



**FUME HOOD &
ACCESSORIES
CATALOG**

2025



TABLE OF CONTENTS

Fume Hood Technology	3-11	Replacement Fixtures	57-58
Fume Hood Glossary	12-13	Vacuum Breakers for Fume Hood	57
Operating Instructions	14	Atmospheric Vacuum Breakers - ColorTech	57
Ordering Information	15-19	Outlets with Hose Connectors	58
Fume Hood Ordering Catalog Number	20	Gooseneck Outlets	58
Spectre Fume Hoods	21-24	Fume Hood Valves	59
Concept Fume Hoods	25-29	Remote Control Service Valves	59
SafeAire II Fume Hoods	30-33	Remote Control Ball Valve Assembly	59
Distillation Shelf for Floor-Mounted Fume Hood	34	Rod and Handle Assembly for Service Valves	59
Demonstration Fume Hood	35	Replacement Fixtures	60
Demonstration Hood Accessories	35	Front-loaded Service Valves	60
Specialty Exhaust Systems	36	Electrical Configuration Options	61-62
Canopy Fume Hoods.....	36	Manual Snap-Switch Fan Motor Starter	61
Ceiling Enclosures	37-61	Recepticals	61
Side Enclosure Panels	37	Ground Fault Interrupter	61
Lower Back Enclosure Panels	37	Switch/GFI	61
Front Ceiling and Sash Enclosure Panels for Spectre or Concept ...	38	Pilot Light	62
Left Ceiling Enclosure Panels for Superstructures	38	Lighted Toggle Switch	62
Right Ceiling Enclosure Panels for Superstructures	38	Miscellaneous Accessories	63-64
Upper Rear Ceiling Enclosure Panels for Superstructures ...	39	Manometer	63
Front Ceiling and Sash Enclosure Panels for		Static Pressure Gauges	63
Floor-Mounted Fume Hood	39	Classified Explosion-Proof Light	63
Left Ceiling Enclosure Panel for		Automatic Fire Extinguishers	64
Floor-Mounted Fume Hood	39	Face Velocity Labels	64
Right Ceiling Enclosure Panels for		Specifications	65-73
Floor-Mounted Fume Hood	40	Typical Front Views - Spectre, Concept & SafeAire II.....	65
Upper Back Ceiling Enclosure Panel for		Typical End Views - Spectre.....	66
Floor-Mounted Fume Hood	40	Typical End Views - Concept	67
Lower Back Enclosure Panel for		Typical End Views - SafeAire II.....	67
Floor-Mounted Fume Hood	40	For Pre-piped Fume Hood	69
Enc. For SafeAire II Bench and High-Line Fume Hoods ..	41-42	For Pre-wired Fume Hood	70
Enc. For SafeAire II Floor-Mounted Fume Hood	43	For Bench Fume Hood	71
Enc. For SafeAire II Postless Sash Fume Hood	43	For Floor-mounted Fume Hood	72
SafeAire II Finished Backs	44	For Postless Sash Fume Hood	73
Filler Assembly	44-45		
Ceiling Fillers	45		
Side Enclosure Panels for Floor-Mounted Fume Hood	46		
Replacement Baffle Screen	46		
Lattice Rod Assemblies	46		
Fixtures and Accessories	47		
Air Flow Alarm Monitor/AFA500	47		
Air Flow Alarm Monitor/AFA1000	47		
HVAC	48		
Duct Transitions	48		
Combination Exhaust Collar/Transitions	48		
Work Surface	49-50		
Epoxy Resin for Spectre, Concept & SafeAire II Fume Hoods ...	49-50		
Cupsinks and Traps	51-52		
Polyolefin Oval Cupsinks	51		
Stainless Steel Oval Cupsink	52		
Polyolefin Tailpiece	52		
Polyolefin "P" Traps	52		
Fume Hood Valve Assemblies	53-56		
Remote Control Rod Driven Single Service Valve	53		
Remote Control Rod Driven Water Faucets.....	53-54		
Front-loaded Water Faucets	55		
Front-loaded Service Valves - ColorTech	56		
Front-loaded Water Faucets - ColorTech	56		



FUME HOOD TECHNOLOGY

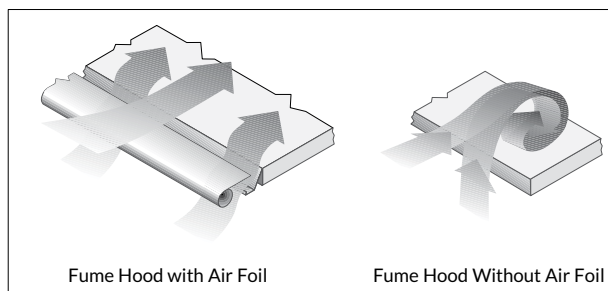
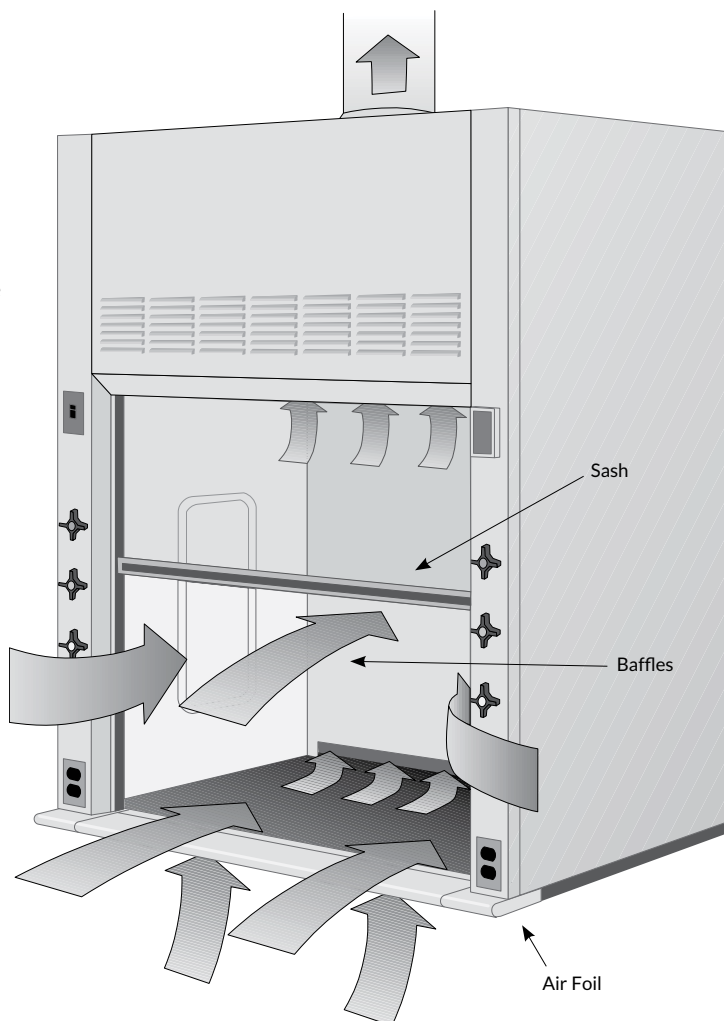
How a Fume Hood Works

The complexities of fume hood operation become apparent when the many variables involved in exhausting fumes generated in the space are considered.

An adequate "pull" of air, known as face velocity is required to move fumes from the fume hood through the ductwork. Face velocity is measured in feet per minute (FPM) at the vertical sash plane. In order to maintain consistent face velocity, a certain quantity of air, or exhaust volume, is required. Exhaust volume is measured in cubic feet per minute (CFM).

Sash position also impacts face velocity. The sash is a transparent panel set in the fume hood face.

Airflow patterns into the fume hood are influenced by the air foil. Located just beneath the sash, the air foil decreases turbulence of air entering the fume hood. Some fume hoods feature air foils on the left and right sides of the sash as well.



These diagrams illustrate how an air foil can reduce the turbulence of air entering a fume hood, thus improving fume hood containment.

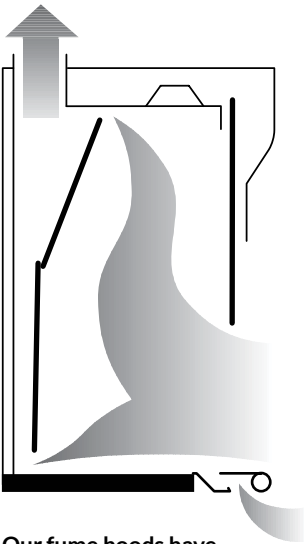


FUME HOOD TECHNOLOGY

How a Fume Hood Works (continued)

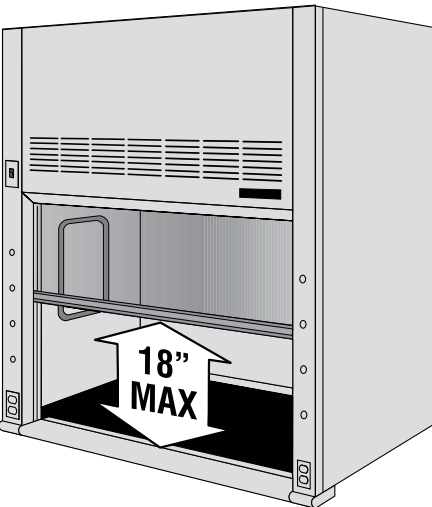
Located across the inside rear of the fume hood, baffles control airflow patterns through the fume hood. Baffle panels are located in a position determined to be most effective for the application. A remote adjustment option allows the user to reposition the baffles according to characteristics of effluents generated in the fume hood. Remote baffle adjustment located on the outside of the fume hood corner post complies with OSHA Lab Standard recommendations.

Baffle Positions

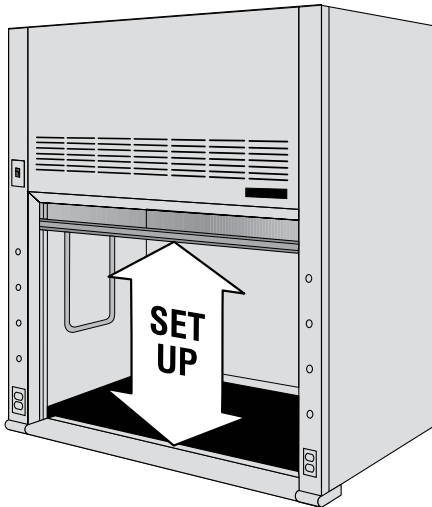


Our fume hoods have a fixed baffle for any applications.

Sash Positions



Sash operating position while work is being performed in the fume hood is a maximum 18" opening for vertical rising sashes.



Sash setup position is defined as an opening greater than the operating position for loading materials with which to perform work. Work should not be performed in the setup position.



FUME HOOD TECHNOLOGY

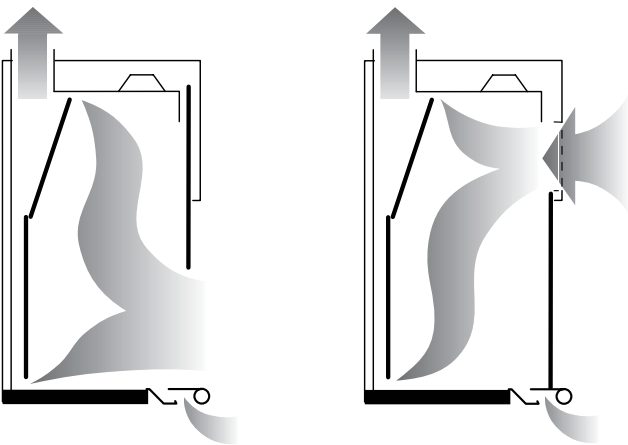
Fume Hood Exhaust Systems

Two types of fume hood exhaust systems are constant volume (CV) and variable air volume (VAV). Either system can be used with individual or manifold duct and blower configurations (see page 8). The fume hood exhaust system must be compatible with the room's HVAC system. The type of fume hood and related exhaust system will depend on the building's HVAC system, the number of fume hoods in the lab, and any special or unique requirements. Consult with a Hamilton representative, Facilities Manager and/or HVAC contractor.

Constant Volume Exhaust Systems

Constant volume fume hoods maintain consistent exhaust volume regardless of sash position. Face velocity varies as the sash is moved. Three types of fume hoods can provide constant volume function: Bypass, Auxiliary Air, and Restricted Bypass.

Bypass Fume Hood with Constant Volume Exhaust Systems



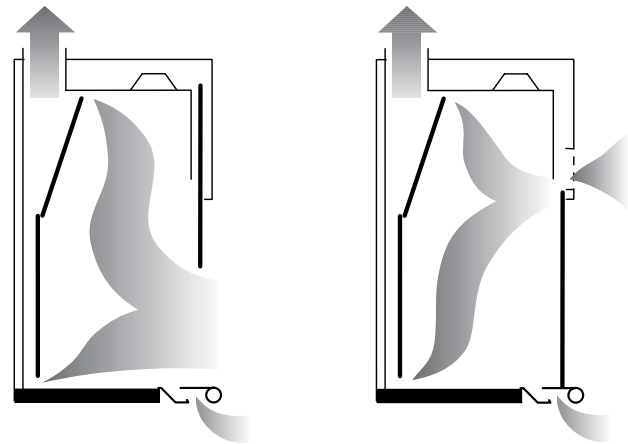
Incorporating a bypass, or additional opening for exhaust air when the sash is lowered, is one way to keep face velocities within an acceptable range while maintaining a balance between the room ventilating system and fume hood exhaust volume.

Constant volume fume hoods are equipped with a bypass located above the sash which opens as the sash is lowered thereby allowing additional air to enter the fume hood. Hamilton fume hoods also feature a lower bypass located below the bottom air foil sill which continuously purges the work surface area.

The face velocity will increase as the sash is lowered. The bypass acts as a relief to limit the increase in face velocity. This negates adverse effects on papers, powders or flames inside the fume hood.

A Constant Volume Bypass fume hood shown first with the sash in the operating position and room air entering from the sash opening, then with the sash closed and room air entering through the louvered and lower bypass openings.

Restricted Bypass Fume Hood with Constant Volume Exhaust Systems



Constant volume operation can be achieved when Restricted Bypass fume hoods are equipped with "face opening reducing devices" and when the exhaust system is sized to maintain operational exhaust volume and face velocity at the reduced opening.

Face opening reducing devices used with restricted bypass fume hood designs include horizontal sashes, combination sashes, and postless sashes (see page 17). These modified sash designs can reduce exhaust volumes by as much as 30% to 60%. This reduced exhaust volume enables the bypass to be reduced thus achieving constant volume operation without excessive face velocity increases.

A Restricted Bypass fume hood shown first with sash in the operating position and air entering through the sash opening, then with sash closed and very little air entering the fume hood compartment.

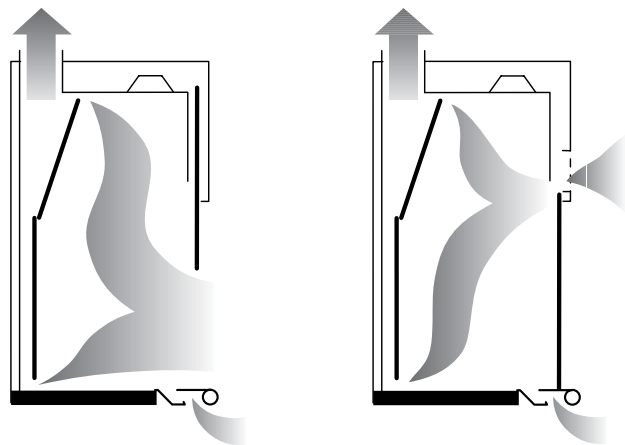


FUME HOOD TECHNOLOGY

Variable Air Volume (VAV) Exhaust Systems

VAV systems maintain constant face velocities by varying exhaust volume in response to changes in sash position. Maximum air is exhausted when the sash is open; minimum air is exhausted when the sash is closed. Based on the fume hood interior volume, the ANSI Z9.5 minimum air flow is 150-375 air changes per hour with the sash closed.

Restricted Bypass Fume Hood with VAV Exhaust Systems



A Variable Air Volume (VAV) system with restricted bypass, shown first with sash in the operating position and damper fully open, then with sash closed and damper allowing minimal exhaust.

All VAV systems should be used with a restricted bypass fume hood. Since only the amount of air needed to maintain the specified face velocity is pulled from the room, significant energy savings can be realized when the sash is in a closed position. Either vertical or horizontal sash configurations can be used effectively in VAV applications.

IMPORTANT: Correlate multiple VAV fume hood controllers with room air supply units so that sufficient air volume is available for every fume hood and room pressure is maintained.



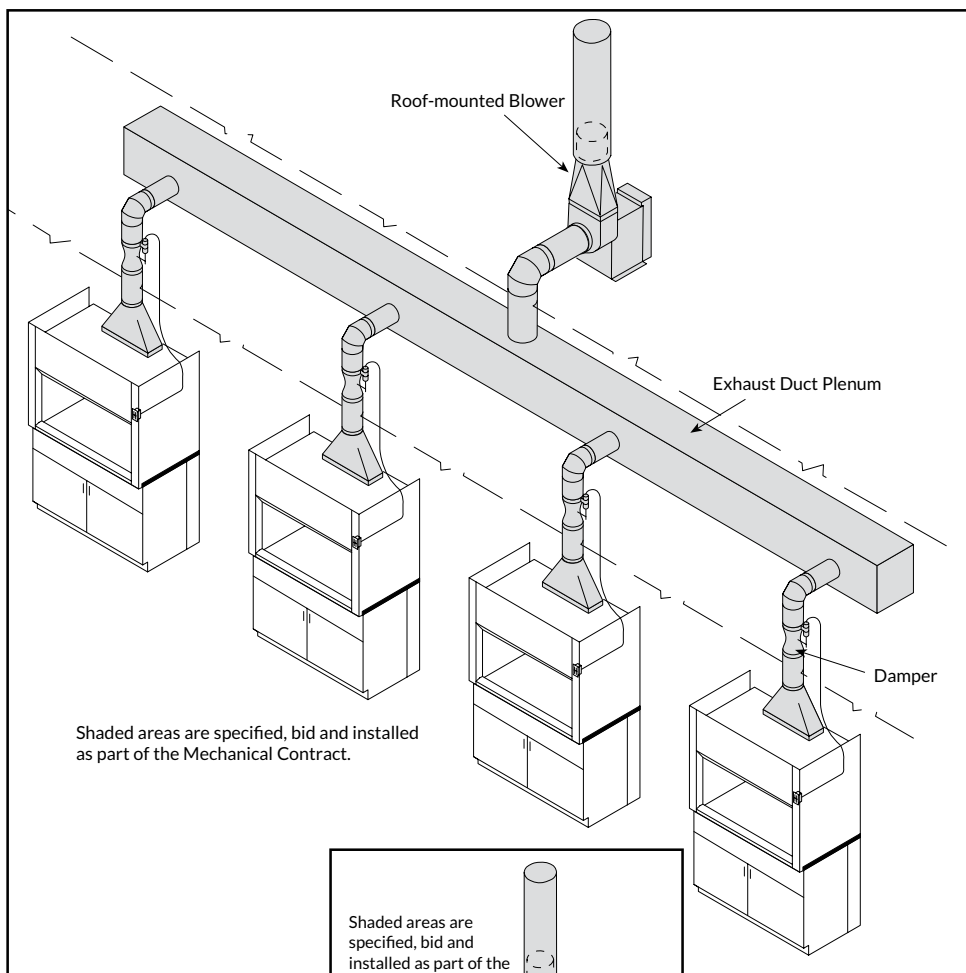
FUME HOOD TECHNOLOGY

Variable Air Volume (VAV) Exhaust Systems

VAV systems maintain constant face velocities by varying exhaust volume in response to changes in sash position. Maximum air is exhausted when the sash is open; minimum air is exhausted when the sash is closed. Based on the fume hood interior volume, the ANSI Z9.5 minimum air flow is 150-375 air changes per hour with the sash closed.

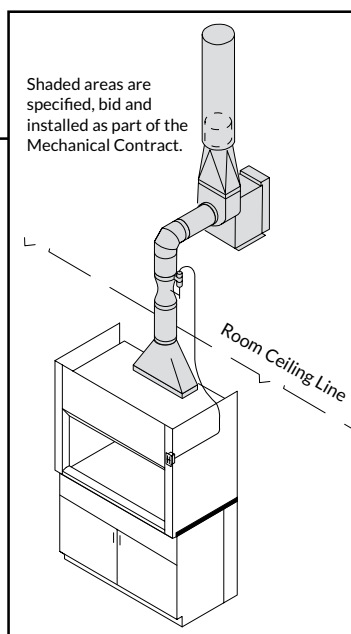
Manifold System

Manifold systems are popular for multiple-fume hood applications. Each fume hood's exhaust is pulled into the exhaust duct plenum and removed by a centralized blower. Manifold systems cost less to install than individual fume hood/blower systems because they share a common blower and duct system. However, it is extremely important that adequate makeup air is available for each fume hood (regardless of the number of fume hood in operation at any given time) and that the total room HVAC system is properly balanced.



Individual System

This is the simplest approach to exhausting a fume hood. This configuration can be used with single and multiple fume hood installations. Although installation and material costs are higher with individual blower systems, they are easier to balance, and failure of one blower will not affect use of remaining fume hood systems.



IMPORTANT:

- Both Individual and Manifold configurations can be designed for constant volume or variable air volume (VAV) systems.



FUME HOOD TECHNOLOGY

Face Velocity, Exhaust Volume, and Static Pressure

Face velocity, exhaust volume, and static pressure are critical parameters in fume hood performance, functioning in unison with the room's HVAC design.

Published Face Velocity Guidelines

The appropriate face velocity will vary depending on usage of the fume hood and the way in which the fume hood has been set up. There are several published guidelines that indicate general ranges for face velocity settings. Additional state and local guidelines for face velocity may exist.

ORGANIZATION	REFERENCE	FACE VELOCITY
OSHA	29 CFR 1910 • 1450	60-100 FPM
ACGIH	Industrial Ventilation Manual 29th Edition	60-100 FPM
ANSI/AIHA	Z9.5, 2012	60-120 FPM
NFPA	NFPA 45, 2015	60-120 FPM
SEFA	SEFA 1, 2010	60-100 FPM

Consult with a planner for the appropriate face velocity for the fume hood selected, taking into account fume hood setup processes and the specific application.

Under typical operating conditions, Hamilton fume hoods most reliably provide containment at the levels specified by applicable industry standards when operated at a 100 feet per minute face velocity.

For other Hamilton fume hoods, please refer to the appropriate product specifications and consult with a lab planner to determine an appropriate face velocity for each specific application.

Determining Exhaust Volume

In order to calculate exhaust volume, fume hood type, size and the number of air changes per hour for the lab are required. (Consult with an HVAC professional or mechanical engineer.)

To determine the quantity of room air available for fume hood exhaust (in CFM), use the following equation:

Exhaust volume (CFM) =
Room size (cubic feet) x [room changes per hour ÷ 60]

To determine exhaust volume for a particular fume hood, use the following equation:

Exhaust Volume (CFM) =
Face velocity (FPM) x fume hood opening (ft²)

Minor discrepancies can be resolved by adjusting fume hood exhaust volume or the amount of air delivered to the room. Choosing an alternative fume hood style or sash configuration may be the only way to reconcile major differences.

As part of the balance contract at installation, a duct traverse should be performed to determine proper fume hood volume.

Static Pressure

Static pressure is the resistance created as air moves through a fume hood. Sometimes referred to as static pressure loss, it is measured in inches of water. Fume hoods operate more efficiently and with less noise at lower static pressure values.

A low fume hood static pressure rating indicates that the fume hood is offering minimal resistance to air flow, resulting in reduced noise and requiring a smaller exhaust fan. A few fume hood design characteristics that also affect static pressure include:

- Larger baffle slots make it easier for air to move through the fume hood
- A larger exhaust outlet enables more air to pass through at lower velocity
- A tapered exhaust collar reduces turbulence
- Together, the correct exhaust collar and baffle configuration will reduce fume hood static pressure

The static pressure rating of the fume hood is very important to correct sizing of the blower system and should be provided to the HVAC contractor to ensure a properly sized exhaust system.



FUME HOOD TECHNOLOGY

Duct Work

Round ducts are more efficient and less expensive than rectangular ducts, and are highly recommended for fume hood supply and exhaust systems.

