

UniFlow Laboratory Fume Hoods

HEMCO

*Non-corrosive,
Unitized Construction
for Superior Strength,
Durability & Performance*



UniFlow SE Hood



UniFlow CE Hood



UniFlow LE Hood



UniFlow FM Hood

Laboratory Fume Hoods, Special Purpose Hoods & Enclosures



Welcome to HEMCO

*Experience and Service you can count on!
A leading manufacturer of basic laboratory equipment
serving R & D, Life Science & Technology Industries
since 1958. Working with Architects, Engineers, Lab
Planners, Contractors and Customers to complete Lab
Projects on-time and on budget.*



*Located in Independence, Missouri, the heart of America.
A major hub for transportation, communication, distribution and
manufacturing industries worldwide. Just minutes away from the
Kansas City International Trade Zone.*

*HEMCO's state of the art manufacturing and distribution facilities combined with our many years of
experience uniquely qualifies us to provide Laboratory Hoods, Furniture, Enclosures and Clean
Labs. Our extensive engineering, design and manufacturing know-how can transform your ideas
into reality.*

"Fume Hoods and Equipment for Labs of the Future"



UniFlow SE Hood



UniFlow CE Hood



UniFlow LE Hood



UniFlow FM Hood

We invite you to explore our laboratory product line.

Fume Hoods: HEMCO offers a complete line of UniFlow Laboratory Fume Hoods. Bench mounted hoods in sizes from 24" to 96" wide. Floor mounted (Walk-in) hoods 48" to 144" wide and up to 96" deep. Speciality hoods include UniFlow Conventional VAV hoods, UniFlow Auxiliary Air hoods, UniFlow Clean Air I hoods, UniFlow Perchloric Acid hoods, UniFlow Acid Digestion hoods, UniFlow Trace Metals hoods, UniFlow Radioisotope hoods, and UniFlow Dual Entry hoods. Our technical service consultants will gladly assist in choosing the right fume hood for your laboratory.

Hood Accessories: Our complete line of system components is available to build a Laboratory Fume Hood System to meet your specific applications. Our accessories include sinks, plumbing services, electrical services, fire extinguishers, distillation apparatus grid, worksurfaces, base cabinets and air flow monitors.

Hood Ventilation: HEMCO offers the complete solution to Laboratory ventilation. Integrated components, exhaust blower, ducting, and filters engineered to provide a safe, and efficient fume hood ventilation system.

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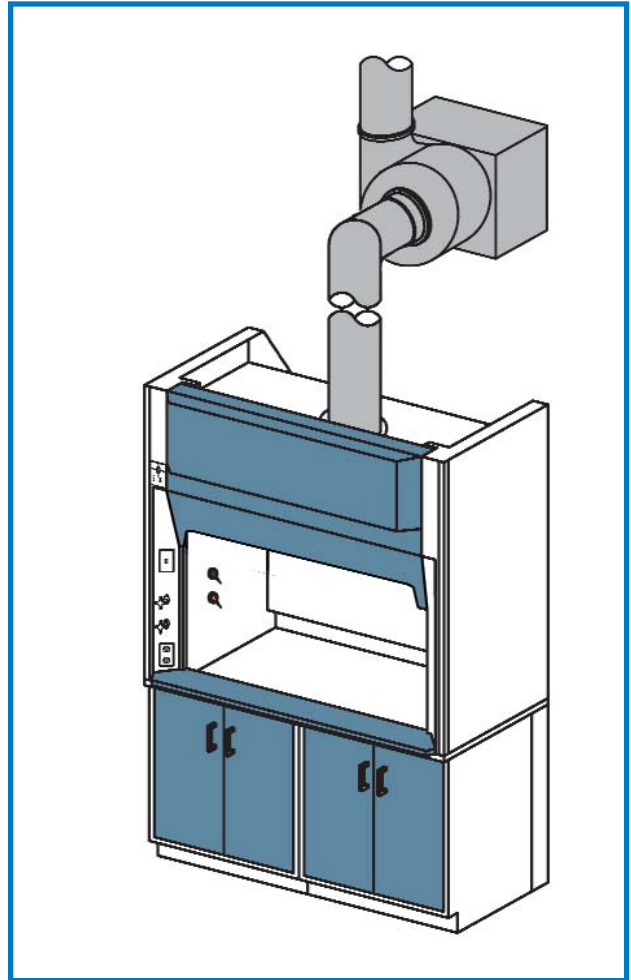
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UniFlow Fume Hood Systems



Designed to offer the complete solution to laboratory ventilation concerns. Integrated components, including fume hoods, filters, blowers, ducting, electrical services, plumbing options and base cabinets work together to provide a safe, efficient fume hood system.

UNIMAX HOODS & HAZMAX ENCLOSURES



Vented Hoods & Enclosures - UniMax hoods and HazMax enclosures suit requirements for large special purpose work stations (see pages 40-41). The UniMax and HazMax hood and enclosures can be supplied to your specific size and operational specifications. Can be shipped completely assembled or knocked down for onsite assembly.

INNOVATIVE LABS & CLEAN ROOMS



Pre-Engineered Modular Labs - When clean labs or containment lab space is required. The ModuLab is your solution for a clean temperature controlled work area or designated work area as called out in OSHA Federal Register 29 CFR Part 1910. (see page 45)

UniFlow Laboratory Fume Hoods

Enhanced Performance for Safety & Energy Efficiency. Reliable & Durable for Long Lasting Service



UniFlow SE Laboratory Fume Hood #45611 shown with optional service fixtures, plumbing & electrical, airflow monitor, work surface, base cabinet and accessories. HEMCO recommends all fume hoods be equipped with an airflow monitor

HEMCO offers a complete line of UniFlow Laboratory Fume Hoods. Bench-mounted hoods in widths from 24" to 96". Floor-mounted (walk-in) hoods from 48" to 144" wide and up to 96" deep. UniFlow hoods are constant volume low flow designed for performance and energy savings.

HEMCO UniFlow Fume Hoods are designed and manufactured to conform and perform to industry recommendations and standards

- OSHA, Occupational Health & Safety Federal Register 29 CFR Part 1910
- SEFA, Scientific Equipment Furniture Association, SEFA 1-2003
- NFPA, National Fire Protection Association, NFPA - 45, 2000
- ASHRAE, American Society of Heating, Refrigerating and Air-Conditioning Engineers, ASHRAE - 110, 1995
- ANSI, American National Standards Institute, Z9.5, 2003 Laboratory Ventilation
- ASTM, American Society for Testing and Materials ASTM E-84, 2001
- UL, Underwriters Laboratory UL 1805 & UL 3101
- CSA, Canadian Standards Associations CAN/CSA - C 22.2
- CE European Community
- International Electrical Services available

UniFlow Laboratory Fume Hood Features

1. Enhanced performance aerodynamic sash opening and aerodynamic airfoil provides maximum user protection. The VaraFlow baffle system directs the airflow through the fume chamber to the exhaust outlet with minimum turbulence. UniFlow Fume Hoods are tested to comply with ASHRAE-110 fume hood performance guidelines.
2. Advanced unitized composite fiberglass construction features a one-piece fume chamber. Composite fiberglass provides superior chemical resistance and durability. The glass-smooth walls and coved corners are easy to clean and maintain. The one-piece design also reduces installation costs.
3. Other fume chamber liner materials are available, such as stainless steel 304 and 316 grades, PVC, Polypro, Phenolic, Tempered Glass and Composite Vinylester resin construction.
4. HEMCO offers complete services and systems to complete your UniFlow Fume Hood installation, such as service fixtures for gases and liquids, plumbing, electrical services, work surfaces, sinks, base cabinets, ventilation ducting, HEPA and carbon filters, monitors and exhaust blowers to meet your exact application requirements.
5. HEMCO recommends all fume hoods be equipped with an airflow monitor to assure ANSI Standards, alarms and sash stops to limit the opening. If there is a potential for a fire hazard, HEMCO fume hood fire extinguishers are available. HEMCO technical service answers safety questions and helps you select components to meet your requirements or you may visit: www.HEMCOcorp.com.

COLOR SELECTION (additional colors are available provided a color sample is supplied)

Pearl White - 01	Silver Beige - 02	Zircon Blue - 03	Pewter Gray - 04

UniFlow SE Fume Hood compared to traditional metal hood

UniFlow Unitized Construction with One-Piece Seamless Fume Chamber, Coved Corners and Glass Smooth Surfaces (a minimum of metal parts & fasteners)



Traditional Steel Frame Fume Hood

UniFlow Advanced Composite Fume Hood

A. Fully Assembled Fume Hoods

Traditional Fume Hood (60" wide)

Weight: 435 lbs.
Painted Steel Panels: 10
Galvanized Steel Braces: 13
Composite Liner Panels: 8
Bolts and screws: 175

UniFlow Fume Hood (60" wide)

Weight: 265 lbs.
Entire superstructure is unitized construction; no cracks or seams, no painted steel panels.



Traditional Steel Frame Fume Hood

UniFlow Advanced Composite Fume Hood

B. All Structural Fasteners Removed

Traditional Fume Hood (60" wide)

175 bolts and screws removed. No caulk or grouting used to seal corner joints and seams from chemical corrosion. Galvanized formers and braces subject to corrosion & failure

UniFlow Fume Hood (60" wide)

Unitized, advanced composite construction. No assembly required. Glass smooth, one-piece fume chamber with coved corners: no seams or joints.



Traditional Steel Frame Fume Hood

UniFlow Advanced Composite Fume Hood

C. All Non-Corrosive Resistant Supports, Fasteners and Panels Removed

Traditional Steel Fume Hood (60" wide)

Weight: 139 lbs.
Number of Liner Panels: 8

HEMCO Advanced Composite UniFlow Fume Hood (60" wide)

Weight (sash weights removed) 210 lbs.
Composite components (superstructure, access panel, air foil)

Customer's Comments:

"Metal hoods, based on the nature of the products we analyze (sulfur chlorides, sulfuric acids, oleums), last about two or three years. These chemicals have corroded both the exterior panels and the internal framework of the metal hoods...We replaced them eight years ago with HEMCO fiberglass hoods and have had no repairs since then. We are building a new facility and we plan to install HEMCO hoods."
Steve Mixon, Chief Chemist

UniFlow SE Laboratory Fume Hoods (Series 45)

High Efficiency, Full Duty Fume Hood in 48", 60", 72" and 96" widths



UniFlow SE Laboratory Fume Hood #45611 shown with optional service fixtures, plumbing & electrical, airflow monitor, worksurface, base cabinet and accessories. HEMCO recommends all fume hoods be equipped with an airflow monitor

UniFlow SE Fume Hood is designed for high efficiency, energy savings and maximum user protection. The aerodynamic face opening with airfoil provides uniform airflow through the fume chamber. A constant volume low flow hood with VaraFlow baffle system efficiently directs the airflow through the fume chamber to the bell shaped exhaust outlet with minimum turbulence and maximum user protection.

UniFlow SE Laboratory Hood Features

UniFlow Superstructure

Exclusive unitized composite construction for superior chemical resistance, strength, and durability.

Extended Viewing Height

Full 36" height allows unobstructed vision into fume chamber

Fume Chamber

Molded one piece with all corners covered. Surface is glass smooth for ease of cleaning and excellent light reflectivity.

Ergonomic Sash Lift

Contoured for efficient airflow and ease of movement

Aerodynamic Airfoil

Ergonomic aerodynamic design allows air to sweep across the worksurface and maintain uniform airflow.

VaraFlow Baffle System

Maintains uniform airflow through fume chamber.

Angled Picture Frame Opening

Efficient air entry into fume chamber.

COMPLETE YOUR FUME HOOD INSTALLATION

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Ventilation Systems

(Blowers, Filters and Scrubbers)
see pages 34-39

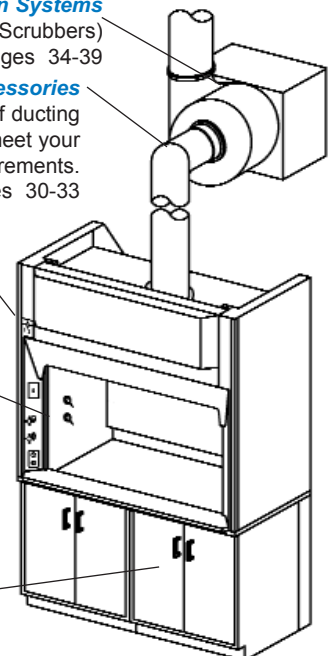
Ducting and Ducting Accessories

HEMCO offers a full line of ducting accessories to meet your specific requirements.
see pages 30-33

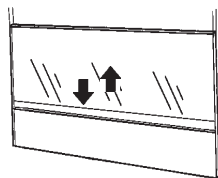
Airflow Monitors and Sash Stop
see page 5

Plumbing and Electrical Services
Factory installed according to your exact specifications
see pages 27-28

Base Cabinets and Worksurfaces
see pages 24-25

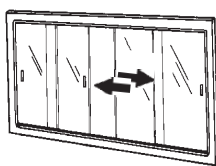


SASH OPTIONS



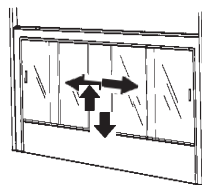
VERTICAL MOVING SASH

The standard sash for HEMCO fume hoods. The sash may be lifted to the completely open position for maximum access to the fume chamber. Sash stops available. See page 5.



HORIZONTAL MOVING SASH

The maximum sash opening for the horizontal sash is 1/2 to 2/3 that of the vertical sash. The opening is smaller, less air is exhausted resulting in energy savings. See page 5.



COMBINATION MOVING SASH

Offers the advantages of both sash types. Horizontal openings offer energy savings while vertical option allows full access to the fume chamber. See page 5.

UNIFLOW SE Laboratory Fume Hoods (Series 45)

SPECIFICATIONS	FUME HOOD WIDTH			
	48"	60"	72"	96"
1. UniFlow Bypass Fume Hood with Vapor-Proof Light Superstructure to be unitized corrosion and fire resistant, non-metallic composite fiberglass construction, one piece fume chamber liner to have white glass smooth molded-in finish and all covered corners. Adjustable VaraFlow baffle system and bell shaped exhaust collar. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing, track and aerodynamic sash lift. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz, AC. All electrical components UL listed. Remote exhaust blower see pages 34-35.	Cat. No. 45411	Cat. No. 45511	Cat. No. 45611	Cat. No. 45811
2. UniFlow Bypass Fume Hood with Vapor-Proof Light and Built-In Exhaust Blower Same as #1 above except equipped with built-in corrosion resistant, vertical discharge, direct drive exhaust motor/blower, 115 volt, 60Hz, AC with control switches prewired to single point junction box. All electrical components UL listed. Maximum duct run of 20'. Ducting options see pages 32-33.	Cat. No. 45412	Cat. No. 45512	Cat. No. 45612	Cat. No. 45812
3. UniFlow Bypass Fume Hood with Explosion-Proof Light Same as #1 above except equipped with explosion-proof, vapor-proof light fixture, Class I, Group C & D, Class II, Group E, F & G, 115 volt, 60Hz AC, UL Listed. Installed but not wired, must be wired to comply with local codes. For explosion-proof electrical options see page 29, explosion-proof exhaust blower see pages 34-35, fire extinguisher see page 28.	Cat. No. 45413	Cat. No. 45513	Cat. No. 45613	Cat. No. 45813
4. UniFlow Bypass Fume Hood with Explosion-Proof Light and built-in Explosion-Proof Exhaust Blower Same as #3 above except equipped with built-in corrosion resistant, non sparking, explosion-proof motor/blower exhaust system, Class I, Group C & D, Class II, Group E, F & G, 115, volt 60Hz, AC. Explosion-proof exhaust blower and light are installed but not wired, must be wired to comply with local codes. Maximum duct run of 20'. For explosion-proof electrical options see page 29, fire extinguisher see page 28.	Cat. No. 45414	Cat. No. 45514	Cat. No. 45614	Cat. No. 45814
5. Horizontal Sliding Sash Option - Add suffix to catalog number.	45HS-4	45HS-5	45HS-6	45HS-8
6. Combination Sliding Sash Option - Add suffix to catalog number.	45CS-4	45CS-5	45CS-6	45CS-8

UNIFLOW SE FUME HOODS

FUME HOOD SIZES				
A	48"	60"	72"	96"
B	38"	50"	61"	85"
C	14"	20"	15"	—
D	10"	10"	12"	(2)10"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN				
48"	60"	72"	96"	
773 CFM	938 CFM	1162 CFM	1613 CFM	
100 FPM WITH SASH 50% OPEN				
385 CFM	474 CFM	592 CFM	800 CFM	

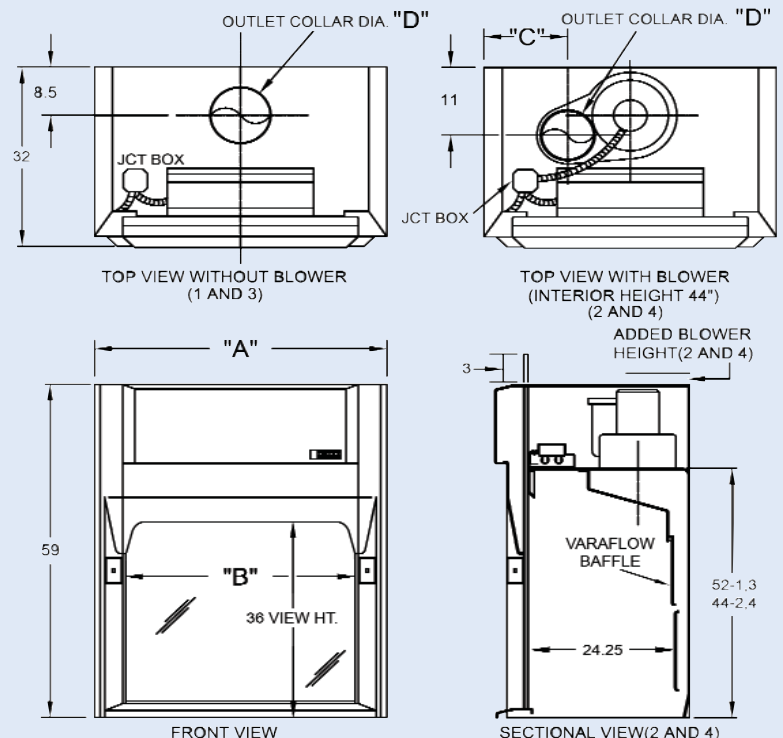
AIRFLOW MONITOR Cat. No. 51406

Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz



SAFETY SASH STOP Cat. No. 51651

Factory installed to specified designated height. Also available for field installation.



UniFlow Conventional / VAV Fume Hoods

The conventional fume hood maintains constant air volume through sash opening. Equipped with optional VAV system, face velocity can be controlled to meet specific requirements.



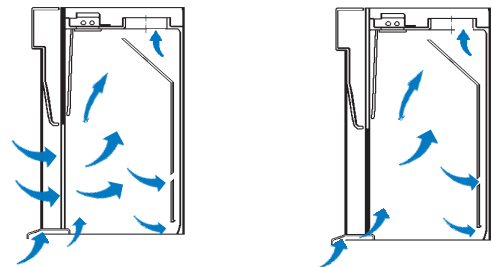
UniFlow Conventional VAV Fume Hood #21501 with optional service fixtures, plumbing & electrical, worksurface, and base cabinet. HEMCO recommends all fume hoods be equipped with an airflow monitor

UniFlow Conventional Fume Hoods

Maintain constant air exhaust volume at different sash openings while the face velocity varies at each sash opening. Closing the sash increases the the speed of incoming air, thus increasing face velocity.

VAV System Ensures Sufficient Airflow

The optional Variable Air Volume Control System constantly monitors face velocity and adjusts to a pre-set level regardless of sash position, ensuring sufficient air flow and maintaining volume to contain fumes even at the near-closed sash positions. This system protects laboratory workers and reduces energy costs.



Airflow (Sash Open)

Airflow (Sash Closed)

Sash open, all air enters through the sash opening and under the airfoil into the fume chamber for a smooth uniform airflow. As sash lowers, all air is forced through a reduced sash opening thus increasing the face velocity. Sash fully closed, all air enters under the airfoil.

VARIABLE AIR VOLUME CONTROLS

Variable Air Volume (VAV) Systems allow fume hoods to reduce energy consumption while maintaining face velocity. The system operates by sensing actual face velocity and actuating a motorized damper or blower speed control to continuously adjust face velocity as sash is raised or lowered.

VAV DAMPER CONTROL

Cat. No. 51401

utilizes electronically actuated dampers within the ductwork to create and maintain optimal airflow. The VAV System includes the front mounted audio-visual alarm, electronic actuated damper controller and wallmounted sensor, transformer and calibration. Night set back, emergency air flow, mute of audible alarm, and self test mode are standard features of the unit.



VAV MOTOR SPEED CONTROL

Cat. No. 51408

adjusts exhaust velocity by varying blower motor speed. The VAV System includes the front mounted audio-visual alarm, speed controller and wallmounted sensor, transformer and calibration. Night set back, emergency airflow, mute of audible alarm, and self test mode are standard features of the unit.

COMPLETE YOUR FUME HOOD INSTALLATION

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Ventilation Systems

(Blowers, Filters and Scrubbers)
see pages 34-39

Ducting and Ducting Accessories

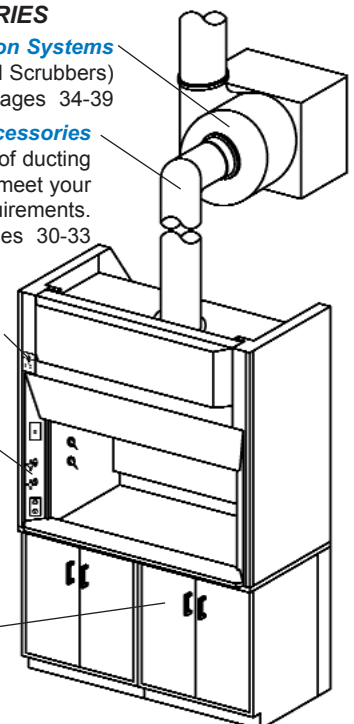
HEMCO offers a full line of ducting accessories to meet your specific requirements.
see pages 30-33

Airflow Monitors and Sash Stop
see page 7

Plumbing and Electrical Services

Factory installed according to your exact specifications
see pages 27-28

Base Cabinets and Worksurfaces
see pages 24-25



UNIFLOW Conventional / VAV Fume Hoods

SPECIFICATIONS	FUME HOOD WIDTH			
	48"	60"	72"	96"
1. UniFlow Conventional/VAV Fume Hood with Vapor-Proof Light. Superstructure to be unitized composite FRP fire corrosion resistant non-metallic construction. Integral fume chamber to be seamless glass smooth with all covered corners with adjustable VaraFlow baffle system and bell shaped exhaust collar. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing, track and aerodynamic sash lift. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed. Requires a remotely located exhaust blower Pages 34-35.	Cat. No. 21401	Cat. No. 21501	Cat. No. 21601	Cat. No. 21801
2. UniFlow Conventional Fume Hood with Vapor-Proof Light and Built-In Exhaust Blower. Same as #1 above except equipped with built-in vertical discharge exhaust blower with non-sparking chemical resistant housing and impeller wheel. External mounted direct drive motor is 115 volt, 60Hz AC with control switch and prewired to single point junction box. All electrical components UL Listed.	Cat. No. 21402	Cat. No. 21502	Cat. No. 21602	Cat. No. 21802
3. UniFlow Conventional / VAV Fume Hood with Explosion-Proof Light. Same as #1 above except equipped with explosion-proof vapor-proof light fixture Class I, Group C & D, Class II Group E, F & G electrical fixture installed but not wired, must be wired to comply with local codes. 115 volt, 60Hz AC. For other explosion-proof electrical options see page 29 and explosion-proof exhaust blowers on pages 34-35. All electrical components UL Listed. Switch not included. Requires a remotely located exhaust blower pages 34-35.	Cat. No. 21403	Cat. No. 21503	Cat. No. 21603	Cat. No. 21803
4. UniFlow Conventional Fume Hood with Explosion-Proof Light and Built-In Explosion-Proof Exhaust Blower. Same as #3 above except equipped with built-in vertical discharge exhaust blower with non-sparking chemical resistant housing and impeller wheel external mounted direct drive explosion-proof motor is 115 volts, 60Hz AC, Class I, Group C & D, Class II Group E, F & G. Explosion-proof exhaust blower and light fixture are installed but not wired, must be wired to comply with local codes. See page 29 for other explosion-proof options. All electrical components UL Listed. Switches not included.	Cat. No. 21404	Cat. No. 21504	Cat. No. 21604	Cat. No. 21804
5. Horizontal Sliding Sash Option - Add suffix to catalog number.	HS-4	HS-5	HS-6	HS-8
6. Combination Sliding Sash Option - Add suffix to catalog number.	CS-4	CS-5	CS-6	CS-8

UNIFLOW CONVENTIONAL/VARIABLE AIR VOLUME FUME HOODS

FUME HOOD SIZES				
A	48"	60"	72"	96"
B	38-3/4"	50-5/8"	61-3/4"	85-3/4"
C	14"	20"	15"	—
D	10"	10"	12"	(2)10"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN			
48"	60"	72"	96"
773 CFM	938 CFM	1162 CFM	1613 CFM
100 FPM WITH SASH 50% OPEN			
385 CFM	474 CFM	592 CFM	800 CFM

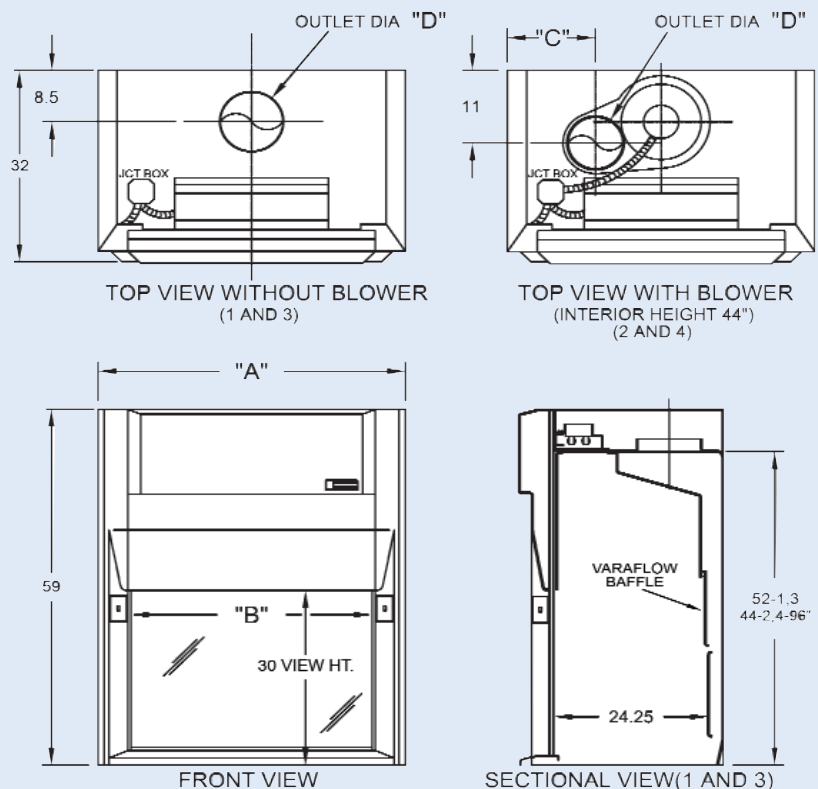
AIRFLOW MONITOR Cat. No. 51406

Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz



SAFETY SASH STOP Cat. No. 51651

Factory installed to specified designated height. Also available for field installation.



