

PROTECTOR® LABORATORY FUME HOODS





Protector • **Laboratory Fume Hoods & Enclosures**

Overview

Since the manufacture of our first product in 1925, the Kjeldahl Apparatus, Labconco has focused on finding effective ways to remove chemical fumes from the laboratory. That knowledge and experience led to the development of our first molded fiberglass-lined fume hoods in 1961. We continue to build on that expertise today as we refine our designs to exacting standards and adapt to the changing needs of the marketplace. The result is the broadest, most comprehensive and innovative line of laboratory ventilated enclosures available anywhere.

Labconco is ISO 9001 certified. one measure of our commitment to quality and consistency in design and manufacturing. We back our quality products with outstanding customer service. Whether you need a single fume hood and all its required system components, a unique custom-designed fume hood to handle a special application, or an entire building of fume hoods and supporting casework, Labconco technical specialists are ready to help you throughout the process. With our worldwide network of distributors, we are dedicated to providing quality products and service to meet your requirements and exceed your expectations.

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Protector ** Laboratory Fume Hoods & Enclosures

Overview



Built To Exacting Standards

Protecting your laboratory environment is the foundation of our product development, and every Labconco fume hood and enclosure is designed with safety in mind. Our fume hoods are rigorously tested and conform to a long list of government and independent agency standards that specify safe construction and performance criteria for laboratory hoods:

- Occupational Health and Safety (OSHA)
 Federal Register 29 CFR Part 1910
- *Industrial Ventilation,* American Conference of Governmental Industrial Hygienists
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 110-1995
- ANSI Z9.5-2003
- Scientific Equipment & Furniture Association (SEFA) 1-2005
- National Fire Protection Association (NFPA) 45-2004
- American Society for Testing and Materials (ASTM) E84-01
- Underwriters Laboratories (UL) 1805
- UL 3101-1/61010-1
- Canadian Standards Association (CAN/CSA) C22.2 No. 1010.1
- European Community (CE)

Brief explanations of these standards can be found on page 11. Throughout the catalog, the specific regulations and standards met by each style of hood are provided in the ordering information.

To ensure that our hoods meet or exceed ASHRAE 110-1995, Labconco engineers rigorously test newly designed fume hoods and routinely test randomly-selected hoods from our product line in Labconco's Airflow Test Laboratory (see pages 122-125 for more information). Besides internal testing, many of our hoods undergo stringent testing and



As part of ASHRAE 110-95, a tracer gas is released at an established rate and at various positions within the hood. The gas is monitored in the breathing zone of a mannequin placed at various positions in front of the hood. Based on the release rate of the tracer gas and

the average exposure in the breathing zone, a performance rating is determined. An "As Manufactured" (AM) rating of 0.05 part per million (ppm) or less is considered effective containment.

certification by an unbiased independent organization, Intertek Testing Services



(ITS). ITS, which acquired ETL Testing Laboratories in 1996, is recognized by OSHA as a Nationally Recognized

Testing Laboratory (NRTL) just as UL, CSA and several other independent organizations are recognized. A federal law passed in 1988 established the NRTL program to eliminate provisions that explicitly required or implied that product certification be performed only by standardwriting companies such as UL. Since each NRTL must meet the same OSHA competency requirements, NRTLs recognized for the same product safety test standard are considered equivalent in the capability to certify to that standard. Labconco fume hoods with the ETL mark have been certified to UL 1805 and/or UL 3101-1/61010-1 and CAN/CSA Standard C22.2 No. 1010.1. Products that bear the ETL mark are subjected to a comprehensive safety program that includes testing, listing, labeling and quarterly follow-up

inspections. For a current list of Labconco products bearing the ETL mark, go to www.etlsemko.com.



Labconco fume hoods designed for international 230 volt, 50 Hz operation carry the

CE mark. The CE mark indicates that the product conforms to all safety and other directives/specifications presently required by the Council of European Communities. The CE mark was established in 1993 to standardize European countries' electrical directives into a single set of regulations, eliminating barriers to trade. Present rules require that products meet electrical safety requirements set for laboratory equipment and also pass electromagnetic emissions testing (interference signals being output by the product) and electromagnetic immunity testing (the product should not respond to outside electromagnetic interference signals). An independent outside agency tests and confirms Labconco hoods' conformity to electromagnetic emissions and immunity standards.

Protector®—first choice in hoods

The Protector line of laboratory hoods offers you choice. Protector Hoods run the gamut of styles that fit a full range of applications from general chemistry to perchloric acid use. Liner materials include one-piece molded fiberglass, fiberglass-reinforced composite panel, stainless steel, PVC and tempered safety glass. Whatever your laboratory situation demands, there's a Protector Laboratory Hood to meet your needs.





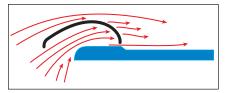
Protector Laboratory Fume Hoods & Enclosures

Overview

Defining Features

Consistent among Protector Hoods are several defining features that set them apart from the rest. Sleek exteriors with durable glacier white epoxy coating complement laboratory casework and allow compatible mixing and matching of several hood types.

The patented* ergonomic air foil with Clean-Sweep™ openings has an aerodynamic curve that allows air to sweep the work surface for maximum containment. Clean-Sweep openings pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant protective barrier that keeps contaminants away. In addition, should the operator inadvertently block the air flowing across the air foil, air continues to enter from beneath and through the Clean-Sweep openings.



Side view of an air foil with Clean-Sweep openings illustrates airflow entering over, through and under the air foil.



When the operator blocks the front of the air foil, air enters from under the air foil so "dead-air" zones are minimized and containment maintained.

Protector *corner posts* have a streamlined shape to enhance containment and are epoxy-coated for chemical resistance. Switches and electrical receptacles mounted in the standard locations on the corner posts meet Americans with Disabilities Act (ADA) height requirements.

Color-coded service fixtures are also mounted at ADA height on the corner posts. Each service type has a sculpted, colored knob and matching interiormounted hose connector for easy service identification and comfortable grip.

Access plates on the corner posts provide front availability to plumbing connections to simplify installation and service. Cover plates feature hood operating instructions, providing constant reminders to work safely in the hood.



Color-coded fixtures provide at-a-glance service type identification.

Protector Premier Laboratory Hoods—superior molded fiberglass liner

Protector Premier Laboratory Hoods feature interior liners molded of specially formulated fiberglass reinforced polyester. The one-piece, glossy fiberglass liner has



Front cover plates may be easily removed for quick access to service valves.

been the signature feature of Labconco's leading line of general chemistry fume hoods since its development by Labconco engineers in 1961. Benefits you can expect from fiberglass include durability, cleanability, high light reflectivity, fire resistance and chemical resistance.

Labconco fiberglass withstands exposure to a wide range of laboratory acids, solvents and alkalies. It will not absorb spills and resists staining and discoloration. The smooth one-piece surface with radiused corners has no cracks or crevices for contaminants to collect, so maintenance is minimal.

The chart of chemical resistance for Labconco fiberglass material shown below is based on ASTM Test C-581-00 in which 4" x 5" samples are *immersed in reagents* for one to three months or longer.

Fiberglass Chemical Resistance

Reagent	Satisfactory For Normal Use	Satisfactory For Occasional Use	Slight Discoloration with Heavy Use
Acetic Acid	•	•	
Acetone (50%)		•	
Ammonium Hydro	oxide	•	
Benzene		•	
Fatty Acids	•	•	
Formaldehyde (44		•	
Hydrochloric Acid	•	•	
Hydrofluoric Acid		•	•
Hydrogen Peroxid	le •	•	•
Naphthalene	•	•	
Nitric Acid (35%)	•	•	•
Peracetic Acid	•	•	
	lse only in Protector Stainles	ss Steel or PVC Perchloric Acid I	Hood.
Petroleum Ether	•	•	
Phosphoric Acid	•	•	
Tannic Acid	•	•	
Sulfuric Acid (50%	ó) •	•	•

^{*} U.S. Patent No. 6,461,233



Protector ** Laboratory Fume Hoods & Enclosures

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Protector XStream Laboratory Hoods—high performance and energy savings

The performance of a fume hood is measured by its ability to contain contaminants, i.e. its safety. No fume hood keeps contaminants contained better than Protector XStream Laboratory Hoods. Unlike other high performance, low flow, low volume hoods on the market, Protector XStream Laboratory Hoods do NOT rely on restricted sash openings, airflow sensors and electronic control, mechanical components or additional fans. Protector XStream Laboratory Hoods have patented* features that work together to significantly reduce the concentrations of contaminants in areas behind the sash opening,

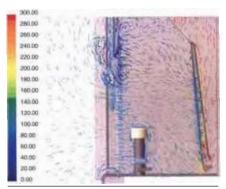


Figure 1: The Protector XStream Hood's velocity vector at 60 fpm is shown on a plane through the center of the hood. The horizontal laminar air vectors turn downward as they reach the perforated baffle. The Protector XStream Hood shows diminished vortex roll, thereby reducing air turbulence and instability in the hood.

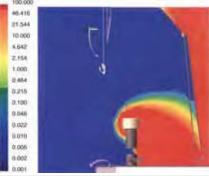


Figure 2: Sulfur hexafluoride (SF₆) gas is emitted from the ejector on a plane through the center of the hood at 4 liters per minute. The Protector XStream Hood is operating at 60 fpm with the sash fully open. The area near the sash plane where the operator would stand and work is dark blue indicating it is free of contaminants. The concentrations of contaminants, shown in orange, are contained deep within the interior of the hood so that contaminants can be exhausted in a single pass.



A Protector XStream Laboratory Hood is installed along the wall. Protector XVS Ventilation Stations are mounted back-to-back

and near the user's breathing zone. These features include an upper dilution air supply that bathes the area behind the sash with clean air, without the use of additional blowers; an ergonomic air foil with Clean-Sweep openings that allow air to sweep the work surface; a rear downflow dual baffle system that directs airflow in nonturbulent laminar flow air streams to the back of the hood and counteracts the tendency for air inside a fume hood to roll forward; and a containment-enhancing sash handle that sweeps airflow into the hood with minimal turbulence.

To ensure that containment was maintained under adverse conditions, Labconco engineers developed variations of the ANSI/ASHRAE 110-1995 Standard to challenge the Protector XStream Hood. They tested the hood's containment limit by varying face velocities (as low as 40 fpm), differing sash heights and adding interior obstructions, cross drafts and door movements. In every instance, the Protector XStream showed tracer gas leakage below the acceptable ASHRAE level of less than 0.05 ppm. These worst-case conditions demonstrate the robust nature of the Protector XStream Hood.

To validate their successful ASHRAE test results, Labconco engineers used computational fluid dynamics (CFD) to build a model of the Protector XStream Hood. CFD predicts fluid flow behavior and provides a means of visualizing airflow. Like the tracer gas in ASHRAE testing, CFD was used as a tool to test the hood's performance. Design features were finetuned based on CFD test results until performance was optimized. The illustrations in Figures 1 and 2 are actual CFD outputs.

Protector XStream Laboratory Hoods are the clear choice when looking for energy savings without compromising safety. Operating these hoods at OSHA-approved 60 fpm provides significant energy savings compared to operating a traditional hood at 80 or 100 fpm and provides a comfortable margin of safety, confirmed by the adverse challenges these hoods withstood. In addition, because Protector XStream Hoods maintain containment, regardless of sash position, they may be installed with confidence in areas where users have poor, or unproven technique, such as teaching facilities with unsupervised student operators.



Protector Laboratory Fume Hoods & Enclosures

Overview

Protector XL Laboratory Hoods—broadest range of sizes and options

Protector XL Laboratory Hoods have a flexible platform for customization of features and dimensions. Their liners of durable fiberglass-reinforced composite panels may be configured in a variety of widths and depths to match architect specifications. Benchtop models are offered in widths from 4 to 16 feet and three depths.

Protector XLE Laboratory Hoods—enhanced safety features and energy savings

Protector XLE Laboratory Hoods feature a sash that automatically closes to an 18" sash opening to help conserve energy. Since the sash self-closes to a preset operating height and does not require a sash stop, sash position is not dependent on user compliance. In addition, these hoods have a viewing height of 35" and a low profile air foil with secondary spill trough, which enhances operator access to the interior. The spill trough does not add to the hood's overall height. Protector XLE Hoods are available in widths from 4' to 8', including 7' hoods.

Protector XL Floor-Mounted Laboratory Hoods—for maximum work area

Protector XL Floor-Mounted Laboratory Hoods have additional interior height to accommodate large apparatus. Hood interior depths from 30" to 48" and widths from 4' to 16' are available. Since they mount on the floor, these hoods permit roll-in loading of heavy or bulky apparatus.

Protector ClassMate Laboratory Hoods for instructional laboratories

Patented* Protector ClassMate Laboratory Hoods have clear sides, back and baffle for visibility from all sides. A stationary glass viewing panel above the sash frame creates a 39" viewing height. They are ideal for advanced educational settings where students need to observe demonstrations conducted in the hood or the instructor needs to supervise students using the hood.



Transparent glass backs and baffles provide a clear view through these Protector ClassMate Combination Sash Laboratory Hoods mounted back-to-back on peninsular casework at this university laboratory.

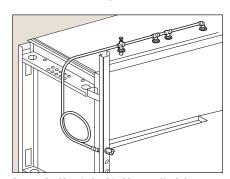
Protector Pass-Through Laboratory Hoods—access on two sides

Protector Pass-Through Laboratory Hoods are designed for in-wall installation between two laboratories or for an island or peninsular configuration. Sashes on two sides allow access and visibility from either side. To maintain a safe airflow velocity, only one sash may be opened at a time — an audible alarm sounds when both sashes are opened simultaneously.

Protector Special Application Laboratory Hoods—for radioisotope, perchloric acid or heavy acid use

Applications involving radioisotopes, perchloric acid and acid digestion require laboratory hoods with specialized features. Protector Stainless Steel Radioisotope Hoods have integral welded work surfaces and coved interiors to facilitate decontamination. Labconco offers two perchloric acid hoods: the Protector Stainless Steel Perchloric Acid Hood and the Protector PVC Perchloric Acid Hood. These hoods feature washdown systems, integral work surfaces and drainage troughs so that they may be thoroughly

rinsed after each use to prevent the accumulation of potentially reactive perchloric salts. Protector PVC Acid Digestion Hoods feature Lexan** sashes, recommended for hydrofluoric acid use.



Protector Perchloric Acid and Acid Digestion Hoods feature a built-in washdown system consisting of plumbing connected to a control knob and spray nozzles located along the top interior.

Labconco offers you choices

The discussion that follows provides some of the factors to consider when choosing a laboratory ventilation system. The Selection Guides on pages 8-10 provide an at-a-glance listing of the fume hoods, ventilated enclosures and carbon-filtered enclosures offered in this catalog. The Guides help you find the Labconco fume hoods and enclosures with the characteristics you require for your system.

**Lexan® is a registered trademark of General Electric Company.



Protector ** Laboratory Fume Hoods & Enclosures

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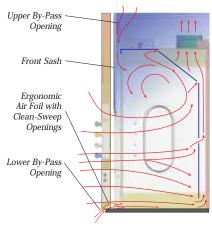
Types of Exhaust Systems

Fume hoods use one of two types of exhaust systems: constant air volume (CAV) or variable air volume (VAV). The fume hoods offered in this catalog have been designed to be used with a constant volume system and can be easily modified for use with a variable air volume system. Contact Labconco for ordering information on variable air volume modifications.

Constant volume hoods come in conventional, by-pass and auxiliary-air types. All Labconco fume hoods feature by-pass airflow design. Protector Premier and XL Laboratory Hoods may be modified to an auxiliary-air design with an accessory Auxiliary-Air Plenum Kit (see page 120).

By-Pass

By-pass hoods have a movable, fullyclosing front sash and an interior baffle. These hoods are designed so that as the sash is being closed, the air entering the hood is redistributed via by-pass openings above and below the sash. These openings help to stabilize airflow and elimi-



By-Pass Airflow Design

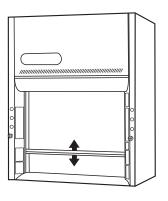
nate high velocity air streams that can disturb delicate procedures or instrumentation in the hood. All Protector Premier, XStream, XL, XLE, Stainless Steel and PVC Hoods as well as Basic and Fiberglass 30 Hoods incorporate the by-pass feature.

Size

Labconco offers hoods in a range of sizes from compact 24" wide Protector XVS Ventilation Stations and 30" wide Fiberglass 30 Laboratory Hoods to Protector XL Laboratory Hoods as wide as 16 feet. OSHA 29 CFR-1910 recommends laboratories provide an average of 2.5 linear feet of hood space per person.

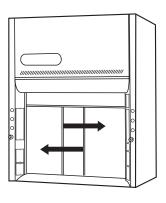
Sash Configuration

Most Labconco Hoods have verticalrising sashes. *Vertical-rising* sashes may
be lifted to the completely open position
offering the maximum area for loading
materials and apparatus. During operation, the sash should be lowered as
much as possible to a comfortable working height to provide a barrier to protect
the user from splashes and chemical
reactions.



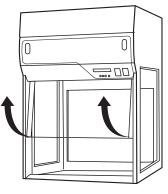
Vertical-rising sash

Horizontal-sliding sashes allow the user to reach around both sides of the sash while using the sash as a shield. Horizontal-sliding sashes provide a smaller maximum sash opening approximately one-half the size of vertical-rising sashes. Because their sash openings are smaller and less air volume is exhausted, hoods with horizontal-sliding sashes conserve energy. Protector XL Floor-Mounted Hoods in widths from 8 to 16 feet have horizontal-sliding sashes.



Horizontal-sliding sashes

Pivoting sashes are found on Protector Demonstration Hoods, Paramount Filtered Enclosures, Protector XVS Ventilation Stations and Protector Work Stations. These enclosures have a small permanent sash opening height that restricts energy usage. The sashes may not be fully closed but may be pivoted up to a full open position for loading of materials.



Pivoting sash (See Combination Sash next page)



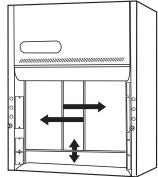
Protector Laboratory Fume Hoods & Enclosures

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Combination vertical-rising/horizontal-

sliding sashes offer the advantages of both sash types. For energy conservation, the hood's air volume is based on its smaller horizontal-sliding sash opening (generally 50% of the full open position). To maintain safe face velocities, sash stops limit opening the vertical-rising sash beyond 50% except when deliberately released by the operator during loading or unloading. Some models of Protector ClassMate Hoods have combination sashes

Combination sashes on other hood models are available upon request.



Combination vertical-rising/horizontal-sliding sashes



The Protector XL Benchtop Laboratory Hoods installed in this laboratory feature combination vertical-rising/horizontal-sliding sashes.

Remote Blower vs. Built-In Blower

Most laboratory hoods are designed for use with remotely-located blowers. Of all the components required to complete a laboratory hood ventilation system, the blower is the most crucial to the hood's performance. Labconco offers a variety of blowers and exhaust devices sized for our hoods. The Blowers Booklet located in the back pocket of this catalog provides further information on our Coated Steel, Fiberglass and PVC Blowers, Air Ejectors, Swirlaway® Fume Scrubbers and Ductwork.

Selected models of Protector Premier Hoods in 4', 5' and 6' widths, Basic Hoods, Fiberglass 30 Hoods and Carbon-Filtered Enclosures have built-in blowers. Easy to install, these hoods feature blowers sized to accommodate relatively short, uncomplicated duct runs. Contact Labconco at **800-821-5525** or **816-333-8811** for technical assistance regarding the use of hoods with built-in blowers.



The built-in blower in this Protector Premier Laboratory Hood is visible when the front panel is removed.

Liner Material

Labconco offers a variety of liner materials. Protector Premier and Fiberglass 30 Laboratory Hoods are lined with molded, one-piece fiberglass. Protector XStream, XL and XLE Hoods have fiberglass-reinforced composite panel liners. Protector Radioisotope and Perchloric Acid Hoods have stainless steel liners. Other Protector Perchloric Acid and Acid Digestion Hoods have PVC liners. Protector ClassMate Laboratory Hoods, Pass-Through Hoods, XVS Ventilation Stations, Protector Demonstration Hoods, Paramount Filtered Enclosures and Protector Work Stations

have interiors that use tempered safety glass and epoxy-coated aluminum channel construction. Basic Laboratory Hoods are epoxy-coated steel inside and out.

The best liner material for your hood should be determined by the applications, types and concentrations of chemicals that will be handled in the hood and exhaust system. Hood liners are subject to attack from acid fumes and solvent vapors by: (1) corrosion (the destruction of metal or other material by chemical or electrochemical action), (2) dissolution (a dissolving action to which coatings and plastics are subject), and (3) melting (occurs with certain plastics and coatings at elevated operating temperatures). The Hood Liner Materials table on page 7 describes the characteristics of the various liner materials found in Labconco hoods and enclosures to help you select the right ventilation product for your application.



Protector • Laboratory Fume Hoods & Enclosures

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Hood Liner Materials

Liner Material	Stain Resistance	Moisture Resistance	Chemical Resistance	Heat Resistance	Flame Spread Index*
One-piece, molded fiberglass	Good	Excellent	Excellent	Very good	≤25
Fiberglass- reinforced composite panel	Good	Excellent	Excellent	Very good	≤25
Tempered safety glass	Excellent	Excellent	Excellent	Very good	0
Stainless steel (Type 316 or 304)	Good	Excellent	Good resistance to a wide range, subject to attack by some acids	Excellent	0
Polyvinyl chloride (PVC)	Very good	Excellent	Excellent except for some solvents	Poor. Will distort at 160° F	≤20
Epoxy-coated steel	Good	Very good	Good	Very good	≤5

^{*} The lower a material's flame spread index, the greater its flame-retarding capabilities. NFPA 45 Standard on Fire Protection for Laboratories Using Chemicals states that materials of construction should have flame spread of 25 or less. The flame spread index is determined using ASTM E84 test method which compares the surface flame spread and smoke development measurements of a particular material to those obtained from tests of standard calibration materials at the opposite ends of the spectrum — mineral fiber cement board (flame spread index = 0) and select grade red oak flooring (smoke spread index = 100). The test specimen surface, 18" wide x 24" long, is exposed to a flaming fire for 10 minutes. Flame spread over its surface is measured and recorded. Test results are presented as the computed comparisons to the standard calibration materials.

Ducted Hoods vs. Ductless Carbon-Filtered Enclosures

Protector, Basic, Fiberglass 30 and Canopy Hoods, Protector XVS Ventilation Stations and some models of Protector Work Stations and Protector Demonstration Hoods require ducting to the outside so that contaminants can be dispersed and diluted above the roofline. Ducting to the outside provides the safest means to ensure that contaminants are removed from the laboratory. Other Labconco enclosures, such as the Protector XVS Ventilation Stations and Protector Demonstrations Hoods with FilterMate Portable Exhausters, Paramount Filtered Enclosures, Protector Work Stations and Fume Adsorbers, return filtered exhaust air back to the laboratory. These enclosures rely on specially treated or activated carbon media that treat or adsorb chemical gases including certain organic solvents, ammonia, acids and formaldehyde. Paramount Duet Filtered Enclosures and some models of Protector XVS Ventilation Stations with FilterMate use both carbonbased and HEPA filters, which can be used with applications that create both gaseous and particulate contaminants.



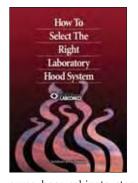
When located in a clean room, the Paramount Duet Filtered Enclosure, which uses both carbon-based and HEPA filter cells, provides a safe, self-contained work station for removal of chemical fumes or vapors while exhausting ISO Class 5 (formerly Class 100) air.

Filtered enclosures provide a practical solution for situations where ducting is not feasible, such as laboratories surrounded by interior walls and located several stories from the roof. Filtered enclosures are appropriate for light duty chemical work in air-starved laboratories where make-up air is unavailable. When placed on mobile stands, they become portable stations that can be shared by several laboratories or easily moved out of the way for storage.

Whether or not a carbon-filtered enclosure is the right ventilation product for your application requires consideration of factors such as the time-weighted exposure limits of your materials. Using Labconco's exclusive chemical assessment program, our technical specialists can help you determine the right product for your application. To begin the process, please complete the chemical usage assessment form available at www.

labconco.com/chemical-usage.html.

In-depth Laboratory Hood System Information Available



The preceding discussion on the many fume hood options available provides an overview to the detailed ordering information on specific hoods, enclo-

sures, base cabinets, stands, work surfaces and accessories that follows. For an in-depth generic discussion on various hood selection considerations and choices, Labconco offers the *How To Select The Right Laboratory Hood System* booklet.

Please call **800-821-5525** or **816-333-8811** or visit **www.labconco.com** for your free copy of this informative guide.



Protector Laboratory Fume Hoods & Enclosures Selection Guide

Chemical Fume Hoods and

Product	Applications/Considerations	Liner Material	Nominal Exterior Widths
Protector Premier	Broad range for general chemistry	One-piece molded fiberglass	4', 5', 6', 8'
Protector XStream	Broad range for general chemistry, Energy savings, Enhanced containment	Fiberglass-reinforced composite panel	4', 5', 6', 8'
Protector XL Benchtop	Broad range for general chemistry	Fiberglass-reinforced composite panel	4', 5', 6', 8', 10', 12', 16'
Protector XL Floor-Mounted	Broad range for general chemistry, large apparatus and processes	Fiberglass-reinforced composite panel	4', 5', 6', 8', 10', 12', 16'
Protector XLE	Broad range for general chemistry, Energy savings	Fiberglass-reinforced composite panel	4', 5', 6', 7', 8'
Protector ClassMate	Instruction, Demonstration	Tempered safety glass, Epoxy-coated steel	4', 5', 6'
Protector Pass-Through	Instruction, Demonstration	Fiberglass-reinforced composite panel, Tempered safety glass	4', 5', 6'
Protector Stainless Steel Radioisotope	Low level radiochemistry	Type 304 stainless steel	4', 5', 6', 8'
Protector Stainless Steel Perchloric Acid	Perchloric acid	Type 316 stainless steel	4', 5', 6', 8'
Protector PVC Perchloric Acid	Perchloric acid	PVC	4', 6', 8"
Protector PVC Acid Digestion	Acid digestion, Hydrofluoric acid	PVC	4', 6', 8'
Basic	Light duty general chemistry, Organic chemistry	Epoxy-coated steel	4', 6'
Fiberglass 30	General chemistry	One-piece molded fiberglass	30"
Protector XVS Ventilation Station	Light duty chemistry/weighing, Instruction, Organic chemistry	Tempered safety glass, Epoxy- coated aluminum and steel	2', 3', 4'
Protector Demonstration	Low-toxicity, Instruction, Demonstration	Tempered safety glass, Epoxy-coated aluminum	3'
Protector Work Station	Histology, Pathology, Tissue grossing, Staining, Organic chemistry	Type 304 stainless steel, Tempered safety glass, Epoxy-coated aluminum	4'



Protector • **Laboratory Fume Hoods & Enclosures**Selection Guide

Enclosures Selection Guide

Interior Depths	Blower Options	Auxiliary-Air	Sash Configurations	Pages
23.5"	Remote, built-in	Available on some models	Vertical-rising*	12-19
27.3"	Remote	-	Vertical-rising*	20-25
24", 30", 36"	Remote	Available on some models	Vertical-rising*	26-31, 37-38
30", 36", 48"	Remote	-	Vertical-rising, Horizontal-sliding	32-36, 39-40
30"**	Remote	_	Vertical-rising	41-43
25.75", 26.25"	Remote	-	Vertical-rising, Combination	44-47
23.75"	Remote	_	Vertical-rising	48-51
23.5"**	Dedicated remote	_	Vertical-rising	52-55
23.5"**	Dedicated remote	_	Vertical-rising	56-59
30"	Dedicated remote	_	Vertical-rising	60-63
30"	Dedicated remote	_	Vertical-rising	60-63
18.44"	Remote, Built-in	-	Vertical-rising	64-69
22.67"	Remote, Built-in	_	Vertical-rising	70-71
23"	Remote, FilterMate Portable Exhauster	_	Pivoting with permanent 8" or 10" opening	82-85
23"	Remote, FilterMate Portable Exhauster	_	Pivoting with permanent 8" or 10" opening	88-89
23"	Remote	-	Pivoting with permanent 8" opening	90-93

^{*} Contact Labconco at 800-821-5525 or 816-333-8811 for ordering information on hoods with combination sashes. ** Contact Labconco at 800-821-5525 or 816-333-8811 for ordering information on hoods with other depths.



Protector • **Laboratory Fume Hoods & Enclosures**Selection Guide

Carbon-Filtered Enclosures Selection Guide

Product	Filter Types	Applications	Carbon Filter Capacity	Liner Materials	Nominal Exterior Widths	Interior Depth	Pages
Paramount Filtered Enclosure/ Paramount Duet Filtered Enclosure	Organic Carbon	Organic chemistry, Histology/cytology, Solvent cleaning, Welding & gluing	26 lbs. (2 each required)	Tempered safety glass, Epoxy-coated aluminum & stee	3', 6'	24.25"	74-81, 94-95
	Acid Gases Carbon Ammonia Carbon	Acid pouring & mixing Photoengraving, Plastics production					
	Formaldehyde Carbon	Endoscopy instrument cleaning, Pathology					
Paramount Duet Filtered Enclosure	Carbon/HEPA	Clean room, Critical environments, Combination dry & liquid chemicals, Weighing chemical powders, Pathology, Soldering, Solvent cleaning	26 lbs. (2 each required)	Tempered safety glass, Epoxy-coated aluminum & steel	3', 6'	24.25"	74-81, 94-95
Protector XVS Ventilation Station or Protector Demonstration Hood with FilterMate Portable Exhauster	Organic Carbon	Histology/cytology Soldering, Solvent cleaning, Welding & gluing	12 lbs. (1 or 2 each required)	Tempered safety glass, Epoxy-coated aluminum	2', 3', 4'	23.0"	82-89, 94-95
	Ammonia Carbon	Photoengraving, Plastics production	16 lbs. (1 or 2 each required)				
	Formaldehyde Carbon	Endoscopy instrument cleaning, Pathology	14 lbs. (1 or 2 each required)				
	Carbon/HEPA	Clean room, Critical environments, Combination dry & liquid chemicals, Non-hazardous microbe with trace chemicals, Pathology, Soldering, Solvent cleaning	Varies es				
Protector Work Station	Organic Carbon	Histology/cytology	11 lbs. (2 each required)	Type 304 stainless steel, Tempered safety glass, Epoxy- coated steel	4'	23.0"	90-95
	Carbon-Based Formaldehyde	Pathology					
Fume Adsorber/ Fume Adsorber-2	Organic Carbon	Histology/cytology	6 lbs./12 lbs.	Acrylic, Epoxy- coated steel	30", 60"	14.5"	72-73
	Formaldehyde Carbon	Pathology	7.5 lbs./15 lbs.				
	Ammonia Carbon	Photoengraving	8.8 lbs./17.6 lbs.				



Applicable Standards

Key aspects of standards and codes as they relate to laboratory ventilation are summarized below.

Federal Register 29 CFR Part 1910

Occupational exposure to hazardous chemicals in laboratories

National Research Council Recommendations Concerning Chemical Hygiene in Laboratories (Nonmandatory) from "Prudent Practices."

- Fume hoods should have a continuous monitoring device.
- Face velocities should be between 60-100 linear feet per minute (lfpm).
- Average 2.5 linear feet of hood space per person.

Occupational Safety & Health Administration U.S. Department of Labor

200 Constitution Avenue, NW Washington, DC 20210 (800) 321-6742 www.osha.gov

Industrial Ventilation-ACGIH

- Fume hood face velocities between 60-100 lfpm.
- Maximum of 125 lfpm for radioisotope hoods.
- Duct velocities of 1000-2000 fpm for vapors, gases and smoke.
- Stack discharge height 1.3-2.0 x building height.
- Well designed fume hood containment, loss <0.10 ppm.

Industrial Ventilation: A Manual of Recommended Practice 24th Edition, 2001

American Conference of Governmental Industrial Hygienists

1330 Kemper Meadow Drive Cincinnati, OH 45240 (513) 742-2020 www.acgih.org

ASHRAE 110-1995 Method of Testing Performance of Laboratory Fume Hoods (ANSI Approved)

Evaluates fume hood's containment characteristics

- Three part test: Smoke generation, face velocity profile, tracer gas release @ 4 liters per minute.
- Rated As Manufactured (AM), As Installed (AI) and As Used (AU).

American Society of Heating, Refrigerating and Air-Conditioning Engineers

1791 Tullie Circle NE Atlanta, GA 30329 (404) 636-8400 www.ashrae.org

ANSI Z9.5-2003 Standard— Laboratory Ventilation

Covers entire laboratory ventilation system.

- Vertical stack discharge @ 2000-3000 fpm.
- New and remodeled hoods shall have a monitoring device.
- Ductless hoods should only be used with nonhazardous materials.

American Industrial Hygiene Association

2700 Prosperity Avenue, Suite 250 Fairfax, VA 22031 (703) 849-8888 www.aiha.org

SEFA 1-2005 Laboratory Fume Hoods Recommended Practices

- Fume hood face velocities based on toxicity levels of chemicals
 - Class A—materials of extreme toxicity—125 to 150 fpm.
 - Class B—standard lab chemicals—80 to 100 fpm. Class C—materials of low toxicity—75 to 80 fpm.
- Test method —face velocity profile and smoke generation.

Scientific Equipment & Furniture Association

1205 Franklin Avenue Suite 320 Garden City, NY 11530 (516) 294-5424 www.sefalabs.com

NFPA 45: Standard on Fire Protection for Laboratories Using Chemicals, 2004 Edition

- Laboratory hoods should not be relied on for explosion protection.
- Fume hood exhaust air should not be recirculated.
- Services should be external to the hood.
- Canopy hoods only for non-hazardous applications.
- Materials of construction should have flame spread of 25 or less.

National Fire Protection Association

1 Batterymarch Park Quincy, MA 02169-7471 (800) 344-3555 or (617) 770-3000 www.nfpa.org

ASTM E84-01 Standard Test Method for Surface Burning Characteristics of Building Materials

Determines the relative burning behavior of the material by observing the flame spread along the specimen.

- Measures flame spread and smoke development.
- Material is exposed to flaming fire for 10 minutes and the results measured and recorded.
- Results are compared to the indexes of mineral fiber cement board (flame spread and smoke development of zero) and red oak flooring (smoke development of 100).

ASTM International

100 Barr Harbor Drive P.O. Box C700 West Conshohocken, PA 19428-2959 (610) 832-9585 www.astm.org

UL 1805—Standard for Laboratory Hoods and Cabinets

- Hood interior constructed of nonflammable, corrosion and chemical-resistant materials.
- · Counterbalanced sash of non-shattering material.
- · Shielded by-pass opening.

- · Dished work surface to contain spills.
- · No air recirculation.
- Integral blower wheel of nonsparking materials.
- Externally-mounted electrical receptacles, light fixtures and service fixture controls.
- No indication of reverse flow or backflow when tested with sash at full, 2/3 and 1/3 open positions at flow rate recommended by the manufacturer.

UL 61010-1 (formerly 3101-1) Electrical Equipment for Laboratory Use

Specifies the general safety requirements for electrical equipment

- Based on International Electrotechnical Commission (IEC) Publication 61010-1 with differences noted for U.S. use.
- Tests for protection against electrical shock, mechanical hazards, spread of fire, radiation, liberated gases, explosion and implosion.
- Tests for resistance to shock, vibration, impact, heat, moisture and liquids.

Underwriters Laboratories Inc.

333 Pfingsten Road Northbrook, IL 60062-2096 (847) 272-8800 www.ul.com

CAN/CSA Standard C22.2 No. 1010.1-92 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use

Specifies general safety requirements for electrical equipment

Design and methods of construction should provide adequate protection to the operator and the surrounding area against shock or burn, mechanical hazards, excessive temperature, spread of fire from the equipment, gas liberation, explosion or implosion.

Canadian Standards Association

5060 Spectrum Way Mississauga, Ontario L4W 5N6 CANADA (800) 463-6727 or (416) 747-4044 www.csa.ca

CE Marking

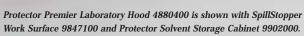
Established in 1993 to standardize the European Community's electrical directives into a single set of regulations. Indicates an electrical apparatus conforms to all safety and other directives/specifications presently required by the Council of European Communities.

- · Electrical safety.
- Electromagnetic emissions testing interference signals being output by the product.
- Electromagnetic immunity testing the product does not respond to outside electromagnetic interference signals.

European Union

www.europa.eu.int









Protector Premier Laboratory Hoods

Features & Benefits

By-pass airflow design

ensures stable face velocities

that meet or exceed estab-

lished standards

Protector® Premier™ Laboratory Hoods incorporate a sleek exterior with a molded one-piece fiberglass liner, the signature feature of Labconco's leading line of fume hoods since 1961.

The one-piece liner of specially-formulated, fiberglass-reinforced polyester offers corrosion and fire resistance and easy clean up.

Front and side panels may

be easily removed for lamp

electrical supply connections.

replacement and access to

Protector Premier Laboratory Hoods are offered in 4', 5', 6' and 8' widths so their dimensions exactly match standard laboratory casework or accessory Protector Base Cabinets and Stands. Choose from hoods designed to be used with a remotely-located blower or hoods that include a built-in blower.

Corrosion-resistant,

molded fiberglass exhaust

connection(s) on models for

use with remote blowers

Models with built-in blower are available. Quiet built-in blower is belt-driven with molded thermoplastic housing and coated aluminum impeller that is non-sparking and corrosion-resistant. Available with explosion-proof or standard motor.

Fluorescent lighting illuminates the interior. The high efficiency, instant start, T8 fluorescent lights are located outside the hood interior for corrosion-resistance and easy replacement. Explosion-proof models are supplied with an incandescent light fixture.

for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Two service fixtures are preplumbed on fixtured models. Each hood is factory prepared for up to eight service fixtures (four on each side).

Color-coded service fixtures

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No. 1010.1.





Ergonomic air foil allows air to sweep the work surface for maximum containment. Clean-Sweep* airflow openings pull inflow air from under the air foil so that clean air

continually flows over the air foil creating a constant barrier of protection from contaminants.

Durable and attractive exterior is glacier white, dry powder epoxy-coated steel.

CE mark*. All 230 volt, 50 Hz models conform to the CE (European Community) requirements for electrical safety and electromagnetic compatibility. **Pre-set baffle** provides a uniform face velocity pattern across the sash opening of the hood.

Large 28" sash opening offers superior viewing. When fully open, the sash does not extend above the hood.

Vertical-rising tempered safety glass sash is antiracking for smooth operation. Contact Labconco for ordering information on horizontalsliding or combination sashes.

Service access panels allow accessibility to plumbing from the front of the hood.

One-piece molded fiberglass liner gives superior corrosion and chemical resistance, durability and light reflectivity. Its smooth, radiused corners make cleaning easy.

Pre-wired electrical components. Fluorescent lights and switches are factory-wired to the hood's single point junction box. One electrical duplex receptacle is factorywired on 115 volt, 60 Hz fixtured models. Each hood is factory-prepared for up to four electrical duplexes and an airflow monitor. Explosionproof models are furnished without switches, electrical receptacle and wiring as these must conform to varying local codes.

Performance tested to ASHRAE 110-1995.

Exclusive Feature

*U.S. Patent No. 6,461,233 †pending



Protector Premier Laboratory Hoods

for use with remote blower



Protector Premier Laboratory Hood 9683000 is shown with SpillStopper Work Surface 9847400, Protector Solvent Storage Cabinet 9902000 and Acid Storage Cabinet 9901000. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models feature:

- By-pass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Glacier white, dry powder epoxy-coated steel exterior.
- One-piece molded fiberglass liner and pre-set baffle(s) with flame spread less than 25 per ASTM E-84.
- 3/16" thick tempered safety glass vertical-rising sash(es) with epoxy-coated sash handle. Sash does not extend above the hood when fully open.
- Removable front and side panels and front access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, light and blower switches.
- Molded fiberglass 12.81" ID exhaust connection(s).
- Exclusive Feature

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)†

Fixtured models feature:

 Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. Inlet tubing is not provided. One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side (115 volt models)

All models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.
- Work Surface. See pages 100-104.
- **Base Cabinet or Stand.** See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 119-120.
- **Distillation Grid Kits.** See page 120.
- Auxiliary-Air Kits. See page 120.
- Sash Stop Kits. See page 121.
- **Snuffer Fire Extinguishers.** See page 121.

