

VENTURI

High Performance Fume Hoods



KEWAUNEE



VENTURI EFFECT

"A short tube with tapering constriction in the middle that causes an increase in velocity of flow...or creating suction." *Oxford Dictionary*

Giovanni Batista Venturi - (1746-1822)

The Venturi Port accelerates the airflow in the lower corners of the hood opening. *patent pending*

VENTURI

Supreme Air | Kewaunee Scientific Corporation

Kewaunee's Venturi Fume Hood Offering

- Constant Volume
- Variable Air Volume
- Bench Mounted Hoods
 - 24"- 30"- 36" interior depths
 - 48" and 60" interior heights
 - 28" and 35" sash heights
- Floor Mounted Hoods
 - 24"- 30"- 36"- 48" interior depths
 - 83" interior height
 - 74" viewing height
- ADA Accessible
- TruView - Teaching Hoods
- Sash offerings
 - Vertical
 - Split Vertical
 - Horizontal
 - Combination
 - Split Combination
- Liner Options:
 - Kemglass – FRP
 - Stainless Steel
 - Phenolic Resin

Contents

Venturi Fume Hood Features.....	2
Venturi Selection Guide	3
VenturiPart Num Explanation.....	4
TruView Part Num Explanation.....	5
Guide to Fume Selection	6
General Purpose Bench Hoods.....	8
Split Sash Bench Hoods.....	14
ADA Bench Hoods	18
LX Series Bench Hoods	22
LX Series Split Sash Hoods	30
V40 - Isotope Hoods.....	38
V45 - Perchloric Acid Hoods.....	40
TruView Teaching Hoods.....	42
TruView Configurations.....	58
Floor Mounted Hoods	60
Distillation Hoods.....	66
Venturi Fume Hood Options.....	70
Electrical Fixtures	73
Pre-wired	73
Work Tops	76
Cupsinks.....	78
Ceiling Enclosures	79
Service Fittings.....	80
TruView Enclosures.....	84
TruView Service Fittings.....	85
Base Cabinets.....	87
Fume Hood Accessories.....	92
Pre-wired & Pre-piped	94
Recommended Work Practices...	95
Glossary of Term & Definitions	100
Typical Installations	102
Fume Hood Testing Facilities.....	103



Supreme Air Venturi
V05 Vertical Rising
Sash Bench Hood

Venturi Fume Hood Features



Light & Sash Stop Controller

General Features

- LED interior lighting with 15 intensity and 3 color settings
- Large viewing height
- Unparalleled containment
- Low Flow/High Performance
- Energy Efficient
- Venturi post design improves corner airflow
- Electromechanical sash stop integrated into sash track
(*mechanical sash stop on floor mounted hoods*)
- Flush airfoil for easy user access
- Easily removable, gasketed Access Panels
- Two GFCI protected duplex receptacles in each corner post
- Room for five service fittings per side post
- Sash handle notched at each end for cord pass-through



Venturi Port & Notched Sash Handle

Belt Driven Sash & Pulley System

- Low maintenance, dual shaft, belt and gear driven, sash system utilizing lineal bearings in the sash track for smooth operation



- Tested to 300,000 cycles

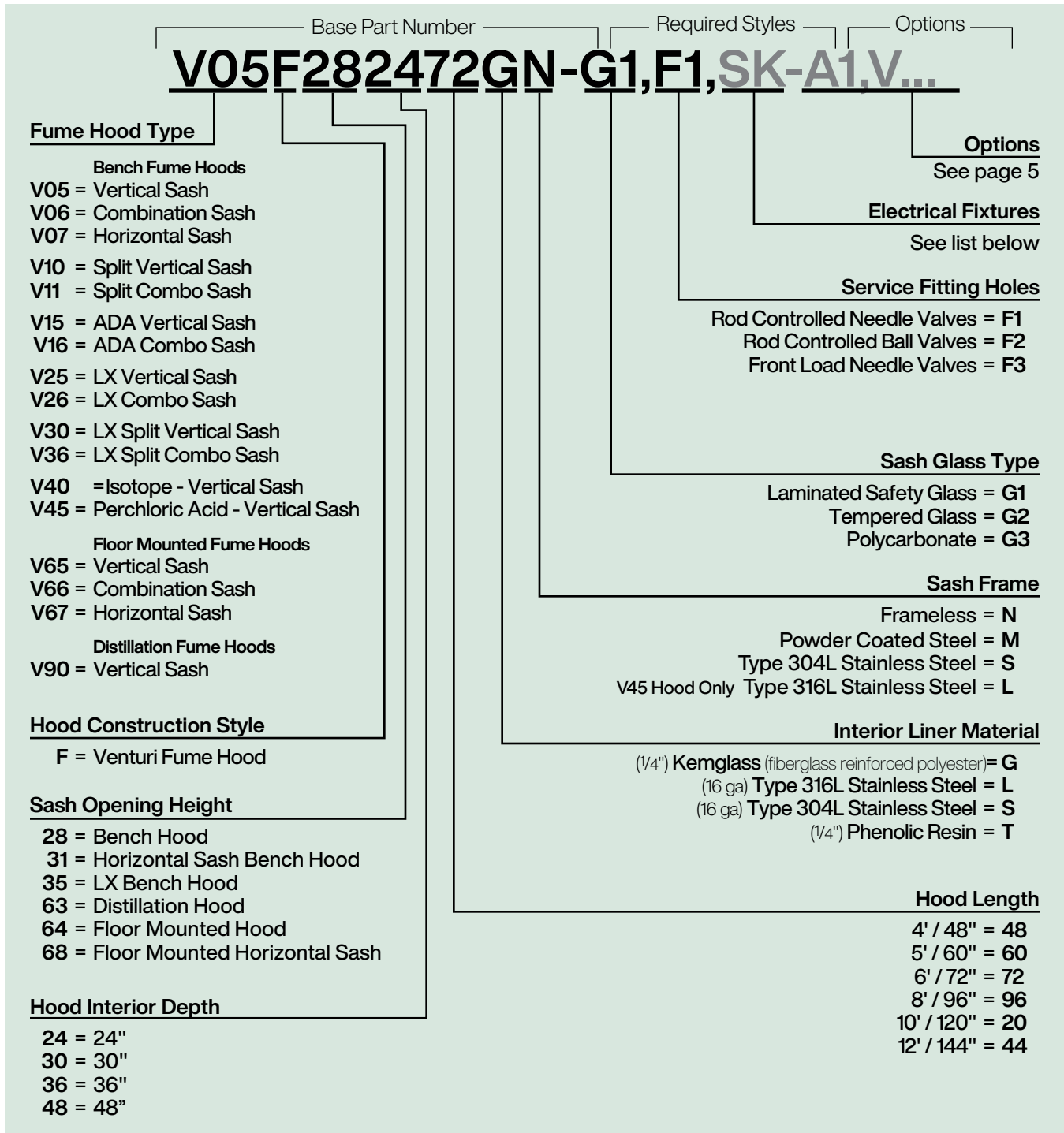


Venturi Fume Hood Selection Guide

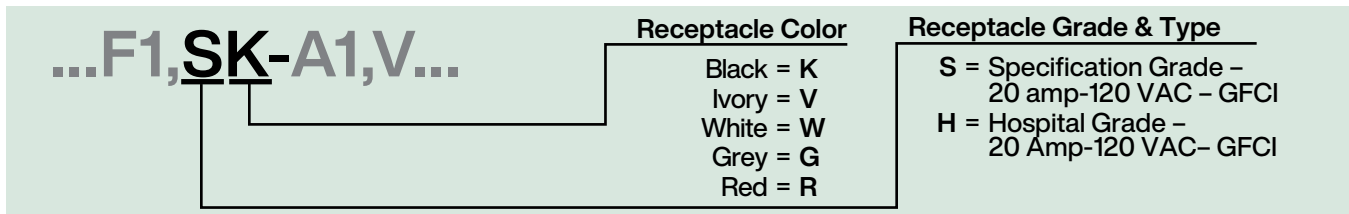
		Interior Height	Sash Type	Sash Opening Height	Available Interior Depths				Available Exterior Lengths						
General Purpose Bench Hoods					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V05		48"	Vertical	28"	■	■	■		■	■	■	■			page 8-9
V06		48"	Combination	28"	■	■	■		■	■	■	■			page 10-11
V07		48"	Horizontal	31"	■	■	■		■	■	■	■			page 12-13
Split Sash Hoods (Extra Length)					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V10		48"	Vertical	28"	■	■	■					■	■	■	page 14-15
V11		48"	Combination	28"	■	■	■					■	■	■	page 16-17
ADA Hoods					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V15		51"	Vertical	28"	■				■	■	■	■			page 18-19
V16		51"	Combination	28"	■				■	■	■	■			page 20-21
V52	Teaching	51"	Vertical	28"	■				■	■	■	■			page 46-47
V53	Teaching	51"	Combination	28"	■				■	■	■	■			page 48-49
V57	Teach Dbl Side	51"	Vertical	28"				■	■	■	■	■			page 54-55
V58	Teach Dbl Side	51"	Combination	28"				■	■	■	■	■			page 56-57
LX Series Fume Hoods (Extra Height)					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V25		60"	Vertical	28" - 35"	■	■	■		■	■	■	■			page 22-25
V26		60"	Combination	28" - 35"	■	■	■		■	■	■	■			page 26-29
LX Series Split Sash Hoods (Extra Length & Extra Height)					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V30		60"	Vertical	28" - 35"	■	■	■					■	■	■	page 30-33
V36		60"	Combination	28" - 35"	■	■	■					■	■	■	page 34-37
Specialty Hoods					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V40	Isotope	48"	Vertical	28"	■				■	■	■	■			page 38-39
V45	Perchloric Acid	48"	Vertical	28"	■				■	■	■	■			page 40-41
TruView Teaching Hoods					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V50		48"	Vertical	28"	■				■	■	■	■			page 42-43
V51		48"	Combination	28"	■				■	■	■	■			page 44-45
V55	Double Sided	48"	Vertical	28"				■	■	■	■	■			page 50-51
V56	Double Sided	48"	Combination	28"				■	■	■	■	■			page 52-53
General Purpose Floor Mounted Hoods					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V65		83¾"	Vertical	64¼"	■	■	■	■	■	■	■	■			page 54-55
V66		83¾"	Combination	64¼"	■	■	■	■	■	■	■	■			page 56-57
V67		83¾"	Horizontal	68"	■	■	■	■			■	■	■		page 58-59
Distillation Fume Hoods					24"	30"	36"	48"	48"	60"	72"	96"	120"	144"	
V90		83"	Vertical	63"	■	■	■		■	■	■	■			page 60-61

Part Number Explanation

Venturi Fume Hood Catalog Number Explanation

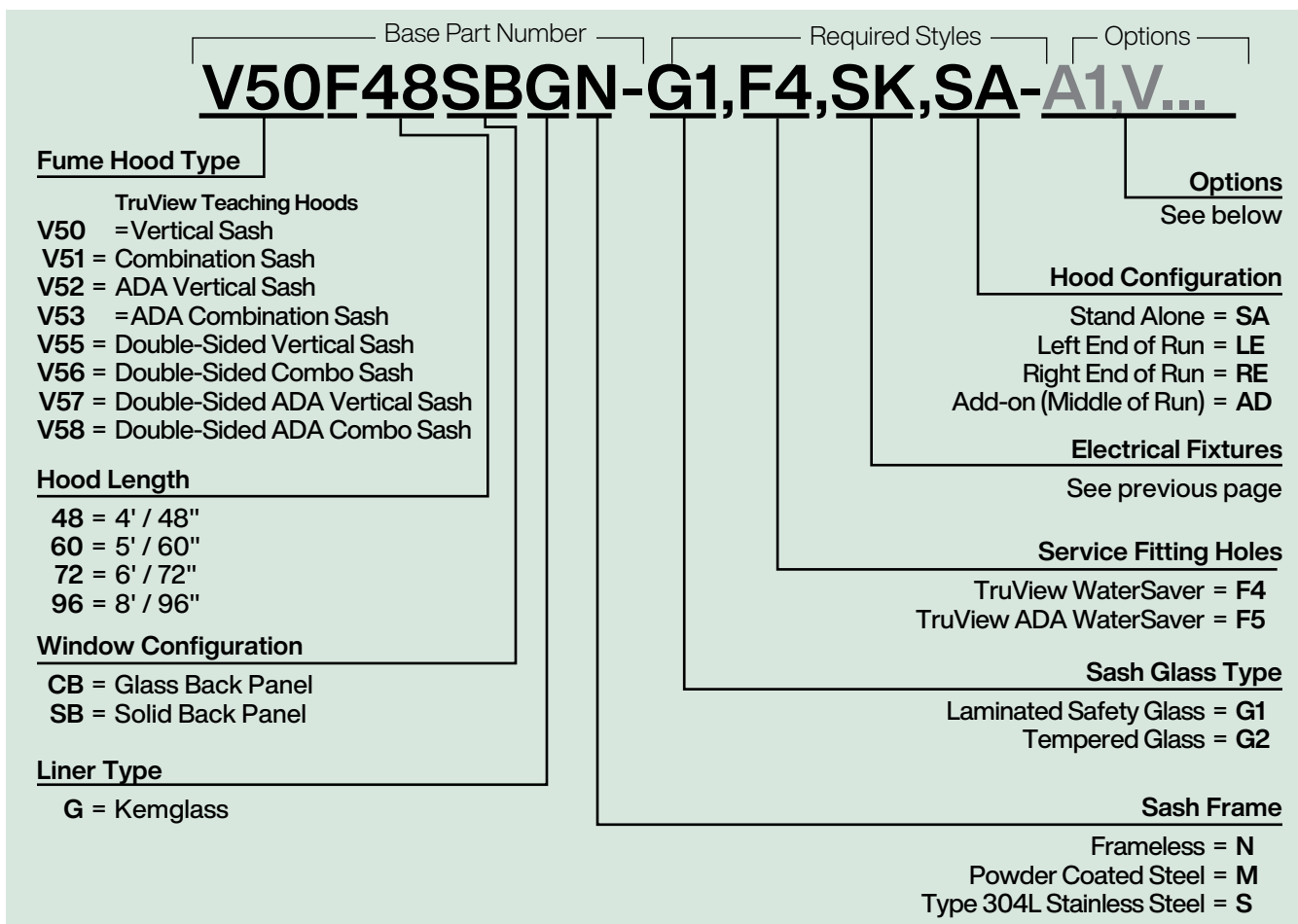


Electrical Fixtures:



Part Number Explanation

TruView Teaching Hood Catalog Number Explanation



Options:

V05F48SBGN-G1,F4,SK,SE-A1,V...

Airflow Modification

V = VAV Bypass page 70

Airflow Safety

A1 = Air Alert 600 for Vertical Sash page 70
A2 = Air Alert 600 for Combo Sash page 70
A3 = Air Alert 300 page 70
L = Sash Stop Label page 70

Fittings & Fixtures

K = Fan/Blower Switch page 73
P1 = Cord Port (one in each post) page 74
U/U2 = Pre-wired/UL Listed page 73

Stainless Steel Parts

C = Stainless Steel Duct Collar (Type 316) page 71
O = Stainless Steel Airfoil (Type 304) page 72
O2 = Stainless Steel Airfoil (Type 316) page 72
Q = Stainless Steel Sash Pull (Type 304) page 72

Sash Operators

R1 = Auto Sash Return page 74
R3 = Proximity Sash Operator page 74

Miscellaneous Options

D = Distillation Rack Preparation page 71
S = Safety Shield page 71
T = Tissue Screen page 72
W = Work Shelf Supports page 75

Guide to Fume Hood Selection

Introduction

Selection of the proper type of fume hood to use in a laboratory should be based upon two interrelated considerations:

1. The hood must allow the user to perform the work in a safe, efficient manner.
2. The need to reduce air conditioning cost.

The hood must be large enough to accommodate the required apparatus

within the prescribed safe work area of the hood (6" behind the plane of the sash and 2" in front of the back baffle). The configuration of the hood should be such that apparatus can be moved in and out of the hood easily. The sash opening of the hood must allow sufficient access for safely manipulating the apparatus within the hood. The interior of the hood must resist the corrosive effects of chemicals. The hood understructure should provide for

storage of the required chemicals and/or apparatus for the work being done in the hood.

The total operating cost of a hood is greatly affected by its exhaust air requirements. The annual cost of heating and cooling the air exhausted by the hood can be as high as the initial cost of the hood itself. Choosing the proper hood type, sash configuration, and ventilation system can significantly reduce these costs.

Low Exhaust Volume Hoods

Low Exhaust Volume (LEV) fume hoods are designed to have a lower exhaust requirement than a traditional fume hood of the same size running at 100 FPM with a fully opened sash by operating with a face velocity of 60 FPM or less through the same sash opening and offering containment levels equal to, or superior to, the traditional fume hood. LEV hoods are required by SEFA to be able to pass ASHRAE 110 with a performance rating equal to or better than 4.0 AM 0.05, and 4.0 AI/AU 0.10. LEV fume hoods offer a suite of new features not found on traditional fume hoods, such as innovative bypass designs, baffle conformations, and aerodynamic flush airfoils and radiused fascias. These fume hoods are designed to go anywhere a traditional fume hood might go. They are able to be

incorporated into either Constant Air Volume (CAV) or Variable Air Volume (VAV) systems.

Dynamic Barrier Bypasses are designed for LEV fume hoods being used in a CAV system. In a CAV system the exhaust volume to the hood is always the same, so as the sash height increases or decreases, the velocity decreases or increases, respectively. This type of bypass has a dynamic slot that opens wider as the sash is closed. This works with constant volume fume hoods since it allows additional air to enter the bypass above the sash, otherwise there would be a much larger increase in velocity when the sash is fully closed. The design of the Dynamic Barrier Bypass directs the air entering the fume hood so that it sweeps down the back of the sash, providing an extra

barrier of protection for the user.

Vertical Bypasses are designed for LEV fume hoods being used in a VAV system. VAV systems are designed to vary the fume hoods exhaust rate so when the sash is open, the face velocity is always the same and when the sash is closed, the exhaust rate decreases to a minimum value decided by the users EHS or Safety Management department based on ANSI/AIHA Z9.5. This type of bypass is designed to have a small opening that doesn't change size regardless of sash height with the bypass panel running parallel to the sash. This opening is required by the VAV system so that it can operate as designed.

Face Velocity

In a laboratory fume hood, the control of contaminants is achieved by drawing air through the face (sash) opening. The face velocity is defined as the average velocity of the air in this opening and is expressed in units of feet per minute (FPM). The Occupational Safety and Health Administration (OSHA) in its Laboratory Standard does not specify a required fume hood face velocity. As a result, hood users must look to published guidelines for recommendations on proper face velocities. The most authoritative

of these published guidelines is the ANSI/AIHA Z9.5 American National Standard for Laboratory Ventilation. This publication recommends using an average face velocity of between 60 and 120 feet per minute.

Newer technologies (like Kewaunee's Venturi series) have allowed face velocities below 60 FPM to show good containment. Part of the reasoning for these newer, lower face velocities is that the face velocity by itself does not define the protection level of a fume hood. There are other factors which are

as important such as: the design of the hood, the location of the hood within the laboratory, the quality of the supply air distribution, and most importantly the work practices of the user. The ANSI/AIHA Z9.5 recommendation assumes that these factors have been optimized through proper design and work rules.

Where local and state codes require the use of a specific face velocity, these codes should be followed.

Baffle Design

Venturi fume hoods come with fixed slots in the rear baffles. The size of the slots are optimized to provide the best

performance for general purpose use. The Venturi baffle technology works in both heavier-than-air and lighter-than-

air applications. Therefore there is not a need for baffle adjustment.

For answers to frequently asked questions about Kewaunee fume hoods visit the Kewaunee website.

Guide to Fume Hood Selection (continued)

Configurations

Bench hoods are set on a worksurface approximately 36" above the floor and provide a convenient work area for the standing position.

Floor mounted hoods are used where taller apparatus is required or equipment is rolled into the hood.

Distillation hoods are used where taller apparatus is required and convenient access to the floor of the hood is needed.

ADA fume hoods are designed in accordance with the guidelines for the Americans with Disabilities Act with controls lowered to improve

accessibility. These hoods are also used when a sitting position is desired for work at the hood. They provide the same size work area as the corresponding bench hoods.

Sash Arrangements

Vertical sash hoods provide the best horizontal and vertical access to the hood interior but they also have the highest exhaust requirements. The exhaust requirements can be reduced by using a sash stop, although, this restricts the vertical access into the work area. Split sash hoods can be used where two work areas are needed.

Auto-Return Vertical Sash hoods use a vertical sash that will automatically return to

a pre-set position if released from a higher position. A full-open lock-out is provided for set-ups.

Horizontal sash hoods provide good access into the hood vertically and allow for lower exhaust requirements. These sashes do restrict the access across the hood for loading of wide equipment and apparatus. This limitation becomes less significant in larger hoods.

Combination vertical rising/horizontal sash hoods, as the name implies, provide the benefits of both the vertical and horizontal sash hoods. For normal operation the sash can be partially raised vertically, or the horizontal panels can be used. The sash can be fully opened vertically for loading equipment into the hood.

Special Purpose Fume Hoods

Isotope hoods are designed for use with radioactive materials. The Type 304L stainless steel cove corner seamless welded construction eases

cleaning and decontamination.

Perchloric Acid hoods are required when this acid is heated above ambient temperature. The Type 316L stainless

steel liner is fabricated to eliminate the possibility of formation of perchloric acid deposits. This hood includes a water wash down feature.

Liner Material

Kemglass and **Phenolic Resin** are general purpose liners with very good to excellent chemical resistance. **Stainless Steel** is usually used where cleanability and/or heat resistance are the prime requirements.

Phenolic Resin (T) liner is reinforced with cellulose fibers and is surfaced with white melamine material. The brown phenolic resin is visible at the edges of the sheet material.

Kemglass (G) is white fiberglass reinforced polyester sheet material.

Type 304L Stainless Steel (S) and **Type 316L Stainless Steel (L)** is 14 gauge stainless steel sheet with a No. 4 finish.

HOOD LINER CHARACTERISTICS

LINER MATERIAL	RESISTANCE TO HEAT	CHEMICAL RESISTANCE		CLEANABILITY
		ACIDS	SOLVENTS	
Phenolic Resin	G	E	E	G
Kemglass	G	E	G	G
Stainless Steel	E	F	E	E

E = Excellent G = Good F = Fair P = Poor

Work Tops

Epoxy Resin work tops are available in four colors, have excellent chemical resistance, and good heat resistance. They are the normal choice for general purpose hoods and highly corrosive

applications.

Stainless Steel work tops are available in Types 304L and 316L. They are used where cleanability and heat resistance are important. Type 316 is preferred

where improved chemical resistance is desired.

The work top is specified by a separate part number for all hoods except Isotope and Perchloric Acid hoods.

For answers to frequently asked questions about Kewaunee fume hoods visit the Kewaunee website.

Technical Information

V05

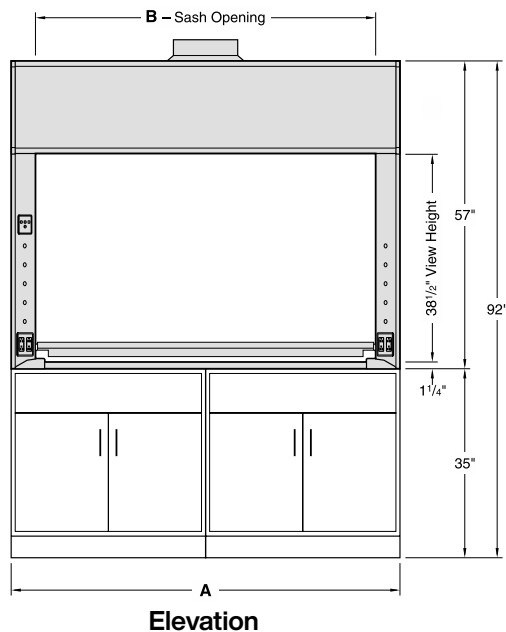
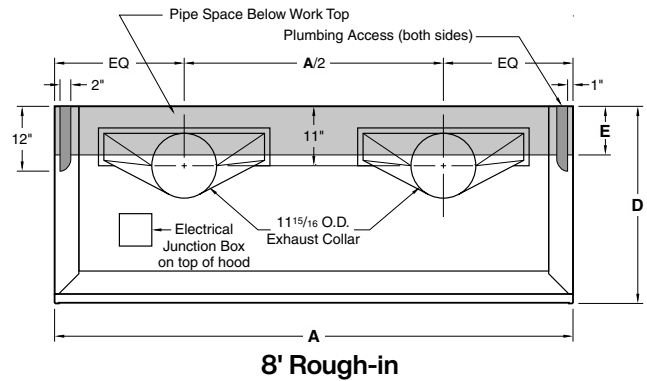
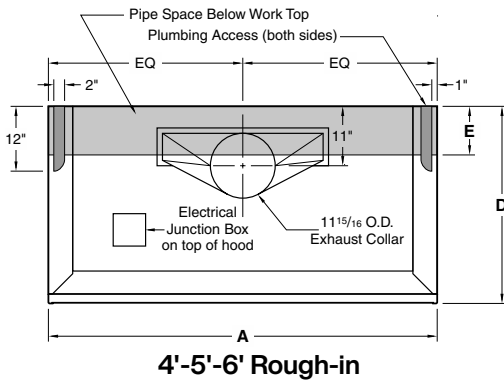
Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14	301	0.06	394	0.07	486	0.09	671	0.06
50 FPM	386	0.09	506	0.12	624	0.15	861	0.10	251	0.04	328	0.05	405	0.07	559	0.04

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

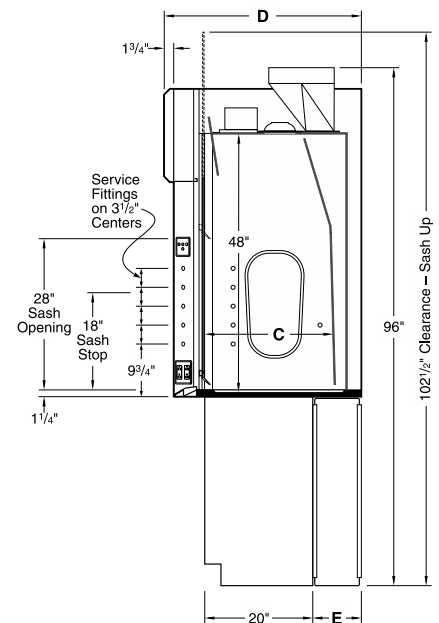
ANSI Z9.5 Minimum Flow Rate

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	100 CFM	120 CFM	170 CFM	190 CFM	240 CFM	300 CFM	410 CFM
30" deep	90 CFM	120 CFM	150 CFM	200 CFM	230 CFM	290 CFM	360 CFM	500 CFM
36" deep	110 CFM	140 CFM	170 CFM	240 CFM	270 CFM	350 CFM	430 CFM	590 CFM



Elevation

Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V06 – General Purpose Bench Fume Hood

with Combination Vertical Rising/Horizontal Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Available Liner Types:

part no.
code

Kemglass **G**

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel **L**
1805 UL classified

Type 304L Stainless Steel **S**
1805 UL classified

Phenolic Resin **T**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

V06F Sash Opening Height: **28** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas): , , ...

Technical Information

V06

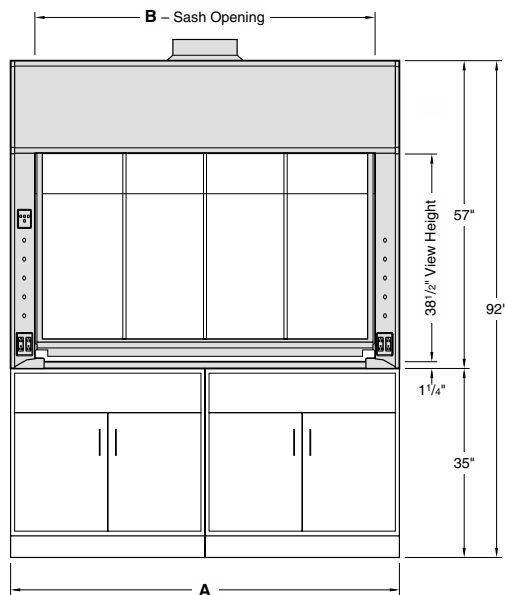
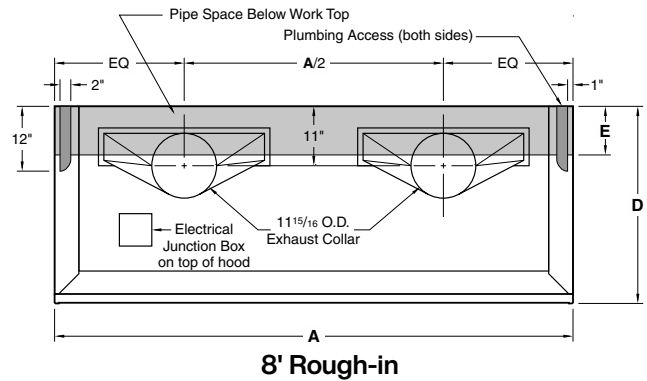
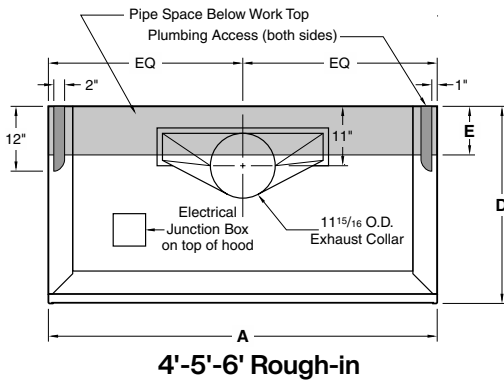
Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening								Sash Closed – Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	424	0.11	567	0.14	709	0.19	995	0.13
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	339	0.07	453	0.09	568	0.12	796	0.09
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	254	0.04	340	0.05	426	0.07	597	0.05
50 FPM	251	0.04	328	0.05	405	0.07	559	0.04	212	0.03	284	0.04	355	0.05	498	0.04

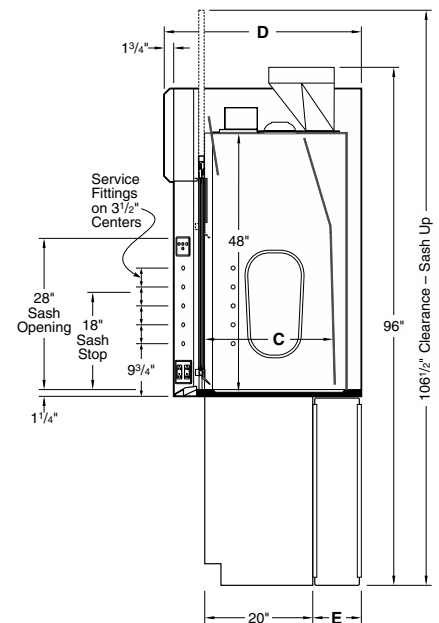
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	100 CFM	120 CFM	170 CFM	190 CFM	240 CFM	300 CFM	410 CFM
30" deep	90 CFM	120 CFM	150 CFM	200 CFM	230 CFM	290 CFM	360 CFM	500 CFM
36" deep	110 CFM	140 CFM	170 CFM	240 CFM	270 CFM	350 CFM	430 CFM	590 CFM



Dimensions – Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Dimensions – Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V07 – General Purpose Bench Fume Hood

with Horizontal Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller

Available Sizes:

part no.
code

Sash Opening Height:

31 inches / 787mm **31**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Available Liner Types:

part no.
code

Kemglass **G**

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel **L**
1805 UL classified

Type 304L Stainless Steel **S**
1805 UL classified

Phenolic Resin **T**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Frameless **N**

V07F Sash Opening Height: **31** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) **...**

Technical Information

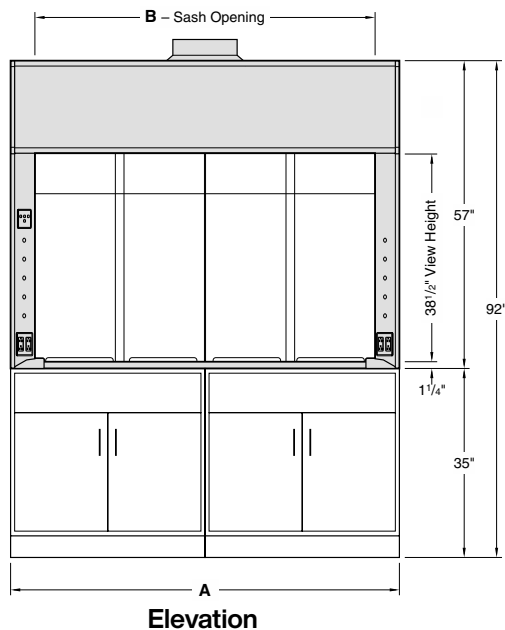
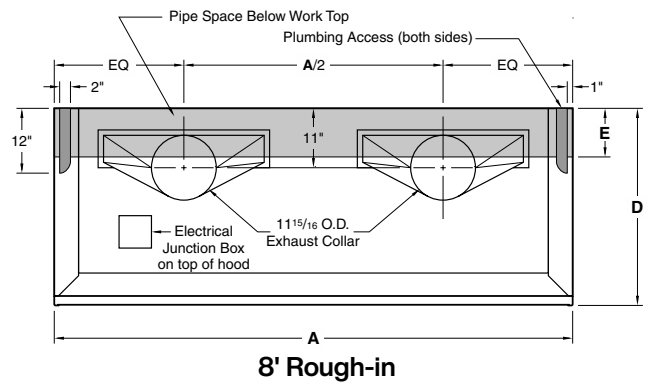
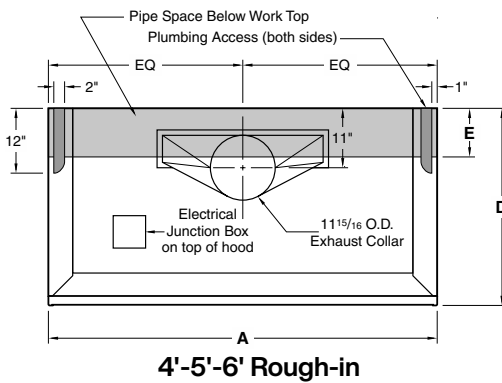
V07

Airflow (CFM) Requirements

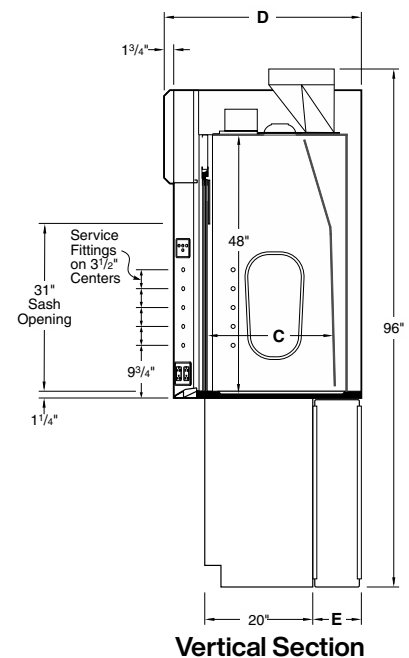
Face Velocity	Panels Fully Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	546	0.18	716	0.23	887	0.29	1229	0.20
80 FPM	437	0.12	573	0.15	710	0.19	983	0.13
60 FPM	328	0.07	430	0.09	533	0.11	738	0.07
50 FPM	273	0.05	358	0.06	444	0.08	615	0.05

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	100 CFM	120 CFM	170 CFM	190 CFM	240 CFM	300 CFM	410 CFM
30" deep	90 CFM	120 CFM	150 CFM	200 CFM	230 CFM	290 CFM	360 CFM	500 CFM
36" deep	110 CFM	140 CFM	170 CFM	240 CFM	270 CFM	350 CFM	430 CFM	590 CFM



Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V10 – General Purpose Bench Fume Hood

with Split Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 2 LED light fixture with illumination and color controller
- 2 Electromechanical sash stops with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

96 inches / 2438mm **96**

120 inches / 3048mm **20**

144 inches / 3658mm **44**

Available Liner Types:

part no.
code

Kemglass **G**

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel **L**
1805 UL classified

Type 304L Stainless Steel **S**
1805 UL classified

Phenolic Resin **T**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

V10F Sash Opening Height: **28** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) **...**

Technical Information

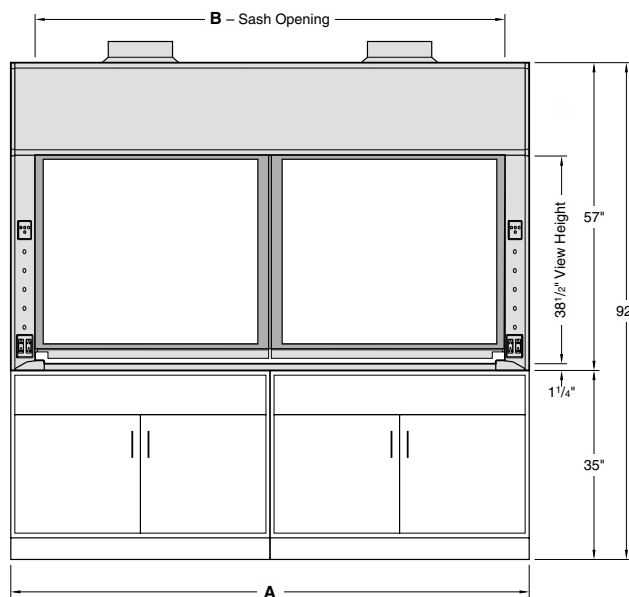
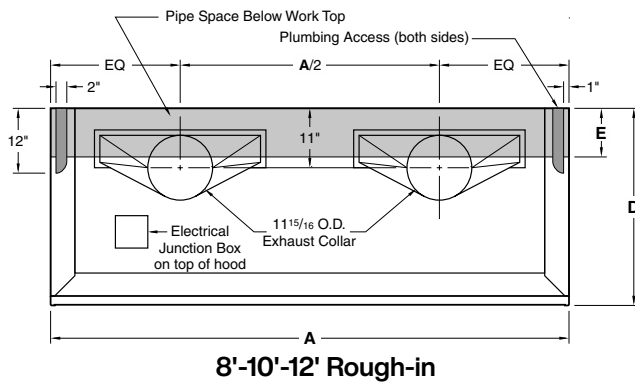
V10

Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening						18" High Sash Opening					
	8'-0" / 96"		10'-0" / 120"		12'-0" / 144"		8'-0" / 96"		10'-0" / 120"		12'-0" / 144"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	1722	0.38	2197	0.48	2672	0.59	1118	0.16	1427	0.21	1735	0.26
80 FPM	1378	0.25	1758	0.31	2138	0.39	895	0.11	1141	0.14	1388	0.17
60 FPM	1034	0.14	1319	0.18	1604	0.23	671	0.06	856	0.08	1041	0.10
50 FPM	861	0.10	1099	0.13	1336	0.16	559	0.04	714	0.06	868	0.07

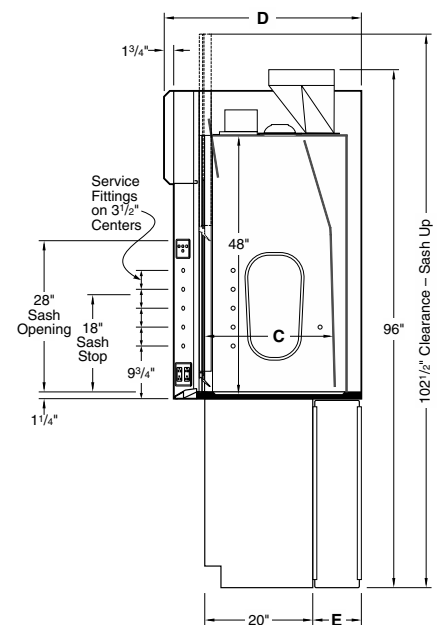
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

