Protector® Stainless Steel Radioisotope & Perchloric Acid Laboratory Hoods

Features, Benefits & Selection Guide

By-pass airflow design for stable face velocities. Restricted by-pass increases air velocity above the sash.

Stainless steel baffle and liner with integral work surface for a seamless work area. Perchloric Acid Hoods also have a drainage trough.

Built-in washdown system* for removing hazardous perchlorates from behind the baffle. It consists of pre-plumbed internal piping, spray nozzles and upper left side-mounted remote control knob.

Optional color-coded service fixtures for gas, air, water, vacuum and other services have remote controls for use regardless of the sash position. Left corner post is factory-prepared for up to three service fixtures, right for up to four (eight fixtures total per hood). **Additional service fixtures require holes drilled in the liner at the factory or on site.**

❊ **Large unobstructed sightline** of 37.5" high from the work surface to the header panel allows taller users comfortable viewing while standing.

❊ **Clean-Sweep™ sash handle and tracks**
Openings on the sash handle bleed air into the hood chamber and away from the operator's breathing zone. Slots on the sash tracks enhance airflow.



❊ **Eco-Foil™ air foil with Clean-Sweep™ openings** reduces energy consumption by 7-10% compared to flat air foils. Aerodynamic curve allows air to sweep the work surface for maximum containment. Air foil is durable powder-coated stainless steel.

Bright interior lighting
High-efficiency, instant start, T8 fluorescent lights are located outside the hood interior for corrosion-resistance and easy replacement.

❊ **Pre-wired electrical components**
Fluorescent lights and switches 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.

Cord-Keeper™ slots on both sides of the air foil allow the sash to close completely when electrical cords from equipment inside the hood are plugged in. Cords are kept out of the way of the operator.



	Liner Material	Washdown System	Applications	Pages
Radioisotope Hood	Type 304 stainless steel withstands high temperatures	—	Radiochemicals Nuclear medicine Micro electronics Contact Labconco for use with lead bricks or shields	4-5
Perchloric Acid Hood	Type 316 stainless steel withstands high temperatures and is less chemically reactive than Type 304 stainless steel	Includes valve, drain trough and nozzles (see page 11)	Perchloric acid	6-7

*Washdown system and drainage trough on Perchloric Acid Hoods only.

❊ Labconco exclusive feature

Protector® Stainless Steel Perchloric Acid Laboratory Hoods

Features & Benefits



All models feature:

- By-pass airflow design and by-pass block
- Glacier white powder-coated steel exterior
- ❇ Eco-Foil air foil with aerodynamic Clean-Sweep airflow openings*
- ❇ Cord-Keeper slots on left and right side of air foil
- Type 316 stainless steel liner with radiused corners, integral work surface, drainage trough and pre-set baffle(s)
- ❇ Powder-coated aluminum sash handle with Clean-Sweep openings and Clean-Sweep slots on the powder-coated stainless steel sash tracks*
- Tempered safety glass vertical-rising sash with cable and pulley
- Removable front and side panels, and front service panels for access to plumbing and electrical wiring
- Pre-wired T8 fluorescent lighting with vapor-proof design and ADA-compliant light and blower switches
- Built-in washdown system with internal piping and spray nozzles (see specifications on page 11)
- Black enamel-coated hardboard supporting surface
- Type 316 stainless steel, 11.0" OD exhaust connection(s)

Standards conformance & regulations:

- 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

Fixtured models may 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 air. Components for converting either or both fixtures to cold water and vacuum are provided. **Inlet tubing is not provided**
- One pre-wired GFCI electrical duplex receptacle on lower right side and, on 8' models, one additional pre-wired GFCI electrical duplex receptacle on lower left side

Required accessories (not included):

- Dedicated remote PVC blower
- Wash rings and other ductwork
- Base cabinet or stand

Optional accessories for on-site installation include:

- Service Fixture Kits
- Washdown Valve Kit
- Guardian Airflow Monitor Kits
- Electrical Duplex Receptacle Kits
- Sash Stop Kits
- Ceiling Enclosure and Rear Finish Panel Kits