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on explosion-proof lighting and other sash configurations and for blower sizing assistance.

With Sash Full Open (28")									
Nomina Width	Nominal <u>Total Exhaust</u> Width 100 fpm			nd Stat		s.P.			
4 Feet	730)	.17"	590)	.11"			
5 Feet	960)	.24"	770)	.16"			
6 Feet	1180)	.31"	940	C	.20"			
8 Feet	1660)	.22"	1330)	.15"			
,	With Sa	sh 6	0% Op	en (1	8")**				
Nominal	Total Exh	aust C	FM and S	tatic Pre	ssure				
Width	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.			
4 Feet	470	.07"	380	.05"	280	.03"			
5 Feet	610	.11"	490	.08"	370	.04"			
6 Feet	750	.14"	600	.09"	450	.05"			
8 Feet	1060	.08"	850	.06"	640	.03"			

^{*} U.S. Patent No. 6,461,233

[†] pending

^{**} Sash stop required

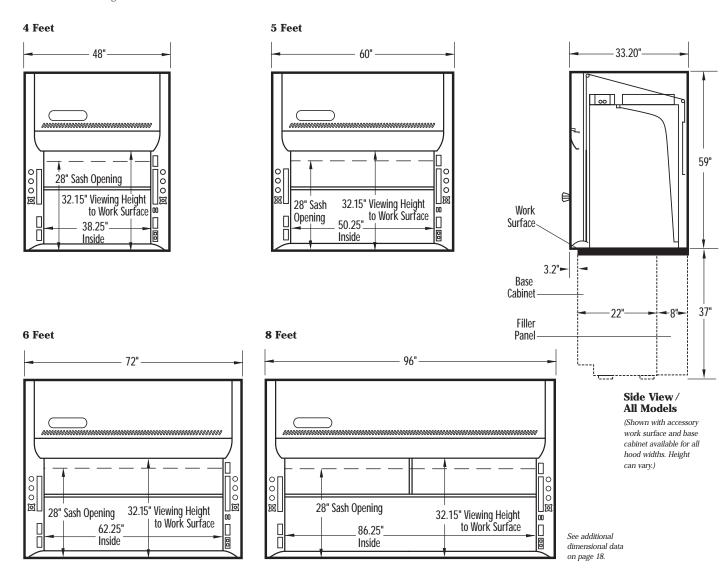
Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.



Ordering Information Protector® Premier® Laboratory Hoods for use with remote blower

Nominal Width	Catalog Number	Electrical Requirements	12.81" ID Exhaust Collar(s)	Sash	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Shipping Weight lbs./kg
4 Feet	4880100 4880400 4871500* 4871600*	115 volts, 60 Hz 115 volts, 60 Hz 230 volts, 50 Hz 230 volts, 50 Hz	1 1 1 1	1 1 1	2 ea. 25 watt 2 ea. 25 watt 2 ea. 25 watt 2 ea. 25 watt	None 2 None 2	None 1 None None	325/147 335/152 325/147 335/152
5 Feet	6080100 6080400 6071500* 6071600*	115 volts, 60 Hz 115 volts, 60 Hz 230 volts, 50 Hz 230 volts, 50 Hz	1 1 1 1	1 1 1	2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt	None 2 None 2	None 1 None None	410/186 420/191 410/186 420/191
6 Feet	7280100 7280400 7271500* 7271600*	115 volts, 60 Hz 115 volts, 60 Hz 230 volts, 50 Hz 230 volts, 50 Hz	1 1 1	1 1 1	2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt	None 2 None 2	None 1 None None	485/220 495/225 485/220 495/225
8 Feet	9683000 9674500*	115 volts, 60 Hz 230 volts, 50 Hz	2 2	2 2	4 ea. 25 watt 4 ea. 25 watt	2 2	1 None	660/299 660/299

^{*}International electrical configuration





Protector Premier Laboratory Hoods

with built-in blower



All models feature:

- Built-in belt-driven, corrosion-resistant exhaust blower with adjustable sheave, molded thermoplastic housing and nonsparking, coated aluminum impeller.
- By-pass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Glacier white, dry powder epoxy-coated steel exterior.
- One-piece molded fiberglass liner and pre-set baffle(s) with flame spread less than 25 per ASTM E-84.
- 3/16" thick tempered safety glass vertical-rising sash with epoxy-coated sash handle. Sash does not extend above the hood when fully open.
- Removable front and side panels and front access panels for access to plumbing and electrical wiring.
- 10.81" ID exhaust connection (4' models); 12.81" ID exhaust connection (5' and 6' models).

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)†

Standard models feature:

 Pre-wired T8 fluorescent lighting, light and blower switches.



Explosion-proof models feature:

- Explosion-proof blower and incandescent light fixture (bulb not included).
- Furnished without switches, electrical receptacle and wiring as these must conform to varying local codes.

Fixtured models feature:

- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side (115 volt models).

All models require (not included):

- Ductwork. See back pocket.
- Work Surface. See pages 100-104.
- **Base Cabinet or Stand.** See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 119-120.
- Distillation Grid Kits. See page 120.
- Auxiliary-Air Kits. See page 120.
- Sash Stop Kits. See page 121.

Built-In Blower Maximum External Static Pressure @ 100 fpm							
Hood Width	CFM	S.P.	Nominal Ductwork Diameter	Equivalent Resistance**			
4 Feet	730	.17"	10"	75			
5 Feet	960	.12"	12"	75			
6 Feet	1180	.17"	12"	70			

^{*} U.S. Patent No. 6,461,233

Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.

^{**} Equivalent resistance in feet of straight duct

pending



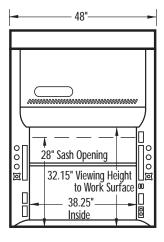
Ordering Information Protector® Premier® Laboratory Hoods with built-in blower

Nominal Width	Catalog Number	Built-In Blower	Electrical Requirements	Exhaust Collar (ID)	EP Incandescent Light Fixture*	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Shipping Weight lbs./kg
4 Feet	4880000 4880200 4880300 4871300** 4871400**	1/3 HP, Std. 1/3 HP, EP 1/3 HP, Std. 1/2 HP, Std. 1/2 HP, Std.	115 volts, 60 Hz 115 volts, 60 Hz 115 volts, 60 Hz 230 volts, 50 Hz 230 volts, 50 Hz	10.81" 10.81" 10.81" 10.81" 10.81"	_ 1 ea. _ _ _	2 ea. 25 watt 2 ea. 25 watt 2 ea. 25 watt 2 ea. 25 watt	None None 2 None 2	None None 1 None None	365/166 375/170 375/170 370/168 380/172
5 Feet	6080000 6080200 6080300 6071300** 6071400**	1/2 HP, Std. 1/2 HP, EP 1/2 HP, Std. 1/2 HP, Std. 1/2 HP, Std.	115 volts, 60 Hz 115 volts, 60 Hz 115 volts, 60 Hz 230 volts, 50 Hz 230 volts, 50 Hz	12.81" 12.81" 12.81" 12.81" 12.81"	1 ea. — — —	2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt	None None 2 None 2	None None 1 None None	450/204 460/209 460/209 455/206 455/211
6 Feet	7280000 7280200 7280300 7271300** 7271400**	1/2 HP, Std. 1/2 HP, EP 1/2 HP, Std. 1/2 HP, Std. 1/2 HP, Std.	115 volts, 60 Hz 115 volts, 60 Hz 115 volts, 60 Hz 230 volts, 50 Hz 230 volts, 50 Hz	12.81" 12.81" 12.81" 12.81" 12.81"	1 ea. — —	2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt 2 ea. 32 watt	None None 2 None 2	None None 1 None None	525/238 535/243 535/243 530/240 540/245

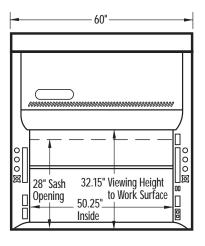
^{*}Bulb not included

EP = explosion - proof

4 Feet



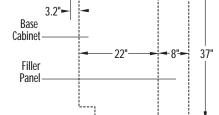
5 Feet



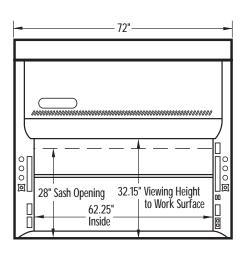
23.5 Work

Surface-

33.20"



6 Feet



See additional dimensional data on page 19.

Side View/All Models

(Shown with accessory work surface and base cabinet available for all hood widths. Height can vary.)

65.63" 59"

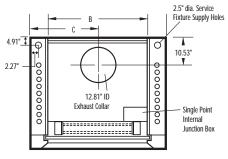
48"

^{**}International electrical configuration

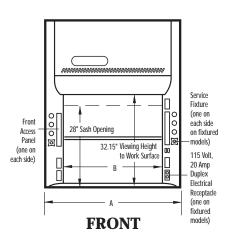


Dimensional Data

4', 5', 6' and 8' Protector® Premier® Laboratory Hoods for use with remote blower

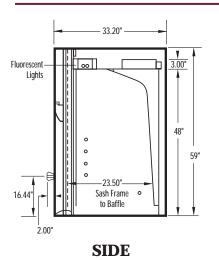


TOP



4', 5' and 6' Hoods

	A	В	C
4' Hood	48"	38.25"	24"
5' Hood	60"	50.25"	30"
6' Hood	72"	62.25"	36"



2.5" dia. Service Fixture Supply Holes

86.25"

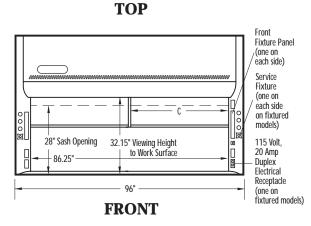
4.91" I

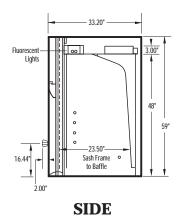
2.27"

333.20"

Single Point Internal Junction Box

8' Hoods



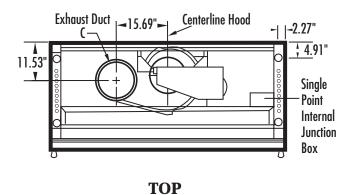


Contact Labconco at **800-821-5525** or **816-333-8811** or visit **www.labconco.com** for detailed AutoCAD drawings. AutoCAD* is a registered trademark of AutoDesk.

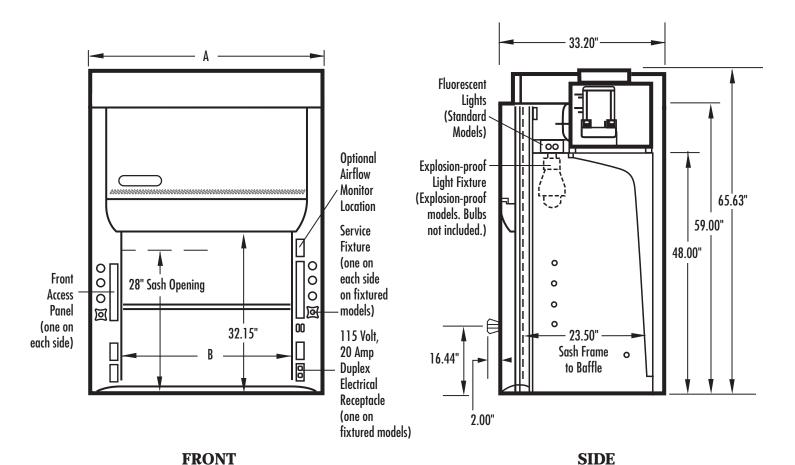


Dimensional Data

4', 5' and 6' Protector® Premier® Laboratory Hoods with built-in blower



	A	В	C
4' Hood	48"	38.25"	10.81" ID
5' Hood	60"	50.25"	12.81" ID
6' Hood	72"	62.25"	12.81" ID





Protector XStream Laboratory Hood 9840600 is shown with SpillStopper Work Surface 9849800, Protector Acid Storage Cabinet 9901100 and Protector Standard Storage Cabinet 9900100.

Requires Ductwork and Blower

Protector XStream Laboratory Hoods

Patented* High Performance and Low Flow Features & Benefits

With its energy savings potential and unsurpassed containment, regardless of sash position, the patented Protector XStream is truly a high performance hood. Features, such as an upper dilution air supply, containment-enhancing sash handle, rear downflow dual baffle system and air foil, work together to decrease turbulence and enhance airflow. When operated at OSHA-approved 60 fpm

face velocity, Protector XStream Laboratory Hoods provide an excellent economic payback when compared to traditional hoods running at 80 or 100 fpm.

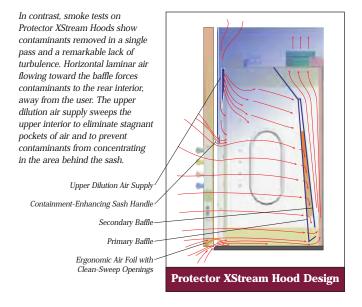
These panel-lined hoods are available in 4', 5', 6' and 8' widths. They are designed to be used with a remotely-located blower or building exhaust system.

Using the concepts of fluid dynamics, Labconco researchers engineered the Protector XStream Laboratory Hood with **horizontal laminar airflow to reduce the tendencies for turbulence.** The innovative and aerodynamic designs of the sash handle, air foil, upper dilution air supply and rear downflow baffle work in concert

Traditional Hood Design

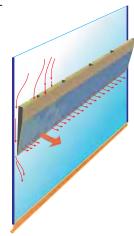
to produce horizontal airflow patterns that significantly reduce concentrations of chemical contaminants throughout the work area, particularly near the face of the hood, the operator's breathing zone and at the work surface. Depending on sash position, tendencies for air turbulence, vortexing and "the roll" frequently observed during traditional fume hood smoke tests are virtually eliminated.

Smoke tests on traditional hoods show the tendency for contaminants generated in the interior to roll forward producing high concentrations of contaminants behind the sash in close proximity to the user's breathing zone.



Upper Dilution Air Supply

The sash interior is constantly bathed with room air from the dilution supply above the work area to eliminate chemical fumes along the sash plane, near the critical breathing zone. Five to ten percent of the required air volume is introduced through the dilution air supply to ensure maximum containment and greatest worker protection. No additional blowers are required.



Rear Downflow Dual Baffle System

When the sash is open to the 18" working height or 28" loading height, the slots in the primary baffle **direct inflow air in non-turbulent streams** from the hood face into the baffle in a single pass. The secondary baffle, located between the primary baffle and



the back wall, counteracts the upward air streams that create roll in traditional hoods by forcing the air movement downward before exhausting. No moving mechanical components are used.

Smoke released inside the hood moves in a horizontal stream to the primary baffle slots.

Solution Containment-Enhancing Sash Handle

The revolutionary sash handle design includes a perforated air passage directly atop the handle to bleed air into the hood cham-

ber and direct chemical fume concentrations away from the user's breathing zone. The large radiused sash handle sweeps airflow into the hood with minimal turbulence. Its ergonomic design is comfortable to the touch and easy to grasp to raise and lower the sash.



At left: Arrows show how air enters under the sash handle and through slots directly atop the handle.

Exclusive Feature

* U.S. Patent No. 6,461,233

Protector XStream Laboratory Hoods

Additional Features & Benefits

Front and side panels may be easily removed for lamp replacement and access to electrical supply connections.

Fluorescent lighting illuminates the interior. The high efficiency, instant start, T8 fluorescent lights are located outside the hood interior for corrosion-resistance and easy replacement. Contact Labconco for ordering information on explosion-proof lighting.

Durable and attractive exterior is glacier white, dry powder epoxycoated steel.

Large 28" sash opening offers superior viewing. When fully open, the sash does not extend above the

Vertical-rising tempered safety glass sash is anti-racking for smooth operation.

Chemical-resistant, fiberglassreinforced composite panel liner surpasses all national codes for flame spread and has a bright white surface for excellent light reflectivity.

Service access panels allow accessibility to plumbing from the front and inside of the hood.

Color-coded service fixtures for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Two service fixtures are pre-plumbed on fixtured models. Each hood is factory prepared for up to eight service fixtures (four on each side).

By-pass airflow design ensures stable face velocities that meet or exceed established standards.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No.1010.1.

Performance tested to ASHRAE 110-1995.

CE mark. All 230 volt, 50 Hz models conform to the CE (European Community) requirements for electrical safety and electromagnetic compatability.



Sash stop located at 18" working height maximizes energy conservation by preventing the sash from being raised further unless manually released.

Ergonomic air foil allows air to sweep the work surface for maximum containment. Clean-Sweep* airflow openings pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant barrier of protection from contaminants.

Pre-wired electrical components. Fluorescent lights and switches are factory-wired to the hood's single point junction box. One electrical duplex receptacle is factory-wired on 115 volt, 60 Hz fixtured models. Each hood is factory-prepared for up to four electrical duplexes and an airflow monitor.





Protector XStream Laboratory Hoods



Protector XStream Laboratory Hood 9840600 is shown with SpillStopper Work Surface 9849800, Protector Acid Storage Cabinet 9901100 and Protector Standard Storage Cabinet 9900100. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models feature:

- By-pass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Upper Dilution Air Supply.*
- Glacier white, dry powder epoxy-coated steel exterior.
- Chemical-resistant, fiberglass-reinforced, composite panel liner and pre-set Rear Downflow Dual Baffle System* with flame spread less than 25 per ASTM E-84.
- 3/16" thick tempered safety glass vertical-rising sash with epoxy-coated aluminum sash handle with large radius and perforations.*

- Removable front and side panels and front and interior service access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, ADAcompliant light and blower switches for 115 volt, 60 Hz operation.
- Sash stop located at 18" sash opening position.
- Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on explosion-proof lighting and other sash configurations and for blower sizing assistance.

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)

Fixtured models feature:

- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

All models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.
- Work Surface. See pages 100-104.
- **Base Cabinet or Stand.** See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 119-120.
- Distillation Grid Kits. See page 120.
- Sash Stop Kits. See page 121.
- **Snuffer Fire Extinguishers.** See page 121.

* U.S. Patent No. 6,461,233







Ordering Information

Protector® XStream® Laboratory Hoods

ASHRAE 110-95 tests show less than 0.05 ppm leak rate when tested at 4.0 lpm; at OSHA-recognized 60, 80, and 100 fpm face velocity and sash positions of 18" and 28". To ensure performance at 60 fpm, Labconco engineers challenged the Protector XStream Hood under

adverse conditions such as 30-75 fpm cross drafts, interior obstructions and average face velocities as low as 40 fpm. Contact Labconco for a technical paper with complete ASHRAE test data or visit our airflow test facility for hands-on testing.

Total Exhaust CFM and Static Pressure @ 18" Sash Opening (60% open)

Nominal Width	100 fpm	s.p.	80 fpm	s.p.	60 fpm	s.p.	CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
4 feet	470	0.11"	380	0.07"	280	0.04"	190	\$1330
5 feet	610	0.13"	490	0.08"	370	0.05"	240	\$1680
6 feet	750	0.15"	600	0.10"	450	0.06"	300	\$2100
8 feet	1060	0.12"	850	0.08"	640	0.04"	420	\$2940

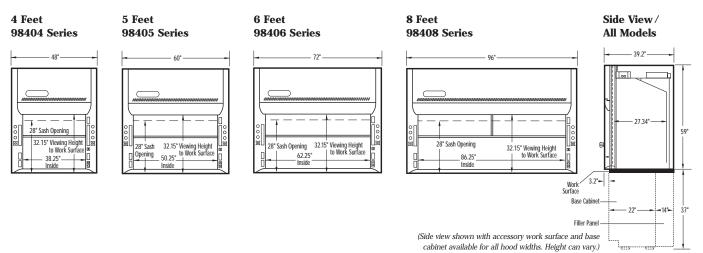
Total Exhaust CFM and Static Pressure @ 28" Sash Opening (100% open)

Nominal Width	100 fpm	s.p.	80 fpm	s.p.	60 fpm	s.p.	CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
4 feet	730	0.25"	590	0.13"	440	0.08"	290	\$2030
5 feet	960	0.30"	770	0.19"	580	0.11"	380	\$2660
6 feet	1180	0.36"	940	0.23"	710	0.13"	470	\$3290
8 feet	1660	0.28"	1330	0.18"	1000	0.10"	660	\$4620

^{*}Based on average annual dollars per CFM usage of \$7.00, fume hood operating 24 hours a day, 5 days per week (6240 hours per year). Average annual dollars per CFM usage can range from \$5.00 - \$12.00 depending on geographic location.

Catalog Number	Nominal Width	Electrical Requirements	Exterior Depth	Interior Working Depth	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Exhaust Collar(s)	Shipping Wt. lbs./kg
9840400	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	440/200
9840401	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	2	1	12.81" ID	450/204
9840402**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	440/200
9840403**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	2	None	12.81" ID	450/204
9840500	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	525/238
9840501	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	525/243
9840502**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	525/238
9840503**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	535/243
9840600	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	600/272
9840601	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	610/277
9840602**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	600/272
9840603**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	610/277
9840800	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	770/349
9840801	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	2	1	(2) 12.81" ID	780/354
9840802**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	770/349
9840803**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	2	None	(2) 12.81" ID	780/354

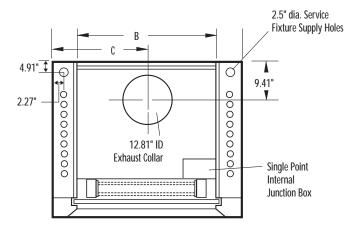
 $^{**}International\ electrical\ configuration$





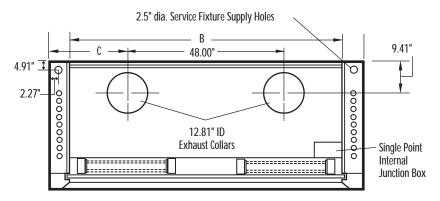
Dimensional Data

Protector® XStream® Laboratory Hoods

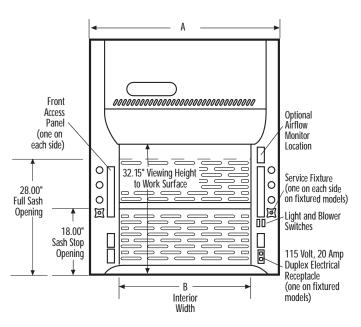


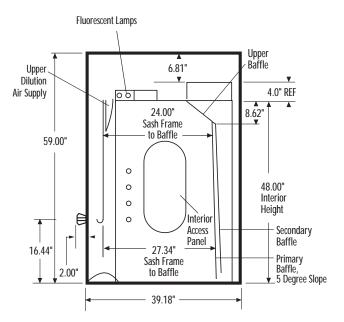
	A	В	C
4' Hood	48.00"	38.25"	24.00"
5' Hood	60.00"	50.25"	30.00"
6' Hood	72.00"	62.25"	36.00"
8' Hood	96.00"	86.25"	24.00"

TOP 4', 5', 6'



TOP 8'





FRONT SIDE







Features & Benefits

Protector XL Benchtop Laboratory Hoods have chemical-resistant panel liners that offer superior design flexibility. They are supplied in widths from 4 to 16 feet and three depths to meet a variety of installation and application requirements.

Front and side panels may be easily removed for lamp replacement and access to electrical supply connections.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL Standard 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No.

Large sash openings offer superior viewing. Benchtop hoods feature 28" opening heights and 32.15" viewing heights.

Vertical-rising tempered safety glass sash is anti-racking for smooth operation. When fully open, the sash does not extend above the hood.

Interior working dimensions are offered in standard and larger depths. Working depths include 24", 30", and 36".

Fluorescent lighting illuminates the interior. The high-efficiency, instant start, T8 fluorescent lights are located outside the hood interior for corrosion-resistance and easy replacement. Contact Labconco for ordering information on explosion-proof lighting.

Service access panels allow easy accessibility to plumbing from the front and inside of the hood.

Chemical-resistant, fiberglassreinforced composite panel liner surpasses all national codes for flame spread and has a bright white surface for excellent light reflectivity.

Pre-wired electrical components.

Fluorescent lights and switches are factory-wired to the hood's single point junction box. One electrical duplex receptacle is factory-wired on intured models. Each hood is factory-prepared for up to four electrical duplexes and an airflow monitor.

Durable and attractive exterior is glacier white, dry powder epoxycoated steel.

By-pass airflow design ensures relatively stable face velocities. Contact Labconco for ordering information on by-pass blocks.

Performance tested to ASHRAE 110-1995.



Color-coded service fixtures for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Two service fixtures are pre-plumbed on fixtured models. Each hood is factory prepared for up to eight service fixtures (four on each side).

Bergonomic air foil allows air to sweep the work surface for maximum containment. Benchtop models feature patented* Clean-Sweep™ airflow openings that pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant barrier of protection from contaminants

Pre-set baffle provides a uniform face velocity pattern across the sash opening of the hood. Contact Labconco for ordering information on adjustable baffles.



Exclusive Feature

*U.S. Patent No. 6,461,233



Protector® XL™ Benchtop Laboratory Hoods



Protector XL Benchtop Laboratory Hood 9700103 is shown with SpillStopper Work Surface 9848800, Protector Acid Storage Cabinet 9901000 and Protector Solvent Storage Cabinet 9902000. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models feature:

- By-pass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Glacier white, dry powder epoxy-coated steel exterior.
- Chemical-resistant molded composite panel liner and pre-set baffle(s) with flame spread less than 25 per ASTM E-84.
- 3/16" thick tempered safety glass vertical-rising sash(es) with epoxy-coated aluminum sash handle(s). Sash does not extend above the hood when fully open.
- Removable front and side panels and front and interior service access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, light and blower switches for 115 volt, 60 Hz operation.
- Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805

Fixtured models feature:

- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

All models require (not included):

- **Remote Blower.** See back pocket.
- Ductwork. See back pocket.
- Work Surface. See page 100-104.
- **Base Cabinet or Stand.** See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 1 19-120.
- **Distillation Grid Kits.** See page 120.
- Auxiliary-Air Kits. See page 120.
- Sash Stop Kits. See page 121.
- **Snuffer Fire Extinguishers.** See page 121.

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on adjustable baffles, explosion-proof lighting, tissue screens and other sash configurations and for blower sizing assistance.

7	With Sash Full Open (28")												
Nominal Width													
4 Feet	730	.16"	590	.11"									
5 Feet	960	.24"	770	.15"									
6 Feet	1180	.28"	940	.18"									
8 Feet	1660	.19"	1330	.12"									
10 Feet	2130	.28"	1700	.18"									
12 Feet	2600	.39"	2080	.25"									
16 Feet	3550	.23"	2840	.15"									

,	With Sash 60% Open (18")**												
Nominal Width	Total Exh 100 fpm	aust Cl S.P.	FM and St 80 fpm	atic Pro	essure 60 fpm	S.P.							
4 Feet	470	.07"	380	.05"	280	.03"							
5 Feet	610	.11"	490	.08"	370	.04"							
6 Feet	750	.14"	600	.09"	450	.05"							
8 Feet	1060	.08"	850	.06"	640	.03"							
10 Feet	1370	.12"	1100	.08"	820	.05"							
12 Feet	1670	.16"	1340	.11"	1000	.06"							
16 Feet	2290	.10"	1830	.07"	1380	.04"							

Exclusive Feature



Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.

^{*}U.S. Patent No. 6,461,233

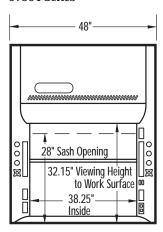
^{**}Sash stop required



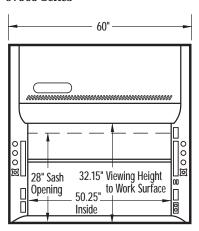
Ordering Information 4′, 5′ and 6′ Protector® XL™ Benchtop Laboratory Hoods

Nominal Width	Catalog Number	Exterior Depth (A)	Interior Depth (B)	12.81" ID Exhaust Collar	Sash	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Shipping Weight lbs./kg
4 Feet	9750400 9750401 9750402 9750403 9750404 9750405	39.20" 39.20" 45.20" 45.20" 33.20" 33.20"	30" 30" 36" 36" 24" 24"	1 1 1 1 1	1 1 1 1 1	2 ea. 25 watt 2 ea. 25 watt	None 2 None 2 None 2	None 1 None 1 None 1	415/188 425/193 460/209 470/213 375/170 380/172
5 Feet	9750500 9750501 9750502 9750503 9750504 9750505	39.20" 39.20" 45.20" 45.20" 33.20"	30" 30" 36" 36" 24" 24"	1 1 1 1 1	1 1 1 1 1	2 ea. 32 watt 2 ea. 32 watt	None 2 None 2 None 2	None 1 None 1 None 1	490/222 500/227 535/243 545/247 450/204 460/209
6 Feet	9750600 9750601 9750602 9750603 9750604 9750605	39.20" 39.20" 45.20" 45.20" 33.20"	30" 30" 36" 36" 24" 24"	1 1 1 1 1	1 1 1 1 1	2 ea. 32 watt 2 ea. 32 watt	None 2 None 2 None 2	None 1 None 1 None 1	565/256 575/261 610/277 620/281 525/238 535/243

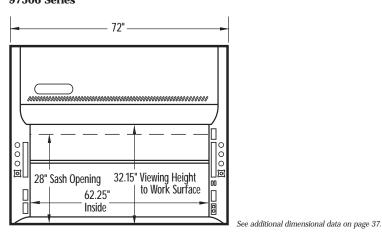
4 Feet **97504 Series**

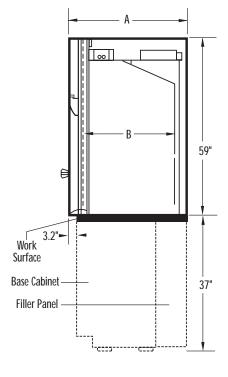


5 Feet **97505 Series**



6 Feet **97506 Series**





Side View/All Models (Shown with accessory work surface and base cabinet available for all

hood widths. Height can vary.)

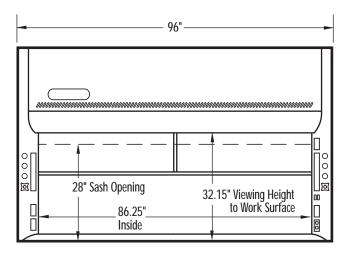
29



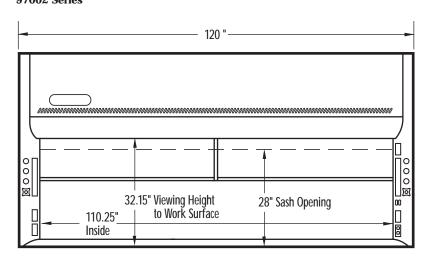
Ordering Information 8' and 10' Protector*XL™ Benchtop Laboratory Hoods

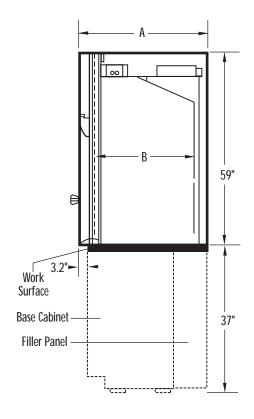
Nominal Width	Catalog Number	Exterior Depth (A)	Interior Depth (B)	12.81" ID Exhaust Collars	Sashes	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Shipping Weight lbs./kg
8 Feet	9700100 9700101 9700102 9700103 9700104 9700105	39.20" 39.20" 45.20" 45.20" 33.20" 33.20"	30" 30" 36" 36" 24" 24"	2 2 2 2 2 2 2	2 2 2 2 2 2	4 ea. 25 watt 4 ea. 25 watt	None 2 None 2 None 2	None 1 None 1 None 1	715/324 725/329 760/345 770/349 675/306 685/311
10 Feet	9700200 9700201 9700202 9700203 9700204 9700205	39.20" 39.20" 45.20" 45.20" 33.20"	30" 30" 36" 36" 24" 24"	2 2 2 2 2 2	2 2 2 2 2 2	4 ea. 32 watt 4 ea. 32 watt	None 2 None 2 None 2	None 1 None 1 None 1	895/403 905/411 945/529 955/433 855/388 865/392

8 Feet 97001 Series



10 Feet **97002 Series**





Side View/All Models

(Shown with accessory work surface and base cabinet available for all hood widths. Height can vary.)

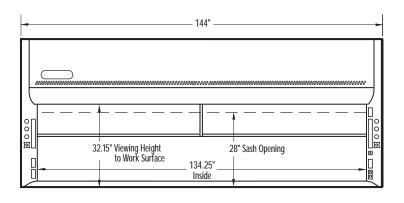
See additional dimensional data on page 38.

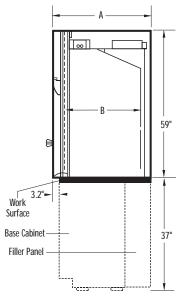


Ordering Information 12' and 16' Protector * XL™ Benchtop Laboratory Hoods

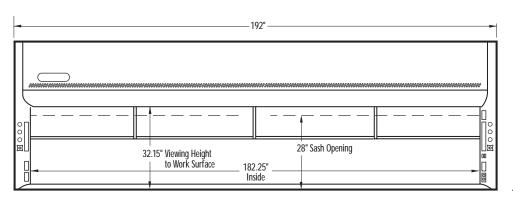
Nominal	Catalog	Exterior	Interior	12.81" ID	Sashes	Fluorescent	Service	Electrical	Shipping
Width	Number	Depth (A)	Depth (B)	Exhaust Collars		Lamps	Fixtures	Duplex	Weight lbs./kg
12 Feet	9700300	39.20"	30"	2	2	4 ea. 32 watt	None	None	1200/544
	9700301	39.20"	30"	2	2	4 ea. 32 watt	2	1	1210/549
	9700302	45.20"	36"	2	2	4 ea. 32 watt	None	None	1260/572
	9700303	45.20"	36"	2	2	4 ea. 32 watt	2	1	1270/576
	9700304	33.20"	24"	2	2	4 ea. 32 watt	None	None	1140/497
	9700305	33.20"	24"	2	2	4 ea. 32 watt	2	1	1150/522
16 Feet	9700400 9700401 9700402 9700403 9700404 9700405	39.20" 39.20" 45.20" 45.20" 33.20" 33.20"	30" 30" 36" 36" 24" 24"	4 4 4 4 4	4 4 4 4 4	8 ea. 25 watt 8 ea. 25 watt	None 2 None 2 None 2	None 1 None 1 None 1	1600/726 1610/730 1680/762 1690/767 1520/689 1530/694

12 Feet 97003 Series





16 Feet 97004 Series



Side View/All Models

(Shown with accessory work surface and base cabinet available for all hood widths. Height can vary.)

See additional dimensional data on page 38.





Protector®XL™ Floor-Mounted Laboratory Hoods

Features & Benefits

Protector XL Floor-Mounted Laboratory Hoods accommodate laboratory procedures that require cumbersome equipment or maximum work area. Applications requiring distillation racks, extraction apparatus or large drums and carboys benefit from the

increased height these hoods provide. Protector XL Floor-Mounted Laboratory Hoods are supplied in three depths and several widths up to 16 feet. Depending on the model, these hoods have vertical-rising or horizontal-sliding sashes.



Protector® XL™ Floor-Mounted Laboratory Hoods



Protector XL Floor-Mounted Laboratory Hood 9700805. Blower and ductwork must be ordered separately.

All models feature:

- · By-pass airflow design.
- Glacier white, dry powder epoxy-coated steel exterior.
- Chemical-resistant, fiberglass-reinforced composite panel liner and adjustable upper and lower baffles with flame spread less than 25 per ASTM E-84.
- Removable front and side panels and exterior and interior service access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, light and blower switches for 115 volt, 60 Hz operation.
- Shipped in multiple sections, top and bottom.
- Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

4', 5', 6' and 8' models feature:

Two 3/16" thick tempered safety glass vertical-rising sashes framed with PVC (4', 5' and 6' models) or epoxy-coated aluminum (8' models). Sashes do not extend above the hood when fully open.

8', 10', 12' and 16' models feature:

 Four 3/16" thick tempered safety glass horizontal-sliding sashes with epoxycoated aluminum frames and sash tracks.

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805

Fixtured models feature:

 Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided.
 Inlet tubing is not provided.

Protector XL Floor-Mounted Laboratory Hood 9860601. Blower and ductwork must be

 One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

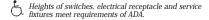
All models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 119-120.
- **Snuffer Fire Extinguishers.** See page 121.

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on explosion-proof lighting, solid epoxy floors, tissue screens and distillation grids; and for blower sizing assistance.



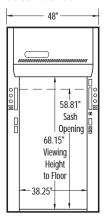


Ordering Information
4′, 5′, 6′ and 8′ Protector®XL™ Floor-Mounted Laboratory Hoods with vertical-rising sashes

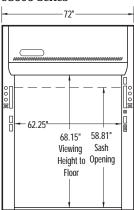
Nominal	Catalog	Exterior	Interior	12.81" ID	Fluorescent	Service	Electrical	Shipping
Width	Number	Depth (A)	Depth (B)	Exhaust Collar(s)	Lamps	Fixtures	Duplex	Weight lbs./kg
4 Feet	9860401	39.20"	30"	1	2 ea. 25 watt	2	1	700/318
	9860403	45.20"	36"	1	2 ea. 25 watt	2	1	715/324
	9860405	57.20"	48"	1	2 ea. 25 watt	2	1	745/338
5 Feet	9860501	39.20"	30"	1	2 ea. 32 watt	2	1	815/370
	9860503	45.20"	36"	1	2 ea. 32 watt	2	1	830/376
	9860505	57.20"	48"	1	2 ea. 32 watt	2	1	860/390
6 Feet	9860601	39.20"	30"	1	2 ea. 32 watt	2	1	940/426
	9860603	45.20"	36"	1	2 ea. 32 watt	2	1	955/433
	9860605	57.20"	48"	1	2 ea. 32 watt	2	1	985/447
8 Feet	9700807	39.20"	30"	2	4 ea. 25 watt	2	1	1180/535
	9700809	45.20"	36"	2	4 ea. 25 watt	2	1	1195/542
	9700811	57.20"	48"	2	4 ea. 25 watt	2	1	1225/556

Nominal Width	Total Exhaust C 100 fpm	FM and Static S.P.	Pressure with 80 fpm	sashes 50% open S.P.
4 Feet	680	.16"	550	.10"
5 Feet	900	.24"	720	.16"
6 Feet	1120	.28"	900	.18"
8 Feet	1560	.19"	1250	.12"

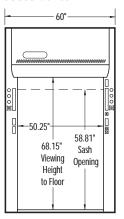
4 Feet **98604 Series**



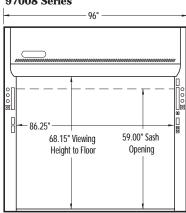
6 Feet **98606 Series**



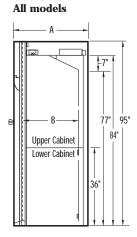
5 Feet **98605 Series**



8 Feet 97008 Series



Side View



See additional dimensional data on page 39.

