Hamilton Fume Hoods Specification Catalog

safety, performance and efficiency

for dynamic laboratories

Hamilton
LABORATORY SOLUTIONS

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Fume Hood Technology

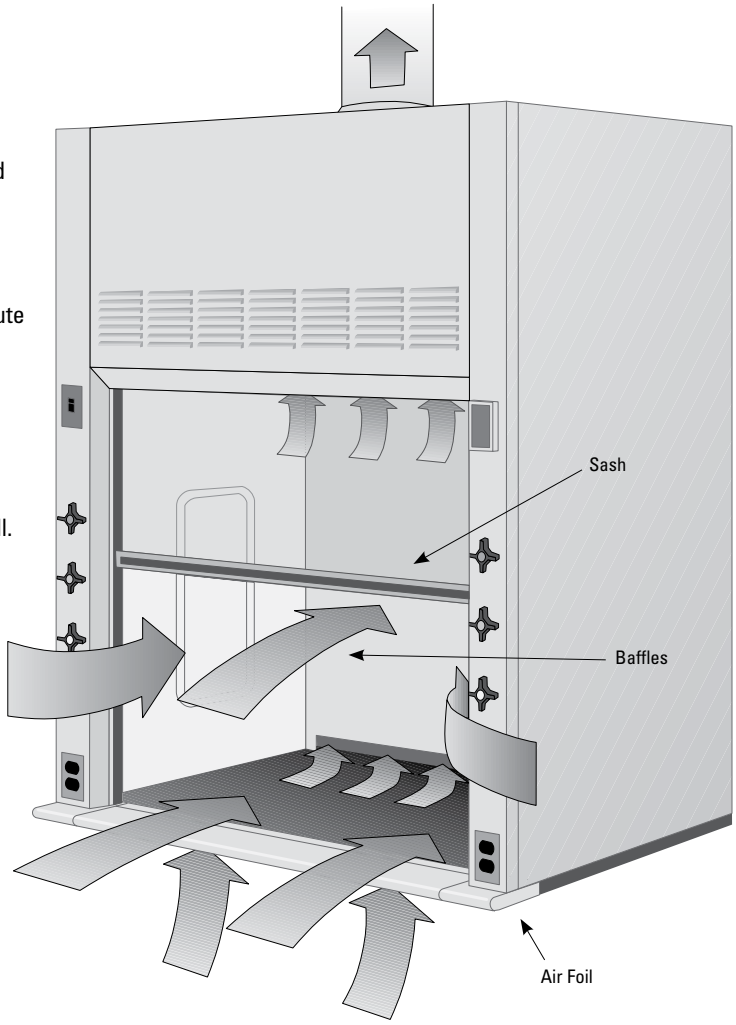
How a Fume Hood Works

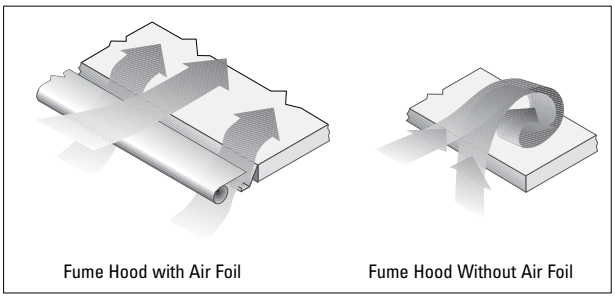
The complexities of fume hood operation become apparent when the many variables involved in exhausting fumes generated in the space are considered.

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.

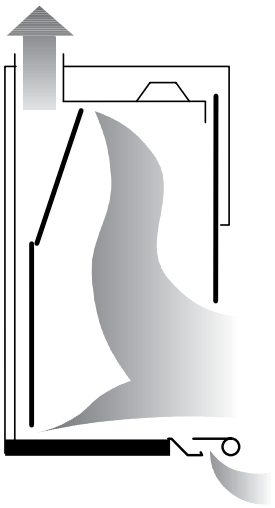
Fume Hood Technology

How a Fume Hood Works (continued)

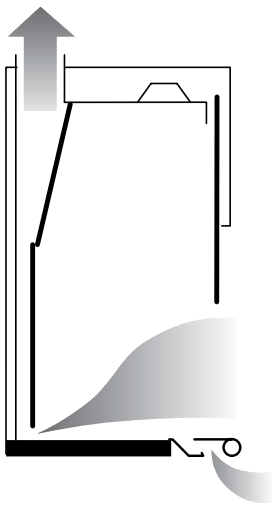
Located across the inside rear of the fume hood, baffles control airflow patterns through the fume hood. Baffle panels are located in a position determined to be most effective for the application. A remote adjustment option allows the user to reposition the baffles according to characteristics of effluents generated in the fume hood.

Remote baffle adjustment located on the outside of the fume hood corner post complies with OSHA Lab Standard recommendations.

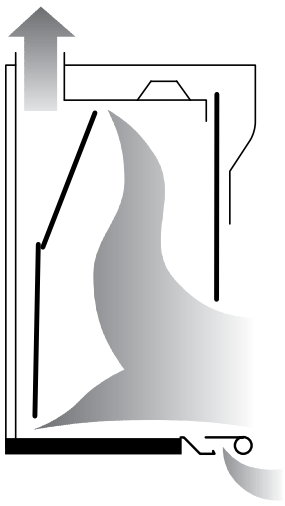
Baffle Positions



For lighter-than-air gases and high heat generation, maximum airflow is provided at the top of the fume hood. The top slot is adjusted to wide open, center and side slots remain at normal position, and the bottom slot is reduced.

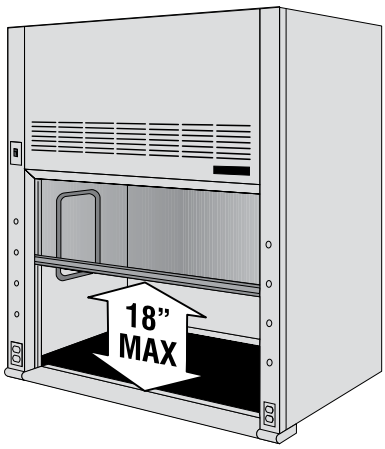


For heavier-than-air gases and fumes generated at the work surface, maximum air flow is provided at the bottom of the fume hood, near the work surface. The top slot is closed, and the center, side and bottom slots are open.

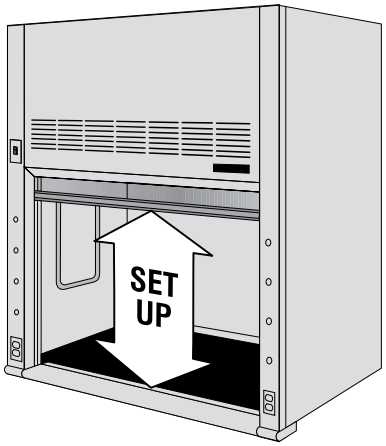


Concept and Pioneer fume hoods only have a fixed baffle for lower face velocity applications.

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.

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Fume Hood Technology

Fume Hood Exhaust Systems

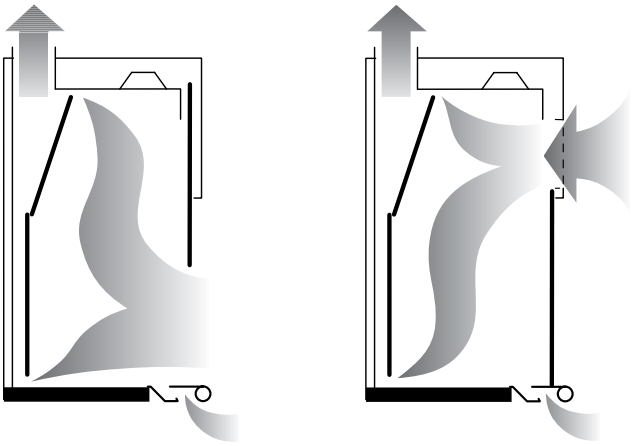
Two types of fume hood exhaust systems are constant volume (CV) and variable air volume (VAV). Either system can be used with individual or manifold duct and blower configurations (see page 8). The fume hood exhaust system must be compatible with the room's HVAC system.

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



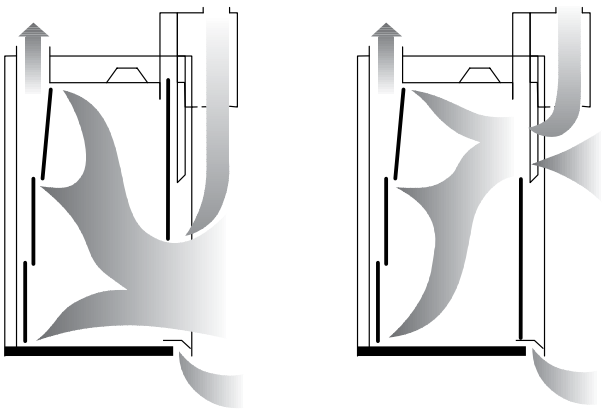
A Constant Volume Bypass fume hood shown first with the sash in the operating position and room air entering from the sash opening, then with the sash closed and room air entering through the louvered and lower bypass openings.

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.

Auxiliary Air Fume Hood with Constant Volume Exhaust Systems



An Auxiliary Air fume hood shown first with the sash in operating position and auxiliary air entering from the sash opening, then with the sash closed and auxiliary air entering directly into the fume hood compartment.

When there is insufficient room air to supply the fume hood's exhaust volume requirements, an auxiliary air fume hood may be recommended.

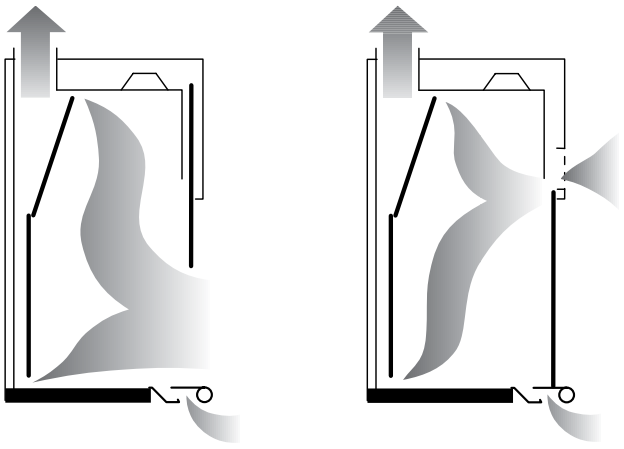
Air is brought in from the outside, heated to room temperature in winter, or cooled to room temperature +20° in summer, then supplied to the fume hood. (Hamilton fume hoods will reach over 95% efficiency in controlling and capturing the supply air when its temperature falls in the "room air to +20°F" range.)

When the sash is raised, auxiliary air is directed to the fume hood face. When the sash is lowered, auxiliary air enters the fume hood from above.

Operating with 50 to 70% auxiliary supply air, these fume hoods use significantly less room air, which can result in energy savings. However, supply air temperature and moisture content should be carefully controlled to manage containment effects on work performed in the fume hood. Undesirable turbulence at the fume hood face can be minimized by careful balancing of the fume hood with the room ventilation system.

Fume Hood Technology

Restricted Bypass Fume Hood with Constant Volume Exhaust Systems



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.

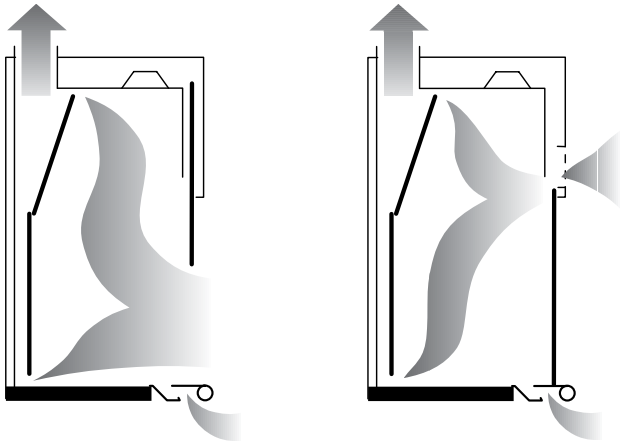
Constant volume operation can be achieved when Restricted Bypass fume hoods are equipped with "face opening reducing devices" and when the exhaust system is sized to maintain operational exhaust volume and face velocity at the reduced opening.

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.

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

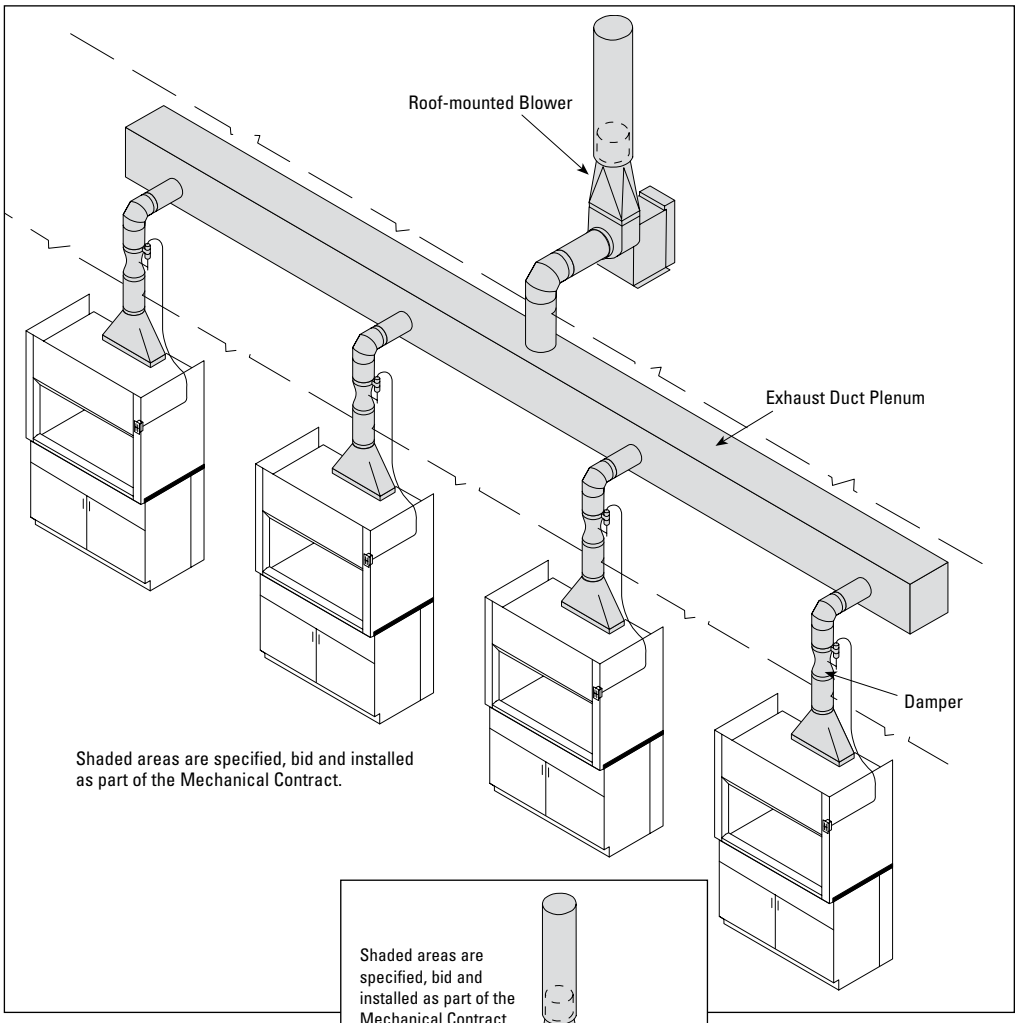
Typical Fume Hood Duct & Blower Configurations

Both manifold and individual configurations can be used with either constant volume or variable air volume exhaust systems.

Manifold System

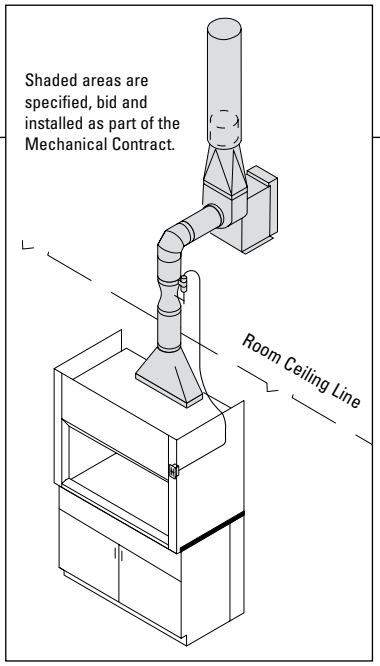
Manifold systems are popular for multiple-fume hood applications. Each fume hood's exhaust is pulled into the exhaust duct plenum and removed by a centralized blower.

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:

- Perchloric Acid fume hoods should not be connected to a manifold system.
- Both Individual and Manifold configurations can be designed for constant volume or variable air volume (VAV) systems.

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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	80-120 FPM
NFPA	NFPA 45, 2015	80-120 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 (ft^2)

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 chloride (PVC)
- 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

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.

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.

Fume Hood Exhaust Volume (A): _____ CFM

Fume Hood SPL* (B): _____ inches WG

Example: 54L2774P0 (5') (Page 21)

Fume Hood Exhaust Volume (A) 1000 CFM

Fume Hood SPL* (B): .18 inches WG

* For Auxiliary Air fume hood, use the Static Pressure Value from the Supply Air Requirements chart (not the Operating Parameters chart) on the product information page of the specified unit.

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

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.

Calculations for 10 Feeet 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
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″	1475
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

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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) x (F) = _____ linear feet (G)

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

(D) + (G) = _____ linear feet (H)

Straight Duct Length Equivalent for 90º 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 90º 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) x (F) = 3 x 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) ÷ 10 = _____ (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) x (I) = _____ inches WG (J)

Example:

(H) ÷ 10 = 120 ÷ 10 = 12 10-ft lengths (I)
(C) x (I) = .020 x 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) =_____ 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

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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 non-critical 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

Fume Hood Technology

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

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

1) Do not use this fume hood unless you have received proper training from the owner's industrial hygienist or safety representative.
2) 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.
3) 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.
4) 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.
5) Place chemicals and other work materials at least six (6) inches inside the sash.
6) 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.
7) Never place your head inside the fume hood.
8) 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.
9) If this fume hood is equipped with adjustable baffles, do not adjust the baffles without consulting the owner's industrial hygienist or safety representative.
10) Wear gloves and other protective clothing if contact with contaminants is a hazard.
11) Clean spills immediately.
12) 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.
13) 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.

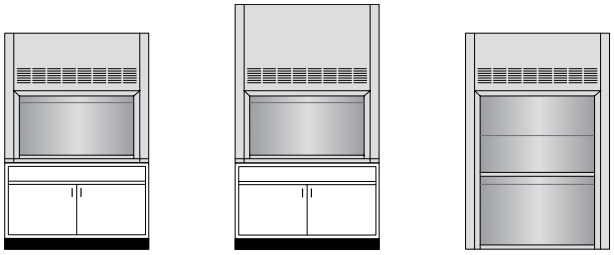
IMPORTANT: Fume hood must be carefully coordinated with the building's HVAC system, sink outlet material, trap material, and building acid waste system. Failure to verify compatibility of these elements can result in costly alterations or less-than-optimal component or system function. **Compatibility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

Step 1 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 | High-line | Floor-mounted

Step 2 Determine if a Special-Purpose Fume Hood is Required

A Special-Purpose fume hood may be required when, for example:

- Radioactive materials or perchloric acid will be handled in the fume hood.
- Neither a general-purpose high-line nor general-purpose floor-mounted model will accommodate especially tall or large apparatus.
- Wheelchair-bound persons will be using the fume hood.
- A classroom situation calls for special demonstration fume hood.

If any of these conditions apply to a special situation, review special-purpose fume hood product pages. If one of these fume hoods meets a particular need, continue with Step 4 to determine the base product number.

If a special-purpose fume hood is required and none of the models in this catalog will meet a specific need, a representative will help design a custom fume hood for the specific requirements.

Special Purpose Fume Hood

Education	ADA	Research/ Chemical	Other
Horizon	Concept ADA	Radioisotope	Canopy
Pass/Through Demonstration		Perchloric Acid	
Table Top		Postless Sash	

Step 3 Determine the Appropriate Operating Type

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

Refer to pages 4-9 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 High-line	Floor-mounted
Bypass	Bypass	Bypass
Auxiliary Air	Auxiliary Air	Auxiliary Air
Restricted Bypass	Restricted Bypass	Restricted Bypass

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Step 4 Select a Liner Material

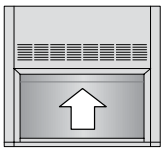
Liner Material	Suffix*	Advantages	Disadvantages
Polyresin	P	High illumination, easy to clean. Strong and resilient. High chemical resistance	
Stainless Steel	S	Work surface is caulked to superstructure.	Subject to attack by some chemicals.
Stainless Steel	K	Coved corners make this easy to clean. Ideal for Perchloric Acid use.	Subject to attack by some chemicals.
PVC	C	Excellent for highly corrosive applications.	Material loses structural integrity when exposed to high temperatures.

* Suffix for ordering purposes.

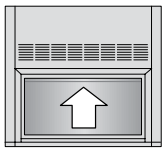
Step 5 Select a Sash Type

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.

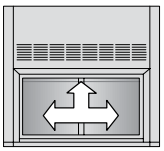
Optional sash configurations include framed vertical rising, horizontal, and combination. If you are interested in energy conservation, compare the exhaust volume value in the Exhaust Parameters chart on the product information page with the exhaust volume indicated for the sash option being considered. 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: O = Standard unframed
F = Framed sash option
B = Combination sash option - bench-top fume hood

Step 6 Select a Color

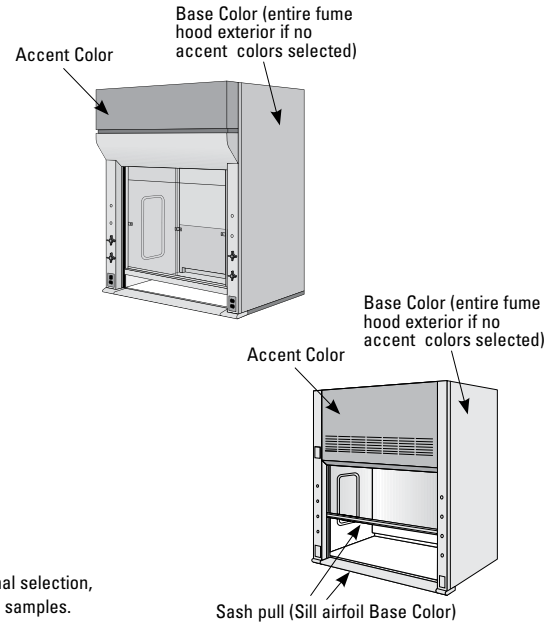
The two-digit color codes are listed separate from the product number. Three selections can be made:

1. **Base Color** - this is side panels and front vertical corner posts if an accent color is selected, or, the entire exterior panel surface if an accent color is not selected.
2. **Accent Color** - a second color applied to the lintel panel above the sash.
3. **Sash/Sill** - sash pull and sill airfoil will be the same color as the base color unless otherwise specified.

Fume Hood Base and Accent Colors

BK Black
BL Blue
BS Blue Slate
BD Brown Burgundy
CH Chameleon
DK Dark Khaki
G1 Dove Grey
G3 Grey Slate
HG Hunter Green
IN Indigo
KK Khaki
PW Petal White
PM Piedmont Green
PL Platinum
PA Purple
SA Sand
SS Sandstone
SW Shell White

RECOMMENDATION: Prior to making your final selection, please contact your representative to obtain samples.



Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

The Hamilton SafeAire II has been designed and tested to incorporate the latest in technology, performance and ergonomic features. The ergonomic flush sill provides user comfort, and the secondary trough increases safety SafeAire® II fume hood are available in either bench or floor-mounted designs of widths 36" to 96" and depths 31" to 43".

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Exterior Fluorescent Lighting

Located safely away from harmful fumes and vapors, the fluorescent lighting system provides excellent task lighting.

Unique Exhaust Collar Design

A contoured rectangular exhaust collar provides more vertical space, reduces noise levels and conserves energy by maintaining lower static pressure.

Louvered Bypass

Louvers provide an additional source of exhaust air when the sash is lowered, helping to maintain consistent face velocities.

Gasketed Access Panel

Soft PVC gasket on the interior access panel eliminates contaminant into sidewall.

Sash Safety Features

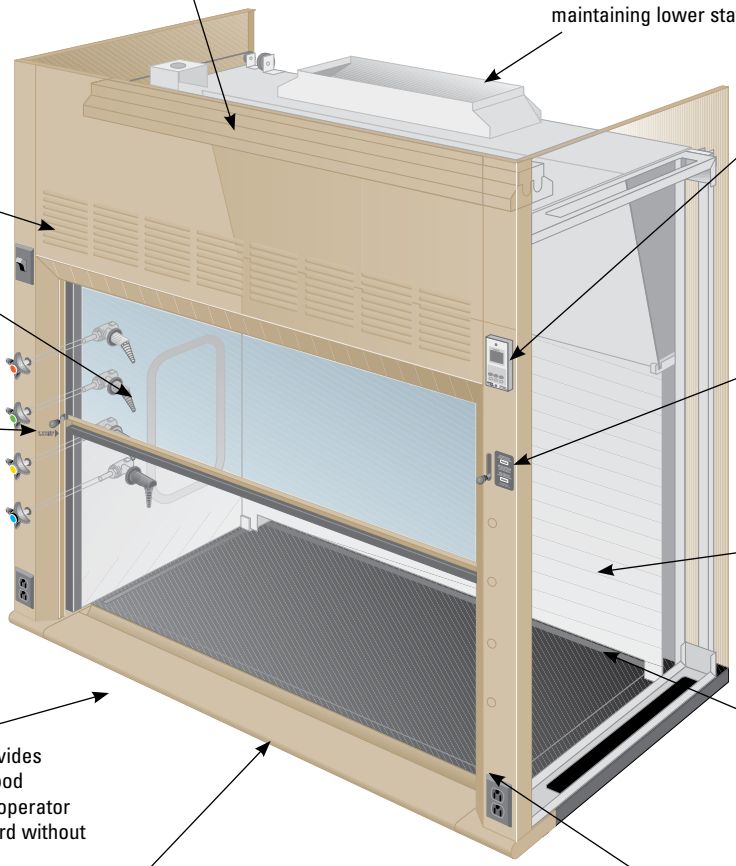
The unframed sash design has greater impact resistance. The 18" sash lock/release defines the operating position.

Service Fixture Options

A choice of remote control fixtures is available, all with acid-resistant finishes. The fixtures are color coded for added safety.

Low Profile Air Foil

The ergonomically designed airfoil provides obstruction-free access to the fume hood interior. The pivoting airfoil allows the operator to use a hospital grade 20 amp plug cord without obstructing the work area.



Safety Monitor (Recommended)

The optional electronic safety monitor activates an alarm if face velocity reaches a predetermined set point.

Remote Baffle Control

The optional two-position remote baffle control can be used to adjust baffle position according to the types of fumes generated in the fume hood.

Liner Materials

Several liner materials available and have low flame spread ratings and meet NFPA standards.

Perimeter Baffle Slots

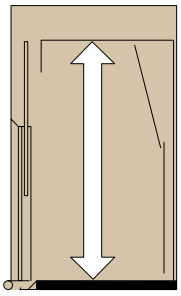
Side slots increase fume containment and eliminate dead spaces where fumes can accumulate.

Secondary Trough

The secondary trough provides an additional safeguard for the containment of spills not secured by a dished work surface.

Chemical-resistant Finish

Independently tested 1.0-1.5 mil thick urethane powdercoat finish has excellent chemical and abrasion resistance. Hamilton fume hood finishes are SEFA 8 and U.S. Green Building Council LEED compliant in 18 standard colors.



Increased Vertical Space

The exhaust collar and baffle angle designs create additional space and are perfect for taller apparatus.

Life-cycle Tested Sash Counter Balance System

This system features a single weight and cable system. The full weight of the counterweight is retained in the event of a cable break.

Metal-free Interior

Five non-metallic liners are resistant to high temperatures and meet all NFPA 45 standards. Interiors do not have metal brackets, angles or screw heads (which can rust or corrode).

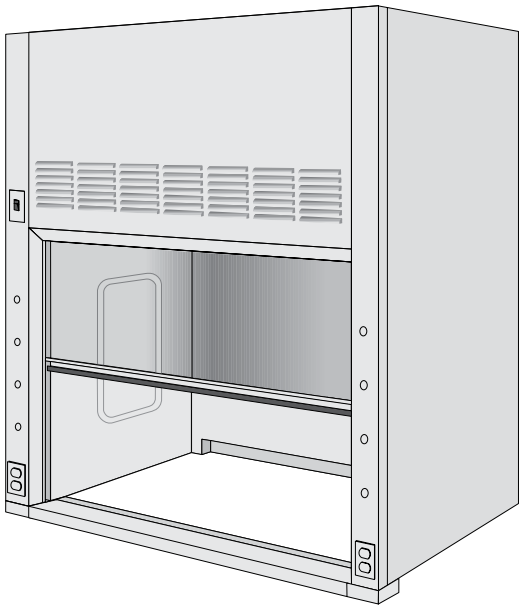
Full-frame Construction

All panels are attached to full-perimeter steel frame members for long term strength and durability.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Restricted Bypass Superstructure

For use with Constant Volume or Variable Air Volume Exhaust Systems



- Designed for installation on 26-1/8" (663 mm) to 38-1/8" (968 mm) deep work surface
- Recommended for use when an independent VAV controller (supplied by others) is utilized
- Also recommended for use with horizontal or combination sashes used in conjunction with VAV or constant volume systems
- Incorporates a 2" (51 mm) bypass above sash when closed to minimize leakage at minimum flow
- Vertical sash is full-view, laminated safety glass with full-width recessed pull
- 28-1/2" (724 mm) high opening for setup
- One double tube (T-8) florescent light fixture on 36", 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- Shipped assembled
- 31-1/4" (794 mm) deep fume hoods require a sink base unit below a rear cupsink
- UL 1805 classified
- See page 19 for additional product features common to all SafeAire II fume hoods

Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM Vertical Sash 28-1/2" Opening*		100 FPM Vertical Sash 18" Opening*		100 FPM Combination Sash 28-1/2" 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.

SafeAire II Restricted Bypass Superstructure

For use with Constant Volume or Variable Air Volume Exhaust Systems

Product Numbers

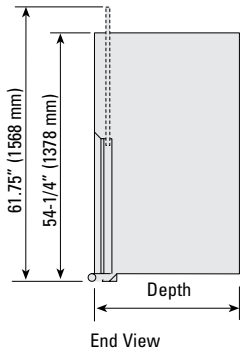
		Depth							
		31-1/4" (794 mm)		36" (914 mm)		37-1/4" (946 mm)		43-1/4" (1099 mm)	
Width	Sash Opening Height	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment
36" (914 mm)	28.5" (724 mm)	54L2766__	54L2768__	60L2766P_	60L2768P_	–	–	–	–
48" (1219 mm)	28.5" (724 mm)	54L2769__	54L2771__	60L2769P_	60L2771P_	61L2769P_	61L2771P_	62L2769P_	62L2771P_
60" (1524 mm)	28.5" (724 mm)	54L2772__	54L2774__	60L2772P_	60L2774P_	61L2772P_	61L2774P_	62L2772P_	62L2774P_
72" (1829 mm)	28.5" (724 mm)	54L2775__	54L2777__	60L2775P_	60L2777P_	61L2775P_	61L2777P_	62L2775P_	62L2777P_
96" (2438 mm)	28.5" (724 mm)	54L2778__	54L2780__	60L2778P_	60L2780P_	61L2778P_	61L2780P_	62L2778P_	62L2780P_

Liner Materials – Insert suffix in **8th** digit of product number for 31-1/4" depth only:
P – Polyresin
S – Stainless Steel (Not available on 36" wide fume hood)
C – PVC

Sash Options – Insert suffix in **9th** digit of product number:

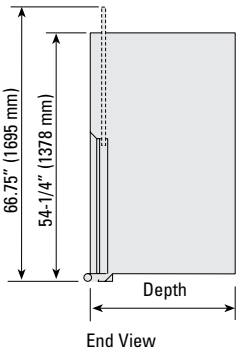
Sash Type	Suffix
Standard	0
Combination	B
Framed	F

36" wide fume hood only available with standard sash.



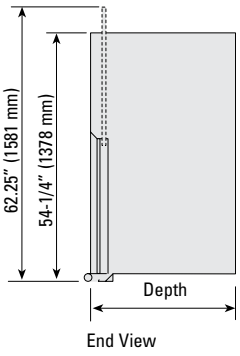
End View

Hood with Standard Sash



End View

Hood with Combination Sash



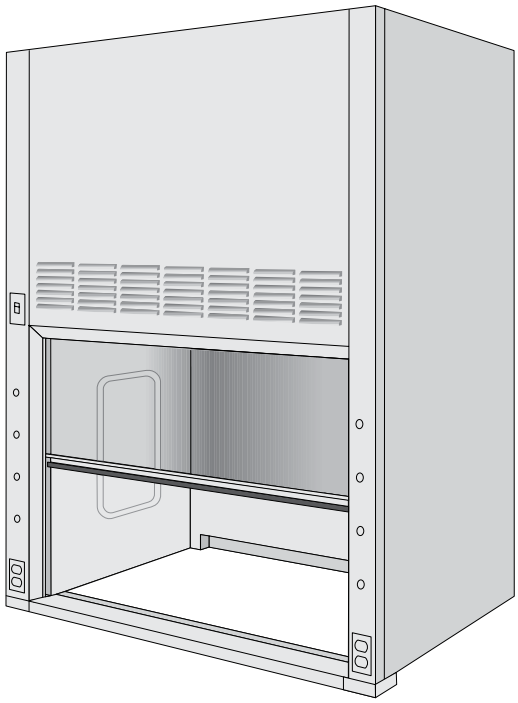
End View

Hood with Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II High-line Restricted Bypass Superstructure

For use with Constant Volume or Variable Air Volume Exhaust Systems



- Designed for installation on 26-1/8" (663 mm) to 38-1/8" (968 mm) deep work surface
- Extra-height interior to accommodate apparatus up to 60" (1524 mm) high
- Recommended when an independent VAV controller is used (supplied by others)
- Also recommended for use with horizontal or combination sashes used in conjunction with VAV or constant volume systems
- Incorporates a 2" (51 mm) bypass above sash when closed to minimize leakage at minimum flow.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull
- Choice of 28-1/2" (724 mm) or 36" (914 mm) high opening for setup.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts
- Shipped assembled
- 31-1/4" (794 mm) deep fume hoods require a sink base unit below a rear cupsink
- UL 1805 classified.
- See page 19 for additional product features common to all SafeAire II fume hoods

Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM Vertical Sash 28-1/2" Opening*		100 FPM Vertical Sash 18" Opening*		100 FPM Vertical Sash 36" Opening*		100 FPM Horizontal Sash 28-1/2" 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 28-1/2" (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.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II High-line Restricted Bypass Superstructure

For Use With Constant Volume or Variable Air Volume Exhaust Systems

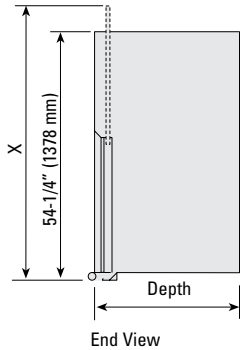
Product Numbers

		Depth							
		31-1/4" (794 mm)		36" (914 mm)		37-1/4" (946 mm)		43-1/4" (1099 mm)	
Width	Sash Opening Height	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment
48" (1219 mm)	28.5" (724 mm)	54L2801__	54L2803__	60L2801P_	60L2803P_	61L2801P_	61L2803P_	62L2801P_	62L2803P_
48" (1219 mm)	36.0" (914 mm)	54L2813__	54L2815__	60L2813P_	60L2815P_	61L2813P_	61L2815P_	62L2813P_	62L2815P_
60" (1524 mm)	28.5" (724 mm)	54L2804__	54L2806__	60L2804P_	60L2806P_	61L2804P_	61L2806P_	62L2804P_	62L2806P_
60" (1524 mm)	36.0" (914 mm)	54L2816__	54L2818__	60L2816P_	60L2818P_	61L2816P_	61L2818P_	62L2816P_	62L2818P_
72" (1829 mm)	28.5" (724 mm)	54L2807__	54L2809__	60L2807P_	60L2809P_	61L2807P_	61L2809P_	62L2807P_	62L2809P_
72" (1829 mm)	36.0" (914 mm)	54L2819__	54L2821__	60L2819P_	60L2821P_	61L2819P_	61L2821P_	62L2819P_	62L2821P_
96" (2438 mm)	28.5" (724 mm)	54L2810__	54L2812__	60L2810P_	60L2812P_	61L2810P_	62L2810P_	62L2810P_	62L2812P_
96" (2438 mm)	36.0" (914 mm)	54L2822__	54L2824__	60L2822P_	60L2824P_	61L2822P_	61L2824P_	62L2822P_	62L2824P_

Liner Materials – Insert suffix in **8th** digit of product number for 31-1/4" depth only:
P – Polyresin
C – PVC

Sash Options – Insert suffix in **9th** digit of product number:

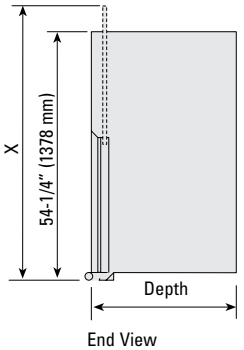
Sash Type	Suffix
Standard	0
Combination	B
Framed	F



End View

Hood with Standard Sash

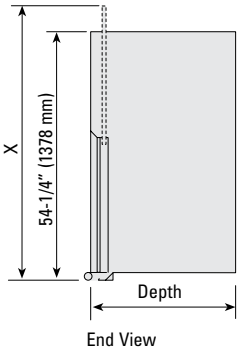
28.5" sash opening height X = 66-1/4"
36" sash opening height X = 76-3/4"



End View

Hood with Combination Sash

28.5" sash opening height X = 66-3/4"
36" sash opening height X = 81-1/4"



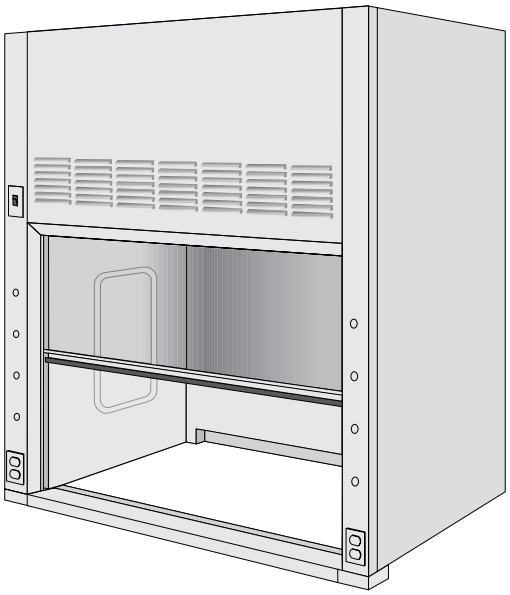
End View

Hood with Framed Sash

28.5" sash opening height X = 66-1/4"
36" sash opening height X = 77-1/4"

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Constant Volume Bypass Superstructure



- Designed for installation on 26-1/8" (663 mm) to 38-1/8" (968 mm) deep work surface.
- Incorporates double bypass to maintain constant exhaust volume at all sash positions.
- Designed to permit exact balancing of room ventilation system with fume hood exhaust volume.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- 28-1/2" (724 mm) high opening for setup.
- One double tube (T-8) florescent light fixture on 36", 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- Shipped assembled.
- 31-1/4" (794 mm) deep fume hoods require a sink base unit below a rear cupsink.
- UL 1805 classified.
- See page 19 for additional product features common to all SafeAire II fume hoods.

Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*	
		CFM	SP	CFM	SP
36" (914 mm)	6" x 9" (152 x 229 mm)	520	.22	360	.12
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09
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

*28-1/2" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening.

SafeAire II Constant Volume Bypass Superstructure

Product Numbers

		Depth							
		31-1/4" (794 mm)		36" (914 mm)		37-1/4" (946 mm)		43-1/4" (1099 mm)	
Width	Sash Opening Height	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment
36" (914 mm)	28.5" (724 mm)	54L2586__	54L2588__	60L2586P_	60L2588P_	–	–	–	–
48" (1219 mm)	28.5" (724 mm)	54L2589__	54L2591__	60L2589P_	60L2591P_	61L2589P_	61L2591P_	62L2589P_	62L2591P_
60" (1524 mm)	28.5" (724 mm)	54L2592__	54L2594__	60L2592P_	60L2594P_	61L2592P_	61L2594P_	62L2592P_	62L2594P_
72" (1829 mm)	28.5" (724 mm)	54L2595__	54L2597__	60L2595P_	60L2597P_	61L2595P_	61L2597P_	62L2595P_	62L2597P_
96" (2438 mm)	28.5" (724 mm)	54L2598__	54L2600__	60L2598P_	60L2600P_	61L2598P_	61L2600P_	62L2598P_	62L2600P_

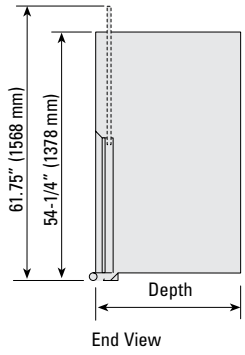
Liner Materials – Insert suffix in **8th** digit of product number for 31-1/4" depth only:

P – Polyresin
S – Stainless Steel
(Not available on 36" wide fume hood)
C – PVC

Sash Options – Insert suffix in **9th** digit of product number:

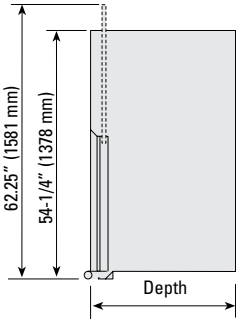
Sash Type	Suffix
Standard	0
Framed	F

36" wide fume hood only available with standard sash.



End View

Hood with Standard Sash



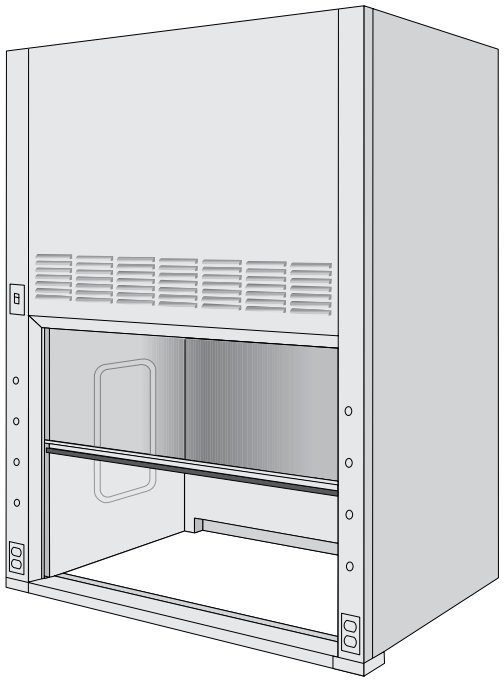
End View

Hood with Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II High-line Constant Volume Bypass Superstructure

- Designed for installation on 26-1/8" (663 mm) to 38-1/8" (968 mm) deep work surface.
- Extra-height interior to accommodate apparatus up to 60" (1524 mm) high.
- Incorporates a double bypass to maintain constant exhaust volume at all sash positions.
- Designed to permit exact balancing of room ventilation system with fume hood exhaust volume.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- Choice of 28-1/2" (724 mm) or 36" (914 mm) high opening for setup.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- Shipped assembled.
- 31-1/4" (794 mm) deep fume hoods require a sink base unit below a rear cupsink.
- UL 1805 classified.
- See page 19 for additional product features common to all SafeAire II fume hoods.



Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*		100 FPM @ 36" Sash Opening*	
		CFM	SP	CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09	960	.27
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09	1260	.28
72" (1829 mm)	6" x 23" (152 x 584 mm)	1250	.27	785	.13	1560	.35
96" (2438 mm)	6" x 30" (152 x 762 mm)	1710	.26	1081	.09	2160	.34

*28-1/2" (724 mm) and 36" (914 mm) openings are for setup only; operating position is an 18" (457 mm) opening.

SafeAire II High-line Constant Volume Bypass Superstructure

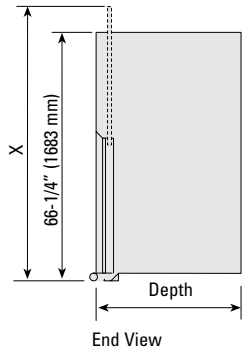
Product Numbers

		Depth							
		31-1/4" (794 mm)		36" (914 mm)		37-1/4" (946 mm)		43-1/4" (1099 mm)	
Width	Sash Opening Height	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment	Fixed Baffle	Remote Baffle Adjustment
48" (1219 mm)	28.5" (724 mm)	54L2685__	54L2687__	60L2685P_	60L2687P_	61L2685P_	61L2687P_	62L2685P_	62L2687P_
48" (1219 mm)	36.0" (914 mm)	54L2697__	54L2699__	60L2697P_	60L2699P_	61L2697P_	61L2699P_	62L2697P_	62L2699P_
60" (1524 mm)	28.5" (724 mm)	54L2688__	54L2690__	60L2688P_	60L2690P_	61L2688P_	61L2690P_	62L2688P_	62L2690P_
60" (1524 mm)	36.0" (914 mm)	54L2700__	54L2702__	60L2700P_	60L2702P_	61L2700P_	61L2702P_	62L2700P_	62L2702P_
72" (1829 mm)	28.5" (724 mm)	54L2691__	54L2693__	60L2691P_	60L2693P_	61L2691P_	61L2693P_	62L2691P_	62L2693P_
72" (1829 mm)	36.0" (914 mm)	54L2703__	54L2705__	60L2703P_	60L2705P_	61L2703P_	61L2705P_	62L2703P_	62L2705P_
96" (2438 mm)	28.5" (724 mm)	54L2694__	54L2696__	60L2694P_	60L2696P_	61L2694P_	61L2696P_	62L2694P_	62L2696P_
96" (2438 mm)	36.0" (914 mm)	54L2706__	54L2708__	60L2706P_	60L2708P_	61L2706P_	61L2708P_	62L2706P_	62L2708P_

Liner Materials – Insert suffix in **8th** digit of product number for 31-1/4" depth only:
P – Polyresin
C – PVC

Sash Options – Insert suffix in **9th** digit of product number:

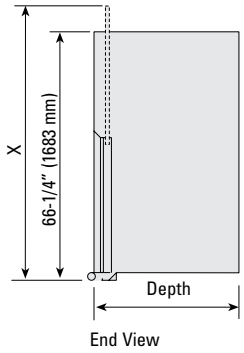
Sash Type	Suffix
Standard	0
Framed	F



End View

Hood with Standard Sash

28.5" sash opening height X = 66-1/4"
36" sash opening height X = 76-3/4"



End View

Hood with Framed Sash

28.5" sash opening height X = 66-1/4"
36" sash opening height X = 77-1/4"

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Perchloric Acid Restricted Bypass Superstructure

For Use With Constant Volume or Variable Air Volume Exhaust Systems

- Designed specifically and exclusively for perchloric acid procedures to minimize possibility of fire and explosion.
- One-piece type 304 stainless steel interior includes dished work surface, with all joints coved, welded and ground.
- Optional type 316 stainless steel interior with integral work surface for high abuse applications (Special order – extended leadtime).
- Integral full-width trough at back of work surface for collection and disposal of wash-down waters; double drain for large volumes.
- High-volume spray heads behind upper baffle.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- 28-1/2" (724 mm) high opening for setup.
- One each remote control cold water faucet with vacuum breaker and control valve for fume hood washdown (Additional valves are required for duct washdown).
- One vapor-proof light with one black light switch and flush plate on 48" (1219 mm) wide unit
- Two vapor-proof lights with one black light switch and flush plate on 72" (1829 mm) wide unit
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service installation standard on both posts.
- Does not include sidewall access panel.
- Baffles are non-adjustable.
- UL 1805 classified
- Not investigated by UL for use with perchloric acid.
- See page 19 for additional product features common to all SafeAire II fume hoods.

Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*	
		CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09
72" (1829 mm)	6" x 23" (152 x 584 mm)	1250	.27	785	.13

*28-1/2" (72.4 mm) openings are for setup only; operating position is an 18" (45.7 mm) opening.

SafeAire II Perchloric Acid Restricted Bypass Superstructure

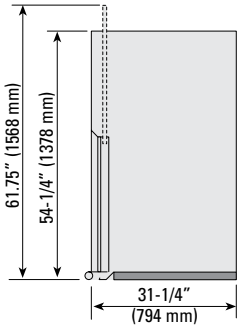
For Use With Constant Volume or Variable Air Volume Exhaust Systems

Width	Product No.
48" (1219 mm)	54L2793K_
72" (1829 mm)	54L2797K_

Liner Material – Stainless steel Type 304, consult factory for optional Type 316 high-abuse stainless steel.

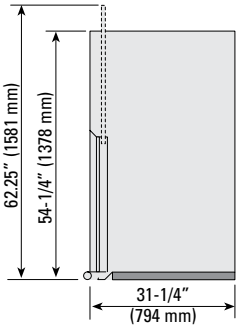
Sash Options – Insert suffix in **9th** digit of product number:

Sash Type	Suffix
Standard	0
Framed	F



End View

Hood with Standard Sash



End View

Hood with Framed Sash

SafeAire II Constant Volume Radioisotope Bypass Superstructure

- Designed for handling of radioactive isotopes.
- One-piece type 304 stainless steel interior and work surface with integral cupsink located at left front corner, all corners coved, welded and ground (Relocating cupsink extends leadtime).
- Filter system recommended.
- Weight capacity of reinforced work surface is 200 lbs per square foot.
- Incorporates double bypass to maintain constant exhaust volume at all sash positions.
- Designed to permit exact balancing of room ventilation system with hood exhaust volume.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- 28-1/2" (724 mm) high opening for setup.
- Does not include sidewall access panel.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- UL 1805 classified
- Not investigated by UL for use with radiological materials.
- See page 19 for additional product features common to all SafeAire II fume hoods.

Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*	
		CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09
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

*28-1/2" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening.

SafeAire II Constant Volume Radioisotope Bypass Superstructure

For Use With Constant Volume Exhaust Systems

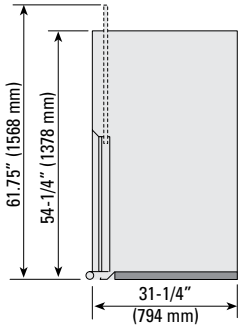
	Product Numbers	
Width	**Fixed Baffle**	**Remote Baffle**
48" (1219 mm)	54L2733K_	54L2735K_
60" (1524 mm)	54L2736K_	54L2738K_
72" (1829 mm)	54L2739K_	54L2741K_
96" (2438 mm)	54L2742K_	54L2744K_

Liner Material – Stainless Steel, **No Options**

Sash Options – Insert suffix in **9th** digit of product number:

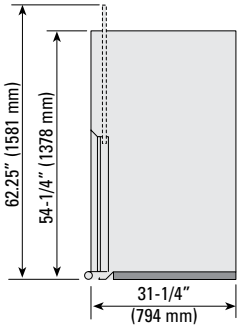
Sash Type	Suffix
Standard	0
Framed	F

Acid or Flammable Liquid storage cabinets cannot be positioned below the existing cupsinks.



End View

Hood with Standard Sash



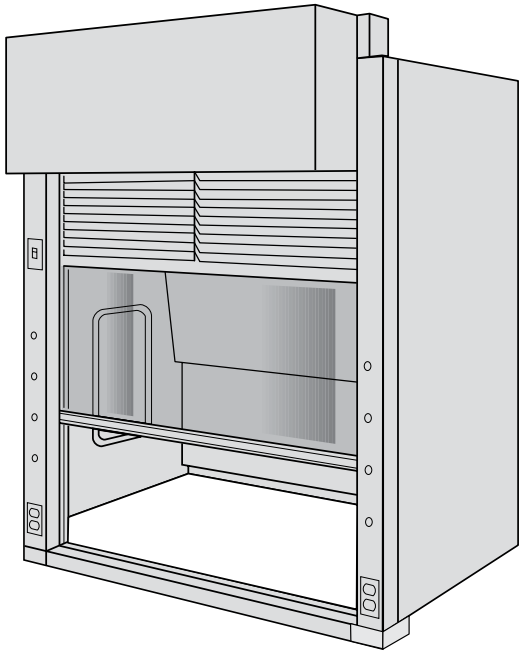
End View

Hood with Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Auxiliary Air Superstructure

For Use With Constant Volume Exhaust Systems



- For installation on 26-1/8" (664 mm) to 38-1/8" (968 mm) deep work surfaces
- Designed to utilize semi-tempered outside air as supply air when total fume hood exhaust volume exceeds room exhaust volume requirements.
- Designed to yield a higher percentage capture rate with lower auxiliary air velocities.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- 28-1/2" (724 mm) high opening for setup.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- Shipped assembled.
- UL 1805 classified.

Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*	
		CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09
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

Supply Air Requirements

Fume Hood Size	Percent of Fume Hood Air Requirement	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*	
		CFM	SP	CFM	SP
48" (1219 mm)	70%	532	.14	340	.07
60" (1524 mm)	70%	700	.29	460	.14
72" (1829 mm)	70%	875	.34	550	.20
96" (2438 mm)	70%	1197	.31	760	.26
48" (1219 mm)	60%	456	.12	290	.05
60" (1524 mm)	60%	600	.26	295	.12
72" (1829 mm)	60%	750	.26	470	.22
96" (2438 mm)	60%	1026	.33	650	.20
48" (1219 mm)	50%	380	.09	240	.03
60" (1524 mm)	50%	500	.16	330	.10
72" (1829 mm)	50%	625	.20	335	.18
96" (2438 mm)	50%	855	.30	540	.17

*28-1/2" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Auxiliary Air Superstructure

For Use With Constant Volume Exhaust Systems

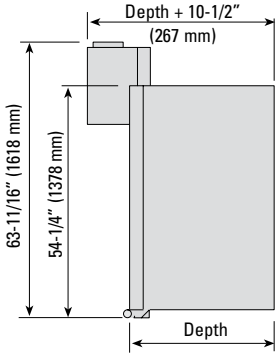
Product Numbers

		Depth			
Width	**Sash Opening Height**	**33-13/16" (859 mm)* Fixed Baffle**	**38-9/16" (979 mm) Fixed Baffle**	**39-13/16" (1011 mm) Fixed Baffle**	**45-13/16" (1164 mm) Fixed Baffle**
48" (1219 mm)	28.5" (724 mm)	54L2625__	60L2625P_	61L2625P_	62L2625P_
60" (1524 mm)	28.5" (724 mm)	54L2628__	60L2628P_	61L2628P_	62L2628P_
72" (1829 mm)	28.5" (724 mm)	54L2631__	60L2631P_	61L2631P_	62L2631P_
96" (2438 mm)	28.5" (724 mm)	54L2634__	60L2634P_	61L2634P_	62L2634P_

Liner Materials – Insert suffix in **8th** digit of product number for 33-13/16" depth only:
P – Polyresin
S – Stainless Steel
C – PVC

Sash Options – Insert suffix in **9th** digit of product number:

Sash Type	Suffix
Standard	0
Framed	F



End View

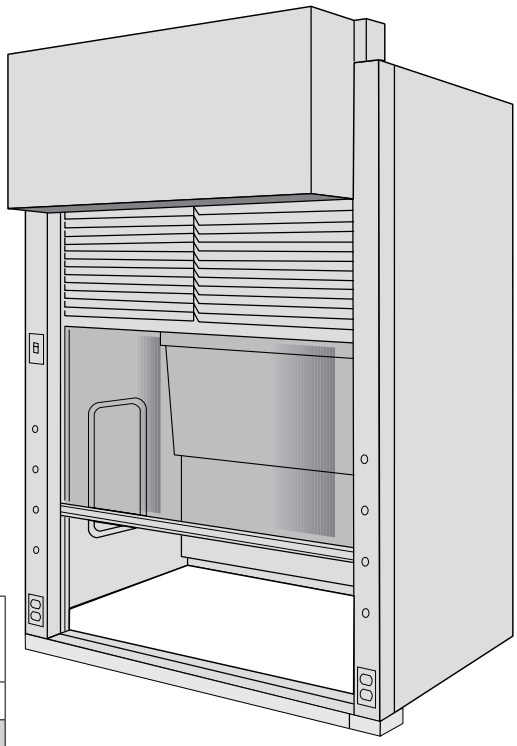
Hood with Standard or Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II High-line Auxiliary Air Superstructure

For Use With Constant Volume Exhaust Systems

- For installation on 26-1/8" (664 mm) to 38-1/8" (968 mm) deep work surfaces
- Designed to utilize semi-tempered outside air as supply air when total fume hood exhaust volume exceeds room exhaust volume requirement.
- Extra-height interior to accommodate apparatus up to 60" (1524 mm) high.
- Designed to yield a higher percentage capture rate with lower auxiliary air velocities.
- More headroom than standard bench models.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- Choice of 28-1/2" (724 mm) or 36" (914 mm) high opening for setup.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- Shipped assembled.
- UL 1805 classified.



Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*		100 FPM @ 36" Sash Opening*	
		CFM	SP	CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	760	.18	485	.09	960	.27
60" (1524 mm)	6" x 23" (152 x 584 mm)	1000	.18	660	.09	1260	.28
72" (1829 mm)	6" x 23" (152 x 584 mm)	1250	.27	785	.13	1560	.35
96" (2438 mm)	6" x 30" (152 x 762 mm)	1710	.26	1081	.09	2160	.34

Supply Air Requirements

Fume Hood Size	Percent of Fume Hood Air Requirement	100 FPM @ 28-1/2" Sash Opening*		100 FPM @ 18" Sash Opening*		100 FPM @ 36" Sash Opening*	
		CFM	SP	CFM	SP	CFM	SP
48" (1219 mm)	70%	532	.14	340	.08	672	.16
60" (1524 mm)	70%	700	.29	460	.14	882	.33
72" (1829 mm)	70%	875	.34	550	.17	1092	.38
96" (2438 mm)	70%	1197	.31	760	.24	1517	.41
48" (1219 mm)	60%	456	.12	290	.06	576	.15
60" (1524 mm)	60%	600	.26	400	.14	756	.30
72" (1829 mm)	60%	750	.26	470	.16	936	.32
96" (2438 mm)	60%	1026	.33	650	.21	1296	.37
48" (1219 mm)	50%	380	.09	240	.04	480	.12
60" (1524 mm)	50%	500	.16	330	.12	630	.22
72" (1829 mm)	50%	625	.20	390	.13	780	.26
96" (2438 mm)	50%	855	.30	540	.16	1080	.33

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAIre II High-line Auxiliary Air Superstructure

For Use With Constant Volume Exhaust Systems

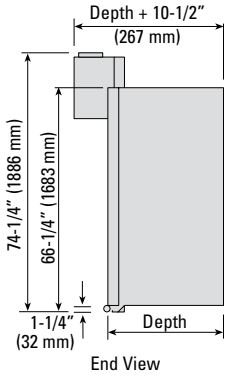
Product Numbers

		Depth			
Width	**Sash Opening Height**	**33-13/16" (859 mm)* Fixed Baffle**	**38-9/16" (979 mm) Fixed Baffle**	**39-13/16" (1011 mm) Fixed Baffle**	**45-13/16" (1164 mm) Fixed Baffle**
48" (1219 mm)	28.5" (724 mm)	54L2709__	60L2709P_	61L2709P_	62L2709P_
48" (1219 mm)	36.0" (914 mm)	54L2721__	60L2721P_	61L2721P_	62L2721P_
60" (1524 mm)	28.5" (724 mm)	54L2712__	60L2712P_	61L2712P_	62L2712P_
60" (1524 mm)	36.0" (914 mm)	54L2724__	60L2724P_	61L2724P_	62L2724P_
72" (1829 mm)	28.5" (724 mm)	54L2715__	60L2715P_	61L2715P_	62L2715P_
72" (1829 mm)	36.0" (914 mm)	54L2727__	60L2727P_	61L2727P_	62L2727P_
96" (2438 mm)	28.5" (724 mm)	54L2718__	60L2718P_	61L2718P_	62L2718P_
96" (2438 mm)	36.0" (914 mm)	54L2730__	60L2730P_	61L2730P_	62L2730P_

Liner Materials – Insert suffix in 8**th** digit of product number for 33-13/16" depth only:
P – Polyresin
C – PVC

Sash Options – Insert suffix in **9th** digit of product number:

Sash Type	Suffix
Standard	0
Framed	F



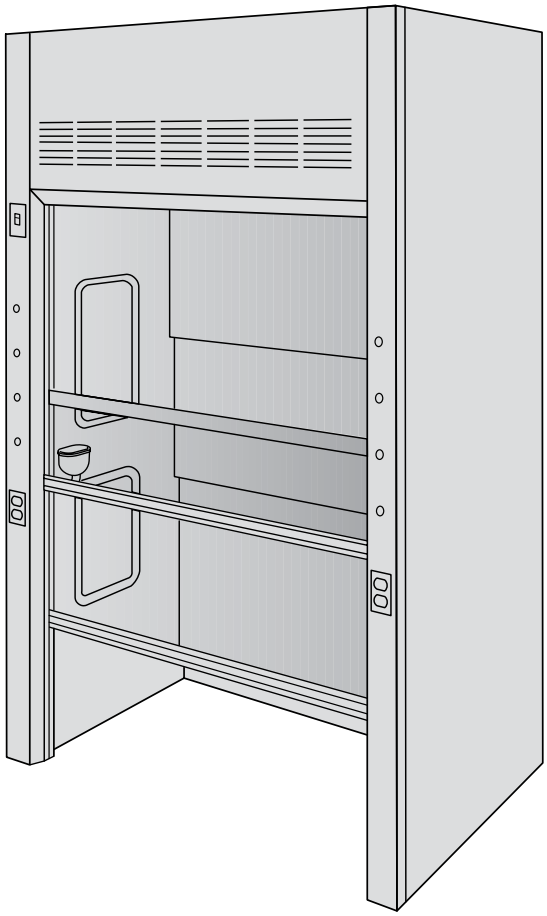
Hood with Standard or Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Restricted Bypass Floor-mounted

For use with Constant Volume or Variable Air Volume Exhaust Systems

- Three standard depths: 32-11/32" (821 mm), 38-11/32" (974 mm), and 44-11/32" (1126 mm)
- Designed for large and complex laboratory apparatus setups and roll-in equipment.
- Recommended when an independent VAV controller is used (supplied by others).
- Also recommended with horizontal or combination sash used in conjunction with VAV or constant volume systems.
- Incorporates a 2" (51 mm) bypass to minimize leakage and maintain minimum flow.
- Double-hung, vertical sash is full-view, laminated safety glass with full-width recessed pulls.
- Sashes raise completely for easy setup (66-1/2" (1689 mm) sash opening).
- Two side-wall access panels with PVC gasket on left side, one on right.
- One cupsink included at front left location. The 96" (2438 mm) wide fume hood has one cupsink and two access panels at each side.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- All floor-mounted fume hoods except those with stainless steel liners are shipped knocked-down and require job-site assembly.
- UL 1805 classified.



Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 31-1/2" Vertical Sash Opening*		100 FPM @ Combination (Horizontal) Sash Opening*	
		CFM	SP	CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	850	.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 Restricted Bypass Floor-mounted

For Use With Constant Volume or Variable Air Volume Exhaust Systems

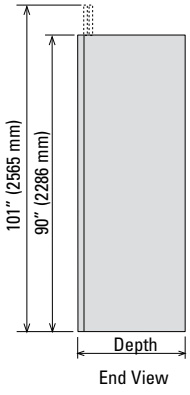
Product Numbers

	Depth		
Width	**32-11/32" (822 mm)* Fixed Baffle**	**38-11/32" (974 mm) Fixed Baffle**	**44-11/32" (1126 mm) Fixed Baffle**
48" (1219 mm)	554S2326__	551S2326P_	552S2326P_
60" (1524 mm)	554S2329__	551S2329P_	552S2329P_
72" (1829 mm)	554S2332__	551S2332P_	552S2332P_
96" (2438 mm)	554S2335__	551S2335P_	552S2335P_

Liner Materials – Insert suffix in **9th** digit of product number for 32-11/32" depth only:
P – Polyresin
S – Stainless Steel

Sash Options – Insert suffix in **10th** digit of product number:

Sash Type	Suffix
Standard	0
Combination, upper frame only	B
Framed	F

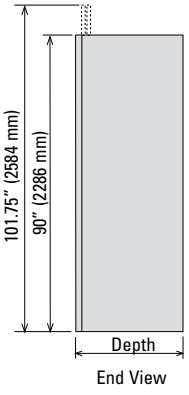


End View

Hood with Standard Sash

End View

Hood with Combination Sash



End View

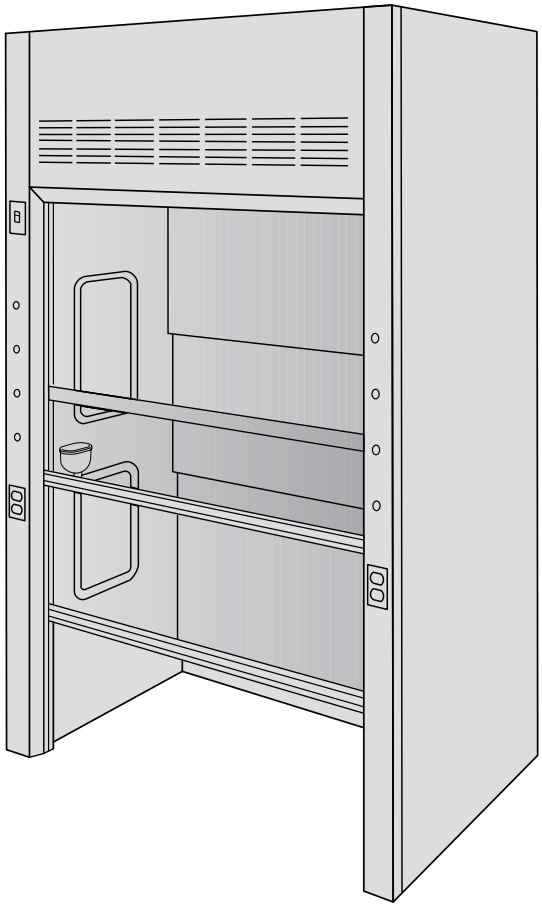
Hood with Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Constant Volume Floor-mounted

For use with Constant Volume Exhaust Systems

- Three standard depths: 32-11/32" (821 mm), 38-11/32" (974 mm), and 44-11/32" (1126 mm)
- Designed for large and complex laboratory apparatus setups and roll-in equipment.
- Incorporates double bypass to maintain constant exhaust volume at all sash positions.
- Designed to permit exact balancing of room ventilation system with fume hood exhaust volume.
- Double-hung, vertical sash is full-view, laminated safety glass with full-width recessed pulls
- Sashes raise completely for easy setup (66-1/2" (1689 mm) sash opening).
- Two side-wall access panels with PVC gasket on left side, one on right.
- One cupsink and two side-wall access panels with PVC gasket included at front left location; 96" (2438 mm) wide fume hood has two cupsinks and two access panels at each side.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- All floor-mounted fume hood except those with stainless steel liners are shipped knocked-down and require job-site assembly.
- UL 1805 classified.



Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 31-1/2" Sash Opening*	
		CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	850	.18
60" (1524 mm)	6" x 23" (152 x 584 mm)	1110	.20
72" (1829 mm)	6" x 23" (152 x 584 mm)	1380	.32
96" (2438 mm)	6" x 30" (152 x 762 mm)	1900	.29

*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 Constant Volume Floor-mounted

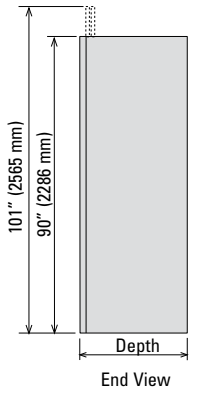
Product Numbers

Width	Depth		
	32-11/32" (822 mm)* Fixed Baffle	38-11/32" (974 mm) Fixed Baffle	44-11/32" (1126 mm) Fixed Baffle
48" (1219 mm)	554S2705__	551S2705P_	552S2705P_
60" (1524 mm)	554S2708__	551S2708P_	552S2708P_
72" (1829 mm)	554S2711__	551S2711P_	552S2711P_
96" (2438 mm)	554S2714__	551S2714P_	552S2714P_

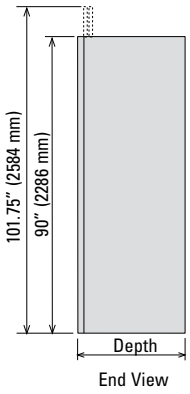
Liner Materials – Insert suffix in **9th** digit of product number for 32-11/32" depth only:
P – Polyresin
S – Stainless Steel

Sash Options – Insert suffix in **10th** digit of product number:

Sash Type	Suffix
Standard	0
Framed	F



Hood with Standard Sash

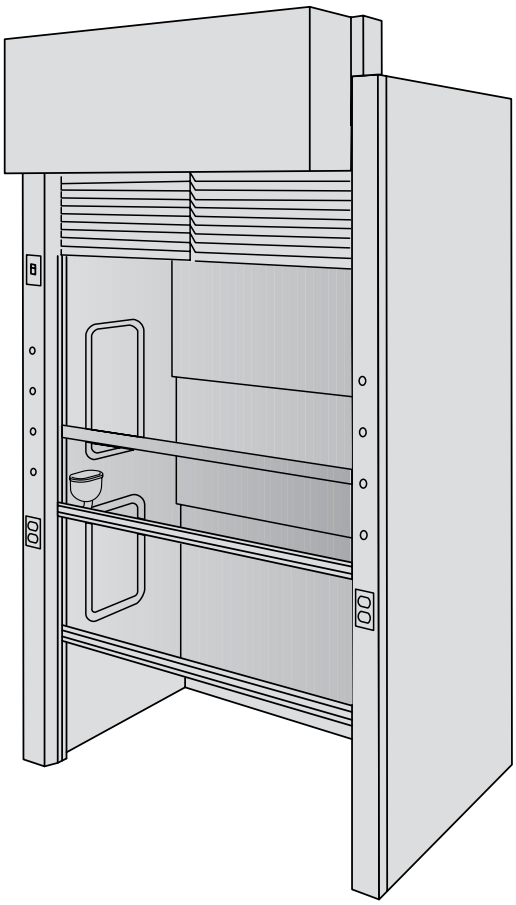


Hood with Framed Sash

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Constant Volume Auxiliary Air Floor-mounted

- Three standard depths: 32-11/32" (821 mm), 38-11/32" (974 mm), and 44-11/32" (1126 mm)
- Designed for large and complex laboratory apparatus setups and roll-in equipment.
- Designed to utilize semi-tempered outside air when total fume hood exhaust volume exceeds room exhaust volume required.
- Designed to yield a higher percentage capture rate with lower auxiliary air velocities.
- Double-hung, vertical sash is full-view, laminated safety glass with full-width recessed pulls.
- Sashes raise completely for easy setup (66-1/2" (1689 mm) sash opening).
- One cupsink and two side-wall access panels with PVC gasket included at front left location. The 96" (2438 mm) wide fume hood has one cupsink and two access panels at each side.
- One double tube (T-8) florescent light fixture on 48", 60" and 72" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- All floor-mounted fume hoods except those with stainless steel liners are shipped knocked-down and require job-site assembly.
- UL 1805 classified.



Exhaust Volumes

Fume Hood Size	Collar Size	100 FPM @ 31-1/2" Sash Opening*	
		CFM	SP
48" (1219 mm)	6" x 15" (152 x 381 mm)	850	.18
60" (1524 mm)	6" x 23" (152 x 584 mm)	1110	.20
72" (1829 mm)	6" x 23" (152 x 584 mm)	1380	.32
96" (2438 mm)	6" x 30" (152 x 762 mm)	1900	.29

*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.

