

# ISO fume

Ducted Fume Hood Data Sheets



ISOfume Max – the ultimate solution for modern laboratory safety and efficiency. Engineered for the most demanding cleanroom laboratory environments, ISOfume Max ducted fume hoods sets a new benchmark in fume hood technology. Combining cutting-edge design with unmatched safety features, this state-of-the-art fume hood offers outstanding performance, energy efficiency, and intuitive usability.

ISOfume Max ensures optimal containment and protection with its dynamic airflow system, minimising turbulence and ensuring consistent operator safety. The product is engineered for low energy consumption without compromising safety, reducing operational costs while supporting sustainability goals.

Its intuitive touch-screen control panel offers real-time monitoring and adjustments, making operation simple, precise and user-friendly.

## TECHNICAL FEATURES



### Intuitive operation and fully usable work top

- Facilitated by utilities and controllers on the side columns



### Acoustic & Environmental comfort

- Improved microclimatic well-being



### Status lights

- For superior operator safety



### Tilting front sash

- Intuitive access configuration



### User-friendly touchscreen with integrated web server

- Industrial communication protocols for connection to BMS management systems
- Activity profiling with dynamic suction curves
- Service, monitoring, and remote access
- Usable with actuators for modulating dampers
- Proprietary firmware and software: constant updates and upgrades with incremental functionalities



- Exceptional containment
- Elite-level construction
- Ducted fume hood
- Designed for BMS compatibility

### Standard Product Options

Integrated safety cabinet

Tilting front sash

## ISOFUME MAX FEATURES

- Exceptional containment and expulsion capacity of harmful vapours
- Certified at 0.3 / 0.5 / 0.7 m/s (UNI EN 14175; UNI/TS 11710)
- Energy savings with utmost safety compliance
- Manufactured with high-quality materials to ensure long-lasting performance and durability over time
- Equipped with CAV and VAV control systems and INDUSTRY 4.0 ready
- Aspirators with brushless EC motors
- User-friendly touchscreen with integrated web server
- Status lights for operator safety
- Adjustable LED light



The ISOfume Pro is a next-generation ductless fume hood designed to deliver exceptional chemical containment in a compact, user-friendly format.

Engineered with a multi-layered carbon filtration system and backed by real-time airflow monitoring, the E Series ensures safety, efficiency, and compliance in fast-paced, high-precision lab environments. Smart, sustainable, and scalable, it's the ideal solution for laboratories where mobility, control, and clean air are critical.

Designed with user experience and operational continuity in mind, ISOfume Pro offers intuitive filter access, silent operation, and continuous status monitoring.

Whether deployed in a Pharmaceutical, R&D or Higher Education setting, it delivers a clean performance – backed by a legacy of precision engineering.



- High efficiency ductless fume hood
- Real-time airflow monitoring
- User-friendly configuration
- Compact fume hood design

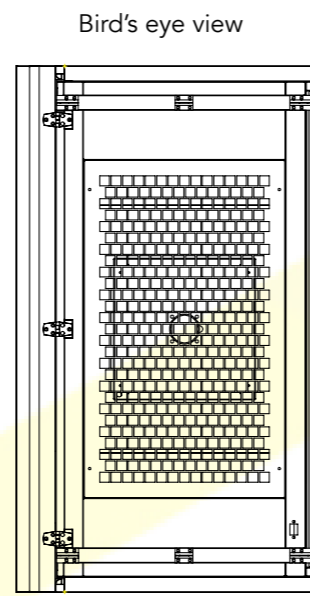
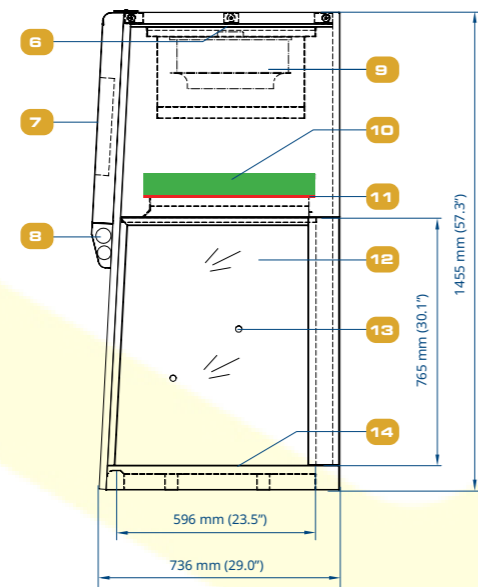
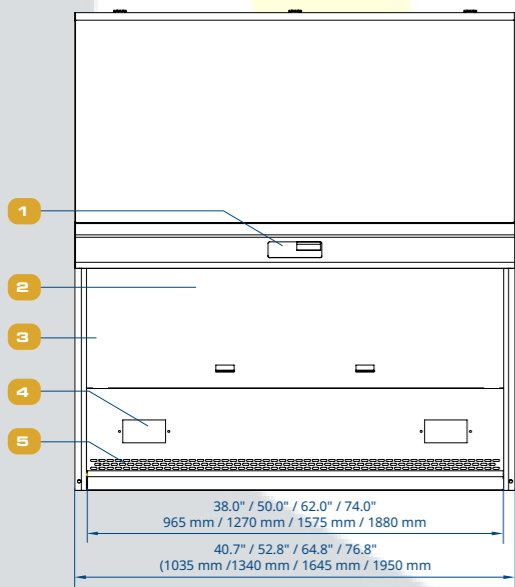


