

# INSTRUCTION MANUAL

Code: 1000R2, 1200R2, 1500R2, 1800R2, 2000R2

## AIRONE™ R2 Range of Filtration Fume Cupboards



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## FOREWORD

This manual has been prepared to give guidance in the use of the following Recirculatory, Filtration Fume Cupboards:

Code:	Description.
1000R2	AIRONE™ 1000-R2 Filtration Fume Cupboards
1200R2	AIRONE™ 1200-R2 Filtration Fume Cupboards
1500R2	AIRONE™ 1500-R2 Filtration Fume Cupboards
1800R2	AIRONE™ 1800-R2 Filtration Fume Cupboards
2000R2	AIRONE™ 2000-R2 Filtration Fume Cupboards

This manual contains the information required to ensure optimum and free operation of the AIRONE™ R2 range of Filtration Fume Cupboards.

Service and maintenance operations should only be undertaken by SAFELAB Service Engineers or their authorised agents.

Details of Service Contracts, along with information on these and other products is available on request from:

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**Airone Building**  
**8 Beaufighter Road**  
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## **SECTION 1**

### **SPECIFICATION**

**Definition:** AIRONE™ Work Stations are chemical Work Stations designed for the protection of operators from gaseous or particulates contaminants produced within the unit.

**Application:** Whenever the operator and the environment need to be protected from gaseous or particulate contaminants.

**Construction:** Manufactured from epoxy coated mild steel and aluminium extrusions. The transparent fume enclosure is constructed using laminated security glass.

**Worksurface:** Polypropylene work surfaces are supplied as standard. A variety of work surfaces are available which include Solid Grade Laminates, Stainless Steel and Cast Epoxy Resin.

**Prefilters:** Particle pre-filters with an efficiency of 96% for particles greater than 0.6 microns.

1000-R2 AIRONE™ Work Stations Size 'RS' (690 x 490mm) 1 Pre-filter  
1200-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 2 Pre-filters  
1500-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 2 Pre-filters  
1800-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 3 Pre-filters  
2000-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 3 Pre-filters

**Main Filters:** 1000-R2 AIRONE™ Work Stations Size 'RS' (690 x 490mm) 1 Filter  
1200-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 2 Filters  
1500-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 2 Filters  
1800-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 3 Filters  
2000-R2 AIRONE™ Work Stations Size 'B' (600 x 450mm) 3 Filters

Safelab Systems offer a wide variety of filter types for different applications, please consult your Operational Safety Log Book.

**Supply:** 1000-R2 AIRONE™ 220-240V 50Hz - 1.4 A  
1200-R2 AIRONE™ 220-240V 50Hz - 2.4 A  
1500-R2 AIRONE™ 220-240V 50Hz - 2.4 A  
1800-R2 AIRONE™ 220-240V 50Hz - 4.0 A  
2000-R2 AIRONE™ 220-240V 50Hz - 4.2 A

Weight:	1000-R2 AIRONE™	98 Kg (excluding filter)
	1200-R2 AIRONE™	126 Kg (excluding filter)
	1500-R2 AIRONE™	140 Kg (excluding filter)
	1800-R2 AIRONE™	180 Kg (excluding filter)
	2000-R2 AIRONE™	200 Kg (excluding filter)

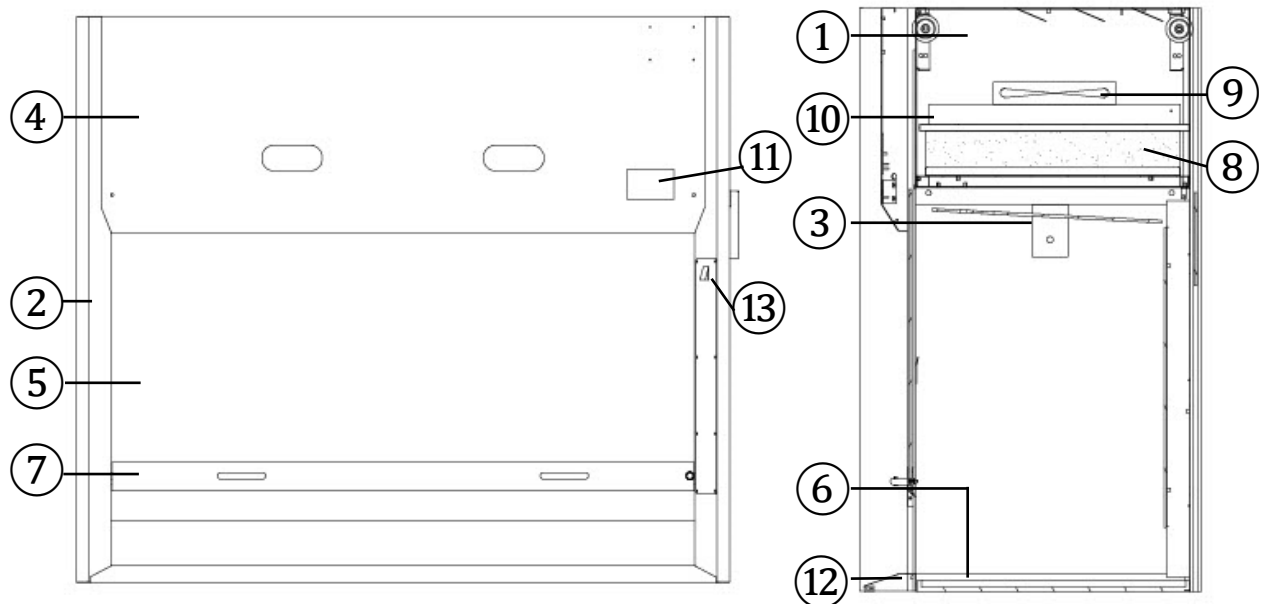
### Specification continued

Dimensions (in millimetres): Width x Depth x Height

1000-R2 AIRONE™	External	1000 x 760 x 1300
1000-R2 AIRONE™	Internal	950 x 550 x 780
1200-R2 AIRONE™	External	1200 x 760 x 1300
1200-R2 AIRONE™	Internal	1150 x 550 x 780
1500-R2 AIRONE™	External	1500 x 760 x 1300
1500-R2 AIRONE™	Internal	1450 x 550 x 780
1800-R2 AIRONE™	External	1800 x 760 x 1300
1800-R2 AIRONE™	Internal	1750 x 550 x 780
2000-R2 AIRONE™	External	2000 x 760 x 1300
2000-R2 AIRONE™	Internal	1950 x 550 x 780

## KEY TO COMPONENT PARTS.

Part	Description
1.	Main Filter Housing and Exhaust Plenum.
2.	Aerofoils.
3.	Airflow Sensor
4.	Location of Front Panel.
5.	Sliding Front Sash.
6.	Work Surface.
7.	Aerodynamic Sash Handle.
8.	Filter Bank(s).
9.	Motor(s).
10.	Filter Clamping Plenum.
11.	Display Touch Screen
12.	Aerodynamic Lower Airfoil/Sill
13.	Main ON/OFF switch.



