



# Airone XP4 Ducted Fume Cupboard

[www.safelab.co.uk](http://www.safelab.co.uk)

With over 40 years of experience, Safelab now part of the SDI Group, is a leading UK designer and manufacturer of high-quality fume cupboards and safety cabinets. Since 2003, we have produced more than 11,000 fume cupboards and provide servicing and support to over 2,500 customers each year.

We work with a broad spectrum of clients, from pharmaceutical organisations, industrial R&D facilities and major universities to schools and small laboratories.

By collaborating closely with consultants, (often with BIM and REVIT information), laboratory furniture specialists, leading construction firms and end users Safelab has become the preferred supplier for many of the UK's largest laboratory projects.

### What Safelab stands for:

- Exceptional Manufacturing Quality
- Expert Consultation
- Outstanding Customer Support
- Continuous Innovation.

To meet the diverse needs of our clients we offer both filtered and ducted fume cupboards, delivering tailored solutions for every environment. We also test, maintain, and service fume cupboards from any manufacturer, ensuring full compliance with COSHH Regulation 9.

### Commitment to Excellence

Our dedication to quality, innovation, and customer care ensures that every Safelab fume cupboard is built to the highest standards.

With Safelab, you can be confident you are choosing the very best in laboratory safety and fume extraction technology.



# Airone XP4

Advanced Fume Extraction for a safer, more efficient laboratory

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## Key Features

- Designed and tested to comply with BS EN 14175
- Double walled construction
- Constant Air Volume (CAV) or Variable Air Volume (VAV) system
- Easily tailored to meet your requirements
- Epoxy coated mild steel construction (RAL7035)
- Aluminium extrusions
- Digital control system
- Counterweighted front sliding sash
- Available in various widths and a walk-in option

The **Airone XP4** is a high-performance, double-walled fume cupboard designed for safety, efficiency, and flexibility. Available with either **CAV (Constant Air Volume)** or energy-saving **VAV (Variable Air Volume)** airflow technology, it delivers reliable containment while optimising energy use.

For building projects requiring **BREEAM compliance**, or general energy efficiency the Airone XP4 is available in a **low flow configuration**, maintaining operator protection at reduced face velocities.

The **Airone XP4** meets **BS EN 14175** standards for low flow robustness and containment, placing it among the market leaders in its class.

Built to the highest quality, features include:

- Stainless steel sill
- Smooth-action, counter-weighted toughened glass sash - providing enhanced user safety
- Digital control interface – providing real-time monitoring of airflow with push button calibration and configuration

# Features & Benefits

Precision Ventilation. Ducted Design. Certified Safety.

Available in a range of sizes, the Airone XP4 can be free standing, walk in and DDA. Built in the UK with extensive service and material options it can be tailored to specific customer requirements.



▲ Digital Control System

**Digital Control System:** On screen display for safe and alarm conditions with audible alarm and LED indication. Displays face velocity with pushbutton calibration and configuration.

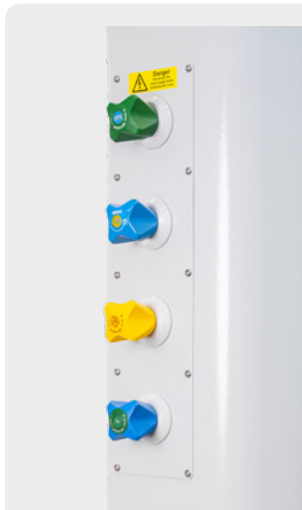
**Sliding Front Sash:** Precision-balanced mechanism reduces strain and enhances user control, allowing for quick adjustments to airflow and access.

**Lighting:** The XP4 is equipped with internal IP20-rated LED lighting, delivering bright, energy-efficient illumination across the working area.



▲ Sliding Front Sash

**Liner and Baffles:** Supplied with Trespa panels as standard, the XP4 also offers optional liners in polypropylene, cast epoxy resin, or stainless steel.



▲ Remote hand wheels for services

**Remote Hand Wheels:** All internal services are easily controlled via remote hand wheels positioned on the front fascia, allowing safe, convenient access without reaching into the working chamber.

**Worktop:** The XP4 comes with a cast epoxy resin worktop as standard, offering exceptional chemical resistance, durability, and ease of cleaning—ideal for demanding laboratory environments. Alternative materials are available to suit specific applications and user preferences.

**Services:** Internal services are housed within a removable panel inside the cupboard, allowing easy access for maintenance and upgrades.



