# Protector XL"Laboratory Fume Hoods Specifications 



## All models feature:

- By-pass airflow design
* Eco-Foil ${ }^{\text {TM }}$ air foil with aerodynamic Clean-Sweep ${ }^{\text {™ }}$ airflow openings ${ }^{\text {* }}$
* Cord-Keeper ${ }^{\text {tw }}$ slots on left and right side of air foil
- Glacier white powder-coated steel exterior
- Chemical-resistant, fiberglass-reinforced, composite panel liner and baffle
*Opti-Zone ${ }^{\text {tw }}$ baffle* with flame spread index less than 25 per ASTM E84**. Baffle is removable for cleaning
- Tempered safety glass vertical-rising sash and cable and pulley
- Powder-coated aluminum sash handle with Clean-Sweep ${ }^{\text {tw }}$ openings*
- $37.5^{\prime \prime}(95.3 \mathrm{~cm})$ high sightline from the work surface and header panel
* Removable front and side panels, and front and interior service panels for access to plumbing and electrical wiring
- Pre-wired LED lighting with vapor-proof design and ADA-compliant light and blower switches. Lighting rated for 50,000 hours
- Powder-coated stainless steel, 12.81 " ( 32.5 cm ) 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 $8^{\star *}$
$\triangle$ WARNING: Cancer - P65Warnings.ca.gov (California only)

[^0]
## 8' models available with:

- Optional split dual tempered safety glass vertical-rising sashes with cable and pulleys and powder-coated sash handles


## $10 '$, 12 ' and 16 ' models feature:

- By-pass block
- Split dual tempered safety glass vertical-rising sashes with cable and pulleys, powder-coated sash handles and 10 " ( 25.4 cm ) high static viewing windows to permit the sashes to be fully raised without extending above the hood. Four sashes on 16 ' 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 GFCI electrical duplex receptacle on lower right side and, on 8 ' and larger models only, one additional pre-wired GFCI electrical duplex 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

*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.


# Protector XL"Laboratory Fume Hoods 

## Ordering Information

## Catalog Number Configurator:

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


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.
3 = $3^{\prime}(91 \mathrm{~cm}), 350 \mathrm{lbs}$. $(159 \mathrm{~kg})$
$4=4^{\prime}(122 \mathrm{~cm})$, 375 lbs . ( 170 kg )
$5=5^{\prime}(152 \mathrm{~cm}), 450 \mathrm{lbs} .(204 \mathrm{~kg})$
$6=6 \mathrm{l}(183 \mathrm{~cm})$, $525 \mathrm{lbs} .(238 \mathrm{~kg})$
$7=7^{\prime}(213 \mathrm{~cm}), 600 \mathrm{lbs} .(272 \mathrm{~kg})$
$8=8^{\prime}(244 \mathrm{~cm}), 675 \mathrm{lbs} .(306 \mathrm{~kg})$
$0=10^{\prime}(305 \mathrm{~cm}), 855 \mathrm{lbs} .(388 \mathrm{~kg})$
$1=12^{\prime}(366 \mathrm{~cm}), 1045 \mathrm{lbs} .(474 \mathrm{~kg})$
$2=16^{\prime}(488 \mathrm{~cm}), 1410 \mathrm{lbs} .(640 \mathrm{~kg})$
Select the EXTERIOR DEPTH of your fume hood. This is the fifth digit of your catalog number. To the shipping weight noted above, add 40 lbs . ( 18 kg ) for $37.7^{\prime \prime}$ deep models and $85^{\prime \prime}(39 \mathrm{~kg})$ for $43.7^{\prime \prime}$ deep models.
$0=31.7^{\prime \prime}(81 \mathrm{~cm}) \quad 1=37.7^{\prime \prime}(96 \mathrm{~cm}) \quad 2=43.7^{\prime \prime}(111 \mathrm{~cm})$

Select the SASH STYLE available for your hood width. Note that either style may be used on 8 ' wide hoods. This is the sixth digit of your catalog number.

| Sash | For hood width: | For hood width: |
| :--- | :---: | :---: |
| Style | $3^{\prime}, 4^{\prime}, 5^{\prime}, 6^{\prime}, 7^{\prime}, 8^{\prime}$ | $8^{\prime}, 10^{\prime}, 12^{\prime}, 16^{\prime}$ |
| Single | 0 | - |
| Dual ${ }^{\star}$ | - | 8 |

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.

|  | No | Two | Two <br> Service |
| :--- | :---: | :---: | :---: |
| Electrical | Service | Service <br>  |  |
| Requirements | Fixtures | Fixtures | GFCI Duplex* |
| $100-115 \mathrm{~V}, 50 / 60 \mathrm{~Hz}, 10 \mathrm{~A}$ | 00 | - | 02 |
| $208-230 \mathrm{~V}, 50 / 60 \mathrm{~Hz}, 5 \mathrm{~A}$ | 20 | 21 | - |