Inside Depth	ANSI Z9.5 Minimum Flow Rate											
	150 Air Changes/Hour						375 Air Changes/Hour					
	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"
24" deep	170 CFM	210 CFM	260 CFM	410 CFM	520 CFM	630 CFM	410 CFM	520 CFM	630 CFM	410 CFM	520 CFM	630 CFM
30" deep	200 CFM	260 CFM	310 CFM	500 CFM	630 CFM	770 CFM	500 CFM	630 CFM	770 CFM	500 CFM	630 CFM	770 CFM
36" deep	240 CFM	300 CFM	370 CFM	590 CFM	750 CFM	910 CFM	590 CFM	750 CFM	910 CFM	590 CFM	750 CFM	910 CFM



Elevation

Dimensions - Length			
A	96"	120"	144"
B	87"	111"	135"

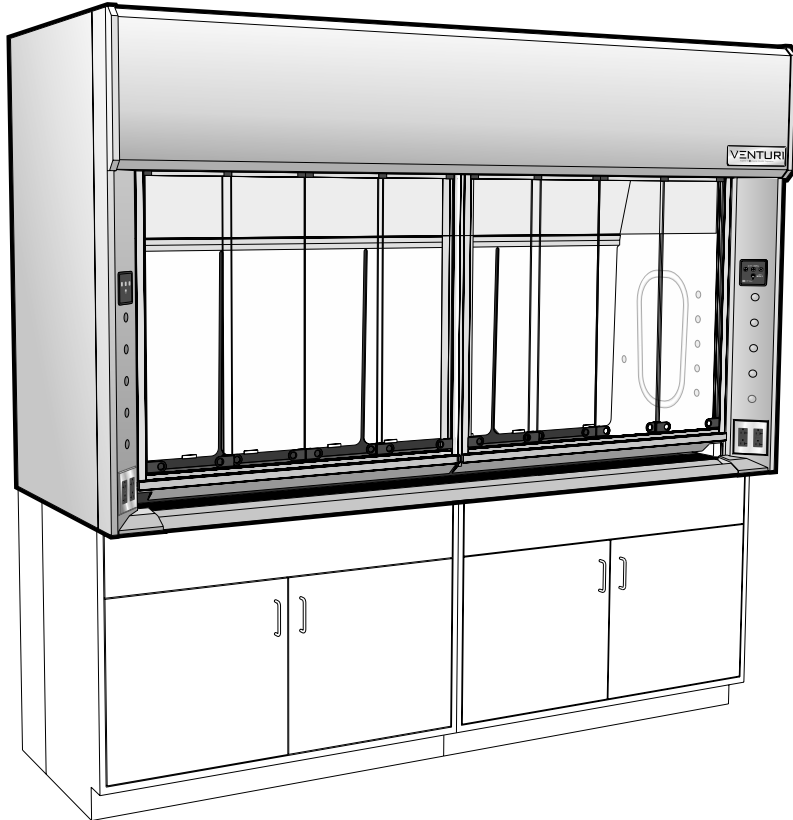


Vertical Section

Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V11 – General Purpose Bench Fume Hood

with Split Combination Vertical Rising/Horizontal Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 2 LED light fixture with illumination and color controller
- 2 Electromechanical sash stops with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm

28

Inside Depth:

24 inches / 610mm

24

30 inches / 762mm

30

36 inches / 914mm

36

Overall Length:

96 inches / 2438mm

96

120 inches / 3048mm

20

144 inches / 3658mm

44

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

V11F Sash Opening Height: **28** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) **...**

Technical Information

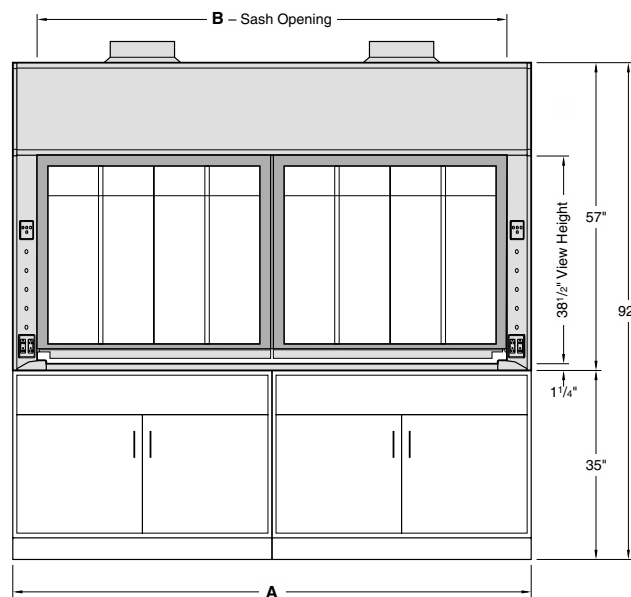
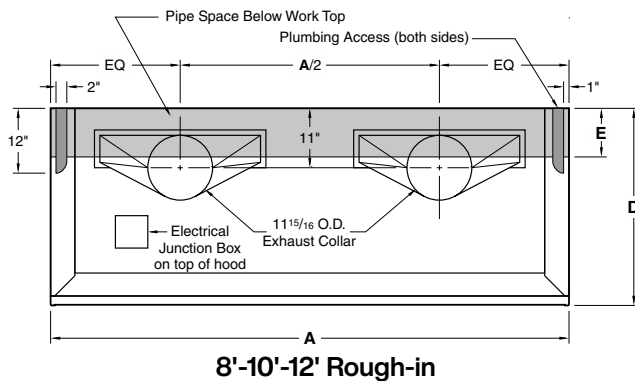
V11

Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening						Sash Closed – Panels Full Open					
	8'-0" / 96"		10'-0" / 120"		12'-0" / 144"		8'-0" / 96"		10'-0" / 120"		12'-0" / 144"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	1118	0.16	1427	0.21	1735	0.26	954	0.12	1240	0.16	1526	0.21
80 FPM	895	0.11	1141	0.14	1388	0.17	763	0.08	992	0.10	1221	0.13
60 FPM	671	0.06	856	0.08	1041	0.10	573	0.05	744	0.06	916	0.08
50 FPM	559	0.04	714	0.06	868	0.07	477	0.03	620	0.04	763	0.06

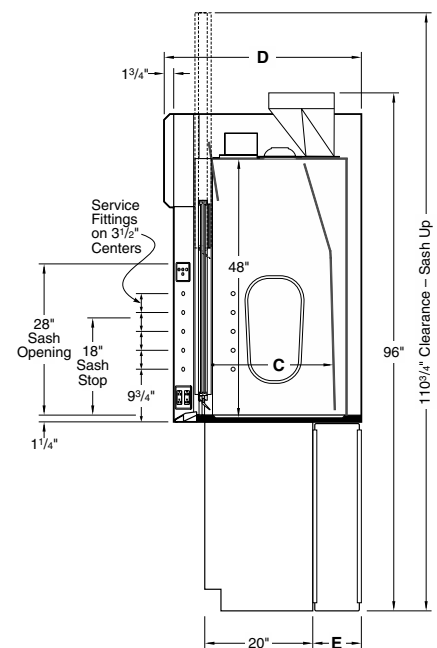
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

Inside Depth	ANSI Z9.5 Minimum Flow Rate					
	150 Air Changes/Hour			375 Air Changes/Hour		
	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"
24" deep	170 CFM	210 CFM	260 CFM	410 CFM	520 CFM	630 CFM
30" deep	200 CFM	260 CFM	310 CFM	500 CFM	630 CFM	770 CFM
36" deep	240 CFM	300 CFM	370 CFM	590 CFM	750 CFM	910 CFM



Elevation

Dimensions – Length			
A	96"	120"	144"
B	87"	111"	135"



Vertical Section

Dimensions – Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V15 – ADA Bench Fume Hood

with Vertical Rising Sash



Accessories Included:

- 2 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm

28

Inside Depth:

24 inches / 610mm

24

Overall Length:

48 inches / 1219mm

48

60 inches / 1524mm

60

72 inches / 1829mm

72

96 inches / 2438mm

96

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Frameless

N

Powder Coated Steel

M

Type 304L Stainless Steel

S

V15F Sash Opening Height: **28** Inside Depth: **24** Overall Length: Liner Type: Sash Frame: - Sash Glass: , Fitting Holes: **F2** , Electrical Fixture: - Option Choices (separated by commas): , ...

Technical Information

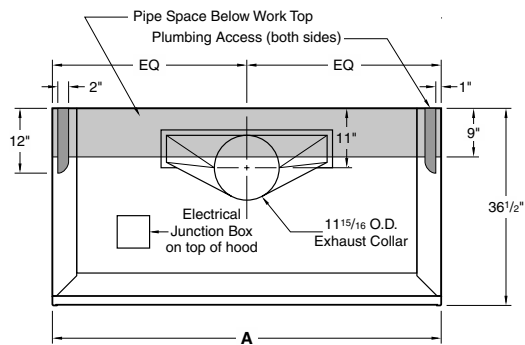
V15

Airflow (CFM) Requirements

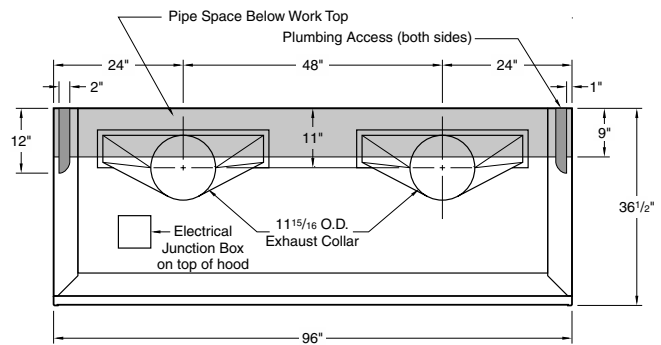
Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14	301	0.06	394	0.07	486	0.09	671	0.06
50 FPM	386	0.09	506	0.12	624	0.15	861	0.10	251	0.04	328	0.05	405	0.07	559	0.04

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

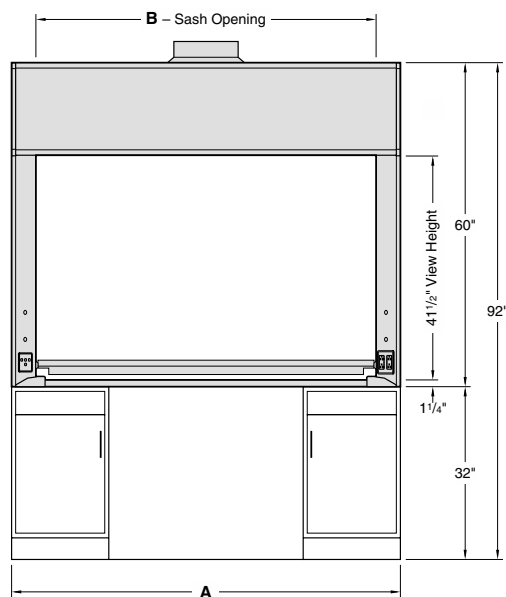
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	ANSI Z9.5 Minimum Flow Rate				ANSI Z9.5 Minimum Flow Rate			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	110 CFM	130 CFM	190 CFM	200 CFM	260 CFM	320 CFM	440 CFM



4'-5'-6' Rough-in

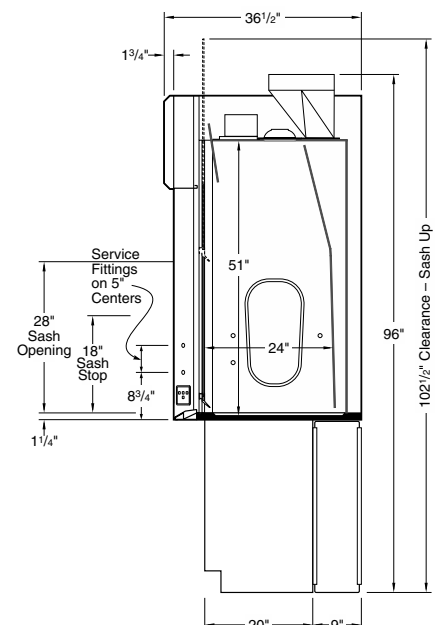


8' Rough-in



Elevation

Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Technical Information

V16

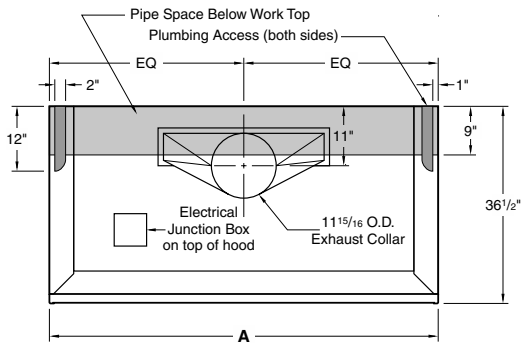
Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening								Sash Closed – Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	424	0.11	567	0.14	709	0.19	995	0.13
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	339	0.07	453	0.09	568	0.12	796	0.09
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	254	0.04	340	0.05	426	0.07	597	0.05
50 FPM	251	0.04	328	0.05	405	0.07	559	0.04	212	0.03	284	0.04	355	0.05	498	0.04

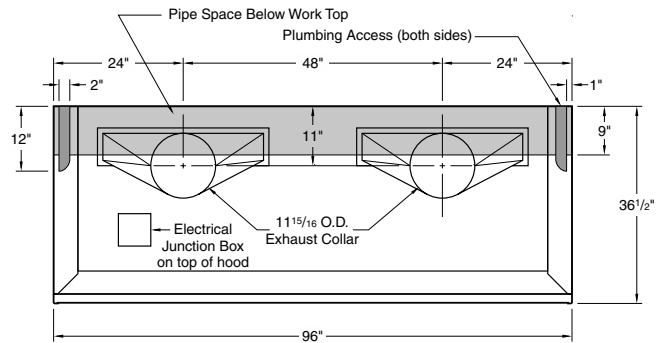
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

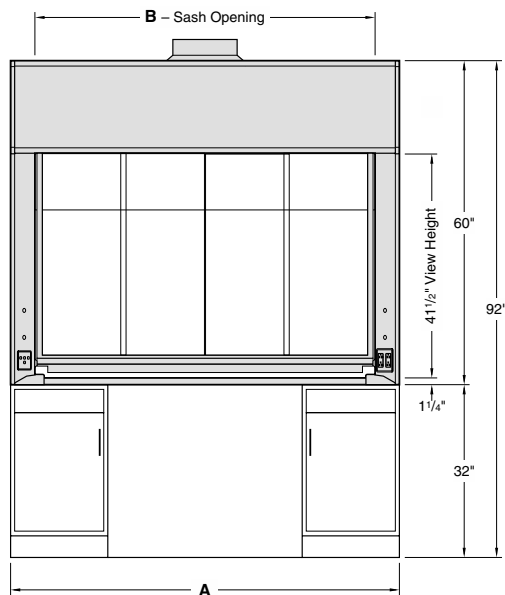
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	110 CFM	130 CFM	190 CFM	200 CFM	260 CFM	320 CFM	440 CFM



4'-5'-6' Rough-in

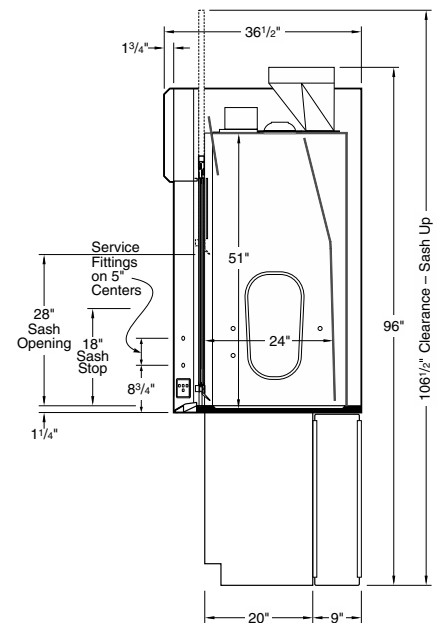


8' Rough-in



Elevation

Dimensions – Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Technical Information

V25

Airflow (CFM) Requirements

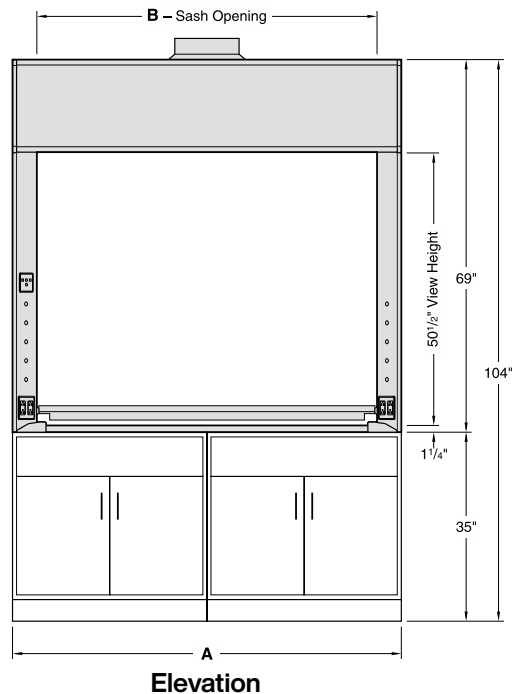
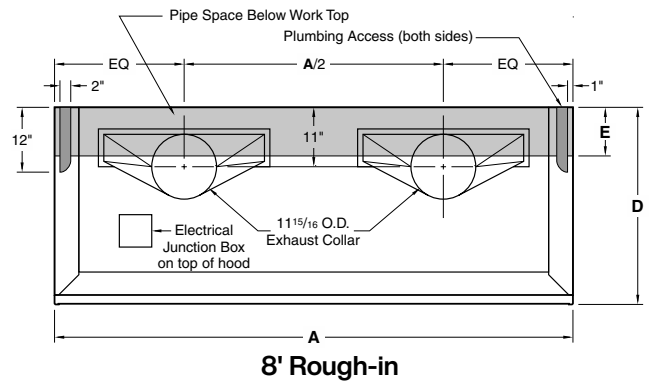
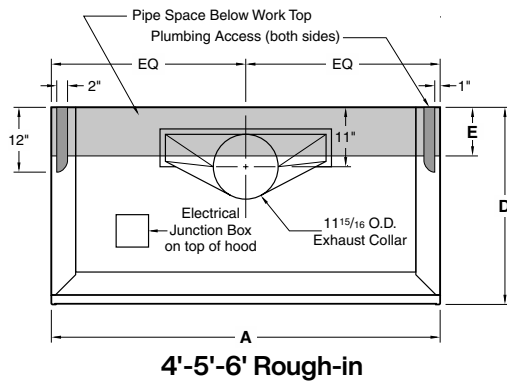
Face Velocity	28" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14

Face Velocity	18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06

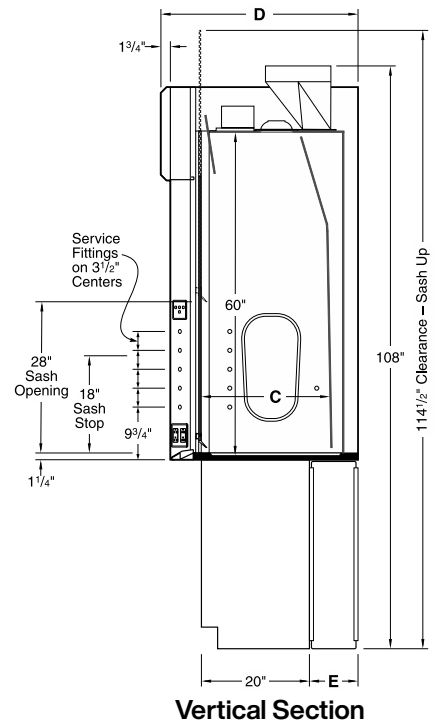
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	100 CFM	120 CFM	150 CFM	210 CFM	230 CFM	300 CFM	370 CFM	510 CFM
30" deep	120 CFM	150 CFM	180 CFM	250 CFM	280 CFM	370 CFM	450 CFM	620 CFM
36" deep	140 CFM	180 CFM	220 CFM	300 CFM	330 CFM	430 CFM	530 CFM	740 CFM



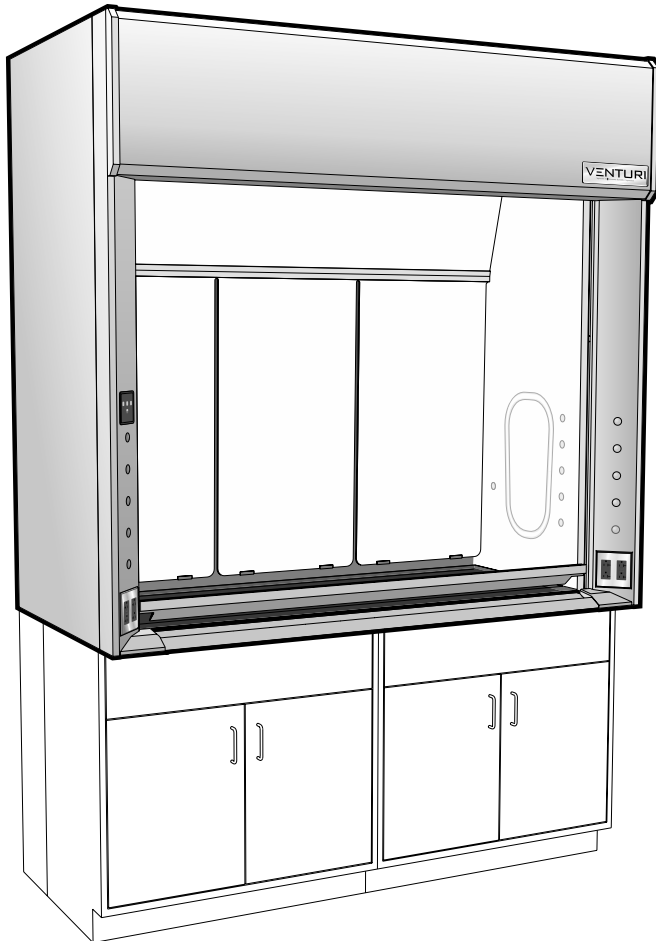
Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V25 – LX Series Bench Fume Hood

60" Interior Height with 35" High Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

35 inches / 889mm **35**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Frameless

N

Powder Coated Steel

M

Type 304L Stainless Steel

S

V25F Sash Opening Height: **35** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) **...**

Technical Information

V25

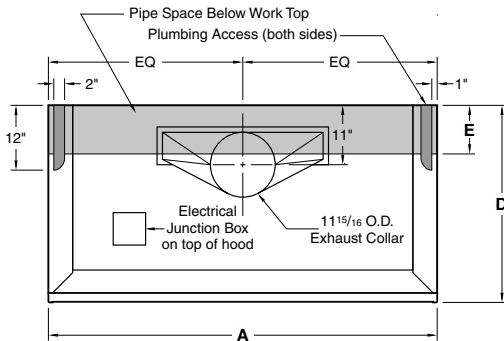
Airflow (CFM) Requirements

Face Velocity	35" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	962	0.53	1258	0.66	1554	0.83	2145	1.24	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	770	0.34	1006	0.43	1243	0.54	1716	0.82	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	577	0.20	755	0.25	932	0.31	1287	0.48	301	0.06	394	0.07	486	0.09	671	0.06

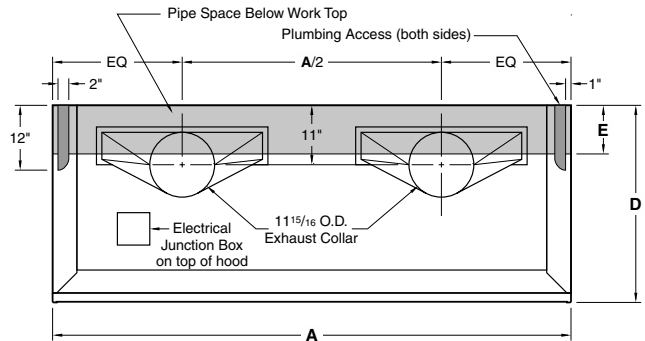
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

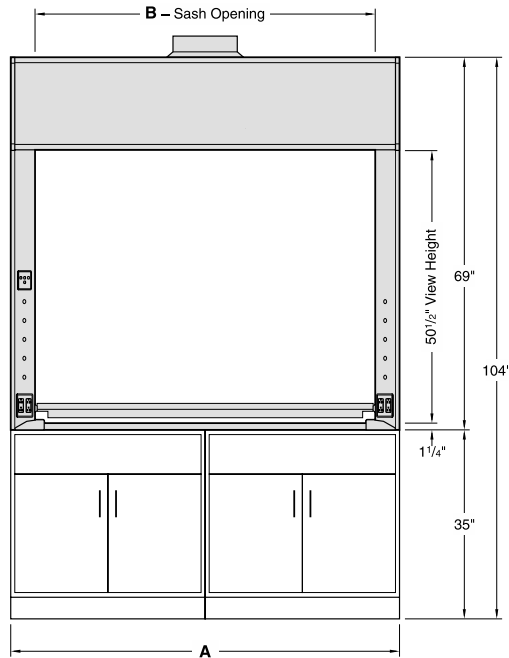
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	100 CFM	120 CFM	150 CFM	210 CFM	230 CFM	300 CFM	370 CFM	510 CFM
30" deep	120 CFM	150 CFM	180 CFM	250 CFM	280 CFM	370 CFM	450 CFM	620 CFM
36" deep	140 CFM	180 CFM	220 CFM	300 CFM	330 CFM	430 CFM	530 CFM	740 CFM



4'-5'-6' Rough-in

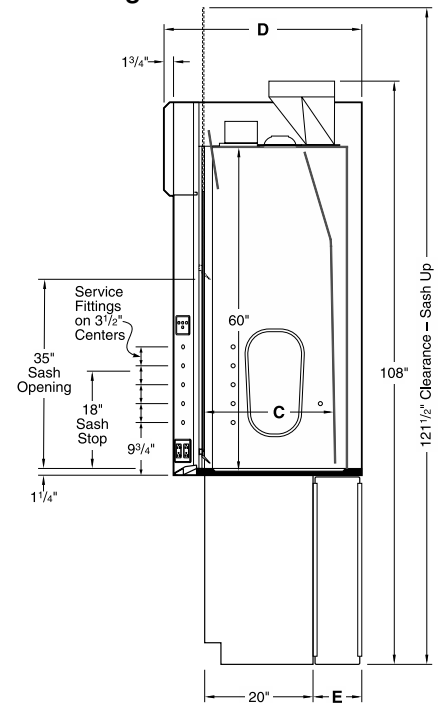


8' Rough-in



Elevation

Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V26 – LX Series Bench Fume Hood

60" Interior Height with 28" High Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel
1805 UL classified

L

Type 304L Stainless Steel
1805 UL classified

S

Phenolic Resin

T

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

V26F Sash Opening Height: **28** Inside Depth: Overall Length: Liner Type: Sash Frame: - Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas): , , ...

Technical Information

V26

Airflow (CFM) Requirements

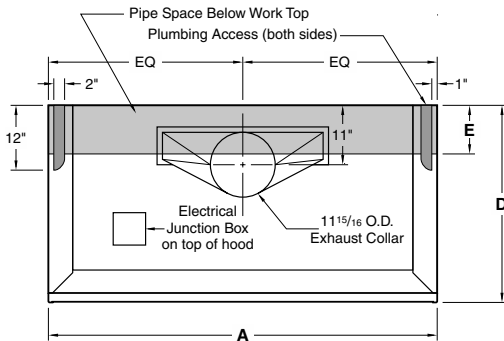
Face Velocity	18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06

Sash Closed – Panels Full Open								
4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		
CFM	SP	CFM	SP	CFM	SP	CFM	SP	
424	0.11	567	0.14	709	0.19	995	0.13	
339	0.07	453	0.09	568	0.12	796	0.09	
254	0.04	340	0.05	426	0.07	597	0.05	

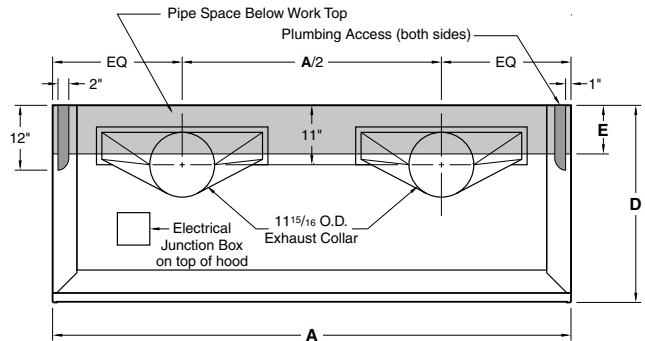
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

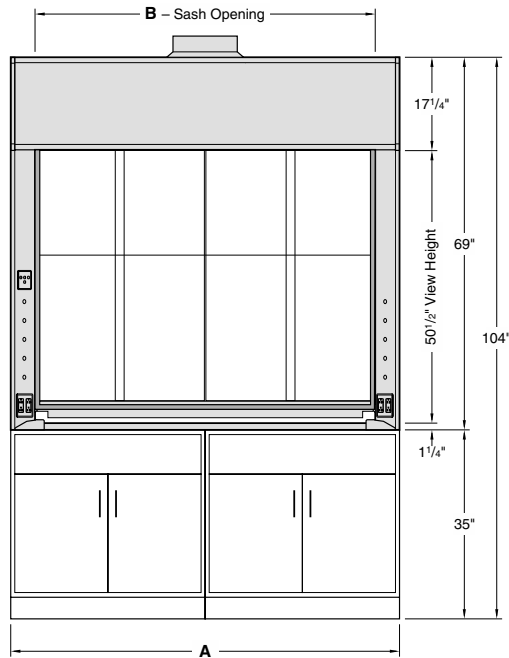
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	100 CFM	120 CFM	150 CFM	210 CFM	230 CFM	300 CFM	370 CFM	510 CFM
30" deep	120 CFM	150 CFM	180 CFM	250 CFM	280 CFM	370 CFM	450 CFM	620 CFM
36" deep	140 CFM	180 CFM	220 CFM	300 CFM	330 CFM	430 CFM	530 CFM	740 CFM



4'-5'-6' Rough-in

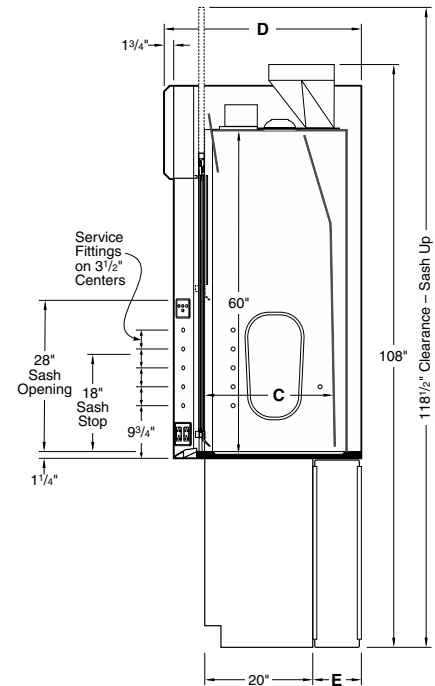


8' Rough-in



Elevation

Dimensions – Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Dimensions – Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V26 – LX Series Bench Fume Hood

60" Interior Height with 35" High Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

35 inches / 889mm **35**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

V26F Sash Opening Height: **35** Inside Depth: Overall Length: Liner Type: Sash Frame: - Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas): , , ...

Technical Information

V26

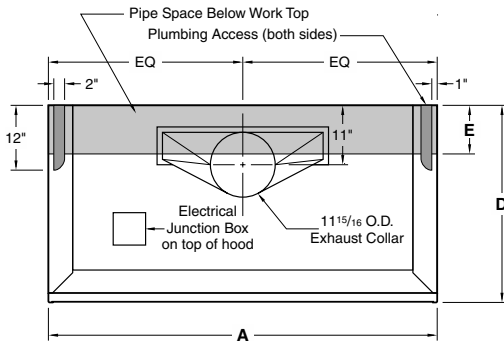
Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening								Sash Closed – Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	508	0.15	680	0.21	852	0.27	1196	0.19
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	407	0.10	544	0.13	682	0.17	957	0.12
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	305	0.06	408	0.08	512	0.10	718	0.07

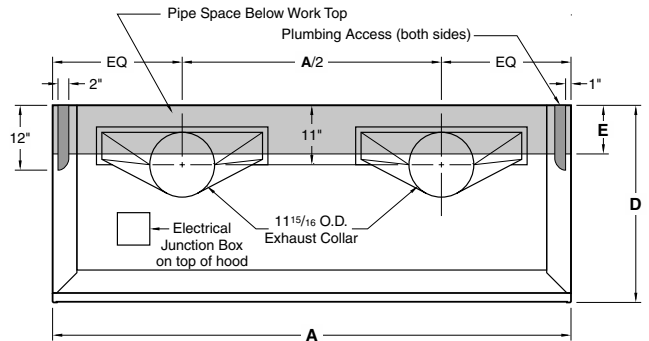
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

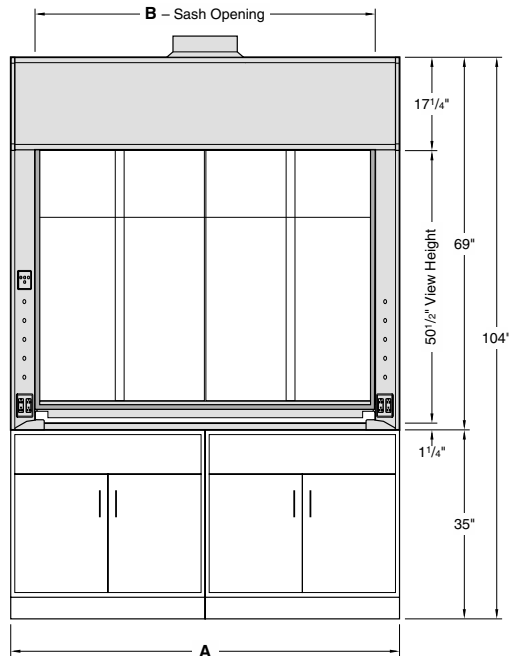
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	100 CFM	120 CFM	150 CFM	210 CFM	230 CFM	300 CFM	370 CFM	510 CFM
30" deep	120 CFM	150 CFM	180 CFM	250 CFM	280 CFM	370 CFM	450 CFM	620 CFM
36" deep	140 CFM	180 CFM	220 CFM	300 CFM	330 CFM	430 CFM	530 CFM	740 CFM



4'-5'-6' Rough-in

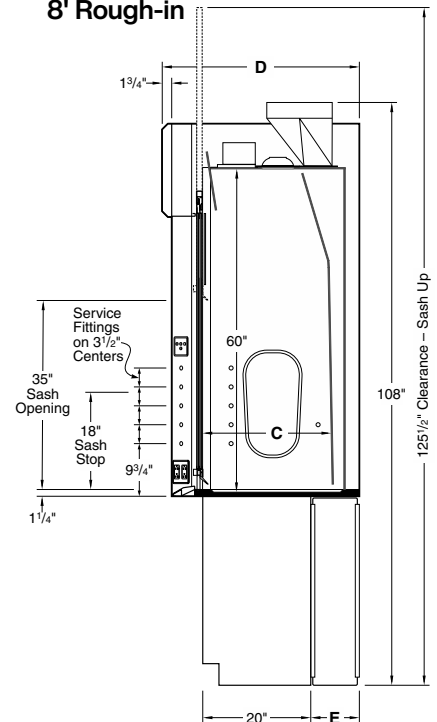


8' Rough-in



Elevation

Dimensions – Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Dimensions – Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V30 – LX Series Bench Fume Hood

60" Interior Height with 28" High Split Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 2 LED light fixture with illumination and color controller
- 2 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

96 inches / 2438mm **96**

120 inches / 3048mm **20**

144 inches / 3658mm **44**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

V30F Sash Opening Height: **28** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas): , , ...

