

**HEMCO**  
***Laboratory Planning Solutions***<sup>®</sup>

# Uniflow Fume Hoods



**BETATEK** INC.  
*Instrumentation Superbly Supported*  
*L'instrumentation à son meilleur*

654 Petrolia Road,  
Toronto, ON M3J 2W3  
Tel: (416) 736-6166  
Toll-Free: (800) 387 3570  
Fax: (416) 736-9346

# **UniFlow** SE AireStream Fume Hoods

by **HEMCO**®



- U.L. 1805 Classification defines requirements specific to Laboratory Fume Hoods & Cabinets
- This Classification covers construction, materials, flammability and containment performance
- HEMCO's test facility is compliant to test Fume Hoods for U.L. 1805 Classification





# UniFlow<sup>®</sup> SE AireStream Fume Hoods

High efficiency, full duty fume hood in 48", 60", 72" and 96" widths. UniFlow SE AireStream Fume Hoods are designed for energy savings & maximum user protection. The aerodynamic face opening with airfoil provides uniform air flow through the fume chamber. A constant volume low flow hood with Vector Baffle System directs the air through the fume chamber to the bell shaped exhaust collar with minimal turbulence. Requires Remote Exhaust Blower. Fume hood is U.L.1805 classified.



**UniFlow SE AireStream Hood Cat. No. 45621** shown with optional epoxy resin worksurface, acid storage cabinet, & fixtures.

**UniFlow Superstructure** non-metallic construction, total chemical and corrosion resistance (**NO RUST**), superior durability and long life. Interior fume chamber one-piece glass smooth, all covered corners for ease of cleaning. Unitized construction reduces weight for ease of installation. 5 year warranty.

## UniFlow AireStream Vector Baffle

System Features Vector Air Flow Slots for low flow and high performance. Maintains uniform air flow thru the baffle system to bell shaped exhaust collar outlet.

**Access Panel** removable to access ducting connections, plumbing & electrical services from a single point electrical box, 115/60Hz AC operation.

**Vapor Proof T-5 LED light fixture** polished stainless steel reflectors, and light switch on left column, all factory installed. Energy efficient 15W, 50/60Hz, 100-277VAC. 5 Year warranty. U.L. Listed

**28" Vertical Sash Height** provides ease of access for apparatus set-up in fume chamber. Sash is perfectly counter balanced, 3/16 tempered safety glass, coated stainless steel cable with stainless steel pulley assembly. Framed in nonmetallic PVC framing, track, and aerodynamic sash lift for ease of movement and air flow efficiency. Standard Sash.

**35" Viewing Height** interior fume chamber with 24" or 30" interior reach in depth. With 54" interior working height, allowing for tall apparatus and distillation grid.

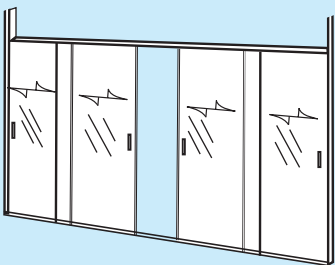
**Angled Picture Frame Opening** the aerodynamic face opening with air foil provides uniform air flow into the fume chamber and thru the Vector AireStream Baffle System.



**Air Flow Monitor** (Optional equipment) continuously monitors face velocity air flow, meets ANSI and OSHA requirements.

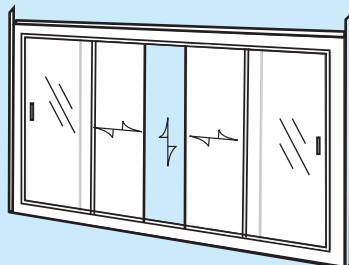
**Cat. No. 51403**

## SASH OPTIONS



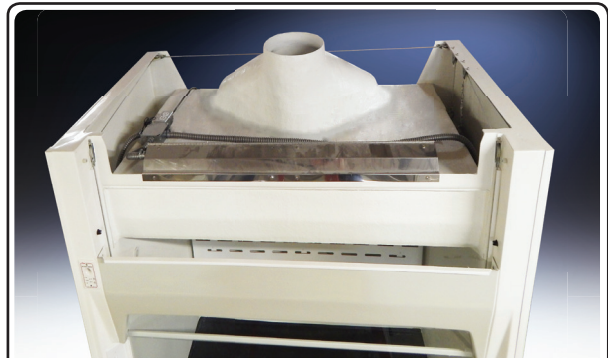
### Horizontal Sashes

Max opening is 50%, (4) panels on (2) tracks, conveniently lift out for equipment set-up or cleaning. For 50% reduction of air supply.