The optimum diameter for the specific system will be determined by duct system static pressure and exhaust volume.

Duct Material

The ideal duct material is resistant to corrosive fumes, fireproof, lightweight, low in cost and smooth on its interior surface.

Commonly used:

- Stainless Steel Types #302, 304 and 316
- Polyvinyl steel (PVS)

Recommended Duct Air Velocity

Moderate duct air velocities (approximately 1600 FPM) are high enough to evaporate moisture and other condensates that might form in the duct system, but low enough to minimize static pressure and associated noise.

Certain conditions may dictate the need for higher duct velocities. In these cases, an increase in static pressure and noise is to be expected.

Controlling Duct and System Noise

To minimize noise associated with a fume hood duct system, static pressure must also be minimized. Undersized ducts and tight duct elbows also can contribute to unacceptable noise levels.

Selecting a Fume Hood Blower (information only, not available to purchase)

Proceed through the following steps, in order presented, to select the most appropriate blower for the fume hood application.

The steps required for selecting a blower are as follows:

Step 1: Identifying Fume Hood Exhaust Volume & Static Pressure Loss (SPL)

Step 2: Determining Optimum Duct Diameter

Step 3: Calculating Total Duct Length

Step 4: Calculating Duct SPL

Step 5: Calculating Total System SPL

Step 6: Choosing a blower with the capacity to move system exhaust volume at total system SPL

Step 1

Identify Fume Hood Exhaust Volume & Static Pressure Loss (SPL)

Turn to the specific product page in this catalog that describes the fume hood selected. Exhaust volume (CFM) and static pressure (SP) values are provided in the Operating Parameters chart.

Example:

2B605331RUSP (Page 34)
Fume Hood Exhaust Volume (A) 1000 CFM
Fume Hood SPL* (B): .18 inches WG

The grey boxes appearing within these instructions include an example of selecting a blower for a 60" (1524 mm) Restricted Bypass Fume Hood.

IMPORTANT: This process is intended only for selecting a blower for an individual fume hood/exhaust system, with the blower located on the building exterior at the discharge end of the exhaust duct. Consult with an HVAC professional to select a blower for a manifold system.



FUME HOOD TECHNOLOGY

Determining the Proper Blower and Duct System

Information:

Values in these charts are based on the performance characteristics of round ducts. If the application requires the use of rectangular ducts, calculate the round duct diameter equivalents using the conversion information on the next page.

Diameter and Area of a Round Duct

DIAMETER	AREA (Square Inches)	AREA (Square Feet)
2" (51 mm)	3.141	.0218
3" (76 mm)	7.068	.0491
4" (106 mm)	12.566	.0872
5" (127 mm)	19.635	.1364
6" (152 mm)	28.274	.1964
7" (178 mm)	38.485	.2673
8" (203 mm)	50.285	.3491
9" (229 mm)	63.617	.4418
10" (254 mm)	78.540	.5454
12" (305 mm)	113.098	.7854
14" (356 mm)	153.938	1.0690
16" (406 mm)	201.062	1.3960
18" (457 mm)	254.470	1.7670
20" (508 mm)	314.160	2.1820
24" (607 mm)	452.390	3.1420

Calculations for 10 Feet of Metal Duct Handling Air - Cont.

DUCT DIAMETER	CFM	Static Pressure Loss - WG	Duct Velocity FPM
12" (305 mm)	840	.015"	1125
12" (305 mm)	900	.017"	1270
12" (305 mm)	940	.018"	1330
12" (305 mm)	1000	.020"	1375
12" (305 mm)	1110	.024"	1415
12" (305 mm)	1250	.030"	1625
12" (305 mm)	1390	.037"	1790
12" (305 mm)	1500	.043"	1900
12" (305 mm)	1560	.046"	1975
12" (305 mm)	1670	.052"	2175
12" (305 mm)	1870	.064"	2380
14" (357 mm)	800	.006"	750
14" (357 mm)	1000	.009"	935
14" (357 mm)	1200	.013"	1125
14" (357 mm)	1430	.018"	1335
14" (357 mm)	1710	.026"	1600
14" (357 mm)	1900	.032"	1780
14" (357 mm)	2380	.048"	2230
14" (357 mm)	2140	.038"	2005
14" (357 mm)	2380	.048"	2230
14" (357 mm)	2570	.055"	2400
14" (357 mm)	2860	.067"	2730
16" (406 mm)	1000	.0048"	725
16" (406 mm)	1200	.0067"	875
16" (406 mm)	1400	.0080"	960
16" (406 mm)	1600	.0120"	1175
16" (406 mm)	1800	.0150"	1300
16" (406 mm)	2000	.0180"	1425
16" (406 mm)	2200	.0220"	1600
16" (406 mm)	2400	.0250"	1750
16" (406 mm)	2600	.0280"	1875
16" (406 mm)	2800	.0330"	2010
16" (406 mm)	3000	.0380"	2175
18" (457 mm)	1800	.008"	1010
18" (457 mm)	2000	.010"	1175
18" (457 mm)	2200	.012"	1275
18" (457 mm)	2400	.014"	1370
18" (457 mm)	2600	.016"	1425
18" (457 mm)	2800	.019"	1600
18" (457 mm)	3000	.022"	1700
18" (457 mm)	3200	.024"	1825
18" (457 mm)	3500	.028"	2000
18" (457 mm)	3500	.028"	2000

Calculations for 10 Feet of Metal Duct Handling Air

DUCT DIAMETER	CFM	Static Pressure Loss - WG	Duct Velocity FPM
8" (203 mm)	390	.025"	1120
8" (203 mm)	520	.045"	1490
8" (203 mm)	650	.068"	1865
8" (203 mm)	788	.097"	2260
10" (254 mm)	400	.009"	735
10" (254 mm)	570	.017"	1055
10" (254 mm)	630	.021"	1155
10" (254 mm)	760	.030"	1400
10" (254 mm)	850	.037"	1580
10" (254 mm)	950	.045"	1745
10" (254 mm)	1060	.056"	1945
10" (254 mm)	1140	.064"	2090
10" (254 mm)	1270	.079"	2330
12" (305 mm)	600	.008"	760
12" (305 mm)	750	.011"	950

Straight Duct Length Equivalent for 90 degree elbows

Duct Diameter	8"	10"	12"	14"	16"	18"	20"	24"
Linear Feet	15	20	25	30	36	41	46	57

Values in these charts are based on performance characteristics of round ducts. If the application requires the use of rectangular ducts, calculate the round duct diameter equivalents using the conversion information on the next page.



FUME HOOD TECHNOLOGY

Step 2

Determine Optimum Duct Diameter

Reference corresponding chart on previous page. Based on exhaust volume selected in Step 1, the ideal duct velocity should range from 1300 to 1600 FPM, which will help to determine the proper duct diameter.

Example:
 1000 CFM Based on 10 feet of duct length the Static Pressure Loss = .020" wg (Duct Velocity = 1375 FPM)
 Duct Diameter Selected = 12"

Step 3

Calculate Total Duct Length

Total duct length will be used in determining Duct System SPL.

Length of straight duct (D): _____ linear feet
 (Use plan drawings for reference, if necessary.)

Number of elbows (E): _____

Length equivalent per elbow (F) (per chart below): _____ linear feet

Multiply the number of elbows (E) by the length equivalent of elbows (F) for the total elbow length equivalent (G).

$(E) \times (F) = \text{_____ linear feet (G)}$

Add length of straight duct (D) to total elbow length equivalent (G) for total duct length (H).

$(D) + (G) = \text{_____ linear feet (H)}$

Straight Duct Length Equivalent for 90° degree elbows*

Duct Diameter	8"	10"	12"	14"	16"	18"	20"	24"
Linear Feet	15	20	25	30	36	41	46	57

*Based on smooth inside surface and elbows with radius 1.5 times duct diameter

To calculate straight duct length equivalents for elbows with radii other than 90°, multiply the 90° equivalent from above table by the value as shown below.

ELBOW RADIUS	MULTIPLY 90° EQUIVALENT BY
60°	.67
45°	.50
30°	.33

Example:
 Length of straight duct (D): 30 linear feet
 Number of elbows (E): 3 elbows
 Length equivalent per elbow (F) = 30 linear feet
 $(E) \times (F) = 3 \times 30 = 90$ linear feet (G)
 $(D) + (G) = 30 + 90 = 120$ linear feet (H)

Step 4

Calculate Duct Static Pressure Loss (SPL)

Divide total duct length (H) by 10 in order to use the values on the operating parameters table for 10 feet of duct.

$(H) \div 10 = \text{_____ (I)}$

Refer to the line in the operating parameters table that was chosen in Step 3.

Multiply 10-foot duct SPL (C) by duct length (I) for total duct SPL (J)
 $(C) \times (I) = \text{_____ inches WG (J)}$

Example:
 $(H) \div 10 = 120 \div 10 = 12$ 10-ft lengths (I)
 Total duct length will be used in determining Duct System SPL.
 $(C) \times (I) = .020 \times 12 = .24$ inches WG (J)

Step 5

Determine Total System Static Pressure Loss (SPL)

Add total Fume Hood SPL (B) to duct SPL (J) for total system SPL (K).

$(B) + (J) = \text{_____ inches WG (K)}$

Example:
 $(B) + (J) = .18 + .24 = .42$ inches WG (K)

Summary

Exhaust volume (A) = _____ CFM

Total system SPL (K) = _____ inches WG

Example:
 (Exhaust volume = 1000
 Total static pressure loss = .42



FUME HOOD GLOSSARY

ACGIH – American Conference of Governmental Industrial Hygienists

ADA – Americans with Disabilities Act

Air Foil – Shaped or streamlined member at fume hood entrance designed to enhance movement of air into the fume hood

Air Volume – Rate of air flow, normally expressed in cubic feet per minute (CFM)

ASHRAE – American Society of Heating, Refrigerating and Air Conditioning Engineers, a professional group that sets industry-accepted standards for fume hood testing procedures

Auxiliary Air – Supply or make-up air delivered external to the chamber of a fume hood to reduce air consumption

Baffle – Panels located across back of fume hood interior which control pattern of air moving through the fume hood

Bench – Type of fume hood designed to rest atop a counter or base cabinet

Blower – Air-moving device (or fan) consisting of motor, impeller and scroll

Bypass – Compensating opening that helps maintain constant volume exhaust from fume hood, regardless of sash position

Canopy Fume Hood – Ceiling-suspended ventilating device for noncritical use with heat, water vapor, odors, etc.

CFM – Cubic feet per minute; unit of air volume measurement

Combination Sash – Horizontal panels in a vertically rising frame; see Sash

Constant Volume – Type of fume hood exhaust system that exhausts the same volume of air, regardless of sash position

Containment – Extent to which fumes are confined within the fume hood compartment

Damper – Device installed in duct to control air flow volume

Demonstration Fume Hood – Fume hood accessible from front and back sides used for demonstration purposes

Diversity – Percentage of total fume hood that are in operation at one time

Duct – Round, square, or rectangular tube used to enclose moving air

Duct Velocity – Speed of air moving in duct, measured in feet per minute (FPM)

Entrance – Fume hood front or access opening

Exhaust Collar – Place where exhaust duct connects to fume hood and through which all exhaust air passes

Exhaust Volume/Parameters – Quantity of air exhausted by the fume hood; quantity of air required to maintain desired face velocity, expressed in cubic feet per minute (CFM)

Face Velocity – Speed of air moving into the fume hood through the face opening (through the sash), measured in feet per minute (FPM)

Floor-Mounted – Tall or full-height type of fume hood, designed for large or tall apparatus

FPM – Feet Per Minute; measurement of air velocity

Fume Hood – Five-sided ventilated enclosure used in laboratories to collect and exhaust contaminants

Fume Hood Diversity – See Diversity

Liner – Fume hood interior sides, back and top, including baffle

Lintel – Portion of fume hood front located above access opening

Louvers – Slit-like openings in the lintel that allow bypass air to enter the fume hood when the sash is closed

LPM – Liters Per Minute; Metric measurement of air volume

Magnehelic – Type of gauge suitable for measuring very low air pressures

Manometer – Device used to measure air pressure differential

Makeup Air – Free or available air needed to permit fume hood to develop face velocity

MPM – Meters Per Minute; Metric measurement for air velocity

NFPA – National Fire Protection Association

Negative Pressure – Pressures lower than one atmosphere

Plenum Chamber – Chamber or enclosure where air moves at reduced velocity and has different pressure from balance of system or atmosphere

Positive Pressure – Pressures higher than one atmosphere

Restricted Bypass Fume Hood – Fume hood operating type, designed with limited bypass area; commonly used in conjunction with Variable Air Volume (VAV) exhaust systems and restricted sash opening designs

Safety Shield – Transparent horizontal panel used in conjunction with a bench fume hood and vertical-rising sash that provides added protection for the user

Sash – Sliding glass panel set in the fume hood face that provides access to the fume hood interior

Sash Operating Position – Position of the sash while work is being performed in fume hood, typically an 18" opening for vertical rising sashes

Sash setup Position – Position of the sash while the fume hood is being loaded with materials to perform work

Service Fitting – Water faucets and gas valves mounted on or fastened to the fume hood

Slot Velocity – Speed of air moving through fume hood baffle openings

Smoke Stick – Smoke-producing item used in evaluating fume hood airflow patterns and containment performance



FUME HOOD GLOSSARY

Static Pressure – Air pressure, or resistance, in fume hood or duct, expressed in inches of water

Superstructure – Portion of the fume hood supported by base cabinets, the work surface or the floor

Supplemental Air – Air delivered to a fume hood to reduce volume of air exhausted from room, also known as supply air; see Auxiliary Air

Total Pressure – Sum of velocity pressure and static pressure as measured in duct

Transport Velocity – Speed of air moving in duct; used when particles must be carried by air stream

UL 1805 – Verifies conformance to electrical, mechanical and airflow characteristics

VAV – See Variable Air Volume

Variable Air Volume – Type of fume hood exhaust system that typically maintains constant fume hood face velocity by adjusting blower motor speed or a balance damper in response to changes in sash position

Velocity – Speed of air, measured in Feet per Minute (FPM)

Velocity Pressure – Force per square inch applied by moving air

Velometer – Instrument used to measure air flow velocity

Volume – Quantity of air, usually measured in cubic feet per minute (CFM)

Water Gauge (WG) – Measuring device using the weight of a column of water, calibrated in inches

Work Surface – Top material; area in fume hood where apparatus rests and where work takes place



GENERAL FUME HOOD OPERATING INSTRUCTIONS

WARNING

This product is intended for use with certain chemicals that can cause serious injury or illness through inhalation or physical contact. While this product is intended to minimize exposure to certain hazardous chemicals when selected, installed and operated properly, its performance and the safety of the user is affected by a number of factors. These include the HVAC system, the specific chemicals and processes being used, proper operation and the condition of the room.

Before using this fume hood, consult the owner's industrial hygienist or safety representative to make sure: 1) the specific fume hood alarms, controls and the HVAC system have been properly selected and are operating correctly, 2) the fume hood has been tested after installation and routinely thereafter to ensure the fume hood is providing the proper containment for the specific chemicals and processes being used, 3) there has been appropriate training on the correct use of the fume hood and handling of the specific chemicals and the fume hood operating instructions have been reviewed, 4) any personal protective devices that are required are properly selected and provided, and 5) the fume hood is being operated at the appropriate face velocity. The fume hood should never be operated with the sash in the full open position.

Failure to follow these instructions could result in physical injury or illness

- ❶ Do not use this fume hood unless you have received proper training from the owner's industrial hygienist or safety representative.
- ❷ This fume hood is not intended to be used with all chemicals or all chemical processes. Consult the owner's industrial hygienist or safety representative to determine whether the fume hood is appropriate for the chemicals and processes to be used.
- ❸ Verify that the fume hood exhaust system and controls are operating properly and providing the necessary air flow. If in doubt, the owner's industrial hygienist or safety representative should be consulted. It is recommended that the fume hood be equipped with an air flow monitoring device. Before using the fume hood, verify that the monitor is operating properly by testing the monitor.
- ❹ The fume hood should not be operated with the sash in the full open (setup) position. When the fume hood is in use, the opening of the sash glass should be kept at a minimum. On a vertical rising sash, the sash glass should be no higher than 18". Horizontal sliding panels on combination sashes must be closed when sash is raised vertically. The sash should remain closed when the fume hood is not in use.
- ❺ Place chemicals and other work materials at least six (6) inches inside the sash.
- ❻ Do not restrict air flow inside the fume hood. Do not put large items in front of the baffles. Large apparatus should be elevated on blocks. Remove all materials not needed for the immediate work. The fume hood must not be used for storage purposes.
- ❼ Never place your head inside the fume hood.
- ❽ External air movement can affect the performance of the fume hood. Do not operate near open doors, open windows or fans. Avoid rapid body movements. Do not open the fume hood if there are cross-drafts or turbulence in front of the fume hood. Do not open the sash rapidly.
- ❾ If this fume hood is equipped with adjustable baffles, do not adjust the baffles without consulting the owner's industrial hygienist or safety representative.
- ❿ Wear gloves and other protective clothing if contact with contaminants is a hazard.
- ⓫ Clean spills immediately.
- ⓬ If fumes or odors are present, stop operating the fume hood, close the sash and contact the owner's industrial hygienist or safety representative immediately.
- ⓭ It is recommended that this fume hood be tested and certified annually by the owner according to applicable industry and government standards.



ORDERING INFORMATION

Follow the steps in this section to select the best fume hood model for a particular application, then fit it out with appropriate options and accessories.

Please record the following information before beginning:

- Room size (length x width x height)
- Lineal feet of fume hood space required
- Room air changes per hour*
- Lab heat load*
- Type of lab and nature of work performed
- Types of materials handled

- Frequency of use
 - Sizes of apparatus to be used in the fume hood
- * Consult with the facilities manager or HVAC contractor.

IMPORTANT: Fume hood must be carefully coordinated with the building's HVAC system, sink outlet material, trap material, and building acid waste system. Failure to verify compatibility of these elements can result in costly alterations or less-than-optimal component or system function. **Compatibility is the responsibility of the laboratory specifier, as is compliance with local and state codes.**

Step 1

How to Select Which Fume Hood Type is Right for You

PRODUCT LINE					
FEATURE/PURPOSE	SERIES				
	SPECTRE 7	CONCEPT 1	SAFEAIRE II 2	DEMO 3	SPECIALTY CANOPY CNP
Rectangular Exhaust Collar	•	•	•	•	
Sleek contour post design	•				
Low flow (60 fpm face velocity)	•	•			
100 fpm face velocity	•	•	•	•	
Chain & Sprocket Sash System	•	•			
Pulley & Cable Sash System			•	•	
LED light fixtures	•	•	•	•	
Research/Chemical	•	•	•		
Postless Sash			•		
ADA Compliant Options	•	•	•	•	
Pass Through/Education				•	
Exhaust heat/steam/odor					•



ORDERING INFORMATION

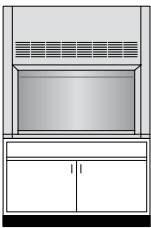
Step 2

Select a Style

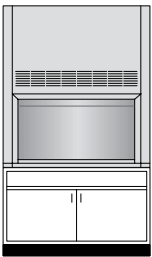
Bench fume hoods are superstructures designed for installation on base cabinet/work surface assemblies.

High-line fume hoods are bench models designed with extra interior clearance to accommodate apparatus up to 60" (1524 mm) high.

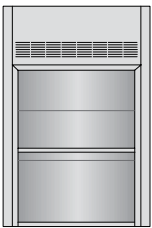
Floor-mounted fume hoods are designed for large, complex laboratory apparatus setups and roll-in equipment. For flexible work and storage arrangements, floor-mounted fume hoods can be combined with removable shelves and/or an adjustable-height table.



Bench



Hi-Line



Floor-Mounted

Step 3

Dimensions

Two-digit width, height and depth of superstructure

Width x Height x Depth

Step 4

Determine Appropriate Air Flow

The next step is to determine the operating type that is most appropriate for the particular application.

Refer to pages 5-11 for information on fume hood exhaust systems, and consult with the facilities manager, architect, lab planner, HVAC contractor, or Hamilton representative if assistance is needed.

The diagram illustrates the operating-type choices available for each style of general purpose fume hood. Review the product page for the fume hood that is preferred. If none of these models are appropriate, a representative will help design a custom fume hood that meets a specific requirement.

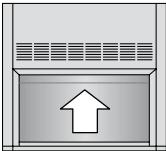
General Purpose Fume Hood		
Bench	Bench Hi-Line	Floor-Mounted
Bypass	Bypass	Bypass
Restricted Bypass	Restricted Bypass	Restricted Bypass

Step 5

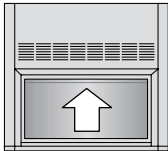
Select a Sash Type

The standard sash on most fume hood models is a vertical rising frameless sash. The unique frameless design captures the edge of the sash glass in a vertical sash track located behind the fume hood front corner post. In the event of an explosion, this positive containment design is significantly more effective in retaining the glass sheet than a framed sash. A second benefit of an unframed sash is full width visibility of the fume hood interior.

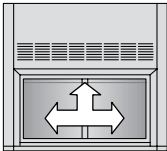
Optional sash configurations include framed vertical rising, horizontal, and combination. If you are interested in energy conservation, compare the exhaust volume value in the Exhaust Parameters chart on the product information page with the exhaust volume indicated for the sash option being considered. The lower the exhaust volume value, the greater is the potential energy savings.



Unframed Vertical Rising



Framed Vertical Rising



Combination Vertical/Horizontal

Most fume hood models are available with an optional sash. Sash options applicable to each fume hood model are indicated on the specific product information page.

Sash Types: U - Unframed
F - Framed
C - Combination
H - Horizontal

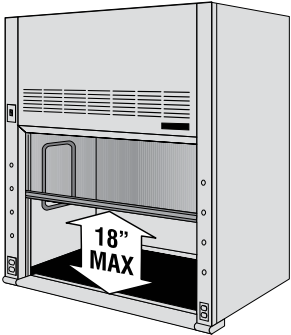


ORDERING INFORMATION

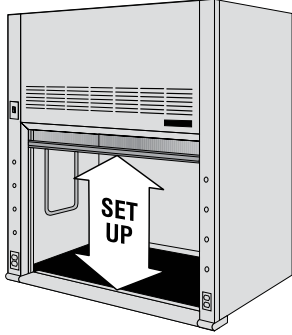
Step 6

Sash Opening

S – Standard	E – Extended
Bench 28.5"	
Hi-Line 28.5"	Hi-Line 36.0"
Floor 66.0"	



Sash operating position while work is being performed in the fume hood is a maximum 18" opening for vertical rising sashes.



Sash setup position is defined as an opening greater than the operating position for loading materials with which to perform work. Work should not be performed in the setup position.

Step 7

Select a Liner Material

LINER MATERIAL		
P – Polyresin (default)	S – Stainless Steel	T – Stainless Steel 316
High illumination, east to clean, strong and resilient. High chemical resistance.	Work surface is caulked to superstructure. Subject to attack by some chemicals.	-

Step 8

Programmable AutoSash™ Closer Option

Closes the sash automatically & shuts down the unit when the user is not present in front of the fume hood.

MATERIAL

*N – Standard (default)

Y – Yes

*(Not available with Combination or horizontal sash)

Step 9

LED Light

LED lighting is standard on all hood models

- One fixture per hood for widths 36" through 72"
- Two fixtures per 96" hood

Step 10

Sash Guides

MATERIAL	
P – PVC Standard (default)	S – 304 Stainless Steel



ORDERING INFORMATION

Step 11

Sill/Airfoil Material Options

SILL MATERIAL		
P – Painted as hood base color (default)	S – Stainless Steel 304	T – Stainless Steel 316

Step 12

Vent Collar Material Options

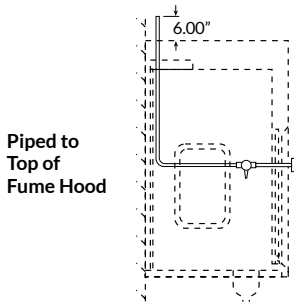
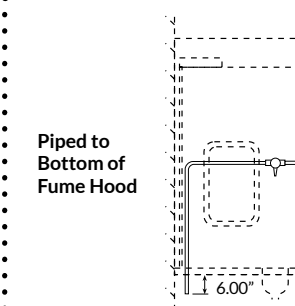
VENT COLLAR MATERIAL OPTIONS			
P – Polyresin (default)	S – Stainless Steel	T – Stainless Steel 316	C – Low profile SS combo transition collar (replaces standard collar)

Step 13

Fume Hood Fixture Piping

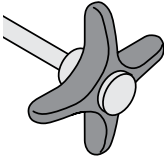
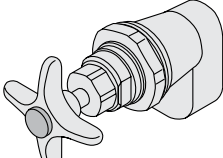
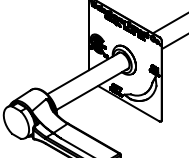
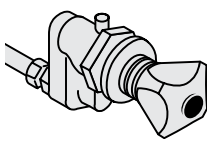
The following pre-piping configurations are available with standard list pricing and standard lead-times.

