



PROTECTOR[®] WORK STATIONS

for histology and pathology



Protecting your
laboratory environment

LABCONCO[®]

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Protector Work Station 3930001 is shown on Work Surface with Sink 6942003 and Telescoping Base Stand 3746702.

Inset: Protector Work Station 3930000 is shown on Solid Epoxy Work Surface 3908402 and Telescoping Base Stand 3746702.



**This Model
Requires
Ductwork and
Blower**



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 OSHA-recommended 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 perforations promotes horizontal laminar airflow to maximize containment. On Models 3930000 and 3930020, the area behind the baffle accommodates two Carbon Filters (sold separately), which are accessible by unfastening two release knobs and lowering the baffle.

Ergonomic 20° angled sash allows a closer view, reduces glare and provides a more comfortable operating position than vertical sashes. The hinged sash with spring-loaded latch pivots upward and locks to a height of 20° for 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.

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

Front-mounted light and blower switches.

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 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 3101-1/61010-1 and CAN/CSA C22.2 No. 1010.1.

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.

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 user-supplied computer.

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

Optional Work Surface 6942003 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

**Contact Labconco for ordering information on FilterMate Portable Exhausters, Filters and Hoses.





Protector® Work Stations



This Model Requires Ductwork and Blower



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*
- 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 20" height
- Fluorescent lighting
- Light and blower switches
- Exterior rear-mounted electrical receptacle

All models conform to the following regulations and standards:

- SEFA 1-2002
- Modified ASHRAE 110-1995
- ANSI Z9.5-1993
- 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 page 6.

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 8. Contact Labconco for ordering information on FilterMate Portable Exhausters.
- Ductwork. See page 8.

All models require (not included):

- Supporting work surface. See page 7.
- Supporting base. See pages 7-8. Contact Labconco for ordering information on Hydraulic Lift Base Stands.

Optional accessories include:

- Guardian Jr. and Guardian 1000 Digital Airflow Monitors. See page 6.
- Utility Shelves. See page 6.

Face Velocity (fpm)	Exhaust Volume (CFM)	Noise Pressure db(A) (Models 3930000 & 3930020)	Static Pressure Loss (Inches of H ₂ O) (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



Exclusive Feature



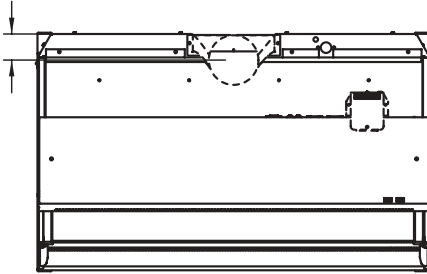
Ordering Information & Dimensional Data

Protector® Work Stations

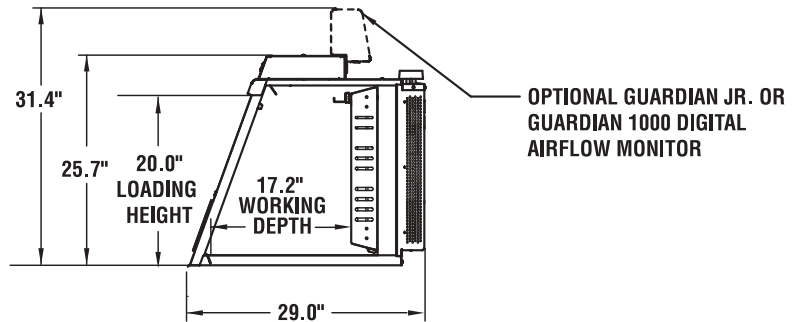
Catalog Number	Electrical Requirements	Power & Plug	Blower	Carbon Filters*	Shipping Weight lbs./kg
3930000	115 volts, 60 Hz, 10 amps	6.5'	Built-in	Requires two	120/54
3930001	115 volts, 60 Hz, 10 amps	6.5'	Requires remote blower, house exhaust or FilterMate Portable Exhauster**		100/45
3930020	230 volts, 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 page 6 for ordering information. ** See page 8 for ordering information on Remote Blowers. Contact Labconco for ordering information on FilterMate Portable Exhausters.