▲ Services

**Maintenance Access:** A hinged top panel provides quick and convenient access to key components, simplifying routine maintenance and servicing.

**Construction:** The XP4 is built from epoxy-coated mild steel, finished in RAL7035 and RAL9016 for a clean, professional appearance.



▲ Hinged Access Panel

# Options

Precision Ventilation. Ducted Design. Certified Safety.

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**Fire Suppression:** The XP4 can be fitted with an integrated fire suppression system, designed to detect and respond rapidly to fire risks within the working chamber.

**BMS Integration:** The XP4 supports seamless integration with Building Management Systems via BACnet or Modbus data modules. Outputs can be configured as volt-free or volumetric.



▲ Waste (integrated sink)

**Alternative Worktops:** In addition to the standard cast epoxy surface, the XP4 offers alternative worktops in ceramic, polypropylene, or stainless steel.



▲ Waste (small round drip cup)



▲ Vented Storage Cabinet

**PIR:** A Passive Infrared (PIR) sensor can be optionally integrated to detect user presence, enabling intelligent airflow control and energy savings.

**Vented Storage Cabinet:** Optional mild steel vented storage cabinets can be installed beneath the XP4 for safe containment of hazardous materials. For enhanced protection, a 90-minute fire-rated upgrade is available, supporting compliance with stringent safety standards.



▲ Fire Rated Storage Cabinet



▲ PIR Sensor

**Front Sash:** An optional Passive Infrared (PIR) sensor enables automatic sash closure when no user is detected, enhancing safety and energy efficiency.

## Mechanical Data

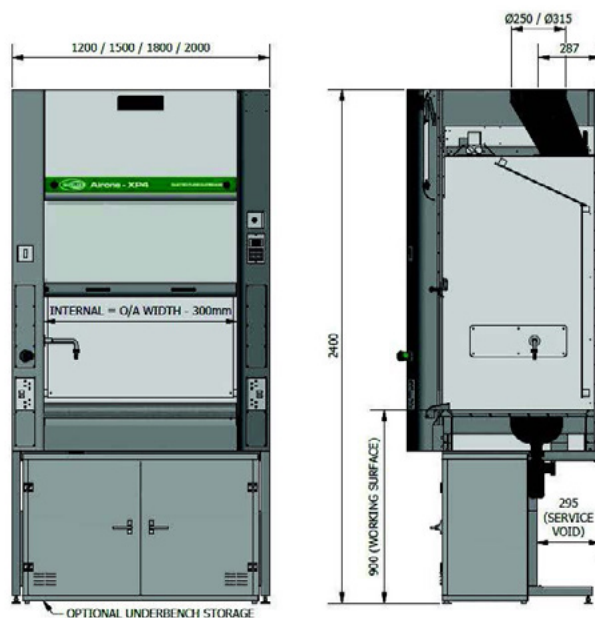
### Airone XP4 Ducted Fume Cupboard

|                               |                      |
|-------------------------------|----------------------|
| <b>Min. Working Height</b>    | 44mm <sup>[1]</sup>  |
| <b>Max. Working Height</b>    | 500mm <sup>[1]</sup> |
| <b>Max. Override Height</b>   | 844mm <sup>[2]</sup> |
| <b>Usable Internal Height</b> | 980mm <sup>[3]</sup> |
| <b>Power Supply</b>           | 230V, 50Hz           |
| <b>Main Construction</b>      | Mild Steel           |
| <b>Stand</b>                  | Mild Steel           |
| <b>Duct Spigot</b>            | PVC                  |

[1] From sill to sash.

[2] Achieved by overriding sash stop to access upper sections of fume cupboard for maintenance. Be aware sash protrudes the top of the fume cupboard by 110 mm at maximum override height.

[3] From worktop to lowest point of top baffle.



## Mechanical Data

### Airone XP4 Walk-in Ducted Fume Cupboard

|                               |                       |
|-------------------------------|-----------------------|
| <b>Min. Working Height</b>    | 130mm <sup>[1]</sup>  |
| <b>Max. Working Height</b>    | 500mm <sup>[1]</sup>  |
| <b>Max. Override Height</b>   | 1480mm <sup>[2]</sup> |
| <b>Usable Internal Height</b> | 1825mm <sup>[3]</sup> |
| <b>Power Supply</b>           | 230V, 50Hz            |
| <b>Main Construction</b>      | Mild Steel            |
| <b>Duct Spigot</b>            | PVC                   |

[1] From floor to sash.