UniFlow Auxiliary-Air Fume Hoods

The Auxiliary-Air Fume Hood reduces the loss of expensive tempered air from the laboratory. Ideal for laboratories with inadequate make-up air supply.



UniFlow Auxiliary-Air Fume Hood #21521 with optional service fixtures, plumbing & electrical, worksurface, and base cabinet. HEMCO recommends all fume hoods be equipped with an airflow monitor

Auxiliary-Air Fume Hoods

Recommended when there is insufficient air available in the lab to support the volume of air required to maintain a desired face velocity. Auxiliary-Air Hoods have a supply plenum to which ducting connects to a supply blower. Depending on the size of the hood and the length of supply duct, a collection of fans are shown on page 9.

Energy Efficient

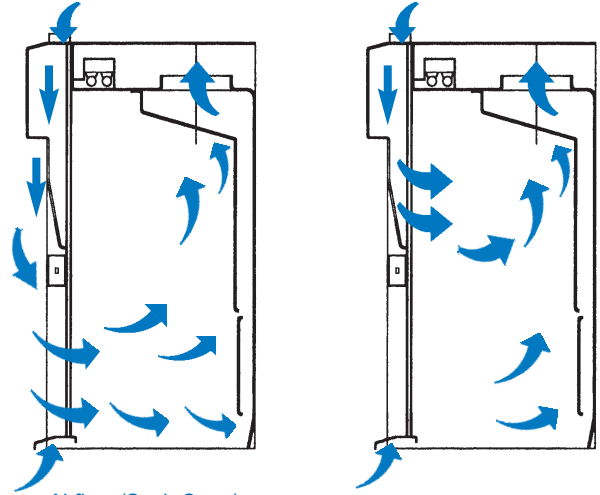
In addition to supplementing air to fume hoods when there is less than sufficient air available in the lab, Auxiliary Air fume hoods reduce the amount of expensive air-conditioned or heated air that exhausted to the outside. Between 50% to 70% of the exhaust can be supplied from outside the lab.

Cost Effective

When there is a shortage of air in the lab, it is less costly to provide an Auxiliary Air fume hood system than to change or enlarge the whole building air handling system. The make-up air can be efficiently brought directly to the point of use fume hood.

Auxiliary-Air Fume Hoods come in 48", 60", 72" and 96" widths. A supply air solution for many labs that have insufficient room airflow. Equipped with auxiliary air plenum to induce added airflow to face opening of hood. Supply air ducting and remote blower is required. Equipped with vapor proof-light and switch. All electrical components and services are UL and CSA listed. Optional hood accessories and hood ventilation systems are available.

UniFlow Auxiliary Airflow Diagram



Airflow (Sash Open)

Auxiliary make-up, air enters supply plenum and is distributed down the exterior face in through sash opening.

Airflow (Sash Closed)

Auxiliary make-up, air diverts from the supply plenum through the air-by-pass opening into the fume chamber.

COMPLETE YOUR FUME HOOD INSTALLATION

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Auxiliary Air Supply Blowers
see pages 8-9

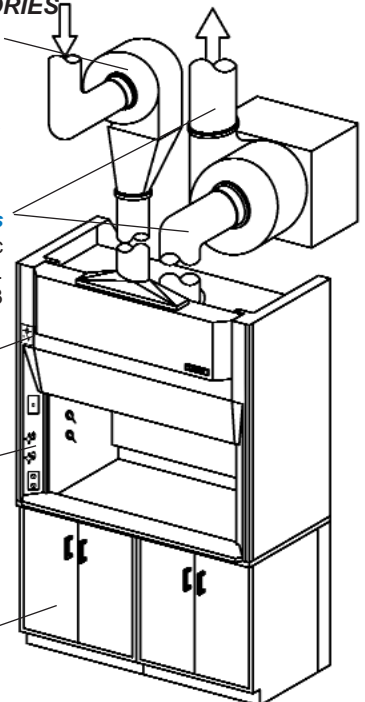
Ventilation Systems
(Filters and Scrubbers)
see pages 34-39

Ducting and Accessories
to meet your specific requirements.
see pages 30-33

Airflow Monitors and Sash Stop
see page 9

Plumbing and Electrical Services
Factory installed according to your exact specifications
see pages 27-28

Base Cabinets and Worksurfaces
see pages 24-25



UNIFLOW Auxiliary-Air Fume Hoods

SPECIFICATIONS	FUME HOOD WIDTH			
1. UniFlow Auxiliary Air Fume Hood with Vapor-Proof Light. Superstructure to be unitized composite FRP fire corrosion resistant non-metallic construction. Integral fume chamber to be seamless glass smooth with all coved corners with adjustable VaraFlow baffle system and bell shaped exhaust collar. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing, track and aerodynamic sash lift. Built-in auxiliary air supply feature to reduce volume of conditioned air from room. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed. Requires a remote exhaust blower see pages 34-35 & auxiliary supply blowers see below.	48"	60"	72"	96"
	Cat. No. 21421	Cat. No. 21521	Cat. No. 21621	Cat. No. 21821
2. UniFlow Auxiliary Air Fume Hood with Explosion-Proof Light. Same as #1 above except equipped with explosion-proof vapor-proof light fixture Class I, Group C & D, Class II Group E, F & G electrical fixture installed but not wired, must be wired to comply with local codes. 115 volt, 60Hz AC. For other explosion-proof electrical options see page 29 and explosion-proof exhaust blowers on pages 34-35 & auxiliary supply blower see below. All electrical components UL Listed.	Cat. No. 21423	Cat. No. 21523	Cat. No. 21623	Cat. No. 21823
	AUXILIARY AIR SUPPLY BLOWERS			
3. Belt drive steel blower and impeller wheel are epoxy coated. V-belt drive and adjustable pulleys permit field balancing. Weather housing is furnished. Motor has thermal overload protection. Specify 115 V 1 ph, 230V 1 ph, 230/460 V 3 ph. Blowers are based on 50% supply make-up.	1/4 HP 385 CFM @ 1/2" S.P. Loss	51901		
	1/4 HP 474 CFM @ 1/2" S.P. Loss		51902	
	1/4 HP 542 CFM @ 1/2" S.P. Loss			51903
	1/4 HP 800 CFM @ 1/2" S.P. Loss			51904

UNIFLOW AUXILIARY AIR FUME HOODS

FUME HOOD SIZES				
A	48"	60"	72"	96"
B	38"	50"	61"	85"
C	24"	30"	36"	(2) x 24"
D	10"	10"	12"	(2) x 10"
E	3 x 12"	3 x 18"	3 x 24"	(2) 3 x 12"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN				
48"	60"	72"	96"	
773 CFM	938 CFM	1162 CFM	1613 CFM	
100 FPM WITH SASH 50% OPEN				
385 CFM	474 CFM	592 CFM	800 CFM	

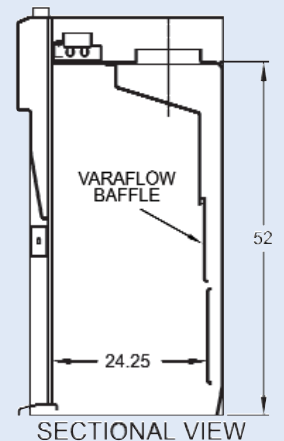
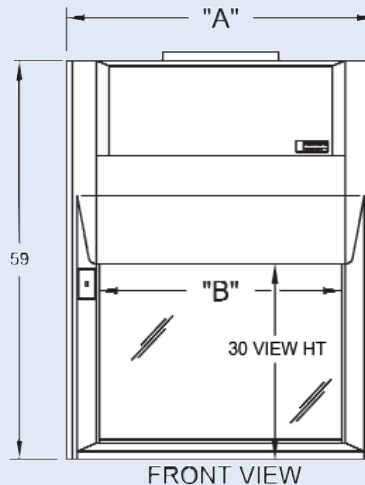
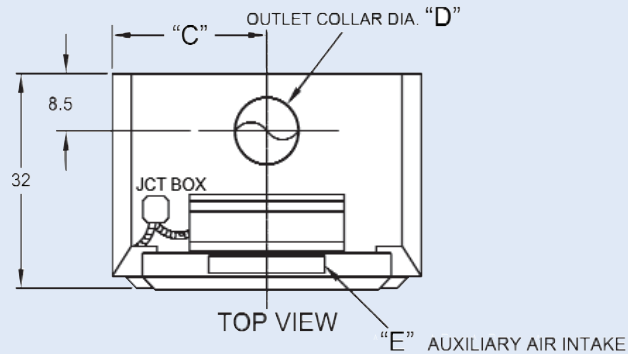
AIRFLOW MONITOR Cat. No. 51406

Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz



SAFETY SASH STOP Cat. No. 51651

Factory installed to specified designated height. Also available for field installation.



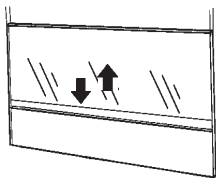
UniFlow LE Laboratory Fume Hoods (Series 35)

Full Duty Fume Hoods featuring Low Flow and Constant Volume Design for Budget Sensitive Projects.



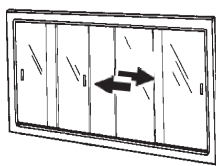
UniFlow LE Fume Hood #35411 shown with optional service fixtures, plumbing & electrical, airflow monitor, worksurface, base cabinet, and accessories. HEMCO recommends all fume hoods be equipped with an airflow monitor

SASH OPTIONS



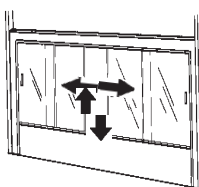
VERTICAL MOVING SASH

The standard sash for HEMCO fume hoods. The sash may be lifted to the completely open position for maximum access to the fume chamber. Sash stops available. See page 5.



HORIZONTAL MOVING SASH

The maximum sash opening for the horizontal sash is 1/2 to 2/3 that of the vertical sash. The opening is smaller, less air is exhausted resulting in energy savings. See page 5.



COMBINATION MOVING SASH

Offers the advantages of both sash types. Horizontal openings offer energy savings while vertical option allows full access to the fume chamber. See page 5.

The UniFlow LE Fume Hoods are low flow constant volume for high efficiency energy saving and maximum user protection. The aerodynamic face opening with airfoil provides uniform airflow into the fume chamber. Available in sizes 48", 60", 72" and 96" wide x 48" height x 32" depth.

The VaraFlow baffle system directs the airflow through the fume chamber to the exhaust outlet with minimum turbulence and maximum airflow efficiency.

UniFlow LE Model Hood Features

UniFlow Superstructure

Exclusive unitized composite construction for superior chemical resistance, strength, and durability.

Extended Viewing Height

Full 32" height allows unobstructed vision into fume chamber

Fume Chamber

Molded one piece with all corners covered. Surface is glass smooth for ease of cleaning and excellent light reflectivity.

Ergonomic Sash Lift

Contoured for efficient airflow and ease of movement

Aerodynamic Airfoil

Ergonomic aerodynamic design allows air to sweep across the worksurface and maintain uniform airflow.

VaraFlow Baffle System

Maintains uniform airflow through fume chamber.

Angled Picture Frame Opening

Efficient air entry into fume chamber.

COMPLETE YOUR FUME HOOD INSTALLATION

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Ventilation Systems

(Blowers, Filters and Scrubbers)
see pages 34-39

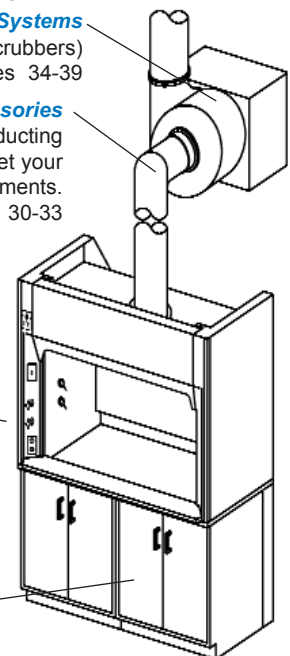
Ducting and Ducting Accessories

HEMCO offers a full line of ducting accessories to meet your specific requirements.
see pages 30-33

Airflow Monitors and Sash Stop
see page 11

Plumbing and Electrical Services
Factory installed according to your exact specifications
see pages 27-28

Base Cabinets and Worksurfaces
see pages 24-25



UNIFLOW LE Laboratory Fume Hoods (Series 35)

SPECIFICATIONS		FUME HOOD WIDTH			
		48"	60"	72"	96"
1. UniFlow LE Fume Hood with Vapor-Proof Light. Superstructure to be unitized corrosion and fire resistant, non-metallic composite fiberglass construction, one piece fume chamber liner to have white glass smooth molded-in finish and all covered corners. Adjustable VaraFlow baffle system and bell shaped exhaust collar. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing, track and aerodynamic sash lift. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz, AC. All electrical components UL listed. Remote exhaust blower see pages 34-35.					
		Cat. No. 35411	Cat. No. 35511	Cat. No. 35611	Cat. No. 35811
2. UniFlow LE By-Pass Fume Hood with Explosion-Proof Light. Same as #1 above except equipped with explosion-proof vapor-proof light fixture Class I, Group C & D, Class II Group E, F & G electrical fixture installed but not wired, must be wired to comply with local codes. 115 volt, 60Hz AC. For other explosion-proof electrical options see page 29 and explosion-proof exhaust blowers on pages 34-35. All electrical components UL Listed.					
		Cat. No. 35413	Cat. No. 35513	Cat. No. 35613	Cat. No. 35813
CONVENTIONAL SPECIFICATIONS					
3. UniFlow LE Conventional Fume Hood with Vapor-Proof Light. UniFlow Bypass Fume Hood with Explosion-Proof Light - Same as #1 above except equipped with explosion-proof, vapor-proof light fixture, Class I, Group C & D, Class II, Group E, F & G, 115 volt 60Hz AC, UL Listed. Installed but not wired, must be wired to comply with local codes. For explosion-proof electrical options see page 29. Explosion-proof exhaust blower see pages 34-35. Fire extinguisher see page 28.					
		Cat. No. 35401	Cat. No. 35501	Cat. No. 35601	Cat. No. 35801
4. UniFlow LE Conventional Fume Hood with Explosion-Proof Light. Same as #3 above except equipped with explosion-proof vapor-proof light fixture Class I, Group C & D, Class II Group E, F & G electrical fixture installed but not wired, must be wired to comply with local codes. 115 volt, 60Hz AC. For other explosion-proof electrical options see page 29 and explosion-proof exhaust blowers on pages 34-35. All electrical components UL Listed.					
		Cat. No. 35403	Cat. No. 35503	Cat. No. 35603	Cat. No. 35803
5. Horizontal Sliding Sash Option - Add suffix to catalog number.		35HS-4	35HS-5	35HS-6	35HS-8
6. Combination Sliding Sash Option - Add suffix to catalog number.		35CS-4	35CS-5	35CS-6	35CS-8

UNIFLOW LE LABORATORY FUME HOODS

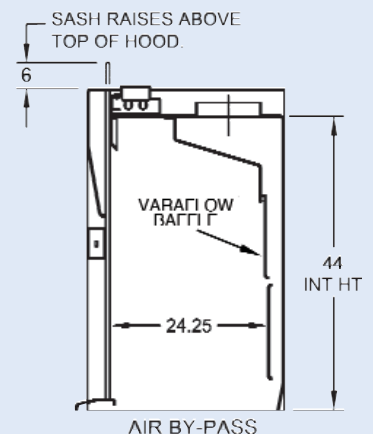
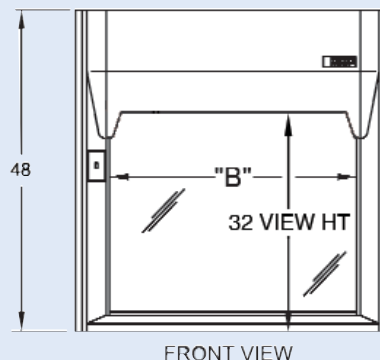
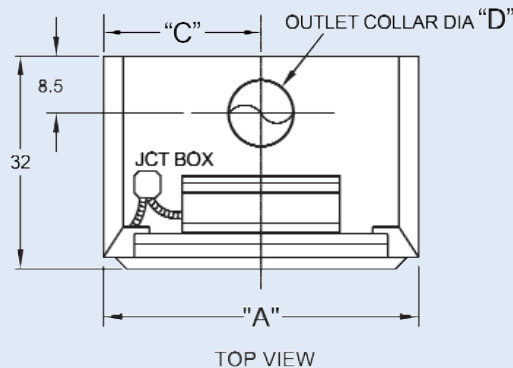
FUME HOOD SIZES				
A	48"	60"	72"	96"
B	38-3/4"	50-5/8"	61-3/4"	85-3/4"
C	24"	30"	36"	(2) 24"
D	10"	10"	12"	(2) 10"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN				
48"	60"	72"	96"	
773 CFM	938 CFM	1162 CFM	1613 CFM	
100 FPM WITH SASH 50% OPEN				
385 CFM	474 CFM	592 CFM	800 CFM	

AIRFLOW MONITOR Cat. No. 51406
Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz



SAFETY SASH STOP Cat. No. 51651
Factory installed to specified designated height. Also available for field installation.



UniFlow CE Laboratory Fume Hoods (Series 9)

Full Duty Fume Hoods in Space and Energy Saving Sizes of 30", 36" and 48" widths

These models are a low flow constant volume, LCV type fume hood that requires no VAV controls, no motorized baffles, no costly auxiliary air system and no special integral supply fans. These units can save 50% or more in costly exhaust volume typically

required to operate a conventional fume hood. The CE series accomplishes this superior containment performance through engineering and manufacturing features incorporated into the HEMCO line of UniFlow Laboratory Fume Hoods.

Compact Design Saves Space and Energy

UniFlow Superstructure

Exclusive unitized composite construction for superior chemical resistance, strength, and durability.

Fume Chamber

Molded one piece with all corners covered. Surface is glass smooth for ease of cleaning and excellent light reflectivity.

Vertical Moving Sash

Made of 3/16" tempered safety glass with chemical resistant PVC framing and track. Counter balanced for ease of movement.

Ergonomic Sash Lift

Contoured for efficient airflow and ease of movement

Service Fixtures

Color coded to specific service and mounted on right or left side. Electrical services also available.

Air Foil

Ergonomic aerodynamic design allows air to sweep across the worksurface and maintain uniform airflow.

Base Cabinet

Available in standard base, acid storage and base tables.

Access Panel

Easily removed for access to electrical, plumbing and control services.

AirFlow Monitor

Continuously monitors face velocity airflow of fume hood.

Extended Viewing Height

Full 26.5" height allows unobstructed vision into fume chamber.

VaraFlow Baffle System

Maintains uniform airflow through fume chamber.

Safety Sash Stop

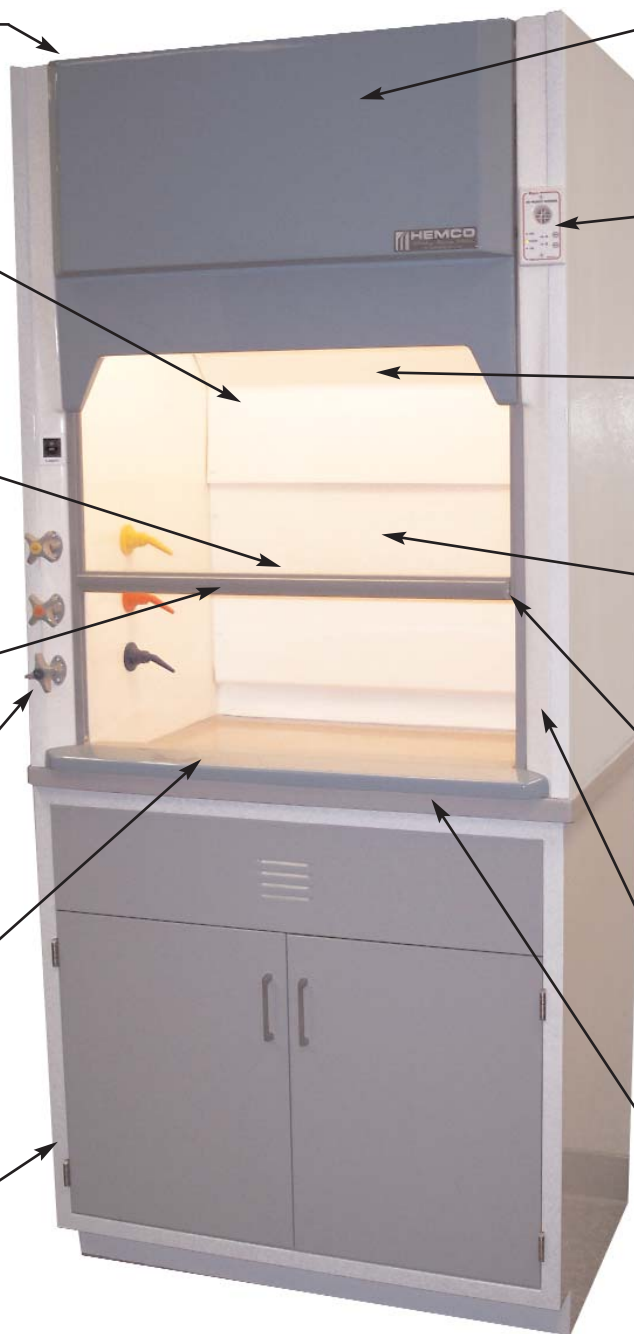
Limits sash opening to designed working height providing user protection and energy savings.

Angled Picture Frame Opening

Efficient air entry into fume chamber.

Worksurface

Chemical resistant composite construction 1.25" thick, work area is dished to contain spills.



Performance Tested to Ashrae 110-1995

UniFlow CE Model #14891 tested at 60 FPM & 100 FPM Face Velocity. Flow visualization (smoke test) small local challenge and large challenge were tested with "no escape". The SF-6 containment test

was conducted with the average parts per million of 0.001 PPM. The complete Ashrae 110-1995 test report is available. For a copy, please call HEMCO Customer Service 816-796-2900.

