

FumeBox™

Ductless Enclosures, Low-Profile Horizontal Design

"Safety, Convenience and Performance."



— Fume Box™ AP60H

An Affordable, Effective Air Filtration System Solution



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- Options and Accessories (p.6)



APPLICATIONS

- Soldering
- Histology
- Cover Slipping
- Staining
- Pathology
- Graphic Arts, Sign Shops
- Art Conservation
- Electronics Assembly
- Particulate Control
- Manufacturing Processes
- Air Purification

INTRODUCTION

Air Science Fume Box ductless enclosures are designed to protect the user from chemicals, vapors or powders during low-volume chemical manipulations by effectively containing low concentrations of noxious fumes, vapors or powders.



FumeBox™
Ductless Enclosures, Low-Profile Horizontal Design

- Low-profile, completely portable, no ductwork required.
 - Compact size, easily positioned on shallow countertops or counters with overhanging wall cabinets.
 - Clear viewing enclosure prevents chemical splash.
 - Modular design permits multiple configurations.
- Front and Side View of the Fume Box AP60H-XL



multiple™

AIR SCIENCE MULTIPLEX FILTRATION TECHNOLOGY SYSTEM

The Fume Box utilizes the exclusive Air Science Multiplex filtration system, a unique configuration that includes a pre-filter and main filter to create a chemical, physical or combination architecture to adsorb, neutralize or trap the target chemical or particulate while constant negative pressure removes vapors and particulates from the user's breathing zone. Clean, filtered air is returned to the laboratory, eliminating the need for external ducting and minimizing loss of treated, conditioned air from the facility.

- An electrostatic polyester fiber pre-filter with 95% particulate arrestance intercepts larger particulates to help extend carbon and HEPA/ULPA filter life.
- The activated carbon filter adsorbs organic odors and hazardous vapors such as xylene and toluene.
- A HEPA filter can be added for particulate control.

MULTIPLEX SYSTEM FILTERS

- **Pre-Filter.** The electrostatic pre-filter protects the main filters from aerosols, dust and particulates with filtration efficiency superior to 95.5% down to 0.5 microns.
- **Main Filter.** Activated carbon FILTCO™ sourced. A single carbon filter containing chemically-formulated activated carbon granules is selected when ordering to accommodate a specific vapor or family of vapors.
- **HEPA Filter.** A self-contained Camfil Farr HEPA filter is designed to physically capture particles larger than 0.3 microns.

Air Science carbon filters are based on enhanced, activated carbon particle formulations from specially selected, naturally occurring raw material superior to wood or other organic sources. The carbon is treated to attain the proper porosity and aggregate surface area and to react with several ranges of aerosolized chemicals moved through the filter by an air handling blower.




PRODUCT FEATURES:

- A. Main On/Off Switch:** High quality rocker On/Off switch controls unit power.
- B. Steel Support Frame:** The chemical resistant epoxy coated steel frame adds mechanical strength.
- C. Electrostatic Pre-Filter:** The 99.5% effective electrostatic pre-filter is accessible from inside the chamber to contain the release of any particulates that it traps.
- D. Color:** The cabinet is white with blue trim; side and back panels are clear.
- E. Enclosed Filtration Chamber:** Main filters can be carbon and/or HEPA/ULPA to fit a variety of containment needs.

Fume Box AP60V (vertical)



The optional source capture hose converts the Fume Box to a fume extraction unit with a 6" diameter (152 mm) hose to capture pollutants at their source. Hose can attach to any vented enclosure, exhaust port on your equipment or desk mount scoop.

Catalog No. AP60EX

THE AIR SCIENCE PERFORMANCE ADVANTAGE

Each Air Science Fume Box includes features expressed through sound design and certified quality construction. Options and accessories add functional performance to meet specific applications.