[2] Achieved by overriding sash stop to access upper sections of fume cupboard for maintenance. Be aware sash protrudes the top of the fume cupboard by 110 mm at maximum override height.

[3] From worktop to lowest point of top baffle.

## Technical Data

|                                              | 1200 XP4               | 1500 XP4                   | 1800 XP4                    | 2000 XP4               |
|----------------------------------------------|------------------------|----------------------------|-----------------------------|------------------------|
| <b>External</b><br>(W x D x H)               | 1200 x 900 x<br>2400mm | 1500 x 900 x<br>2400mm     | 1800 x 900 x<br>2400mm      | 2000 x 900 x<br>2400mm |
| <b>Internal (Standard)</b><br>(W x D x H)    | 900 x 645 x<br>1200mm  | 1200 x 645 x<br>1200mm     | 1500 x 645 x<br>1200mm      | 1700 x 645 x<br>1200mm |
| <b>Internal (Walk-In)</b><br>(W x D x H)     | 900 x 645 x<br>1825mm  | 1200 x 645 x<br>1825mm     | 1500 x 645 x<br>1825mm      | 1700 x 645 x<br>1825mm |
| <b>Air Volume</b><br>@ 0.5m/s                | 810m <sup>3</sup> /hr  | 1080m <sup>3</sup> /hr     | 1350m <sup>3</sup> /hr      | 1530m <sup>3</sup> /hr |
| <b>Lighting</b>                              | 2 no. 8W 2ft LED       | 2 no. 8W 2ft LED           | 2 no. 17W 4ft LED           | 2 no. 17W 4ft LED      |
| <b>Duct Spigot</b>                           | 250mm Ø                | 315mm Ø                    | 315mm Ø                     | 315mm Ø                |
| <b>Storage Cabinet</b><br>(not walk-in unit) | 1no. 1100mm            | 1no. 500mm +<br>1no. 900mm | 1no. 500mm +<br>1no. 1100mm | 2no. 900mm             |



## Airflow Volumes

### CAV – Constant Airflow Volume:

Designed using the traditional bypass system which incorporates opening above the sash, a constant air volume fume cupboard (CAV) provides a constant flow of air whether the cupboard is in use or if the sash is open or closed. The face velocity and exhaust volume stay constant therefore energy usage stays constant.

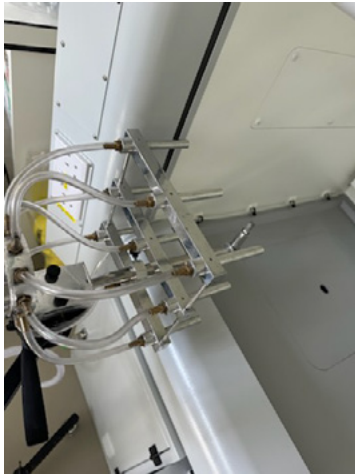
### VAV – Variable Airflow Volume:

A non-bypass VAV system reduces the volume of air taken from the fume cupboard when its not being used and the sash height is reduced. This results in much better energy consumption compared to CAV systems, reducing carbon emissions and potentially saving money. VAV systems are also available with automatic front sash closure systems helping to save even more energy consumption.

# BS EN 14175 Type Testing

Tested for Safety. Proven in Performance

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Every fume cupboard design is rigorously type tested to confirm compliance with the highest safety and performance standards.

Testing is undertaken at various inflow velocities confirming contamination at lower than historical flows.