Supply Air Requirements

Fume Hood Size	Percent of Fume Hood Air Required	100 FPM @ 31-1/2" Sash Opening*	
		CFM	SP
48" (1219 mm)	70%	532	.14
60" (1524 mm)	70%	700	.29
72" (1829 mm)	70%	875	.34
96" (2438 mm)	70%	1197	.31
48" (1219 mm)	60%	456	.12
60" (1524 mm)	60%	600	.26
72" (1829 mm)	60%	750	.26
96" (2438 mm)	60%	1026	.33

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Constant Volume Auxiliary Air Floor-mounted

For use with Constant Volume Exhaust Systems

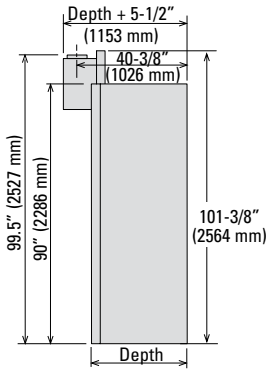
Product Numbers

	Depth		
Width	**34-15/16" (887 mm)* Fixed Baffle**	**40-15/16" (1040 mm) Fixed Baffle**	**46-15/16" (1192 mm) Fixed Baffle**
48" (1219 mm)	554S2720__	551S2720__	52S2720__
60" (1524 mm)	554S2723__	551S2723__	552S2723__
72" (1829 mm)	554S2726__	551S2726__	552S2726__
96" (2438 mm)	554S2729__	551S2729__	552S2729__

Liner Materials – Insert suffix in **9th** digit of product number for 34-15/16" depth only:
P – Polyresin
S – Stainless Steel

Sash Options – Insert suffix in **10th** digit of product number:

Sash Type	Suffix
Standard	0
Framed	F



End View

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

SafeAire II Combination Bench/Floor-mounted Constant Volume Assembly

- Combination bench/floor-mounted assembly consisting of fume hood superstructure, work surface and base cabinets.
- Designed for unlimited access to work area for setup of wide apparatus.
- Half of work surface is removable; cupboard base cabinet opens for roll-in capability.
- Air foil design with double bypass to maintain constant exhaust volume at all sash positions.
- Fixed work surface is dished epoxy resin; removable surface is flat stainless steel.
- Choice of left or right side floor-mounted.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- 28-1/2" (724 mm) high opening for setup.
- Polyresin liner; no options.
- Two double-tube (T-8) florescent light fixtures
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- 96" (2438 mm) width only.
- Extended lead time.
- UL 1805 classified.

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

*28-1/2" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

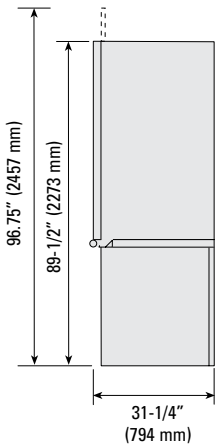
SafeAire II Combination Bench/Floor-mounted Bypass Assembly

For use with Constant Volume Exhaust Systems

Fixed Baffle Only

Walk-in Side	Product No.
Left	554S2350P
Right	554S2353P

Liner Material – Polyresin, no options.

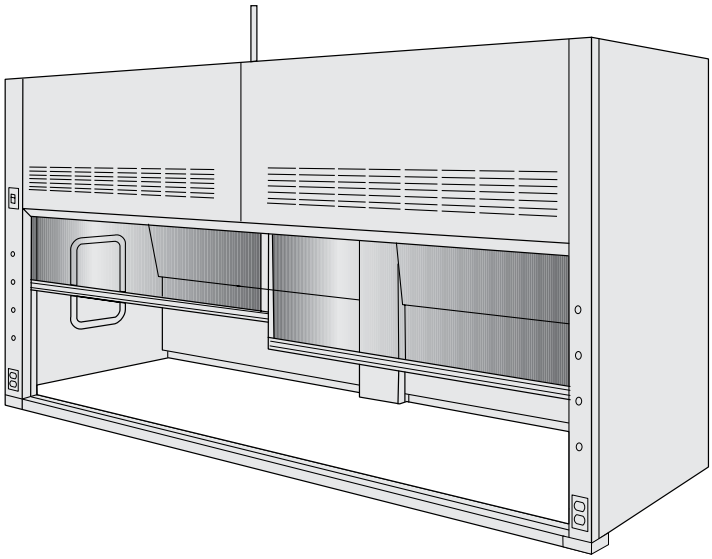


End View

SafeAire II Framed Postless Sash Restricted Bypass Superstructure

For use with Constant Volume or Variable Air Volume Exhaust Systems

- For installation on 26-1/8" (664 mm) work surface
- Designed for unlimited access to work area for setup of wide apparatus.
- Two independently-operating framed vertical sashes are full-view, laminated safety glass with full-width recessed pull and disappearing guides.
- 28-1/2" (724 mm) high opening for setup.
- Incorporates a restricted bypass to eliminate leakage and maintain minimum flow.
- Polyresin liner; no options.
- Two double-tube (T-8) florescent light fixtures
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- 120" (3049 mm) and 144" (3658 mm) wide units shipped in two sections and require job-site assembly and central support to ceiling.
- Two exhaust collars each on 120" (3049 mm) and 144" (3658 mm) models.
- UL 1805 classified.



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

*28-1/2" (724 mm) openings are for setup only; operating position is an 18" (457 mm) opening.

SafeAire II Framed Postless Sash Restricted Bypass Superstructure

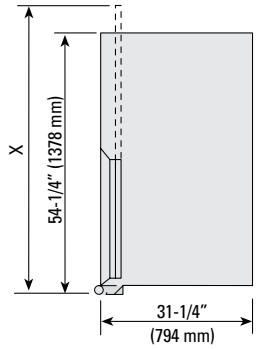
For use with Constant Volume or Variable Air Volume Exhaust Systems

Width	Product Numbers	
	Fixed Baffle	Remote Baffle
72" (1829 mm)	54L2781P_	54L2783PF_
96" (2438 mm)	54L2784P_	54L2786PF_
120" (3048 mm)	54L2787P_	54L2789PF_
144" (3658 mm)	54L2790P_	54L2792PF_

Liner Material – Polyresin, no options

Sash Type – Insert suffix in **9th** digit of product number:

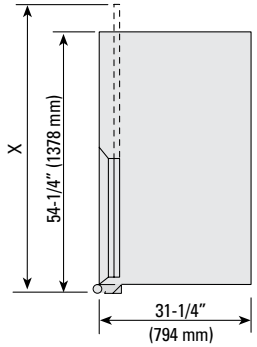
Sash Type	Suffix
Combination	B
Framed	F



End View

Hood with Combination Sash

sashes closed - top of sash guide
X = 65-1/2"
28.5" sash open - top of sash frame
X = 66-3/4"
28.5" sash open - top of sash guide
X = 68-1/2"



End View

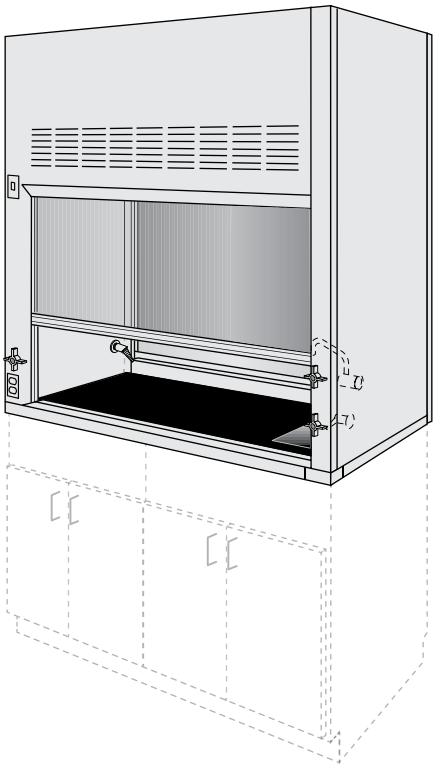
Hood with Framed Sash

sashes closed - top of sash guide
X = 65-1/2"
28.5" sash open - top of sash frame
X = 62"
28.5" sash open - top of sash guide
X = 69-3/4"

SafeAire II Pass-through Demonstration Superstructure

For use with Constant Volume or Variable Air Volume Exhaust Systems

- Designed to permit demonstration and observation from either side.
- Partial assembly consists of a restricted bypass fume hood superstructure, work surface and cupsink.
- Can be used freestanding or positioned in a wall between a classroom and a prep room.
- Standard fixtures include: one cold water gooseneck faucet; two single gas fixtures; two black duplex AC outlets/flush plates; two exhaust collars. Maximum two fixtures per side.
- All electrical is pre-wired to a junction box at the top of the fume hood.
- Two full-view vertically rising sashes made of 7/32" (6 mm) laminated safety glass with recessed pulls (one each side).
- 28-1/2" (724 mm) high opening for setup.
- Fixed baffle position.
- One double-tube (T-8) florescent light fixture
- One 3-way black light switch and flush plate mounted on each side of unit
- One 120 VAC black receptacle and flush plate mounted on each side of unit
- 60" (1524 mm) wide.
- Optional sash interlock 90L162N0 allows only one sash to be opened at a time (special order and extended lead time).
- UL 1805 classified (only with 90L162N0 sash interlock factory installed).
- Work surface not included - see pages 92-93 to order
- Resin sink not included. See page 47 to order



Order base cabinets separately

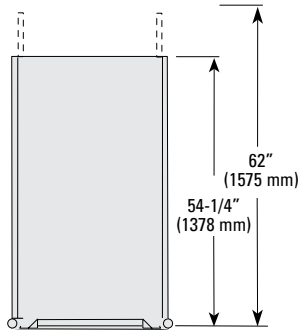
Exhaust Volumes
Based on sash open one side only

Fume Hood Size	Collar Size	100 FPM @ 18" Sash Opening*	
		CFM	SP
60" (1524 mm)	6" x 15" (152 x 381 mm)	700	.10

*28-1/2" (72.4 mm) openings are for setup only; operating position is an 18" (45.7 mm) opening (one side only).

SafeAire II Pass-through Demonstration Superstructure

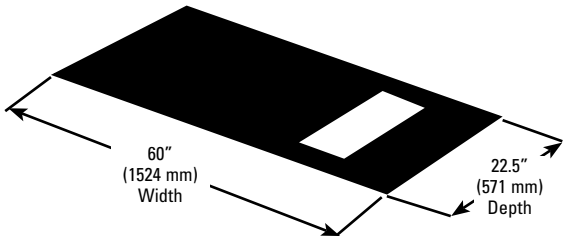
For Use With Constant Volume or Variable Air Volume Exhaust Systems



End View

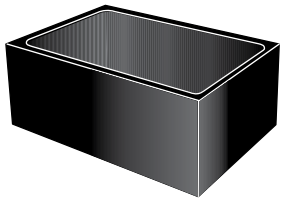
Width	Liner Material	Product No.
60" (1524 mm)	Polyresin	54L2825P0

Optional sash interlock
Order product number 90L162N0; requires extended lead time.



- 1-1/4" thick epoxy resin top
- Not dished
- Cutout for 52L45400 sink (below)

Width	Product No.
48" (1219 mm)	21L482200
60" (1524 mm)	21L602200
72" (1829 mm)	21L722200

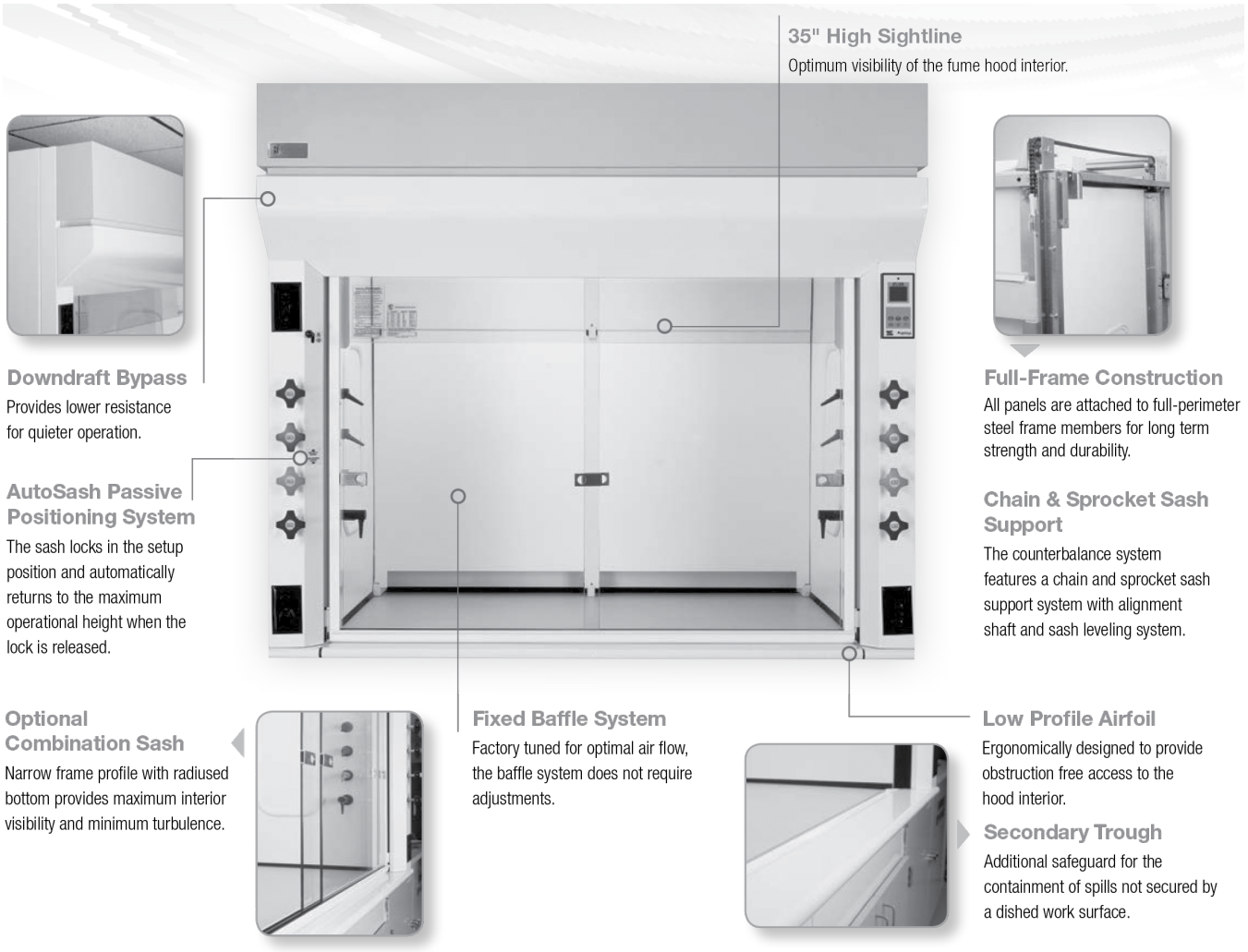


- Molded epoxy resin sink
- Internal dimensions 16" x 8" x 7" (deep)
- See Fixtures and Accessories catalog for other dimensions
- Order sink hangars separately

Product No.
52L45400

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Concept Fume Hood Superstructure



35" High Sightline
Optimum visibility of the fume hood interior.

Downdraft Bypass
Provides lower resistance for quieter operation.

AutoSash Passive Positioning System
The sash locks in the setup position and automatically returns to the maximum operational height when the lock is released.

Optional Combination Sash
Narrow frame profile with radiused bottom provides maximum interior visibility and minimum turbulence.

Fixed Baffle System
Factory tuned for optimal air flow, the baffle system does not require adjustments.

Full-Frame Construction
All panels are attached to full-perimeter steel frame members for long term strength and durability.

Chain & Sprocket Sash Support
The counterbalance system features a chain and sprocket sash support system with alignment shaft and sash leveling system.

Low Profile Airfoil
Ergonomically designed to provide obstruction free access to the hood interior.

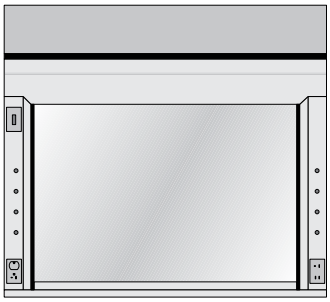
Secondary Trough
Additional safeguard for the containment of spills not secured by a dished work surface.

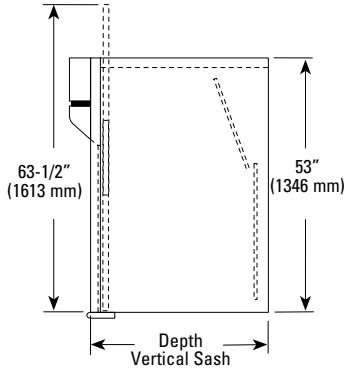
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Concept Constant Volume and Restricted Bypass

Fume hoods ship with both left and right enclosure panels.
See next page for exhaust volumes.

Bypass and restricted bypass vertical rising sash





Constant Volume Vertical Rising Unframed Sash

Product Numbers

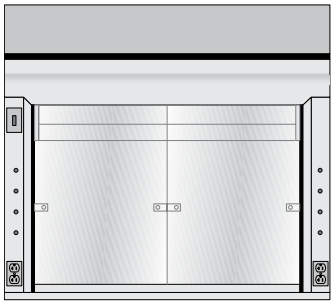
	Depth		
Width	**31.25" (870 mm)***	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2570POB	61L2570POB	62L2570POB
60" (1524 mm)	54L2571POB	61L2571POB	62L2571POB
72" (1829 mm)	54L2572POB	61L2572POB	62L2572POB
84" (2134 mm)	54L2573POB	61L2573POB	62L2573POB
96" (2438 mm)	54L2574POB	61L2574POB	62L2574POB

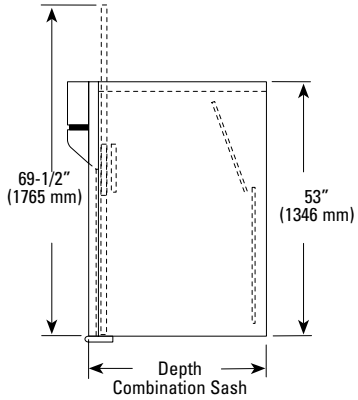
Restricted Bypass Vertical Rising Unframed Sash

Product Numbers

	Depth		
Width	**31.25" (870 mm)***	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2750POB	61L2750POB	62L2750POB
60" (1524 mm)	54L2751POB	61L2751POB	62L2751POB
72" (1829 mm)	54L2752POB	61L2752POB	62L2752POB
84" (2134 mm)	54L2753POB	61L2753POB	62L2753POB
96" (2438 mm)	54L2754POB	61L2754POB	62L2754POB

Restricted bypass combination sash





Restricted Bypass Combination Sash

Product Numbers

	Depth		
Width	**31.25" (870 mm)***	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2750PBB	61L2750PBB	62L2750PBB
60" (1524 mm)	54L2751PBB	61L2751PBB	62L2751PBB
72" (1829 mm)	54L2752PBB	61L2752PBB	62L2752PBB
84" (2134 mm)	54L2753PBB	61L2753PBB	62L2753PBB
96" (2438 mm)	54L2754PBB	61L2754PBB	62L2754PBB

* 31-1/4" (79.4 mm) deep fume hoods require a sink base unit below a rear cupsink.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Exhaust Volumes

Concept 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* 28-1/2*	100 60	.09"	6" x 15" (152 x 381 mm)
60″ (1524 mm)	634	18* 28-1/2*	100 60	.09"	6" x 23" (152 x 584 mm)
72″ (1829 mm)	784	18* 28-1/2*	100 60	.13"	6" x 23" (152 x 584 mm)
84″ (2134 mm)	934	18* 28-1/2*	100 60	.15"	6" x 26" (152 x 660 mm)
96″ (2438 mm)	1084	18* 28-1/2*	100 60	.09"	6" x 30" (152 x 762 mm)

* 28-1/2″ and 24″ opening is for setup only; operating position is an 18″ high sash opening.

Concept Fume Hood with Combination Sash

		Sash Opening			Face Velocity			
Fume Hood Width	Exhaust Volume	Vertical Sash Height	Horizontal Sash Height	Sliding Sash Panels	Vertical**	Horizontal	Static Pressure	Exhaust Collar Size
48″ (1219 mm)	400	18* 24*	27 x 17-3/8	2	80 60	100	.07"	6" x 15" (152 x 381 mm)
60″ (1524 mm)	540	18* 24*	27 x 23-3/8	2	80 60	100	.07"	6" x 23" (152 x 584 mm)
72″ (1829 mm)	650	18* 24*	27 x 28-1/4	4	80 60	100	.11"	6" x 23" (152 x 584 mm)
84″ (2134 mm)	790	18* 24*	27 x 34-1/4	4	80 60	100	.13"	6" x 26" (152 x 660 mm)
96″ (2438 mm)	930	18* 24*	27 x 40-1/4	4	80 60	100	.07"	6" x 30" (152 x 762 mm)

** Vertical face velocities – nominal.

Concept Fume Hood with Horizontal Sash

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

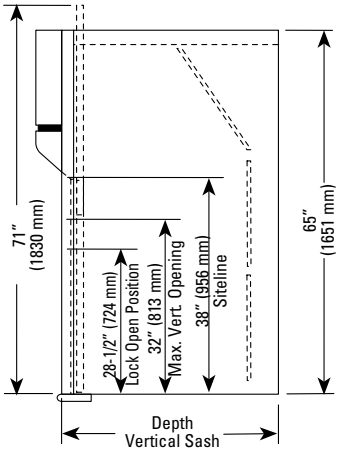
Fume Hood Width	Exhaust Volume (CFM)	Face Velocity (Nominal)	Static Pressure Loss (Inches W.G.)	Horizontal Sash Opening (Height x Width)
48″ (1219 mm)	420	100	.08	28 x 17.375
60″ (1524 mm)	560	100	.09	28 x 23.375
72″ (1829 mm)	680	100	.12	28 x 28.250
84″ (2134 mm)	825	100	.14	28 x 34.250
96″ (2438 mm)	965	100	.09	28 x 40.250

*Bypass is based on 3″ by the interior width of the fume hood. (1: at the sill and 2″ above the sash behind the lintel panel)

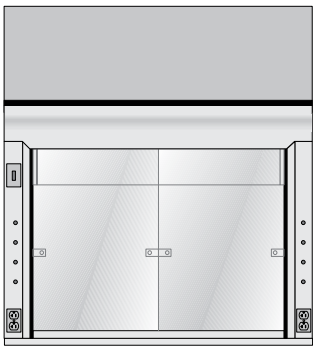
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

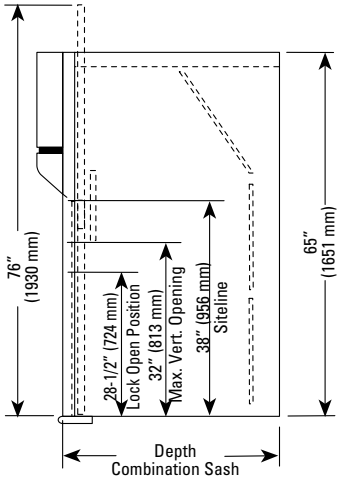
Concept High-line Constant Volume and Restricted Bypass

Vertical rising sash



Combination and Horizontal sash





Polyresin Liner, Vertical Rising Sash, Constant Volume

Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2650PO	61L2650PO	62L2650PO
60" (1524 mm)	54L2651PO	61L2651PO	62L2651PO
72" (1829 mm)	54L2652PO	61L2652PO	62L2652PO
84" (2134 mm)	54L2653PO	61L2653PO	62L2653PO
96" (2438 mm)	54L2654PO	61L2654PO	62L2654PO

Polyresin Liner, Vertical Rising Sash, Restricted Bypass

Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2641PO	61L2641PO	62L2641PO
60" (1524 mm)	54L2642PO	61L2642PO	62L2642PO
72" (1829 mm)	54L2643PO	61L2643PO	62L2643PO
84" (2134 mm)	54L2644PO	61L2644PO	62L2644PO
96" (2438 mm)	54L2645PO	61L2645PO	62L2645PO

Polyresin Liner, Combination Sash, Restricted Bypass

Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2641PB	61L2641PB	62L2641PB
60" (1524 mm)	54L2642PB	61L2642PB	62L2642PB
72" (1829 mm)	54L2643PB	61L2643PB	62L2643PB
84" (2134 mm)	54L2644PB	61L2644PB	62L2644PB
96" (2438 mm)	54L2645PB	61L2645PB	62L2645PB

Polyresin Liner, Horizontal Sash, Restricted Bypass

Product Numbers

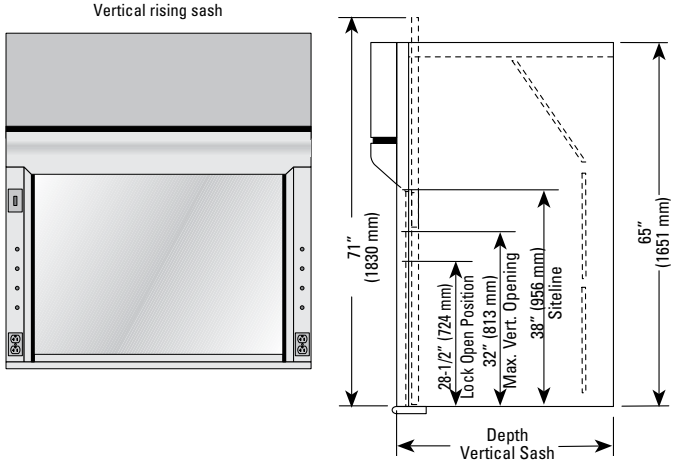
	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2641PC	61L2641PC	62L2641PC
60" (1524 mm)	54L2642PC	61L2642PC	62L2642PC
72" (1829 mm)	54L2643PC	61L2643PC	62L2643PC
84" (2134 mm)	54L2644PC	61L2644PC	62L2644PC
96" (2438 mm)	54L2645PC	61L2645PC	62L2645PC

* 31-1/4" deep fume hood require a sink base unit below a rear cupsink.

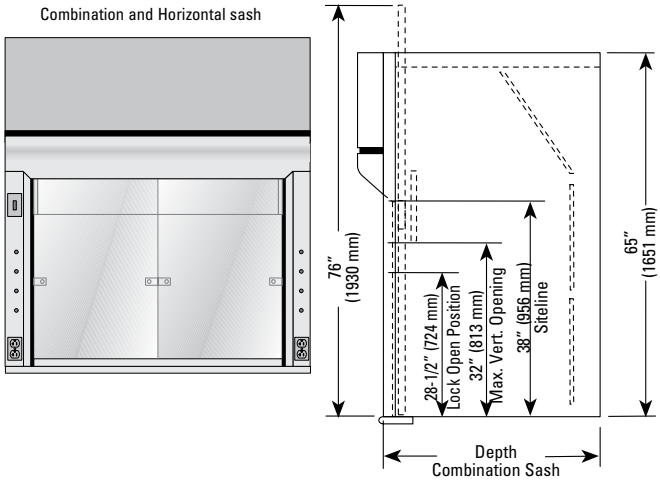
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Concept High-line Constant Volume and Restricted Bypass

Vertical rising sash



Combination and Horizontal sash



Stainless Steel, Vertical Rising Sash, Constant Volume

Product Numbers

	Depth		
Width	**31.25″ (870 mm)**	**37.25″ (946 mm)**	**43.25″ (1099 mm)**
48″ (1219 mm)	54L2650SO	61L2650SO	62L2650SO
60″ (1524 mm)	54L2651SO	61L2651SO	62L2651SO
72″ (1829 mm)	54L2652SO	61L2652SO	62L2652SO
84″ (2134 mm)	54L2653SO	61L2653SO	62L2653SO
96″ (2438 mm)	54L2654SO	61L2654SO	62L2654SO

Stainless Steel, Vertical Rising Sash, Restricted Bypass

Product Numbers

	Depth		
Width	**31.25″ (870 mm)**	**37.25″ (946 mm)**	**43.25″ (1099 mm)**
48″ (1219 mm)	54L2641SO	61L2641SO	62L2641SO
60″ (1524 mm)	54L2642SO	61L2642SO	62L2642SO
72″ (1829 mm)	54L2643SO	61L2643SO	62L2643SO
84″ (2134 mm)	54L2644SO	61L2644SO	62L2644SO
96″ (2438 mm)	54L2645SO	61L2645SO	62L2645SO

Stainless Steel, Combination Sash, Restricted Bypass

Product Numbers

	Depth		
Width	**31.25″ (870 mm)**	**37.25″ (946 mm)**	**43.25″ (1099 mm)**
48″ (1219 mm)	54L2641SB	61L2641SB	62L2641SB
60″ (1524 mm)	54L2642SB	61L2642SB	62L2642SB
72″ (1829 mm)	54L2643SB	61L2643SB	62L2643SB
84″ (2134 mm)	54L2644SB	61L2644SB	62L2644SB
96″ (2438 mm)	54L2645SB	61L2645SB	62L2645SB

Stainless Steel, Horizontal Sash, Restricted Bypass

Product Numbers

	Depth		
Width	**31.25″ (870 mm)**	**37.25″ (946 mm)**	**43.25″ (1099 mm)**
48″ (1219 mm)	54L2641SC	61L2641SC	62L2641SC
60″ (1524 mm)	54L2642SC	61L2642SC	62L2642SC
72″ (1829 mm)	54L2643SC	61L2643SC	62L2643SC
84″ (2134 mm)	54L2644SC	61L2644SC	62L2644SC
96″ (2438 mm)	54L2645SC	61L2645SC	62L2645SC

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Exhaust Volumes

Concept High-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* 28-1/2*	100 65	.09"	6" x 15" (152 x 381 mm)
60″ (1524 mm)	670	18* 28-1/2*	100 65	.09"	6" x 23" (152 x 584 mm)
72″ (1829 mm)	825	18* 28-1/2*	100 65	.13"	6" x 23" (152 x 584 mm)
84″ (2134 mm)	980	18* 28-1/2*	100 65	.15"	6" x 26" (152 x 660 mm)
96″ (2438 mm)	1150	18* 28-1/2*	100 65	.09"	6" x 30" (152 x 762 mm)

*28-1/2″ opening is for setup only; operating position is an 18″ high sash opening.

Concept High-line Fume Hood with Combination Sash

		Sash Opening			Face Velocity			
Fume Hood Width	Exhaust Volume	Vertical Sash Height	Horizontal Sash Height	Sliding Sash Panels	Vertical	Horizontal	Static Pressure	Exhaust Collar Size
48″ (1219 mm)	510	18* 28-1/2*	30.5 x 17-3/8	2	105 65	110	.08"	6" x 15" (152 x 381 mm)
60″ (1524 mm)	670	18* 28-1/2*	30.5 x 23-3/8	2	105 65	110	.09"	6" x 23" (152 x 584 mm)
72″ (1829 mm)	825	18* 28-1/2*	30.5 x 28-1/4	4	105 65	110	.12"	6" x 23" (152 x 584 mm)
84″ (2134 mm)	980	18* 28-1/2*	30.5 x 34-1/4	4	105 65	110	.13"	6" x 26" (152 x 660 mm)
96″ (2438 mm)	1150	18* 28-1/2*	30.5 x 40-1/2	4	105 65	110	.09"	6" x 30" (152 x 762 mm)

*28-1/2″ opening is for setup only; operating position is an 18″ high sash opening.

Concept High-line Fume Hood with Horizontal Sash

Exhaust volumes based on 100 FPM 31-1/2" vertical sash opening, bypass* area included

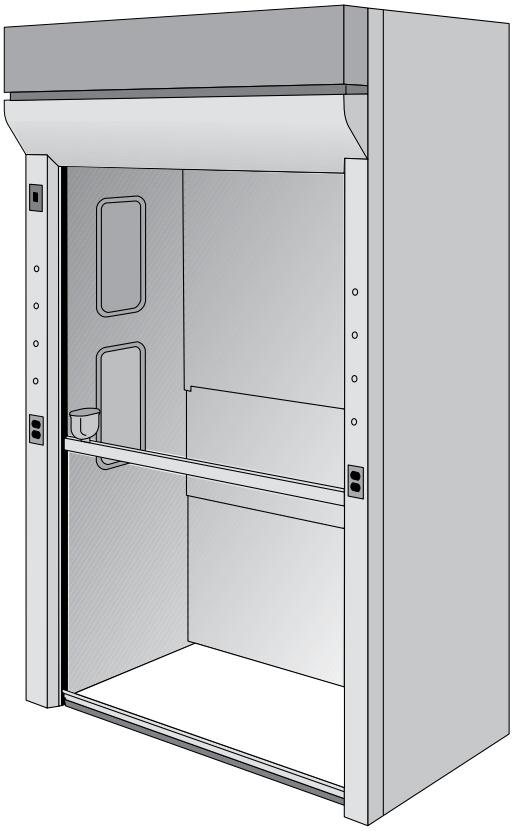
Fume Hood Width	Exhaust Volume (CFM)	Face Velocity (Nominal)	Static Pressure Loss (Inches W.G.)	Horizontal Sash Opening (Height x Width)
48″ (1219 mm)	460	100	.08	31-1/2 x 17-3/8
60″ (1524 mm)	620	100	.09	31-1/2 x 23-3/8
72″ (1829 mm)	750	100	.12	31-1/2 x 28-1/4
84″ (2134 mm)	910	100	.14	31-1/2 x 34-1/4
96″ (2438 mm)	1060	100	.09	31-1/2 x 40-1/4

*Bypass is based on 3″ by the interior width of the fume hood. (1″ at the sill and 2″ above the sash behind the lintel panel).

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

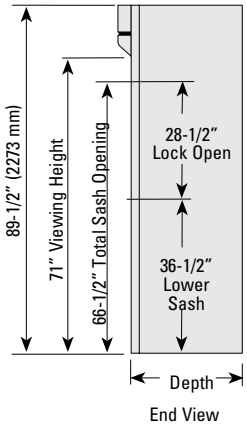
Concept Constant Volume/Restricted Bypass Floor-mounted Fume Hood with Vertical Sash

- Three standard depths: 35" (889 mm), 41" (1041 mm) and 47" (1194 mm).
- Designed for large and complex laboratory apparatus setups and roll-in equipment.
- Double-hung, vertical rising sash is full-view, laminated safety glass with full-width recessed pulls.
- AutoSash upper automatic sash positioning system – sash locks in setup position and automatically returns to maximum operational height of 18" (457 mm) when lock is released.
- Chain and sprocket sash counterbalance system features alignment shaft and sash leveling system.
- Preset fixed baffle system – no adjustment required – factory tuned for optimal airflow characteristics.
- Downdraft bypass – improves airflow through bypass area with increased volume and less resistance for quieter operation.
- One cupsink and two side-wall access panels with PVC gasket included at front left location. 84" (2134 mm) and 96" (2438 mm) wide fume hood have two cupsinks and two access panels at each side.
- One double tube (T-8) florescent light fixture on 48", 60", 72" and 84" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- All floor-mounted fume hoods except those with stainless steel liners are shipped knocked-down and require job-site assembly.
- UL 1805 classified.