UniFlow CE Laboratory Fume Hoods (Series 9)

SPECIFICATIONS	FUME HOOD WIDTH		
	30"	36"	48"
1. UniFlow Compact Fume Hood with Vapor-Proof Light. Superstructure to be unitized corrosion and fire resistant, non-metallic composite fiberglass construction, one piece fume chamber liner to have white glass smooth molded-in finish and all covered corners. Adjustable VaraFlow baffle system and bell shaped exhaust collar. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing, track and aerodynamic sash lift. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz, AC. All electrical components UL listed. Remote exhaust blower see pages 34-35.	Cat. No. 13091	Cat. No. 13691	Cat. No. 14891
2. UniFlow Compact Fume Hood with Vapor-Proof Light and Built-in Exhaust Blower. Same as #1 above except equipped with built-in corrosion resistant, vertical discharge, direct drive exhaust motor/blower, 115 volt, 60Hz, AC with control switches prewired to single point junction box. All electrical components UL listed. Maximum duct run of 20'. Ducting options see pages 32-33.	Cat. No. 13092	Cat. No. 13692	Cat. No. 14892
3. UniFlow Compact Fume Hood with Explosion-Proof Light. Same as #1 above except equipped with explosion-proof, vapor-proof light fixture, Class I, Group C & D, Class II, Group E, F & G, 115 volt 60Hz AC, UL Listed. Installed but not wired, must be wired to comply with local codes. For explosion-proof electrical options see page 29. Explosion-proof exhaust blower see pages 34-35. Fire extinguisher see page 28.	Cat. No. 13093	Cat. No. 13693	Cat. No. 14893
4. UniFlow Compact Fume Hood with Explosion-Proof Light and Built-in Explosion-Proof Exhaust Blower. Same as #3 above except equipped with built-in corrosion resistant, non sparking, explosion-proof motor/blower exhaust system, Class I, Group C & D, Class II, Group E, F & G, 115 volt, 60Hz, AC. Explosion-proof exhaust blower and light are installed but not wired, must be wired to comply with local codes. Maximum duct run of 20'. For explosion-proof options see page 29. Fire extinguisher see page 28.	Cat. No. 13094	Cat. No. 13694	Cat. No. 14894
5. Epoxy Resin Worksurface - flat 3/4" thick	13015	13615	14815
6. Composite Resin Worksurface - dished interior to contain spillage 1 1/4" thick	13017	13617	14817

A	30"	36"	48"
B	23.5"	28.5"	40.5"
C	7"	10"	16"
D	4"	6"	8"

30"	36"	48"
378 CFM	460 CFM	654 CFM
100 FPM WITH SASH 50% OPEN		
189 CFM	230 CFM	327 CFM

UNIFLOW CE FUME HOODS

UniFlow Clean Air / Fume Hoods

The UniFlow Clean Air / Hoods are available in 48", 60", 72" and 96" models incorporated with filtration systems to control exhaust emissions.



Access panel removed showing filter housing.

UniFlow Clean Air Hoods feature a factory installed filter housing that can be equipped with either HEPA and/or carbon filters to help meet environmental concerns and regulations according to the Clean Air Act. Contaminants are then filtered prior to exhausting to the outside, therefore reducing pollution and avoiding the risk of contaminants re-entering the building through the air supply system. Since the filter housing is located on the fume hood, monitoring and maintaining the filters is convenient. Carbon and HEPA filters are available to suit your specific particulate or gas/vapor removal requirements.

UniFlow Clean Air Hoods can function as a Class 1 ductless hood for selected contaminants and procedures. Specifically, non-hazardous low volume chemical fumes and noxious odors can be effectively absorbed by a carbon filters or particulate collected by a HEPA filter. The airflow can then be safely discharged back into the laboratory space.

Depending on the process and contaminants, the filtration system can be designed to incorporate a combination of carbon and HEPA modules.

Filters are ordered separately. Please refer to page 37 for chemical list/carbon reference chart for specifying your filter selection.

Filters and safety accessories are shown below.

UniFlow Clean Air I #17041 with optional service fixtures, plumbing & electrical, airflow monitor, worksurface, and base cabinet. HEMCO recommends all fume hoods be equipped with an airflow monitor

FILTER SELECTION

HEPA Filter

HEPA filters are 99.99% efficient in capturing particulate 0.3 microns or larger. NOTE: Consult factory for combined CARBON/HEPA filter arrangements. **Available only on hoods without blower.** Requires remote exhaust fan. Dimensions are 24"X24"X12"

Cat. No. 50095

Replacement Prefilter

30% pleated type. 24" x 24" x 2"

Cat. No. 52001



Minihelic Gauge

Continuously monitors fume hood performance based on static pressure loss.

Can be recess mounted into fume hood column. Gauge features an easy-to-read dial ranging from 0-.20 with minor deviation of .1. Caution: Use with air of compatible non-corrosive gases only.

Cat. No. 51300

Carbon Filter

Carbon filter absorbs a wide variety of organic vapors, odors, gases and solvents. Different activated or impregnated carbon types are available to control specific contaminants. For acid applications, add suffix 01, for solvents add suffix 02 to catalog number, i.e. 17000-01. Consult factory for other contaminant applications. Overall dimensions are 24"X24"X12". See chart on page 37.

Cat. No. 17000



Gas Monitor

Detects and warns of carbon filter saturation and high concentrations of dangerous gases such as chlorinated solvents, ammonia, ethylene oxide, etc. Unit has visual and audio alarm and is factory calibrated to specific gas. 115 volt and power cord. Specify gas and alarm level with order.

Cat. No. 51400

COMPLETE YOUR FUME HOOD INSTALLATION

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Ventilation Systems
(Blowers, Filters and Scrubbers)
see pages 34-39

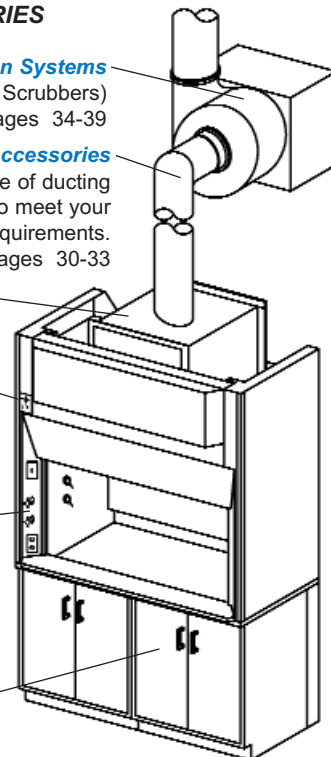
Ducting and Ducting Accessories
HEMCO offers a full line of ducting accessories to meet your specific requirements.
see pages 30-33

Integral Filter Housing
see page 15

Airflow Monitors and Sash Stop
see page 15

Plumbing and Electrical Services
Factory installed according to your exact specifications
see pages 27-28

Base Cabinets and Worksurfaces
see pages 24-25



UNIFLOW Clean Air / Fume Hoods

SPECIFICATIONS	FUME HOOD WIDTH			
	48"	60"	72"	96"
<p>1. Uniflow Clean Air / Fume Hood without Blower Molded, one piece, seamless liner with coved corners for ease of cleaning. The superstructure is manufactured from fire retardant, chemical resistant advanced composite materials. Filter housing is factory installed. Conveniently located behind the removable front panel, filters can be easily accessed and changed. Vertical moving viewing sash is constructed of clear tempered safety glass with frame and track fabricated of chemical resistant PVC. Hood is equipped with VaraFlow baffle to efficiently direct air through fume chamber, baffle is easily removed for cleaning. Vapor-proof light fixture pre-wired to single point junction box. All electrical components UL listed, 115volt, 60 Hz. Hood is shipped completely assembled. Requires a remotely located exhaust blower Pages 34-35. This fume hood system is designed for exhaust only. Filters not included - see filter selection page 14.</p>	Cat. No. 17041	Cat. No. 17051	Cat. No. 17061	Cat. No. 17081
<p>2. Uniflow Clean Air / Fume Hood with Built-In Exhaust Blower Same as above, except equipped with built-in blower and column mounted control switch. Blower motor to be 115 volt, 60 Hz. Other blower sizes available upon request. Blower and switch are U.L. listed and pre-wired to junction box. This fume hood system is designed for recirculation of non-hazardous fumes only. Consult Factory. Filters not included - see filter selection page 14.</p>	Cat. No. 17042	Cat. No. 17052	Cat. No. 17062	Cat. No. 17082
<p>3. Horizontal Sliding Sash Option - Add suffix to catalog number.</p>	HS-4	HS-5	HS-6	HS-8

UNIFLOW CLEAN AIR / FUME HOODS

FUME HOOD SIZES				
A	48"	60"	72"	96"
B	38"	50"	61"	85"
C	24"	30"	36"	NA
D	10"	10"	12"	(2) 10"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN				
48"	60"	72"	96"	
773 CFM	938 CFM	1162 CFM	1613 CFM	
100 FPM WITH SASH 50% OPEN				
385 CFM	474 CFM	592 CFM	800 CFM	

AIRFLOW MONITOR

Cat. No. 51406

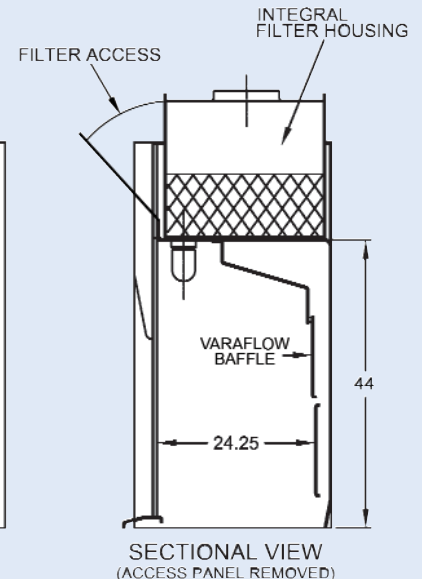
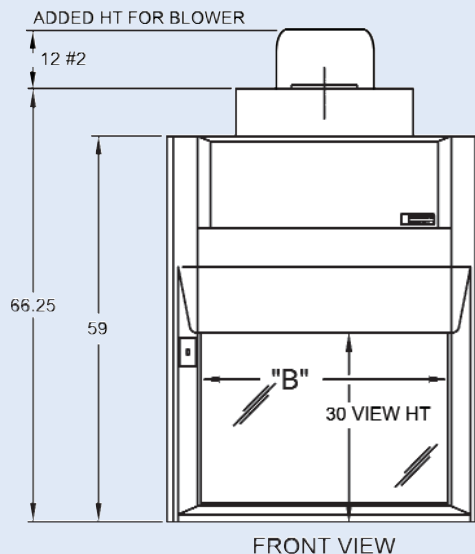
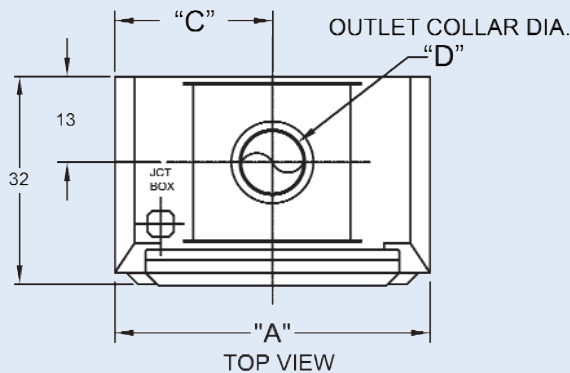
Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz



SAFETY SASH STOP

Cat. No. 51651

Factory installed to specified designated height. Also available for field installation.



UniFlow Perchloric Acid Laboratory Fume Hoods

Perchloric Acid and Acid Digestion Hoods feature a stainless steel or PVC liner and a convenient washdown system for the safe handling of acids.



UniFlow Perchloric Acid Fume Hood #12601 with optional service fixtures, plumbing & electrical, and base cabinet. HEMCO recommends all fume hoods be equipped with an airflow monitor

UniFlow Perchloric Acid Bypass Design Features:

- Superstructure acid resistant composite construction with type 316 stainless steel fume chamber and baffle or PVC fume chamber and baffle.
- Dedicated wash down with integral piping, spray nozzles and remote control on right column.
- Aerodynamic face with ergonomic airfoil for superior airflow and user safety.
- Pre-wired 2 tube fluorescent light with switch, blower switch 115 volt, 60Hz, pre-wired to external junction box.

UniFlow Perchloric Acid Laboratory Hoods

UniFlow Stainless Steel Perchloric Acid Bypass Hoods are designed specifically for Perchloric Acid use. Features seamless type 316 stainless steel fume chamber and baffle with 24" interior depth to baffle. Integral stainless steel reinforced work surface and drainage trough. Dedicated wash down and exhaust system is recommended to thoroughly wash down fume chamber and exhaust system after each use.

UniFlow PVC Acid Digestion & Perchloric Acid Laboratory Fume Hoods

UniFlow PVC Perchloric Acid Bypass and Acid Digestion Hoods feature fume chamber and baffle constructed of type 1 PVC liner with 24" interior depth. Integral reinforced PVC work surface and drainage trough. Dedicated wash down and exhaust system recommended to thoroughly wash down fume chamber and exhaust system after each use. When using hydrofluoric acid, specify polycarbonate sash.

PERCHLORIC ACID FUME HOOD INSTALLATION

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Ducting & Wash Down Systems

by others.

Perchloric Acid Exhaust Blowers

see page 17

Airflow Monitors
and Sash Stop

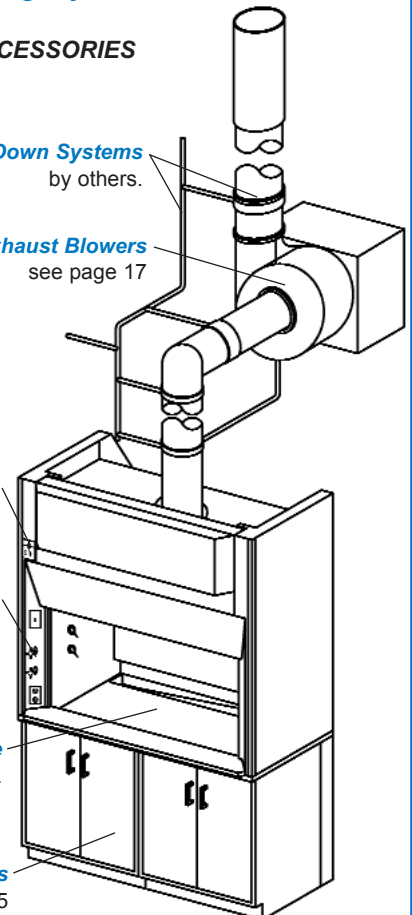
see page 17

Plumbing and
Electrical Services

Factory installed
according to your
exact specifications
see pages 27-28

Integral worksurface
T-316 Stainless Steel.

Base Cabinets
see pages 24-25



UNIFLOW Perchloric Acid Fume Hoods

STAINLESS STEEL PERCHLORIC ACID HOOD SPECIFICATIONS		FUME HOOD WIDTH		
1. Uniflow Stainless Steel Perchloric Acid Laboratory Fume Hoods Seamless type 316 stainless steel fume chamber with integral work surface and drainage trough, all covered corners with baffle and exhaust collar. Hood has built-in wash down system with spray nozzles and piping to front mounted control valve. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing and track and aerodynamic sash lift. Vapor-proof light fixture and switch prepwired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed	48"	60"	72"	
	Cat. No. 12401	Cat. No. 12501	Cat. No. 12601	
PVC PERCHLORIC ACID / ACID DIGESTION HOOD SPECIFICATIONS				
2. Uniflow PVC Perchloric Acid Laboratory Fume Hoods Seamless PVC fume chamber with integral work surface and drainage trough, all covered corners with baffle and exhaust collar. Hood has built-in wash down system with spray nozzles and piping to front mounted control valve. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing and track and aerodynamic sash lift. Vapor-proof light fixture and switch prepwired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed	Cat. No. 13401	Cat. No. 13501	Cat. No. 13601	
3. Uniflow PVC Acid Digestion Laboratory Fume Hoods Same as #2 above, except with polycarbonate sash for use with hydrofluoric acid.	Cat. No. 13411	Cat. No. 13511	Cat. No. 13611	
PERCHLORIC ACID EXHAUST BLOWERS				
4. Blowers are constructed of halar-coated steel, are belt driven, include TEFC motors and feature a spray wash nozzle and drain in the blower housing. The specifications to the right are based on 100 FPM face velocity.	1/2 HP Blower - 800 CFM @ 1" SP (for 48" hoods)		Cat. No. 51395	
	1/2 HP Blower - 1000 @ 1" SP (for 60" hoods)			Cat. No. 51396
	3/4 HP Blower - 1200 CFM @ 1" SP (for 72" hoods)			Cat. No. 51397
5. Optional Stainless Steel Stack Outlet with Wash Down Nozzles			Cat. No. 51398	Cat. No. 51398
			Cat. No. 51399	Cat. No. 51399

UNIFLOW PERCHLORIC ACID FUME HOODS

FUME HOOD SIZES

A	48"	60"	72"
B	37-3/4"	49-5/8"	60-3/4"
C	24"	30"	36"
D	10"	10"	12"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN		
48"	60"	72"
773 CFM	938 CFM	1162 CFM
100 FPM WITH SASH 50% OPEN		
385 CFM	474 CFM	592 CFM

<p style="margin: 0;">AIRFLOW MONITOR Cat. No. 51406</p> <p style="margin: 0; font-size: small;">Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz</p>	
<p style="margin: 0;">SAFETY SASH STOP Cat. No. 51651</p> <p style="margin: 0; font-size: small;">Factory installed to specified designated height. Also available for field installation.</p>	

UniFlow Radioisotope Fume Hoods

The UniFlow Radioisotope Fume Hood is available in 48", 60" and 72" widths. Constructed of welded Type 304 stainless steel to prevent absorption of radioactive and corrosive materials.



UniFlow Radioisotope Fume Hood #14401 with optional service fixtures, plumbing & electrical, airflow monitor, worksurface, and base cabinet. HEMCO recommends all fume hoods be equipped with an airflow monitor

RADIOISOTOPE EXHAUST BLOWERS & FILTERS



Radioisotope Exhaust Blowers

HEMCO offers specialty exhaust blowers to safely and efficiently vent radioisotope fume hoods. Blowers are sized based on the hood and length of ducting. Selected exhaust blowers are shown on page 19.



Radioisotope Filters

HEMCO engineers Bag-In/Bag-Out Filtration systems to meet specific exhaust requirements. Carbon filters are used to absorb fumes and HEPA filters are used to collect particulate. Bag-In/Bag-Out Filters are shown on page 19.

Stainless Steel Prevents Radioactive Absorption

Interior is constructed of Type 304 Stainless Steel to prevent absorption of radioactive and corrosive materials.

Seamless Interior Easily Decontaminated

One piece interior and integral work surface have welded, seamless construction with covered corners which prevents chemical build-up and provides easy decontamination. Stainless steel baffle is removable for easy cleaning.

Work Surface Features Reinforced Construction

Work surface is welded integral to the fume chamber. Surface is reinforced to support heavy isotope shielding materials.

COMPLETE YOUR FUME HOOD INSTALLATION

Designed to provide a complete solution to radioisotope fume hood requirements. A complete system can include bag-in, bag-out HEPA or carbon filters, ductwork, and exhaust blowers, work together to provide a safe, efficient radioisotope fume hood system

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

Ducting and Ventilation Systems

Stainless steel recommended by others.

Radioisotope Exhaust Blowers and Filters

see pages 18-19

Airflow Monitors and Sash Stop

see page 19

Plumbing and Electrical Services

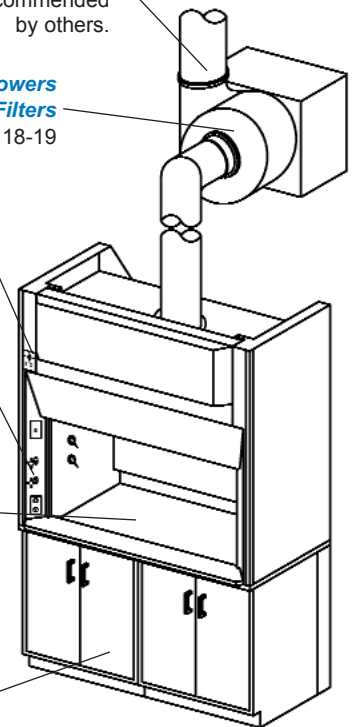
Factory installed according to your exact specifications see pages 27-28

Integral Stainless Steel Dished Worksurface

with 6"x3" oval cupsink. reinforced to support isotope containers.

Base Cabinets

see pages 24-25



UNIFLOW Radioisotope Fume Hoods

SPECIFICATIONS		FUME HOOD WIDTH		
		48"	60"	72"
1. Uniflow Radioisotope Fume Hood with Stainless Steel Interior Liner. Seamless type 304 stainless steel fume chamber with integral work surface all covered corners with baffle and exhaust collar. Picture frame sash opening with counter balanced clear tempered safety glass sash with chemical resistant PVC framing and track and aerodynamic sash lift. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed. Optional service fixtures are shown on page 27. Optional electrical services are shown on page 29.		Cat. No. 14401	Cat. No. 14501	Cat. No. 14601
RADIOISOTOPE EXHAUST BLOWERS & FILTERS				
2. Radioisotope Exhaust Blowers V-belt drive coated steel blower with adjustable sheaves, thermal overload protection, and weather cover. The specifications at right are based on 100 fpm face velocity.	1/2 HP Blower - 800 CFM @ 1" SP (for 48" hoods)	Cat. No. 51715		
	1/2 HP Blower - 938 CFM @ 1" SP (for 60" hoods)		Cat. No. 51721	
	1/2 HP Blower -1175 CFM @ 1" SP (for 72" hoods)			Cat. No. 51724
3. Hepa Filter Bag-In/Bag-Out Filter is contained within a type 304 stainless steel housing with Bag-in/Bag-out attachment and prefilter. HEPA is 99.99% efficient and the prefilter is 30% efficient. Filter is rated at 1000 cfm. One filter required for 48" and 60" hoods; 2 filters required for 72" hoods. See page 37 for more information.		Cat. No. 51189	Cat. No. 51189	Cat. No. 51189
4. Carbon Filter Bag-In/Bag-Out Filter is contained within a type 304 stainless steel housing with bag in, bag out attachment and prefilter. Advise factory of specific contaminant and volume so proper carbon can be supplied. Filter rated at 1000 CFM. One filter required for 48" and 60" hoods; 2 filters required for 72" hoods. See page 36 for more information.		Cat. No. 51198	Cat. No. 51198	Cat. No. 51198

UNIFLOW RADIOISOTOPE FUME HOODS

FUME HOOD SIZES			
A	48"	60"	72"
B	38"	50"	61"
C	24"	30"	36"
D	10"	10"	12"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN		
48"	60"	72"
773 CFM	938 CFM	1162 CFM
100 FPM WITH SASH 50% OPEN		
385 CFM	474 CFM	592 CFM

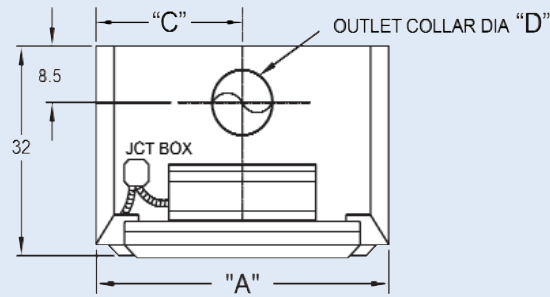
AIRFLOW MONITOR Cat. No. 51406

Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz

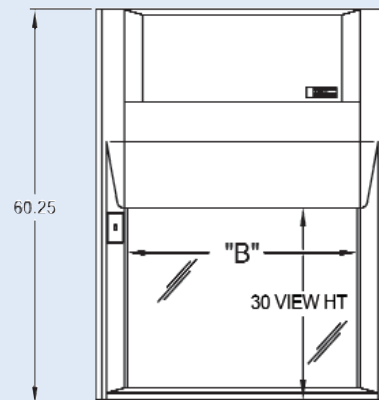


SAFETY SASH STOP Cat. No. 51651

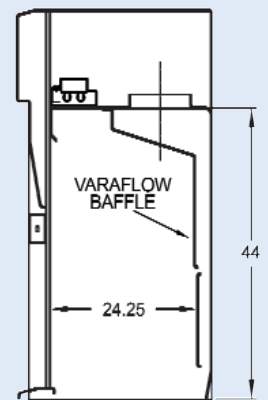
Factory installed to specified designated height. Also available for field installation.



TOP VIEW



FRONT VIEW



SECTIONAL VIEW

UniFlow Dual Entry Fume Hoods

Dual Entry Air By-Pass Hoods are ideal for demonstrations or applications where observation and access is required from both sides of the fume hood.



UniFlow Dual Entry Fume Hood #12270 with optional electrical, worksurface, base cabinet and vertical-moving sash. HEMCO recommends all fume hoods be equipped with an airflow monitor

Designed for a Variety of Applications

Dual Entry Fume Hoods are available in 48", 60", 72" and 96" wide models in either 30" or 48" depths. They can be positioned on an island or peninsular locations. Dual Entry hoods can also be located on a common wall of two rooms with accessibility from either room.

Ideal for Group Observation

The unique design of the UniFlow Dual Entry Hood with safety glass sashes front and back allows groups of observers a clear view as well as easy access to procedures.

Convenient plumbing and electrical locations are available on both sides of the fume hood while providing safe containment for laboratory processes.