## **PRINCIPLE OF OPERATION**

### **Recirculatory Mode of Operation (see diagram on following page)**

Air is drawn in through the front opening (1) at a velocity ensuring containment of any contaminants generated within the work area (2).

The operator can determine the required aperture by sliding the glass sash up to a maximum determined by the sash stop.

The contaminants from area (2) are drawn either upwards as in the case of lighter than air volatiles (4), or drawn across the worksurface to the secondary extract slot created by the back baffle, as in the case of heavier than air volatiles or particulates (3).

The combinations of extract slots (6) and (7) ensure that all contaminants entrained in the airflow are effectively transferred to the filter (5).

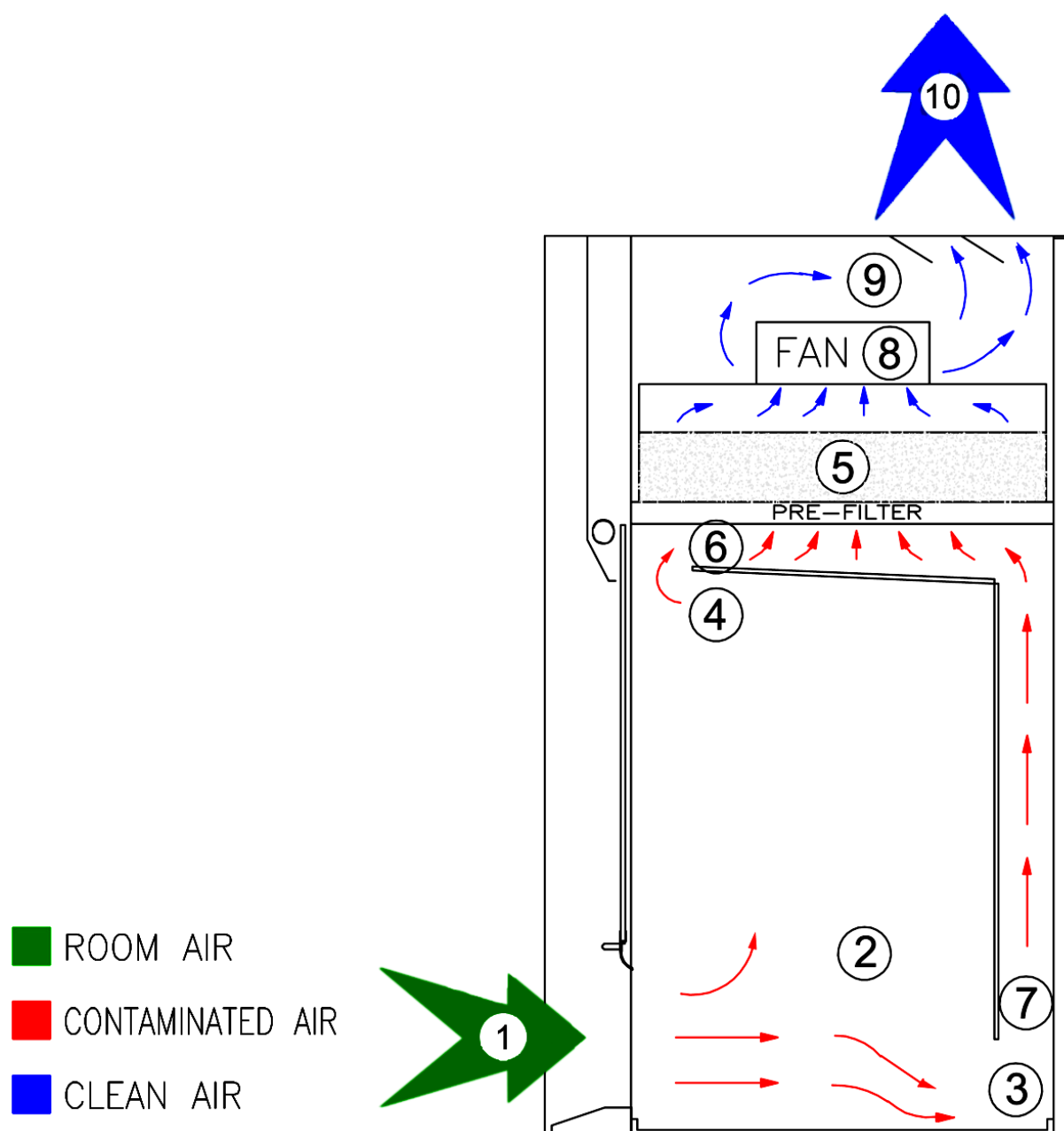
The filter(s) (5) combine large surface areas with a deep bed depth to ensure efficient filtration of contaminants. Clean filtered air is then drawn through the fan(s) (8) and after passing into the dispersal chamber (9) is exhausted via the louvres (10).

The relatively high pressure drop across the carbon filters ensures even flow through the filter and exceptionally uniform saturation.

AIRONE™ R2 Filtration Fume Cupboards present a combination of advantages and unique features - ensuring the health and safety of operators by prevention of their exposure to concentrations of toxic chemical compounds providing protection to their environment - in line with British, European and US Federal Safety Standards.

Moving the vertical gliding safety glass upwards and downwards causes the fan to speed up or slow down to give a constant face velocity. To avoid the unit alarming unnecessarily, the sash should be moved slowly.

## Airone R2 airflow:





## **SECTION 2**

### **INSTALLATION AND ASSEMBLY INSTRUCTIONS.**

(Only applies if cabinet is mounted on stand)

#### **Contents of Packaging (as standard)**

- AIRONE™ Filtration Fume Cupboard complete
- One envelope containing Prefilters (these may in some instances be fitted in the unit)
- One bag containing:
  - Operational Safety Log Book.
  - Operational Manual.
  - PAT Testing Documents
  - Quality Control Certificate.
  - Mains Lead.
  - Allen Key.

Additional packages will include, if ordered, support stand, filters, etc.

Please note that for optimum performance it is advisable to site the AIRONE™ Filtration Fume Cupboards as directed in the Operational Safety Log Book (ref: BS EN 14175).

Space for free air circulation must be provided around the AIRONE™ Filtration Fume Cupboard.

Place the AIRONE™ Filtration Fume Cupboard on the selected bench or stand.

