

PREMIUM LABORATORY FUME HOODS

FOR USE WITH REMOTE BLOWER



All models feature:

- By-pass airflow design
- * Eco-Foil™ air foil with aerodynamic Clean-Sweep™ airflow openings*
- * Cord-Keeper™ slots on left and right side of air foil
- Glacier white powder-coated steel exterior
- * One-piece molded fiberglass liner and pre-set baffle(s) with flame spread less than 25 per ASTM E84**
- Tempered safety glass vertical-rising sash and cable and pulley
- Powder-coated aluminum sash handle with Clean-Sweep™ openings*
- 37.5" (95.3 cm) high sightline from the work surface to header panel
- Removable front and side panels, and front service access panels for access to plumbing and electrical wiring
- Pre-wired LED lighting with vapor-proof design and ADA-compliant light and blower switches. Lighting is rated for 50,000 hours
- Molded fiberglass 12.8" ID exhaust connection(s)

Standards conformance & regulations:

- ADA
- CFR 29, Part 1910**
- SEFA 1**
- NFPA 45**
- ASTM E84-09C**
- ASHRAE 110**
- ANSI Z9.5**
- UL 61010-1**
- CAN/CSA C22.2 No. 61010-1**
- UL 1805
- CE Conformity Marking (230V models)**
- SEFA 8**

⚠ **WARNING:** Cancer - P65Warnings.ca.gov (California only)

* Labconco exclusive feature

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 GFCI electrical duplex receptacle on lower right side and, on 8' models only, one additional pre-wired GFCI electrical duplex receptacle on lower left side

Required accessories (not included):

- Remote blower. Contact Labconco
- Ductwork. Contact Labconco
- Work surface. See pages 17-18
- Base cabinet or stand. Contact Labconco

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 19
- Electrical Duplex Kits. See page 20
- Guardian Airflow Monitor Kits. See page 20
- Sash Stop Kits. See page 20
- Ceiling Enclosure, Rear Finish Panel Kits and Distillation Grid Kits. Contact Labconco



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

Face Velocity (fpm)	Airflow Volumetric Rate (CFM) @ Static Pressure (inches of water)							
	4' Hood		5' Hood		6' Hood		8' Hood	
Sash @ Full Open	CFM	s.p.	CFM	s.p.	CFM	s.p.	CFM	s.p.
100	725	0.22	955	0.31	1180	0.41	1640	0.28
80	580	0.14	765	0.20	945	0.26	1310	0.18
60	435	0.08	575	0.11	710	0.15	985	0.10

Total Exhaust CFM and Static Pressure @ 18" Sash Opening (62.5% Open)

Face Velocity (fpm)	Airflow Volumetric Rate (CFM) @ Static Pressure (inches of water)							
	4' Hood		5' Hood		6' Hood		8' Hood	
Sash @ 62.5% Open	CFM	s.p.	CFM	s.p.	CFM	s.p.	CFM	s.p.
100	450	0.09	595	0.12	735	0.16	1025	0.11
80	365	0.06	480	0.08	590	0.10	820	0.07
60	270	0.03	360	0.04	440	0.06	615	0.04

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

**See page 21 for list of regulations, standards and registered trademarks

⚠ Heights of switches and electrical receptacles meet requirements of ADA when work surface is set to ADA height.

PREMIUM LABORATORY FUME HOODS

FOR USE WITH REMOTE BLOWER ORDERING INFORMATION & DIMENSIONAL DATA

Catalog Number Configurator:

Use this key to configure the nine digit catalog number to order your Protector Premier Laboratory Hood.