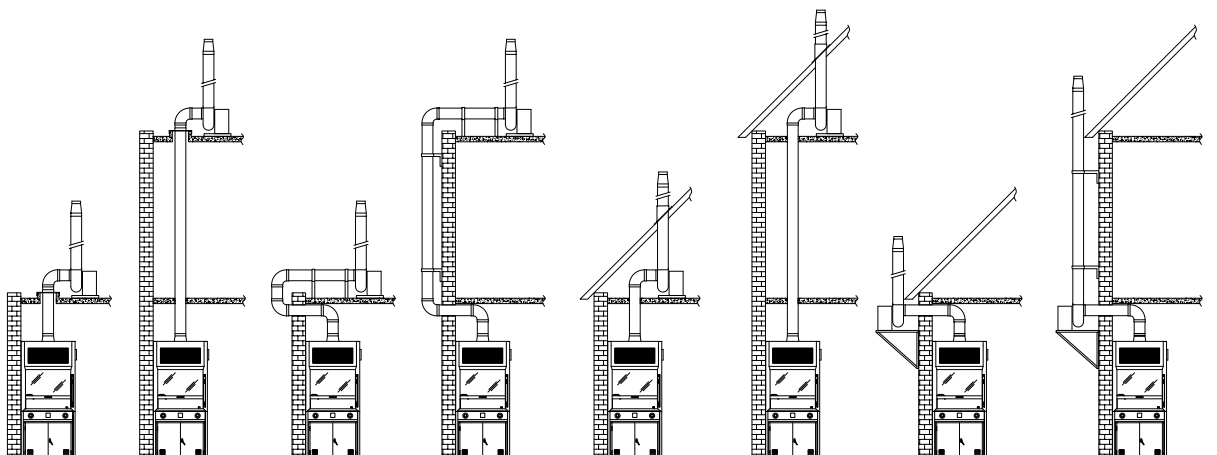
Using advanced airflow and SF<sub>6</sub> tracer gas testing, we ensure each model delivers exceptional containment, reliable operator protection, and consistent performance in real-world laboratory conditions.

## Extract Duct

The Airone XP Ducted fume cupboard range must be connected to an extract system with a properly sized fan to manage pressure loss and effectively remove harmful fumes.

Safelab Systems has extensive experience supplying and installing these systems, whether for new builds or retrofitting into existing structures. By collaborating with architect, contractor and end users we ensure smooth installations.

## Typical Duct Routes





*Working with Safelab has been an absolute pleasure. Whether discussing the different autosash or PIR options or canvassing opinions on ductwork, I've been extremely happy with their professionalism and with the final product.*

# Service & Maintenance

Precision Maintenance for Peak Lab Performance

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It is a **legal requirement** that all fume cupboards undergo a **thorough examination and test at least every 14 months** to comply with COSHH Regulation 9. Safelab provides nationwide service and maintenance for **all makes and models** of fume cupboards and laminar flow cabinets whether ducted or filtered.

## Trusted Expertise

Our service engineers are highly trained and accredited, including **COSHH LEV P601 qualification**, ensuring compliance with legislation and peace of mind for our clients. All staff are **DBS-checked** and operate to strict safety standards. We test and maintain to the latest regulations and guidance:

- **BS 7989:2001**
- **BS EN14175**
- **COSHH REG9**
- **HSG258**
- **CLEAPSS G9 (schools)**

Safelab is also accredited by **Reset**, **Constructionline**, **SafeContractor**, **CHAS**, and **Building with Confidence**, reflecting our strong health & safety culture.



## What Our Thorough Examination & Test Includes

- Operation checks on the fume cupboard and services
- **Qualitative (smoke)** and **quantitative (anemometer)** airflow assessments
- Condition and operation checks on **external fans and ductwork** (where applicable)

## Flexible Service Programs

We offer a choice of service plans to fit your requirements:

- **Routine inspections** and maintenance visits
- **Specialist testing** for clients needing additional performance certification

Safelab keeps your laboratory safe, compliant, and running smoothly with tailored support you can rely on.



# Safelab Product Portfolio

Integrated Products. Consistent Protection.

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AIRONE XP DOUBLE  
WALL DUCTED FUME  
CUPBOARD



AIRONE X2 SINGLE  
WALL DUCTED FUME  
CUPBOARD



AIRONE R3  
FILTRATION FUME  
CUPBOARD



AIRONE C700  
FILTRATION FUME  
CUPBOARD



POLYPROPYLENE  
AIRONE X DUCTED  
FUME CUPBOARD



POLYPROPYLENE  
AIRONE R FILTRATION  
FUME CUPBOARD



FORENSIC SCIENCE  
SAFETY CABINET



STORAGE CABINET



AIRONE CLASS II  
MICROBIOLOGICAL  
SAFETY CABINET



AIRONE HORIZONTAL  
LAMINAR FLOW  
CABINET



AIRONE VERTICAL  
LAMINAR FLOW  
CABINET



EXTRACT FAN





#### **UK Head Headquarters**

Airone Building  
8 Beaufighter Road  
Weston Super Mare  
Somerset  
BS24 8EE

[www.safelab.co.uk](http://www.safelab.co.uk)  
[safelab@safelab.co.uk](mailto:safelab@safelab.co.uk)  
+ 44 [0]1934 421340

