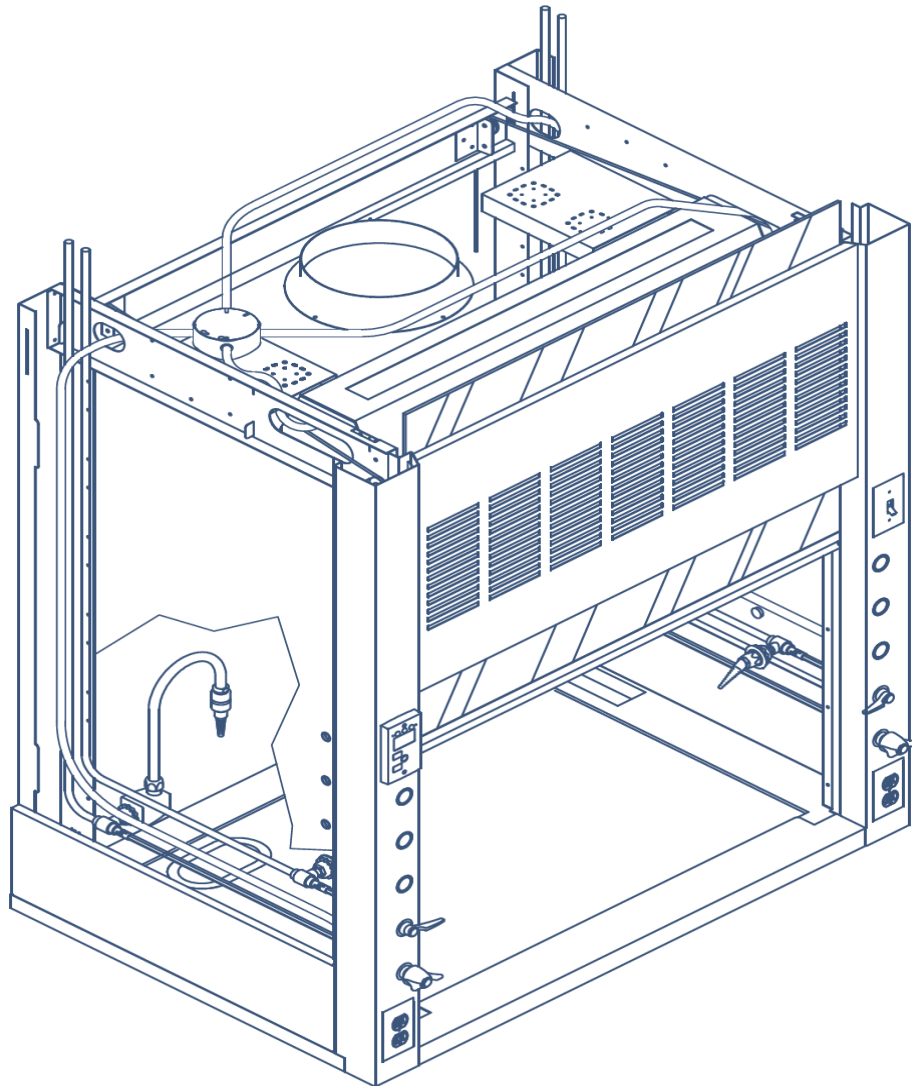




VANGUARD BENCH MOUNTED FUME HOOD

OPERATION AND MAINTENANCE MANUAL



Superior Containment...even at lower face velocities

BASIC MAINTENANCE

Your laboratory fume hood exterior paneling is manufactured with a chemical resistant powder coating designed to withstand most of the standard chemicals used in a laboratory environment. However, prolonged exposure may cause fading or discoloration. To assure that your fume hood paneling keeps similar appearance for years, regularly clean all surfaces.

Clean up liquid spills immediately within the hour.

All exterior and interior surfaces should be wiped regularly with glass cleaner or a solution of water and mild dish soap. It is important to make sure that this cleaner is compatible with any other chemicals within the laboratory. Any scratches or surface damages should immediately be touch-up to avoid corrosion of the exposed metal. Never use abrasive material or steel wool since it might scratch the finish.

The counter top surfaces can also be cleaned the same way. It is important to immediately wipe any chemical spillage that may occur and rinse the surface with water. To bring the original luster back, generously apply lemon oil with a gentle cloth and remove excess. Keep extreme heat from direct contact with surface.

The inside baffles should be removed at least once a year to permit a good cleaning of the surface at the back of the baffles. Carefully remove top baffle by lifting slightly it off from the plastic support. The bottom baffle will fall forward for easy removal. Clean back of Fume Hood and back of baffles with soap and water and before reinstalling. Do not reverse baffle to reinstall. It will not fit properly.

It is important to put the baffles back before re-using the Fume Hood again.

Stainless steel components and countertops should be cleaned with stainless steel cleaner. Wipe only in the direction of the grain to avoid scratching the surface.

The glass sash must be cleaned the same as any glass surface.

Light fixture: The neon light or LED lamp needs to be changed from the top of the hood by qualified maintenance personnel. The light switch is located at face of Fume Hood Post. **There is NO ACCESS from inside the hood to the light bulb or lamp.**

Touch-up Paint

For more information about touch-up paint, please get in touch with your local supplier or directly with the Bedcolab/Bedco after sales service representatives.