Exhaust Volume

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



End View

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

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Concept Constant Volume/Restricted Bypass Floor-mounted Fume Hood with Vertical Sash

Constant Volume Fume Hood with Stainless Steel Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
48" (1219 mm)	554S2741SO	551S2741SO	552S2741SO
60" (1524 mm)	554S2742SO	551S2742SO	552S2742SO
72" (1829 mm)	554S2743SO	551S2743SO	552S2743SO
84" (2134 mm)	554S2744SO	551S2744SO	552S2744SO
96" (2438 mm)	554S2745SO	551S2745SO	552S2745SO

Constant Volume Fume Hood with Polyresin Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
48" (1219 mm)	554S2741PO	551S2741PO	552S2741PO
60" (1524 mm)	554S2742PO	551S2742PO	552S2742PO
72" (1829 mm)	554S2743PO	551S2743PO	552S2743PO
84" (2134 mm)	554S2744PO	551S2744PO	552S2744PO
96" (2438 mm)	554S2745PO	551S2745PO	552S2745PO

Restricted Bypass Fume Hood with Stainless Steel Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
48" (1219 mm)	554S2746SO	551S2746SO	552S2746SO
60" (1524 mm)	554S2747SO	551S2747SO	552S2747SO
72" (1829 mm)	554S2748SO	551S2748SO	552S2748SO
84" (2134 mm)	554S2749SO	551S2749SO	552S2749SO
96" (2438 mm)	554S2750SO	551S2750SO	552S2750SO

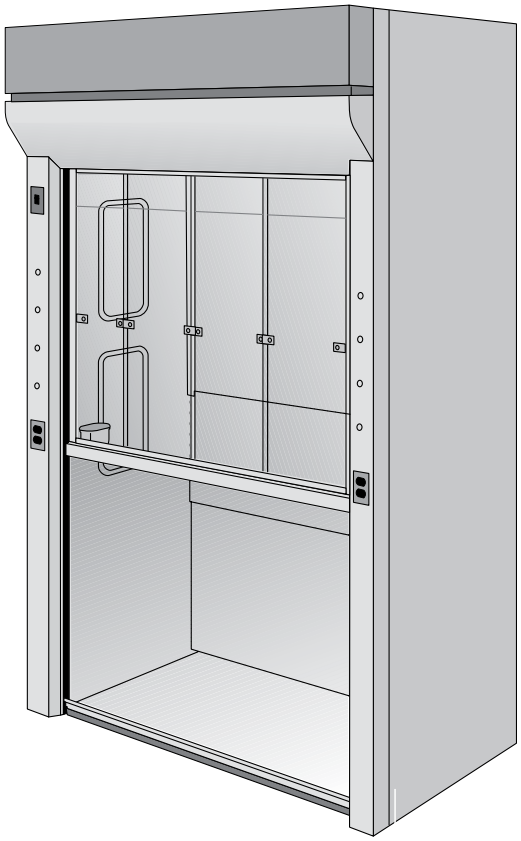
Restricted Bypass Fume Hood with Polyresin Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
48" (1219 mm)	554S2746PO	551S2746PO	552S2746PO
60" (1524 mm)	554S2747PO	551S2747PO	552S2747PO
72" (1829 mm)	554S2748PO	551S2748PO	552S2748PO
84" (2134 mm)	554S2749PO	551S2749PO	552S2749PO
96" (2438 mm)	554S2750PO	551S2750PO	552S27450PO

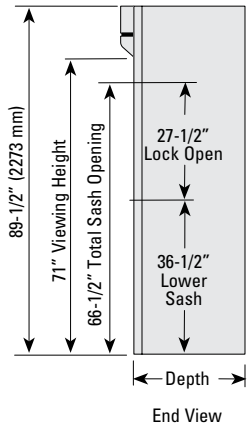
Concept Restricted Bypass Floor-mounted Fume Hood with Combination Sash

- Three standard depths: 35" (889 mm), 41" (1041 mm) and 47" (1194 mm).
- Designed for large and complex laboratory apparatus setups and roll-in equipment.
- Double-hung, vertical rising top-hung combination sash is full-view, laminated safety glass with full-width recessed pulls.
- AutoSash upper automatic sash positioning system – sash locks in setup position and automatically returns to maximum operational height of 18" (457 mm) when lock is released.
- Chain and sprocket sash counterbalance system features alignment shaft and sash leveling system.
- Preset fixed baffle system, no adjustment required. Factory tuned for optimal airflow characteristics.
- Downdraft bypass improves airflow through bypass area with increased volume and less resistance for quieter operation.
- One cupsink and two side-wall access panels with PVC gasket included at front left location. 84" (2134 mm) and 96" (2438 mm) wide fume hood have two cupsinks and two access panels at each side.
- One double tube (T-8) florescent light fixture on 48", 60", 72" and 84" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- All floor-mounted fume hoods except those with stainless steel liners are shipped knocked-down and require job-site assembly.
- UL 1805 classified.



Exhaust Volume

	Based on Upper Sash @ 100 FPM Full Open			Based on Upper Sash @100 FPM open 18"				
Fume Hood Width	**Exhaust Volume (CFM)**	**Vertical Sash Height***	**Static Pressure**	**Exhaust Volume**	**Top Sash Height**	**Static Pressure**	**!8" Face Velocity**	**Horizontal Face Velocity****
48" (1219 mm)	790	28-1/2" (724 mm)	.17	508	18" (457 mm)	.10	100	110
60" (1524 mm)	1035	28-1/2" (724 mm)	.19	666	18" (457 mm)	.09	100	110
72" (1829 mm)	1285	28-1/2" (724 mm)	.30	824	18" (457 mm)	.14	100	110
84" (2134 mm)	1520	28-1/2" (724 mm)	.28	983	18" (457 mm)	.15	100	110
96" (2438 mm)	1770	28-1/2" (724 mm)	.30	1141	18" (457 mm)	.11	100	110



End View

*Both sash assemblies raise for setup only, providing a 66-1/2" 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.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Concept Restricted Bypass Floor-mounted Fume Hood with Combination Sash

Restricted Bypass Fume Hood with Stainless Steel Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
48" (1219 mm)	554S2751SB	551S2751SB	552S2751SB
60" (1524 mm)	554S2752SB	551S2752SB	552S2752SB
72" (1829 mm)	554S2753SB	551S2753SB	552S2753SB
84" (2134 mm)	554S2754SB	551S2754SB	552S2754SB
96" (2438 mm)	554S2755SB	551S2755SB	552S2755SB

Restricted Bypass Fume Hood with Polyresin Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
48" (1219 mm)	554S2751PB	551S2751PB	552S2751PB
60" (1524 mm)	554S2752PB	551S2752PB	552S2752PB
72" (1829 mm)	554S2753PB	551S2753PB	552S2753PB
84" (2134 mm)	554S2754PB	551S2754PB	552S2754PB
96" (2438 mm)	554S2755PB	551S2755PB	552S2755PB

Concept Restricted Bypass Floor-mounted Fume Hood with Horizontal Sliding Sash

- Three standard depths: 35" (889 mm), 41" (1041 mm) and 47" (1194 mm).
- Designed for large and complex laboratory apparatus setups and roll-in equipment.
- Full-view top-hung horizontal sliding sash with laminated safety glass.
- Preset fixed baffle system, no adjustment required. Factory tuned for optimal airflow characteristics.
- Downdraft bypass – improves airflow through bypass area with increased volume and less resistance for quieter operation.
- One cupsink and two side-wall access panels with PVC gasket included at front left location. 84" (2134 mm) and 96" (2438 mm) wide fume hood have two cupsinks and two access panels at each side.
- One double tube (T-8) florescent light fixture on 72" and 84" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- All floor-mounted fume hoods except those with stainless steel liners are shipped knocked-down and require job-site assembly.
- UL 1805 classified.

Restricted Bypass Fume Hood with Stainless Steel Liner

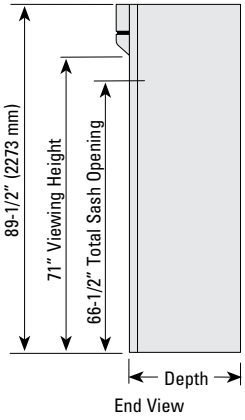
Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
72" (1829 mm)	554S2760SC	551S2760SC	552S2760SC
84" (2134 mm)	554S2761SC	551S2761SC	552S2761SC
96" (2438 mm)	554S2762SC	551S2762SC	552S2762SC

Restricted Bypass Fume Hood with Polyresin Liner

Product Numbers

	Depth		
Width	**35" (889 mm)**	**41" (1041 mm)**	**47" (1194 mm)**
72" (1829 mm)	554S2760PC	551S2760PC	552S2760PC
84" (2134 mm)	554S2761PC	551S2761PC	552S2761PC
96" (2438 mm)	554S2762PC	551S2762PC	552S2762PC



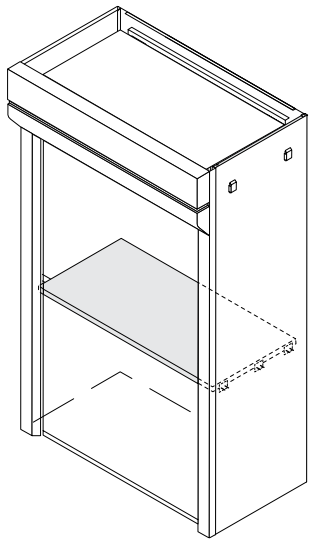
End View

Exhaust Volumes Based on Two Sashes Open @ 100 FPM

Fume Hood Width	Exhaust Volume (CFM)	Vertical Sash Opening Height	Static Pressure	Sash Opening Width
72" (1829 mm)	1485	66-1/2" (1689 mm)	.35	28-1/2" (724 mm)
84" (2134 mm)	1770	66-1/2" (1689 mm)	.33	35-1/2" (902 mm)
96" (2438 mm)	2070	66-1/2" (1689 mm)	.35	41-1/2" (1054 mm)

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Distillation Shelf for Floor-mounted Fume Hood



- Stainless steel shelf attaches to side walls
- Used with SafeAire II & Concept floor-mounted hoods

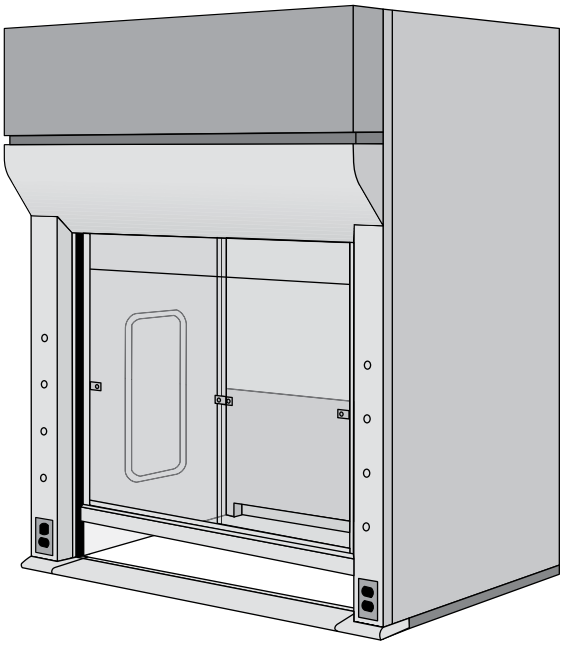
Product Numbers

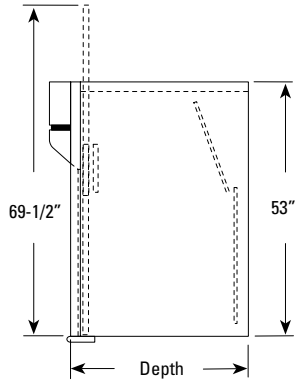
	Series		
Width	**554S Series**	**551S Series**	**552S Series**
48″ (1219 mm)	54L38210	54L38270	54L38330
60″ (1524 mm)	54L50210	54L50270	54L50330
72″ (1829 mm)	54L62210	54L62270	54L62330
84″ (2134 mm)	54L74210	54L74270	54L74330
96″ (2438 mm)	54L86210	54L86270	54L86330

Concept ADA Assemblies

For Use With Constant Volume or Variable Air Volume Exhaust Systems

- Two standard depths: 31-1/4" (794 mm) and 37-1/4" (946 mm).
- Convenient access from standing or sitting position.
- Restricted bypass operating type.
- Interior panels for access to utilities; removable front post for access to fixtures.
- Flush bottom air foil.
- 1-1/4" (32 mm) thick dished epoxy resin work surface for primary containment. Order separately.
- Spill trough assembly for secondary containment – urethane powdercoat finish.
- Baffle screen prevents paper and objects from being exhausted into ductwork.
- Combination horizontal/vertical sash with safety glass viewing panel.
- Auto-sash positions vertical operating height at 18" (457 mm).
- Extra high sash provides clear vision line for standing user, even when hood is located at lower work surface height. 35" (889 mm) sash viewing height.
- One double tube (T-8) florescent light fixture on 48", 60", 72" and 84" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One combination light switch/receptacle and one duplex prewired to a junction box.
- Chain/sprocket counter balance.
- Designed for 60-100 FPM face velocities.
- Optional blade handle fixtures are available.
- UL 1805 classified.





Product Numbers

	Depth	
Width	**31.25" (870 mm)***	**37.25" (946 mm)**
48" (1219 mm)	54L2755PB	61L2755PB
60" (1524 mm)	54L2756PB	61L2756PB
72" (1829 mm)	54L2757PB	61L2757PB
84" (2134 mm)	54L2758PB	61L2758PB
96" (2438 mm)	54L2759PB	61L2759PB

Only available with combination sash
* 31-1/4" (794 mm) deep Fume Hood requires a sink base unit below a rear cupsink

Concept ADA Fume Hood with Combination Sash

		Sash Opening			Face Velocity			
Fume Hood Width	**Exhaust Volume**	**Vertical Sash Height**	**Horizontal Sash Height**	**Sliding Sash Panels**	**Vertical**	**Horizontal**	**Static Pressure**	**Exhaust Collar Size**
48" (1219 mm)	400	18* 24*	28.5 x 17.375	2	80** 60**	100	.07"	6" x 15" (152 x 381 mm)
60" (1524 mm)	540	18* 24*	28.5 x 23.375	2	80** 60**	100	.07"	6" x 23" (152 x 584 mm)
72" (1829 mm)	650	18* 24*	28.5 x 28.250	4	80** 60**	100	.11"	6" x 23" (152 x 584 mm)
84" (2134 mm)	790	18* 24*	28.5 x 34.250	4	80** 60**	100	.13"	6" x 26" (152 x 660 mm)
96" (2438 mm)	930	18* 24*	28.5 x 40.250	4	80** 60**	100	.07"	6" x 30" (152 x 762 mm)

**Vertical face velocities – nominal
* 24" (610 mm) openings is for setup only

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

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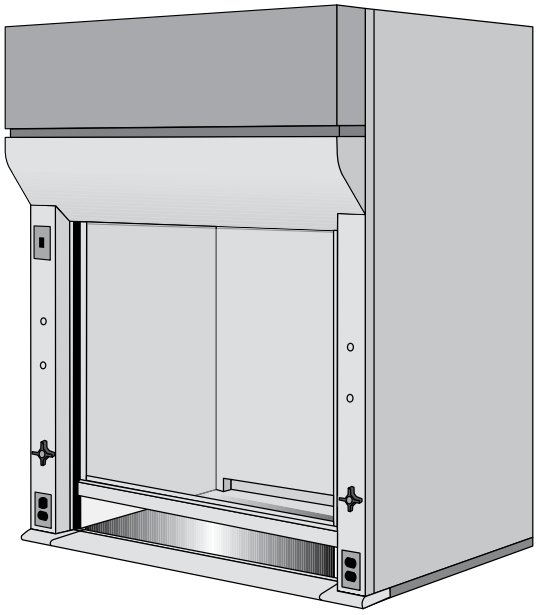
Concept Perchloric Acid Restricted Bypass Superstructure

For Use With Constant Volume or Variable Air Volume Exhaust Systems



- Designed specifically and exclusively for perchloric acid procedures to minimize possibility of fire and explosion.
- One-piece type 304 stainless steel interior includes dished work surface, with all joints coved, welded and ground.
- Optional type 316 stainless steel interior with integral work surface for high abuse applications (Special order – extended leadtime).
- Integral full-width trough at back of work surface for collection and disposal of wash-down waters; double drain for large volumes.
- High-volume spray heads behind upper baffle.
- Vertical sash is full-view, laminated safety glass with full-width recessed pull.
- 28-1/2" (724 mm) high opening for setup.
- One each remote control cold water faucet with vacuum breaker and control valve for fume hood washdown (Additional valves are required for duct washdown).
- One vapor-proof light fixture on 48" and 60" wide units
- Two vapor-proof light fixtures on 72", 84" and 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Does not include sidewall access panel.
- UL 1805 classified
- Not investigated by UL for use with perchloric acid.
- See page 48 for additional product features common to all Concept fume hoods.

Exhaust Volumes

Fume Hood Width	Exhaust Volume	Vertical Sash Opening Height	Face Velocity	Static Pressure	Exhaust Collar Size
48" (1219 mm)	484	18* 28.5*	100 60	.09"	6" x 15" (152 x 381 mm)
60" (1524 mm)	634	18* 28.5*	100 60	.09"	6" x 23" (152 x 584 mm)
72" (1829 mm)	784	18* 28.5*	100 60	.13"	6" x 23" (152 x 584 mm)
84" (2134 mm)	934	18* 28.5*	100 60	.15"	6" x 26" (152 x 660 mm)
96" (2438 mm)	1084	18* 28.5*	100 60	.09"	6" x 30" (152 x 762 mm)

*28-1/2" and 24" opening is for setup only; operating position is an 18" high sash opening

Concept Perchloric Acid Restricted Bypass Superstructure

For Use With Constant Volume or Variable Air Volume Exhaust Systems

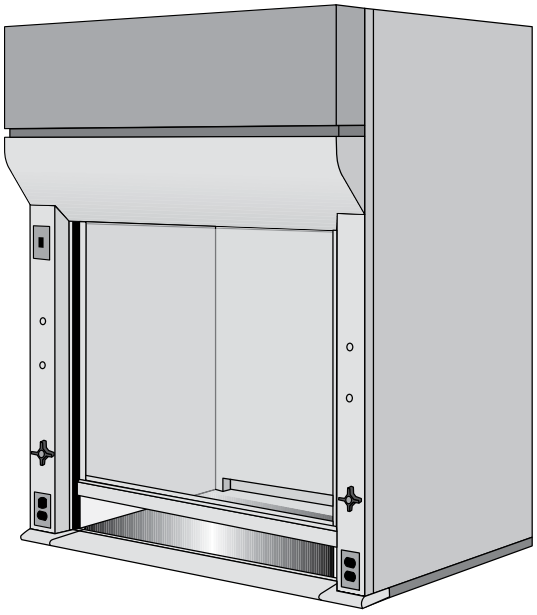
Liner Material – Stainless steel Type 304, consult factory for optional Type 316 high-abuse stainless steel.

Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2501KO	61L2501KO	62L2501KO
60" (1524 mm)	54L2502KO	61L2502KO	62L2502KO
72" (1829 mm)	54L2503KO	61L2503KO	62L2503KO
84" (2134 mm)	54L2504KO	61L2504KO	62L2504KO
96" (2438 mm)	54L2505KO	61L2505KO	62L2505KO

Concept Constant Volume and Restricted Bypass Radioisotope Superstructure

- Designed for handling of radioactive isotopes.
- One-piece type 304 stainless steel interior and work surface with integral cupsink located at left front corner, all corners coved, welded and ground (Relocating cupsink extends leadtime).
- Filter system recommended.
- Weight capacity of reinforced work surface is 200 lbs per square foot.
- Designed to permit exact balancing of room ventilation system with hood exhaust volume.
- Does not include sidewall access panel.
- One double tube (T-8) florescent light fixture on 48", 60", 72" and 84" wide units
- Two double-tube (T-8) florescent light fixtures on 96" wide units
- One black light switch and flush plate
- Two each 120 VAC black receptacles and flush plates
- Plugged holes for future service fixture installation standard on both posts.
- UL 1805 classified
- Not investigated by UL for use with radiological materials.
- See page 48 for additional product features common to all Concept fume hoods.



Exhaust Volumes

Concept Radioisotope 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* 28-1/2*	100 60	.09"	6" x 15" (152 x 381 mm)
60" (1524 mm)	634	18* 28-1/2*	100 60	.09"	6" x 23" (152 x 584 mm)
72" (1829 mm)	784	18* 28-1/2*	100 60	.13"	6" x 23" (152 x 584 mm)
84" (2134 mm)	934	18* 28-1/2*	100 60	.15"	6" x 26" (152 x 660 mm)
96" (2438 mm)	1084	18* 28-1/2*	100 60	.09"	6" x 30" (152 x 762 mm)

*28-1/2" and 24" opening is for setup only; operating position is an 18" high sash opening

Concept Radioisotope Fume Hood with Combination Sash

	Sash Opening			Face Velocity			
Exhaust Volume	Vertical Sash Height	Horizontal Sash Opening	Sliding Sash Panels	Vertical**	Horizontal	Static Pressure	Exhaust Collar Size
400	18* 24*	28-1/2 x 17-3/8	2	80 60	100	.07"	6" x 15" (152 x 381 mm)
540	18* 24*	28-1/2 x 23-3/8	2	80 60	100	.07"	6" x 23" (152 x 584 mm)
650	18* 24*	28-1/2 x 28-1/4	4	80 60	100	.11"	6" x 23" (152 x 584 mm)
790	18* 24*	28-1/2 x 34-1/4	4	80 60	100	.13"	6" x 26" (152 x 660 mm)
930	18* 24*	28-1/2 x 40-1/4	4	80 60	100	.07"	6" x 30" (152 x 762 mm)

*28-1/2" and 24" opening is for setup only; operating position is an 18" high sash opening

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Concept Constant Volume and Restricted Bypass Radioisotope Superstructure

Liner Material – Stainless steel Type 304, consult factory for optional Type 316 high-abuse stainless steel.

Vertical Rising Sash, Constant Volume
Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2506KO	61L2506KO	62L2506KO
60" (1524 mm)	54L2507KO	61L2507KO	62L2507KO
72" (1829 mm)	54L2508KO	61L2508KO	62L2508KO
84" (2134 mm)	54L2509KO	61L2509KO	62L2509KO
96" (2438 mm)	54L2510KO	61L2510KO	62L2510KO

Vertical Rising Sash, Restricted Bypass
Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2521KO	61L2521KO	62L2521KO
60" (1524 mm)	54L2522KO	61L2522KO	62L2522KO
72" (1829 mm)	54L2523KO	61L2523KO	62L2523KO
84" (2134 mm)	54L2524KO	61L2524KO	62L2524KO
96" (2438 mm)	54L2525KO	61L2525KO	62L2525KO

Combination Sash, Restricted Bypass
Product Numbers

	Depth		
Width	**31.25" (870 mm)**	**37.25" (946 mm)**	**43.25" (1099 mm)**
48" (1219 mm)	54L2521KB	61L2521KB	62L2521KB
60" (1524 mm)	54L2522KB	61L2522KB	62L2522KB
72" (1829 mm)	54L2523KB	61L2523KB	62L2523KB
84" (2134 mm)	54L2524KB	61L2524KB	62L2524KB
96" (2438 mm)	54L2525KB	61L2525KB	62L2525KB

Pioneer Fume Hood Superstructure

Restricted Bypass

35" High Sightline

Provides users with optimum visibility of fume hood interior.

Designed to maximize containment performance and energy efficiency, the Hamilton Directed Airflow Technology makes this possible.

Subjected to both standard and modified ASHRAE test procedures, the Pioneer has been tested at face velocities as low as 50 fpm, sash fully open, with unmatched performance.

Fixed Baffle System

The baffle system is factory-tuned for optimal airflow characteristics and requires no adjustment.

Chain and Sprocket Sash Support System

The counter-balance system features alignment shaft and sash leveling device.

Laminar Airflow Control Module

Directed air flow helps purge operator's breathing zone with room air when sash is raised above the 18" operating position.

Dual Performance Monitor

A multifunction control system monitors both the sash opening and the directed airflow system.

AutoSash Automatic Positioning System

Sash locks in setup position and automatically returns to maximum operational height when lock is released.

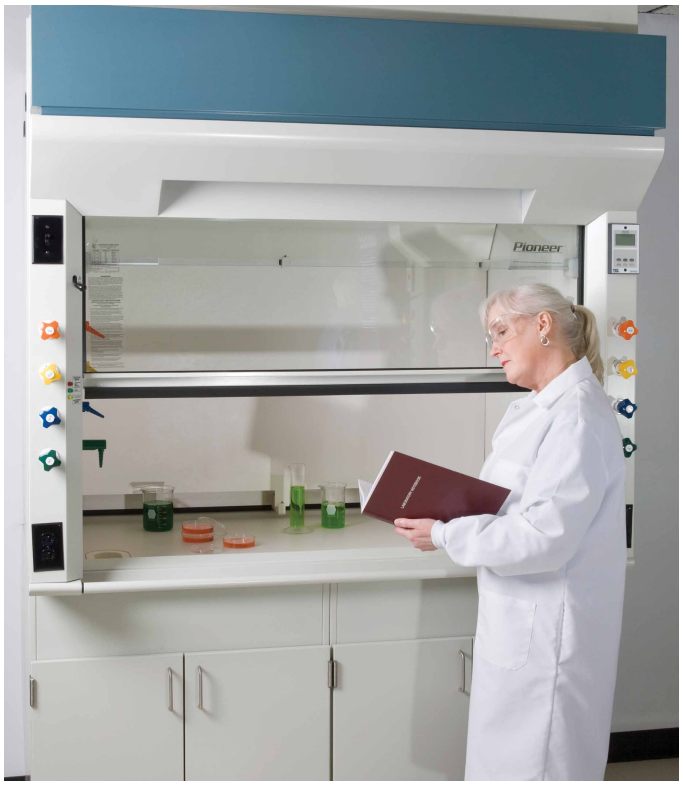
Low Profile Sill Airfoil

Ergonomically designed airfoil provides obstruction-free access to fume hood interior.

Directed Airflow Technology

Setup Position – Sash above 18" to full open, laminar flow control module activated.

Operating Position – Sash at 18" to closed, laminar flow control module deactivated.



Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

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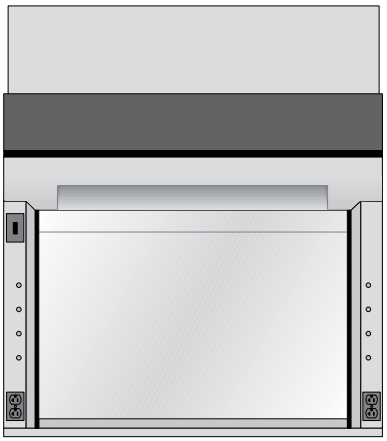
Pioneer Fume Hood Superstructure



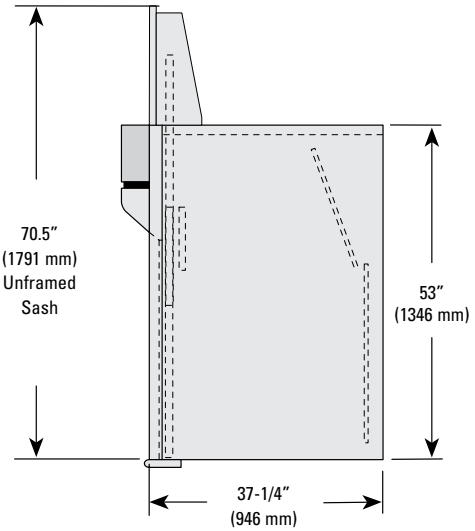
- Restricted Bypass Vertical Rising Unframed Sash
- 37-1/4" Depth
- Includes front ceiling/sash enclosure

Width	Product No.
48" (1219 mm)	61L2655PO
60" (1524 mm)	61L2656PO
72" (1829 mm)	61L2657PO
84" (2134 mm)	61L2658PO
96" (2438 mm)	61L2659PO

Technical Data - Pioneer Fume Hood with Vertical Sash

Fume Hood Width	Exhaust Volume	Vertical Sash Opening Height	Face Velocity	Static Pressure	Exhaust Collar Size
48" (1219 mm)	440	18* 27-1/2*	92 60	.08"	6" x 15" (152 x 381 mm)
60" (1524 mm)	580	18* 27-1/2*	92 60	.08"	6" x 23" (152 x 584 mm)
72" (1829 mm)	715	18* 27-1/2*	92 60	.12"	6" x 23" (152 x 584 mm)
84" (2134 mm)	855	18* 27-1/2*	92 60	.14"	6" x 26" (152 x 660 mm)
96" (2438 mm)	990	18* 27-1/2*	92 60	.08"	6" x 30" (152 x 762 mm)

*27-1/2" (699 mm) opening is for setup only; operating position is an 18" (457 mm) high sash opening.



Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

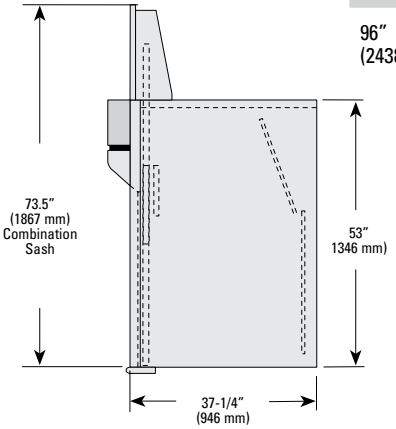
Pioneer Fume Hood Superstructure

- Restricted Bypass Combination Sash
- 37-1/4" Depth
- Includes front ceiling/sash enclosure

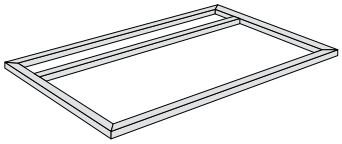
Width	Product No.
48″ (1219 mm)	61L2655PB
60″ (1524 mm)	61L2656PB
72″ (1829 mm)	61L2657PB
84″ (2134 mm)	61L2658PB
96″ (2438 mm)	61L2659PB

Technical Data - Pioneer Fume Hood with Combination Sash

		Sash Opening			Face Velocity			
Fume Hood Width	Exhaust Volume	Vertical Sash Height	Horizontal Sash Height	Sliding Sash Panels	Vertical	Horizontal	Static Pressure	Exhaust Collar Size
48″ (1219 mm)	440	18 27.5	28-1/2 x 17-3/8	2	92 60	110	.08"	6" x 15" (152 x 381 mm)
60″ (1524 mm)	580	18 27.5	28-1/2 x 23-3/8	2	92 60	110	.08"	6" x 23" (152 x 584 mm)
72″ (1829 mm)	715	18 27.5	28-1/2 x 28-1/4	4	92 60	110	.12"	6" x 23" (152 x 584 mm)
84″ (2134 mm)	855	18 27.5	28-1/2 x 34-1/4	4	92 60	110	.14"	6" x 26" (152 x 660 mm)
96″ (2438 mm)	990	18 27.5	28-1/2 x 40-1/4	4	92 60	110	.08"	6" x 30" (152 x 762 mm)



Spacer for Full-height Door Cabinets



- Pioneer fume hoods incorporate a unique bottom airfoil sill that enhances air flow performance. The sill extends over the cabinet front. Base cabinets with full-height doors or full-overlay upper panels require a spacer between the cabinet and work surface to provide clearance.
- 30-3/4″ depth

Width	Product No.
48″ (1219 mm)	619S2480
60″ (1524 mm)	619S2600
72″ (1829 mm)	619S2720
84″ (2134 mm)	619S2840
96″ (2438 mm)	619S2960

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Horizon Full-view Superstructure

- **Adaptable Product Offering** – Choose from 48", 60" and 72" widths in both single- and double-sided configurations.
- **Improved Visibility** – Full-view side and back glass panels provide visibility for spotting hazardous situations.
- **Verifiable Performance** – All Horizon fume hoods meet or exceed ASHRAE 110 95 standards.
- **State-of-the-Art Airflow** – Perimeter exhaust slots provide uniform airflow through the fume hood for added safety.
- **Lower Operating Costs** – Lower static pressure ratings require lower initial system investment and more economical long-term operating costs.
- **Improved Access to Hood Interior** – The flush air foil sill eliminates the vertical obstruction common to traditional raised sill style air foils.
- **Secondary Spill Containment** – Integral spill trough along front edge of work surface provides additional protection from dangerous chemical spills.
- **More Usable Work Surface** – Service fixtures are mounted in an isolated vertical service drop compartment in the fume hood interior, providing a larger work surface area.
- **More Interior Work Area** – Air foil front with narrow post design provides more usable interior width.
- **Easier Handling Upon Delivery** – Horizon units ship knocked-down for reduced freight costs and easier transport through interior doorways.
- **Lifetime Durability** – Sash counterbalance system is life cycle tested to 100,000 cycles.
- **UL 1805 Classification** – Covers electrical, mechanical, flammability and airflow characteristics

Multiple-unit Capability – Two Horizon fume hoods placed side-by-side sharing a common end.

Perimeter Exhaust Slots – Improve airflow through the fume hood.

Epoxy Resin Work Surfaces – With dished edge for added spill containment.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

AutoSash Automatic 18" Sash Operating Opening – Reduces exhaust air and provides added face and upper body protection.

Side Panels – Constructed of 7/32" laminated safety glass for excellent visibility and user protection.

Isolated Service Drop – Allows for vertical fixture mounting away from the work surface.

Flush Air Foil Sill – Provides easy access to work surface.

Secondary Spill Containment Trough – Extra protection from the hazards associated with spills and accidents.

optional wood base cabinets

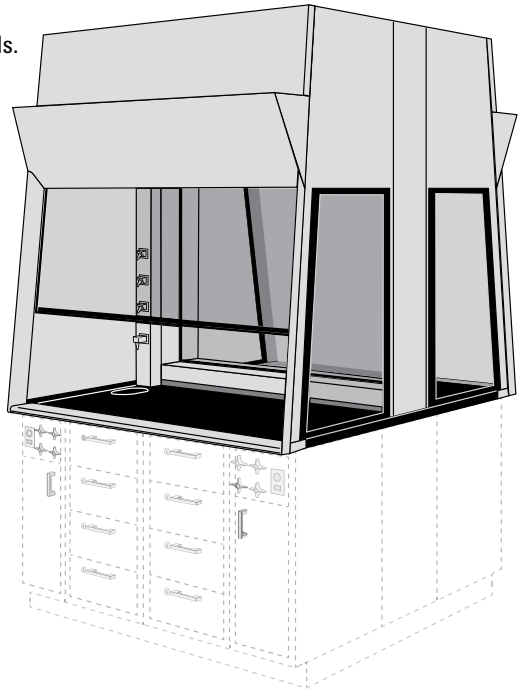
Remote Control Service Valves – Easily accessible; no need to dismantle the fume hood for service.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Horizon Full-view Fume Hood Superstructure

For Use With Constant Volume or Variable Air Volume Exhaust Systems

- Designed to facilitate total visibility of the entire lab from any location.
- Single-faced wall style or double-faced island models available; can be "ganged" side-by-side.
- Restricted bypass can be operated as constant volume with supplied header panels.
- Back panel on single units is white polyresin (optional glass back panel is available on extended lead times); side panels and vertical sash are 7/32" (6 mm) laminated safety glass.
- Back, side and sash panels on island units are 7/32" laminated safety glass.
- Services, when specified, include remote control gas, air, vacuum and cold water with 3" x 6" (76 x 152 mm) cupsink. Service controls are base cabinet mounted.
- If services are not specified, plugged fixture holes are provided for future use.
- Automatic 18" (457 mm) sash stop.
- 34" (864 mm) high opening for setup.
- Integral spill trough along front edge of work surface for secondary spill containment.
- Narrow angled front posts for enhanced visibility and airflow.
- Flush sill air foil for easy access to work surface.
- Isolated service drop allows vertical fixture mounting for maximum work surface area.
- Perimeter exhaust slots provide uniform airflow.
- Two-tube (T-8) fluorescent light fixture.
- Optional lattice rack available. Ordered separately.
- Ships knocked-down.
- Not applicable for use in highly corrosive environments.
- UL 1805 classified.
- Order optional fume hood alarm separately. Only 54LAFA1000 can be used.



*Order base cabinets separately

*
- 48" wide assembly has one combination light switch/receptacle and flush plate in right base cabinet.
- 60" wide assembly has one combination light switch/receptacle and flush plate in right base cabinet; one 120 VAC duplex receptacle and flush plate in left base cabinet.
- 72" wide assembly has one light switch and flush plate, and one 120 VAC duplex receptacle and flush plate in right base cabinet; one 120 VAC duplex receptacle and flush plate in left base cabinet.

Standalone or Multiple-unit Assembly Components

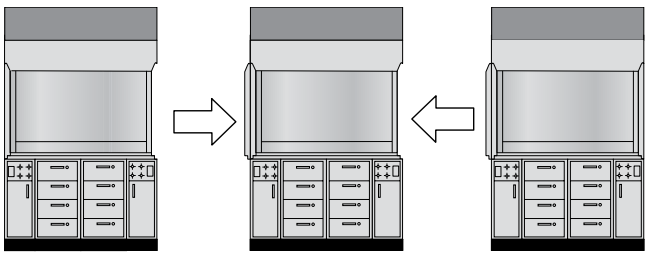
Standalone
Suffix "N"

Instead of double ends between units, Horizon multiple-unit assemblies include a cost-effective common end with a single pane of glass between adjoining units.

Two-unit assemblies include a right and left connector. Three-unit assemblies include a right connector, middle, left connector. Additional middle units can be added for assemblies of more than three units.

When building multiple unit assemblies, assemble fume hood from right unit to left unit.

Left end is referred to as "R" product because it connects on its **right side**.