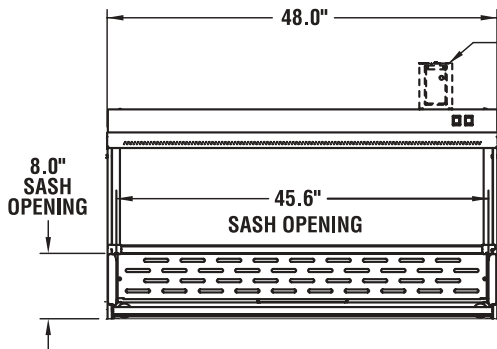
3.2" CENTERLINE OF OPTIONAL TRANSITION ADAPTER 3912401



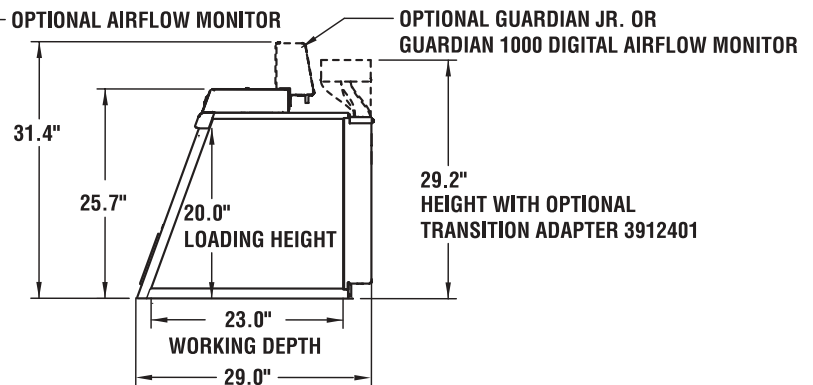
TOP VIEW (Models 3930001 & 3930021)



SIDE VIEW (Models 3930000 & 3930020)



FRONT VIEW (All Models)



SIDE VIEW (Models 3930001 & 3930021)



Accessories

Protector® Work Stations



Carbon Filters for Protector Work Stations 3930000 & 3930020

Adsorb harmful chemical fumes and vapors. Whether or not the Protector Work Station 3930000 or 3930020 would be appropriate for your application requires consideration of factors such as the OSHA*-recommended TWA exposure limits of your materials. Using Labconco's exclusive chemical assessment program, our technical specialists can help you determine if it is the right ventilation product for your applications, and, if so, estimate filter life. **Two filters are required for Protector Work Station 3930000 or 3930020, either two of the same filter or a combination of two different filters.** Dimensions: 18" w x 36" d x 1" thick.

Catalog #	Description	Pounds of Carbon	Adsorption Wt./Adsorption Vol.	Shipping Wt. lbs./kg
3924200	Organic Vapor. For adsorbing xylene, toluene or other solvents. Type RL10 carbon.	11.0	Varies depending on chemical/ Varies depending on chemical	12/5.4
3924201	Formaldehyde. For adsorbing formalin and formaldehyde. Impregnated carbon.	13.3	10% (1.33 lbs.)/1512 ml of 37% formalin	14/6.4
3924202	Ammonia. For adsorbing ammonia and amines. Impregnated carbon.	15.2	10% (1.52 lbs.)/1382 ml of 50% ammonia solution	16/7.3



Guardian™ 1000 Digital Airflow Monitors

An LCD displays actual face velocity. Mount atop Protector Work Stations in factory-prepared location. See dimensional drawing on page 5. Include face plate with circuit board, electrical power pack, airflow sensor 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 programmed setpoint, an audible alarm sounds and the LOW indicator glows red. The ENTER switch, when pressed, mutes the alarm.