### Combination Horizontal / Vertical Sash

Offers the advantages of both sash types. Horizontal sash offer energy savings while vertical option allows full access to the fume chamber. Frame is of type 304 stainless steel.



### Low Resistance Exhaust Collar

Engineered to reduce static pressure and improve air flow volume & efficiency.

10" Diameter Exhaust Collar.....**Cat.No. 80101**

12" Diameter Exhaust Collar.....**Cat.No. 80121**

# UniFlow SE AireStream Fume Hoods

UNIFLOW SE AIRESTREAM DESCRIPTIONS		Fume Hood Width "A"			
1. UniFlow SE AireStream CAV Fume Hood: Air Bypass low flow, constant air volume hood. Dual wall unitized construction, all non-metallic corrosion and fire resistant composite fiberglass construction. Vector AireStream Baffle System and transition bell exhaust connection. Molded one-piece fume chamber with white glass-smooth surface with all covered corners. Vertical sash to be counter balanced 3/16" tempered safety glass with chemical resistant non-metallic PVC framing, track, and aerodynamic sash lift. A sash stop is installed at the 1/2 open position. Vapor proof LED light fixture and control switch are wired to a single point junction box, 115/60Hz. AC All electrical components are U.L. listed. Fume hood is U.L. 1805 classified	Hood Depth "B"	48" Cat.No.	60" Cat.No.	72" Cat.No.	96" Cat.No.
2. UniFlow SE AireStream VAV Fume Hood: Same as #1 above except equipped with Variable Air Volume VAV restricted bypass feature in place of CAV bypass feature. Ducting must be connected to optional VAV exhaust system controls.	30"	45421	45521	45621	45821
	36"	45431	45531	45631	45831
3. UniFlow SE AireStream Fume Hood with Explosion-Proof Light: Same as #1 above except, equipped with explosion proof vapor tight light fixture. Class I Div II Group A B C & D, Class II Div II Group F & G, 115/230V, 50/60Hz U.L. listed fixture is installed but not wired. Must be field wired to comply with codes. Optional explosion proof switches, receptacles.	30"	45422	45522	45622	45822
	36"	45432	45532	45632	45832
4. UniFlow SE AireStream Fume Hood International Configuration: Same as #1 above except equipped to comply to international electrical configuration. 220V/50Hz AC Optional international electrical configuration, electrical switches, other receptacles.	30"	45423	45523	45623	45823
	36"	45433	45533	45633	45833
5. Horizontal Sliding Sash Option: Add suffix to number above		45HS-4	45HS-5	45HS-6	45HS-8
6. Combination Sliding Sash Option: Add suffix to number above		45CS-4	45CS-5	45CS-6	45CS-8

**CLASSIFIED** U.L., Underwriters Laboratory U.L.1805 for fume hoods & cabinets. This classification covers construction, materials, flammability, & containment. U.L. 3101 electrical performance is tested using HIPOT testing, (high potential high voltage). HEMCO's test facility is compliant to test fume hoods for U.L. 1805 Classification.

## UniFlow SE AireStream Hood Dimensions

Hood Width "A"	48"	60"	72"	96"
Interior Width "C"	38"	50"	62"	86"
Diameter "D"	12"	12"	12"	(2) 12"