Left End
Suffix "R"
Right Side Connector

Middle
Suffix "B"

Right End
Suffix "L"
Left Side Connector

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Horizon Product Numbers

Stand-alone Superstructure

Single-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L853N0	54L853NR	(Not Available)
60″ (1524 mm)	54L854N0	54L854NR	54L854NB
72″ (1829 mm)	54L855N0	54L855NR	54L855NB

Double-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L850N0	54L850NR	(Not Available)
60″ (1524 mm)	54L851N0	54L851NR	54L851NB
72″ (1829 mm)	54L852N0	54L852NR	54L852NB

Left-end Superstructure

Single-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L853R0	54L853RR	(Not Available)
60″ (1524 mm)	54L854R0	54L854RR	54L854RB
72″ (1829 mm)	54L855R0	54L855RR	54L855RB

Double-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L850R0	54L850RR	(Not Available)
60″ (1524 mm)	54L851R0	54L851RR	54L851RB
72″ (1829 mm)	54L852R0	54L852RR	54L852RB

Middle Superstructure

Single-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L853B0	54L853BR	(Not Available)
60″ (1524 mm)	54L854B0	54L854BR	54L854BB
72″ (1829 mm)	54L855B0	54L855BR	54L855BB

Double-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L850B0	54L850BR	(Not Available)
60″ (1524 mm)	54L851B0	54L851BR	54L851BB
72″ (1829 mm)	54L852B0	54L852BR	54L852BB

Right-end Superstructure

Single-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L853L0	54L853LR	(Not Available)
60″ (1524 mm)	54L854L0	54L854LR	54L854LB
72″ (1829 mm)	54L855L0	54L855LR	54L855LB

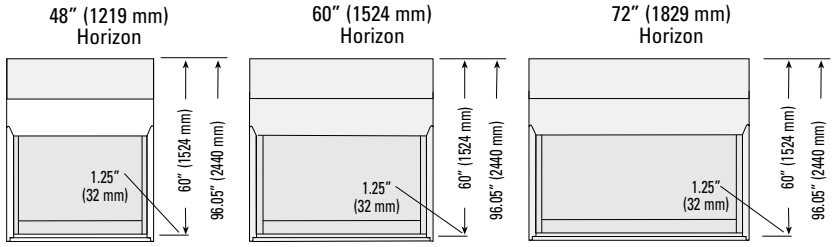
Double-faced Style

Width	Product No.		
	Without Fixtures	Fixtures Right Side Only	Fixtures Both Sides
48″ (1219 mm)	54L850L0	54L850LR	(Not Available)
60″ (1524 mm)	54L851L0	54L851LR	54L851LB
72″ (1829 mm)	54L852L0	54L852LR	54L852LB

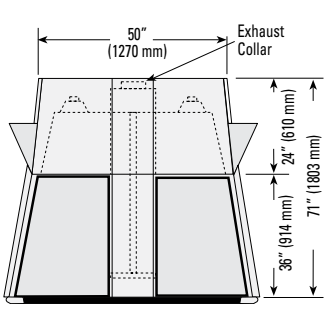
Superstructures do not include work surface.
Order separately.

Horizon Dimensions and Operating Parameters

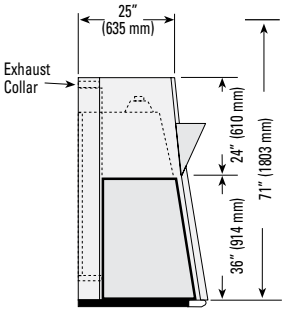
Typical Front Views



End Views



End View – Double Unit



End View – Single Unit
For applications against wall or end of island or peninsula.

Operating Parameters
VAV (Variable Air Volume)

Fume Hood Size	100FPM @ 18" Both sashes open	100FPM @ 18" one sashes open one sash closed	Both sashes closed**
48" (1219 mm)	1100	720	340
60" (1524 mm)	1400	915	430
72" (1829 mm)	1700	1110	520

Operating Parameters
CV (Constant Volume)

Fume Hood Size	Configuration	Collar Size	100 FPM @ 18" Sash Opening*	
			CFM	SP
48" (1219 mm)	Single-sided	4" x 30" (102 x 762 mm)	550	.15
48" (1219 mm)	Double-sided	9" x 30" (229 x 762 mm)	1100	.25
60" (1524 mm)	Single-sided	4" x 30" (102 x 762 mm)	700	.18
60" (1524 mm)	Double-sided	9" x 30" (229 x 762 mm)	1400	.30
72" (1829 mm)	Single-sided	4" x 30" (102 x 762 mm)	850	.21
72" (1829 mm)	Double-sided	9" x 30" (229 x 762 mm)	1700	.35

*For free-standing use, use a 3-sided U-shaped sink shroud in place of the fillers on each side.
34" opening for set up only. Operating position is an 18" opening.

**Set to meet NFPA recommendations of 25 CFM per sq. ft. of interior work surface.

- Sash tracking (versus sidewall sensing controls) are recommended when fume hood is applied to a VAV system.
- Utilize only series 54LAFA1000 alarm.
- Use 2 alarms on double-sided fume hood.
- For VAV control applications on the two-sided hood; utilization of two single hoods back to back with optional glass back is recommended.

Plumbing

Coiled tubing is 1/4" O.D. copper for all services. Plumber required to route to the top or bottom of fume hood for final connection. A field connection is required from valve in the cabinet to the fixture.

Shipping

Fume hood ships knocked down.

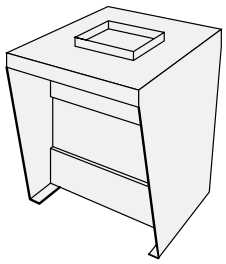
Electrical

Electrician to connect wiring from junction box in cabinet to top of fume hood.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Specialty Exhaust Systems

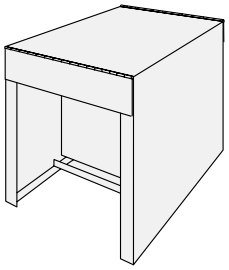
Up-draft Table-top Fume Hoods



- Available with extended lead-time
- Designed for use with overhead exhaust system to provide maximum efficiency
- Adjustable, positive-control baffles
- Steel with chemical-resistant powdercoat finish, specify color
- Exhaust collar 2" (51 mm) by 6" (152 mm)
- 16" (406 mm) wide
- 18" (457 mm) high

		Exhaust Volumes		
Depth	**Description**	**CFM**	**SP**	**Product No.**
10" (254 mm)	Single-face	200	.50	54L27000
20" (508 mm)	Double-faced	400	.50	54L27100

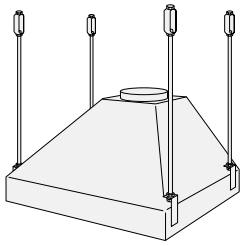
Down-draft Drip-panel Table-top Fume Hoods



- Designed for use with hinged front top panel to accommodate tall equipment
- Steel with chemical-resistant powdercoat finish, specify color
- Available with extended lead-time
- Exhaust collar 2" (51 mm) by 20" (58 mm)
- 21" (533 mm) wide
- 22" (559 mm) high

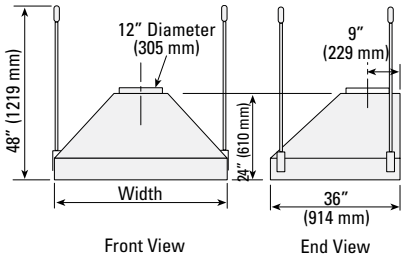
		Exhaust Volumes		
Depth	**Description**	**CFM**	**SP**	**Product No.**
16-3/4" (425 mm)	Single-face	200	.50	54L27600
29" (508 mm)	Double-faced	400	.50	54L27700

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)	554S8810
48" (1219 mm)	554S8820
60" (1524 mm)	554S8830
72" (1829 mm)	554S8840
84" (2134 mm)	554S8850
96" (2438 mm)	554S8860



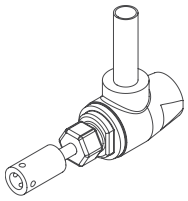
Fume Hood Size	**50FPM Through Each Open Face**	
	CFM	**SP**
36" (914 mm)	1050	.17
48" (1219 mm)	1225	.20
60" (1524 mm)	1400	.30
72" (1829 mm)	1575	.37
84" (2134 mm)	1750	.45
96" (2438 mm)	1925	.57

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Fixtures and Accessories

Common features:
- 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
- Shipped loose for field installation only
- All standard valves are CSA approved

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	32L20000
Distilled water with stem	32L20001

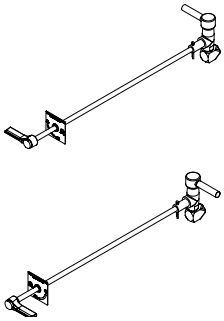
- Single service remote control valve
- Max. working pressure is 125 PSI
- Valves for oxygen and nitrogen are cleaned for pure gas service

Service	Product No.
Gas, air, vacuum with stem	32L20200
Oxygen, nitrogen with stem	32L20001

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

Service	Product No.
Steam with stem	32L20400

Remote Control Ball Valve Assembly*

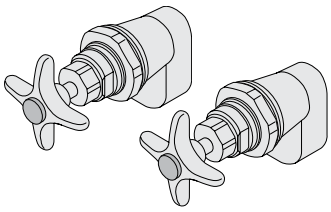


- Remote control service valve is factory assembled, includes guide plate, rod and handle
- Forged brass, chrome-plated lever handle. For other handle finishes, add suffix "FH"
- Colored plastic index disc
- Max. working pressure is 75 PSI
- Suitable for water and gas services
- These products cannot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

Service	Product No.
Right	32L20600
Left	32L20700

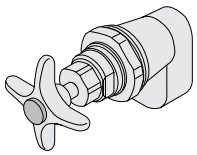
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Front-loaded Service Valves



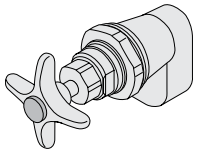
- Two front-loaded service valves for hot and cold water mixing
- Forged brass four-arm handle with clear epoxy-coated chrome
- Colored plastic index disc
- Max. working pressure is 80 PSI
- Requires 1-1/4" (32 mm) diameter hole in panel

Service	Product No.
Hot and cold water	32L26300



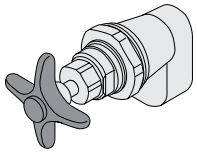
- Front-loaded single service valve
- Forged brass four-arm handle with clear epoxy-coated chrome
- Colored plastic index disc
- Max. working pressure is 80 PSI
- Requires 1-1/4" (32 mm) diameter hole in panel

Service	Product No.
Hot or cold water	32L26400
Distilled water	32L26500



- 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

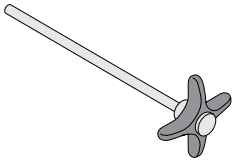
Service	Product No.
Gas, air, vacuum	32L26600
Oxygen, nitrogen	32L26800



- 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.
Steam	32L26700

Rod and Handle Assembly for Service Valves



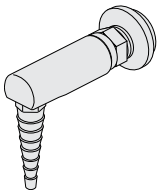
- Rod and handle assembly for remote control service valve
- Black 3/8" (10 mm) diameter aluminum rod
- Black nylon four-arm handle with color-coded index button
- Requires field cut to fit

Service	Product No.
7-9/16"	32L24500
11-1/2"	32L24600
31-5/16"	32L24700

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

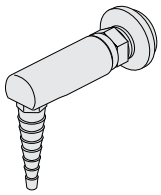
Common features:
- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
- Parts exposed in fume hood have acid- and solvent-resistant epoxy finish, color-coded to match index button (unless otherwise noted)
- Goosenecks and outlets have removable serrated hose 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



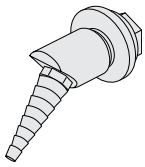
- Powdercoated brass turret and removable hose connector positioned at 90°
- Turret supplied with locknut, ferrule and compression fitting for 3/8" copper tubing
- 1/2" I.D. compression inlet
- For use with remote control service valves with stems

Service	Product No.
Hot water	32L25500
Cold water	32L25300



- 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	32L25400



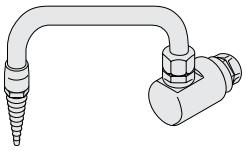
- Powdercoated brass turret and removable hose connector positioned at a 45° angle
- Turret supplied with locknut, ferrule and compression nut
- 1/2" I.D. compression inlet

Service	Product No.
Generic (color: black)	32L24800
Air	32L24900
Vacuum	32L25000
Gas	32L25100
Nitrogen (cleaned for pure gas service)	32L25200
Oxygen (cleaned for pure gas service)	32L25600

Common features:

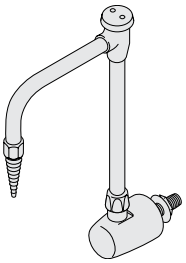
- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
- Parts exposed in fume hood have acid- and solvent-resistant epoxy finish, color-coded to match index button (unless otherwise noted)
- Goosenecks and outlets have removable serrated hose tip
- Goosenecks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

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	32L26900
6" (152 mm) spread gooseneck	32L27000



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

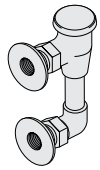
* Vacuum breaker is not recommended inside fume hood per NFPA

Service	Product No.
6" (152 mm) spread gooseneck	32L27100

Vacuum Breakers for Fume Hood

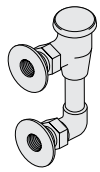
- Brass vacuum breaker with no finish
- For use with hidden applications
- 3/8" IPS female inlet and outlet

Product No.
32L27400



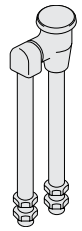
- Brass vacuum breaker assembly with polished chrome finish
- Union connection
- 1/2" IPS female inlet and outlet
- Not for use on Concept, Pioneer or Horizon fume hoods

Product No.
32L27500



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

Product No.
32L28100



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

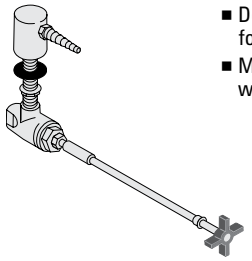
Product No.
32L27600

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Common features:

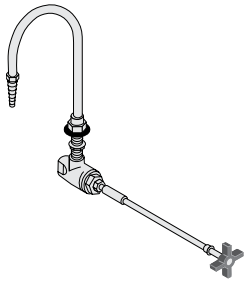
- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
- Parts exposed in fume hood have acid- and solvent-resistant epoxy finish, color-coded to match index button (unless otherwise noted)
- Goosenecks and outlets have removable serrated hose tip
- Goosenecks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

Remote Control Deck-mounted Service Fixtures



- Deck-mounted single-service valve for air, gases or vacuum
- Mounting hardware for 1-1/4" (32 mm) work surface

Service	Top Depth	Mount Location	Product No.
Gas	36" (914 mm)	Wood base cabinet	30L567G0
Air	36" (914 mm)	Wood base cabinet	30L567A0
Vacuum	36" (914 mm)	Wood base cabinet	30L567V0
Gas	30" (762 mm)	Table frame, wood/steel	30L568G0
Air	30" (762 mm)	Table frame, wood/steel	30L568A0
Vacuum	30" (762 mm)	Table frame, wood/steel	30L568V0
Gas	36" (914 mm)	Table frame, wood/steel	30L569G0
Air	36" (914 mm)	Table frame, wood/steel	30L569A0
Vacuum	36" (914 mm)	Table frame, wood/steel	30L569V0
Gas	30" (762 mm)	Steel base cabinet	30L570G0
Air	30" (762 mm)	Steel base cabinet	30L570A0
Vacuum	30" (762 mm)	Steel base cabinet	30L570V0
Gas	36" (914 mm)	Steel base cabinet	30L571G0
Air	36" (914 mm)	Steel base cabinet	30L571A0
Vacuum	36" (914 mm)	Steel base cabinet	30L571V0
Gas	30" (762 mm)	Wood base cabinet	30L572G0
Air	30" (762 mm)	Wood base cabinet	30L572A0
Vacuum	30" (762 mm)	Wood base cabinet	30L572V0



- Single-service gooseneck
- Washer and lock nut for deck mounting on 1-1/4" (32 mm) work surface
- For use with cupsink installed front or rear
- "H0" suffix indicates hot water
- "C0" suffix indicates cold water

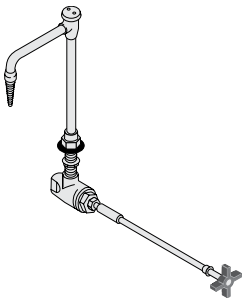
Top Depth	Mount Location	Product No.
36" (914 mm)	Wood base cabinet	32L617H0
36" (914 mm)	Wood base cabinet	32L617C0
30" (762 mm)	Table frame, wood/steel	32L618H0
30" (762 mm)	Table frame, wood/steel	32L618C0
36" (914 mm)	Table frame, wood/steel	32L619H0
36" (914 mm)	Table frame, wood/steel	32L619C0
30" (762 mm)	Steel base cabinet	32L620H0
30" (762 mm)	Steel base cabinet	32L620C0
36" (914 mm)	Wood base cabinet	32L621H0
36" (914 mm)	Wood base cabinet	32L621C0
30" (762 mm)	Wood base cabinet	32L627H0
30" (762 mm)	Wood base cabinet	32L627C0

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Common features:

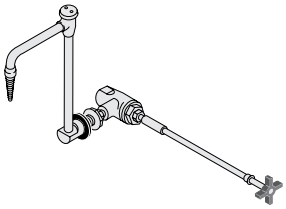
- Fixture has forged brass valve body, black washer and color-coded outlet to match index button
- Parts exposed in fume hood have acid- and solvent-resistant epoxy finish, color-coded to match index button (unless otherwise noted)
- Goosenecks and outlets have removable serrated hose tip
- Goosenecks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

Remote Control Deck-mounted Service Fixtures (continued)



- Single-service gooseneck with vacuum breaker
- Washer and lock nut for deck mounting on 1-1/4" (32 mm) work surface
- For use with cupsink installed front or rear
- H0 suffix indicates hot water
- C0 suffix indicates cold water
- Vacuum breaker is not recommended inside fume hood per NFPA

Top Depth	Mount Location	Product No.
36" (914 mm)	Wood base cabinet	32L622H0
36" (914 mm)	Wood base cabinet	32L622C0
30" (762 mm)	Table frame, wood/steel	32L623H0
30" (762 mm)	Table frame, wood/steel	32L623C0
36" (914 mm)	Table frame, wood/steel	32L624H0
36" (914 mm)	Table frame, wood/steel	32L624C0
30" (762 mm)	Steel base cabinet	32L625H0
30" (762 mm)	Steel base cabinet	32L6250
36" (914 mm)	Steel base cabinet	32L626H0
36" (914 mm)	Steel base cabinet	32L626C0
30" (762 mm)	Wood base cabinet	32L628H0
30" (762 mm)	Wood base cabinet	32L628C0



- Single-service color-coded gooseneck
- For use with cupsink installed front or rear
- Sidewall mounted
- Add HW (hot water) or CW (cold water) to end of Product Number for service required
- Extended lead time

Product No.
CA32L552

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

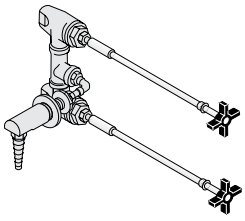
Common features:

- 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

Installation requirements:

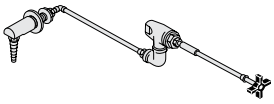
- Requires 1" (254 mm) mounting hole on interior end panels
- Requires 9/16" (14.3 mm) mounting hole at front posts

Remote Control Water Faucets



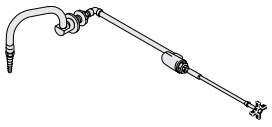
- General mixing faucet
- Turret base with serrated hose end
- Flat mounting flange for wall mount
- For use with front-mounted cupsink
- "WA" suffix indicates front fixtures

Fume Hood Type	Fixture Location	Product No.
Auxiliary Air	Front	32L564WA
Bypass, VAV, Radioisotope	Front	32L565WA
Bypass, VAV Floor-mounted	Front	32L567WA
Auxiliary Air Floor-mounted	Front	32L568WA



- 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	Auxiliary Air	Rear	32L595CW
Hot water	Auxiliary Air	Rear	32L595HW
Cold water	Bypass, VAV, Radioisotope	Rear	32L596CW
Hot water	Bypass, VAV, Radioisotope	Rear	32L596HW

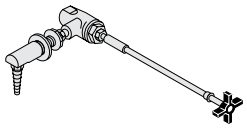


- Single-service color-coded gooseneck with 4" (102 mm) spread
- Sidewall mounted
- For cold water service
- For use with rear mounted cupsink

Fume Hood Type	Product No.
Auxiliary Air Bench/High-line	32L692CW
Constant Volume/Restricted Bypass Bench/High-line	32L693CW

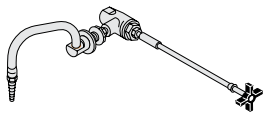
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Remote Control Water Faucets (continued)



- 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	Auxiliary Air	Front	32L551CW
Hot Water	Auxiliary Air	Front	32L551HW
Distilled Water	Auxiliary Air	Front	32L576DW
Steam	Auxiliary Air	Front	32L62900
Cold Water	Bypass, VAV, Radioisotope	Front	32L552CW
Hot Water	Bypass, VAV, Radioisotope	Front	32L552HW
Distilled Water	Bypass, VAV, Radioisotope	Front	32L577DW
Steam	Bypass, VAV, Radioisotope	Front	32L63000
Cold Water	Bypass, VAV Floor-mounted	Front	32L554CW
Hot Water	Bypass, VAV Floor-mounted	Front	32L554HW
Distilled Water	Bypass, VAV Floor-mounted	Front	32L579DW
Steam	Bypass, VAV Floor-mounted	Front	32L63100
Cold Water	Auxiliary Air Floor-mounted	Front	32L555CW
Hot Water	Auxiliary Air Floor-mounted	Front	32L555HW
Distilled Water	Auxiliary Air Floor-mounted	Front	32L580DW
Steam	Auxiliary Air Floor-mounted	Front	32L63200

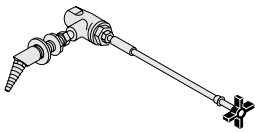


- Single-service color-coded gooseneck with 4" (102 mm) spread
- Sidewall mounted
- For cold water service
- For use with front mounted cupsink

Fume Hood Type	Product No.
Auxiliary Air Bench/High-line	32L688CW
Constant Volume/Restricted Bypass Bench/High-line	32L689CW
Constant Volume/Restricted Bypass Floor-mounted	32L690CW
Auxiliary Air Floor-mounted	32L691CW

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Remote Control 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	Auxiliary Air	30L496GW
Air	Auxiliary Air	30L496AW
Vacuum	Auxiliary Air	30L496VW
Nitrogen	Auxiliary Air	30L57300
Oxygen	Auxiliary Air	30L57700
Gas	Bypass & R.B., Radioisotope	30L497GW
Air	Bypass & R.B., Radioisotope	30L497AW
Vacuum	Bypass & R.B., Radioisotope	30L497VW
Nitrogen	Bypass & R.B., Radioisotope	30L57400
Oxygen	Bypass & R.B., Radioisotope	30L57800
Gas	Bypass & R.B. Floor-mounted	30L499GW
Air	Bypass & R.B. Floor-mounted	30L499AW
Vacuum	Bypass & R.B. Floor-mounted	30L499VW
Nitrogen	Bypass & R.B. Floor-mounted	30L57500
Oxygen	Bypass & R.B. Floor-mounted	30L57900
Gas	Auxiliary Air Floor-mounted	30L500GW
Air	Auxiliary Air Floor-mounted	30L500AW
Vacuum	Auxiliary Air Floor-mounted	30L500VW
Nitrogen	Auxiliary Air Floor-mounted	30L57600
Oxygen	Auxiliary Air Floor-mounted	30L58000

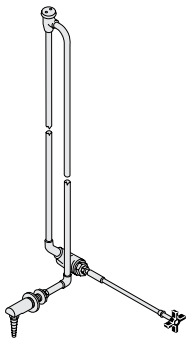
Common features:

- 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
- Can be installed on right or left side
- For use with cupsink installed front or rear

Installation requirements:

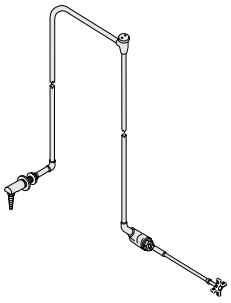
- Requires 1" (254 mm) mounting hole on interior end panels
- Requires 9/16" (14.3 mm) mounting hole at front posts

Remote Control Water Faucets with Vacuum Breakers



- Single-service assembly
- Vacuum breaker

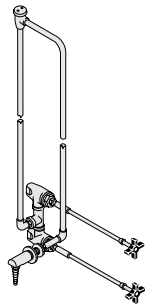
Fume Hood Type	Fixture Location	Product No.
Auxiliary Air	Front	32L675CW
Bypass, Restricted Bypass, Radioisotope	Front	32L676CW
Bypass, Restricted Bypass, Floor-mounted	Front	32L677CW
Auxiliary Air, Floor-mounted	Front	32L678CW



- Single-service assembly
- Vacuum breaker

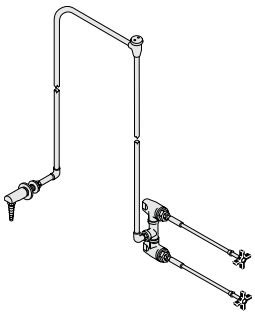
Fume Hood Type	Fixture Location	Product No.
Auxiliary Air	Rear	32L663CW
Bypass, Restricted Bypass, Radioisotope	Rear	32L664CW
Bypass, Restricted Bypass	Rear	32L665CW
Perchloric Acid	Rear	32L616CW

Remote Control Water Faucets with Vacuum Breakers (continued)



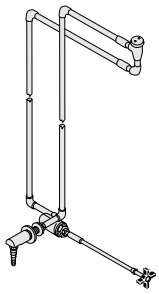
- Assembly for hot and cold water
- Vacuum breaker

Fume Hood Type	Fixture Location	Product No.
Auxiliary Air	Front	32L66800
Bypass, Restricted Bypass, Radioisotope	Front	32L66900
Auxiliary Air, Floor-mounted	Front	32L67000



- Assembly for hot and cold water
- Vacuum breaker

Fume Hood Type	Fixture Location	Product No.
Auxiliary Air	Rear	32L67100
Bypass, Restricted Bypass, Radioisotope	Rear	32L67200



- Single-service assembly
- Top-mount front vacuum breaker
- Vacuum breaker is exposed
- Not for use on Concept and Pioneer

Fixture Location	Product No.
Front	32L657CW

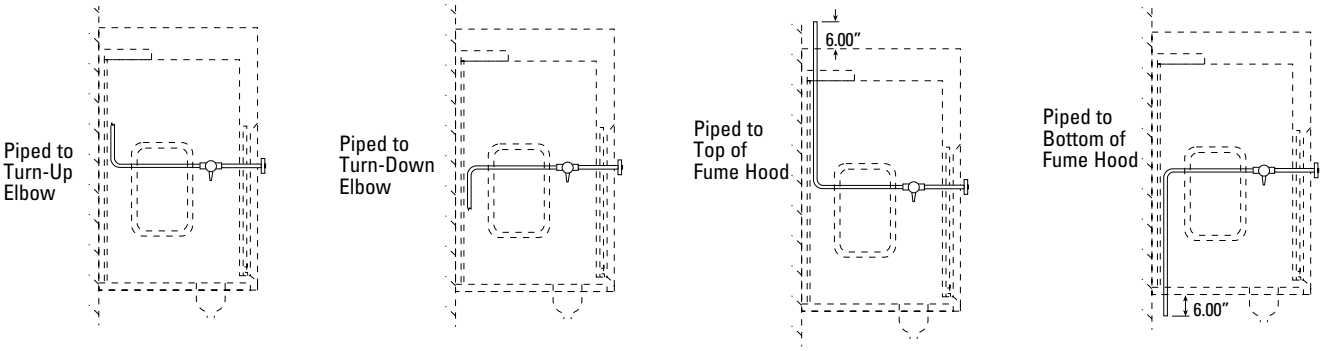
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Product information:

- 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 either soldered with 95/5 solder or are mechanically attached with compression fittings
- Front-loaded service fixtures are not available in standard pre-piped configurations
- Verify compliance with all state and local codes prior to ordering
- Products on this page cannot be shipped loose
- Requires 9/16" (14.3 mm) remote control or 1-1/4" (31.8 mm) front-loaded mounting holes at front posts

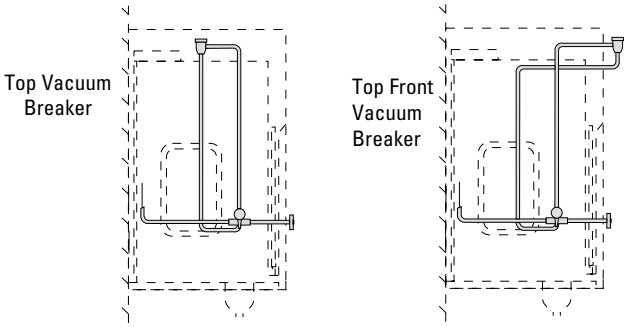
Standard Configurations

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



Vacuum Breaker Configurations

Pre-piped cold water fixtures are available with vacuum breakers in two configurations. State and local codes will dictate the version that should be used in your location.



Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Standard Pre-piped Fixture Configurations

		To Up Elbow	To Down Elbow	Piped Up	Piped Down
Pipe Size/Material	**Fixture Type**	**Product No.**	**Product No.**	**Product No.**	**Product No.**
3/8″ Copper	CW Front	32L80200	32L80000	32L80800	32L80600
3/8″ Copper	HW Front	32L80300	32L80100	32L80900	32L80700
3/8″ Black Iron	Steam Front	32L80500	32L80400	32L81100	32L81000
3/8″ Copper	CW Rear	32L81400	32L81300	32L81600	–
3/8″ Copper	CW Front w/ Top VB	32L81700	32L81900	32L844CW	32L843CW
3/8″ Copper	CW Rear w/ Top VB	32L81800	32L82000	32L842CW	–
3/8″ Copper	H & CW Front	32L82600	32L82500	32L82800	32L82700
3/8″ Copper	H & CW Rear	32L83000	32L82900	32L83200	–
3/8″ Copper	CW Rear w/ Top Front VB	32L91500	32L91900	–	–
3/8″ Copper	CW Front w/ Top Front VB	32L91600	32L92000	–	–
3/8″ Copper	H & CW Rear w/ Top VB	32L84600	32L84500	32L84800	–
3/8″ Copper	H & CW Front w/ Top VB	32L85000	32L84900	32L85200	32L85100
3/8″ Copper	Air Front	30L80000	30L80500	30L81000	30L81500
3/8″ Copper	Vacuum Front	30L80100	30L80600	30L81100	30L81600
3/8″ Copper	Nitrogen Front	30L80200	30L80700	30L81200	30L81700
3/8″ Copper	Oxygen Front	30L80300	30L80800	30L81300	30L81800
3/8″ Black Iron w/ Coupling	Gas Front	30L82100	30L82000	30L82200	30L82300

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

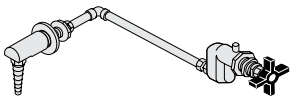
Common features:

- 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

Installation requirements:

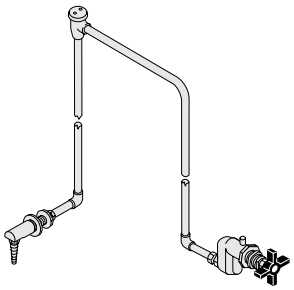
- Requires 1" (25 mm) mounting hole at interior end panels
- Requires 1-1/4" (32 mm) mounting hole at front posts

Front-loaded Water Faucets



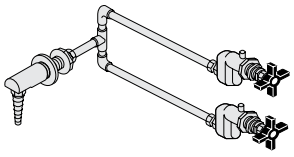
- Single-service valve
- Turret base with serrated hose end
- Without vacuum breaker
- Tin-lined model for distilled water
- For use with cupsink at front or rear

Service	Product No.
Cold water	32L645CW
Hot water	32L645HW
Distilled water	32L64800



- 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	32L647CW
Hot water	32L647HW

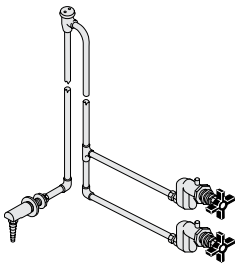


- General mixing faucet, hot and cold water
- Turret base with serrated hose end
- Without vacuum breaker
- For use with cupsink at front or rear

Product No.
32L64600

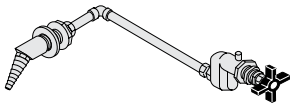
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Front-loaded Water Faucets (continued)



- 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.
32L64900



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

Service	Product No.
Gas	30L589GW
Air	30L589AW
Vacuum	30L589VW
Nitrogen	30L589NW
Oxygen	30L589OW

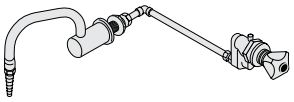
Common features of front loaded ColorTec valves:

- Fixture has brass valve body with white hybrid epoxy/polyester blend finish.
- Color-coded (per media) plastic hooded handle and plastic index button.
- Color-coded (per media) removable serrated hose end with internal shank.
- Shank washer finished in black powdercoat.

Installation requirements

- Shipped loose – for field installation only.
- Requires 1" (25 mm) mounting hole at interior end panels.
- Requires 1-1/4" (32 mm) mounting hole at front posts

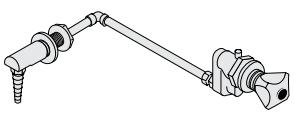
Front-loaded ColorTech Water Faucets



- 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

∗ Available on extended lead time.

Service	Product No.
Cold water	28L152CW
Hot water	28L152HW*

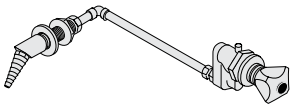


- Single-service water valve
- For straight front fume hood
- Serrated hose end and internal shank

Service	Product No.
Cold water	28L151CW
Hot water	28L151HW*

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

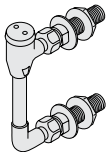
Front-loaded Service Valves - Color Tec



- 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	27L161A0
Gas	27L161G0
Vacuum	27L161V0
Oxygen	27L16200
Nitrogen	27L16300

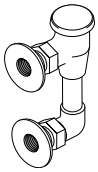
Atmospheric Vacuum Breakers - Color Tec



- 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/Pioneer or Horizon fume hood

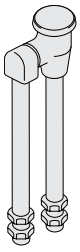
Product No.
28L02700*

*Available on extended lead time



- 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.
32L27700



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

Product No.
32L2800

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

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
- Operations manual is provided
- Features:
  - Low air alarm relay output
  - Simplified push-button calibration
  - Relay input for night setrear to mute audible alarm

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

Factory Installed (Pre-wired)

Fume Hood Use	Product No.
SafeAire II, 3' and 4'	54LAFA0500S4
SafeAire II, 5'	54LAFA0500S5
SafeAire II, 6'	54LAFA0500S6
SafeAire II, 8'	54LAFA0500S8
Concept, 4'	54LAFA0500C4
Concept, 5'	54LAFA0500C5
Concept, 6'	54LAFA0500C6
Concept, 7'	54LAFA0500C7
Concept, 8'	54LAFA0500C8
Demonstration	54LAFA0500D0
10' postless sash fume hood	54LAFA0500S1
12' postless sash fume hood	54LAFA0500S3
Pioneer, all widths	54LAFA0500P

Field Installed (Cartoned)

Fume Hood Use	Product No.
SafeAire II, Concept and Pioneer	54LAFA0500SC
Demonstration	54LAFA0500HC

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Air Flow Alarm Monitor – AFA1000

- Continuously monitors flow based on internal fume hood pressure and has field adjustable set points that will activate the alarm signal
- Operations manual is provided
- Features:
  - Digital display of face velocity
  - LED alarm indicators
  - Push-button calibration and configuration
  - One programmable output relays
  - Three configurable inputs
  - Com ports for local or network connection

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

Factory Installed (Pre-wired)

Fume Hood Use	Product No.
SafeAire II, 3' and 4'	54LAFA1000S4
SafeAire II, 5'	54LAFA1000S5
SafeAire II, 6'	54LAFA1000S6
SafeAire II, 8'	54LAFA1000S8
Concept and Pioneer, 4'	54LAFA1000C4
Concept and Pioneer, 5'	54LAFA1000C5
Concept and Pioneer, 6'	54LAFA1000C6
Concept and Pioneer, 7'	54LAFA1000C7
Concept and Pioneer, 8'	54LAFA1000C8
Demonstration	54LAFA1000D0
10' postless sash fume hood	54LAFA1000S1
12' postless sash fume hood	54LAFA1000S3
Pioneer, all widths	54LAFA1000P
Advantage, all widths	54LAFA1000A0

Field Installed (Cartoned)

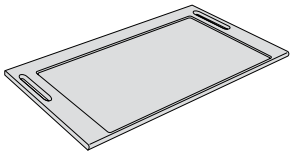
Fume Hood Use	Product No.
SafeAire II, Concept and Pioneer	54LAFA1000SC
Demonstration	54LAFA1000HC
Advantage	54LAFA1000AC

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Common features:
- Black epoxy resin work surface.
- Cupsink cutouts sized for product number 34L13200 polyolefin cupsinks. Special cutouts must be specified if alternate cupsinks are selected.
- 1-1/4" (32 mm) thick.