COMPLETE YOUR FUME HOOD INSTALLATION

Designed to offer the complete solution to laboratory ventilation concerns. Integrated components, including fume hoods, filters, blowers, ducting, electrical services, plumbing options and base cabinets work together to provide a safe, efficient fume hood system.

Refer to HEMCO's PLAN-A-HOOD on page 26 to assist in the planning of your UNIFLOW Fume Hoods.

OPTIONAL ACCESSORIES

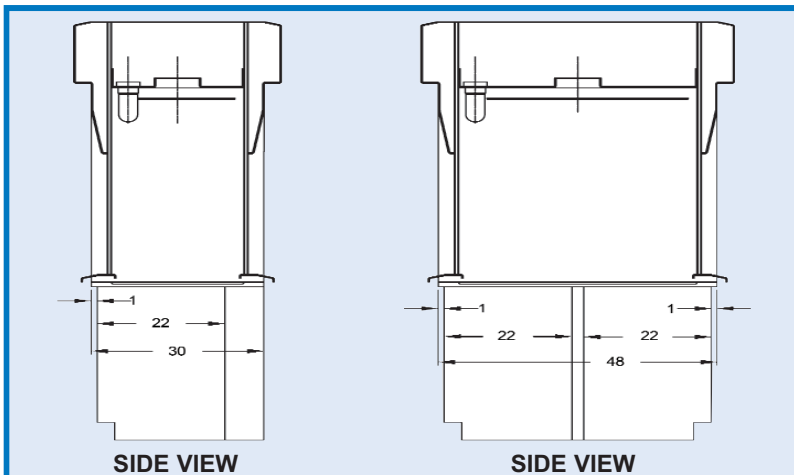
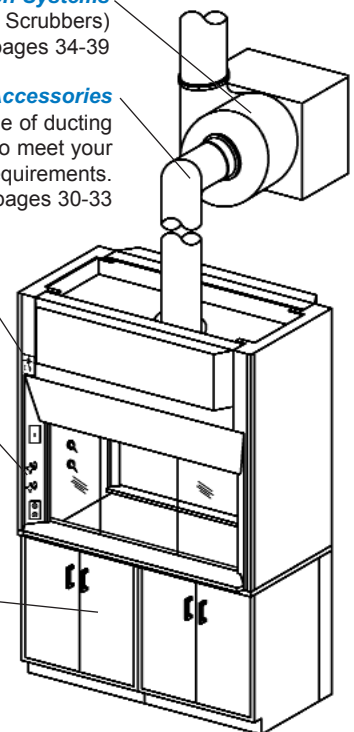
Ventilation Systems
(Blowers, Filters, Scrubbers)
see pages 34-39

Ducting and Ducting Accessories
HEMCO offers a full line of ducting accessories to meet your specific requirements.
see pages 30-33

Airflow Monitors and Sash Stop
see page 21

Plumbing and Electrical Services
Factory installed according to your exact specifications
see pages 27-28.

Base Cabinets
see pages 20-21



Base Cabinet 30" Deep

Base Cabinet 48" Deep

Dual Entry Fume Hoods are available with optional worksurface and support cabinets. The 30" deep model would require a standard cabinet with a finished rear panel assembly. The 48" deep model would require two cabinets back-to-back, allowing cabinet access from both sides. See page 21.

UNIFLOW Dual Entry Fume Hoods

SPECIFICATIONS		FUME HOOD WIDTH			
1. Dual Entry Bypass Hood 30" Depth. Superstructure to be modular composite chemical resistant FRP non-metal construction. Interior fume chamber to be glass smooth with bell shaped exhaust collar. Picture frame sash opening in front with (4) horizontal moving sashes constructed of clear tempered safety glass with chemical resistant PVC framing, track. Can be shipped knocked down for onsite erection. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed.		48"	60"	72"	96"
		Cat. No. 12140	Cat. No. 12150	Cat. No. 12160	Cat. No. 12180
2. Dual Entry Bypass Hood 48" Depth. Superstructure to be modular composite chemical resistant FRP non-metal construction. Interior fume chamber to be glass smooth with bell shaped exhaust collar. Picture frame sash opening in front with (4) horizontal moving sashes constructed of clear tempered safety glass with chemical resistant PVC framing and track. Can be shipped knocked down for onsite erection. Vapor-proof light fixture, switch prewired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed. Same as #1 above except with (2) vapor-proof light fixtures and overall depth is 48"		Cat. No. 12240	Cat. No. 12250	Cat. No. 12260	Cat. No. 12280
3. Vertical Moving Sash Option - Add suffix to catalog number.		VS-4	VS-5	VS-6	VS-8
WORKSURFACES - Sized to fit Dual Entry Hoods					
4. Epoxy Resin work surface: ideal for high concentrations of solvents, acids and alkalis. Excellent scratch and wear resistance. Dished to contain spillage. 1 1/4" thick, color – black.	30" deep worksurface	Cat. No. 20435	Cat. No. 20535	Cat. No. 20635	Cat. No. 20835
	48" deep worksurface	20445	20545	20645	20845
BASE CABINETS					
5. Base Cabinet Assembly: consists of cabinets and filler panels of top grade welded furniture steel. Cabinets include two hinged doors. See diagram page 20.	30" deep - cabinet access from one side only	Cat. No. 50430	Cat. No. 50530	Cat. No. 50630	Cat. No. 50830
	48" deep - cabinet access from both sides	50448	50548	50648	50848

UNIFLOW DUAL ENTRY FUME HOODS

FUME HOOD SIZES								
A	48"	60"	72"	96"				
B	37-3/4"	49-5/8"	60-3/4"	84-3/4"				
C	24"	30"	36"	42"				
D	10"	10"	12"	(2)10"				
E	30"	48"	30"	48"	30"	48"	30"	48"
F	24"	42"	24"	42"	24"	42"	24"	42"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH 2 SASHES OPEN ON ONE SIDE			
48"	60"	72"	96"
385 CFM	474 CFM	592 CFM	807 CFM

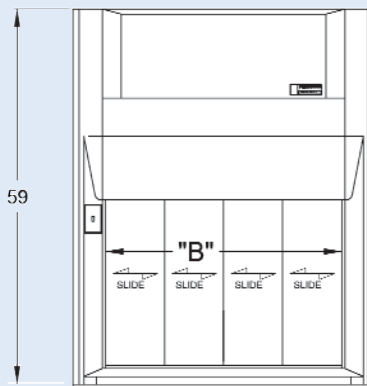
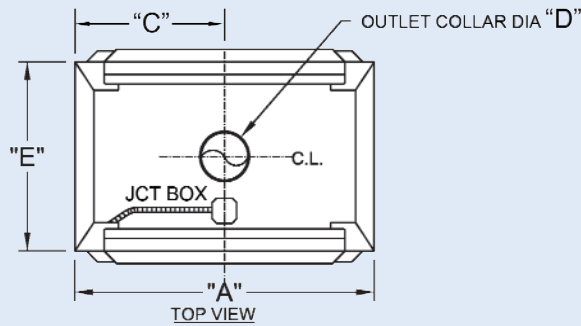
AIRFLOW MONITOR Cat. No. 51406

Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz

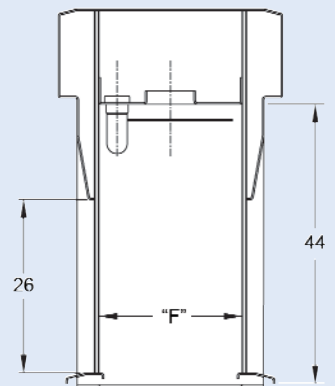


SAFETY SASH STOP Cat. No. 51651

Factory installed to specified designated height. Also available for field installation.



FRONT OR REAR VIEW



SECTIONAL VIEW

UniFlow FM Floor Mounted Fume Hoods

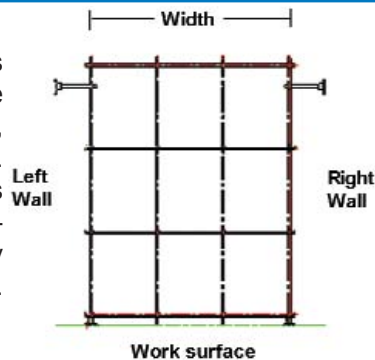
The Air By-Pass Walk-In Hood is ideally suited for synthesis, distillation and other rack type operations where tall apparatus is used or equipment is rolled into the work area.



UniFlow FM (Walk-In) Fume Hood #11050 shown with optional service fixtures, plumbing & electrical, airflow monitor, and distillation apparatus grid. Note: Optional work surface and ramp are available. HEMCO recommends all fume hoods be equipped with an airflow monitor

Distillation Apparatus Grid

Offered in aluminum, stainless steel, and non-metallic composite plastic. Three sizes for 48", 60", 72" and 96" wide Fume Hoods. Heights are 35". Includes rods and all connectors. Can be doubled-up for larger hoods. Factory installed when ordered with hood. Also, may be field installed.



Hood Width and Catalog Number				
Hood Width	48" Hood	60" Hood	72" Hood	96" Hood
Grid Width for Hood Width	35" Width	46" Width	56" Width	81" Width
1. Aluminum Rod Assy	50141	50151	50161	50181
2. Stainless Steel Assy	50142	50152	50162	50182
3. Plastic/FG Rod Assy	50143	50153	50163	50183

Designed For Large Scale Lab Experiments

In sizes 48", 60", 72" & 96" widths and depths of 30", 36" & 48". The UniFlow Walk-In Hood accommodates laboratory procedures requiring an increased height work area for floor height equipment such as distillation and other rack type operations where tall apparatus is used or when equipment must be rolled into the work area.

Standard or special sizes are available to meet various applications. Walk-in hoods can be shipped fully assembled or knocked-down for onsite installation.

Advanced Composite Liner

Advanced composite materials reflect light while minimizing glare, reducing eye strain and allowing greater productivity for laboratory personnel. The liner has a smooth, non-porous surface that ensures efficient air flow, resists chemical discoloration, allows for easy cleaning and reduces contaminant buildup.

COMPLETE YOUR FUME HOOD INSTALLATION

Designed to offer the complete solution to laboratory ventilation concerns. Integrated components, work together to provide a safe, efficient fume hood system.

OPTIONAL ACCESSORIES

Ventilation Systems
(Blowers, Filters, Scrubbers)
see pages 34-39

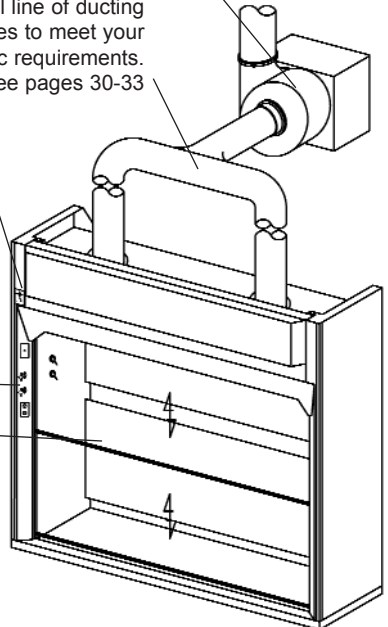
Ducting and Ducting Accessories
HEMCO offers a full line of ducting accessories to meet your specific requirements.
see pages 30-33

Airflow Monitors and Sash Stop
see page 23

Plumbing and Electrical Services
Factory installed according to your exact specifications
see pages 27-28.

Standard Sash
upper vertical raising sash with (2) lower hinged doors. Optional sash arrangement: upper and lower vertical raising sashes.

Optional: integral phenolic resin work surface.



UNIFLOW FM Floor Mounted Fume Hoods

SPECIFICATIONS		FUME HOOD WIDTH			
1. Uniflow Walk-in Bypass Fume Hood with Vapor-Proof Light. Superstructure to be modular composite chemical resistant FRP non-metallic construction. Interior fume chamber to be glass smooth with adjustable VaraFlow baffle system and bell shaped exhaust collar. Picture frame upper and lower sash opening with counter balanced upper and lower sashes of clear tempered safety glass with chemical resistant PVC framing, track and aerodynamic sash lift. Can be shipped knocked down for onsite erection. Vapor-proof light fixture and switch prewired to single point junction box, 115 volt, 60Hz AC, All electrical components UL Listed.	HOOD DEPTH E	48"	60"	72"	96"
	30"	Cat. No. 11048	Cat. No. 11050	Cat. No. 11060	Cat. No. 11070
	36"	Cat. No. 11042	Cat. No. 11052	Cat. No. 11062	Cat. No. 11072
	48"	Cat. No. 11043	Cat. No. 11053	Cat. No. 11063	Cat. No. 11073
2. Uniflow Walk-In Bypass Fume Hood with Explosion-Proof Light. Same as #1 above except equipped with explosion-proof vapor-proof light fixture Class I, Group C & D, Class II Group E, F & G electrical fixture installed but not wired, must be wired to comply with local codes. 115 volt, 60Hz AC. For other explosion-proof electrical options see page 29 and explosion-proof exhaust blowers on pages 34-35. All electrical components UL Listed.	30"	Cat. No. 11041	Cat. No. 11051	Cat. No. 11061	Cat. No. 11071
	36"	Cat. No. 11044	Cat. No. 11054	Cat. No. 11064	Cat. No. 11074
	48"	Cat. No. 11045	Cat. No. 11055	Cat. No. 11065	Cat. No. 11075
	3. Phenolic Resin Worksurface Phenolic resin work surfaces are recommended for general laboratory work where high concentrations of solvent, acids and alkalis are being worked with. Work surface combines excellent chemical resistance with superior scratch and wear resistance. Surface is dished to contain spillage. Color: black	30"	Cat. No. 20418	Cat. No. 20518	Cat. No. 20618
36"		Cat. No. 21418	Cat. No. 21518	Cat. No. 21618	Cat. No. 21818
48"		Cat. No. 22418	Cat. No. 22518	Cat. No. 22618	Cat. No. 22818
4. Horizontal Sliding Sash - for 72" & 96" hoods only		FMHS-6 FMHS-8			

UNIFLOW FM FLOOR MOUNTED FUME HOODS

FUME HOOD SIZES				
A	48"	60"	72"	96"
B	38"	50"	61"	85"
C	24"	30"	36"	(2) 24"
D	10"	10"	12"	(2) 10"
E	30" 36" 48"	30" 36" 48"	30" 36" 48"	30" 36" 48"
F	24" 30" 42"	24" 30" 42"	24" 30" 42"	24" 30" 42"

EXHAUST AIR VOLUME REQUIRED FOR 100 FPM WITH SASH FULLY OPEN			
48"	60"	72"	96"
773 CFM	938 CFM	1162 CFM	1613 CFM
100 FPM WITH SASH 50% OPEN			
385 CFM	474 CFM	592 CFM	800 CFM

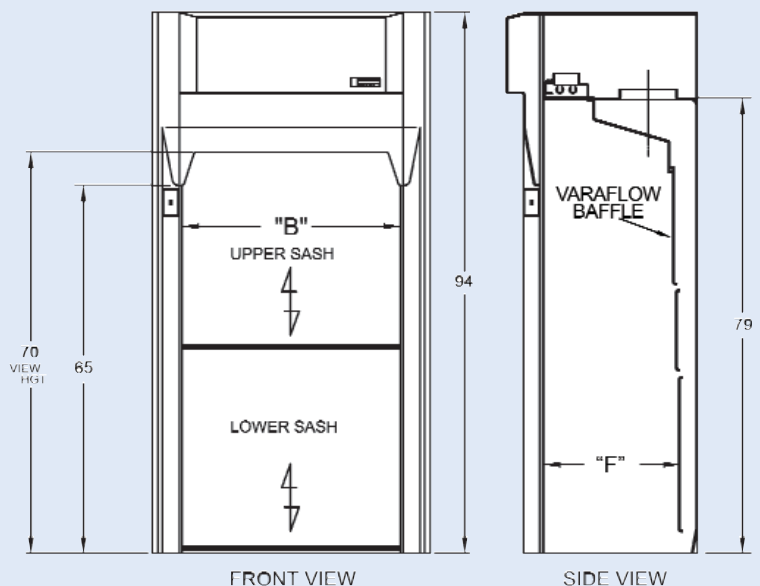
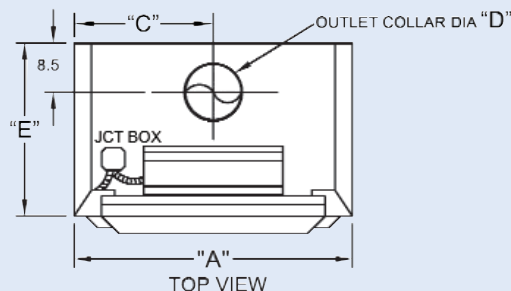
AIRFLOW MONITOR Cat. No. 51406

Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz



SAFETY SASH STOP Cat. No. 51651

Factory installed to specified designated height. Also available for field installation. Vertical moving upper sash available also.



UNIFLOW Fume Hood Work Surfaces & Base Cabinets

HEMCO offers a complete line of work surfaces and cabinets to suit any application from economical light duty to heavy acid solvent use. Select the work surfaces and cabinets to meet your laboratory requirements. Standard sizes are listed below. HEMCO's technical staff will gladly make recommendations to suit your specific needs.

FUME HOOD WORK SURFACES



EPOXY RESIN WORK SURFACES

Epoxy Resin Work Surfaces are recommended for general laboratory work where greater chemical resistance is required. Work surface is cast of thermosetting epoxy resin, creating a molded solid 1 1/4" thick top which is extremely hard and abrasion and heat resistant. Surface is dished 3/8" to contain spillage. Color: black.

Size	Cat. No.
48"W X 30"D	20415
60"W X 30"D	20515
72"W X 30"D	20615
96"W X 30"D	20815



COMPOSITE RESIN WORK SURFACES

Composite Resin fume hood work surfaces are recommended for general laboratory work where greater chemical resistance is required. Work surface is reinforced with advanced composite materials 1 1/4" thick, work area is dished 3/8" to contain spillage. Designed to fit HEMCO fume hoods. Color: gray.

Size	Cat. No.
48"W X 30"D	20413
60"W X 30"D	20513
72"W X 30"D	20613
96"W X 30"D	20813



PHENOLIC RESIN WORK SURFACES

Phenolic resin work surfaces are recommended for general laboratory work where high concentrations of solvent, acids and alkalis are being worked with. Work surface combines excellent chemical resistance with superior scratch and wear resistance. Surface is flat 1" thick. Colors: black, white and gray.

Size	Cat. No.
48"W X 30"D	20418
60"W X 30"D	20518
72"W X 30"D	20618
96"W X 30"D	20818



STAINLESS STEEL WORK SURFACES

Stainless steel work surface is fabricated of type 304, 16 gauge stainless steel with #4 satin finish. All corners, ends and joints are continuous heliarc welded and ground smooth. Thickness is 1 1/4". Surface is dished 3/8" to contain spillage.

Size	Cat. No.
48"W X 30"D	20416
60"W X 30"D	20516
72"W X 30"D	20616
96"W X 30"D	20816

FUME HOOD CABINETS AND BASE TABLE



BASE CABINETS

Base Cabinets are constructed of top grade furniture steel. Surface finish provides excellent resistance to moisture, abrasions, acids, bases and solvents. Cabinets are 22" deep and 35.25" high and have an adjustable shelf. Quick shipping on Silver Beige.

Width	Cat. No.
18" wide.....	51011
24" wide.....	50211
30" wide.....	53011
36" wide.....	50311
48" wide.....	50411
60" wide.....	50511



ACID STORAGE BASE CABINET

Constructed of top grade furniture steel with chemical resistant finish. Interior is lined with composite resin panels for superior corrosion resistance. Cabinet has an adjustable shelf and hinged doors. Cabinets are 22" deep and 35.25" high. Quick shipping on Silver Beige.

Width	Cat. No.
18" wide.....	15010
24" wide.....	15020
30" wide.....	15300
36" wide.....	15030
48" wide.....	15040
60" wide.....	15050
vent kit	81000



FLAMMABLE STORAGE CABINET

Flame resistant base cabinet provides safe storage of flammables. Constructed of welded, double wall furniture grade steel with chemical resistant finish. Cabinet has an adjustable shelf and locking hinge doors. Cabinets are 22" deep and 35.25" high. Quick shipping on Silver Beige.

Width	Cat. No.
18" wide.....	18010
24" wide.....	18020
30" wide.....	18300
36" wide.....	18030
48" wide.....	18040
vent kit	81000



BASE TABLE

Heavy duty base table. All welded 2" square tube steel construction with chemical resistant finish. Standard depth is 29" deep. Each leg has levelers with fitted black boots. Available in three heights. Color: Pearl White.

Catalog Numbers	
Width...18"H.....29"H.....35"H	
30".....	53018...53032...53012
36".....	53618...53632...53612
48".....	54818...54832...54812
60".....	56018...56032...56012
72".....	57218...57232...57212
96".....	59618...59632...59612

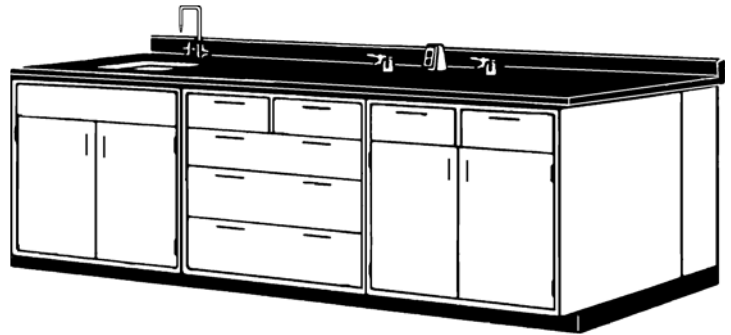
UNILINE Casework Groupings

Unitized design incorporates our most popular casework styles to meet your specific requirements. To compliment your fume hood setup, these groupings are available for quick delivery and easy installation. Standard construction is welded steel with chemical resistant finish.

ATLANTIS GROUPING

UNILINE Atlantis Grouping features (1) sink base cabinet, (1) 5 drawer cabinet and (1) combination two drawer, two door cabinet. Work surface is black phenolic, 1" thick x 30" deep with 4" backsplash. Assembly includes: (1) Hot/Cold gooseneck; (1) drop-in polypro sink, 16" x 16" x 8" with overflow and outlet; (2) keycocks (specify service); (1) duplex electrical pedestal outlet.

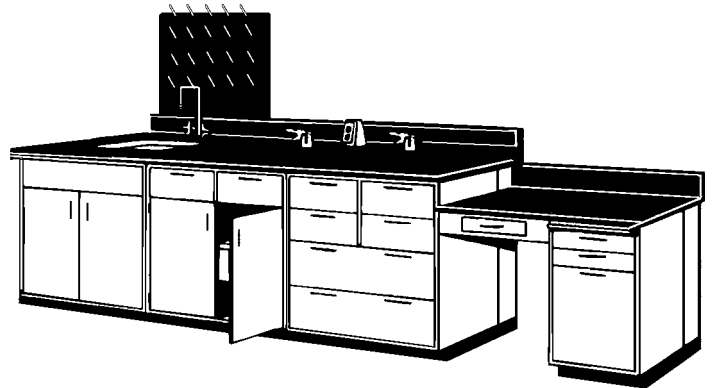
Length	Cat. No.
9' 0"	70001
10' 0"	70002
12' 0"	70003



DISCOVERY GROUPING

UNILINE Discovery Grouping features a stand up work area and sit down deck on end. Includes (1) sink cabinet; (1) combination two drawer, two door cabinet, (1) six drawer cabinet and the convenience of an end desk with organizational and file space. Worksurface is black phenolic, 1" thick x 30" deep with 4" backsplash. Assembly includes: (1) Hot/Cold gooseneck; (1) drop-in polypro sink 16" x 16" x 8" d with overflow and outlet; (1) resin pegboard, 24" x 30"; (2) keycocks (specify service) and; (1) duplex electrical pedestal outlet.

Length	Cat. No.
13' 6"	70101
14' 6"	70102
16' 6"	70103



ENTERPRISE GROUPING

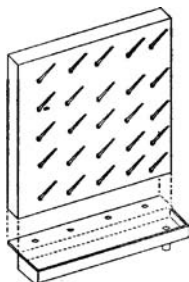
UNILINE Enterprise Grouping provides a versatile balance of storage and work space with (2) wall cabinets with sliding glass doors; (1) sink cabinet; (2) combination cabinets with 1 door and 4 drawers. Worksurface is black phenolic, 1" thick x 30" deep with 4" backsplash. Assembly includes: (1) Hot/Cold gooseneck, (1) drop-in polypro sink, 16" x 16" x 8" d; (1) resin pegboard, 24" x 30"; (2) keycocks (specify service); (2) duplex electrical pedestal outlets.

