

## Operation of the Fume Hoods in Amstuz Chemistry labs

The following is a list of general guidelines for safe, effective hood usage:

Topic	Guideline
Hood Operation	The fume hoods are equipped with variable air volume controls, which means that when the sash is lowered, the air flow is low and when the sash is raised, the air flow is increased to the optimum velocity for efficient operation.
Low flow alarm	The hood is equipped with a monitor that continuously monitors the air flow and will sound an alarm if the air flow falls too low. If this occurs, immediately stop all chemical work, close chemical containers, lower the sash and contact the Physical Plant 629-7356. OSHA regulations require that lab personnel have a means to verify that the hood is operational. This low flow alarm is the device to provide you this verification.
Sash Height	The Sash should always be kept in the lowest possible position, thus minimizing the Face opening and exposure potential. Never work with chemicals with the sash raised above the sash stop. The sash stop can be temporarily by-passed when moving large apparatus in and out of the hood.
Air flow alarm silencing	If the sash is raised above the sash stop, the monitor will detect low flow and the alarm at the hood will sound. You can silence the alarm temporarily by pressing the acknowledgement button. This will allow you to complete apparatus set up in the hood. Be sure to lower the sash below the stop when set up is completed, and push the reset button to reset the low flow monitor.
Working Distance	To avoid turbulence at the sash edge and to allow for greater protection, keep your work at least 6 inches back from the edge of the sash.
Hood Housekeeping	Since objects placed in the hood affect air flow, it is important not to clutter up a hood with extraneous items. Do not place large items in front of the baffles at the rear of the hood.
Chemical Disposal	Hoods should not be regarded as a means for chemical disposal. Apparatus in hoods should be fitted with condensers, traps or scrubbers to contain and collect waste solvents, toxic vapors or dusts, before the exit gases are released into the hood system.
Chemical Storage	Hoods are not to be used for chemical storage, except for the hoods dedicated to chemical waste storage.

Traffic in the Room	Foot traffic at the face of the hood should be kept to a minimum as individuals walking in front of the hood can disrupt the airflow within the hood.
Ignition sources	Items such as hot plates, controllers, open flame devices and electrical connectors must be certified, and labeled, as being intrinsically safe for operation within a laboratory hood.
Inside the hood	Your head should never cross the plane of the hood sash when you are dismantling equipment or at any other time.
Fire Suppression	<p>Each hood is equipped with an automatic fire suppression system. There are heat detectors inside the hood which are set to initiate at 155 deg F. Each hood has a horn/strobe above it.</p> <p>If a fire is detected, the horn and strobe directly over the hood will sound. All personnel should immediately <b>close the hood sash</b> and back away from the hood. The suppression system will discharge to extinguish the fire. At the same time, the building alarm system will be initiated and all personnel should evacuate the building and not re-enter until the area has been checked and the all clear is given.</p> <p>The ventilation and gas for all hoods in Amstuz will be shut off automatically during a fire alarm. The system must be re-initiated before lab work can resume. Because the ventilation is off, the low flow alarms will be sounding until the system is re-set.</p>
Fire Suppression manual activation	The suppression system can be manually initiated by pulling the appropriate pull station for the hood on fire. The pull stations are located at the doorway to the lab. The pull stations are labeled A, B, C, D, E corresponding to the letters on the hood above the window.
Gas Shutoff	Each hood has a gas shutoff within six feet inside a panel under the hood. In the event of a building alarm, all gas to all the labs will be automatically shut off. You should still shut off valves as you evacuate so that the gas will not come on when the system is reset.
Chemical Spills	Clean up incidental chemical spills immediately using the spill clean up supplies provided in the lab.
Completion of work	<b>Lower the sash to the closed position when hood is not in use.</b>

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