Technical Information

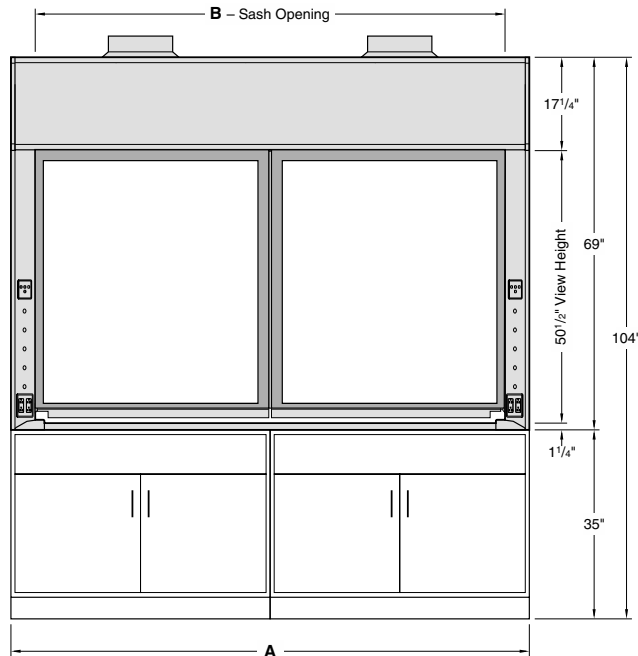
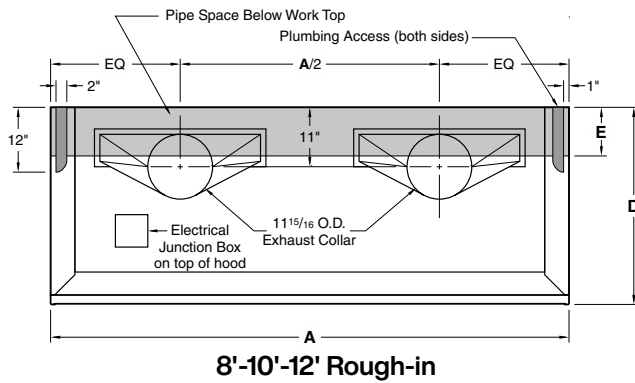
V30

Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening						18" High Sash Opening					
	8'-0" / 96"		10'-0" / 120"		12'-0" / 144"		8'-0" / 96"		10'-0" / 120"		12'-0" / 144"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	1722	0.38	2197	0.48	2672	0.59	1118	0.16	1427	0.21	1735	0.26
80 FPM	1378	0.25	1758	0.31	2138	0.39	895	0.11	1141	0.14	1388	0.17
60 FPM	1034	0.14	1319	0.28	1604	0.23	671	0.06	856	0.08	1041	0.10

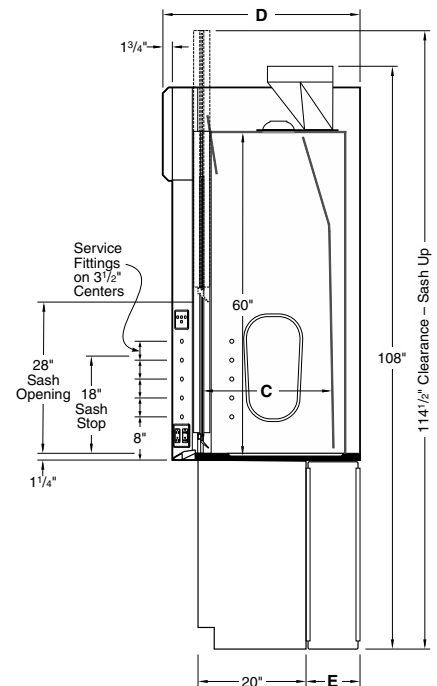
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

Inside Depth	ANSI Z9.5 Minimum Flow Rate						ANSI Z9.5 Minimum Flow Rate					
	150 Air Changes/Hour			375 Air Changes/Hour			150 Air Changes/Hour			375 Air Changes/Hour		
	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"
24" deep	210 CFM	260 CFM	320 CFM	510 CFM	650 CFM	790 CFM	210 CFM	260 CFM	320 CFM	510 CFM	650 CFM	790 CFM
30" deep	250 CFM	320 CFM	390 CFM	620 CFM	790 CFM	960 CFM	250 CFM	320 CFM	390 CFM	620 CFM	790 CFM	960 CFM
36" deep	300 CFM	380 CFM	460 CFM	740 CFM	940 CFM	1140 CFM	300 CFM	380 CFM	460 CFM	740 CFM	940 CFM	1140 CFM



Elevation

Dimensions - Length			
A	96"	120"	144"
B	87"	111"	135"



Vertical Section

Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

Technical Information

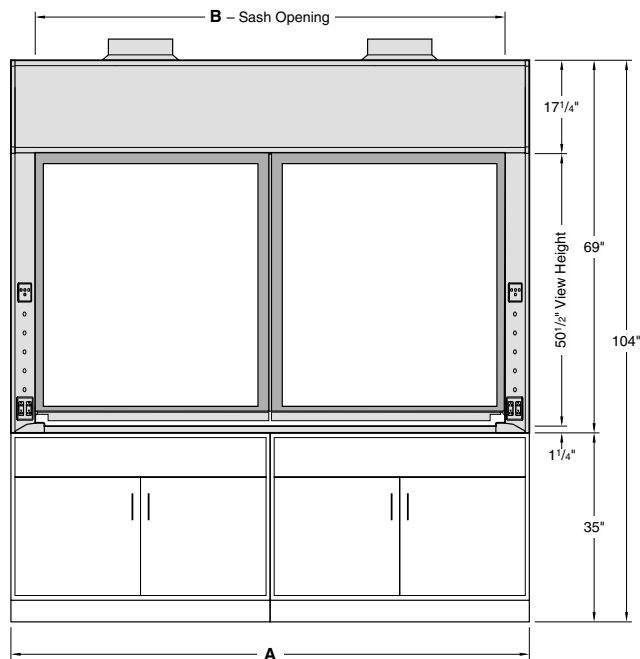
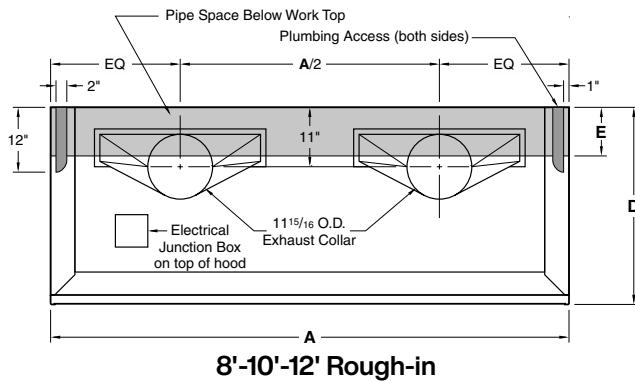
V30

Airflow (CFM) Requirements

Face Velocity	35" High Sash Opening						18" High Sash Opening					
	8'-0" / 96"		10'-0" / 120"		12'-0" / 144"		8'-0" / 96"		10'-0" / 120"		12'-0" / 144"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	2145	1.24	2737	0.72	3329	0.90	1118	0.16	1427	0.21	1735	0.26
80 FPM	1716	0.82	2190	0.47	2663	0.59	895	0.11	1141	0.14	1388	0.17
60 FPM	1287	0.48	1642	0.27	1997	0.34	671	0.06	856	0.08	1041	0.10

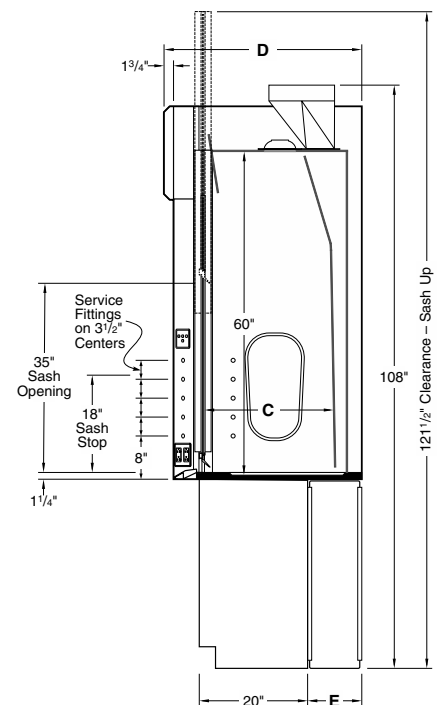
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

Inside Depth	ANSI Z9.5 Minimum Flow Rate			ANSI Z9.5 Minimum Flow Rate		
	150 Air Changes/Hour			375 Air Changes/Hour		
	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"
24" deep	210 CFM	260 CFM	320 CFM	510 CFM	650 CFM	790 CFM
30" deep	250 CFM	320 CFM	390 CFM	620 CFM	790 CFM	960 CFM
36" deep	300 CFM	380 CFM	460 CFM	740 CFM	940 CFM	1140 CFM



Elevation

Dimensions - Length			
A	96"	120"	144"
B	87"	111"	135"

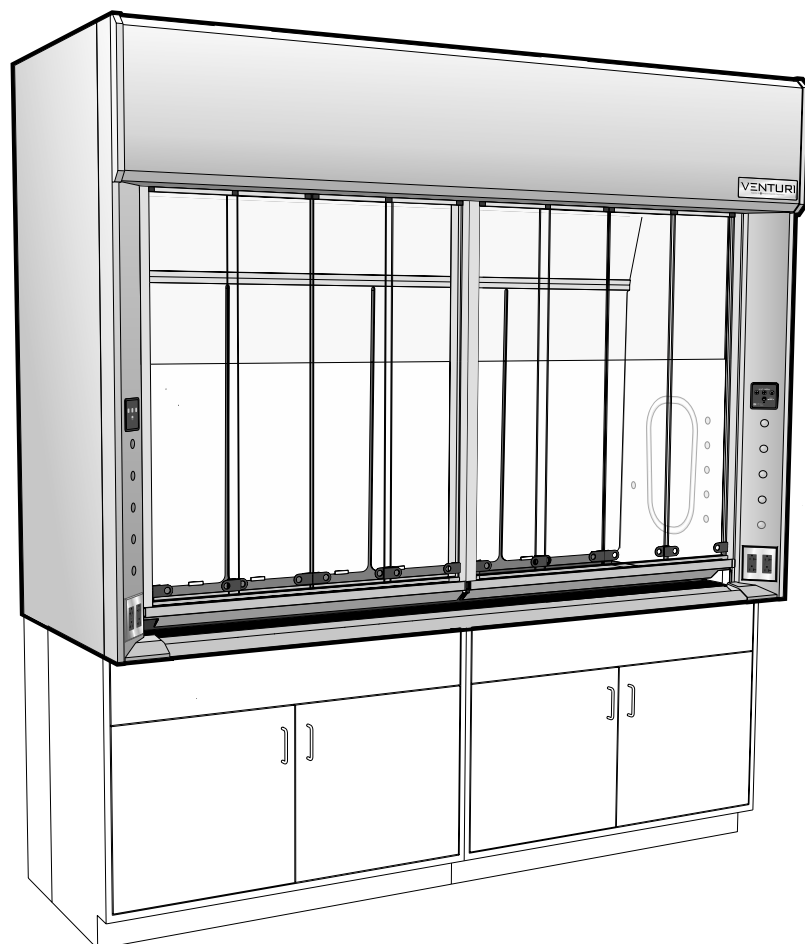


Vertical Section

Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V36 – LX Series Bench Fume Hood

60" Interior Height with 28" High Split Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 2 LED light fixture with illumination and color controller
- 2 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 7119mm **28**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

96 inches / 2438mm **96**

120 inches / 3048mm **20**

144 inches / 3658mm **44**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

V36F Sash Opening Height: **28** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas): , , ...

Technical Information

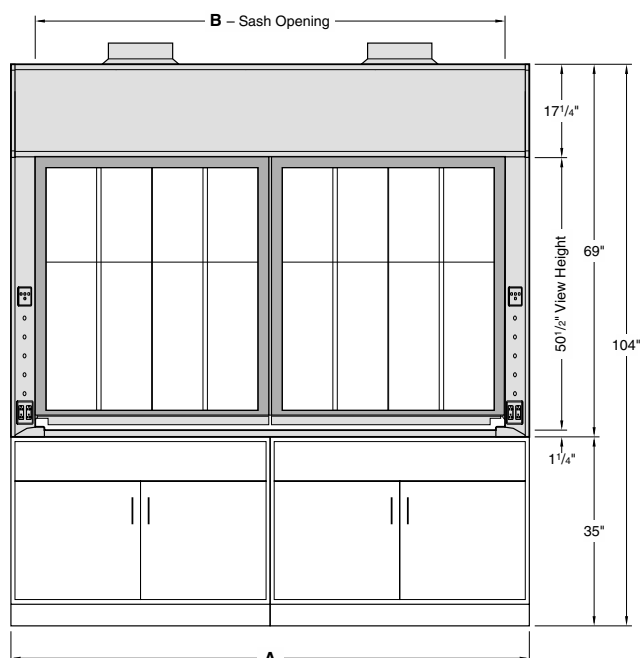
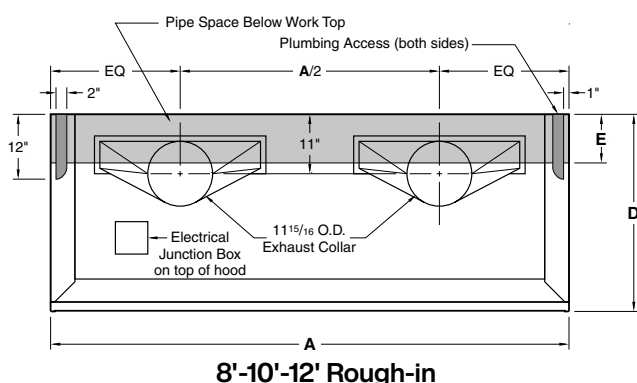
V36

Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening						Sash Closed – Panel Full Open					
	8'-0" / 96"		10'-0" / 120"		12'-0" / 144"		8'-0" / 96"		10'-0" / 120"		12'-0" / 144"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	1118	0.16	1427	0.21	1735	0.26	954	0.12	1240	0.16	1526	0.21
80 FPM	895	0.11	1141	0.14	1388	0.17	763	0.08	992	0.10	1221	0.13
60 FPM	671	0.06	856	0.08	1041	0.10	573	0.05	744	0.06	916	0.08

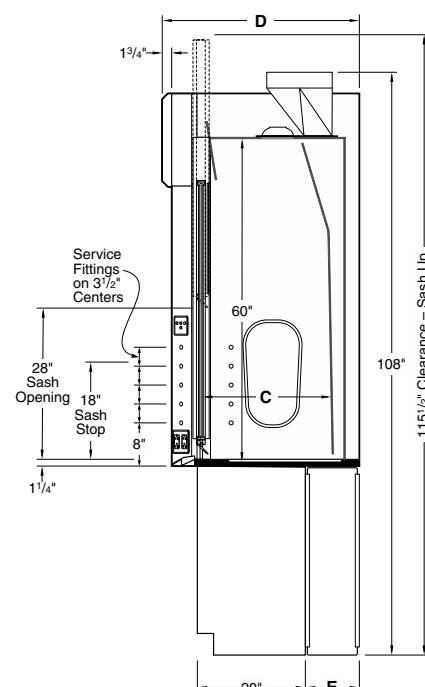
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

Inside Depth	ANSI Z9.5 Minimum Flow Rate						ANSI Z9.5 Minimum Flow Rate					
	150 Air Changes/Hour			375 Air Changes/Hour			150 Air Changes/Hour			375 Air Changes/Hour		
	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"
24" deep	210 CFM	260 CFM	320 CFM	510 CFM	650 CFM	790 CFM	210 CFM	260 CFM	320 CFM	510 CFM	650 CFM	790 CFM
30" deep	250 CFM	320 CFM	390 CFM	620 CFM	790 CFM	960 CFM	250 CFM	320 CFM	390 CFM	620 CFM	790 CFM	960 CFM
36" deep	300 CFM	380 CFM	460 CFM	740 CFM	940 CFM	1140 CFM	300 CFM	380 CFM	460 CFM	740 CFM	940 CFM	1140 CFM



Elevation

Dimensions – Length			
A	96"	120"	144"
B	87"	111"	135"

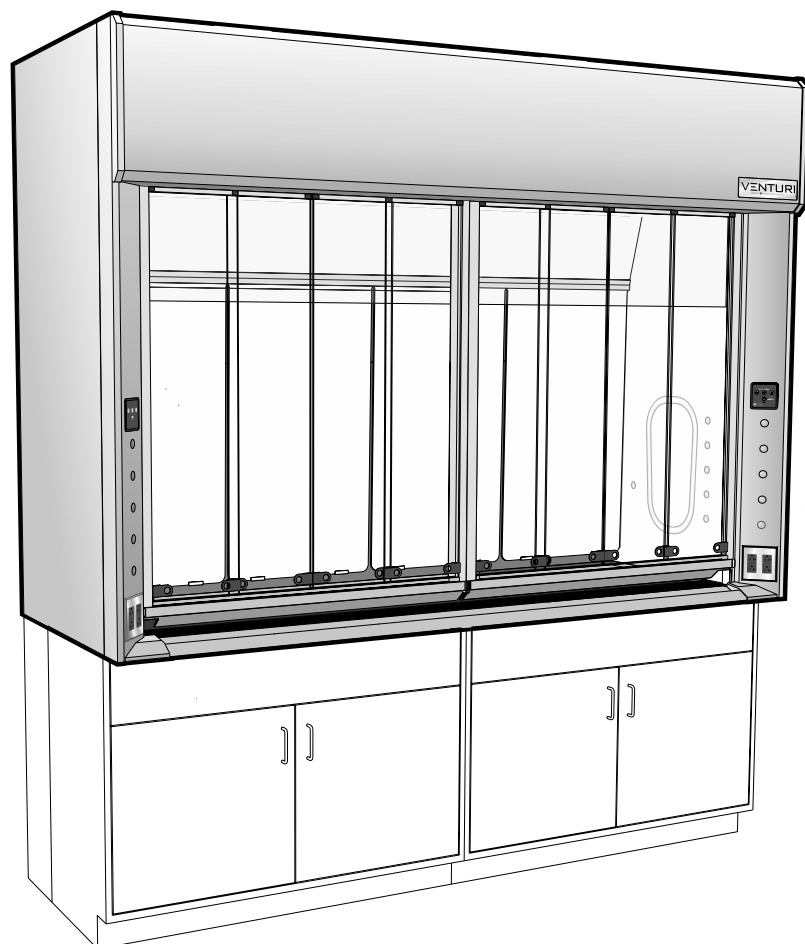


Vertical Section

Dimensions – Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

V36 – LX Series Bench Fume Hood

60" Interior Height with 35" High Split Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 2 LED light fixture with illumination and color controller
- 2 Electromechanical sash stop with push button override

Available Sizes:

part no.
code

Sash Opening Height:

35 inches / 889mm **35**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

96 inches / 2438mm **96**

120 inches / 3048mm **20**

144 inches / 3658mm **44**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Sash Frames:

part no.
code

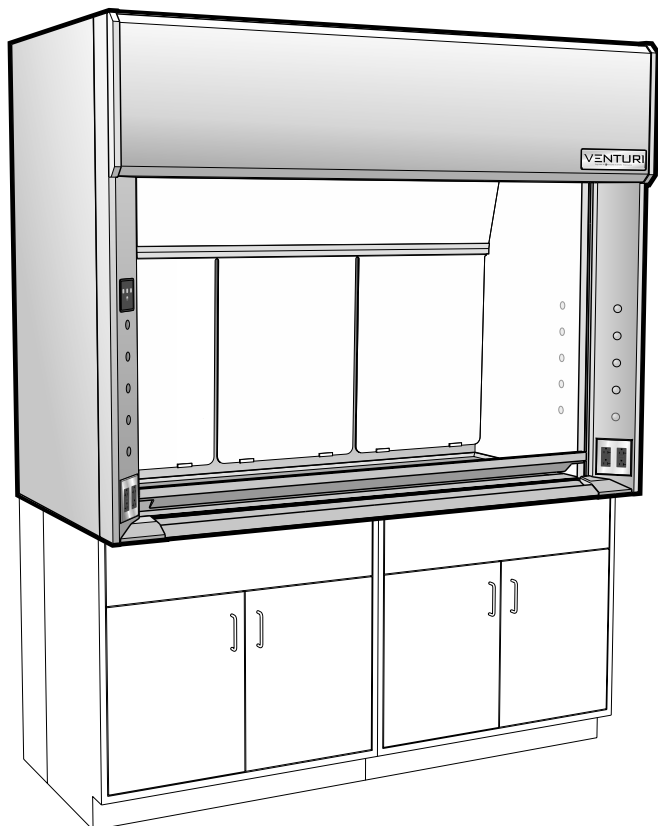
Powder Coated Steel **M**

Type 304L Stainless Steel **S**

V36F Sash Opening Height: **35** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas): , , ...

V40 – Isotope Bench Fume Hood

with Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Electromechanical sash stop with push button override.
- 1 Reinforced stainless steel work top seamlessly coved welded to side and back liners.
- 1 5" diameter stainless steel cupsink welded into left rear corner of work top.

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm

28

Inside Depth:

24 inches / 610mm

24

Overall Length:

48 inches / 1219mm

48

60 inches / 1524mm

60

72 inches / 1829mm

72

96 inches / 2438mm

96

Additional Parts Required for a Complete Fume Hood Assembly

Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Liner Types:

part no.
code

Type 304L Stainless Steel
1805 UL Classified

S

Available Sash Frames:

part no.
code

Frameless

N

Powder Coated Steel

M

Type 304L Stainless Steel

S

V40F

28	24		
----	----	--	--

S	
---	--

 -

--	--

 , **F3** ,

--	--

 -

--	--

 ,

--	--

 , ...

Technical Information

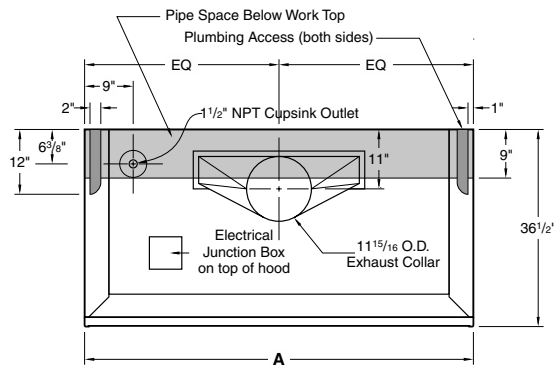
V40

Airflow (CFM) Requirements

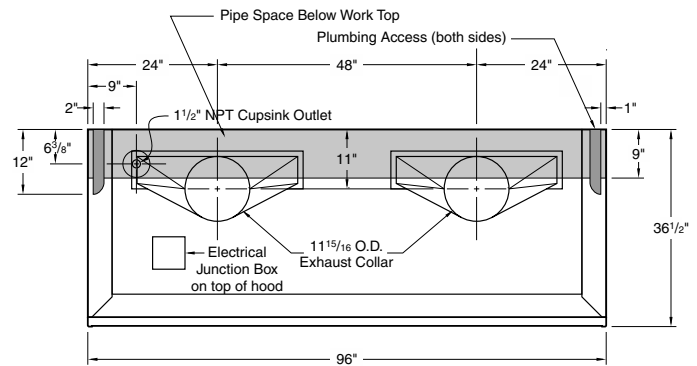
Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
120 FPM	927	0.49	1212	0.62	1497	0.77	2067	0.54	602	0.21	787	0.27	972	0.34	1342	0.23
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

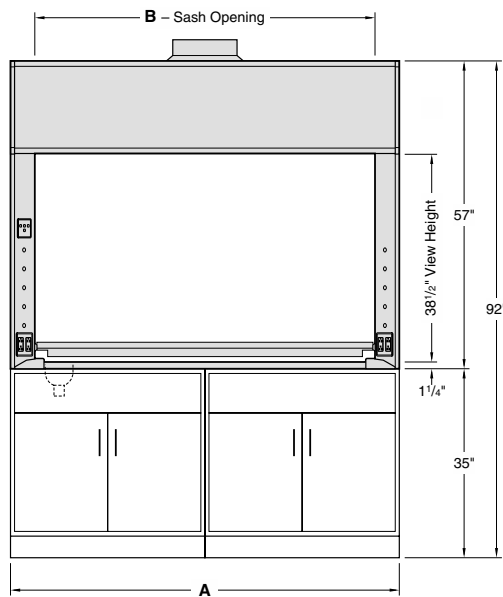
Inside Depth	ANSI Z9.5 Minimum Flow Rate								ANSI Z9.5 Minimum Flow Rate							
	150 Air Changes/Hour				375 Air Changes/Hour				150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	100 CFM	120 CFM	170 CFM	190 CFM	240 CFM	300 CFM	410 CFM	80 CFM	100 CFM	120 CFM	170 CFM	190 CFM	240 CFM	300 CFM	410 CFM



4'-5'-6' Rough-in

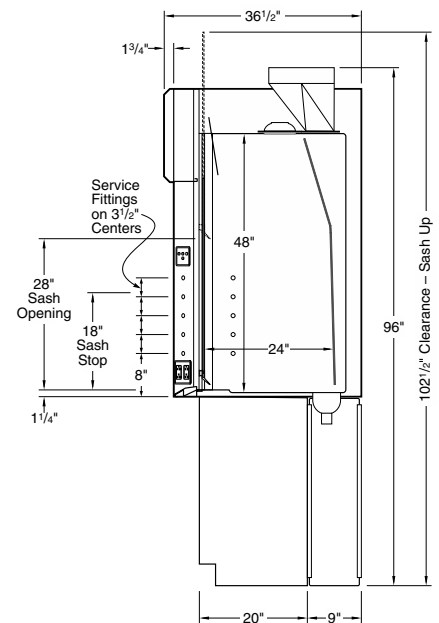


8' Rough-in



Elevation

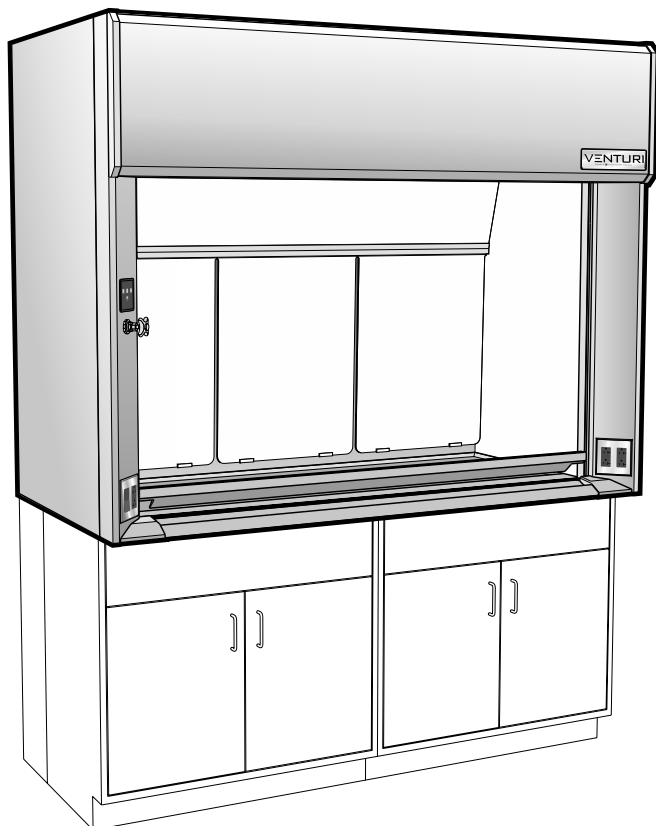
Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

V45 – Perchloric Acid Bench Fume Hood

with Vertical Rising Sash



Accessories Included:

- 3 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 Vapor proof light fixture with 120 VAC, 20 amp light switch
- 1 Electromechanical sash stop with push button override
- 1 Stainless steel work top with integral drain trough in rear.
- 1 Washdown fitting with hood interior washdown spray.

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm

28

Inside Depth:

24 inches / 610mm

24

Overall Length:

48 inches / 1219mm

48

60 inches / 1524mm

60

72 inches / 1829mm

72

96 inches / 2438mm

96

Additional Parts Required for a Complete Fume Hood Assembly

Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 87

Available Liner Types:

part no.
code

Type 316L Stainless Steel
1805 UL Classified

L

Available Sash Frames:

part no.
code

Frameless

N

Type 316L Stainless Steel

L

Note: Acid storage and vacuum pump storage cabinets can not be vented through perchloric acid fume hood work tops.

V45F Sash Opening Height: **28** Inside Depth: **24** Overall Length: Liner Type: **L** Sash Frame: - Sash Glass: Fitting Holes: **F3** Electrical Fixture: Option Choices (separated by commas): , , ...

Technical Information

V45

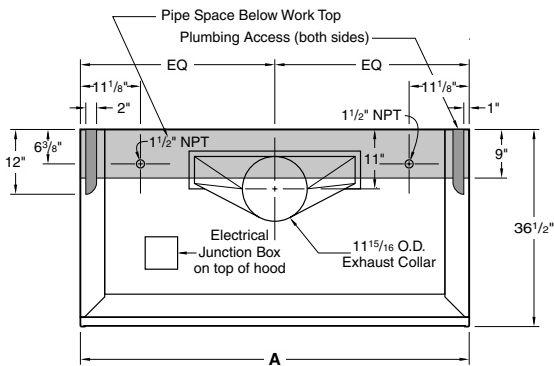
Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
120 FPM	927	0.49	1212	0.62	1497	0.77	2067	0.54	602	0.21	787	0.27	972	0.34	1342	0.23
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	not recommended		not recommended		not recommended		not recommended		not recommended		not recommended		not recommended		not recommended	

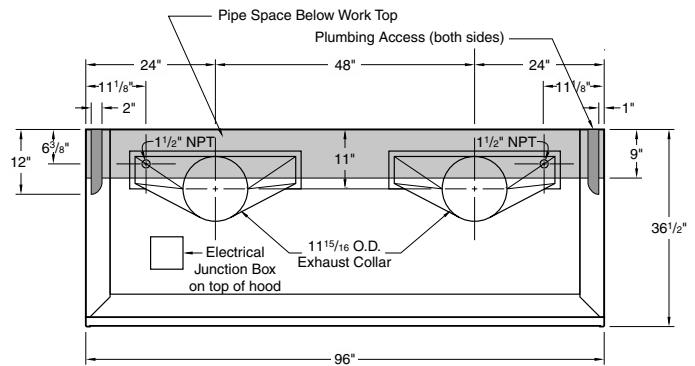
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

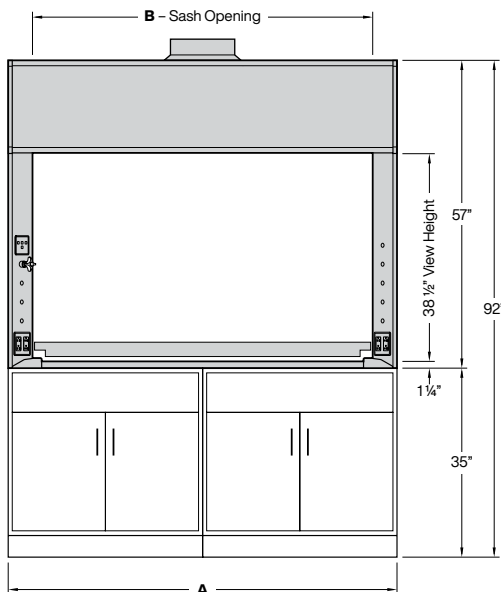
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	80 CFM	100 CFM	120 CFM	170 CFM	190 CFM	240 CFM	300 CFM	410 CFM



4'-5'-6' Rough-in



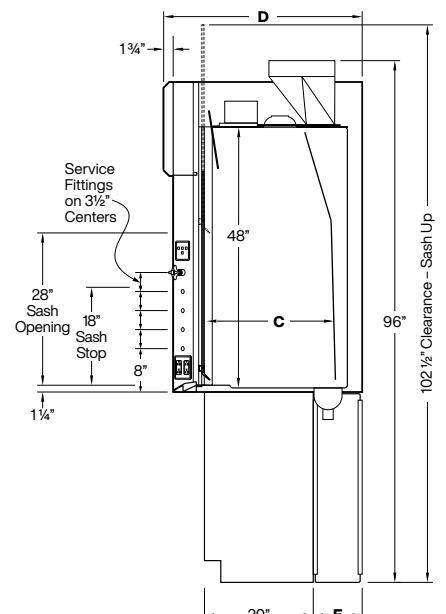
8' Rough-in



Elevation

Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"

Note: Hood liner comes with no fixture holes as standard. Facias will be plugged.

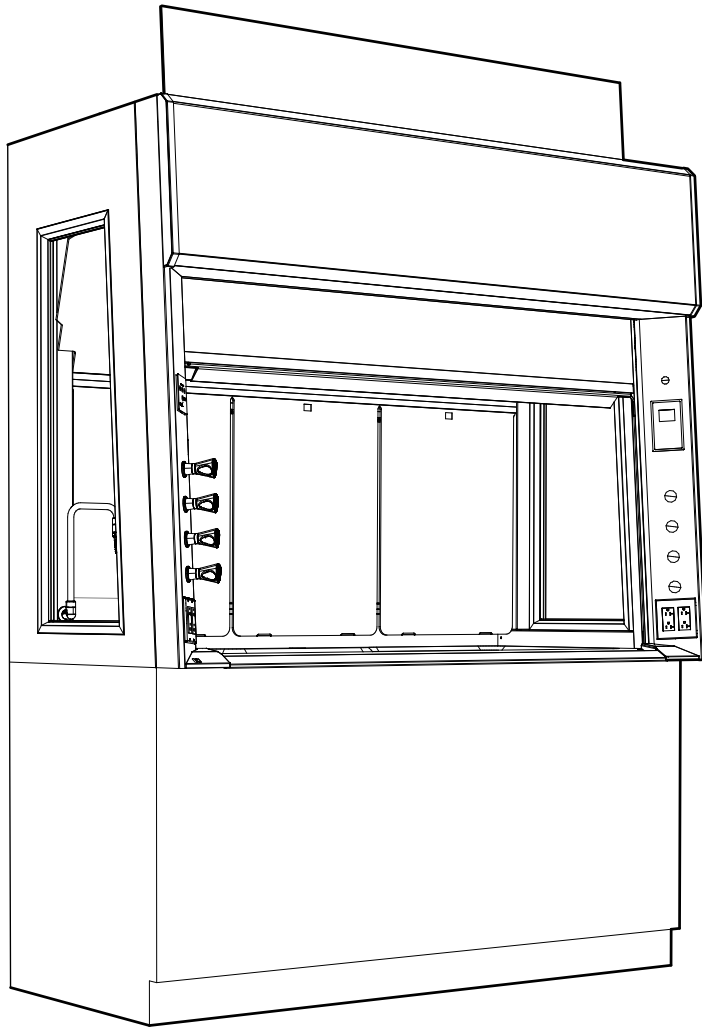


Vertical Section

Dimensions - Depth	
C	36 1/2"
D	36 1/2"
E	9"

V50 – TruView Teaching Fume Hood

Single Sided with Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

24 inches / 610mm **24**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Window Config:

part no.
code

Glass Back Panel **CB**

Solid Back Panel **SB**

Available Liner Types:

part no.
code

Kemglass **G**

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Frameless **N**

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

Fitting Holes:

part no.
code

Front Load WaterSaver **F4**

WaterSaver ADA **F5**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76,84
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

Hood Configuration:

part no.
code

Stand Alone **SA**

Left End of Run **LE**

Right End of run **RE**

Add-on (middle of run) **AD**

for explanation see page 58-59

V50F Overall Length Window Config Liner Type Sash Frame Sash Glass Fitting Holes Electrical Fixture Hood Config Option Choices (separated by commas)

G **-** **F4** **S** **-** **...**

Technical Information

V50F...

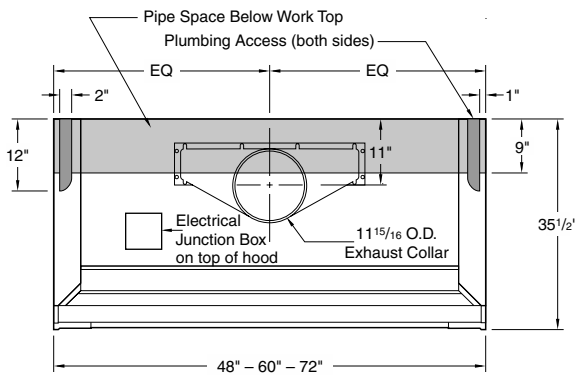
Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14	301	0.06	394	0.07	486	0.09	671	0.06
50 FPM	386	0.09	506	0.12	624	0.15	861	0.10	251	0.04	328	0.05	405	0.07	559	0.04

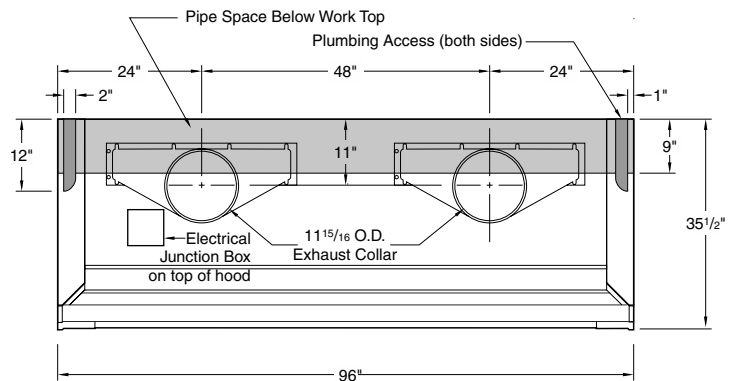
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

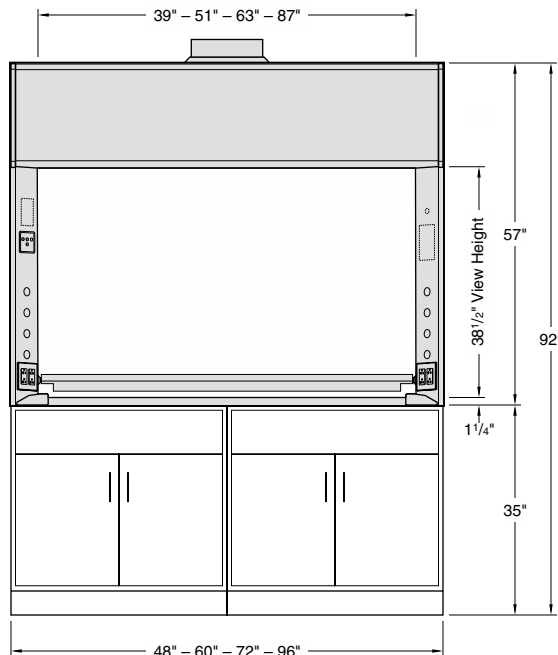
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	70 CFM	90 CFM	110 CFM	145 CFM	170 CFM	220 CFM	235 CFM	365 CFM



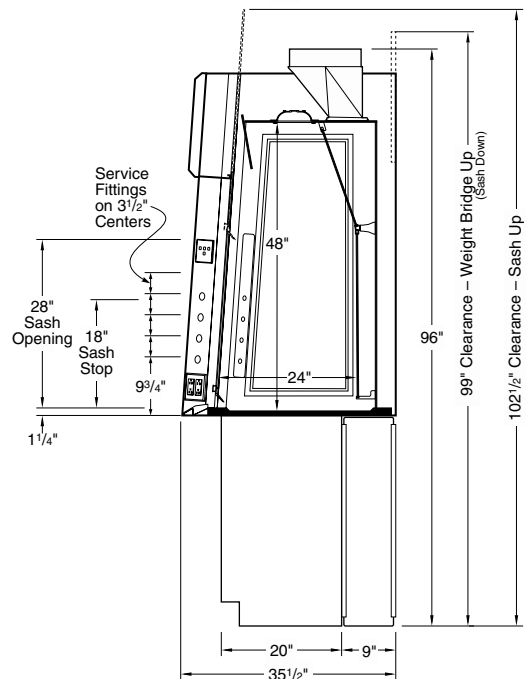
4'-5'-6' Rough-in



8' Rough-in



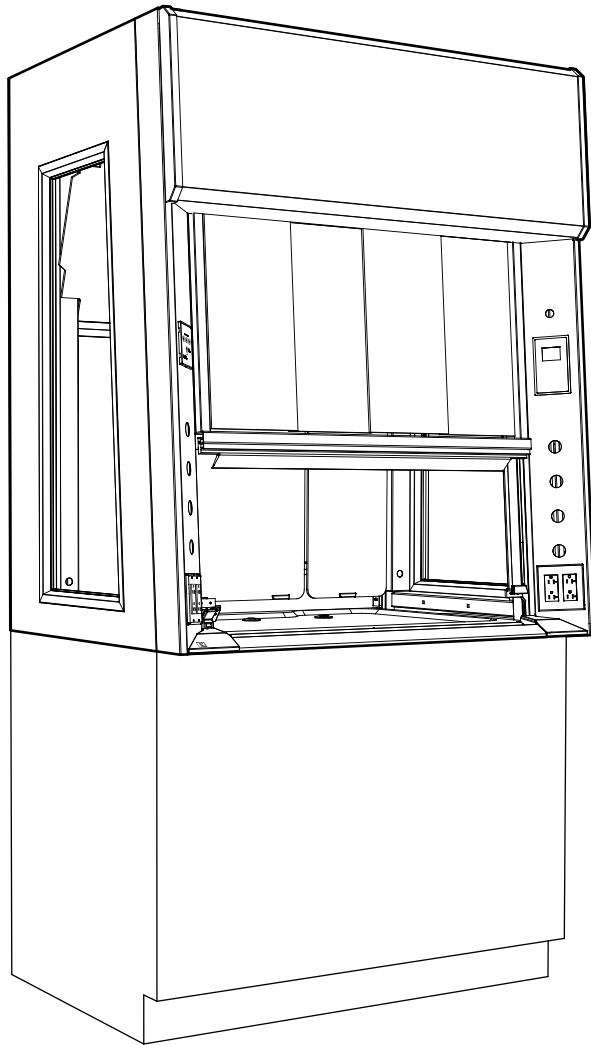
Elevation



Vertical Section

V51 – TruView Teaching Fume Hood

Single Sided with Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

24 inches / 610mm **24**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Window Config:

part no.
code

Glass Back Panel **CB**

Solid Back Panel **SB**

Available Liner Types:

part no.
code

Kemglass **G**

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

Fitting Holes:

part no.
code

Front Load WaterSaver **F4**

WaterSaver ADA **F5**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76,84
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

Hood Configuration:

part no.
code

Stand Alone **SA**

Left End of Run **LE**

Right End of run **RE**

Add-on (middle of run) **AD**

for explanation see page 58-59

V51F

Overall
Length

Window
Config

Liner
Type

Sash
Frame

Sash
Glass

Fitting
Holes

Electrical
Fixture

Hood
Config

Option Choices (separated by commas)

G **-** **F4** **S** **-** **...**

Technical Information

V51F...