### Standard Product Options

Stainless steel, phenolic resin or epoxy resin worktop
Faucet and drip cup
Support stand
Castor wheels
Filters - standard, acid, mercury, sulphur, halogen, aldehyde, ammonia, chloroform
European style service fixture
American style service fixture
Copper piping for service fixture
Solenoid valve fitting



## TECHNICAL DRAWINGS



- |   |  |                                 |   |
|---|--|---------------------------------|---|
| 1. Sentinel™ Silver Microprocessor Control System | 4. Optional EO-HA Single Electrical Outlet (max 5A combined for max 2 outlets) | 7. Electrical Panel             | carbon filter)  |
| 2. Tempered Glass Sliding Sash Window             | 5. AutoPurge™ Slots  | 8. LED Lamp                     | 12. Tempered Glass Sides                                    |
| 3. E.G. Steel Back wall                           | 6. Optional VOC sensor   | 9. Fan                          | 13. Service Fixture Retrofit Kit Provision (2 on each side) |
|   |  | 10. Main Carbon filter          | 14. Stainless Steel Worktop                                 |
|   |  | 11. Prefilter (built inside the |   |

## ISOFUME PRO FEATURES

- Carbon filtration system: high-efficiency filter captures hazardous chemical fumes at source – clean air is safely recirculated into the workspace
- Real-time airflow monitoring: the microprocessor provides continuous status updates, alarms and performance logging
- Energy efficient: recirculating design eliminates ductwork, minimises HVAC load, and reduces energy consumption
- Flexible and mobile: compact footprint with lockable castors – ideal for space-conscious labs and multi-purpose work zones
- Toolless filter change: simple, safe, and efficient filter replacement via front-access panels
- Compliance ready: independently tested to meet international standards including ashrae 110 and en 14175
- Smart filter control: onboard sensor tracks filter saturation and provides automatic alerts when change is required
- Low noise operation: quiet airflow system minimises disruption to lab workflow and enhances user comfort

The ISO Fume Plus ducted fume hood is a high performance, low flow fume hood engineered for safety, performance and energy efficiency, all combined in one multi-featured product.

Its ability to operate at a reduced face velocity of 60 fpm (0.3 m/s) allows for an exhaust volume reductions of up to 58% as compared to a conventional fume hood. This directly translates to more savings for your application.

Designed with precisely tuned aerodynamics, outstanding user safety, design flexibility, energy-efficiency and aesthetics, this conventional laboratory fume hood marries efficiency with safety.

Each fume hood comes standard with a Water Enhanz and Gas Enhanz remote controlled fixture plumbed to the top and four single electrical outlets with splash proof covers.



