ACMAS Technologies Inc.

CE | An ISO 9001:2000 Company

Fume Hood

Model No.-ATI-131

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OBROMAX

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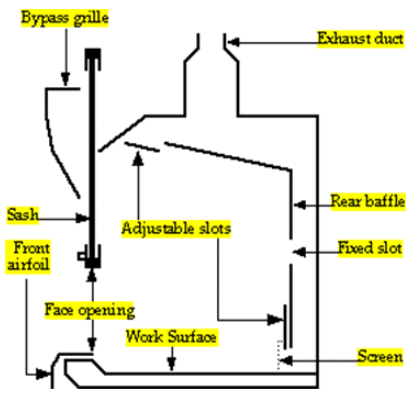
OBROMAXTM with its laborious and consistent planning is among the leading manufacturers of laboratory and research based scientific equipment. OBROMAXTM has developed a wide range of high quality scientific and laboratory equipment by using latest and modern technologies. OBROMAXTM with its technical knowledge and modern technologies like computer and Ethernet connectivity also provides GMP/GLP compliant systems with complete documentation if required. Further customization is also possible as per customer's requirement.

Salient features:

- Customer satisfaction is priority
- Modern technologies
- Complete Documentation (as per requirement)
- Customizable
- GMP/GLP compliant systems
- Post sale services
- Discount & Warranty Policies



A fume hood is a ventilated enclosure containing gases, vapors and fumes which is used to control exposure of the hood user and lab occupants to hazardous or odorous chemicals and it also prevents their release into the laboratory. (An exhaust fan that is situated on the top of the laboratory building pulls air and airborne contaminants in the hood through a ductwork which is connected to the hood and exhaust them to the atmosphere.

Technical Specifications

Primary parts of the Fume Hood

Face - The face of the hood is the opening where air capture takes place.

Sash - The sash is the glass "window" that travels in the plane of the hood face that opens or closes the hood and protects the user during use.

Baffles - The baffles are located in the back of the hood and direct air in the appropriate direction. The baffles can also be adjusted to account for different vapor densities of chemicals (heavier than air and lighter than air).

Duct - The duct connects the hood to the ventilation system and exhausts to the outside air.

Air foil - The air foil is fixed to the bottom front edge of the hood and is a vent that keeps a minimum gap open at all times but more importantly gives aerodynamic properties that allow better, less turbulent air flow and better capture.

Construction:

- Fabricated out of thick wooden board, these are designed so as to throw-out all toxic/ harmful vapors, thus protecting costly instruments and the person working in the lab.
- Outer is finished with sun mica and inner epoxy painted.
- Working table top is fitted with acid/alkali resistant tiles/ S.Steel and a small wash basin with connections provided for inlet and outtlet of water.
- The front door moves vertically up and down with concealed counter balanced weight .
- The unit is fitted with flourescent light and a gas cock for gas/air supply The front facing panel is fitted with 15/5 Amp socket with swiches for exhaust system and flourscent light .
- TO WORK ON 220/230 volts A.C. Supply

Operating Performance of a Fume Hood

Location: The location of the hood affects its efficiency. Ideally, fume hoods should be located in an area of minimal traffic. When a person walks by a fume hood, turbulence can be created causing contaminants to be drawn outside the hood. Also, if the air diffuser is located directly above the fume hood, air turbulence may be created causing contaminants to escape into the room. The air flow into the room has an effect on the fume hood. All doors and windows should be kept closed to maintain the negative pressure of the lab with respect to the outside corridor. This ensures that any contaminants in the lab will be exhausted through the fume hood and not escape into the hallway.

Face velocity: Face velocity is a measurement of the average velocity at which air is drawn through the face of the fume hood. Face velocities too high or to low can be detrimental to the performance of the fume hood. The acceptable range of the average face velocity may vary between 60-100 feet per minute (fpm) depending on hood type and hazard. If non-carcinogenic materials are being used the acceptable face velocity for minimally hazardous materials is 50 fpm. Currently, all fume hoods are certified for work with hazardous chemicals if the air velocity is between 80 and 120 fpm. At velocities greater than 125 fpm face velocity, studies have demonstrated that the creation of turbulence causes contaminants to flow out of the hood and into the user's breathing zone.

Air flow indicators: Small pieces of tinsel are taped to the bottom corner of the sash. Inward movement of the tinsel indicates air is being drawn into the hood. Air flow indicators do not determine face velocity. They only indicate that air is being exhausted through the fume hood.

Construction	MS/SS-304
Table	Stainless steel sheet table of ss-304 grade/ fortified acid proof glazed tiles
Sink	Stainless steel sink with tap
Coating	FRP lining
Air Flow	Unidirectional
Air flow control	Three step air flow speed controller
Blower assembly	Centrifugal lubricated bearing type ISI marked assembly
Illumination	Fluorescent light illumination greater than 800 lux on work table.
Noise level	> 65 dB
Power Supply	220 V/50-60 Hz

Working dimensions

Working size	4'X 2' X 2'	6'X 2' X 2'	5'X 3' X 3'	7'X 3' X 3'

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