

# UniFlow Auxiliary Air Fume Hoods

Zero room air requirements. The Fume hood exhaust is equal to the auxiliary supply air, thereby zero room air is required. With the sash in the 1/2 open position and face velocity of 100 feet per minute, the CFM required equals the air supply. The hood exhaust air plus auxiliary air make up for room supply deficiencies. Since expensive tempered room air is not required, Auxiliary Air Fume Hoods provide energy savings.



**UniFlow Auxiliary Air Hood Cat. No. 21521** shown with optional epoxy resin worksurface, fixtures, and base cabinets.

**UniFlow Superstructure** exclusive unitized dual wall construction for superior chemical resistance strength, and durability. One-piece interior fume chamber to be glass-smooth with VaraFlow baffle system & bell shaped exhaust collar. Meets NFPA-45 classification with flame spread of less than 25 per ASTM E-84.

**Access Panel** removable to access ducting connections and 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, 115V-230VAC. 5 Year warranty. U.L. Listed

**28" Vertical Sash Height** provides ease of access for apparatus set-up in fume chamber. 24" interior reach in depth, and 44" interior working height. 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.

**Plumbing Services** fixtures are color coded to specific service. (Optional equipment)

**Epoxy or Work Surfaces**

(Optional equipment)

**Fume Hood Base Cabinet**

(Optional equipment)



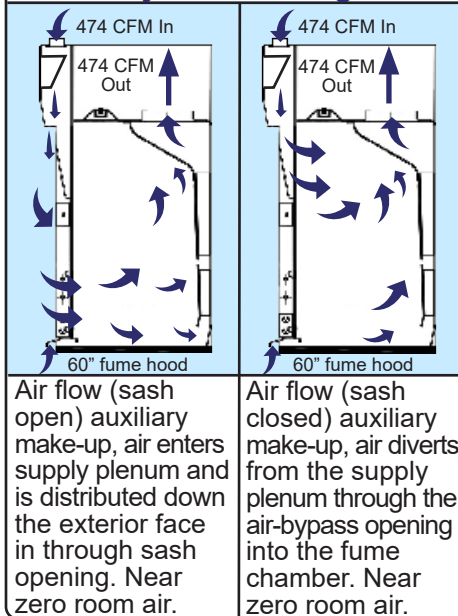
**Air Flow Monitor** (Optional equipment) continuously monitors face velocity air flow, meets ANSI and OSHA requirements.

Cat. No. 51403

## UniFlow Auxiliary Air Fume Hoods

- Auxiliary-Air fume hoods are equipped with auxiliary air plenum to induce added air flow to face opening of hood.
- Supply air ducting and remote blower are required.
- Example: A 60" Hood with the sash 1/2 open, and an exhaust of 474 CFM combined with a 474 CFM supply of ambient air. The amount of make up room air required would be zero.

## Auxiliary Air Flow Diagram

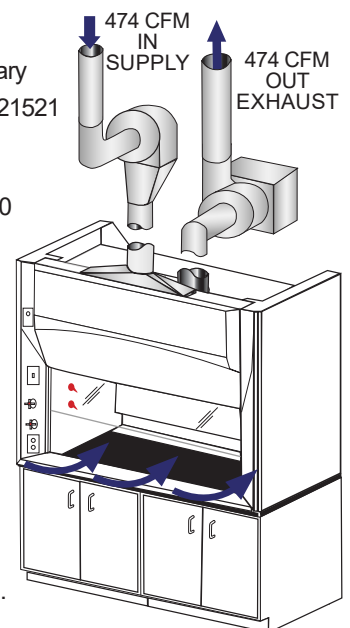


## UniFlow Auxiliary Air Fume Hood

### Zero Room Air

- For a 60" UniFlow Auxiliary Air fume hood Cat. No. 21521

- Sash opening design set at 1/2 open, and 100 FPM face velocity. The exhaust CFM is 474 CFM out.
- The Auxiliary Air supply blower is set at 474 CFM input.
- This balances out the theoretical room air requirement to 0 CFM.



# UniFlow Auxiliary Air Fume Hoods

UNIFLOW AUXILIARY AIR DESCRIPTIONS		Hood Depth "B"	FUME HOOD WIDTH "A"		
			48" Cat.No.	60" Cat.No.	72" Cat.No.
<b>1. UniFlow Auxiliary Air CAV Bypass Fume Hood with Vapor-Proof Light:</b> Superstructure to be unitized composite FRP fire 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 counterbalanced clear tempered safety glass sash with chemical resistant PVC framing, track, and aerodynamic sash lift. Built-in auxiliary air supply plenum to reduce volume of conditioned air from room. Vapor-proof LED light fixture and control switch pre-wired to single point junction box, 115/60Hz AC, All electrical components U.L. listed. Requires a remote exhaust blower, based on 50% supply air makeup.		30"	21421	21521	21621
<b>2. UniFlow Auxiliary Air By Pass Fume Hood with Explosion-Proof Light:</b> Same as #1 above except equipped with explosion-proof vapor-proof light fixture Class I, Div II Groups A B C & D, Class II Div II Groups F & G electrical fixture installed but not wired, must be wired to comply with local codes. 115/230V, 50/60Hz AC. For other explosion-proof electrical options, auxiliary supply blower see below. All electrical components UL listed.		30"	21423	21523	21623
<b>AUXILIARY AIR SUPPLY BLOWERS</b>					
<b>3. Supply blower, belt drive, coated steel with:</b> V-belt drive and adjustable pulleys permit field balancing. Weather housing and drain is furnished. Motor has thermal overload protection Specify 115V 1 ph, 230V 1 ph, 230/460V 3 ph. Blowers based on 50% supply makeup.	For 48" 1/4 HP 385 CFM @ 1/2" S.P. Loss		51901		
	For 60" 1/4 HP 474 CFM @ 1/2" S.P. Loss			51902	
	For 72" 1/4 HP 542 CFM @ 1/2" S.P. Loss				51903

**Questions / Ready to order  
Call 1-800-779-4362**

UniFlow Auxiliary Air Hood Dimensions			
Width "A"	48"	60"	72"
Width "C"	38"	50"	62"
Diameter "D"	10"	10"	12"
Dimension "E"	3" X 12"	3" X 18"	3" X 24"

**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"
1/2 Open CFM	385	474	592
Full Open CFM	773	938	1162

**Sash Stop** located at 1/2 open position to reduce air flow volume 50%, provides best possible user protection and safety.

**Cat. No. 51651**