- For fume hoods that are pre-piped to the bottom of the fume hood, pipes are pivoted upward for shipment and installation above the fume hood's work-surface. Prior to making final hookups, disconnect the pipes at the valves, point them down and reinstall
- All piping configurations listed comply with the following national plumbing codes:
SPC – Standard Plumbing Code
NPC – National Plumbing Code
UPC – Uniform Plumbing Code
NSPC – National Standard Plumbing Code
- All copper pipe is Type "L" copper. Copper pipe joints are mechanically attached with compression fittings

FUME HOOD FIXTURE PIPING		
P – Pipe Up	D – Pipe Down	N – None
 Piped to Top of Fume Hood	 Piped to Bottom of Fume Hood	

Step 14

Valves/Handle Options

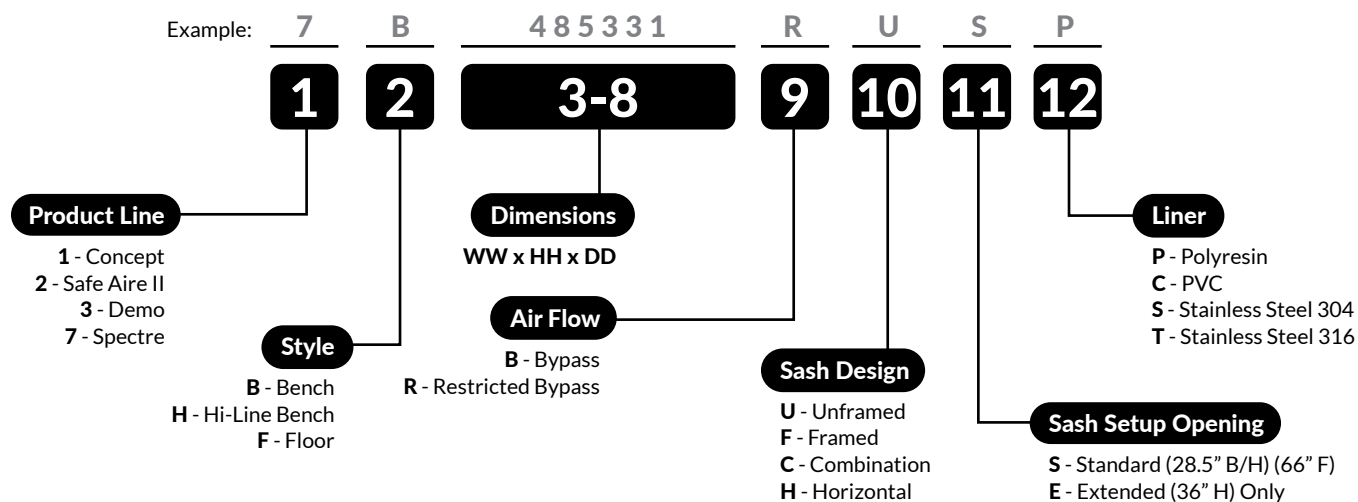
VALVES/HANDLE OPTIONS				
R – Rod Driven (default)	F – Front Loaded	L – Lever Handle NOTE: For ADA Compliant (DL)	C – Color Tech	N – None
 Rod Driven Valve Assembly for Service Valves	 Front Loaded Service Valves	 Remote Control Ball Valve Assembly (ADA Compliant)	 Front-loaded Service Valves - Color Tec	



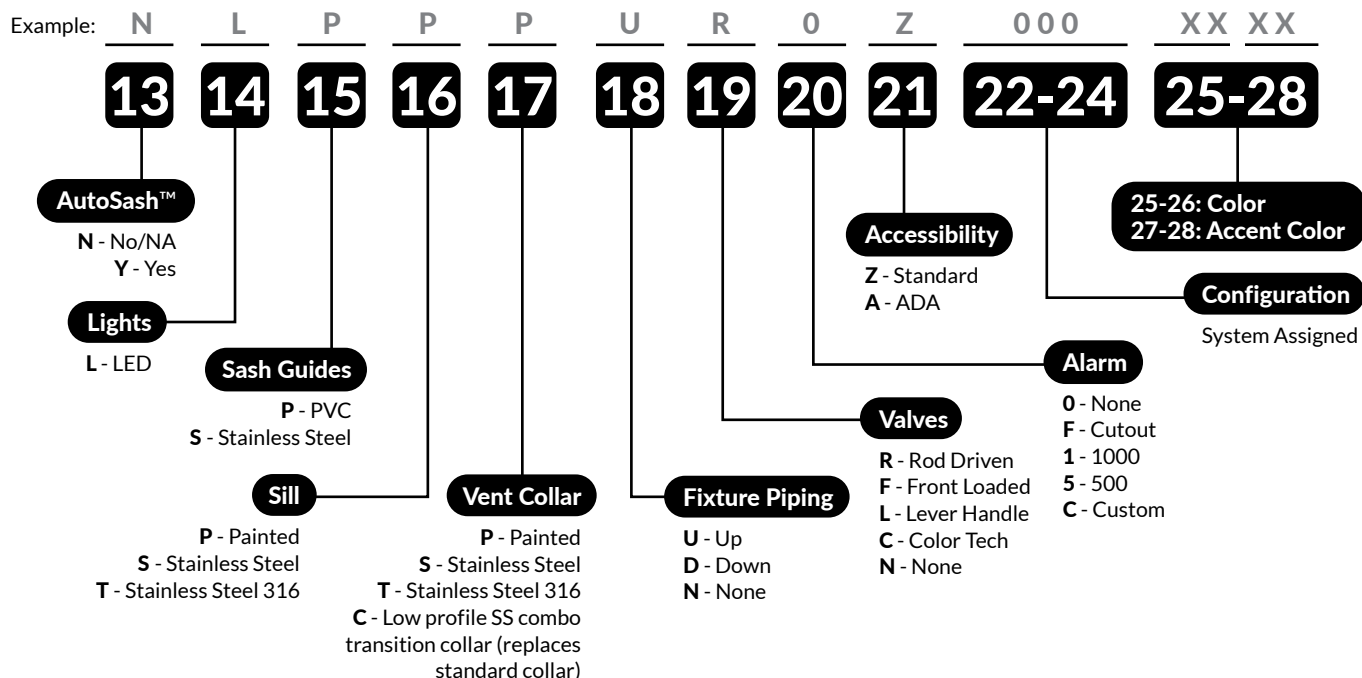
FUME HOOD ORDERING CATALOG NUMBER

How to order your Fume Hood in a few simple steps

Base



Options





OVERVIEW

The **Spectre Fume Hood** is the latest addition to the **Hamilton Laboratory Solutions** fume hood portfolio. It is the perfect hood enclosure to ensure the safety of your lab while enhancing the efficiency of tests and experiments that involve hazardous materials. Standard features included for the safety of your lab team include laminated safety glass sash, LED interior lighting, chemical resistant epoxy resin work surface, and pre-wired light switch and GFCI receptacles are. The **Spectre** is available in several configurations, all of which feature a number of design enhancements that also aid in operating efficiency.

STANDARD FEATURES

- **Size Options:** 4', 5', 6' & 8' STD Widths
- **Interior Lighting:** High-efficiency LED with dimmable and color changing options
- Laminated safety glass sash. Available in vertical rising and combination sash configurations
- AutoSash™ passive positioning system. Returns the sash to working height from full open
- Chain & Sprocket sash drive for ergonomic/smooth operation
- Low-profile air foil
- **Radius:** Contoured design to enhance airflow
- **Electrical:** GFCI receptacles and light switch pre-installed
- Hoods will maintain safe containment @100FPM to 60FPM face velocity (low flow application)

- **Fixtures:** Choose from a variety of options from WaterSaver
- Rectangular duct connection collar promotes better airflow and quieter operation
- **Exterior:** SEFA powder coated steel
- ANSI/ASHRAE 110-216 Tested
- UL Listed
- ADA option available
- Optional AutoSash™ closer available

Note: The Spectre Fume Hood can be utilized in variable air volume (VAV) or constant volume applications. VAV fume hoods can be factory prepped to receive a VAV controller field installed by your mechanical contractor. Consult your mechanical engineer, HVAC professional or Hamilton representative to determine the appropriate fume hood type needed.



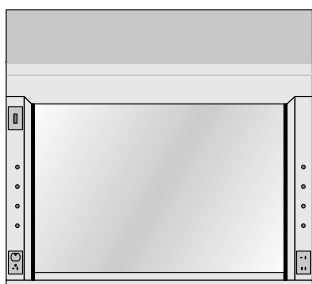
SPECTRE® FUME HOODS



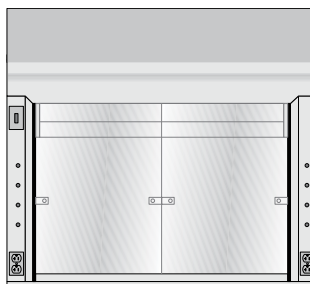
Bypass

SERIES	STYLE	WIDTH	HEIGHT	DEPTH*	AIRFLOW	SASH	OPENING	LINER
7	Bench	48 60 72 96	53	31 37 43	Bypass	Unframed Vertical Rising	Standard (28.5)	Polyresin
7	Bench Hi-Line	48 60 72 96	65	31 37 43	Bypass	Unframed Vertical Rising	Standard (28.5) Extended (36)	Polyresin
7	Floor	48 60 72 96	90	35 41 47	Bypass	Unframed Vertical Rising	Standard (66.5)	Polyresin

* Depths 31" and 37" are ADA compliant options.



Bypass and restricted bypass
vertical rising sash



Combination & horizontal sash

Restricted Bypass

SERIES	STYLE	WIDTH	HEIGHT	DEPTH*	AIRFLOW	SASH	OPENING	LINER
7	Bench	48 60 72 96	53	31 37 43	Restricted Bypass	Unframed Vertical Rising Combination & Horizontal	Standard (28.5)	Polyresin
7	Bench Hi-Line	48 60 72 96	65	31 37 43	Restricted Bypass	Unframed Vertical Rising Combination & Horizontal	Standard (28.5) Extended (36)	Polyresin
7	Floor	48 60 72 96	90	35 41 47	Restricted Bypass	Unframed Vertical Rising Combination & Horizontal	Standard (66.5)	Polyresin

* Depths 31" and 37" are ADA compliant options.



SPECTRE® FUME HOODS

Exhaust Volumes

Spectre Bench Mount - Airflow Data

FUME HOOD WIDTH	EXHAUST VOLUME	SASH OPENING			FACE VELOCITY		STATIC PRESSURE	EXHAUST COLLAR SIZE
		VERTICAL SASH HEIGHT	HORIZONTAL SASH HEIGHT	SLIDING SASH PANELS	VERTICAL**	HORIZONTAL		
48" (1219 mm)	300 480	18 24	27.75 x 17.5	2	60 100	77 120	.08" .14"	6" x 15" (152 x 381 mm)
60" (1524 mm)	400 640	18 24	27.75 x 23.25	2	60 100	77 120	.07" .16"	6" x 23" (152 x 584 mm)
72" (1829 mm)	480 770	18 24	27.75 x 28.25	4	60 100	77 120	.09" .21"	6" x 23" (152 x 584 mm)
96" (2438 mm)	700 1110	18 24	27.75 x 40.25	4	60 100	77 120	.08" .21"	6" x 30" (152 x 762 mm)

** Vertical face velocities – nominal

*Bypass area is 3" X the interior width of the fume hood (1" at the sill + 2" above the sash lintel panel)

Spectre Hi-Line Fume Hood with Horizontal Sash

Exhaust volumes based on 100 FPM 31.50" vertical sash opening, bypass* area included

FUME HOOD WIDTH	EXHAUST VOLUME (CFM)	FACE VELOCITY (NOMINAL)	STATIC PRESSURE LOSS (INCHES W.G.)	HORIZONTAL SASH OPENING (HEIGHT X WIDTH)
48" (1219 mm)	460	100	.08	31.50 x 17.375
60" (1524 mm)	620	100	.09	31.50 x 23.375
72" (1829 mm)	750	100	.12	31.50 x 28.25
96" (2438 mm)	1060	100	.09	31.50 x 40.25

*Bypass area is the interior width x 3" in. (1" at the sill + 2" above the sash, behind the lintel panel)

Spectre Hi-Line - Airflow Data

FUME HOOD WIDTH	EXHAUST VOLUME	SASH OPENING			FACE VELOCITY		STATIC PRESSURE	EXHAUST COLLAR SIZE
		VERTICAL SASH HEIGHT	HORIZONTAL SASH HEIGHT	SLIDING SASH PANELS	VERTICAL**	HORIZONTAL		
48" (1219 mm)	300 480	18 28	30.5 x 17.5	2	60 100	77 120	.08" .14"	6" x 15" (152 x 381 mm)
60" (1524 mm)	400 640	18 28	30.5 x 23.25	2	60 100	77 120	.07" .16"	6" x 23" (152 x 584 mm)
72" (1829 mm)	480 770	18 28	30.5 x 28.25	4	60 100	77 120	.09" .21"	6" x 23" (152 x 584 mm)
96" (2438 mm)	700 1110	18 28	30.5 x 40.25	4	60 100	77 120	.08" .21"	6" x 30" (152 x 762 mm)

** Vertical face velocities – nominal

*Bypass area is 3" X the interior width of the fume hood (1" at the sill + 2" above the sash lintel panel)



SPECTRE® FUME HOODS

Exhaust Volumes

Spectre Floor-Mounted Fume Hood with Combo &/or Vertical Sash

FUME HOOD WIDTH	BASED ON UPPER SASH @ 100 FPM FULL OPEN				BASED ON UPPER SASH @ 100 FPM OPEN 18"				
	EXHAUST VOLUME (CFM)	VERTICAL SASH HEIGHT	STATIC PRESSURE	SLIDING SASH PANELS	EXHAUST VOLUME	TOP SASH HEIGHT	STATIC PRESSURE	FACE VELOCITY*	HORIZONTAL FACE VELOCITY**
48" (1219 mm)	790	28.50" (724mm)	0.1	2	508	18" (457mm)	0.17	100	110
60" (1524 mm)	1035	28.50" (724mm)	0.09	2	666	18" (457mm)	0.19	100	110
72" (1829 mm)	1285	28.50" (724mm)	0.14	4	824	18" (457mm)	0.30	100	110
96" (2438 mm)	1770	28.50" (724mm)	0.11	4	1141	18" (457mm)	0.30	100	110

*Both sash assemblies raise to 66.5" providing clearance for setup only. However, the operating position are 18" vertical sash opening or with the top vertical component closed and the sliding panels opened.

**Nominal with bottom vertical sashes closed and upper @ 18".



Vertical



Combo

Spectre Floor-Mounted Fume Hood with Horizontal Sash

FUME HOOD WIDTH	EXHAUST VOLUME (CFM)	VERTICAL OPENING HEIGHT	STATIC PRESSURE	SLIDING SASH PANELS	SASH OPENING WIDTH
72" (1829 mm)	1485	66.5" (724mm)	0.35	4	28.5" (724 mm)
96" (2438 mm)	2070	66.5" (724mm)	0.33	4	41.5" (1054 mm)

*Exhaust volumes based on two sashes open @ 100FPM

Horizontal





OVERVIEW

The **Concept Fume Hood** from **Hamilton Laboratory Solutions** has been the leading choice for commercial and educational labs for years. It is the perfect hood enclosure to ensure the safety of your lab while enhancing the efficiency of tests and experiments that involve hazardous materials. A laminated safety glass sash, LED interior lighting, chemical resistant epoxy resin work surface, and GFCI receptacles are standard features included for the safety of your lab team.

STANDARD FEATURES

- **Size Options:** 4', 5', 6' & 8' STD Widths
- **Interior Lighting:** LED
- Laminated safety glass sash. Available in vertical rising and combination sash configurations
- AutoSash™ passive positioning system. Returns the sash to working height from full open
- Chain & Sprocket sash drive
- Low-profile air foil
- **Electrical:** GFCI receptacles and light switch pre-installed
- Downdraft Bypass provides lower resistance for quieter operation
- Rectangular duct connection collar promotes better airflow and quieter operation
- **Fixtures:** Choose from a variety of options from WaterSaver
- Hoods will maintain safe containment @100FPM to 60FPM face velocity (low flow application)
- Full frame construction
- Secondary trough for added safety
- **Exterior:** SEFA powder coated steel
- ANSI/ASHRAE 110-216 Tested
- UL Listed
- Optional AutoSash™ closer available

Note: The Concept Fume Hood can be utilized in variable air volume (VAV) or constant volume applications. VAV fume hoods can be factory prepped to receive a VAV controller field installed by your mechanical contractor. Consult your mechanical engineer, HVAC professional or Hamilton representative to determine the appropriate fume hood type needed.



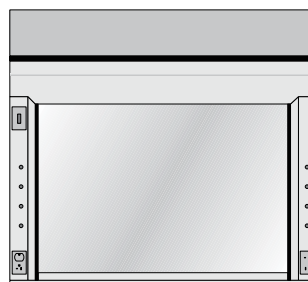
CONCEPT® FUME HOODS



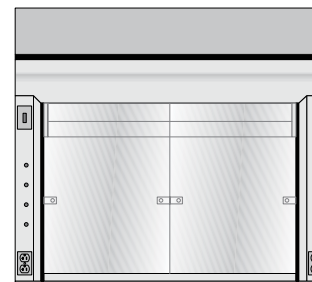
Bypass

SERIES	STYLE	WIDTH	HEIGHT	DEPTH*	AIRFLOW	SASH	OPENING	LINER
1	Bench	48 60 72 84 96	53	31 37 43	Bypass	Unframed Vertical Rising	Standard (28.5)	Polyresin
1	Bench Hi-Line	48 60 72 84 96	65	31 37 43	Bypass	Unframed Vertical Rising	Standard (28.5) Extended (36)	Polyresin
1	Floor	48 60 72 84 96	90	31 37 43	Bypass	Unframed Vertical Rising	Standard (66.5)	Polyresin

* Depths 31" and 37" are ADA compliant options.



Bypass and restricted bypass
vertical rising sash



Restricted bypass
combination sash

Restricted Bypass

SERIES	STYLE	WIDTH	HEIGHT	DEPTH*	AIRFLOW	SASH	OPENING	LINER
1	Bench	48 60 72 84 96	53	31 37 43	Restricted Bypass	Unframed Vertical Rising Combination	Standard (28.5)	Polyresin
1	Bench Hi-Line	48 60 72 84 96	65	31 37 43	Restricted Bypass	Unframed Vertical Rising Combination	Standard (28.5) Extended (36)	Polyresin
1	Floor	48 60 72 84 96	90	35 41 47	Restricted Bypass	Unframed Vertical Rising Combination	Standard (66.5)	Polyresin

* Depths 31" and 37" are ADA compliant options.



CONCEPT® FUME HOODS

Exhaust Volumes

Concept Bench Fume Hood with Vertical Sash

FUME HOOD WIDTH	EXHAUST VOLUME	VERTICAL SASH OPENING HEIGHT	FACE VELOCITY	STATIC PRESSURE	EXHAUST COLLAR SIZE
48" (1219 mm)	484	18* 28.50*	100 60	.09"	6" x 15" (152 x 381 mm)
60" (1524 mm)	634	18* 28.50*	100 60	.09"	6" x 23" (152 x 584 mm)
72" (1829 mm)	784	18* 28.50*	100 60	.13"	6" x 23" (152 x 584 mm)
84" (2134 mm)	934	18* 28.50*	100 60	.15"	6" x 26" (152 x 660 mm)
96" (2438 mm)	1084	18* 28.50*	100 60	.09"	6" x 30" (152 x 762 mm)

* 28.50" and 24" opening is for setup only; operating position is an 18" high sash opening.

Concept Bench Fume Hood with Combination Sash

FUME HOOD WIDTH	EXHAUST VOLUME	SASH OPENING			FACE VELOCITY		STATIC PRESSURE	EXHAUST COLLAR SIZE
		VERTICAL SASH HEIGHT	HORIZONTAL SASH HEIGHT	SLIDING SASH PANELS	VERTICAL**	HORIZONTAL		
48" (1219 mm)	400	18* 24*	27 x 17.375	2	80 60	100	.07"	6" x 15" (152 x 381 mm)
60" (1524 mm)	540	18* 24*	27 x 23.375	2	80 60	100	.07"	6" x 23" (152 x 584 mm)
72" (1829 mm)	650	18* 24*	27 x 28.25	4	80 60	100	.11"	6" x 23" (152 x 584 mm)
84" (2134 mm)	790	18* 24*	27 x 34.25	4	80 60	100	.13"	6" x 26" (152 x 660 mm)
96" (2438 mm)	930	18* 24*	27 x 40.25	4	80 60	100	.07"	6" x 30" (152 x 762 mm)

** Vertical face velocities – nominal

Concept Bench Fume Hood with Horizontal Sash

Exhaust volumes based on 100 FPM thru 28" opening, bypass* area included

FUME HOOD WIDTH	EXHAUST VOLUME (CFM)	FACE VELOCITY (NOMINAL)	STATIC PRESSURE LOSS (INCHES W.G.)	HORIZONTAL SASH OPENING (HEIGHT X WIDTH)
48" (1219 mm)	420	100	.08"	28 x 17.375
60" (1524 mm)	560	100	.09"	28 x 23.375
72" (1829 mm)	680	100	.12"	28 x 28.25
84" (2134 mm)	825	100	.14"	28 x 34.25
96" (2438 mm)	965	100	.09"	28 x 40.25

*Bypass area is the interior width x 3" in. (1" at the sill + 2" above the sash, behind the lintel panel)



CONCEPT® FUME HOODS

Exhaust Volumes

Concept Hi-Line Fume Hood with Vertical Sash

FUME HOOD WIDTH	EXHAUST VOLUME	VERTICAL SASH OPENING HEIGHT	FACE VELOCITY	STATIC PRESSURE	EXHAUST COLLAR SIZE
48" (1219 mm)	510	18* 28.50*	100 65	.09"	6" x 15" (152 x 381 mm)
60" (1524 mm)	670	18* 28.50*	100 65	.09"	6" x 23" (152 x 584 mm)
72" (1829 mm)	825	18* 28.50*	100 65	.13"	6" x 23" (152 x 584 mm)
84" (2134 mm)	980	18* 28.50*	100 65	.15"	6" x 26" (152 x 660 mm)
96" (2438 mm)	1150	18* 28.50*	100 65	.09"	6" x 30" (152 x 762 mm)

* 28.50" opening is for setup only; operating position is an 18" high sash opening

Concept Hi-Line Fume Hood with Combination Sash

FUME HOOD WIDTH	EXHAUST VOLUME	SASH OPENING			FACE VELOCITY		STATIC PRESSURE	EXHAUST COLLAR SIZE
		VERTICAL SASH HEIGHT	HORIZONTAL SASH HEIGHT	SLIDING SASH PANELS	VERTICAL	HORIZONTAL		
48" (1219 mm)	510	18* 28.50*	30.5 x 17.375	2	105 65	110	.08"	6" x 15" (152 x 381 mm)
60" (1524 mm)	670	18* 28.50*	30.5 x 23.375	2	105 65	110	.09"	6" x 23" (152 x 584 mm)
72" (1829 mm)	825	18* 28.50*	30.5 x 28.25	4	105 65	110	.12"	6" x 23" (152 x 584 mm)
84" (2134 mm)	980	18* 28.50*	30.5 x 34.25	4	105 65	110	.13"	6" x 26" (152 x 660 mm)
96" (2438 mm)	1150	18* 28.50*	30.5 x 40.50	4	105 65	110	.09"	6" x 30" (152 x 762 mm)