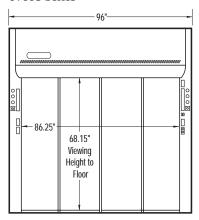


Ordering Information
8′, 10′, 12′ and 16′ Protector®XL™ Floor-Mounted Laboratory Hoods with horizontal-sliding sashes

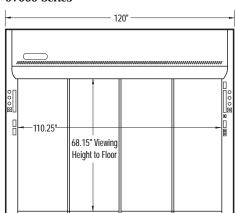
Nominal	Catalog	Exterior	Interior	12.81" ID	Fluorescent	Service	Electrical	Shipping
Width	Number	Depth (A)	Depth (B)	Exhaust Collars	Lamps	Fixtures	Duplex	Weight lbs./kg
8 Feet	9700801	39.20"	30"	2	4 ea. 25 watt	2	1	1130/513
	9700803	45.20"	36"	2	4 ea. 25 watt	2	1	1145/519
	9700805	57.20"	48"	2	4 ea. 25 watt	2	1	1175/533
10 Feet	9700901	39.20"	30"	2	4 ea. 32 watt	2	1	1375/624
	9700903	45.20"	36"	2	4 ea. 32 watt	2	1	1390/630
	9700905	57.20"	48"	2	4 ea. 32 watt	2	1	1420/644
12 Feet	9701001	39.20"	30"	2	4 ea. 32 watt	2	1	1645/733
	9701003	45.20"	36"	2	4 ea. 32 watt	2	1	1660/753
	9701005	57.20"	48"	2	4 ea. 32 watt	2	1	1690/767
16 Feet	9716001	39.20"	30"	4	8 ea. 25 watt	2	1	2085/946
	9716003	45.20"	36"	4	8 ea. 25 watt	2	1	2100/953
	9716005	57.20"	48"	4	8 ea. 25 watt	2	1	2130/966

Nominal Width	Sashes Open	Total Ex 100 fpm	chaust CFM S.P.	and Static Pre 80 fpm	ssure S.P.
8 Feet	2	2200	.30"	1760	.19"
10 Feet	1	1360	.12"	1090	.08"
12 Feet	1	1660	.15"	1330	.10"
16 Feet	1	2260	.10"	_	_

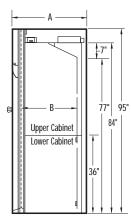
8 Feet **97008 Series**



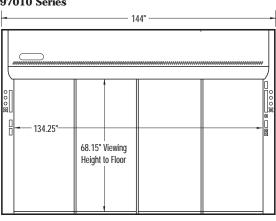
10 Feet **97009 Series**



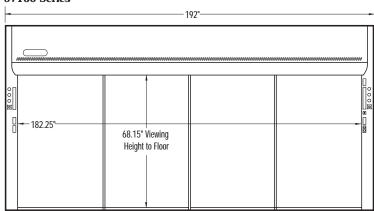
Side View All models



12 Feet **97010 Series**



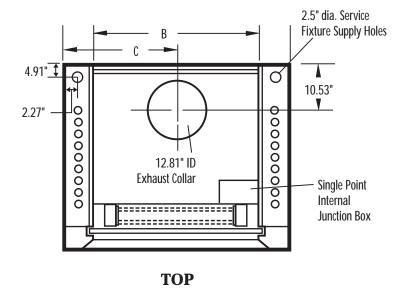
16 Feet **97160 Series**



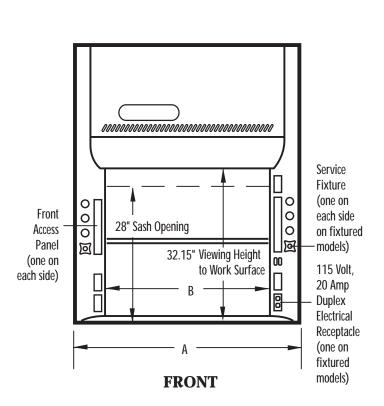
See additional dimensional data on page 40.

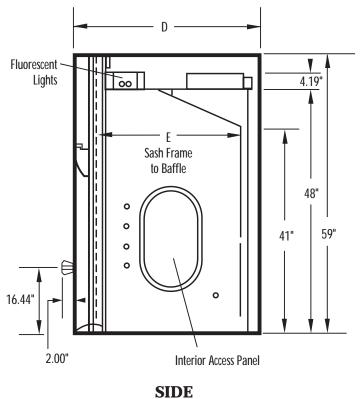


4', 5' and 6' Protector®XL™ Benchtop Laboratory Hoods



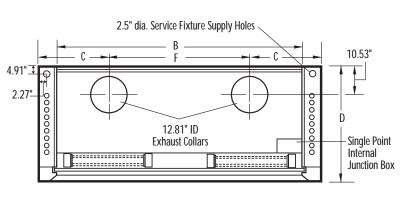
	A	В	C	D	E
4' Hood					
9750400 9750401	48"	38.25"	24"	39.20"	30"
9750401 9750402 9750403	48"	38.25"	24"	45.20"	36"
9750403 9750404 9750405	48"	38.25"	24"	33.20"	24"
5' Hood					
9750500 9750501	60"	50.25"	30"	39.20"	30"
9750501 9750502 9750503	60"	50.25"	30"	45.20"	36"
9750503 9750504 9750505	60"	50.25"	30"	33.20"	24"
6' Hood					
9750600 9750601	72"	62.25"	36"	39.20"	30"
9750601 9750602 9750603	72"	62.25"	36"	45.20"	36"
9750603 9750604 9750605	72"	62.25"	36"	33.20"	24"





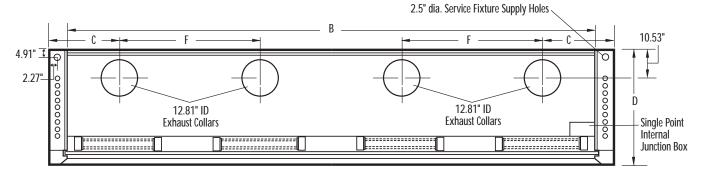


8', 10', 12' and 16' Protector® XL™ Benchtop Laboratory Hoods

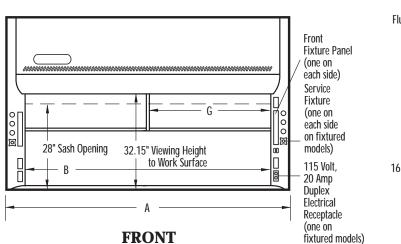


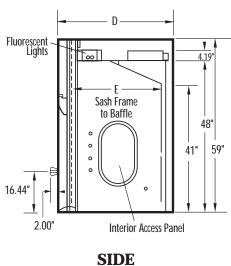
TOP (8', 10', 12')

	A	В	C	D	E	F	G
8' Hood 9700100, 9700101 9700102, 9700103 9700104, 9700105	96" 96" 96"	86.25" 86.25" 86.25"	24" 24" 24"	39.20" 45.20" 33.20"	30" 36" 24"	48" 48" 48"	42.84" 42.84" 42.84"
10' Hood 9700200, 9700201 9700202, 9700203 9700204, 9700205	120" 120" 120"	110.25" 110.25" 110.25"	35" 35" 35"	39.20" 45.20" 33.20"	30" 36" 24"	50" 50" 50"	54.84" 54.84" 54.84"
12' Hood 9700300, 9700301 9700302, 9700303 9700304, 9700305	144" 144" 144"	134.25" 134.25" 134.25"	41" 41" 41"	39.20" 45.20" 33.20"	30" 36" 24"	62" 62" 62"	66.84" 66.84" 66.84"
16' Hood 9700400, 9700401	192"	182.25"	24"	39.20"	30"	48" Four Collars	44.84" End 46" Center (Four Sashes)
9700402, 9700403	192"	182.25"	24"	45.20"	36"	48" Four Collars	44.84" End 46" Center (Four Sashes)
9700404, 9700405	192"	182.25"	24"	33.20"	24"	48" Four Collars	44.84" End 46" Center (Four Sashes)



TOP (16')

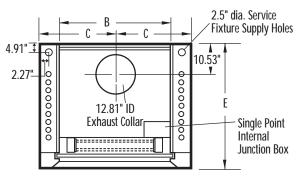




Contact Labconco at 800-821-5525 or 816-333-8811 or visit www.labconco.com for detailed AutoCAD drawings.

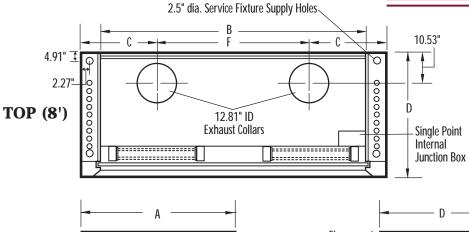


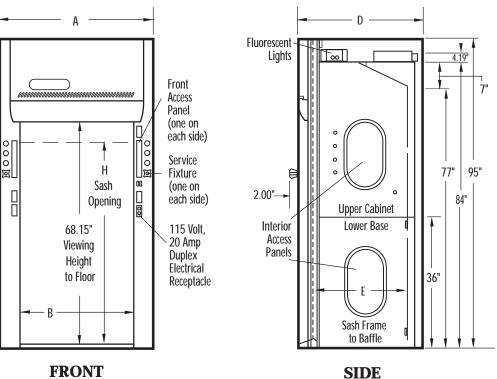
4', 5', 6' and 8' Protector®XL™ Floor-Mounted Laboratory Hoods with vertical-rising sashes



TOP 4', 5', 6'

	A	В	C	D	E	F	H
4' Hood							
9860401	48"	38.25"	24"	39.20"	30"	_	58.81"
9860403	48"	38.25"	24"	45.20"	36"	_	58.81"
9860405	48"	38.25"	24"	57.20"	48"	_	58.81"
5' Hood 9860501 9860503 9860505	60" 60"	50.25" 50.25" 50.25"	30" 30" 30"	39.20" 45.20" 57.20"	30" 36" 48"	_ _ _	58.81" 58.81" 58.81"
6' Hood 9860601 9860603 9860605	72" 72" 72"	62.25" 62.25" 62.25"	36" 36" 36"	39.20" 45.20" 57.20"	30" 36" 48"	_ _ _	58.81" 58.81" 58.81"
8' Hood 9700807 9700809 9700811	96" 96" 96"	86.25" 86.25" 86.25"	24" 24" 24"	39.20" 45.20" 57.20"	30" 36" 48"	48" 48" 48"	59.00" 59.00" 59.00"

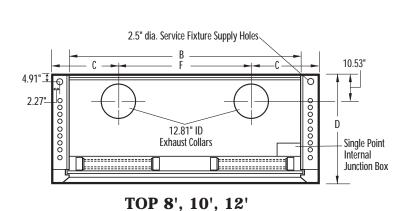




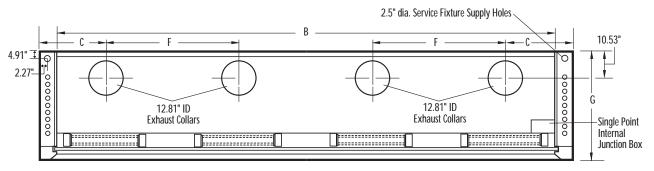
Contact Labconco at 800-821-5525 or 816-333-8811 or visit www.labconco.com for detailed AutoCAD drawings.



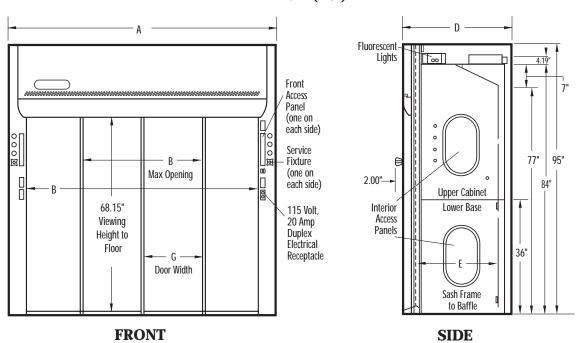
8', 10', 12' and 16' Protector® XL™ Floor-Mounted Laboratory Hoods with horizontal-sliding sashes



C D G H E 8' Hood 9700801 86.25" 24" 39.20" 30" 48" 22.5" 43.25" 9700803 45.20" 36" 22.5" 43.25" 96" 86.25" 24" 48" 9700805 96" 86.25" 24" 57.20" 48" 48" 22.5" 43.25" 10' Hood 9700901 120" 110.25" 35" 39.20" 30" 50" 28.5" 55.25" 9700903 120" 110.25" 35" 45.20" 36" 50" 28.5" 55.25" 9700905 120" 110.25" 35" 57.20" 48" 50" 28.5" 55.25" 12' Hood 9701001 39.20" 34.5" 67.25" 144" 134.25" 41" 30' 62" 9701003 144" 134.25" 45.20" 62" 34.5" 67.25" 41" 36" 48" 34.5" 9701005 144" 134.25" 41" 57.20" 62" 67.25" 16' Hood 48" 9716001 192" 182.25" 24" 39.20" 30" 46.5" 91.25" (Four Collars) 9716003 182.25" 48" 91.25" 45.20" (Four Collars) 9716005 192" 182.25" 24" 57.20" 48" 91.25" (Four Collars)



TOP (16')



Contact Labconco at 800-821-5525 or 816-333-8811 or visit www.labconco.com for detailed AutoCAD drawings.



Protector® XLE® Laboratory Hoods



Protector XLE Laboratory Hood automatically closes to an 18" high sash opening for added safety and to help conserve energy.



The ergonomic low-profile air foil provides a comfortable surface for arms resting on it and improves operator access to the hood's interior. Patented* Clean-Sweep airflow openings significantly improve airflow.



The sash latch holds the sash in the 28" high position for loading. When the latch is released, the sash automatically returns to the 18" operating height position.



Openings on both ends of the air foil allow electrical cord pass through without disrupting airflow. Cords do not block airflow and are out of the way of the operator.



The integral spill trough prevents spills on the work surface from leaking out the front of the hood. The air foil pivots up to provide access to the spill trough for cleaning.

Protector * XLE * Laboratory Hoods



Protector XLE Laboratory Hood 9970600 is shown with SpillStopper Work Surface 9969600, Protector Standard Storage Cabinets 9900700 and 9900400 and Protector Solvent Storage Cabinet 9903100. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models feature:

- · By-pass airflow design.
- Ergonomic, low-profile air foil with aerodynamic Clean-Sweep* airflow openings and ADA-compliant spill trough. The air foil pivots up for cleaning. The spill trough requires no cabinet overhang.
 - Electrical cord pass through on both ends of air foil to keep cords out of the way.
 - · Glacier white, dry powder epoxy-coated steel exterior.
 - Chemical-resistant molded composite panel liner and pre-set baffle(s) with flame spread less than 25 per ASTM E-84.
 - 3/16" thick tempered safety glass verticalrising sash with self-closing mechanism, counterbalance system and epoxy-coated aluminum sash handle. When raised, the sash automatically closes to an 18" high sash opening.
 - Sash latch at 28" sash opening to hold sash in raised position during loading.
 - 35" sash viewing height.
 - Removable front and side panels and front and interior service access panels for access to plumbing and electrical wiring

- Pre-wired T8 fluorescent lighting, light and blower switches for 115 volt, 60 Hz operation.
- Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805

Fixtured models feature:

- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

All models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.
- Work Surface. See page 100-104.
- Base Cabinet or Stand. See pages 105-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow **Monitor Kits.** See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See page 119.
- Distillation Grid Kits. See page 120.
- Snuffer Fire Extinguishers. See page 121.

Contact Labconco at 800-821-5525 or **816-333-8811** for ordering information on other hood depths, adjustable baffles, explosion-proof lighting, tissue screens and other sash configurations and for blower sizing assistance.

Sel	f-Closin	ıg Sa	sh 60%	6 Ор	en (18")
Nominal	Total Exh	aust Cl	FM and St	atic Pr	essure	
Width	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.
4 Feet	520	.09"	420	.06"	310	.03"
5 Feet	690	.12"	550	.08"	410	.04"
6 Feet	850	.15"	680	.10"	510	.06"
7 Feet	1020	.09"	820	.06"	610	.03"
8 Feet	1180	.10"	940	.06"	710	.04"
1	Latched	Sasl	ı Full C	pen	(28")	
Nominal	Total Exh	aust Cl	FM and St	atic Pr		
Width	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.
4 Feet	790	.19"	630	.12"	470	.07"
5 Feet	1040	28"	830	.18"	620	.10"
3 FEEL	1040	.20	030	.10	620	.10
6 Feet	1280	.33"	1020	.21"	770	.12"
		.20				



Exclusive Feature

Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.

*U.S. Patent No. 6,461,233

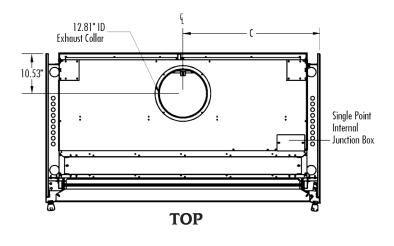


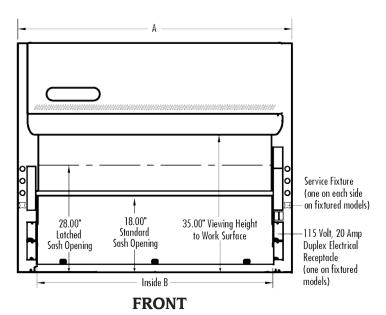
Ordering Information & Dimensional Data

Protector®*XLE*™ *Laboratory Hoods*

Nominal	Catalog	Exterior	Interior	12.81" ID	Sash*	Fluorescent	Service	Electrical	Shipping
Width	Number	Depth*	Depth*	Exhaust Collar		Lamps	Fixtures	Duplex	Weight lbs./kg
4 Feet	9970400	39.20"	30"	1	1	2 ea. 25 watt	None	None	400/181
	9970401	39.20"	30"	1	1	2 ea. 25 watt	2	1	430/195
5 Feet	9970500	39.20"	30"	1	1	2 ea. 32 watt	None	None	480/218
	9970501	39.20"	30"	1	1	2 ea. 32 watt	2	1	490/222
6 Feet	9970600	39.20"	30"	1	1	2 ea. 32 watt	None	None	545/247
	9970601	39.20"	30"	1	1	2 ea. 32 watt	2	1	555/252
7 Feet	9970700	39.20"	30"	2	1	2 ea. 32 watt	None	None	620/281
	9970701	39.20"	30"	2	1	2 ea. 32 watt	2	1	630/286
8 Feet	9970800	39.20"	30"	2	1	4 ea. 25 watt	None	None	695/315
	9970801	39.20"	30"	2	1	4 ea. 25 watt	2	1	705/320

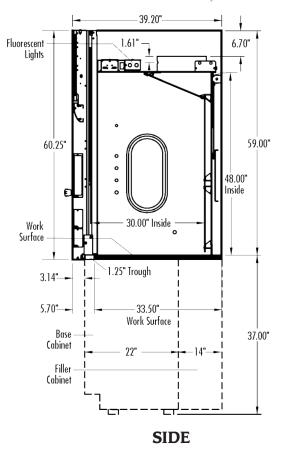
^{*}Contact Labconco for Protector XLE Laboratory Hoods in other depths and with top-hung combination sashes.





	A	В	С
4' Hood	48.00"	38.25"	24.00"
5' Hood	60.00"	50.25"	30.00"
6' Hood	72.00"	62.25"	36.00"
7' Hood	84.00"	74.25"	21.00"*
8' Hood	96.00"	86.25"	24.00"*

* 7' Hoods have two exhaust collars 21.00" both sides from center. 8' Hoods have two exhaust collars 24.00" both sides from center.



SIDE VIEW (Shown with accessory work surface and base cabinet available for all hood widths. Height can vary.)



Protector ClassMate Laboratory Hood 6970401 is shown with SpillStopper Work Surface 6986400 and Protector Acid Storage Cabinet 9901000.





Features & Benefits

The patented* Protector ClassMate Laboratory Hoods are designed to meet the needs of instructional laboratories. Clear back and sides and taller front viewing window provide enhanced visibility for conducting chemistry demonstrations or observing

students using the hood. The clear back does not obstruct visibility when hoods are placed back-to-back in an island configuration. Protector ClassMate Hoods are offered in 4', 5' and 6' widths. Models with combination sashes are also available.

Durable and attractive frame is glacier white, dry powder epoxy-coated steel and aluminum.

Energy-efficient, rapid-start fluorescent lighting is located behind a laminated safety glass shield and outside the hood interior for corrosionresistance and easy replacement. Contact Labconco for ordering information on explosion-proof lighting.

Ergonomic 5° angled sash and panel allow closer, more comfortable viewing, without

Clear, tempered safety glass sash, viewing panel, sides, back and baffle provide maximum visibility. All glass components except verticalrising sashes are removable for cleaning. Laminated safety glass and solid composite sides and back are also available. Contact Labconco for ordering information.

Color-coded service fixtures

for gas, air, water, vacuum and other services have remote controls for use regardless of sash position. Four service fixtures are pre-plumbed on fixtured models. Each hood is factory prepared for up to 8 service fixtures (four controlled from the front of the hood and four from the base cabinet)



Baffle directs airflow to the rear of the interior to provide efficient airflow. For cleaning, the entire baffle may be removed or upper baffle tilted up and the lower baffle tilted down

By-pass airflow design ensures relatively stable face velocities.

Performance tested to ASHRAE 110-1995.

Front panel may be easily removed for lamp replacement and access to electrical

supply connections.

Low profile trough below air foil contains spills. The trough is the same depth as the work surface (1.25") and requires no cabinet overhang. The air foil pivots up for cleaning

Interior cover plates allow easy accessibility to plumbing from the front and inside of the hood

ETL-listed. Hoods carry the ETL mark signifying that they are certified to 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No. 1010.1.

Ergonomic air foil allows air to sweep the work surface for maximum containment. Clean-Sweep** airflow openings pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant barrier of protection from contaminants.

Streamlined corner posts provide maximum visibility and working area.

Static viewing panel above the sash frame creates a 39" viewing height, permitting the hood to be mounted in a low or high position to accommodate persons of different heights and still maintain the same visual accessibility.

Anti-racking vertical-rising sash for smooth operation may be raised from closed to 29" fully open height from the work surface for loading and cleaning. A sash stop limits the working height to 18" to help conserve energy. Exhaust volume and blower sizing are based on the 18" height. When raised, the sash does not extend above the fume hood.

Combination horizontalsliding/vertical-rising sashes

are provided on some models. Two sets of integral sash stops prevent raising the

vertical sash above the halfopen (15") and fully-closed positions unless manually defeated by the operator.

Pre-wired electrical components. Fluorescent lights and switches are factory-wired to the hood's junction boxes. Two electrical duplex receptacles are factory-wired on fixtured models

Tissue screen located directly below the exhaust outlet prevents debris from potentially damaging the remote blower.

Large interior working depth of 26" and height of 48" provide ample space to conduct experiments.





* U.S. Design Patent No. 472,645

** U.S. Patent No. 6,461,233

Protector ClassMate Laboratory Hoods



Above: Protector ClassMate Laboratory Hood 6970401 is shown with SpillStopper Work Surface 6986400 and Protector Acid Storage Cabinet 9901000. Blower, ductwork, work surface and base cabinet must be ordered separately. Inset: Protector ClassMate Combination Sash Laboratory Hood 6971501 is shown with SpillStopper Work Surface 6986500, Protector Solvent Storage Cabinet 9902200 and Protector Acid Storage Cabinet 9901200. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models feature:

- Patented* design.
- Glacier white, dry powder epoxy-coated steel and aluminum frame.
- Ergonomic air foil with aerodynamic Clean-Sweep** airflow openings.
- Low profile, ADA-compliant spill trough that requires no cabinet overhang.
- Removable, clear, 1/4" thick, tempered safety glass sides, back and baffle.
- Pre-wired fluorescent lighting, light switch and blower switch for 115 volt, 60 Hz, 15 amp operation.
- Tissue screen located directly below exhaust outlet.
- Removable front panel and interior cover plates for access to plumbing and electrical wiring.
- Epoxy-coated steel 8.63" ID exhaust connection.
- Exclusive Feature

Models series 69704, 69705 and 69706 also feature:

Blower

- By-pass airflow design.
- 5° angled, tempered safety glass, 1/4" thick viewing window and 3/16" thick sash with anti-racking shaft and epoxycoated aluminum frames that provides 39" high visibility.
- Sash stop at 18" height from work surface (60% open). Fully open sash is 29" from work surface.

Models series 69714, 69715 and 69716 also feature:

- Combination horizontal-sliding/ vertical-rising sashes** that allow the operator to use the hood with sashes half open either horizontally or vertically. Sash stops at fully closed and 15" height from work surface (50% open). Sash stops at the 50% open (15") and fullyclosed positions along with a sash pocket that blocks the upper by-pass and reduces amount of air exhausted.
- Highly visible yellow air foil with recessed sash track.

- 5° angled, tempered safety glass,
 1/4" thick sash and stationary viewing panel** to provide viewing height of
 39" for visual accessibility regardless of mounting height.
- Epoxy-coated steel sash pocket behind the front panel.

All models conform to the following regulations and standards:

- SEFA 1-2005
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1

Models 6970401, 6970501, 6970601, 6971401, 6971501 and 6971601 feature:

- Four pre-plumbed service fixtures with forged brass valves; three with 0.25" copper tubing for use with cold water, air and vacuum, and one with 0.25" brass tubing for use with gas. Inlet tubing is not provided.
- Two pre-wired 115 volt, 15 amp electrical duplex receptacles.

Models 6971401, 6971501 and 6971601 also feature:

- Left-side mounted cold water rigid gooseneck faucet in place of standard service fixture.
- Pre-wired digital airflow monitor.

All models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.
- Work Surface. See pages 100-104.
- Base Cabinet. See pages 105-116.

Optional accessories for on-site installation include:

- Distillation Grid Kits. See page 120.
- Guardian Jr. and Digital Airflow Monitors. See page 118.
- Rear Finish Panel Kits. See page 120.
- Service Fixtures. Contact Labconco.
- * U.S. Design Patent No. 472,645 ** U.S. Patent No. 6,461,233
- Heights of switches, electrical receptacles and service fixtures meet requirements of ADA.

Contact Labconco at **800-821-5525** or **816-333-8811** for blower sizing assistance.



Ordering Information & Dimensional Data

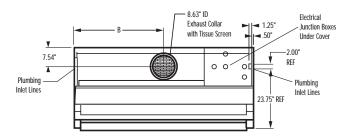
Protector[®] ClassMate[®] Laboratory Hoods

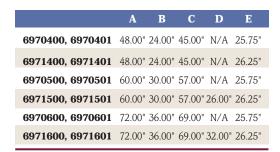
	Total Exhaust CFM and Static Pressure at 18" sash opening height (60% open)*								
Catalog Number	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.			
6970400, 6970401	570	0.24"	460	0.16"	340	0.09"			
6970500, 6970501	730	0.39"	590	0.26"	440	0.14"			
6970600, 6970601	890	0.51"	710	0.33"	540	0.19"			

	Total Exhaust CFM and Static Pressure at 50% sash opening height horizontally or vertically								
Catalog Number	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.			
6971400, 6971401	470	0.16"	380	0.11"	280	0.06"			
6971500, 6971501	550	0.22"	440	0.14"	330	0.08"			
6971600, 6971601	680	0.30"	550	0.20"	410	0.11"			

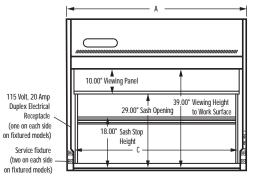
^{*}Contact Labconco for other sash opening height data.

Nominal	Catalog	Fluorescent	Service	Electrical	Digital	Shipping
Width	Number	Lamps	Fixtures	Duplexes	Monitor	Weight lbs./kg
4 Feet	6970400	2 ea. 30 watt	None	None	No	400/181
4 Feet	6970401	2 ea. 30 watt	4	2	No	400/181
4 Feet	6971400	2 ea. 30 watt	None	None	No	485/220
4 Feet	6971401	2 ea. 30 watt	4	2	Yes	485/220
5 Feet	6970500	2 ea. 40 watt	None	None	No	460/209
5 Feet	6970501	2 ea. 40 watt	4	2	No	460/209
5 Feet	6971500	2 ea. 40 watt	None	None	No	570/259
5 Feet	6971501	2 ea. 40 watt	4	2	Yes	570/259
6 Feet	6970600	2 ea. 40 watt	None	None	No	550/249
6 Feet	6970601	2 ea. 40 watt	4	2	No	550/249
6 Feet	6971600	2 ea. 40 watt	None	None	No	680/308
6 Feet	6971601	2 ea. 40 watt	4	2	Yes	680/308

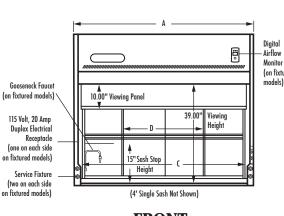




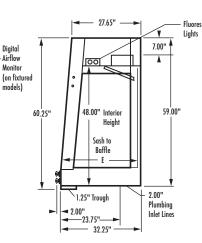
TOP (All Models)



FRONT (Model series 69704, 69705 and 69706)



FRONT (Model series 69714, 69715 and 69716)



SIDE (All Models)





Protector Pass-Through Laboratory Hoods

Features & Benefits

With sashes on two sides, Protector Pass-Through Laboratory Hoods may be operated from either side while an audible sash alarm sounds to prevent simultaneous opening of both sashes. When mounted in an island or peninsular configuration, the hoods' unobstructed viewing from either side make them ideal for

conducting chemistry demonstrations or observing students using the hood. An optional right-side mounted viewing window further enhances visibility. These hoods may also be installed in the wall between two rooms. An audible sash alarm sounds when both sashes are opened at the same time.

Front and side panels may be easily removed for lamp replacement and access to sash weight and electrical supply connections.

Durable and attractive frame is glacier white, dry powder epoxycoated steel and aluminum.

Performance tested to ASHRAE 110-1995.

By-pass airflow design ensures relatively stable face velocities.

Upper baffle directs airflow to the center of the interior to provide efficient airflow.

, **Streamlined corner posts** provide maximum visibility and working area.

Clear, vertical-rising tempered safety glass sashes provide maximum visibility.

Large 15" x 24", right-side mounted, clear, tempered safety glass viewing window is included on some models and provides an additional observation vantage point.

Chemical-resistant, fiberglassreinforced composite panel liner surpasses all national codes for flame spread and has a bright white surface for excellent light reflectivity.

Pre-wired electrical components.

Incandescent light, switches and GFCI electical duplex receptacle are factory-wired to the hood's junction box.

Factory-prepared for optional accessories. Each hood has four factory-prepared locations for electrical duplexes and two for airflow monitors.

Ergonomic air foils allow air to sweep the work surface for maximum containment. Clean-Sweep* airflow openings pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant barrier of protection from contaminants.

Audible sash alarm alerts the operator to unsafe conditions.

The alarm sounds when both sashes are opened simultaneously and continues until one sash is completely closed.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No.1010.1.



XX Exclusive Feature

* U.S. Patent No. 6,461,233



Protector® Pass-Through Laboratory Hoods



Protector Pass-Through Laboratory Hood 9942502 is shown with SpillStopper Work Surface 9972500 and Protector Standard Storage Cabinets 9900200. Blower, ductwork, work surface and base cabinet must be ordered separately.

All models feature:

- · By-pass airflow design.
- Glacier white, dry powder epoxy-coated steel and aluminum frame.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Two each 3/16" thick tempered safety glass vertical-rising sashes.
- M Audible alarm that sounds when both sashes are open at the same time.

- Pre-wired 100-watt vapor-proof incandescent light.
- One pre-wired 115-volt, 20 amp GFCI electrical duplex receptacle on lower right side (one side).
- Pre-wired light and blower switches (one side).
- Removable front and side panels for access to light, electrical wiring and sash cables.
- Epoxy-coated steel 10.09" ID exhaust connection.

All models conform to the following regulations and standards:

- SEFA 1-2005
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1

Models 9942402, 9942502 and 9942602 feature:

• Clear, 1/4" thick, right-side mounted tempered safety glass side window, 15" x 24".

All models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.
- Work Surface. See pages 100-104.
- Base Cabinet. See pages 106-116.

Optional accessories for on-site installation include:

- Sash Stop Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitors. See page 118.
- Duplex Electrical Receptacle Kits. See page 118.
- Ceiling Enclosure Kits. See page 119.
- Distillation Grid Kits. See page 120.

5									
	With Sash Full Open (26")								
	Nominal Width Total Exhaust CFM and Static Pressure S.P.								
	4 Feet	830	.26"						
	5 Feet	1100	.40"						
	6 Feet	1350	.65"						
	1	With Sash	60% Open (18")						
	Nominal Width	Total Exha 100 fpm	ust CFM and Static Pressure S.P.						
	4 Feet	530	.10"						
	5 Feet	700	.16"						

Contact Labconco at 800-821-5525 or **816-333-8811** for ordering information on service fixtures and blower sizing assistance.



Exclusive Feature

* U.S. Patent No. 6,461,233

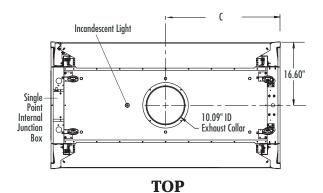
Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.

^{**} Sash stop required

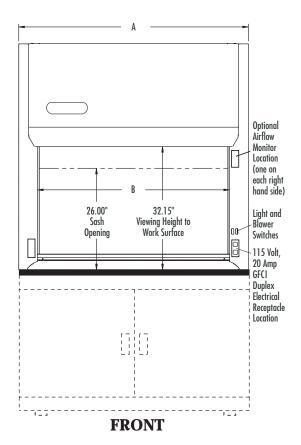


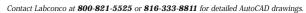
Ordering Information & Dimensional Data Protector® Pass-Through Laboratory Hoods

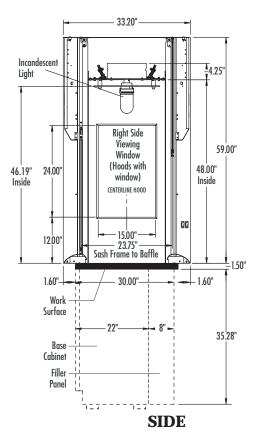
Nominal	Catalog	Incandescent	Service	GFCI Electrical	Viewing	Shipping
Width	Number	Lamp	Fixtures	Duplex	Window	Weight lbs./kg
4 Feet	9942402	1 ea. 100 watt	None	1	Right Side	450/202
4 Feet	9942403	1 ea. 100 watt	None	1	None	460/207
5 Feet	9942502	1 ea. 100 watt	None	1	Right Side	520/235
5 Feet	9942503	1 ea. 100 watt	None	1	None	530/240
6 Feet	9942602	1 ea. 100 watt	None	1	Right Side	610/275
6 Feet	9942603	1 ea. 100 watt	None	1	None	620/280



	A	В	C
4' Hood	48.00"	38.25"	24.00"
5' Hood	60.00"	50.25"	30.00"
6' Hood	72.00"	62.25"	36.00"

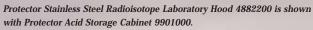






SIDE VIEW (Shown with accessory work surface and base cabinet available for all hood widths. Height can vary.)









Protector Stainless Steel Radioisotope Laboratory Hoods

Features & Benefits

Protector Stainless Steel Radioisotope Laboratory Hoods provide protection from applications requiring the use of certain radio-chemicals. Available in 4', 5', 6' and 8' widths, these benchtop hoods feature a corrosion-resistant Type 304 stainless steel interior.

The one-piece liner features radiused corners and is free of joints, cracks or crevices to prevent build-up of residue and simplify decontamination procedures.



Color-coded service fixtures for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Two service fixtures are pre-plumbed. Each corner post is factory-prepared for up to 4 service fixtures (8 fixtures total per hood). Additional service fixtures require holes drilled in the liner at the factory or on site.

Ergonomic air foil allows air to sweep the work surface for maximum containment. Clean-Sweep* airflow openings pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant barrier of protection from contaminants. *ETL-listed.* Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No. 1010.1.

Performance tested to ASHRAE 110-1995.

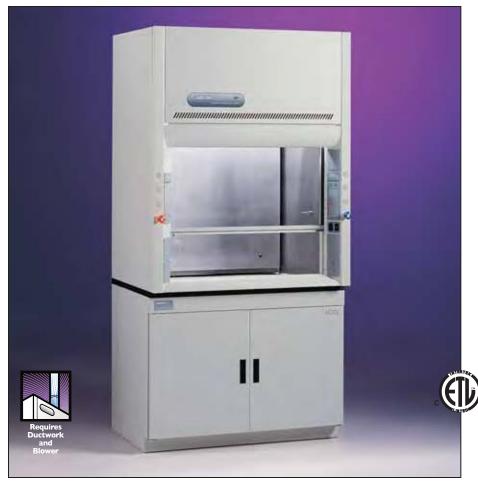
replacement.



Exclusive Feature

* U.S. Patent No. 6,461,233

Protector Stainless Steel Radioisotope Laboratory Hoods



Protector Stainless Steel Radioisotope Laboratory Hood 4882200 is shown with Protector Acid Storage Cabinet 9901000. Blower, ductwork and base cabinet must be ordered separately.

All models feature:

- By-pass airflow design.
- Glacier white, dry powder epoxy-coated steel exterior.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Type 304 stainless steel liner (23.5" interior depth) with radiused corners, integral work surface and pre-set baffle(s).
- Black enamel-coated hardboard surface to support the integral work surface.
- 3/16" thick tempered safety glass verticalrising sash with frame of epoxy-coated aluminum and PVC. Sash does not extend above the hood when fully open.
- Removable front and side panels and front access panels for access to plumbing and electrical wiring.

- Pre-wired T8 fluorescent lighting, light switch and blower switch for 115 volt, 60 Hz operation to single point internal junction box.
- Two pre-plumbed service fixtures with forged brass valves and chrome-plated brass serrated hose connectors, lower right side with brass tubing for gas and lower left side with copper tubing for air. Components for converting either or both fixtures to cold water and vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.
- 11.00" OD Type 304 stainless steel exhaust connection(s).

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805

All models require (not included):

- **Dedicated Remote Blower.** See back pocket.
- Ductwork. Type 304 stainless steel duct is recommended. Contact Labconco for source recommendations.
- Base Cabinet or Stand. See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- **Electrical Duplex Kits.** See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Sash Stop Kits. See page 121.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 119-120.

With Sash Full Open (28") @ 100 fpm							
Nominal Total Exhaust CFM and Static Pressure							
Width	CFM	S.P.					
4 Feet	730	.20"					
5 Feet	960	.30"					
6 Feet	1180	.50"					
8 Feet	1660	.26"					

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on additional service fixtures, recommendations on HEPA and carbon filters and for blower sizing assistance.



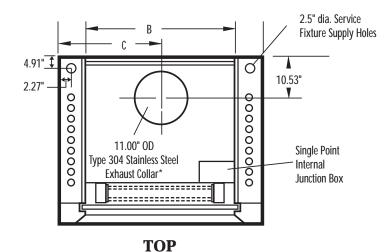
* U.S. Patent No. 6,461,233

Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.



Ordering Information & Dimensional Data Protector* Stainless Steel Radioisotope Laboratory Hoods

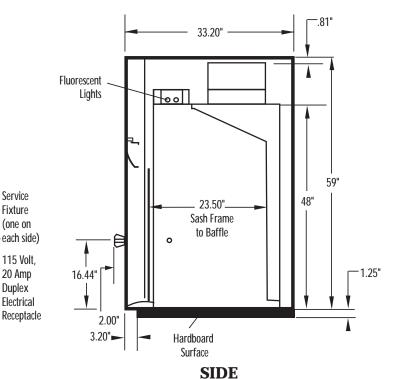
Nominal Width	Catalog Number	Electrical Requirements	11.00" OD Exhaust Collar(s)	Sash	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Shipping Weight lbs./kg
4 Feet	4882200	115 volts, 60 Hz	1	1	2 ea. 25 watt	2	1	650/295
5 Feet	6082200	115 volts, 60 Hz	1	1	2 ea. 32 watt	2	1	700/318
6 Feet	7282200	115 volts, 60 Hz	1	1	2 ea. 32 watt	2	1	755/342
8 Feet	9682200	115 volts, 60 Hz	2	1	4 ea. 25 watt	2	1	865/392



	A	В	С
4' Hood	48"	38.25"	24"
5' Hood	60"	50.25"	30"
6' Hood	72"	62.25"	36"
8' Hood	96"	86.25"	24"*

^{* 8&#}x27; model has two exhaust collars, 24.00" on each side of centerline

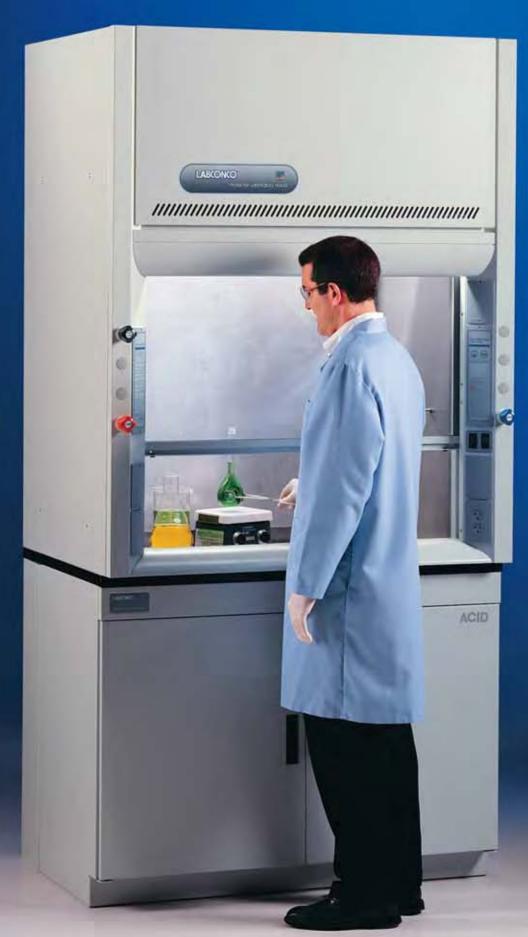
Service 0 000 Front 00 **Fixture** 28.00" Sash Opening Access (one on Panel 回 each side) 32.15" Viewing Height (one on 00 to Work Surface 115 Volt, each side) 20 Amp В Duplex

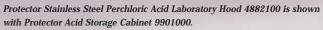


Contact Labconco at 800-821-5525 or 816-333-8811 or visit www.labconco.com for detailed AutoCAD drawings.