Catalog #	Electrical Requirements	Shipping Wt. lbs./kg
3908802	115 volts, 60 Hz	10/4.5
3908803**	230 volts, 50 Hz	10/4.5



Guardian™ Jr. Airflow Monitors

Mount atop Protector Work Stations in factory-prepared location. See dimensional drawing on page 5. 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	Shipping Wt. lbs./kg
3908702	115 volts, 60 Hz	10/4.5
3908703**	230 volts, 50 Hz	10/4.5



3925000 Utility Shelves

Three epoxy-coated steel shelves attach to the rear baffle perforations to hold a 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. (2.2 kg)



3746000 Adjustable Footrest

Elevates feet and permits angle repositioning while in use. 18.5" w x 11.5" d x 8" high. Shipping weight 6 lbs. (2.7 kg)

*Occupational Health and Safety Administration

**International electrical configuration



Accessories

Protector® Work Stations



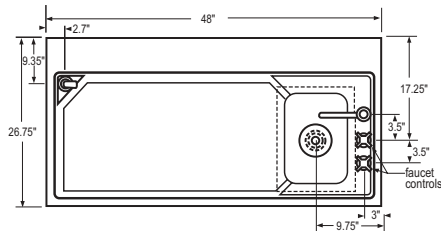
3744000 Ergonomic Chair with Armrests

Chair has 6-way articulating seat and back control for personalized adjustment. Pneumatic mechanism adjusts seat height from 18.25" to 25.75". Five-leg black reinforced composite base rests on 2" diameter ball-bearing casters. Aluminum support ring. Removable armrests. Black vinyl upholstery. Shipping weight 35 lbs. (16 kg)

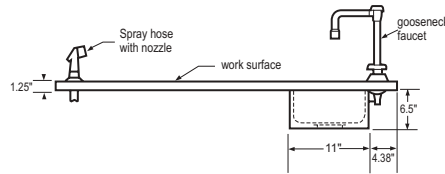


6942003 Work Surface with Sink

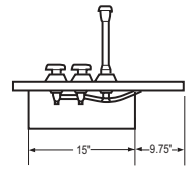
Molded from durable epoxy resins, this unique work surface accommodates standard dissecting boards and is dished to contain spills. It resists corrosion and does not stain or absorb liquids. Includes a 10" x 14" x 6" deep molded epoxy sink. Fixtures include a chrome-plated gooseneck faucet with vacuum breaker, two chrome-plated faucet controls, and a spray nozzle with hose. **Sink requires a 1.5" drain connection.** Dimensions: 48" w x 26.75" d x 1.25" thick. Shipping weight 125 lbs. (57 kg).



TOP



FRONT



SIDE



3908402 Solid Epoxy Work Surface

Black chemical-resistant work surface is dished to contain spills and contoured to fit the dimensions of Protector Work Stations. Dimensions: 48" w x 26.7" d x 1" thick. Shipping weight 96 lbs. (44 kg)



Telescoping Base Stands

Support Protector Work Stations. Telescoping legs allow height adjustment in 1" increments from 27.5 to 33.5". Tubular 1.75" square, glacier-white epoxy-coated steel. Include four fixed feet or 5" diameter toe-locking casters. **Work surface is required. See Work Surfaces 6942003 and 3908402.**

Catalog #	Width	Width	Description	Shipping Wt. lbs./kg
3746702	48.0"	29.0"	Telescoping Base Stand with Fixed Feet	80/36
3746712*	48.0"	29.0"	Telescoping Base Stand with Toe-Locking Casters	84/38

* Protector Work Stations supported by mobile base stands require special modifications to incorporate flexible ducting, wiring and plumbing when applied.



Protector Solvent Storage Cabinets

Support Protector Work Stations. Dual wall, glacier white, epoxy-coated steel construction with 1.5" air gap. Manual-closing or self-closing doors with 3-position locking handle. Self-closing doors close automatically in case of fire when temperature reaches 165° F (74° C). Meet National Fire Protection Association (NFPA) 30-2000 Flammable and Combustible Liquids Code specifications. Meet OSHA 29 CFR 1910, section 1910.106 specifications. Cabinet 9903000 with self-closing doors meets UFC* 97. Include epoxy-coated steel interior shelf, two rear vent connections with flame arrestors and closure plugs, four leveling feet, and one 8" filler panel to increase cabinet depth from 22" to 30". Contact Labconco for ordering information on other Filler Panels. Dimensions: 48" w x 22" d x 35.5" to 36.75" high. **Work surface is required. See Work Surface 3908402.**