* 28.50" opening is for setup only; operating position is an 18" high sash opening

Concept Hi-Line Fume Hood with Horizontal Sash

Exhaust volumes based on 100 FPM 31.50" vertical sash opening, bypass* area included

FUME HOOD WIDTH	EXHAUST VOLUME (CFM)	FACE VELOCITY (NOMINAL)	STATIC PRESSURE LOSS (INCHES W.G.)	HORIZONTAL SASH OPENING (HEIGHT X WIDTH)
48" (1219 mm)	460	100	.08	31.50 x 17.375
60" (1524 mm)	620	100	.09	31.50 x 23.375
72" (1829 mm)	750	100	.12	31.50 x 28.25
84" (2134 mm)	910	100	.14	31.50 x 34.25
96" (2438 mm)	1060	100	.09	31.50 x 40.25

*Bypass area is the interior width x 3" in. (1" at the sill + 2" above the sash, behind the lintel panel)



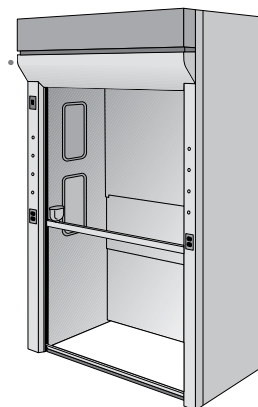
CONCEPT® FUME HOODS

Exhaust Volumes

Concept Floor-Mounted with Vertical Sash Exhaust Volumes

FUME HOOD WIDTH	BASED ON UPPER SASH @ 100 FPM FULL OPEN			BASED ON UPPER SASH @100 FPM OPEN 18"		
	EXHAUST VOLUME (CFM)	TOP VERTICAL SASH HEIGHT*	STATIC PRESSURE	EXHAUST VOLUME	TOP SASH HEIGHT*	STATIC PRESSURE
48" (1219 mm)	790	28.5" (724 mm)	.17	508	18" (457 mm)	.10
60" (1524 mm)	1035	28.5" (724 mm)	.19	666	18" (457 mm)	.09
72" (1829 mm)	1285	28.5" (724 mm)	.30	824	18" (457 mm)	.14
84" (2134 mm)	1520	28.5" (724 mm)	.28	983	18" (457 mm)	.15
96" (2438 mm)	1770	28.5" (724 mm)	.30	1141	18" (457 mm)	.11

* Both sashes raise for setup only, operating position is an 18" high sash opening

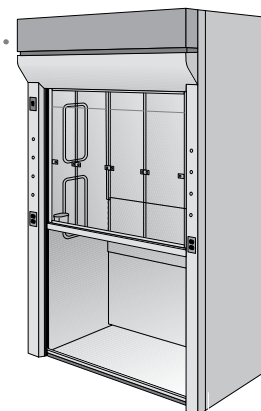


Concept Floor-Mounted with Combination Sash Exhaust Volumes

FUME HOOD WIDTH	Based on Upper Sash @ 100 FPM Full Open			Based on Upper Sash @100 FPM open 18"				
	Exhaust Volume (CFM)	Top Vertical Sash Height*	Static Pressure	Exhaust Volume	Top Sash Height*	Static Pressure	18" Face Velocity	Horizontal Face Velocity**
48" (1219 mm)	790	28.5" (724 mm)	.17	508	18" (457 mm)	.10	100	110
60" (1524 mm)	1035	28.5" (724 mm)	.19	666	18" (457 mm)	.09	100	110
72" (1829 mm)	1285	28.5" (724 mm)	.30	824	18" (457 mm)	.14	100	110
84" (2134 mm)	1520	28.5" (724 mm)	.28	983	18" (457 mm)	.15	100	110
96" (2438 mm)	1770	28.5" (724 mm)	.30	1141	18" (457 mm)	.11	100	110

* Both sash assemblies raise for setup only, providing a 66.50" clearance; however the operating positions are an 18" vertical sash opening on or with the top vertical component closed and the sliding panels opened

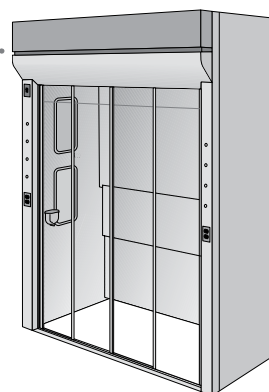
** With both vertical sashes closed



Concept Floor-Mounted with Horizontal Sliding Sash Exhaust Volumes

(Based on Two Sashes Open @ 100 FPM)

Fume Hood Width	Exhaust Volume (CFM)	Vertical Sash Opening	Static Pressure	Sash Opening Width
72" (1829 mm)	1485	66.50" (1689 mm)	.35	28.50" (724 mm)
84" (2134 mm)	1770	66.50" (1689 mm)	.35	35.50" (902 mm)
96" (2438 mm)	2070	66.50" (1689 mm)	.35	41.50" (1054 mm)





OVERVIEW

The **SafeAire II Fume Hood** from **Hamilton Laboratory Solutions** has a proven track-record as a high-performing, quality hood enclosure that ensures the safety of your lab while enhancing the efficiency of tests and experiments that involve hazardous materials. Standard features include laminated safety glass sash, LED interior lighting, chemical resistant epoxy resin work surface, and GFCI receptacles for added safety of your lab team. **SafeAire II** offers a variety of customizable sizes and options to fit your workflow needs.

STANDARD FEATURES

- **Size Options:** 3', 4', 5', 6' & 8' STD Widths
31", 36", 37" & 41" Depths
- **Interior Lighting:** LED
- **Laminated Safety Glass Sash:** Available in vertical rising, horizontal, and combination
- Low-profile air foil
- Extended 35" viewing height allows for comfortable working access (only available as option with High-Line Hood)
- Full frame construction
- Secondary trough for added safety
- Two-sided demonstration, high-line and floor-mounted hoods available

- Hoods will maintain safe containment @100FPM to 100FPM face velocity
- **Fixtures:** Choose from a variety of options from WaterSaver
- Rectangular duct connection collar promotes better airflow and quieter operation
- **Exterior:** SEFA powder coated steel
- ANSI/ASHRAE 110-216 Tested
- UL Listed

Note: The SafeAire II Fume Hood can be utilized in variable air volume (VAV) or constant volume applications. VAV fume hoods can be factory prepped to receive a VAV controller field installed by your mechanical contractor. Consult your mechanical engineer, HVAC professional or Hamilton representative to determine the appropriate fume hood type needed.



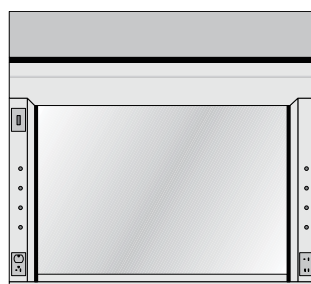
SAFEAIRE II® FUME HOODS



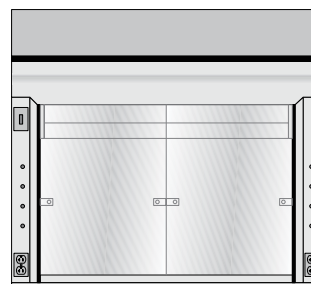
Bypass

SERIES	STYLE	36" WIDTH	HEIGHT	DEPTH*	AIRFLOW	SASH**	OPENING	LINER
2	Bench	48 60 72 96	53	31 36 37 43	Bypass	Unframed Vertical Rising Framed Vertical Rising	Standard (28.5)	Polyresin
2	Bench Hi-Line	48 60 72 96	65	31 36 37 43	Bypass	Unframed Vertical Rising Framed Vertical Rising	Standard (28.5) Extended (36)	Polyresin
2	Floor	48 60 72 96	90	35 36 41 47	Bypass	Unframed Vertical Rising Framed Vertical Rising	Standard (66.5)	Polyresin

* Depths 31"/36"/37" are ADA compliant options. ** 36" Framed sash not available in 36"W.



Bypass and restricted bypass
vertical rising sash



Restricted bypass
combination sash

Restricted Bypass

SERIES	STYLE	36" WIDTH	HEIGHT	DEPTH*	AIRFLOW	SASH	OPENING	LINER
2	Bench	48 60 72 96	53	31 37 43	Restricted Bypass	Combination	Standard (28.5)	Polyresin
2	Bench Hi-Line	48 60 72 96	65	31 37 43	Restricted Bypass	Combination	Standard (28.5) Extended (36)	Polyresin
2	Floor	48 60 72 96	90	32 38 44	Restricted Bypass	Combination	Standard (66.5)	Polyresin

* Depths 31" and 37" are ADA compliant options. ** 36" Framed option not available.



SAFEAIRE II® FUME HOODS

SafeAire II Bench Exhaust Volumes

FUME HOOD SIZE	COLLAR SIZE	100 FPM Vertical Sash 28.50" Opening*		100 FPM Vertical Sash 18" Opening*		100 FPM Combination Sash 28.50" Opening	
		CFM	SP	CFM	SP	CFM	SP
36" (914 mm)	6" x 9" (152 x 229 mm)	520	.22	360	.12	N/A	N/A
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09	420	.06
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09	570	.07
72" (1829 mm)	6" x 23" (152 x 584 mm)	1250	.27	785	.13	690	.12
96" (2438 mm)	6" x 30" (152 x 762 mm)	1710	.26	1081	.09	980	.08

* Vertical 28-1/2" sash opening is for setup only; operating position is an 18" opening
Combination sash volume is based on vertically closed horizontally open sash position.

SaveAire II Hi-Line Exhaust Volumes

FUME HOOD SIZE	COLLAR SIZE	100 FPM Vertical Sash 28.50" Opening*		100 FPM Vertical Sash 18" Opening*		100 FPM Vertical Sash 36" Opening*		100 FPM Horizontal Sash 28.50" Opening*		100 FPM Horizontal Sash 36" Opening*	
		CFM	SP	CFM	SP	CFM	SP	CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09	960	.27	420	.06	510	.06
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09	1260	.28	570	.07	690	.07
72" (1829 mm)	6" x 23" (152 x 584 mm)	1250	.27	785	.13	1560	.35	690	.12	830	.12
96" (2438 mm)	6" x 30" (152 x 762 mm)	1710	.26	1081	.09	2160	.34	980	.08	1180	.08

* Vertical 28.50" (724 mm) and 36" (914 mm) sash openings are for setup only; operating position is an 18" (45.7 mm) opening.
Combination sash volume is based on vertically closed horizontally open sash position

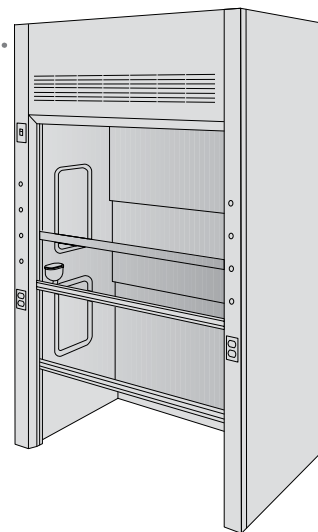


SAFEAIRE II® FUME HOODS

SafeAire II Floor-Mounted Exhaust Volumes

FUME HOOD SIZE	COLLAR SIZE	100 FPM @ 31.50" Vertical Sash Opening*		100 FPM @ Combination (Horizontal) Sash Opening*	
		CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	480	.09
60" (1524 mm)	6" x 23" (152 x 584 mm)	1110	.20	670	.09
72" (1829 mm)	6" x 23" (152 x 584 mm)	1380	.32	790	.13
96" (2438 mm)	6" x 30" (152 x 762 mm)	1900	.29	1125	.10

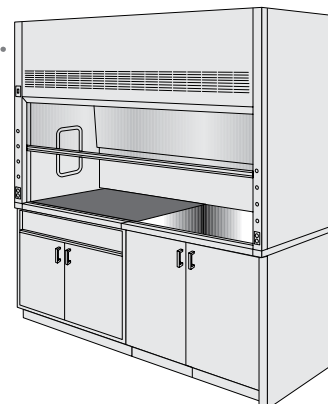
* Floor-mounted fume hood should be operated through a maximum face opening of 18" (457 mm) through a single sash with the other sash closed.



SafeAire II Combination Bench/Floor-Mounted Constant Volume Exhaust Volumes

FUME HOOD SIZE	COLLAR SIZE	100 FPM @ 18" Sash Opening*	
		CFM	SP
96" (2438 mm)	6" x 30" (152 x 762 mm)	1710	.26

* 28.50" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening

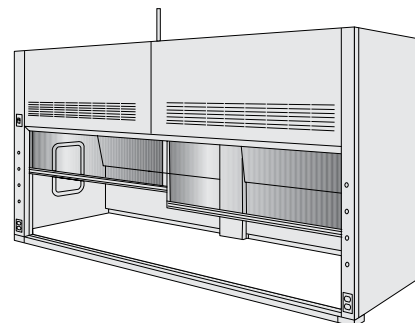


SafeAire II Framed Postless Exhaust Volumes

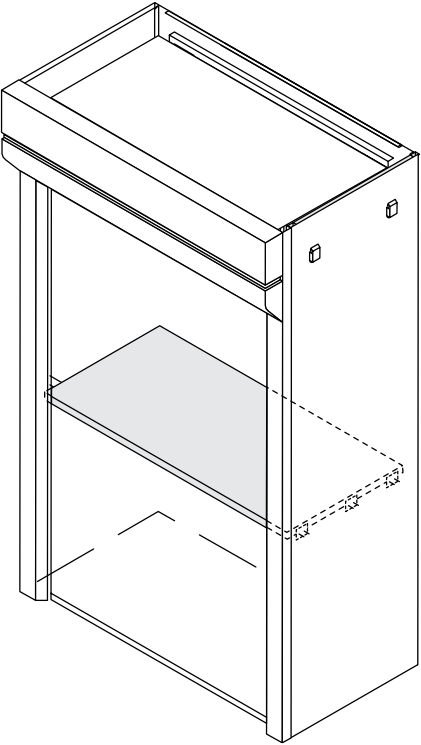
(Based on both sashes open)

FUME HOOD SIZE	COLLAR SIZE	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*	
		CFM	SP	CFM	SP
72" (1829 mm)	6" x 23" (152 x 584 mm)	1250	.27	785	.13
96" (2438 mm)	6" x 30" (152 x 762 mm)	1710	.26	1081	.09
120" (3048 mm)	6" x 23" (152 x 584 mm)	2180	.18	1384	.10
144" (3658 mm)	6" x 23" (152 x 584 mm)	2660	.29	1684	.15

* 28.50" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening



DISTALLATION SHELF FOR FLOOR-MOUNTED FUME HOOD



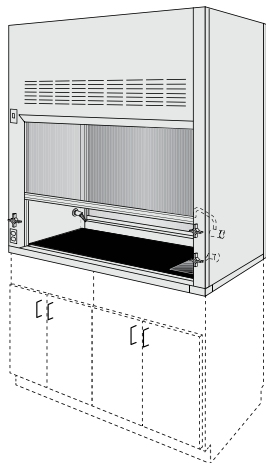
- Stainless steel shelf attaches to side walls

SPECTRE & CONCEPT			
WIDTH	DEPTH		
	35" (889mm)	41" (1041mm)	47" (1194mm)
48" (1219 mm)	HSH4835	HSH4841	HSH4847
60" (1524 mm)	HSH6035	HSH6041	HSH6047
72" (1829 mm)	HSH7235	HSH7241	HSH7247
84" (2134 mm)	HSH8435	HSH8441	HSH8447
96" (2438 mm)	HSH9635	HSH9641	HSH9647

SAFEAIRE II			
WIDTH	DEPTH		
	32" (813mm)	38" (965mm)	44" (1118mm)
48" (1219 mm)	HSH4832	HSH4838	HSH4844
60" (1524 mm)	HSH6032	HSH6038	HSH6044
72" (1829 mm)	HSH7232	HSH7238	HSH7244
84" (2134 mm)	HSH8432	HSH8438	HSH8444
96" (2438 mm)	HSH9632	HSH9638	HSH9644



DEMONSTRATION FUME HOOD

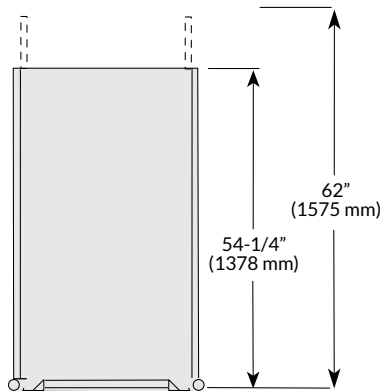


Demo Fume Hood Exhaust Volumes (Based on sash open one side only)

SERIES	STYLE	WIDTH	HEIGHT	DEPTH	AIRFLOW	SASH	SETUP OPENING	INTERIOR
3	Bench	48 60 72	53	32	Restricted Bypass	Unframed Vertical Rising	Standard (28.5)	Polyresin

DEPTH	LINER MATERIAL	PRODUCT NO.
32" (813 mm)	Polyresin	54L2825P0

Order base cabinets separately

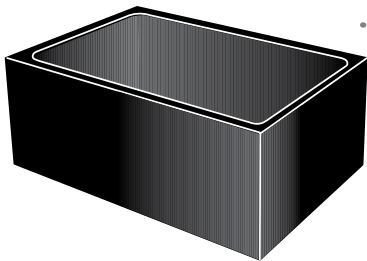
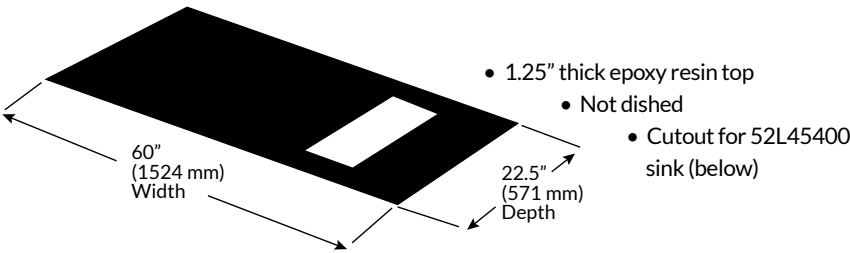


END VIEW

- Designed to permit demonstration and observation from either side
- Can be used freestanding or positioned in a wall between a classroom and a prep room
- Two full-view vertically rising sashes made of 7/32" (6 mm) laminated safety glass with recessed pulls (one each side)
- One 3-way, black, light switch and flush plate mounted on each side of unit
- Sash interlock is standard allowing only one sash to be opened at a time
- Standard fixtures include: (1) cold water gooseneck faucet (2) single gas fixtures; (2) black duplex GFCI outlets (max two fixtures per slide).
- Two exhaust collars (Maximum two fixtures per side)

Demonstration Hood Accessories

WIDTH	PRODUCT NO.
48" (1219 mm)	TPE4822DEMO
60" (1524 mm)	TPE6022DEMO
72" (1829 mm)	TPE7222DEMO



- Molded epoxy resin sink
- Internal dimensions 16" x 8" x 7" (deep)
- Order sink hangars separately

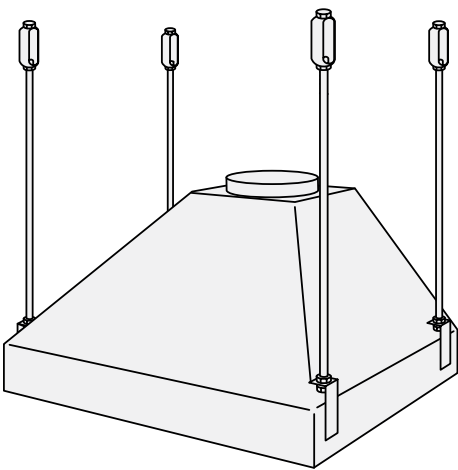
PRODUCT NO.
SKE160807



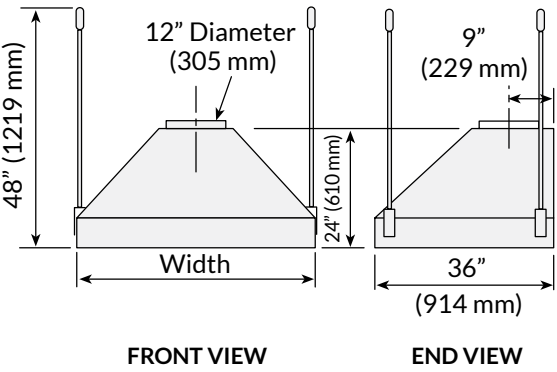
SPECIALTY EXHAUST SYSTEMS

Canopy Fume Hoods

- Designed to collect and exhaust heat, steam and odors when mounted above hot plates, water baths or portable equipment
- Equipped with baffles to maximize slot velocities and control fumes
- Steel with reagent-resistant finish (Optional stainless steel; available with extended leadtime)
- Four 48" (1219 mm) rods with coupler for additional ceiling height
- Connecting ductwork not included
- Exhaust collar is 2" (51 mm) high with 12" (305 mm) diameter, located on a center line 9" (229 mm) from back of fume hood



WIDTH	PRODUCT NO.
36" (914 mm)	CNP36FH
48" (1219 mm)	CNP48FH
60" (1524 mm)	CNP60FH
72" (1829 mm)	CNP72FH
84" (2134 mm)	CNP84FH
96" (2438 mm)	CNP96FH



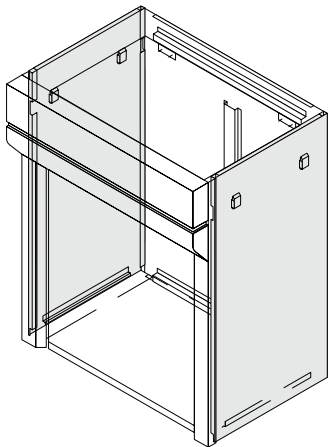
FUME HOOD SIZE	50FPM Through Each Open Face	
	CFM	SP
36" (914 mm)	1050	.17
48" (1219 mm)	1225	.20
60" (1524 mm)	1400	.30
72" (1829 mm)	1575	.37
84" (2134 mm)	1750	.45
96" (2438 mm)	1925	.57



PANELS

- Panels for sides and rear of Spectre, Concept fume hood superstructures and SafeAire II
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

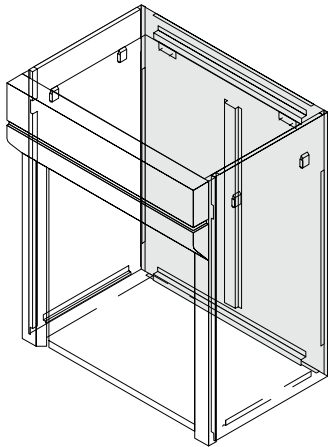
Side Enclosure Panels (Replacement)



- Use to enclose one or both sides of Spectre, Concept or SafeAire II fume hood superstructures
- Product number is for single panel

HOOD DEPTH	HEIGHT		
	Standard Superstructure	Hi-Line Superstructure	Demonstration Hood
31.25" (794 mm)	EC13153B	EC23166H	-
32" (813 mm)	-	-	EC33253B
36" (914 mm)	EC13653B	EC23666H	-
37.25" (946 mm)	EC13753B	EC23766H	-
43.25" (1099 mm)	EC14353B	EC24366H	-

Finished Back Panels (Optional Feature)



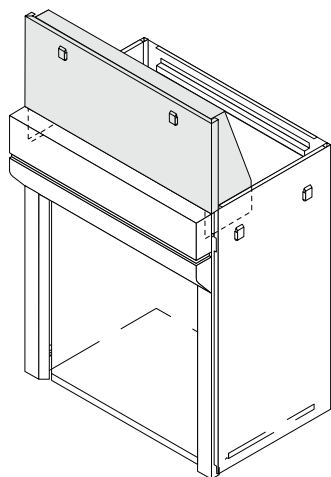
- Use to enclose the back of Spectre or Concept fume hood superstructures

HOOD WIDTH	HEIGHT	
	Standard Superstructure	Hi-Line Superstructure
48" (1219 mm)	HB14853B	HB14865H
60" (1524 mm)	HB16053B	HB16065H
72" (1829 mm)	HB17253B	HB17265H
84" (2134 mm)	HB18453B	HB17265H
96" (2438 mm)	HB19653B	HB19665H