Total Exhaust CFM and Static Pressure

Face Velocity (fpm)	Airflow Volumetric Rate (CFM) @ Static Pressure (inches of water)							
	4' Hood		5' Hood		6' Hood		8' Hood	
	CFM	s.p.	CFM	s.p.	CFM	s.p.	CFM	s.p.
Sash @ Full Open (28")								
125	905	0.39"	1195	0.52"	1475	0.78"	2050	0.44"
100	725	0.25"	955	0.33"	1180	0.50"	1640	0.28"
Sash @ 62.5% Open (18")								
125	565	0.15"	745	0.20"	920	0.31"	1280	0.17"
100	455	0.10"	595	0.13"	740	0.20"	1025	0.11"

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

❇ Labconco exclusive feature

♿ Heights of switches, electrical receptacles and service fixtures meet requirements of Americans with Disabilities Act (ADA).

Protector® Stainless Steel Perchloric Acid Laboratory Hoods

Ordering Information & Dimensional Data

Catalog Number Configurator:

Use this key to configure the nine digit catalog number to order your Protector Stainless Steel Perchloric Acid Laboratory Hood.

1 3 0 ☐ ☐ 0 0 ☐ ☐

Select the **WIDTH** of your fume hood. This is the fourth digit of your catalog number. Shipping weight is also noted for 31.7" models. Add 65 lbs. (29 kg) for 37.7" models. Add 10 lbs. (5 kg) for fixtured models.

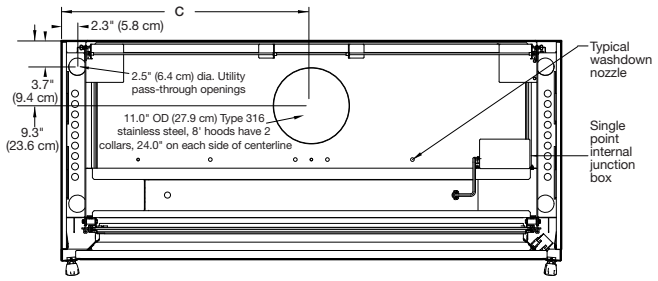
- **4** = 4' (122 cm) 770 lbs. (349 kg)
- **5** = 5' (152 cm) 825 lbs. (374 kg)
- **6** = 6' (183 cm) 885 lbs. (401 kg)
- **8** = 8' (244 cm) 1000 lbs. (454 kg)

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

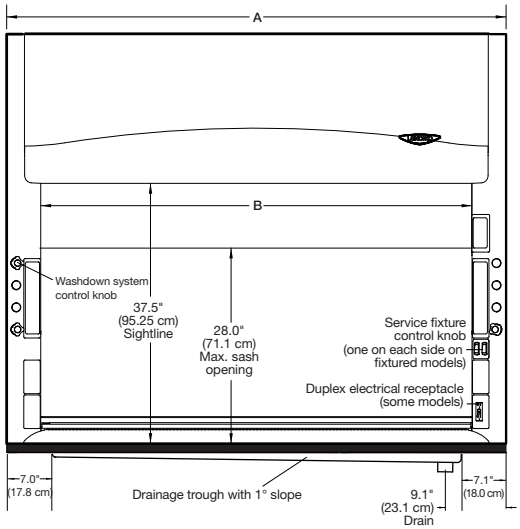
- **0** = 31.7" (80.5 cm)
- **1** = 37.7" (95.8 cm)

Select the **ELECTRICAL REQUIREMENTS, SERVICE FIXTURES** and **GFCI ELECTRICAL DUPLEX RECEPTACLE** combination you desire. 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	01	02
208-230V, 50/60 Hz, 5A	20	21	—

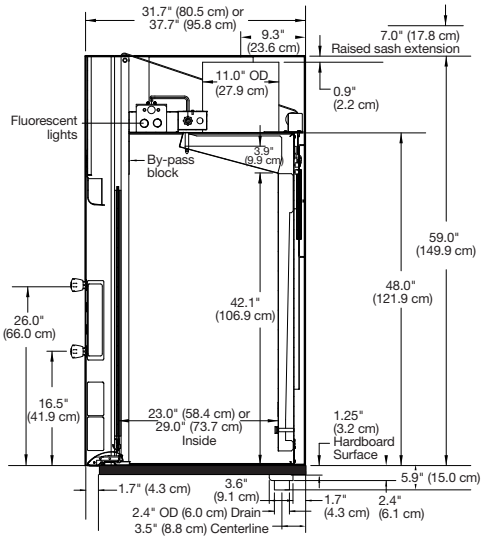


TOP



FRONT

	A	B	C
4' Hood	48.0" (121.9 cm)	38.25" (97.2 cm)	24.0" (61.0 cm)
5' Hood	60.0" (152.4 cm)	50.25" (97.2 cm)	30.0" (76.2 cm)
6' Hood	72.0" (182.9 cm)	62.25" (158.1 cm)	36.0" (91.4 cm)
8' Hood	96.0" (243.8 cm)	86.25" (219.1 cm)	24.0" (61.0 cm)**



SIDE

Visit labconco.com for detailed AutoCAD drawings.