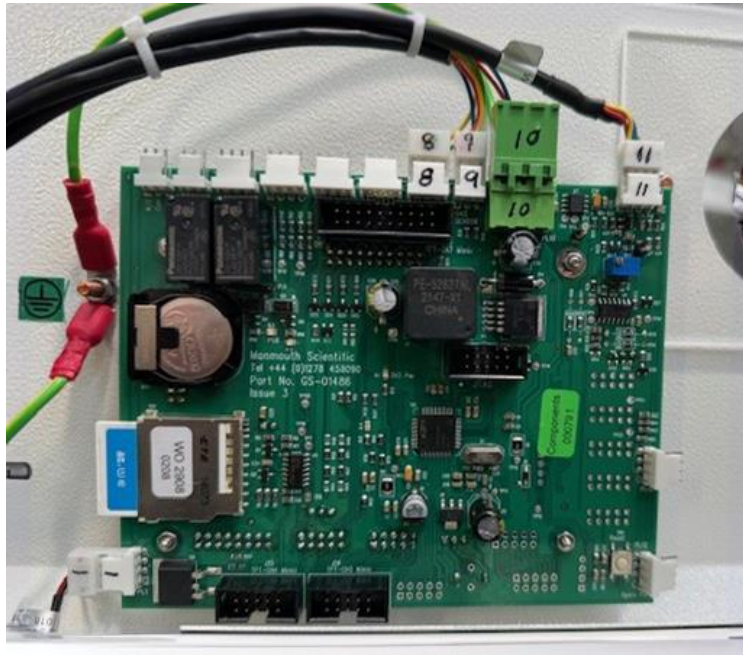
Fitting the Filters - It is advisable to have another person available to assist

The following procedure should be followed:

- Ensure that power to the unit is switched off.
- Ensure that the front sash is at its lowest position.
- Unscrew the main front cover panel by removing the Allen screws and wiring connections to the display PCB to expose the main filter housing aluminium cover plate. If possible have an assistant support the cover while this is done.
- Loosen screws and remove cover plate by sliding it up and out of the keyhole slots.
- The filter housing units each comprise of a combined motor and filter plenum chamber.
- Unpack the Main Activated Carbon or HEPA filters and slide them gasket side downward between the support guides for each main filter housing.

## Good filter seating is essential for optimum performance

- When all filters are in place, tighten the clamping nuts firmly.
- One filter identification label will be supplied with the filter so that when the filter is installed it is visible through the viewing window.
- Replace both the front cover panels and retaining screws (ensuring the wiring to the display PCB is reconnected correctly).



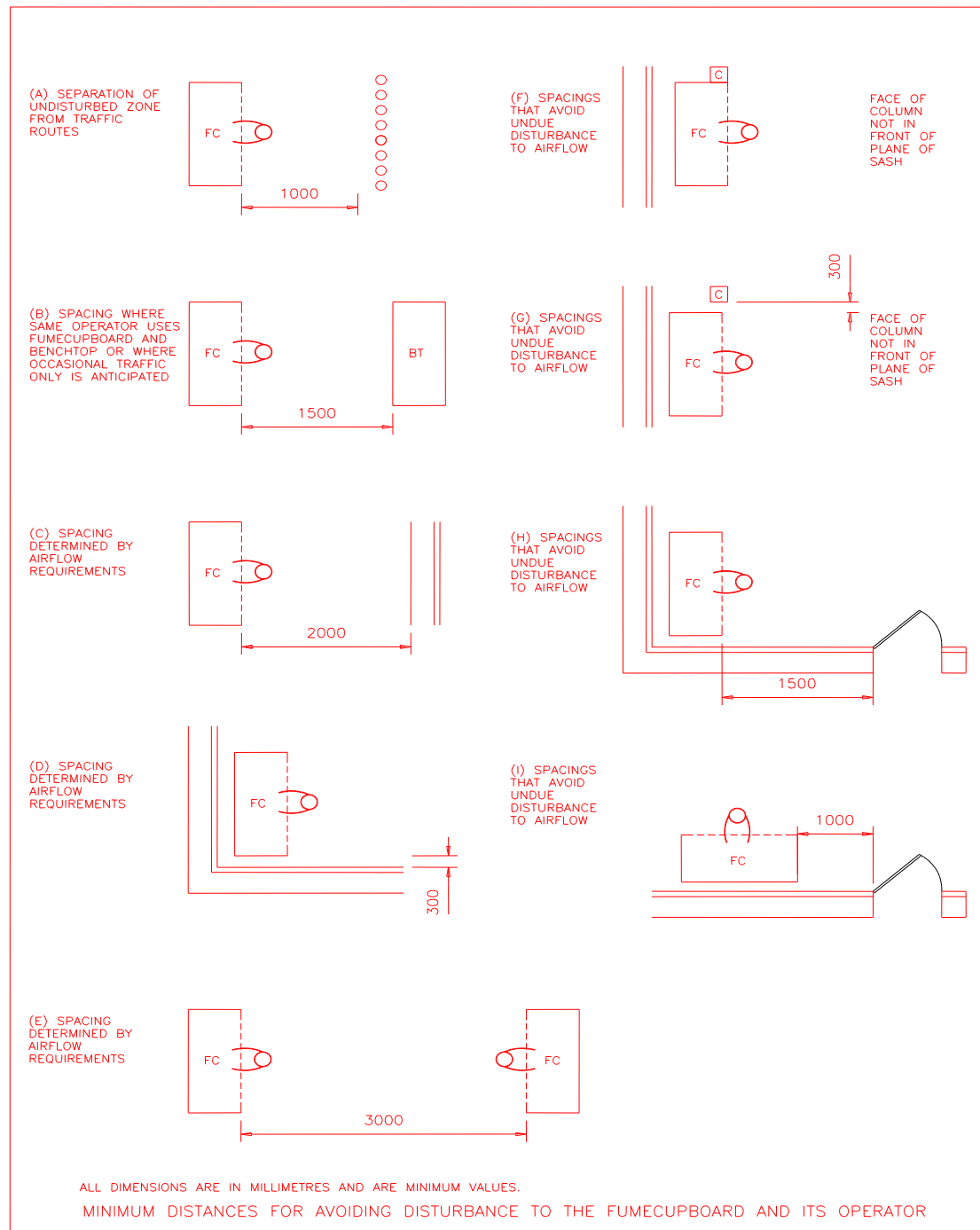
- Access to the pre-filters is made when the internal upper baffle is unfastened at the front and allowed to fold down. Access does not interrupt the seating of the main filters.
- Carefully unscrew the knurled nuts holding the internal baffle in position and allow it to fold down to expose the pre-filter carrying frames.
- Unfasten the knurled nut holding the lower pre-filter carriers and allow them to fold down.
- Beneath each main filter place a single FILTRETE particle pre-filter.
- Fold shut the pre-filter carriers and then refit the internal baffle.
- Amend the Operational Safety Log Book.
- Connect to the power supply and the AIRONE Filtration Fume Cupboard is ready for use.

## STAND ASSEMBLY (Optional)

**⚠ WARNING** Never remove either the lower rear support panel [1] or the rear cross member [2], once the stand is assembled and sited with the unit in place. As both of these items are structural supports.




## SITING LOCATIONS



## OPERATING INSTRUCTIONS

### General Operation

- The main on/off switch is located on the right-hand aerofoil.
- When first turned on the LCD control panel will display operator instructions for cabinet use.
- The cabinet can be put into standby mode by pressing the  key. When in standby mode the fan, lights and control system are turned off. Normal operation can be resumed by touching the screen.