CEILING ENCLOSURES FOR SPECTRE & CONCEPT

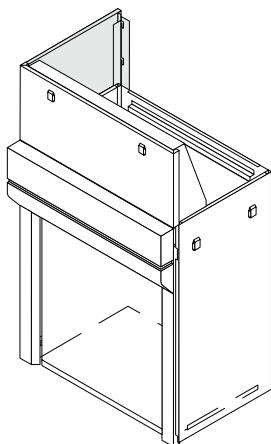
Front Ceiling and Sash Enclosure Panels



- Use to enclose space between front top and ceiling superstructure, also provides enclosure for raised sash

HOOD WIDTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
48" (1219 mm)	EC14817F	EC14820F	EC14828F	EC14832F
60" (1524 mm)	EC16017F	EC16020F	EC16028F	EC16032F
72" (1829 mm)	EC17217F	EC17220F	EC17228F	EC17232F
84" (2134 mm)	EC18417F	EC18420F	EC18428F	EC18432F
96" (2438 mm)	EC19617F	EC19620F	EC19628F	EC19632F

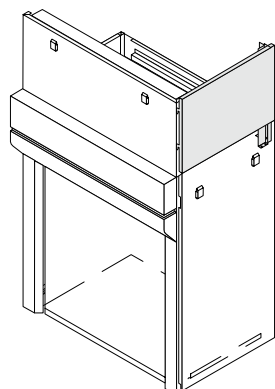
Left Ceiling Enclosure Panels for Superstructures



- Use to enclose space at left side between lower left side panel and ceiling
- Requires front ceiling and sash enclosure panels

HOOD DEPTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
31.25" (794 mm)	EC13117L	EC13120L	EC13128L	EC13132L
37.25" (946 mm)	EC13717L	EC13720L	EC13728L	EC13732L
43.25" (1099 mm)	EC14317L	EC14320L	EC14328L	EC14332L

Right Ceiling Enclosure Panels for Superstructures



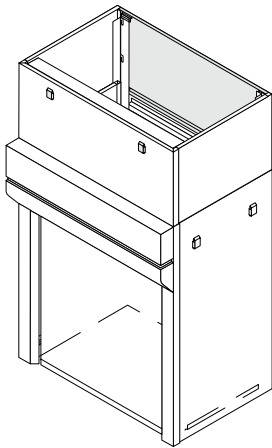
- Use to enclose space at right side between lower right side panel and ceiling
- Requires front ceiling and sash enclosure panels

HOOD DEPTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
31.25" (794 mm)	EC13117R	EC13120R	EC13128R	EC13132R
37.25" (946 mm)	EC13717R	EC13720R	EC13728R	EC13732R
43.25" (1099 mm)	EC14317R	EC14320R	EC14328R	EC14332R



CEILING ENCLOSURES

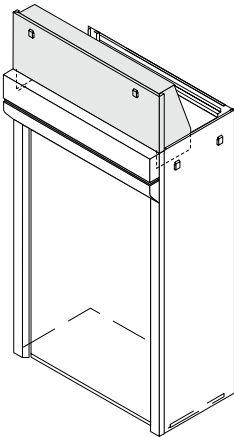
Upper Rear Ceiling Enclosure Panels for Superstructures



- Use to enclose space between lower rear panel and ceiling of Spectre or Concept fume hoods
- Requires front ceiling and sash enclosure, left and right ceiling enclosure panels

HOOD WIDTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
48" (1219 mm)	EC14817UB	EC14820UB	EC14828UB	EC14832UB
60" (1524 mm)	EC16017UB	EC16020UB	EC16028UB	EC16032UB
72" (1829 mm)	EC17217UB	EC17220UB	EC17228UB	EC17232UB
84" (2134 mm)	EC18417UB	EC18420UB	EC18428UB	EC18432UB
96" (2438 mm)	EC19617UB	EC19620UB	EC19628UB	EC19632UB

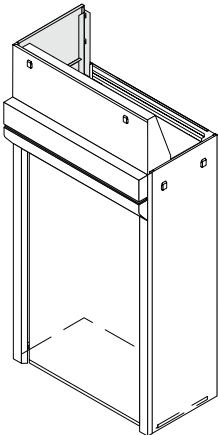
Front Ceiling and Sash Enclosure Panels for Floor-Mounted Fume Hoods



- Use to enclose space between front top and ceiling
- Provides enclosure for raised sash

HOOD WIDTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
48" (1219 mm)	EC14817FF	EC14820FF	EC14828FF	EC14832FF
60" (1524 mm)	EC16017FF	EC16020FF	EC16028FF	EC16032FF
72" (1829 mm)	EC17217FF	EC17220FF	EC17228FF	EC17232FF
84" (2134 mm)	EC17217FF	EC18420FF	EC18428FF	EC18432FF
96" (2438 mm)	EC19617FF	EC19620FF	EC19628FF	EC19632FF

Left Ceiling Enclosure Panel for Floor-Mounted Fume Hoods



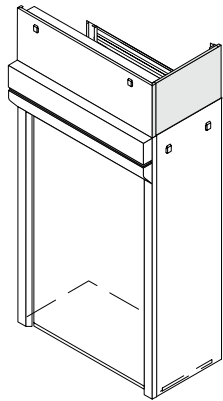
- Use to enclose space at left side of Concept floor-mounted fume hood between lower left side panel and ceiling
- Requires front ceiling and sash enclosure panel

HOOD DEPTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
35" (889 mm)	EC13517LF	EC13520LF	EC13528LF	EC13532LF
41" (1041 mm)	EC14117LF	EC14120LF	EC14128LF	EC14132LF
47" (1194 mm)	EC14717LF	EC14720LF	EC14728LF	EC14732LF



CEILING ENCLOSURES

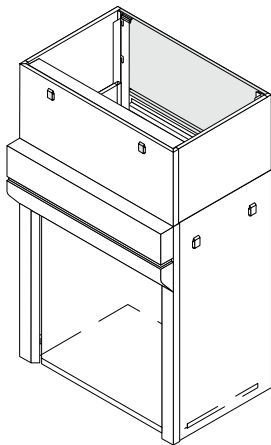
Right Ceiling Enclosure Panel for Floor-Mounted Fume Hoods



- Use to enclose space at left side of Concept floor-mounted fume hood between lower right side panel and ceiling
- Requires front ceiling and sash enclosure panel

HOOD DEPTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
35" (889 mm)	EC13517RF	EC13520RF	EC13528RF	EC13532RF
41" (1041 mm)	EC14117RF	EC14120RF	EC14128RF	EC14132RF
47" (1194 mm)	EC14717RF	EC14720RF	EC14728RF	EC14732RF

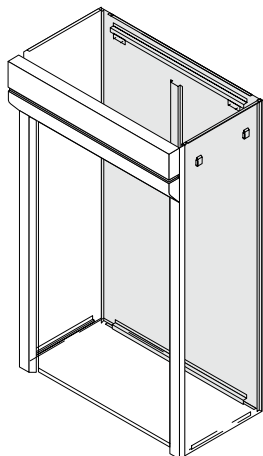
Upper Back Ceiling Enclosure Panels for Floor-Mounted Fume Hoods



- Use to enclose space between lower back panel and ceiling of Concept floor-mounted fume hoods
- Requires front ceiling and sash enclosure, left and right ceiling enclosure panels

HOOD WIDTH	HEIGHT			
	17.50" (445 mm)	20.50" (521 mm)	28.50" (724 mm)	32.50" (826 mm)
48" (1219 mm)	EC14817UB	EC14820UB	EC14828UB	EC14832UB
60" (1524 mm)	EC16017UB	EC16020UB	EC16028UB	EC16032UB
72" (1829 mm)	EC17217UB	EC17220UB	EC17228UB	EC17232UB
84" (2134 mm)	EC18417UB	EC18420UB	EC18428UB	EC18432UB
96" (2438 mm)	EC19617UB	EC19620UB	EC19628UB	EC19632UB

Lower Back Ceiling Enclosure Panels for Floor-Mounted Fume Hoods



- Use to enclose space between lower back panel and ceiling of Concept floor-mounted fume hoods
- Requires front ceiling and sash enclosure, left and right ceiling enclosure panels

HOOD WIDTH	PRODUCT NO.
48" (1219 mm)	HB14890F
60" (1524 mm)	HB16090F
72" (1829 mm)	HB17290F
84" (2134 mm)	HB18490F
96" (2438 mm)	HB19690F



CEILING ENCLOSURES FOR SAFEAIRE II

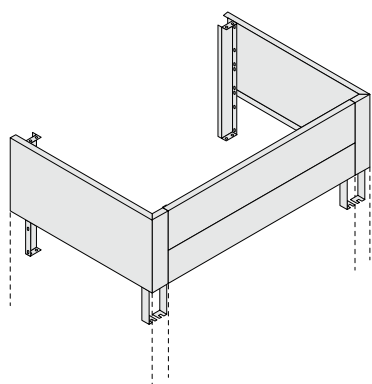
- Provides finished appearance between fume hood and ceiling
- Conceals and protects fume hood ductwork, electrical conduit and vertical service supply lines
- Finished to match superstructure
- 12.50" (318 mm) height can be cut down in field for ceilings as low as 8 feet
- Bench and high line only
- Use to enclose space between ceiling and top of fume hood superstructure
- Made of steel, finished to match fume hood superstructure

- Installation hardware included
- Lower front panel is removable for access to light fixture

Installation information:

With suspended ceilings, it is suggested that the enclosure assembly extend to the bottom of the ceiling. The hung ceiling should extend over the top of the fume hood and be trimmed around the mechanical connections to ensure proper room pressure control of the HVAC system.

Enclosures for Bench and Hi-Line Fume Hoods



12.50" (318 mm) High

WIDTH	HOOD DEPTH			
	31.25" (794 mm)	36" (914 mm)	37.25" (946 mm)	43.25" (1099 mm)
36" (914 mm)	EC2363112BH	EC2363612BH	EC2363712BH	EC2364312BH
48" (1219 mm)	EC2483112BH	EC2483612BH	EC2483712BH	EC2484312BH
60" (1524 mm)	EC2603112BH	EC2603612BH	EC2603712BH	EC2604312BH
72" (1829 mm)	EC2723112BH	EC2723612BH	EC2723712BH	EC2724312BH
96" (2438 mm)	EC2963112BH	EC2963612BH	EC2963712BH	EC2964312BH

17" (431 mm) High

WIDTH	HOOD DEPTH			
	31.25" (794 mm)	36" (914 mm)	37.25" (946 mm)	43.25" (1099 mm)
36" (914 mm)	EC2363117BH	EC2363617BH	EC2363717BH	EC2364317BH
48" (1219 mm)	EC2483117BH	EC2483617BH	EC2483717BH	EC2484317BH
60" (1524 mm)	EC2603117BH	EC2603617BH	EC2603717BH	EC2604317BH
72" (1829 mm)	EC2723117BH	EC2723617BH	EC2723717BH	EC2724317BH
96" (2438 mm)	EC2963117BH	EC2963617BH	EC2963717BH	EC2964317BH

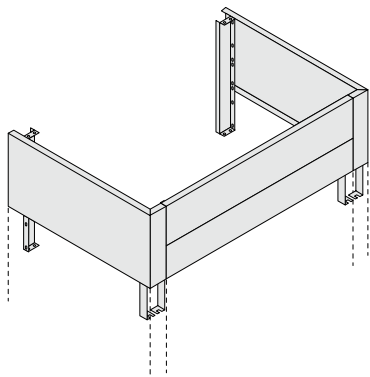
24.50" (622 mm) High

WIDTH	HOOD DEPTH			
	31.25" (794 mm)	36" (914 mm)	37.25" (946 mm)	43.25" (1099 mm)
36" (914 mm)	EC2363124BH	EC2363624BH	EC2363724BH	EC2364324BH
48" (1219 mm)	EC2483124BH	EC2483624BH	EC2483724BH	EC2484324BH
60" (1524 mm)	EC2603124BH	EC2603624BH	EC2603724BH	EC2604324BH
72" (1829 mm)	EC2723124BH	EC2723624BH	EC2723724BH	EC2724324BH
96" (2438 mm)	EC2963124BH	EC2963624BH	EC2963724BH	EC2964324BH



CEILING ENCLOSURES FOR SAFEAIRE II

Enclosures for Bench and Hi-Line Fume Hoods (continued)



29" (737 mm) High

WIDTH	HOOD DEPTH			
	31.25" (794 mm)	36" (914 mm)	37.25" (946 mm)	43.25" (1099 mm)
36" (914 mm)	EC2363129BH	EC2363629BH	EC2363729BH	EC2364329BH
48" (1219 mm)	EC2483129BH	EC2483629BH	EC2483729BH	EC2484329BH
60" (1524 mm)	EC2603129BH	EC2603629BH	EC2603729BH	EC2604329BH
72" (1829 mm)	EC2723129BH	EC2723629BH	EC2723729BH	EC2724329BH
96" (2438 mm)	EC2963129BH	EC2963629BH	EC2963729BH	EC2964329BH

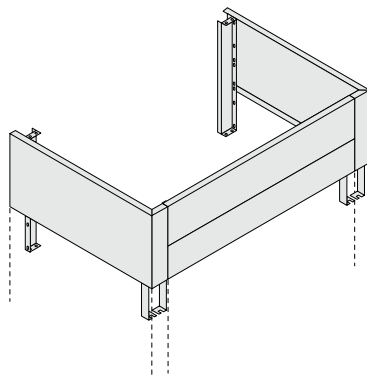
36.50" (927 mm) High

WIDTH	HOOD DEPTH			
	31.25" (794 mm)	36" (914 mm)	37.25" (946 mm)	43.25" (1099 mm)
36" (914 mm)	EC2363136BH	EC2363636BH	EC2363736BH	EC2364336BH
48" (1219 mm)	EC2483136BH	EC2483636BH	EC2483736BH	EC2484336BH
60" (1524 mm)	EC2603136BH	EC2603636BH	EC2603736BH	EC2604336BH
72" (1829 mm)	EC2723136BH	EC2723636BH	EC2723736BH	EC2724336BH
96" (2438 mm)	EC2963136BH	EC2963636BH	EC2963736BH	EC2964336BH



CEILING ENCLOSURES FOR SAFEAIRE II

Enclosures for Floor-Mounted Fume Hoods



24.50" (622 mm) High

WIDTH	HOOD DEPTH		
	32.375" (822 mm)	38.375" (974 mm)	44.375" (1126 mm)
48" (1219 mm)	EC2483224F	EC2483824F	EC2484424F
60" (1524 mm)	EC2603224F	EC2603824F	EC2604424F
72" (1829 mm)	EC2723224F	EC2723824F	EC2724424F
96" (2438 mm)	EC2963224F	EC2963824F	EC2964424F

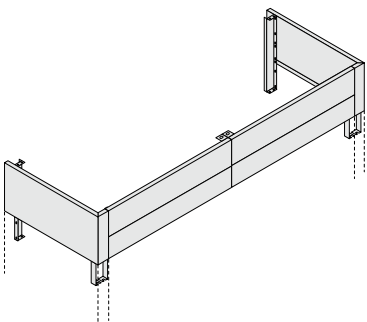
29" (737 mm) High

WIDTH	HOOD DEPTH		
	32.375" (822 mm)	38.375" (974 mm)	44.375" (1126 mm)
48" (1219 mm)	EC2483229F	EC2483829F	EC2484429F
60" (1524 mm)	EC2603229F	EC2603829F	EC2604429F
72" (1829 mm)	EC2723229F	EC2723829F	EC2724429F
96" (2438 mm)	EC2963229F	EC2963829F	EC2964429F

36.50" (927 mm) High

WIDTH	HOOD DEPTH		
	32.375" (822 mm)	38.375" (974 mm)	44.375" (1126 mm)
48" (1219 mm)	EC2483236F	EC2483836F	EC2484436F
60" (1524 mm)	EC2603236F	EC2603836F	EC2604436F
72" (1829 mm)	EC2723236F	EC2723836F	EC2724436F
96" (2438 mm)	EC2963236F	EC2963836F	EC2964436F

Enclosures for Postless Sash Fume Hoods



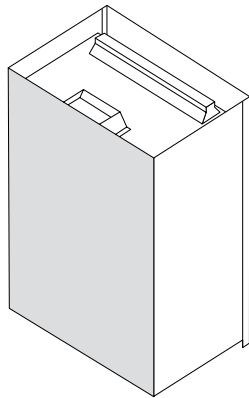
31-1/4" (794 mm) Depth

HEIGHT	WIDTH	
	120" (3048mm)	144" (3658mm)
12.5" (318mm)	EC21203112	EC21443112
17" (432mm)	EC21203117	EC21443117
24.5" (622mm)	EC21203124	EC21443124
29" (737mm)	EC21203129	EC21443129
36" (927mm)	EC21203136	EC21443136



ENCLOSURES FOR SAFEAIRE II

Finished Backs



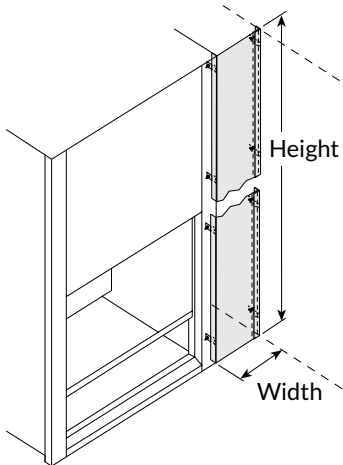
- Used to enclose rear of fume hood superstructure when exposed
- Made of steel, finished to match fume hood superstructure
- Installation hardware included
- These finished backs do not fit on fume hoods with stainless steel interiors; special detailing is required

Installation information:

With suspended ceilings, it is suggested that the enclosure assembly extend to the bottom of the ceiling. The hung ceiling should extend over the top of the fume hood and be trimmed around the mechanical connections to ensure proper room pressure control of the HVAC system.

WIDTH	FUME HOOD TYPE		
	Benchtop	Hi-Line	Floor-Mounted
36" (914 mm)	HB23653B	–	–
48" (1219 mm)	HB24853B	HB24865H	HB24890F
60" (1524 mm)	HB26053B	HB26065H	HB26090F
72" (1829 mm)	HB27253B	HB27265H	HB27290F
96" (2438 mm)	HB29653B	HB29665H	HB29690F

Filler Assembly



- Use to enclose space between wall and side of fume hood or space between rear of fume hood and wall
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

Installation information:

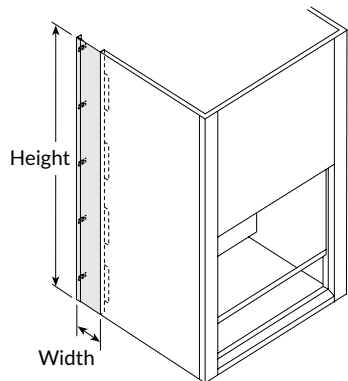
With suspended ceilings, it is suggested that the enclosure assembly extend to the bottom of the ceiling. The hung ceiling should extend over the top of the fume hood and be trimmed around the mechanical connections to ensure proper room pressure control of the HVAC system.

WIDTH	HEIGHT		
	Standard Superstructure 54.25" (1378 mm)	Hi-Line Superstructure 66.25" (1682 mm)	Floor-Mounted Hood 90" (2286 mm)
1" (25 mm)	HFL0154FE	HFL0166FE	HFL0190FE
2" (51 mm)	HFL0254FE	HFL0266FE	HFL0290FE
3" (76 mm)	HFL0354FE	HFL0366FE	HFL0390FE
6" (152 mm)	HFL0654FE	HFL0666FE	HFL0690FE



ENCLOSURES FOR SAFEAIRE II (Options)

Filler Assembly



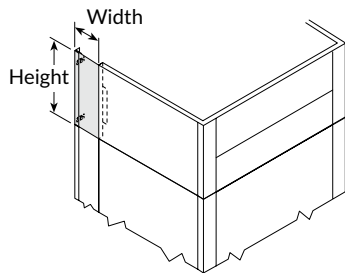
- Use to enclose space between wall and rear of fume hood superstructure or floor-mounted fume hood
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

Installation information:

With suspended ceilings, it is suggested that the enclosure assembly extend to the bottom of the ceiling. The hung ceiling should extend over the top of the fume hood and be trimmed around the mechanical connections to ensure proper room pressure control of the HVAC system.

WIDTH	HEIGHT		
	Standard Superstructure 54.25" (1378 mm)	Hi-Line Superstructure 66.25" (1682 mm)	Floor-Mounted Hood 90" (2286 mm)
1" (25 mm)	HFL0154CH	HFL0166CH	HFL0190CH
2" (51 mm)	HFL0254CH	HFL0266CH	HFL0290CH
3" (76 mm)	HFL0354CH	HFL0366CH	HFL0390CH
6" (152 mm)	HFL0654CH	HFL0666CH	HFL0690CH

Fillers



- Use to enclose space between wall and rear of ceiling enclosure
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

Installation information:

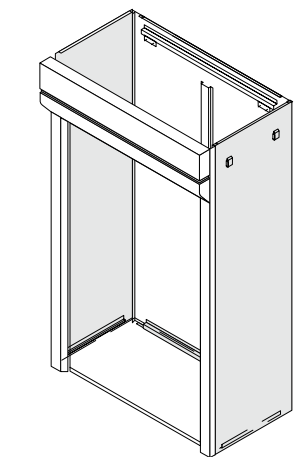
With suspended ceilings, it is suggested that the enclosure assembly extend to the bottom of the ceiling. The hung ceiling should extend over the top of the fume hood and be trimmed around the mechanical connections to ensure proper room pressure control of the HVAC system.