Catalog #	Description	Shipping Wt. lbs./kg
9902000†	Solvent Storage Cabinet with Manual Doors	260/118
9903000*	Solvent Storage Cabinet with Self-Closing Doors	260/118

*Uniform Fire Code

†Factory Mutual approved



Accessories

Protector® Work Stations



9900000 Protector Standard Storage Cabinet

Supports Protector Work Stations. Glacier white, epoxy-coated steel construction. Manual-closing, non-locking doors. Includes four leveling feet and one 8" filler panel to increase cabinet depth from 22" to 30". Contact Labconco for ordering information on other Filler Panels. Dimensions: 48" w x 22" d x 35.5" to 36.75" high. **Work surface is required. See Work Surfaces 3908402 and 6942003.** Shipping weight 260 lbs. (118 kg)

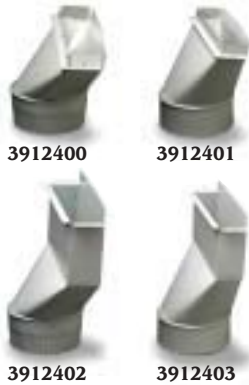


Remote Blowers for Protector Work Stations 3930001 & 3930021

A remote blower is required for Protector Work Stations 3930001 and 3930021 (unless connected to a house exhaust system or the FilterMate Portable Exhauster). 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 (37.1 x 34.3 x 33.6 cm).

Catalog #	For use with:	Electrical Requirements	Shipping Wt. lbs./kg
4863500	3930001	115 volts, 60 Hz, 4.4 amps	35/16
4863501*	3930021	115/230 volts, 50 Hz, 5.6/2.8 amps	35/16
7053501**	3930001	115 volts, 60 Hz, 4.4 amps	40/18

CFM @ Static Pressure - Inches of H ₂ O						
S.P.	0.0	0.12	0.25	0.50	0.75	0.87
CFM	595	560	515	420	300	167



Transition Adapters for Protector Work Stations 3930001 & 3930021

Catalog #	Description	Shipping Wt. lbs./kg
3912400	Upper Exhaust Transition Adapter, epoxy-coated steel, 5" diameter for connection 5" ID hose (included with FilterMate)	5/2.2
3912401	Upper Exhaust Transition Adapter, epoxy-coated steel, 6" diameter for connection to 6" OD duct	5/2.2
3912402	Lower Exhaust Transition Adapter, epoxy-coated steel, 5" diameter for connection to 5" ID hose	5/2.2
3912403	Lower Exhaust Transition Adapter, epoxy-coated steel, 6" diameter for connection to 6" OD duct	5/2.2

Ductwork for Protector Work Stations 3930001 & 3930021

Catalog #	Description	Equivalent Resistance†	Shipping Wt. lbs./kg
4708600	Thermoplastic Duct, 6.625" OD, 6.250" ID, 10' length	10'	25/11.3
4708900	Female PVC Duct Coupling, 6" nominal diameter, connects two sections of Thermoplastic Duct	0'	4/1.8
4708700	90° PVC Elbow, 6" nominal diameter, has belled end connections to directly receive Thermoplastic Duct or Male Duct Coupling	12'	8/3.6
3924000	Manual Exhaust Damper, powder-coated steel, 6" nominal diameter	1'	1/45
4724200	Manual Exhaust Damper, PVC, 6" nominal diameter	1'	1/45
4861800	Flexible Duct Connection, 7" nominal diameter for use with 6" nominal diameter duct	1'	8/3.6
4861700	Blower Transition Adapter, 4.25" x 7.75" rectangle to 6" diameter round	1'	3/1
4722200	Zero Pressure PVC Weathercap, 6" nominal diameter, fits atop Thermoplastic Duct	5'	20/9.1

*International electrical configuration

**Explosion-proof

†Equivalent resistance is measured in feet of straight duct.

Contact Labconco for other ductwork.

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