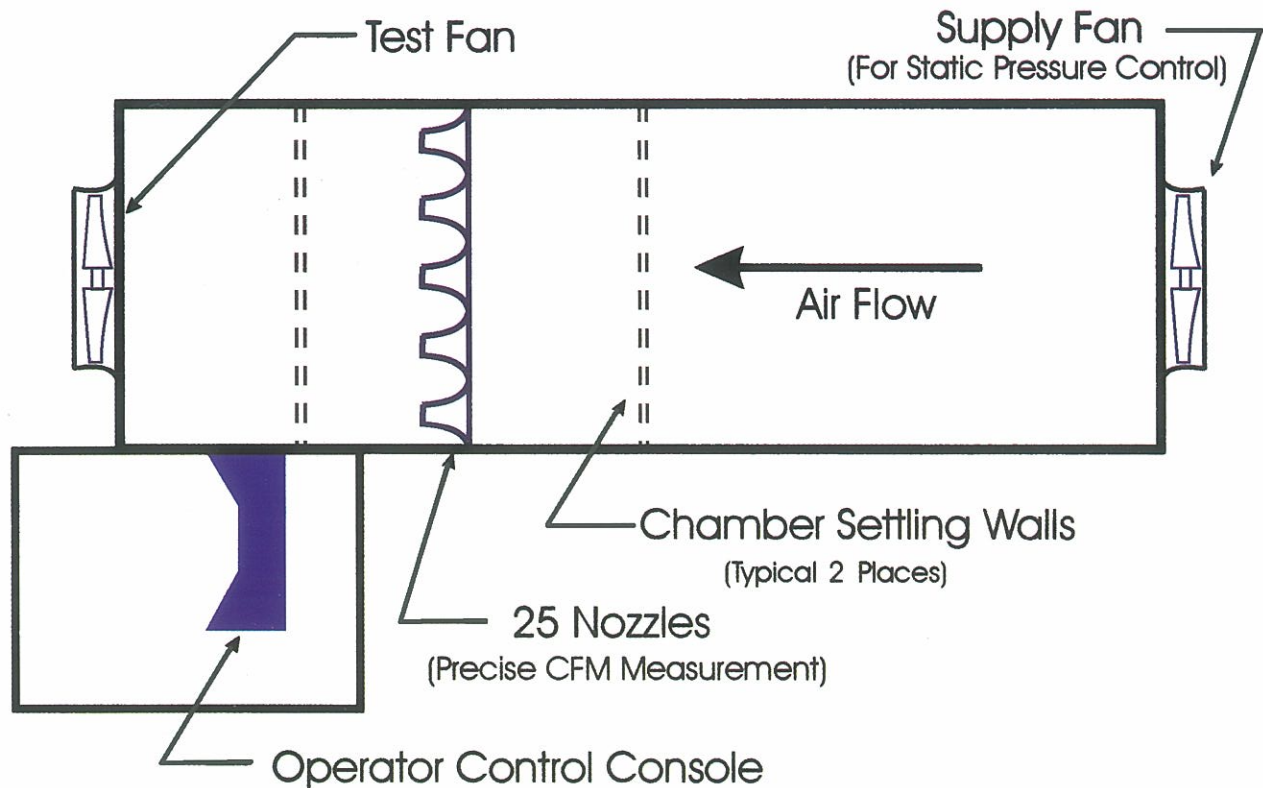


How the Test Cell Works



Air enters the test cell at the end opposite the test fan. Test cell static pressure is controlled by the operator using the supply fan or louvers to achieve and maintain the target static pressure at the test fan. The supply fan has capacity to develop sufficient positive pressure in the chamber to overcome the pressure drop of the settling walls and nozzles allowing fan tests down to zero static pressure.

Settling walls are used at two locations to reduce the open area of the test cell and create a uniform airflow pressure and velocity profile. Settling walls are an essential component to ensure a uniform air profile at the nozzle bank where CFM is actually measured. The settling walls also provide uniform air delivery to the fan being tested to guarantee the most accurate representation of fan performance.

Each of the 25 nozzles in the nozzle wall are constructed to stringent specifications for size, shape and surface finish to provide unparalleled accuracy of air flow measurement. Pressure measurements are taken at the AMCA prescribed distance from each side of the nozzle wall and the CFM is calculated based on the difference in pressure across the nozzle wall.