WIDTH	HEIGHT				
	12.50" (318 mm)	17" (432 mm)	24.50" (622 mm)	29" (737 mm)	36.50" (927 mm)
1" (25 mm)	HFC0112CRC	HFC0117CRC	HFC0124CRC	HFC0129CRC	HFC0136CRC
2" (51 mm)	HFC0112CRC	HFC0117CRC	HFC0124CRC	HFC0129CRC	HFC0136CRC
3" (76 mm)	HFC0312CRC	HFC0317CRC	HFC0324CRC	HFC0329CRC	HFC0336CRC
6" (152 mm)	HFC0612CRC	HFC0617CRC	HFC0624CRC	HFC0629CRC	HFC0636CRC



OPTIONS

Side Enclosure Panel for Floor-Mounted Fume Hoods (Replacement)

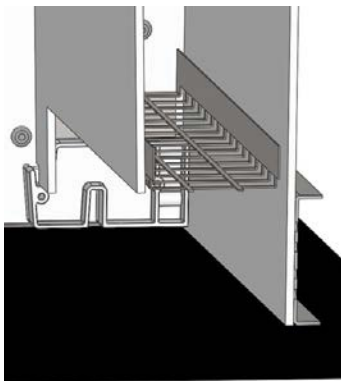


- Use to enclose one or both sides of Spectre/Concept and SafeAire II superstructures

SPECTRE/CONCEPT		
DEPTH		
35" (889mm)	41" (1041mm)	47" (1194mm)
EC13590F	EC14190F	EC14790F

SAFEAIRE II		
DEPTH		
32" (813mm)	38" (965mm)	44" (1118mm)
EC23290F	EC23890F	EC24490F

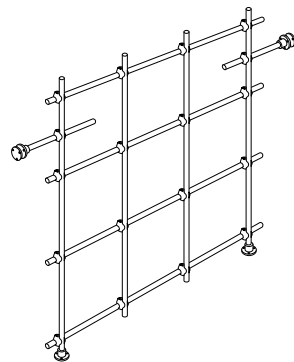
Replacement Baffle Screen



- Baffle screen prevents papers and loose items from being drawn into the duct

HOOD WIDTH	304 Stainless Steel Painted	304 Stainless Steel Unpainted	316 Stainless Steel Unpainted
36" (914 mm)	BFSP36	BFSS36	BFST36
48" (1219 mm)	BFSP48	BFSS48	BFST48
60" (1524 mm)	BFSP60	BFSS60	BFST60
72" (1829 mm)	BFSP72	BFSS72	BFST72
96" (2438 mm)	BFSP96	BFSS96	BFST96

Lattice Rod Assemblies



- For all Spectre, Concept, and SafeAire II fume hoods
- Solid 1/2" (13 mm) aluminum rod lattice to support interior fume hood apparatus
- Fastening hardware included

FUME HOOD WIDTH	PRODUCT NO:
48" (1219mm)	LAT48
60" (1524 mm)	LAT60
72" (1829 mm)	LAT72
96" (2438 mm)	LAT96



FIXTURES AND ACCESSORIES

Air Flow Alarm Monitor – AFA500

- Continuously monitors flow based on internal fume hood pressure and has field adjustable set points that will activate the alarm signal



Specifications:

Alarm range: 30-400 fpm (.15-2.0 m/s)
Field setup: One-point velocity calibration
Accuracy: +or – 10%
Airflow sensor: On-board
Low air alarm delay: fixed five seconds
Relay: Output – 1
 Input – 2, night setrear & sash high
Analog Output: Not available
Sash High Indication: Yes, using a micro or proximity switch input.
 With repeat alarm feature factory set to 5 minutes. (Can be adjusted via laptop up to 30 minutes)
Night Setrear: Yes, using a relay input
External Alarm Indication: Not available
Power: Input 120VAC, 60Hz
 Output 15VDC, 500ma
Display, visual: **Red LED** – Alarm
 Green LED – Normal
Alarm Indication: Red LED and audible
Horn Silence: Yes, temporary
Mounting: Semi-flush
Operating Temperature: 55-86°F, 13-30°C
Dimensions: 5.2"H x 3-1/2"W x 2"D (132 x 81 x 51 mm)
Agency Listing: UL and CE

(Cartoned)

FUME HOOD USE	PRODUCT NO.
Spectre, Concept & SafeAire II	AFA500
Demonstration	AFA500D

Air Flow Alarm Monitor – AFA1000



Specifications:

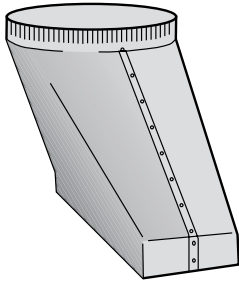
Display/Alarm range: 0-999 fpm (0-5.0 m/s)
Field Setup: Two-point velocity calibration, with on-screen instructions
Accuracy: Sensor/display resolution 1 fpm. Face velocity + or – 10%
Alarm Delays: 0-60 sec.
Relay: Output – 1, Input – 3
Analog Output: Not available
Sash High Indication: Yes, with separate plug-in connection
Night Setrear: Yes
External Alarm Indication: Yes
Power: Input 120VAC, 60Hz, Output 15VDC, 500ma
Units: English and metric, user selective
Display, visual: Analog bar graph or fault timeline
 Red LED – Alarm
 Yellow LED – Caution
 Green LED – Normal
 Digital display of velocity reading can be turned off
Alarm Indication: Red LED and audible
Horn Silence: Yes, temporary
Airflow sensor: Remote
Low air alarm delay: fixed five seconds
Mounting: Semi-flush
Operating Temperature: 55-86°F, 13-30°C
Dimensions: 5.2"H x 3.2"W x 2"D (132 x 81 x 51 mm)
Agency Listing: UL and CE

(Cartoned)

FUME HOOD USE	PRODUCT NO.
Spectre, Concept & SafeAire II	AFA1000
Demonstration	AFA1000D



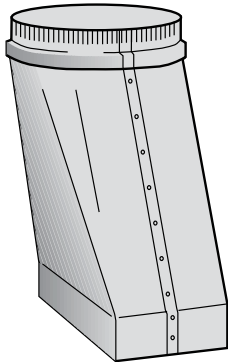
Duct Transitions



- Metal ductwork connecting fume hood exhaust or supply system to building exhaust or supply system
- Exhaust transitions made in 22 gauge type 304 stainless steel (rectangular duct to round duct)
- 16" (406 mm) high

Exhaust Transitions

Duct O.D.	PRODUCT NO:
6" x 9" to 8" round (152 x 229 to 203 mm round)	CLREXH060908
6" x 15" to 10" round (152 x 381 to 254 mm round)	CLREXH061510
6" x 23" to 12" round (152 x 584 to 305 mm round)	CLREXH062312
6" x 26" to 12" round (152 x 660 to 305 mm round)	CLREXH062612
6" x 30" to 14" round (152 x 762 to 356 mm round)	CLREXH063014

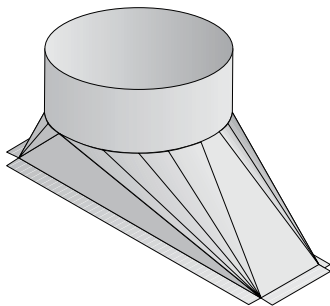


- Metal ductwork connecting fume hood exhaust or supply system to building exhaust or supply system
- Supply transitions made in 22 gauge galvanized steel (round duct to rectangular duct)
- 16" (406 mm) high

Supply Transitions

Duct O.D.	PRODUCT NO:
9" round to 6" x 12" (203 mm round to 152 x 305 mm)	CLRSUP061209
10" round to 6" x 15" (254 mm round to 152 x 381 mm)	CLRSUP061510
11" round to 6" x 18" (279 mm round to 152 x 457 mm)	CLRSUP061811
12" round to 6" x 24" (305 mm round to 152 x 610 mm)	CLRSUP062412

Combination Exhaust Collar/Transitions



- Replaces standard rectangular vent exhaust collar
- Cannot be used with stainless steel-lined fume hood
- Low profile transition from fume hood to duct for use where ceiling heights are lower than normal
- Designed to reduce static pressure
- Made of 22 gauge type 304 stainless steel
- 13.50" (343 mm) high
- Shipped separate unless ordered as nonstandard

FUME HOOD WIDTH	OUTLET DIAMETER	BASE SIZE	PRODUCT NO.
48" (1219 mm)	10" (254 mm)	6" x 20.50" (152 x 521 mm)	CLREXH62048
60" (1524 mm)	12" (305 mm)	6" x 26.50" (152 x 673 mm)	CLREXH62660
72" (1829 mm)	12" (305 mm)	6" x 32.50" (152 x 826 mm)	CLREXH63272
84" (2134 mm)	12" (305 mm)	6" x 35.50" (152 x 902 mm)	CLREXH63884
96" (2438 mm)	14" (356 mm)	6" x 38.50" (152 x 978 mm)	CLREXH63596



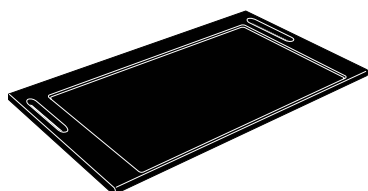
WORK SURFACE

- Black epoxy resin work surface
- Cupsink cutouts sized for Hamilton Laboratory Solutions products - see page XX

- 1-1/4" (32 mm) thick

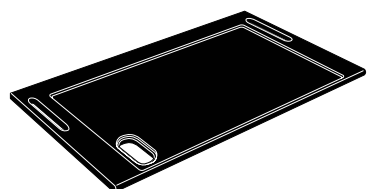
NOTE: Cupsinks and other service fixtures must be ordered separately

Epoxy Resin for Spectre, Concept & SafeAire II Fume Hoods



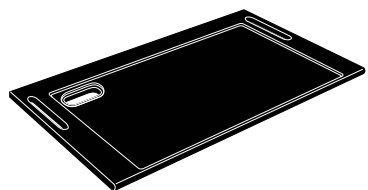
No Cupsink Cutouts

WIDTH	WORK SURFACE DEPTH			
	26.125" (663 mm) 54L - Fume Hood	30.875" (784 mm) 60L - Fume Hood	32.125" (815 mm) 61L - Fume Hood	38.125" (968 mm) 62L - Fume Hood
36" (914 mm)	TPE362600	TPE363100	-	-
48" (1219 mm)	TPE482600	TPE483100	TPE483200	TPE483800
60" (1524 mm)	TPE602600	TPE603100	TPE603200	TPE603800
72" (1829 mm)	TPE722600	TPE723100	TPE723200	TPE723800
84" (2134 mm)	TPE842600	-	TPE843200	TPE843800
96" (2438 mm)	TPE962600	TPE963100	TPE963200	TPE963800



Left Front Cupsink Cutout

WIDTH	WORK SURFACE DEPTH			
	26.125" (663 mm) 54L - Fume Hood	30.875" (784 mm) 60L - Fume Hood	32.125" (815 mm) 61L - Fume Hood	38.125" (968 mm) 62L - Fume Hood
36" (914 mm)	TPE3626LF	TPE3631LF	-	-
48" (1219 mm)	TPE4826LF	TPE4831LF	TPE4832LF	TPE4838LF
60" (1524 mm)	TPE6026LF	TPE6031LF	TPE6032LF	TPE6038LF
72" (1829 mm)	TPE7226LF	TPE7231LF	TPE7232LF	TPE7238LF
84" (2134 mm)	TPE8426LF	-	TPE8432LF	TPE8438LF
96" (2438 mm)	TPE9626LF	TPE9631LF	TPE9632LF	TPE9638LF



Left Rear Cupsink Cutout

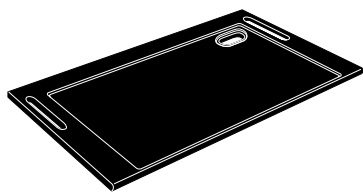
WIDTH	WORK SURFACE DEPTH			
	26.125" (663 mm) 54L - Fume Hood	30.875" (784 mm) 60L - Fume Hood	32.125" (815 mm) 61L - Fume Hood	38.125" (968 mm) 62L - Fume Hood
36" (914 mm)	TPE3626LR	TPE3631LR	-	-
48" (1219 mm)	TPE4826LR	TPE4831LR	TPE4832LR	TPE4838LR
60" (1524 mm)	TPE6026LR	TPE6031LR	TPE6032LR	TPE6038LR
72" (1829 mm)	TPE7226LR	TPE7231LR	TPE7232LR	TPE7238LR
84" (2134 mm)	TPE8426LR	-	TPE8432LR	TPE8438LR
96" (2438 mm)	TPE9626LR	TPE9631LR	TPE9632LR	TPE9638LR

*Rear mounted cupsink requires use of a sink base cabinet



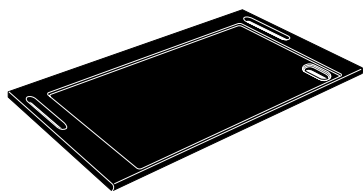
WORK SURFACE

Epoxy Resin for Spectre, Concept & SafeAire II Fume Hoods



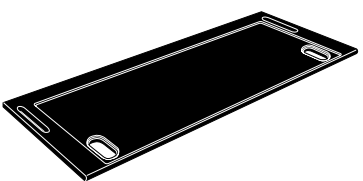
Right Rear Cupsink Cutout

WIDTH	WORK SURFACE DEPTH			
	26.125" (663 mm) 54L - Fume Hood	30.875" (784 mm) 60L - Fume Hood	32.125" (815 mm) 61L - Fume Hood	38.125" (968 mm) 62L - Fume Hood
36" (914 mm)	TPE3626RR	TPE3631RR	-	-
48" (1219 mm)	TPE4826RR	TPE4831RR	TPE4832RR	TPE4838RR
60" (1524 mm)	TPE6026RR	TPE6031RR	TPE6032RR	TPE6038RR
72" (1829 mm)	TPE7226RR	TPE7231RR	TPE7232RR	TPE7238RR
84" (2134 mm)	TPE8426RR	-	TPE8432RR	TPE8438RR
96" (2438 mm)	TPE9626RR	TPE9631RR	TPE9632RR	TPE9638RR



Right Front Cupsink Cutout

WIDTH	WORK SURFACE DEPTH			
	26.125" (663 mm) 54L - Fume Hood	30.875" (784 mm) 60L - Fume Hood	32.125" (815 mm) 61L - Fume Hood	38.125" (968 mm) 62L - Fume Hood
36" (914 mm)	TPE3626RF	TPE3631RF	-	-
48" (1219 mm)	TPE4826RF	TPE4831RF	TPE4832RF	TPE4838RF
60" (1524 mm)	TPE6026RF	TPE6031RF	TPE6032RF	TPE6038RF
72" (1829 mm)	TPE7226RF	TPE7231RF	TPE7232RF	TPE7238RF
84" (2134 mm)	TPE8426RF	-	TPE8432RF	TPE8438RF
96" (2438 mm)	TPE9626RF	TPE9631RF	TPE9632RF	TPE9638RF



Two Front Cupsink Cutouts

WIDTH	WORK SURFACE DEPTH			
	26.125" (663 mm) 54L - Fume Hood	30.875" (784 mm) 60L - Fume Hood	32.125" (815 mm) 61L - Fume Hood	38.125" (968 mm) 62L - Fume Hood
96" (2438 mm)	TPE9626BF	TPE9631BF	TPE9632BF	TPE9638BF

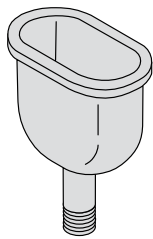


CUPSINKS AND TRAPS

Polyolefin Oval Cupsinks

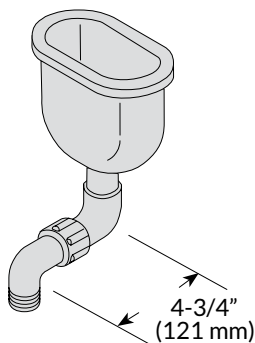
PRODUCT NO:

CSK070509



- 7-1/2" (191 mm) x 4-1/2" (114 mm) oval cupsink, 3" x 6" I.D.
- IPS outlet – 1-1/2" (38 mm)
- Overall height – 8-3/16" (208 mm)

NOTE: Adapters to connect cupsink to plumbing must be ordered separately



- 7" (178 mm) x 3-7/8" (99 mm) oval panel-mounted cupsink with strainer
- Outlet – 1-1/2" (38 mm)
- Overall height – 6-13/16" (173 mm)

NOTE: Adapters to connect cupsink to plumbing must be ordered separately

2 x 6 I.D.

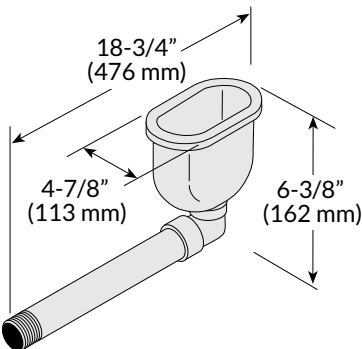
PRODUCT NO:

Cupsink only

CSK070407

Cupsink with elbow

CSK070407ELB



- Shallow cupsink for restricted spaces, ideal for a fume hood installed above an acid or flammable storage cabinet
- Provides for front-mounted location above acid/flammable cabinet with flush front
- 6" (152 mm) x 3" (76 mm) inside dimension
- Outlet – 1-1/2" (38 mm)

NOTE: Adapters to connect cupsink to plumbing must be ordered separately

2 x 6 I.D.

PRODUCT NO:

Shallow cupsink with elbow

CSK051907

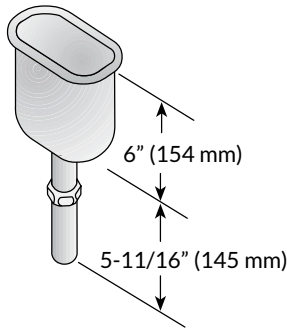


CUPSINKS AND TRAPS

Stainless Steel Oval Cupsink

PRODUCT NO:

CSK070509SS



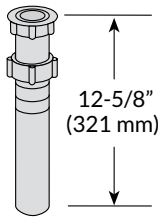
- 7-1/2" (191 mm) x 4-1/2" (114 mm) oval cupsink, 3" x 6" I.D.
- IPS outlet - 1-1/2" (38 mm)
- Overall height - 8-3/16" (208 mm)

NOTE: Adapters to connect cupsink to plumbing must be ordered separately

Polyolefin Tailpiece

PRODUCT NO:

CSKTLIPO1.5



- 1-1/2" (38 mm) Tailpiece assembly

Polyolefin "P" Traps

Inlet/Outlet

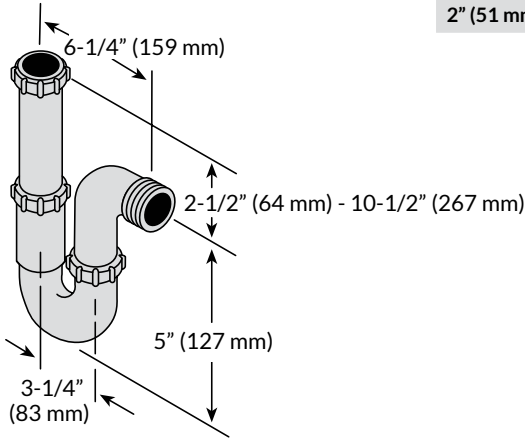
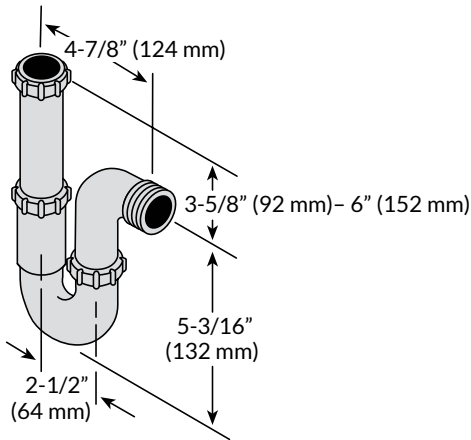
PRODUCT NO:

1-1/2" (38 mm)

CSKTRPIO1.5

2" (51 mm)

CSKTRPIO2



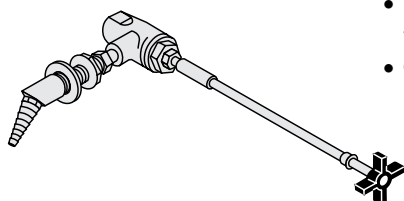
FUME HOOD VALVE ASSEMBLIES

Ordering information:

- The following valve options are to be selected when configuring a fumehood in Hamilton Lab Configurator

- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
- Parts exposed in fume hood have acid- and solvent-resistant epoxy finish, color-coded to match index button (unless otherwise noted)
- Black nylon four-arm handle with nylon color-coded index button
- Removable serrated tip
- Requires 1" (254 mm) mounting hole on interior end panels
- Requires .563" (14.3 mm) mounting hole at front posts
- For rear location, replace **F** with **R**

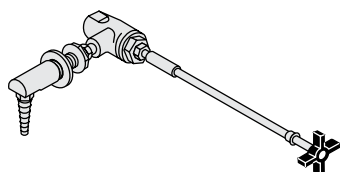
Remote Control Rod Driven Single Service Valve



- Panel-mounted single-service valve for air, gases or vacuum
- Color-coded outlet to match index button, with black washer

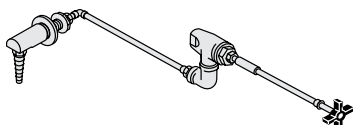
SERVICE	FUME HOOD TYPE	PRODUCT NO.
Gas	Bench/Hi-Line	VRDEGAS
Air	Bench/Hi-Line	VRDEAIR
Vacuum	Bench/Hi-Line	VRDEVAC
Nitrogen	Bench/Hi-Line	VRDENIT
Oxygen	Bench/Hi-Line	VRDEOXY
Gas	Floor-Mounted	VRDEFGAS
Air	Floor-Mounted	VRDEFAIR
Vacuum	Floor-Mounted	VRDEFVAC
Nitrogen	Floor-Mounted	VRDEFNIT
Oxygen	Floor-Mounted	VRDEFOXY

Remote Control Rod Driven Water Faucets



- Single-service water valve
- Turret base with serrated hose end
- Flat mounting flange for wall mount
- For working pressure up to 80 PSI
- For use with cupsink installed at front
- Distilled water fixtures are tin-lined

SERVICE	FUME HOOD TYPE	FIXTURE LOCATION	PRODUCT NO.
Cold water	Bench/Hi-Line	Front	VRDECW
Hot water	Bench/Hi-Line	Front	VRDEHW
Distilled Water	Bench/Hi-Line	Front	VRDEDW
Steam	Bench/Hi-Line	Front	VRDESTM
Cold water	Floor-Mounted	Front	VRDEFWCW
Hot water	Floor-Mounted	Front	VRDEFHW
Distilled Water	Floor-Mounted	Front	VRDEFDW
Steam	Floor-Mounted	Front	VRDEFSTM



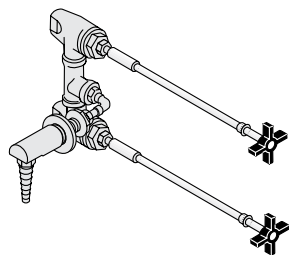
- Single-service water valve
- Turret base with serrated hose end
- Flat mounting flange for wall mount
- For working pressure up to 80 PSI
- For use with rear mounted cupsink

SERVICE	FUME HOOD TYPE	FIXTURE LOCATION	PRODUCT NO.
Cold water	Bench/Hi-Line	Rear	VRDRCW
Hot water	Floor	Rear	VRDRHW



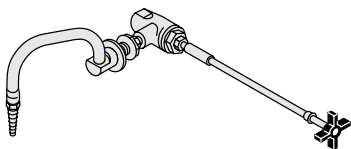
FUME HOOD VALVE ASSEMBLIES

Remote Control Rod Driven Water Faucets (continued)



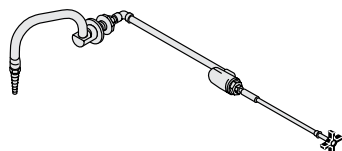
- General mixing faucet
- Turret base with serrated hose end
- Flat mounting flange for wall mount
- For use with front-mounted cupsink

SERVICE	FUME HOOD TYPE	FIXTURE LOCATION	PRODUCT NO.
Hot water	Bench/Hi-Line	Front	VRDFHCW
Cold water	Floor	Front	VRDFFHCW



- Single-service color-coded gooseneck with 4" (102 mm) spread
- Sidewall mounted
- For cold water service
- For use with front mounted cupsink

FUME HOOD TYPE	PRODUCT NO.
Bench/Hi-Line Floor-Mounted	VRDGN4FCW
Bench/Hi-Line Floor-Mounted	VRDGN4FFCW



- Single-service color-coded gooseneck with 4" (102 mm) spread
- Sidewall mounted
- For cold water service
- For use with rear mounted cupsink

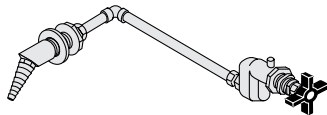
FUME HOOD TYPE	PRODUCT NO.
Bench/Hi-Line	VRDGN4RCW



FUME HOOD VALVE ASSEMBLIES

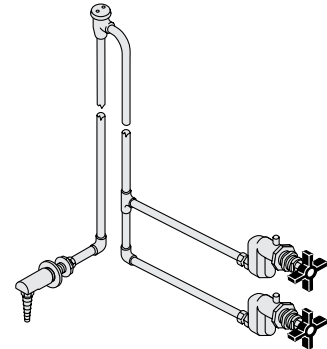
- Fixture has forged brass valve body and outlet
- Straight front panel mounting only
- Valve is chrome-plated
- Valve seat can be replaced from the front of fixture
- Valve handle is clear epoxy-plated with nylon color-coded index button
- Outlets in fume hood have acid- and solvent-resistant color-coded finish to match index button, with black washer
- Removable serrated tip
- Pressure varies with fixture:
Water 80 PSI
Needle Valve 125 PSI
Steam Valve 20 PSI
- Index buttons are included with fixtures
- Requires 1" (25 mm) mounting hole at interior end panels
- Requires 1-1/4" (32 mm) mounting hole at front posts

Front-loaded Faucets



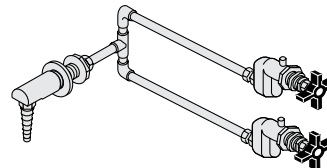
- Needle valve service for gases, air and vacuum
- Flat mounting flange with angle serrated hose end

SERVICE	PRODUCT NO.
Gas	VFLGAS
Air	VFLAIR
Vacuum	VFLVAC
Nitrogen	VFLNIT
Oxygen	VFLOXY



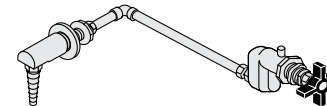
- General mixing faucet, hot and cold water with vacuum breaker
- Turret base with serrated hose end
- For use with cupsink at front or rear

PRODUCT NO.
VFLVBRHCW



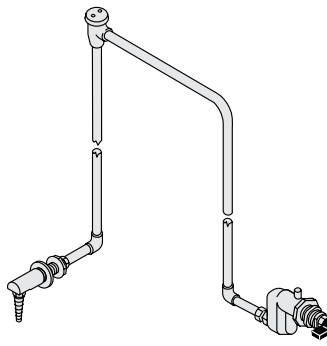
- General mixing faucet, hot and cold water
- Turret base with serrated hose end
- Without vacuum breaker
- For use with cupsink at front or rear

PRODUCT NO.
VFLHCW



- Single-service valve
- Turret base with serrated hose end
- Without vacuum breaker
- Tin-lined model for distilled water
- For use with cupsink at front or rear

SERVICE	PRODUCT NO.
Cold water	VFLCW
Hot water	VFLHW
Distilled water	VFLDW



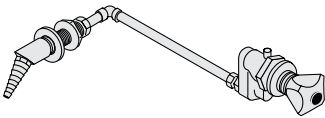
- Single-service valve with vacuum breaker
- Turret base with serrated hose end
- For use with cupsink at front or rear

SERVICE	PRODUCT NO.
Cold water	VFLBRCW
Hot water	VFLBRHW



FUME HOOD VALVE ASSEMBLIES

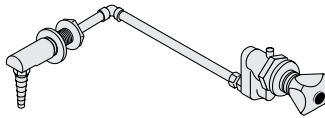
Front-loaded Service Valves - ColorTech



- Single-service valve
- For straight front fume hood
- Panel-mount 45° angle outlet fitting
- Serrated hose end and internal shank
- Oxygen and nitrogen valves are cleaned for pure gas service

SERVICE	PRODUCT NO.
Air	VCTAIR
Gas	VCTGAS
Vacuum	VCTVAC
Oxygen	VCTOXY
Nitrogen	VCTNIT

Front-loaded Water Faucets - ColorTech

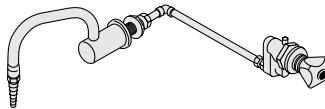


- Single-service water valve
- For straight front fume hood
- Serrated hose end and internal shank

SERVICE	PRODUCT NO.
Cold water	VCTCW
Hot water	VCTHW*

* Available on extended lead time

Front-loaded Water Faucets - ColorTech



- Panel-mount turret base with 4" (102 mm) rigid gooseneck
- For straight front fume hood
- Serrated hose end and internal shank
- For use with cupsink installed front or rear

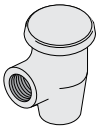
SERVICE	PRODUCT NO.
Cold water	VCTGN4CW
Hot water	VCTGN4HW*

* Available on extended lead time



REPLACEMENT FIXTURES

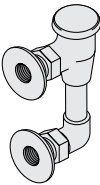
Vacuum Breakers for Fume Hood



- Brass vacuum breaker with no finish
- For use with hidden applications
- 3/8" IPS female inlet and outlet

PRODUCT NO.