Length	Cat. No.
9' 0"	70201
10' 0"	70202
12' 0"	70203



GLASSWARE DRYING RACK

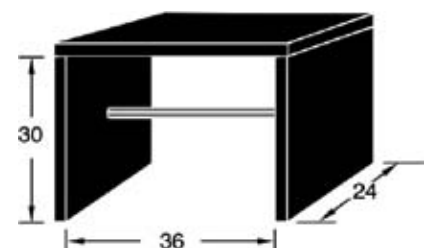
Drying racks are constructed of 1" thick epoxy resin for superior chemical, abrasion and heat resistance. White polypropylene pegs insert easily and provide additional support with a dual stud mounting system.



Optional drain trough constructed of stainless steel is available. See chart for sizes and model numbers

Epoxy Resin Drying Rack			Trough
No of Pegs	Size W x H	Cat. No.	Cat. No.
39	24 x 30	52430	72430
44	24 x 36	52436	72436
46	30 x 30	53030	73030
59	30 x 36	53036	73036
60	36 x 30	53630	73630

BALANCE TABLE



Constructed of 2 1/2" thick epoxy resin. Table ships knocked down and includes center support tube.
Cat. No. 59036



HEMCO

PLAN-A-HOOD

visit / www.hemcocorp.com / thanks

HEMCO CORPORATION
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INDEPENDENCE MO 64056

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Fax: (816) 796-3333

info@HEMCOcorp.com

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CUSTOMER _____
CONTACT PERSON _____
PHONE _____ FAX _____
E-MAIL _____

DATE _____ BY _____
FUME HOOD CAT. NO. _____
COLOR _____ QTY _____

<input checked="" type="checkbox"/>	SPECIAL PURPOSE HOOD
<input type="checkbox"/>	CONVENTIONAL/VAV
<input type="checkbox"/>	AUXILLIARY AIR
<input type="checkbox"/>	DISTILLATION
<input type="checkbox"/>	RADIOISOTOPE
<input type="checkbox"/>	PERCHLORIC ACID
<input type="checkbox"/>	DUAL ENTRY
<input type="checkbox"/>	ADA

<input checked="" type="checkbox"/>	AIR FLOW MONITOR	CAT. NO.
<input type="checkbox"/>	FLUSH MOUNTING	
<input type="checkbox"/>	SURFACE MOUNTING	
<input type="checkbox"/>	OTHER	

<input checked="" type="checkbox"/>	SASH	CAT. NO.
<input type="checkbox"/>	VERTICAL MOVING	
<input type="checkbox"/>	HORIZONTAL MOVING	
<input type="checkbox"/>	COMBINATION H&V	

<input checked="" type="checkbox"/>	SASH STOP	CAT. NO.
<input type="checkbox"/>	SPECIFY LOCATION	

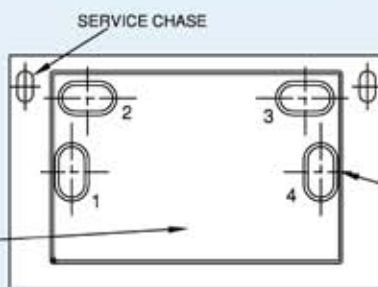
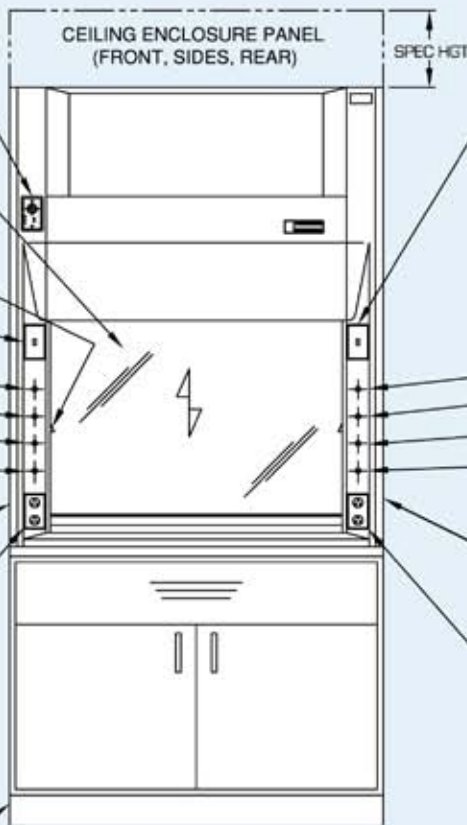
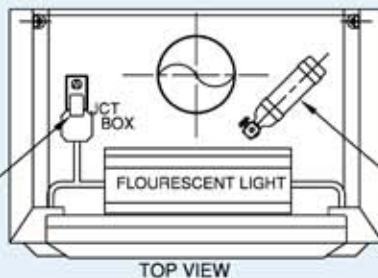
<input checked="" type="checkbox"/>	SERVICE FIXTURES	CAT. NO.
<input type="checkbox"/>	REMOTE CONTROLLED	
<input type="checkbox"/>	REMOTE CONTROLLED	
<input type="checkbox"/>	REMOTE CONTROLLED	
<input type="checkbox"/>	OTHER	
<input type="checkbox"/>	SPECIFY AIR,GAS,VAC,C/W OR OTHER	

<input checked="" type="checkbox"/>	ACCESS PANEL	
<input type="checkbox"/>	INSIDE LOCATION	
<input type="checkbox"/>	OUTSIDE LOCATION	

<input checked="" type="checkbox"/>	ELECT. SERVICE	CAT. NO.
<input type="checkbox"/>	DUPLEX RECEPT. 125V,15A	
<input type="checkbox"/>	DUPLEX RECEPT. 125V,20A	
<input type="checkbox"/>	SIMPLEX RECEPT. 250V	
<input type="checkbox"/>	DUPLEX RECEPT--GFI	
<input type="checkbox"/>	OTHER	

<input checked="" type="checkbox"/>	CABINETS	CAT. NO.
<input type="checkbox"/>	SINK CABINET	
<input type="checkbox"/>	BASE CABINET	
<input type="checkbox"/>	ACID CABINET	
<input type="checkbox"/>	FLAMMABLE CABINET	
<input type="checkbox"/>	BASE TABLE	
<input type="checkbox"/>	ADA	

<input checked="" type="checkbox"/>	SINK/LOCATION	CAT. NO.
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>	SPECIFY LOCATION	



<input checked="" type="checkbox"/>	SPECIAL CUSTOMER NOTES

<input checked="" type="checkbox"/>	FIRE EXTINGUISHER	CAT. NO.
<input type="checkbox"/>	2.7 LB DRY CHEMICAL	
<input type="checkbox"/>	5.4 LB DRY CHEMICAL	
<input type="checkbox"/>	OTHER	

<input checked="" type="checkbox"/>	BLOWER SWITCH	CAT. NO.
<input type="checkbox"/>	TOGGLE SWITCH 125V,15A	
<input type="checkbox"/>	TOGGLE SWITCH 125V,15A	
<input type="checkbox"/>	TOGGLE SWITCH 250V,20A	
<input type="checkbox"/>	TOGGLE SWITCH W/PILOT	
<input type="checkbox"/>	MOTOR STARTER SWITCH	
<input type="checkbox"/>	OTHER	

<input checked="" type="checkbox"/>	SERVICE FIXTURES	CAT. NO.
<input type="checkbox"/>	REMOTE CONTROLLED	
<input type="checkbox"/>	REMOTE CONTROLLED	
<input type="checkbox"/>	REMOTE CONTROLLED	
<input type="checkbox"/>	OTHER	
<input type="checkbox"/>	SPECIFY AIR,GAS,VAC,C/W OR OTHER	

<input checked="" type="checkbox"/>	ACCESS PANEL	
<input type="checkbox"/>	INSIDE LOCATION	
<input type="checkbox"/>	OUTSIDE LOCATION	

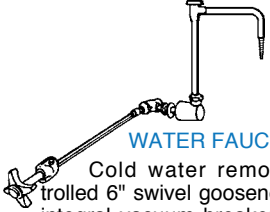
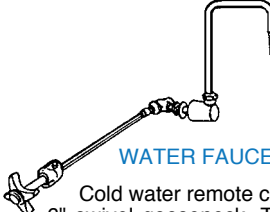
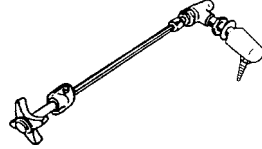

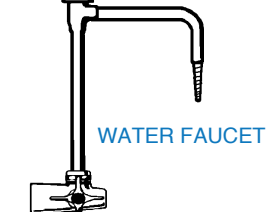
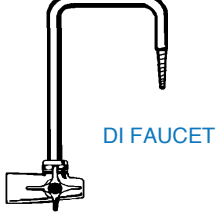
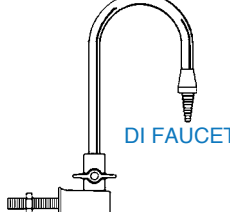
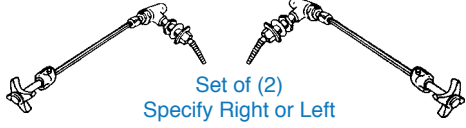
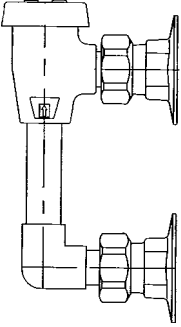
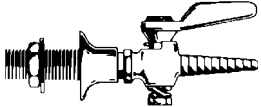
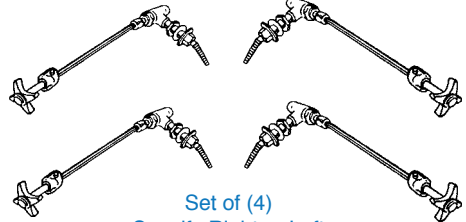
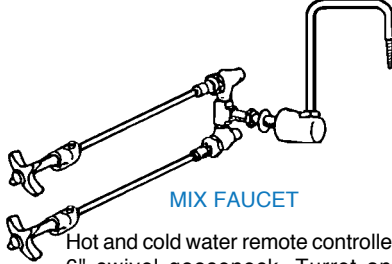
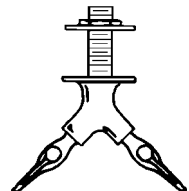
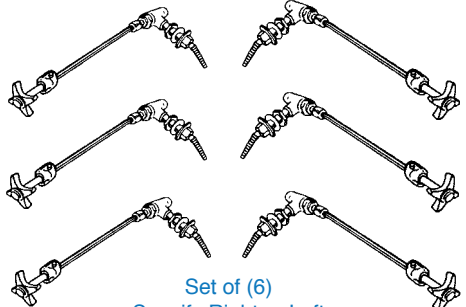
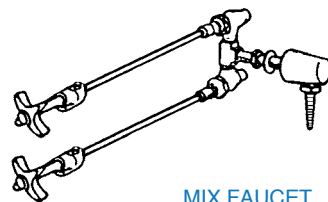
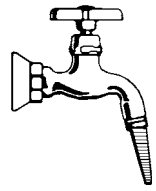
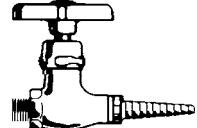
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<input type="checkbox"/>	DUPLEX RECEPT. 125V,20A	
<input type="checkbox"/>	SIMPLEX RECEPT. 250V	
<input type="checkbox"/>	DUPLEX RECEPT--GFI	
<input type="checkbox"/>	OTHER	

<input checked="" type="checkbox"/>	WORKSURFACE	CAT. NO.
<input type="checkbox"/>	EPOXY RESIN	
<input type="checkbox"/>	COMPOSITE RESIN	
<input type="checkbox"/>	PHENOLIC RESIN	
<input type="checkbox"/>	316 STAINLESS STEEL	
<input type="checkbox"/>	OTHER	

<input checked="" type="checkbox"/>	CUPSINKS	CAT. NO.
<input type="checkbox"/>	3" X 6" POLYPRO CUPSINK	
<input type="checkbox"/>	3" X 9" POLYPRO CUPSINK	
<input type="checkbox"/>	OTHER(SEE NOTE BELOW)	
<input type="checkbox"/>	SPECIFY LOCATION 1 2 3 4	

UNIFLOW Fume Hood Wall Mounted Service Fixtures

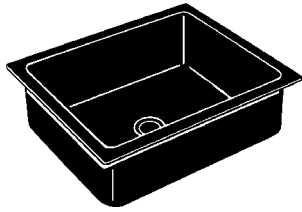
Fume hood remote control service fixtures feature non-metallic, chemical resistant, color-coded, serrated hose connections, 3/8" NPT brass valves with rod and handles assembly. Fixtures are factory installed on the hood. Please specify service required, fixture location, inside or outside service access panels.

 <p>WATER FAUCET Cold water remote controlled 6" swivel gooseneck with integral vacuum breaker. Turret and gooseneck are epoxy coated brass.</p> <p>Cat. No. 50113-CW</p>	 <p>WATER FAUCET Cold water remote controlled 6" swivel gooseneck. Turret and gooseneck are epoxy coated brass.</p> <p>Cat. No. 50112-CW</p>	 <p>SERVICE FIXTURE Cold water remote controlled epoxy-coated brass turret.</p> <p>Cat. No. 50012</p>	 <p>SERVICE FIXTURE Remote controlled single service outlet. Color-coded index buttons with matching color-coded serrated tip outlets.</p> <p>Cat. No. 50013</p>
 <p>WATER FAUCET Cold water 6" swivel gooseneck with integral vacuum breaker. Epoxy-coated brass.</p> <p>Cat. No. 50023</p>	 <p>DI FAUCET Cold water 6" swivel tin-lined gooseneck. Epoxy-coated brass.</p> <p>Cat. No. 50022</p>	 <p>DI FAUCET Distilled water 6" rigid PVC gooseneck.</p> <p>Cat. No. 50019</p>	<p>Service Set of Two</p>  <p>Set of (2) Specify Right or Left</p> <p>Two remote controlled service fixture set. Color-coded index buttons with matching color-coded serrated tip. Specify service required. Epoxy-coated brass. Can be ordered in combination with other fixtures.</p> <p>Cat. No. 50121-FS</p>
 <p>EXTERNAL MOUNTED VACUUM BREAKER Breaker with 3/8" IPS inlet and outlet.</p> <p>Cat. No. 50044</p>	 <p>SINGLE KEYCOCK Single flange mounted key cock with integral flange and shank connection. Epoxy-coated brass.</p> <p>Cat. No. 50025</p>	<p>Service Set of Four</p>  <p>Set of (4) Specify Right or Left</p> <p>Four remote controlled service fixture set. Color-coded index buttons with matching color-coded serrated hose tips. Specify service required. Epoxy-coated brass. Can be ordered in combination with other fixtures.</p> <p>Cat. No. 50141-FS</p>	
 <p>MIX FAUCET Hot and cold water remote controlled 6" swivel gooseneck. Turret and gooseneck are epoxy coated brass.</p> <p>Cat. No. 50102</p>	 <p>DOUBLE KEYCOCK Double flange mounted key cock with integral flange and shank connection. Epoxy-coated brass.</p> <p>Cat. No. 50125</p>	<p>Service Set of Six</p>  <p>Set of (6) Specify Right or Left</p> <p>Six remote controlled service fixture set. Color-coded index buttons matching color-coded serrated hose tips. Specify service required. Epoxy-coated brass. Can be ordered in combination with other fixtures.</p> <p>Cat. No. 50161-FS</p>	
 <p>MIX FAUCET Hot and cold water remote controlled turret. Turret and gooseneck are epoxy-coated brass.</p> <p>Cat. No. 50101</p>	 <p>DI FAUCET Distilled water tin-lined outlet with shank connection. Epoxy-coated brass.</p> <p>Cat. No. 50122-DI</p>		
	 <p>DI FAUCET Distilled water tin-lined outlet with flange and shank connection. Epoxy-coated brass.</p> <p>Cat. No. 50123-DI</p>		

UNIFLOW Fume Hood Sinks, Plumbing & Electrical Services

HEMCO offers a complete line of sinks in epoxy resin, polypropylene and stainless steel. We also offer a wide variety of plumbing accessories including neutralization tanks and steam baths. HEMCO welcomes the opportunity to quote on your special applications. Additional sink sizes are available, please contact factory for details.

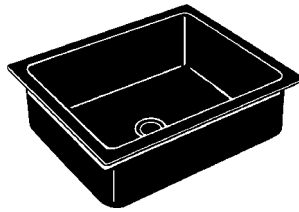
LABORATORY SINKS



EPOXY RESIN SINK

Laboratory sinks made of chemical and corrosion resistant epoxy resin. Drop-in sink. Black color. Please specify desired location.

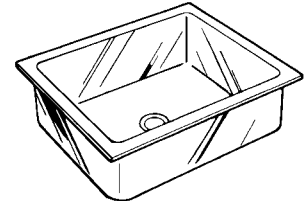
Size	Cat. No.
9" x 6" x 6" depth	42021
16" x 12" x 8" depth	42022
28" x 15" x 12" depth	42023



POLYPROPYLENE SINKS

Laboratory sinks made of chemical resistant heavy duty polypropylene. Drop-in sink. Black color. Please specify desired location.

Size	Cat. No.
12" x 12" x 8" deep	42001
12" x 18" x 8" deep	42002
24" x 16" x 8" deep	42003



STAINLESS STEEL SINKS

Laboratory sinks made of one piece type 304 stainless steel and polished to a No. 4 satin finish. Drop-in sink. Underside is sound deadened to reduce drumming. Please specify desired location.

Size	Cat. No.
12" x 12" x 7.5" deep	42031
16" x 16" x 7.5" deep	42032
16" x 24" x 7.5" deep	42033

CUP SINKS • TRAPS • MOUNTED PLUMBING FIXTURES

CUPSINK 6" Diameter



Cupsink is made of polypropylene with 1 1/2" IPS tailpiece and outlet strainer.

Cat. No. 40118

OVAL CUPSINK 6" x 3"



Cupsink is made of polypropylene with 1 1/2" IPS tailpiece and outlet strainer.

Cat. No. 40119

P TRAP



P trap is made of polypropylene with 1 1/2" IPS tailpiece.

Cat. No. 40120

OVAL CUPSINK 9" x 3"



Cupsink is made of polypropylene with 1 1/2" IPS tailpiece and outlet strainer.

Cat. No. 40121

OVAL WALL CUPSINK 6" x 3"



Cupsink is made of polypropylene with 1 1/2" IPS tailpiece and outlet strainer.

Cat. No. 40419

JAR P TRAP



P Trap includes adjustable tailpiece removable jar. 1 1/2" IPS tailpiece

Cat. No. 40220



NEUTRALIZATION TANKS

Molded of one piece chemical resistant polyolefin, neutralization tanks are designed to dilute and neutralize laboratory waste and concentrated corrosives. Limestone is utilized as the medium for neutralizing the hazardous waste. Note: Limestone is not included with tank - see below.

- 5 gallon tank Cat. No. 40222
- 11" dia. X 16.25" H with 1 1/2" IPS inlet and outlet
- 15 gallon tank Cat. No. 40322
- 17.25" dia. X 15.50" H with 1 1/2" IPS inlet and outlet
- Limestone 50 lb. bag Cat. No. 40223
- PH Monitoring System Cat. No. 40224
- Including sampling tank, PH probe, and control panel

OVERFLOWS



Beehive overflows are made of epoxy resin and are used to prevent water from overflowing the sink. Available in 1 1/2" IPS tailpiece.

Liquid Height	Cat. No.
6"	40069
8"	40169

SINK OUTLET



Sink outlets are made of polypropylene and are inserted into counter-bore opening in bottom of sink. Includes strainer. Available in 1 1/2" IPS tailpiece.

Cat. No. 40179

SINK STOPPER



Sink stopper is made of epoxy resin or polypropylene and is placed into the sink outlet opening to prevent water exit. Available in 1 1/2" IPS tailpiece.

Cat. No. 40189

STEAM BATHS AND FIRE EXTINGUISHER

STEAM BATHS

Stainless steel body with flanged top edge to allow recess-mount installation. Copper clad immersion heater. Concentric rings are 5 1/8" diameter and are designed to gently warm, melt or concentrate samples. Bath openings become progressively larger in 1" increments by removing successive concentric rings. Adjustable water level regulator continuously maintains desired liquid depths when connected to suitable supply source.



Description	Cat. No.
4-Hole, 3 gallon 14 7/8" L x 14 7/8" W x 12 5/8" D.	42040
8-Hole, 7 gallon 15 3/8" L x 28 7/8" W x 12 5/8" D.	42080

FUME HOOD FIRE EXTINGUISHER

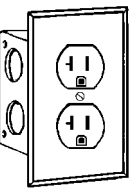
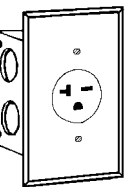
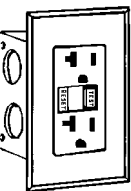
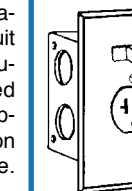
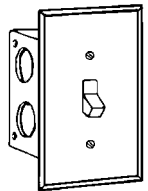
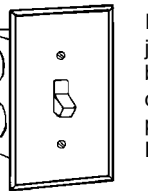
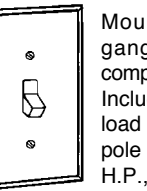

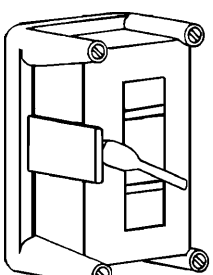

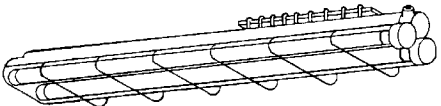

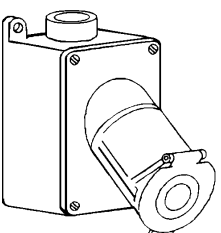


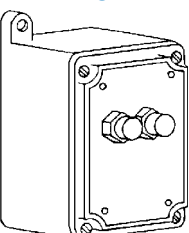
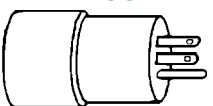



Potentially flammable or explosive situations require a fume hood fire extinguisher to provide protection against Class A, B and C fires. HEMCO offers 2.7, 5.4 lb. and 10 lb. Clean Agent FE-241 extinguishers. A fusible link mounted in the fume chamber senses excessive heat and automatically discharges system. Factory installed when ordered with a hood or field mounted on most existing hoods.



1. 2.7 lb. extinguisher for up to 4' hoods.....Cat. No. 53050
2. 5.4 lb. extinguisher for up to 8' hoods.....Cat. No. 53125
3. 10 lb. extinguisher for hoods over 8'.....Cat. No. 53200
4. Remote System Status Indicator Light.....Cat. No. 53006
5. Remote (audible) Discharge Alarm.....Cat. No. 53007
6. Manual Front Mount Discharge Cable.....Cat. No. 53008

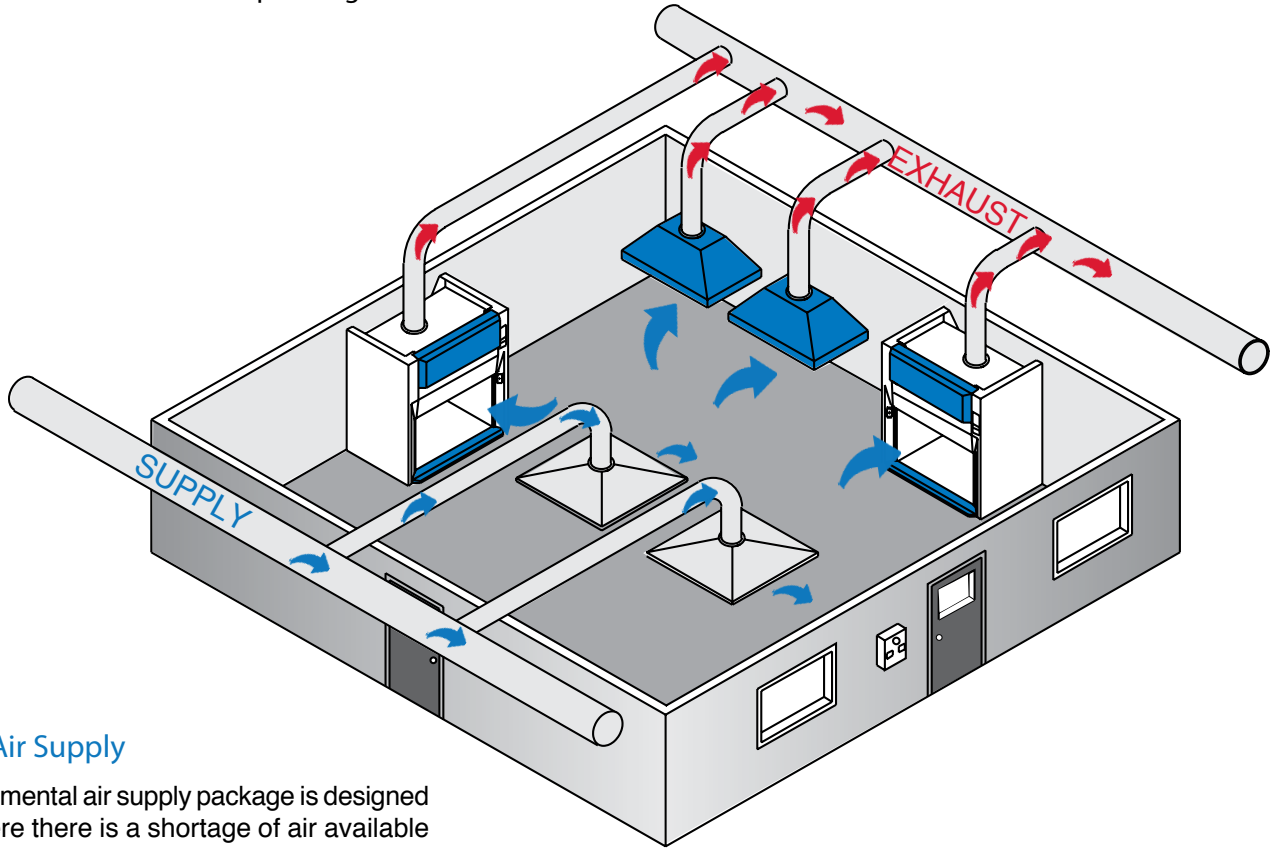
UNIFLOW Fume Hood Electrical Services

Electrical services are U.L. and C.S.A. approved and factory installed when ordered with fume hoods. Services must be wired to comply with local codes. HEMCO welcomes the opportunity to quote your special applications. Additional electrical services available.