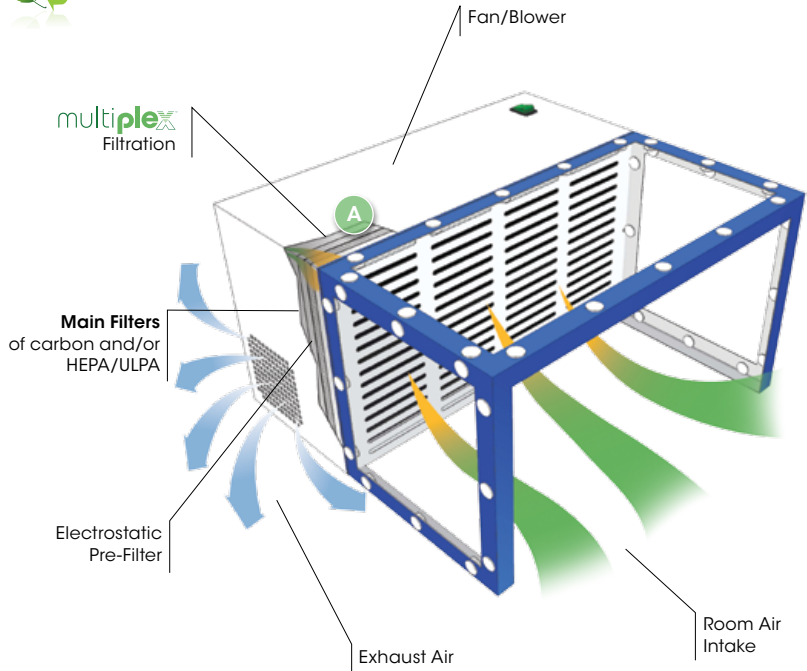
- **Professional Quality.** Air Science enclosures comply with current technical and safety regulations.
- **Advanced Filtration.** Air Science Multiplex filtration provides high performance protection.
- **Industrial Components.** The enclosure frame and work surfaces are durable and chemically resistant.
- **Reliability.** Internal systems are isolated from contamination, extending product life.



The Fume Box incorporates an energy-efficient ebmpapst™ permanently lubricated direct drive centrifugal blower for maximum operational savings, low noise and minimal vibration.



FUME BOX AIRFLOW PATTERN

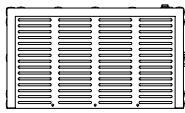


- Fume Box, AP60H shown with Multiplex filtration system.
- Room air enters from the front of the cabinet through the pre-filter where larger particles are trapped, increasing the service life of the main filter.
- The Fume Box maintains a constant face velocity of 100 fpm in compliance with U.S.A. and international standards for safety and performance. Contaminated air is pulled through the Multiplex filtration system where activated carbon adsorbs chemical vapors and/or particulates if HEPA/ULPA filters are used. Clean air is returned to the room.
- A. The main filter is easy to replace. The filter clamps tightly against the filter gasket to prevent filter bypass and to maintain filter integrity.

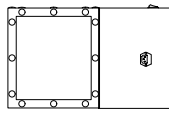
FILTER SUMMARY

Formula	Description
GP Plus!	The most widely used filter in the range, primarily for solvent, organic, and alcohol removal.
ACI Plus!	Neutralizes volatile inorganic acid vapors.
ACR	Iodine and methyl iodide vapors. It is frequently used for iodination reactions with low level radioactive iodine.
ACM	Mercury vapor.
AMM	Removes vapors from dilute ammonia solutions and to remove low molecular weight amines.
SUL	Designed to remove hydrogen sulphide and low molecular weight mercaptans.
CYN	Removal of hydrogen cyanide. Many cyanide compounds will evolve HCN gas if acidified, so this filter is normally specified if working with any cyanide compound.
FOR	Designed to oxidize formaldehyde and glutaraldehyde fumes. It is widely used in hospital pathology laboratories.
ETH	Diethyl ether is adsorbed on activated carbon, but because of its low boiling point, local heat adsorption can reduce the capacity of the filter. Special impregnation allows a chemical reaction which increases the filter capacity.
EDU	Designed to handle chemicals normally used in a university level chemistry curriculum.
MIL	As the name implies, this filter is designed for military applications involving war gasses.
HEPA/UPLA	Powders and particulates.