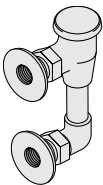
VBRIO38HID



- Brass vacuum breaker assembly with polished chrome finish
- Union connection
- 3/8" IPS female inlet and outlet
- Not for use on Concept fume hoods

PRODUCT NO.

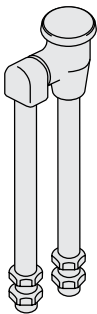
VBRIO38UNI



- Brass vacuum breaker assembly with polished chrome finish
- Union connection
- 1/2" IPS female inlet and outlet
- Not for use on Concept fume hoods

PRODUCT NO.

VBRIO12UNI

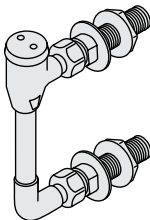


- Brass vacuum breaker assembly with polished chrome finish
- To be used with Concept fume hoods
- Chrome-plated locknuts
- 3/8" IPS female inlet and outlet

PRODUCT NO.

VBRIO381

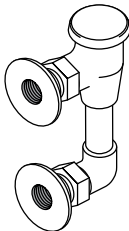
Atmospheric Vacuum Breakers - Color Tech



- 3/8" (10 mm) IPS laboratory vacuum breaker
- Panel-mounted
- 3/8" (10 mm) IPS mounting shank with locknut and washer
- Not for use on Concept fume hood
- Available on extended lead time

PRODUCT NO.

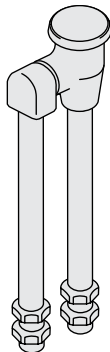
VCTVBRIO38



- Brass vacuum breaker assembly with white powdercoat finish
- For use with concealed piping
- Union connection
- 3/8" IPS female inlet and outlet
- For use with Safe Aire II fume hoods

PRODUCT NO.

VCTVBRIO382



- Brass vacuum breaker assembly with white powdercoat finish
- For use with Concept fume hoods
- White finished locknuts
- 3/8" IPS female inlet and outlet

PRODUCT NO.

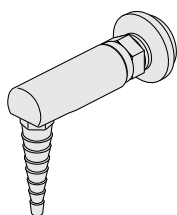
VCTVBRIO381



REPLACEMENT FIXTURES

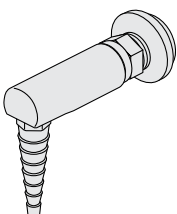
- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
- Parts exposed in fume hood have acid- and solvent-resistant epoxy finish, color-coded to match index button (unless otherwise noted)
- Goosenecks and outlets have removable serrated hose tip
- Goosenecks have 6" (152 mm) spread (unless otherwise noted)
- Shipped loose for field installation only
- All standard valves are CSA approved

Outlet with Hose Connector



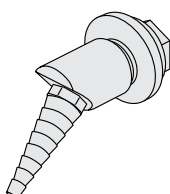
- Powdercoated brass turret and removable hose connector positioned at 90°
- Turret supplied with locknut, ferrule and compression fitting or 3/8" copper tubing
- 1/2" I.D. compression inlet
- For use with remote control service valves with stems

SERVICE	PRODUCT NO.
Hot water	OHC90HW
Cold water	OHC90CW



- Powdercoated brass turret and removable ten-serration hose connector positioned at 90°
- Tin-lined connector and turret
- Turret supplied with locknut, ferrule and compression fitting for 3/8" copper tubing
- 1/2" I.D. compression inlet

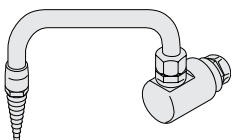
SERVICE	PRODUCT NO.
Distilled water	OHC90DW



- Powdercoated brass turret and removable hose connector positioned at a 45° angle
- Turret supplied with locknut, ferrule and compression nut
- 1/2" I.D. compression inlet

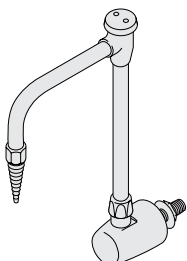
SERVICE	PRODUCT NO.
Generic (color: black)	OHC45GEN
Air	OHC45AIR
Vacuum	OHC45VAC
Gas	OHC45GAS
Nitrogen (cleaned for pure gas service)	OHC45NIT
Oxygen (cleaned for pure gas service)	OHC45OXY

Gooseneck Outlets



- Low profile gooseneck with turret and removable hose end
- Turret supplied with locknut, ferrule and compression nut
- 1/2" I.D. compression inlet
- Rigid/swing adapter
- Color: green

SERVICE	PRODUCT NO.
4" (102 mm) spread gooseneck	OGN04LP
6" (152 mm) spread gooseneck	OGN06LP



- Gooseneck with vacuum breaker, turret and removable hose end
- Vandal resistant turret supplied with locknut
- 3/8" NPS inlet

SERVICE	PRODUCT NO.
6" (152 mm) spread gooseneck	OGNVBR06

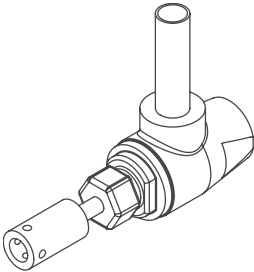
* Vacuum breaker is not recommended inside fume hood per NFPA



REPLACEMENT VALVES

- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
 - Parts exposed in fume hood have acid- and solvent-resistant epoxy
- finish, color-coded to match index button (unless otherwise noted)
 - Serrated hose tip

Remote Control Service Valves



- Single service remote control valve
- Max. working pressure is 80 PSI
- Valves with stem for use with outlet, with hose connector

SERVICE	PRODUCT NO.
Cold water with stem	VALSTCW
Distilled water with stem	VALSTDW

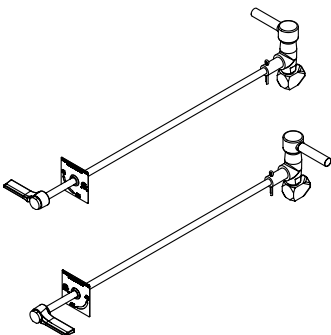
- Single service remote control valve
- Max. working pressure is 125 PSI
- Valves for oxygen and nitrogen are cleaned for pure gas service

SERVICE	PRODUCT NO.
Gas	VALSTGAS
Air	VALSTAIR
Vacuum	VALSTVAC
Oxygen	VALSTOXY
Nitrogen	VALSTNIT

- Single service remote control valve
- Max. working pressure is 20 PSI

SERVICE	PRODUCT NO.
Steam with stem	VALSTSTM

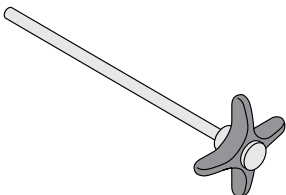
Remote Control Ball Valve Assembly



- Remote control service valve is factory assembled, includes guide plate, rod and handle
- Forged brass, chrome-plated lever handle
- Colored plastic index disc
- Max. working pressure is 75 PSI
- Suitable for water and gas services
- These products cannot be used for steam

SERVICE	PRODUCT NO.
Right	VREBALLH
Left	VREBALLRH

Rod and Handle Assembly for Service Valves



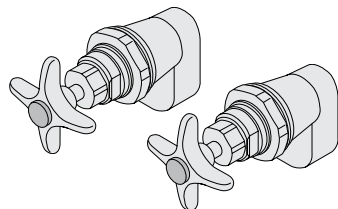
- Rod and handle assembly for remote control service valve
- Black 3/8" (10 mm) diameter aluminum rod
- Black nylon four-arm handle with color-coded index button
- Requires field cut to fit

SERVICE	PRODUCT NO.
7-9/16"	VRD08
11-1/2"	VRD12
31-5/16"	VRD32



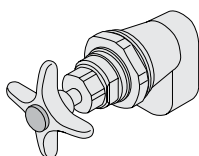
REPLACEMENT VALVES

Front-loaded Service Valves



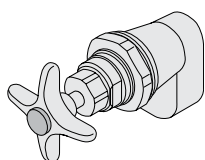
- Two front-loaded service valves for hot and cold water mixing
- Forged brass four-arm handle with clear epoxy-coated chrome
- Colored plastic index disc
- Max. working pressure is 80 PSI
- Requires 1-1/4" (32 mm) diameter hole in panel

SERVICE	PRODUCT NO.
Hot and cold water	VFLHCW



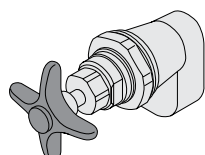
- Front-loaded single service valve
- Forged brass four-arm handle with clear epoxy-coated chrome
- Colored plastic index disc
- Max. working pressure is 80 PSI
- Requires 1-1/4" (32 mm) diameter hole in panel

SERVICE	PRODUCT NO.
Hot water	VFLHW
Cold water	VFLCW
Distilled water	VFLDW



- Front-loaded single service valve
- Forged brass four-arm handle with clear epoxy-coated chrome
- Colored plastic index disc
- Max. working pressure is 125 PSI
- Requires 1-1/4" (32 mm) diameter hole in panel

SERVICE	PRODUCT NO.
Gas	VFLGAS
Oxygen	VFLOXY
Air	VFLAIR
Vacuum	VFLVAC
Nitrogen	VFLNIT



- Front-loaded single service valve
- Four-arm heat resistant black handle
- Black plastic index disc
- Max. working pressure is 20 PSI
- Requires 1-1/4" (32 mm) diameter hole in panel

SERVICE	PRODUCT NO.
Oxygen	VFLOXYBLK
Nitrogen	VFLNITBLK



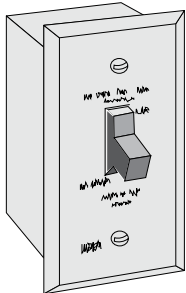
ELECTRICAL CONFIGURATION OPTIONS

Ordering information:

- The following electrical options are to be selected when configuring a fumehood in Hamilton Lab Configurator

Manual Snap-switch Fan Motor Starter

PRODUCT NO.
SWIFANMTR1HP



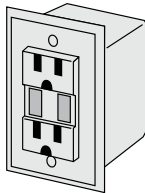
- Fractional HP manual AC motor starter for all single-phase motors up to one HP
- Mounted in single gang receptacle box with flush stainless steel face plate
- Double pole switch for up to 1 HP, single-phase, 60-cycle, 115/230 Vac motor
- Thermal overload protection
- Heater coil not included
- Special order/extended lead time

Receptacle

- UL listed
- All fixtures on this page are black plastic with black flush
- 240 Volt outlets are available on special order
- Only flush single-faced electric outlets fit on fume hood front upright post
- Electrical fixtures are not recommended inside fume hood per NFPA-45

RECEPTACLE CONFIGURATION		BOX STYLE
Polarized 3-wire, grounding type, 120V, 20 Amp, NEMA 5-20R		REC120
Polarized 3-wire, grounding type, 240V, 20 Amp, NEMA 6-20R		REC240

Ground Fault Interrupter



- For protection against line-to-ground shock hazards
- 120V, 20 amp, NEMA-5-20R
- Flush mounted with black plastic face plate

PRODUCT NO.
RECGFI120
RECGFI240

Switch/GFI



- 125V, 15 amp
- Flush mounted with black face plate
- Standard on ADA option fume hood

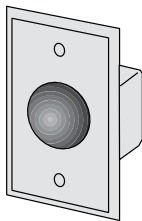
PRODUCT NO.
RECSWI



ELECTRICAL CONFIGURATION OPTIONS

Indicator Light

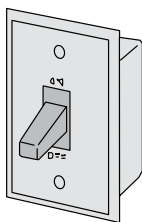
PRODUCT NO.
REMTLT



- UL listed
- Black plastic with black flush plate
- For use on motor blowers up to 3/4 h.p.
- Motor 'ON' Indicator Light for remote on/off switch applications

Lighted Toggle Switch

PRODUCT NO.
LITSWI



- UL listed
- Black plastic with black flush plate
- For use on motor blowers up to 3/4 h.p.

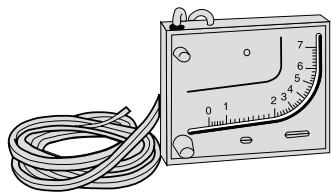


MISCELLANEOUS ACCESSORIES

Manometer

PRODUCT NO.

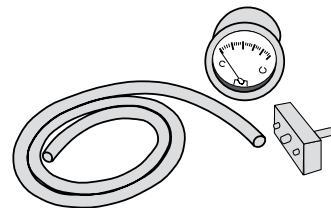
GGEMANOMETER



- Used with filters in fume removal system
- Inclined vertical, liquid-filled gauge continuously measures pressure differentials to monitor filter conditions
- 0–3" WC operating range
- Assembly includes 8 feet of double tubing, two connectors, mounting screws, one bottle of red gauge oil, and instructions
- Extended lead time required for delivery

Static Pressure Gauges

WIDTH	PRODUCT NO.
0-1	GGESTPRS01
0-3 for use with HEPA filter	GGESTPRSHEPA03



- Compact Minihelic® dial-type gauge to sense static pressure and determine airflow
- Flush or surface-mounted with optional bracket
- Includes tube adapter, sensor set, 42" (1067 mm) long tubing and instructions
- Extended lead time required for delivery

Classified Explosion-proof Light

PRODUCT NO.

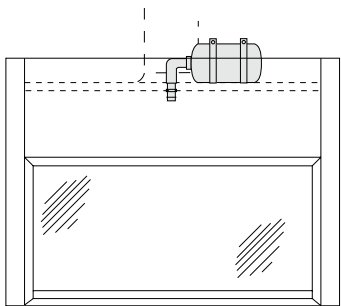
LITEP

- For use in hazardous atmosphere conditions
- UL listed to the following National Electric code classes: Class I – Division 1, 2 – Group C, D
- Uses one 32-watt CFL bulb (125-watt incandescent equivalent)
- 120V, 60-cycle
- One light is adequate for 3' and 4' fume hood
- Two lights recommended for 5', 6', 7' and 8' fume hoods



MISCELLANEOUS ACCESSORIES

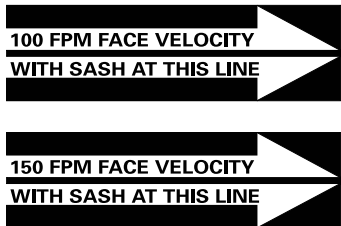
Automatic Fire Extinguisher



- Dry chemical system
- Includes dry chemicals, distribution piping, heads and activating link
- Fume-resistant plastic finish on all exposed parts
- Activating link set to operate at 300°F (148°C)
- Extended lead time required for delivery
- Requires field installation
- Class ABC, 8 pound
- Stainless Steel interior may be stained if extinguisher is discharged

Fume Hood Width	Fume Hood with Non-Stainless Steel Liners
48" (1219 mm)	EXTPLNR48
60" (1524 mm)	EXTPLNR60
72" (1829 mm)	EXTPLNR72
96" (2438 mm)	EXTPLNR96

Face Velocity Labels



- Mount on left or right post of vertical-rising sash fume hood
- Identifies face velocity in relation to sash position
- Peel-and-stick, fume- and reagent-resistant plastic material

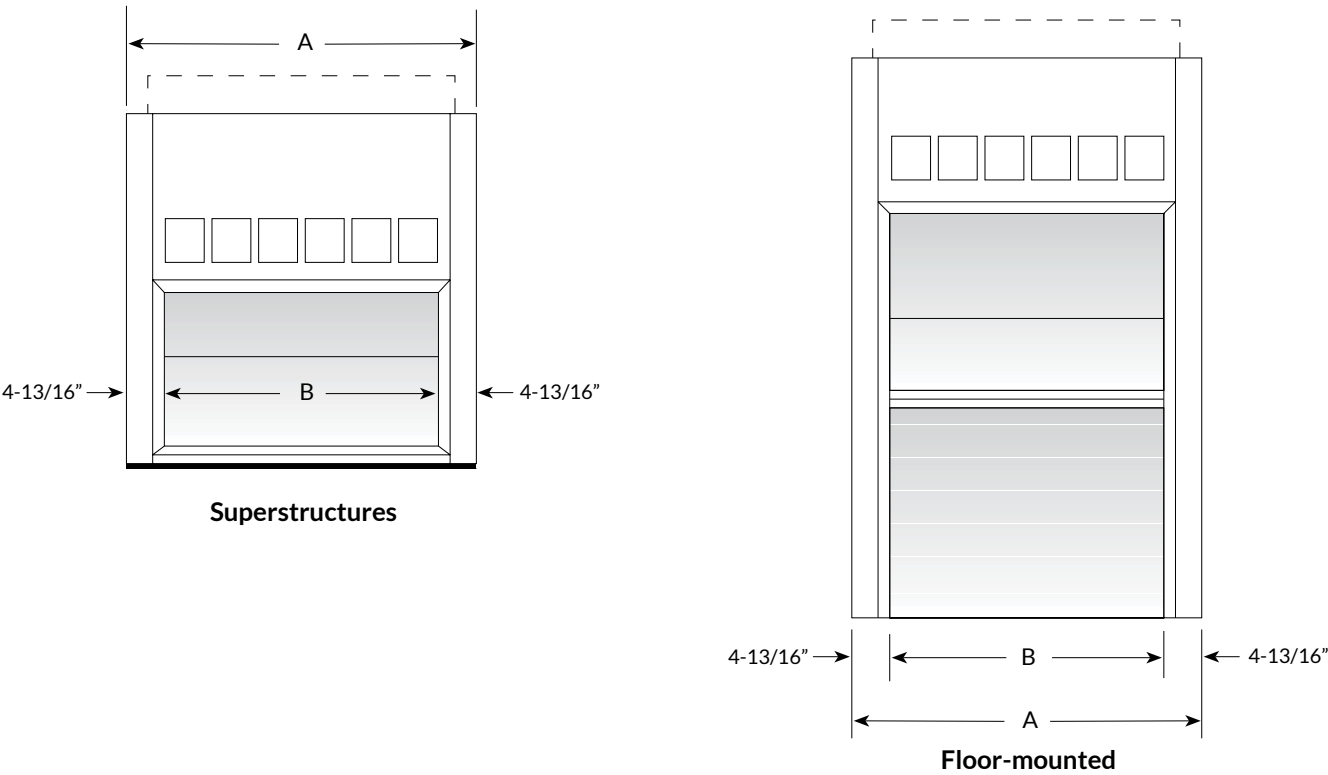
Post Orientation	100FPM (black)	150FPM (red)
Left	LBLLFV100	LBLLFV150
Right	LBLLRFV100	LBLLRFV150



SPECIFICATIONS

Typical Front Views

Unless otherwise noted these dimensions apply to all Spectre, Concept and SafeAire II fume hoods.



Fume Hood Width	Superstructure A	Superstructure B	High-line Superstructure A	High-line Superstructure B	Floor-mounted A	Floor-mounted B
36" (914 mm)	36" (914 mm)	26.375" (670 mm)	36" (914 mm)	26.375" (670 mm)	36" (914 mm)	26.375" (670 mm)
48" (1219 mm)	48" (1219 mm)	38.375" (975 mm)	48" (1219 mm)	38.375" (975 mm)	48" (1219 mm)	38.375" (975 mm)
60" (1524 mm)	60" (1524 mm)	50.375" (1279 mm)	60" (1524 mm)	50.375" (1279 mm)	60" (1524 mm)	50.375" (1279 mm)
72" (1829 mm)	72" (1829 mm)	62.375" (1584 mm)	72" (1829 mm)	62.375" (1584 mm)	72" (1829 mm)	62.375" (1584 mm)
84" (2134 mm)	84" (2134 mm)	74.375" (1889 mm)	84" (2134 mm)	74.375" (1889 mm)	84" (2134 mm)	74.375" (1889 mm)
96" (2438 mm)	96" (2438 mm)	86.375" (2194 mm)	96" (2438 mm)	86.375" (2194 mm)	96" (2438 mm)	86.375" (2194 mm)
120" (3048 mm)	120" (3048 mm)	111.625" (2835 mm)	-	-	-	-
144" (3658 mm)	144" (3658 mm)	135.625" (3445 mm)	-	-	-	-

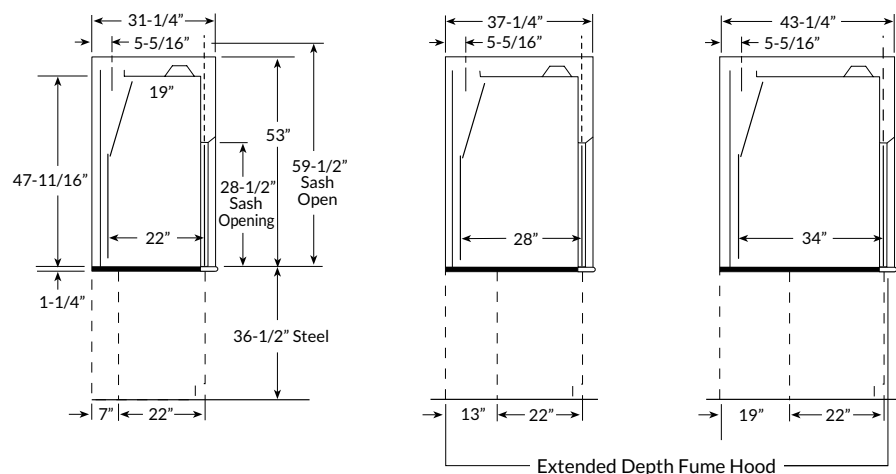


SPECTRE® SPECIFICATIONS

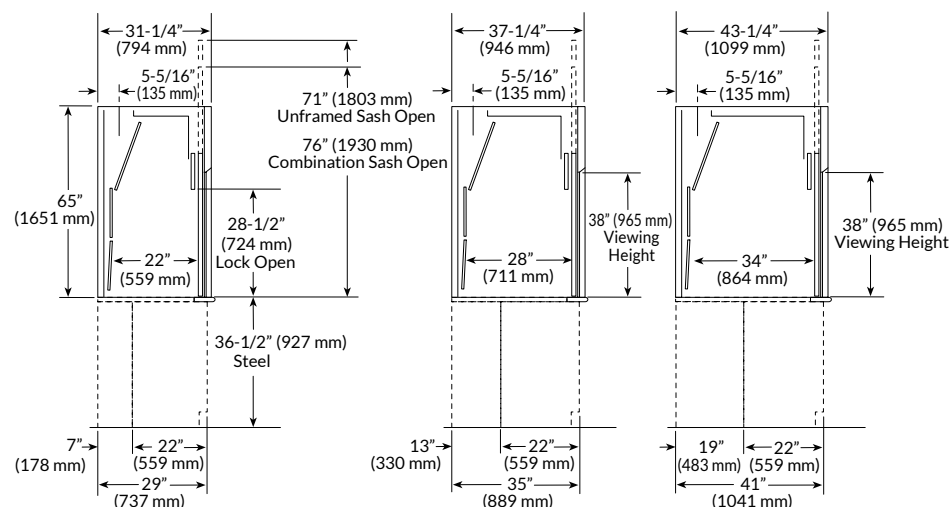
Typical End Views

These dimensions apply to general-purpose and special-purpose fume hood unless otherwise noted on specific fume hood catalog page.