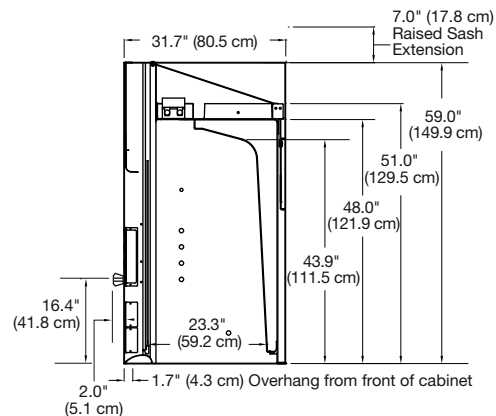
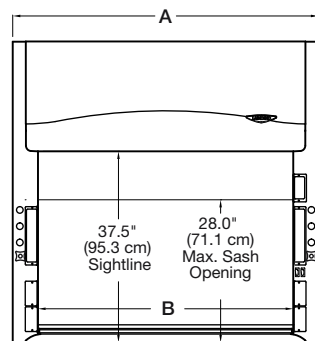
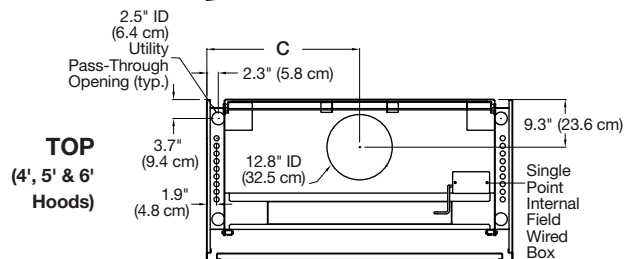
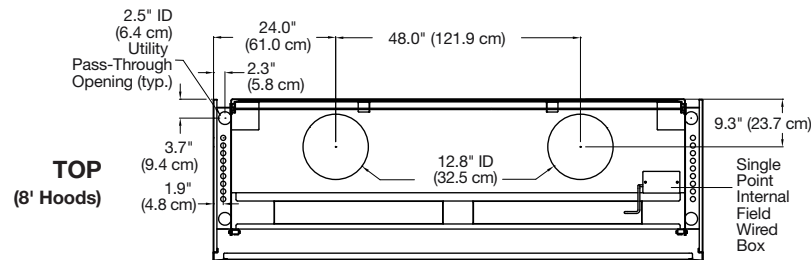
1 0 0 0 0 0

Select the **WIDTH** of your fume hood. This is the fourth digit of your catalog number. Shipping weight is also noted. Add 10 lbs. (5 kg) for fixtured models.

- 4** = 4' (122 cm), 325 lbs. (147 kg)
- 5** = 5' (152 cm), 410 lbs. (186 kg)
- 6** = 6' (183 cm), 485 lbs. (220 kg)
- 8** = 8' (244 cm), 650 lbs. (295 kg)

Select the **ELECTRICAL REQUIREMENTS, SERVICE FIXTURES** and **GFCI ELECTRICAL DUPLEX RECEPTACLE** of your fume hood. These are the eighth and ninth digits of your catalog number.

Electrical Requirements	No Service Fixtures	Two Service Fixtures	Two Service Fixtures & GFCI Duplex*
100-115V, 50/60 Hz, 10A	00	—	02
208-230V, 50/60 Hz, 5A	20	21	—



	A	B	C
4' Hood	48.0" (121.9 cm)	38.1" (96.8 cm)	24.0" (61.0 cm)
5' Hood	60.0" (152.4 cm)	50.1" (127.3 cm)	30.0" (76.2 cm)
6' Hood	72.0" (182.9 cm)	62.1" (157.7 cm)	36.0" (91.4 cm)
8' Hood	96.0" (243.8 cm)	86.1" (218.7 cm)	—

PREMIUM LABORATORY FUME HOODS

WITH BUILT-IN BLOWER SPECIFICATIONS



All models feature:

- By-pass airflow design
- Built-in belt-driven, corrosion-resistant exhaust blower with adjustable sheave, molded thermoplastic housing and non-sparking, coated aluminum impeller
- * Eco-Foil™ air foil with aerodynamic Clean-Sweep™ airflow openings*
- * Cord-Keeper™ slots on left and right side of air foil
- Glacier white powder-coated steel exterior
- * One-piece molded fiberglass liner and pre-set removable baffle(s) with flame spread less than 25 per ASTM E84**
- Tempered safety glass vertical-rising sash and cable and pulley
- Powder-coated aluminum sash handle with Clean-Sweep™ openings*
- 37.5" (95.3 cm) high sightline from the work surface and header panel
- * Removable front and side panels, and front service access panels for access to plumbing and electrical wiring
- 10.8" ID exhaust connection (4' models); 12.8" ID exhaust

