

Monmouth⁺
Circulaire

VLF650E

VERTICAL LAMINAR FLOW CABINET

OPERATING AND MAINTENANCE MANUAL



CONTENTS

SECTION 1	4
DESCRIPTION	4
SECTION 2	5
INSTALLATION	5
GENERAL	5
TESTING / COMMISSIONING	6
SECTION 3	6
OPERATION	6
SECTION 4	7
MAINTENANCE	7
FUSES	7
FLUORESCENT LIGHT.....	7
PRE-FILTER - CHANGING.....	7
MAIN HEPA FILTER - CHANGING	7
SECTION 5	8
SERVICING	8

Warning

This cabinet must be used in compliance with these instructions and any repairs or maintenance carried out by qualified personnel.

**For parts or service information please contact Monmouth Scientific
on +44 (0) 1278 458090**

SECTION 1

DESCRIPTION OF THE CABINET

The Circulaire VLF650E Vertical Laminar Flow cabinet provides Class 100 clean air at average velocity $>0.35\text{m/sec.}$ over the entire working area.

	<i>Circulaire VLF-650E</i>
External Dimensions	669mmWide 408mmDeep 1100mm High
Internal Dimensions	657mmWide 400mmDeep 730mm High

SECTION 2

INSTALLATION

GENERAL

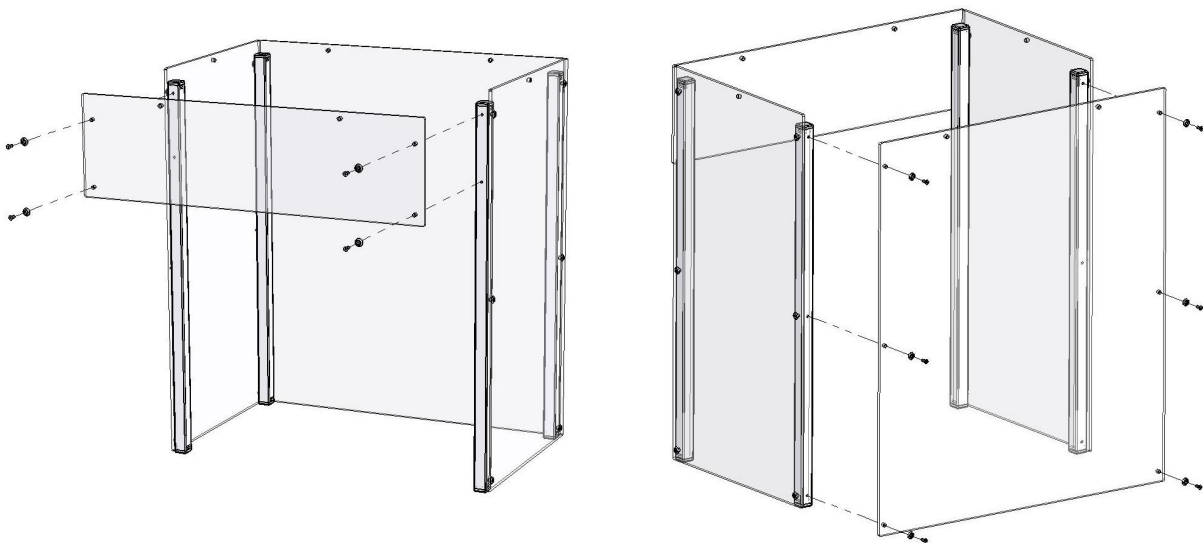
The following guidelines should be observed when installing the cabinet:

- Site the cabinet in a draught free position with a minimum clearance of 200mm from the top of the cabinet to the ceiling to prevent obstructing the air inlet and to provide access to change the pre-filter.
- Connect the cabinet to a 13A socket.

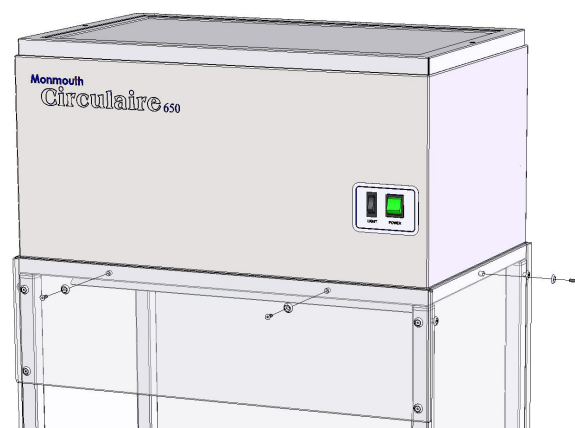
ASSEMBLY

The cabinet is delivered partially assembled and requires the lower section to be assembled and head section fitted prior to use.

- Attach front and rear glazing sections to the pre-assembled side panels with supplied screws and cup-washers



- With assistance, position head section onto the lower section and secure with supplied screws and cup-washers.



TESTING / COMMISSIONING

A test certificate is supplied for conformity to CE marking, and electrical test.

The airflow should be checked using a vane anemometer and the results recorded.

The main HEPA filter will have been factory tested before delivery.
A DOP filter challenge test should be carried out to verify filter integrity when the cabinet is installed prior to use.

THE CABINET SHOULD BE TESTED EVERY 12 MONTHS.

SECTION 3

OPERATION

Master power on/off and lighting on/off control switches are provided on the front panel.

The cabinet should be left running for 10 minutes prior to starting any procedure to allow the working area to purge and achieve class 100 status.

SECTION 4

MAINTENANCE

The cabinet should be isolated from the electricity supply before carrying out any maintenance procedures.

FUSES

Two main fuse are located within the mains IEC inlet socket located on the rear of the cabinet. Remove the mains lead and withdraw the fuses using a small screwdriver. Always replace with the correct type and rating – 3A Type T.

PRE-FILTER – CHANGING

This is located on top of the cabinet and can be accessed by removing the screws on the securing frame.

Pre-Filter Part Number is PF-0022

(Note orientation of filter prior to refitting - metal gauze should be on the inside).

MAIN HEPA FILTER – CHANGING

- Isolate from the electricity supply and remove the mains inlet cable.
- Filter changing requires removal of the fan module from the lower enclosure.
- Remove the 6 screws in the glazing panels to enable the fan module to be lifted off with assistance.
- Turn the fan module upside down and remove the 8 screws securing the HEPA filter retaining frame.
- The filter can now be lifted out and replaced
- Replacement HEPA filter Part Number is K-HF0099
- The replacement filter should be DOP tested prior to use and the airflow checked. DOP upstream sample port is located on the rear, next to the power inlet socket.

FLUORESCENT LIGHT

To replace the fluorescent tube, it is necessary to remove the head from the lower section.

- Follow previously detailed procedure for removing main HEPA filter retaining frame to gain access to light fitting.
- Unplug the light fitting and unclip from its mounting.
- The tube may now be replaced.
- Replacement Tube – 16w T4 Triphosphor.

SECTION 5

SERVICING

An annual service is recommended to maintain optimum operating conditions and will include the following points:

- Check / replace pre-filter
- DOP test the main HEPA filter
- Check and record downflow velocity readings
- Check general condition of cabinet - glazing, hinges etc.
- Inspect electrical components, lighting, cables etc.
- Issue test report and airflow certificate.

**For parts or service information please contact Monmouth Scientific
on +44 (0) 1278 458090**

Monmouth Scientific Ltd

Units 5 & 6 Kilnside

East Quay

Bridgwater

Somerset TA6 4DB

Email: info@monmouthscientific.co.uk