



**Clean Air**

Fume Cupboards

The Science of Fume Containment



# APEX-2 Fume Cupboards



ISO 9001  
ISO 14001  
ISO 45001

 **MADE IN  
BRITAIN**



Developed in collaboration with a leading Russell Group university, the APEX-4 Premium Fume Cupboard offers a spacious and light-filled working environment. Toughened glass single-skin side panels maximise visibility, bringing natural light into the internal chamber and creating a more pleasant, productive workspace. An 1800mm wide APEX-4 provides a larger working area than a typical 2000mm-wide conventional fume cupboard, with generous height and depth to support a wide range of applications.

The energy-efficient Variable Air Volume (VAV) model includes a fixed glass panel above the sliding sash, providing full-height viewing access to the internal chamber. Constant Air Volume (CAV) units feature an aluminium bypass grille.

## Installation & Relocation

To future-proof your laboratory the APEX-2 is easily relocatable. Instead of traditional on-site assembly, the APEX-2 units arrive in two parts. This allows quick and easy installation with either a FLT or pump truck. Relocation is also quick and simple, removing the worry of damaged or lost parts.

## Performance

The curved radius-profile entrance improves airflow and enhances containment, even at low face velocities down to 0.3m/s. Independently tested to BS EN 14175, the APEX-4 delivers exceptional performance, achieving a Robustness of Containment Protection Factor (PFR) of 1,300,000 on an 1800mm unit at 0.3m/s.

The APEX-4 also meets the highest level of the new BS EN 14175 Typical Containment Settings, Setting A, at 0.3m/s. This confirms it is ideal for high-hazard environments such as research laboratories and industrial facilities.

## All This as Standard

- Carcass constructed from polyester-coated zintec steel
- Interior liners & baffles from Trespa® TopLab® BASE solid grade laminate, complete with toughened glass side panels
- Electrics pre-wired to a 5-way consumer unit complete with built-in RCBOs & MCBs
- Energy-efficient, long-life LED flat panel lighting
- Cast epoxy worktop with raised edges
- Visual and audible low airflow alarm
- 316-grade stainless steel hinged lower aerofoil for cable entry
- 316-grade stainless steel tissue guards to prevent debris from being drawn into the extract ductwork
- Hinged drop-down upper panel for quick, easy maintenance and inspection
- State-of-the-art appearance
- 12-month free warranty

## Controls

- Advanced programmable control panel
- Alarms for air velocity, sash high, and fan operation
- Alarm levels reported on the display
- BACnet MS/TP and Modbus RTU available

## Customise to your application

- Bench-mounted and walk-in models available
- Variable Air Volume (VAV) technology for energy efficiency, Constant Air Volume (CAV), and Low Flow designs
- Bespoke and larger size units are available on request – tell us your preferred dimensions
- Recirculating carbon-filtered systems where ductwork cannot be installed
- Automatic sash closure with PIR presence sensor
- Automatic fire suppression system (dry powder, CO2, or foam)
- Worktops from cast epoxy, Trespa® TopLab® PLUS, ceramic, stainless steel, polypropylene or PVC-u
- Broen water and gas, Spectrolab specialist gas, and Vacuubrand services
- Drip cups and sinks
- Standard single socket outlets, commando socket outlets, data sockets and emergency stop button
- Alternative sash configurations, including framed sash and framed sash with horizontal sliding panels
- Scaffold bosses (polypropylene or stainless steel) and scaffold frames
- Polypropylene tissue guards
- Standard steel storage cupboards, polypropylene acid storage cupboards, fire-rated solvent storage cupboards or vac pump cupboards
- Pass through ports in side panels or from front panel into the chamber
- Anti-shatter film for glass panels
- Colour matching to your branding in RAL colours

## Servicing

A Clean Air service includes much more than simply face velocity testing – ask us for details

- Full service and maintenance packages available
- Options to lock in prices
- Highly trained test engineers
- Never over-run your test date with our free test scheduling service
- Most makes and models of fume cupboard serviced

## APEX-2 Fume Cupboards Technical Specification



The APEX 2 fume cupboard comes in standard sizes and can also be manufactured to your bespoke size requirements – just ask us for more information

### Dimensions APEX 2

External width	1000mm	1200mm	1500mm	1800mm	2000mm	2400mm
External height	2650mm					
External depth	900mm					
Chamber width	968mm	1168mm	1468mm	1768mm	1968mm	2368mm
Chamber Height	1280mm (Worktop to Soffit)					
Chamber depth	640mm (Sash to Baffle)					
Sash Opening Width	700mm	900mm	1200mm	1500mm	1700mm	2000mm
Max Sash Opening Height	845mm					

### Extract Volumes

	Face Velocity	1000mm	1200mm	1500mm	1800mm	2000mm	2400mm
Extract Volumes at a 400mm sash opening	0.3m/s	0.101m <sup>3</sup> /s	0.130m <sup>3</sup> /s	0.173m <sup>3</sup> /s	0.216m <sup>3</sup> /s	0.245m <sup>3</sup> /s	0.303m <sup>3</sup> /s
	0.35m/s	0.118m <sup>3</sup> /s	0.152m <sup>3</sup> /s	0.202m <sup>3</sup> /s	0.252m <sup>3</sup> /s	0.286m <sup>3</sup> /s	0.353m <sup>3</sup> /s
	0.4m/s	0.135m <sup>3</sup> /s	0.173m <sup>3</sup> /s	0.231m <sup>3</sup> /s	0.288m <sup>3</sup> /s	0.327m <sup>3</sup> /s	0.404m <sup>3</sup> /s
	0.5m/s	0.168m <sup>3</sup> /s	0.216m <sup>3</sup> /s	0.288m <sup>3</sup> /s	0.360m <sup>3</sup> /s	0.408m <sup>3</sup> /s	0.504m <sup>3</sup> /s
Extract Volumes at a 500mm sash opening	0.3m/s	0.126m <sup>3</sup> /s	0.162m <sup>3</sup> /s	0.216m <sup>3</sup> /s	0.270m <sup>3</sup> /s	0.306m <sup>3</sup> /s	0.378m <sup>3</sup> /s
	0.35m/s	0.147m <sup>3</sup> /s	0.189m <sup>3</sup> /s	0.252m <sup>3</sup> /s	0.315m <sup>3</sup> /s	0.357m <sup>3</sup> /s	0.441m <sup>3</sup> /s
	0.4m/s	0.168m <sup>3</sup> /s	0.216m <sup>3</sup> /s	0.288m <sup>3</sup> /s	0.360m <sup>3</sup> /s	0.408m <sup>3</sup> /s	0.504m <sup>3</sup> /s
	0.5m/s	0.210m <sup>3</sup> /s	0.270m <sup>3</sup> /s	0.360m <sup>3</sup> /s	0.450m <sup>3</sup> /s	0.510m <sup>3</sup> /s	0.630m <sup>3</sup> /s

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