Standards conformance & regulations:

- ADA
- CFR 29, Part 1910**
- SEFA 1**
- NFPA 45**
- ASTM E84-09C**
- ASHRAE 110**
- ANSI Z9.5**
- UL 61010-1**
- CAN/CSA C22.2 No. 61010-1**
- UL 1805
- CE Conformity Marking (230V models)**
- SEFA 8**

⚠ **WARNING:** Cancer - P65Warnings.ca.gov (California only)

* Labconco exclusive feature

Standard models feature:

- Pre-wired LED lighting with vapor-proof design, and ADA-compliant light and blower switches. Lighting is rated for 50,000 hours

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 GFCI electrical duplex receptacle on lower right side

Required accessories (not included):

- Ductwork. Contact Labconco
- Work surface. See pages 17-18
- Base cabinet or stand. Contact Labconco

Optional accessories for on-site installation include:

- Service Fixture Kits. See page 19
- Electrical Duplex Kits. See page 20
- Guardian Airflow Monitor Kits. See page 20
- Sash Stop Kits. See page 20
- Ceiling Enclosure, Rear Finish Panel Kits and Distillation Grid Kits. Contact Labconco



Built-in Blower Maximum External Static Pressure @ 100 fpm and with Sash Full Open (28")

Hood Width	CFM	S.P.	Nominal Ductwork Diameter	Equivalent Resistance†	HP
4 Feet	725	0.17"	10"	75	1/3
5 Feet	955	0.12"	12"	75	1/2
6 Feet	1180	0.17"	12"	75	1/2

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

**See page 21 for list of regulations, standards and registered trademarks

†In feet of straight duct

‡Heights of switches and electrical receptacles meet requirements of ADA when work surface is set to ADA height.

PREMIUM LABORATORY FUME HOODS

WITH BUILT-IN BLOWER ORDERING INFORMATION & DIMENSIONAL DATA

Catalog Number Configurator:

Use this key to configure the nine digit catalog number to order your Protector Premier Laboratory Hood.

1 0 0 0 0 0

Select the **WIDTH** of your fume hood. This is the fourth digit of your catalog number. Shipping weight is also noted. Add 10 lbs. (5 kg) for fixtured models.

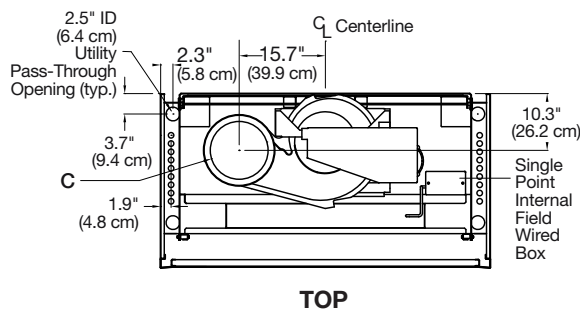
4 = 4' (122 cm), 365 lbs. (166 kg)

5 = 5' (152 cm), 450 lbs. (204 kg)

6 = 6' (183 cm), 525 lbs. (238 kg)

Select the **ELECTRICAL REQUIREMENTS, SERVICE FIXTURES** and **GFCI ELECTRICAL DUPLEX RECEPTACLE** of your fume hood. These are the eighth and ninth digits of your catalog number.