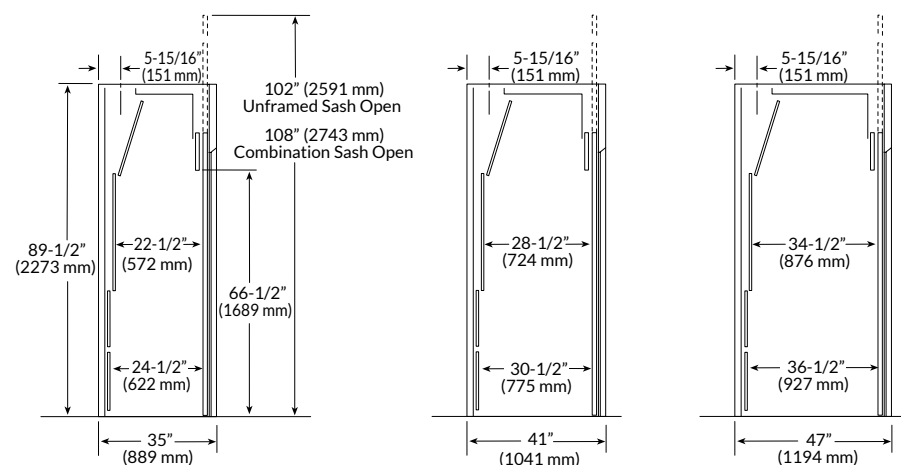
Spectre Bench



Spectre High-Line Bench



Spectre Floor-Mounted Bench

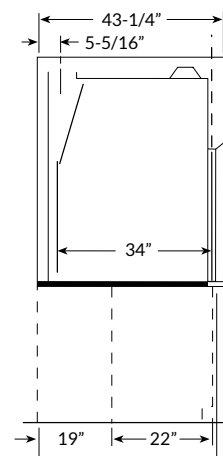
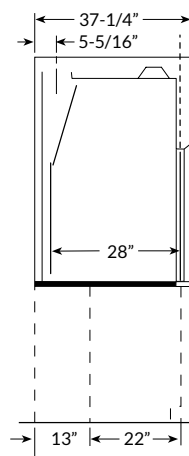
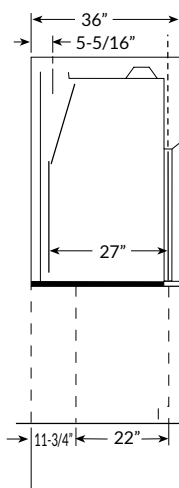
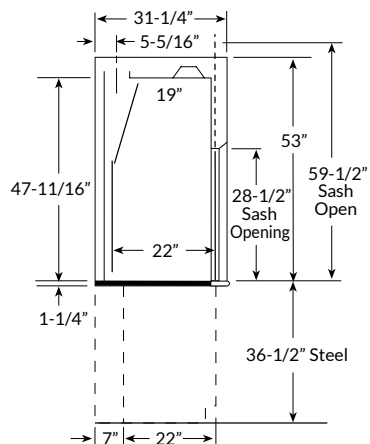


SAFEAIRE II® SPECIFICATIONS

Typical End Views

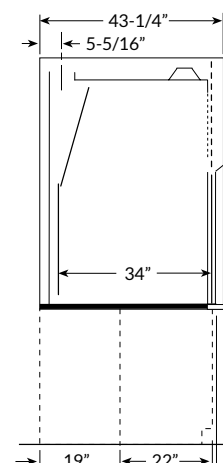
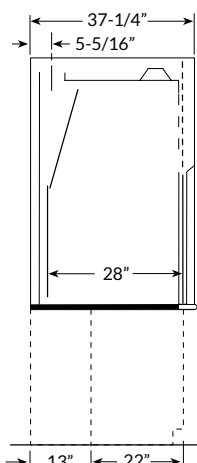
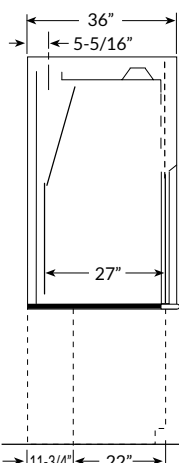
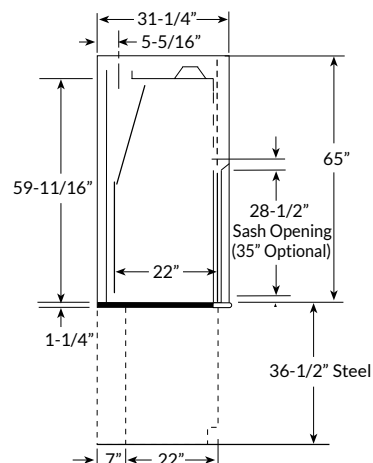
These dimensions apply to general-purpose and special-purpose fume hood unless otherwise noted on specific fume hood catalog page.

SafeAire II Bench



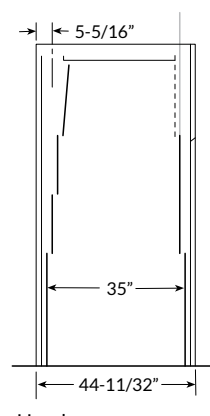
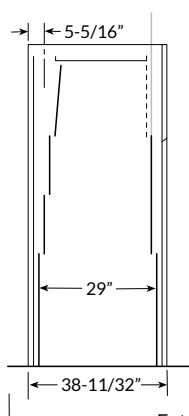
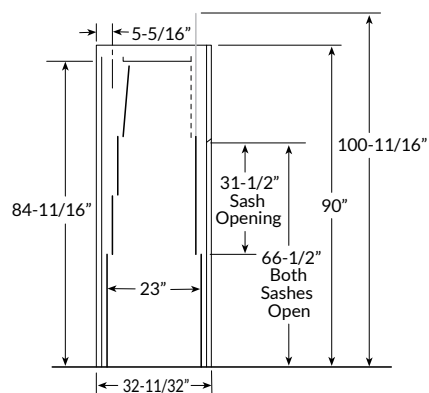
Extended Depth Fume Hood

Safe Aire II High-Line Bench



Extended Depth Fume Hood

SafeAire Floor-Mounted



Extended Depth Fume Hood



SPECIFICATIONS

For Pre-piped Fume Hood

General Information:

- Fume hood service line connections for water, waste, gas, air and vacuum will vary, depending on the point of origin and number of services provided
- Services may be brought up from below, through the floor, or down from the ceiling through the fume hood wall
- Any other method of supplying services may require special scribing or installation procedures

Product Information:

- Material selections are as follows:

Water pipe – copper

Air pipe – copper

Gas pipe – black Iron

Vacuum pipe – copper

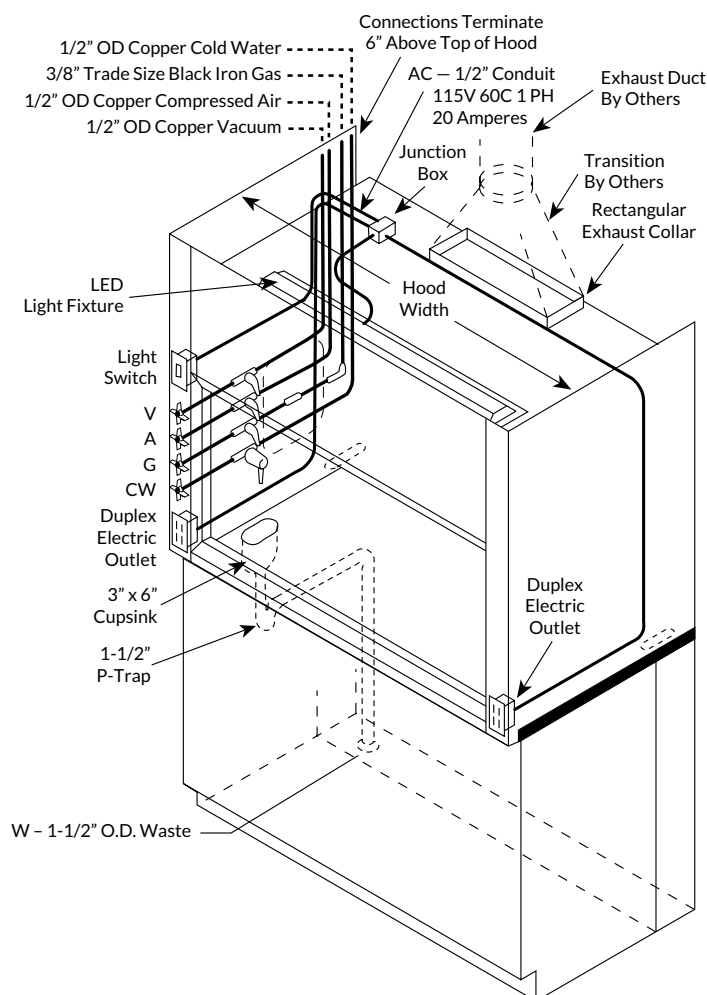
Oxygen & nitrogen – copper (cleaned for pure gas service)

Installation Information:

- Piping and connectors required for final connection to building lines are not furnished
- Because of code requirements and variable building conditions, connection components should be furnished by appropriate contractor
- Refer to roughing-in details for the specific type of fume hood for location of service outlets

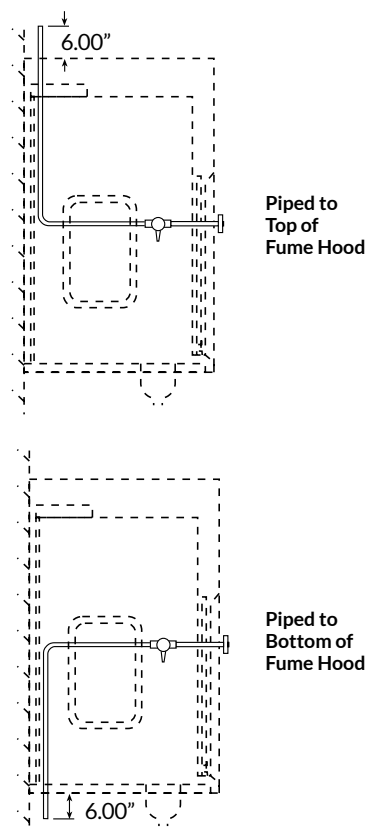
Typical Layout

Pre-piped and pre-wired fume hood installation,
Show in roughed-in from above.



Standard Configurations

The two pre-piped configurations below are available
with standard pricing and lead times



NOTE: For shipping purposes piping risers are turned up; they must be turned down when fume hood is installed.

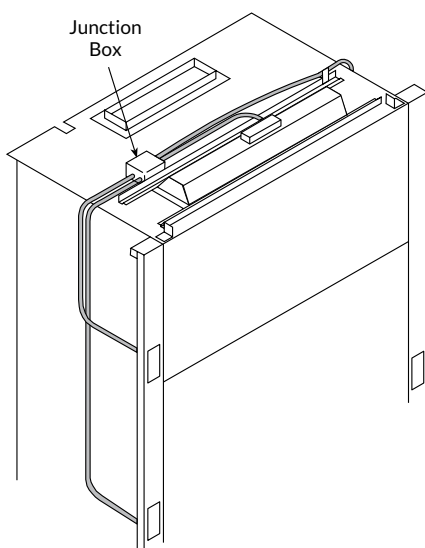


SPECIFICATIONS

For Pre-wired Fume Hood

- Pre-wired electrical service connections are available as an option and must be ordered separately
- All electrical services in fume hood post are pre-wired to a single junction box on top of fume hood
- All electrical services for items included in base cabinet(s) must be ordered separately (e.g. VARIACS)
- Contact Hamilton Laboratory Solutions for more information about this item.

Pre-wired Fume Hood



Factory Pre-wiring of Standard Fume Hood

Used as a pre-wire line for the standard set of electrical devices on any standard fume hood superstructure. One line is required for each device. In addition, it may be used to pre-wire one (1) additional standard, cataloged, 36L series product on each fume hood corner post. Please note that two-gang devices are not included, as these items will not fit in a standard fume hood corner post.

This product number does not represent a product that can be ordered by itself. The product should be used in conjunction with a fume hood superstructure ordered with a fixture location sheet.

Standard attached fume hood safety monitors do not require a pre-wire line.



SPECIFICATIONS

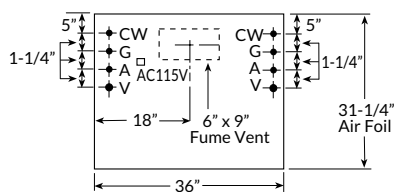
For Bench Fume Hood

Dimensions – all bench fume hood:

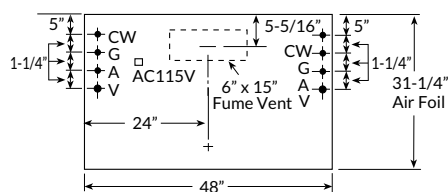
- Top of exhaust vent: Bench Hood 88-1/4" (2242 mm) above finished floor with steel base
- Top of exhaust vent: Bench High-line Hood 100-1/4" (2546 mm) above finished floor with steel base
- Duct connection must overlap vent by maximum of 1-1/4" (32 mm)

Symbols:

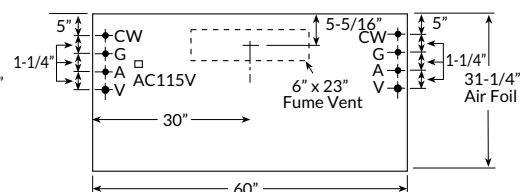
CW – Cold Water
HW – Hot Water
G – Gas
A – Compressed Air
V – Vacuum
W – Waste
AC – 115 or 230 Volt



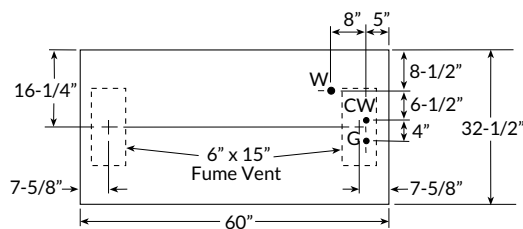
36" Wide Bench Fume Hood



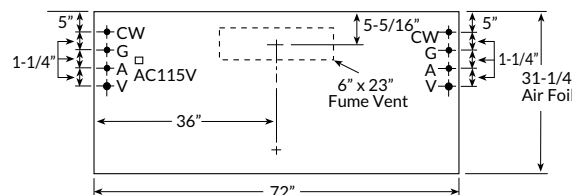
48" Wide Bench Fume Hood



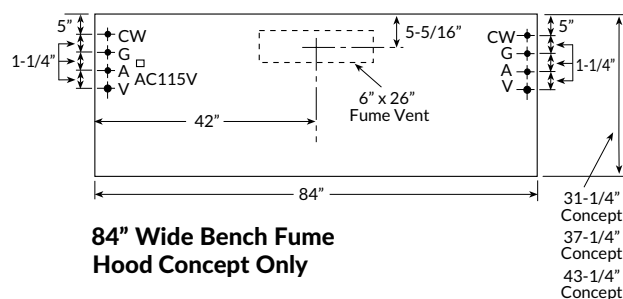
60" Wide Bench Fume Hood



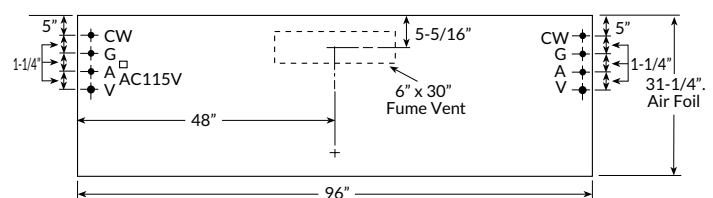
60" Wide Demonstration Fume Hood



72" Wide Bench Fume Hood



84" Wide Bench Fume Hood Concept Only



96" Wide Bench Fume Hood

- Standard fume hood depths show (31.25") Other depths include 36", 37.35" and 43.25"



SPECIFICATIONS

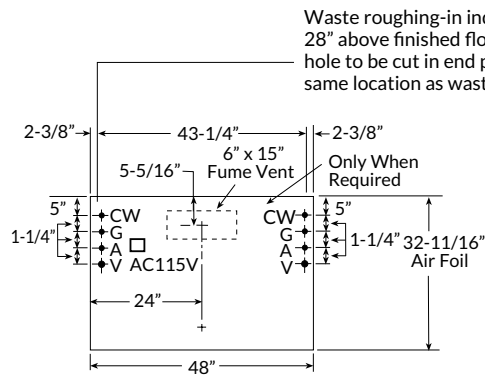
For Floor-mounted Fume Hood

Dimensions – all floor-mounted fume hood:

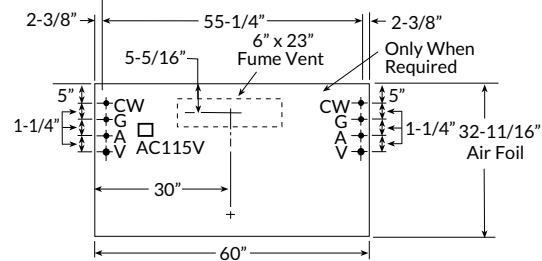
- Top of exhaust vent is 88-7/16" (2246 mm) above finished floor (87-15/16" [2237 mm] for Concept)
- Duct connection must overlap vent by maximum of 1-1/4" (32 mm)

Symbols:

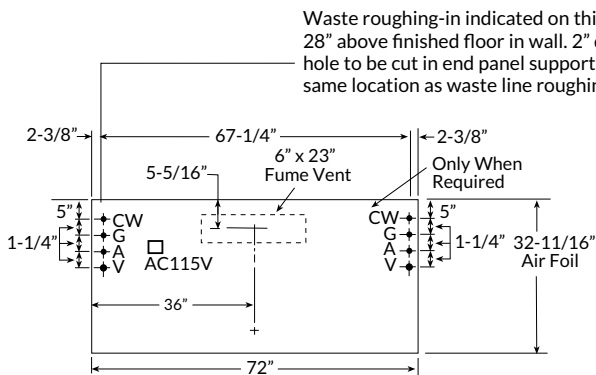
- CW – Cold Water
- HW – Hot Water
- G – Gas
- A – Compressed Air
- V – Vacuum
- W – Waste
- AC – 115 or 230 Volt



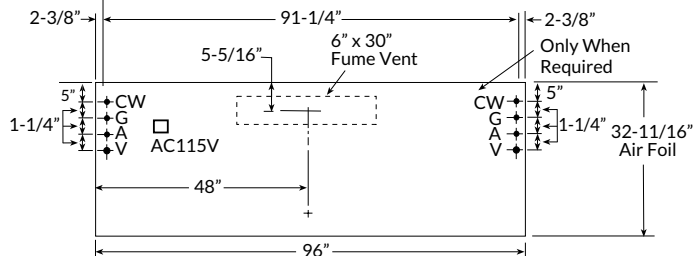
48" Wide Floor-mounted Fume Hood



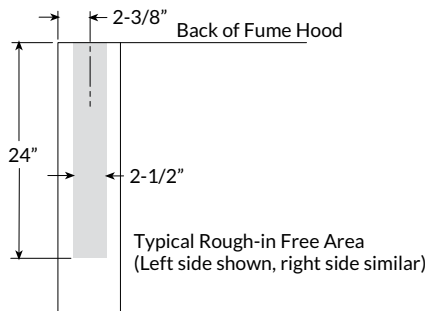
60" Wide Floor-mounted Fume Hood



72" Wide Floor-mounted Fume Hood



96" Wide Floor-mounted Fume Hood



- Optional fume hood depths include 38-11/16" and 44-11/16".
- Waste on Concept Fume Hood is located on the floor in either sideport – or 9" off the floor if routed to the back.



SPECIFICATIONS

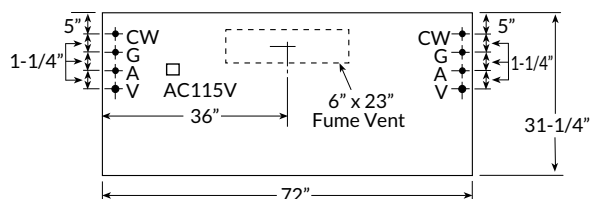
For Postless Sash Fume Hood

Dimensions – all postless sash fume hood:

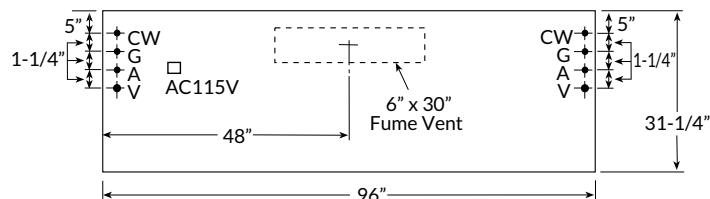
- Top of exhaust vent:
88-1/4" (2242 mm) above finished floor with steel base
- Duct connection must overlap inlet by maximum of 1-1/4" (32 mm)
- Suggested roughing-in dimensions are from floor

Symbols:

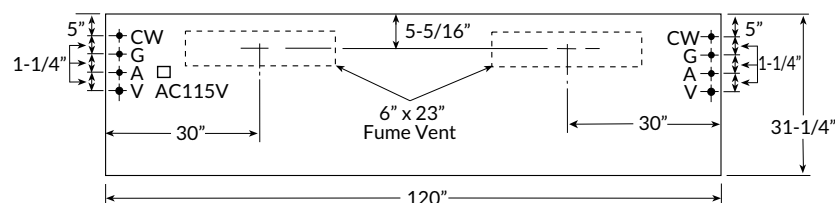
CW – Cold Water
 HW – Hot Water
 G – Gas
 A – Compressed Air
 V – Vacuum
 W – Waste
 AC – 115 or 230 Volt



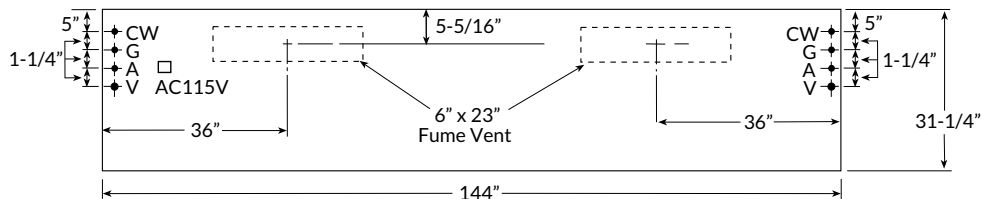
72" Wide Postless Sash Fume Hood



96" Wide Postless Sash Fume Hood



120" Wide Postless Sash Fume Hood



144" Wide Postless Sash Fume Hood





**HAMILTON LABORATORY
SOLUTIONS — U.S.**

1 Pickroy Road
Jasper, GA 30143
Phone: 920-657-1970
websales@hamiltonlab.com

**HAMILTON LABORATORY
SOLUTIONS CO., LTD. — CHINA**

Rm. 510, Bld 2, 59 Shennan Rd.
Shanghai, China 201108
Phone: +86-21-5429-2605

