

Glossary of Hood Terms and Definitions

Access opening	part of the fume hood or glove box through which work is performed - entrance.	Damper	device installed in duct to control air volume — can either be pneumatically, electrically, or manually operated.
ACGIH	American Conference of Government Industrial Hygienists.	Differential Pressure	difference in static pressure between two locations.
Air foil	curved or angular member at front of hood designed to reduce air turbulence.	Duct	round, square or rectangular tube used to enclose moving air.
Air volume	quantity of air normally expressed in cubic feet per minute (cfm).	Duct velocity	speed of air moving in duct (measured in FPM).
Arrangement No. 9	fan configuration in which the motor is mounted outboard of the impeller shaft support frame.	Dynamic barrier by-pass	a louvered front-to-back by-pass system located above the top sash that introduces by-pass air behind the operating sash plane to provide a buffer zone between the contaminated hood interior and the hood operator.
Anemometer	instrument for measuring low air velocities.	Face	front opening of hood through which the user works.
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers.	Face velocity	speed of air moving into fume hood at face opening usually expressed in units of feet per minute.
Auxiliary air	air delivered directly to fume hood to reduce room air consumption — sometimes called supply or supplemental air.	Fan	air moving device consisting of a motor, impeller and housing – sometimes called a blower.
Backward Inclined Blade Fan	fan with large flat blades with the tips inclined away from the direction of rotation. Most suitable for highly corrosive applications. Recommended for most hood exhaust applications.	Forward Inclined Blade Fan	fan with small, curved blades with the tips inclined in the direction of rotation. Best suited for less corrosive applications and auxiliary air supply.
Baffle	panel or panels located at rear of the hood interior which aid in distributing the flow pattern of air into and through the hood.	FPM	Feet per minute; measurement of air velocity.
By-pass hood	hood which contains a by-pass and, usually, air foils — also called a constant volume hood.	Fume hood	a ventilated, enclosed work space, with an open front, intended to capture, contain and exhaust airborne contaminants generated within it — also called a laboratory hood.
Centrifugal Fans	fan having a scroll-type housing and air flows perpendicular to the shaft on which the impeller wheel is mounted.	Included Angle	angle formed by and between two intersecting straight lines.
CFM	cubic feet per minute — unit of air volume measurement.	Kem-FP Coating	a fluoropolymer resin coating that exhibits outstanding chemical resistance. Is virtually unaffected by all commonly used corrosive chemicals.
Cross draft	a flow of air that blows into or across the hood face.		

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Liner	material used in the interior of the hood which is exposed to contaminants.	Sash	movable panel set in hood face, usually transparent and can be either vertical rising or horizontal sliding.
Louvered panel	a panel with louvers to allow by-pass air to enter the hood when the sash is closed.	Side walls (End walls)	The area between the interior hood liner, and the exterior end panel. (4" nominal dimension)
Make-up air	free or available air needed to permit fume hood to develop face velocity.	Smoke candle	device producing large quantities of smoke for testing hoods — also called smoke bomb.
Manometer	device used to measure air pressure differential — usually calibrated in inches of water.	Static pressure	air pressure exerted perpendicular to the direction of flow, usually expressed in units of inches of water.
Negative Pressure	pressures lower than atmospheric pressure. (Less than one atmosphere.)	Superstructure	part of hood assembly that excludes work top, base cabinets, auxiliary air chamber, and plumbing and electrical fixtures.
NFPA	National Fire Protection Association.	Supplemental (supply) air	air delivered directly to fume hood to reduce room air consumption — also called auxiliary air.
Perchloric Acid	a colorless, syrupy hygroscopic liquid, HClO_4 , used chiefly as a reagent in analytical chemistry. Explosively unstable when crystallize or when in contact with combustible materials at elevated temperatures.	V-Belt Drive Fan	fan on which the motor is connected to the impeller wheel via, a v-belt, sheaves, and an impeller wheel shaft. Allows the impeller wheel speed to be varied by using an adjustable motor sheave.
Pitot tube	device for measuring velocity of air in a duct.	Variable air volume (VAV)	type of fume hood that utilizes controller to maintain constant face velocity by adjusting blower motor speed or balance damper in response to changes in sash position.
Positive pressure	pressures higher than atmospheric pressure. (More than one atmosphere.)	Velocity	speed of air — measured in feet per minute.
Restricted by-pass fume hood	basic type of hood design with limited by-pass area. Commonly used in conjunction with "VAV" Variable Air Volume controls.	Walk-in hood	floor-mounted, full height hood designed to accommodate tall apparatus and permit roll-in of instruments and equipment.
Safety shield	horizontal sliding transparent panel at face of hood which the user places in front of his body to protect himself from small explosions inside of hood.		