FRONT

Electrical









Protector Stainless Steel Perchloric Acid Laboratory Hoods

Features & Benefits

Protector Stainless Steel Perchloric Acid Laboratory Hoods are designed specifically for procedures involving the use of perchloric acid. They feature an internal washdown system, integral work surface and drainage trough so that they may be thoroughly rinsed after each use to prevent the accumulation of potentially reactive perchloric salts. Available in 4', 5', 6' and 8' widths, these benchtop hoods feature a corrosion-resistant Type 316 stainless steel interior to withstand reaction from perchloric acid.

Front and side panels may be easily removed for lamp replacement and access to electrical and plumbing connections.

By-pass airflow design ensures relatively stable face velocities.

Durable and attractive exterior is glacier white, dry powder epoxy-coated steel.

Performance tested to ASHRAE 110-1995.

Pre-set baffle has been designed to provide a uniform face velocity pattern across the sash opening of the hood.

Large 28" sash opening offers superior viewing. When fully open, the sash does not extend above the hood.

Vertical-rising tempered safety glass sash is antiracking for smooth operation.

Service access panels allow accessibility to plumbing from the front of the hood.

Corrosion-resistant, Type 316 stainless steel liner with integral work surface and drainage trough provides a seamless work area.

Pre-wired electrical components. Fluorescent lights, switches and one 115 volt, 60 Hz electrical duplex receptacle are factory-wired to the hood's single point junction box. Each hood is factory-prepared for up to four electrical duplexes and an airflow monitor.

Hardboard surface to support integral work surface is included.

Fluorescent lighting illuminates the interior. The high efficiency, instant start T8 fluorescent lights are located outside the hood interior for corrosion-resistance and easy replacement.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No. 1010.1.



Color-coded service fixtures for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Two service fixtures are pre-plumbed. Corner posts are factory-prepared for up to four remote control knobs (eight fixtures total per hood).

Additional service fixtures

require holes drilled in the liner at the factory or on site.

Built-in washdown system facilitates the removal of hazardous perchlorates from behind the baffle. The system consists of pre-plumbed internal piping, spray nozzles and upper left sidemounted remote control knob.



* U.S. Patent No. 6,461,233



Ergonomic air foil allows

for maximum containment. Clean-Sweep* airflow openings pull inflow air from under the

ally flows over the air foil

air to sweep the work surface

air foil so that clean air continu-

creating a constant barrier of

protection from contaminants.

Protector® Stainless Steel Perchloric Acid Laboratory Hoods



Protector Stainless Steel Perchloric Acid Laboratory Hood 4882100 is shown with Protector Acid Storage Cabinet 9901000. Blower, ductwork and base cabinet must be ordered separately.

All models feature:

- By-pass airflow design.
- Glacier white, dry powder epoxy-coated steel exterior.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Type 3l6 stainless steel liner (23.5" interior depth) with radiused corners, integral work surface, drainage trough and pre-set baffle(s).
- Black enamel-coated hardboard surface to support the integral work surface.
- 3/16" thick tempered safety glass verticalrising sash with frame of epoxy-coated aluminum and PVC. Sash does not extend above the hood when fully open.
- Removable front and side panels and front access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, light switch and blower switch for 115 volt, 60 Hz operation to single point internal junction box.

- Built-in washdown system with internal piping and spray nozzles behind the baffle and remote control fixture on upper left side.
- Washdown fitting located on top of hood to facilitate connection to external wash rings (wash rings not included).
- Two pre-plumbed service fixtures with forged brass valves and chrome-plated brass serrated hose connectors, lower right side with brass tubing for gas and lower left side with copper tubing for air. Components for converting either or both fixtures to cold water and vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.
- 11" OD Type 316 stainless steel exhaust connection(s).

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805

All models require (not included):

- **Dedicated remote PVC Blower.** See back pocket.
- Wash Rings and other ductwork. See back pocket.
- Base Cabinet or Stand. See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See page 120.
- Sash Stop Kits. See pages 119-120.

With Sash Full Open (28") @ 100 fpm							
Nominal Width	Total Exhaust CFM CFM	and Static Pressure S.P.					
4 Feet	730	.20"					
5 Feet	960	.30"					
6 Feet	1180	.50"					
8 Feet	1660	.26"					

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on additional service fixtures and blower sizing assistance.

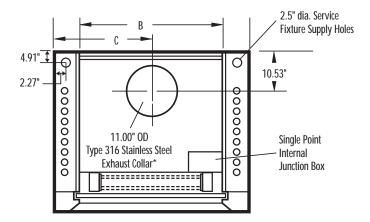


* U.S. Patent No. 6,461,233



Ordering Information & Dimensional Data Protector* Stainless Steel Perchloric Acid Laboratory Hoods

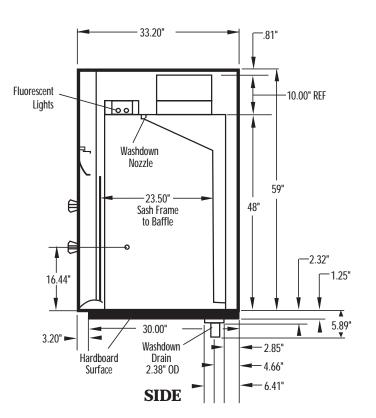
Nominal Width	Catalog Number	Electrical Requirements	11.00" OD Exhaust Collar(s)	Sash	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Spray Nozzles	Shipping Weight lbs./kg
4 Feet	4882100	115 volts, 60 Hz	1	1	2 ea. 25 watt	2	1	3	755/342
5 Feet	6082100	115 volts, 60 Hz	1	1	2 ea. 32 watt	2	1	4	810/367
6 Feet	7282100	115 volts, 60 Hz	1	1	2 ea. 32 watt	2	1	4	870/395
8 Feet	9682100	115 volts, 60 Hz	2	1	4 ea. 25 watt	2	1	6	990/449



	A	В	C	D	E
4' Hood	48"	38.25"	24"	34"	14.88"
5' Hood	60"	50.25"	30"	46"	20.88"
6' Hood	72"	62.25"	36"	58"	26.88"
8' Hood	96"	86.25"	24"*	82"	38.88"

^{* 8&#}x27; model has two exhaust collars, 24.00" on each side of centerline

TOP Washdown Control Knob 回 0 Service 0 0 Fixture Front 28.00" Sash Opening 0 o (one on Access 回 each side) 32.15" Viewing Height Panel 00 to Work Surface 115 Volt, (one on 20 Amp each side) Duplex Electrical Receptacle Drainage Trough **2**.12



Contact Labconco at 800-821-5525 or 816-333-8811 or visit www.labconco.com for detailed AutoCAD drawings.

FRONT







Protector® PVC Perchloric Acid & Acid Digestion Laboratory Hoods

Features & Benefits

Protector PVC Perchloric Acid Laboratory Hoods feature an internal washdown system, integral work surface and drainage trough so that they may be thoroughly rinsed after each use to prevent the accumulation of potentially reactive perchloric salts. The liner of Type 1 unplasticized polyvinyl chloride is designed to withstand

Durable and attractive exterior is glacier white, dry powder epoxy-coated steel.

By-pass airflow design ensures relatively stable face velocities.

reaction from perchloric acid and other highly corrosive inorganic chemicals that do not involve high temperatures. Protector PVC Acid Digestion Laboratory Hoods feature a Lexan* sash, which is recommended for applications involving the use of acids including hydrofluoric acid but not perchloric acid.

Front and side panels may be easily removed for lamp replacement and access to electrical and plumbing connections.

Performance tested to ASHRAF 110-1995.

Pre-set baffle has been designed to provide a uniform face velocity pattern across the sash opening of the hood.

Large 28" sash opening offers superior viewing. When fully open, the sash does not extend above the hood.

Vertical-rising tempered safety glass sash is antiracking for smooth operation. Protector PVC Acid Digestion Hoods feature a Lexan* polycarbonate sash that resists fogging or etching when exposed to hydrofluoric acid fumes.

Service access panels allow accessibility to plumbing from the front of the hood.

Corrosion-resistant liner of Type 1 unplasticized PVC with integral work surface provides a crevice-free work area and withstands low heat up to 160° F.

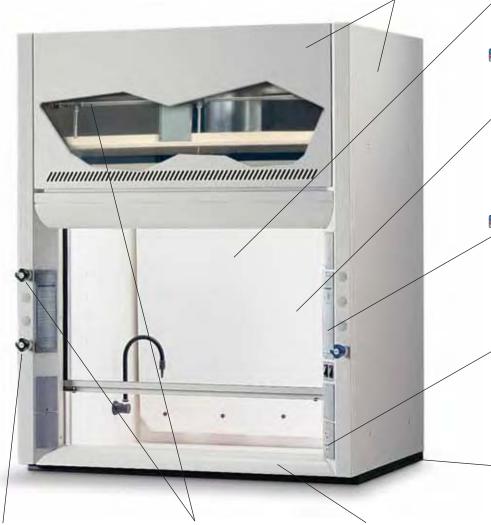
Pre-wired electrical components. Fluorescent lights, switches and one 115 volt, 60 Hz electrical duplex receptacle are factory-wired to the hood's single point junction box. Each hood is factory-prepared for up to four electrical duplexes and an airflow monitor.

Hardboard surface to support integral work surface is included.

Fluorescent lighting illuminates the interior. The high efficiency, instant start T8 fluorescent lights are located outside the hood interior for corrosion-resistance and easy replacement.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1, UL 1805 and CAN/CSA C22.2 No. 1010.1.

Exclusive Feature



Color-coded service fixtures for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Two service fixtures are pre-plumbed. Corner posts are factory-prepared for up to 4 remote control knobs (8 fixtures total per hood). Additional service fixtures require holes drilled in the liner at the factory or on site.

Built-in washdown system facilitates the removal of hazardous perchlorates and chemical residue from hood interior. The system consists of preplumbed internal piping, spray nozzles and upper left sidemounted remote control knob.



Ergonomic air foil allows air to sweep the work surface for maximum containment.

Clean-Sweep** airflow openings pull inflow air from under the air foil so that clean air continually flows over the air foil creating a constant barrier of protection from contaminants.

^{*} Lexan is a registered trademark of General Electric Company

^{**} U.S. Patent No. 6,461,233

Protector® PVC Perchloric Acid & Acid Digestion Laboratory Hoods







Protector PVC Perchloric Acid Laboratory Hood 4882400 is shown with Protector Acid Storage Cabinet 9901000. Blower, ductwork and base cabinet must be ordered separately.

All models feature:

- By-pass airflow design.
- Glacier white, dry powder epoxy-coated steel exterior.
- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Heat-welded Type 1 unplasticized PVC liner (30.0" interior depth) with integral work surface, drainage trough and preset baffle(s). PVC withstands maximum continuous operating temperature of 180° F.
- Hardboard surface to support the integral work surface.
- Removable front and side panels and front access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, light switch and blower switch for 115 volt, 60 Hz operation to single point internal junction box.
- Built-in washdown system with internal piping and spray nozzles behind the baffle and remote control fixture on upper left side.

- Sash that does not extend above the hood when fully open.
- Washdown fitting located on top of hood facilitates connection to external wash rings (wash rings not included).
- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing and plastic serrated hose connector for gas and lower left side with copper tubing and gray PVC rigid gooseneck faucet for cold water. Components for converting the lower right fixture to air or vacuum are provided. Inlet tubing is not provided.
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.
- 12.75" OD PVC exhaust connection(s).

Protector PVC Perchloric Acid Laboratory Hoods feature:

 3/16" thick tempered safety glass vertical-rising sash with frame of epoxy-coated aluminum and PVC. Glass is suitable for perchloric acid use.

Protector PVC Acid Digestion Laboratory Hoods feature:

 1/4" thick Lexan polycarbonate verticalrising sash with frame of epoxy-coated aluminum and PVC. Lexan resists etching by hydrofluoric acid fumes.

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805

All models require (not included):

- **Dedicated remote PVC Blower.** See back pocket.
- Wash Rings and other ductwork. See back pocket.
- Base Cabinet or Stand. See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 117.
- Electrical Duplex Kits. See page 118.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 118.
- Ceiling Enclosure and Rear Finish Panel Kits. See pages 119-120.

With Sash Full Open (28") @ 100 fpm								
Nominal Width Total Exhaust CFM and Static Pressure CFM S.P.								
4 Feet	730	.17"						
6 Feet	1180	.38"						
8 Feet	1660	.22"						

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on tissue screens and blower sizing assistance.

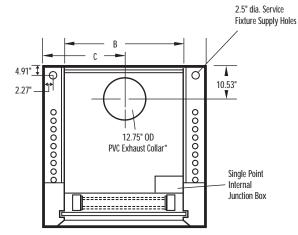
* U.S. Patent No. 6,461,233





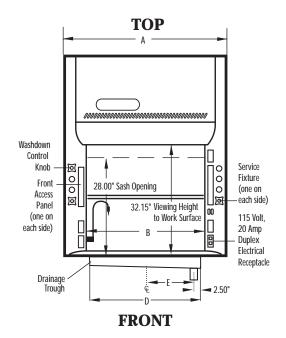
Ordering Information & Dimensional Data Protector® PVC Perchloric Acid & Acid Digestion Laboratory Hoods

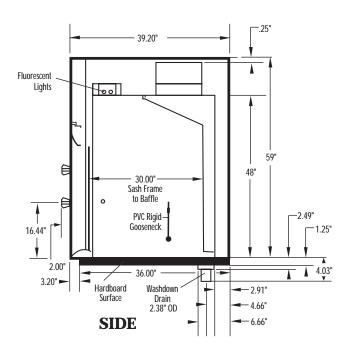
Nominal Width	Catalog Number	Electrical Requirements	12.75" OD Exhaust Collar(s)	Sash	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Spray Nozzles	Shipping Weight lbs./kg	
Protector PVC Perchloric Acid Laboratory Hoods										
4 Feet	4882300	115 volts, 60 Hz	1	1	2 ea. 25 watt	2	1	3	735/333	
6 Feet	7282300	115 volts, 60 Hz	1	1	2 ea. 32 watt	2	1	4	850/386	
8 Feet	9682300	115 volts, 60 Hz	2	1	4 ea. 25 watt	2	1	6	970/440	
Protector 1	PVC Acid Dig	estion Laboratory	Hoods							
4 Feet	4882400	115 volts, 60 Hz	1	1	2 ea. 25 watt	2	1	3	735/333	
6 Feet	7282400	115 volts, 60 Hz	1	1	2 ea. 32 watt	2	1	4	850/386	
8 Feet	9682400	115 volts, 60 Hz	2	1	4 ea. 25 watt	2	1	6	970/440	



	A	В	C	D	E
4' Hood	48"	38.25"	24"	34"	14.50"
6' Hood	72"	62.25"	36"	58"	26.50"
8' Hood	96"	86.25"	24"*	82"	38.50"

^{* 8&#}x27; model has two exhaust collars, 24.00" on each side of centerline





Contact Labconco at 800-821-5525 or 816-333-8811 for detailed AutoCAD drawings.







Features & Benefits

Basic 47 and 70 Laboratory Hoods are designed specifically for modular laboratories, classrooms and light duty applications where safe ventilation is required.

Constructed of epoxy-coated steel, Basic Hoods are economical and have a smaller overall height and depth than traditional hoods so they fit in areas with low ceilings or narrow aisles. Choose from 4' and 6' widths.

Front panel may be removed for access to blower and electrical connections.

Versatile blower mounts on top of the hood liner or in a remote location. Hoods are also available without blower.

CE mark*. Contact Labconco for specific 230 volt, 50 Hz models that conform to CE (European Community) requirements for electrical safety and electromagnetic compatibility.

Two-piece baffle is adjustable.

The right side fixture panel is factory-prepared for up to three color-coded service fixtures, one duplex electrical receptacle and an airflow monitor.

Durable and attractive exterior is glacier white, dry powder epoxy-coated steel.

Vapor-proof incandescent lighting illuminates the interior. Explosion-proof models include an explosion-proof incandescent light fixture (bulb not included).

Top of the hood liner is factory-prepared to accommodate two customersupplied apparatus rods.

Vertical-rising tempered safety glass sash protects the operator while providing excellent visibility.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1 and CAN/CSA C22.2 No. 1010.1.

The curved air foil directs airflow into the hood to minimize turbulence and ensure fume containment. The foil lifts off for cleaning.

Unassembled models available. Components fit into a carton less than one half its assembled size. The compact container is more economical to ship and store than assembled hood cartons and transports readily to remote locations. Assembly is simple and fast. **Unassembled models are not pre-wired.**

Performance tested to ASHRAE 110-1995.



The right interior wall is factory-prepared to accommodate an accessory cupsink and turret (sold separately).

Compact dimensions accommodate tight installations.

The 48" height, 53" with built-in blower, makes it ideal for laboratories with lower ceiling heights. Overall depth of 25" makes it adaptable to shallow cabinetry.

Durable epoxy-coated 16 gauge steel liner resists chemical degradation.





Pre-wired electrical components. Incandescent lighting and switches are factory-wired to the hood's junction box.

Explosion-proof models are furnished without switches and wiring as these must conform to varying local codes.

* Contact Labconco for specific models.



Basic™ Laboratory Hoods



Basic 47 Laboratory Hood 2247300 is shown with Flat Solid Epoxy Work Surface 4882803 and Protector Acid Storage Cabinet 9901000. Blower module is included. Ductwork, work surface and base cabinet must be ordered separately.

All models feature:

- By-pass airflow design.
- · Curved air foil that lifts off for cleaning.
- Glacier white, dry powder epoxy-coated, 16 gauge steel exterior and interior.
- Two-piece adjustable baffle.
- 3/16" thick tempered safety glass. vertical-rising sash with epoxy-coated aluminum sash handle.
- Removable front panel for access to electrical wiring.
- Factory-prepared right side fixture panel for up to three service fixtures, one duplex electrical receptacle and one airflow monitor (fixtures, receptacle and monitor not included).
- Factory-prepared right interior wall for one cupsink and turret (cupsink and turret not included).

- Factory-prepared top of hood liner for two apparatus rods (rods not included).
- Epoxy-coated steel 10.31" OD exhaust connection.

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- CE Conformity Marking (220 volt models)*

Vapor-proof models feature:

• Pre-wired 100-watt vapor-proof incandescent light, light and blower switches.

Explosion-proof models feature:

- Explosion-proof incandescent light fixture. (Requires installation. Bulb not included.)
- Furnished without switches and wiring as these must conform to varying local codes.

Models with blower module feature:

- Belt-driven blower with adjustable sheave.
- Epoxy-coated steel base and housing.
- Corrosion-resistant coated aluminum impeller.

Unassembled models feature:

- Basic 47 Hood carton dimensions: 51" w x 39" d x 14.5" h.
- Basic 70 Hood carton dimensions: 74" w x 39" d x 14.5" h.
- Blower carton dimensions (if applicable): 20" w x 28" d x 16" h.

All models require (not included):

- Blower. See page 65 and back pocket.**
- Ductwork. See back pocket.
- Work Surface. See page 104.
- **Base Cabinet or Stand.** See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 69.
- Electrical Duplex Kits. See page 69.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 69.
- Cupsink and Turret Kit. See page 69.
- Sash Stop Kit. See page 69.
- **Right Side Finish Panel Kit.** See page 69.

Contact Labconco at **800-821-5525** or **816-333-8811** for blower sizing assistance.

^{*}Contact Labconco for specific models. **Many models include a blower module.

Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.



Ordering Information & Dimensional Data

Basic™ 47 Laboratory Hoods

Basic 47 Hoods with Blower Module

Capable of overcoming a maximum external static pressure of .25" H_2O at 720 CFM (100 fpm). Overall dimensions: 47.00" wide x 25.00" deep x 53.00" high (with blower module mounted on top of hood).

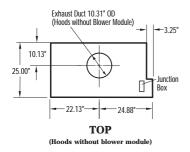
Nominal Width	Catalog Number	Electrical Requirements	Incandescent Lamp	Blower Motor	Resis	valent tance* 12" dia.	Assembly Configuration	Shipping Weight lbs./kg
4 Feet	2247300	115 volts, 60 Hz	Vapor-Proof	1/3 hp	100'	250'	Fully Assembled	370/168
	2247301**	220 volts, 50 Hz	Vapor-Proof	1/2 hp	100'	250'	Fully Assembled	370/168
	2247500	115/230 volts, 60 Hz	\mathbf{EP}^{\dagger}	1/3 hp, EP	100'	250'	Fully Assembled	375/170
	2247501**	220 volts, 50 Hz	EP [†]	1/3 hp, EP	100'	250'	Fully Assembled	375/170
	2246603	115 volts, 60 Hz	Vapor-Proof	1/3 hp	100'	250'	Unassembled	$272/123$ $29/13^{\dagger\dagger}$
	2246604**	220 volts, 50 Hz	Vapor-Proof	1/2 hp	100'	250'	Unassembled	272/123 29/13 ^{††}
	2246605	115/230 volts, 60 Hz	EP^\dagger	1/3 hp, EP	100'	250'	Unassembled	$272/123$ $41/19^{\dagger\dagger}$
	2246606**	220 volts, 50 Hz	EP [†]	1/3 hp, EP	100'	250'	Unassembled	$\frac{272}{123}$ $\frac{41}{19}$

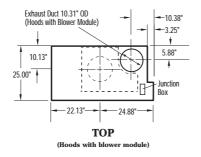
Basic 47 Hoods for use with remote blower

Static pressure loss does not exceed .35" H₂O at 100 fpm (720 CFM). Overall dimensions: 47.00" wide x 25.00" deep x 48.00" high.

Nominal Width	Catalog Number	Electrical Requirements	Incandescent Lamp	Assembly Configuration	Shipping Weight lbs./kg
4 Feet	2247400	115 volts, 60 Hz	Vapor-Proof	Fully Assembled	275/125
	2247401**	220 volts, 50 Hz	Vapor-Proof	Fully Assembled	275/125
	2246600	115 volts, 60 Hz	Vapor-Proof	Unassembled	272/123
	2246601**	110/220 volts, 50 Hz	Vapor-Proof	Unassembled	272/123
	2246602	115/230 volts, 50/60 Hz	\mathbf{EP}^{\dagger}	Unassembled	272/123

EP = explosion-proof





Blower Module

48.00"

26.00" Sash Opening/
27.13" Viewing Height to work Surface

41.25"

Sash Opening

43.19" Inside

47.00"

FRONT

SIDE

See page 69 for blower module detail.

^{*}Maximum length of straight duct to achieve 100 fpm face velocity

^{**} International electrical configuration

[†]Bulb not included

 $^{^{\}dagger\dagger}$ Shipping weight of separate blower carton



Ordering Information & Dimensional Data

Basic™ 70 Laboratory Hoods

Basic 70 Hoods with Blower Module

Capable of overcoming a maximum external static pressure of .23" H_2O at 1120 CFM (100 fpm). Overall dimensions: 70.00" wide x 25.00" deep x 53.00" high (with blower module mounted on top of hood).

Nominal Width	Catalog Number	Electrical Requirements	Incandescent Lamp	Blower Motor	Resist	valent tance* 12" dia.	Assembly Configuration	Shipping Weight lbs./kg
6 Feet	2246300	115 volts, 60 Hz	Vapor-Proof	3/4 hp	45'	100'	Fully Assembled	450/204
	2246301**	220 volts, 50 Hz	Vapor-Proof	3/4 hp	45'	100'	Fully Assembled	450/204
	2246500	115/230 volts, 60 Hz	\mathbf{EP}^{\dagger}	3/4 hp, EP	45'	100'	Fully Assembled	455/206
	2246501**	220 volts, 50 Hz	EP†	3/4 hp, EP	45'	100'	Fully Assembled	455/206
	2246703	115 volts, 60 Hz	Vapor-Proof	3/4 hp	45'	100'	Unassembled	426/193 29/13 ^{††}
	2246704**	220 volts, 50 Hz	Vapor-Proof	3/4 hp	45'	100'	Unassembled	426/193 41/19 ^{††}
	2246705	115/230 volts, 60 Hz	EP⁺	3/4 hp, EP	45'	100'	Unassembled	$426/193$ $41/19^{\dagger\dagger}$
	2246706**	220 volts, 50 Hz	EP⁺	3/4 hp, EP	45'	100'	Unassembled	426/193 41/19 ^{††}

Basic 70 Hoods for use with remote blower

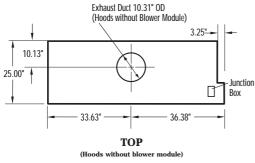
Static pressure loss does not exceed .57" H₂O at 100 fpm (1120 CFM). Overall dimensions: 70.00" wide x 25.00" deep x 48.00" high.

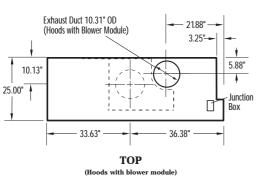
Nominal Width	Catalog Number	Electrical Requirements	Incandescent Lamp	Assembly Configuration	Shipping Weight lbs./kg
6 Feet	2246400	115 volts, 60 Hz	Vapor-Proof	Fully Assembled	430/195
	2246401**	220 volts, 50 Hz	Vapor-Proof	Fully Assembled	430/195
	2246700	115 volts, 60 Hz	Vapor-Proof	Unassembled	426/193
	2246701**	110/220 volts, 50 Hz	Vapor-Proof	Unassembled	426/193
	2246702	115/230 volts, 50/60 Hz	EP^\dagger	Unassembled	426/193

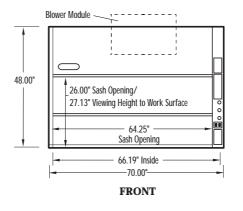
EP = explosion-proof *Maximum length of straight duct to achieve 100 fpm face velocity

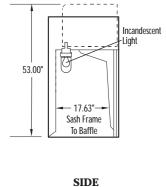
** International electrical configuration †Bulb not included

 $^{\dagger\dagger}\mathit{Shipping}$ weight of separate blower carton









See page 69 for blower module detail.



Accessories

Basic™ Laboratory Hoods



Guardian[™] **Jr. Airflow Monitor Kits**

Audible/visual alarm alerts user to low face velocity. For installation in a factory-prepared cutout on upper portion of right side fixture panel. Shipping weight 6 lbs. (2.7 kg)

Catalog #	Description
9743208	Guardian Jr. Airflow Monitor for 115 volt, 60 Hz operation
9743210**	Guardian Jr. Airflow Monitor for 230 volt, 50 Hz operation



Duplex Electrical Receptacle Kits

Each kit includes duplex electrical receptacle, junction box and receptacle cover plate. For mounting on the lower right side fixture panel. **Electrical wiring is not included.**

Catalog #	Kit	Shipping Wt.
4844400	115 volts, 20 amps AC	4 lbs. (1.8 kg)
4844401	115 volts, 20 amps AC, GFCI	4 lbs. (1.8 kg)



4852500 Cupsink and Turret Kit

Polypropylene cupsink, 3" x 6", and chrome turret mount on right side wall. **Plumbing pipe is not included.** Shipping weight 0.5 lb. (0.2 kg)



Guardian™ Digital Airflow Monitor Kits

An LCD displays average face velocity. Audible/visual alarm alerts user to low or high face velocity. For installation in a factory-prepared cutout on upper portion of right side fixture panel. Shipping weight 6 lbs. (2.7 kg)

Catalog #	Description
9743207	Guardian Digital Airflow Monitor for 115 volt, 60 Hz operation
9743209**	Guardian Digital Airflow Monitor for 230 volt, 50 Hz operation



4965901 Sash Stop Kit

The Sash Stop restricts how far the sash may be opened. This small plastic device may be easily installed on the left side of Basic Hoods to restrict sash opening height. Shipping weight 0.5 lb. (0.2 kg)

4878600 Right Side Finish Panel Kit

Includes a glacier white epoxy-coated steel panel to provide a finished appearance to the right side of the hood. The panel hides the exposed plumbing when service fixtures are installed. Not for use with 4852500 Cupsink and Turret. Shipping weight 20 lbs. (9 kg)



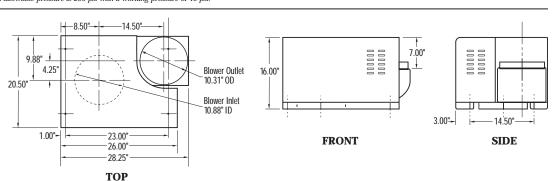
Standard Service Fixture Kits

Each kit includes one remotely-controlled service fixture with 0.25" diameter valve and tubing, color-coded fixture knob and color-coded hose connector. For mounting on the right side fixture panel. Shipping weight 4 lbs. (1.8 kg.)

Catalog #	Kit	Tubing	Valve	Knob/ Connector Color	Maximum Flow Rate	Maximum Working Pressure*
2832600	Cold Water (CW)	Copper	Brass	Green	3.5 GPM (13.2 LPM)	40 psi
2832601	Hot Water (HW)	Copper	Brass	Red	3.5 GPM (13.2 LPM)	40 psi
2832602	Deionized/ Distilled Water (DI)	Stainless Steel	Nickel-Plated/ Stainless Steel	White	3.5 GPM (13.2 LPM)	40 psi
2832603	Vacuum (VAC)	Copper	Brass	Yellow	8.6 CFM	14.7 psi
2832604	Air (AIR)	Copper	Brass	Orange	23.7 CFM	40 psi
2832605	Gas (GAS)	Brass	Brass	Blue	29.0 CFM (441 BTU/sec)	40 psi
2832606	Nitrogen (NIT)	Copper	Brass	Brown	24.1 CFM	40 psi
2832607	Argon (ARG)	Copper	Brass	Gray	20.2 CFM	40 psi
2832608	Steam (STM)	Copper	Brass	Black	0.5 LBM/min	40 psi

GPM = gallons per minute LPM = liters per minute CFM = cubic feet per minute BTU/sec = British thermal unit per second LBM/min = pounds mass per minute * Maximum allowable pressure is 200 psi with a working pressure of 40 psi.

Blower Module Detail



^{**} International electrical configuration

Fiberglass 30 Laboratory Hoods



Fiberglass 30 Laboratory Hood 3030002 is shown with Flat Solid Epoxy Work Surface 4882806 and Protector Standard Storage Cabinet 9900200. Remote blower, ductwork, work surface and base cabinet must be ordered separately.

Compact Fiberglass 30 Laboratory Hoods are designed for research, educational and clinical applications requiring small working space and efficient fume removal. Like the Protector Premier line, these hoods feature a corrosion-resistant, one-piece molded fiberglass liner.

All models feature:

- · By-pass airflow design.
- Durable glacier white, dry powder epoxy-coated steel exterior.
- One-piece molded fiberglass interior and pre-set baffle with flame spread index less than 25 per ASTM E-84.
- 3/16" thick tempered safety glass vertical-rising sash with epoxy-coated aluminum handle.
- · Pivoting air foil.
- Right side fixture panel factory-prepared to accept up to three service fixtures, one electrical duplex and one airflow monitor (kits are sold separately).
- 6.69" ID fiberglass exhaust connection.

All models conform to the following regulations and standards:

- SEFA 1-2005
- NFPA 45-2004
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)*

Models 3030000 and 3030001 feature:

- Built-in corrosion-resistant, direct drive exhaust blower capable of overcoming a maximum external static pressure of .12" H₂O at 310 CFM (100 fpm).
- Pre-wired 100 watt, vapor-proof incandescent lighting, light and blower switches.

Models 3030002 and 3030003:

 Designed for use with remote blower (not included).

- Static pressure loss does not exceed .14" H₂O at 100 fpm (310 CFM).
- Pre-wired 100 watt, vapor-proof incandescent lamp, light and blower switches.

Models 3030004 and 3030005 feature:

- Built-in corrosion-resistant, explosionproof, direct drive exhaust blower capable of overcoming a maximum external static pressure of .12" H₂O at 310 CFM (100 fpm).
- Furnished without light, switches or wiring. Wiring must conform to local codes. (Explosion-proof Light Fixture Kit is available. See page 67.)

All models require (not included):

- **Ductwork.** See back pocket.
- Work Surface. See page 104.
- **Base Cabinet or Stand.** See pages 106-116.

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 71.
- **Electrical Duplex Kits.** See page 71.
- Guardian Jr. and Digital Airflow Monitor Kits. See page 71.
- Explosion-Proof Light Fixture Kit. See page 71.

Contact Labconco at **800-821-5525** or **816-333-8811** for blower sizing assistance.

*Contact Labconco for specific models.

Ordering Information

Catalog Number	Built-in Blower		valent tance** 8" dia.	Electrical Requirements	Vapor-Proof Lamp	Dimensions (w x d x h)	Shipping Weight lbs./kg
3030000	1/10 HP, Std.	20'	80'	115 volts, 60 Hz	100 watt	30.00" x 30.16" x 48.00"	230/104
3030001 [†]	1/3 HP, Std.	20'	80'	230 volts, 50 Hz	100 watt	30.00" x 30.16" x 52.00"	230/104
3030002	None	_	_	115 volts, 60 Hz	100 watt	30.00" x 30.16" x 48.00"	210/95
3030003 [†]	None	_	_	230 volts, 50 Hz	100 watt	30.00" x 30.16" x 48.00"	210/95
3030004	1/4 HP, EP	20'	80'	115 volts, 60 Hz	None	30.00" x 30.16" x 54.00"	240/109
3030005 [†]	1/3 HP, EP	20'	80'	230 volts, 50 Hz	None	30.00" x 30.16" x 54.00"	240/109

EP = Explosion-proof

^{**} Maximum length of straight duct to achieve 100 fpm face velocity

[†] International electrical configuration



Accessories & Dimensional Data

Fiberglass 30 Laboratory Hoods



Duplex Electrical Receptacle Kits

Each kit includes duplex electrical receptacle, wiring, junction box and receptacle cover plate. For mounting on the lower right side fixture panel.

Catalog #	Kit	Shipping Wt.
2834800	115 volts, 20 amps AC	4 lbs. (1.8 kg)
2834801	115 volts, 20 amps AC, GFCI	4 lbs. (1.8 kg)



Standard Service Fixture Kits

Each kit includes one remotely-controlled service fixture with 0.25" diameter valve and tubing, color-coded fixture knob and color-coded hose connector. For mounting on the right side fixture panel. Shipping weight 4 lbs. (1.8 kg.)

Catalog #	Kit	Tubing	Valve	Knob/Connector Color
2832600	Cold Water (CW)	Copper	Brass	Green
2832601	Hot Water (HW)	Copper	Brass	Red
2832602	Deionized/ Distilled Water (DI)	Stainless Steel	Nickel-Plated Stainless Ste	.,
2832603	Vacuum (VAC)	Copper	Brass	Yellow
2832604	Air (AIR)	Copper	Brass	Orange
2832605	Gas (GAS)	Brass	Brass	Blue
2832606	Nitrogen (NIT)	Copper	Brass	Brown
2832607	Argon (ARG)	Copper	Brass	Gray
2832608	Steam (STM)	Copper	Brass	Black

See maximum flow rates and working pressures on page 69.



Guardian™ Digital Airflow Monitor Kits

An LCD displays average face velocity. Audible/visual alarm alerts user to low or high face velocity. For installation in a factory-prepared cutout on upper portion of right side fixture panel. Shipping weight 6 lbs. (2.7 kg)

Catalog #	Description
9743201	Guardian Digital Airflow Monitor for 115 volt, 60 Hz operation
9743205*	Guardian Digital Airflow Monitor for 230 volt, 50 Hz operation



Guardian™ Jr. Airflow Monitor Field Installation Kits

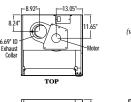
Audible/visual alarm alerts user to low face velocity. For installation in a factory-prepared cutout on upper portion of right side fixture panel. Shipping weight 6 lbs. (2.7 kg)

Catalog #	Description
9743202	Guardian Jr. Airflow Monitor for 115 volt, 60 Hz operation
9743206*	Guardian Jr. Airflow Monitor for 230 volt, 50 Hz operation

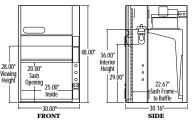


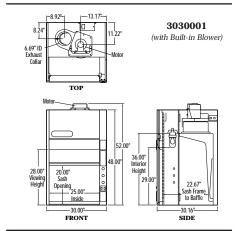
4892900 Explosion-Proof Light Fixture Kit

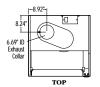
For mounting on Fiberglass 30 Hood 3030004 or 3030005. Includes explosion-proof incandescent light fixture, mounting hardware and instructions. 13" h x 7" diameter. **Bulb and electrical wiring are not included.** Shipping weight 11 lbs. (5 kg)



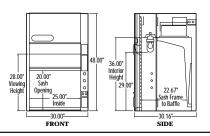
3030000 (with Built-in Blower)

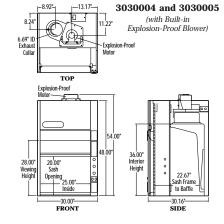






3030002 and 3030003 (for use with Remote Blower)





^{*} International electrical configuration



Fume Adsorbers

At right: Fume Adsorber 3955200 is shown with Flat Solid Epoxy Work Surface 4882803 and Protector Solvent Storage Cabinet 9902000. Work surface and base cabinet must be ordered separately. Below: Fume Adsorber-2 3955400 is shown with Flat Solid Epoxy Work Surface 4882804 and Protector Standard Storage Cabinets 9904500 and 9904200. Work surface and base cabinets must be ordered separately.



Fume Adsorbers are designed for light duty applications involving organic solvents, formaldehyde, ammonia or low molecular weight amines. Fume Adsorbers use carbon filtration to trap vapors so that safe, filtered air is returned to the laboratory. No outside ducting is required. These portable, low profile enclosures fit easily on countertops with overhanging cabinets and are available in two widths.

Each Fume Adsorber includes one carbon filter (each Fume Adsorber-2 includes two) that adsorbs vapors from organic solvents, formaldehyde or ammonia, depending on the filter.

Whether or not the Fume Adsorber would be appropriate for your application requires consideration of factors such as the time-weighted exposure limits of your materials. Using Labconco's exclusive chemical assessment service, our technical specialists can help you determine if it is the right product for your application and estimate filter life. Complete the Chemical Usage Assessment Form available at

www.labconco.com/chemical_usage.html or call 800-821-5525.

All models feature:

- Built-in motorized impeller to provide face velocity up to 35 fpm (Fume Adsorber-2 models include two impellers.)
- Glacier white, dry powder, epoxy-coated steel housing with perforated baffle for uniform airflow.
- Clear, one-piece, 3/8" thick, shatterresistant acrylic canopy.
- Quiet operation at 58-63 dBA.