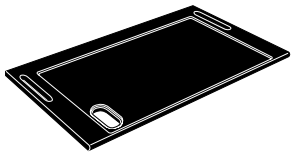
Ordering information:
- Cupsinks and other service fixtures must be ordered separately.

Epoxy Resin for SafeAire II and Concept Fume Hoods



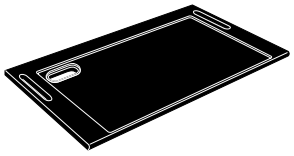
No Cupsink Cutouts

	Work Surface Depth			
Width	**26-1/8" (663 mm) 54L – Fume Hood**	**30-7/8" (784 mm) 60L – Fume Hood**	**32-1/8" (815 mm) 61L – Fume Hood**	**38-1/8" (968 mm) 62L – Fume Hood**
36" (914 mm)	21L3626000	21L3631000	–	–
48" (1219 mm)	21L4826000	21L4831000	21L4832000	21L4838000
60" (1524 mm)	21L6026000	21L6031000	21L6032000	21L6038000
72" (1829 mm)	21L7226000	21L7231000	21L7232000	21L7238000
84" (2134 mm)	21L8426000	–	21L8432000	21L8438000
96" (2438 mm)	21L9626000	21L9631000	21L9632000	21L9638000



Left Front Cupsink Cutout

	Work Surface Depth			
Width	**26-1/8" (663 mm) 54L – Fume Hood**	**30-7/8" (784 mm) 60L – Fume Hood**	**32-1/8" (815 mm) 61L – Fume Hood**	**38-1/8" (968 mm) 62L – Fume Hood**
36" (914 mm)	21L36261LF	21L36311LF	–	–
48" (1219 mm)	21L48261LF	21L48311LF	21L48321LF	21L48381LF
60" (1524 mm)	21L60261LF	21L60311LF	21L60321LF	21L60381LF
72" (1829 mm)	21L72261LF	21L72311LF	21L72321LF	21L72381LF
84" (2134 mm)	21L84261LF	–	21L84321LF	21L84381LF
96" (2438 mm)	21L96261LF	21L96311LF	21L96321LF	21L96381LF



Left Rear Cupsink Cutout

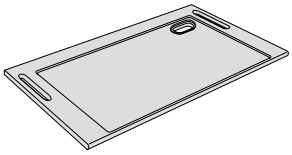
	Work Surface Depth			
Width	**26-1/8" (663 mm) 54L – Fume Hood***	**30-7/8" (784 mm) 60L – Fume Hood**	**32-1/8" (815 mm) 61L – Fume Hood**	**38-1/8" (968 mm) 62L – Fume Hood**
36" (914 mm)	21L36261LR	21L36311LR	–	–
48" (1219 mm)	21L48261LR	21L48311LR	21L48321LR	21L48381LR
60" (1524 mm)	21L60261LR	21L60311LR	21L60321LR	21L60381LR
72" (1829 mm)	21L72261LR	21L72311LR	21L72321LR	21L72381LR
84" (2134 mm)	21L84261LR	–	21L84321LR	21L84381LR
96" (2438 mm)	21L96261LR	21L96311LR	21L96321LR	21L96381LR

*Rear mounted cupsink requires use of a sink base cabinet.

Common features:
- Black epoxy resin work surface.
- Cupsink cutouts sized for product number 34L13200 polyolefin cupsinks. Special cutouts must be specified if alternate cupsinks are selected.
- 1-1/4" (32 mm) thick.

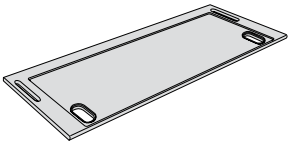
Ordering information:
- Cupsinks and other service fixtures must be ordered separately.

Epoxy Resin for SafeAire II and Concept Fume Hoods



Right Rear Cupsink Cutout

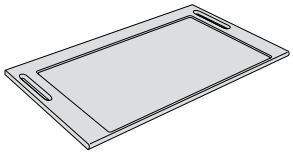
	Work Surface Depth			
Width	**26-1/8" (663 mm) 54L – Fume Hood**	**30-7/8" (784 mm) 60L – Fume Hood**	**32-1/8" (815 mm) 61L – Fume Hood**	**38-1/8" (968 mm) 62L – Fume Hood**
36" (914 mm)	21L36261RR	21L36311RR	–	–
48" (1219 mm)	21L48261RR	21L48311RR	21L48321RR	21L48381RR
60" (1524 mm)	21L60261RR	21L60311RR	21L60321RR	21L60381RR
72" (1829 mm)	21L72261RR	21L72311RR	21L72321RR	21L72381RR
84" (2134 mm)	21L84261RR	–	21L84321RR	21L84381RR
96" (2438 mm)	21L96261RR	21L96311RR	21L96321RR	21L96381RR



Two Front Cupsink Cutouts

	Work Surface Depth			
Width	**26-1/8" (663 mm) 54L – Fume Hood**	**30-7/8" (784 mm) 60L – Fume Hood**	**32-1/8" (815 mm) 61L – Fume Hood**	**38-1/8" (968 mm) 62L – Fume Hood**
96" (2438 mm)	21L96262BF	21L96312BF	21L96322BF	21L96382BF

Epoxy Resin for Pioneer



- 37-1/4" Depth Only

Add the following suffix letters to product numbers at left for cupsink cutout requirements:

000 = No cupsink cutouts
1LF = Left Front
1RF = Right Front
2BF = Both Front Sides (96" width only)
1LR = Left Rear
1RR = Right Rear

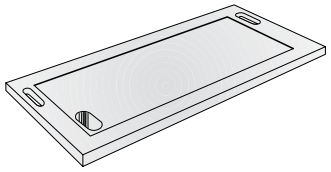
Width	Product No.
48" (1219 mm)	21L4830___
60" (1524 mm)	21L6030___
72" (1829 mm)	21L7230___
84" (2134 mm)	21L8430___
96" (2438 mm)	21L9630___

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Common features:
- Stainless steel work surfaces are No. 304 stainless steel with smooth satin finish.
- 1-1/4" (32 mm) thick.

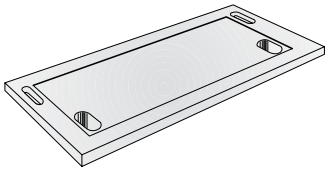
Ordering information:
- Integral cupsinks included, other service fixtures must be ordered separately.
- Special cutouts must be specified if alternate cupsinks are selected.

Stainless Steel for only SafeAire II Fume Hood



- Front left cupsink
- 26-1/8" deep

Width	Product No.
36" (914 mm)	21L36261LFSS
48" (1219 mm)	21L48261LFSS
60" (1524 mm)	21L60261LFSS
72" (1829 mm)	21L72261LFSS



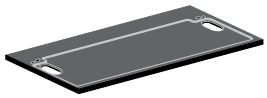
- Front right and left cupsink
- 26-1/8" deep

Width	Product No.
96" (2438 mm)	21L96261LFSS

Common features:
- Work surface for use with Horizon fume hood assemblies.
- Cupsink cutouts sized for product number 34L13200 polyolefin cupsinks. Special cutouts must be specified if alternate cupsinks are selected.
- 1-1/4" (32 mm) thick.

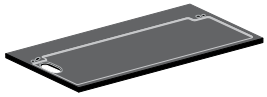
Ordering information:
- Cupsinks and other service fixtures must be ordered separately.

Molded Black Resin for only Horizon Superstructures



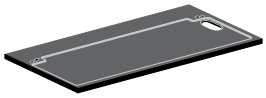
- Two cupsinks

Width	Product No.
48" (1219 mm)	20L258BB
60" (1524 mm)	20L259BB
72" (1829 mm)	20L260BB



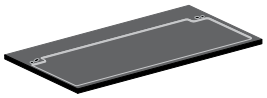
- Left cupsink

Width	Product No.
48" (1219 mm)	20L258BL
60" (1524 mm)	20L259BL
72" (1829 mm)	20L260BL



- Right cupsink

Width	Product No.
48" (1219 mm)	20L258BR
60" (1524 mm)	20L259BR
72" (1829 mm)	20L260BR



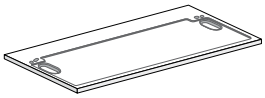
- No cupsinks

Width	Product No.
48" (1219 mm)	20L258BN
60" (1524 mm)	20L259BN
72" (1829 mm)	20L260BN

Common features:
- Work surface for use with Horizon fume hood assemblies.
- Cupsink cutouts sized for product number 34L13200 polyolefin cupsinks. Special cutouts must be specified if alternate cupsinks are selected.
- 1-1/4" (32 mm) thick.

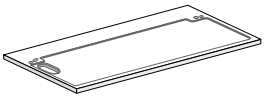
Ordering information:
- Cupsinks and other service fixtures must be ordered separately.

Molded White Resin for only Horizon Superstructures



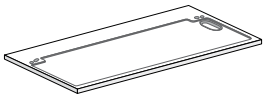
- Two cupsinks

Width	Product No.
48" (1219 mm)	20L258WB
60" (1524 mm)	20L259WB
72" (1829 mm)	20L260WB



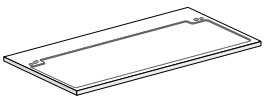
- Left cupsink

Width	Product No.
48" (1219 mm)	20L258WL
60" (1524 mm)	20L259WL
72" (1829 mm)	20L260WL



- Right cupsink

Width	Product No.
48" (1219 mm)	20L258WR
60" (1524 mm)	20L259WR
72" (1829 mm)	20L260WR



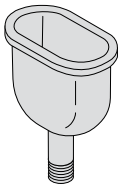
- No cupsinks

Width	Product No.
48" (1219 mm)	20L258WN
60" (1524 mm)	20L259WN
72" (1829 mm)	20L260WN

For use with:
- Work surfaces with cupsink cutouts.

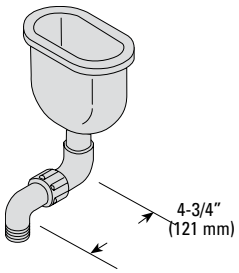
Ordering information:
- Adapters to connect cupsink to plumbing must be ordered separately.
- Coordinate selection of plumbing fixtures, sink outlet material, trap material and building acid waste system.

Polyolefin Oval Cupsinks



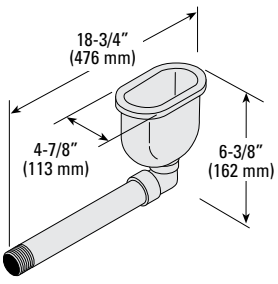
- 7-1/2" (191 mm) x 4-1/2" (114 mm) oval cupsink, 3" x 6" I.D.
- IPS outlet – 1-1/2" (38 mm)
- Overall height – 8-3/16" (208 mm)

Product No.
34L13200



- 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)

2 x 6 I.D.	Product No.
Cupsink only	34L19000
Cupsink with elbow	34L19400

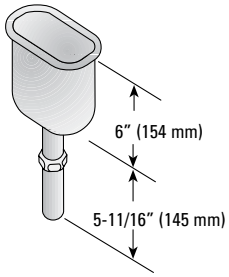


- Shallow cupsink for restricted spaces, ideal for a fume hood installed above an acid or flammable storage cabinet
- Provides for front-mounted location above acid/flammable cabinet with flush front
- 6" (152 mm) x 3" (76 mm) inside dimension
- Outlet – 1-1/2" (38 mm)

2 x 6 I.D.	Product No.
Shallow cupsink with elbow	34L13700

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

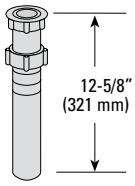
Stainless Steel Oval Cupsink



- 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)

Product No.
34L19100

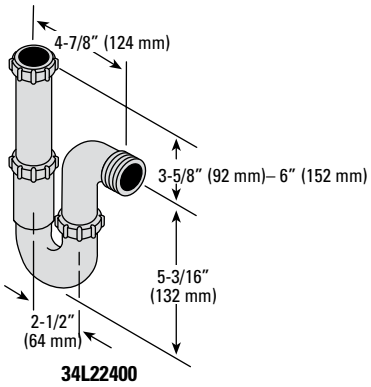
Polyolefin Tailpiece



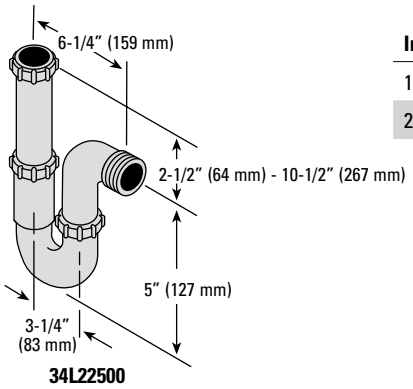
- 1-1/2" (38 mm) Tailpiece assembly

Product No.
34L24500

Polyolefin "P" Traps



34L22400



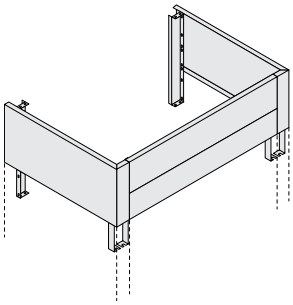
34L22500

Inlet/Outlet	Product No.
1-1/2" (38 mm)	34L22400
2" (51 mm)	34L22500

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Product features:
- 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.
- 12-1/2" (318 mm) height can be cut down in field for ceilings as low as 8 feet.

Enclosures for SafeAire II Bench and High-line Fume Hoods



- 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
- Add "S" to end of product number to designate for fume hood with stainless steel interior

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.

12-1/2" (318 mm) High

	Depth			
Width	**31-1/4" (794 mm)**	**36" (914 mm)**	**37-1/4" (946 mm)**	**43-1/4" (1099 mm)**
36" (914 mm)	54L0361231	60L0361236	61L0361237	62L0361243
48" (1219 mm)	54L0481231	60L0481236	61L0481237	62L0481243
60" (1524 mm)	54L0601231	60L0601236	61L0601237	62L0601243
72" (1829 mm)	54L0721231	60L0721236	61L0721237	62L0721243
96" (2438 mm)	54L0961231	60L0961236	61L0961237	62L0961243

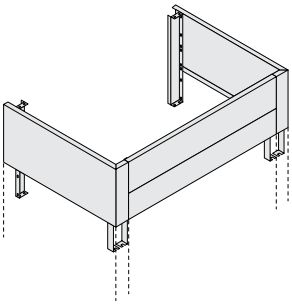
17" (431 mm) High

	Depth			
Width	**31-1/4" (794 mm)**	**36" (914 mm)**	**37-1/4" (946 mm)**	**43-1/4" (1099 mm)**
36" (914 mm)	54L0361731	60L0361736	61L0361737	62L0361743
48" (1219 mm)	54L0481731	60L0481736	61L0481737	62L0481743
60" (1524 mm)	54L0601731	60L0601736	61L0601737	62L0601743
72" (1829 mm)	54L0721731	60L0721736	61L0721737	62L0721743
96" (2438 mm)	54L0961731	60L0961736	61L0961737	62L0961743

24-1/2" (622 mm) High

	Depth			
Width	**31-1/4" (794 mm)**	**36" (914 mm)**	**37-1/4" (946 mm)**	**43-1/4" (1099 mm)**
36" (914 mm)	54L0362431	60L0362436	61L0362437	62L0362443
48" (1219 mm)	54L0482431	60L0482436	61L0482437	62L0482443
60" (1524 mm)	54L0602431	60L0602436	61L0602437	62L0602443
72" (1829 mm)	54L0722431	60L0722436	61L0722437	62L0722443
96" (2438 mm)	54L0962431	60L0962436	61L0962437	62L0962443

Enclosures for SafeAire II Bench and High-line Fume Hoods (continued)



- 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
- Add "S" to end of product number to designate for fume hood with stainless steel interior

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.

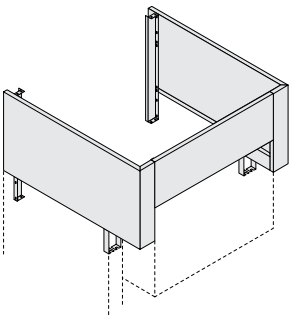
29" (737 mm) High

	Depth			
Width	**31-1/4" (794 mm)**	**36" (914 mm)**	**37-1/4" (946 mm)**	**43-1/4" (1099 mm)**
36" (914 mm)	54L0362931	60L0362936	61L0362937	62L0362943
48" (1219 mm)	54L0482931	60L0482936	61L0482937	62L0482943
60" (1524 mm)	54L0602931	60L0602936	61L0602937	62L0602943
72" (1829 mm)	54L0722931	60L0722936	61L0722937	62L0722943
96" (2438 mm)	54L0962931	60L0962936	61L0962937	62L0962943

36-1/2" (927 mm) High

	Depth			
Width	**31-1/4" (794 mm)**	**36" (914 mm)**	**37-1/4" (946 mm)**	**43-1/4" (1099 mm)**
36" (914 mm)	54L0363631	60L0363636	61L0363637	62L0363643
48" (1219 mm)	54L0483631	60L0483636	61L0483637	62L0483643
60" (1524 mm)	54L0603631	60L0603636	61L0603637	62L0603643
72" (1829 mm)	54L0723631	60L0723636	61L0723637	62L0723643
96" (2438 mm)	54L0963631	60L0603636	61L0963637	62L0963643

Enclosures for SafeAire II Auxiliary Air Fume Hoods



- 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
- Add "S" to end of product number to designate for fume hood with stainless steel interior

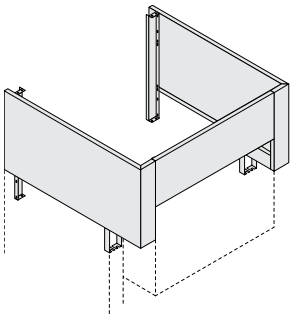
Installation information: With suspended ceilings, it is suggested that the enclosure assembly extend to the bottom of the ceiling. The hung ceiling should extend over the top of the fume hood and be trimmed around the mechanical connections to ensure proper room pressure control of the HVAC system.

24-1/2" (622 mm) High

	Depth			
Width	**33-3/16" (859 mm)**	**38-5/8" (980 mm)**	**39-3/16" (1011 mm)**	**45-3/16" (1164 mm)**
48" (1219 mm)	54L0482434	60L0482439	61L0482440	62L0482446
60" (1524 mm)	54L0602434	60L0602439	61L0602440	62L0602446
72" (1829 mm)	54L0722434	60L0722439	61L0722440	62L0722446
96" (2438 mm)	54L0962434	60L0962439	61L0962440	62L0962446

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Enclosures for SafeAire II Auxiliary Air Fume Hoods (continued)



- 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
- Add "S" to end of product number to designate for fume hood with stainless steel interior

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.

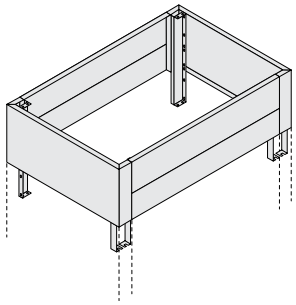
29" (737 mm) High

	Depth			
Width	**33-3/16" (859 mm)**	**38-5/8" (980 mm)**	**39-3/16" (1011 mm)**	**45-3/16" (1164 mm)**
48" (1219 mm)	54L0482934	60L0482939	61L0482940	62L0482946
60" (1524 mm)	54L0602934	60L0602939	61L0602940	62L0602946
72" (1829 mm)	54L0722934	60L0722939	61L0722940	62L0722946
96" (2438 mm)	54L0962934	60L0962939	61L0962940	62L0962946

36-1/2" (927 mm) High

	Depth			
Width	**33-3/16" (859 mm)**	**38-5/8" (980 mm)**	**39-3/16" (1011 mm)**	**45-3/16" (1164 mm)**
48" (1219 mm)	54L0483634	60L0483639	61L0483640	62L0483646
60" (1524 mm)	54L0603634	60L0603639	61L0603640	62L0603646
72" (1829 mm)	54L0723634	60L0723639	61L0723640	62L0723646
96" (2438 mm)	54L0963634	60L0963639	61L0963640	62L0963646

Enclosures for SafeAire II Demonstration Fume Hood



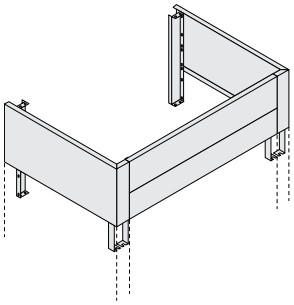
- Use to enclose space between ceiling and top of fume hood superstructure
- Made of steel, finished to match fume hood superstructure
- Installation hardware included
- Lower front panel is removable for access to light fixture
- 32-1/2" (826 mm) depth

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	**48" (1219 mm)**	**60" (1524 mm)**	**72" (1829 mm)**
12-1/2" (318 mm)	54L0481233	54L0601233	54L0721233
24-1/2" (622 mm)	54L0482433	54L0602433	54L0722433
36-1/2" (927 mm)	54L0483633	54L0603633	54L0723633

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Enclosures for SafeAire II Floor-mounted Fume Hoods



- Use to enclose space between ceiling and top of floor-mounted fume hoods
- Made of steel, finished to match fume hood superstructure
- Installation hardware included
- Add "S" to end of product number to designate for fume hood with stainless steel interior
- 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.

24-1/2" (622 mm) High

	Depth		
Width	**32-3/8" (822 mm)**	**38-3/8" (974 mm)**	**44-3/8" (112 6 mm)**
48" (1219 mm)	554S0482432	551S0482438	552S0482444
60" (1524 mm)	554S0602432	551S0602438	552S0602444
72" (1829 mm)	554S0722432	551S0722438	552S0722444
96" (2438 mm)	554S0962432	551S0962438	552S0962444

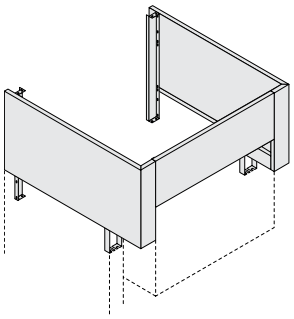
29" (737 mm) High

	Depth		
Width	**32-3/8" (822 mm)**	**38-3/8" (974 mm)**	**44-3/8" (1126 mm)**
48" (1219 mm)	554S0482932	551S0482938	552S0482944
60" (1524 mm)	554S0602932	551S0602938	552S0602944
72" (1829 mm)	554S0722932	551S0722938	552S0722944
96" (2438 mm)	554S0962932	551S0962938	552S0962944

36-1/2" (927 mm) High

	Depth		
Width	**32-3/8" (822 mm)**	**38-3/8" (974 mm)**	**44-3/8" (1126 mm)**
48" (1219 mm)	554S0483632	551S0483638	552S0483644
60" (1524 mm)	554S0603632	551S0603638	552S0603644
72" (1829 mm)	554S0723632	551S0723638	552S0723644
96" (2438 mm)	554S0963632	551S0963638	552S0963644

Enclosures for SafeAire II Auxiliary Air Floor-mounted Fume Hoods



- Use to enclose space between ceiling and top of floor-mounted fume hood
- Made of steel, finished to match fume hood superstructure
- Installation hardware included
- Add "S" to end of product number to designate for fume hood with stainless steel interior

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.

24-1/2" (622 mm) High

	Depth		
Width	**34-15/16" (887 mm)**	**40-15/16" (1040 mm)**	**46-15/16" (1192 mm)**
48" (1219 mm)	554S0482435	551S0482441	552S0482447
60" (1524 mm)	554S0602435	551S0602441	552S0602447
72" (1829 mm)	554S0722435	551S0722441	552S0722447
96" (2438 mm)	554S0962435	551S0962441	552S0962447

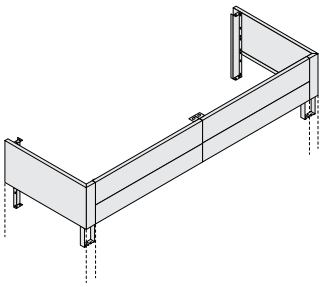
29" (737 mm) High

	Depth		
Width	**34-15/16" (887 mm)**	**40-15/16" (1040 mm)**	**46-15/16" (1192 mm)**
48" (1219 mm)	554S0482935	551S0482941	552S0482947
60" (1524 mm)	554S0602935	551S0602941	552S0602947
72" (1829 mm)	554S0722935	551S0722941	552S0722947
96" (2438 mm)	554S0962935	551S0962941	552S0962947

36-1/2" (927 mm) High

	Depth		
Width	**34-15/16" (887 mm)**	**40-15/16" (1040 mm)**	**46-15/16" (1192 mm)**
48" (1219 mm)	554S0483635	551S0483641	552S0483647
60" (1524 mm)	554S0603635	551S0603641	552S0603647
72" (1829 mm)	554S0723635	551S0723641	552S0723647
96" (2438 mm)	554S0963635	551S0963641	552S0963647

Enclosures for SafeAire II Postless Sash Fume Hoods

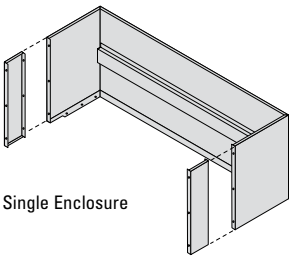


- Use to enclose space between ceiling and top of fume hood superstructure
- Made of steel, finished to match fume hood superstructure
- Installation hardware included
- Lower front panel is removable for access to light fixture
- 31-1/4" (794 mm) depth

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	**120" (3048 mm)**	**144" (3658 mm)**
12-1/2" (318 mm)	54L1201231	54L1441231
17" (432 mm)	54L1201731	54L1441731
24-1/2" (622 mm)	54L1202431	54L1442431
29" (737 mm)	54L1202931	54L1442931
36-1/2" (927 mm)	54L1203631	54L1443631

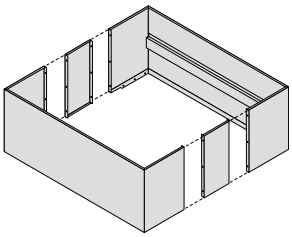
Ceiling Enclosure Panels for Horizon



Single Enclosure

- Use to enclose space between ceiling and top of fume hood superstructure
- All installation hardware provided
- Single ceiling enclosure panel is 23-1/2" (597 mm) deep and double enclosure panel is 47" (1194 mm) deep

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.



Double Enclosure

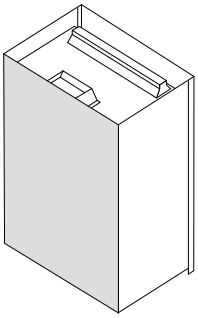
Single Ceiling Enclosure

	For Hood Width		
Height	**48" (1219 mm)**	**60" (1524 mm)**	**72" (1829 mm)**
9-3/4" (248 mm)	54L0481024	54L0601024	54L0721024
21-3/4" (553 mm)	54L0482224	54L0602224	54L0722224

Double Ceiling Enclosure

	For Hood Width		
Height	**48" (1219 mm)**	**60" (1524 mm)**	**72" (1829 mm)**
9-3/4" (248 mm)	54L0481030	54L0601030	54L0721030
21-3/4" (553 mm)	54L0482230	54L0602230	54L0722230

SafeAire II Finished Backs

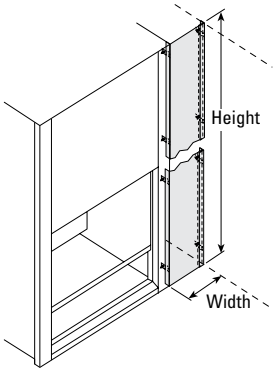


- Used to enclose rear of fume hood superstructure when exposed
- Made of steel, finished to match fume hood superstructure
- Installation hardware included
- These finished backs do not fit on fume hoods with stainless steel interiors; special detailing is required

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.

	Fume Hood Type		
Width	**Benchtop**	**High-line**	**Floor-mounted**
36″ (914 mm)	90L19200	–	–
48″ (1219 mm)	90L19300	90L19700	90L20100
60″ (1524 mm)	90L19400	90L19800	90L20200
72″ (1829 mm)	90L19500	90L19900	90L20300
96″ (2438 mm)	90L19600	90L20000	90L20400

Filler Assembly

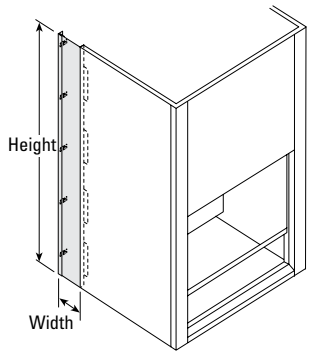


- Use to enclose space between wall and side of fume hood or space between rear of fume hood and wall
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

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.

	Height		
Width	**Standard Superstructure 54-1/4″ (1378 mm)**	**High-line Superstructure 66-1/4″ (1682 mm)**	**Floor-mounted Hood 90″ (2286 mm)**
1″ (25 mm)	90L15000	90L15400	90L15800
2″ (51 mm)	90L15100	90L15500	90L15900
3″ (76 mm)	90L15200	90L15600	90L16000
6″ (152 mm)	90L15300	90L15700	90L16100

Filler Assembly

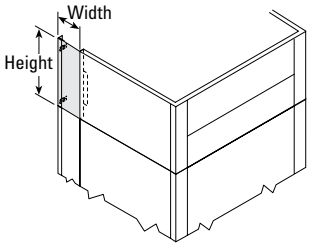


- Use to enclose space between wall and rear of fume hood superstructure or floor-mounted fume hood
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

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.

	Height		
Width	**Standard Superstructure 54-1/4" (1378 mm)**	**High-line Superstructure 66-1/4" (1682 mm)**	**Floor-mounted Hood 90" (2286 mm)**
1" (25 mm)	90L150N0	90L154N0	90L158N0
2" (51 mm)	90L151N0	90L155N0	90L159N0
3" (76 mm)	90L152N0	90L156N0	90L160N0
6" (152 mm)	90L153N0	90L157N0	90L161N0

Ceiling Fillers



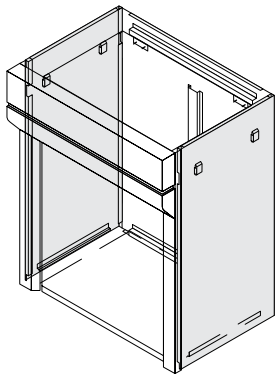
- Use to enclose space between wall and rear of ceiling enclosure
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

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.

	Height				
Width	**12-1/2" (318 mm)**	**17" (432 mm)**	**24-1/2" (622 mm)**	**29" (737 mm)**	**36-1/2" (927 mm)**
1" (25 mm)	90L138N0	90L130N0	90L139N0	90L134N0	90L140N0
2" (51 mm)	90L141N0	90L131N0	90L142N0	90L135N0	90L143N0
3" (76 mm)	90L144N0	90L132N0	90L145N0	90L136N0	90L146N0
6" (152 mm)	90L147N0	90L133N0	90L148N0	90L137N0	90L149N0

Product features:
- Enclosure panels for front, sides and rear of Concept and Pioneer fume hood superstructures
- Encloses space between top of superstructure and ceiling
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

Side Enclosure Panels

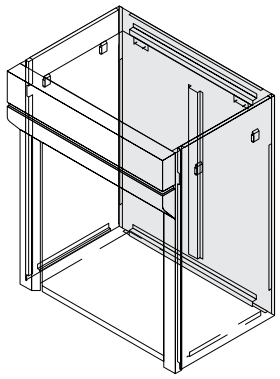


- Use to enclose one or both sides of Concept, Pioneer, or SafeAire II fume hood superstructures
- Product number is for single panel

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.

	Height		
Hood Depth	**Standard Superstructure**	**High-line Superstructure**	**Pass-thru Demonstration Hood**
31-1/4" (794 mm)	54L31530FHEP	54L31650FHEP	–
32" (813 mm)	–	–	54L32530FHEP
36" (914 mm)	54L36530FHEP	54L36650FHEP	–
37-1/4" (946 mm)	54L37530FHEP	54L37650FHEP	–
43-1/4" (1099 mm)	54L43530FHEP	54L43650FHEP	–

Lower Back Enclosure Panels



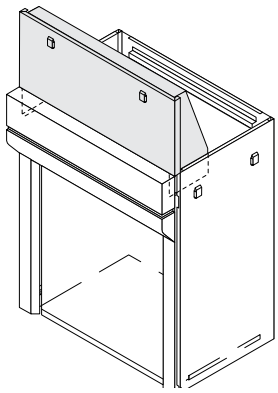
- Use to enclose back of Concept and Pioneer fume hood superstructures

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.

	Height	
Hood Width	**Standard Superstructure**	**High-line Superstructure**
48" (1219 mm)	54L48530LBEP	54L48550LBEP
60" (1524 mm)	54L60530LBEP	54L60550LBEP
72" (1829 mm)	54L72530LBEP	54L72550LBEP
84" (2134 mm)	54L84530LBEP	54L84550LBEP
96" (2438 mm)	54L96530LBEP	54L96550LBEP

Product features:
- Enclosure panels for front, sides and rear of Concept and Pioneer fume hood superstructures
- Encloses space between top of superstructure and ceiling
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

Front Ceiling and Sash Enclosure Panels for Concept

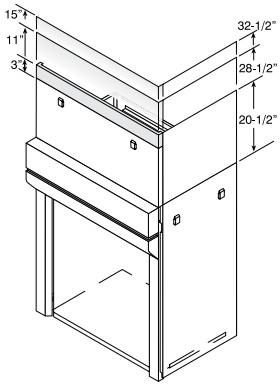


- Use to enclose space between front top and ceiling of Concept superstructure, also provides enclosure for raised sash
- Not for Concept Perchloric Acid fume hoods

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.

	Height			
Hood Width	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
48" (1219 mm)	54L48170FCSE	54L48200FCSE	54L48280FCSE	54L48320FCSE
60" (1524 mm)	54L60170FCSE	54L60200FCSE	54L60280FCSE	54L60320FCSE
72" (1829 mm)	54L72170FCSE	54L72200FCSE	54L72280FCSE	54L72320FCSE
84" (2134 mm)	54L84170FCSE	54L84200FCSE	54L84280FCSE	54L84320FCSE
96" (2438 mm)	54L96170FCSE	54L96200FCSE	54L96280FCSE	54L96320FCSE

Front Ceiling Enclosure Panels for Pioneer



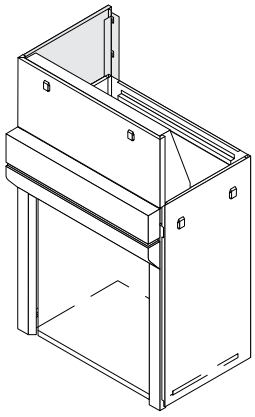
- Use to enclose space between front top ceiling/sash enclosure panel and room ceiling of Pioneer fume hood superstructure
- 17-1/2" high front ceiling and sash enclosure panel is standard on Pioneer fume hood having an unframed sash
- 20-1/2" high front ceiling panel is standard on combination sash fume hood

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.

	Panel Height		
Hood Width	**For use with 20-1/2" high side enclosure panels 3" (76 mm)**	**For use with 28-1/2" high side enclosure panels 11" (279 mm)**	**For use with 32-1/2" high side enclosure panels 15" (381 mm)**
48" (1219 mm)	54L04803*	54L04811	54L04815
60" (1524 mm)	54L06003*	54L06011	54L06015
72" (1829 mm)	54L07203*	54L07211	54L07215
84" (2134 mm)	54L08403*	54L08411	54L08415
96" (2438 mm)	54L09603*	54L09611	54L09615

* For use only on unframed sash hood.

Left Ceiling Enclosure Panels for Superstructures

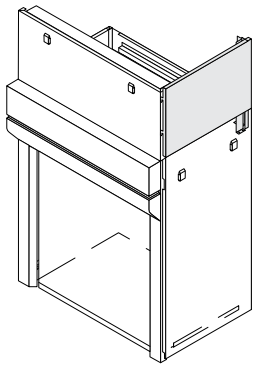


- Use to enclose space at left side of Concept and Pioneer between lower left side panel and ceiling
- 17-1/2" high panel is limited to Pioneer fume hood having an unframed sash
- Requires front ceiling and sash enclosure panels

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.