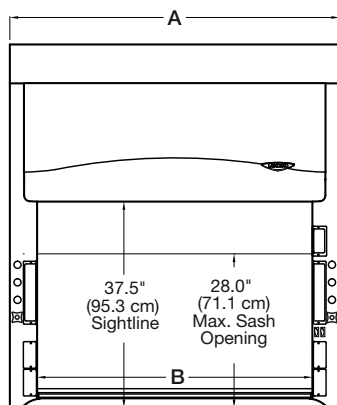
Electrical Requirements	No Service Fixtures	Two Service Fixtures	Two Service Fixtures & GFCI Duplex*
100-115V, 60 Hz, 10A	40	—	42
208-230V, 50 Hz, 5A	50	51	—
208-230V, 60 Hz, 5A	60	61	—
100-115V, 60 Hz, 10A explosion-proof blower**	70	71	—
208-230V, 50 Hz, 5A explosion-proof blower**	80	81	—
208-230V, 60 Hz, 5A explosion-proof blower**	90	91	—



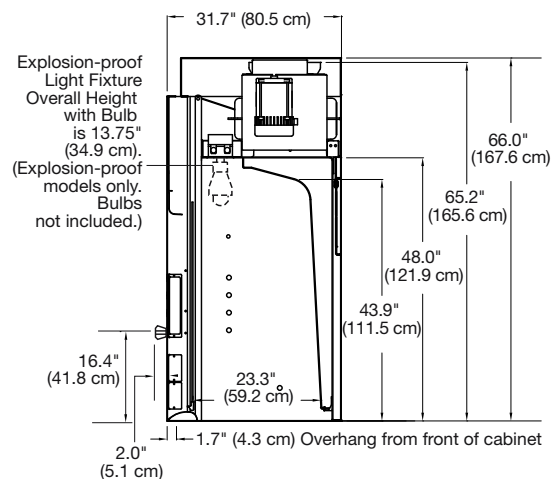
TOP

	A	B	C
4' Hood	48.0" (121.9 cm)	38.1" (96.8 cm)	10.8" ID (27.5 cm)
5' Hood	60.0" (152.4 cm)	50.1" (127.3 cm)	12.8" ID (32.5 cm)
6' Hood	72.0" (182.9 cm)	62.1" (157.7 cm)	12.8" ID (32.5 cm)

Contact Labconco at (800) 821-5525 or (816) 333-8811 or visit labconco.com for detailed AutoCAD® drawings. See page 21 for trademark information.



FRONT



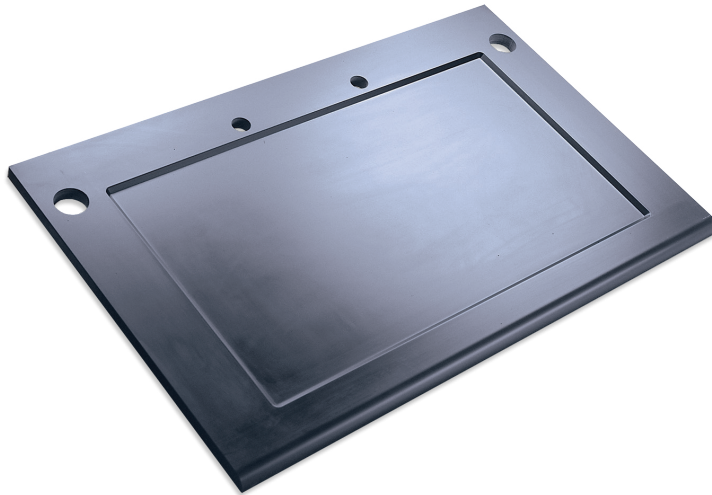
SIDE

*Hoods with GFCI electrical duplex are rated at 20 amps.

**Explosion-proof hoods are furnished without switches, electrical receptacles and wiring.

PREMIUM LABORATORY FUME HOODS

SPILLSTOPPER WORK SURFACES & CUP SINK SPECIFICATIONS & ORDERING INFORMATION



- Molded from a special formulation of corrosion-resistant epoxy resins
- Dished and contoured to conform to the interior liners of Protector Hoods
- Front edge has a large radius to aerodynamically direct airflow into the hood
- Pre-drilled 1.5" (5.8 cm) diameter holes for venting and 2.5" (6.4 cm) diameter holes for plumbing pass-through
- May be ordered with a 6.0" x 3.0" (15.2 x 7.6 cm) oval cupsink cutout. Cupsink sold separately. See below

Catalog Number Configurator:

Use this key to configure the seven digit catalog number to order your SpillStopper Work Surface.