ELECTRICAL SERVICES																					
<p>DUPLEX RECEPTACLE</p>  <p>115V. Single Phase Receptacle installed on front column of fume hood. Includes junction box and cover plate. UL Listed</p> <table border="1"> <tr><td></td><td>Cat. No.</td></tr> <tr><td>15amps</td><td>50029-1</td></tr> <tr><td>20amps</td><td>50029-2</td></tr> </table>		Cat. No.	15amps	50029-1	20amps	50029-2	<p>SINGLE RECEPTACLE</p>  <p>230V single phase. Receptacle is installed on front column of fume hood. Includes junction box and cover plate. UL Listed</p> <table border="1"> <tr><td></td><td>Cat. No.</td></tr> <tr><td>15amps</td><td>50030-1</td></tr> <tr><td>20amps</td><td>50030-2</td></tr> </table>		Cat. No.	15amps	50030-1	20amps	50030-2	<p>GROUND FAULT INTERRUPTER</p>  <p>Consists of a combination ground fault circuit interrupts and two duplex 3-wire polarized grounded. 115V receptacle. Includes junction box and cover plate. UL Listed.</p> <table border="1"> <tr><td></td><td>Cat. No.</td></tr> <tr><td>115V 15amp</td><td>50048-1</td></tr> <tr><td>115V 20amp</td><td>50048-2</td></tr> </table>		Cat. No.	115V 15amp	50048-1	115V 20amp	50048-2	<p>SINGLE RECEPTACLE WITH ON-OFF SWITCH</p>  <p>Receptacle has on-off switch to control power to plug-in. 115 V 15 amp. Includes junction box and cover plate. UL Listed</p> <p style="text-align: right;">Cat. No. 50051</p>
	Cat. No.																				
15amps	50029-1																				
20amps	50029-2																				
	Cat. No.																				
15amps	50030-1																				
20amps	50030-2																				
	Cat. No.																				
115V 15amp	50048-1																				
115V 20amp	50048-2																				
<p>LIGHT SWITCH</p>  <p>Includes junction box and cover plate. UL Listed</p> <table border="1"> <tr><td></td><td>Cat. No.</td></tr> <tr><td>115V 15amp</td><td>50028-1</td></tr> </table>		Cat. No.	115V 15amp	50028-1	<p>BLOWER SWITCH WITH PILOT LIGHT</p>  <p>Includes junction box and cover plate. UL Listed</p> <table border="1"> <tr><td></td><td>Cat. No.</td></tr> <tr><td>115V 15amp</td><td>50027-1</td></tr> <tr><td>115V 20amp</td><td>50027-2</td></tr> <tr><td>230V 20amp</td><td>50027-3</td></tr> </table>		Cat. No.	115V 15amp	50027-1	115V 20amp	50027-2	230V 20amp	50027-3	<p>MOTOR STARTER SWITCH</p>  <p>Mounted in a single gang receptacle box complete with face plate. Includes thermal overload protection. Double pole switch for up to 1 H.P., single phase, 60 Hz, 115v/230v AC motors. UL Listed</p> <p style="text-align: right;">Cat. No. 50050</p>	<p>SERVICE PORT PASS-THRU</p>  <p>Convenient port allows cords, tubes or cables to pass to and from the fume hood.</p> <p style="text-align: right;">Cat. No. 50100</p>						
	Cat. No.																				
115V 15amp	50028-1																				
	Cat. No.																				
115V 15amp	50027-1																				
115V 20amp	50027-2																				
230V 20amp	50027-3																				
EXPLOSION PROOF SERVICES (CLASS I GROUP C&D, CLASS II GROUP E,F & G)																					
<p>EXPLOSION PROOF SWITCH</p>  <p>For use in hazardous locations. Surface mount type with cast iron housing. 120v-240v, 20amp. UL Listed</p> <p style="text-align: right;">Cat. No. 50036</p>	<p>EXPLOSION PROOF LIGHT</p>  <p>For use in hazardous locations. Gray, two-coat epoxy finish with easily removed prismatic globe. Accepts long neck incandescent bulb up to 300 watts. (Bulb not included). UL Listed</p> <p style="text-align: right;">Cat. No. 50038</p>	<p>EXPLOSION PROOF FLUORESCENT FIXTURES</p>  <p>Available in 115 volt. Unit is designed for use in hazardous locations requiring corrosion resistant, durable constructed fixtures which are specifically suited to areas subject to extreme temperatures, strong vibrations or corrosive elements. UL Listed</p> <p style="text-align: right;">Cat. No. 50078</p>																			
<p>EXPLOSION PROOF JUNCTION BOX</p>  <p>For use in hazardous locations. For use on explosion-proof motors and blowers. Has hole for self-tapping ground screw. UL Listed</p> <p style="text-align: right;">Cat. No. 50049</p>	<p>EXPLOSION PROOF RECEPTACLE</p>  <p>For use in hazardous locations. Surface mount type with aluminum housing. 3-pole, 2-wire, 115v-230v, 20amp. UL Listed</p> <p>Explosion-Proof Receptacle Configurations</p> <p>230volts AC </p> <p>115 volts AC </p> <p style="text-align: right;">Cat. No. 50037</p>	<p>EXPLOSION PROOF GROUND FAULT INTERRUPTER</p>  <p>For use in hazardous locations. Factory sealed GFI is designed to interrupt a circuit when a ground fault is detected by personnel. 115 volt AC, 20 amp. UL Listed</p> <p style="text-align: right;">Cat. No. 50104</p>	<p>EXPLOSION PROOF PLUG</p>  <p>Plug is adaptable for use with all receptacles. 3-pole, 2-wire, 115/230 volt AC, 20 amp. UL Listed</p> <p style="text-align: right;">Cat. No. 50039</p>																		
INTERNATIONAL ELECTRICAL SERVICES (CONSULT FACTORY FOR MORE OPTIONS)																					
<p>CONTINENTAL EUROPEAN (SCHUKO) SOCKET</p>  <p>With snap cover. CEE7 standard. 230 V 16 amp. 50 Hz. UL Listed</p> <p style="text-align: right;">Cat. No. 50004</p>	<p>BRITISH SOCKET</p>  <p>BS 546. 230 V 15 amp. 50 Hz UL Listed</p> <p style="text-align: right;">Cat. No. 50006</p>	<p>U.K. SOCKET</p>  <p>BS 1363. 230 V 13 amp. 50 Hz UL Listed</p> <p style="text-align: right;">Cat. No. 50007</p>																			

UniFLOW Engineered Fume Hood Systems

Designed to offer the complete solution to laboratory ventilation concerns. Integrated components, blowers, fume scrubbers, and ducting are engineered together to provide a safe, effective and efficient fume hood ventilation system. VAV controllers minimize the amount of expensive conditioned air that is exhausted through the fume hood which saves operating costs.



Supplemental Air Supply

Laboratory supplemental air supply package is designed for situations where there is a shortage of air available in a proper air supply to fume hoods. Supplemental air supply package serves as an alternative to auxiliary air hoods by diffusing makeup air to the laboratory rather than creating turbulence at the face of the hood. Package includes: 2' x 2' ceiling diffuser, prefilter, flexible ducting and fan.

500 CFM Package	(1) diffuser included	Cat. No. 90001
1000 CFM Package	(2) diffusers included	Cat. No. 90002
1500 CFM Package	(3) diffusers included	Cat. No. 90003

VARIABLE AIR VOLUME CONTROLS

Variable Air Volume (VAV) Systems allow fume hoods to reduce energy consumption while maintaining face velocity. The system operates by sensing actual face velocity and actuating a motorized damper or blower speed control to continuously adjust face velocity as sash is raised or lowered.

VAV DAMPER CONTROL

Cat. No. 51401

utilizes electronically actuated dampers within the ductwork to create and maintain optimal air flow. The VAV System includes the front mounted audio-visual alarm, electronic actuated damper controller and wallmounted sensor, transformer and calibration. Night set back, emergency air flow, mute of audible alarm, and self test mode are standard features of the unit.

VAV MOTOR SPEED CONTROL

Cat. No. 51408

adjusts exhaust velocity by varying blower motor speed. The VAV System includes the front mounted audio-visual alarm, speed controller and wallmounted sensor, transformer and calibration. Night set back, emergency air flow, mute of audible alarm, and self test mode are standard features of the unit.



SAFETY SASH STOPS

Sash stops restrict how far the sash may be raised. By restricting the sash opening, exhaust volume demand is reduced saving energy and the operator is afforded more protection. Factory installed at predetermined positions, alternate positions can be field drilled. The sash stop can be manually released to open the sash for full access into the fume hood.



Cat. No. 51651

Fume Hood Ventilation Recommendations

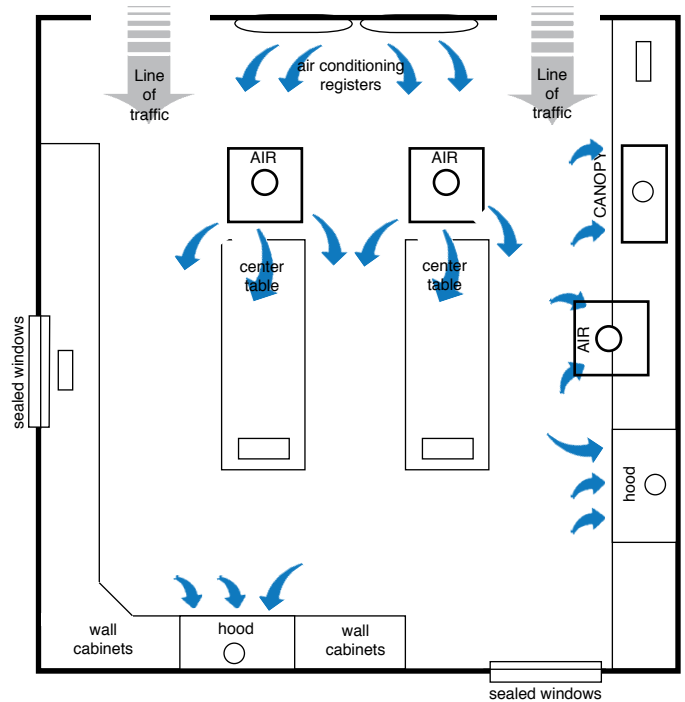
Proper placement and use of fume hoods and blowers are important laboratory ventilation requirements. HEMCO offers the following suggestions to help in planning your laboratory layout.

Location Of Hood

- Room airflow patterns and user convenience are the most important considerations in planning the location of hoods within the laboratory
- Hoods placed directly in front of doors, open windows or air conditioning registers will not perform efficiently. The drafts interfere with airflow into the fume hood.
- Hoods should not be placed where users would be forced to work in the line of traffic. Traffic in front of hood adversely affects fume hood airflow.
- When common exhaust or supply systems are used for several hoods the hood units should be arranged so minimum amount of ductwork is required. See page 32 for more suggestions on planning your ducting system.
- Hoods used as part of air conditioning system to exhaust air from the laboratory should generally be located on the opposite wall from side-wall inlet registers. The hoods should be placed so that air from registers or diffusers sweeps through the laboratory area first and then into the hoods.

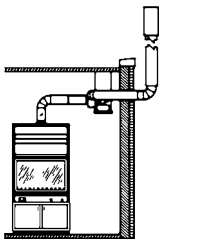
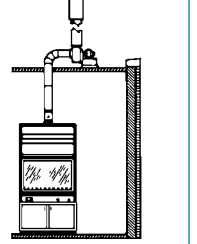
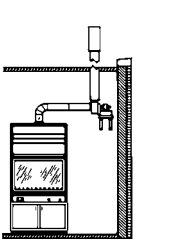
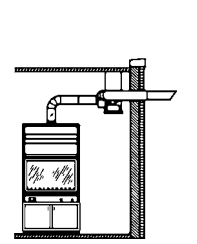
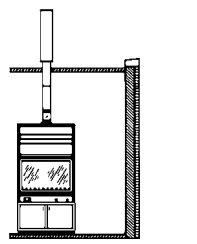
Hood Operation

- Proper use and maintenance will increase hood life.
- Hoods should not be used as laboratory storage space. Piles of unnecessary material, or unused bottles and flasks in a hood can block exhaust openings and interfere with hood performance.
- An air flow monitor should be incorporated on hood to monitor velocities and warn operator of potentially dangerous low air flows through the hood due to damper or blower failure, blockage of ductwork system or extreme sash opening height.



RECOMMENDED FUME HOOD LOCATION

TYPICAL VENTILATION INSTALLATIONS

				
Ceiling-suspended remote blower vented through wall with vertical discharge.	Roof-mounted remote blower with vertical discharge.	Wall-mounted remote blower with vertical roof discharge.	Ceiling-suspended remote blower vented through wall with horizontal discharge.	Internally-mounted blower with vertical roof discharge.

Blower Selection & Installation

- Blower systems must be properly installed and maintained since they control the amount of air movement through the hood.
- Select a blower of large enough capacity for your application and setup. Remember to allow for some drop in capacity from fouling by dust and other contaminants.
- Blowers and ductwork should be arranged so pressure loss in the system is a minimum. The fewer elbows and other restrictions the better. The simplest arrangements are generally the most effective and efficient.
- It is suggested that each hood have its own blower and ducts for maximum flexibility and to avoid back flow from other hoods. Common ductwork systems will also perform efficiently provided duct and blowers have been properly sized for the number of hood units in the system.
- It is recommended that the blower be located as close as possible to the exhaust end of the duct system. By keeping the number of elbows to a minimum, the air will be under negative pressure; thereby, should a leak occur, clean air would be pulled into the duct rather than contaminated air being pushed out.
- Auxiliary air hoods, supply and exhaust blowers should be operated

by one switch to avoid danger of turning on supply blower only. An alternative method would be to have one switch operate both exhaust and supply blowers and a second switch to operate exhaust blower only.

- Where fume hoods are used as part of the laboratory ventilation system, blowers should be in operation at all times.

Blower Maintenance

Proper maintenance of blower and ducting will increase the efficiency of your fume removal system.

- Blower and ductwork systems should be part of your regular maintenance schedule. Contaminant build up collected on impeller blades of a centrifugal blower can greatly reduce its capacity.
- Blowers should be checked to make certain the direction of rotation is correct. Centrifugal blowers will function while rotating in wrong direction, but output will be greatly reduced.
- The above figures show various suggested arrangements of ducts and blowers. Blowers may be installed within the lab, on the roof, on an external wall, or in the fume hood itself. Your choice of arrangements will depend on your particular laboratory location and setup, facility policies and building codes.

Fume Hood Ducting & Exhaust System

HEMCO offers a complete line of rigid and flexible PVC ducting and connections for fume hood exhaust systems.

Ductwork connected to fume hoods may be arranged in a variety of patterns, depending on requirements. Generally, the best exhaust system involves the shortest duct length and the fewest elbows. Duct size, length and number of elbows affect static pressure loss and blower efficiency. Ideally, each fume hood should have its own ducting and blower to maximize hood flexibility and reduce danger of backdraft from other hoods.

Common or manifold ductwork designs can be used, provided duct and blower have been sized properly. In these designs, individual hood dampers are recommended to balance the system and hood users must be aware of how different hood exhaust fumes will react when mixed in the ductwork.

Rigid PVC ductwork is recognized as an excellent fume hood exhaust duct. The smooth interior surface reduces static pressure loss and chemical waste build up, and PVC is extremely resistant to a wide variety of reagents. For some applica-

tions flexible PVC lined duct provides adequate service and can significantly reduce installation costs. When planning exhaust ducting, duct size, length, number of bends and exhaust material must be considered.

Fume hoods exhaust large quantities of laboratory air, and to work properly, a similar quantity of fresh air must be supplied to the room. The most common cause of sub-standard hood performance is the shortage of supply air in the area. In multiple hood arrangements, lack of supply air can cause backdraft and room air contamination. Under normal conditions, a hood equipped room should be supplied with nearly the same amount of air as is exhausted. The remaining amount would then be drawn from the surrounding building through doors, corridors, etc. This system achieves a negative pressure in the room relative to the remaining building, helping to prevent the spread of chemicals and fumes into the rest of the building.

SAFETY SASH STOPS

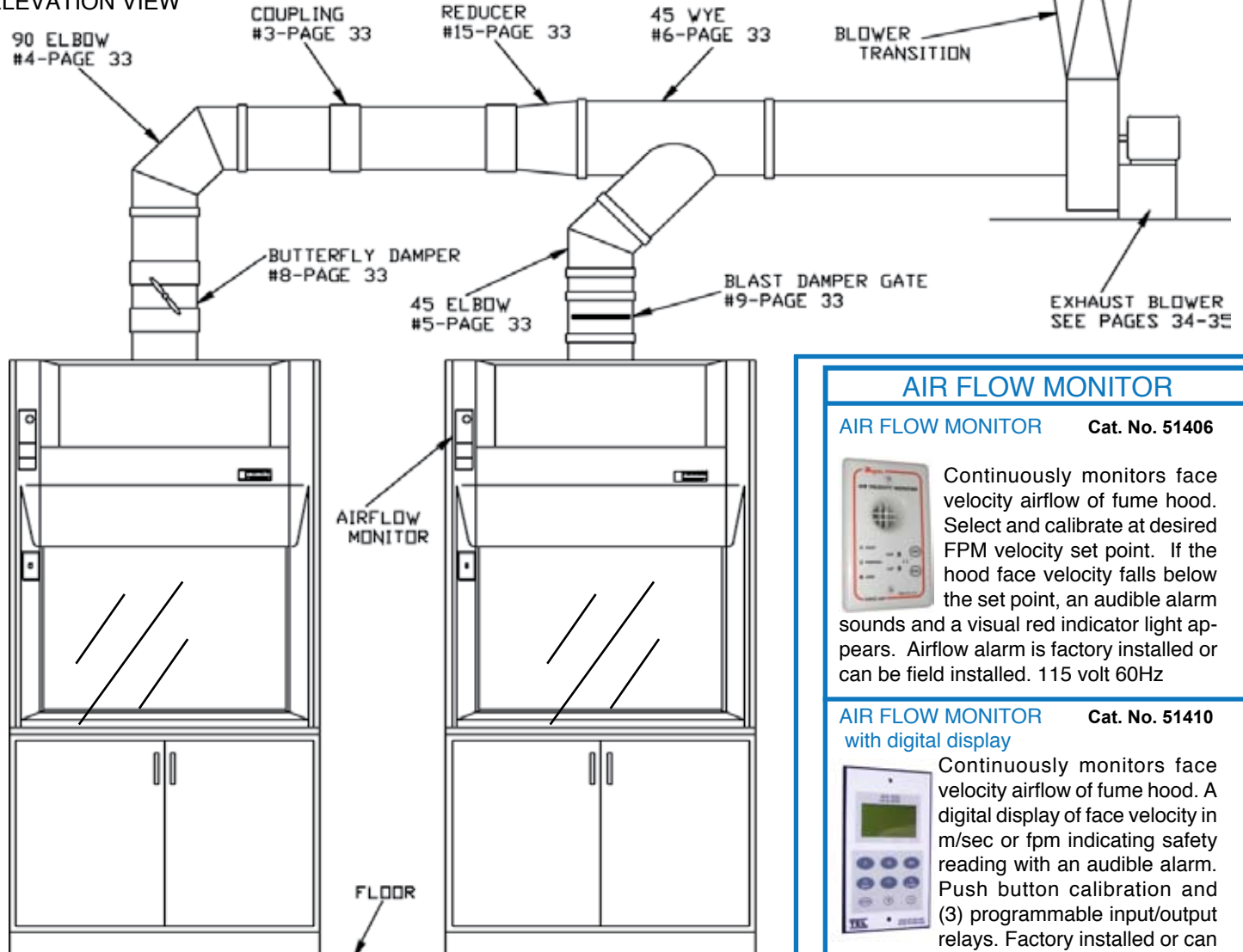
Sash stops restrict how far the sash may be raised. By restricting the sash opening, exhaust volume demand is reduced saving energy and the operator is afforded more protection. Factory installed at predetermined positions, alternate positions can be field drilled. The sash stop can be manually released to open the sash completely for full access into the fume hood.



Cat. No. 51651

TYPICAL FUME HOOD DUCTING INSTALLATION

ELEVATION VIEW



AIR FLOW MONITOR

AIR FLOW MONITOR Cat. No. 51406



Continuously monitors face velocity airflow of fume hood. Select and calibrate at desired FPM velocity set point. If the hood face velocity falls below the set point, an audible alarm sounds and a visual red indicator light appears. Airflow alarm is factory installed or can be field installed. 115 volt 60Hz


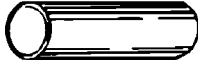

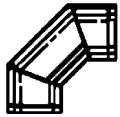

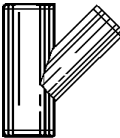
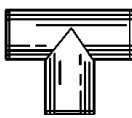

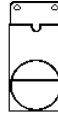
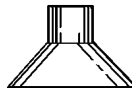
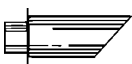

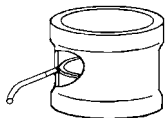
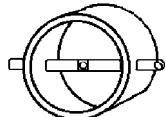

AIR FLOW MONITOR with digital display Cat. No. 51410



Continuously monitors face velocity airflow of fume hood. A digital display of face velocity in m/sec or fpm indicating safety reading with an audible alarm. Push button calibration and (3) programmable input/output relays. Factory installed or can be field installed.

Fume Hood Ductwork & Venting Accessories

DUCTING AND ACCESSORIES ARE CHEMICAL RESISTANT AND EASY TO INSTALL

FLEXIBLE AND RIGID PVC DUCTING		4"	6"	8"	10"	12"														
1.	 <p>FLEXIBLE DUCTING neoprene-impregnated fiberglass reinforced with steel helix wire. Standard 12' lengths. Each piece includes two strap clamps.</p>	Cat. No. 80051	Cat. No. 80052	Cat. No. 80053	Cat. No. 80054	Cat. No. 80055														
2.	 <p>PVC RIGID DUCTING chemical resistant and durable schedule 40 PVC for permanent installations. Standard 10' lengths with straight ends.</p>	82004	82006	82009	82011	82013														
3.	 <p>PVC COUPLING required to connect straight sections.</p>	82147	82149	82153	82157	82159														
4.	 <p>PVC 90° ELBOW connects with straight sections. Has belled ends for duct connections.</p>	82060	82061	82063	82066	82068														
5.	 <p>PVC 45° ELBOW offsets obstacles. Less static pressure loss than a 90° elbow. Has belled ends for duct connections.</p>	82082	82083	82085	82087	82089														
6.	 <p>PVC 45° WYE Lateral for joining common ductwork in multiple hood designs. Branch diameter may be sized equal to 2" to 4" smaller than main diameter. Has belled ends for duct connections.</p>	82216	82218	82226	82229	82233														
7.	 <p>PVC TEE for manifold exhaust systems. Has belled ends for duct connection.</p>	82034	82036	82038	82040	82044														
8.	 <p>PVC BUTTERFLY DAMPER modifies CFM for single or multiple hood arrangement. Has belled ends for duct connection.</p>	82450	82452	82454	82456	82458														
9.	 <p>PVC BLAST GATE DAMPER with a gate that slides in and out to control CFM. Has belled ends for duct connection.</p>	82369	82371	82373	82375	82377														
10.	 <p>PVC RAIN SKIRT slips over straight pipe on roof to slope water away from cutout.</p>	82328	82330	82332	82334	82336														
11.	 <p>PVC VENT OUTLET for horizontal venting through wall or window. Angled end prevents rain from entering. Male connector included.</p>	80074	80076	80077	80078	80079														
12.	 <p>ZERO PRESSURE WEATHER CAP discharges fumes vertically away from roof. Self-draining. Minimal static pressure loss. This is the recommended weather cap.</p>	82350	82352	82354	82356	82358														
13.	 <p>CONDENSATION RING Collects condensed vapors in ducting and channels them to a drain outlet.</p> <p>10" Condensation Ring Cat. No. 82590 12" Condensation Ring Cat. No. 82591</p>	14.		 <p>WASH RING Suited for use in perchloric acid duct systems. Features a wide angle spray nozzle and supply water connector.</p> <p>10" Wash Ring Cat. No. 82580 12" Wash Ring Cat. No. 82581</p>	15.	 <p>REDUCERS Transition ducting to smaller duct diameter sizes. Square-to-round transitions also available.</p> <table border="1"> <thead> <tr> <th>A X B (inches)</th> <th>CAT NO.</th> </tr> </thead> <tbody> <tr> <td>6 X 4</td> <td>82613</td> </tr> <tr> <td>8 X 6</td> <td>82615</td> </tr> <tr> <td>10 X 8</td> <td>82617</td> </tr> <tr> <td>10 X 12</td> <td>82619</td> </tr> <tr> <td>14 X 12</td> <td>82620</td> </tr> <tr> <td>16 X 14</td> <td>82621</td> </tr> </tbody> </table>	A X B (inches)	CAT NO.	6 X 4	82613	8 X 6	82615	10 X 8	82617	10 X 12	82619	14 X 12	82620	16 X 14	82621
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16 X 14	82621																			

Fume Hood Exhaust Blowers

HEMCO offers a complete line of belt and direct drive exhaust blowers which are chemical resistant and available in standard and explosion proof models. HEMCO blowers are designed to operate effectively and efficiently to remove noxious and hazardous fumes from within the fume hood.

