Carbon Filter types Available

Filter	Example
A/C	Organic / Inorganic Solvents
FORM	Formaldehyde / Glutaraldehyde
AMN	Ammonia, Amines
SUL	Hydrogen Sulphide, Mercaptans
ACI	Mineral Acids
ETHE	Diethyl Ether
CYND	Cyanide Compounds
A/C-R	Radioactive Iodine
A/C-Hg	Mercury Vapours
ED	Special blend for use in education
MCH	Custom filter to comprise of up to 4 carbons from above list.
HEPA	Particulate filter for powders, dusts etc.

Microbiological Safety Cabinets

Chemical Dispensing Station

Downflow Workstations

Laminar Flow Cabinets

Chemical Storage Cabinets

Mobile Fume Cabinets

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Filtration Fume Cupboards

AURA Non-ducted Fume Cupboards

aura

LABCAIRE
For Tomorrow's Environment

Containment from Filtration

aura *non-ducted fume Cupboards*

Low-airflow alarm

All Labcaire AURA non-ducted fume cupboards are offered with a range of filtration monitoring systems. The 'L' versions include as standard a Low-airflow indicator. This will illuminate should the face airflow through the cabinet fall below the specified minimum, thereby indicating the pre-filter may require attention.

Eversafe™ Control Panel

Deep-lipped Spillage Tray

The spillage tray fitted into each AURA cabinet is surrounded by a 40mm lip. This ensures that any spillage remains within the confines of the cabinet. The tray itself is a one-piece moulded unit from chemical resistant epoxy coated GRP and can easily be removed to allow thorough cleaning.

The Benefits of Carbon filtration

The benefits of carbon filtration fume-cupboards are many. The cabinets themselves are easy to install, as no connection to ductwork is necessary. All that is required is a standard 13-amp electricity supply. This means that the cabinet can be sited almost anywhere – you do not have to search around looking for a suitable outside wall. In addition to this, should your requirements or the layout of your laboratory change, then the cabinet can easily be moved with no costs involved. By recirculating clean air back into the laboratory rather than venting it to the outside, installing the AURA cabinet means that you do not have to provide extra ventilation or heating into your room. This is especially important in controlled environments like Clean Rooms or air-conditioned rooms.

Carbon filters can be used to remove the large majority of chemical fumes. There are 10 types of carbon regularly used in the AURA range – see the back cover for a full breakdown – and each filter can contain up to 4 blends of carbon to offer multi-purpose filtration. Should powders be used in the cabinet, then HEPA filters can be installed or combined with carbon filters to achieve both Powder and Fume removal.

FILTRAK™ Filter Change System

The unique FILTRAK™ Filter clamping system makes the changing of filters simple.

Carbon filters slide easily into the cabinet on their aluminium rails and by turning the yellow levers the filters will lock down into place and be clamped evenly around all sides. This ensures a tight and regular seal around all edges.

Pre-filters are changed without disturbing the carbon filters on the drop down internal tray. This allows changing whilst the fan is running and therefore keeps any dust particles confined to the inside of the cabinet.

Changing carbon filters

Changing pre-filters

EVERSAFE™ Monitoring

The Labcaire EVERSAFE™ fume monitoring system is one of the most advanced monitoring systems available. It will of course offer full air-flow monitoring but should the aperture of the cabinet be disturbed or the pre-filters start to block then the EVERSAFE™ will increase or decrease the fan speed accordingly to ensure optimum face velocity is maintained. Should the adjustment required be outside the parameters of the cabinet then the unit will give both audible and visual alarms.

In addition to this, the EVERSAFE™ system is connected to a three-level toxicity sensor to fully monitor the clean side of the filter. If the sensor starts to detect chemical breakthrough, the EVERSAFE™ will again alarm audibly and visually to allow easy and efficient filter replacement well within safe limits.

The EVERSAFE™ system will also continuously display the specific filter fitted to your cabinet so you can be sure the cabinet is being used for a suitable application. At the press of a button it gives full details of when the filter was fitted and for how long the filter has been in use.

760mm wide AURA 250E

1370mm wide AURA 750E

1070mm wide AURA 550E

AURA Non-ducted Fume Cupboards

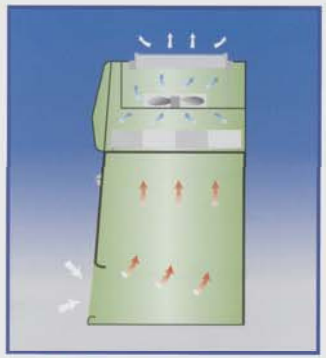
The AURA range is available in three standard sizes of cabinet. This ensures that there is a model available to suit the requirements of almost any laboratory. Should the size not be exactly as required, then we can produce a model to your own specifications.

Each cabinet is provided with either a 'Low-airflow' alarm or full EVERSAFE™ fume monitoring system depending on individual requirements.

The extra tall fixed height apertures used in the AURA range guarantee that the maximum recommended sash height will not be exceeded. The apertures designed into the AURA offer up to 40% greater height than previous models. Extra filters can be installed such as outlet carbon safety filters for extra safety or outlet HEPA filters for removal of particulate as small as 0.3 microns. The outlet HEPA filter is especially useful as it enables the cabinets to be used in a Clean Room environment where no dust or particulate must be allowed to enter the working area.