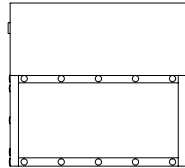
This Product Exceeds OSHA, ANSI and Other International Standards.



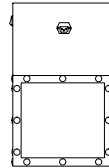
AP60H



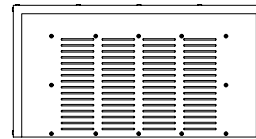
(side view)



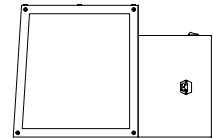
AP60V



(side view)



AP60H-XL



(side view)

MODEL	DIMENSIONS		WEIGHT (lbs/Kg)	
	(W x D x H)	Shipping (W x D x H)	Net	Ship
Fume Box				
AP60H	21.25" x 19.75" x 12" 540 x 502 x 305 mm	24" x 22" x 14" 610 x 559 x 356 mm	29 / 13	31 / 14
AP60V	21.25" x 12" x 19.75" 540 x 305 x 502 mm	24" x 22" x 14" 610 x 559 x 356 mm	29 / 13	31 / 14
AP60H-XL	29.85" x 23.25" x 15.65" 758 x 591 x 398 mm	36" x 20" x 36" 914 x 508 x 914 mm	45 / 20	70 / 32

PRODUCT SPECIFICATIONS

Fume Box Model	AP60H	AP60V	AP60H-XL
Filter Weight		<... 7 lbs / 3.5 kg ...>	
Pre-Filter Weight		<... 1 lb / 0.4 kg ...>	
Airflow		<... 135.9 cfm ...>	
Face Velocity		<... 100 fpm ...>	
Construction	<... White epoxy-coated steel filtration unit with blue enclosure. Clear sides and top panels. ...>		
Blower	<... ebmpapst centrifugal fan. ...>		
Electrical	<... 120V, 60Hz or 220V, 50Hz voltages available. Specify when ordering. ...>		
Electrical Controls	<... Main On/Off switch. ...>		

*Specifications are subject to change without notice.

OPTIONS AND ACCESSORIES

Vertical Mount*	Unit mounts vertically to create an upflow airflow stream.	AP60V
Source Capture Hose*	Converts the Fume Box to a fume extraction unit with a 6" diameter (152 mm) hose to capture pollutants at their source. Hose can attach to any vented enclosure, exhaust port on your equipment or desk mount scoop.	AP60EX
Polypropylene Construction*	Units available in all polypropylene construction.	AP60H-PP AP60V-PP AP60EX-PP AP60H-XL-PP
Spill Tray	Polypropylene spillage tray, slides out for easy cleaning.	TRAY-AP60

* Factory installed. Specify when ordering.

STANDARDS & COMPLIANCE

Quality Management Systems	ISO 9001
Chemical Fume Containment	ANSI/ASHRAE 110 1995
Carbon Filter Efficiency	BS 7989-2001 AFNOR NFX 15-211
Biological Safety Filter Efficiency HEPA and ULPA	IEST-RP-CC-0034.2 IEST-RP-CC007.1 IEST-RP-CC001-4 EN 1822
Electrical Safety	UL-C-61010-1 CE Mark ROHS Exempt under EEE Category 9
Product Design	ANSI Z 9.5-2003 ANSI Z 9.7-1998
OSHA, Occupational Safety and Health Administration	OSHA Standard -29 CFR, Safety and Health Regulations for General Industry, 1910.1450: Occupational exposure to hazardous chemicals in laboratories. Part B, definition, laboratory type hood. All Air Science products meet this definition.
Environment	ISO 14001 Energy Star Partner



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