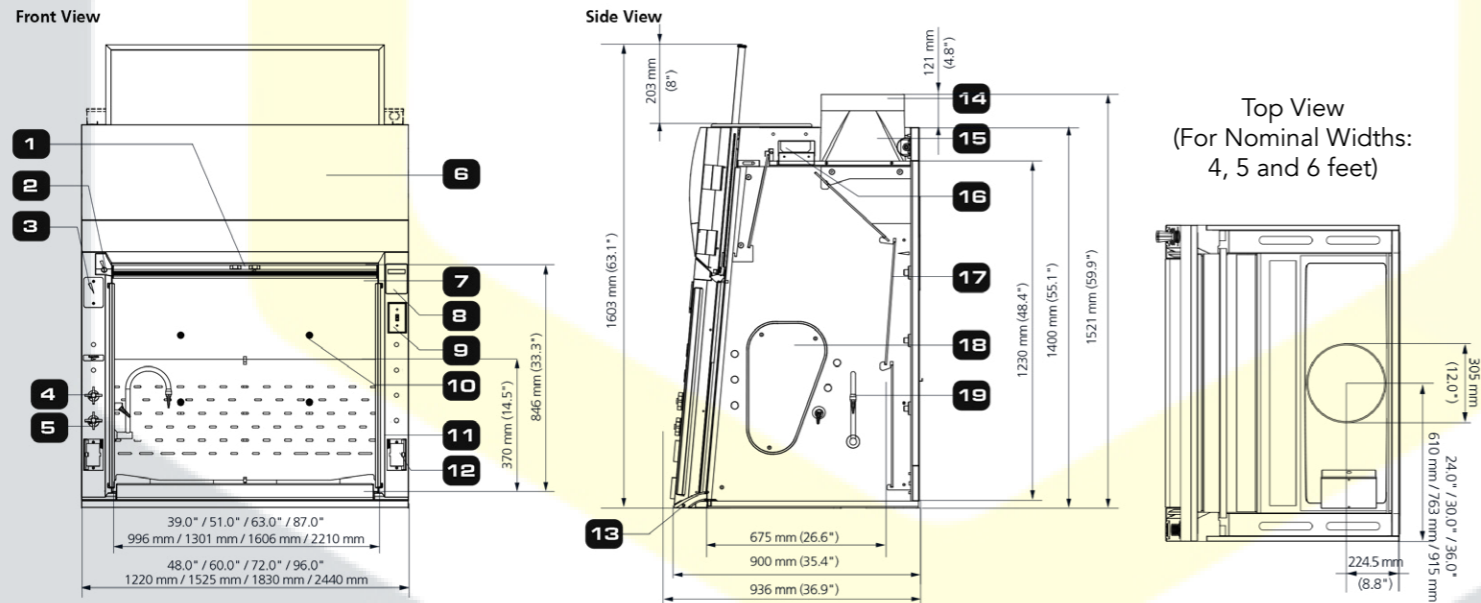
- High-quality ducted fume hood
- Energy-efficient
- Triple layer wall construction
- High sight line for enhanced visibility



### Standard Product Options

Vertical or Combination sash
Service Fixture: water, hot water, DI water, hydrogen, gas, vacuum, nitrogen, oxygen, compressed air, CO2, argon
Support Stand with Levelling Feet
Distillation Grid
Exhaust Blower
Electrical outlets

## TECHNICAL DRAWINGS



- 1. Sentinel™ Silver Microprocessor Control System
- 2. Tempered Glass Sliding Sash Window
- 3. E.G. Steel Back wall
- 4. Optional EO-HA Single Electrical Outlet (max 5A combined for max 2 outlets)
- 5. AutoPurge™ Slots
- 6. Optional VOC sensor
- 7. Electrical Panel
- 8. LED Lamp
- 9. Fan
- 10. Main Carbon filter
- 11. Prefilter (built inside the carbon filter)
- 12. Tempered Glass Sides
- 13. Service Fixture Retrofit Kit Provision (2 on each side)
- 14. Stainless Steel Worktop

## ISO FUME PLUS FEATURES

- Tri-wall construction: triple layer for maximum robustness and durability
- High sight line: high sight line of 857 mm (33.7") For enhanced visibility
- Sash angled front: 5° slope minimizes glares and reflections. Allows users to work further into the hood without strain
- Hot zone baffles: the unique hot zone baffle design draws most contaminants back in single pass displacement of the air. Thermal heat relief is quickly achieved
- Worktop options: multiple worktop options allows more applications to be done
- Standard worktop is phenolic resin. Options include: epoxy resin, ceramic, ss 304, ss 316
- Isocide antimicrobial powder coating: eliminates 99.9% Of surface bacteria within 24 hours of exposure



The ISOfume Lite is a high-performance ductless fume hood designed to provide reliable protection when handling hazardous chemicals, vapours and toxic substances. Combining advanced airflow control, high-capacity activated carbon filtration and continuous safety monitoring, ISOfume Lite delivers exceptional operator protection without the need for expensive ductwork or complex infrastructure.