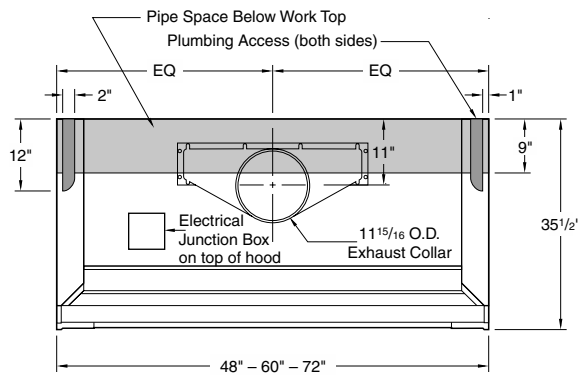
Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening								Sash Closed - Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	424	0.11	567	0.14	709	0.19	995	0.13
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	339	0.07	453	0.09	568	0.12	796	0.09
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	254	0.04	340	0.05	426	0.07	597	0.05
50 FPM	251	0.04	328	0.05	405	0.07	559	0.04	212	0.03	284	0.04	355	0.05	498	0.04

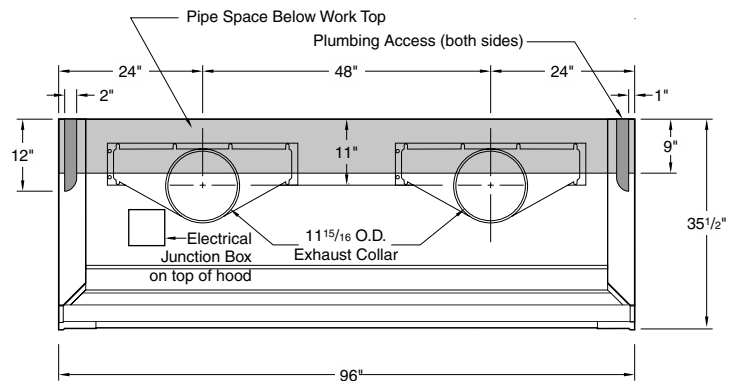
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

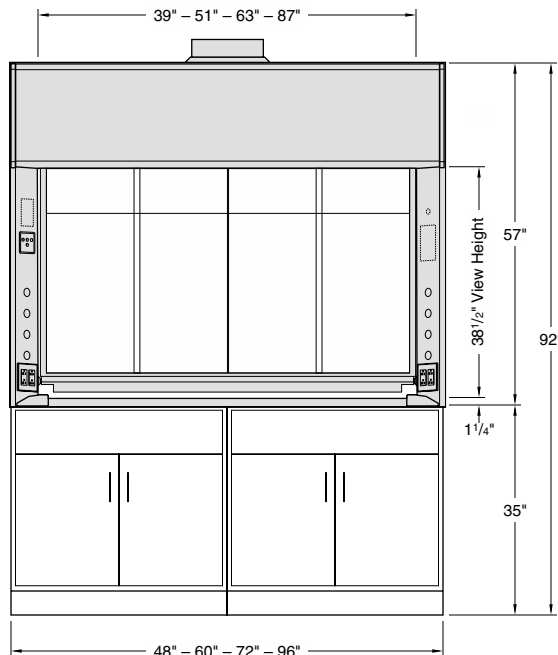
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	70 CFM	90 CFM	110 CFM	145 CFM	170 CFM	220 CFM	265 CFM	365 CFM



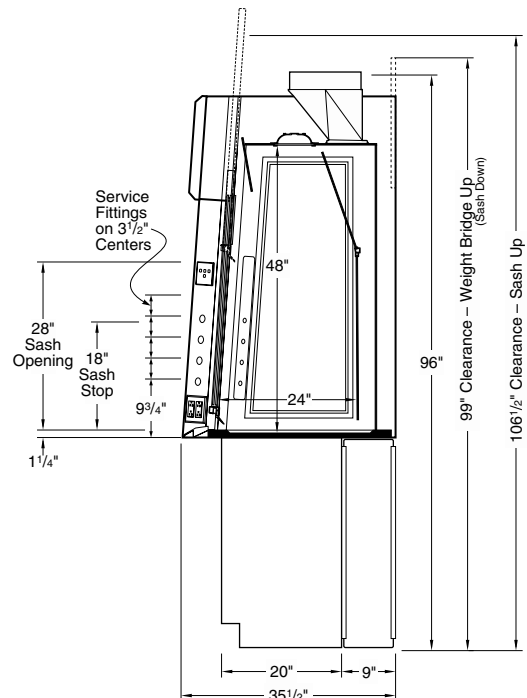
4'-5'-6' Rough-in



8' Rough-in



Elevation



Vertical Section

Technical Information

V52F...

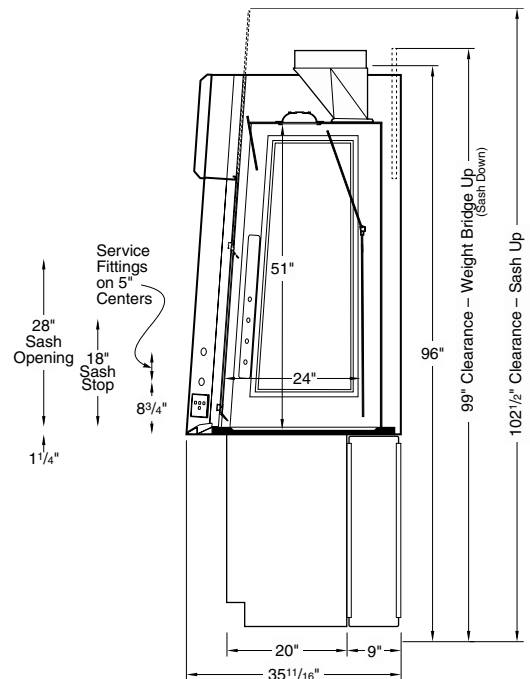
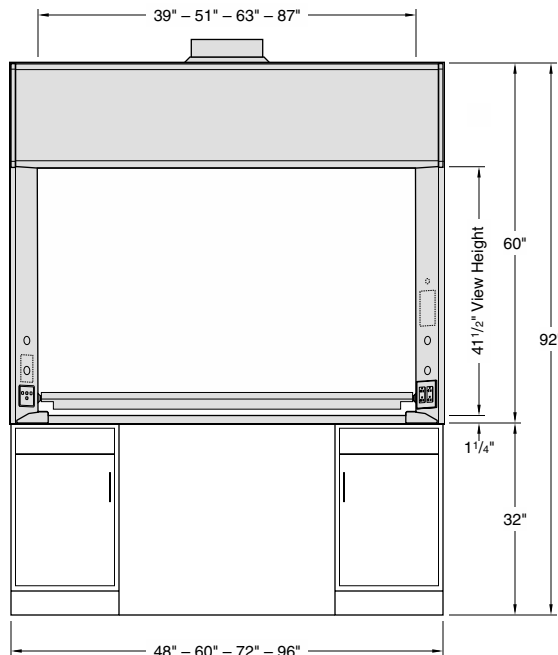
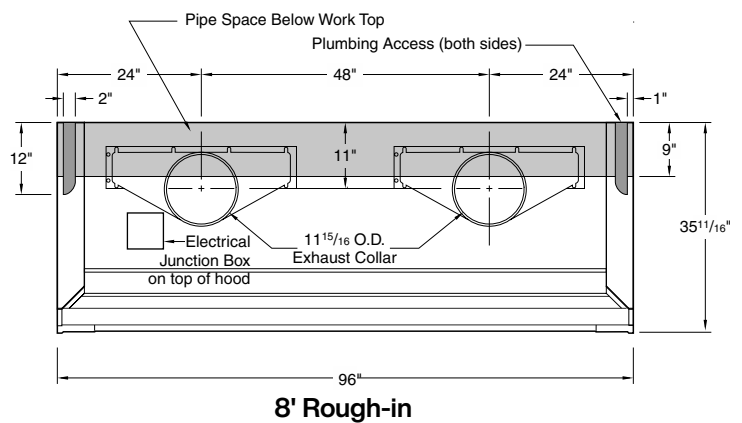
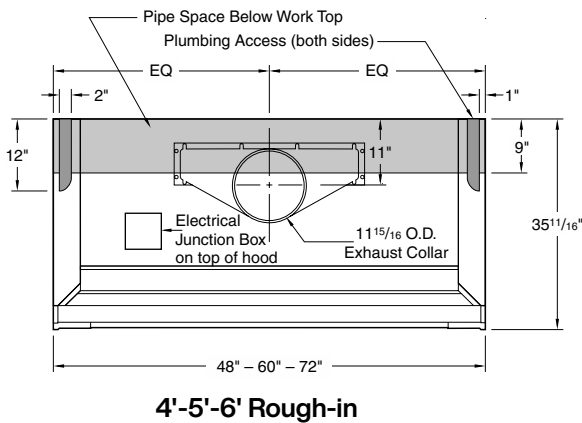
Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14	301	0.06	394	0.07	486	0.09	671	0.06
50 FPM	386	0.09	506	0.12	624	0.15	861	0.10	251	0.04	328	0.05	405	0.07	559	0.04

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

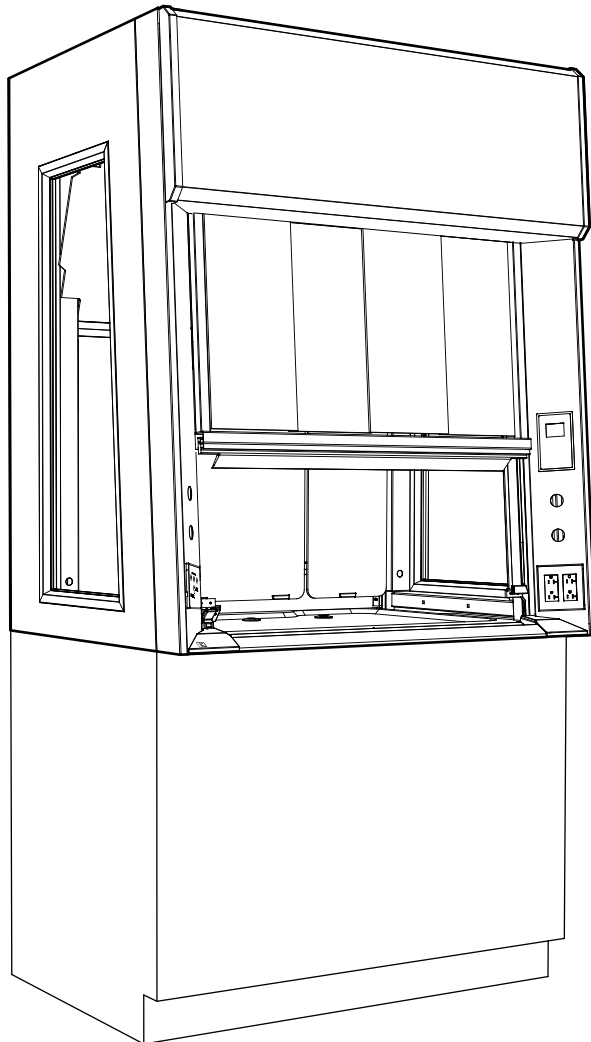
ANSI Z9.5 Minimum Flow Rate

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	75 CFM	100 CFM	120 CFM	155 CFM	185 CFM	235 CFM	285 CFM	390 CFM



V53 – TruView Teaching Fume Hood

Single Sided ADA with Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm

28

Inside Depth:

24 inches / 610mm

24

Overall Length:

48 inches / 1219mm

48

60 inches / 1524mm

60

72 inches / 1829mm

72

96 inches / 2438mm

96

Window Config:

part no.
code

Glass Back Panel

CB

Solid Back Panel

SB

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

Fitting Holes:

part no.
code

Front Load WaterSaver

F4

WaterSaver ADA

F5

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76,84
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

Hood Configuration:

part no.
code

Stand Alone

SA

Left End of Run

LE

Right End of run

RE

Add-on (middle of run)

AD

for explanation see page 58-59

V53F Overall Length Window Config Liner Type Sash Frame Sash Glass Fitting Holes Electrical Fixture Hood Config Option Choices (separated by commas)

G **-** **S** **-** **...**

Technical Information

V53F...

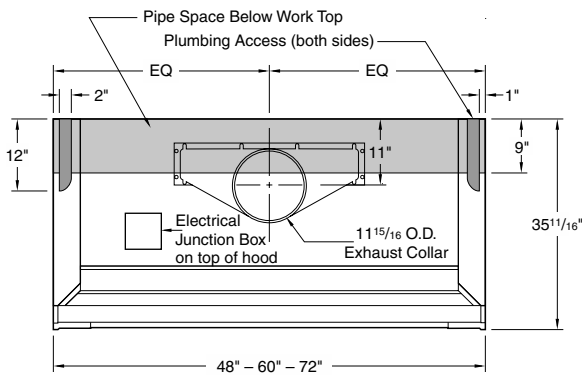
Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening								Sash Closed - Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	424	0.11	567	0.14	709	0.19	995	0.13
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	339	0.07	453	0.09	568	0.12	796	0.09
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	254	0.04	340	0.05	426	0.07	597	0.05
50 FPM	251	0.04	328	0.05	405	0.07	559	0.04	212	0.03	284	0.04	355	0.05	498	0.04

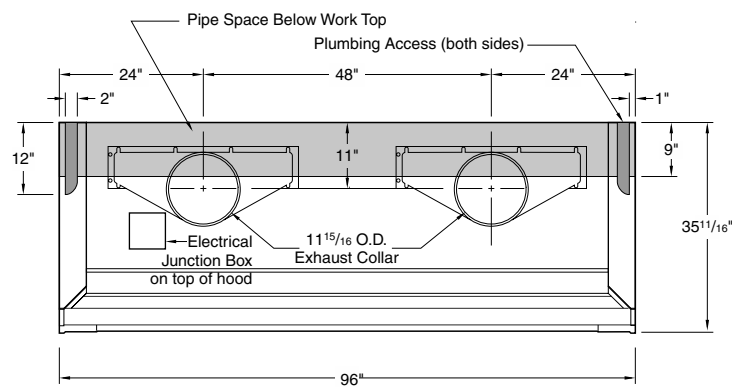
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

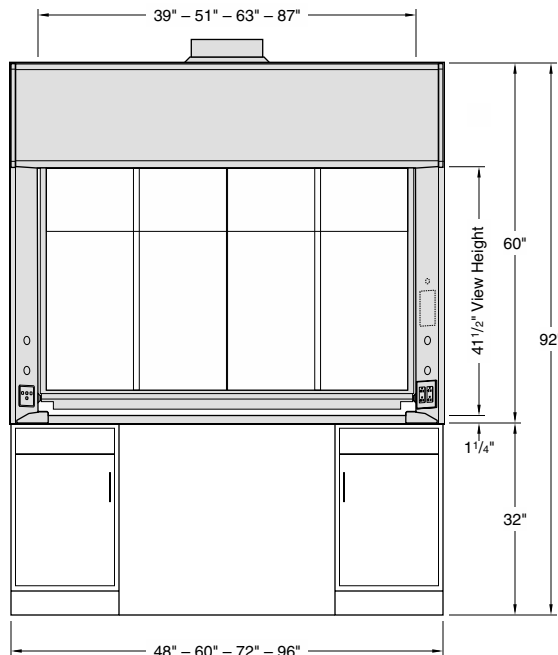
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	75 CFM	100 CFM	120 CFM	155 CFM	185 CFM	235 CFM	285 CFM	390 CFM



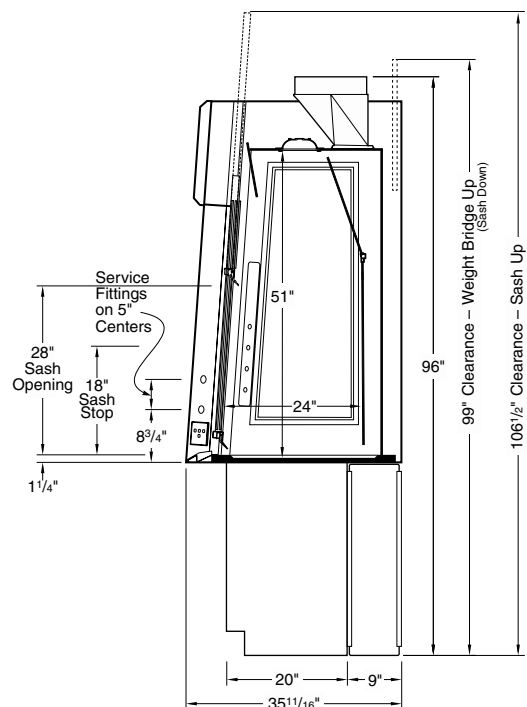
4'-5'-6' Rough-in



8' Rough-in



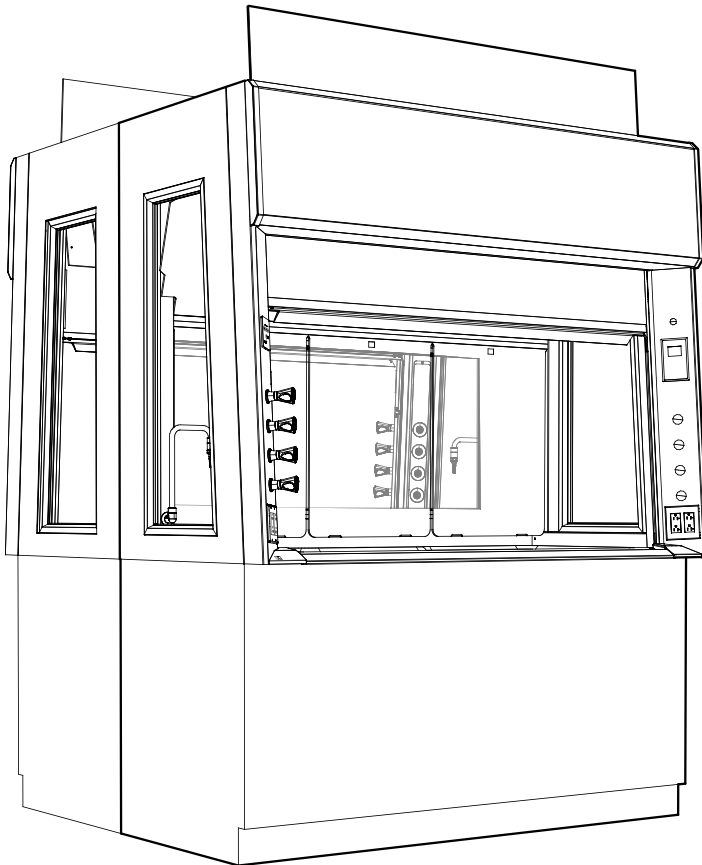
Elevation



Vertical Section

V55 – TruView Teaching Fume Hood

Double Sided with Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

48 inches / 1219mm **48**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Window Config:

part no.
code

Glass Back Panel **CB**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Frameless **N**

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

Hood Configuration:

part no.
code

Stand Alone **SA**

End Unit **EU**

for explanation see page 58-59

Fitting Holes:

part no.
code

Front Load WaterSaver **F4**

WaterSaver ADA **F5**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

V55F Overall Length Window Config **CB** Liner Type **G** Sash Frame Sash Glass **F4** Fitting Holes **S** Electrical Fixture Hood Config Option Choices (separated by commas) **...**

Technical Information

V55F...

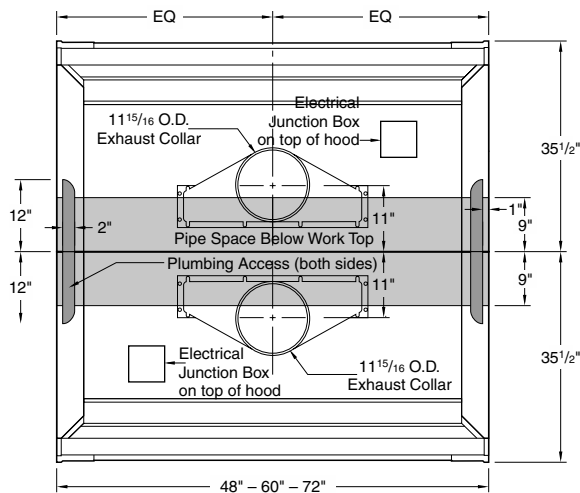
Airflow (CFM) Requirements (Values in chart are for ONE SIDE - Double values for entire superstructure)

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14	301	0.06	394	0.07	486	0.09	671	0.06
50 FPM	386	0.09	506	0.12	624	0.15	861	0.10	251	0.04	328	0.05	405	0.07	559	0.04

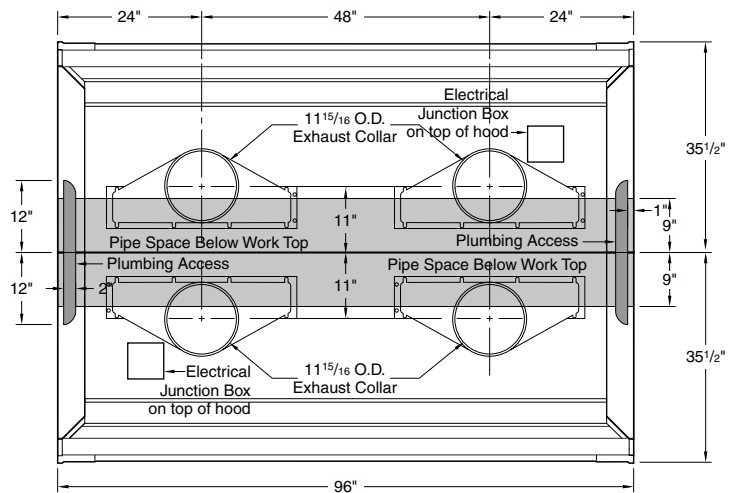
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate (Values in chart are for ONE SIDE - Double values for entire superstructure)

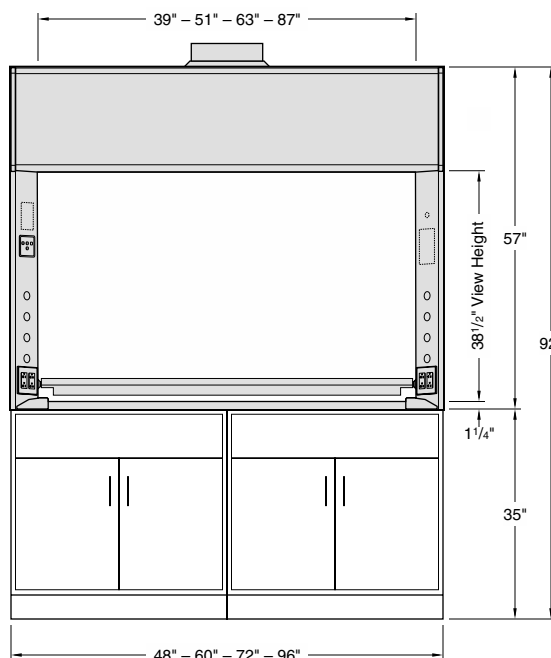
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	70 CFM	90 CFM	110 CFM	145 CFM	170 CFM	220 CFM	235 CFM	365 CFM



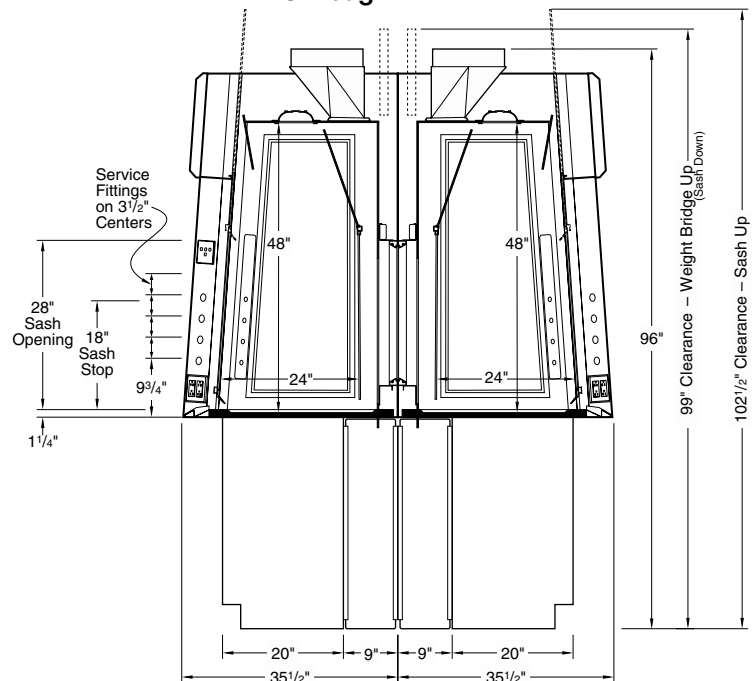
4'-5'-6' Rough-in



8' Rough-in



Elevation



Vertical Section

V56 – TruView Teaching Fume Hood

Double Sided with Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

48 inches / 1219mm **48**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Window Config:

part no.
code

Glass Back Panel **CB**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

Fitting Holes:

part no.
code

Front Load WaterSaver **F4**

WaterSaver ADA **F5**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

Hood Configuration:

part no.
code

Stand Alone **SA**

Add-on (middle of run) **AD**

End Unit **EU**

for explanation see page 58-59

V56F **CB** **G** **-** **, F4, S** **-** **, ...**

Overall Length Window Config Liner Type Sash Frame Sash Glass Fitting Holes Electrical Fixture Hood Config Option Choices (separated by commas)

Technical Information

V56F...

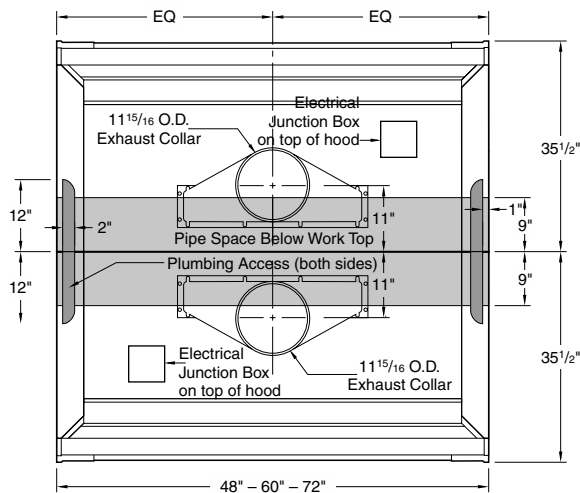
Airflow (CFM) Requirements (Values in chart are for ONE SIDE - Double values for entire superstructure)

Face Velocity	18" High Sash Opening								Sash Closed - Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	424	0.11	567	0.14	709	0.19	995	0.13
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	339	0.07	453	0.09	568	0.12	796	0.09
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	254	0.04	340	0.05	426	0.07	597	0.05
50 FPM	251	0.04	328	0.05	405	0.07	559	0.04	212	0.03	284	0.04	355	0.05	498	0.04

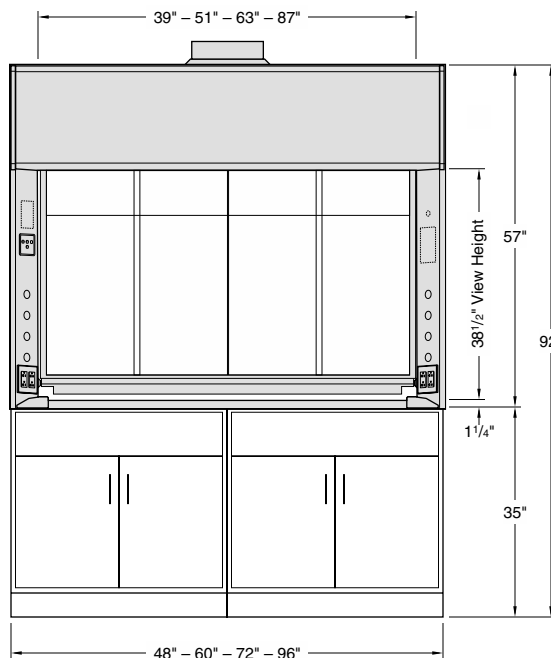
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate (Values in chart are for ONE SIDE - Double values for entire superstructure)

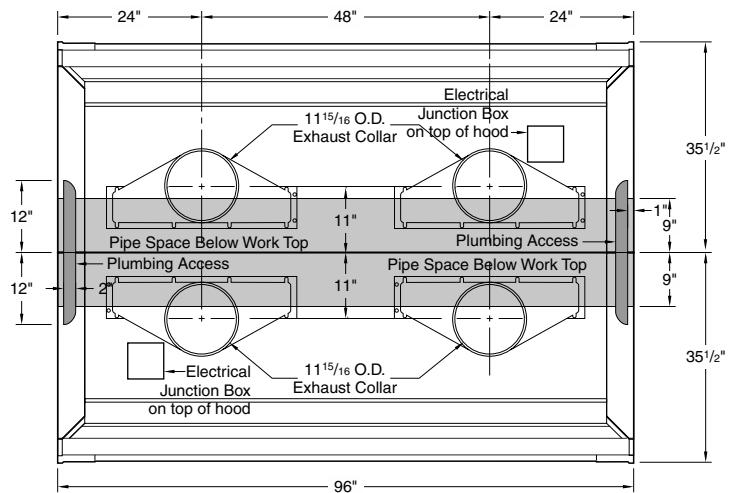
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	70 CFM	90 CFM	110 CFM	145 CFM	170 CFM	220 CFM	265 CFM	365 CFM



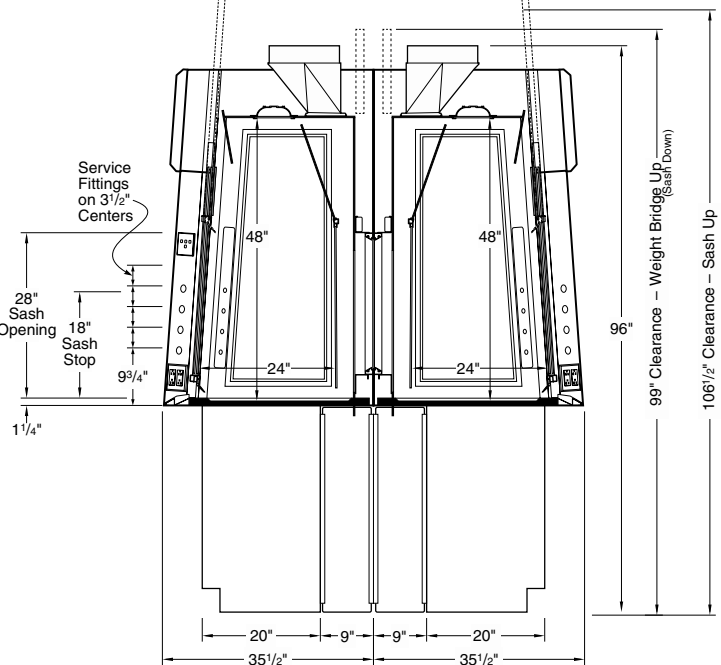
4'-5'-6' Rough-in



Elevation



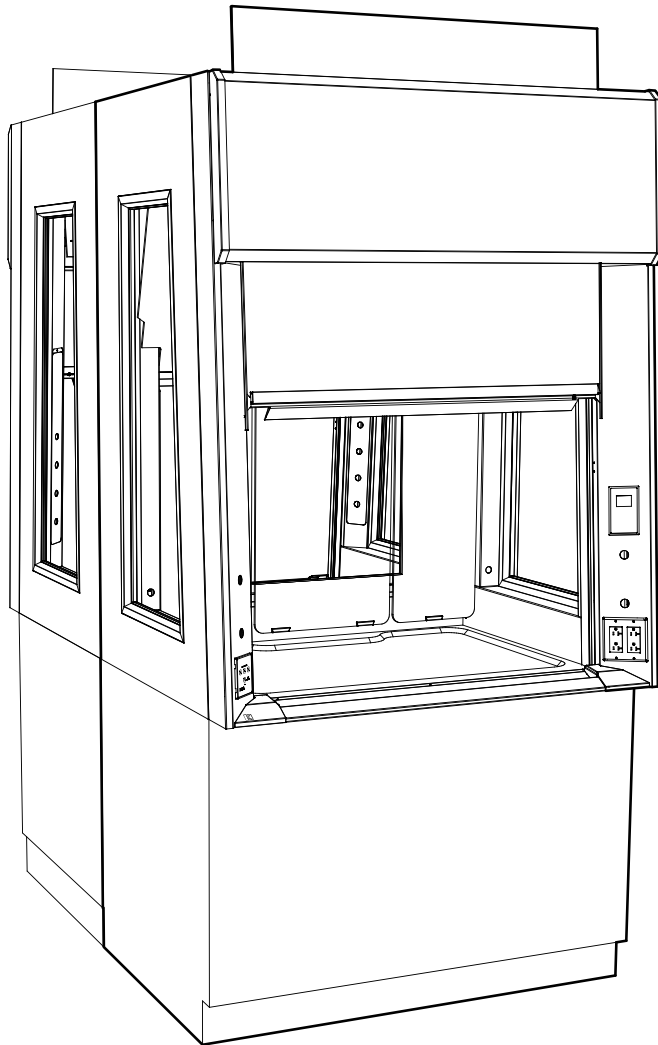
8' Rough-in



Vertical Section

V57 – TruView Teaching Fume Hood

Double Sided ADA with Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm **28**

Inside Depth:

48 inches / 1219mm **48**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Window Config:

part no.
code

Glass Back Panel **CB**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Frameless **N**

Powder Coated Steel **M**

Type 304L Stainless Steel **S**

Fitting Holes:

part no.
code

Front Load WaterSaver **F4**

WaterSaver ADA **F5**

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

Hood Configuration:

part no.
code

Stand Alone **SA**

Add-on (middle of run) **AD**

End Unit **EU**

for explanation see page 58-59

V57F Overall Length Window Config Liner Type Sash Frame Sash Glass Fitting Holes Electrical Fixture Hood Config Option Choices (separated by commas)

V57F **CB** **G** - , , **S** , - , , ...

Technical Information

V57F...

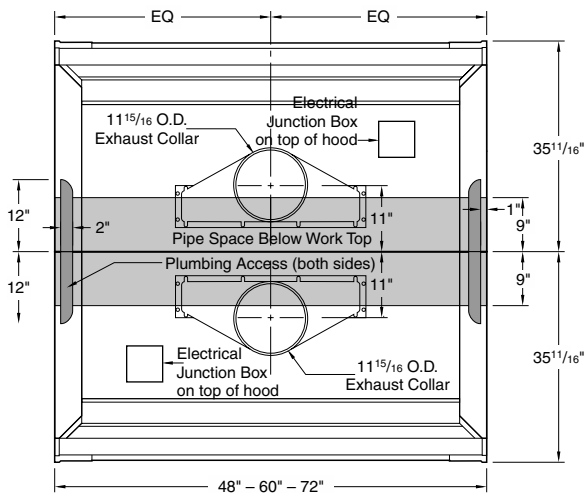
Airflow (CFM) Requirements (Values in chart are for ONE SIDE - Double values for entire superstructure)

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	772	0.35	1010	0.44	1247	0.55	1722	0.38	502	0.15	656	0.19	810	0.24	1118	0.16
80 FPM	618	0.23	808	0.29	998	0.36	1378	0.25	401	0.10	525	0.13	648	0.16	895	0.11
60 FPM	464	0.13	606	0.16	749	0.21	1034	0.14	301	0.06	394	0.07	486	0.09	671	0.06
50 FPM	386	0.09	506	0.12	624	0.15	861	0.10	251	0.04	328	0.05	405	0.07	559	0.04

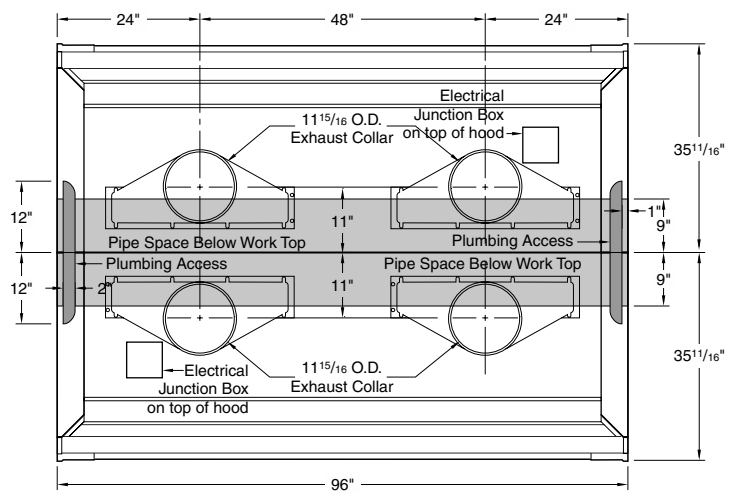
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate (Values in chart are for ONE SIDE - Double values for entire superstructure)

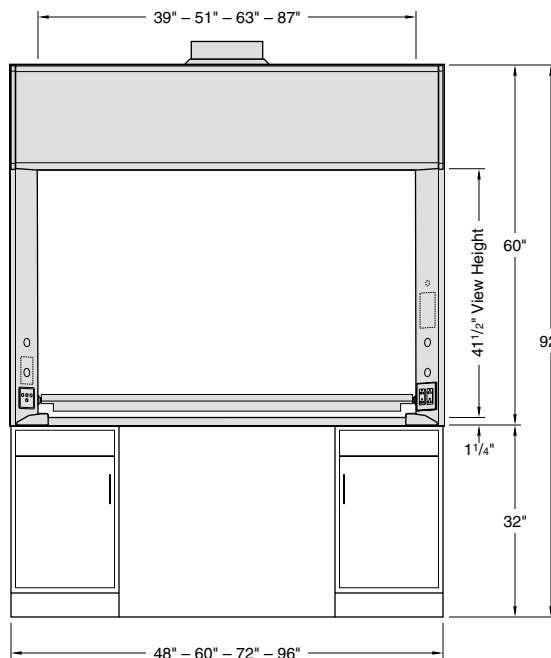
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	75 CFM	100 CFM	120 CFM	155 CFM	185 CFM	235 CFM	285 CFM	390 CFM



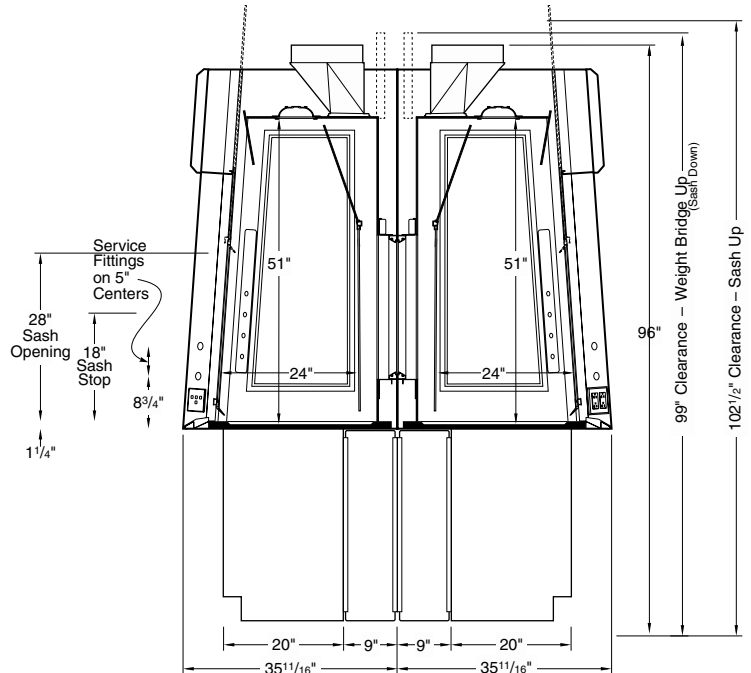
4'-5'-6' Rough-in



8' Rough-in



Elevation



Vertical Section

V58 – TruView Teaching Fume Hood

Double Sided ADA with Combination Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Manual sash stop

Available Sizes:

part no.
code

Sash Opening Height:

28 inches / 711mm

28

Inside Depth:

48 inches / 1219mm

48

Overall Length:

48 inches / 1219mm

48

60 inches / 1524mm

60

72 inches / 1829mm

72

96 inches / 2438mm

96

Window Config:

part no.
code

Glass Back Panel

CB

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

Fitting Holes:

part no.
code

Front Load WaterSaver

F4

WaterSaver ADA

F5

Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 84
Service Fittings	see page 85
Base Cabinets	see page 87

Hood Configuration:

part no.
code

Stand Alone

SA

Add-on (middle of run)

AD

End Unit

EU

for explanation see page 58-59

V58F **CB** **G** - , , **S** - , , ...