- Pre-wired with rear-mounted auxiliary electrical receptacle and top-mounted blower switch with circuit breaker.
- Rear-mounted air sampling port.
- Exterior dimensions: 15.4" h x 23.4" d.
- Interior dimensions: 13.5" h x 14.5" d.
- Available in two widths: 30.0" and 60.0".

All models conform to the following regulations and standards:

- UL 3101-1/61010-1 (115 volt models)
- CAN/CSA C22.2 No. 1010.1 (115 volt models)
- CE Conformity Marking (230 volt models)

Fume Adsorber Model 3955200 features one each and Fume Adsorber-2 Model 3955400 features two each:

 Replaceable 6 pound Type AC activated carbon filter, 26.0" w x 9.0" h, to adsorb organic vapors such as xylene and toluene. Adsorbs up to one third its weight.

Fume Adsorber Model 3955201 features one each and Fume Adsorber-2 Model 3955401 features two each:

• Replaceable 7.5 pound impregnated carbon filter, 26.0" w x 9.0" h, treated to adsorb formaldehyde. Adsorption weight 10% (0.75 lb).

Fume Adsorber Model 3955202 features one each and Fume Adsorber-2 Model 3955402 features two each:

 Replaceable 8.8 pound impregnated carbon filter, 26.0" w x 9.0" h, treated to adsorb ammonia and low molecular weight amine vapors. Adsorption weight 10% (0.88 lb).

Fume Adsorber Models 3955200, 3955201 and 3955202 and Fume Adsorber-2 Models 3955400, 3955401 and 3955402 feature:

- Operation on 115 volts, 60 Hz, 2 amps.
- 6.5' IEC three-wire cord with plug.

Fume Adsorber Models 3955220, 3955221 and 3955222 and Fume Adsorber-2 Models 3955420, 3955421 and 3955422 feature:

- Operation on 230 volts, 50 Hz, 1 amp.
- 9' IEC three-wire cord. **An electrical plug is required.**

If not placed on existing casework, all models require:

- Flat Work Surface. See page 104.
- **Base Stand or Cabinet.** See pages 106-116.







Ordering Information & Dimensional Data Fume Adsorbers

Catalog #	Description Ship	ping Wt. lbs./kg
3955200	Fume Adsorber with Activated Carbon Filter for Organic Vapors. 30.0" exterior width, 29.25" interior width, for 115 volt, 60 Hz, 2 amp operation.	67/30
3955201	Fume Adsorber with Impregnated Carbon Filter for Formaldehyde Vapors. 30.0" exterior width, 29.25" interior width, for 115 volt, 60 Hz, 2 amp operation.	69/31
3955202	Fume Adsorber with Impregnated Carbon Filter for Ammonia Vapors. 30.0" exterior width, 29.25" interior width, for 115 volt, 60 Hz, 2 amp operation.	71/32
3955220*	Fume Adsorber with Activated Carbon Filter for Organic Vapors. 30.0" exterior width, 29.25" interior width, for 230 volt, 50 Hz, 1 amp operation.	67/30
3955221*	Fume Adsorber with Impregnated Carbon Filter for Formaldehyde Vapors. 30.0" exterior width, 29.25" interior width, for 230 volt, 50 Hz, 1 amp operation.	69/31
3955222*	Fume Adsorber with Impregnated Carbon Filter for Ammonia Vapors. 30.0" exterior width, 29.25" interior width, for 230 volt, 50 Hz, 1 amp operation.	71/32
3955400	Fume Adsorber-2 with Activated Carbon Filters for Organic Vapors. 60.0" exterior width, 59.25" interior width, for 115 volt, 60 Hz, 2 amp operation.	135/61
3955401	Fume Adsorber-2 with Impregnated Carbon Filters for Formaldehyde Vapors. 60.0" exterior width, 59.25" interior width, for 115 volt, 60 Hz, 2 amp operation.	137/62
3955402	Fume Adsorber-2 with Impregnated Carbon Filters for Ammonia Vapors. 60.0" exterior width, 59.25" interior width, for 115 volt, 60 Hz, 2 amp operation.	139/63
3955420*	Fume Adsorber-2 with Activated Carbon Filters for Organic Vapors. 60.0" exterior width, 59.25" interior width, for 230 volt, 50 Hz, 2 amp operation.	135/61
3955421*	Fume Adsorber-2 with Impregnated Carbon Filters for Formaldehyde Vapors. 60.0" exterior width, 59.25" interior width, for 230 volt, 50 Hz, 2 amp operation.	137/62
3955422*	Fume Adsorber-2 with Impregnated Carbon Filters for Ammonia Vapors. 60.0" exterior width, 59.25" interior width, for 230 volt, 50 Hz, 2 amp operation.	139/63
6961300	Replacement Activated Carbon Filter for use with organic vapors. 6 pounds of activated carbon. Adsorbs up to one third of its weight. Adsorption capacity dependent on chemical properties.** One each. Fume Adsorber Models 3955200 and 3955220 include one filter; Fume Adsorber-2 Models 3955400 and 3955420 include two filters.	9/4
6961301	Replacement Formaldehyde Carbon Filter for use with formaldehyde and gluteraldehyde. 7.5 pounds of impregnated carbon. Adsorption weight 10% (0.75 lb.). Adsorption volume 850 ml of 37% formalin. One each. Fume Adsorber Models 3955201 and 3955221 include one filter; Fume Adsorber-2 Models 3955421 and 3955421 include two filters.	11/5
6961302	Replacement Ammonia Carbon Filter for use with ammonia and low molecular weight amines. 8.8 pounds of impregnated carbon. Adsorption weight 10% (0.88 lbs.). Adsorption volume 800 ml of 50% ammonia. One each. Fume Adsorber Models 3955202 and 3955222 include one filter; Fume Adsorber-2 Models 3955402 and 3955422 include two filters.	13/6
6924900	Syringe Kit for carbon saturation detection. Contaminant detector tubes are not included (See Detector Tubes below or contact your safety supply distributor).	5 1/0.5
6926000	Formaldehyde Detector Tubes, package of 3.	0.5/0.2
6925700	Ammonia Detector Tubes, package of 3.	0.5/0.2

 $^{^{}st}$ International electrical configuration

 $^{**}Complete the Chemical Usage Assessment Form at www.labconco.com/chemical_usage/html \ or \ call \ 800-821-5525 \ or \ 816-333-8811.$



Paramount[®] Filtered Enclosures

Features & Benefits

Paramount Filtered Enclosures are self-contained work stations that use carbon filters to rid the laboratory of annoying or unsafe concentrations of organic solvents, formaldehyde, acid gases or ammonia. Unlike traditional fume hoods, they **require no ducting** and can be moved from lab to lab.

Paramount Duet Filtered Enclosures use both carbon-based and 99.99% efficient HEPA filters for removing gaseous and particulate contaminants. These enclosures are suited to clean room and other applications that use chemicals that generate fumes,

LCD message center provides

continuous filter status reports

vapors and/or particulates yet require ISO Class 5 (formerly Class 100) conditions.

Built-in blower is quiet, non-

sparking and corrosion-resistant.

Color-Smart Filter Cells used in the Paramount are sold separately and come in five types: Ammonia, Acid Gas, Organic, Formaldehyde and HEPA. See page 94 for application discussion and ordering information. For technical assistance in determining the right Filter Cells for your application, submit the Chemical Usage Assessment Form available at www.labconco.com/chemical_usage.html or contact Labconco at 800-821-5525 or 816-333-8811.



Programming touchpad and two built-in timers allow the user to program the filter check and change times through the LCD. Alert messages appear after the user-specified number of hours has elapsed.

Filter clamping mechanism with gas-assisted lift opens effortlessly and applies uniform pressure across the entire top surface of the filter cells for leak-proof, one-step filter replacement from the front of the enclosure. Color-Smart Filter Cells are sold separately.

Two-position tempered safety glass sash is angled to allow—closer, more comfortable viewing without glare. Set at 13" sash opening to work surface, face velocity is 100 fpm; at 15", velocity is 80 fpm. The sash pivots up for loading and cleaning.

Convenient utility ports allow passage of tubing and electrical cords from equipment inside the enclosure through the back for connection to services.

ETL-listed. Hoods carry the ETL mark signifying that they are certified to UL 3101-1/61010-1 and CAN/CSA C22.2 No. 1010.1.



Air foil directs airflow into the hood to ensure fume containment.

Performance tested to ASHRAE 110-1995.





Fully assembled and prewired. Mount the Paramount on existing cabinetry or accessory work surface and base, install filters, plug into an electrical outlet and it's ready to use.



Durable construction. Sides and sash are tempered safety glass that won't easily discolor or craze like plastic. The frame is glacier white, dry powder epoxy-coated aluminum.

Prefilters remove dust and other particulates, extending the life of the Color-Smart Filter Cells.

Audible/visual alarm reminds the user to check the filters using sampling tubes or to replace the filters. The alarm can be programmed to alert after the blower has run for a preset period of time. On models with organic vapor sensors, the same alarm activates when high concentrations of organic vapors are detected by the sensors.

Fluorescent lights illuminate the interior and are replaceable from the front.

Air-mixing rear baffle extends filter life, ensures safe and rapid fume removal and distributes an even concentration of contaminants to the filters for uniform loading. Paramount 360 Filtered Enclosures have a clear, tempered safety glass baffle for 360° of visibility, ideal for training or classroom demonstrations. The glass baffle pivots down for cleaning.

CE mark. All 230 volt, 50 Hz models conform to the CE (European Community) requirements for electrical safety and electromagnetic compatibility.

Paramount[®] Filtered Enclosures



Paramount 360 Filtered Enclosure 6910104 is shown with Mobile Base Stand 6910700. Color-Smart Filter Cells and supporting base must be ordered separately.

All models feature:

- Glacier white, dry powder epoxy-coated aluminum construction.
- 3/16" thick tempered safety glass sides.
- Air-mixing, epoxy-coated steel rear baffle.*
- Two prefilters.
- Two 1.5" diameter utility ports with plastic plugs.
- Gas-assisted filter clamping mechanism.
- Control panel with LCD for display of filter time elapsed; programmable timer for audio/visual alarm; ALARM/MUTE switch with LED indicator; SET FILTER TIME, UP/DOWN, and ENTER programming switches; and event timer.

- Built-in, non-sparking motor/blower.
- Pre-wired with two 20-watt fluorescent lights and switches for blower and light.
- Angled 1/4" thick tempered safety glass sash, adjustable to two operating height positions (13" and 15" to work surface), pivots to full open position (24.25") for cleaning and transfer of material.
- Face velocity of 100 fpm (236 CFM) when sash opening to work surface is 13" and 80 fpm (236 CFM) when sash opening is 15".
- Air sampling test port and syringe.
- · Shipped fully assembled.



All models conform to the following regulations and standards:

- SEFA 1-2005
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- CE Conformity Marking (230 volt models)

Paramount 360 Filtered Enclosure models feature:

 Clear, 3/16" thick tempered safety glass baffle and back panel. The baffle pivots down for cleaning.

Models with vapor sensors feature:

Two vapor sensors for detection of organic vapors with concentrations of 50 ppm or greater. One sensor is located in the filter bed and one in the exhaust air stream. Upon detection, the sensors activate the audible/visual alarm.

All models require (not included):

- Work Surface and Base. See pages 80-81.
- *Color-Smart Filter Cells*. See pages 94-95.
- *HEPA Color-Smart Filter Cells* (for Duet models only). See pages 94-95.

Optional accessories (see page 81):

- Replacement Roughing Prefilters
- Electrostatic Prefilters
- Exhaust Collar Kit (for outside ducting)

Contact Labconco at **800-821-5525** or **816-333-8811** for application assistance.

^{*} Baffle on Paramount 360 models is tempered safety glass.

Ordering Information & Dimensional Data

Paramount

Filtered Enclosures

6930100 Paramount Easy Order

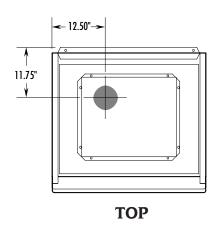
Paramount Easy Order includes all the components needed for a complete Paramount Enclosure System—from ceiling to floor. Order just one catalog number, 6930100, and receive the following items:

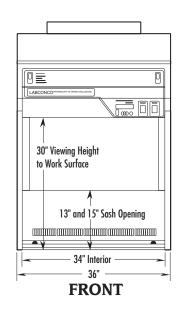
- 1. 6910100 Paramount Filtered Enclosure for 115 volts, 60 Hz operation as described below.
- 2. 6910700 Mobile Base Stand as described on page 80.
- **3.** 6910400 Organic Color-Smart Filter Cells as described on pages 94-95.

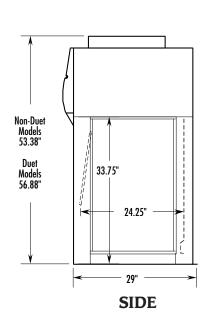
Nominal Width	Catalog Number	Electrical Requirements	8-Foot Power Cord & Plug	Organic Vapor Sensors	360 Model Clear Back & Baffle	Duet Model Requires HEPA Filters	Shipping Weight lbs./kg
Models without Organic Sensors			3				3 3
3 Feet	6910100	115 volts, 60 Hz, 3 amps	•				290/132
3 Feet	6910101*	230 volts, 50 Hz, 1.5 amps	no plug				290/132
3 Feet	6910104	115 volts, 60 Hz, 3 amps	•		•		290/132
3 Feet	6910105*	230 volts, 50 Hz, 1.5 amps	no plug		•		290/132
3 Feet	6910110	115 volts, 60 Hz, 3 amps	•			•	290/132
3 Feet	6910111*	230 volts, 50 Hz, 1.5 amps	no plug			•	290/132
3 Feet	6910114	115 volts, 60 Hz, 3 amps	•		•	•	290/132
3 Feet	6910115*	230 volts, 50 Hz, 1.5 amps	no plug		•	•	290/132
Models with	Organic Sensor	S					
3 Feet	6910000†	115 volts, 50 Hz, 3 amps	•	•			290/132
3 Feet	6910001†	230 volts, 50 Hz, 1.5 amps	no plug	•			290/132
3 Feet	6910004†	115 volts, 60 Hz, 3 amps	•	•	•		290/132
3 Feet	6910005†	230 volts, 50 Hz, 1.5 amps	no plug	•	•		290/132
3 Feet	6910010†	115 volts, 60 Hz, 3 amps	•	•		•	290/132
3 Feet	6910011*†	230 volts, 50 Hz, 1.5 amps	no plug	•		•	290/132
3 Feet	6910014†	115 volts, 60 Hz, 3 amps	•	•	•	•	290/132
3 Feet	6910015 *†	230 volts, 50 Hz, 1.5 amps	no plug	•	•	•	290/132

^{*} International electrical configuration

^{† 69100} Series Models are for use when organic vapors are expected to exceed 50 ppm. For applications involving organic vapors with concentrations below 50 ppm, 69101 Series Models are recommended. For help in determining concentration levels for your applications, contact Labconco at 800-821-5525 or 816-333-8811. See pages 94 and 95 for ordering information on Color-Smart Filter Cells.







Paramount® 72 Filtered Enclosures



Paramount 72 Filtered Enclosure 6910102 is shown with Dished Work Surface 6935000 and two Base Cabinets 3552702. Color-Smart Filtered Cells must be ordered separately.

All models feature:

- Glacier white, dry powder epoxy-coated aluminum construction.
- 3/16" thick tempered safety glass sides.
- Air-mixing, epoxy-coated steel rear baffle.*
- Four prefilters.
- Four 1.5" diameter utility ports with plastic plugs.
- Two gas-assisted filter clamping mechanisms.
- Control panel with LCD for display of filter time elapsed; programmable timer for audio/visual alarm; ALARM/MUTE switch with LED indicator; SET FILTER TIME, UP/DOWN, and ENTER programming switches; and event timer.

- Two built-in, non-sparking motor/blowers.
- Pre-wired with four 20-watt fluorescent lights and switches for blower and light.
- Angled, 1/4" thick tempered safety glass sash, adjustable to two operating height positions (13" and 15" to work surface), pivots to full open position (24.25") for cleaning and transfer of material.
- Face velocity of 100 fpm (472 CFM) when sash opening to work surface is 13" and 80 fpm (472 CFM) when sash opening is 15".
- Air sampling test port and syringe.
- · Shipped fully assembled.

All models conform to the following regulations and standards:

- SEFA 1-2005
- ASHRAE 110-95
- ANSI Z9.5-2003
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- CE Conformity Marking (230 volt models)

Paramount 360 Filtered Enclosure models feature:

 Clear, 3/16" thick tempered safety glass baffles and back panel. When set screws are loosened, the baffles pivot down for cleaning.

Models with vapor sensors feature:

Two vapor sensors for detection of organic vapors with concentration of 50 ppm or greater. One sensor is located in the filter bed. Upon detection, the vapor sensor activates the audible/visual alarm. A second sensor is located in the exhaust air stream and, upon detection, activates the audible/visual alarm.

All models require (not included):

- Work Surface and Base. See pages 80-81.
- Two sets of Color-Smart Filter Cells. See pages 94-95.
- Two sets of HEPA Color-Smart Filter Cells (for Duet models only). See pages 94-95.

Optional accessories (see page 81):

- Replacement Roughing Prefilters
- Electrostatic Prefilters
- Exhaust Collar Kits (for outside ducting)

Contact Labconco at **800-821-5525** or **816-333-8811** for application assistance.

Exclusive Feature

^{*} Baffle on Paramount 360 models is tempered safety glass.

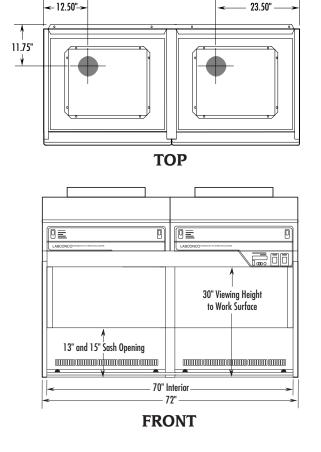
Ordering Information & Dimensional Data

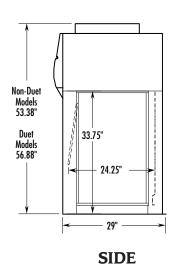
Paramount® 72 Filtered Enclosures

Nominal Width	Catalog Number	Electrical Requirements	8-Foot Power Cord & Plug	Organic Vapor Sensors	360 Model Clear Back & Baffle	Duet Model Requires HEPA Filters	Shipping Weight lbs./kg
Models with	out Organic Sen	sors	-				
6 Feet	6910102	115 volts, 60 Hz, 6 amps	•				580/264
6 Feet	6910103*	230 volts, 50 Hz, 3 amps	no plug				580/264
6 Feet	6910106	115 volts, 60 Hz, 6 amps	•		•		580/264
6 Feet	6910107*	230 volts, 50 Hz, 3 amps	no plug		•		580/264
6 Feet	6910112	115 volts, 60 Hz, 6 amps	•			•	580/264
6 Feet	6910113*	230 volts, 50 Hz, 3 amps	no plug			•	580/264
6 Feet	6910116	115 volts, 60 Hz, 6 amps	•		•	•	580/264
6 Feet	6910117*	230 volts, 50 Hz, 3 amps	no plug		•	•	580/264
Models with	Organic Sensors	S					
6 Feet	6910002 [†]	115 volts, 50 Hz, 6 amps	•	•			580/264
6 Feet	6910003†	230 volts, 50 Hz, 3 amps	no plug	•			580/264
6 Feet	6910006†	115 volts, 60 Hz, 6 amps	•	•	•		580/264
6 Feet	6910007†	230 volts, 50 Hz, 3 amps	no plug	•	•		580/264
6 Feet	6910012†	115 volts, 60 Hz, 6 amps	•	•		•	580/264
6 Feet	6910013*†	230 volts, 50 Hz, 3 amps	no plug	•		•	580/264
6 Feet	6910016†	115 volts, 60 Hz, 6 amps	•	•	•	•	580/264
6 Feet	6910017*†	230 volts, 50 Hz, 3 amps	no plug	•	•	•	580/264

^{*} International electrical configuration

^{† 69100} Series Models are for use when organic vapors are expected to exceed 50 ppm. For applications involving organic vapors with concentrations below 50 ppm, 69101 Series Models are recommended. For help in determining concentration levels for your applications, contact Labconco at 800-821-5525 or 816-333-8811. See pages 94 and 95 for ordering information on Color-Smart Filter Cells.

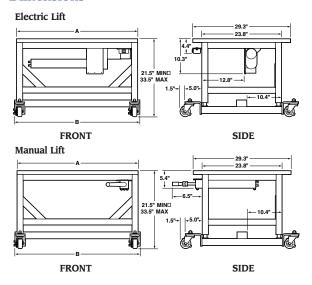




Paramount[®] Electric & Manual Hydraulic Lift Base Stands



Dimensions



Paramount Base Stands offer both height flexibility and portability for Paramount Filtered Enclosures. The hydraulic lift adjustment accommodates persons of different heights and allows for easier access to the Paramount Enclosure's upper chamber for filter testing and replacement. Manual and electric hydraulic lift models are offered. The Stands have a unique low profile, caster-mounting design so that the Paramount Filtered Enclosure may be lowered to pass through an 80" high doorway, ensuring portability for sharing among classrooms and laboratories or for storage.

Features (All Models):

- Support Paramount Filtered Enclosures.
- Support loads up to 1000 pounds.

人 ADA-compliant.

- Durable 1.75" tubular, epoxy-coated steel frame with rear crossbar supports. Support frame is 2.0" x 3.0" tubular steel.
- Attractive glacier white finish complements laboratory casework and Paramount Filtered Enclosures.
- Hydraulic lift legs have infinite adjustment from 21.5" to 33.5" high.
- Include four 3" diameter, non-marking polyurethane casters with bearings for quiet operation.
- Include 1" thick gray solid epoxy work surface. Surface is dished on 3-foot models; flat on 6-foot models.

Features (Electric Hydraulic Lift Models):

- Include front-accessible, right-side mounted up/down switch.
- Available in two electrical configurations. Models for 115 volts, 60 Hz operation include a 12-foot, 3-wire cord and plug. Models for 230 volt, 50 Hz operation include a 12-foot, 3-wire cord and a NEMA 6-15P plug.*
- Electrical components are UL listed.

Features (Manual Hydraulic Lift Models):

• Include front-accessible, right-side mounted hand crank. Turning the crank clockwise raises the stand; counterclockwise lowers it. The handle may be folded under, out of the way, when not in use.

3-Foot Models	Α	В	
3781000, 3781001, 3782000	36.0"	37.2"	
6-Foot Models			
3743500, 3743501, 3754500	72.0"	73.2"	

Ordering Information



Nominal Width	Catalog #	Hydraulic Lift	Overall Width x Depth	Electrical Requirements	Shipping Weight lbs./kg	For Use With:
3 feet	3781000	Electric	36.0" w x 29.0" d	115 volts, 60 Hz, 2.4 amps	200/91	3' Paramount Filtered Enclosure
3 feet	3781001*	Electric	36.0" w x 29.0" d	230 volts, 50 Hz, 0.8 amp	200/91	3' Paramount Filtered Enclosure
3 feet	3782000	Manual	36.0" w x 29.0" d	not applicable	180/82	3' Paramount Filtered Enclosure
6 feet	3743500	Electric	72.0" w x 29.0" d	115 volts, 60 Hz, 2.4 amps	350/159	6' Paramount Filtered Enclosure
6 feet	3743501*	Electric	72.0" w x 29.0" d	230 volts, 50 Hz, 0.8 amp	350/159	6' Paramount Filtered Enclosure
6 feet	3754500	Manual	72.0" w x 29.0" d	not applicable	330/150	6' Paramount Filtered Enclosure

^{*} International electrical configuration. The NEMA 6-15P plug may require replacement with a different plug to match the user's intended receptacle.



5 Stand height meets requirements of the ADA..

Paramount® Filtered Enclosures

6911000 Replacement Prefilters

Remove dust and other particulates, extending the life of Color-Smart Filter Cells. Labconco recommends replacing prefilters whenever changing Color-Smart Filter Cells. 1 pair. Shipping weight 3 lbs. (1.4 kg)

6912000 Electrostatic Prefilters

Remove aerosols, mist and fine particles, extending the life of Color-Smart Filter Cells. These optional prefilters are used in place of Roughing Prefilters for removal of aerosols. 1 pair. Shipping weight 3 lbs. (1.4 kg)

6910900 Exhaust Collar Kit

Permits connection of the Paramount to 6" diameter PVC duct for optional exhausting to the outside. Includes 8" x 6" thermoplastic duct reducer and 7" diameter flexible duct connection with two clamps. Paramount 72 Enclosures require two collars. **Remote blower is required.** Contact Labconco at **800-821-5525** or **816-333-8811** for blower selection assistance.



Mobile Base Stands

Glacier white epoxy-coated tubular steel frame with 5" diameter, toe-locking casters. Include solid epoxy work surface. Stand is 37.2" high.

Catalog #	Description	Dimensions	Shipping Weight
6910700	3' Stand with Dished Surface	36" w x 29.25" d x 1" thick	155 lbs. (70 kg)
6934000	6' Stand with Flat Surface	72" w x 29.25" d x 1" thick	265 lbs. (120 kg)



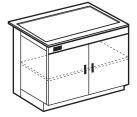
6910600 Dished Work Surface for 3' Paramount Filtered Enclosures

For use on existing cabinetry. Included with Mobile Base Stand 6910700 and Base Cabinet 6910800. Gray solid epoxy. 36.00" w x 29.25" d x 1.00" thick. Shipping weight 70 lbs. (32 kg)



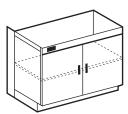
6935000 Flat Work Surface for 6' Paramount Filtered Enclosures

For use on existing cabinetry or with 2 each 3552702 Base Cabinets. Included with Mobile Base Stand 6934900. Gray solid epoxy. 72.00" w x 29.25" d x 1.00" thick. Shipping weight 160 lbs. (73 kg)



6910800 Base Cabinet with 31 Dished Work Surface

Epoxy-coated steel cabinet with work surface supports 3' Paramount Filtered Enclosure. Interior shelf stores one set of Filter Cells (not included). Includes four leveling feet and one 8" filler panel to increase cabinet depth from 22.00" to 30.00". Cabinet dimensions: 36.00" w x 22.00" d x 35.50 - 36.75" high. Work surface dimensions: 36.00" w x 29.25" d x 1.00" thick. Shipping weight 260 lbs. (118 kg)



3552702 Base Cabinet without work surface

Epoxy-coated steel base cabinet. Interior shelf stores one set of Filter Cells (not included). Includes four leveling feet and one 8" filler panel to increase cabinet depth from 22.00" to 30.00". Dimensions: 36.00" w x 22.00" d x 35.50 - 36.75" high. Shipping weight 190 lbs. (86 kg). Order two each 3552702 Base Cabinets and one each 6935000 Flat Work Surface to support Paramount 72 Filtered Enclosure.



Protector®XVS™ Ventilation Stations

Features & Benefits

Protector XVS Ventilation Stations are enclosures that provide an economical alternative to traditional fume hoods. With their low profile and clear sides, top and sash, Protector XVS Ventilation Stations are well suited for classroom and educational laboratory environments where supervision or demonstrations are required. They may also be used as weighing stations, light duty fume hoods, solvent cleaning work bays, and veterinary pathology and cytology enclosures. Smaller than most fume hoods, XVS Stations, in 2', 3' and 4' widths, exhaust less tempered room air and conserve more energy than traditional hoods. They have no switches, wiring or service fixtures that can add significant costs.

Protector XVS Stations may be connected to a remote blower from either the top or bottom and exhausted to the outside. Alternatively, they may be connected to the FilterMate Portable Exhauster, which uses a carbon filter(s), a HEPA filter(s) or HEPA/carbon filter combination to remove fumes and vapors and/or hazardous particulates from the exhaust air. No outside ducting is required.

Tempered safety glass front sash, sides and top offer excellent visibility, ambient light and protection. Glass provides better fire, scratch and chemical resistance than acrylic and dissipates static charge. For additional illumination, the accessory Fluorescent Task Light may be mounted atop the enclosure

Sturdy glacier white and gray, dry powder epoxy-coated aluminum frame and steel rear plenum and baffle dissipate static charge and provide durability and better chemical resistance compared to acrylic models. No unreliable plasticto-plastic bonding is used.

Low profile design requires less space than most ventilated enclosures.

Deep 23" interior easily accommodates a variety of apparatus including large balances.

W Upper dilution air supply introduces room air at the top of the sash to dilute contaminants in the upper chamber and

bathes the back of the sash with clean air.

Upper containment sash foil bleeds air into the enclosure to direct concentrations of contaminants away from the operator's breathing zone.

Ergonomic angled sash allows a closer view, reduces glare and provides a more comfortable operating position than vertical sashes. The hinged sash pivots upward and locks to a loading height of 19" or 27.7" depending on the model.

Patented* rear baffle with **zones of perforations** promotes horizontal laminar airflow to maximize containment. The baffle pivots down and is easily removable for cleaning.

Patented* upper containment sash foil bleeds air into the enclosure to direct concentrations of contaminants away from the operator's breathing zone.

8" high sash opening limits exhaust demand, conserves costly tempered room air and requires a smaller remote blower than most fume hoods. Models 32" high have a 10" sash opening.

Flexible exhaust options. 2" x 10" rectangular exhaust openings on the top and **bottom** allow the Protector XVS Ventilation Station to be connected to ductwork for exhausting to the outside or to a FilterMate™ Portable Exhauster for filtered removal of fumes, particulates or powders. Using the bottom exhaust opening keeps ductwork hidden, maximizing room visibility.



Side-entry air foils allow air to sweep across the interior glass surfaces to enhance containment.

Optional Guardian™ 1000 Digital or Guardian™ Jr. Airflow Monitor alerts the user to face velocities outside of preset range. The Guardian 1000 Digital Monitor has an RS232 port for connection to a user-supplied computer.

Patented* Clean-Sweep™ air foil allows air to sweep the work surface for maximum containment. Airflow openings pull inflow air from under the air foil so that clean air continually flows through the air foil creating a constant barrier of protection from contaminants. The air foil's ergonomic design provides a comfortable position for the operator's forearms.

Two utility ports allow passage of tubing, electrical cords and interface cables from inside to back exterior for connection to services.

Modified ASHRAE 110-1995 conformity independently verified by ECT, Inc.

Particulate containment independently verified by SafeBridge Consultants, Inc.

U.S. Patent No. 6,461,233 Other patent pending

Protector®XVS™ Ventilation Stations









At left: Protector XVS Ventilation Station 4863010 is shown with Black Solid Epoxy Dished Work Surface 3908401 and Telescoping Base Stand with Casters 3747011. Blower, ductwork, work surface and supporting base must be ordered separately. Above left: Protector XVS Ventilation Station 4862030 is shown with Black Solid Epoxy Dished Work Surface 3908400 and Telescoping Base Stand 3747000. Blower, ductwork, work surface and supporting base must be ordered separately. Above right: Protector XVS Ventilation Station 4864030 is shown with Black Solid Epoxy Dished Work Surface 3908402 and Telescoping Base Stand 3747002. Blower, ductwork, work surface and supporting base must be ordered separately.

All models feature:

- By-pass airflow design.
- Deep 23" interior.
- Clean-Sweep air foil.*
- Upper containment sash foil.*
- Upper dilution air supply.
- Rear baffle with zones of perforations that pivots down and is removable for cleaning.*
- Side-entry air foils.
- Glacier white and gray, dry powder epoxy-coated aluminum frame and steel rear plenum and baffle. No unreliable plastic-to-plastic bonding is used.
- Clear, 3/16" thick, tempered safety glass front sash, sides and top.
- Models, 22.75" high, have a 20° angled sash with an 8" sash opening; Models, 32.0" high, have a 14° angled sash with a 10" sash opening. The hinged sash pivots upward and locks to a loading height of 19.0" or 27.7" depending on the model.

- Two utility ports with iris openings and plastic plugs.
- Top and bottom 2" x 10" rectangular exhaust collars.
- Particulate containment independently verified by SafeBridge Consultants, Inc.
- Modified ASHRAE 110-1995 conformity independently verified by ECT, Inc.

All models conform to the following regulations and standards:

- SEFA 1-2005
- Modified ASHRAE 110-95
- ANSI Z9.5-2003

All models require:

- Remote blower or FilterMate Portable Exhauster (each sold separately).
 See pages 94-95 or 97.
- Work surface. See page 96.
- Supporting base. See pages 106-116.

Optional accessories:

- Fluorescent Task Lights. See page 96.
- Utility Shelves. See page 96.
- Bottle Holder. See page 96.
- Tissue Holder. See page 96.
- Transition Adapters. See page 97.
- Guardian Airflow Monitors. See page 98.

22.75" Hi	gh Models	With 8"	High Sash (Opening
Nominal	T-4-1 E-1	CEM	and Static Pre	
Width	80 fpm	S.P.	60 fpm	S.P.
2.5	-	02"	70	00"
2 Feet	95	.03"	70	.02"
3 Feet	145	.06"	110	.04"
4 Feet	200	.10"	150	.06"
32" High	Models V	Vith 10" F	ligh Sash O	pening
02 mg				Perms

32" High Models With 10" High Sash Opening						
Nominal	Total Exha	aust CFM a	and Static Pre	essure		
Width	80 fpm	S.P.	60 fpm	S.P.		
2 Feet	120	.05"	90	.03"		
3 Feet	185	.10"	140	.06"		
4 Feet	250	.16"	185	.09"		

Exclusive Feature

* U.S. Patent No. 6,461,233



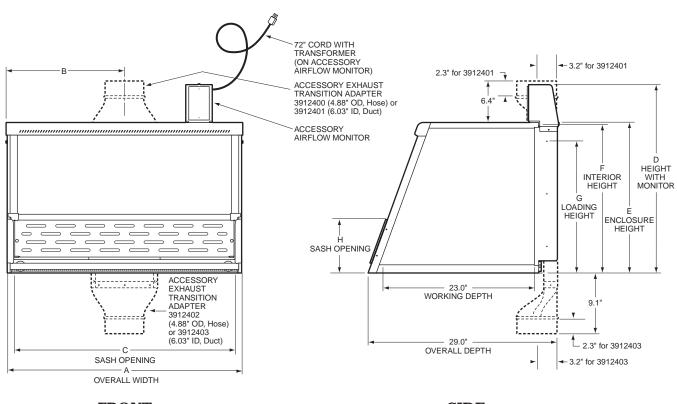
Ordering Information & Dimensional Data

Protector® XVS® Ventilation Stations

Protector® XVS Ventilation Stations

Nominal Width	Catalog Number	Overall Height (E)	(A)	(B)	(C)	(D)	(F)	(G)	(H)	Shipping Weight lbs./kg
2 Feet	4862010	22.8"	24.0"	12.0"	21.6"	28.6"	22.3"	20.0"	8.0"	50/23
2 Feet	4862030	32.0"	24.0"	12.0"	21.6"	37.8"	31.5"	29.3"	10.0"	60/27
3 Feet	4863010	22.8"	36.0"	18.0"	33.6"	28.6"	22.3"	20.0"	8.0"	70/32
3 Feet	4863030	32.0"	36.0"	18.0"	33.6"	37.8"	31.5"	29.3"	10.0"	80/36
4 Feet	4864010	22.8"	48.0"	24.0"	45.6"	28.6"	22.3"	20.0"	8.0"	90/41
4 Feet	4864030	32.0"	48.0"	24.0"	45.6"	37.8"	31.5"	29.3"	10.0"	100/45

^{*} Contact Labconco for ordering information on Ventilation Stations in 5', 6' and 8' widths.



FRONT SIDE



FilterMate™ Portable Exhausters



FilterMate Portable Exhauster 3970000. Includes HEPA filter.



FilterMate Portable Exhauster 3970001.

Requires carbon filter (not included).



FilterMate Portable Exhauster 3970002. Includes HEPA filter and thimble connection. **Requires ducting to outside.**



FilterMate Portable Exhauster 3970003. Includes HEPA filter. Requires carbon filter (not included).

An accessory for the Protector XVS
Ventilation Station, Protector Demonstration
Hood, Protector Work Station and XPert™
Balance Enclosure, the FilterMate uses a
HEPA filter, carbon filter or a combination
of both filters to remove hazardous powders, particulates or vapors from the
exhaust air stream and return filtered air
to the environment.

All models feature:

- Compact, corrosion-resistant housing of glacier white and light gray, dry powder, epoxy-coated steel with rubber feet.
- Variable-speed, non-sparking motorized impeller.
- Quiet operation. Oversized HEPA filter, efficient impeller and perforated exhaust cover work together to provide lower system exhaust velocity and noise pressure levels.

Exhaust CFM	Noise Pressure dB(A)
100	45-47
150	51-54
200	56-61
250	63-65

- Inherently safe design. A negative pressure plenum surrounds the positive pressure impeller so that if a leak occurs, the unfiltered air is captured and refiltered.
- Sized for Protector Demonstration Hoods, Protector XVS Ventilation Stations, Protector Work Stations and XPert Balance Enclosures. Capable of efficiently filtering up to 250 CFM for HEPA or carbon filtration; up to 200 CFM for combination HEPA/carbon filtration (60-100 fpm depending on enclosure model).
- Front-mounted rocker switch to control power to the blower.
- Rear-mounted, auxiliary electrical outlet that may be connected to an airflow monitor or other user-supplied accessories.
- Only one FilterMate is required for all 2', 3' and 4' wide enclosures. Multiple FilterMates may be used for 5', 6' and 8' wide enclosures.







- Included: 8 feet of 5" ID flexible gray polypropylene hose, two clamps and a 4.88" OD Upper Transition Adapter for connection to the top of the Protector XVS Ventilation Station, Protector Work Station or Protector Demonstration Hood. Models 3970004 and 3970024 include a 4.88" OD Lower Transition Adapter instead of the Upper Transition Adapter.
- 6.5' IEC three-wire electrical cord with plug (115 volt models).
- 9' IEC three-wire electrical cord.
 An electrical plug is required (230 volt models).

All models conform to the following regulations and standards:

- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- CE Conformity Marking (230 volt models)

Models 3970000, 3970020, 3970002, 3970002, 3970003 and 3970023 feature:

- HEPA filter, 99.99% efficient on particulates 0.3 micron in size.
- True bag-in/bag-out filter disposal system for safely removing and replacing the filter without detaching the hose. The HEPA filter may be easily accessed by removing the exhaust cover for field leak testing by a certified technician.

Models 3970002 and 3970022 feature:

• 6.06" ID thimble connection from the FilterMate to an existing house exhaust system for added safety.

Models 3970001, 3970021, 3970003 and 3970023 require one each and Models 3970004 and 3970024 require two each (not included):

 Carbon Filter. Organic Vapor, Formaldehyde or Ammonia Filters are offered. See pages 94-95.

Optional Accessories

- Replacement HEPA Filter. See pages 94-95.
- Replacement Bag-In/Bag-Out Bag. See page 95.
- Flexible Hose. See page 96.