BASIC SAFETY

Read all instructions before using the fume hood and basic precautions should always be followed, including the following:

- A meticulous exam of sash guides, cables, pulley wheels and other working parts of the sash counterweight system should be accomplished at least once a year and a regular visual checkup must be done in the condition of internal pulleys and sash cables.
- The sash door has a protection function. It is safe to locate it at an opening permitting the necessary access and a maximal protection.
- The inside baffles should never be modified or removed without the manufacturer's authorization.
- Always keep the sash in a closed position when you are not working in the Fume Hood.
- The Fume Hood should not be used as a chemical storage area. The chemical products should be kept as the minimum required by the work.
- The Fume Hood should not be used for evacuation of perchloric acids, radioisotope products or any biological or bacteriological products without the manufacturer authorization.
- It is also important to follow these directives for safe utilisation of the Fume Hoods:
 - When the sash is open, avoid fast movement in front of the Fume Hood.
 - Minimise other personnel circulation than the end user in front of the Fume Hood.
 - Avoid placing your head inside the fume hood.
 - Verify the exhaust system is operating before each use.

ALARMS

Variable Fume Hood Monitors: Monitors are adjusted once with air flow from full height sash opening and from fully closed sash opening. The monitor normally reads the opening and not the actual air flow.

Constant Air Flow Fume Hood Alarms: Alarms will read air flow and will go on if flow is above or below 60 to 100 fpm

If Monitor or Alarms goes on, call maintenance personnel immediately and stop any experiments already in progress.

Close supervision is necessary when this furnishing is used by, or near children, invalids, or disabled persons.

Electrical Diagram

There is a sticker applied to the top of the lamp box which indicates the "Electrical diagram" of the wiring of all fume hood electrical components to the junction box located over the hood.

The hood is listed by Intertek to UL 1805. Connections to the fume hood must be done by a qualified electrical sub-contractor.

Safety/Procedures

A face velocity test should be performed at least once a year. Unless noted otherwise, the Fume Hood should operate with a face velocity of 100 feet/minute at full sash opening.

BASIC USE

The fluorescent or LED lamp is activated by the light switch located on the left front post. This lamp, same as all the other electrical components, is located outside of the working area away from the chemicals exhausted by the Fume Hood.

Chemical fume hoods must not be used for biological work, chemical storage, spray painting or any operation incompatible with materials used in the hood construction.

If you are uncertain about the suitability of your fume hood for a particular use, contact Bedcolab.

INFORMATION LABELS LOCATED ON THE FUME HOOD

Fume Hood Identification: This black background label is located on the right front post and indicates the CSA/UL approvals for Canada and United States. The label also indicates the following information:

- Model #
- Serial #
- Fabrication date
- Electrical rating (Volts, Amps, Hz)

Operating Instructions: This black background label is located on the left side front post and indicates the end user Fume Hood operating instructions.

VANGUARD USE

The electrical outlets are located on the front posts away from the inside fume hood chamber. The outlets are pre-wired to a junction located on top of the hood.

All plumbing fixtures for water, gas, air, vacuum or other services (optional), are supplied with the control handles on the front posts and the outlets on the interior walls. The plumbing servicing can be done through the access panels located on the inside walls or by removing the exterior side panels.

The plumbing fixtures are identified by a colour code and an identification on the control handles as the following:

Fixtures	Color code	Identification
Cold water	Green	CW
Hot water	Red	HW
Distilled or pure water	White	DW
Gas	Dark blue	Gas
Vacuum	Yellow	Vac
Air	Orange	Air
Nitrogen	White	N
Steam	Black	St
Helium	Chrome	HE

Close sash completely as much as possible during the experiments for safety and energy saving.

Avoid “walking by” fume hood fronts when experiments are in progress and door open. A normal pace would disturb airflow in fume hood and pull air out of the fume hood.

Fume hoods should never be used as a storage area for chemicals or equipment not used during the experiments.

Do not post any papers on the sash glass. It is a lot safer to use markers directly on the glass.

SETUP FOR EXPERIMENTATION / SETTING UP OF EQUIPMENT

Open sash full height if necessary by relieving sash stopper.

Make sure large equipment is at least 1" off counter and 5" to 6" from the back baffle.

Any burning device must be off the epoxy countertop by a minimum of 1" and away 6" from side walls and inside baffles.

MAXIMUM OPERATING CHARACTERISTICS

- For indoors use only
- Pollution degree: 2
- Installation category: III
- Maximum altitude utilization: 2000 meters
- Humidity: 80% maximum for temperatures up to 31 degrees C decreasing linearly to 50% relative humidity at 40 degrees C.
- Temperature: 5 to 40 degrees C
- Main supply voltage fluctuations not to exceed ± 10 % of the nominal supply voltage

TECHNICAL SERVICES

If you require any additional information, please contact the following addresses for prompt responses.

Supplier and distributor

Bedcolab Ltd
2305 Francis-Hughes Avenue
Laval, Quebec, Canada
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Telephone: 514-384-2820 or 1-800-461-6414
Fax: 514-384-9292
Web site: www.bedcolab.com
Email address: information@bedcolab.com

Manufacturer

Bedco, division of Gerodon Canada Inc.
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