	Height			
Hood Depth	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
31-1/4" (794 mm)	54L31170LCEP	54L31200LCEP	54L31280LCEP	54L31320LCEP
37-1/4" (946 mm)	54L37170LCEP	54L37200LCEP	54L37280LCEP	54L37320LCEP
43-1/4" (1099 mm)	54L43170LCEP	54L43200LCEP	54L43280LCEP	54L43320LCEP

Right Ceiling Enclosure Panels for Superstructures

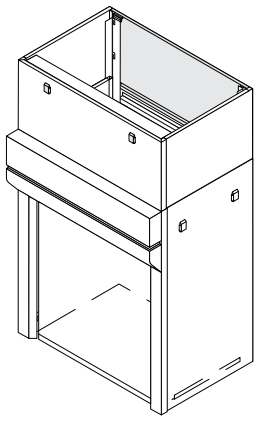


- Use to enclose space at right side of Concept and Pioneer between lower right side panel and ceiling
- 17-1/2" high panel is limited to Pioneer fume hood having an unframed sash
- Requires front ceiling and sash enclosure panels

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.

	Height			
Hood Depth	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
31-1/4" (794 mm)	54L31170RCEP	54L31200RCEP	54L31280RCEP	54L31320RCEP
37-1/4" (946 mm)	54L37170RCEP	54L37200RCEP	54L37280RCEP	54L37320RCEP
43-1/4" (1099 mm)	54L43170RCEP	54L43200RCEP	54L43280RCEP	54L43320RCEP

Upper Rear Ceiling Enclosure Panels for Superstructures



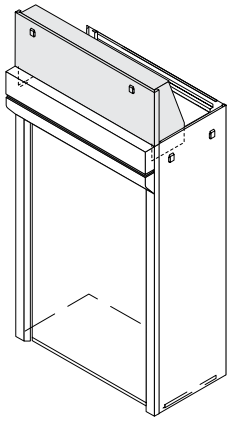
- Use to enclose space between lower rear panel and ceiling of Concept and Pioneer fume hoods
- 17-1/2" high panel is limited to Pioneer fume hood having an unframed sash
- Requires front ceiling and sash enclosure, left and right ceiling enclosure panels

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.

	Height			
Hood Depth	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
48" (1219 mm)	54L48170UBCE	54L48200UBCE	54L48280UBCE	54L48320UBCE
60" (1524 mm)	54L60170UBCE	54L60200UBCE	54L60280UBCE	54L60320UBCE
72" (1829 mm)	54L72170UBCE	54L72200UBCE	54L72280UBCE	54L72320UBCE
84" (2134 mm)	54L84170UBCE	54L84200UBCE	54L84280UBCE	54L84320UBCE
96" (2438 mm)	54L96170UBCE	54L96200UBCE	54L96280UBCE	54L96320UBCE

Product features:
- Enclosure panels for front, both sides and rear of floor-mounted fume hoods. Encloses space between top of superstructure and ceiling
- Made of steel, finished to match fume hood superstructure
- Installation hardware included

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

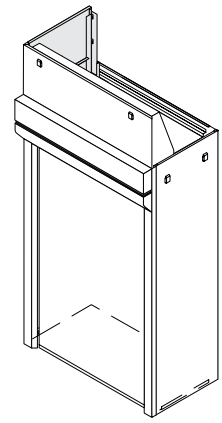


- Use to enclose space between front top and ceiling
- Provides enclosure for raised sash

	Height			
Hood Depth	**17-1/2" (445 mm)***	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
48" (1219 mm)	54L48175FCSE	54L48205FCSE	54L48285FCSE	54L48325FCSE
60" (1524 mm)	54L60175FCSE	54L60205FCSE	54L60285FCSE	54L60325FCSE
72" (1829 mm)	54L72175FCSE	54L72205FCSE	54L72285FCSE	54L72325FCSE
84" (2134 mm)	54L84175FCSE	54L84205FCSE	54L84285FCSE	54L84325FCSE
96" (2438 mm)	54L96175FCSE	54L96205FCSE	54L96285FCSE	54L96325FCSE

* 17-1/2" assembly for use with frameless vertical rising sash only

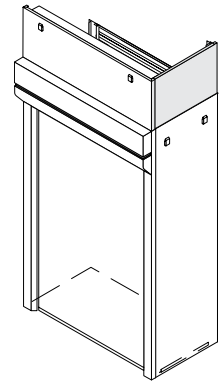
Left Ceiling Enclosure Panel for Floor-mounted Fume Hoods



- 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

	Height			
Hood Depth	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
35" (889 mm)	54L35170LCEP	54L35200LCEP	54L35280LCEP	54L35320LCEP
41" (1041 mm)	54L41170LCEP	54L41200LCEP	54L41280LCEP	54L41320LCEP
47" (1194 mm)	54L47170LCEP	54L47200LCEP	54L47280LCEP	54L47320LCEP

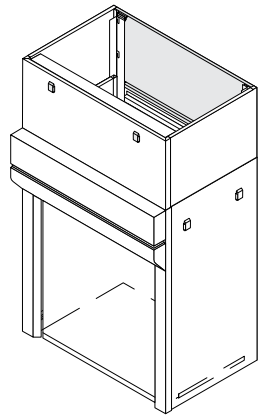
Right Ceiling Enclosure Panel for Floor-mounted Fume Hoods



- 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

	Height			
Hood Depth	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
35" (889 mm)	54L35170RCEP	54L35200RCEP	54L35280RCEP	54L35320RCEP
41" (1041 mm)	54L41170RCEP	54L41200RCEP	54L41280RCEP	54L41320RCEP
47" (1194 mm)	54L47170RCEP	54L47200RCEP	54L47280RCEP	54L47320RCEP

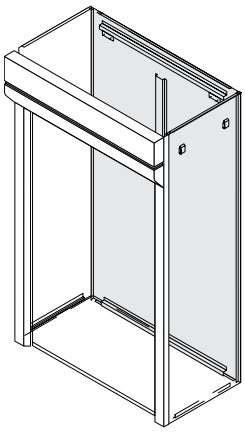
Upper Back Ceiling Enclosure Panels for Floor-mounted Fume Hoods



- 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

	Height			
Hood Depth	**17-1/2" (445 mm)**	**20-1/2" (521 mm)**	**28-1/2" (724 mm)**	**32-1/2" (826 mm)**
48" (1219 mm)	54L48170UBCE	54L48200UBCE	54L48280UBCE	54L48320UBCE
60" (1524 mm)	54L60170UBCE	54L60200UBCE	54L60280UBCE	54L60320UBCE
72" (1829 mm)	54L72170UBCE	54L72200UBCE	54L72280UBCE	54L72320UBCE
84" (2134 mm)	54L84170UBCE	54L84200UBCE	54L84280UBCE	54L84320UBCE
96" (2438 mm)	54L96170UBCE	54L96200UBCE	54L96280UBCE	54L96320UBCE

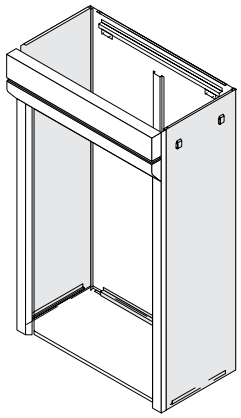
Lower Back Ceiling Enclosure Panels for Floor-mounted Fume Hoods



- 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 Depth	**Product No.**
48" (1219 mm)	54L48895LBEP
60" (1524 mm)	54L60895LBEP
72" (1829 mm)	54L72895LBEP
84" (2134 mm)	54L84895LBEP
96" (2438 mm)	54L96895LBEP

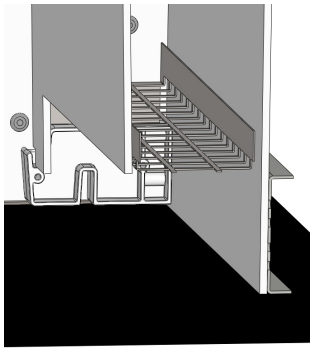
Side Enclosure Panel for Floor-mounted Fume Hoods



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

	Fume Hood	
Fume Hood Series	**Concept**	**SafeAire II**
554S Series	54L35890FHEP	54L33900FHEP
551S Series	54L41890FHEP	54L38900FHEP
552S Series	54L48890FHEP	54L44900FHEP

Baffle Screen

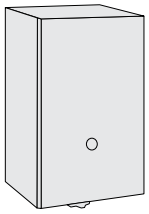


- Baffle screen prevents papers and loose items from being drawn into the duct

Hood Width	304 Stainless Steel painted	304 Stainless Steel unpainted	316 Stainless Steel unpainted
36" (914 mm)	90L02900WH	90L02900	90L02900S6
48" (1219 mm)	90L03000WH	90L03000	90L03000S6
60" (1524 mm)	90L03100WH	90L03100	90L03100S6
72" (1829 mm)	90L03200WH	90L03200	90L03200S6
96" (2438 mm)	90L03300WH	90L03300	90L03300S6

Ordering information:
- Include the following information when ordering: product number, voltage, amps, watts and cycle of blower

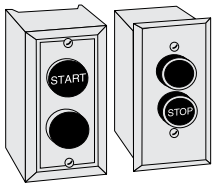
Magnetic Fan Motor Starter



- Integral-HP magnetic AC motor starter for single and three-phase motors from 1 to 10 HP
- Designed for full-voltage starting of motors
- Single-phase starter for use with self-starting, single-phase motors up to 3 HP/115 volts and 7-1/2 HP/230 volts
- Use with Remote Control Station for Motor Starter shown below
- Protection against positive overload and low-voltage release
- Heater coil not included
- Must be installed in or on a wall near the fume hood
- Extended lead time

			NEMA Contact Ratings – 60 Cycle					
			Max HP 1-Phase		Max HP 3-Phase			
Max. Amps.	NEMA Size	Poles	115V	230V	208V	240V	460V	Product No.
18	0	2	1	–	–	–	–	36L19000
18	0	2	–	2	–	–	–	36L19100
18	0	3	–	2	–	3	–	36L19300
18	0	3	–	–	–	–	5	36L19400
27	1	3	–	3	–	7-1/2	–	36L19600

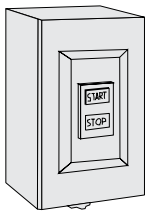
Remote Control Station for Motor Starter



- Remote control station for use with Magnetic Fan Motor Starter
- Vertical or horizontal mounting
- NEMA Type 1 general-purpose construction
- Surface-mount station has steel base and tight-fitting wrap-around cover
- Flush-mount station has stainless steel flat cover and mounting strap
- Extended lead time

Mount	Product No.
Surface	36L19800
Flush	36L19900

Manual Fan Motor Starter

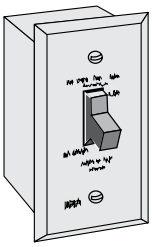


- Integral-HP manual AC motor starter for single and three-phase motors from 1 to 10 HP
- Designed for full-voltage starting of motors
- Built-in start/stop buttons
- Thermal overload protection
- Heater coil not included
- Must be installed in or on a wall near the fume hood
- Extended lead time

		NEMA Contact Ratings – 60 Cycle				
		Max HP 1-Phase		Max HP 3-Phase		
NEMA Size	Poles	115V	230V	230V	460/575V	Product No.
0	2	1	2	–	–	36L20000
0	3	–	–	3	5	36L20100
1	3	–	–	7-1/2	10	36L20200

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

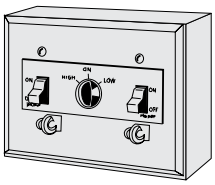
Manual Snap-switch Fan Motor Starter



- 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

Product No.
36L20300

Two-Speed Manual Motor Starters



- For use with all two-speed blowers
- On-off selector switch for both high or low speed selection
- Two on/off switches with pilot lights and thermal overload protection
- NEMA Type 1, either as stainless steel plate for flush mounting, or as enclosure for surface mounting
- Heater coil not included
- Must be installed in or on a wall or base cabinet near the fume hood
- Extended lead time

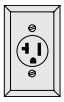
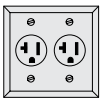
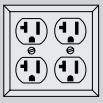
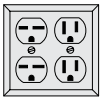
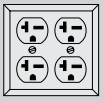
Mount	Product No.
Surface	36L20400
Flush	36L20500

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

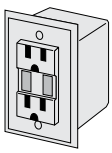
Outlets

Product features

- UL listed.
- All fixtures on this page are ivory with chrome flush plate unless noted with:
  - * = Black Plastic Flush Plate and Device
  - S = Stainless Steel Flush Plate
  - H = Hospital Grade
- 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: Flush Single-faced	Box Style: Flush 2-Gang Single-faced
Polarized 3-wire, grounding type, 120V, 20 Amp, NEMA 5-20R		36L13300 36L20700*	– NA –
		– NA –	36L15100
Polarized 3-wire, grounding type, 120V, 20 Amp, NEMA 5-20R		36L11200 36L112S0 36L112H0 36L21200*	– NA –
		– NA – 36L120H0	36L12000
Polarized 3-wire, grounding type, combination, 120V, 20 Amp, NEMA 5-20R, 240 V, 15 Amp, NEMA 6-20R		– NA –	36L09000
Polarized 3-wire, grounding type, 240V, 20 Amp, NEMA 6-20R		36L12300 36L21300*	– NA –
		– NA –	36L12900
Polarized 3-wire, grounding type		36L10900 36L109S0 36L209S0	– NA –

Ground Fault Interrupter



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

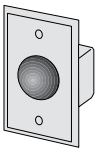
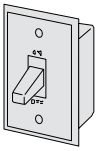
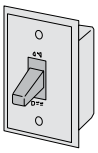
Product No.
36L20600

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

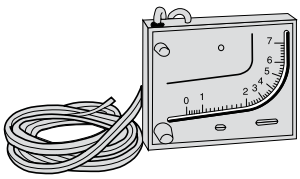
Switches & Pilot Lights

Product features

- UL listed.
- All fixtures on this page are ivory with chrome flush plate unless noted with:
  - * = Black plastic flush plate and device
  - S = Stainless steel
- For use on motor blowers up to 3/4 h.p.

	Pilot Light	Pole		Volt		Amps	Product No.
		Single	Double	120	240	20	
 Pilot Light Only	X			X		–	36L13100
	X			X		–	36L131S0
	X			X		–	36L24400*
 Toggle Switches			X		X	X	36L11600
			X		X	X	36L24100*
		X		X		X	36L11100
		X		X		X	36L111S0
		X		X		X	36L21100*
		X		X		X	36L211S0
 Lighted Toggle Switch	X	X		X		X	36L12100
	X	X		X		X	36L121S0
	X		X		X	X	36L12600
	X	X		X		X	36L24200*
	X		X		X	X	36L24300*

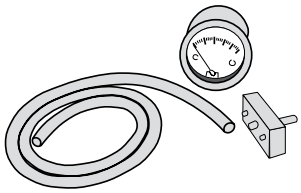
Manometer



- 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.

Product No.
54L25600

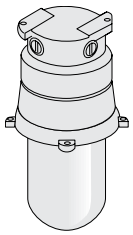
Static Pressure Gauges



- 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.

Width	Product No.
0-1	54L31200
0-3 for use with HEPA filter	54L31300

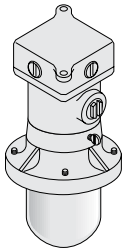
Vapor-proof Light



- Provides alternate interior fume hood illumination for procedures requiring vapor-proof lighting
- Uses one 23-watt CFL bulb (100-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
- 3-3/4" (95 mm) diameter
- 6" (152 mm) deep
- Extended lead time

~~Product No.~~
54L21400

Classified Explosion-proof Light

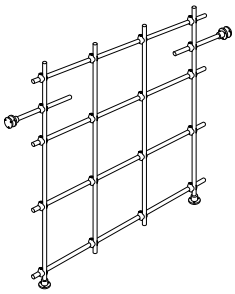


- For use in hazardous atmosphere conditions
- UL listed to the following National Electric code classes: Class I – Division 1, 2 – Group C, D
- Uses one 32-watt CFL bulb (125-watt incandescent equivalent)
- 120V, 60-cycle
- One light is adequate for 3' and 4' fume hood two lights recommended for 5',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

Product No.
54L21600

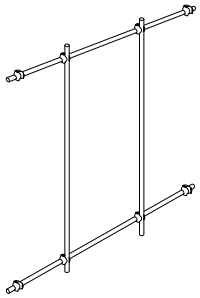
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Lattice Rod Assemblies



- For all SafeAire II, Pioneer and Concept 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" (1219 mm)	26L15000
60" (1524 mm)	26L15100
72" (1829 mm)	26L15200
96" (2438 mm)	26L15300

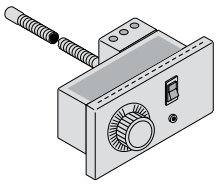


- For Horizon fume hoods
- Solid 1/2" (13 mm) aluminum rod lattice – 30" (762 mm) height
- Two horizontal and two vertical rods.
- Fastening hardware included

Fume Hood Width	Product No.
48" (1219 mm)	26L15800
60" (1524 mm)	26L15900
72" (1829 mm)	26L16000

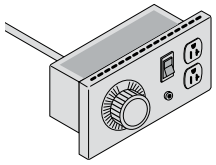
- Designed for factory installation in the front flush panel of base cabinets to provide a variable voltage source for heating devices
- "O" suffix indicates a junction box attached to the rear of the enclosure
- "A" suffix indicates a 42" long twist-lock cord plug
- Flush Variac units in base cabinets will create a nonstandard cabinet

Variac Voltage Trasformers



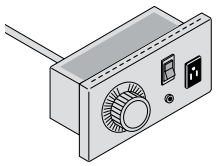
- Includes a switch and pilot light
- Input – 120VAC, 50/60 Hz
  Output – One variable junction box 0-120VAC, 10AMP

	Product No.
For all steel cabinets	36L290S0
For wood and plastic laminate cabinets	36L290W0



- Includes a switch and pilot light, one constant duplex electrical receptacle 120VAC 16AMP
- Input – 120VAC, 50/60 Hz
  Output – 0-120VAC, 10AMP

	Product No.
For all steel cabinets	36L288S0
For wood and plastic laminate cabinets	36L288W0
For all steel cabinets	36L288SA
For wood and plastic laminate cabinets	36L288WA

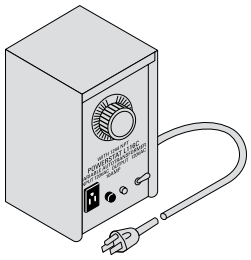


- Includes a switch and pilot light, one single electrical receptacle
- Input – 120VAC, 50/60 Hz
  Output – one variable outlet, 0-120VAC,10AMP

	Product No.
For all steel cabinets	36L289S0
For wood and plastic laminate cabinets	36L289W0
For all steel cabinets	36L289SA
For wood and plastic laminate cabinets	36L289WA

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

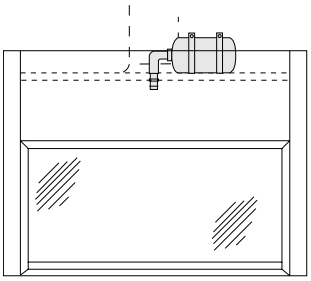
Free-Standing Variac Voltage Transformer



- Variable auto-transformer free-standing module designed for installation on the counter top
- Input, 120VAC, 50/60 Hz – output, 0-140VAC, 10AMP
- Includes integral toggle switch, fuse holder, single electrical receptacle and power-on light
- Supplied with 72" long power cord with receptacle plug

	Product No.
Special order	36L26700

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

Fume Hood Width	Fume hood with any liners except "S" & "K"	Fume hood with "S" liners*	Fume hood with "K" liners*
48" (1219 mm)	54L48600	54L4860S	54L4860K
60" (1524 mm)	54L48700	54L4870S	54L4870K
72" (1829 mm)	54L48800	54L4880S	54L4880K
96" (2438 mm)	54L48900	54L4890S	54L4890K

*Fume hood with "S" & "K" liners and Hamilton Concept are nonstandard when ordering fire extinguishers

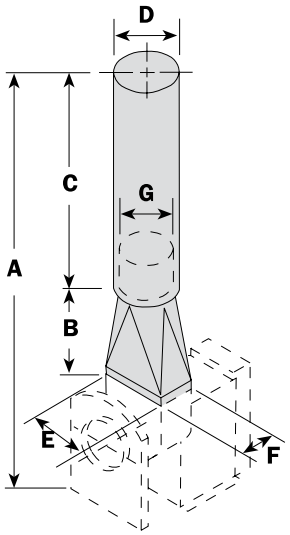
Face Velocity Labels

- 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	90L10000	90L10100
Right	90L07600	90L07700

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Zero-static Exhaust Outlets

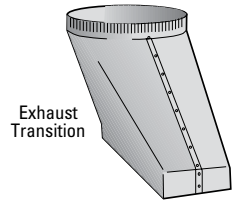


- Roof-top stack outlet for vertical fume hood exhaust discharge
- For roof-mounted blowers only
- Designed to minimize re-entrainment by ducting fumes above roof surface dead air area
- Weather- and corrosion-resistant stainless steel, for weather protection without additional back-pressure
- This assembly may be required by code in some states

For Use with Blower	A	B	C	D	E*	F*	G	Product No.
55L75300 thru 55L75800	81-7/8″ (2080 mm)	16″ (406 mm)	46″ (1168 mm)	9″ (229 mm)	8-1/4″ (210 mm)	5-3/8″ (137 mm)	8″ (203 mm)	54L41100
55L75900 thru 55L76600	82-1/8″ (2086 mm)	16″ (406 mm)	46″ (1168 mm)	10″ (254 mm)	10-3/4″ (273 mm)	6-1/2″ (165 mm)	9″ (229 mm)	54L41200
55L76700 thru 55L77200 55L78500 and 55L78600	87-1/8″ (2213 mm)	16″ (406 mm)	50″ (1270 mm)	11″ (279 mm)	11-3/4″ (298 mm)	8″ (203 mm)	10″ (254 mm)	54L41300
55L77300 thru 55L77800 55L78700 and 55L78800	104-1/2″ (2654 mm)	16″ (406 mm)	62″ (157 mm)	14″ (356 mm)	13-1/4″ (337 mm)	9-5/8″ (244 mm)	13″ (330 mm)	54L41400
55L77900 thru 55L78200 55L78900	111-3/8″ (2829 mm)	18″ (457 mm)	66″ (1676 mm)	15″ (381 mm)	14-3/8″ (365 mm)	10-3/4″ (273 mm)	14″ (356 mm)	54L41500
55L78300 and 55L78400 55L79000	120-3/4″ (3067 mm)	18″ (457 mm)	74″ (1880 mm)	17″ (432 mm)	16-1/4″ (413 mm)	11-3/4″ (298 mm)	16″ (406 mm)	54L41600

*Blower exhaust outlet.

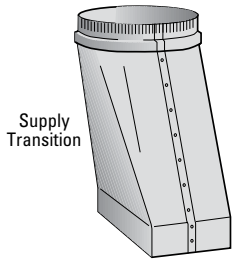
Duct Transitions



- 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)
- Supply transitions made in 22 gauge galvanized steel (round duct to rectangular duct)
- 16″ (406 mm) high

Exhaust Transitions

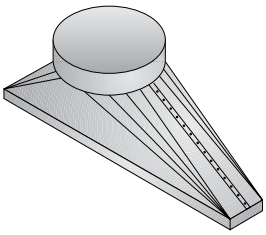
Duct O.D.	Product No.
6″ x 9″ to 8″ round (152 x 229 to 203 mm round)	54L90100
6″ x 15″ to 10″ round (152 x 381 to 254 mm round)	54L90200
6″ x 23″ to 12″ round (152 x 584 to 305 mm round)	54L90300
6″ x 26″ to 12″ round (152 x 660 to 305 mm round)	54L90900
6″ x 30″ to 14″ round (152 x 762 to 356 mm round)	54L90400



Suppy Transitions

Duct O.D.	Product No.
9″ round to 6″ x 12″ (203 mm round to 152 x 305 mm)	54L90500
10″ round to 6″ x 15″ (254 mm round to 152 x 381 mm)	54L90600
11″ round to 6″ x 18″ (279 mm round to 152 x 457 mm)	54L90700
12″ round to 6″ x 24″ (305 mm round to 152 x 610 mm)	54L90800

Exhaust Duct Transitions for Horizon Only



- 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″ (328 mm) overall height

For Single Fume Hood

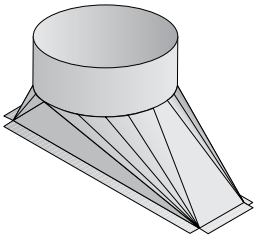
Fume Hood Width	Outlet Diameter	Inlet Dimensions	Product No.
48″ (1219 mm)	10″ (254 mm)	4″ x 30″ (102 x 762 mm)	54L91400
60″ (1524 mm)	10″ (254 mm)	4″ x 30″ (102 x 762 mm)	54L91400
72″ (1829 mm)	12″ (305 mm)	4″ x 30″ (102 x 762 mm)	54L91500

For Double Fume Hood

Fume Hood Width	Outlet Diameter	Inlet Dimensions	Product No.
48″ (1219 mm)	12″ (254 mm)	9″ x 30″ (229 x 762 mm)	54L91600
60″ (1524 mm)	12″ (254 mm)	9″ x 30″ (229 x 762 mm)	54L91600
72″ (1829 mm)	14″ (305 mm)	9″ x 30″ (229 x 762 mm)	54L91700

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

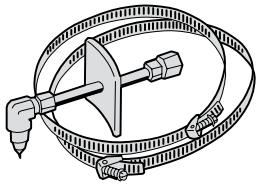
Combination Exhaust Collar/Transitions



- 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
- 13-1/2" (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 20-1/2" (152 x 521 mm)	54L91000
60" (1524 mm)	12" (305 mm)	6" x 26-1/2" (152 x 673 mm)	54L91100
72" (1829 mm)	12" (305 mm)	6" x 32-1/2" (152 x 826 mm)	54L91200
84" (2134 mm)	12" (305 mm)	6" x 35-1/2" (152 x 902 mm)	54L91800
96" (2438 mm)	14" (356 mm)	6" x 38-1/2" (152 x 978 mm)	54L91300

Perchloric Acid Duct Nozzle Assembly

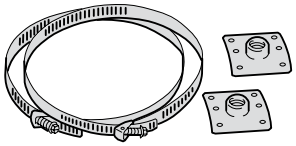


- Designed for provide a positive, fine spray for perchloric acid duct washdown
- For 12" (305 mm) diameter duct; may be field cut for smaller duct diameters
- Stainless steel and fluorocarbon plastic
- Large nozzle orifice minimizes plugging
- Installation hardware (bands, screws and fittings for 1/4" diameter IPS pipe) included
- Available on extended lead time

Frequent washdown of perchloric systems will reduce explosion hazards. A 30-40 second washdown after fume hood usage is sufficient. Remove all apparatus from fume hood interior before washdown.

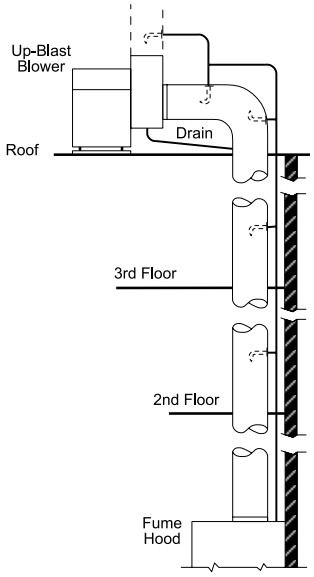
Water Volume per Nozzle								Product No.
Water pressure (PSI)	20	30	40	50	60	70	80	54L33300
Flow rate (GPM)	1.9	2.3	2.7	3.0	3.3	3.5	3.8	

Perchloric Acid Blower/Duct Drain Connection



- Assembly including one set of two stainless steel and fluorocarbon plastic drains to provide connection between blower and duct for disposal of washdown waters
- Stainless steel and fluorocarbon plastic
- Attachment to blower scroll by screws, to duct by stainless steel bands or screws (provided)
- Sized for 1/2" diameter IPS pipe
- Connecting pipe not included
- Available on extended lead time

Product No.
54L33500

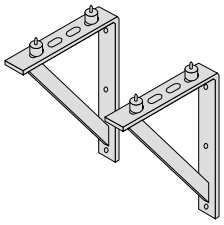


Installation information: Locate nozzles approximately every five feet and in each elbow. Fume Hood drains will handle 30 GPM. With long duct systems, stage washdown to prevent overflow. Washdown system should drain empty through fume hood nozzles.

Frequent wash- and wipe-down of perchloric systems will reduce explosion hazards and extend liner life. A 30-40 second washdown after fume hood usage is sufficient. Remove all apparatus from fume hood interior before washdown.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

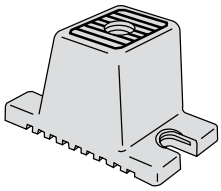
Wall-hung Blower Mounting Brackets



- Provides stable base for wall-mounted blowers
- Includes shock-absorbing adjustable motor mounts
- Installation hardware included
- Brackets sold in pairs
- Reference blower dimensions

Depth	Height	Product No.
18" (457 mm)	18" (457 mm)	54L22000
25" (635 mm)	25" (635 mm)	54L22000
30" (762 mm)	30" (762 mm)	54L22000

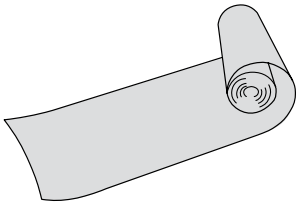
Blower Mounting Pads



- Neoprene vibration isolators designed to absorb vibration and maintain secure mount
- Maximum deflection (under heaviest load range) is 0.30 inches

Pads/Package	For Use with Blowers	Product No.
4	55L75300 thru 55L77200 55L78500 and 55L78600	54L54900
6	55L77300 thru 55L77800 55L78700 and 55L78800 55L81100 thru 55L81400	54L55000

Silicone Duct Wrap



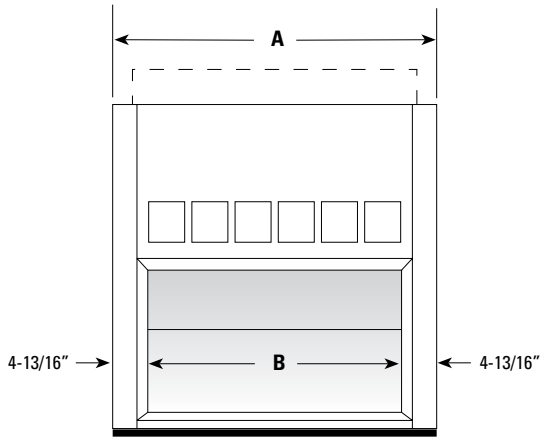
- Fiberglass cloth provides vibration damping connection between blower and duct, or between fume hood collar and duct
- Allows connector to serve as transition for differences in diameter or for minor offsets
- Fume-, vapor- and condensation-resistant
- Installed with duct tape or silicone cement (not provided)
- Not suitable for perchloric acid systems

Width	Length	Product No.
5" (127 mm)	72" (1829 mm)	54L33100

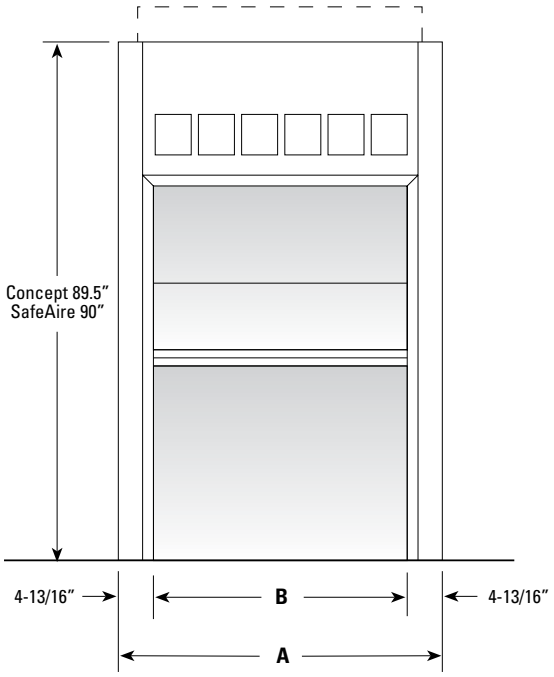
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Typical Front Views

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



Superstructures



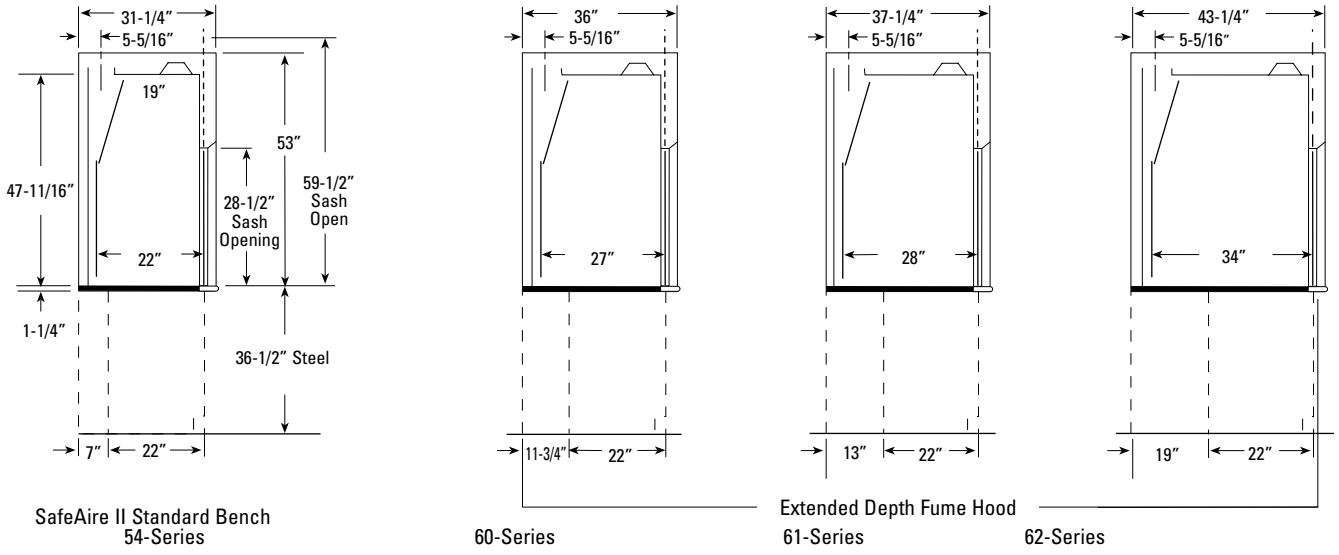
Floor-mounted

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)	26-3/8″ (670 mm)	36″ (914 mm)	26-3/8″ (670 mm)	36″ (914 mm)	26-3/8″ (670 mm)
48″ (1219 mm)	48″ (1219 mm)	38-3/8″ (975 mm)	48″ (1219 mm)	38-3/8″ (975 mm)	48″ (1219 mm)	38-3/8″ (975 mm)
60″ (1524 mm)	60″ (1524 mm)	50-3/8″ (1279 mm)	60″ (1524 mm)	50-3/8″ (1279 mm)	60″ (1524 mm)	50-3/8″ (1279 mm)
72″ (1829 mm)	72″ (1829 mm)	62-3/8″ (1584 mm)	72″ (1829 mm)	62-3/8″ (1584 mm)	72″ (1829 mm)	62-3/8″ (1584 mm)
84″ (2134 mm)	84″ (2134 mm)	74-3/8″ (1889 mm)	84″ (2134 mm)	74-3/8″ (1889 mm)	84″ (2134 mm)	74-3/8″ (1889 mm)
96″ (2438 mm)	96″ (2438 mm)	86-3/8″ (2194 mm)	96″ (2438 mm)	86-3/8″ (2194 mm)	96″ (2438 mm)	86-3/8″ (2194 mm)
120″ (3048 mm)	120″ (3048 mm)	111-5/8″ (2835 mm)	—	—	—	—
144″ (3658 mm)	144″ (3658 mm)	135-5/8″ (3445 mm)	—	—	—	—