### Control system


- The cabinet is controlled and monitored by a microprocessor with an LCD touch screen.
- The touch screen provides the operator with general information about the cabinet and displays the current face velocity and filter condition. Control of light level, fan speed and other operating settings are all accessed via a menu system.
- The control system is factory set to maintain the following parameters:

Normal face velocity: 0.42m/sec. (0.51m/sec for asbestos)  
Low airflow alarm: 0.30m/sec.

These settings can be changed by a Safelab engineer. Please contact Safelab Systems for further advice.


## Start up

When first turned on the screen below is displayed providing information about the filters fitted to the cabinet. **It is vitally important that the correct filters are fitted to suit the work being carried out.** Basic filter information can be displayed by pressing the  key. Please contact Safelab Systems for further advice on filter types.

	<b>NOTE</b>
	There will be a short delay on start-up of approx. 60 secs before the system and airflow reading is stabilised. During this period, a message of "Low Airflow" is displayed. It is recommended the cabinet is NOT used until the message has cleared.

This fume cabinet is fitted with  
C-100E grade carbon filter/s  
Suitable for use with  
Ethers & general organics


Is this suitable for your application?

 Filter Types

YES


NO

If the procedures carried out inside the cabinet are always the same this screen can be bypassed in the Supervisor Settings (page 16)  
When the filter type has been accepted the normal running screen below is displayed.








Face Velocity

0.48 m/sec.



Carbon Filter Condition OK





Safelab

+44(0) 1934 421340

## **Face velocity**

The microprocessor controls the fan speed to compensate for filter blockage and other changes in airflow. The face velocity is continuously monitored and displayed. The value will fluctuate slightly during normal operation, this is normal and is an indication that the fan is under microprocessor control.

## **Carbon filter condition**

The cabinet may be fitted with a hydrocarbon sensor which monitors the airflow after it has passed through the main filter/s. The filter condition is displayed on the bar graph indicator in the middle of the display. If filter breakthrough is detected the green line will progress to the right and warning messages will be displayed. If the main filter fitted to the cabinet is a HEPA filter the bar graph will not be displayed.

## CONTROL BUTTONS



Light On / Off



Reduce Brightness



Increase Brightness



Settings - access to settings menu




Information - Cabinet and filter information

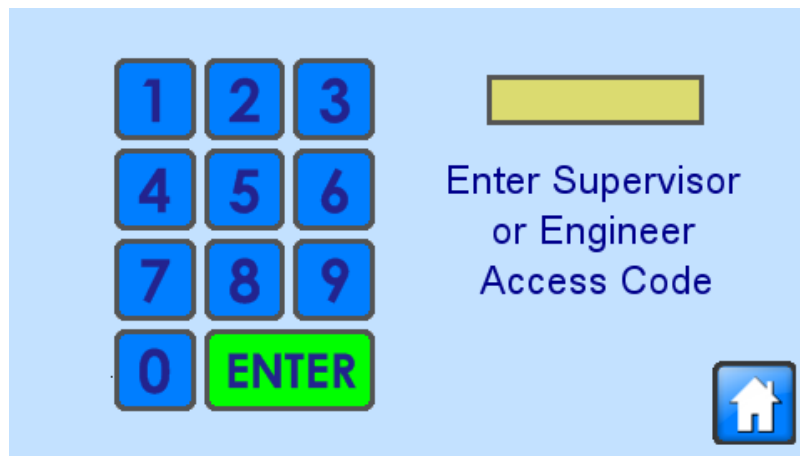


Standby - Puts cabinet into standby



## SETTINGS

Pressing the  key on the main screen enters the Set-Up menu access screen.



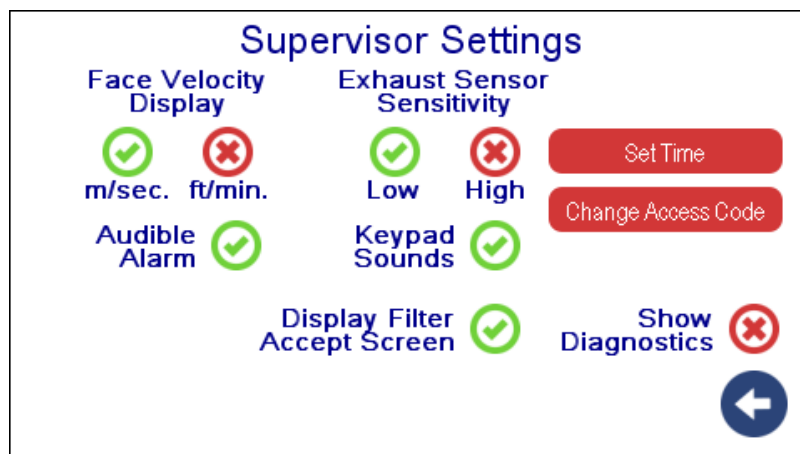
The supervisor access code is 4916 and allows access to change operating preferences.

The engineer access code is reserved for service engineers to carry out maintenance procedures.


The  key returns to the normal display screen.

## Supervisor settings


When the correct Supervisor code is entered the screen below is displayed.

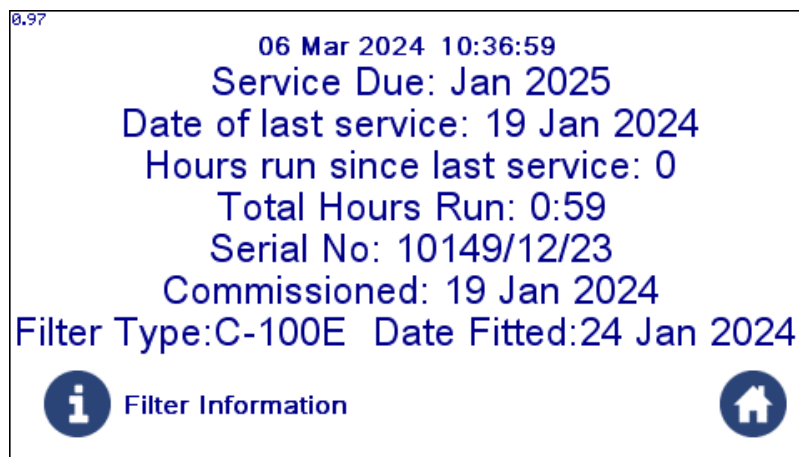


- **Face Velocity Display** - select preferred velocity units.
- **Exhaust Sensor Sensitivity** - Changes the sensitivity of the carbon filter sensor to enable detection of less volatile chemicals.
- **Audible Alarm** - Turns on/off the audible low airflow alarm.
- **Keypad Sounds** - Turns on/off the audible key beeps.
- **Display Acceptance Screen** - Turns on/off the Filter type acceptance screen at start up.
- **Set Time** - displays a time / date setup screen



Pressing the  key returns to the previous screen.

## Information screen

Pressing the  key on the main screen will display the information screen below.



Service information is reset by a Safelab engineer during a service visit. When a service becomes due a warning screen will be displayed momentarily on start-up during the preceding month.