9 5 0

Select the **MODEL** and **EXTERIOR DEPTH** of your fume hood. This is the fourth digit of your catalog number.

- 0** = Premier, XL with 31.7" depth
- 1** = XL with 37.7" depth
- 2** = XL with 43.7" depth
- 3** = XStream with 37.7" depth

Select the **NOMINAL WIDTH** of your fume hood. This is the fifth digit of your catalog number.

- 3** = 3'* **8** = 8'
- 4** = 4' **0** = 10'*
- 5** = 5' **1** = 12'*
- 6** = 6' **2** = 16'*
- 7** = 7'*

Select a **LEFT CUPSINK CUTOUT** option (cupsink is sold separately). This is the sixth digit of your catalog number.

- 0** = None
- 1** = Rear
- 2** = Side**

Select a **RIGHT CUPSINK CUTOUT** option (cupsink is sold separately). This is the seventh digit of your catalog number.

- 0** = None
- 1** = Rear
- 2** = Side**



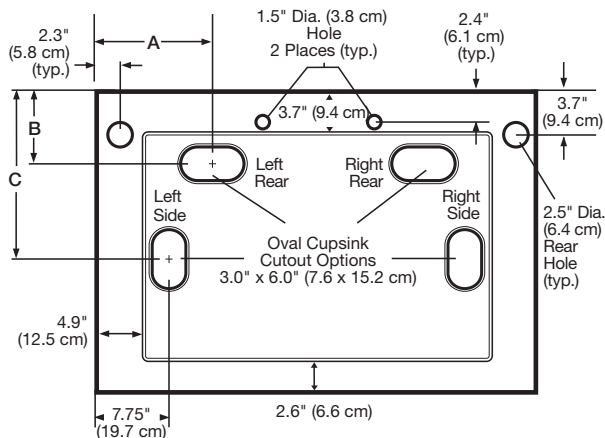
4005200—Oval Polypropylene Cupsink. Mounts in work surface with cupsink cutout, 3.0" x 6.0" (7.6 x 15.2 cm). 1.5" (5.8 cm) National Pipe Straight Mechanical (NPSM) thread. Shipping weight 4.0 lbs. (1.8 kg)

*Protector XL Laboratory Hoods only.

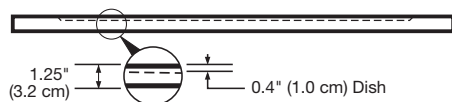
**Not compatible with Protector Solvent Storage Cabinets.

PREMIUM LABORATORY FUME HOODS

SPILLTOPPER WORK SURFACES DIMENSIONAL DATA



TOP



FRONT

Radiused Front Edge Only



SIDE

Hood Model/ Depth	Work Surface Depth	A	B	C
Premier & XL, 31.7" deep	30.0" (76.2 cm)	9.5" (24.1 cm)	4.6" (11.7 cm)	18.8" (47.8 cm)
XL, 37.7" deep	36.0" (91.4 cm)	12.5" (31.8 cm)	7.3" (18.5 cm)	19.0" (48.3 cm)
XL, 43.7" deep	42.0" (106.7 cm)	12.5" (31.8 cm)	7.3" (18.5 cm)	14.9" (37.8 cm)
XStream, 37.7" deep	36.0" (91.4 cm)	12.5" (31.8 cm)	10.3" (26.2 cm)	19.0" (48.3 cm)