Technical Information

V58F...

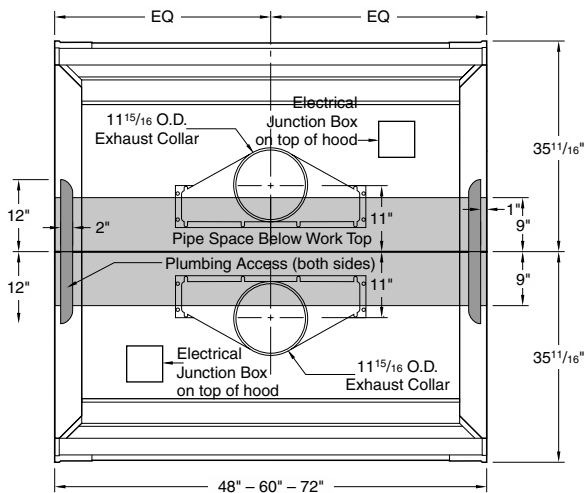
Airflow (CFM) Requirements (Values in chart are for ONE SIDE - Double values for entire superstructure)

Face Velocity	18" High Sash Opening								Sash Closed - Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
100 FPM	502	0.15	656	0.19	810	0.24	1118	0.16	424	0.11	567	0.14	709	0.19	995	0.13
80 FPM	401	0.10	525	0.13	648	0.16	895	0.11	339	0.07	453	0.09	568	0.12	796	0.09
60 FPM	301	0.06	394	0.07	486	0.09	671	0.06	254	0.04	340	0.05	426	0.07	597	0.05
50 FPM	251	0.04	328	0.05	405	0.07	559	0.04	212	0.03	284	0.04	355	0.05	498	0.04

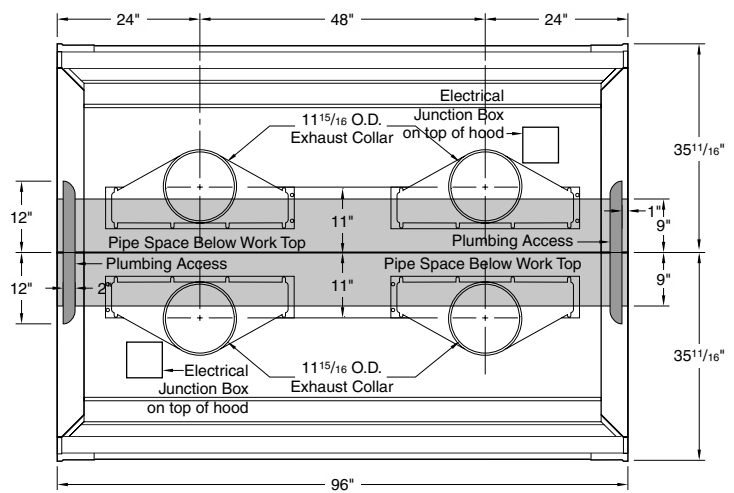
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate (Values in chart are for ONE SIDE - Double values for entire superstructure)

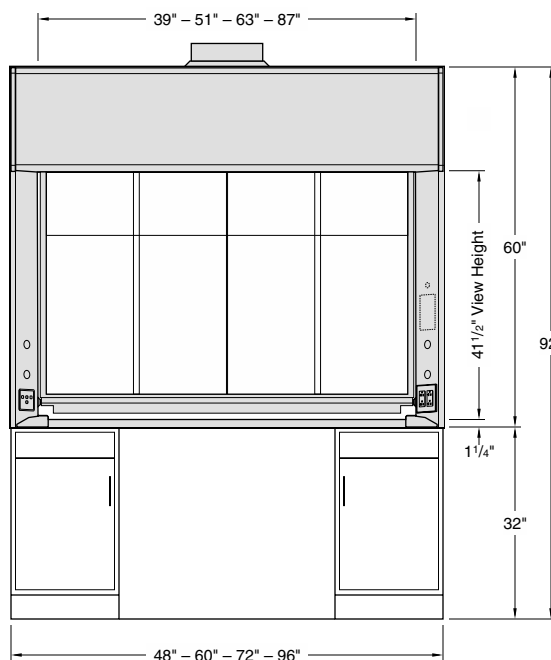
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	75 CFM	100 CFM	120 CFM	155 CFM	185 CFM	235 CFM	285 CFM	390 CFM



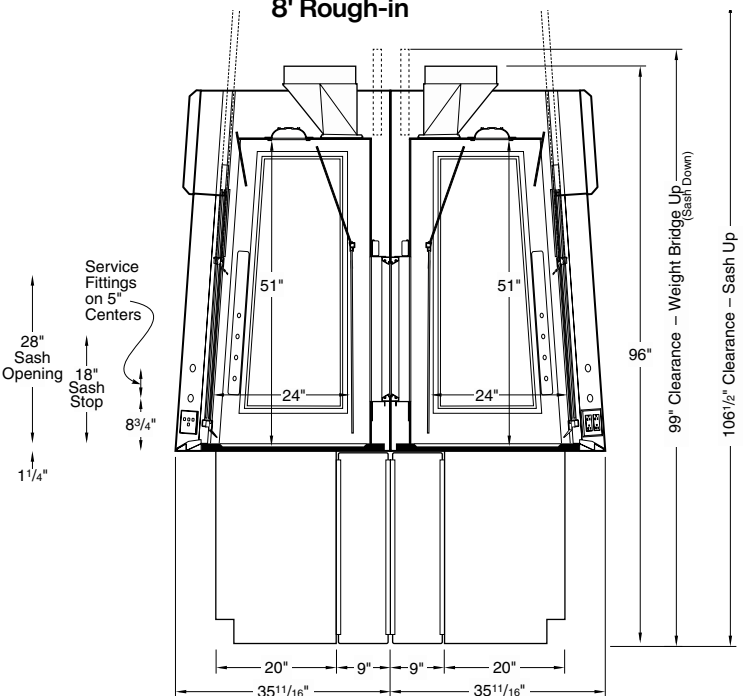
4'-5'-6' Rough-in



8' Rough-in

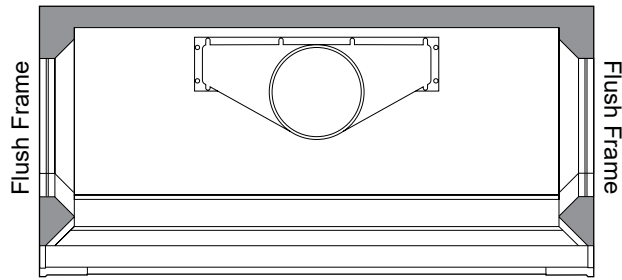


Elevation

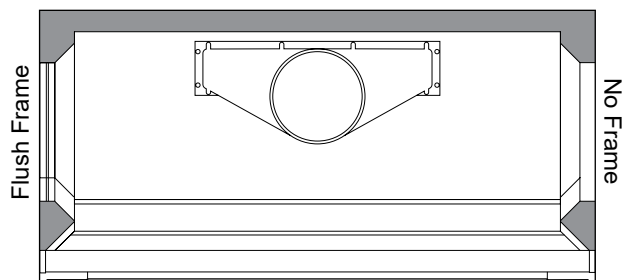


Vertical Section

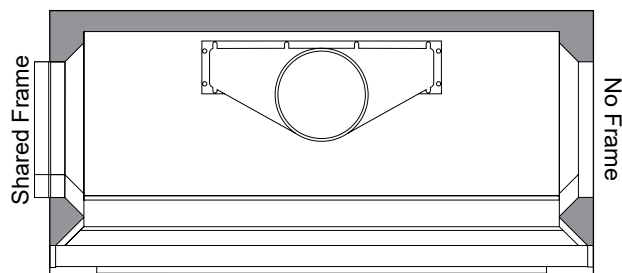
Hood Configurations (TruView)



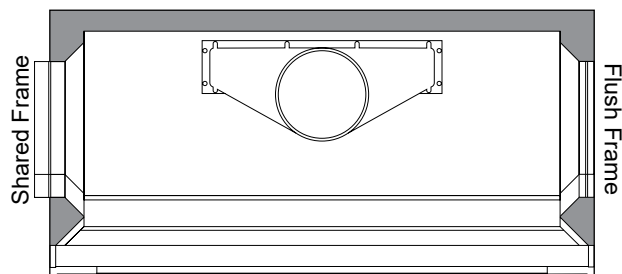
SA Stand Alone (Free standing)



LE Left End (Left end of run)



AD Add-on (Middle of Run)



RE Right End (Right end of run)

Window Configurations

REAR WINDOW:

SB: Solid back Kemglass liner w/Kemglass baffles

CB: Clear back laminated safety glass (LSG) window with LSG baffles

SIDE WINDOWS:

All standard configurations (SA, LE, AD, RE) as shown to the left include glass side windows. When applicable, the glass inserts can be replaced with solid Kemglass inserts when the fume hood is positioned next to a wall or standing height cabinet. These options (N1, N2, N3) are shown on the Technical Data Sheets as defined below.

N1: Solid Left Kemglass Side Window

N2: Solid Right Kemglass Side Window

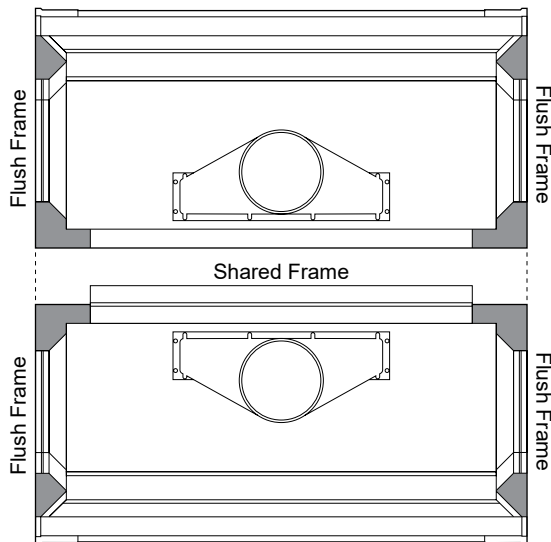
N3: Solid Left and Right Kemglass Side Windows

Hood Configuration

Single-Sided TruView (V50-V51-V52-V53)

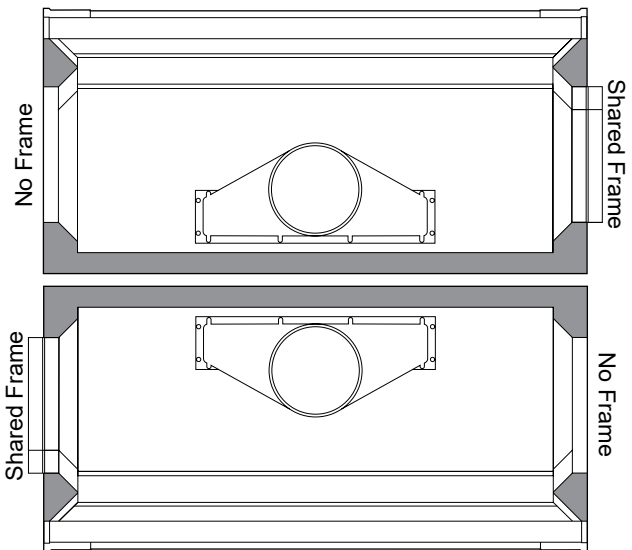
Hood Configurations (TruView)

SIDE TWO



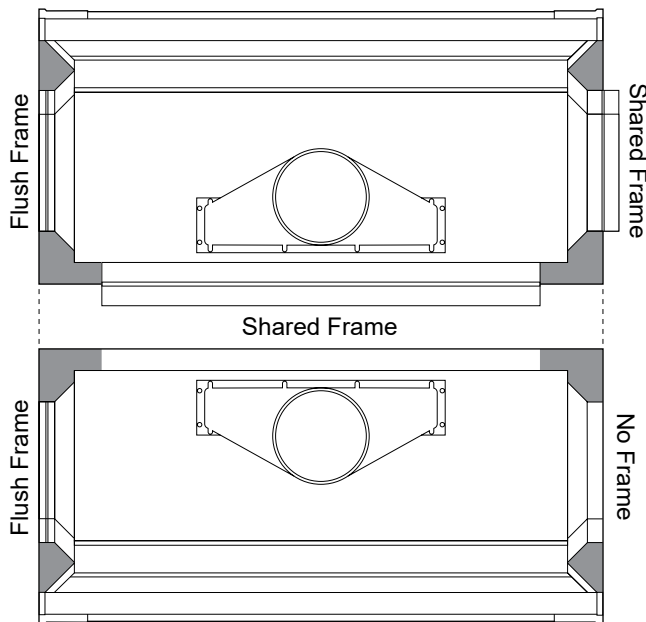
SIDE ONE

SA Stand Alone (Free standing)



AD Add-on (Middle of Run)

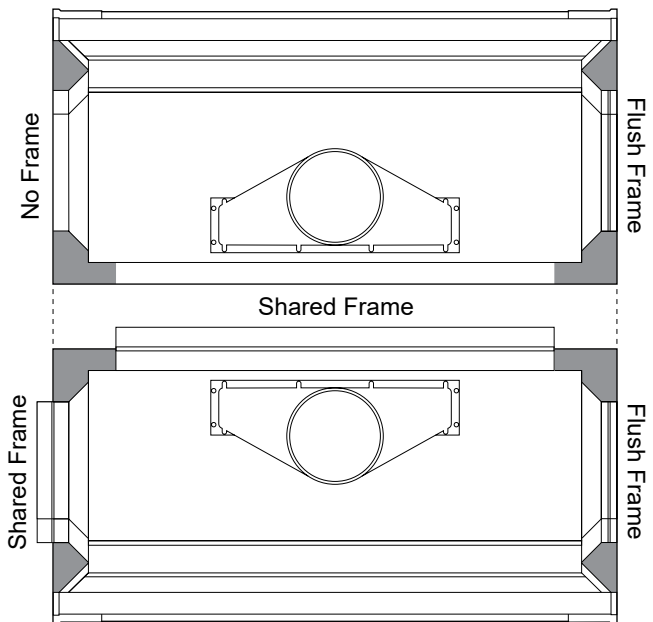
SIDE TWO



SIDE ONE

EU End Unit (End of Run)

SIDE ONE



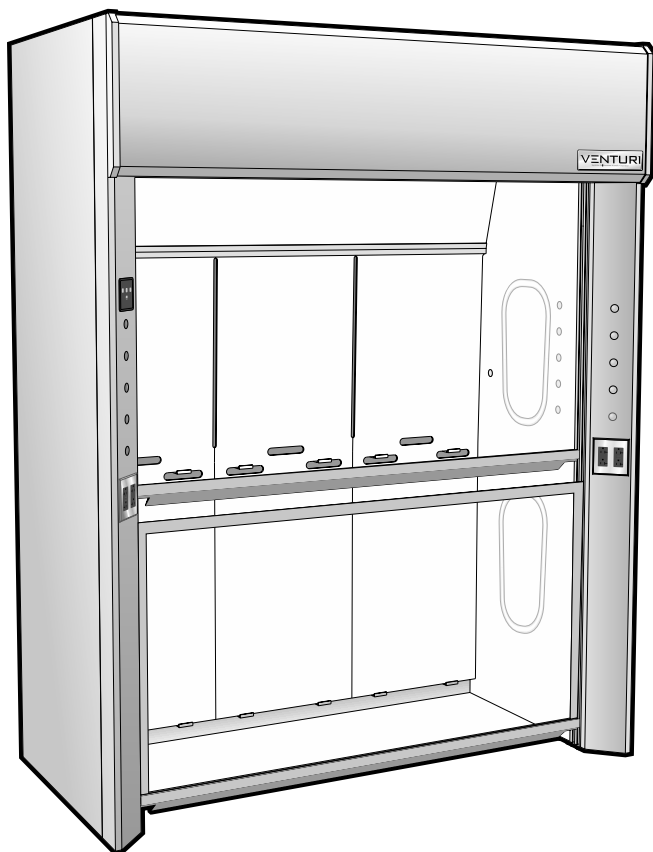
SIDE TWO

EU End Unit (End of Run)

Hood Configuration
Double-Sided TruView (V55-V56-V57-V58)

V65 – Floor Mounted Fume Hood

with Vertical Rising Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Mechanical sash stop

Available Sizes:

part no.
code

Sash Opening Height:	
64 ¹ / ₄ inches / 1632mm	64
Inside Depth:	
24 inches / 610mm	24
30 inches / 762mm	30
36 inches / 914mm	36
48 inches / 1219mm	48
Overall Length:	
48 inches / 1219mm	48
60 inches / 1524mm	60
72 inches / 1829mm	72
96 inches / 2438mm	96

Available Liner Types:

part no.
code

Kemglass	G
Fiberglass reinforced polyester 1805 UL classified	
Type 316L Stainless Steel 1805 UL classified	L
Type 304L Stainless Steel 1805 UL classified	S
Phenolic Resin	T

Additional Parts Required for a Complete Fume Hood Assembly

Work Floor & Shelf	see page 76
Ceiling Enclosure	see page 79
Service Fittings	see page 80

Available Sash Frames:

part no.
code

Frameless <i>Upper Sash Only</i>	N
Powder Coated Steel	M
Type 304L Stainless Steel	S

V65F

Sash Opening Height	Inside Depth	Overall Length	Liner Type	Sash Frame	Sash Glass	Fitting Holes	Electrical Fixture	Option Choices (separated by commas)
64								

- **,** **,** **-** **,** **,** **...**

Technical Information

V65

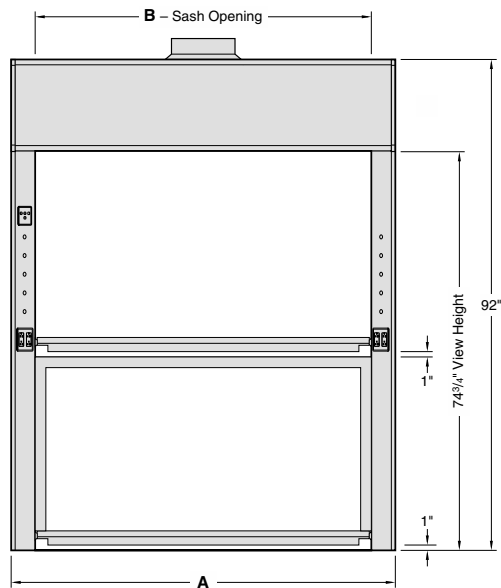
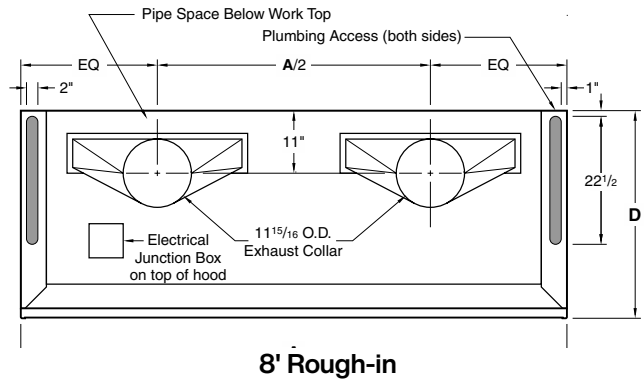
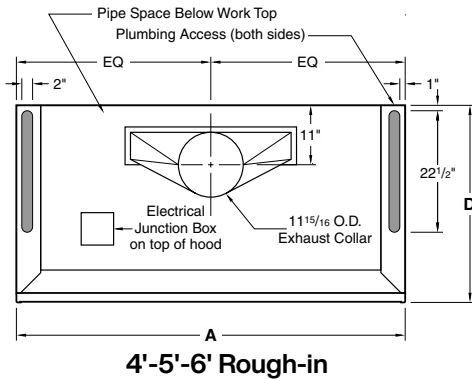
Airflow (CFM) Requirements

Face Velocity	28" High Sash Opening								18" High Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
120 FPM	992	0.56	1297	0.70	1602	0.88	2212	0.61	667	0.26	872	0.33	1077	0.41	1487	0.28
100 FPM	827	0.39	1081	0.50	1335	0.62	1843	0.43	556	0.18	727	0.23	897	0.29	1239	0.20
80 FPM	661	0.26	865	0.32	1068	0.41	1475	0.28	445	0.12	581	0.15	718	0.19	991	0.13

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

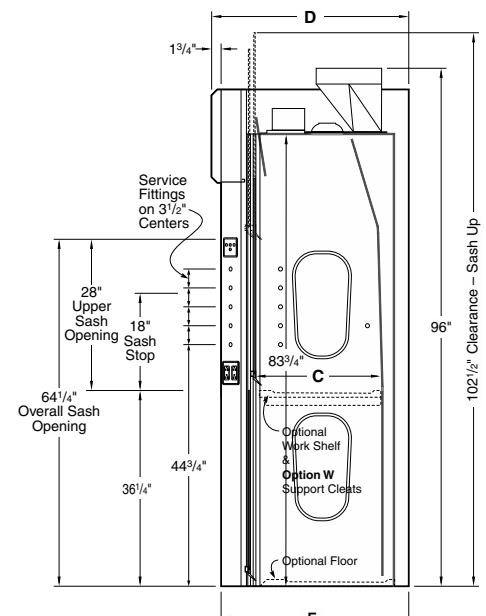
ANSI Z9.5 Minimum Flow Rate

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	130 CFM	170 CFM	210 CFM	290 CFM	320 CFM	420 CFM	520 CFM	720 CFM
30" deep	160 CFM	210 CFM	260 CFM	350 CFM	390 CFM	510 CFM	630 CFM	870 CFM
36" deep	190 CFM	250 CFM	300 CFM	420 CFM	470 CFM	610 CFM	750 CFM	1030 CFM
48" deep	250 CFM	320 CFM	390 CFM	540 CFM	610 CFM	790 CFM	980 CFM	1350 CFM



Elevation

Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"

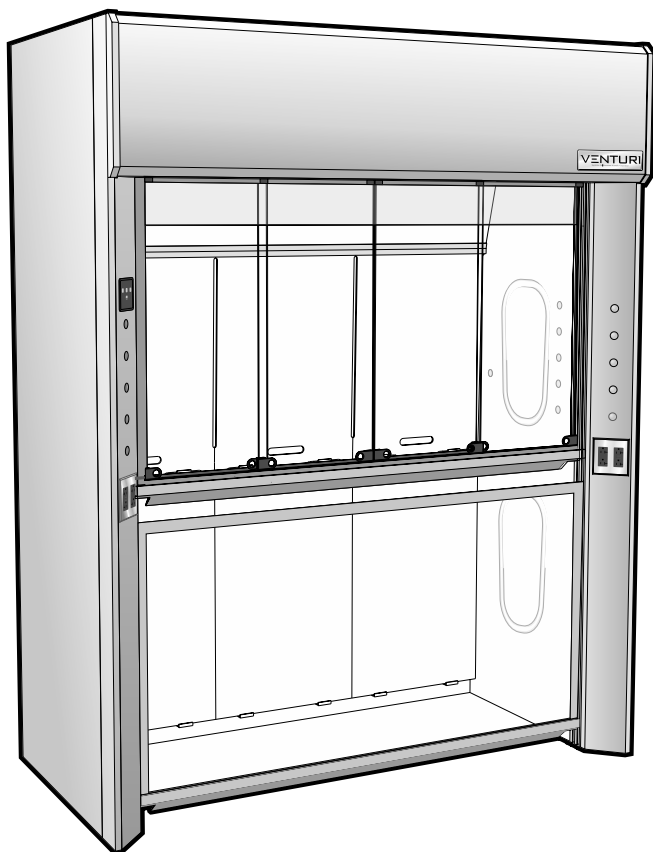


Vertical Section

Dimensions - Depth				
C	24"	30"	36"	48"
D	36 1/2"	42 1/2"	48 1/2"	60 1/2"
E	34 3/4"	40 3/4"	46 3/4"	58 3/4"

V66 – Floor Mounted Fume Hood

with Combination Vertical Rising/Horizontal Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Mechanical sash stop

Available Sizes:

part no.
code

Sash Opening Height:	
64 ¹ / ₄ inches / 1632mm	64
Inside Depth:	
24 inches / 610mm	24
30 inches / 762mm	30
36 inches / 914mm	36
48 inches / 1219mm	48
Overall Length:	
48 inches / 1219mm	48
60 inches / 1524mm	60
72 inches / 1829mm	72
96 inches / 2438mm	96

Available Liner Types:

part no.
code

Kemglass	G
Fiberglass reinforced polyester 1805 UL classified	
Type 316L Stainless Steel 1805 UL classified	L
Type 304L Stainless Steel 1805 UL classified	S
Phenolic Resin	T

Additional Parts Required for a Complete Fume Hood Assembly

Work Floor & Shelf	see page 76
Ceiling Enclosure	see page 79
Service Fittings	see page 80

Available Sash Frames:

part no.
code

Powder Coated Steel	M
Type 304L Stainless Steel	S

V66F Sash Opening Height: **64** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) **...**

Technical Information

V66

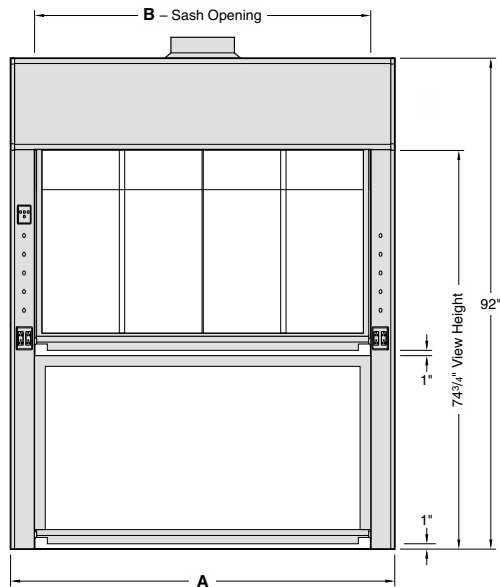
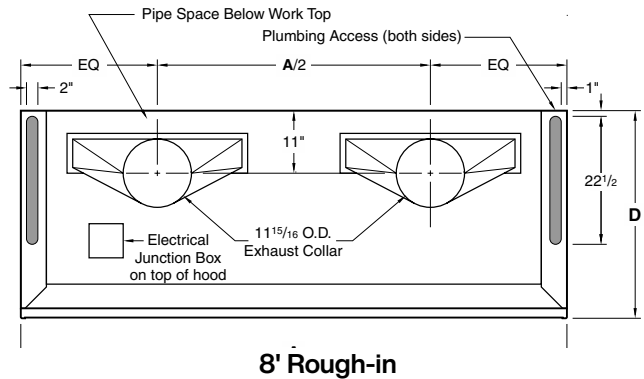
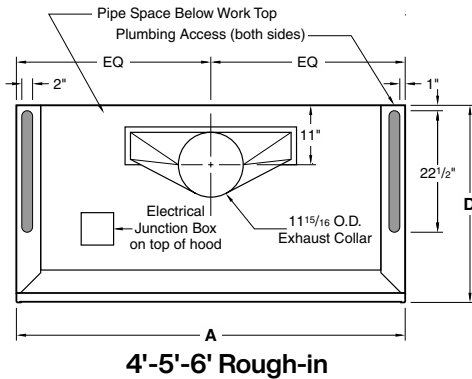
Airflow (CFM) Requirements

Face Velocity	18" High Sash Opening								Sash Closed – Panels Full Open							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"		4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
120 FPM	667	0.26	872	0.33	1077	0.41	1487	0.28	536	0.17	716	0.23	896	0.29	1256	0.21
100 FPM	556	0.18	727	0.23	897	0.29	1239	0.20	447	0.12	597	0.16	747	0.21	1047	0.15
80 FPM	445	0.12	581	0.15	718	0.19	991	0.13	357	0.08	477	0.10	597	0.14	837	0.09

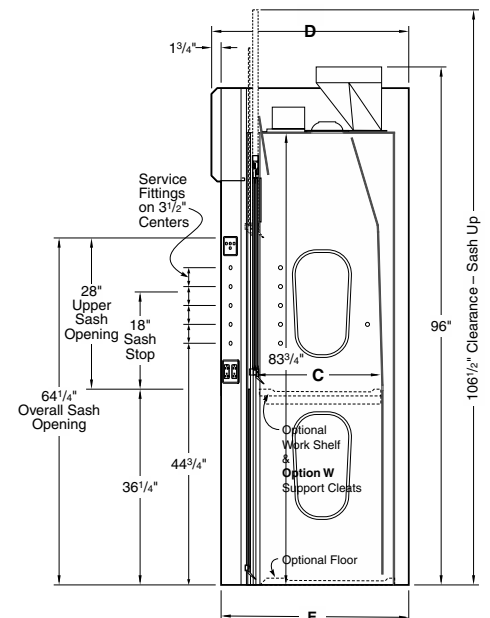
Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

ANSI Z9.5 Minimum Flow Rate

Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	130 CFM	170 CFM	210 CFM	290 CFM	320 CFM	420 CFM	520 CFM	720 CFM
30" deep	160 CFM	210 CFM	260 CFM	350 CFM	390 CFM	510 CFM	630 CFM	870 CFM
36" deep	190 CFM	250 CFM	300 CFM	420 CFM	470 CFM	610 CFM	750 CFM	1030 CFM
48" deep	250 CFM	320 CFM	390 CFM	540 CFM	610 CFM	790 CFM	980 CFM	1350 CFM



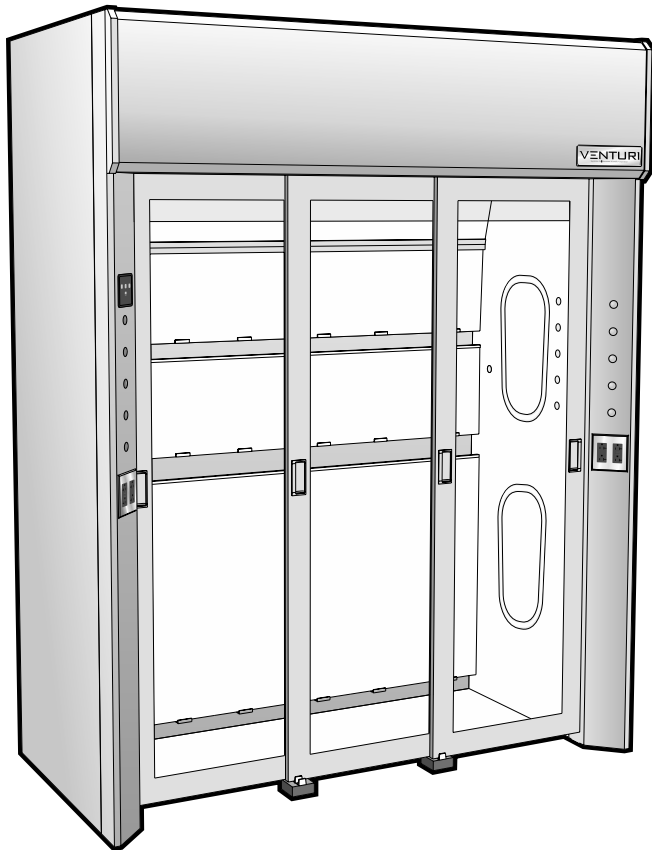
Dimensions – Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Dimensions – Depth				
C	24"	30"	36"	48"
D	36 1/2"	42 1/2"	48 1/2"	60 1/2"
E	34 3/4"	40 3/4"	46 3/4"	58 3/4"

V67 – Floor Mounted Fume Hood

with Horizontal Sash



Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller

Available Sizes:

part no.
code

Sash Opening Height:

68 inches / 1727mm **68**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

48 inches / 1219mm **48**

Overall Length:

72 inches / 1829mm **72**

96 inches / 2438mm **96**

120 inches / 3040mm **20**

144 inches / 3658mm **44**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel
1805 UL classified

L

Type 304L Stainless Steel
1805 UL classified

S

Phenolic Resin

T

Additional Parts Required for a Complete Fume Hood Assembly

Work Floor & Shelf	see page 76
Ceiling Enclosure	see page 79
Service Fittings	see page 80

Available Sash Frames:

part no.
code

Powder Coated Steel

M

Type 304L Stainless Steel

S

V67F Sash Opening Height: **68** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) ...

Technical Information

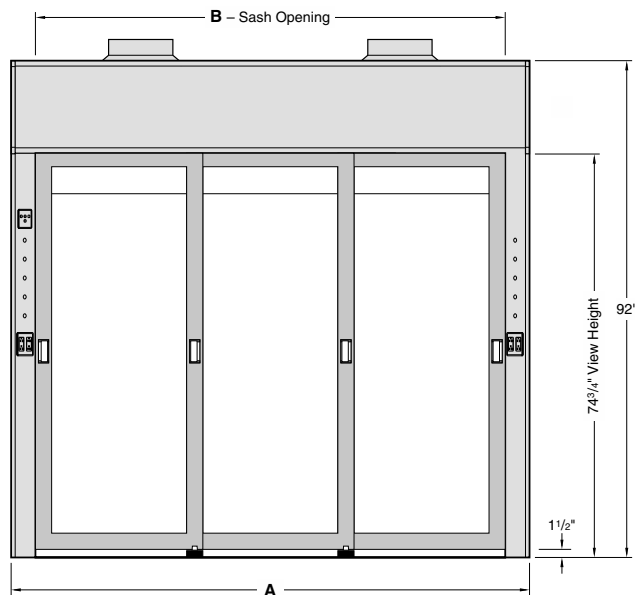
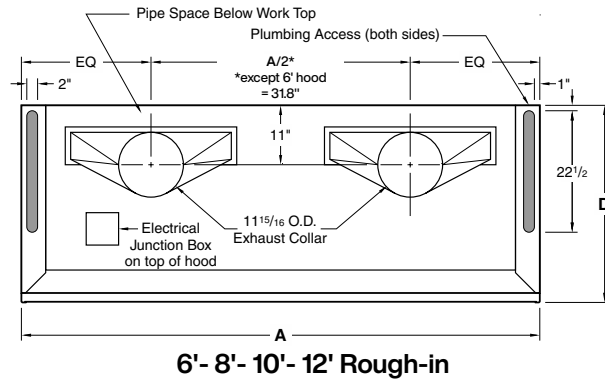
V67

Airflow (CFM) Requirements

Face Velocity	Panels Fully Open							
	6'-0" / 72"		8'-0" / 96"		10'-0" / 120"		12'-0" / 144"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP
120 FPM	2672	1.32	3688	1.63	4239	1.66	5166	2.06
100 FPM	2227	0.92	3074	1.15	3532	1.17	4305	1.46
80 FPM	1782	0.60	2459	0.75	2826	0.77	3444	0.96

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

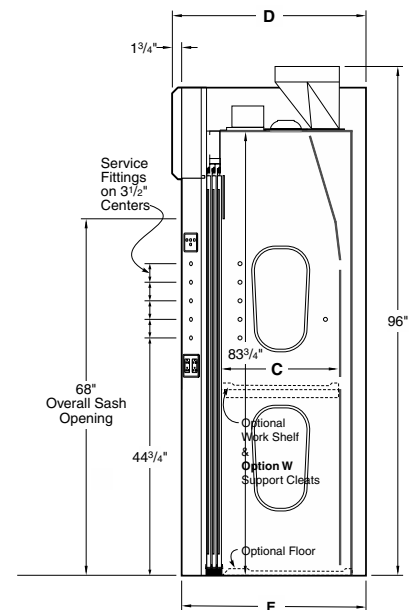
Inside Depth	150 Air Changes/Hour				375 Air Changes/Hour			
	6'-0" / 72"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"	6'-0" / 72"	8'-0" / 96"	10'-0" / 120"	12'-0" / 144"
24" deep	210 CFM	290 CFM	370 CFM	450 CFM	520 CFM	720 CFM	910 CFM	1110 CFM
30" deep	260 CFM	350 CFM	450 CFM	540 CFM	630 CFM	870 CFM	1110 CFM	1350 CFM
36" deep	300 CFM	420 CFM	530 CFM	640 CFM	750 CFM	1030 CFM	1320 CFM	1600 CFM
48" deep	390 CFM	540 CFM	690 CFM	840 CFM	980 CFM	1350 CFM	1720 CFM	2090 CFM



Elevation

Dimensions - Length				
A	72"	96"	120"	144"
B	63"	87"	111"	135"

Sash Panel Widths and Quantities				
Hood	72"	96"	120"	144"
Doors	23"(3)	31"(3)	23"(5)	29"(5)

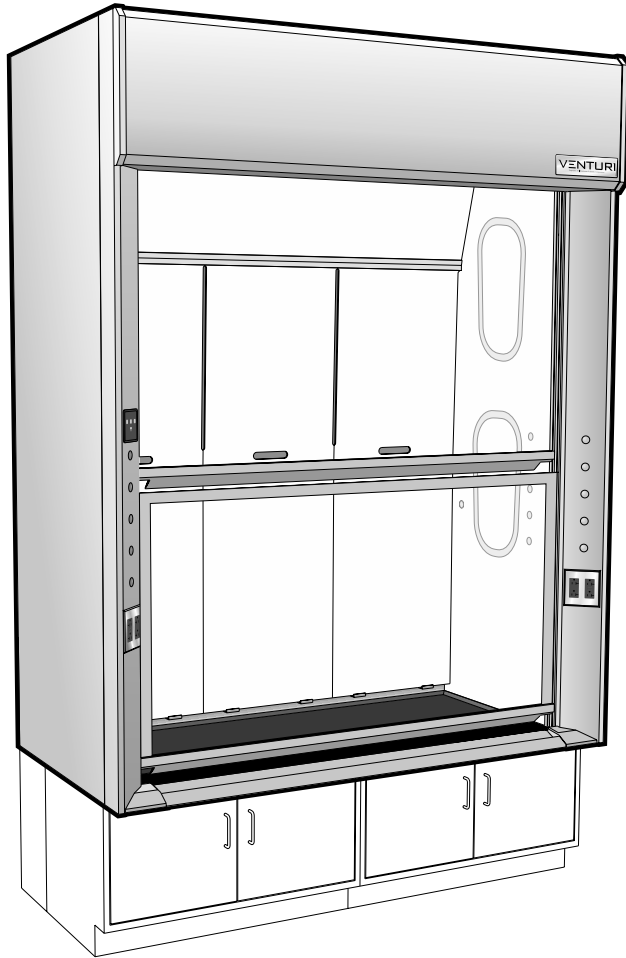


Vertical Section

Dimensions - Depth				
C	24"	30"	36"	48"
D	36 1/2"	42 1/2"	48 1/2"	60 1/2"
E	34 3/4"	40 3/4"	46 3/4"	58 3/4"

V90 – Distillation Fume Hood

with Vertical Rising Sash



Additional Parts Required for a Complete Fume Hood Assembly

Work Top	see page 76
Cupsink	see page 78
Ceiling Enclosure	see page 79
Service Fittings	see page 80
Base Cabinets	see page 70

Accessories Included:

- 4 120 VAC 20 amp GFCI* protected duplex receptacles
** when wired to a single circuit, as standard with Option U*
- 1 LED light fixture with illumination and color controller
- 1 Mechanical sash stop

Available Sizes:

part no.
code

Full Sash Opening Height:

63 inches / 16001mm **63**

Inside Depth:

24 inches / 610mm **24**

30 inches / 762mm **30**

36 inches / 914mm **36**

Overall Length:

48 inches / 1219mm **48**

60 inches / 1524mm **60**

72 inches / 1829mm **72**

96 inches / 2438mm **96**

Available Liner Types:

part no.
code

Kemglass

G

Fiberglass reinforced polyester
1805 UL classified

Type 316L Stainless Steel

L

1805 UL classified

Type 304L Stainless Steel

S

1805 UL classified

Phenolic Resin

T

Available Sash Frames:

part no.
code

Frameless

N

Upper Sash Only

Powder Coated Steel

M

Type 304L Stainless Steel

S

V90F Sash Opening Height: **63** Inside Depth: Overall Length: Liner Type: Sash Frame: Sash Glass: Fitting Holes: Electrical Fixture: Option Choices (separated by commas) ...