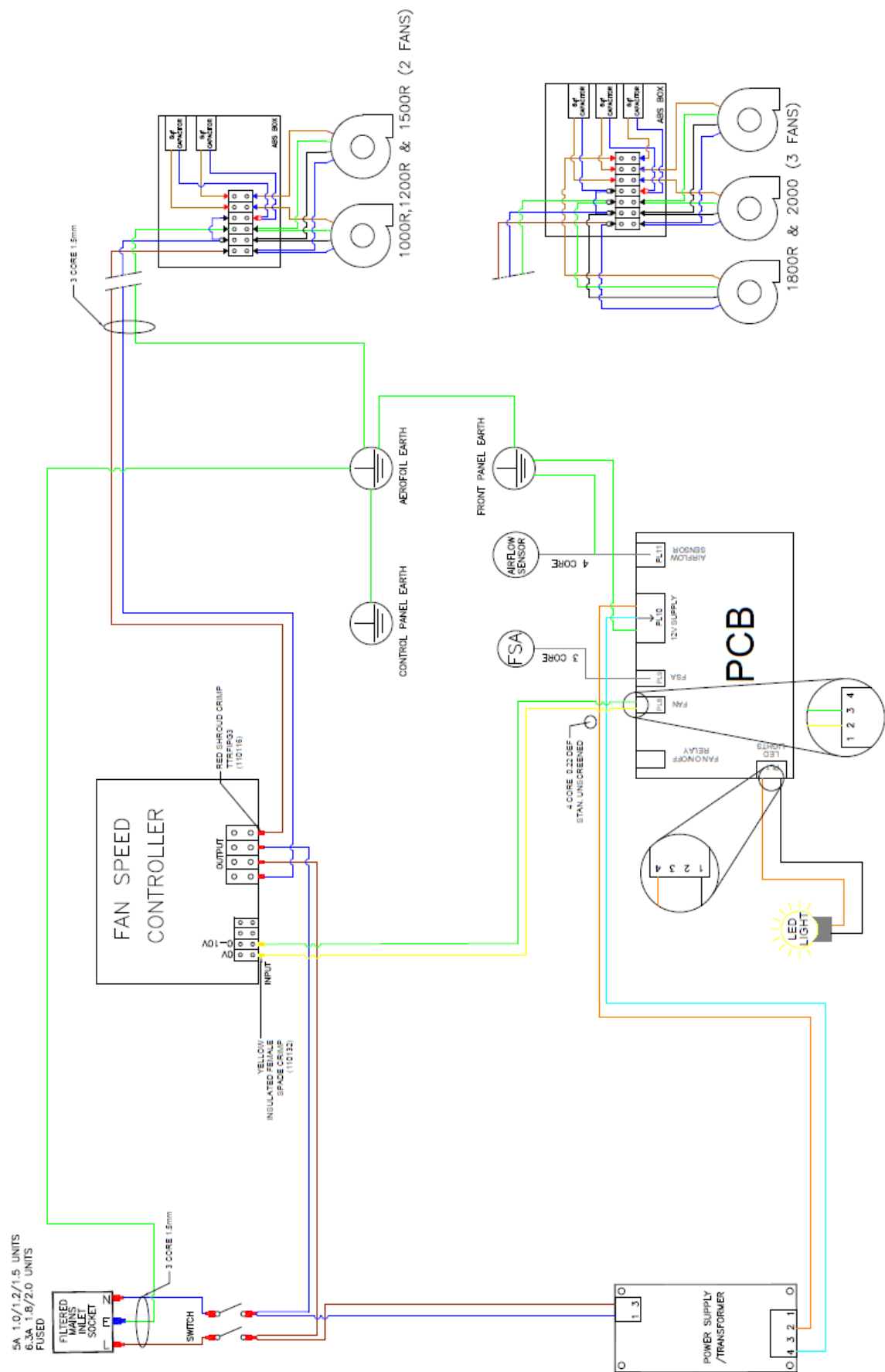
Pressing the  key will display the screen below providing information on the type of filters available. The  key will return to the previous screen.

### Available Filter Types.

<b>C-100:</b>	General organics
<b>C-100E:</b>	Ethers & general organics
<b>CI-200:</b>	Aldehydes & general organics
<b>CI-300:</b>	Ammonia /Amines & general organics
<b>CI-400:</b>	Acids & general organics
<b>CI-410:</b>	Sulphur /Mercury & general organics
<b>CI-420:</b>	Cyanides & general organics
<b>CI-RI:</b>	Radioactive iodine & general organics
<b>CMS:</b>	Blend (for schools) - organics/acids/ammonia/amines
<b>C/C:</b>	Split carbon/carbon filter with a blend of the above
<b>C/H:</b>	Split carbon/HEPA filter
<b>HEPA:</b>	Particulates



