

Laboratory Hoods

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Laboratory hoods are the primary means for protecting individuals from inhaling volatile chemicals in a lab.

Always choose to use chemicals in a laboratory hood when possible.



Common Features

Motion Sensor

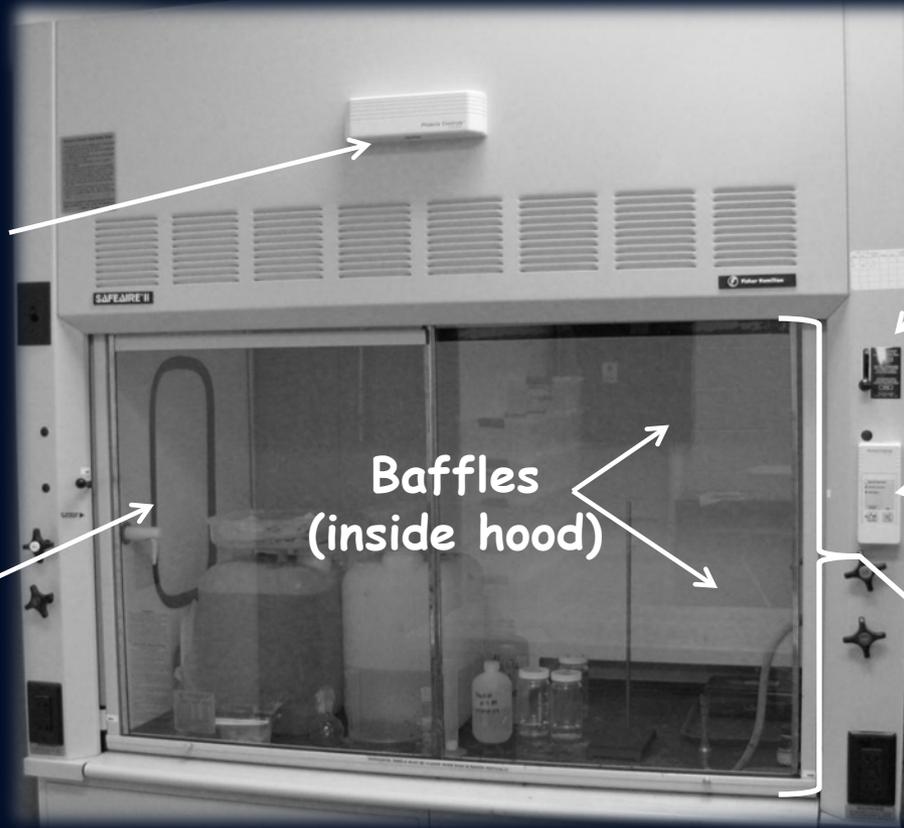
Baffle Control Lever

Electronic Controls

Sash

Gasketed Access Panel

Baffles (inside hood)



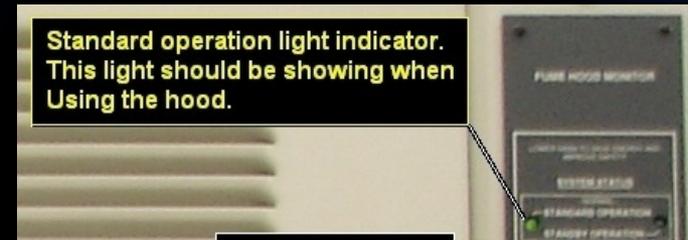
Preparing for Use

- 1. Make sure chemicals, equipment, and other objects aren't stored in the lab hood.*
- 2. Place equipment and apparatuses as far back into the hood as possible. Position objects at least 6-inches in back of the sash.*
- 3. Large bulky equipment or apparatuses should be placed in the hood in a manner that allows airflow around them. If they are large, raise them up an inch or two above the work surface.*

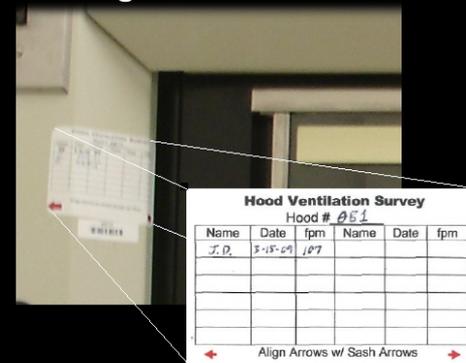


Preparing for Use

1. *Verify that the hood is functioning properly by checking the following:*
 - *If present, check the standard operation light (see image to the right);*
 - *Verify that audible alarms are not sounding and air is flowing into the hood; and*
 - *Check the testing and certification label (see image to the right) to make sure an adequate face velocity was achieved last time the hood was tested.*
2. *Position the sash to minimize the sash openings, but still allow you to perform your work.*