Ordering Information & Dimensional Data FilterMater Portable Exhausters

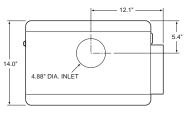
FilterMate™ Portable Exhausters

Catalog Number	Filter Usage	Overall Dimensions	Electrical Requirements	Airflow Potential		Shipping ight lbs./kg
3970000	HEPA included	14.0" w x 23.0" d x 22.7" h	115 volts, 60 Hz	250 CFM (60-100 fpm)	None. Room exhaust.	50/23
3970020*	HEPA included	14.0" w x 23.0" d x 22.7" h	230 volts, 50 Hz	250 CFM (60 100 fpm)	None. Room exhaust.	50/23
3970001	Carbon required [†]	14.0" w x 23.0" d x 22.7" h	115 volts, 60 Hz	250 CFM (60-100 fpm)	None. Room exhaust.	48/22
3970021*	Carbon required†	14.0" w x 23.0" d x 22.7" h	230 volts, 50 Hz	250 CFM (60-100 fpm)	None. Room exhaust.	48/22
3970002	HEPA included	18.6" w x 23.0" d x 24.7" h	115 volts, 60 Hz	250 CFM (60-100 fpm)	6.06" ID Thimble to outside	54/25
3970022*	HEPA included	18.6" w x 23.0" d x 24.7" h	230 volts, 50 Hz	250 CFM (60-100 fpm)	6.06" ID Thimble to outside	54/25
3970003	HEPA included†† Carbon required†	14.9" w x 23.0" d x 22.7" h	115 volts, 60 Hz	200 CFM (60-100 fpm)**	None. Room Exhaust.	52/24
3970023*	HEPA included ^{††} Carbon required [†]	14.9" w x 23.0" d x 22.7" h	230 volts, 50 Hz	200 CFM (60-100 fpm)**	None. Room Exhaust.	52/24
3970004	Two Carbon required [†]	14.9" w x 23.0" d x 22.7" h	115 volts, 60 Hz	200 CFM (60-100 fpm)**	None. Room Exhaust.	52/24
3970024	Two Carbon required [†]	14.9" w x 23.0" d x 22.7" h	230 volts, 50 Hz	200 CFM (60-100 fpm)**	None. Room Exhaust.	52/24

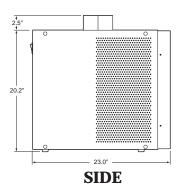
^{*} International electrical configuration

 $\ast\ast\,60\text{-}80$ fpm on 4' enclosure.

Models 3970000, 3970001, 3970020 & 3970021

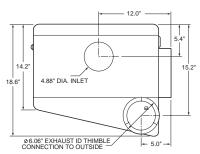


TOP

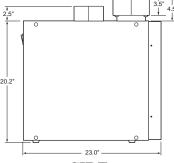


8A POWER OUTLET (115V or 230V MODEL) 10A FUSE **REAR**

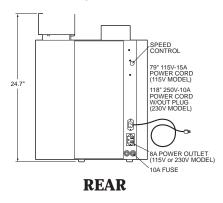
Models 3970002 & 3970021



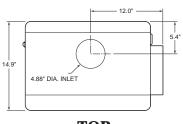
TOP



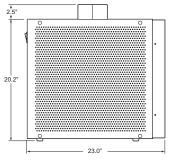
SIDE



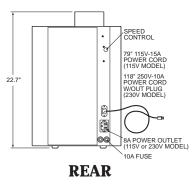
Models 3970003 & 3970023



TOP



SIDE



^{††}HEPA filter may be removed and substituted with a second carbon filter.



Protector[®] Demonstration Hoods



Protector Demonstration Hood System 3945001.

Protector Demonstration Hoods are low profile, light-duty fume hoods designed to provide 360° of close observation of procedures during educational demonstrations.

All models feature:

- Deep 23" interior that easily accommodates a variety of apparatus.
- Patented* Clean-Sweep™ air foil that allows air to sweep the work surface for maximum containment. Airflow openings pull inflow air from under the air foil so that clean air continually flows through the air foil creating a constant barrier of protection from contaminants.
- Upper containment sash foil that bleeds air into the enclosure to direct concentrations of contaminants away from the operator's breathing zone.
- Upper dilution air supply that introduces room air at the top of the sash to dilute concentrations in the upper chamber and bathes the back of the sash with clean air.
- Clear rear baffle that directs air streams to the back of the interior for removal through the exhaust connection. The baffle may be pivoted downward for cleaning.
- Side-entry air foils that allow air to sweep across the interior glass surfaces to enhance containment.

- Sturdy glacier white and gray, dry powder epoxy-coated aluminum frame
- Tempered safety glass front sash, sides, rear baffle and top that offer excellent 360° visibility, ambient light and protection. Glass provides better fire, scratch and corrosion resistance than acrylic.
- 8" high sash opening that limits exhaust demand, conserves costly tempered room air and requires a smaller remote blower than most fume hoods. Tall models, 32.0" high, have a 10" high sash opening.
- Ergonomic angled sash allows a closer view, reduces glare and provides a more comfortable operating position than vertical sashes. Models, 22.8" high, have a 20° angle; models, 32.0" high, have a 14° angle. The hinged sash pivots upward and locks to a loading height of 19.0" or 27.7" depending on the model.
- Lower exhaust tissue screen.
- Two utility ports with iris openings that allow passage of tubing, electrical cords and interface cables from inside to back exterior for connection to services.
- Flexible exhaust options. 2" x 10" rectangular exhaust collars on the top and bottom allow the Protector Demonstration Hood to be connected to ductwork for exhausting to the outside or to a FilterMate Portable Exhauster for filtered removal of fumes and/or particulates. Using the bottom exhaust collar keeps ductwork hidden, maximizing room visibility.

All models conform to the following regulations and standards:

- SEFA 1-2005
- Modified ASHRAE 110-1995
- ANSI Z9.5-2003
- UL 3101-1/61010-1 (115 volt models)

- CAN/CSA C22.2 No. 1010.1 (115 volt models)
- CE Conformity Marking (230 volt models)

System Models 3945000, 3945001, 3945020 & 3545021 also include:

- Cart of glacier white epoxy-coated tubular steel with black 1" thick solid epoxy dished work surface, handle bar, bottom shelf and 4" diameter toe-locking casters.
- FilterMate Portable Exhauster designed for use with two Carbon Filters or one Carbon Filter and one HEPA Filter (Filters are not included. See pages 94-95 for ordering information.) Includes 8 feet of 5" ID flexible gray polypropylene hose, two clamps, a 4.88" OD Lower Transition Adapter for connection to the bottom of the Protector Demonstation Hood, and an IEC 3-wire electrical cord with plug.

Models 3944300 & 3944301 require:

- Connection to a remote blower, house exhaust or FilterMate
 Portable Exhauster. See pages 86-87 for FilterMate. See pages 97-98 for Remote Blowers and ductwork.
- Work surface and supporting base. See page 98 for Cart. See page 104 for work surface and pages 106-116 for Base Cabinets and Stands.

Accessories include:

- Fluorescent Task Lights. See page 96.
- Transition Adapters. See page 97.
- Exhaust Dampers. See page 97.
- Guardian 1000 Digital and Guardian Jr. Airflow Monitors. See page 98.
- · Cart. See page 98.

Nominal	Overall	Sash Opening	Total Exhaust CFM and Static Pressure					
Width	Height	Height	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.
3 Feet	22.8"	8"	185	.10"	145	.06"	110	.04"
3 Feet	32.0"	10"	230**	.15"	185	.10"	140	.06"



^{*} U.S. Patent No. 6,461,233

^{**} FilterMate Portable Exhauster with two filters provides up to 220 CFM and with single filter provides up to 270 CFM.



Ordering Information & Dimensional Data

Protector® Demonstration Hoods

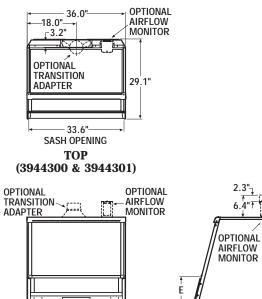
Nominal Width	Catalog Number	Electrical Requirements	Enclosure Height	Shipping Weight lbs./kg			
Protector Demonstration Hoods							
3 Feet	3944300	not applicable	22.8"	75/34			
3 Feet	3944301	not applicable	32.0"	85/39			

Protector Demonstration Hood Systems - include Cart with Work Surface, Lower Transition Adapter and FilterMate Portable Exhauster for use with two Carbon Filters or one Carbon Filter and one HEPA Filter in any combination.*

3 Feet	3945000	115 volts, 60 Hz, 10 amps	22.8"	125/57
3 Feet	3945001	115 volts, 60 Hz, 10 amps	32.0"	135/61
3 Feet	3945020**	230 volts, 50/60 Hz, 5 amps	22.8"	125/57
3 Feet	3945021**	230 volts, 50/60 Hz, 5 amps	32.0"	135/61

^{*} Filters are required but not included. See pages 94-95 for ordering information.

^{**} International electrical configuration

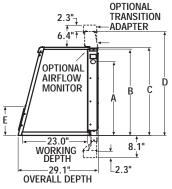


OPTIONAL TRANSITION

ADAPTER

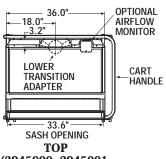
FRONT (3944300 & 3944301)

-18.0"

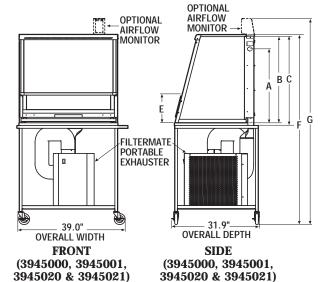


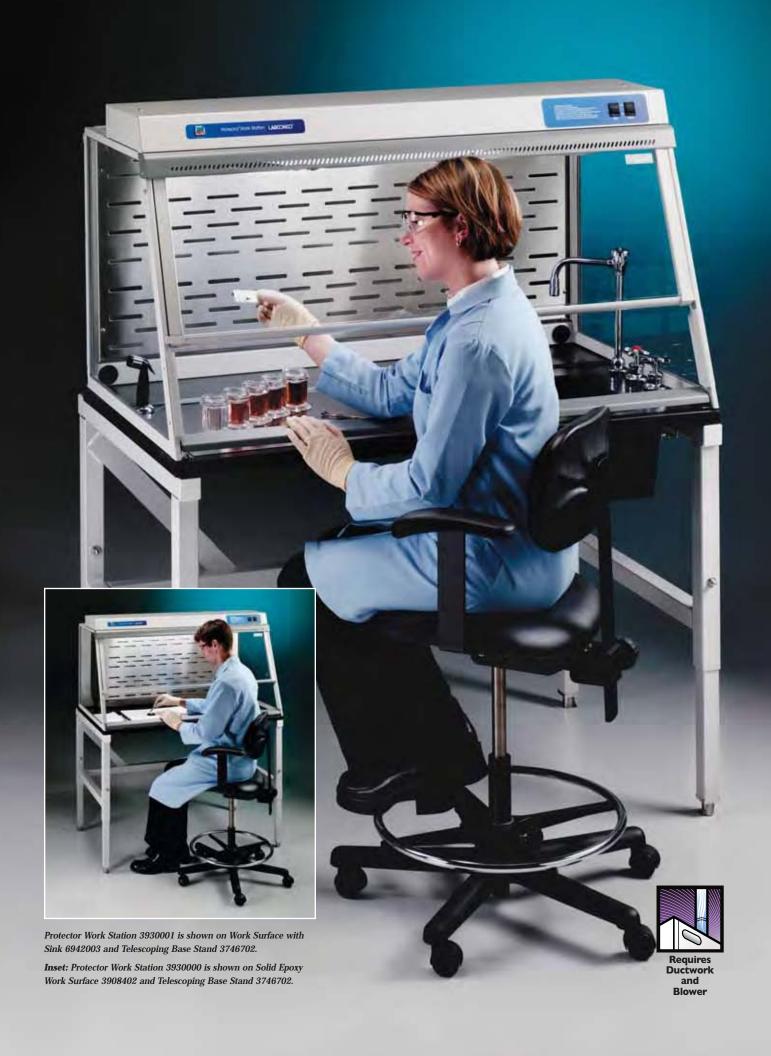
SIDE (3944300 & 3944301)

	A	В	C	D	E	F	G
3944300, 3945000 & 3945020	19.0" loading height	22.3" interior height	22.8" enclosure height	28.6" height w/ monitor	8.0" sash opening	58.8" height w/cart	64.6" height w/cart & monitor
3944301, 3945001& 3945021	27.7" loading height	31.5" interior height	32.0" enclosure height	37.9" height w/ monitor	10.0" sash opening	68.0" height w/cart	73.9" height w/cart & monitor



(3945000, 3945001, 3945020 & 3945021)







Protector® Work Stations

Features & Benefits

Protector Work Stations are specifically designed for the needs of pathologists and histotechnologists. These enclosures rely on patented* containment-enhancing features and face velocities from 60 to 100 fpm to rid the laboratory of solvent vapors associated with gross sectioning, trimming, coverslipping and staining.

Protector Work Stations are available in two configurations. Models designed for connection to a remote blower or house exhaust system offer protection from a broad range of chemicals and are recommended when chemical concentrations are high. unknown or unpredictable. In lieu of outside ducting, these

models may also be connected to the FilterMate Portable Exhauster, which returns filtered air to the laboratory. The FilterMate Portable Exhauster and Filters are sold separately.**

Alternatively, if ducting to the outside is not feasible, Protector Work Stations with built-in blower are available. These enclosures accommodate two large carbon filters — Organic, Formaldehyde and Ammonia — used in any combination. The filters keep low concentrations of these chemicals below OSHArecommended time-weighted average (TWA) levels, restoring clean air to the laboratory. Carbon Filters are sold separately.

Patented* Type 304 stainless steel rear baffle with zones of perfora-tions promotes horizontal laminar airflow to maximize containment. The baffle pivots down and is easily removable for cleaning. On Models 3930000 and 3930020, the area behind the baffle accommodates two Carbon Filters (sold separately).

Glare-free fluorescent lighting.

Two convenient utility ports with iris openings (Models 3930001 and 3930021 only) allow passage of tubing and electrical cords from equipment inside the enclosure through the back for connection to services. Plugs are provided to seal the ports when not in use.

Side-entry air foils allow air to sweep across the interior side glass surfaces to enhance containment.

Patented* Clean-Sweep™ air foil allows air to sweep the work surface for maximum containment. Airflow openings pull inflow air from under the air foil so that clean air continually flows through the air foil creating a constant barrier of protection from contaminants. The air foil's ergonomic design provides a comfortable position for the operator's forearms

Flexible exhaust options (Models 3930001 and 3930021 only). 2" x 10" rectangular exhaust openings

on the top and bottom allow the Protector Work Station to be connected to ductwork for exhausting to the outside or to a FilterMate Portable Exhauster** for filtered removal of vapors, particles or a combination of both. Using the bottom exhaust opening keeps ductwork hidden, maximizing room visibility.

Rear-mounted electrical receptacle, activated by the blower switch, may be used to provide power to the optional Guardian 1000 Digital or Guardian Jr. Airflow Monitor.

ETL-listed. All 115 volt models carry the ETL mark signifying that they are certified to UL 3101-1/61010-1 and CAN/CSA C22.2 No. 1010.1

Ergonomic 20° angled sash allows a closer view, reduces glare and provides a more comfortable operating position than vertical sashes. The hinged sash with and locks to a height of 19.0" for

spring-loaded latch pivots upward loading and cleaning. The sash's wiping seals help keep contaminants contained

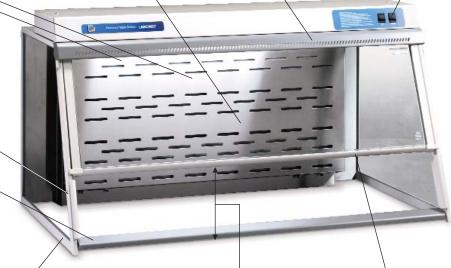
Performance tested to modified ASHRAE 110-1995.

Upper dilution air supply introduces room air at the top of the sash to dilute contaminants in the upper chamber and bathes the back of the sash with clean air.

Optional Guardian 1000 Digital or Guardian Jr. Airflow Monitor alerts the user to face velocities outside of preset range. The Guardian 1000 Digital Monitor also has a RS232 port for connection to a

Front-mounted light and blower switches.

user-supplied computer.



Sturdy and chemical-resistant construction. The frame and rear plenum are glacier white and gray, dry powder epoxy-coated aluminum and steel. The sides and front sash are fire-, scratch- and chemical-resistant 1/4" thick tempered safety glass.

Built-in motorized impeller (Models 3930000 and 3930020 only) is dynamically-balanced for quiet operation.

Speed control (Models 3930000 and 3930020 only) allows a certified technician to validate and adjust the speed of the motorized impeller to achieve the desired inflow velocity.

CE mark. All 230 volt, 50 Hz models conform to the CE (European Community) requirements for electrical safety and electromagnetic compatibility.

8" high sash opening limits exhaust demand, conserves costly tempered room air and requires a smaller remote blower than most fume hoods.

Patented* upper containment sash foil bleeds air into the enclosure to direct concentrations of contaminants away from the operator's breathing



of solid black epoxy is corrosion and stain resistant and dished to contain spills. Includes a 10" x 14" x 6" deep molded epoxy sink; corrosion-resistant, chrome-plated gooseneck fixture with vacuum breaker and two faucet controls. A retractable hose with spray nozzle speeds clean up. A Solid Epoxy Work Surface without sink is also available



^{*} U.S. Patent No. 6,461,233

**See pages 86-87 for ordering information on FilterMate Portable Exhausters.



Protector® Work Stations



Protector Work Station 3930001 is shown on Work Surface with Sink 6942003 and Telescoping Base Stand 3746702. Blower, ductwork, work surface and supporting base must be ordered separately.

All models feature:

- Ergonomic air foil with aerodynamic Clean-Sweep* airflow openings.
- Upper dilution air supply.
- Upper containment sash foil.*
- Zone-perforated Type 304 stainless steel rear baffle that pivots down and is removable for cleaning.*
- Side-entry air foils.
- Glacier white and gray, dry powder epoxy-coated aluminum frame and steel rear plenum.
- 1/4" thick tempered safety glass front sash and sides.
- 8" high sash opening.
- Ergonomic 20° angled and hinged sash with wiping seals and spring-loaded latch that pivots upward and locks to a 19.0" height.
- · Fluorescent lighting.
- Light and blower switches.
- Exterior rear-mounted electrical receptacle.

All models conform to the following regulations and standards:

- SEFA 1-2005
- Modified ASHRAE 110-1995
- ANSI Z9.5-2003
- UL 3101-1/61010-1 (115 volt models)
- CAN/CSA C22.2 No. 1010.1 (115 volt models)
- CE Conformity marking (230 volts models)

Models 3930000 and 3930020 are designed for use with two carbon filters (not included) and feature:

- Built-in dynamically-balanced motorized impeller.
- Speed control.
- Baffle with two release knobs that pivots down for filter access.
- Quiet operation. See chart below.

Models 3930000 and 3930020 require (not included):

• Two Carbon Filters. See pages 94-95.

Models 3930001 and 3930021 are designed for use with remote blower or FilterMate Portable Exhauster and feature:

- 2" x 10" rectangular exhaust openings on the top and bottom.
- Two utility ports with iris openings and plugs.
- Static pressure loss from .06" to .16". See chart below.

Models 3930001 and 3930021 require (not included):

- Remote blower, house exhaust or FilterMate Portable Exhauster.
 See page 97 for Remote Blower. See pages 86-87 for FilterMate.
- Ductwork. See pages 97-98.

All models require (not included):

- Supporting work surface. See page 96.
- Supporting base. See pages 106-116.

Optional accessories include:

- Guardian Jr. and Guardian 1000 Digital Airflow Monitors. See page 98.
- Transition Adapters. See page 97.
- Utility Shelves. See page 96.
- Bottle Holder. See page 96.
- Tissue Holder. See page 96.

Face Velocity (fpm)	Exhaust Volume (CFM)	Noise Pressure db(A) (Models 3930000 & 3930020)	Static Pressure Loss (Inches of H_2O) (Models 3930001 & 3930021)
60	150	57-59	.06"
80	200	62-64	.10"
100	250	69-71	.16"

^{*} U.S. Patent No. 6,461,233



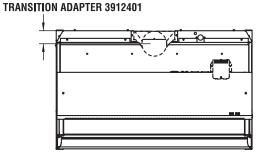


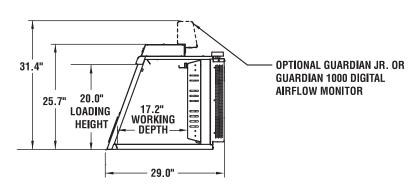
Ordering Information & Dimensional Data Protector® Work Stations

Catalog Number	Electrical Requirements	Power Cord & Plug	Blower	Carbon Filters*	Shipping Weight lbs./kg
3930000	115 volts, 60 Hz, 10 amps	6.5'	Built-in	Requires two	120/54
3930001	115 volts, 60 Hz, 10 amps	6.5'	Requires remote blower, house exhaust or FilterMate Portable Exhauster**		100/45
3930020	230 volts, 50 Hz, 5 amps	9'. No Plug.	Built-in	Requires two	120/54
3930021	230 volts, 50 Hz, 5 amps	9'. No Plug.	Requires remote blower, house exhaust or FilterMate Portable Exhauster**		100/45

^{*} See pages 94-95 for ordering information.

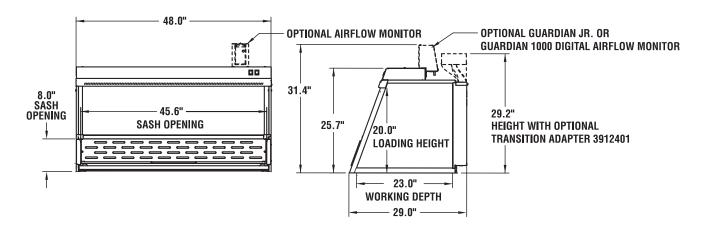
3.2" CENTERLINE OF OPTIONAL





TOP VIEW (Models 3930001 & 3930021)

SIDE VIEW (Models 3930000 & 3930020)



FRONT VIEW (All Models)

SIDE VIEW (Models 3930001 & 3930021)

^{**} See page 97 for ordering information on Remote Blowers and pages 86-87 for ordering information on FilterMate Portable Exhausters.



Carbon and HEPA Filters

Below is an Application Matrix that provides examples of appropriate uses for carbon and/or HEPA filters expended in the Paramount Filtered Enclosure. FilterMate Portable Exhauster or Protector Work Station. Whether or not any ductless enclosure is appropriate for your application requires consideration of factors such as the time-weighted exposure limits of your materials. Using Labconco's exclusive chemical assessment program, our technical specialists can help you determine if a Labconco ductless enclosure is the right ventilation product for your application and, if so, estimate filter life. To begin the process, please complete the Chemical Usage Assessment Form available on our

www.labconco.com/chemical_usage.html or call us at **800-821-5525** or **816-333-8811.**

Depending on the enclosure, Carbon and HEPA Filters are available in a variety of types and, in some cases, may be used in carbon/HEPA filter combination.

- Organic Filters are suitable for vapors from organic solvents including acetone, ethyl acetate, toluene and xylene. Organic Filters are available for use with Paramount Filtered Enclosures, FilterMate Portable Exhausters and Protector Work Stations.
- Acid Gas Filters are suitable for fumes from acids including hydrochloric, nitric and sulfuric. Acid Gas Filters are available for use with Paramount Filtered Enclosures.
- Formaldehyde Filters are suitable for vapors from formaldehyde, formalin and gluteraldehyde. Formaldehyde Filters are available for use with Paramount Filtered Enclosures, FilterMate Portable Exhausters and Protector Work Stations.

- Ammonia Filters are suitable for ammonia and low molecular weight amines. Ammonia Filters are available for use with Paramount Filtered Enclosures, FilterMate Portable Exhausters and Protector Work Stations.
- HEPA Filters, 99.99% efficient, are suitable for removing particulates such as powders and pollen. They should not be used to capture biohazardous materials or volatile organic material. HEPA Filters are available for use with Paramount Filtered Enclosures and FilterMate Portable Exhausters.



Color-Smart™ Filters 6910200

Application Matrix

Filter Type	Paramount/FilterMate/Protector Work Station		or Work Station	Paramount	FilterMate		
Configuration	Organic	Acid Gases*	Ammonia	Formaldehyde	Carbon**/HEPA†	HEPA/Carbon*††	НЕРА
Acid pouring and mixing		•					
Asbestos handling							•
Clean room/critical environment					•		
Combination dry and liquid chemica	als					•	
Drug compounding/research					•		•
Endoscopy instrument cleaning				•			
Histology/cytology tissue staining, coverslipping	•						
Histology/pathology	•					•	
Hormone research						•	•
Non-biohazardous microbiological samples with trace chemicals						•	
Particulates in conjunction with chemical agents						•	
Pathology/tissue grossing				•		•	
Photo-engraving			•				
Plastics production			•				
Pollen handling						•	•
Soldering						•	•
Solvent cleaning	•						
Solvent welding/gluing	•						
Weighing chemical powders						•	•

^{*} Acid Gases Carbon Filter for use with Paramount Filtered Enclosures only.

^{**} Carbon filter type varies based on application

[†] Carbon filter is placed below the HEPA filter on the Paramount so that gaseous contaminants are removed first.

^{††} HEPA filter is placed below the carbon filter on the Paramount so that particulate contaminants are removed first.



Carbon and HEPA Filters

Color-Smart™ Filters for use with Paramount Filtered Enclosures

Color-Smart Filter Cells are engineered to the National Institute for Occupational Safety and Health (NIOSH) guidelines for respirators. Filters are color coded in the same way as respirator cartridge types for at-a-glance recognition. Each pair of Ammonia, Acid Gas and Formaldehyde Filters includes three sampling tubes that detect a broad range of chemicals specific to the filter type. A color change indicates the presence of contaminants. Detector tubes more sensi-

tive to the specific chemical in use may be necessary and are available from laboratory safety supply distributors. Due to the broad range of possible organic chemicals, detector tubes are not included with Organic Filters; they should be purchased separately to suit your application. **All Paramount models require one pair and all Paramount 72 models require two pairs of Carbon Filters.**

Catalog #	Description	Shipping Wt. lbs./kg
6910200	Ammonia Carbon Filters, Type CX. Color-coded bright green. Each filter contains a minimum of 26 pounds of impregnated carbon. One pair. Includes 3 contaminant detector tubes.	90/41
6910300	Acid Gas Carbon Filters, Type ST-1. Color-coded white. Each filter contains a minimum of 26 pounds of impregnated carbon. One pair. Includes 3 contaminant detector tubes.	90/41
6910400	Organic Carbon Filters, Type AC. Color-coded black. Each filter contains a minimum of 26 pounds of activated carbon. One pair.	90/41
6910500	Formaldehyde Carbon Filters, Type CI. Color-coded drab green. Each filter contains a minimum of 26 pounds of impregnated carbon. One pair. Includes 3 contaminant detector tubes.	90/41
6933200	HEPA Filters, 99.99% efficient. Color-coded purple. Suitable for removing 0.3 micron particulates. 1 pair. One pair is required for Paramount Duet models and two pairs are required for Paramount Duet 72 models.	90/41





Carbon and HEPA Filters and Accessories for use with FilterMate Portable Exhausters

A HEPA Filter and Bag-In/Bag-Out Bag are included with FilterMate Portable Exhausters designed for use with HEPA filters. One or two Carbon Filters are required for operation with FilterMate Portable Exhausters designed for use with carbon filters. The type of Carbon Filter(s) required depends on the application.

Catalog #	Description	Shipping Wt. lbs./kg
3923400	Organic Carbon Filter, Type AC. Contains 12 pounds of granular activated carbon media.	14/6.3
3923401	Formaldehyde Carbon Filter, Type ST-1. Contains a minimum of 14 pounds of impregnated carbon media.	17/7.7
3923402	Ammonia Carbon Filter, Type AC. Contains a minimum of 16 pounds of impregnated carbon media.	21/9.5
3707900	Replacement HEPA Filter, 99.99% efficient on particles 0.3 micron in size.	10/4.5
3776002	Replacement Bag-In/Bag-Out Bag to ensure containment of particulate matter during HEPA filter changing.	1/0.5
1968800	Orange Cinching Strap for Bag-In/Bag-out Bag.	1/0.5



Carbon Filters for use with Protector Work Stations

Protector Work Stations 3930000 or 3930020 require two each Carbon Filters, either two of the same filter or a combination of two filters.

Catalog #	Description	Shipping Wt. lbs./kg
3924200	Organic Carbon Filter, Type RL10. Contains 11 pounds of granular activated carbon media.	12/5.4
3924201	Formaldehyde Carbon Filter. Contains a minimum of 13 pounds of impregnated carbon media.	14/6.4
3923402	Ammonia Carbon Filter. Contains a minimum of 15 pounds of impregnated carbon media.	16/7.3

Filter Accessories

Catalog #	Description	Shipping Wt. lbs./kg
6925700	Ammonia Detector Tubes, package of 3.	0.5/0.2
6925800	Acid Gas Detector Tubes, package of 3.	0.5/0.2
6926000	Formaldehyde Detector Tubes, package of 3.	0.5/0.2
6924900	Syringe Kit for carbon filter saturation detection.	1/0.5



Protector® XVS Ventilation Stations. Protector® Demonstration Hoods & Protector® Work Stations



Solid Epoxy Work Surfaces

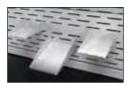
Black work surfaces are contoured to fit the dimensions of Protector XVS Ventilation Stations, Protector Demonstration Hoods and Protector Work Stations and dished to contain spills. One inch thick molded solid epoxy is chemical resistant and fire proof.

Catalog #	Dimensions	For use with:	Shipping Wt. lbs./kg
3908400	24.0" w x 26.7" d	2' Protector XVS	48/22
3908401	36.0" w x 26.7" d	3' Protector XVS, Protector Demonstration Hoods	72/33
3908402	48.0" w x 26.7" d	4' Protector XVS, Protector Work Stations	96/44



6942003 Work Surface with Sink

For use with Protector Work Stations. Accommodates standard dissecting boards. Molded black solid epoxy is chemical resistant and fire proof. Includes a 10.0" x 14.0" x 6.0" deep molded epoxy sink. Fixtures include a chrome-plated gooseneck faucet with vacuum breaker, two chrome-plated faucet controls and a spray nozzle with hose. Sink requires a 1.5" diameter drain connection. Dimensions: 48.0" w x 26.8" d x 1.25" thick. Shipping weight 125 lbs. (57 kg)



3925000 Utility Shelves

For use with Protector XVS Ventilation Stations and Protector Work Stations. Three epoxy-coated steel shelves attach to the rear baffle perforations to hold items such as a balance printer, utensils and other miscellaneous supplies. The utensil shelf has a scalloped front edge to support scalpels, forceps and other items. Shipping weight 5 lbs. (2 kg)



3927700 Bottle Holder

For use with Protector XVS Ventilation Stations and Protector Work Stations. Epoxy-coated steel. Attaches to the rear baffle perforations to hold a squirt bottle or other round container. 3" diameter opening. Shipping weight 1 lb. (0.5 kg)



3927800 Tissue Holder

For use with Protector XVS Ventilation Stations and Protector Work Stations. Epoxy-coated steel. Attaches to the rear baffle perforations to hold tissue wipers in the upside down position. An opening in the bottom of the holder permits wipers to be dispensed from the bottom. Shipping weight 1 lb. (0.5 kg)



Fluorescent Task Lights

Rest atop Protector XVS Ventilations Stations and Protector Demonstration Hoods to enhance illumination of the interior. Include auxiliary electrical receptacle with switch for connection of accessories such as a printer or airflow monitor.

Catalog #	Description SI	nipping Wt. lbs./kg
3909200	115 volts, 60 Hz, 10 amps. Includes IEC, three-wire cord with plug.	15/7
3909201*	230 volts, 50 Hz, 10 amps. Includes IEC, three-wire cord. Plug is required (not include	ed). 15/7

Flexible Hose for FilterMate Portable Exhauster

For use with the FilterMate Portable Exhauster instead of the flexible polypropylene hose included. 8' length. Include two clamps.

Catalog #	Description	Shipping Wt. lbs./kg
3927500	5" ID, clear urethane, smooth bore with white helix, static dissipative, suitable for pharmaceutical and clean room applications.	3/1
3927600	6" ID, black thermoplastic rubber hose with 6.09" ID cuffs, suitable for pharmaceutical and clean room applications. May be used to duct to the outsi	3/1 ide.

3913600 Thimble Connection Kit

For retrofitting FilterMate Portable Exhausters 3970000, 3970020, 3970001, 3970004 and 3970024. Included with FilterMate Portable Exhausters 3970002 and 3970022. Shipping weight 10 lbs. (4 kg)

^{*} International electrical configuration



Protector® XVS Ventilation Stations, Protector® Demonstration Hoods & Protector® Work Stations









Transition Adapters

For use with Protector XVS Ventilation Stations, Protector Demonstration Hoods and Protector Work Stations designed for outside ducting or connected to the FilterMate Portable Exhauster. Epoxy-coated steel.

Catalog #	Description S	Shipping Wt. lbs./kg
3912400	Upper Exhaust Transition Adapter, 2.0" x 10.0" rectangular to 5.0" diameter round for connection to 5" ID hose. Included with FilterMate Portable Exhauste	5/2 er.
3912401	Upper Exhaust Transition Adapter, 2.0" x 10.0" rectangular to 6.0" diameter round for connection to 6" OD duct.	5/2
3912402	Lower Exhaust Transition Adapter, 2.0" x 10.0" rectangular to 5.0" diameter 2.0" x 10.0" rectangular to 5.0" diameter round for connection to 5" ID hose. Included with Protector Demonstration Hood System.	5/2
3912403	Lower Exhaust Transition Adapter, 2.0" x 10.0" rectangular to 6.0" diameter round for connection to 6" OD duct.	5/2

Ductwork

Catalog #	Description	Equivalent Resistance†	Shipping Wt. lbs./kg
4708600	Thermoplastic Duct, 6.625" OD, 6.250" ID, 10' length	10'	25/11
4708900	Female PVC Duct Coupling, 6" nominal diameter, connects two sections of Thermoplastic Duct	0'	4/2
4708700	90° PVC Elbow, 6" nominal diameter, has belled end connections to directly receive Thermoplastic Duct or Male Duct Coupling	12'	1/0.5
3924000	Manual Exhaust Damper, powder-coated steel, 6" nominal diameter	1'	1/0.5
4724200	Manual Exhaust Damper, PVC, 6" nominal diameter	1'	1/0.5
4861800	Flexible Duct Connection, 7" nominal diameter, for use with 6" nominal diameter duct	1'	8/4
4861700	Blower Transition Adapter, 4.25" x 7.75" rectangle to 6" diameter round	1'	3/1
4722200	Zero Pressure Weathercap, 6" nominal diameter, fits atop Thermoplastic Du	ct 5'	20/9

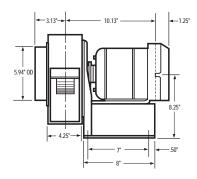
[†] Equivalent resistance is measured in feet of straight duct.

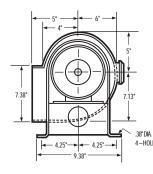


Remote Blowers

A remote blower is required when ducting the Protector XVS Ventilaton Station, Protector Demonstration Hood or Protector Work Station to the outside. The direct drive blower has a 1/4 hp TEFC-type motor and overcomes external static pressure of 0.5" at 420 CFM. Housing and impeller are corrosion-resistant, phenolic-coated steel. Blower inlet is 5.94" OD and is sized to accept 6" nominal diameter PVC duct. Blower outlet is 4.25" x 7.38" OD. Dimensions: 14.6' w x 13.5" d x 13.25" high.

Catalog #	Electrical Requirements	Shipping Wt. lbs./kg
4863500	115 volts, 60 Hz, 4.4 amps	35/16
4863501*	115/230 volts, 50 Hz, 5.6/2.8 amps	35/16
7053501**	115 volts, 60 Hz 4.4 amps	40/18





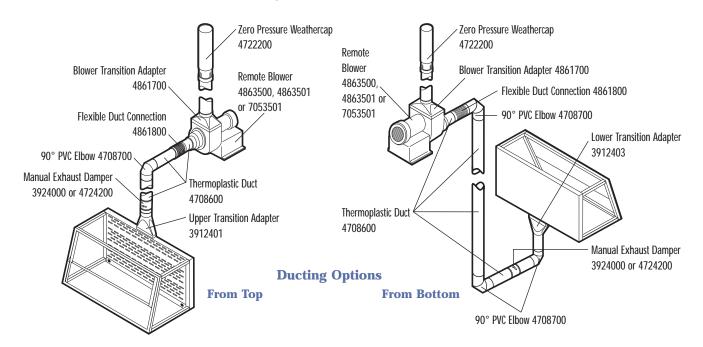
	CFM @ Static Pressure - Inches of H ₂ O					
S.P.	0.0"	0.125"	0.25"	0.50"	0.75"	0.87"
CFM	595	560	515	420	300	167

See Blower Booklet for more information.

 $[*] International\ electrical\ configuration. \qquad **Explosion-proof$



Protector® XVS Ventilation Stations, Protector® Demonstration Hoods & Protector® Work Stations





Guardian™ 1000 Digital Airflow Monitors

Mount atop Protector XVS Ventilation Stations, Protector Demonstration Hoods and Protector Work Stations in factory-prepared location. Monitor and alert the operator to low airflow conditions. Include face plate with circuit board, electrical power pack, airflow hose, flow hose adapter and glacier white epoxy-coated steel casing. LCD displays actual airflow in fpm or m/sec from 0 to 999 fpm (0 to 5.0 m/s). Audible/visual alarm alerts user to sustained low velocity condition. Calibration instructions displayed on LCD. LED lights display red for alarm, yellow for caution, green for normal. Include temperature-compensated diode sensor, RS-232 port, night setback and alarm mute functions. UL and CE listed.

Catalog #	Electrical Requirements	For use with:	Shipping Wt. lbs./kg
3908800	115 volts, 60 Hz	Protector XVS Ventilation Station, Protector Demonstration Hood	10/4.5
3908801*	230 volts, 50 Hz	Protector XVS Ventilation Station, Protector Demonstration Hood	10/4.5
3908802	115 volts, 60 Hz	Protector Work Station	10/4.5
3908803*	230 volts, 50 Hz	Protector Work Station	10/4.5



Guardian™ Jr. Airflow Monitors

Mount atop Protector XVS Ventilation Stations, Protector Demonstration Hoods and Protector Work Stations in factory-prepared location. Include face plate with circuit board, electrical power pack, vinyl tubing, airflow tube adapter and glacier white epoxy-coated steel casing. From the monitor's face plate, the user can easily select and calibrate a setpoint between 30 and 250 fpm using a velocity meter and a screwdriver. If the hood's face velocity falls below the setpoint for more than 6 seconds, an audible alarm sounds and the ALERT indicator glows red. The TEST RESET switch, when pressed, mutes the alarm.

Catalog #	Electrical Requirements	For use with:	Shipping Wt. lbs./kg
3908700	115 volts, 60 Hz	Protector XVS Ventilation Station, Protector Demonstration Hood	10/4.5
3908701*	230 volts, 50 Hz	Protector XVS Ventilation Station, Protector Demonstration Hood	10/4.5
3908702	115 volts, 60 Hz	Protector Work Station	10/4.5
3908703*	230 volts, 50 Hz	Protector Work Station	10/4.5



8026000 Cart for Protector Demonstration Hoods

Provides mobile support for Protector Demonstration Hoods and 3' Protector XVS Ventilation Stations. Glacier white epoxy-coated tubular steel with black 1" thick solid epoxy dished work surface, handle bar, bottom shelf and 4" diameter toe-locking casters. Supports loads up to 400 pounds. Cart is included with Protector Demonstration Hood Systems 3945000, 3945020 and 3945021. Dimensions: 39.0" w x 31.9" d x 36.0" h. Shipping weight 50 lbs. (23 kg)

 $^{^{}st}$ International electrical configuration



Canopy Hoods



Canopy Hood 4799000. Blower and ductwork must be ordered separately.

The Canopy Hood is specifically designed to vent non-toxic materials such as heat, steam and odors from large or bulky apparatus such as ovens, steam baths and autoclaves. The hood may be installed on a wall or suspended from the ceiling for peninsular and corner locations. For most efficient performance, the hood should be installed no more than 12" above the equipment to be ventilated. Coupled with a blower and ductwork, the Canopy Hood can operate at a wide range of exhaust rates.

Features:

- Glacier white, dry powder epoxy-coated steel construction.
- Integral baffle.
- Fully assembled.
- Include mounting hardware for installation on wall or suspended from ceiling.
 Threaded rod is required for suspension from ceiling.

Both models require (not included):

- Remote Blower. See back pocket.
- Ductwork. See back pocket.