To ensure correct airflow, it is important that blowers be sized correctly. To meet OSHA's requirements for continuous monitoring, specify HEMCO Airflow Monitor, catalog number 51406. See page 32. For applications where there is a shortage of air, specify HEMCO Sash Stop, catalog number 51651. See page 32.

EPOXY COATED STEEL BLOWER BELT DRIVE

Belt drive steel blower and impeller wheel are epoxy coated for superior chemical resistance. Explosion proof blowers have epoxy coated non-sparking aluminum impeller wheels. V-belt drive and adjustable pulleys permit field balancing. Seven discharge positions to suit installation. Weather housing is furnished. Motor has thermal overload protection. Specify 115 1 ph, 230V 1 ph, 230/460V 3ph. (CONSULT FACTORY FOR TRANSITIONS)



CFM	INLET DIA-METER	*OUTLET SIZE	CATALOG NUMBER AT STATIC PRESSURE											
			1/2" STATIC PRESSURE			3/4" STATIC PRESSURE			1" STATIC PRESSURE			1 1/2" STATIC PRESSURE		
			HP	STD	EXP	HP	STD	EXP	HP	STD	EXP	HP	STD	EXP
296	8 7/8"	10 1/8"x4 1/8"	1/4	51701	51801	1/4	51702	51802	1/4	51703	51803	1/4	51704	51804
474	8 7/8"	10 1/8"x4 1/8"	1/4	51705	51805	1/4	51706	51806	1/4	51707	51807	1/2	51708	51808
652	8 7/8"	10 1/8"x6 3/8"	1/2	51709	51809	1/2	51710	51810	1/2	51711	51811	1/2	51712	51812
800	8 7/8"	10 1/8"x6 3/8"	1/2	51713	51813	1/2	51714	51814	1/2	51715	51815	3/4	51716	51816
914	9 7/8"	11 1/2"x8 1/4"	1/2	51717	51817	1/2	51718	51818	---	---	---	---	---	---
1044	9 7/8"	11 1/2"x8 1/4"	1/2	51719	51819	1/2	51720	51820	3/4	51721	51821	---	---	---
1175	9 7/8"	11 1/2"x8 1/4"	1/2	51722	51822	1/2	51723	51823	3/4	51724	51824	---	---	---
1240	9 7/8"	11 1/2"x8 1/4"	1/2	51725	51825	1/2	51726	51826	3/4	51727	51827	3/4	51728	51828
1240	11 7/8"	13 3/8"x8 1/4"	1/3	51729	51829	1/2	51730	51830	---	---	---	---	---	---
1506	11 7/8"	13 3/8"x8 1/4"	1/2	51731	51831	1/2	51732	51832	3/4	51733	51833	---	---	---
1771	11 7/8"	13 3/8"x8 1/4"	1/2	51734	51834	3/4	51735	51835	3/4	51736	51836	1	51737	51837
2037	11 7/8"	13 3/8"x8 1/4"	1	51738	51838	1 1/2	51739	51839	1 1/2	51740	51840	1 1/2	51741	51841

EPOXY COATED STEEL BLOWER DIRECT DRIVE

Direct drive steel blower and impeller wheel are epoxy coated for superior chemical resistance. Explosion proof blowers have epoxy coated non-sparking aluminum impeller wheels. Motor is 115V 1 ph and has thermal overload protection.



EPOXY COATED STEEL BLOWER EPOXY COATED STEEL WHEEL MOTOR: 115V SINGLE PHASE

CATALOG NUMBER		SPECIFICATIONS			CFM AT STATIC PRESSURE			
STANDARD	EXPLOSION PROOF	MOTOR	INLET SIZE	OUTLET SIZE	1/4" SP	1/2" SP	3/4" SP	1" SP
51077	51078	1/4 HP	6" OD	6" OD	515	420	300	175
51079	51080	1/2 HP	10" OD	10" OD	870	765	655	520
51081	51082	1/2 HP	10" OD	10" OD	930	850	773	640
51083	51084	3/4 HP	12" OD	12" OD	1400	1290	1200	1000

Optional weather cover may be specified by adding "WC" at the end of catalog number.

EPOXY COATED STEEL BLOWER DIRECT DRIVE

Direct drive steel blower and aluminum paddle wheel are epoxy coated for superior chemical resistance. Aluminum paddle wheels are non-sparking for explosion proof applications. Motor has thermal overload protection. Specify 115V 1 ph or 230/460V 3 ph. *Consult factory for rectangular to round transitions.



EPOXY COATED STEEL BLOWER EPOXY COATED ALUMINUM WHEEL MOTOR: 115V SINGLE PHASE 1/4 HP & 1/2 HP - 230/460V THREE PHASE 1 HP & 2 HP

CATALOG NUMBER		SPECIFICATIONS			CFM AT STATIC PRESSURE			
STANDARD	EXPLOSION PROOF	MOTOR	INLET SIZE	OUTLET SIZE	1/4" SP	1/2" SP	3/4" SP	1" SP
51090	51091	1/4 HP	9" OD	11"x7"	765	635	480	200
51092	51093	1/2 HP	10" OD	12"x8"	1335	1225	1100	945
51094	51095	1 HP	13 1/4" OD	13"x10"	2220	2070	1890	1700
51096	51097	2 HP	14 1/2" OD	15"x11"	2840	2660	2480	2280

Optional weather cover may be specified by adding "WC" at the end of catalog number.

Fume Hood Exhaust Blowers

HEMCO offers a wide selection of chemical resistant PVC and fiberglass exhaust blowers. Direct and belt drive blowers including standard and explosion proof models are available to meet your specific ventilation and corrosion resistance requirements.

PVC AND FIBERGLASS BLOWER DIRECT DRIVE



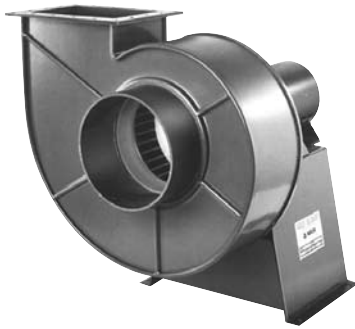
PVC blower with polypro wheel recommended for general use. Fiberglass blower with PVC wheel recommended for use with oxidizing acids or concentrated phosphoric, nitric and sulfuric acids.

PVC BLOWER POLYPRO WHEEL MOTOR: 115V SINGLE PHASE

CATALOG NUMBER		SPECIFICATIONS			CFM AT STATIC PRESSURE			
STANDARD	EXPLOSION PROOF	MOTOR	INLET SIZE	OUTLET SIZE	1/4" SP	1/2" SP	3/4" SP	1" SP
51311	51411	1/6 HP	5 1/2" OD	4 1/2" OD	230	185	140	NA

CATALOG NUMBER		SPECIFICATIONS			CFM AT STATIC PRESSURE			
STANDARD	EXPLOSION PROOF	MOTOR	INLET SIZE	OUTLET SIZE	1/4" SP	1/2" SP	3/4" SP	1" SP
51321	51421	1/3 HP	8" OD	8" OD	625	500	365	NA
51331	51431	1/3 HP	8" OD	8" OD	1040	965	885	815

PVC BLOWER BELT DRIVE



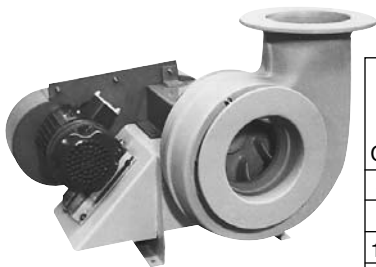
Designed for fume hood application. PVC blower with PVC wheel is ideal for use with nitric, sulfuric and phosphoric acids. Rigid, welded PVC blower transitions are available for easy connection to ductwork.

PVC BLOWER PVC WHEEL MOTOR: 115V 1-PHASE (1/4, 1/2, 3/4 HP) 230V/460V 3-PHASE (1, 1 1/2, 2 HP)

CFM	INLET SIZE	OUTLET SIZE	CATALOG NUMBER AT STATIC PRESSURE							
			1/2" STATIC PRESSURE		1" STATIC PRESSURE		1 1/2" STATIC PRESSURE		2" STATIC PRESSURE	
400	7 3/4"	10 3/4"	1/4 HP	51360	1/4 HP	51370	1/3 HP	51380	1/2 HP	51390
800	9 3/4"	12 3/4"	1/4 HP	51361	1/2 HP	51371	1/2 HP	51381	3/4 HP	51391
1000	9 3/4"	12 3/4"	1/2 HP	51362	1/2 HP	51372	3/4 HP	51382	1 HP	51392
1200	9 3/4"	12 3/4"	1/2 HP	51363	3/4 HP	51373	1 HP	51383	1 1/2 HP	51393
1600	9 3/4"	12 3/4"	1 HP	51364	1 1/2 HP	51374	1 1/2 HP	51384	2 HP	51394

For explosion proof blower add suffix EP to catalog number - eg. 51360-EP

FIBERGLASS BLOWER BELT DRIVE



Designed specifically for exhausting small volumes of highly corrosive fumes. Fiberglass blower with fiberglass wheel can be ordered with either vertical or horizontal (pictured) discharge. Fiberglass is recognized as a solution to the problem of handling various corrosives within specific applications.

FIBERGLASS BLOWER FIBERGLASS WHEEL
MOTOR: 115V 1-PHASE (1/4, 1/2, 3/4 HP) - 230V/460V 3-PHASE (1, 1 1/2, 2 HP)

CFM	INLET SIZE	OUTLET SIZE	CATALOG NUMBER AT STATIC PRESSURE							
			1/2" STATIC PRESSURE		1" STATIC PRESSURE		1 1/2" STATIC PRESSURE		2" STATIC PRESSURE	
400	8"	8"	1/4 HP	51532	1/4 HP	51534	1/4 HP	51535	1/3 HP	51537
800	8"	8"	1/4 HP	51542	1/3 HP	51544	1/2 HP	51545	3/4 HP	51547
1000	8"	8"	1/2 HP	51552	1/2 HP	51554	3/4 HP	51555	3/4 HP	51557
1200	8"	8"	3/4 HP	51562	3/4 HP	51564	1 HP	51565	1 HP	51567
1600	10"	10"	3/4 HP	51572	3/4 HP	51574	1 HP	51575	1 1/2 HP	51577
2200	10"	10"	1 1/2 HP	51582	1 1/2 HP	51584	2 HP	51585	2 HP	51587

For explosion proof blower add suffix EP to catalog number - eg. 51532-EP

VARIABLE MOTOR SPEED DRIVE



Motor speed control can be used to manually adjust blower CFM. Adjustable speed control for 3-phase motors 3/4 to 10 horsepower at 230/460 volts and 50/60 Hz. These drives provide high operation efficiency and constant input power factor throughout the entire speed range of 3 to 60 Hz.

Drives are rugged, reliable and backed by years of manufacturing and application experience in motors and controls. These drives are tailored to the variable torque loads in fans or fume hoods.

1/2 - 5 HP 230V 3ph, 50/60 Hz.
1 - 5 HP 460V 3ph, 50/60 Hz.

Cat. No. 51402
Cat. No. 51407

CLEAN-AIRE HEPA Filter Systems

High Efficiency Particulate (HEPA) filters effectively collect particulate contaminants from the air stream. Can be paired with carbon filters to remove chemical fumes and odors.

HEPA FILTER PAK



CLEAN-AIRE HEPA Filter Pak

The HEPA Filter Pak is designed to collect airborne particulate from the exhaust. The filter pak housing is constructed with a convenient latched/hinged access door for filter change out. Inlet and outlet plenums with duct connection collars are installed. Note: 1. The HEPA filter is not included with the housing. Please select HEPA filter below. 2. We recommend a minihelic or magnehelic gage to monitor the airflow differential across the filter. The static pressure indicated would alert when to change the filter. The gages can be hood or filter mounted. 3. We recommend ordering a back-up replacement filter.

CLEAN-AIRE HEPA FILTER PAK			
CFM	Size	Duct Size	Cat. No
250-650	26" x 15" x 35 1/2"	4", 8" diameter	50188
650-1200	26" x 26" x 35 1/2"	8", 10", 12" diameter	50189

HEPA FILTERS			PREFILTER (6 per carton)		
CFM	Size	Cat. No.	CFM	Size	Cat. No.
550	24" x 12" x 12"	50094	500	24" x 12" x 2"	52000
1000	24" x 24" x 12"	50095	1000	24" x 24" x 2"	52001

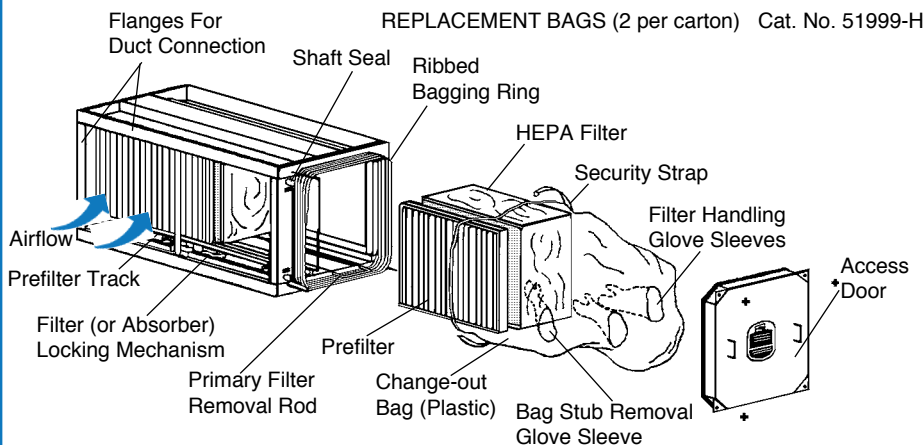
HEPA FILTER BAG IN - BAG OUT



Filter housing is fabricated of type-304 stainless steel and includes (1) HEPA-99.99% efficient at 0.3 microns and larger, (1) 24" x 24" x 2" 30% pleated prefilter and 1 bag. Bag In-Bag Out filters are designed to meet air filtration requirements to handle hazardous particulate materials. The housing incorporates a ribbed bagging ring around the side access door over which a specially designed plastic bag is attached. Filters are then installed and changed through the bag to reduce the risk of exposure to personnel. Note: 1. The HEPA filter is not included with the housing. Please select HEPA filter below. 2. We recommend a minihelic or magnehelic gage to monitor the airflow differential across the filter. The static pressure indicated would alert when to change the filter. The gages can be hood or filter mounted. 3. We recommend ordering a back-up replacement filter.

DESCRIPTION	CFM	Size	Cat. No.
CLEAN-AIRE HEPA FILTER BAG IN BAG OUT SYSTEM	1000	26" x 26" x 35 1/2"	51189
HEPA FILTER	1000	24" x 24" x 12"	50095
HEPA PREFILTER (6 per carton)	1000	24" x 24" x 2"	52001
REPLACEMENT BAGS (2 per carton)			51989

BAG IN - BAG OUT INSTALLATION



MINIHELIC GAUGE



Gauge monitors the pressure differential across the HEPA filter. Gauge conveniently mounts on the fume hood or on the filter housing. Measure range is from 0 to 2.0" wg. Gauge is 3" dia. with 5% accuracy.

Cat. No. 51300

MAGNEHELIC GAUGE



Gauge measures static pressure across the HEPA filter. Can mount on the fume hood or the filter housing. Rang of measurement is from 0 to 2" wg. Gauge is 5" dia. with 2% accuracy.

Cat. No. 51301

CLEAN-AIRE Carbon Filtration Systems

Carbon Filters are widely used in laboratory air supply and exhaust systems to remove chemical odors and fume vapors. Can be paired with HEPA filters to remove particulate.

CARBON FILTER PAK



The Carbon Filter Pak is engineered to remove undesirable fumes and odors from a Uniflow fume hood exhaust system. The filter pak housing is constructed with a convenient latched/hinged access door for filter change out. Inlet and outlet plenums with duct connection collars are installed. Note: 1. The carbon filter is not included with the housing. Please review the adjacent contaminant chart and select the appropriate carbon filter. 2. We recommend that the sampling kit below to check if there has been break through in the carbon filter. 3. We recommend ordering a back-up replacement filter.

CLEAN-AIRE CARBON FILTER PAK				
CFM	Size	Duct Size	Cat. No.	
250-650	26" x 15" x 35 1/2"	4", 8" diameter	50297	
650-1200	26" x 26" x 35 1/2"	8", 10", 12" diameter	50298	
CARBON FILTERS		PREFILTER (6 per carton)		
CFM	Cat. No.	CFM	Cat. No.	Size
500	52100	500	52000	24" x 12" x 2"
1000	52101	1000	52001	24" x 24" x 2"

CONTAMINANT

The following chart is a partial list of contaminants and the proper type of carbon for maximum efficiency. For additional contaminants, please consult factory.

Contaminant	Carbon Type
Acetic Acid	01
Acetone	01
Ammonia*	05
Benzene	01
Butyl Acetate	01
Caprylic Acid	01
Carbolic Acid	01
Carbon Tetrachloride	01
Chlorine*	02
Chloroform	01
Chlorophicbin	01
Crotonaldehyde	01
Cyclohexanone	01
Dibromoethane	01
Dichloronitroethane	01
Dichloropropane	01
Dimethyl Sulfate	01
Dipropyl Keyton	01
Ethyl Alcohol	01
Ethyl Benzene	01
Ethylene Dichloride	01
Ethylene Oxide	06
Formaldehyde	03
Formic Acid*	02
Glutaraldehyde	04
Heptane	01
Heptylene	01
Hexane	01
Hydrogen Bromide*	02
Hydrogen Chloride	02
Iodine	01
Isopropyl Alcohol	01
Isopropyl Ether	01
Methyl Butyl Keytone	01
Methyl Ethyl Keytone	01
Methylene Chloride	01
Nitric Acid*	02
Nitrobenzene	01
Nitropropane	01
Octalene	01
Propyl Mercaptan	01
Pyridne	01
Styrene Monomer	01
Sulphur Dioxide*	02
Sulphuric Acid*	02
Toluene	01
Trichloroethalene	01
Trichloroethane	01
Xylene	01

CARBON FILTER BAG IN - BAG OUT

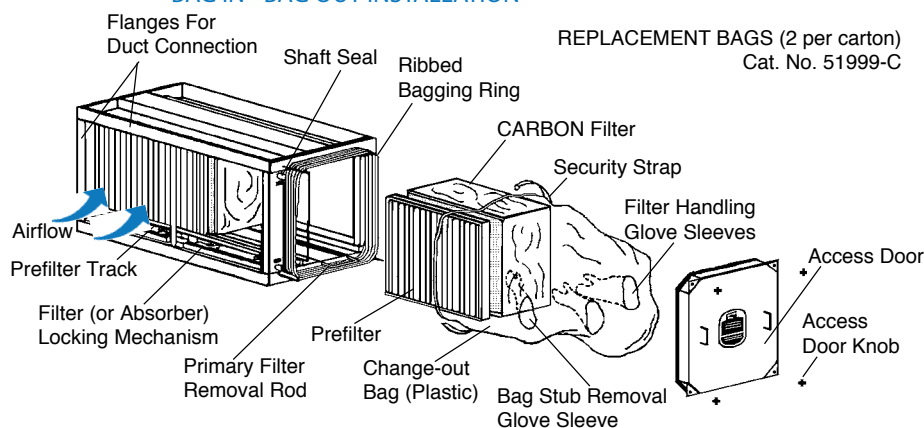


Filter housing is fabricated of type-304 stainless steel and requires (1) Carbon Filter Absorber, (1) 24" x 24" x 2" 30% pleated prefilter and (1) bag. Bag In-Bag Out filters are designed to meet air filtration requirements to handle hazardous fumes and vapors. The housing incorporates a ribbed bagging ring around the side access door over which a specially designed plastic bad is attached. Filters are then installed and changed through the bag to reduce the risk of exposure to personnel. Note: 1. The carbon filter is not included with the housing. Please review the adjacent contaminant chart and select the appropriate carbon filter. 2. we recommend that the sampling kit below to check if there has been a break through in the carbon filter. 3. We recommend ordering a back-up replacement filter.

View the Contaminant List for carbon type(s).

	CFM	Size	Cat. No.
CLEAN-AIRE CARBON FILTER BAG IN BAG OUT SYSTEM	1000	26" x 26" x 35 1/2"	51198
CARBON FILTERS	1000	24" x 24" x 12"	52101
CARBON PREFILTER (6 per carton)	1000	24" x 24" x 2"	50001
REPLACEMENT BAGS (2 per carton)			51999

BAG IN - BAG OUT INSTALLATION



GAS MONITOR



Gas monitor detects and warns of high concentrations of dangerous gases such as chlorinated solvents, ammonia, ethylene oxide, etc. Unit has visual and audio alarm and is factory calibrated to specific gas. 115V and power cord. Specify gas and alarm level.

Cat. No. 51400

Manifolded Laboratory Exhaust Systems

Exhauster stack systems are designed to your specific ventilation requirement. Manifolded exhaust systems feature lower construction costs, increased safety, and easy adaptability as requirements change.

SPECIFICATIONS

Manifolded Exhauster Stack

2000 CFM, direct drive, epoxy coated motor housing, fiberglass discharge nozzle, entrainment wind band outlet, 1 HP TEFC motor, 230 V 3 ph, 1200 RPM

Cat. No. 82000

Manifolded Exhauster Stack

Same as above except 3200 CFM, 2 HP, TEFC motor, 230 V 3 ph,

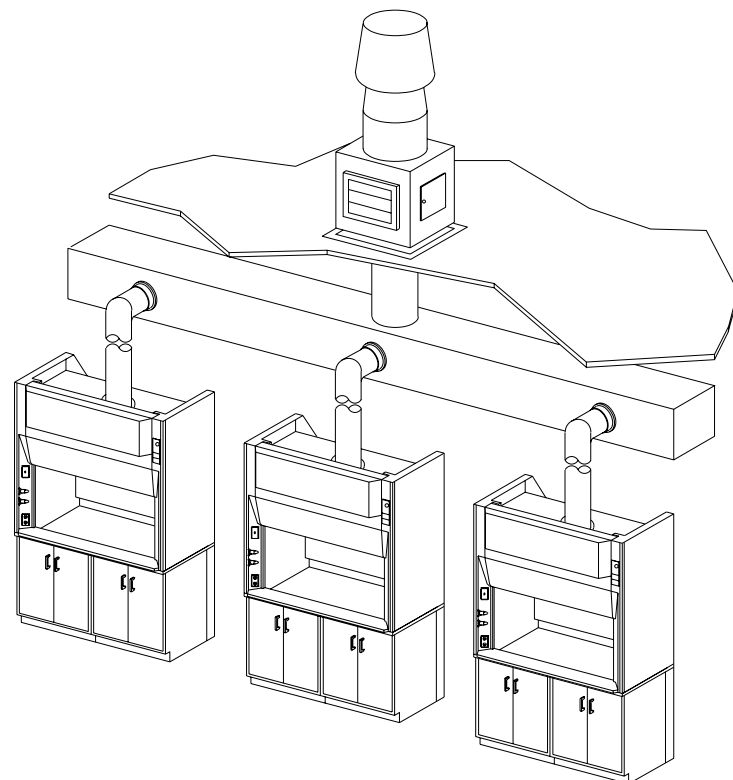
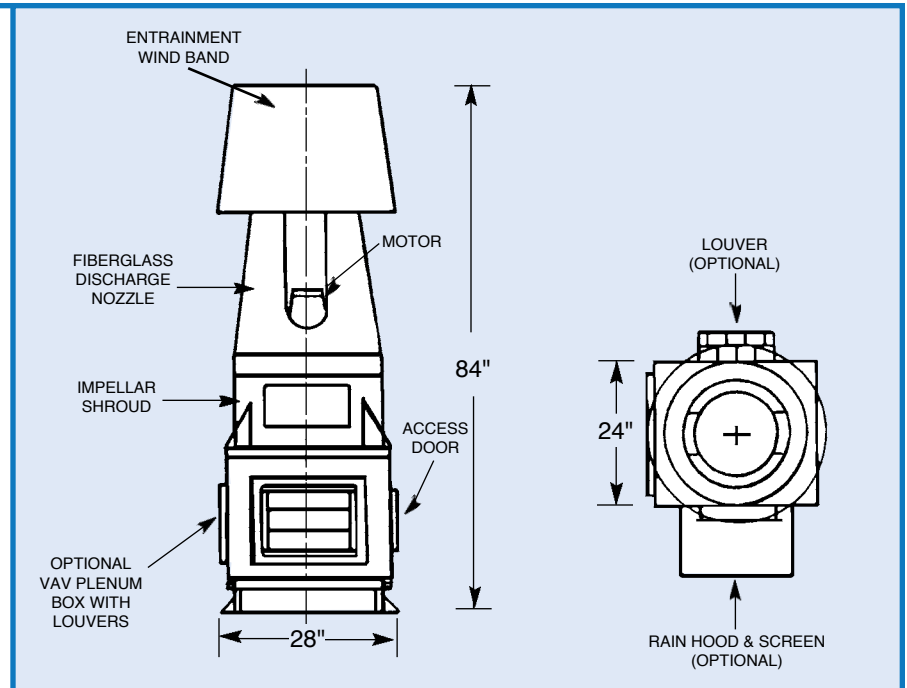
Cat. No. 83200

ByPass VAV Inlet Louver and mixing plenum box.