Technical Information

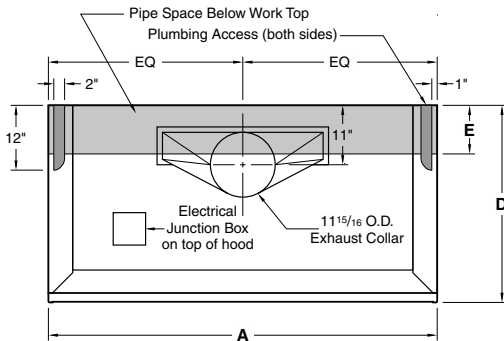
V90

Airflow (CFM) Requirements

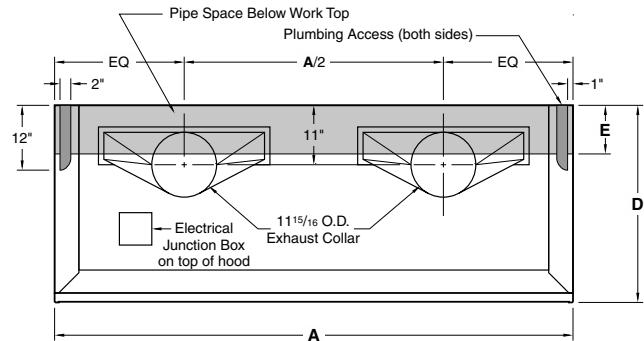
Face Velocity	28" High Upper Sash Opening							
	4'-0" / 48"		5'-0" / 60"		6'-0" / 72"		8'-0" / 96"	
	CFM	SP	CFM	SP	CFM	SP	CFM	SP
120 FPM	992	0.56	1297	0.70	1602	0.88	2212	0.61
100 FPM	827	0.39	1081	0.50	1335	0.62	1843	0.43
80 FPM	661	0.26	865	0.32	1068	0.41	1475	0.28

Static pressures shown are for the pressure drop through the hoods only. The total pressure drop through the hood and the duct system must be calculated to select the proper exhaust fan.

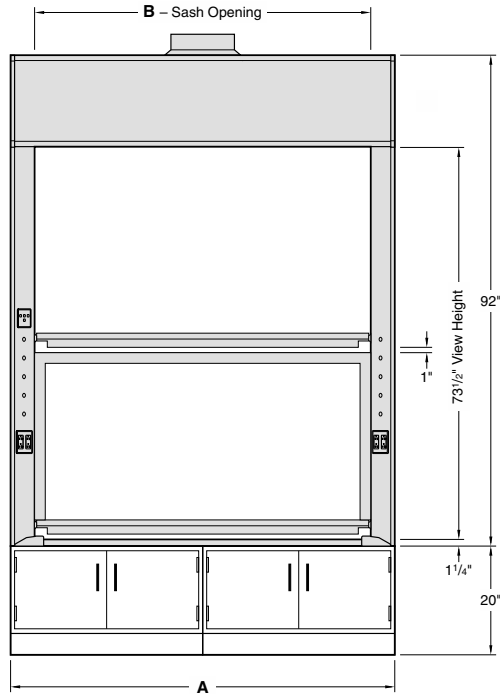
Inside Depth	ANSI Z9.5 Minimum Flow Rate							
	150 Air Changes/Hour				375 Air Changes/Hour			
	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"	4'-0" / 48"	5'-0" / 60"	6'-0" / 72"	8'-0" / 96"
24" deep	120 CFM	160 CFM	200 CFM	270 CFM	300 CFM	390 CFM	480 CFM	660 CFM
30" deep	150 CFM	200 CFM	240 CFM	330 CFM	370 CFM	480 CFM	590 CFM	820 CFM
36" deep	180 CFM	230 CFM	290 CFM	390 CFM	440 CFM	570 CFM	710 CFM	970 CFM



4'-5'-6' Rough-in

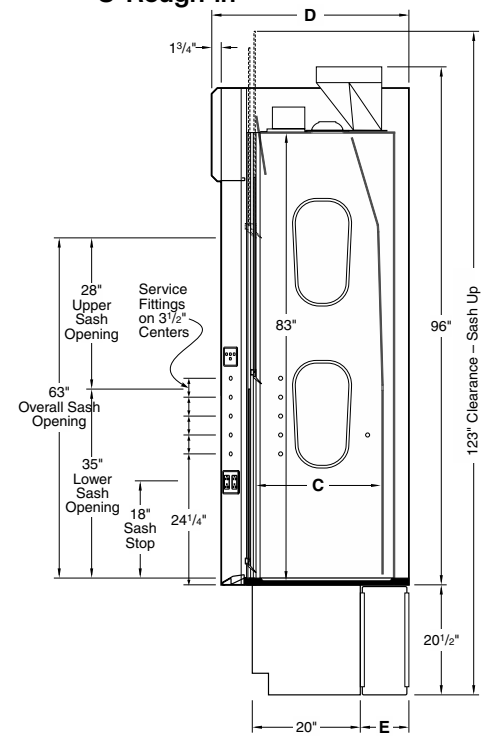


8' Rough-in



Elevation

Dimensions - Length				
A	48"	60"	72"	96"
B	39"	51"	63"	87"



Vertical Section

Dimensions - Depth			
C	24"	30"	36"
D	36 1/2"	42 1/2"	48 1/2"
E	9"	15"	21"

Fume Hood Style & Option Availability

			General Purpose			Split Sash		ADA		LX Series	
			V05	V06	V07	V10	V11	V15	V16	V25	V26
Kemglass Liner (1/4")	G		.	.	.	.	.	.	.	.	.
Type 316L Stainless Steel Liner (16 ga)	L		.	.	.	.	.	.	.	.	.
Type 304L Stainless Steel Liner (16 ga)	S		.	.	.	.	.	.	.	.	.
Phenolic Resin Liner (1/4")	T		.	.	.	.	.	.	.	.	.
Frameless Sash	N		.		.			.		.
Powder Coated Steel Sash Frame	M		.	.		.	.	.	.	.	.
Type 304L Stainless Steel Sash Frame	S		.	.		.	.	.	.	.	.
Type 316L Stainless Steel Sash Frame	L										
Laminated Safety Glass Sash	G1		.	.	.	.	.	.	.	.	.
Tempered Glass Sash	G2		.	.	.	.	.	.	.	.	.
Polycarbonate	G3		.	.	.	.	.	.	.	.	.
Rod Driven Needle Valve Fittings	F1		.	.	.	.	.			.	.
Rod Driven Ball Valve Fittings	F2							.	.		
Front Load Needle Valve Fittings	F3		.	.	.	.	.			.	.
Front Load Fittings TruView	F4										
Front Load Fittings ADA	F5										
Specification Grade GFCI Receptacles	S_		.	.	.	.	.	.	.	.	.
Hospital Grade GFCI Receptacles	H_		.	.	.	.	.	.	.	.	.
Variable Air Volume (VAV)	V		.	.	.	.	.	.	.	.	.
Air Alert 600 Alarm - Vertical Sash	A1		.			.		.		.
Air Alert 600 Alarm - Combo Sash	A2			.	.		.		.		.
Air Alert 300 Alarm	A3		.	.	.	.	.	.	.	.	.
Sash Stop/Sash Open Safety Label	L		.	.		.	.	.	.	.	.
Distillation Rack - Preparation	D		.	.	.	.	.	.	.	.	.
Fire Suppression System	E		.	.	.	.	.	.	.	.	.
xxSafety Shield	S		.			.		.		.
Tissue Screen	T		.	.	.	.	.	.	.	.	.
Cord Ports (<i>one provided in each side post</i>)	P1		.	.	.	.	.	.	.	.	.
Work Shelf Supports	W										
Vapor Proof Light	B1		.	.	.	.	.	.	.	.	.
Explosion Proof Light	B2		.	.	.	.	.	.	.	.	.
Fan/Blower Switch (<i>1hp motor rated</i>)	K		.	.	.	.	.	.	.	.	.
Pre-wired/UL 61010A-1 (<i>to a single circuit</i>)	U/U2		.	.	.	.	.	.	.	.	.
Type 304L Stainless Steel Airfoil	O		.	.	.	.	.	.	.	.	.
Type 316L Stainless Steel Airfoil	O2		.	.	.	.	.	.	.	.	.
Type 304L Stainless Steel Sash Pulls	Q		.	.		.	.	.	.	.	.
Type 316L Stainless Steel Duct Collar	C		. ¹	. ¹	. ¹	. ¹	. ¹	. ¹	. ¹	. ¹	. ¹
Auto Sash Return	R1		.	.				.	.	.	.
Proximity Sash Operator	R3		.	.		. ³	. ³	.	.	.	.

¹ Standard on stainless steel lined hoods

² Controls top sash only

³ Closes both sashes

⁴ Available for 48", 60" & 72" long hoods only

Fume Hood Style & Option Availability

		LX Series		Specialty		TruView Teaching								Floor Mounted			
		V30	V36	V40	V45	V50	V51	V52	V53	V55	V56	V57	V58	V65	V66	V67	V90
Kemglass Liner (1/4")	G	.	.			.	.	.	.	.	.	.	.	.	.	.	.
Type 316L S/S Liner (16 ga)	L	.	.		.									.	.	.	.
Type 304L S/S Liner (16 ga)	S	.	.	.										.	.	.	.
Phenolic Resin Liner (1/4")	T	.	.											.	.	.	.
Frameless Sash	N			.	.	.		.		.		.		.	.	.	.
Powder Coat Steel Sash Frame	M	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
Type 304L S/S Sash Frame	S	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
Type 316L S/S Frame	L				.												
Laminated Safety Glass Sash	G1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Tempered Glass Sash	G2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Polycarbonate	G3	.	.	.	.									.	.	.	.
Rod Ctrl Needle Valve Fittings	F1	.	.											.	.	.	.
Rod Ctrl Ball Valve Fittings	F2																
Front Load Fittings	F3	.	.	.	.									.	.	.	.
Front Load Fittings TruView	F4					.	.	.	.	.	.	.	.				.
Front Load Fittings ADA	F5							.	.			.	.
Spec. GFCI Receptacles	S_	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hospital GFCI Receptacles	H_	.	.	.	.									.	.	.	.
Variable Air Volume (VAV)	V	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Air Alert 600 - Vertical Sash	A1	.		.	.	.		.		.		.		.	.	.	.
Air Alert 600 - Combo Sash	A2		.				.		.		.		.		.	.	.
Air Alert 300 Alarm	A3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sash Stop/Sash Open Label	L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Distillation Rack - Preparation	D	.	.			.	.	.	.	.	.	.	.	.	.	.	.
Fire Suppression System	E	.	.											.	.	.	.
Safety Shield	S	.		.	.									.	.	.	.
Tissue Screen	T	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cord Ports	P1	.	.														.
Work Shelf Supports	W													.4	.4	.4	
Vapor Proof Light	B1	.	.	.	std									.	.	.	.
Explosion Proof Light	B2	.	.	.	.									.	.	.	.
Fan/Blower Switch	K	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pre-wired/UL 61010A-1	U/U2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Type 304L S/S Airfoil	O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Type 316L S/S Airfoil	O2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Type 304L S/S Sash Pulls	Q	.	.	.	.	.	.	.	.	.	.	.	.	.a	.a		.a
Type 316L S/S Duct Collar	C	.1	.1	std	std	.	.	.	.	.	.	.	.	.1	.1	.1	.1
Auto Sash Return	R1					.	.	.	.	.	.	.	.
Proximity Sash Operator	R3	.3	.3	.	.	.	.	.	.	.	.	.	.	.3	.3		.3

^a Pulls on lower sash only

¹ Standard on stainless steel lined hoods

² Controls top sash only

³ Closes both sashes

⁴ Available for 48", 60" & 72" long hoods only

Venturi Fume Hood Options

VAV Restricted Bypass - Option V

Venturi fume hoods are also designed for operation on Variable Air Volume (VAV) exhaust systems when used with a VAV control package (not provided with hood).

The fume hood will be modified for VAV system field installation (by VAV Controls Contractor).

The manufacturer and model number of the VAV controller along with the minimum flow rate requirement of the system must be provided at time of order to ensure the bypass is sized correctly for the exhaust system.

ANSI Z9.5 has defined a minimum flow rate range of 150 ACH - 375 ACH of the fume hood chamber.

Air Alert Fume Hood Monitor – Option A1 & A2



Air Alert 600 Fume Hood Monitor

consists of a thermistor sensor mounted on the fume hood interior wall and connected to fume hood containment cavity by a sensor port. A tube to the fume hood fascia completes monitored air path. The monitor measures and records the fume hood face velocity and sounds an alarm when the airflow falls below safe levels. A LCD displays a velocity readout and a visual one-hour "Event Timeline" that records alarm occurrences and their length for a continually updated one-hour time interval.

The display background displays green, amber, or red to signal safe, marginal, and low face velocity conditions. The alarm and display offers the hood user a variety of alarm features including, alarm set points, metric or classical units, alarm delay intervals, nighttime setback, and muting options. The Air Alert 600 operates on 9-30 volts AC or DC and comes complete with an adapter that can be plugged into any 120 VAC receptacle.

Option A1 — Air Alert 600 – Vertical Sash Fume Hoods

Option A2 — Air Alert 600 – Combination & Horizontal Sash Fume Hoods

Air Alert Fume Hood Monitor – Option A3

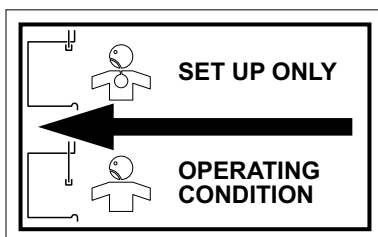


Air Alert 300 consists of a thermistor sensor mounted through the end wall of the hood, and a control monitor that gives both a visual and audible alarm. The alarm monitors the fume hood face velocity and sounds an alarm when the airflow falls below safe levels. A glowing green light signals when conditions are again safe. The control monitor, which is

mounted on the hood fascia, also contains a test/reset button that allows the hood user to verify alarm readiness.

The Air Alert 300 operates on a 9 volt DC circuit and comes complete with an adapter that can be plugged into any 120 VAC receptacle.

Sash Stop Label – Option L



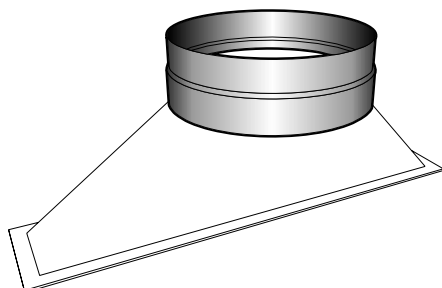
Label Size 2⁵/₈" x 1⁵/₈"

Sash Open Safety Label

May be used on any vertical or combination sash fume hood to indicate proper sash position for safe fume hood operation. Ideal for use when fans are sized for less than full sash open operation. Label is printed in black on white vinyl.

Venturi Fume Hood Options

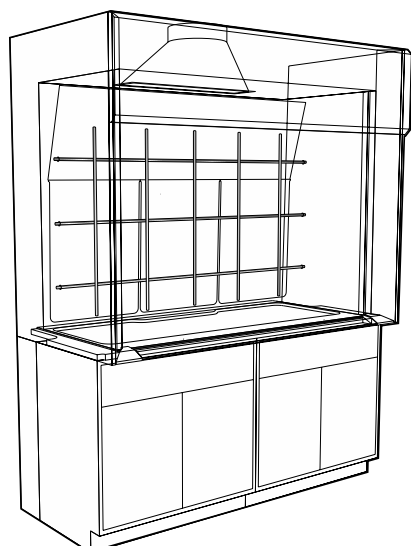
Stainless Steel Duct Collar – Option C



Stainless Steel Duct Collar may be specified on any Venturi fume hood as an addition to the standard FRP plenum and duct collar assembly. (Type 316 Stainless Steel)

Adds 4" to the height of plenum duct collar assembly.

Distillation Rack Preparation – Option D



See page 84 for Distillation Rack Part numbers for TruView hoods.

Venturi Fume Hoods may be prepared to accept a lattice style distillation rack. The rack consists of vertical and horizontal 1/2" diameter rods, fastened with rod clamps to form a lattice of approximate 12" squares. Rods are

available in Stainless Steel, Duralumin, or Fiberglass Reinforced Polyester (FRP) rods.

Rod Assemblies must be Ordered Separately. (see below)

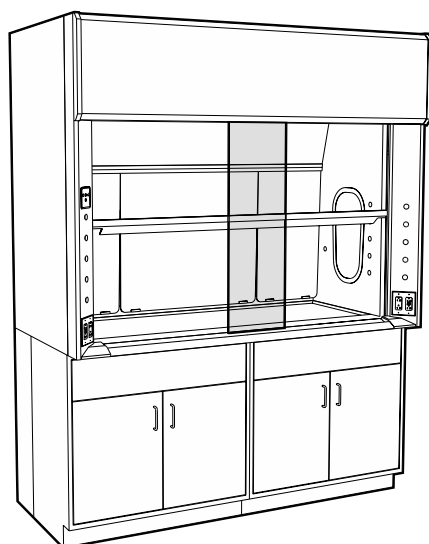
Type 304 Stainless Steel Rods

Bench Hoods 48"-60" High Interior	Floor & Distillation 80"-84" High Interior	Hood Length	Bench Hoods 48"-60" High Interior	Floor & Distillation 80"-84" High Interior
VDRS480148	VDRS840148	4'-0" / 48"	VDRP480148	VDRP840148
VDRS480160	VDRS840160	5'-0" / 60"	VDRP480160	VDRP840160
VDRS480172	VDRS840172	6'-0" / 72"	VDRP480172	VDRP840172
VDRS480196	VDRS840196	8'-0" / 96"	VDRP480196	VDRP840196
VDRS480120	VDRS840120	10'-0" / 120"	VDRP480120	VDRP840120
VDRS480144	VDRS840144	12'-0" / 144"	VDRP480144	VDRP840144

Duralumin Rods

Bench Hoods 48"-60" High Interior	Floor & Distillation 80"-84" High Interior	Hood Length
VDRA480148	VDRA840148	4'-0" / 48"
VDRA480160	VDRA840160	5'-0" / 60"
VDRA480172	VDRA840172	6'-0" / 72"
VDRA480196	VDRA840196	8'-0" / 96"
VDRA480120	VDRA840120	10'-0" / 120"
VDRA480144	VDRA840144	12'-0" / 144"

Sliding Safety Shield – Option S



Sliding Safety Shield designed to provide protection to fume hood users from small explosions, splattering of chemicals, breaking glass, etc. This 12" wide x 1/4" thick polycarbonate shield slides the full length of the hood face opening on ball bearing rollers suspended from a track at the top of the sash opening, with a guide at the

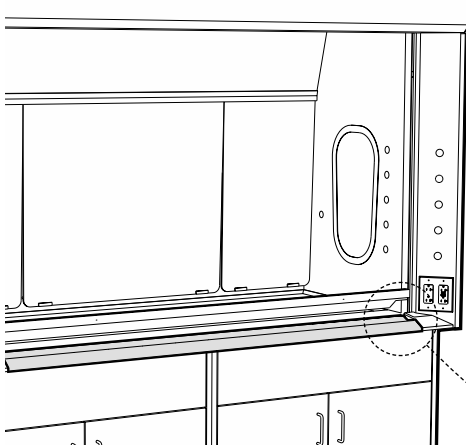
bottom to keep the shield from swinging. When the shield is not in use, it can be easily removed from the upper track and stored until it is needed again for safety purposes.

Designed to be used on Vertical Rising Sash Bench Hoods only.

Not compatible with Option Q.

Venturi Fume Hood Options

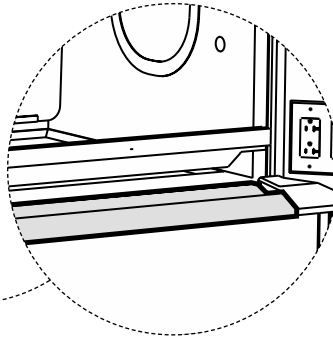
Stainless Steel Airfoil – Option O & O2



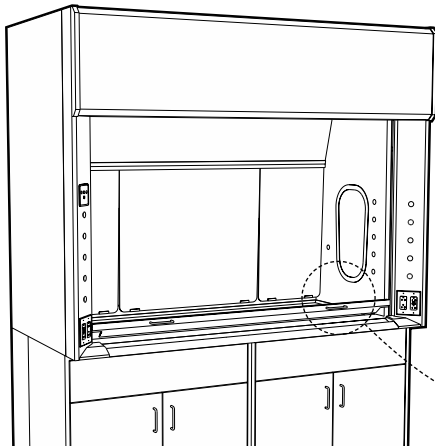
Stainless Steel Airfoil in lieu of standard powder coated steel airfoil.

Option O - Type 304L Stainless Steel

Option O2 - Type 316L Stainless Steel



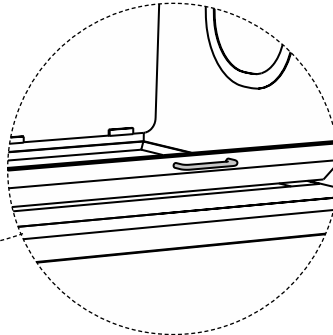
Stainless Steel Sash Pulls – Option Q



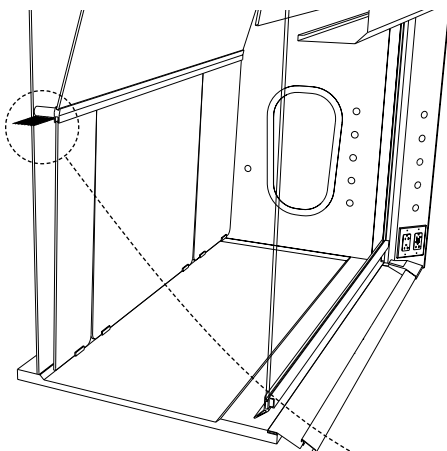
Stainless Steel Pulls integrated into spoiler shaped sash foil. (Type 304 Stainless Steel)

on lower sash only of floor mounted and distillation hoods.

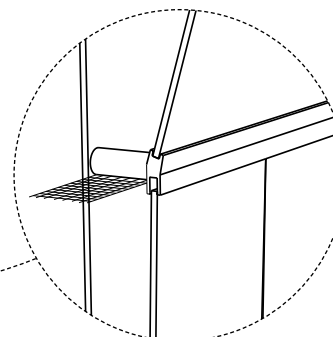
Not Compatible with Option S



Tissue Screen – Option T



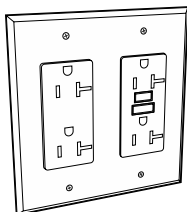
Tissue Screen protects the back baffle area just above the safety slot. Fabricated of perforated type 304 stainless steel, the screen blocks tissue and other light material from being swept up behind the upper baffle and into the exhaust system.



Venturi Fume Hood Options

Electrical Fixture Options

Specification Grade GFCI – Option S_

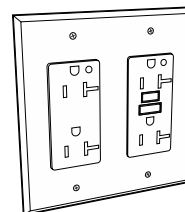


SK = GFCI Specification Grade – Black
SV = GFCI Specification Grade – Ivory
SW = GFCI Specification Grade – White
SG = GFCI Specification Grade – Grey
SR = GFCI Specification Grade – Red

120 volt GFCI specification grade, 20 amp, ground fault protected, double duplex receptacle.

Note: One ground fault circuit interrupter will protect the duplexes in each post when wired on the same circuit as standard.

Hospital Grade GFCI – Option H_

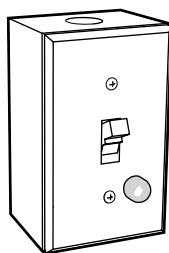


HK = GFCI Hospital Grade – Black
HV = GFCI Hospital Grade – Ivory
HW = GFCI Hospital Grade – White
HG = GFCI Hospital Grade – Grey
HR = GFCI Hospital Grade – Red

120 volt GFCI hospital grade, 20 amp, ground fault protected, double duplex receptacle.

Note: One ground fault circuit interrupter will protect the duplexes in each post when wired on the same circuit as standard.

Fan/Blower Switch – Option K



Motor rated starter switch with pilot light mounted in a single gang receptacle box complete with face plate, 120 volt pilot light, and double pole toggle switch with thermal overload protection for up to 1 HP single phase, 60 hertz 120/240 volt AC motors. (Thermal unit not provided)

Mounted on left fascia post above Light/Sash Stop Release Controller panel.

K = Fan Switch

Pre-wired/UL 61010A-1 Listed – Option U & U2 (single circuit)

Pre-wired — All Venturi Fume Hoods may be pre-wired at the factory. Pre-wired hoods are wired using flexible metallic conduit to a single junction box located at the top of the hood for a single circuit, single point connection for a UL 61010A-1 listing.

Pre-wired hoods configured with a fan/blower switch (Option K) include a second junction box on the top of the hood.

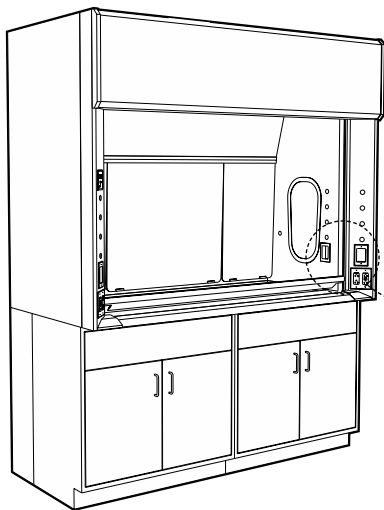
(see page 73 for more information)

U = Pre-wiring for hoods with standard LED lighting

U2 = Prewiring for hoods with Vapor Proof (Option B1) or Explosion Proof (Option B2) lighting

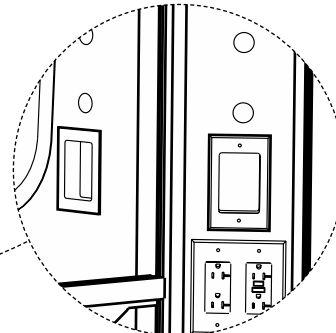
Venturi Fume Hood Options

Cord Ports – Option P1



Cord Ports — provide convenient, safe passage of wires and tubes for equipment connections.

One provided in each side post.
Replaces lowest service fitting holes.



Auto Sash Return – Option R1

The Auto Sash Return option provides an automatic, gravity operated, sash return that lowers the sash to 18" from the full-open set-up position. When the

sash is raised to the full open position a sash lock holds the sash open for set-up purposes. By pressing the electronic **Sash Stop Release Button**,

the sash automatically closes to the 18" operating height.

Proximity Sash Operator – Option R3

The Proximity Sash Operator uses an overhead motion sensor to monitor the area in front of the hood for the presence of lab personnel. Scanning at regular intervals, when it senses there has been no movement within the programmed period of time, it automatically closes the sash slowly and safely. When personnel are present, the sash is able to be opened and closed manually.

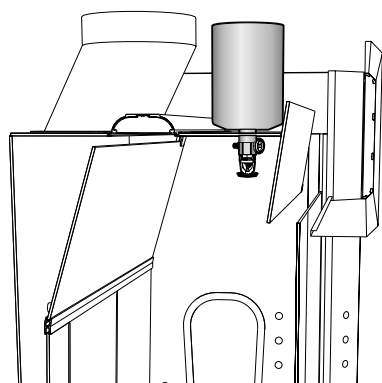
In addition to the motion sensor, a photoelectric sensor placed on the sash creates a light beam which scans the sash area for obstructions in the path of the sash. When an obstruction exists, the sash will halt its descent, and a warning light will signal that an obstruction exists.

Once the obstruction is removed, the sash operator warning light will reset, and the unit will re-engage.

The Proximity Sash Operator is factory installed on the fume hood with all required mechanical connections to the sash shaft for proper operation, and is pre-wired to a junction box located on the top of the hood.

Venturi Fume Hood Options

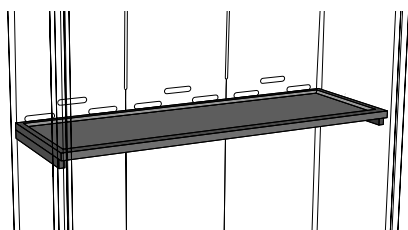
Fire Suppression System – Option E



Venturi Fume Hoods may be fitted with a Fire Suppression System to control runaway experiments and the hazards of fire. The heart of the system is the patented CFF 800 Dual Agent ABC Dry Chemical Fire Suppression System Unit, vertically mounted in the top of the fume hood for complete coverage. The suppression unit is fully self-contained and may be easily removed for maintenance or replacement. Each fire suppression unit is equipped with a pressure gauge for easy status checking, a pressure switch that can be wired

back to a monitoring or control panel (IE; burglar alarm) for 24 hour a day monitoring supervision and notification, and a 155F temperature bulb for automatic heat activation. To ensure complete coverage, four foot, five foot, six foot, and eight foot long fume hoods are protected with one fire suppression unit mounted in the center of the enclosure. Ten foot and twelve foot long fume hoods require two units for complete protection. Each CFF 800 unit is capable of protecting 8.2' x 8.2' x 12.2' or 820 cubic feet.

Work Shelf Supports – Option W

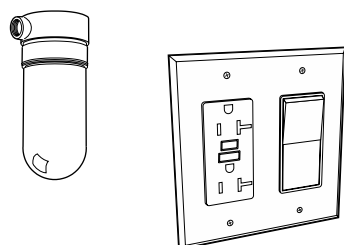


Venturi Floor Mounted Fume Hoods may be fitted with a removable Work Shelf mounted at 36" above the floor. The Work Shelf requires reinforcements in the fume end walls to attach the Work Shelf Cleats and to carry the weight

of the Work Shelf. Option W adds the reinforcements to a Floor Mounted Fume Hood, but not the Work Shelf and cleats which must be ordered separately.

Available for 4 foot, 5 foot, and 6 foot Floor Mounted Hoods only

Vapor Proof Light – Option B1

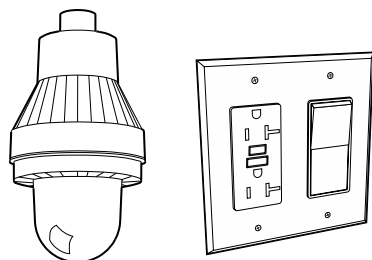


Option B1 replaces the standard LED light, light controller, and double GFCI double duplex receptacles on the left hand sash post with an 150 watt vapor proof light and a combination single duplex, 120 volt AC, 20 amp, GFCI receptacle and a single pole, 120/240 volt AC, 20 amp light switch.

Fixtures are furnished installed but not wired unless Option U2 (pre-wired is specified).

(Type A21, 150W, E26 base bulb not included)

Explosion Proof Light – Option B2



Option B2 replaces the standard LED light, light controller, and double GFCI double duplex receptacles on the left hand sash post with an 150 watt explosion proof light and combination single duplex, 120 volt AC, 20 amp, GFCI receptacle and a single pole, 120/240 volt AC, 20 amp light switch.

Light switch and receptacles are furnished installed but not wired unless Option U2 (pre-wired) is specified. Explosion proof light is supplied loose for field installation when not pre-wired. (Globe ships loose.)

Explosion Proof Light

Class 1, Division 1 & 2, Group C & D
Class 2, Division 1 & 2, Group E, F, & G
Class 3
(Type A-19 bulb not included)

(Light switch is not explosion proof)

Sash Glass

- Laminated Safety – Option G1
- Tempered – Option G2
- Polycarbonate – Option G3

Laminated Safety Glass

Laminated safety glass is made from two layers of float glass bound together by a layer of Polyvinyl Butyral (PVB). When broken, glass pieces will tend to adhere to the PVB layer instead of flying or falling into an adjacent user

Tempered Safety Glass

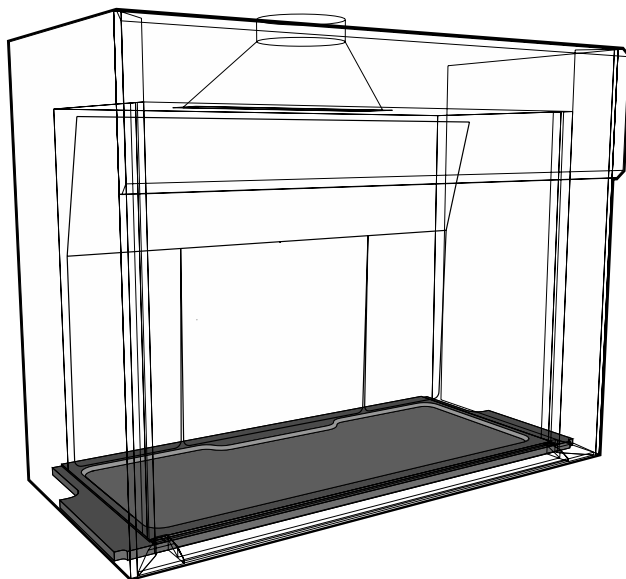
Tempered safety glass offers higher impact resistance. It performs well in areas of rapid and high temperature changes. If broken, it will shatter into small, safe pieces.

Polycarbonate

Polycarbonate is suggested when using Hydrofluoric Acid (HF) and provides superior resistance to chemical etching.

Venturi Fume Hood & TruView Tops

Work Tops – Work Shelves – Work Floor



Venturi Bench Hoods require a Work Top that must be ordered separately. Work Tops are available in either Kemresin or Stainless Steel, are dished 1/2" to retain spillage, and incorporate a 2" wide safety rim at the front.

They may include cutouts for cupsinks or vent pipes when specified with the cutout option.

Cupsinks must be ordered separately.

Venturi Floor Mounted Hoods may be ordered with a removable Work Shelf and/or a Work Floor that must be ordered separately. Both are available in either Kemresin or Stainless Steel, are dished 1/2" to retain spillage, incorporate a 2" wide safety rim at the front, and are not furnished with cutouts standard.

To mount the removable Work Shelf, the Venturi Floor Mounted Hood must be ordered with the **W** Option (see page 57).

Work tops and floors over 96 inches long are shipped in multiple sections.

Hood Type	Material	Thickness	Depth	Overall Length	Kemresin Color	Optional Cutouts (separated by commas) see next page
V		01				VH

Hood Type

BT = Work Top for Vertical Sash Bench & Distillation Hoods

HB = Work Top for Horizontal Sash Bench Hoods

WS = Work Shelf with Cleats
(for 4'-5'-6' Floor Mounted Hoods)

HF=Hood Floor
(for Floor Mounted Hoods)

Top Material

R = Kemresin

S = Type 304L Stainless Steel

L = Type 316L Stainless Steel

Top Thickness

01 = 1 1/4"

Required for Kemresin Tops Only

Work Top Color

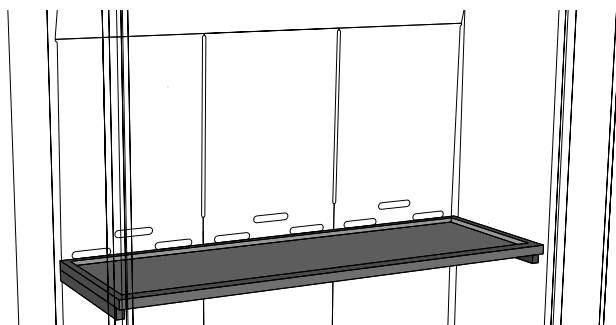
Black = BK Grey = GR

Putty = PT Slate = SL

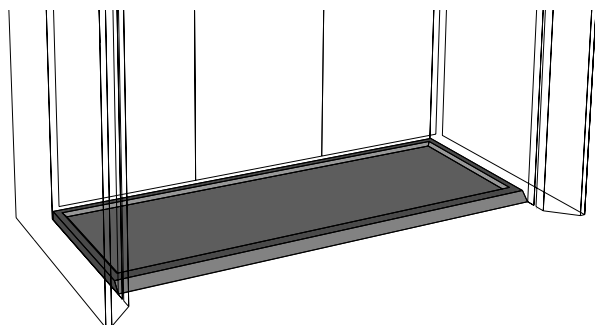
Hood Overall Length

4'-0" / 48" = 48	10'-0" / 120" = 20
5'-0" / 60" = 60	12'-0" / 144" = 44
6'-0" / 72" = 72	
8'-0" / 96" = 96	

Floor Mounted Hood Work Shelf	—	Bench Hood Work Tops & Floor Mounted Hood Floor
Work Shelf Depth		Hood Interior Depth
18" = 18		24" = 24 30" = 30
24" = 24		36" = 36 48" = 48



Optional Work Shelf with Cleats
for 4 foot, 5 foot & 6 foot Floor Mount Hood



Optional Hood Work Floor
for Floor Mount Hood

Venturi Fume Hood & TruView Tops

Cutout Options

Kemresin and poly cupsinks are shipped loose. Stainless steel cupsinks, when ordered with the top, are welded in place.

Cupsink Cutout

Cupsink Part Number	Cupsink Location	Cupsink Direction	Cupsink Elevation
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Cupsink Part Number

Kemresin/Poly

90 = 0490 3"x6" Oval

91 = 0491 3"x6" Oval

92 = 0492 3"x9" Oval

93 = 0493 Rectangular

99 = 0499 Rear Outlet
front vertical position only

Stainless Steel

50 = 0950 Type 304L Round

51 = 0951 Type 316L Round

Cupsink Elevation

Flush = F
Raised = R

stainless steel cupsinks are only available flush mounted

Cupsink Direction

Horizontal = H
Vertical = V

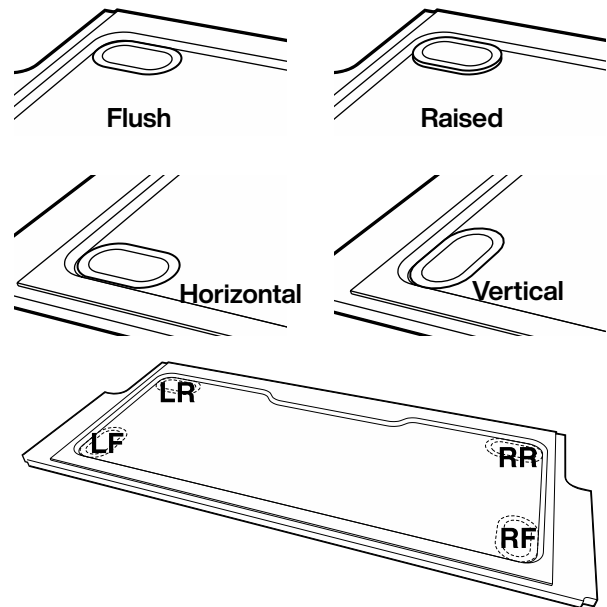
cupsinks can not be vertically mounted in the rear of 24" deep hoods

Cupsink Location

Left Front = LF
Left Rear = LR
Right Front = RF
Right Rear = RR

steel tops, and type 316L stainless steel cupsinks may only be used in the type 316L tops.

Cupsinks must be ordered separately.



Vent Cutout 2" diameter hole

Cutout Type	Vent Location
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Cutout Type

VH = Vent Hole
for 4' - 5' - 6' - 8' tops

VL = Vent Hole
for Left Side of 10' - 12' tops

VR = Vent Hole
for Right Side of 10' - 12' tops

Vent Locations

None = 000
Left = 100
Center = 010
Right = 001
Left & Center = 110
Center & Right = 011
Left & Right = 101
Left, Right & Center = 111

Work Tops for 4 foot, 5 foot, 6 foot and 8 foot hoods may include up to three vent holes. Work Tops for 10 foot and 12 foot hoods may include up to six vent holes.