Nominal Width	Catalog Number	Shipping Weight lbs./kg
4 Feet	4799000	140/64
6 Feet	7099000	205/93

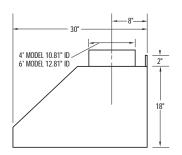
4' Canopy Hood 4799000

CFM	I at S	tatic 1	Pressu	ıre - I	nches	H ₂ O	
.12"	.19"	.22"	.36"	.39"	.73"	2.45"	
325	450	488	650	675	975	1950	

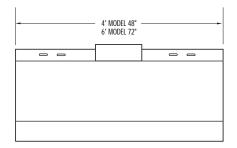
6' Canopy Hood 7099000

CFM	I at S	tatic 1	Pressu	re - l	inches	H ₂ O
.17"	.24"	.31"	.45"	.49"	.89"	2.5"
425	550	638	825	850	1275	2550

Dimensional Data



SIDE



FRONT

Contact Labconco at **800-821-5525** or **816-333-8811** for blower sizing assistance.



SpillStopper™ Work Surfaces



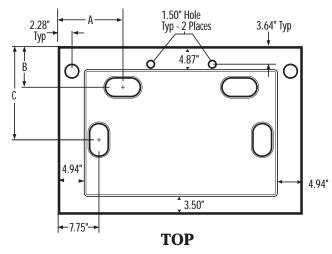
Features:

- Molded from a special formulation of corrosion-resistant epoxy resins.
- Dished and contoured to conform to the interior liner of Protector Laboratory Hoods
- Front edge has a large radius to aerodynamically direct airflow into the hood.
- Pre-drilled 1.5" diameter holes for venting and 2.5" diameter holes for plumbing passthrough.
- May be ordered with a pre-cut 6" x 3" oval cupsink cutout. Cupsink is sold separately. See page 104.

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on work surfaces with pre-drilled cutouts for fixtures, electrical receptacles or larger sinks.

Dimensional Data

SpillStopper Work Surfaces for Use with Protector Premier, XStream, XL and XLE Laboratory Hoods



<u> </u>	,		
1.25"		—.38" Dish	
	FRON	Γ	
			- Radiused Front Edge Only

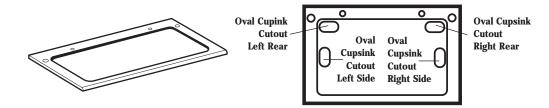
SIDE

Hood	Work Surface Depth	A	В	С	Radius Front Edge
Premier, XL	30"	9.50"	5.81"	20.00"	1.00"
XL	36"	12.50"	8.50"	20.00"	1.00"
XL	42"	12.50"	8.50"	16.12"	1.00"*
XStream	36"	12.50"	11.50"	20.00"	1.00"
XLE	33.50"	12.50"	8.50"	20.00"	0.25"

^{*} Contact Labconco for availability.



SpillStopper™ Work Surfaces



For use with Protector[®] Premier[®] and XL Laboratory Hoods with 24" interior depth

AL Labor	ratory noods with 24" interior dept	.n
Catalog #	•	ipping Wt lbs./kg
9847100	4' w x 30" d, no cutouts	110/50
9847101	4' w x 30" d, cupsink cutout, left rear	110/50
9847102	4' w x 30" d, cupsink cutout, right rear	110/50
9847103*	4' w x 30" d, cupsink cutout, left side	110/50
9847104*	4' w x 30" d, cupsink cutout, right side	110/50
9847105	4' w x 30" d, cupsink cutouts, left and right rear	110/50
9847200	5' w x 30" d, no cutouts	150/68
9847201	5' w x 30" d, cupsink cutout, left rear	150/68
9847202	5' w x 30" d, cupsink cutout, right rear	150/68
9847203*	5' w x 30" d, cupsink cutout, left side	150/68
9847204*	5' w x 30" d, cupsink cutout, right side	150/68
9847205	5' w x 30" d, cupsink cutouts, left and right rear	150/68
9847300	6' w x 30" d, no cutouts	205/93
9847301	6' w x 30" d, cupsink cutout, left rear	205/93
9847302	6' w x 30" d, cupsink cutout, right rear	205/93
9847303*	6' w x 30" d, cupsink cutout, left side	205/93
9847304*	6' w x 30" d, cupsink cutout, right side	205/93
9847305	6' w x 30" d, cupsink cutouts, left and right rear	205/93
9847400	8' w x 30" d, no cutouts	240/109
9847401	8' w x 30" d, cupsink cutout, left rear	240/109
9847402	8' w x 30" d, cupsink cutout, right rear	240/109
9847403*	8' w x 30" d, cupsink cutout, left side	240/109
9847404*	8' w x 30" d, cupsink cutout, right side	240/109
9847405	8' w x 30" d, cupsink cutouts, left and right rear	240/109
9847500 [†]	10' w x 30" d, two pieces, no cutouts	290/132
9847501 [†]	10' w x 30" d, two pieces, cupsink cutout, left rear	290/132
9847502 [†]	10' w x 30" d, two pieces, cupsink cutout, right rear	290/132
9847503*†	10' w x 30" d, two pieces, cupsink cutout, left side	290/132
9847504*†	10' w x 30" d, two pieces, cupsink cutout, right side	290/132
9847505 [†]	10' w x 30" d, two pieces, cupsink cutouts, left and right rear	290/132
9847600 [†]	12' w x 30" d, two pieces, no cutouts	370/168
9847601 [†]	12' w x 30" d, two pieces, cupsink cutout, left rear	370/168
9847602 [†]	12' w x 30" d, two pieces, cupsink cutout, right rear	370/168
9847603* [†]	12' w x 30" d, two pieces, cupsink cutout, left side	370/168
9847604*†	12' w x 30" d, two pieces, cupsink cutout, right side	370/168
9847605 [†]	12' w x 30" d, two pieces, cupsink cutouts, left and right rear	370/168
9847700 [†]	16' w x 30" d, three pieces, no cutouts	480/218
9847701 [†]	16' w x 30" d, three pieces, cupsink cutout, left rear	480/218
9847702 [†]	16' w x 30" d, three pieces, cupsink cutout, right rear	480/218
9847703* [†]	16' w x 30" d, three pieces, cupsink cutout, left side	480/218
9847704* [†]	16' w x 30" d, three pieces, cupsink cutout, right side	
9847705 [†]	16' w x 30" d, three pieces, cupsink cutouts, left and right rear	480/218

* Not for use with Protector Solvent Storage Cabinets \dagger Requires field assembly

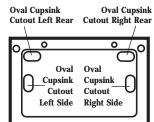
For use with Protector $^\circ$ XL $^\circ$ Laboratory Hoods with 30 $^\circ$ interior depth

C + 1 · · "	D :	
Catalog #	•	ipping Wt. lbs./kg
9847800	4' w x 36" d, cupsink cutout, no cutouts	120/54
9847801	4' w x 36" d, cupsink cutout, left rear	120/54
9847802	4' w x 36" d, cupsink cutout, right rear	120/54
9847803*	4' w x 36" d, cupsink cutout, left side	120/54
9847804*	4' w x 36" d, cupsink cutout, right side	120/54
9847805	4' w x 36" d, cupsink cutouts, left and right rear	120/54
9847900	5' w x 36" d, no cutouts	160/73
9847901	5' w x 36" d, cupsink cutout, left rear	160/73
9847902	5' w x 36" d, cupsink cutout, right rear	160/73
9847903*	5' w x 36" d, cupsink cutout, left side	160/73
9847904*	5' w x 36" d, cupsink cutout, right side	160/73
9847905	5' w x 36" d, cupsink cutouts, left and right rear	160/73
9848000	6' w x 36" d, no cutouts	220/100
9848001	6' w x 36" d, cupsink cutout, left rear	220/100
9848002	6' w x 36" d, cupsink cutout, right rear	220/100
9848003*	6' w x 36" d, cupsink cutout, left side	220/100
9848004*	6' w x 36" d, cupsink cutout, right side	220/100
9848005	6' w x 36" d, cupsink cutouts, left and right rear	220/100
9848100	8' w x 36" d, no cutouts	250/113
9848101	8' w x 36" d, cupsink cutout, left rear	250/113
9848102	8' w x 36" d, cupsink cutout, right rear	250/113
9848103*	8' w x 36" d, cupsink cutout, left side	250/113
9848104*	8' w x 36" d, cupsink cutout, right side	250/113
9848105	8' w x 36" d, cupsink cutouts, left and right rear	250/113
9848200^{\dagger}	10' w x 36" d, two pieces, no cutouts	320/145
9848201 [†]	10' w x 36" d, two pieces, cupsink cutout, left rear	320/145
9848202 [†]	10' w x 36" d, two pieces, cupsink cutout, right rear	320/145
9848203* [†]	10' w x 36" d, two pieces, cupsink cutout, left side	320/145
9848204* [†]	10' w x 36" d, two pieces, cupsink cutout, right side	320/145
9848205 [†]	10' w x 36" d, two pieces, cupsink cutouts, left and right rear	320/145
9848300 [†]	12' w x 36" d, two pieces, no cutouts	440/200
9848301 [†]	12' w x 36" d, two pieces, cupsink cutout, left rear	440/200
9848302 [†]	12' w x 36" d, two pieces, cupsink cutout, right rear	
9848303* [†]	12' w x 36" d, two pieces, cupsink cutout, left side	440/200
9848304* [†]	12' w x 36" d, two pieces, cupsink cutout, right side	
9848305 [†]	12' w x 36" d, two pieces,	440/200
	cupsink cutouts, left and right rear	
9848400 [†]	16' w x 36" d, three pieces, no cutouts	500/228
9848401 [†]	16' w x 36" d, three pieces, cupsink cutout, left rear	
9848402 [†]	16' w x 36" d, three pieces, cupsink cutout, right rear	500/228
9848403* [†]	16' w x 36" d, three pieces, cupsink cutout, left side	
9848404* [†]	16' w x 36" d, three pieces, cupsink cutout, right side	500/228
9848405 [†]	16' w x 36" d, three pieces, cupsink cutouts, left and right rear	500/228
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SpillStopper™ Work Surfaces





For use with Protector $^\circ$ XL $^\circ$ Laboratory Hoods with 36" interior depth

Catalog #	Description SI	nipping Wt. lbs./kg
9848500	4' w x 42" d, no cutouts	140/64
9848501	4' w x 42" d, cupsink cutout, left rear	140/64
9848502	4' w x 42" d, cupsink cutout, right rear	140/64
9848503*	4' w x 42" d, cupsink cutout, left side	140/64
9848504*	4' w x 42" d, cupsink cutout, right side	140/64
9848505	4' w x 42" d, cupsink cutouts, left and right rear	140/64
9848600	5' w x 42" d, no cutouts	180/82
9848601	5' w x 42" d, cupsink cutout, left rear	180/82
9848602	5' w x 42" d, cupsink cutout, right rear	180/82
9848603*	5' w x 42" d, cupsink cutout, left side	180/82
9848604*	5' w x 42" d, cupsink cutout, right side	180/82
9848605	5' w x 42" d, cupsink cutouts, left and right rear	180/82
9848700	6' w x 42" d, no cutouts	250/113
9848701	6' w x 42" d, cupsink cutout, left rear	250/113
9848702	6' w x 42" d, cupsink cutout, right rear	250/113
9848703*	6' w x 42" d, cupsink cutout, left side	250 /113
9848704*	6' w x 42" d, cupsink cutout, right side	250/113
9848705	6' w x 42" d, cupsink cutouts, left and right rear	250/113
9848800	8' w x 42" d, no cutouts	290/132
9848801	8' w x 42" d, cupsink cutout, left rear	290/132
9848802	8' w x 42" d, cupsink cutout, right rear	290/132
9848803*	8' w x 42" d, cupsink cutout, left side	290/132
9848804*	8' w x 42" d, cupsink cutout, right side	290/132
9848805	8' w x 42" d, cupsink cutouts, left and right rear	290/132
9848900 [†]	10' w x 42" d, two pieces, no cutouts	350/159
9848901 [†]	10' w x 42" d, two pieces, cupsink cutout, left rear	350/159
9848902 [†]	10' w x 42" d, two pieces, cupsink cutout, right rear	350/159
9848903* [†]	10' w x 42" d, two pieces, cupsink cutout, left side	350/159
9848904*†	10' w x 42" d, two pieces, cupsink cutout, right side	350/159
9848905 [†]	10' w x 42" d, two pieces, cupsink cutouts, left and right rear	350/159
9849000 [†]	12' w x 42" d, three pieces, no cutouts	480/218
9849001 [†]	12' w x 42" d, three pieces, cupsink cutout, left rear	480/218
9849002^{\dagger}	12' w x 42" d, three pieces, cupsink cutout, right rear	480/218
9849003* [†]	12' w x 42" d, three pieces, cupsink cutout, left side	480/218
9849004* [†]	12' w x 42" d, three pieces, cupsink cutout, right side	e 440/218
9849005 [†]	12' w x 42" d, three pieces, cupsink cutouts, left and right rear	480/218
9849100^{\dagger}	16' w x 42" d, three pieces, no cutouts	550/249
9849101 [†]	16' w x 42" d, three pieces, cupsink cutout, left rear	550/249
9849102 [†]	16' w x 42" d, three pieces, cupsink cutout, right rear	550/249
9849103* [†]	16' w x 42" d, three pieces, cupsink cutout, left side	550/249
9849104* [†]	16' w x 42" d, three pieces, cupsink cutout, right side	550/249
9849105 [†]	16' w x 42" d, three pieces, cupsink cutouts, left and right rear	550/249

* Not for use with Protector Solvent Storage Cabinets \dagger Requires field assembly

For use with Protector * XStream * Laboratory Hoods

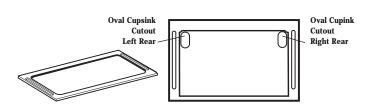
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Catalog #	Description	Shipping Wt. lbs./kg
0040000	41 2611 dtt-	U
9849600	4' w x 36" d, no cutouts	120/54
9849601	4' w x 36" d, cupsink cutout, left rear	120/54
9849602	4' w x 36" d, cupsink cutout, right rear	120/54
9849603*	4' w x 36" d, cupsink cutout, left side	120/54
9849604*	4' w x 36" d, cupsink cutout, right side	120/54
9849605	4' w x 36" d, cupsink cutouts, left and right rear	120/54
9849700	5' w x 36" d, no cutouts	160/73
9849701	5' w x 36" d, cupsink cutout, left rear	160/73
9849702	5' w x 36" d, cupsink cutout, right rear	160/73
9849703*	5' w x 36" d, cupsink cutout, left side	160/73
9849704*	5' w x 36" d, cupsink cutout, right side	160/73
9849705	5' w x 36" d, cupsink cutouts, left and right rear	160/73
9849800	6' w x 36" d, no cutouts	220/100
9849801	6' w x 36" d, cupsink cutout, left rear	220/100
9849802	6' w x 36" d, cupsink cutout, right rear	220/100
9849803*	6' w x 36" d, cupsink cutout, left side	220/100
9849804*	6' w x 36" d, cupsink cutout, right side	220/100
9849805	6' w x 36" d, cupsink cutouts, left and right rear	220/100
9849900	8' w x 36" d, no cutouts	250/113
9849901	8' w x 36" d, cupsink cutout, left rear	250/113
9849902	8' w x 36" d, cupsink cutout, right rear	250/113
9849903*	8' w x 36" d, cupsink cutout, left side	250/113
9849904*	8' w x 36" d, cupsink cutout, right side	250/113
9849905	8' w x 36" d, cupsink cutouts, left and right rear	250/113

For use with Protector * XLE * Laboratory Hoods

roi use	with littlector ALL Laboratory in	Jous
Catalog #	Description S	hipping Wt. lbs./kg
9969400	4' w x 33.5" d, no cutouts	115/52
9969401	4' w x 33.5" d, cupsink cutout, left rear	115/52
9969402	4' w x 33.5" d, cupsink cutout, right rear	115/52
9969403*	4' w x 33.5" d, cupsink cutout, left side	115/52
9969404*	4' w x 33.5" d, cupsink cutout, right side	115/52
9969405*	4' w x 33.5" d, cupsink cutouts, left and right rear	115/52
9969500	5' w x 33.5" d, no cutouts	150/68
9969501	5' w x 33.5" d, cupsink cutout, left rear	150/68
9969502	5' w x 33.5" d, cupsink cutout, right rear	150/68
9969503*	5' w x 33.5" d, cupsink cutout, left side	150/68
9969504*	5' w x 33.5" d, cupsink cutout, right side	150/68
9969505*	5' w x 33.5" d, cupsink cutouts, left and right rear	150/68
9969600	6' w x 33.5" d, no cutouts	205/93
9969601	6' w x 33.5" d, cupsink cutout, left rear	205/93
9969602	6' w x 33.5" d, cupsink cutout, right rear	205/93
9969603*	6' w x 33.5" d, cupsink cutout, left side	205/93
9969604*	6' w x 33.5" d, cupsink cutout, right side	205/93
9969605*	6' w x 33.5" d, cupsink cutouts, left and right rear	205/93
9969700	7' w x 33.5" d, no cutouts	220/100
9969701	7' w x 33.5" d, cupsink cutout, left rear	220/100
9969702	7' w x 33.5" d, cupsink cutout, right rear	220/100
9969703*	7' w x 33.5" d, cupsink cutout, left side	220/100
9969704*	7' w x 33.5" d, cupsink cutout, right side	220/100
9969705*	7' w x 33.5" d, cupsink cutouts, left and right rear	220/100
9969800	8' w x 33.5" d, no cutouts	235/107
9969801	8' w x 33.5" d, cupsink cutout, left rear	235/107
9969802	8' w x 33.5" d, cupsink cutout, right rear	235/107
9969803*	8' w x 33.5" d, cupsink cutout, left side	235/107
9969804*	8' w x 33.5" d, cupsink cutout, right side	235/107
9969805*	8' w x 33.5" d, cupsink cutouts, left and right rear	235/107



SpillStopper™ Work Surfaces & Accessories



For use with Protector ClassMate Laboratory Hoods

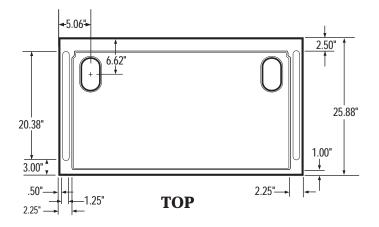
Catalog #	Description	Shipping Wt. lbs./kg
6986400	4' w x 25.9" d, no cutouts	110/50
6986401*	4' w x 25.9" d, cupsink cutout, left rear	110/50
6986402*	4' w x 25.9" d, cupsink cutout, right rear	110/50
6986403*	4' w x 25.9" d, cupsink cutouts, left and right rea	r 110/50
6986500	5' w x 25.9" d, no cutouts	150/68
6986501*	5' w x 25.9" d, cupsink cutout, left rear	150/68
6986502*	5' w x 25.9" d, cupsink cutout, right rear	150/68
6986503*	5' w x 25.9" d, cupsink cutouts, left and right rea	r 150/68
6986600	6' w x 25.9" d, no cutouts	205/93
6986601*	6' w x 25.9" d, cupsink cutout, left rear	205/93
6986602*	6' w x 25.9" d, cupsink cutout, right rear	205/93
6986603*	6' w x 25.9" d, cupsink cutouts, left and right rea	r 205/93

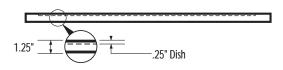
For use with Protector[®] Pass-Through Laboratory Hoods

Catalog #	Description	Shipping Wt. lbs./kg
9972400	4' w x 30" d, no cutouts	110/50
9972500	5' w x 30" d, no cutouts	150/68
9972600	6' w x 30" d, no cutouts	205/93

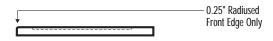
Dimensional Data

SpillStopper Work Surfaces for Use with Protector ClassMate Laboratory Hoods





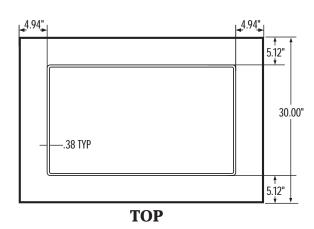
FRONT

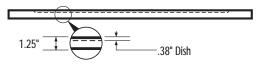


SIDE

Dimensional Data

SpillStopper Work Surfaces for Use with Protector Pass-Through Laboratory Hoods





FRONT



SIDE

 $^{^{*}}$ Not for use with Protector Solvent Storage Cabinets



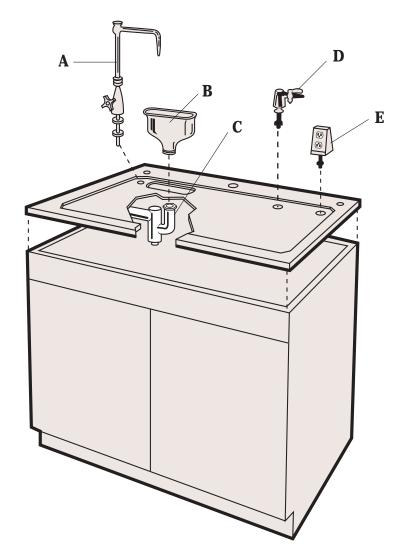
Flat Work Surfaces & Accessories

Flat Solid Epoxy Work Surfaces

For Use with Labconco Enclosures including Fiberglass 30 and Basic Laboratory Hoods and Fume Adsorbers*



Catalog #	Description	Shipping Wt. lbs./kg
4882806	30" w x 30" d x 1.25" thick, no cutouts	86/39
4882805	36" w x 30" d x 1.25" thick, no cutouts	90/41
4882803	48" w x 30" d x 1.25" thick, no cutouts	110/50
4882804	72" w x 30" d x 1.25" thick, no cutouts	205/93



- (A) 4005100 Cold Water Faucet with Rigid Gooseneck Factory-drilled mounting hole in work surface is required. Shipping weight 4 lbs. (1.8 kg)
- (A) 4005900 Cold Water Faucet with Rigid Gooseneck and Vacuum Breaker Factory-drilled mounting hole in work surface is required. Shipping weight 4 lbs. (1.8 kg)
- **(B) 4005200 Oval Polypropylene Cupsink** Mounts in work surface with cupsink cutout. 3" x 6". 1.5" NPSM** thread. Shipping weight 4 lbs. (1.8 kg)
- (C) 4005400 Trap, Lead 1.5" diameter drum with coupling nut. For use with cupsink. Shipping weight 10 lbs. (4.5 kg)
- (C) 1432600 Trap, PVC 1.5" diameter drum with coupling nut. For use with cupsink. Shipping weight 10 lbs. (4.5 kg)
- * Basic Hoods and Fume Adsorbers are not as wide or as deep as the work surfaces that support them. ** National Pipe Straight Mechanical

- **1361100 Sepia Bronze-Coated Cold and Hot Water Mixing Faucet with Swivel Gooseneck** Not shown. Factory-drilled mounting hole in work surface is required. Shipping weight 4 lbs. (1.8 kg)
- **1361200** Chrome-Plated Cold and Hot Water Mixing Faucet with Swivel Gooseneck Not shown. Factory-drilled mounting hole in work surface is required. Shipping weight 4 lbs. (1.8 kg)
- (D) 4005000 Service Fixture Specify air, gas or vacuum. Factory-drilled mounting hole in work surface is required. Shipping weight 4 lbs. (1.8 kg)
- (E) 4005800 Electrical Receptacle Pedestal-type, 115 volt, 15 amp duplex. Factory-drilled mounting hole in work surface is required. Shipping weight 4 lbs. (1.8 kg)



Base Stands & Storage CabinetsSelection Guide

Base stands and cabinets may be mixed or matched so that their total width equals the width of the Labconco fume hood or enclosure they support.*

Base Stands

Width x Depth	Telescoping lidth x Depth w/Fixed Feet w/Casters		Hydraulic Lift Electric 115 Volts, 60 Hz Electric 230 volts, 50 Hz** Manual			
24" x 29.0"	3746700	3746701	_	_	_	_
36" x 29"	3746701	3746711	3780300	3780303	3780400	_
48" x 29"	3746702	3746712	3780301	3780304	3780401	9838600
60" x 29"	3746703	_	_	-	_	_
72" x 29"	3746704	3746714	3780302	3780305	3780402	_

Storage Cabinets

Width/Description	Dual Doors	Acid Right Hinge	Left Hinge	Dual Doors	Solvent Right Hinge	Left Hinge
48"	9901000	_	_	9902000	_	_
36"	9901100	_	_	9902100	_	_
30"	9901200	_	_	9902200	_	_
24"	_	9901300	9901500	_	9902300	9902400
18"	_	9901400	9901600	_	_	_
48" w/self-closing doors	_	_	_	9903000	_	_
36" w/self-closing doors	_	_	_	9903100	_	_
30" w/self-closing doors	_	_	_	9903200	_	_
24" w/self-closing doors	_	_	_	_	9903300	9903400
24" ADA	_	9905000	9905200	_	9906000	9906100
24" ADA w/ self-closing doors	_	_	_	_	9906200	9906300
18" ADA	_	9905100	9905300	_	-	_

Width/Description	Dual Doors	Standard Right Hinge	Left Hinge	Dual Doors	Vacuum Pump Right Hinge	Left Hinge
48"	9900000	_	_	_	_	_
36"	9900100	_	_	_	_	_
30"	9900200	_	_	_	_	_
24"	_	9900300	9900600	_	_	_
18"	_	9900400	9900700	_	9907000	9907100
12"	_	9900500	9900800	_	-	_
24" ADA	_	9904000	9904300	_	_	_
18" ADA	_	9904100	9904400	_	_	-
12" ADA	_	9904200	9904500	_	_	_

^{*} Basic Laboratory Hoods are not as wide or as deep as the base cabinets, stands and work surfaces that support them.
** International electrical configuration



Protector Acid Storage Cabinets



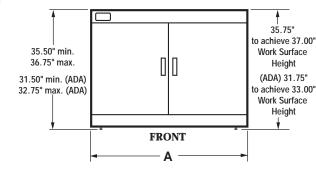
Protector Acid Storage Cabinet 9901100 with dual doors, 36" wide.

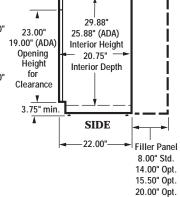
Protector Acid Storage Cabinets support Labconco fume hoods and safely store and vent acids and other corrosive liquids.

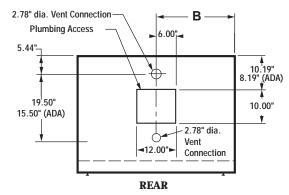
Features:

- Support all Labconco benchtop fume hoods. **Work surface is required.**
- Support loads up to 800 pounds.
- Durable epoxy-coated steel construction with corrosion-resistant polyethylene-lined interior.
- Attractive glacier white exterior complements laboratory casework and Labconco fume hoods.
- Manual-closing, non-locking door(s).*
- Include vacuum-formed PVC liner tray.
- Include two rear vent connection cutouts for venting the cabinet into a fume hood. Vent Kit 3591100 is sold separately. See page 107.
- Include four leveling feet and one 8" filler panel to increase cabinet depth from 22" to 30".
- Work surface and interior shelf kits are sold separately. See pages 100-104 and 107.

Dimensional Data







Model	A	В	
48"	48"	24"	
36"	36"	18"	
30"	30"	15"	
24"	24"	12"	
18"	18"	9"	
24" ADA	24"	12"	
18" ADA	18"	9"	

^{*} Contact Labconco for ordering information on Protector Acid Storage Cabinets with locking doors.



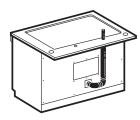
Protector* Acid Storage Cabinets

Ordering Information



Catalog #		Cabinet Dimensions (w x d x h)	Depth with filler panel	Door(s)	Shipping Wt. lbs./kg
9901000		48" x 22" x 35.5" to 36.75" (122 x 56 x 90 to 93 cm)	30" (76 cm)	Dual	260/118
9901100		36" x 22" x 35.5" to 36.75" (91 x 56 x 90 to 93 cm)	30" (76 cm)	Dual	180/82
9901200		30" x 22" x 35.5" to 36.75" (76 x 56 x 90 to 93 cm)	30" (76 cm)	Dual	155/70
9901300		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single Right Hinge	130/59
9901400		18" x 22" x 35.5" to 36.75" (46 x 56 x 90 to 93 cm)	30" (76 cm)	Single Right Hinge	90/41
9901500		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single Left Hinge	130/59
9901600		18" x 22" x 35.5" to 36.75" (46 x 56 x 90 to 93 cm)	30" (76 cm)	Single Left Hinge	90/41
9905000	Ė	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single Right Hinge	120/54
9905100	Ė	18" x 22" x 31.5" to 32.75" (46 x 56 x 80 to 83 cm)	30" (76 cm)	Single Right Hinge	85/39
9905200	Ġ.	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single Left Hinge	120/54
9905300	Ė	18" x 22" x 31.5" to 32.75" (46 x 56 x 80 to 83 cm)	30" (76 cm)	Single Left Hinge	85/39

Accessories



3591100 Vent Kit

Used for venting the Protector Acid Storage Cabinet through the SpillStopper Work Surface and into the fume hood. Includes one plastic vent tube assembly complete with 2" diameter threaded connection locknut, flexible tubing and vent extension. Shipping weight 5 lbs. (2.3 kg)

Interior Shelf Kits

Include epoxy-coated steel shelf, acid-resistant PVC tray and mounting hardware.

Width	Catalog #	Shipping Wt. lbs./kg
48"	9919000	15/6.8
36"	9919001	12/5.4
30"	9919002	10/4.5
24"	9919003	8/3.6
18"	9919004	7/3.2

Filler Panels

One 8" filler panel is included with each Storage Cabinet to extend cabinet depth to 30" and to enclose the utility chase behind the cabinet. Cabinets supporting hoods with external depths greater than 33.2" require deeper filler panels.

Catalog #	Description	Shipping Wt. lbs./kg
9920306	Filler Panel, 8" deep	10/4.5
9920310	Filler Panel, 14" deep	13/5.9
9920312	Filler Panel, 20" deep	15/6.8
9920301	Filler Panel, 15.5" deep	13/5.9
9920307	ADA Filler Panel, 8" deep	9/4.1
9920311	ADA Filler Panel, 14" deep	12/5.4
9920313	ADA Filler Panel, 20" deep	14/6.4
9920304	ADA Filler Panel, 15.5" deep	12/5.4





Protector Solvent Storage Cabinets





Protector Solvent Storage Cabinet 9903200, 36" wide, with dual, automatic self-closing doors.

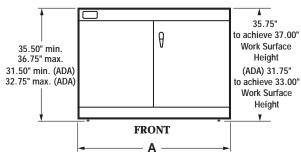
Protector Solvent Storage Cabinet 9903100 with dual, automatic self-closing/self-latching doors, 36" wide.

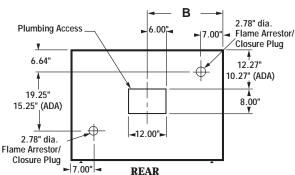
Protector Solvent Storage Cabinets support Labconco fume hoods and safely store and vent solvents and other flammable liquids.

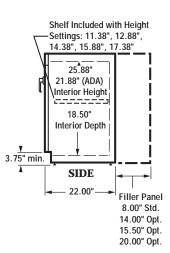
Features:

- Support all Labconco benchtop fume hoods. Work surface is required.
- Support loads up to 800 pounds.
- Durable dual wall epoxy-coated steel construction with 1.5" air gap.
- Attractive glacier white exterior complements laboratory casework and Labconco fume hoods.
- Include key lock. Doors are manualclosing or self-closing/self-latching with sequencing mechanism. Selfclosing door(s) close automatically in case of fire when temperature reaches 165° F (74° C).
- Meet National Fire Protection Association (NFPA) 30-2003 Flammable and Combustible Liquids Code Specifications.
- Include epoxy-coated steel interior shelf with five height settings.
- Include two rear vent connections with flame arrestors and closure plugs.
- Include four leveling feet and one 8" filler panel to increase cabinet depth from 22" to 30".
- Work surface is sold separately. See pages 100-104.

Dimensional Data





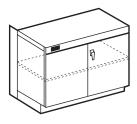


Model	A	В	
48"	48"	24"	
36"	36"	18"	
30"	30"	15"	
24"	24"	12"	
24" ADA	24"	12"	



Protector Solvent Storage Cabinets

Ordering Information



Catalog #		Cabinet Dimensions (w x d x h)	Depth with standard filler pane	Door(s)	Shipping Wt. lbs./kg
9902000*		48" x 22" x 35.5" to 36.75" (122 x 56 x 90 to 93 cm)	30" (76 cm)	Dual Manual	260/118
9902100*		36" x 22" x 35.5" to 36.75" (91 x 56 x 90 to 93 cm)	30" (76 cm)	Dual Manual	180/82
9902200*		30" x 22" x 35.5" to 36.75" (76 x 56 x 90 to 93 cm)	30" (76 cm)	Dual Manual	155/70
9902300		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single, Right Hinge Manual	130/59
9902400		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single, Left Hinge Manual	130/59
9906000	Ġ	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single, Right Hinge Manual	120/54
9906100	Ġ	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single, Left Hinge Manual	120/54
9903000*		48" x 22" x 35.5" to 36.75" (122 x 56 x 90 to 93 cm)	30" (76 cm)	Dual Self-Closing/Self-Latching	260/118
9903100*		36" x 22" x 35.5" to 36.75" (91 x 56 x 90 to 93 cm)	30" (76 cm)	Dual Self-Closing/Self-Latching	180/82
9903200*		30" x 22" x 35.5" to 36.75" (76 x 56 x 90 to 93 cm)	30" (76 cm)	Dual Self-Closing/Self-Latching	155/70
9903300		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single, Right Hinge Self-Closing/Self-Latching	130/59
9903400		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single, Left Hinge Self-Closing/Self-Latching	130/59
9906200	Ġ	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single, Right Hinge Self-Closing/Self-Latching	120/54
9906300	Ġ	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single, Left Hinge Self-Closing/Self-Latching	120/54

Accessories

Filler Panels

One 8" filler panel is included with each Storage Cabinet to extend cabinet depth to 30" and to enclose the utility chase behind the cabinet. Cabinets supporting hoods with external depths greater than 33.2" require deeper filler panels.

Catalog #	Description	Shipping Wt. lbs./kg
9920306	Filler Panel, 8" deep	10/4.5
9920310	Filler Panel, 14" deep	13/5.9
9920312	Filler Panel, 20" deep	15/6.8
9920301	Filler Panel, 15.5" deep	13/5.9
9920307	ADA Filler Panel, 8" deep	9/4.1
9920311	ADA Filler Panel, 14" deep	12/5.4
9920313	ADA Filler Panel, 20" deep	14/6.4
9920304	ADA Filler Panel, 15.5" deep	12/5.4

9910000 Solvent Vent Kit

Includes 1.5" diameter metal flexible hose, two hose clamps and 2" NPT x 1.5" slip-fit outlet adapter. Shipping weight 5 lbs. (2.3 kg)



6 Cabinet height meets requirements of the ADA.

^{*} Factory Mutual approved



Protector Standard Storage Cabinets



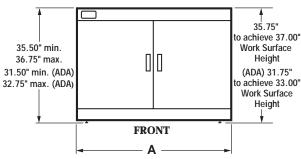
Protector Standard Storage Cabinet 9900000, 48" wide, with dual doors.

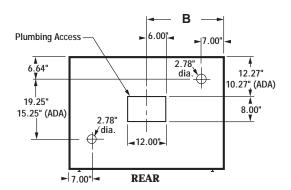
Protector Standard Storage Cabinets support Labconco fume hoods and may be used for storage of supplies and small laboratory instruments.

Features:

- Support all Labconco benchtop fume hoods. **Work surface is required.**
- Support loads up to 800 pounds.
- Durable epoxy-coated steel construction.
- Attractive glacier white exterior complements laboratory casework and Labconco fume hoods.
- Manual-closing, non-locking door(s).*
- Include four leveling feet and one 8" filler panel to increase cabinet depth from 22" to 30".
- Work surface and interior shelf kits are sold separately. See pages 100-104 and 111.

Dimensional Data





23.00" (ADA)	
SIDE	
22.00"——Filler Pan	_

14.00" Opt.

15.50" Opt. 20.00" Opt.

Model 48" 48" 24" 36" 36" 18" 30" 30" 15" 24" 24" 12" 18" 18" 12" 12" 24" ADA 24" 12" 18" ADA 18" 12" ADA

^{*} Contact Labconco for ordering information on Protector Standard Storage Cabinets with locking doors.



Protector Standard Storage Cabinets

Ordering Information



Catalog #		Cabinet Dimensions (w x d x h)	Depth with standard filler panel	Door(s)	Shipping Wt. lbs./kg
9900000		48" x 22" x 35.5" to 36.75" (122 x 56 x 90 to 93 cm)	30" (76 cm)	Dual	260/118
9900100		36" x 22" x 35.5" to 36.75" (91 x 56 x 90 to 93 cm)	30" (76 cm)	Dual	180/82
9900200		30" x 22" x 35.5" to 36.75" (76 x 56 x 90 to 93 cm)	30" (76 cm)	Dual	155/70
9900300		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single Right Hinge	130/59
9900400		18" x 22" x 35.5" to 36.75" (46 x 56 x 90 to 93 cm)	30" (76 cm)	Single Right Hinge	90/41
9900500		12" x 22" x 35.5" to 36.75" (30 x 56 x 90 to 93 cm)	30" (76 cm)	Single Right Hinge	65/29
9900600		24" x 22" x 35.5" to 36.75" (61 x 56 x 90 to 93 cm)	30" (76 cm)	Single Left Hinge	130/59
9900700		18" x 22" x 35.5" to 36.75" (46 x 56 x 90 to 93 cm)	30" (76 cm)	Single Left Hinge	90/41
9900800		12" x 22" x 35.5" to 36.75" (30 x 56 x 90 to 93 cm)	30" (76 cm)	Single Left Hinge	65/29
9904000	Ė	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single Right Hinge	120/54
9904100	Ġ	18" x 22" x 31.5" to 32.75" (46 x 56 x 80 to 83 cm)	30" (76 cm)	Single Right Hinge	85/39
9904200	Ġ	12" x 22" x 31.5" to 32.75" (30 x 56 x 80 to 83 cm)	30" (76 cm)	Single Right Hinge	60/27
9904300	Ė	24" x 22" x 31.5" to 32.75" (61 x 56 x 80 to 83 cm)	30" (76 cm)	Single Left Hinge	120/54
9904400	Ġ	18" x 22" x 31.5" to 32.75" (46 x 56 x 80 to 83 cm)	30" (76 cm)	Single Left Hinge	85/39
9904500	Ė	12" x 22" x 31.5" to 32.75" (30 x 56 x 80 to 83 cm)	30" (76 cm)	Single Left Hinge	60/27

Accessories

Interior Shelf Kits

Include epoxy-coated steel shelf and mounting hardware. Shelf may be mounted at one of three heights: 13.50", 15.25" and 17.00" (9.50", 11.25" and 13.00" for ADA height cabinets).

Width	Catalog #	Shipping Wt. lbs./kg
48"	9919100	15/6.8
36"	9919101	12/5.4
30"	9919102	10/4.5
24"	9919103	8/3.6
18"	9919104	7/3.2
12"	9919105	5/2.3

Filler Panels

One 8" filler panel is included with each Storage Cabinet to extend cabinet depth to 30" and to enclose the utility chase behind the cabinet. Cabinets supporting hoods with external depths greater than 33.2" require deeper filler panels.

Catalog #	Description	Shipping Wt. lbs./kg
9920306	Filler Panel, 8" deep	10/4.5
9920310	Filler Panel, 14" deep	13/5.9
9920312	Filler Panel, 20" deep	15/6.8
9920301	Filler Panel, 15.5" deep	13/5.9
9920307	ADA Filler Panel, 8" deep	9/4.1
9920311	ADA Filler Panel, 14" deep	12/5.4
9920313	ADA Filler Panel, 20" deep	14/6.4
9920304	ADA Filler Panel, 15.5" deep	12/5.4



Cabinet height meets requirements of the ADA.