Cat. No. 80030

Rain Hood and Screen.

Cat. No. 80020



Custom Designed to Customer Needs

A wide selection of additional exhauster sizes, exhaust plenum configurations, accessories and components are available to fit your exact need. Our technical staff will gladly assist in designing a manifolded engineered exhaust system to meet your specific ventilation requirement.

Advantages of Manifolded Exhaust System

- Mixing/dilution potential superior due to wind band aspiration effect and mixing box.
- Constant full volume dispersion above the roof turbulence region is excellent.
- Low stack height is architecturally pleasing.
- Entire exhaust system within the building is under negative pressure.
- Totally stable pressure characteristic of mixed flow impellar eliminates stall surge problems.
- Installation costs are low due to light weight modular construction.
- Single roof penetration can be placed on existing roofs with little or no structural reinforcement.
- Flow variation potential of VAV system is excellent without creating recirculation hazard at intakes.
- Cross contamination possibility is low.
- Occupied roof space is minimal.
- Future add on capacity is easy due to manifold modular construction.

Fume & Vapor CLEAN-AIRE Scrubbers

Scrubber systems offer high efficiency and minimal maintenance on meeting pollution control requirements.



Fume Scrubbers provide excellent air pollution control for water soluble fumes and odors by moving contaminated air through a filter pack media exposing over forty square feet of surface per cubic foot. Contaminant is collected on filter media surface and rinsed off with water. Excess water is then mechanically removed and cleaned air is released. When conditions require, chemical additives can increase absorptive capacity of the scrubber. Unit includes integral recirculation tank and pump which significantly reduces water consumption and related waste disposal costs. Fan is not included, must be sized to meet exhaust requirements. Request a Plan-A-Scrubber specification sheet for planning your scrubber.

Scrubber				Blower		
Size	Dimensions			Cat. No.	Size	Cat. No.
	A	B	C			
500 CFM	49"	30"	18"	80000	500 CFM	80010
1000 CFM	50"	34"	22"	80001	1000 CFM	80011
2000 CFM	50"	40"	28"	80002	2000 CFM	80012
3700 CFM	52"	49"	37"	80003	3700 CFM	80013
6000 CFM	53"	58"	45"	80004	6000 CFM	80014
8000 CFM	54"	65"	52"	80005	8000 CFM	80015

REMOTE RECIRCULATION TANK & PUMP can be supplied for installations where the scrubber is located outdoors and the possibility of freezing exists.

- 500 CFM Cat. No. 80210
- 1000 CFM Cat. No. 80211
- 2000 CFM Cat. No. 80212
- 4000 CFM Cat. No. 80213
- 6000 CFM Cat. No. 80214
- 8000 CFM Cat. No. 80215



PH CONTROL PACKAGE allows precise control over effluent quality and provides neutralization of contaminants. The PH control system consists of a weather-tight, corrosion-proof enclosure containing an analyzer, prewired chemical feed pump, weather-protected terminal block, clear PVC face plate and external chemical-feed connection. Enclosure can be mounted on any vertical surface. A heavy-duty industrial probe with a 10 ft. lead wire is supplied, along with two 10 ft. lengths of vinyl tubing to connect the feed pump.

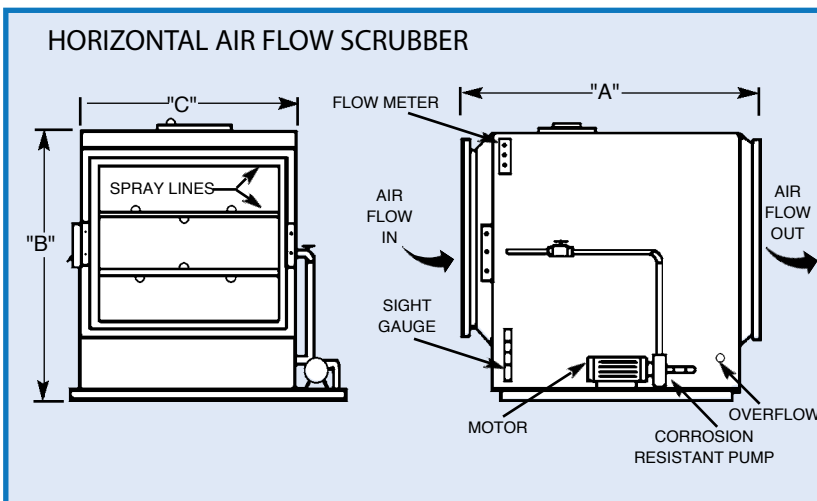


Cat. No. 80112

CATALOG NUMBER AND FUME REMOVAL EFFICIENCIES (BASED ON 3-FOOT BED)

ATMOSPHERIC CONTAMINANT	80000	+ w/pH Control
	80001	
	80002	
	80003	
	80004	
80005		
Acid Mists, General	98%	99%
Acetic Acid Mist	*	99%
Alkaline Mists, General	99.5%	99.9%
Aqua Regina Gas	90%	92%
Ammonia Gas	*	95%
Chlorine Gas	*	90%
Chromic Acid Mist	98%	99%
Cyanide Mist	99.5%	99.8%
Fluoborate Mist	98%	98%
Formaldehyde Gas	*	99%
Haldid Mist	96%	98%
Hydrofluoric Acid Mist	98%	99%
Hydrogen Chloride Gas	85%	98%
Nickel Sulfate Mist	98%	99%
Nitrogen Dioxide Gas	*	*
Perchloric Acid Mist	80%	85%
Phosphoric Acid Mist	96%	99%
Sodium Hydroxide Mist	99.5%	99.9%
Sulfamate Mist	98%	99%
Sulfuric Acid Mist	99.5%	99.9%
Zinc Chloride Mist	90%	95%

The above efficiencies are intended as a guide representing average values. Specific combinations and concentrations of fumes may result in a significant variation from the above.
* Requires extended packing depth and chemical addition to scrubbing solution.



UNIMAX Floor-Mounted Walk-In Fume Hoods

The Unimax Walk-in Fume Hood encloses your workspace to safely contain and vent vapors or contaminants. Available in standard or explosion proof models in 72", 96", 108" or 144" widths



UNIMAX Floor-Mounted Hood #50601 shown with optional table, apparatus grid, and service fixtures.

Built for Durability and Convenient Use

Manufactured of chemical resistant composite materials bonded to 2" urethane foam. Horizontal sliding doors are constructed of insulated tempered glass. The Unimax is available in "double depth" or "walk-through" designs to provide convenient front and rear access. Unit can be mounted to existing floor or to other special floor covering as required.

Air By-pass Design Controls Air Flow

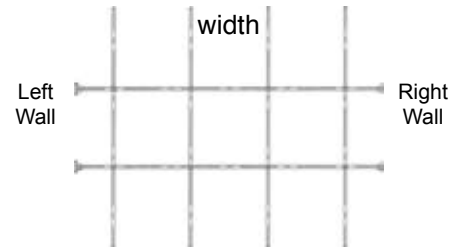
The automatic Air-By-Pass system controls air velocities. A chemical resistant adjustable and removable slotted baffle provides uniform air flow throughout the fume chamber.

Custom Designed to Customer's Needs

Equipped with either recessed vapor light or explosion proof incandescent light. Chemical resistant exhaust blowers for normal or explosion proof applications are available. Can be shipped completely assembled or "knocked down" for on-site assembly.

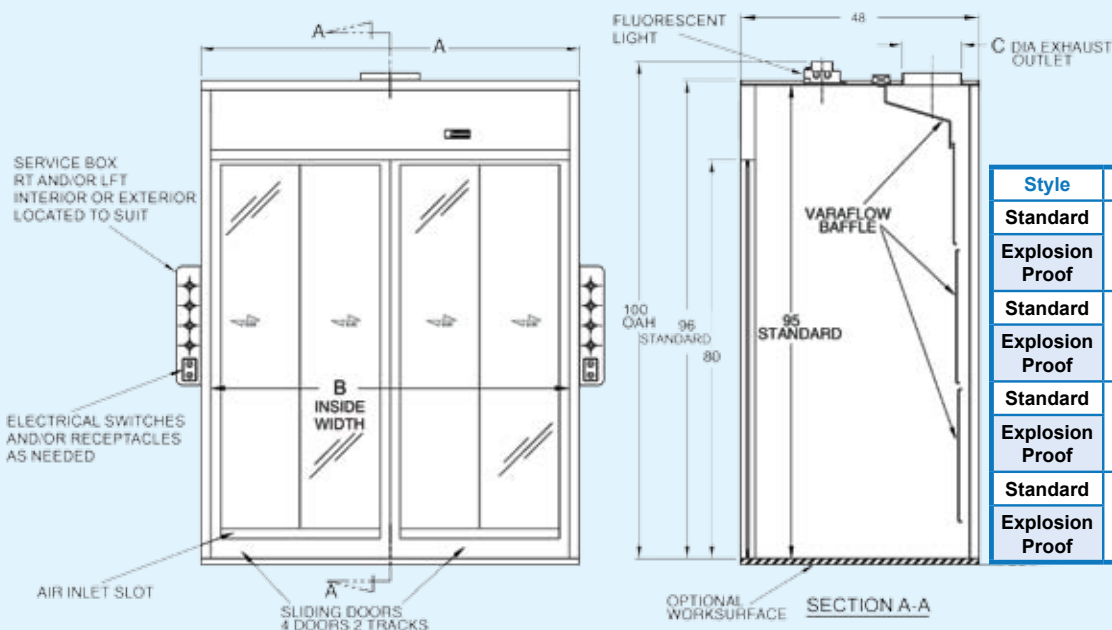
Distillation Apparatus Grid

Offered in aluminum, stainless steel, and non-metallic composite plastic. Includes rod and all connectors. The 76" hood requires one (1) 6' assembly, the 100" hood requires two (2) 4' assemblies, and the 148" hood requires three (3) 4' assemblies.



	76" Width	100" Width	112" Width	148" Width
	Qty Cat No	Qty Cat No	Qty Cat No	Qty Cat No
1. Aluminum Rod Assy.	(1) 50261	(2) 50251	(2) 50251	(3) 50251
2. Stainless Steel Assy.	(1) 50262	(2) 50252	(2) 50252	(3) 50252
3. Plastic / FG Rod Assy.	(1) 50263	(2) 50253	(2) 50253	(3) 50253

UniMax Floor Mount Fume Hoods



Style	A	B	C	Cat. No.
Standard				50601
Explosion Proof	76"	72"	12"	50631
Standard				50602
Explosion Proof	100"	96"	12"	50632
Standard				50603
Explosion Proof	112"	108"	12" (2pl)	50633
Standard				50604
Explosion Proof	148"	144"	12 (2pl)	50634

Also available with access doors on front and back. For plumbing, sinks and electrical fixtures, see pages 27-29. Consult HEMCO for custom UNIMAX applications

HAZMAX Hazardous Containment Work Area

HazMax Floor-Mounted Hoods are designed to safely isolate hazardous materials and procedures from the work area. Hood sizes include 76" and 100" wide models in 48" and 72" depths. Ideal for enclosing potentially hazardous mixing and dispensing procedures or for providing a convenient safe area to store hazardous materials.



HAZMAX Floor Mount Hood is shown with optional service features and accessories.

HAZMAX Floor-Mounted Hood Features

Hood features a chemical resistant, non-sparking construction. Upper and lower air to bypass inlets together with an advanced baffle design maintain a uniform airflow through the fume chamber. Horizontal slide doors are of aluminum framed tempered glass. Optional door systems are available.

Electrical Components

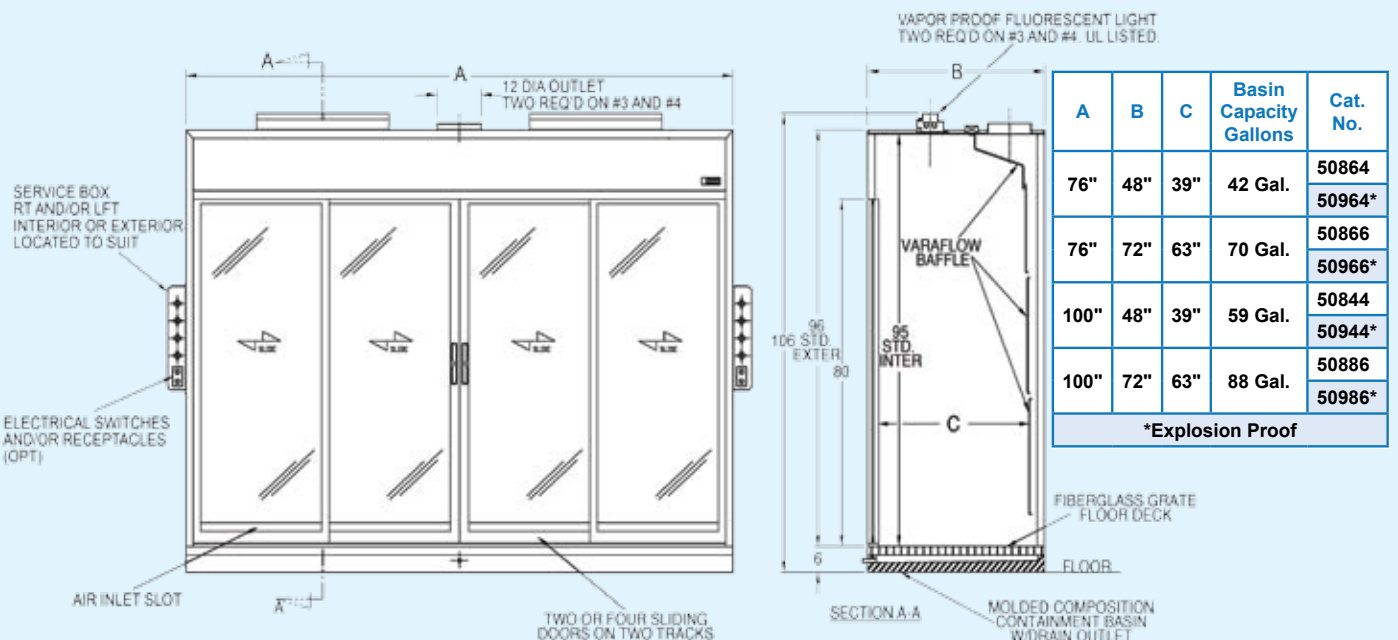
Hood is equipped with vapor proof or explosion proof lighting. All electrical components and services are UL and CSA listed. Other voltage Hertz and phase options are available for international and industry requirements.

Corrosion Resistant Construction

The molded one-piece containment basin safely holds any accidental spills of hazardous liquids or materials. The chemical resistant high strength, raised fiberglass grating supports equipment and personnel. Non-skid grate decking is removable for cleaning and decontamination. Outlet connection is available for drainage basin.

Note: There may be procedures that require personnel entry into floor-mounted hood. Person should have protection/respirators. Consult laboratory safety officer for correct personnel protection equipment.

HazMax Floor Mount Fume Hoods



Special Purpose Hoods and Work Station

HEMCO Specializes in Specializing. We will design/built ventilation hoods and equipment to your specifications. Units shown are examples of custom work for various applications.



EXTRA TALL FUME HOOD 6' wide x 3' deep x 12' high. Specially designed for distillation processes.



CORNER FUME HOOD Unique "wrap around" sash provides access to the entire fume hood interior from one position.



CUSTOM MOBILE WORK STATION 5' wide x 3.5' deep x 7' high features welded steel base and plastic laminate worksurface and enclosure.



WALK-IN FUME HOOD 8' wide x 4' deep x 8' high is equipped with dual vertical sliding sashes, service utilities and controls.

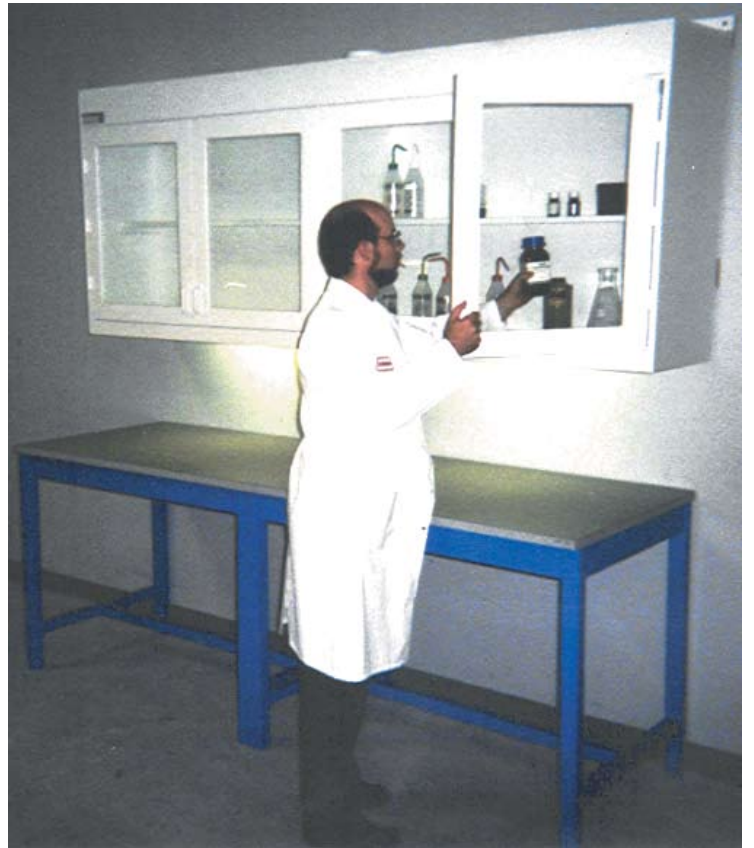
Custom Hoods, Enclosures and Cabinets



16' BENCHTOP HOOD with full interior access features
4 counterbalanced vertical slide sashes and total composite construction.



DOWNDRAFT ENCLOSURE is engineered to pull powders down through grating for collection. Unit has a vertical sliding window and electrical services.



VENTED WALL CHEMICAL STORAGE CABINET, constructed of polypropylene, with airflow thru each shelf to an upper exhaust plenum.

Engineered Enclosures for Robotics and Lab Automation

EnviroMax Enclosures are specifically designed to meet critical containment requirements of lab automation systems and process operations. Enclosures are engineered as mini-environments to either exhaust hazardous fumes, maintain a class clean environment, or control temperature and humidity. Our technical staff works with you from concept to completion.



INTEGRATED SYSTEMS ENCLOSURE 10'W x 3.5'D x 9'H provides HEPA filtered protection for product / process and personnel. Unit is equipped with a stainless steel base and rear access panels.



FLOOR MOUNTED POWDERS CONTAINMENT ENCLOSURE 6'W x 4'D x 8'H Safely contains vents, and filters, airborne powders emitted during weighing and dispensing operations.



ROBOTIC VENTED ENCLOSURE 8'W x 6'D x 4'H has clear viewing and access on all sides. Fumes are exhausted through a clear slotted ceiling baffle allowing surrounding light to enter.



CLEAN WORKSTATION 5.5'W x 3'D x 6'H recirculates class 100 clean air and maintains a face velocity for user protection. Unit is equipped with UV lighting for sterility.

For more information request the HEMCO Enviromax Brochure

Innovative Modular Labs and Rooms

The innovative Unilab and Modulab and Mobile Lab construction is what sets HEMCO rooms apart from the competition. HEMCO wall systems are a fast and cost effective solution to your clean room, isolated lab workspaces, or controlled environmental room requirements. Let the engineering expertise of HEMCO take your ideas on paper to self-contained room system on time and on budget.

UNILAB

An innovative concept in modular laboratory workspace, the self-contained Unilab is pre-engineered and constructed to be cost effective and time and energy efficient. The flexible modular design of the Unilab allows it to retrofit within existing space and control the internal environment. The unique transparent wall design of the Unilab gives your lab an open feeling that is aesthetically appealing. The Unilab can provide you with a complete system to meet your process, equipment, and personnel needs. Further, our modular rooms are built to meet safety, health, environmental, sterility, production, and laboratory standards.

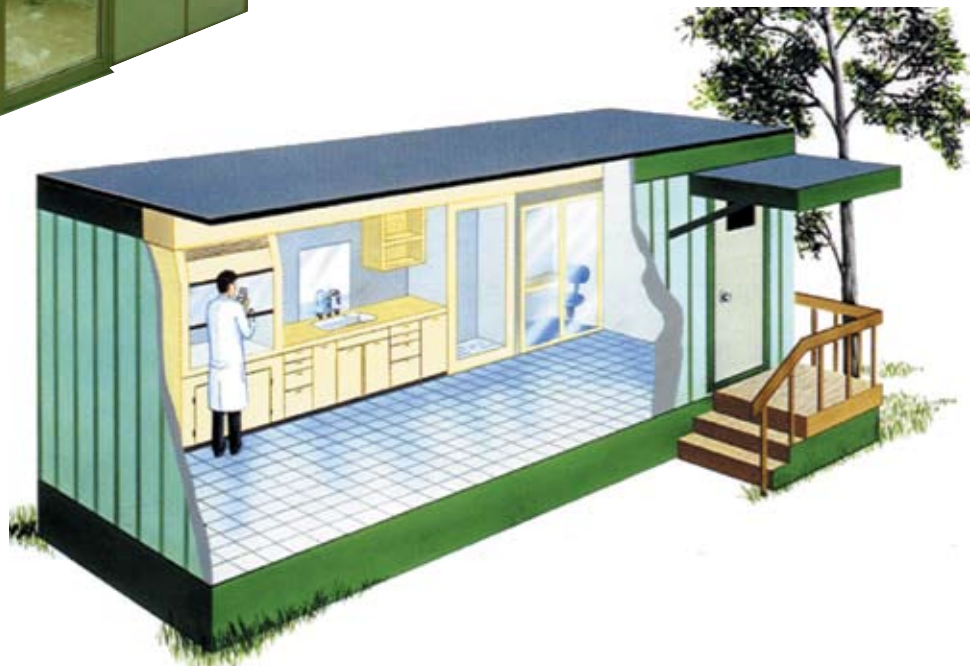


MODULAB

The HEMCO Modulab offers the ultimate in design flexibility. Installation is fast, simple and cost effective. The Modulab can ship either pre-assembled or knock-down. Dismantling and relocation can be quickly and easily accomplished. If your requirements for a fully equipped, operational, environmentally controlled laboratory are immediate, Modulab is the answer.

MOBILAB

Mobilab is designed to be a "turn-key," mobile laboratory, delivered furnished and ready for operation. Fume hoods, furniture, ventilation/filtration systems are available from HEMCO to fully equip the Mobilab. Mobilab provides you with a clean, fully insulated climate controlled laboratory that can be relocated as needs change.



For more information, request the HEMCO Modular Labs and Rooms Brochure

Complete UniFlow Line of Fume Hoods



UniFlow SE Low Flow Constant Volume High Efficiency Fume Hoods available in 48", 60", 72", 96" width models



UniFlow LE Low Profile Constant Volume Fume Hoods cost effective hood series available in 48", 60", 72", 96" width models



UniFlow FM Floor Mount Fume Hoods offered in 48", 60", 72", 96" width models either 30", 36", or 48" depth

HEMCO ALSO HAS LITERATURE AVAILABLE ON THESE PRODUCTS



UniFlow CE
Fume Hood
Brochure



EnviroMax
Robotic Enclosure
Brochure



UniLab
Modular Lab & Room
Brochure



UniLine
Lab Casework
Brochure

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