Vent Cutout Locations 4' - 5' - 6' - 8' Hoods

Fume Hood Length	Center to Center d =
4'	6"
5'	8"
6'	8"
8'	20"

Vent Cutout Locations 10' - 12' Hoods

Fume Hood Length	Center to Center d =
10'	8"
12'	20"

Cupsinks

Oval Cupsinks



0499-BP Black Poly
0499-GP Grey Poly
0499-PP Putty Poly
0499-SP Slate Poly

Complete with integral strainer, 12" horizontal tail-piece, and 90° elbow with 1/2" IPS male straight thread outlet. Cupsink inside dimension, 5 1/2" x 3 1/2". (Overall height is 7", tailpiece and elbow not illustrated)

Designed for front, vertical position in hood work top.



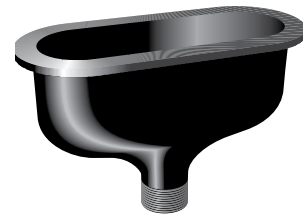
0490-BE Black Epoxy
0490-GE Grey Epoxy
0490-PE Putty Epoxy
0490-SE Slate Epoxy

Complete with removable strainer. 6"x 3" inside dimension. 1/2" IPS male straight thread outlet. (Overall height is 7 1/2")



0491-BP Black Poly
0491-GP Grey Poly

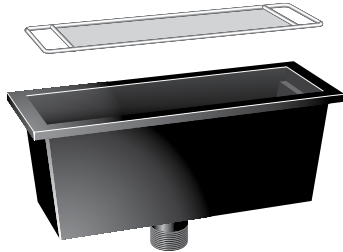
Complete with removable strainer. 6"x 3" inside dimension. 1/2" IPS male straight thread outlet. (Overall height is 8 1/2")



0492-BP Black Poly
0492-GP Grey Poly

Complete with removable strainer. 9"x 3" inside dimension. 1/2" IPS male straight thread outlet. (Overall height is 7")

Rectangular Cupsink



0493-BE Black Epoxy
0493-GE Grey Epoxy
0493-PE Putty Epoxy
0493-SE Slate Epoxy

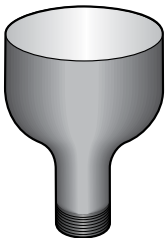
Complete with gasket and removable type 316 stainless steel wire screen. 13 3/8" x 4 1/8" x 5 1/4" I.D. 1/2" IPS male straight thread outlet. (Overall height is 8")

Side Mounted Cupsink

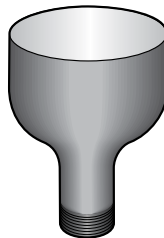


0476-BP Black Poly
Molded of black polyolefin resins. Complete with 90° union elbow. Designed to be mounted in a vertical panel not over 1/4" thick. 6" x 3" inside dimension. 1/2" IPS male straight thread outlet.

Stainless Steel Cupsinks



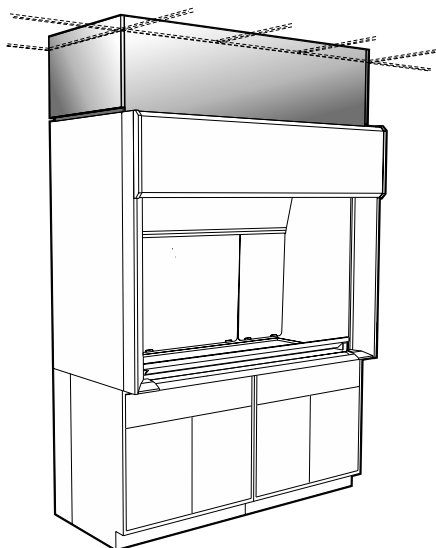
0950-00 Stainless Steel
Made of type 304 stainless steel and has integral cross bars. 5" I.D. 1/2" IPS male straight thread outlet. Designed to be welded into stainless steel tops.



0951-00 Stainless Steel
Made of type 316 stainless steel and has integral cross bars. 5" I.D. 1/2" IPS male straight thread outlet. Designed to be welded into stainless steel tops.

Hood Enclosures & Finished Backs

Fume Hood Ceiling Enclosures



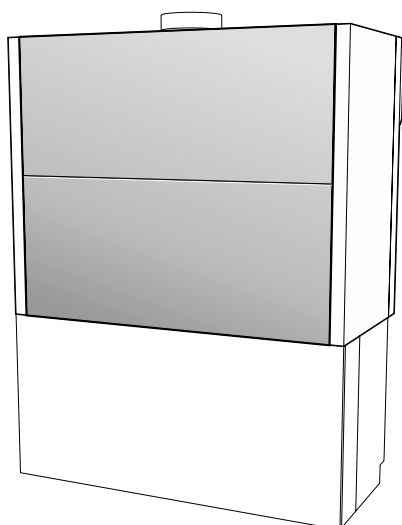
Fume Hood Ceiling Enclosures are designed to fill the space between the top of the hood and the ceiling to provide a finished appearance. They are available in height from 9" to 30" in 1" increments and in lengths to match the hoods. **CF** Style

enclosures are 1 1/8" deeper than **HV** Style enclosures to accommodate thicker sash assemblies.

All are provided with a removable front panel for easy access to the light fixture.

Enclosure Type	Material	Enclosure Height	Enclosure Depth	Overall Length	Style	Option
Ceiling Enclosure	V	CE	M			
Enclosure Type CE = Ceiling Enclosure						
Material M = Powder Coated Steel						
Enclosure Height 09 - 30 in 1" increments						
Enclosure Depth 24 = 24" 30 = 30" 36 = 36"						
Option Finished Back = FB						
Styles Horizontal Sash Hoods = HV V07-V67 & Vertical Sash Bench Hoods V05-V10-V15 V25-V30-V40-V45 Combo Sash Hoods = CF V06-V11-V16-V26-V36 & Floor Mounted Hoods V65-V66-V90						
Hood Overall Length 4'-0" / 48" = 48 5'-0" / 60" = 60 6'-0" / 72" = 72 8'-0" / 96" = 96 10'-0" / 120" = 20 12'-0" / 144" = 44						

Fume Hood Finished Backs



Fume Hood Finished Backs are furnished in two pieces

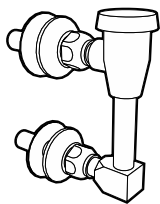
Fume Hood Finished Backs are designed to enclose the back of the fume hood when it is exposed to view and are removable without the use of tools for when access is required.

General Purpose Hood 57" High	ADA Hood 60" High	Length
VFBM570148	VFBM600148	4'-0" / 48"
VFBM570160	VFBM600160	5'-0" / 60"
VFBM570172	VFBM600172	6'-0" / 72"
VFBM570196	VFBM600196	8'-0" / 96"
VFBM570120		
VFBM570144		
LX Series Hood 69" High	Floor Mounted Hood 92" High	Length
VFBM690148	VFBM920148	4'-0" / 48"
VFBM690160	VFBM920160	5'-0" / 60"
VFBM690172	VFBM920172	6'-0" / 72"
VFBM690196	VFBM920196	8'-0" / 96"
VFBM690120	VFBM920120	10'-0" / 120"
VFBM690144	VFBM920144	12'-0" / 144"

Venturi Fume Hood Service Fittings

Service Fittings Part Number

Valve Model	Service	Valve/Outlet Location	Valve Handle	Service Outlet	Back Outlet Location	Piping Options
V <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Valve Model 3185 = Rod Driven Needle Valve 4285 = Rod Driven Ball Valve 0739 = Front Load Needle Valve				Piping Option (no piping) Installed = IN Installed & Piped Up = PU Installed & Piped Down = PD Installed & Piped Up = SP to Single Point		
Service A = Air S = Steam G = Gas D = Distilled Water V = Vacuum W = Cold Water N = Nitrogen H = Hot Water R = Argon M = H & C Water				Back Outlet Location 24" Deep Hood Interior = L24 30" Deep Hood Interior = L30 36" Deep Hood Interior = L36 48" Deep Hood Interior = L48		
Valve/Outlet Location LF = Left Hand - Front of Hood RF = Right Hand - Front of Hood LB = Left Hand - Back of Hood RB = Right Hand - Back of Hood				Service Outlet Angled Color Coded Nylon = AN Angled Color Coded Brass = AB 4 1/4" 90° Color Coded Brass = 4R 4 1/4" 90° Color Coded Brass w/Vac. Breaker = 4RVB Color Coded 6" Gooseneck = 6G Color Coded 6" Vacuum Breaker Gooseneck = 6GVB		
Valve Handle 4C = 4-arm Chrome Plated Brass MN = Color Coded Molded Nylon LC = 2 1/2" Chrome Plated Brass Lever						



Vacuum Breaker Assembly
for elevated mounting in top front panel of fume hood.

V0112-P Pre-piped
3/8" I.P.S. inlet and outlet, includes brass nipples, locknuts, and washers.

Vacuum Breaker (not pictured)
for elevated mounting in side wall of fume hood

V0539-P Pre-piped
3/8" I.P.S. inlet and outlet

Service Fitting Colors & Index Symbols

Service	Fitting Color	Index Symbol	Index Color	Letter Color
Air	Orange	AIR	Orange	Black
Gas	Blue	GAS	Blue	White
Vacuum	Yellow	VAC	Yellow	Black
Nitrogen	Brown	NIT	Brown	White
*Argon	Violet	AR	Violet	White
Steam	Black	STM	Black	White
Distilled Water	White	DW	White	Black
Cold Water	Green	CW	Green	White
*Hot Water	Red	HW	Red	White
*H & C Water	Dark Grey			

* not available in Angled Color Coded Nylon

Pre-wired & Pre-piped

Pre-wired — All Venturi Fume Hoods may be Pre-wired at the factory. Pre-wired hoods are wired using flexible metallic conduit to a single junction box located at the top of the hood for a single point connection at the job site. Select Option U to specify the hood to be pre-wired.

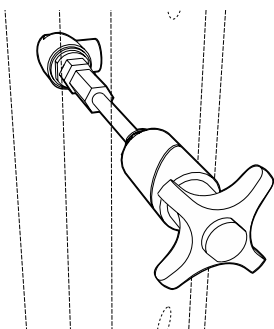
Pre-piped — In addition, all Venturi Fume Hood fittings may be Pre-piped at the factory when pre-piped fittings are selected. Piping is routed to the rear of the hood, in the side of the hood that the fittings are mounted. (If fittings are mounted in both ends, there are two connection points.) Piping may be routed either to the top or bottom of the hood as specified.

Standard 3/8" Piping Materials

Water — Hard Drawn Type L Copper
 Gas — Black Steel
 Steam — Black Steel
 Vacuum — Hard Drawn Type L Copper
 Air — Hard Drawn Type L Copper
 DI Water — PVC
 Other — Hard Drawn Type L Copper
 (Copper connections made with lead free solder, black steel connections are threaded)

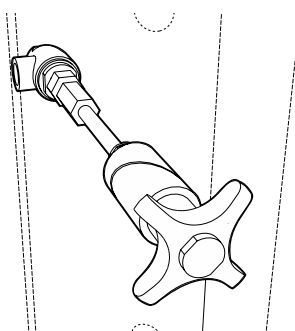
Venturi Fume Hood Service Fittings

Rod Driven Needle Valves — Front Location



3185

Needle Valve - Left Hand



3185

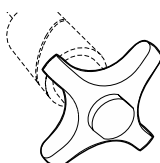
Needle Valve - Right Hand

Minimum Spacing

vertical distance between fittings

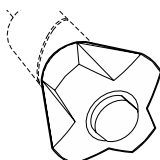
3 1/2"

Valve Handles



4C

4-Arm Handle
Chrome Plated Brass



MN

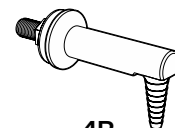
Molded Nylon
Color Coded Handle

Service Outlets



AN

Angled
Color Coded Nylon



4R

4 1/4" 90° Outlet
Color Coded Brass



AB

Angled
Color Coded Brass



4RVB

4 1/4" 90° Outlet
with Vacuum Breaker
Color Coded Brass

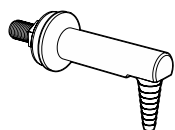
	Loc.	Handle	Outlet	Piping	
V3185A-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Air
V3185G-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Gas
V3185V-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Vacuum
V3185N-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Nitrogen
V3185R-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Argon
V3185S-	<input type="checkbox"/>	F,MN,AN	<input type="checkbox"/>	<input type="checkbox"/>	Steam
V3185D-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Distilled Water

V3185W-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Cold Water
V3185H-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	Hot Water
V3185M-	<input type="checkbox"/>	F	<input type="checkbox"/>	<input type="checkbox"/>	H & C Water

Rod Driven Needle Valves — Back Location

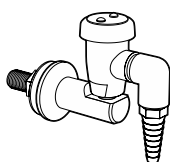
	Loc.	Handle	Outlet	Depth	Piping	
V3185W-	<input type="checkbox"/>	B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cold Water
V3185H-	<input type="checkbox"/>	B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hot Water
V3185M-	<input type="checkbox"/>	B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	H & C Water

Back Location Water Outlets



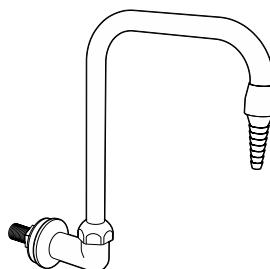
4R

4 1/4" 90° Outlet
Color Coded Brass



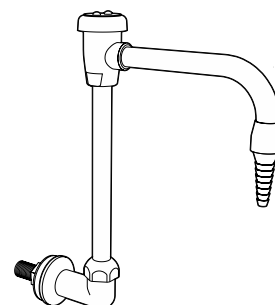
4RVB

4 1/4" 90° Outlet
with Vacuum Breaker
Color Coded Brass



6G

6" Rigid/Swing Gooseneck
Color Coded Brass

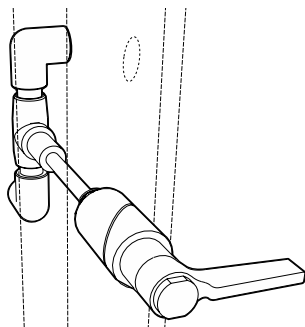


6GVB

6" Rigid/Swing Gooseneck
with Vacuum Breaker
Color Coded Brass

Venturi Fume Hood Service Fittings

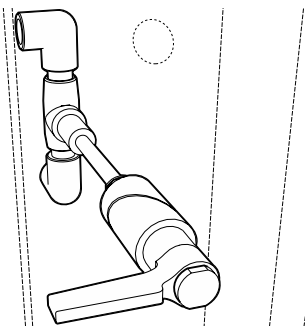
Rod Driven Ball Valves — Front Location — for use on ADA Fume Hoods



4285

Ball Valve - Left Hand

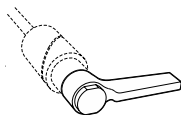
	Loc.	Handle	Outlet	Piping	
V4285A-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Air
V4285G-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Gas
V4285V-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Vacuum
V4285N-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Nitrogen
V4285R-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Argon
V4285D-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Distilled Water
V4285W-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Cold Water
V4285H-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	Hot Water
V4285M-	<input type="checkbox"/>	F	LC	<input type="checkbox"/>	H & C Water



4285

Ball Valve - Right Hand

Valve Handles



LC

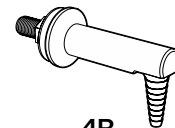
Lever Handle
Chrome Plated Brass

Service Outlets



AN

Angled
Color Coded Nylon



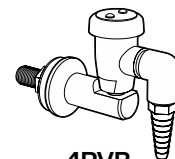
4R

4 1/4" 90° Outlet
Color Coded Brass



AB

Angled
Color Coded Brass



4RVB

4 1/4" 90° Outlet
with Vacuum Breaker
Color Coded Brass

Minimum Spacing

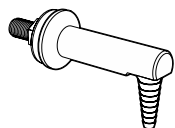
vertical distance between fittings

5"

Rod Driven Ball Valves — Back Location — for use on ADA Fume Hoods

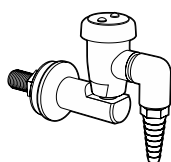
	Loc.	Handle	Outlet	Depth	Piping	
V4285W-	<input type="checkbox"/>	B	LC	<input type="checkbox"/>	L	Cold Water
V4285H-	<input type="checkbox"/>	B	LC	<input type="checkbox"/>	L	Hot Water
V4285M-	<input type="checkbox"/>	B	LC	<input type="checkbox"/>	L	H & C Water

Back Location Water Outlets



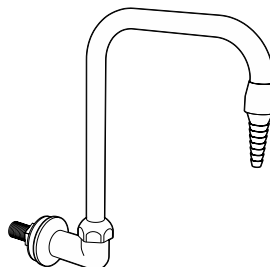
4R

4 1/4" 90° Outlet
Color Coded Brass



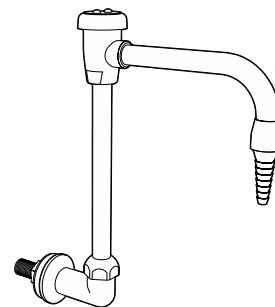
4RVB

4 1/4" 90° Outlet
with Vacuum Breaker
Color Coded Brass



6G

6" Rigid/Swing Gooseneck
Color Coded Brass

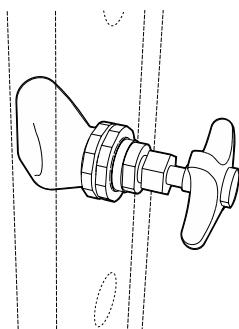


6GVB

6" Rigid/Swing Gooseneck
with Vacuum Breaker
Color Coded Brass

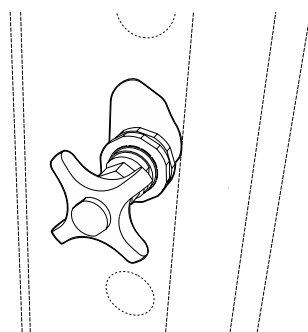
Venturi Fume Hood Service Fittings

Front Load Needle Valves — Front Location



0739

Front Load Valve - Left Hand



0739

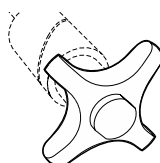
Front Load Valve - Right Hand

Minimum Spacing

vertical distance between fittings

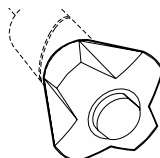
3 1/2"

Valve Handles



4C

4-Arm Handle
Chrome Plated Brass



MN

Molded Nylon
Color Coded Handle

Loc. HandleOutlet Piping

V0739A-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air
V0739G-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gas
V0739V-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vacuum
V0739N-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nitrogen
V0739R-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Argon
V0739S-	<input type="checkbox"/> F	<input type="checkbox"/> MN	<input type="checkbox"/> AN	<input type="checkbox"/>	<input type="checkbox"/>	Steam
V0739D-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Distilled Water

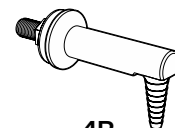
V0739W-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cold Water
V0739H-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hot Water
V0739M-	<input type="checkbox"/> F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	H & C Water

Service Outlets



AN

Angled
Color Coded Nylon



4R

4 1/4" 90° Outlet
Color Coded Brass



AB

Angled
Color Coded Brass



4RVB

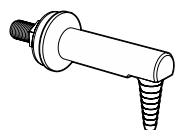
4 1/4" 90° Outlet
with Vacuum Breaker
Color Coded Brass

Front Load Needle Valves — Back Location

Loc. HandleOutlet Depth Piping

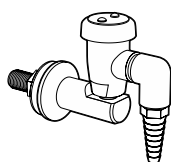
V0739W-	<input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> L	<input type="checkbox"/>	<input type="checkbox"/>	Cold Water
V0739H-	<input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> L	<input type="checkbox"/>	<input type="checkbox"/>	Hot Water
V0739M-	<input type="checkbox"/> B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> L	<input type="checkbox"/>	<input type="checkbox"/>	H & C Water

Back Location Water Outlets



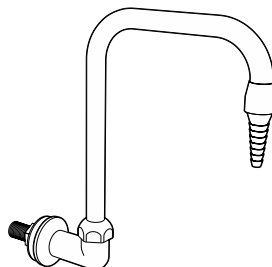
4R

4 1/4" 90° Outlet
Color Coded Brass



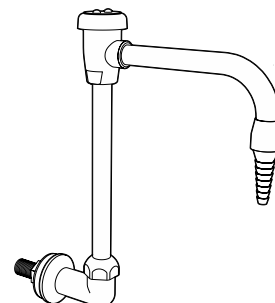
4RVB

4 1/4" 90° Outlet
with Vacuum Breaker
Color Coded Brass



6G

6" Rigid/Swing Gooseneck
Color Coded Brass

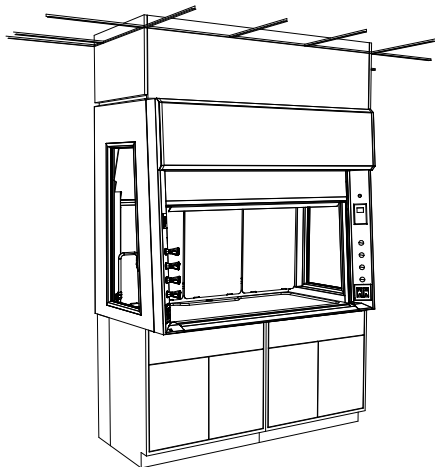


6GVB

6" Rigid/Swing Gooseneck
with Vacuum Breaker
Color Coded Brass

TruView Enclosures & Distillation Racks

TruView Ceiling Enclosures



Fume Hood Ceiling Enclosures are designed to fill the space between the top of the hood and the ceiling to provide a finished appearance. They are available in height from 9" to 30" in 1" increments and

in lengths to match the hoods.

All are provided with a removable front panel for easy access to the light fixture.

Ceiling Enclosure **VTV CE M**

Enclosure Type
CE = Ceiling Enclosure

Material
M = Powder Coated Steel

Option
Finished Back = FB
for V50-V53 models only

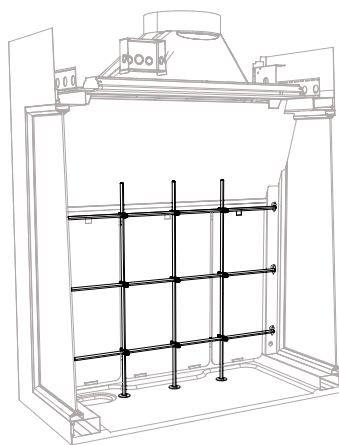
Hood Overall Length
4'-0" / 48" = 48
5'-0" / 60" = 60
6'-0" / 72" = 72
8'-0" / 96" = 96

Enclosure Depth
24" = 24
24" for V50-V53
48" = 48
48" for V55-V58

Enclosure Height

09 = 09"	10 = 10"	11 = 11"	12 = 12"	13 = 13"
14 = 14"	15 = 15"	16 = 16"	17 = 17"	18 = 18"
19 = 19"	20 = 20"	21 = 21"	22 = 22"	23 = 23"
24 = 24"	25 = 25"	26 = 26"	27 = 27"	28 = 28"
29 = 29"	30 = 30"			

Distillation Racks for TruView Hoods



TruView Fume Hoods may be prepared to accept a lattice style distillation rack. The rack consists of vertical and horizontal 1/2" diameter rods, fastened with rod clamps to form a lattice.

Rods are available in Stainless Steel or Aluminum.

Rod Assemblies must be Ordered Separately. (see below)

Type 304 Stainless Steel Rods

Bench Hoods
48"-60" High Interior

VTVDRS480148
VTVDRS480160
VTVDRS480172
VTVDRS480196

Hood Length

4'-0" / 48"
5'-0" / 60"
6'-0" / 72"
8'-0" / 96"

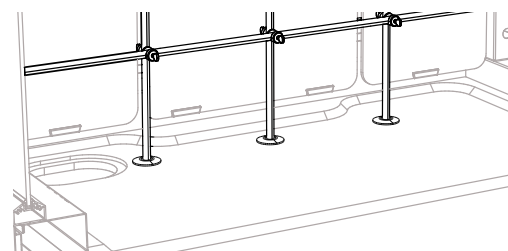
Aluminum Rods

Bench Hoods
48"-60" High Interior

VTVDRA480148
VTVDRA480160
VTVDRA480172
VTVDRA480196

Work Tops for TruView Hoods with Distillation Racks

VTVBTD012448	4'-0" / 48"	3 Holes for Distillation Rack Mounting
VTVBTD012460	5'-0" / 60"	4 Holes for Distillation Rack Mounting
VTVBTD012472	6'-0" / 72"	4 Holes for Distillation Rack Mounting
VTVBTD012496	8'-0" / 96"	6 Holes for Distillation Rack Mounting



TruView Service Fittings

Service Fittings Part Number

V

T

V

W

-

Valve Brand
required
W = WaterSaver

ADA Selection
if applicable
ADA = ADA Handle if Applicable

Service
required
A = Air 45CW = Cold Water with 45° outlet
G = Gas 90CW = Cold Water with 90° outlet
V = Vacuum GSCW = Cold Water with 6" gooseneck outlet
N = Nitrogen

Vacuum Breaker
if applicable
Front Panel = FP__
In-line = IL__
Fixture Install = TVIN

Hood Side
Select for WaterSaver
Left = L
Right = R

Service Fitting Colors & Index Symbols

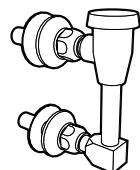
Service	Fitting Color	Index Symbol	Index Color	Letter Color
Air	Orange	AIR	Orange	Black
Gas	Blue	GAS	Blue	White
Vacuum	Yellow	VAC	Yellow	Black
Nitrogen	Brown	NIT	Brown	White
Cold Water	Green	CW	Green	White

Plumbing

All TruView fixtures have the option to be installed with plumbing routed either up or down. Plumbing materials consist of hoses which may be Braided Stainless Steel or Reinforced PVC contingent on fixture manufacturer and type as noted in the chart.

Service	WATERSAVER
Air	Reinforced PVC
Vacuum	Reinforced PVC
Nitrogen	Reinforced PVC
Gas	Braided S/S w/ PTFE Core
Cold Water	Reinforced PVC

Vacuum Breaker Options



Vacuum Breaker Assembly

for elevated mounting in top front panel of fume hood.

FP03 - Includes WaterSaver front panel mounted vacuum breaker for fascia-mounted fixtures and 55" outlet hose

FP04 - Includes WaterSaver front panel mounted vacuum breaker for rear Cold Water with 6" Gooseneck outlet and 76" outlet hose



In-line Vacuum Breaker

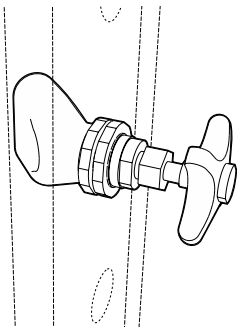
for elevated mounting in side wall of fume hood

IL03 - Includes WaterSaver in-line vacuum breaker for fascia-mounted fixtures and 55" outlet hose

IL04 - Includes WaterSaver in-line vacuum breaker for rear Cold Water with 6" Gooseneck outlet and 76" outlet hose

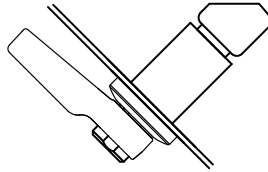
TruView Service Fittings

Front Load Needle Valves — Front Location

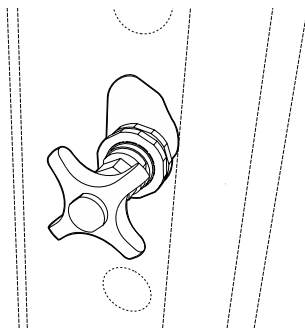


VTVW_L

Front Load Valve - Left Hand



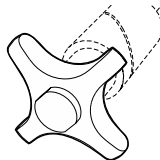
VTVW-ADA



VTVW_R

Front Load Valve - Right Hand

Valve Handles



WaterSaver

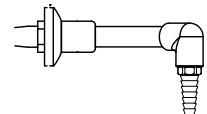
4-Arm Handle
Chrome Plated Brass

Service Outlets



WaterSaver

Angled
Color Coded Brass



VTVW-90CW

WaterSaver 90° CW Outlet
4 1/4" Stand-Off

Minimum Spacing

vertical distance between fittings

3 1/2"

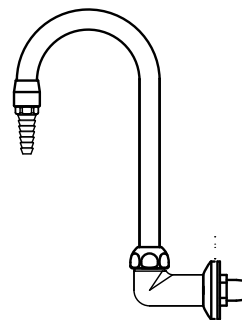
Front Load Valves — Back Location

VTVW-GSCW	Gooseneck Outlet	83" Inlet Hose, 48" Outlet Hose
VTVWADA-GSCW	Gooseneck Outlet	83" Inlet Hose, 48" Outlet Hose

Plumbing Thread Connections

WaterSaver - All fixture and hose threads are 3/8" NPT Pipe Thread.

Back Location Water Outlets

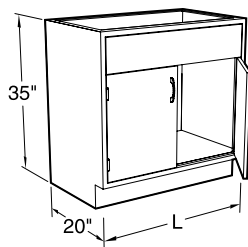


VTVW-GS

6" Rigid/Swing Gooseneck
Color Coded Brass

Fume Hood Base Cabinets

DIMENSIONAL VIEW



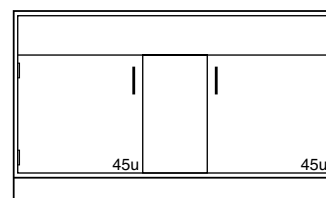
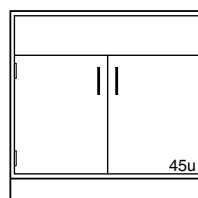
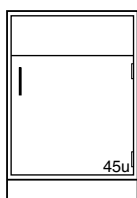
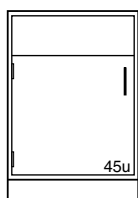
Specifications

Standing Height Steel and Wood Fume Hood Base Cabinets are 35" high and a nominal 20" deep. ADA Height Steel Fume Hood Base Cabinets are 32" high and 20" deep; ADA Height Wood Fume Hood Base Cabinets are 32½" high and nominal 20" deep. Lengths as shown.

Specify cabinet door and hardware style when ordering by replacing blanks in last four digits of catalog number with style numbers. See the Research Collection Steel and Signature Series Wood Catalogs for available styles and details.

Cabinet Style Option:

Standing Height Fume Hood Base Cabinets



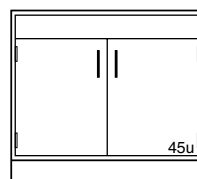
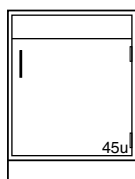
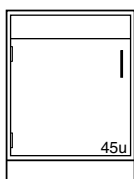
Steel Cabinets (35" High)

G08C352012L_____	12"L	G08C352012-_____	12"L	G08C352030-_____	30"L	G08C352060-_____	60"L
G08C352015L_____	15"L	G08C352015-_____	15"L	G08C352036-_____	36"L		
G08C352018L_____	18"L	G08C352018-_____	18"L	G08C352048-_____	48"L		
G08C352024L_____	24"L	G08C352024-_____	24"L				

Wood Cabinets (35" High)

G08W362012L_____	12"L	G08W362012-_____	12"L	G08W362030-_____	30"L	G08W362060-_____	60"L
G08W362015L_____	15"L	G08W362015-_____	15"L	G08W362036-_____	36"L		
G08W362018L_____	18"L	G08W362018-_____	18"L	G08W362048-_____	48"L		
G08W362024L_____	24"L	G08W362024-_____	24"L				

ADA Height Fume Hood Base Cabinets



Steel Cabinets (32" High)

G08C322012L_____	12"L	G08C322012-_____	12"L	G08C322030-_____	30"L
G08C322015L_____	15"L	G08C322015-_____	15"L	G08C322036-_____	36"L
G08C322018L_____	18"L	G08C322018-_____	18"L	G08C322042-_____	42"L
G08C322024L_____	24"L	G08C322024-_____	24"L	G08C322048-_____	48"L

Wood Cabinets (32½" High)

G08W342012L_____	12"L	G08W342012-_____	12"L	G08W342030-_____	30"L
G08W342015L_____	15"L	G08W342015-_____	15"L	G08W342036-_____	36"L
G08W342018L_____	18"L	G08W342018-_____	18"L	G08W342042-_____	42"L
G08W342024L_____	24"L	G08W342024-_____	24"L	G08W342048-_____	48"L

Solvent Storage Fume Hood Base Cabinets

Specifications

Solvent Storage Cabinets are specifically designed for the storage of flammable and combustible liquids. Both steel and wood cabinets meet UFC, OSHA and NFPA No. 30-1993 construction standards and are UL listed.

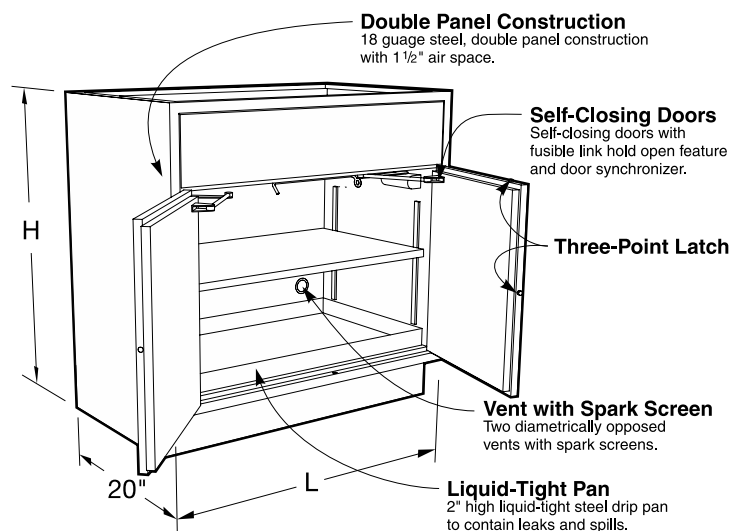
A 2" deep, steel, liquid-tight pan covers the entire bottom to contain liquid leaks and spills. A second pan is provided as a full-depth adjustable shelf.

Two diametrically opposed vents with spark screens are provided in the back for cases when ventilation is required.

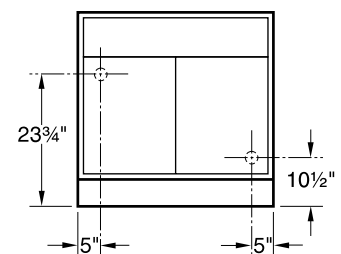
The steel cabinet is all 18 gauge steel, double panel construction with self-closing doors, synchronized so that both doors will always fully close. The right hand door is equipped with a three-point latching system that automatically engages the cabinet frame. Each door

is equipped with a fusible-link hold-open feature that ensures the doors close should the temperature outside the cabinet exceed 165°F. Steel cabinets are provided with a grounding screw at the rear.

All Solvent Storage Cabinets are labeled: CAUTION FLAMMABLE – KEEP FIRE AWAY in English, Spanish, and French.



Vent Locations



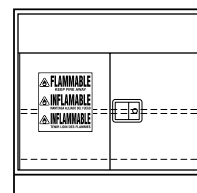
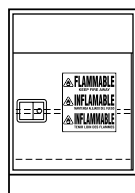
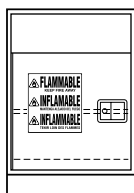
Steel Solvent Cabinets

Vent outlets 2" dia. Female NPT

Wood Solvent Cabinets

Vent outlets 1 1/2" dia. Male NPT

Standing Height Solvent Storage Fume Hood Cabinets



Steel Cabinets (35" High)		Capacity		Capacity	
G68C352024L_100	24"L	G68C352024-_100	24"L 12 gal	G68C352030-_100	30"L 12 gal
<i>Steel Solvent Storage Cabinets are available in Style 0 and 1 only.</i>					
<i>Style 1 - Full Overlay furnished with toespace 1" deeper</i>					
Wood Cabinets (35" High)		Capacity		Capacity	
G68W362024L_0_0	24"L	G68W362024-_0_0	24"L 12 gal	G68W362030-_0_0	30"L 12 gal
<i>Wood Solvent Storage Cabinets are available in Style 1 and 5 only</i>					
				G68W362036-_0_0	36"L 15 gal
				G68W362048-_0_0	48"L 20 gal

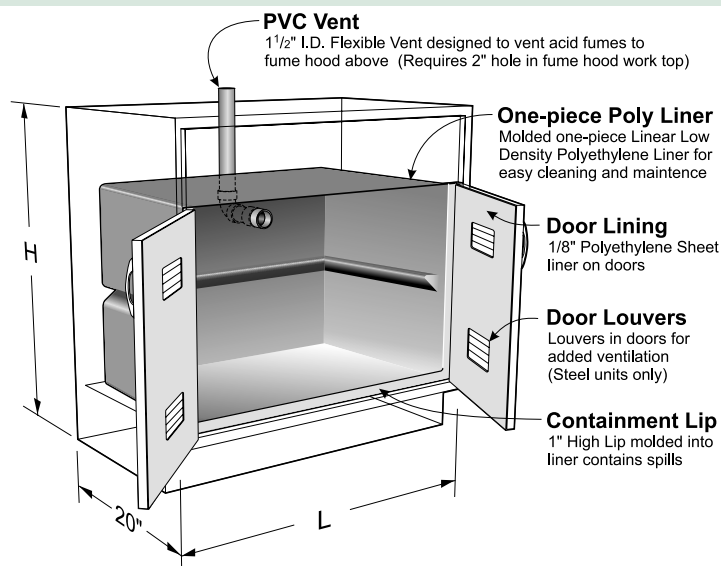
ADA Height Solvent Storage Fume Hood Cabinets

Steel Cabinets (32" High)		Capacity		Capacity	
G68C322024L_100	24"L	G68C322024-_100	24"L 12 gal	G68C322030-_100	30"L 12 gal
<i>Steel Solvent Storage Cabinets are available in Style 0 and 1 only.</i>					
<i>Style 1 - Full Overlay furnished with toespace 1" deeper</i>					
Wood Cabinets (32 1/2" High)		Capacity		Capacity	
G68W342024L_0_0	24"L	G68W342024-_0_0	24"L 12 gal	G68W342030-_0_0	30"L 12 gal
<i>Wood Solvent Storage Cabinets are available in Style 1 and 5 only</i>					
				G68W342036-_0_0	36"L 15 gal
				G68W342048-_0_0	48"L 20 gal

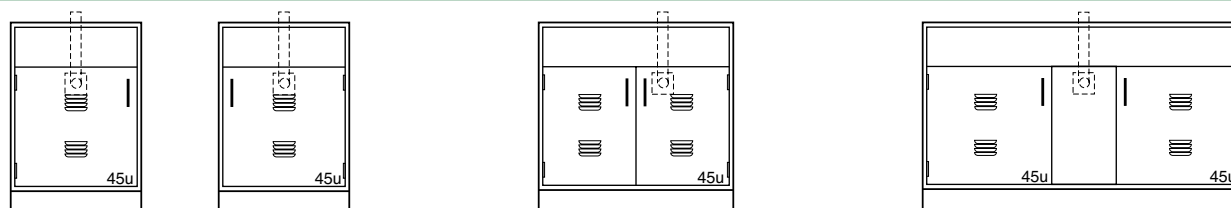
Acid Storage Fume Hood Base Cabinets

Specifications

Acid Storage Fume Hood Base Cabinets are specifically designed for the storage of corrosive chemicals. They are available in either steel or wood. These cabinets are lined with a molded one piece linear low density polyethylene tub with coved corners and a 1" lip at the bottom front. The cabinet doors are lined with 1/8" sheet polyethylene and the doors are latched using a nylon roller catch. Each cabinet is furnished with a 1 1/2" I.D. flexible polyolefin tube for venting to the fume hood above. (Requires a 2" hole in the hood work top.)



