work together is very important before making an adjustment to any of the components.