Nominal Width	Hood Model	Hood Exterior Depth	Hood & Work Surface Width	Work Surface Shipping Weight
3'	XL	31.7"		85 lbs. (39 kg)
		37.7"	36.0" (91.4 cm)	90 lbs. (41 kg)
		43.7"		105 lbs. (48 kg)
4'	Premier, XL	31.7"		110 lbs. (50 kg)
	XL, XStream	37.7"	48.0" (121.9 cm)	120 lbs. (54 kg)
	XL	43.7"		140 lbs. (64 kg)
5'	Premier, XL	31.7"		150 lbs. (68 kg)
	XL, XStream	37.7"	60.0" (152.4 cm)	160 lbs. (73 kg)
	XL	43.7"		180 lbs. (82 kg)
6'	Premier, XL	31.7"		205 lbs. (93 kg)
	XL, XStream	37.7"	72.0" (182.9 cm)	220 lbs. (100 kg)
	XL	43.7"		250 lbs. (113 kg)
7'	XL	31.7"		210 lbs. (95 kg)
		37.7"	84.0" (213.3 cm)	230 lbs. (104 kg)
		43.7"		270 lbs. (122 kg)
8'	Premier, XL	31.7"		240 lbs. (109 kg)
	XL, XStream	37.7"	96.0" (243.8 cm)	250 lbs. (113 kg)
	XL	43.7"		290 lbs. (132 kg)
10' ^{*a}	XL	31.7"		290 lbs. (132 kg)
		37.7"	120.0" (304.8 cm)	370 lbs. (168 kg)
		43.7"		480 lbs. (218 kg)
12' ^{*a}	XL	31.7"		320 lbs. (145 kg)
		37.7"	144.0" (365.8 cm)	440 lbs. (200 kg)
		43.7"		500 lbs. (227 kg)
16' ^{*a}	XL	31.7"		350 lbs. (159 kg)
		37.7"	192.0" (487.7 cm)	480 lbs. (218 kg)
		43.7"		550 lbs. (249 kg)

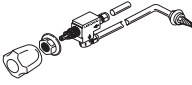
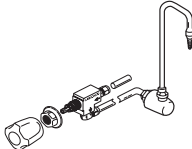
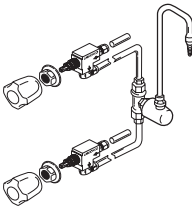
^aShipped in two equal width sections.

PREMIUM LABORATORY FUME HOODS

ACCESSORIES

Service Fixture Kits include one remotely-controlled service fixture with valve, color-coded fixture knob and hose connector.*
Inlet tubing is not included. Not for use with 43.7" and 55.7"

exterior depth XL hoods. Except for vacuum, the maximum allowable pressure is 200 psi with a working pressure of 40 psi.

Kit	Catalog Number	Service Type	Tubing Material & Diameter	Valve	Knob Color	Maximum Flow Rate	Working Pressure**	Shipping Weight
	9808300	Cold Water (CW)	Copper, 0.25"	Brass	Green	3.5 GPM (13.2 LPM)	40 psi	4.0 lbs. (1.8 kg)
	9808400	Air (AIR)	Copper, 0.25"	Brass	Orange	23.7 CFM	40 psi	4.0 lbs. (1.8 kg)
	9808500	Vacuum (VAC)	Copper, 0.25"	Brass	Yellow	8.6 CFM	14.7 psi	4.0 lbs. (1.8 kg)
	9808700	Gas (GAS)	Brass, 0.25"	Brass	Blue	29.0 CFM (441 BTU/sec)	40 psi	4.0 lbs. (1.8 kg)
	9808800	Argon (ARG)	Copper, 0.25"	Brass	Gray	20.2 CFM	40 psi	4.0 lbs. (1.8 kg)
	9808900	Hot Water (HW)	Copper, 0.25"	Brass	Red	3.5 GPM (13.2 LPM)	40 psi	4.0 lbs. (1.8 kg)
	9809100	Deionized (DI)/ Distilled Water (DW)	Stainless Steel, 0.25"	Nickel-Plated & Stainless Steel	White	3.5 GPM (13.2 LPM)	40 psi	4.0 lbs. (1.8 kg)
	9809200	Steam (STM)	Copper, 0.25"	Brass	Black	0.5 LBM/min	40 psi	4.0 lbs. (1.8 kg)
	9809300	Nitrogen (NIT)	Copper, 0.25"	Brass	Brown	24.1 CFM	40 psi	4.0 lbs. (1.8 kg)
	9809700**	Oxygen (OXY)	Copper, 0.25"	Brass with Oxygen-Compatible Lubricant	Light Green	22.6 CFM	40 psi	4.0 lbs. (1.8 kg)
	9827900	Cold water (CW) green epoxy-coated brass gooseneck	Copper, 0.375"	Brass	Green	3.5 GPM	40 psi	10 lbs. (5 kg)
	9857700†	Cold water (CW) gray PVC rigid gooseneck	Copper, 0.375"	Brass	Green	3.5 GPM	40 psi	10 lbs. (5 kg)
	9853400†	Deionized (DI)/ distilled water (DW) gray PVC rigid gooseneck	Stainless Steel, 0.25"	Stainless Steel	White	3.5 GPM	40 psi	10 lbs. (5 kg)
	9828000	Hot (HW) & cold water (CW) mixing white epoxy-coated gooseneck	Copper, 0.25"	Brass	Green & Red	3.5 GPM	40 psi	11 lbs. (5 kg)

