CARON

MADE IN BRITAIN

Laminar Flow Cabinets
For Education

For aseptic teaching techniques and procedures requiring clean air

REV: 06/22

VERTICAL LAMINAR FLOW CABINET

Caron's Educational Laminar Flow Cabinets have been specifically developed for use in schools and colleges. Cabinets are designed to be affordable yet provide a particle-free air conditions at a quality standard used in world-class research laboratories. Most importantly acrylic construction allows excellent all-round vision for students and teachers.

A cabinet may be positioned on an existing bench or can be supplied as a free standing system with worktop and supporting mobile stand with integrated cupboard.

Caron Laminar Flow Cabinets are built to a very high standard using only the best quality materials and fan components. Experience has shown that Caron Laminar Flow Cabinets give consistent performance which is only dependent on replacement of the prefilters and HEPA filters at recommended intervals.

FILTRATION & STANDARDS

- **Pre-filtration eliminates particles 5.0 microns or greater to an efficiency of 92% as defined in BS EN ISO 779.**
- **HEPA filtration (H14 Standard) eliminates particles 0.3 microns or greater to an efficiency of 99.997% providing ultra-clean particle-free. Class 5 BS EN ISO 14644-1:2000 air conditions.**

Definition and classification of clean air safety systems as specified by ISO 14644

LAMINAR FLOW CABINET

A dedicated space in which the concentration of airborne particles is controlled and is constructed and used in a manner to minimise the introduction, generation and retention of particles inside the zone.

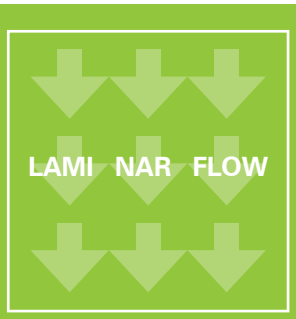
DESCRIPTION AND OPERATION

Classroom air is drawn into the top of the cabinet, passes through the pre filter and enters the fan housing. The speed controllable fan pushes the air through the HEPA filter located above the working area. Ultra-clean air exits the HEPA filter producing a sterile working environment which protects the student's manipulations and procedures from external contamination.

The cabinet structure is formed from 10mm thick clear UV stabilised Clearview cast acrylic which provides excellent all-round visibility for teacher and student whilst carrying out aseptic procedures.

LAMINAR FLOW CABINET

A dedicated space in which the concentration of airborne particles is controlled and is constructed and used in a manner to minimise the introduction, generation and retention of particles inside the zone.



CONSTRUCTION AND MATERIALS

The fan housing is fabricated from mild steel with an epoxy coated, acid resistant white coating. Transparent sides, back and middle panels are manufactured from Clearview 10mm thick cast acrylic, which is flame retardant and easy to clean. Integrated worksurface is manufactured from laboratory grade solid high pressure laminate (HPL) and the working area has a shallow inset groove to retain spillages.

Optional mobile stand: A tubular stand on lockable castors, with or without cupboards and can be provided in sitting, standing or adjustable height modes.

OPTIONAL EXTRAS

SERVICES PACKAGE:

Gas tap, swan-neck water tap with drip cup. Can only be fitted when ordered with mobile stand.

MOBILE STAND:

Mobile stand on lockable castors, with or without cupboards and can be supplied in sitting, standing or adjustable height modes.

SERVICES PORT:

80mm diameter service ports to side, back and middle panels for cable and flexible pipe entry.

LIGHTING:

Internal fluorescent white lighting.

UV DECONTAMINATION:

Internal UV decontamination lighting c/w timer.

KEY BENEFITS:

- Comfortable to use.
- Excellent all round visibility
- Quiet operation

TECHNICAL INFORMATION

Model	1000mm
Designed for:	Up to 2 Students
Ext Dimensions (wxdxh) mm	1000 x 610 x 1000 (39.4" x 24" x 39.4")
Int Dimensions (wxdxh) mm	950 x 590 x 640 (37.4" x 23.2" x 25.1")
Sound Levels	<65dBa
Air Velocity	0.45m/s at filter face
Power Supply	230V, AC, (88 FPM) 50Hz, 5Amp, 1Ø or 110V, AC, 60Hz, 8Amp, 1Ø

SUPPORTING AND DEVELOPING THE USE OF ASEPTIC LAMINAR FLOW CABINETS IN SCHOOLS AND COLLEGES

Design and development of this new range of Laminar Flow Cabinets has been undertaken by Caron's technical team in association with Simon Pugh-Jones of the Writhlington School UK Orchid Project and Dr Lauren Gardiner, botanist at the Royal Botanic Gardens, Kew.

Students and schools nationally will benefit from learning aseptic techniques and working in clean air, as specified in the UK national curriculum KS4 programme of study and GCSE science curricula. Aseptic techniques can be learnt through plant-based work, a proven low risk and educationally successful model for aseptic work in schools, as shown by the Writhlington School Orchid Project experience.

In the past the main barriers to schools undertaking aseptic procedures using laminar flow cabinets have been:-

a) high cost of equipment.

b) lack of educational support materials and training for teachers giving effective lessons and learning projects.

c) lack of available ancillary equipment, consumables and living material for use in schools.

The reduction in the cost of equipment has now been addressed by Caron with the introduction of their educational range of Laminar Flow Cabinets. Caron's new cabinet design is fabricated in the UK and supplied at a cost that is at a significantly lower than in the past.

MORE ABOUT CARON

Since 1972 Caron has been designing, manufacturing and maintaining just about every conceivable style of clean air and safety cabinet and enclosures.

Having grown from a small local business to a company with links worldwide, we now enjoy an unrivalled reputation as the world's most innovative supplier in this specialist sector.

In addition to laminar flow cabinets Caron manufactures ductless fume cabinets, biological safety cabinets, chemical storage systems, PCR cabinets, powder weighing cabinets, robotics & laboratory automation enclosures.

QUALITY ASSURED

CE Caron 230V systems are CE marked

Caron manufactures from UL listed components

CARON PRODUCTS & SERVICES, INC.
PO Box 715 / Marietta OH 45750 / PHONE 740 373 6809 / 800 648 3042 / FAX 740 374 3760

United Kingdom Office:
4/5 Piper's Wood Industrial Park • Waterberry Drive • Waterlooville • Hampshire. PO7 7XU. UK.
Phone: +44 (0)23 9226 6400 • Fax: +44 (0)23 9226 3373

CARON