Protector Vacuum Pump Storage Cabinets

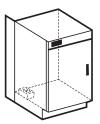


Protector Vacuum Pump Storage Cabinet 9907100 with left hinge door.

Protector Vacuum Pump Storage Cabinets provide enclosed space for vacuum pump storage.

Features:

- Durable epoxy-coated steel construction.
- Attractive glacier white exterior complements laboratory casework and Labconco fume hoods.
- Manual-closing, non-locking door.
- Include four leveling feet and one 8" filler panel to increase cabinet depth from 22" to 30".
- Include one 115 volt, 60 Hz electrical duplex receptacle to provide power to the vacuum pump. **Wiring is required.**
- Include two rear cutouts for pass through of vacuum pump tubing.
- Work surface is required and sold separately. See pages 100-104.



Ordering Information

Catalog #	Cabinet Dimensions (w x d x h)	Depth with standard filler panel	Door	Shipping Wt. lbs./kg
9907000	18" x 22" x 35.5" to 36.75" (46 x 56 x 90 to 93 cm)	30" (76 cm)	Right Hinge	90/41
9907100	18" x 22" x 35.5" to 36.75" (46 x 56 x 90 to 93 cm)	30" (76 cm)	Left Hinge	90/41

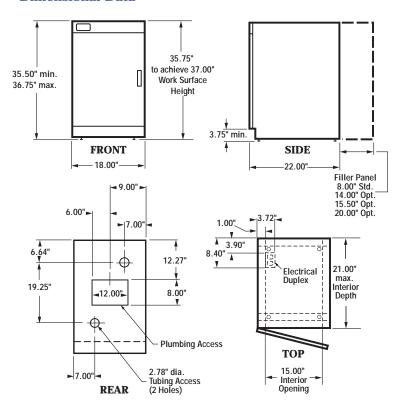
Accessories

Filler Panels

One 8" filler panel is included with each Storage Cabinet to extend cabinet depth to 30" and to enclose the utility chase behind the cabinet.

Catalog #	Description	Shipping Wt. lbs./kg
9920306	Filler Panel, 8" deep	10/4.5
9920310	Filler Panel, 14" deep	13/5.9
9920312	Filler Panel, 20" deep	15/6.8
9920301	Filler Panel, 15.5" deep	13/5.9

Dimensional Data





Telescoping Base Stands



Telescoping Base Stand 3746702, 4" wide. Base Stands have telescoping legs so that they may be adjusted to seven height positions.*

Features:

- Support Labconco fume hoods including Protector Premier, XStream, XL Benchtop, XLE, Stainless Steel, and PVC; and Basic Hoods.
- Durable 1.75" tubular, epoxy-coated steel.
- Attractive glacier white exterior complements laboratory casework and Labconco fume hoods.
- Adjust to seven height positions in 1" increments from 27.5 to 33.5".*
- Include four fixed leveling feet or 5" diameter toe-locking casters.
- Work surface is sold separately. See pages 100-104.

Ordering Information

Select the Base Stand that matches the width of the fume hood or enclosure it supports. When supporting Protector Hoods with widths of 8 feet or larger, Base Stands of multiple widths may be mixed and matched so that their total width equals the width of the hood.



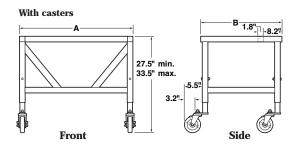
Telescoping Base Stands with Fixed Feet

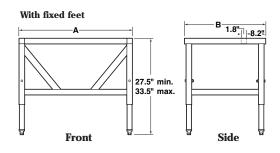
Nominal Width	Catalog #	Width (A)	Depth (B)	Shipping Wt. lbs./kg	For Use With:
2 feet	3746700	24.0"	29.0"	65/29	Protector XVS Station
3 feet	3746701	36.0"	29.0"	72/33	Protector XVS Station, Demonstration Hood, Fiberglass 30 Hood**
4 feet	3746702	48.0"	29.0"	80/36	Protector XVS Station, Protector Hood, Basic 47 Hood,** Protector Work Station
5 feet	3746703	60.0"	29.0"	85/39	Protector Hood
6 feet	3746704	72.0"	29.0"	92/42	Protector Hood, Basic 70 Hood**



Telescoping Base Stands with 5" diameter Toe-Locking Casters†

Nominal Width	Catalog #	Width (A)	Depth (B)	Shipping Wt. lbs./kg	For Use With:
2 feet	3746710	24.0"	29.0"	65/29	Protector XVS Station
3 feet	3746711	36.0"	29.0"	76/34	Protector XVS Station, Demonstration Hood Fiberglass 30 Hood**
4 feet	3746712	48.0"	29.0"	84/38	Protector XVS Station, Protector Hood, Basic 47 Hood,** Protector Work Station
6 feet	3746714	72.0"	29.0"	96/44	Protector Hood, Basic 70 Hood**





- * Height selection and adjustment are required before the hood or enclosure is installed atop the stand.
- ** Basic and Fiberglass 30 Hoods are narrower than the base stands that support them.
- † Hoods and enclosures supported by mobile Base Stands will require special modifications to incorporate flexible ducting, wiring and plumbing when applied.



Electric & Manual Hydraulic Lift Base Stands





Base stands have a built-in hydraulic lift so that height may be adjusted at any time. Stands are available with an electric lift and up/down switch or a manual lift and a hand crank. These adjustable stands allow you to position the stand and the hood or enclosure it supports to accommodate persons of different heights and wheelchair-bound users, to transport equipment through doorways, and easier service access. When coupled with a flat work surface, the stands may be used alone as an adjustable height table.

Features (All Models):

- Support Protector, Basic and Fiberglass 30 Hoods and Protector Work Stations.
- Support loads up to 1000 pounds.

ADA-compliant.

- Durable 1.75" tubular, epoxy-coated steel frame with rear crossbar supports. Support frame is 2.0" x 3.0".
- Attractive glacier white exterior complements laboratory casework and Labconco products.
- Height is infinitely adjustable from 25.5" to 33.5" high.
- Include four powder-coated, die-cast feet with levelers.

 Optional accessory 5" diameter, toelocking Caster Kit is available for field

• Work surface is not included. See pages 100-104.

installation. See below.

Features (Electric Hydraulic Lift Models):

- Include front-accessible up/down switch.
- Available in two electrical configurations. Models for 115 volt, 60 Hz
 operation include a 12-foot, 3-wire cord and plug. Models for 230 volt, 50 Hz
 operation include a 12-foot, 3-wire cord and NEMA 6-15P plug.
- Electrical components are UL listed.

Features (Manual Hydraulic Lift Models):

 Include front-accessible hand crank.
 Turning the crank clockwise raises the stand; counterclockwise lowers it. The handle may be disengaged and folded under, out of the way, when not in use.

Accessory

3784000 Caster Kit*

Casters add mobility to the Hydraulic Lift Base Stand. Kit includes four 5" diameter, non-marking polyurethane casters with toe locks. Load rating for each caster is 250 pounds. Casters have bearings for quiet operation. Casters replace the fixed feet that are included with the stand.

Installation is required. Shipping weight 10 lbs. (4.5 kg)



Stand height meets requirements of the ADA.

^{*} Hoods and enclosures supported by mobile Base Stands will require special modifications to incorporate flexible ducting, wiring and plumbing when applied.

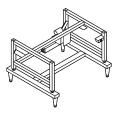


Electric & Manual Hydraulic Lift Base Stands

Ordering Information

Select the Base Stand that matches the width of the fume hood or enclosure it supports.

Electric Hydraulic Lift Base Stands



Nominal Width	Catalog #	Overall Width x Depth	Switch Location	Electrical Requirements	Shipping Wt. lbs./kg	For Use With:
3 feet	3780300	37.2" w x 34.3" d	Right Side	115 volts, 60 Hz, 2.4 amps	100/45	Fiberglass 30 Hood
3 feet	3780303*	37.2" w x 34.3" d	Right Side	230 volts, 50 Hz, 0.8 amps	100/45	Fiberglass 30 Hood
4 feet	3780301	49.2" w x 34.3" d	Right Side	115 volts, 60 Hz, 2.4 amps	120/54	Protector Hood, Basic 47 Hood, Protector Work Station**
4 feet	3780304*	49.2" w x 34.3" d	Right Side	230 volts, 50 Hz, 0.8 amps	120/54	Protector Hood, Basic 47 Hood, Protector Work Station**
6 feet	3780302	73.2" w x 34.3" d	Right Side	115 volts, 60 Hz, 2.4 amps	150/68	Protector Hood Basic 70 Hood
6 feet	3780305*	73.2" w x 34.3" d	Right Side	230 volts, 50 Hz, 0.8 amps	150/68	Protector Hood, Basic 70 Hood

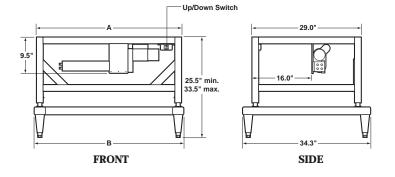
Manual Hydraulic Lift Base Stands



Nominal Width	Catalog #	Overall Width x Depth	Handle Location	Shipping Wt. lbs./kg	For Use With:
3 feet	3780400	37.2" w x 34.3" d	Right Side	100/45	Fiberglass 30 Hood
4 feet	3780401	49.2" w x 34.3" d	Right Side	120/54	Protector Hood, Basic 47 Hood, Protector Work Station**
6 feet	3780402	73.2" w x 34.3" d	Right Side	150/68	Protector Hood, Basic 70 Hood

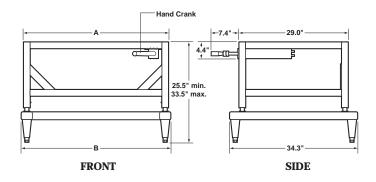
^{*} International electrical configuration

Electric Lift



3-Foot Models	A	В
3780300, 3780303, 3780400	36.0"	37.2"
4-Foot Models	A	В
3780301, 3780304, 3780401	48.0"	49.2"
6-Foot Models	A	В
3780302, 3780305, 3780402	72.0"	73.2"

Manual Lift



^{**}Not compatible with 6942003 Work Surface with Sink



ADA Base Stand



ADA Base Stand 9938600.

The ADA Base Stand is designed to support 4' hoods to the ADA Standard for height and knee clearance.

Features:

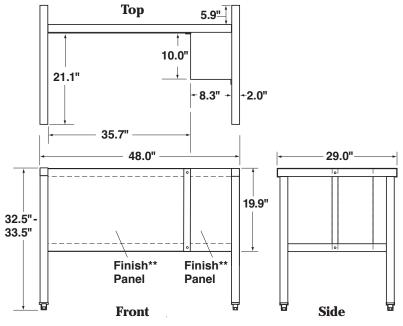
- Support 4' Labconco fume hoods and enclosures including Protector Premier, XStream, XL Benchtop, XLE, Stainless Steel and PVC; and Basic Hoods and Protector Work Stations.
- Durable 2" tubular, epoxy-coated steel.
- Attractive glacier white exterior complements laboratory casework and Labconco fume hoods.
- Include four fixed leveling feet and two epoxy-coated steel finish panels to hide a sink and plumbing. Finish panels may be mounted on either right or left-hand side.
- Work surface is sold separately. See pages 100-104.

Ordering Information



Nominal Width	Catalog #	Width	Depth	Height	Shipping Wt. lbs./kg	For Use With:
4 feet	9938600	48.0"	29.0"	32.5"- 33.5"	84/38	Protector Hood, Basic 47 Hood,* Protector Work Station

Dimensional Data



غے

Height and knee clearance meet requirements of the ADA meets requirements of the ADA.

^{*}Basic 47 Hood is narrower than the Stand.

^{**}Finish panels may be switched and inverted to hide plumbing on the left-hand side.

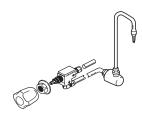




Standard Service Fixture Kits

For mounting on the left or right side of any Protector Premier, XStream, XL, XLE or PVC Hood. Each kit includes one remotely-controlled service fixture with valve and 0.25" diameter tubing, color-coded fixture knob and color-coded hose connector.* **Inlet tubing is not included.** Shipping weight 4 lbs. (1.8 kg)

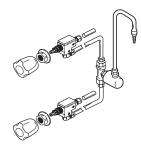
Catalog #	Kit	Tubing	Valve I	Knob/Connec Color	tor Max. M Flow Rate	Max. Working Pressure [†]
9808300**	Cold Water (CW)	Copper	Brass	Green	3.5 GPM (13.2 LPM)	40 psi
9808400**	Air (AIR)	Copper	Brass	Orange	23.7 CFM	40 psi
9808500**	Vacuum (VAC)	Copper	Brass	Yellow	8.6 CFM	14.7 psi
9808700**	Gas (GAS)	Brass	Brass	Blue	29.0 CFM (441 BTU/sec	c) 40 psi
9808800**	Argon (ARG)	Copper	Brass	Gray	20.2 CFM	40 psi
9808900**	Hot Water (HW)	Copper	Brass	Red	3.5 GPM (13.2 LPM)	40 psi
9809100**	Deionized/ Distilled Water (DI)	Stainless Steel	Nickel-Plated & Stainless Steel	White	3.5 GPM (13.2 LPM)	40 psi
9809200**	Steam (STM)	Copper	Brass	Black	0.5 LBM/min	40 psi
9809300**	Nitrogen (NIT)	Copper	Brass	Brown	24.1 CFM	40 psi
9809700** ^{††}	Oxygen (OXY)	Copper	Brass with Oxygen- Compatible Lubric	Light Green ant	22.6 CFM	40 psi



Cold Water Gooseneck Fixture Kits

For mounting on the left or right side of any Protector Premier, XStream, PVC, Stainless Steel, XL or XLE Laboratory Hood with 24" to 30" interior depth. Each kit includes one remotely-controlled gooseneck with brass valve and 0.375" diameter copper tubing and green fixture knob. **Inlet tubing is not included.** Contact Labconco for ordering information on Gooseneck Fixture Kits for Protector Hoods with interior depths of 36" or 48". Shipping Weight 10 lbs. (4.5 kg)

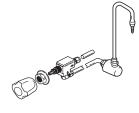
Catalog #	Kit	Description	Max. Flow Rate	Max. Working Pressure ^{††}
9827900**	Cold Water (CW) Gooseneck	For Hoods with Interior Depths of 24" to 30". Includes green epoxy-coated brass rigid/swivel gooseneck.	3.5 GPM (13.2 LPM)	40 psi
9857700**	Cold Water (CW) Gooseneck	For Hoods with Interior Depths of 24" to 30". Includes gray PVC rigid gooseneck.	3.5 GPM (13.2 LPM)	40 psi



Hot and Cold Water Mixing Gooseneck Fixture Kit

For any Protector Premier, XStream, PVC, Stainless Steel, XL or XLE Laboratory Hood with interior depth of 24" to 30". Each kit includes one remotely-controlled, white epoxy-coated, brass rigid/swivel gooseneck with brass valve and 0.25" diameter copper tubing, one green fixture knob and one red fixture knob. **Inlet tubing is not included.** Contact Labconco for ordering information on Gooseneck Fixture Kits for Protector Hoods with interior depths of 36" or 48". Shipping weight 11 lbs. (5.0 kg)

Catalog #	Kit	Description	Max. Flow Rate	Max. Working Pressure ^{††}
9828000**	Hot (HW) and Cold Water (CW) Mixing Gooseneck	For Hoods with Interior Depths of 24" to 30"	3.5 GPM (13.2 LPM)	40 psi



Deionized/Distilled Water Gooseneck Fixture Kit

For mounting on the left or right side of any Protector Premier, XStream, PVC, Stainless Steel, XL or XLE Laboratory Hood with 24" to 30" interior depth. Each kit includes one remotely-controlled, gray PVC rigid gooseneck with stainless steel valve and 0.25" diameter tubing and white fixture knob. Contact Laboraco for ordering information on Gooseneck Fixture Kits for Protector Hoods with interior depths of 36" or 48". **Inlet tubing is not included. All Protector Hoods require 1.375" diameter drilled hole in liner.** Shipping weight 10 lbs. (4.5 kg)

Catalog #	Kit	Description	Max. Flow Rate	Max. Working Pressure ^{††}
9853400**	Deionized/Distilled Water (DW) Gooseneck	For Hoods with Interior Depths of 24" to 30"	3.5 GPM (13.2 LPM)	40 psi

GPM=gallons per minute LPM=liters per minute CFM=cubic feet per minute BTU/sec=British thermal unit per second LBM/min=pounds mass per minute

* Contact Labconco for ordering information on Standard Service Fixtures with chrome-plated brass hose connectors for Protector Stainless Steel Hoods.





Duplex Electrical Receptacle Kits

For mounting in left or right side of any 4', 5', 6', 7' or 8' Protector Premier, XStream, XL or XLE Laboratory Hood. Each kit includes duplex electrical receptacle, wiring, junction box and receptacle cover plate. Contact Labconco for ordering information on Duplex Electrical Receptacle Kits for Protector Hoods with widths of 10', 12' or 16'.

Catalog #	Kit	For Hood with exterior widths:	Shipping Wt. lbs./kg
9851100	115 volts, 20 amps AC	4', 5', 6' and 8'	4/1.8
9851500	115 volts, 20 amps AC, GFCI	4', 5', 6' and 8'	4/1.8
9854200	230 volts, 20 amps AC	4', 5', 6' and 8'	4/1.8



Guardian™ 1000 Digital Airflow Monitor Kits

Monitor and alert the operator to low airflow conditions. Include face plate with circuit board, electrical power pack, airflow hose and flow hose adapter. LCD displays actual airflow in fpm or m/sec from 0 to 999 fpm (0 to 5.0 m/s). Audible/visual alarm alerts user to sustained low velocity condition. Calibration instructions displayed on LCD. LED lights display red for alarm, yellow for caution, green for normal. Include temperature-compensated diode sensor, RS-232 port, night setback and alarm mute functions. UL and CE listed. May be installed in a factory-prepared cutout on upper portion of right fixture panel.

Catalog #	Description	For use with Protector Hood:	Shipping Wt. lbs./kg
9743211	115 volts, 60 Hz	Premier, XStream, XL, XLE, Stainless Steel and PVC	6/2.7
9743212*	230 volts, 50 Hz	Premier, XStream, XL, XLE, Stainless Steel and PVC	6/2.7



Guardian™ Digital Airflow Monitor Kit

Includes face plate with circuit board, electrical power pack, vinyl tubing, side wall flow tube adaptor and wiring instructions. From the monitor's face plate, the user can easily select and calibrate a setpoint between 50 and 250 fpm using a velocity meter. An LCD displays actual face velocity. If the hood's face velocity falls below the programmable setpoint, an audible alarm sounds and the LOW indicator glows red. The TEST RESET switch, when pressed, mutes the audible alarm. The EMERG. PURGE switch, when configured and pressed, can be used to activate a relay to open a hood damper (not included). **Requires cutout in upper right portion of front panel of Protector ClassMate Hood.** Contact Labconco for ordering information on Guardian Digital Airflow Monitors for other Protector Hoods.

Catalog #	Description	For use with Protector Hood:	Shipping Wt. lbs./kg
9743203	115 volts, 60 Hz	ClassMate	6/2.7



Guardian™ Jr. Airflow Monitor Kits

Monitor and alert the operator to low airflow conditions. Include face plate with circuit board, electrical power pack, vinyl tubing and airflow tube adapter. From the monitor's face plate, the user can easily select and calibrate a setpoint between 30 and 250 fpm using a velocity meter and a screwdriver. If the hood's face velocity falls below the setpoint for more than 6 seconds, an audible alarm sounds and the ALERT indicator glows red. The TEST RESET switch, when pressed, mutes the alarm. 9743202 and 9743206 may be installed in a factory-prepared cutout on upper portion of right fixture panel. **9743204 requires cutout in upper right portion of front panel.**

Catalog #	Description	For use with Protector Hood:	Shipping Wt. lbs./kg
9743202	115 volts, 60 Hz	Premier, XStream, XL, XLE, Stainless Steel and PVC	6/2.7
9743204	115 volts, 60 Hz	ClassMate	6/2.7
9743206*	230 volts, 50 Hz	Premier, XStream, XL, XLE, Stainless Steel and PVC	6/2.7

^{*} International electrical configuration





4852600 Side-Mount Oval Polypropylene Cupsink

Mounts on side wall of Protector XL Floor-Mounted Hoods. 6" x 3" cupsink. 1.5" NPSM* thread. **Requires a 1.875" diameter drilled hole in liner.** Shipping weight 4 lbs. (1.8 kg)

3-Sided Ceiling Enclosure Kits

The panels extend above the top of the hood to the ceiling to hide exposed ductwork, plumbing and wiring. For any Protector Premier, XStream, XL, XLE, Stainless Steel or PVC Laboratory Hood. Each kit includes three glacier white epoxy-coated steel ceiling enclosure panels, one for the front of the hood and one for each side of the hood.

		Enclosi	ure Height Range ir	Inches
Hood Width	Hood Interior Depth	10.06/13.08	13.08/17.62	17.62/24.50
	24"	9852003	9852004	9852005
4'	30"	9852103	9852104	9852105
	36"	9852203	9852204	9852205
	24"	9852009	9852010	9852011
5'	30"	9852109	9852110	9852111
	36"	9852209	9852210	9852211
	24"	9852015	9852016	9852017
6'	30"	9852115	9852116	9852117
	36"	9852215	9852216	9852217
	24"	9852021	9852022	9852023
8'	30"	9852121	9852122	9852123
	36"	9852221	9852222	9852223

Front Ceiling Enclosure Kits

The enclosure panel extends above the top of the front of the hood to the ceiling to hide exposed ductwork and wiring. For any Protector Premier, XStream, XL, XLE, Pass-Through, Stainless Steel or PVC Laboratory Hood. Each kit includes one glacier white epoxy-coated steel ceiling enclosure panel for the front of the hood.

	Enclosure Height Range in Inches										
Hood Width	10.06/13.08	13.08/17.62	17.62/24.50								
4'	9852303	9852304	9852305								
5'	9852309	9852310	9852311								
6'	9852315	9852316	9852317								
8'	9852321	9852322	9852323								

Side Ceiling Enclosure Kits

The enclosure panel extends above the top of the side of the hood to the ceiling to hide exposed ductwork and wiring. For any Protector Premier, XStream, XL, Stainless Steel or PVC Laboratory Hood. Each kit includes one glacier white epoxy-coated steel ceiling enclosure panel for one side of the hood.

		Enclose	ıre Height Range ir	Inches
Hood Side	Hood Interior Depth	10.06/13.08	13.08/17.62	17.62/24.50
Right	24"	9852403	9852404	9852405
Right	30"	9852409	9852410	9852411
Right	36"	9852415	9852416	9852417
Left	24"	9833703	9833704	9833705
Left	30"	9833709	9833710	9833711
Left	36"	9833715	9833716	9833717

^{*} National Pipe Straight Mechanical



Rear Finish Panel Kits

The panel hides the hood's interior components. Recommended when hood is mounted on a casework island, each kit includes a glacier white epoxy-coated steel panel to provide a finished appearance for the rear of the hood. Contact Labconco for ordering information on Rear Finish Panels for Protector XL Floor-Mounted Hoods.

Catalog#	Nominal Width	Dimensions (w x h)	For use with Sh Protector Hood:	ipping Weight lbs./kg
6987300	4 Feet	43" x 9.5"	ClassMate	20/9
6987301	5 Feet	55" x 9.5"	ClassMate	25/12
6987302	6 Feet	67" x 9.5"	ClassMate	30/14
9851800	4 Feet	48" wide x 59" high	Premier, XStream, XL, XLE, Stainless Steel, PVC	70/32
9851801	5 Feet	60" wide x 59" high	Premier, XStream, XL, XLE, Stainless Steel	80/36
9851802	6 Feet	72" wide x 59" high	Premier, XStream, XL, XLE, Stainless Steel, PVC	90/41
9851803	8 Feet	96" wide x 59" high	Premier, XStream, XL, XLE, Stainless Steel, PVC	120/54
9851804	10 Feet	120" wide x 59" high	XL	160/73
9851805	12 Feet	144" wide x 59" high	XL	180/82
9851806	16 Feet	192" wide x 59" high	XL	240/109

Distillation Grid Kits

Kits include stainless steel rods, connectors, instruction sheet and drill template.

A C	

Catalog #	Description	For use with Protector Hood:	Shipping Wt. lbs./kg
6973300	4 Feet	ClassMate	15/7
6973301	5 Feet	ClassMate	20/9
6973302	6 Feet	ClassMate	25/11
9725204	4 Feet	Premier, XStream, XL Benchtop, XLE	10/4.5
9725205	5 Feet	Premier, XStream, XL Benchtop, XLE	15/6.8
9725206	6 Feet	Premier, XStream, XL Benchtop, XLE	20/9.1
9725200	8 Feet	Premier, XStream, XL Benchtop, XLE	25/11.3
9725201	10 Feet	XL Benchtop	30/13.6
9725202	12 Feet	XL Benchtop	35/15.9
9725203	16 Feet	XL Benchtop	45/20.4

Contact Labconco for ordering information on distillation grids for Protector XL Floor-Mounted Hoods.



Auxiliary-Air Plenum Kits

For use with 4', 5', 6' and 8' Protector Premier Laboratory Hoods for use with remote blower and XL Benchtop Laboratory Hoods with vertical-rising sashes only. Provide a means to introduce supplemental air for the hood exhaust and limit the percentage of tempered air removed from the laboratory. Useful for air-starved laboratories where room make-up air volume is not adequate to supply a laboratory hood. Each kit includes a glacier white epoxy-coated steel plenum with auxiliary-air inlet, 12.06" wide x 6.62" deep. 8' plenum has two inlets. The plenum replaces the hood's front panel and extends 7.59" in front of the hood when installed. Auxiliary-air inlet centerline is located 1.75" in front of hood's corner posts when the plenum is installed. **Installation, separate ductwork and remote blower are required (not included). Auxiliary-Air Transition Adapter 4889300 is recommended to permit connection of the rectangular inlet to 10" diameter duct.** See Blowers Booklet in back pocket for ordering information on recommended Coated Steel Blowers and Auxiliary-Air Transition Adapter.

Catalog#	Nominal Width	Actual Dimensions (w x d x h)	Static Pressure Loss (50% auxiliary air/ exhaust ratio)	Recommended Coated Steel Blower/Adaptor*	Shipping Weight lbs./kg
9834004	4 Feet	43.75" x 14.81" x 23.25"	.17" @ 100 fpm (365 CFM)	7068000/4722401	100/45
9834005	5 Feet	55.75" x 14.81" x 23.25"	.17" @ 100 fpm (480 CFM)	7068000/4722401	125/57
9834006	6 Feet	67.75" x 14.81" x 23.25"	.17" @ 100 fpm (590 CFM)	7068200/4722401	150/68
9834008	8 Feet	91.75" x 14.81" x 23.25"	.17" @ 100 fpm (830 CFM)	7068600/4722401**	200/90

^{*} Blowers supply auxiliary air volume equal to 50% of exhaust volume of fume hood and provide up to 100 equivalent resistance in feet of 10' diameter straight duct.

^{**} Manual Damper 5983400 or equal is required.

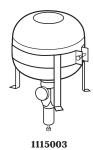




Sash Stop Kits

A Sash Stop restricts how far a vertical-rising sash may be opened. This small plastic device may be easily field installed on the fixture panel of any Protector Premier, XStream, XL Benchtop or Stainless Steel Hood. These hoods have been factory-prepared to accommodate a sash stop at the 60% open position (18" to work surface). Alternate sash positions may be field drilled. Each Sash Stop Kit includes components for one sash. Shipping weight 0.5 lb. (0.2 kg)

Catalog #	For use with Protector Hood:							
9724500	Premier, XL Benchtop, Stainless Steel							
9724501	XStream							
9724502	8' Premier with dual sash; 8', 10' and 12' XL Benchtop with dual sash							



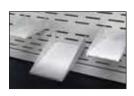
Snuffer™ Fire Extinguishers

Use ABC dry powder to provide fire protection to Protector and Basic Hoods. A fusible link melts at 165° F (74° C) and chemical powder automatically discharges within 5 seconds to extinguish the fire. A pressure gauge permits visual inspection. Rechargeable. **A drilled hole is required in hood liner.** Labconco recommends factory installation. Contact Labconco for selection assistance based on your application, hood liner material, hood width and depth.

Catalog #	Description	Charge Weight lbs./kg	Shipping Weight lbs./kg
1115003	Stainless steel cylinder mounts vertically above hood liner. UL listed	d. 5/2.3	9/4.0
1115004	Stainless steel cylinder mounts vertically above hood liner. UL listed	l. 8/3.6	14/6.

Snuffer Selection Chart

Width of Hood	4' 5'							6' 8'				10'				12'				16'								
Interior Depth of Hood	24"	30"	36"	48"	24"	30"	36"	48"	24"	30"	36"	48"	24"	30"	36"	48"	24"	30"	36"	48"	24"	30"	36"	48"	24"	30"	36"	48"
Catalog Number		Number of Extinguishers Required																										
1115003	1	1	2	2	1	2	2		2	2	2																	
1115004								1				1	1	1	1	2	1	2	2	2	2	2	2	3	2	2	3	3



3925000 Utility Shelves

For use with Protector XStream Laboratory Hoods, Protector XVS Ventilation Stations and Protector Work Stations. Three epoxy-coated steel shelves attach to the rear baffle perforations to hold items such as a balance printer, utensils and other miscellaneous supplies. The utensil shelf has a scalloped front edge to support scalpels, forceps and other items. Shipping weight 5 lbs. (2 kg)



3927700 Bottle Holder

For use with Protector XStream Laboratory Hoods, Protector XVS Ventilation Stations and Protector Work Stations. Epoxy-coated steel. Attaches to the rear baffle perforations to hold a squirt bottle or other round container. 3" diameter opening. Shipping weight 1 lb. (0.5 kg)

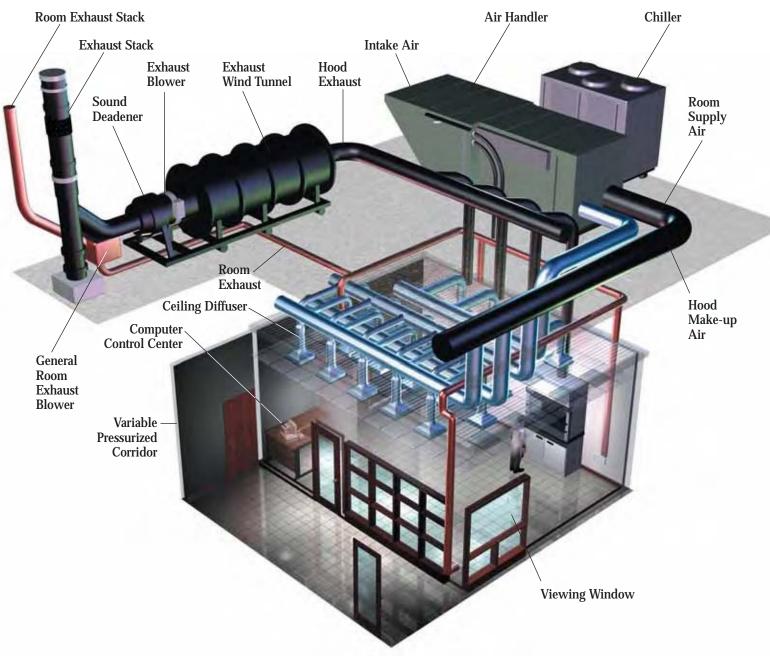


3927800 Tissue Holder

For use with Protector XStream Laboratory Hoods, Protector XVS Ventilation Stations and Protector Work Stations. Epoxy-coated steel. Attaches to the rear baffle perforations to hold tissue wipers in the upside down position. An opening in the bottom of the holder permits wipers to be dispensed from the bottom. Shipping weight 1 lb. (0.5 kg)



Appendix: Advancing Laboratory Ventilation Technology Airflow Test Laboratory











Appendix: Advancing Laboratory Ventilation Technology



At the University of California-Riverside, each Protector XL Laboratory Hood is outfitted with sixteen service fixtures, including gooseneck faucet and turret. Distillation grids are mounted to the hood walls to provide ample areas for suspending apparatus and glassware.



Protector XStream Laboratory Hoods line the walls in this laboratory at Gwinett University Center, Lawrenceville, Georgia.



These 32" high Protector XVS Ventilation Stations are used as student work stations at Fordham University, Bronx. New York.

Labconco — Your Ventilation Partner For Your Next Laboratory Project

Whether you're selecting a single hood, renovating an existing laboratory or starting from the ground up, you can rely on Labconco for assistance. Labconco engineers, product specialists and technical service representatives comprise a focused group dedicated to helping customers find solutions to their laboratory ventilation problems.

Our experts share their extensive knowledge and resources so they can quickly act upon your requests for ventilation products including unique, custom-designed fume hoods. From the beginning to the end of your project, we can serve you in many other ways as well. Below are some of the project elements we can assist you with:

- product selection
- laboratory space planning
- ventilation equipment layout/placement recommendations
- identification of cost and energy saving alternatives
- consultation with your project manager or architect
- submittal packages with CAD drawings
- detailing and specification of Labconco products
- referral to reliable, time-proven vendors for products and services to complete your project including casework, installation and performance certification
- training for your workers on the proper, safe use of your Labconco products
- follow up contact throughout the life of the project and after installation is complete to ensure satisfaction

State-of-the-Art Airflow Test Laboratory

Labconco's Airflow Test Laboratory (diagram on page 122) enhances our capabilities to serve our customers with innovative ventilation products, ASHRAE testing, and replication of specific situations or field conditions. Measuring over 500 square feet, the facility can accommodate a single custom fume hood up to 16 feet wide or four 4-foot fume hoods simultaneously. It has the capacity to exhaust air volumes up to 5600 cubic feet per minute.

Sophisticated software and direct digital controls allow us to monitor and regulate airflow conditions from a computer screen. The entire room is sealed, creating its own "microenvironment" so that a customer's laboratory conditions can be recreated to troubleshoot existing ventilation problems or to anticipate possible future ventilation scenarios. One hundred percent non-recirculated air to the room is provided from the outside after passing through both HEPA and carbon filters to ensure removal of contaminants that could interfere with sophisticated containment testing. The room supply air is heated and/or cooled to pre-set temperature requirements. Humidity may also be controlled and monitored.



Appendix: Advancing Laboratory Ventilation Technology

The Airflow Test Laboratory features fourteen laminar flow ceiling diffusers that introduce supply air to the laboratory and can be individually controlled to provide the ultimate in supply air flexibility. We can shift supply air volumes through one or all fourteen diffusers. Direct digital controls give us the ability to vary the number of room air changes and to create either a positive or negative pressure relationship to the outside corridor.

Located at Labconco's headquarters in Kansas City, the Airflow Test Laboratory is designed for research as well as to showcase our ventilation capabilities to visiting customers. Its range of performance is best demonstrated in person, so we encourage you to be our guest in the near future. Your visit will include hands-on work in the Airflow Test Laboratory and tours of Labconco design and production departments. You'll also have an opportunity to inspect a wide array of Labconco laboratory equipment in our Demonstration Laboratory and Auditorium.

Additional Products from Labconco

In addition to the fume hoods and carbon-filtered enclosures featured in this catalog, Labconco manufactures a variety of other products used in laboratory construction projects. Contact Labconco at 800-821-5525, 816-333-8811 or www.labconco.com for more information on the following products:

- biological safety cabinets
- HEPA-filtered enclosures
- · clean benches
- glove boxes
- laboratory animal cage changing stations
- glassware washers
- · water purification systems



At Stowers Institute for Medical Research, Kansas City, Missouri, the WaterPro PS Polishing Station provides point-of-use, laboratory-grade pure water. An undercounter FlaskScrubber Laboratory Glassware Washer is located nearby.



At Meredith College, Raleigh, North Carolina, Protector XL Laboratory Hoods mounted on Protector Acid and Solvent Laboratory Hoods alternate with Protector XL Laboratory Hoods mounted on wood casework. One hood is mounted lower and with accessibility underneath for a wheelchair.



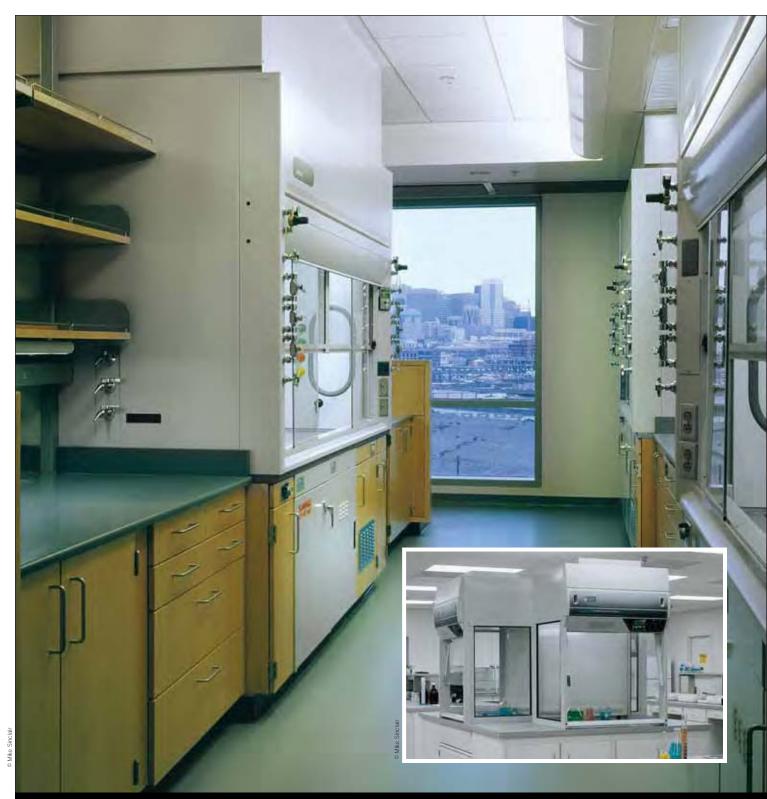
A Protector XL Floor-Mounted Laboratory Hood sits next to a Protector Premier Laboratory Hood at Clemson University, Clemson, South Carolina.



A Purifier Class II, Type A2 Biological Safety Cabinet is installed in this biology classroom at Berry College, Mount Berry, Georgia.



Appendix: Advancing Laboratory Ventilation Technology



A ceiling enclosure hides the ductwork of this Protector XL Laboratory Hood located at University of California-San Francisco.

Inset: Four Paramount Filtered Enclosures are mounted back-to-back on this casework island at Romer Labs, Union, Missouri.



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Protector • Laboratory Fume Hoods & Enclosures

Conversion Factors

To Convert From	То	Multiply By
Centimeters	Inches	0.39370079
Cubic Feet	Liters	28.31605
Cubic feet/minute	Liters/second	0.4719342
Cubic meters/minute	Liters/minute	999.972
Feet	Centimeters	30.48
Feet/minute	Meters/second	0.00508
Foot candles	Lux	10.764
Gallons	Liters	3.785306
Gallons/second	Liters/minute	227.1183
Horsepower	BTU/hour	2547.16
Horsepower	Watts	746
Inches	Centimeters	2.54
Inches of H ₂ O (4° C)	Dynes/square centimeter	2490.82
Inches of H ₂ O (4° C)	Inches of Hg (32° F)	0.0735539
Kilograms	Pounds	2.2046226
Kilowatts	BTU/hour	3414.43
Liters	Gallons	0.2641794
Lux	Foot candles	0.0929
Meters/second	Feet/minute	196.85039
Milliliters	Ounces	0.03381497
Millimeters	Inches	0.039370079
Millimeters of Hg (0° C)	Pounds/square inch	0.0193368
Ounces	Liters	0.029572702
Pounds	Kilograms	0.45359237
Square Feet	Square Meters	0.09290304
Square Meters	Square Feet	10.763910
Watts	BTU/hour	3.41443

Temperature

 $^{\circ}$ **F** = 9/5 $^{\circ}$ C + 32

°**C** = 5/9 (°F - 32)

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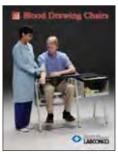
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