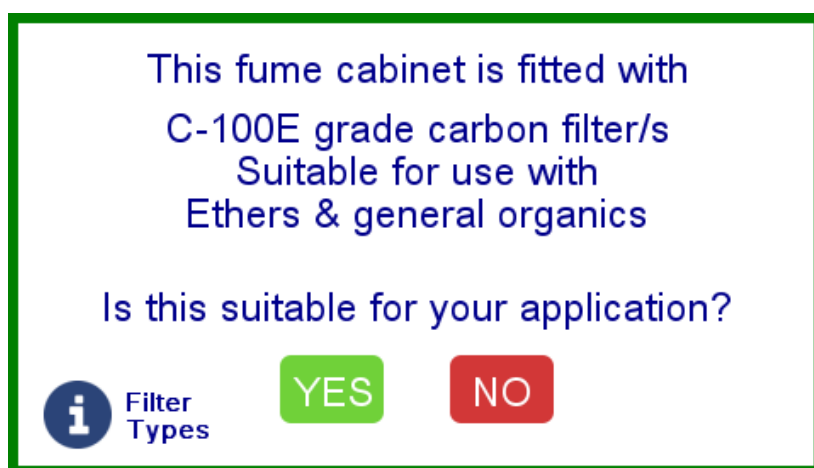
MAIN BLOCK WIRING DIAGRAM



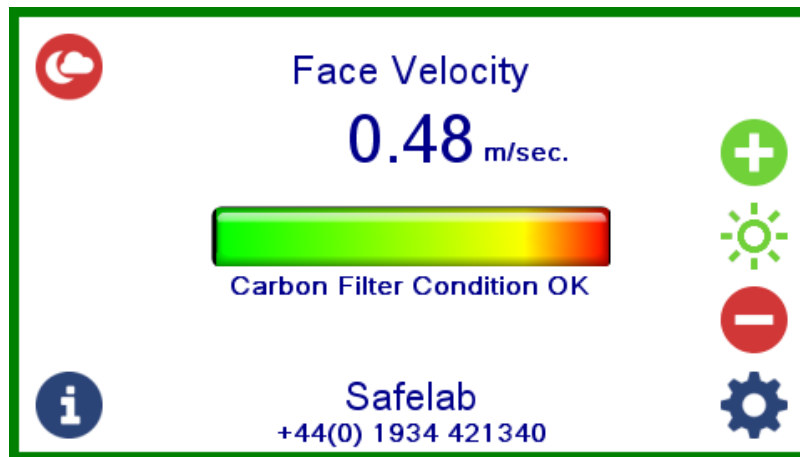
## **SECTION 3**

### **COMMISSIONING PROCEDURE**

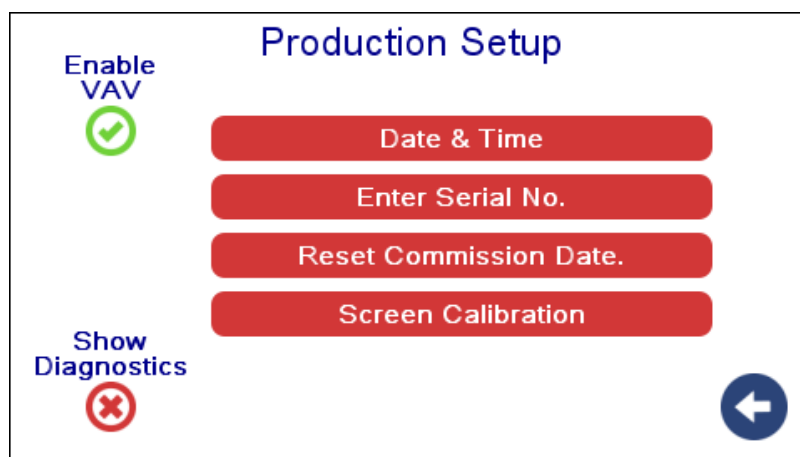
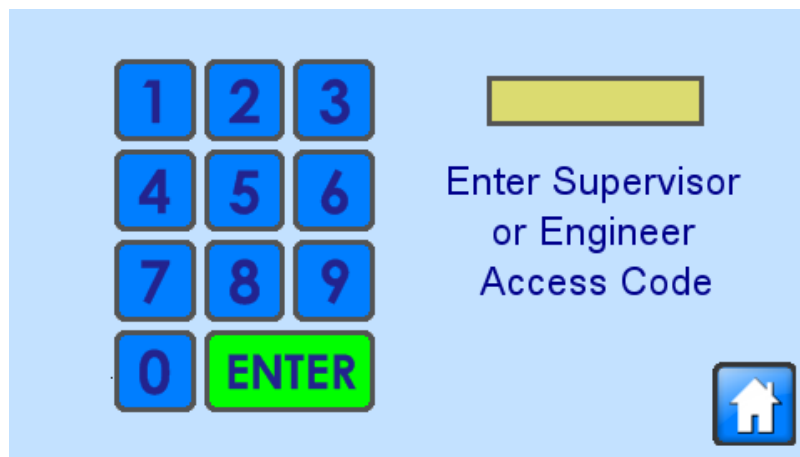
1. Ensure power to the unit is switched off
2. Reduce the sash to its lowest opening
3. Unscrew the main front cover panel by removing the Allen screws to expose the main filter housing aluminium cover plate and wiring connections to the display PCB. If possible have an assistant support the cover while this is done.
4. Loosen screws and remove cover plate by sliding it up and out of the keyhole slots.
5. Carefully unpack the new Activated Carbon or HEPA filters
6. Place the filters as required into the filter location.
7. Fit a CR 2032 battery into the rear of the main front cover panel
8. Replace both the front cover panels and retaining screws (ensuring the wiring to the display PCB is reconnected correctly).
9. Connect the cabinet to a power supply and turn it on
10. The control panel will ask if the fitted filter is 'suitable for your application'. Select YES even if the filter listed is incorrect.



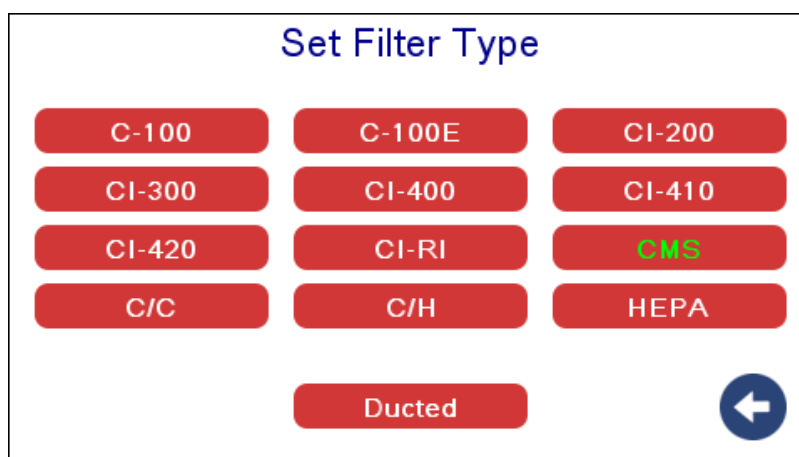
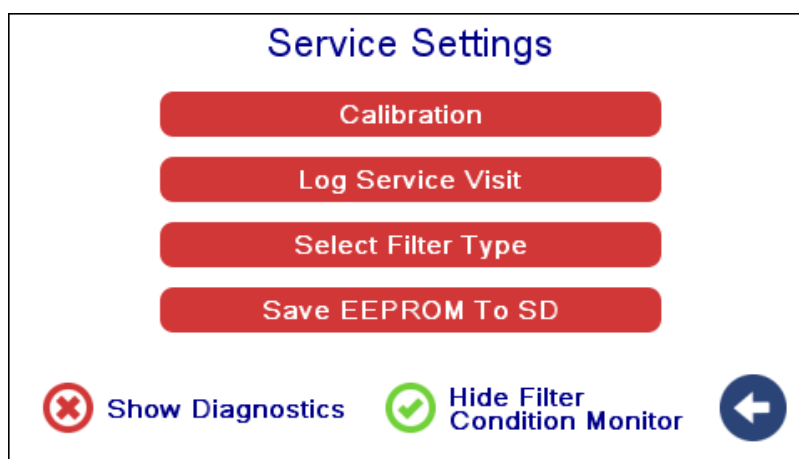
This will take you to the home page as shown below



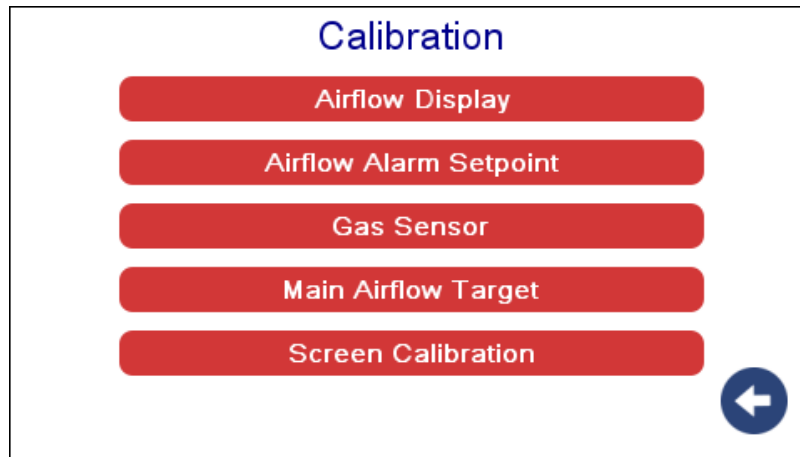
11. Press the COG icon, input code 3176 then press ENTER



