

hseries

chemical resistant
u.P.V.C. fume cupboards



features

- Fully welded rigid u.P.V.C. body.
- Customised sizes if required
(Can be fitted with customised products and accessories).
- Choice of chemical resistant tiles, u.P.V.C, Polypropylene, ABET or Stainless Steel floor covers.
- Raised front edge for safety.
- Floor or wall mounted piped services.
- Air distributed baffles.
- Available with both single and double door openings.

'.. Cupboards for safe science'



HAMILTON
AUSTRALIA

hseries FUME CUPBOARD

The Hamilton 'H'-Series u.P.V.C. Fume cupboards have been the most widely used in Queensland since their inception in 1977. Their reputation for quality, design and workmanship is the result of over 36 years experience in the plastics industry and a consistent productive approach to research and development.

Hamilton 'H'-Series FUME CUPBOARD

1. Provide safe and efficient fume extraction for laboratory use.
2. Utilize high corrosion-resistant materials.
3. Enable easy installment and quiet operation.
4. Are available in a wide range of standard sized units.
5. Easily cater for customised products and accessories.
6. Customization capabilities meet even the most difficult specifications.

Standard Sizes

Hamilton 'H'-Series fume cupboards are manufactured in a range of standard sizes to suit most requirements. They are designed to be bench mounted and are self contained for ease of relocation. The table below details the standard sizes.

Single Sided Design

Length	Height	Depth
915	1650*	750
1200	1650*	750
1500	1650*	750
2000	1650*	750

*Including lower 150mm service plinth

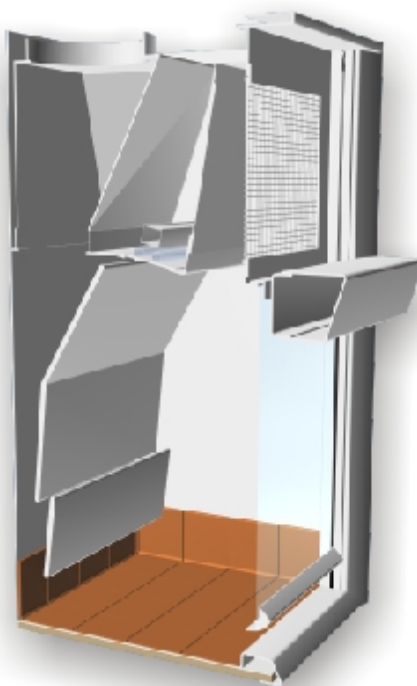
Double Sided Design

Length	Height	Depth
915	1650*	915
1200	1650*	915
1500	1650*	915
2000	1650*	915

*Including lower 150mm service plinth

'H'-Series Custom Sizes and Configurations

Hamilton 'H'-Series fume cupboards may be manufactured to suit any size or configuration that a particular application may require.



Construction Main Body

Standard construction of the external body is fully welded, rigid u.P.V.C. (Polyvinyl chloride) sheet. The body is single skinned with either a white or grey appearance.

Another alternative could be Polypropylene for increased chemical and heat resistance.

An economical alternative to the above method of construction is to retain the standard u.P.V.C. Main body and fit it with an internal liner. Internal liners are available in the following materials;

1. Polypropylene - as above
2. Stainless Steel (in various grades) - for solvent, heat and fire resistance.

Work Surfaces

Standard fume cupboard work surfaces are tiled with heat and acid resistant ceramic tiles. They are fixed to a u.P.V.C. Base and then grouted with a special epoxy cement. The floor corners are covered for easy cleaning. There are also splash backs fitted to all walls. A raised u.P.V.C. Front sill is incorporated to contain any spillages that may occur.



Other work surfaces available in the 'H'-Series range include; rigid u.P.V.C., Stainless steel, "ABET", and epoxy resin. These materials, as well as offering their special resistance properties provide a smooth, easily cleaned base.

Baffles

The baffles at the rear of the cupboard are designed to efficiently channel the exhaust fumes away from the workspace.

The 'H'-Series standard baffle arrangement is designed with three levels of fume extraction, however, any requirement can be met with the flexible design.

Service Panels

All standard bench mounted fume cupboards are 1650mm high, and fitted with a removable panel for access and serviceability to the fluorescent light and other inbuilt services. Shorter units are usually serviceable from above.

hseries



STANDARD ACCESSORIES

Laboratory Fittings

Laboratory fittings are supplied in an epoxy finish. In situations where distilled or treated waters are used, special fittings are also available to ensure no contamination of the liquids.

Fittings are available in various configurations to safely introduce the following materials:

- Cold Water
- Hot Water
- Distilled Water
- Compressed Air
- Oxygen
- Nitrogen
- Hydrogen
- Natural / LP Gas
- Helium
- Vacuum

Controls

Hamilton Australia has developed a range of fume cupboard controllers that exceed the requirements of the relevant standards. Whilst complying with AS/NZS 2243.8, the Hamilton fume cupboard controllers offer the following additional benefits:

User friendly graphical LCD / LED interfaces.

