

# **Fume Cupboard**

### **Labrocare**®

Designed for the professional laboratory, TPE's Labrocare® Fume Cupboard provides proven fume extraction technology, constant air volume (CAV), a wide range of sizes, and optional special features for demanding environments. The Labrocare® Fume Cupboard fully complies with AS/NZS 2243.8 (2014) standards.

# The CAV Fume Cupboard and the Air Bypass System

Constant Air Volume fume cupboards have their exhaust fan set to a fixed speed, calculated to meet the minimum airflow demanded by the relevant standards when the sash is at normal working height. Advanced Air® fume cupboards ensure 0.5 metres/second airflow when the sash is at the recommended working height (normally 500mm).

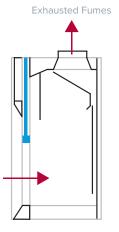
To prevent excessive air velocities through the sash opening when the sash is lowered, Labrocare® CAV fume cupboards use an Air Bypass System, as shown in the diagram.

At the normal working height, incoming air flows in exclusively through the sash opening. As the sash is lowered, part of the airflow is drawn in through the bypass inlet on top of the fume cupboard. The bypass prevents excessive velocity at the sash opening by providing a balanced airflow into the fume cupboard.

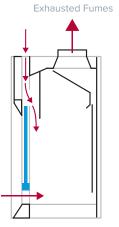
If the sash is opened above normal working height – 730mm is maximum – airflow at the sash will be reduced to an unsafe level. Labrocare® fume cupboards provide a lock at normal working height. It serves as a barrier that must be disabled by the operator to raise the sash above 500mm; it automatically relocks when the sash is lowered.



EcoAir® laboratory fume cupboard.



**Sash in raised position** Normal working height



Sash in lowered position

## **Specifications**

#### **Advanced Air® Model Labrocare® Fume Cupboards**

Sizes	1200mm	1500mm	1800mm	2000mm	4000mm
Overall Height	1380mm	1380mm	1380mm	1380mm	1380mm
Overall Depth	750mm	750mm	750mm	750mm	750mm
Internal Height	1160mm	1160mm	1160mm	1160mm	1160mm
Internal Depth of Work Top	570mm	570mm	570mm	570mm	570mm
Design Face Velocity	0.5 metres/second				

Fixed Volume Flow Rate:	265	340	415	465	960
(Model Labrocare®)	Litres/sec.	Litres/sec.	Litres/sec.	Litres/sec.	Litres/sec.

Work Top Material	Chemical resistant Compact Laminate Work Surface (colour grey)						
Available Work Area	969mm x 535mm	1269mm x 535mm	1569mm x 535mm	1769mm x 535mm	3769 x 535mm		
Construction Design	Fascia proprietary extruded aluminium with additional base beam protection.  Double skin uPVC Standard. Double skin with Polypropylene internal lining optional						
Sash Material	5mm Toughened Glass (Split Sash)						
Control System	Advanced Air® Fixed Volume Controller with LCD type display						
Internal Pre-wiring	Fully pre-wired						
Power Supplies	230V Single-Phase (standard); options available for various countries						
Dry Services	Natural Gas, Nitrogen, Compressed Air, Vacuum, Argon, others available						
Water Services	Cold Water, Hot Water, RO Water, Mixer and Sink						
Power Points	10-Amp Singles, 15-Amp Doubles						

Note: Labrocare®'s fixed-volume system is appropriate when wet fume scrubbers are specified.

#### **Options**

- ▶ Steel powder-coated under-bench frame locates work surface at standard 900mm bench height.
- ▶ Scaffold System, adjustable stainless steel rods with polypropylene connectors.
- ▶ Work surface material: Stainless Steel, Glass, Polypropylene.
- ▶ Electrical, plumbing, and gas services can be added as specified.
- ▶ Side-view glass windows.
- ▶ Fume Scrubbers and Fume Eliminators.
- ▶ Manifold systems.
- Water spray system.