Standing Height Acid Storage Fume Hood Cabinets



Vent Location

On Center

11 5/8" from Top of Cabinet

Vent Location

30" - 7 5/8" Right of Center
36" & 48" - 5" Right of Center
11 5/8" from Top of Cabinet

Vent Location

On Center

11 5/8" from Top of Cabinet

Steel Cabinets (35" High)

G80C352024L____ 24"L Left Hand

G80C352024-____ 24"L Right Hand

G80C352030-____ 30"L

G80C352036-____ 36"L

G80C352048-____ 48"L

G80C352060-____ 60"L

Wood Cabinets (35" High)

G80W362024L____ 24"L Left Hand

G80W362024-____ 24"L Right Hand

G80W362030-____ 30"L

G80W362036-____ 36"L

G80W362048-____ 48"L

G80W362060-____ 60"L

ADA Height Acid Storage Fume Hood Cabinets

Steel Cabinets (32" High)

G80C322024L____ 24"L Left Hand

G80C322024-____ 24"L Right Hand

G80C332030-____ 30"L

G80C332036-____ 36"L

G80M332048-____ 48"L

Wood Cabinets (32 1/2" High)

G80W342024L____ 24"L Left Hand

G80W342024-____ 24"L Right Hand

G80W342030-____ 30"L

G80W342036-____ 36"L

G80W342048-____ 48"L

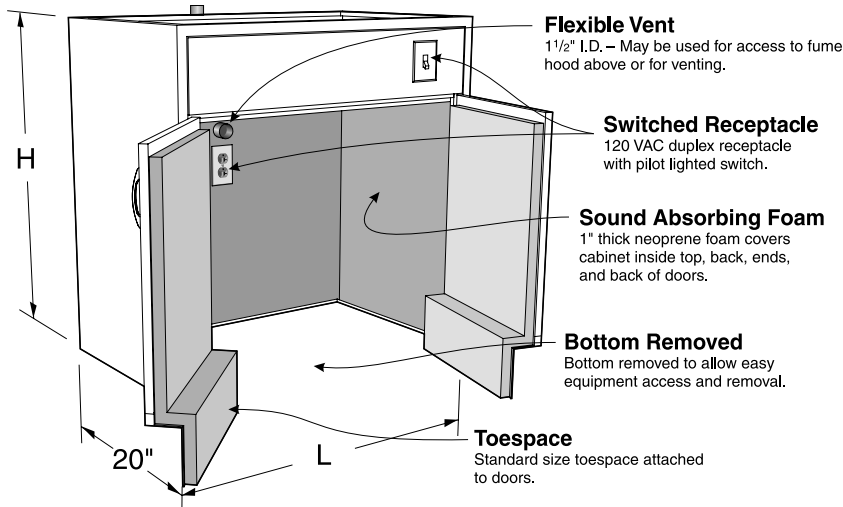
Vacuum Pump Storage Base Cabinets

Specifications

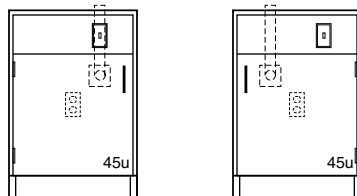
Vacuum Pump Storage Fume Hood Cabinets are designed without a bottom to allow vacuum pumps and other equipment to be rolled in or out of the cabinets. The interior is lined with 1" thick neoprene foam for sound deadening and easy cleaning. Each cabinet is

furnished with a 120 VAC, 20 amp, duplex receptacle mounted on the inside cabinet back and a pilot lighted toggle switch mounted in the top front rail. (Wiring is not included.) Each cabinet is furnished with a 1½" I.D. flexible polyolefin tube for venting to the fume hood above.

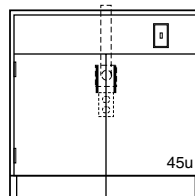
(Requires a 2" hole in the hood work top.) The toespace rail is attached to the door to allow total access to the cabinet. Cabinet inside clearance at the floor is 14½" front-to-back, 25" high, and 3" less than the overall cabinet length.



Standing Height Vacuum Pump Storage Fume Hood Cabinets



Vent Location
5" Off Center
11⅝" from Top of Cabinet



Vent Location
On Center
11⅝" from Top of Cabinet

Steel Cabinets (35" High)

G35C352024L ____ 24"L Left Hand

G35C352024- ____ 24"L Right Hand

Wood Cabinets (35" High)

G35W362024L ____ 24"L Left Hand

G35W362024- ____ 24"L Right Hand

G35C352030- ____ 30"L

G35C352036- ____ 36"L

G35C352048- ____ 48"L

G35W362030- ____ 30"L

G35W362036- ____ 36"L

G35W362048- ____ 48"L

ADA Height Vacuum Storage Fume Hood Cabinets

Steel Cabinets (32" High)

G35C322024L ____ 24"L Left Hand

G35C322024- ____ 24"L Right Hand

Wood Cabinets (32½" High)

G350W342024L ____ 24"L Left Hand

G350W342024- ____ 24"L Right Hand

G35C322030- ____ 30"L

G35C322036- ____ 36"L

G35C322048- ____ 48"L

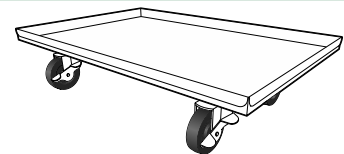
G35W342030- ____ 30"L

G35W342036- ____ 36"L

G35W342048- ____ 48"L

Vacuum Pump Cart

Vacuum Pump Carts are designed for use with Kewaunee's Vacuum Pump cabinets shown on this page. The cart consists of a 1" deep pan, fabricated from powder coated or stainless steel and mounted on 4" swivel casters.



Carts for 20" Deep Cabinets

Powder Coated Steel

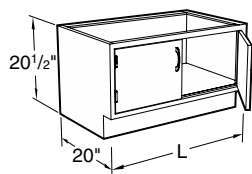
Part Number	Length
VPCC061414-0000	14"
VPCC061420-0000	20"
VPCC061426-0000	26"
VPCC061432-0000	32"
VPCC061438-0000	38"
VPCC061444-0000	44"

Stainless Steel

Part Number	Length
VPCC061414-0030	14"
VPCC061420-0030	20"
VPCC061426-0030	26"
VPCC061432-0030	32"
VPCC061438-0030	38"
VPCC061444-0030	44"

Distillation Hood Base Cabinets

DIMENSIONAL VIEW



Specifications

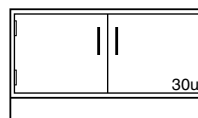
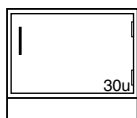
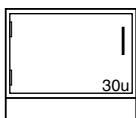
Distillation Fume Hood Steel and Wood Base Cabinets are designed to be used under distillation fume hoods. Both are 20 1/2" high and are a nominal 20" deep. Lengths as shown.

Cabinet Style Option:

Specify cabinet door and hardware style when ordering by replacing blanks in last four digits of catalog number with style numbers.

See the Research Collection Steel and Signature Series Wood Catalogs for available styles and details.

Distillation Hood Base Cabinets



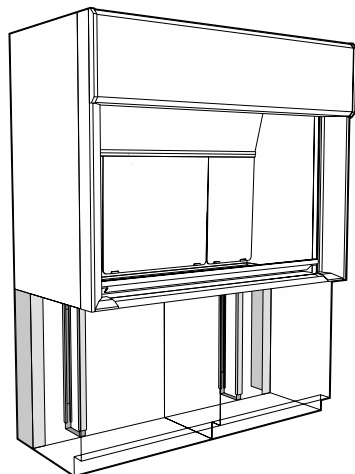
Steel Cabinets (20 1/2" High)

G05C202012L _____	12"L	G05C202012- _____	12"L	G05C202030- _____	30"L
G05C202015L _____	15"L	G05C202015- _____	15"L	G05C202036- _____	36"L
G05C202018L _____	18"L	G05C202018- _____	18"L	G05C202042- _____	42"L
G05C202024L _____	24"L	G05C202024- _____	24"L	G05C202048- _____	48"L

Wood Cabinets (20 1/2" High)

G05W202012L _____	12"L	G05W202012- _____	12"L	G05W202030- _____	30"L
G05W202015L _____	15"L	G05W202015- _____	15"L	G05W202036- _____	36"L
G05W202018L _____	18"L	G05W202018- _____	18"L	G05W202042- _____	42"L
G05W202024L _____	24"L	G05W202024- _____	24"L	G05W202048- _____	48"L

Venturi Fume Hood Accessories



Specifications

Base Cabinet Rear Fillers are designed to close opening between wall and rear of fume hood base cabinet. They are available in both steel and wood in sizes shown.

Kemstruts are steel frame assemblies consisting of steel channels and spacers designed to provide support and stability to the rear overhang of fume hood work tops and provides mounting struts for plumbing and electrical service lines.

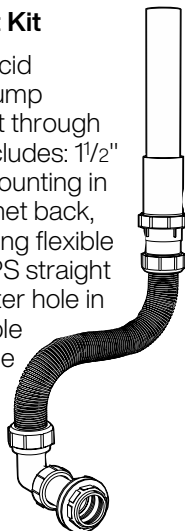
Steel Rear Fillers			Wood Rear Fillers			Kemstruts		
Part Number	D	H	Part Number	D	H	Part Number	D	H
BRSC200009-0000	9"	20½"	X-WP0936-00_0	9"	36"	K12-2009-0A	9"	20½"
BRSC200015-0000	15"	20½"	X-WP1536-00_0	15"	36"	K12-2015-0A	15"	20½"
BRSC200021-0000	21"	20½"	X-WP2136-00_0	21"	36"	K12-2021-0A	21"	20½"
BRSC320009-0000	9"	32"				K12-3209-0A	9"	32"
BRSC320010-0000	10"	32"				K12-3210-0A	10"	32"
BRSC350009-0000	9"	35"				K12-3509-0A	9"	35"
BRSC350010-0000	10"	35"				K12-3510-0A	10"	35"
BRSC350015-0000	15"	35"				K12-3515-0A	15"	35"
BRSC350016-0000	16"	35"				K12-3516-0A	16"	35"
BRSC350021-0000	21"	35"				K12-3521-0A	21"	35"
BRSC350022-0000	22"	35"				K12-3522-0A	22"	35"

Fume Hood Accessories & Canopy Hoods

Flexible Vent

F-9100-00-FIN Vent Kit

Designed for use with Acid Storage and Vacuum Pump Storage cabinets to vent through fume hood work top. Includes: 1 1/2" IPS threaded stub for mounting in 2" diameter hole in cabinet back, 90 degree elbow, 36" long flexible pipe, and 18" long 1 1/2" IPS straight pipe. (requires 2" diameter hole in work top) Both the flexible pipe and the straight pipe may be cut to size.



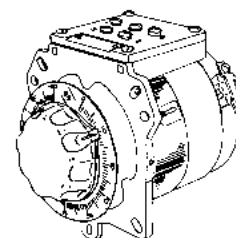
Variable Power Controller

0767-00 Powerstat Variable Power Controller

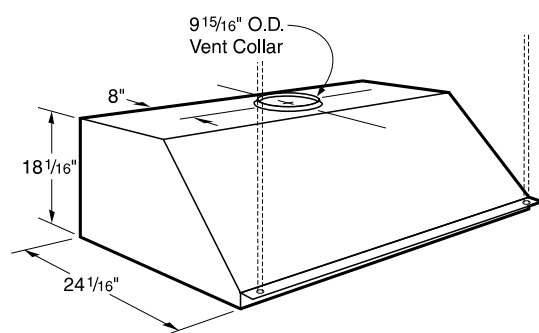
Ratings:

Input: 120 VAC
50/60 hertz, single phase
Output: 0-120 VAC
or 0-240 VAC
Max. Load: 10 amp.

Requires separate on/off control.



Canopy Hoods



Canopy Hoods are useful for conducting heat out of laboratories, and can be mounted over tables where hot plates or other heat generating apparatus is located. They are fabricated of cold rolled steel, phosphate coated with a baked chemical resistant, synthetic resin finish, or of type 304 stainless steel. They are available 3 feet, 4 feet, 5 feet, 6 feet and 8 feet long. The painted steel canopys are available with or without a lining of Kemglass. Each canopy hood is furnished with a 9 15/16" O.D. vent collar. (8 foot canopies are furnished with two duct collars, 48" on center.) (1/2" diameter support rods to the ceiling are not included.)

Kemglass Lined Painted Steel	Unlined Painted Steel	Unlined Stainless Steel	
2B-2818-3G-M	2B-2818-30-M	2B-2818-30-S	36"L
2B-2818-4G-M	2B-2818-40-M	2B-2818-40-S	48"L
2B-2818-5G-M	2B-2818-50-M	2B-2818-50-S	60"L
2B-2818-6G-M	2B-2818-60-M	2B-2818-60-S	72"L
2B-2818-8G-M	2B-2818-80-M	2B-2818-80-S	96"L

Pre-wired and Pre-piped

Specifications:

Pre-wired — All Supreme Air Fume Hoods may be Pre-wired at the factory. Pre-wired hoods are wired using flexible metallic conduit to a single junction box located at the top of the hood for a single point connection at the job site. UL listing is available on standard pre-wired configurations. Contact Kewaunee's Engineering Department for non-standard electrical requirements.

A "U" option must be selected for

fume hoods to be UL 61010A-1 listed.

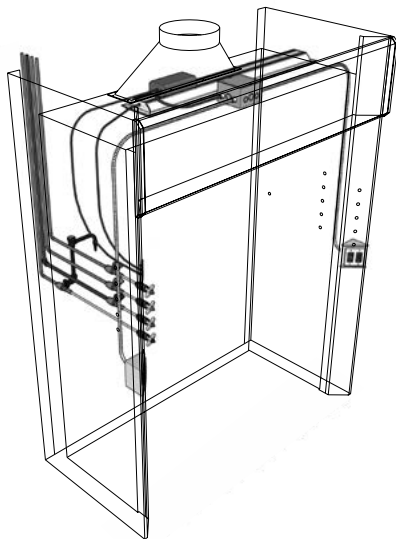
Pre-piped — In addition all Venturi Fume Hoods may Pre-piped at the factory when pre-piped fittings are selected. Piping is routed to the rear of the hood, in the side of the hood that the fittings are mounted. (If fittings are mounted in both ends, there are two connection points.)

Piping may be routed either to the top or bottom of the hood as specified.

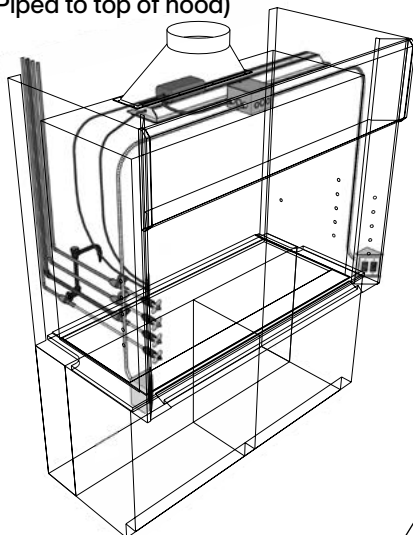
Standard 3/8" Piping Materials

Water	— Hard Drawn Type L Copper
Gas	— Black Steel
Vacuum	— Hard Drawn Type L Copper
Air	— Hard Drawn Type L Copper
DI Water	— PVC
Other	— Hard Drawn Type L Copper
(Copper connections made with lead free solder, black steel connections are threaded)	

Typical Walk-In Hood
(Piped to top of hood)



Typical Bench Hood
(Piped to top of hood)



Final Connection

supplied and connected by others

Supply Lines with shut-off valves

supplied and connected by others

Typical Fume Hood with Plumbing & Wiring Connections
(Piped to bottom of hood)

Piping to Service Fittings

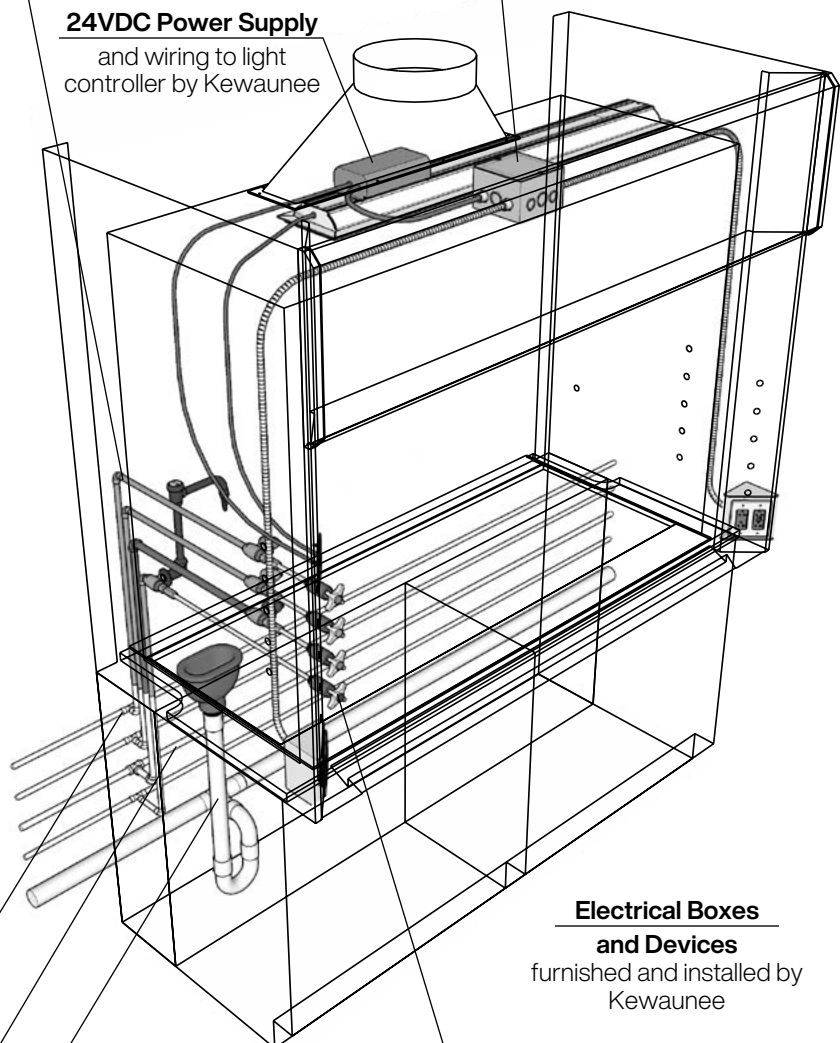
by Kewaunee
when Pre-piping specified

24VDC Power Supply

and wiring to light
controller by Kewaunee

Wiring and Junction Box

by Kewaunee
when Pre-wiring specified



Electrical Boxes

and Devices

furnished and installed by
Kewaunee

Service Fittings and Valves

furnished and installed by
Kewaunee or as specified
(typical for both sides of hood)

Waste Line - Trap - Tailpiece

supplied and installed by others

Recommended Fume Hood Work Practices

A Safe, Healthy Work Environment

Most people think of a scientific laboratory as a clean, safe place to work. But for the people who work there every day, the typical laboratory—filled with flammable and toxic chemicals, harmful vapors, gases and corrosive acids—can be an extremely hazardous place.

By containing harmful contaminants and venting them out of the work area, laboratory fume hoods help create and maintain a safe, healthy environment for you—the laboratory worker—and your co-workers.

Your fume hood is designed to protect you by providing an enclosed work area that has an air barrier between you and the harmful materials you work with. Behind this protective air barrier,

the hood's directional air flow carries harmful contaminants away from you toward the rear of the hood. Also, the properly tuned hood and its exhaust system dilutes the contaminants with large volumes of air and safely exhausts them.

If anything interferes with the protective air barrier of the fume hood or disrupts the proper air flow, the hood's ability to protect you and your co-workers may be seriously reduced.

Since 1906, we at Kewaunee Scientific Corporation have been designing and building laboratory fume hoods to help keep laboratory work environments safe and healthy. Based on our knowledge and experience, we've outlined a

number of basic safety practices for you and your co-workers to follow when choosing, using and maintaining laboratory fume hoods. The following practices are based on the superior design found in Kewaunee Supreme Air Venturi hoods.

We urge you to familiarize yourself with these recommended fume hood work practices and with your facility's safety guidelines and standard operating procedures. We think you'll agree—it's the best way to help ensure a safe, healthy work area for you and your co-workers.

The Right Fume Hood for the Job

If your laboratory fume hood is to properly protect you, it must be designed for the type of work you're doing.

For example, if you work with radioisotopes, carcinogens or other toxic materials for which decontamination is important, you should always use a hood with a non-absorbent lining that is

designed to be easily decontaminated.

If you work with large volumes of flammable substances, you may need a hood equipped with such features as a non-absorbent lining, explosion-proof lights and electrical receptacles, a fire-suppression system, and a spark-resistant exhaust fan.

If you use perchloric acid heated above ambient temperature then you need a fume hood and exhaust system specifically designed for this hazard.

To be sure your fume hood is the right one for the work you're doing, contact your local Kewaunee sales representative.

Venturi Fixed Baffle Configuration

Kewaunee Supreme Air Venturi fume hoods are provided with a fixed baffle

configuration. (See Figures 1 and 2.) The slots in the baffle are optimized to

provide the best performance.

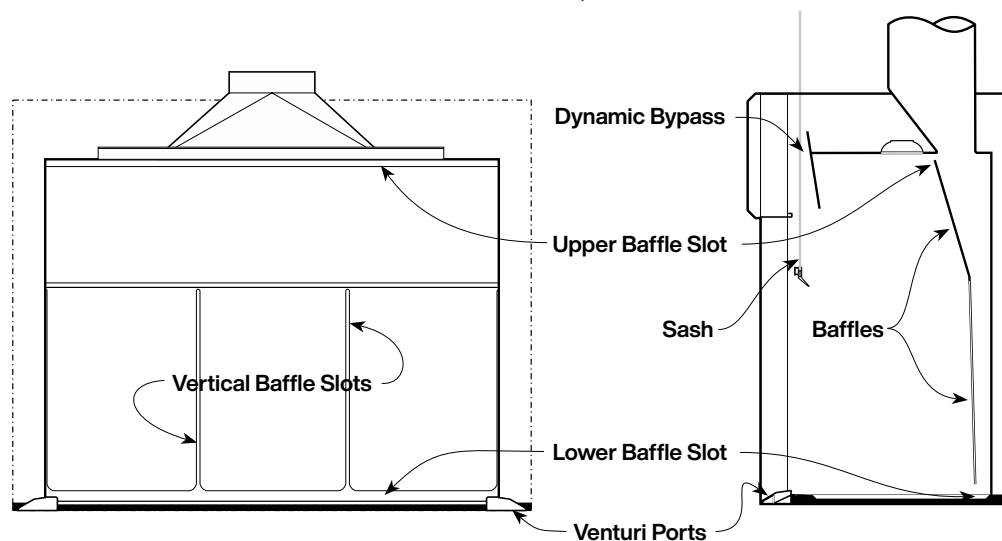


Figure 1. Face Section View

Figure 2. End Section View

Recommended Work Practices (continued)

Checking Fume Hood Performance

To confirm that your fume hood exhaust system is working properly, the Occupational Safety and Health Administration (OSHA) recommends that all hoods be equipped with an airflow monitor. Inspect both the monitor and the system periodically for malfunctions.

For some applications a pressure gauge connected to the exhaust duct is sufficient. The safe pressure range

should be marked on the gauge. When using more hazardous contaminants, a fume hood alarm such as the Kewaunee Air Alert 300 or Air Alert 600 Digital Face Velocity Alarms should be used. These alarms provide both a visual and audible warning when the exhaust flow becomes unsafe.

If your hood is equipped with a variable air volume controller (VAV) with alarm capabilities, then an additional alarm is

not necessary.

You should have a qualified technician thoroughly test your fume hood before you use it the first time and at least once a year after that. You should also have your hood tested after any modification to the laboratory ventilation system or other factors which may affect hood exhaust capability or room air flow patterns.

Maintaining the Protective Air Barrier for a Safe Work Area

When you stand in front of a laboratory fume hood, the air passing your body to enter the hood forms a zone of low air pressure directly in front of you which extends into the hood. Since contaminants may enter this turbulent area from inside the hood, you should keep all hazardous materials at least six inches inside the hood, behind the protective air barrier. (See Figure 3.)

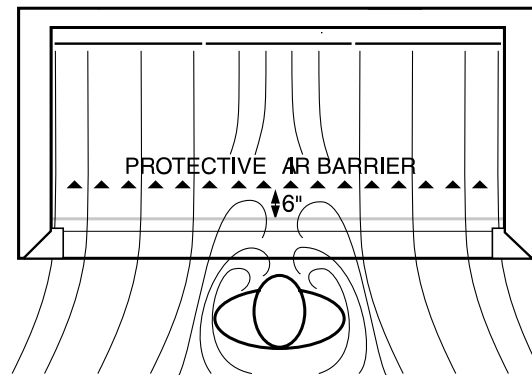


Figure 3
Formation of Protective Air Barrier

The farther behind the fume hood protective air barrier you place the source of contaminants, the greater the protection the hood provides. Therefore,

place the equipment and contaminants as far back inside the hood as possible, being careful not to block the slots in the rear baffle. (See Figure 4.) Never place

apparatus so far back that you have to put your head into the hood while the procedure is generating contaminants.

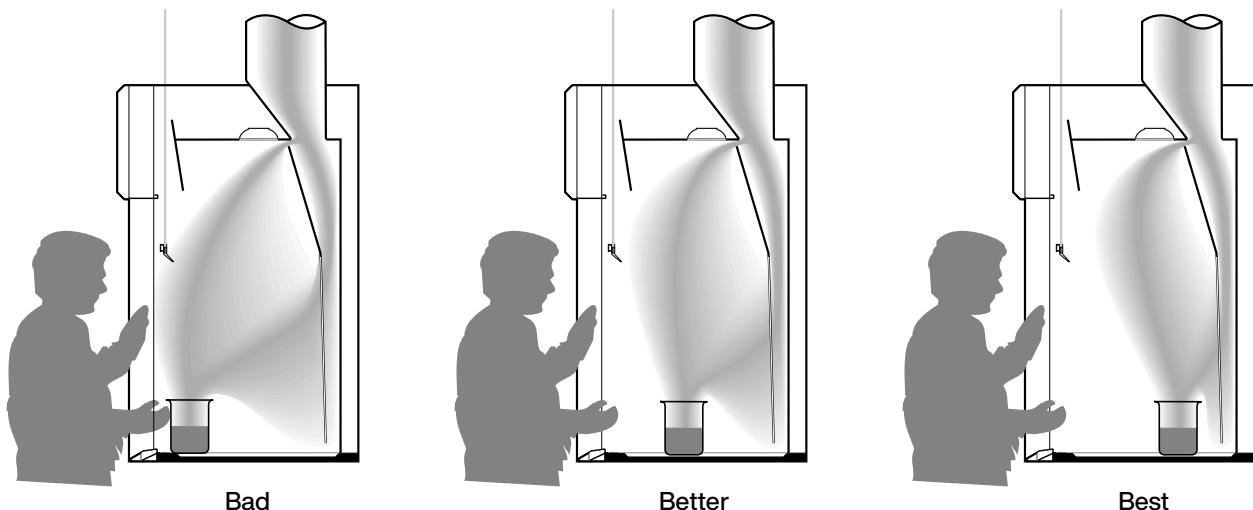


Figure 4
Effect of placement of contaminate source

Recommended Work Practices (continued)

Maintaining the Protective Air Barrier for a Safe Work Area (continued)

Large containers or equipment such as furnaces, incubators and oil baths often interfere with air flow inside the fume hood by causing lazy air and reverse flows which may affect airflow patterns. Placing large, bulky equipment on legs will help improve airflow patterns by allowing air to circulate beneath the equipment. (See Figure 5.)

The fume hood should not be used for storage of chemicals and apparatus. Remove all unnecessary containers and equipment from the hood.

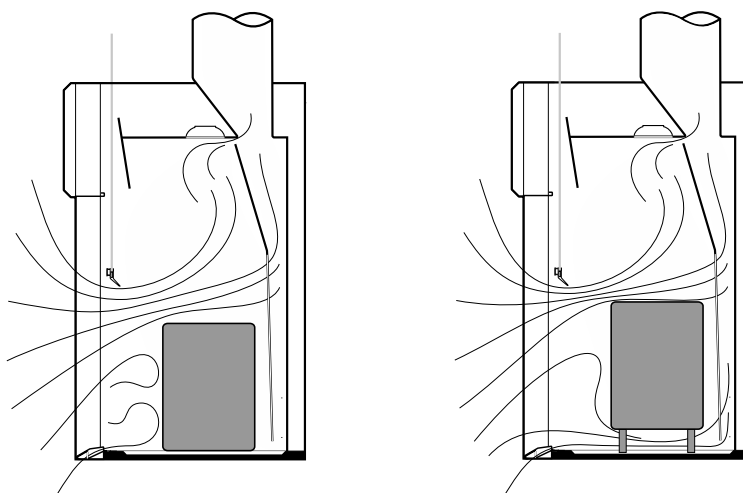


Figure 5
Effect of large equipment

The air velocities used to provide containment in fume hoods are relatively low and the air flow patterns are easily disrupted. Avoid making rapid movements while working at the hood or while walking past the hood.

When working at a fume hood, always open the sash only as far as needed to access to the work area. The lowered sash increases the distance (**D** in Figure 6) between your breathing zone and the area where contaminants may escape. In addition the smaller hood face area makes the hood less susceptible to room drafts and other external air disturbances.

The sash also provides protection by replacing part of the protective air barrier with a solid barrier against contaminants and splashing chemicals.

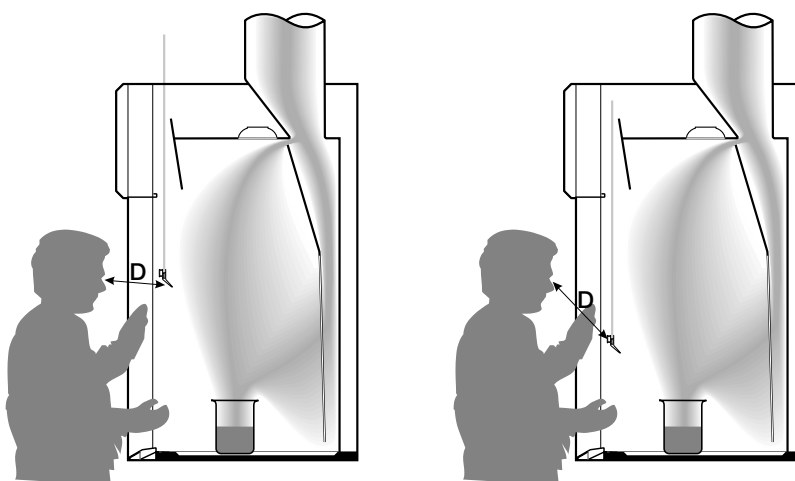


Figure 6
Effect of lowering the sash

If the hood has a sash stop to limit sash travel or is marked for a safe sash height, the sash should not be raised above this point while contaminants are being generated within the hood.

If continuous access is not needed to the inside of the fume hood, the sash should be closed completely. (See Figure 7) A closed sash provides protection from flying debris or a runaway reaction. It also eliminates the effects of room drafts or other adverse air currents.

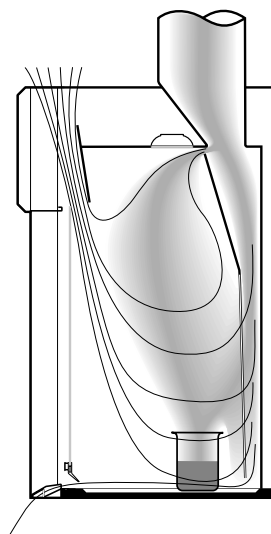


Figure 7
Airflow through By-Pass with Sash Closed

If your hood has horizontal sashes, be sure they are all in place when working with contaminants inside the hood. Operating the hood with any of the sashes removed reduces the protection they provide by decreasing the velocity of the air entering the hood face. If you remove any hood sashes while setting up equipment, be sure to replace them before beginning the actual procedure. On hoods with a combination vertical/horizontal sash, the hood should be operated either with the vertical frame closed while the horizontal panels are open or the horizontal panels closed while the vertical frame is open.

Recommended Work Practices (continued)

For More Information

We at Kewaunee Scientific hope these guidelines will be helpful to you as you choose, use and maintain your laboratory fume hood. If you have

questions we haven't answered in this section, please contact your local Kewaunee sales representative.

Fume Hood Safety Checklist

- ☐ The hood is the correct type for the work to be performed.
- ☐ The airflow monitoring device indicates adequate airflow.
- ☐ There are no unnecessary chemicals or equipment in the fume hood.
- ☐ All chemicals and equipment are at least six inches behind the plane of the sash.
- ☐ All procedures are performed with the laboratory worker's head remaining outside the hood.
- ☐ Large equipment is placed on stands with legs.
- ☐ The sash is not above the safe operating height while the fume hood is in use.
- ☐ The sash is open only as far as needed.
- ☐ Safety equipment is close to the hood in case of fire or explosion.
- ☐ All laboratory workers are following the procedures outlined in these instructions, as well as any additional fume hood safety guidelines supplied by your laboratory safety manager.

Glossary of Hood Terms and Definitions

Access opening	part of the fume hood or glove box through which work is performed - entrance.	Dynamic barrier by-pass	a louvered front-to-back by-pass system located above the top sash that introduces by-pass air behind the operating sash plane to provide a buffer zone between the contaminated hood interior and the hood operator.
ACGIH	American Conference of Government Industrial Hygienists		
Air foil	curved or angular member at front of hood designed to reduce air turbulence.	Face	front opening of hood through which the user works.
Air volume	quantity of air normally expressed in cubic feet per minute (cfm).	Face velocity	speed of air moving into fume hood at face opening usually expressed in units of feet per minute.
Anemometer	instrument for measuring low air velocities.	Fan	air moving device consisting of a motor, impeller and housing - sometimes called a blower.
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers	FPM	Feet Per Minute – measurement of air velocity.
Auxiliary air	air delivered directly to fume hood to reduce room air consumption — sometimes called supply or supplemental air.	Fume hood	a ventilated, enclosed work space, with an open front, intended to capture, contain and exhaust airborne contaminants generated within it — also called a laboratory hood.
Baffle	panel or panels located at rear of the hood interior which aid in distributing the flow pattern of air into and through the hood.	LEV Hood	Low Exhaust Volume Hood – sometimes called a high performance fume hood, are energy efficient fume hoods that contain when tested at 60 FPM or less with a sash full open.
By-pass hood	hood which contains a by-pass and, usually, air foils — also called a constant volume hood.	Liner	material used in the interior of the hood which is exposed to contaminants.
CFM	Cubic Feet per Minute — unit of air volume measurement.	Louvered panel	a panel with louvers to allow by-pass air to enter the hood when the sash is closed.
Cross draft	a flow of air that blows into or across the hood face.	Make-up air	free or available air needed to permit fume hood to develop face velocity.
Damper	device installed in duct to control air volume — can either be pneumatically, electrically, or manually operated.	Manometer	device used to measure air pressure differential — usually calibrated in inches of water.
Differential Pressure	difference in static pressure between two locations.	Negative Pressure	pressures lower than atmospheric pressure. (Less than one atmosphere.)
Duct	round, square or rectangular tube used to enclose moving air.	NFPA	National Fire Protection Association
Duct velocity	speed of air moving in duct (measured in FPM).		

Glossary of Hood Terms and Definitions

OSHA	Occupational Safety and Health Administration Government organization created to assure safe and healthful working conditions.	Supplemental (supply) air	air delivered directly to fume hood to reduce room air consumption — also called auxiliary air.
Perchloric Acid	a colorless, syrupy hygroscopic liquid, HClO_4 , used chiefly as a reagent in analytical chemistry. Explosively unstable when crystallize or when in contact with combustible materials at elevated temperatures.	UFC	Unified Facilities Criteria – a government program that unifies all technical criteria and standards pertaining to planning, design, construction, operation and maintenance of real property facilities.
Pitot tube	device for measuring velocity of air in a duct.		
Positive pressure	pressures higher than atmospheric pressure. (More than one atmosphere.)	V-Belt Drive Fan	fan on which the motor is connected to the impeller wheel via, a v-belt, sheaves, and an impeller wheel shaft. Allows the impeller wheel speed to be varied by using a adjustable motor sheave.
Restricted by-pass fume hood	basic type of hood design with limited by-pass area. Commonly used in conjunction with “VAV” Variable Air Volume controls.	Variable air volume (VAV)	type of fume hood that utilizes controller to maintain constant face velocity by adjusting blower motor speed or balance damper in response to changes in sash position.
Safety shield	horizontal sliding transparent panel at face of hood which the user places in front of his body to protect himself from small explosions inside of hood.	Velocity	speed of air — measured in feet per minute.
Sash	movable panel set in hood face, usually transparent and can be either vertical rising or horizontal sliding.	Vertical Bypass	An air management panel located within the hood structure designed to introduce air behind the operating sash plane to provide a buffer zone between the contaminated hood interior and the operator. Vertical bypasses are specifically designed for LEV hood use within a VAV system.
SEFA	Scientific Equipment & Furniture Association – an association founded to promote the scientific equipment and furniture industry and to improve the quality, safety and timely completion of laboratory facilities in accordance with customer requirements.	Walk-in hood	floor-mounted, full height hood designed to accommodate tall apparatus and permit roll-in of instruments and equipment.
Side walls (End walls)	The area between the interior hood liner, and the exterior end panel. (4" nominal dimension)		
Smoke candle	device producing large quantities of smoke for testing hoods — also called smoke bomb.		
Static pressure	air pressure exerted perpendicular to the direction of flow, usually expressed in units of inches of water.		
Superstructure	part of hood assembly that excludes work top, base cabinets, auxiliary air chamber, and plumbing and electrical fixtures.		

Typical Fume Hood Installations



Fume Hood Testing Facilities



Kewaunee's State-Of-The-Art
Fume Hood Testing Facility.
Statesville, North Carolina

Testing Protocols and Standards

ASHRAE 110 – 2016

ANSI / AIHA Z 9.5

EN 14175 – 3
(European Fume
Hood Standard)

HAM
(Human as Mannequin)
variant of **ASHRAE 110**
(USEPA & UCal-Davis)



Our state-of-the-art testing facility is capable of duplicating most laboratory environments. It allows us to perform the rigorous testing protocols necessary to ensure safe performance of custom designs.

VENTURI

High Performance Fume Hoods

Kewaunee Scientific Corporation is dedicated to manufacturing high quality products for the laboratory marketplace. We offer **Total Laboratory Solutions, Innovative Designs, and Technological Expertise** with a worldwide distribution network to provide laboratories that are truly World Class.

Laboratory Products from Kewaunee®:

ALPHA® – Adaptable Casework System
ALPHA Columns – Expandable Workstations
ALPHA Overhead Carrier Systems
BasikBench® – Simple 4-Leg Benches or Tables
Element Bench – Efficient Benches with Plumbed Posts
Enterprise® – Free-Standing Workstations
Evolution® – Column Based Workstations
Kemresin® – Epoxy Resin Counters & Sinks
Kewaunee Matrix® – Educational Stations
Research Collection® – Steel Casework
Signature® Series – Wood Casework
Supreme Air® – Fume Hoods

For our complete product offering, specifications, catalogs, brochures, case studies, and dealer list, go to www.kewaunee.com, or contact your local sales representative directly.



Kewaunee Scientific Corporation

P.O. Box 1842 • Statesville, NC 28687-1842
704-873-7202 ▪ kscmarketing@kewaunee.com ▪ kewaunee.com

Kewaunee Labway India Pvt. Ltd.

No. CA-9A, 2nd Floor, Jigani Link Road
Jigani, Bangalore 562 106, India
Phone: 9180-27826725 • Fax: 9180-27826724
Web Site: www.kewaunee.in

Kewaunee Labway Asia Pte. Ltd.

194 Pandan Loop, #06-22
Pantech Business Hub, Singapore 128 383
Phone: 65-6773-0288 • Fax: 65-6773-2322



KEWAUNEE

Kewaunee, Alpha, BasikBench, Enterprise, Evolution, Kemresin, Kewaunee Matrix, Research Collection, Signature, and Supreme Air are registered trademarks of Kewaunee Scientific Corporation