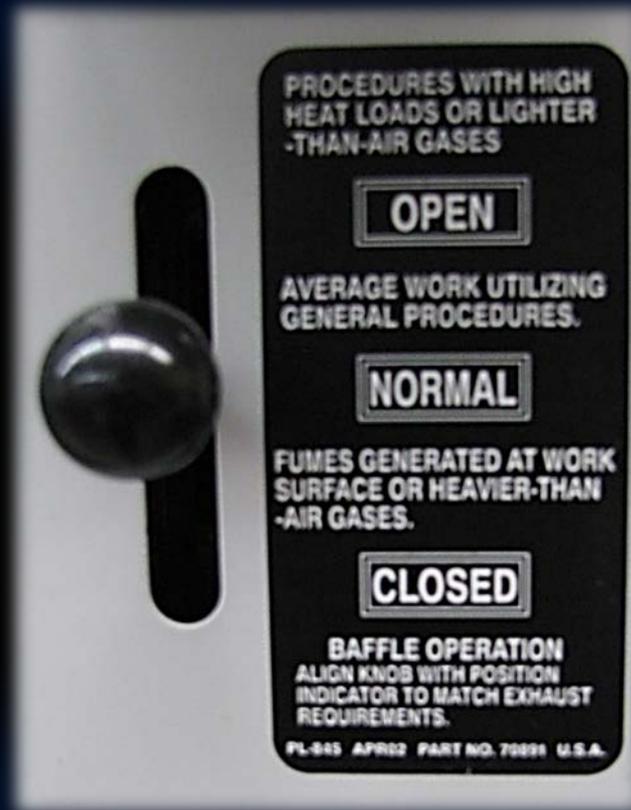


Testing & Certification Label



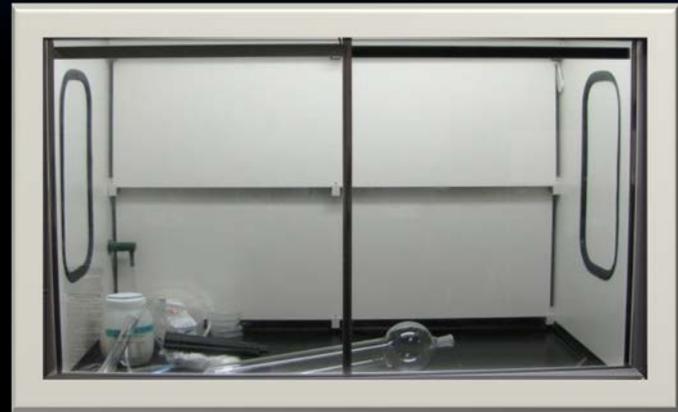
Baffle Position

Adjust the baffle position depending upon what chemicals are being used in the hood and how they are being used.



Laboratory Hood Use

- 1. Avoid rapid body movements when using a hood.*
- 2. Don't open the sash rapidly.*
- 3. Never place your head inside a lab hood.*



Note: make sure to close the sash when the hood isn't in use.

What IF...

During use of any hood, if you detect vapors or gases escaping the hood then:

- 1. Stop what you are doing;*
- 2. Examine your work practices to ensure you are not creating eddies that are kicking contaminants out of the hood; and*
- 3. If the problem persists contact the college Health & Safety Officer (2-6589) or Risk Management (2-4468) to have the face velocity and direction of flow checked.*

Emergency Flow & Repairs

Use the emergency flow button if a spill occurs inside the hood, or if there is a problem achieving standard flow.

Contact Physical Facilities (422-5555) if your hood is in need of repair.



Note: clean up spills as soon as possible to avoid damage to the exposed surfaces of the laboratory hood.

Alterations

Don't alter laboratory hoods or ventilation ducting.

Never tap into an existing duct.

If you feel the ventilation system needs to be altered please contact Physical Facilities and/or submit a work order.



Perchloric Acid

Chemicals must be used in an appropriate hood.

Warning

Not only is perchloric acid very corrosive and a strong oxidizer, it can also form heat, friction, and shock sensitive explosive perchlorates.

Use perchloric acid in a water downwash hood, which can rinse away perchlorates.

If you have questions regarding the appropriateness of your lab hood please contact Risk Management (422-4468).

Hydrofluoric Acid

Warning

Hydrofluoric acid can be absorbed through the skin and is toxic.

Use hydrofluoric acid in a designated hood that has been labeled or signed for such use.



All individuals working in a laboratory where hydrofluoric acid is used must complete hydrofluoric acid training. Contact the college Health & Safety Officer (422-6589) or Risk Management (422-4468) for more information.

Please share this presentation with your co-workers.

- End -