

## Air Flow

Biosafety laboratories must have a minimum of six (6) air changes per hour (10 - 15 for ABSL). This minimum air flow must be maintained at all times, including unoccupied periods. Having an unoccupied setback is dangerous to personnel, animals, high heat producing equipment, and can have adverse effects on materials that expand and contract.

Air ventilation systems must be designed to remove heat dissipated by equipment within the laboratory and meet exhaust air requirements for fume hoods, BSCs, and sterilizers.

Air flow must be able to remove hazardous airborne substances away from their origin and discharge them. These substances include chemical fumes, vapors, and airborne biological substances.

The Ventilation System is a – “Dedicated, single pass, directional (inward), and pressure gradient ventilation system that will provide negative air pressure and move the air from areas of least hazard potential towards areas of greatest hazard potential.” The system shall be designed to maintain a negative pressure differential of 0.05 in. wg. at each containment barrier.

Visual and audible alarm devices should be provided to notify users of any loss in pressure and/or loss of containment. Pressure monitoring devices (such as the **CERTEK Pressure Monitor**) should be placed at each containment barrier so users can ensure the next level of containment is being maintained.

For more information about the **CERTEK Pressure Monitor** please visit our website at [www.certekinc.com](http://www.certekinc.com). Under the Products tab, select Accessories and Kits.

**CERTEK Pressure Monitor (Flush)**  
Model #: CPM-10015-1



**CERTEK Pressure Monitor (Surface)**  
Model #: CPM-10015-2