12. Select SET TIME, input the correct time and date information, then press ENTER
13. Select RESET COMMISSIONING DATE then press the HOME button
14. Press the COG icon, input code 1968 then press enter
15. Next press SELECT FILTER TYPE, select the correct filter, then press the back arrow



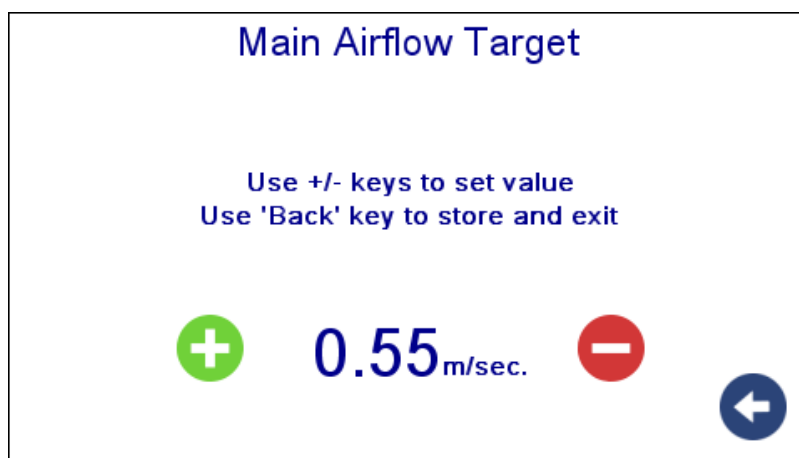
16. Select CALIBRATION
17. Select AIRFLOW DISPLAY



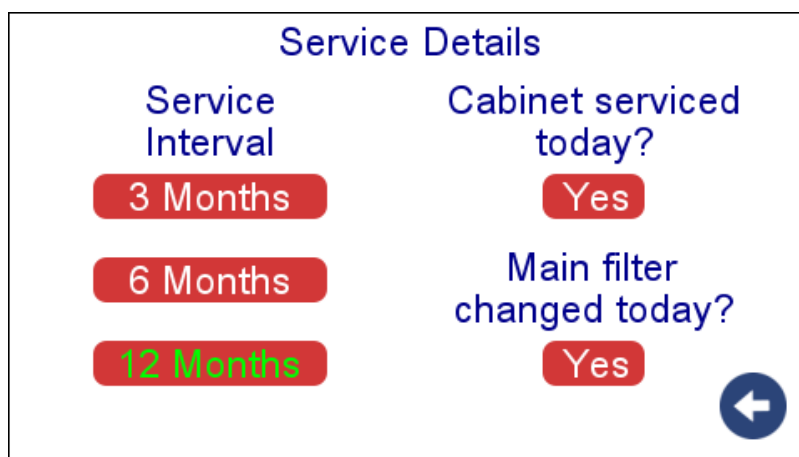
18. Lift the sash to the high sash stop position
19. Using the (+) and (-) buttons, adjust the fan speed to achieve 0.5m/s face velocity using an anemometer. Proceed to the next step.
20. Repeat the process to achieve 0.35m/s
21. Finish the calibration
22. Select AIRFLOW ALARM SET POINT
23. Set to 0.3m/s as standard. Press the back arrow
24. If the unit has a filter saturation alarm fitted, select GAS SENSOR
25. Using the left or right arrow keys, set this to the minimum value possible where the black line is just no longer visible on the left-hand side of the coloured bar. Press the back arrow.



26. Select MAIN AIRFLOW TARGET. Set this to **0.42m/s** (0.51m/s for asbestos).  
Press the back arrow.



27. Press the back arrow again



28. Select LOG SERVICE VISIT
29. Select the correct SERVICE INTERVAL
30. CABINET HAS BEEN SERVICED TODAY – select YES. This will return you to the previous page. Select LOG SERVICE VISIT again.
31. MAIN FILTER CHANGED TODAY – select YES. Press the back arrow
32. Press the back arrow again
33. Select SHOW DIAGNOSTICS then Home
34. Lower sash to the minimum height position
35. Wait for the airflow to settle and then note the FANOP reading
36. Log into Service Settings and log into SET MINIMUM FAN SPEED
37. Set % to the previously note FANOP reading minus 5% (ie 20% becomes 19%)
38. Press the back arrow to return to the main screen
39. Turn the unit off, turn it back on again and the cabinet is ready to use.

## **MAINTENANCE**

It is recommended that a service contract is taken out with SAFELAB SYSTEMS. Regular maintenance by our qualified personnel will save you time and money.

### Replacement of Main Carbon or HEPA filters and Prefilters

The replacement frequency is dictated by the results of regular filter monitoring - see Operational Safety Log Book.

During the filter replacement procedure suitable protective clothing, facemask, gloves and safety glasses must be worn.

## **CLEANING**

The construction materials used for the AIRONE Filtration Fume Cupboard are designed to give a long and problem free life. It is beneficial however to regularly clean and decontaminate the internal and external components.

- It is recommended that all AIRONE Filtration Fume Cupboards are left running during cleaning procedures and that suitable protective clothing, facemask, gloves, and safety glasses are worn.
- If required, the back/upper baffles can be removed for cleaning by carefully unscrewing the support screws. It is recommended that two people undertake this operation.
- Clean glass, acrylic, metalwork and work surfaces with a mild detergent solution.
- After cleaning with mild detergent solution, wipe down all surfaces with a damp cloth.

## **FITTING OR REPLACING THE MAIN CARBON FILTER**

- Switch off the cabinet and disconnect power supply
- Reduce the sash to its lowest opening.
- Unscrew the main front cover panel by removing the Allen screws to expose the main filter housing aluminium cover plate and wiring connections to the display PCB. If possible have an assistant support the cover while this is done.
- Loosen screws and remove cover plate by sliding it up and out of the keyhole slots.
- Carefully unpack the new Activated Carbon or HEPA filters
- Remove the old carbon or HEPA filters and immediately place them into the plastic bags - seal and tape them for secure disposal.
- Place the replacement filters as required into the filter location.
- Ensure that the knurled nuts securing the filters are fastened securely.