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 chrome-plated brass hose connectors for stainless steel hoods.

**Recommended working pressure

†Requires 1.375" dia. drill hole in liner

PREMIUM LABORATORY FUME HOODS

ACCESSORIES



Duplex Electrical Receptacle Kit
9851500

Electrical Receptacle Kits. For mounting in left or right side of any 3', 4', 5', 6', 7' or 8' Protector Hood. Include electrical receptacle, cover plate, wiring and junction box. **Requires hard wiring and unique circuit.** International GFCI Switch is mountable in one corner post location above or below any single outlet. Contact Labconco for ordering information on kits for Protector Hoods with widths of 10', 12' or 16'.

Catalog Number	Kit	Outlet Type	Shipping Weight
9851100	115V, 20A AC, 60 Hz	Duplex, U.S.	4.0 lbs. (1.8 kg)
9851500	115V, 20A AC, GFCI, 60 Hz	Duplex, U.S.	4.0 lbs. (1.8 kg)
9854200	230V, 20A AC, 60 Hz	Duplex, U.S.	4.0 lbs. (1.8 kg)
9412500	230V, 13A AC, 50 Hz	Single, British (UK)	4.0 lbs. (1.8 kg)
9412700	230V, 16A AC, 50 Hz	Single, Schuko	4.0 lbs. (1.8 kg)
9412900	230V, 10A AC, 50 Hz	Single, China	4.0 lbs. (1.8 kg)
9413100	230V, 10A AC, 50 Hz	Single, Australia	4.0 lbs. (1.8 kg)
9413900	230A, 6-16A AC, 50 Hz	Single, India-South Africa	4.0 lbs. (1.8 kg)
9414100	International GFCI Switch, 16A	Not applicable	4.0 lbs. (1.8 kg)



115V, 60 Hz, 20A
for North America



230V, 20A, 60 Hz
for North America



230V, 50 Hz
for Great Britain (UK)



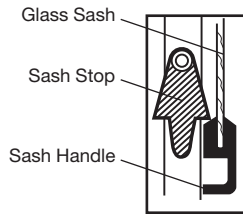
230V, 50 Hz
Schuko



230V, 50 Hz
for China/Australia



230V, 50 Hz
for India/South Africa



9410300—Sash Stop Kit. Restricts how far a vertical-rising sash may be opened. Easily field installed on the fixture panel of many of our popular hoods. Protector XStream Hoods, Premier Hoods and 3' to 12' XL Hoods have been factory-prepared to accommodate a sash stop at the 60%-62.5% open position (18" to work surface). May also be placed at 50% open position (14" to work surface). Alternate sash positions may be field drilled. Includes components for one sash. Two kits are required for 10' and 12' XL Hoods. Not for use on 16' XL Hoods. Plastic. Shipping weight 0.5 lb. (0.2 kg)



