

LABORATORY HOOD WITH VENTURI EFFECT AIR INTAKE DEVICE FOR ANTI-TURBULENT AIR FLOW CONTROL

Abstract

In a laboratory hood system having a housing with an access window opening into an interior work chamber for performing laboratory processes, and an air circulation system for creating an air flow from the laboratory environment inwardly through the access window into the work chamber for preventing hazardous materials from escaping into the laboratory environment through the access window, one or more air intake control devices are disposed in a selected location or locations at the access window to overcome any tendency for air turbulence to occur. The air intake control device has an air flow channel extending from an air intake opening to the laboratory environment to an air discharge opening to the work chamber, with a constriction in the channel for causing a venturi-effect increase in air velocity while flowing through the channel to promote non-turbulent air flow entering the work chamber at the selected location or locations.

Figure 1