Engineered for laboratories, universities, research facilities and industrial environments, ISOfume Lite offers a simple, flexible and energy-efficient solution for chemical handling applications. The microprocessor-controlled airflow system maintains a constant face velocity regardless of sash position, while integrated alarms and filter monitoring provide complete peace of mind during operation.



- Low-noise ducted fume hood
- Advanced operator protection
- User-friendly configuration
- Energy efficient



## TECHNICAL FEATURES

## ISOfume<sup>LITE</sup>

### Reliable Protection

The ISOfume Lite continuously monitors airflow performance, sash position and filter condition to ensure safe operation at all times. Audible and visual alarms immediately alert users to low airflow, incorrect sash position or filter saturation.

### High Efficiency Filtration

Large activated carbon filters provide maximum chemical adsorption and extended service life. A wide range of filter media is available to suit specific chemicals and laboratory processes.



### Comfortable Working Environment

Sliding sash access, large viewing panels and low-noise operation combine to create an ergonomic workspace ideal for daily laboratory use.

### Energy-Efficient Design

Smart standby functionality reduces airflow and power consumption when the unit is not in active use.

## ISOFUME LITE FEATURES

- Microprocessor-controlled airflow system
- Constant face velocity of 0.5 m/s
- High-capacity activated carbon filtration
- Optional secondary safety filters
- Continuous airflow and filter monitoring
- Visual and audible safety alarms
- No ducting required
- Sliding front sash with safety glass side panels
- Low-noise induction motor
- Smart standby mode for reduced energy consumption
- LED lighting included as standard
- Suitable for a wide range of chemical applications
- Stainless steel, ceramic or polypropylene work surface options

**T**HE GUARDWARE customer journey is all about consultation and collaboration. We're here to support and empower you – to help you tailor your order so that it meets all the requirements necessary to elevate your operations.

This philosophy applies to each and every product in the entire range – which is why each and every customer has the option to open up a supportive dialogue with a member of the Guardware team.

We've curated standard product ranges for each item in the ISO family in order to help streamline your customer experience.

But we're also ready to help deliver solutions that are 'outside the box' – just tell us what your bespoke requirements are, and we'll work with you to develop a product that ticks all the right boxes. To get you started, here's a simple Ordering Guide to help you tailor your perfect ISOfume ducted or ductless fume hood.



**STEP ONE**

**Tell us what you'll be using the ISOfume fume hood for?**

- ✓ Mixing acids & bases?
- ✓ Handling solvents?
- ✓ Cytotoxic drug work?
- ✓ Culture media prep?
- ✓ Materials testing?
- ✓ Compounding meds?

**STEP TWO**

**How wide would you like your ideal biological safety cabinet to be?**



**STEP THREE**

**Time for the specifics – give us the finer fume hood details!**

- Do you need a ducted or ductless fume hood?**
- What types of chemicals will be used in the hood?**
- Does the hood need to integrate with an existing HVAC or Building Management System (BMS)?**
- Is there enough space for installation – including ceiling clearance?**



**STEP FOUR**

**Choose your ISOfume fume hood product options**

- ✓ Stainless steel, phenolic resin or epoxy resin worktop
- ✓ Faucet and drip cup
- ✓ Support stands
- ✓ Castors
- ✓ US or European service fixtures
- ✓ Copper piping
- ✓ Solenoid valve fitting
- ✓ Vented storage cupboards



**STEP FIVE**

**Place your order!**

- Head over to [www.guard-ware.co.uk](http://www.guard-ware.co.uk) and submit your Basket enquiry for a specially tailored quote!
- Email [sales@guardtech.com](mailto:sales@guardtech.com) to begin your journey with a Guardware rep
- Call the team directly on **0330 113 0303**

*// I want a 6ft wide fume hood – we work with quantum circuit tech. It needs castors and a support stand //*



# Guardware

cleanroom hardware



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✉ [sales@guardtech.com](mailto:sales@guardtech.com)

🌐 [www.guard-ware.com](http://www.guard-ware.com)