### **Good filter seating is essential for optimum performance**

- Replace both the front cover panels and retaining screws (ensuring the wiring to the display PCB is reconnected correctly).
- Following filter replacement it is recommended that the filter monitoring procedure detailed in the Operational Safety Manual is performed. This ensures correct seating and that satisfactory workstation performance has been verified.
- **Written records of filter monitoring are a legal requirement under COSHH.**

## **PRE-FILTER REPLACEMENT**

- Access to the pre-filters is made when the internal upper baffle is unfastened at the front and allowed to fold down. Access does not interrupt the seating of the main filters.
- Carefully unscrew the knurled nuts holding the internal baffle in position and allow it to fold down to expose the pre-filter carriers.
- Unfasten the knurled nuts holding the lower pre-filter carriers and allow them to fold down partially.
- Carefully remove the old pre-filters.
- Seal the old pre-filters into a polythene bag for disposal.
- Beneath each main filter place a fresh single FILTRETE particle pre-filter ensuring that all the holes are covered.
- Fold shut the pre-filter carriers and then the internal baffle.
- Amend the Operational Safety Log Book with details of the replacement filter fitted.

## **SECTION 4**

### **MONITORING THE AIRONE R RANGE**

This fume cupboard is a 'portable appliance', powered by mains electricity and it complies with EN-BS-61010. The correct fuse must be fitted to the mains plug and this and other parts of the electrical system should be examined frequently for obvious damage. There should be regular formal inspections including earth bonding and insulation testing. Only suitably trained electricians should carry out this testing. Live electrical components could be exposed.

The minimum requirement to comply with COSHH Regulations is that the face velocities and filter efficiencies must be yearly monitored (at least once every 14 months) and a written record kept of the results. There are tables printed on the back-pages of the Operational Safety Log-Book suitable for keeping these records.

SAFELAB SYSTEMS recommend that a simple air-sampling test be carried out once a week at eye-and-mouth level and/or at the outflow port of the AIRONE Fume Cupboard - utilising an appropriate GASTEC Chemical Detector Tube - recording any result in the Operational Safety Log-Book.

It is also recommended that the prefilter be replaced at last once every 6 months. The 6 months span represents a more suitable period between filter-monitoring checks.

SAFELAB SYSTEMS offer Service Contracts for regular filter-monitoring and servicing of all AIRONE Filtration Fume Cupboards. Please phone our Service Department for details.

#### **Do-It-Yourself Filter Monitoring Checks:**

Equipment Required:

Airflow Meter:

A rotating vane anemometer with a vane diameter between 60 to 100mm, with the facility to average readings over a period of 10 seconds. Safelab Systems supply a suitable rotating vane anemometer: Order Code - SRVANE.

Unidirectional Hot Wire Anemometers are also available with the facility of averaging readings.

## **GASTEC VOLUMETRIC GAS-DETECTION KIT:**

The GASTEC gas-detection kit consists of a disposable tube used with a volumetric detector hand pump that draws a measured volume of air through the tube. The length of colour change in the tube indicates the concentration of the gas tested. Safelab Systems can supply a suitable model:

GASTEC Volumetric Detector Pump. *Order code - SRV604*

N.B.: Additional packs of disposable tubes will be required.

Examples:

1 pack of 10 Formalin Tubes. *Order code SRV602*

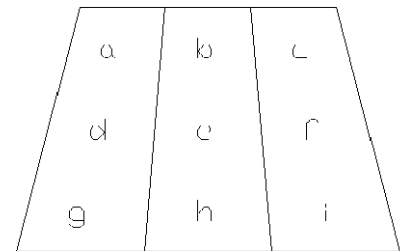
Refer to Operational Safety Log-Book and Chemical Listing for correct selection from over 500 different GASTEC chemical detector tubes available for measuring ppm concentration levels of over 800 compounds in gaseous phase.

## Instructions for face velocity measurements.

(Record results on record form - page 21)

### Procedure: Check once per month

Divide the face of the fume cupboard into nine cells.



Place the anemometer in the plane of the sash and take airflow readings at approximately at the centre of each of the nine cells.

Record for each cell the approximate average reading over a period of at least ten seconds.

Look at the table and repeat any reading which seems to be very different from the general average. Record the average of this and the previous reading.

### Calculation:

Minimum face velocity -

If the minimum face velocity is below 0.3 m/s then containment factors are impaired and the fault will need to be detected and rectified.





## INSTRUCTIONS FOR FILTER SATURATION TESTING

Several filters can be fitted into the AIRONE R2 Filtration Fume Cupboards:

(1) The 'Filtrete' pre-filter is the thin white layer which will filter out dust, smoke and mists. It is located at the top of the working area. As the prefilter becomes clogged from dust, aerosols and particles accumulating on its surface the face velocity of the air gradually decreases. Prefilter replacement will be required more frequently than that of the main filter. Replace prefilters at least once every 6 months.

(2) The 'Main Filter' options are:

- (a) Carbon filter - Safelab Systems activated/impregnated carbon filter for absorbing hazardous gases and vapours.
  - 1200, 1500, 1800 and 2000 wide units:  
Size 'B' - 15 kg in weight - 600mm x 450mm x 100 mm.
  - 1000 wide unit: Size 'RS' - 22 kg in weight - 690mm x 490mm x 100 mm.
- (b) HEPA filter - (H-13 Grade) for removal of particulates to submicron level - efficiency 99.95 % for particles down to 0.3 micron in diameter.
  - 1200, 1500, 1800 and 2000 wide units: Size 'B' HEPA Filter.
  - 1000 wide unit: Size 'RS' HEPA Filter.

Regular filter-checks and monitoring - once a week is recommended - to test quality of the air breathed in by operators and filtration efficiency. Filter-challenge tests can be carried out during routine Service and Maintenance procedures once every 6 months - as described in the Operational Safety Log-Book.

The recommended procedure for testing the efficiency of the system requires a GASTEC Volumetric Detector Pump and Gastec Chemical Detector Tubes. Test the quality of air by sampling at eye and mouth level at regular intervals - once a week - with Gastec tubes calibrated for the particular compound in concentrations below its respective OEL (Occupational Exposure Limit) MEL (Maximum Exposure Limit) or OES (Occupational Exposure Standard (or MAK in Germany and/or TLV in the USA)).

Please refer to the Operational Safety Log-Book for further information.

## **SECTION 5**

### **DECLARATION OF CONFORMITY**



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### **E.C. DECLARATION OF CONFORMITY**

#### **Safelab Systems Ltd**

hereby certify that the

#### **Airone R Filtration Fume Cupboard**

Conforms to the requirements of the  
Low Voltage Directive #73/23/EEC and the  
Electromagnetic Compatibility Directives # 89/336/EEC and #92/31/EEC

Complying with the conformity criteria of European Standards:

EN 61010-1: 1993 safety requirements for electrical equipment for measurement, control and  
laboratory use Part 1 : General requirements

EN 50081-1, EN 50082-1 : Emission Limits to Reference Standards:

EN 60555-2 & 3, EN 55022/B, EN 55014

Signed: .....

Roger Guess, Manager Director  
Safelab Systems Ltd

Dated: 1<sup>st</sup> November 2015

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**The single source for the complete clean air solution**

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