



Fume Cupboards



Viking Plastics has been supplying fume cupboards to Australian laboratories and class rooms for more than 50 years

Viking Plastics' fume cupboards are renowned for their superior workmanship and quality materials. They are constructed in accordance with Australian Standard AS/NZS2243.8:2014 to provide a safe working environment and are backed by a 3 year manufacturing warranty.

Used in laboratories, class rooms and industry, a fume cupboard is in effect a ventilated cabinet designed to protect the user from inhaling toxic fumes when working with dangerous chemicals. The chemical fumes and volatile gases are extracted from the cupboard via plastic ducting and a chemical resistant exhaust fan and safely expelled to atmosphere.

Viking plastics supplies both single-sided and double-sided fume cupboards. A double sided fume cupboard has two vertically sliding sashes (doors) — positioned on opposite sides of the cupboard.

Single Sided Fume Cupboards

Construction

The main body is fabricated from welded unplasticised Polyvinyl Chloride (uPVC) to deliver a clean and neat appearance. uPVC is one of the best materials for use in highly corrosive environments, involving exposure to a wide range of acids, alkalis, oils, salt solutions and volatile fumes.

uPVC retains its smooth gloss surface permanently, even in the presence of gases and chemicals. It is hard to ignite and will not support combustion once the source of ignition is removed.

Fittings and Controls

Viking Plastics' fume cupboards are equipped with control valves mounted on the front panel for services such as gas and water. The workbench is finished in hard-wearing, acid resistant ceramic tiles with rounded corners to facilitate easy cleaning.

The standard units come fitted with a sink, dual GPO with residual-current device (RCD) protection, internal lighting, and a comprehensive control system. The control system controls the gas, power, light and fume extraction fan (with automatic pre-purge and post purge periods) as well as providing operating status and visual and audible alarms.



Viking Plastics' fume cupboards can be custom built with a different selection of fittings to suit your individual requirements

Standard features include:

Main Body

- > Fabricated from welded uPVC for a neat look as well as providing a high level of chemical resistance
- > Available in various sizes: 900mm, 1200mm, 1500mm or 1800mm wide and either 1650mm or 1800mm high with a standard depth of 750mm

Workbench

- > Workbench is finished in hard-wearing acid-resistant ceramic tiles
- > The workbench edges are rounded upwards to facilitate easy cleaning
- > The front edge of the workbench area is raised to contain spillages

Sash (Door)

- > Fitted with a vertically sliding counter-weighted, 4.5mm thick, clear PVC (optional toughened glass) sash to adjust the size of the opening
- > When the sash (door) is fully lowered a 70mm opening remains to ensure there is always air flow through the fume cupboard

Air Flow / Baffles

- > Airflow is regulated to maintain a minimum face velocity of 0.5 metres per second through the working aperture, whatever the position of the sash (door) opening
- > Baffles (uPVC or optional 316 polished stainless steel) fitted to the rear of the work-chamber facilitate efficient airflow directed to the back of the fume cupboard and out through the exhaust duct
- > Baffles are easily removed for cleaning and no tools are required for removal or re-installation
- > Vents on the upper front panel ensure the face velocity air flow remains constant



Fittings

- > Goose neck taps supply water (hot, cold or mixed)
- > Choice of lab or tundish (pot) sink
- > Gas nozzles are colour coded for different gases
- > Gas and water valves are positioned on the front panel at waist height for convenience and do not obstruct the air flow into the fume cupboard
- > Fitted with dual GPO with residual-current device (RCD) protection

Lighting

> Fitted with an internal fluorescent light to illuminate the work surface to a minimum of 400 lux

Control System

- > Comprehensive control system to run the gas, power, light, extraction fan (with pre & post purge time periods), display status and visual and audible alarm functions
- > Control panel automatically ensures the fan is running with a 5 minute pre-purge and 20 minute post-purge time periods to ensure all toxic fumes are extracted from the cupboard
- > Emergency stop button (manual reset type) immediately disconnects the electrical power and gas to the fume cupboard while allowing the exhaust fan to continue operating to ensure the fume cupboard is completely purged of fumes

Warranty

> 3 year manufacturing warranty

Double Sided Fume Cupboards

Standard features are as per a single sided fume cupboard plus the following:

- Fitted with two vertically sliding counter-weighted,
 4.5mm thick, clear PVC sashes (doors) on opposite sides of the cupboard
- > Full set of controls on each side of the fume cupboard
- > Fitted with a door alarm to ensure only one door is open at any one time to prevent cross-draughts





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