Guardian™ Airflow Monitors. Sense and alert you to low airflow conditions. From the monitor's face plate, you can easily select and calibrate a set point between 30 and 250 fpm using a velocity meter and a screwdriver. Audible/visual alarm. Include night setback, external alarm and alarm mute functions. Flush-mount design. **Requires field calibration.**

Catalog Number	Electrical Requirements	For use with Hood	Shipping Weight
9413300	100-115V, 50/60 Hz	Premier, XStream, XL	6.0 lbs. (2.7 kg)
9413301*	208-230V, 50/60 Hz	Premier, XStream, XL	6.0 lbs. (2.7 kg)



Guardian™ Digital Airflow Monitors. Sense and alert you to low airflow conditions. LCD displays actual airflow in fpm or m/sec. Audible/visual alarm alerts you to sustained low velocity condition. LCD displays calibration instructions. Contact Labconco for optional temperature sensor or optional RS-485 port for Modbus** RTU communication. Flush-mount design. **Requires field calibration.**

Catalog Number	Electrical Requirements	For use with Hood	Shipping Weight
9413400	100-115V, 50/60 Hz	Premier, XStream, XL	6.0 lbs. (2.7 kg)
9413401*	208-230V, 50/60 Hz	Premier, XStream, XL	6.0 lbs. (2.7 kg)

*International electrical configuration

**Modbus is a registered trademark of Schneider Automation

PREMIUM LABORATORY FUME HOODS

Standards

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

ASHRAE 110 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
ashrae.org

ANSI Z9.5 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 non-hazardous materials

American Industrial Hygiene Association

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

Federal Register 29 CFR Part 1910

Occupational exposure to hazardous chemicals in laboratories

National Research Council Recommendations Concerning Chemical Hygiene in Laboratories (Non-mandatory) 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
osha.gov

ASTM E84-09C 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 the 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
astm.org

NFPA 45: Standard on Fire Protection for Laboratories Using Chemicals, 2011 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
- 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
nfpa.org

NIH - Section 15991 Onsite Testing for Constant Volume Hoods - June 2006

- Follows ASHRAE test methods except for the following:
 1. 6 L tracer gas release rate instead of 4 L
 2. Hood is loaded with boxes and cans
 3. Rapid walk-by test

National Institutes of Health

9000 Rockville Pike
Bethesda, MD 20892
(301) 496-4000
nih.gov

SEFA 1 Laboratory Fume Hoods Recommended Practices

- High performance fume hood definition: hood with sash fully open and operating at 60 fpm contains at 4.0 AM 0.05
- Covers design, installation, testing, maintenance and safe use of laboratory fume hoods

SEFA 8 Recommended Practices For Metal Laboratory Grade Furniture, Casework, Shelving and Tables, 8.0 Cabinet Surface Finish Tests

Defines test methods for evaluating the finish of laboratory furniture.

- Laboratory grade paint finishes shall withstand chemical exposure, hot water, and impact from a one-pound ball dropped from 12"
- Paint coating shall sufficiently adhere to the substrate
- Paint shall be resistant to scratches

Scientific Equipment & Furniture Association

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

UL 61010-1 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
ul.com

CAN/CSA Standard C22.2 No. 6010-1 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

55 Metcalfe Street, Suite 600
Ottawa, ON
K1P 6L5, Canada
(613) 238-3222
csagroup.org

ETL listing

ETL Testing Laboratories is a Nationally Recognized Testing Laboratory (NRTL). The ETL mark signifies that a product conforms to the following:

- UL Standard 61010-1 in the U.S.
- CAN/CSA Standard C22.2 No. 61010.1 in Canada
- Products that bear the ETL mark are subjected to a comprehensive safety program that includes testing, listing, labeling and quarterly follow-up inspections

Intertek Group

intertek.com

CE Marking

Indicates an electrical apparatus conformity 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

europa.eu

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