New British Standard

The new British Standard for recirculating fume cupboards BS7989 is due for publication in June 2001. The full range of AURA cabinets is fully compliant.



Airflow illustration

Airflow Characteristics

The path of air through the AURA cabinet is easy to follow. Clean air is drawn at a speed of 0.55m/sec into the large front aperture by the fan in the head section. When the air passes through the aperture, it collects any fumes that may be present before pulling them through the pre-filter and then immediately through the main carbon filter.

Following this the air will pass over the three-stage toxicity sensor to check the air is clean. It will then be vented out of the top of the cabinet and back into the room. Should an optional outlet HEPA or Carbon Safety filter be fitted, the air will pass through this filter first before being expelled.

A range to suit all needs

aura *non-ducted Fume Cupboards*

Design the Cabinet to your own requirements

Gas and water options - integral to lipped spillage tray

Electrical Cable Access Port

Labcaire fume cabinets are used for a massively diverse range of applications. This can be from a standard laboratory through to such areas as hi-tech industry or developing fingerprints in forensic science laboratories.

With this diversity in mind we realise that not all users of a laboratory fume cupboard require a standard cabinet and that at times something extra is required.

Should you need any extras or special features with your Labcaire AURA fume cabinet then they can be designed to form an integral part of the unit.

Basic extras can include the addition of gas and water facilities fitted into the lipped spillage tray or a ventilated under cupboard. More advanced and specially installed additions could include custom manufactured aperture designs or a uniquely constructed base section for a particular or specific application.

Please contact Labcaire's Sales Department who will happily discuss any special requirements that you may have along with any possible solutions.

Options for the range of AURA cabinets include:

- Outlet safety filter
- Outlet HEPA filter
- Water taps & integral drip cup
- Gas taps
- Electrical access port
- Ventilated storage base cabinet
- Standard storage base cabinet
- Base stand
- Base trolley

Custom cabinet modifications can include:

- Special glazing arrangements
- Custom dimensions eg. Width
  Depth
  Height

Aura 750E with ventilated under cupboard

Specifications

	aura 250L	aura 250E	aura 550L	aura 550E	aura 750L	aura 750E
External Dimensions mm (W x D x H)	760 x 710 x 1210*		1070 x 710 x 1210*		1370 x 710 x 1210*	
Internal Dimensions mm (W x D x H)	740 x 700 x 800		1050 x 700 x 800		1350 x 700 x 800	
Working aperture mm (W x H)	480 (ave) x 240		770 (ave) x 280		900 (ave) x 300	
Airflow	280 m^3/hr		550 m^3/hr		750 m^3/hr	
Face Velocity (m/sec)	>0.6	Controlled @ 0.55	>0.6	Controlled @ 0.55	>0.6	Controlled @ 0.55
Containment to BS5726	Yes	Yes	Yes	Yes	Yes	Yes
Noise Level - db (A)	Yes <55	Yes <55	Yes <58	Yes <58	Yes <58	Yes <58
Internal Lighting	2 x 18 watt >1000 lux		2 x 18 watt >1000 lux		2 x 18 watt >1000 lux	
CE Marking	Yes	Yes	Yes	Yes	Yes	Yes
Main Filters Size mm (W x D x H)	600 x 340 x115		2 at 600 x 340 x115		2 at 600 x 450 x115	
Main Filter Weight	12kg		2 x 12kg		2 x 16 kg	
Pre-Filter Size mm (W x D)	600 x 340		2 at 600 x 340		2 at 600 x 450	
Pre-Filter Efficiency	95% to 0.5µm		95% to 0.5µm		95% to 0.5µm	
Optional Safety Filter size mm (W x D x H)	450 x 410 x 50		2 at 450 x 410 x 50		2 at 550 x 450 x 50	
Safety Filter Weight	4kg		2 x 4kg		2 x 5kg	
Optional Outlet HEPA filter size mm (W x D x H)	450 x 410 x 66		820 x 450 x 66		1100 x 450 x 66	
Outlet HEPA filter Efficiency	99.997% to 0.3µm		99.997% to 0.3µm		99.997% to 0.3µm	
Low Air-flow alarm	Yes	Yes	Yes	Yes	Yes	Yes
EVERSAFE™ monitor	No	Yes	No	Yes	No	Yes
Power Supply	240V 50 Hz 360 watts	240V 50 Hz 380 watts	240V 50 Hz 700 watts	240V 50 Hz 720 watts	240V 50 Hz 800 watts	240V 50 Hz 820 watts
Construction: Head Section	Zintec steel epoxy powder coated for corrosion protection					
Construction: Base Section	Zintec steel epoxy powder coated. Clear acrylic front and side glazing Opaque back panel (Clear available on request). Moulded chemically resistant fibreglass tray					
Fan	Centrifugal High Performance to IP 44		2 x Centrifugal High Performance to IP 44		2 x Centrifugal High Performance to IP 44	
Packed Weight	108kg*		119kg*		151kg*	

* Excluding outlet safety or HEPA filters