*Hoods with GFCI electrical duplex are rated at 20 amps. 8' hoods have two GFCI electrical duplex receptacles, on mounted on each side, rated at 20 amps each.
**8' model has two exhaust collars, 24.0" on each side of centerline.

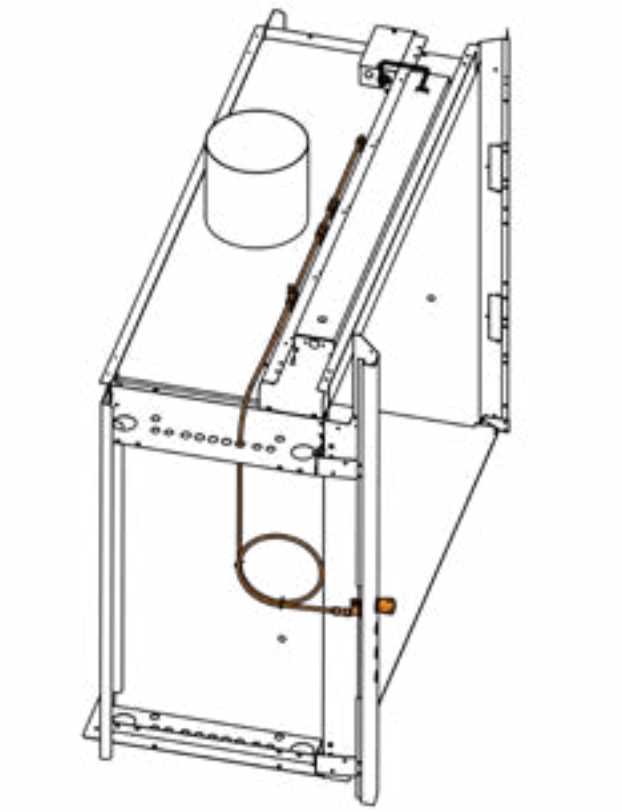
Protector® Stainless Steel & PVC Laboratory Hoods

Washdown System Specifications

Rinsing the fume hood prevents the accumulation of reactive perchlorate salts.

Hoods with washdown feature:

- Built-in washdown system with internal piping and spray nozzles with maximum flow rate from 0.5 - 1.0 GPM
- Include upper left side-mounted remote control fixture with forged brass valve with maximum flow rate of 3 GPM and maximum working pressure ranging from 10 to 40 psi depending on number of hood's spray nozzles
- Valve is capable of supplying water to hood's spray nozzles and one wash ring (wash rings not included) on 4', 5' and 6' models. Valve is capable of supplying water to hood's spray nozzles on 8' models
- Washdown fitting located on top of hood to facilitate connection to external wash rings (wash rings not included)



Washdown System Flow Rates for Protector Stainless Steel Laboratory Hoods

	Number of Spray Nozzles	Flow @ 10 psi	Flow @ 40 psi
4' Hood	3	0.6 gpm	1.2 gpm
5' Hood	4	0.8 gpm	1.6 gpm
6' Hood	4	0.8 gpm	1.6 gpm
8' Hood	6	1.2 gpm	2.4 gpm

Washdown System Flow Rates for Protector PVC Laboratory Hoods

	Number of Spray Nozzles	Flow @ 10 psi	Flow @ 40 psi
4' Hood	3	1.56 gpm	3.0 gpm
5' Hood	4	2.08 gpm	4.0 gpm*
6' Hood	4	2.08 gpm	4.0 gpm*
8' Hood	6	3.12 gpm	6.0 gpm*

*Each washdown valve can only produce up to 3.5 gallons per minute at 40 psi. These operational points require an additional Washdown Valve Kit (9808310).