True air velocity sensing through the fume cupboard exhaust system.

Accurate sash position sensing allowing instant exhaust / supply air volume changes inter-connected with sash height.

Back-up battery operation during power failure.



Laboratory Sinks

A range of standard and custom sinks are available for use in Hamilton fume cupboards. Moulded polypropylene sinks are standard and display the following features:

1. Injection moulded one-piece Construction.
2. Radiused internal corners.
3. Smooth easy-to-clean finish.
4. Excellent chemical resistance.

Other sinks made to order can be manufactured from stainless steel, u.P.V.C. and polypropylene.

Doors

Standard fume cupboard doors are vertical, smooth sliding and fully counter-balanced. This allows them to remain stationary at any set position. The material commonly used is an Armour float glass which is scratch resistant, and has excellent heat and chemical resistance.



Other door materials could be:

Clear u.P.V.C. - light weight, good chemical resistance.

Clear polycarbonate - excellent impact resistance, good heat and chemical resistance with tints available.

Air Bypass Grilles

Automatic or manual bypass grilles are recommended for use with large openings or double side fume cupboards. The fume cupboard is designed so that the air drawn through is relative to the maximum area of the work space, i.e. As the door closes the area decreases and the velocity increases. The large opening or double sided door units can attain such a high velocity that it may affect the experiment in the workspace. A bypass grille channels this moving air away from the workspace, yet maintains a relatively constant velocity through the door opening.

Ceiling Skirts

An optional u.P.V.C. Skirt can be supplied to interface the top of the fume cupboard and ceiling. The skirt is a neat fit with the top of the fume cupboard, and slides up to butt the ceiling after the unit has been installed.

Water Washdown Systems

If using perchloric or other acids in high concentrates, water jet fittings can be incorporated behind the baffle system to wash the acids from the exhaust fumes. The water/acid solution then flows down into a runnel drain and to waste (usually through an acid neutralizing box).

Mist Eliminator

A mist eliminator unit may be installed in the fume cupboard upper chamber to capture and condense any airborne mists, drawn from experiments or water wash down systems. Aerofoil vanes collect and condense the mists into a liquid which is drained off to waste.

Other accessories

Under benches generally white powder coated 32x32x1.2mm R.H.S. (Cladded or uncladded).



Fume Cupboard Maintenance and Service

It is a requirement of the Australian Standard 2243.8, that all fume cupboards be serviced at least once a year. Our experienced NATA accredited technicians have kept our clients safe for over 15 years through regular maintenance of their equipment.

Your fume cupboards, fans and scrubber units can be kept in optimum working condition with periodic maintenance by our Service Division. All servicing is carried out to the current Australian Standard AS2243.8.



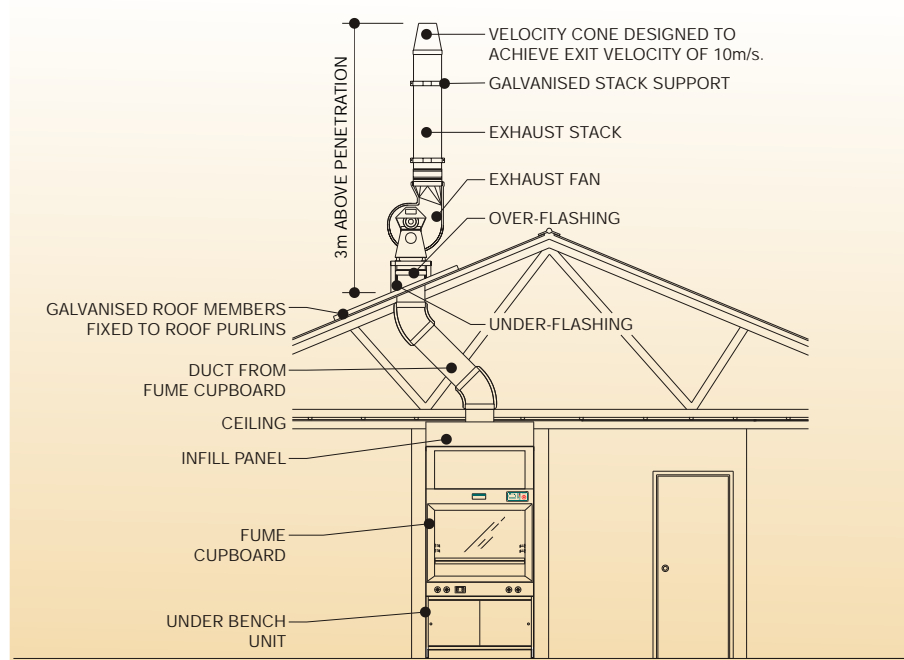
Our company can offer upgrading and complete installation of any new fume cupboards that may be needed to comply with the relevant standards.

We have a fully equipped and experienced service division able to meet all maintenance, emergency and after hours service.

At each service, test reports and compliance certificates are given to the clients for their records.

If you wish to discuss your service requirements or book a service, please contact our Service Division.

Typical Installation.



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