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Typical End Views

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



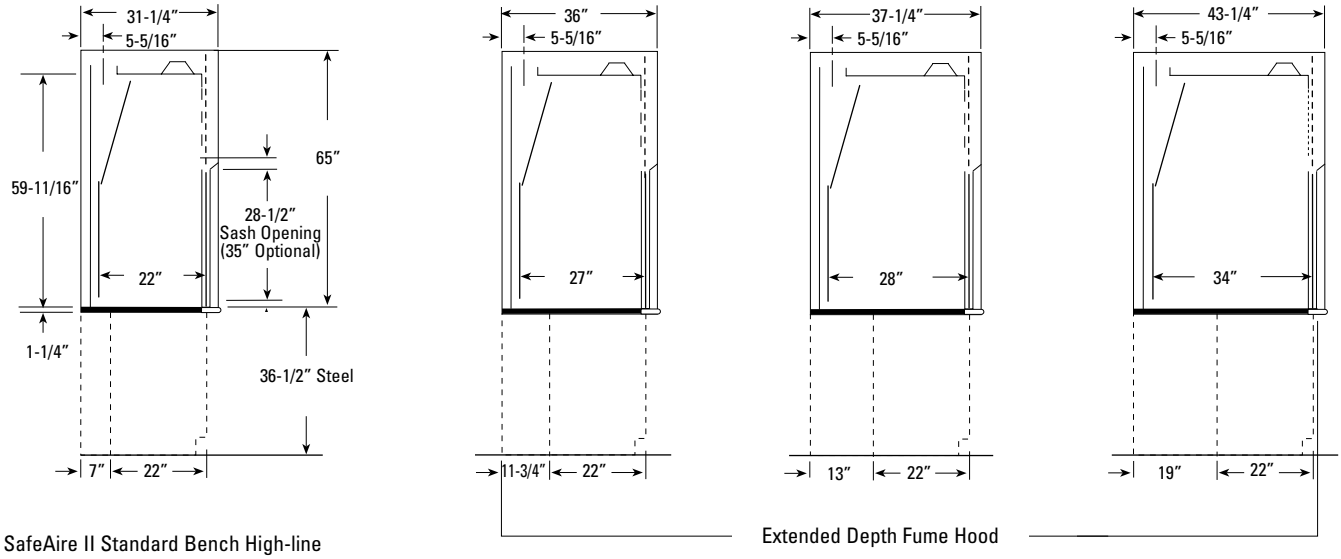
SafeAire II Standard Bench
54-Series

60-Series

Extended Depth Fume Hood

61-Series

62-Series



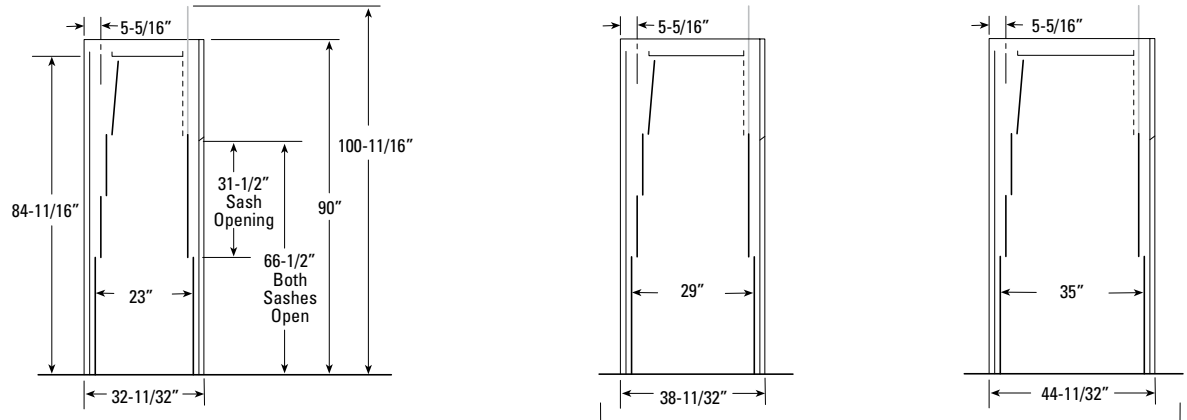
SafeAire II Standard Bench High-line
54-Series

60-Series

Extended Depth Fume Hood

61-Series

62-Series



SafeAire Floor-mounted
554-Series

Extended Depth Fume Hood

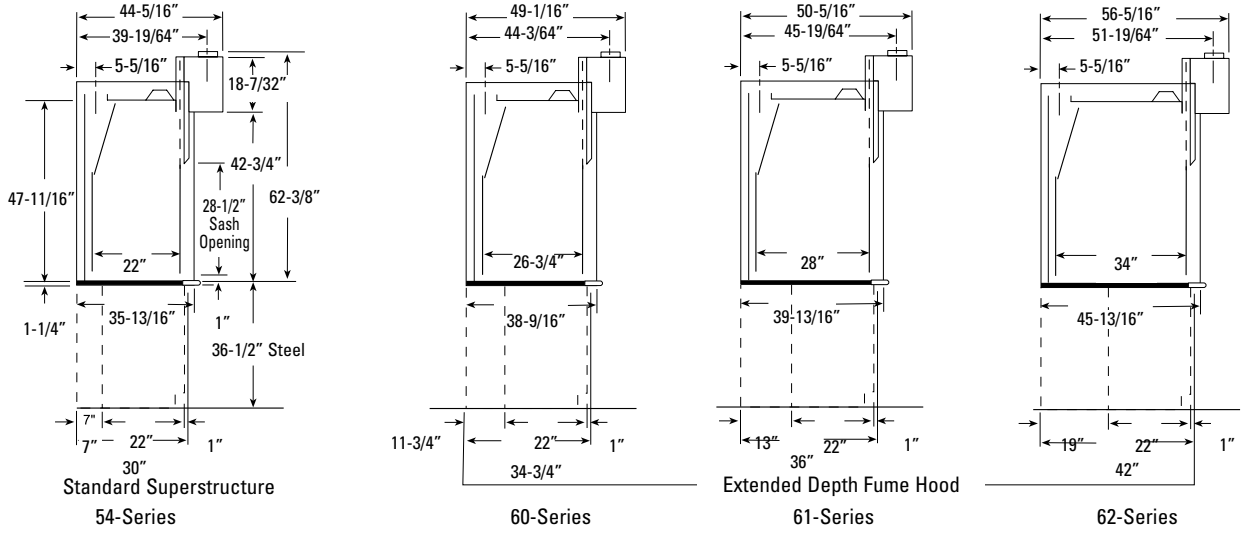
551-Series

552-Series

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

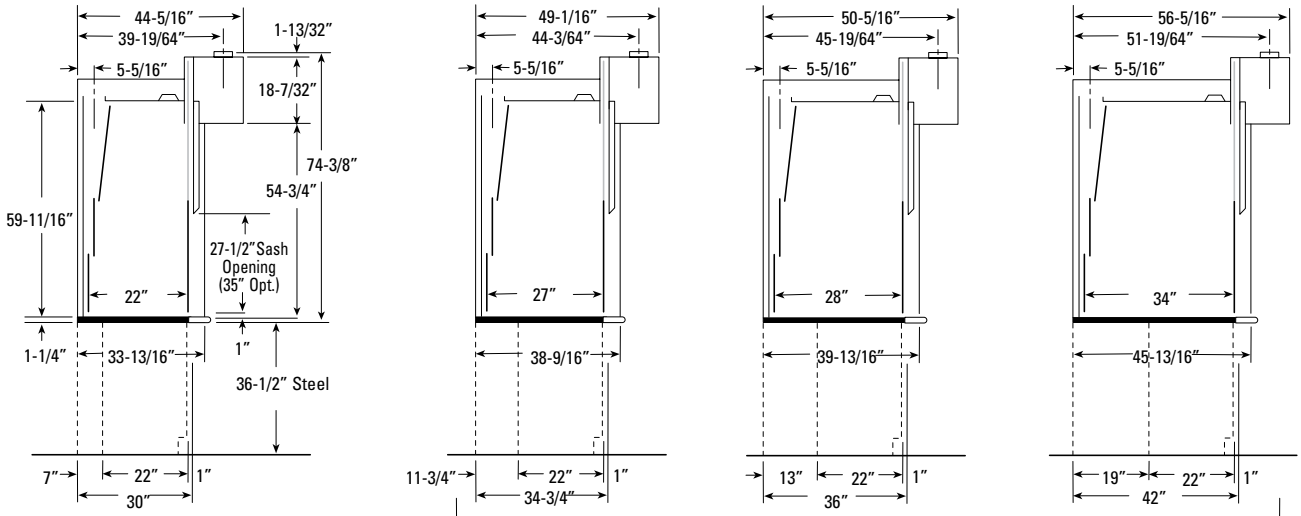
SafeAire II Auxiliary Air Typical End Views

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



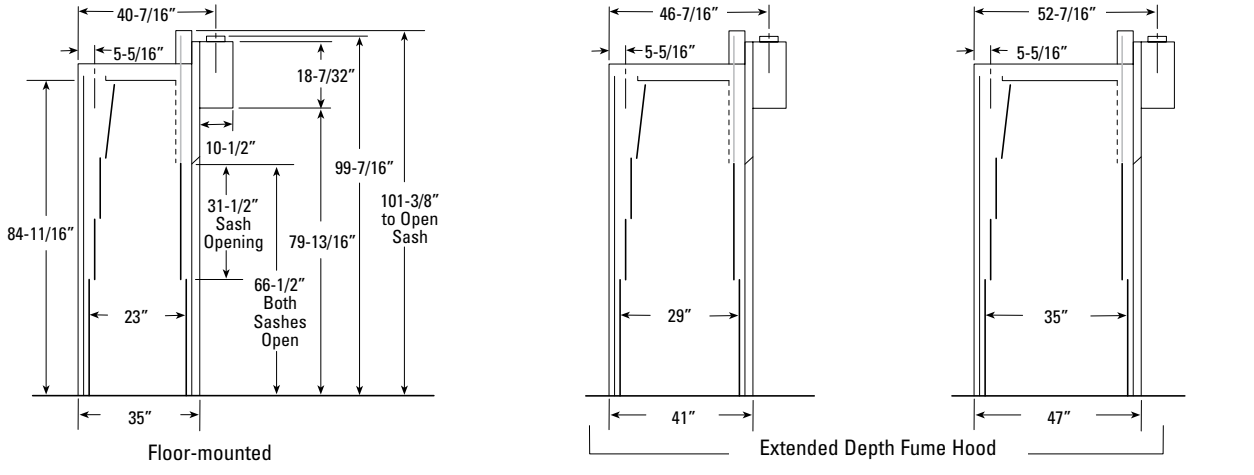
Standard Superstructure

54-Series | 60-Series | Extended Depth Fume Hood 61-Series | 62-Series



Standard High-line Superstructure

54-Series | 60-Series | Extended Depth Fume Hood 61-Series | 62-Series



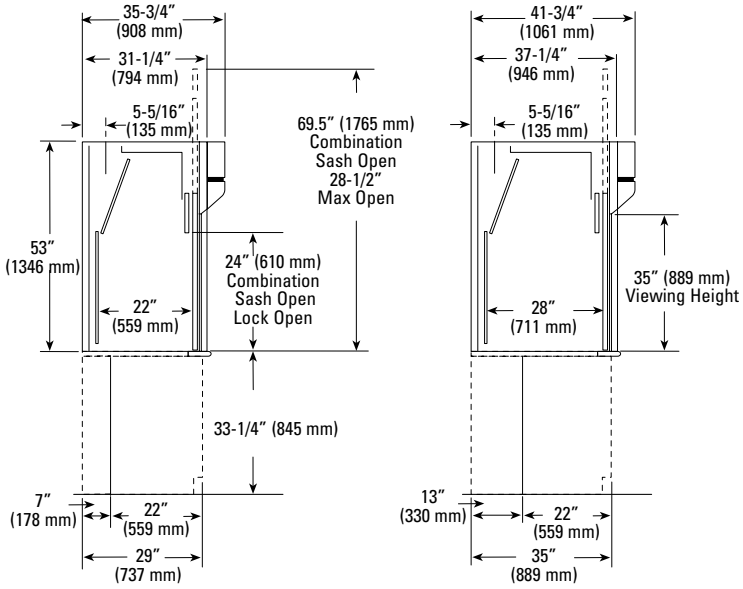
Floor-mounted

554-Series | Extended Depth Fume Hood 551-Series | 552-Series

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Typical End Views

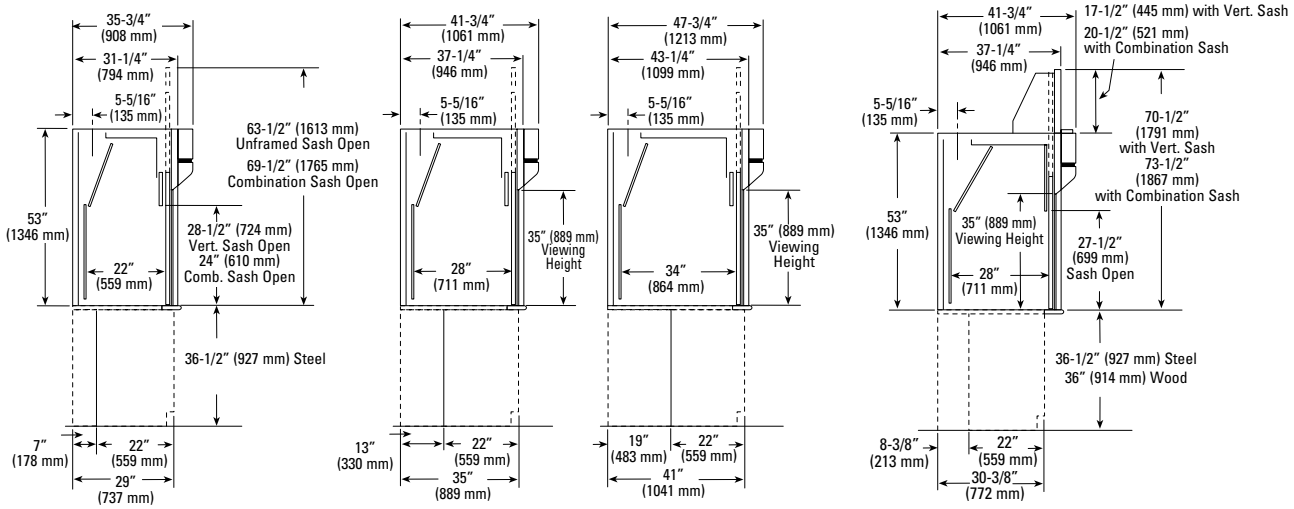
These dimensions apply to general-purpose and special-purpose fume hood unless otherwise noted on specific fume hood catalog page.



Concept ADA Fume Hood Assemblies

54-Series 61-Series

Concept Typical End Views

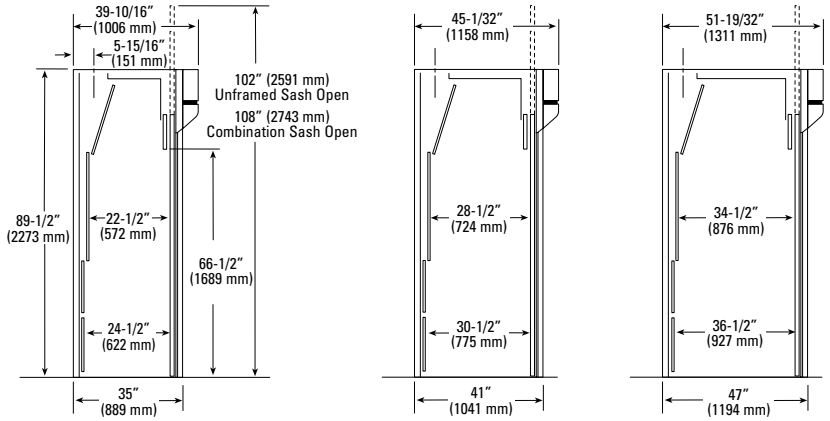


Concept Fume Hood Assemblies

54-Series 61-Series 62-Series

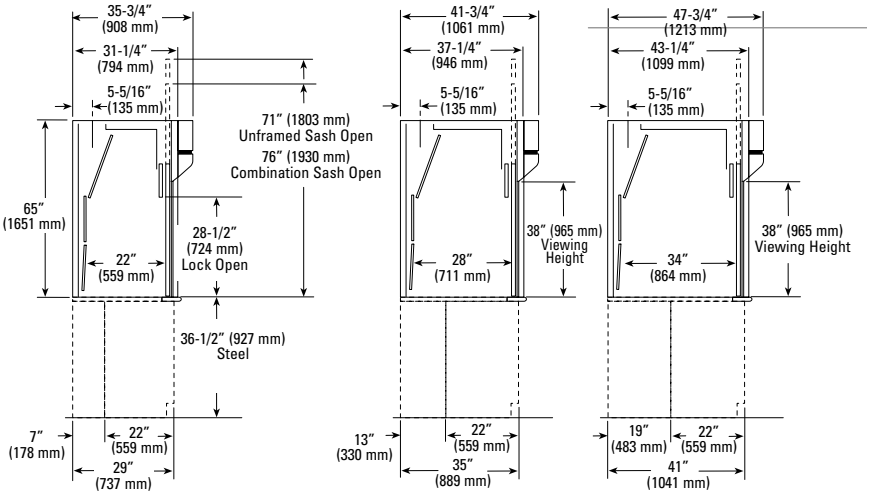
Pioneer Fume Hood Assemblies

61-Series



Concept Floor-mounted Fume Hood Assemblies

554-Series 551-Series 552-Series



Concept Hi-line Fume Hood Assemblies

54-Series 61-Series 62-Series

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

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:

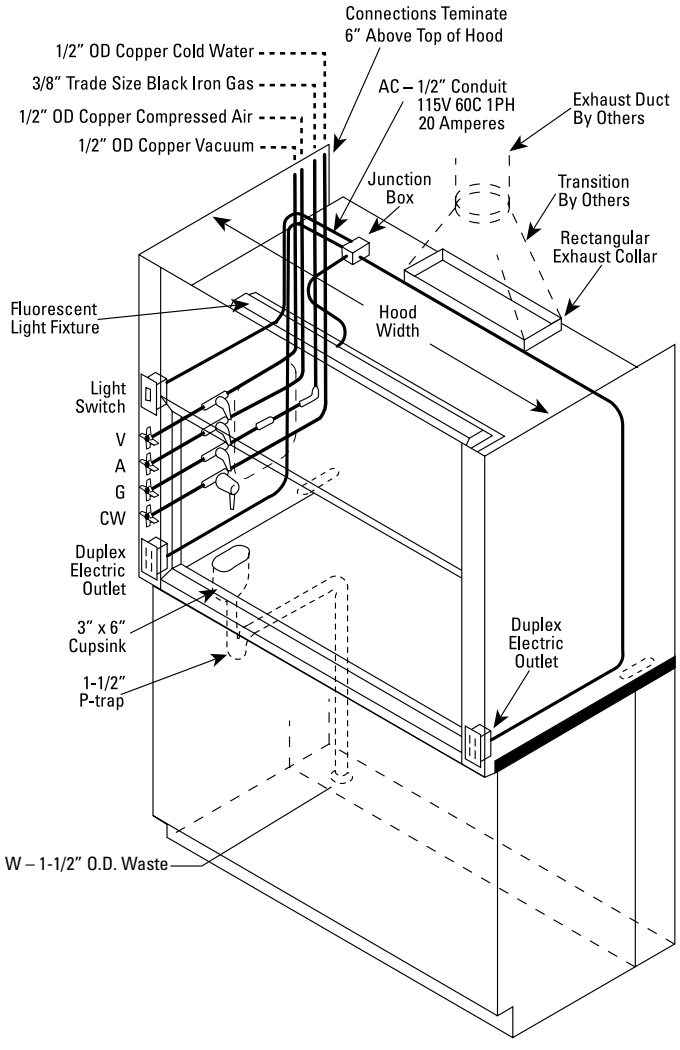
- Material selections are as follows:

  Water pipe – copper
  Air pipe – copper
  Gas pipe – black Iron
  Vacuum pipe – copper
  Oxygen & nitrogen – copper (cleaned for pure gas service)

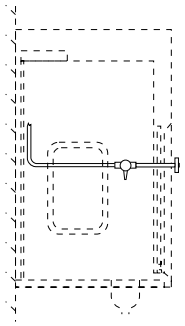
Installation information:

- 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.

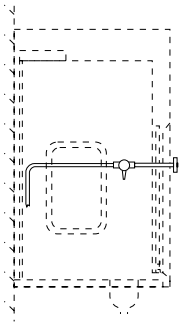
Typical Layout
Pre-piped and pre-wired fume hood installation,
Show in roughed-in from above.



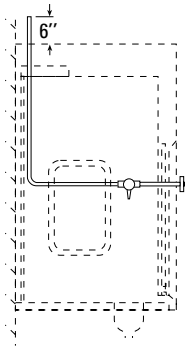
Standard Configurations – The four pre-piped configurations below are available with standard pricing and lead times



Piped to Turned-up Elbow



Piped to Turned-down Elbow



Piped to Top of Fume Hood

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

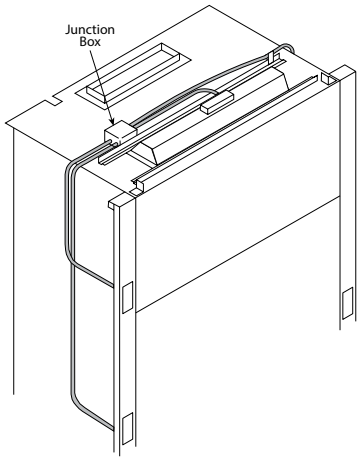
Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

For Pre-wired Fume Hood

Product information:

- 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 your representative for pricing and delivery information.

Pre-wired Fume Hood



Product No.
54L79900

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.

For Bench Fume Hood

Dimensions – all bench fume hood except auxiliary air:

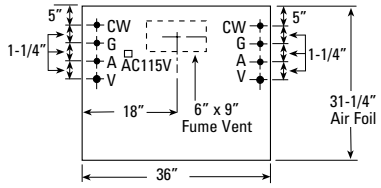
- Top of exhaust vent: Bench Hood
  88-1/4" (2242 mm) above finished floor with steel base.
- Top of exhaust vent: Bench High-line Hood
  100-1/4" (2546 mm) above finished floor with steel base.
- Duct connection must overlap vent by maximum of 1-1/4" (32 mm).

Dimensions – bench auxiliary air fume hood only:

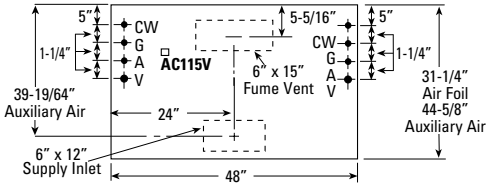
- Top of supply inlet: 98-15/16" (2513 mm) above finished floor with steel base. 98-7/16" (2500 mm) above finished floor with wood base.
- Duct connection must overlap inlet by maximum of 1-7/8" (48 mm).

Symbols:

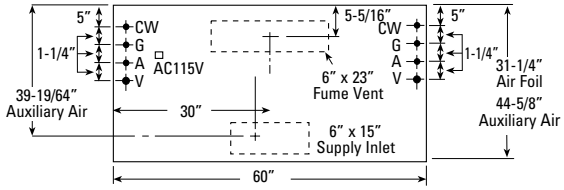
CW – Cold Water
HW – Hot Water
G – Gas
A – Compressed Air
V – Vacuum
W – Waste
AC – 115 or 230 Volt



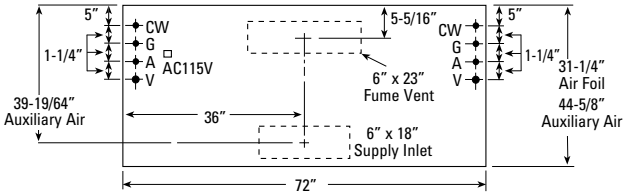
36" Wide Bench Fume Hood



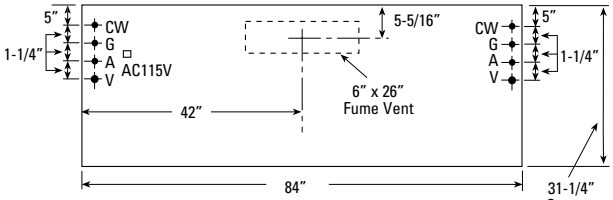
48" Wide Bench Fume Hood



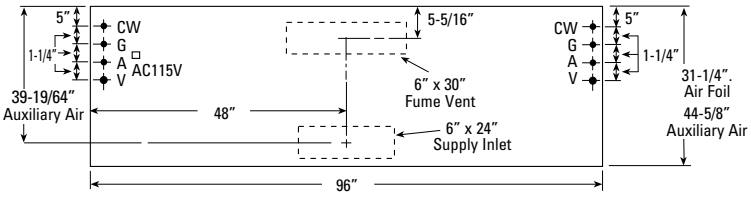
60" Wide Bench Fume Hood



72" Wide Bench Fume Hood



84" Wide Bench Fume Hood
Concept and Pioneer Only



96" Wide Bench Fume Hood

- Optional depth fume hood – add either 4.75", 6.00" or 12.00" to overall depth dimension.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

For Floor-mounted Fume Hood

Dimensions – all floor-mounted fume hood except auxiliary air:

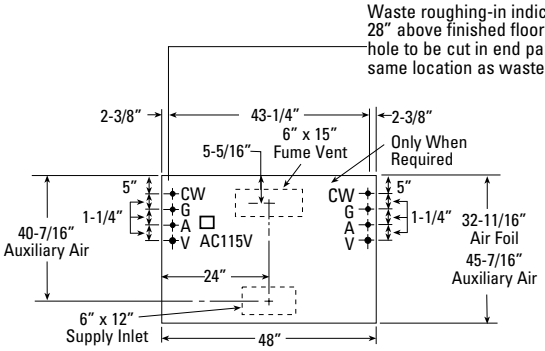
- Top of exhaust vent is 88-7/16" (2246 mm) above finished floor (87-15/16" [2237 mm] for Concept).
- Duct connection must overlap vent by maximum of 1-1/4" (32 mm).

Dimensions – Floor-mounted auxiliary air fume hood only:

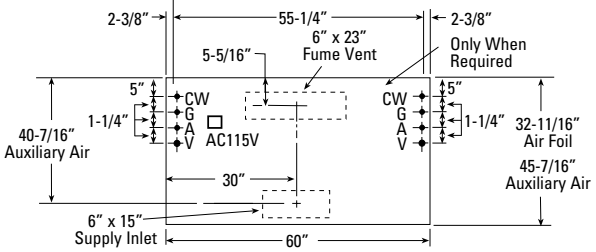
- Top of supply inlet 99-7/16" (2526 mm) above finished floor.
- Duct connection must overlap inlet by maximum of 1-7/8" (48 mm).

Symbols:

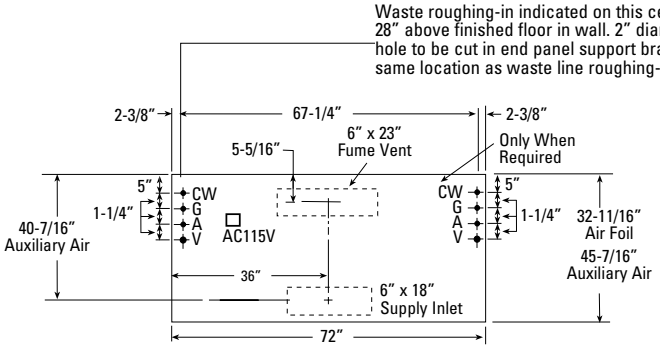
CW – Cold Water
HW – Hot Water
G – Gas
A – Compressed Air
V – Vacuum
W – Waste
AC – 115 or 230 Volt



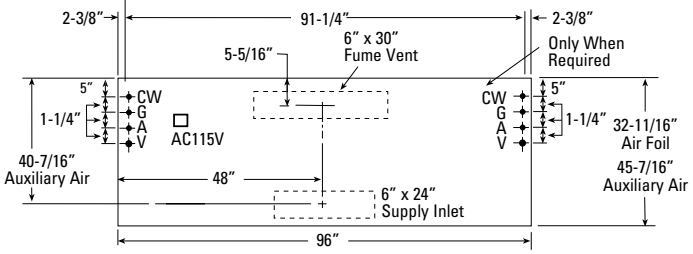
48" Wide Floor-mounted Fume Hood



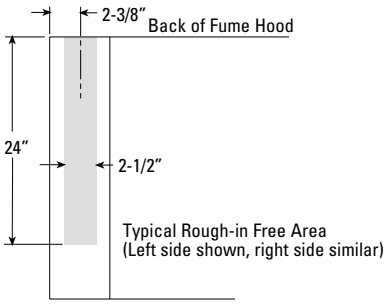
60" Wide Floor-mounted Fume Hood



72" Wide Floor-mounted Fume Hood



96" Wide Floor-mounted Fume Hood



- Optional depth Fume Hood – add either 6" or 12" to overall depth dimension.
- Waste on Concept Fume Hood is located on the floor in either sideport – or 9" off the floor if routed to the back.

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

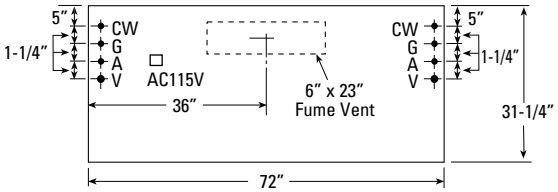
For Postless Sash Fume Hood

Dimensions – all postless sash fume hood:

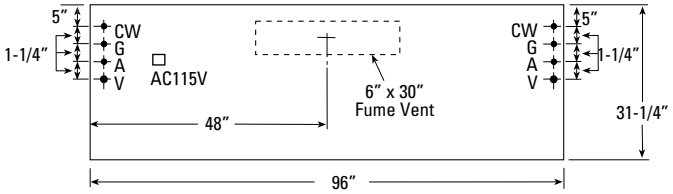
- Top of exhaust vent:
  88-1/4" (2242 mm) above finished floor with steel base.
- Duct connection must overlap inlet by maximum of 1-1/4" (32 mm).
- Suggested roughing-in dimensions are from floor.

Symbols:

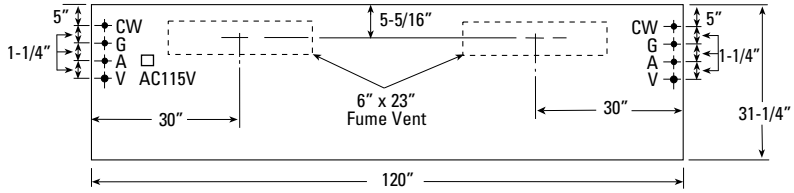
CW – Cold Water
HW – Hot Water
G – Gas
A – Compressed Air
V – Vacuum
W – Waste
AC – 115 or 230 Volt



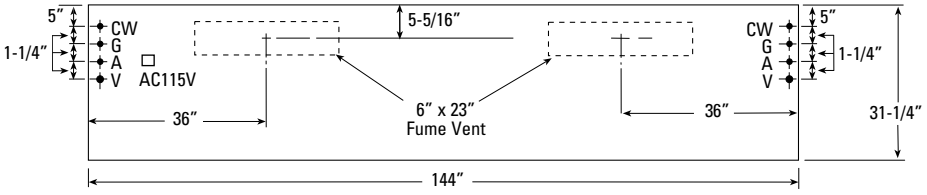
72" Wide Postless Sash Fume Hood



96" Wide Postless Sash Fume Hood



120" Wide Postless Sash Fume Hood



144" Wide Postless Sash Fume Hood

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

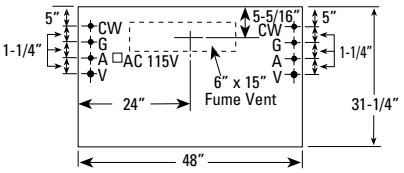
Dimensions – all radioisotope and perchloric acid fume hood:

- Top of exhaust vent: Bench Fume Hood
  88-1/4" (2242 mm) above finished floor with steel base.
- Top of exhaust vent: Bench High-line Fume 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).
- Suggested roughing-in dimensions are from floor.

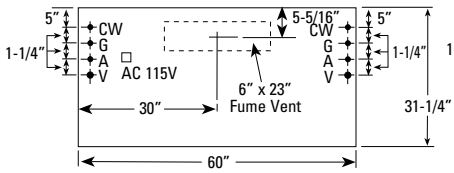
Symbols:

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

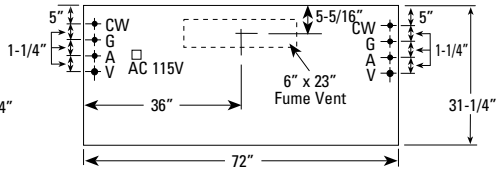
For Radioisotope Fume Hood



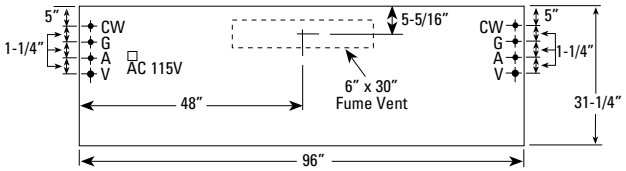
48" Wide Radioisotope Fume Hood



60" Wide Radioisotope Fume Hood

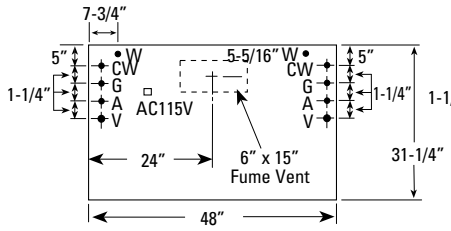


72" Wide Radioisotope Fume Hood

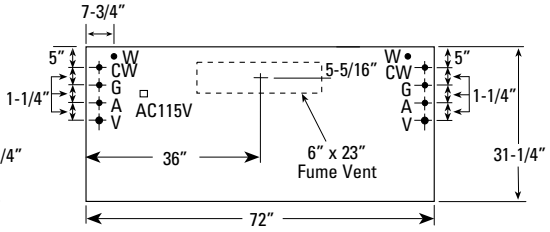


96" Wide Radioisotope Fume Hood

For Perchloric Acid Fume Hood

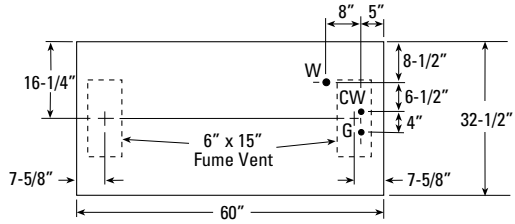


48" Wide Perchloric Acid Fume Hood



72" Wide Perchloric Acid Fume Hood

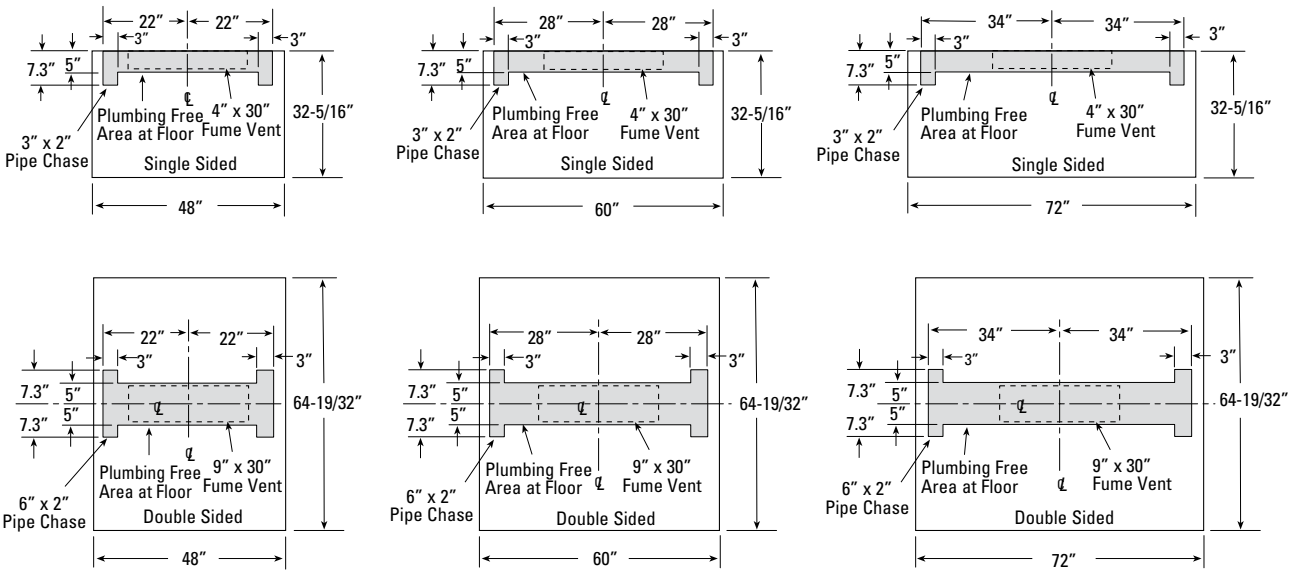
For Pass Through/Demonstration Fume Hood



60" Wide Pass-through/Demonstration Fume Hood

Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

Horizon Fume Hood



Dimensions are nominal. Illustrations and specifications are based on the latest product information available at the time of publication.

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