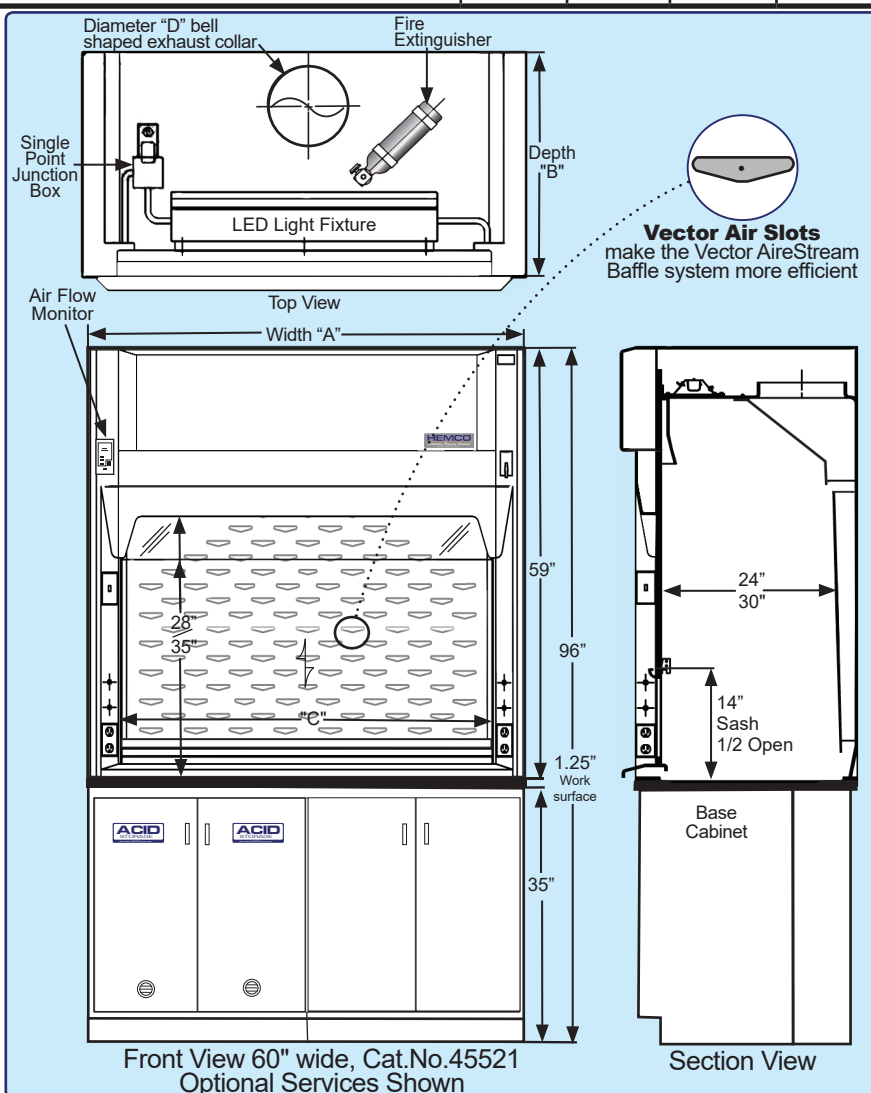
## CAV Fume Hood Face Velocity

The recommended face velocity for efficiency & safety is 80-100 FPM. Lower face velocity may compromise user safety. Sash in full open position should be for setup of apparatus & maintenance service only. Design opening is at 1/2 open at 100 FPM (feet per minute), face velocity at full open would be approximately 50 FPM.

## Sash Management & Design

Size Hood	48"	60"	72"	96"
1/2 Open CFM	385	474	592	800
1/2 Open Static Pressure	.15	.25	.20	.20
Full Open CFM	773	938	1162	1613

**Sash Stop** located at 1/2 open position to reduce air flow volume 50%, provides best possible user protection and safety. **Cat. No. 51651** (standard on SE, LE & CE AireStream fume hoods)





# ***Most Extensive Line of Laboratory Fume Hoods in the Industry***



## ***UniFlow AireStream*** **Laboratory Fume Hoods are available in**

1. UniFlow LE Walk-In Fume Hoods sizes 48", 60", 72" & 96" wide, 36" & 48" deep
  2. UniFlow SE Walk-In Fume Hoods sizes 48", 60", 72" & 96" wide, 30", 36" & 48" deep
  3. UniFlow SE Aire-Stream Fume Hoods sizes 48", 60", 72", 84" & 96" wide, 32", 38" & 44" deep
  4. UniFlow LE Fume Hoods sizes 36", 48", 60", 72" & 96" wide, and depths of 32"
  5. UniFlow CE Fume Hoods sizes 30", 36", 48" & 72" wide, and depths of 24"
- Reduce Energy costs up to 50% with HEMCO Sash Management 1-2-3, which provides maximum energy efficiency and user protection.

**5 YEAR WARRANTY ON ALL UNIFLOW  
SE, LE, & CE U.L. 1805 CLASSIFIED MODELS**



***Specify UniFlow Fume Hoods  
on Your Next Lab Project***

**HEMCO is a corporate member of the following Professional Associations:**



**NSPE  
National Society of  
Professional Engineers®**



**ASHRAE  
American Society of  
Heating Refrigeration and  
Air-Conditioning Engineers**



**SEFA  
Scientific Equipment  
and Furniture Association**



**ASME  
American Society of  
Mechanical Engineers**



**NFPA  
National Fire  
Protection Association**

HEMCO Corporation  
711 S. Powell Road  
Independence, MO 64056  
SEB-07.19

**HEMCO®**  
ISO 9001:2015 Certified Company

Phone (816) 796-2900  
Fax (816) 796-3333  
www.HEMCOcorp.com