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

| Face Velocity (fpm) <br> Sash @ Full Open | Airflow Volumetric Rate (CFM) @ Static Pressure (inches of water) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3' Hood |  | 4' Hood |  | 5' Hood |  | 6' Hood |  | 7' Hood |  | 8' Hood |  | $10{ }^{\prime}$ Hood |  | 12' Hood |  | 16' Hood |  |
|  | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. |
| 100 | 495 | 0.13 | 725 | 0.27 | 955 | 0.34 | 1180 | 0.46 | 1410 | 0.23 | 1640 | 0.31 | 2100 | 0.45 | 2560 | 0.62 | 3500 | 0.37 |
| 80 | 395 | 0.08 | 580 | 0.17 | 765 | 0.22 | 945 | 0.29 | 1125 | 0.15 | 1310 | 0.20 | 1680 | 0.28 | 2050 | 0.39 | 2800 | 0.23 |
| 60 | 295 | 0.05 | 435 | 0.10 | 575 | 0.12 | 710 | 0.17 | 845 | 0.08 | 985 | 0.11 | 1260 | 0.16 | 1535 | 0.22 | 2100 | 0.13 |

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

| Face Velocity (fpm) | Airflow Volumetric Rate (CFM) @ Static Pressure (inches of water) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sash @ | $3^{1}$ Hood |  | 4' Hood |  | 5' Hood |  | 6' Hood |  | 7' Hood |  | 8' Hood |  | 10' Hood |  | 12' Hood |  | $16^{\prime}$ Hood |  |
| 62.5\% Open | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. | CFM | s.p. |
| 100 | 310 | 0.05 | 450 | 0.11 | 595 | 0.13 | 735 | 0.18 | 880 | 0.09 | 1025 | 0.12 | 1300 | 0.17 | 1585 | 0.24 | 2170 | 0.14 |
| 80 | 250 | 0.03 | 365 | 0.07 | 480 | 0.09 | 590 | 0.11 | 705 | 0.06 | 820 | 0.08 | 1050 | 0.11 | 1280 | 0.16 | 1750 | 0.09 |
| 60 | 185 | 0.02 | 270 | 0.04 | 360 | 0.05 | 440 | 0.07 | 525 | 0.03 | 615 | 0.04 | 800 | 0.06 | 970 | 0.09 | 1330 | 0.05 |

[^1]
## Protector XL"Laboratory Fume Hoods

Dimensional Data


|  | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
| $3{ }^{\text {3 }}$ Hood | $\begin{gathered} 36.0^{\prime \prime} \\ (91.4 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 26.1^{\prime \prime} \\ (66.3 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 18.0 " \\ (45.7 \mathrm{~cm}) \end{gathered}$ | - |
| $4{ }^{\text {' Hood }}$ | $\begin{gathered} 48.0^{\prime \prime} \\ (121.9 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 38.1^{\prime \prime} \\ (96.8 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 24.0^{\prime \prime} \\ (61.0 \mathrm{~cm}) \end{gathered}$ | - |
| 5' Hood | $\begin{gathered} 60.0^{\prime \prime} \\ (152.4 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 50.1^{\prime \prime}(127.3 \\ \mathrm{cm}) \end{gathered}$ | $\begin{gathered} 30.0^{1 "}(76.2 \\ \mathrm{cm}) \end{gathered}$ | - |
| $6{ }^{\prime}$ Hood | $\begin{gathered} 72.0^{\prime \prime} \\ (182.9 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 62.1^{\prime \prime}(157.7 \\ \mathrm{cm}) \end{gathered}$ | $\begin{gathered} 36.0 " \\ (91.4 \mathrm{~cm}) \end{gathered}$ | - |
| $7{ }^{\text {' Hood }}$ | $\begin{gathered} 84.0^{\prime \prime} \\ (213.4 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 74.1^{\prime \prime} \\ (188.2 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 21.0 "(53.3 \\ \mathrm{cm}) \end{gathered}$ | $\begin{gathered} 42.0^{\prime \prime} \\ (106.7 \mathrm{~cm}) \end{gathered}$ |
| 8' Hood | $\begin{gathered} 96.0^{\prime \prime} \\ (243.8 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 86.1^{\prime \prime}(218.7 \\ \mathrm{cm}) \end{gathered}$ | $\begin{gathered} 24.0^{\prime \prime} \\ (61.0 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 48.0^{\prime \prime} \\ (121.9 \mathrm{~cm}) \end{gathered}$ |
| 10' Hood | $\begin{gathered} 120.0 " \\ (304.8 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 110.1^{\prime \prime} \\ (279.7 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 35.0 "(88.9 \\ \mathrm{cm}) \end{gathered}$ | $\begin{gathered} 50.0 " \\ (127.0 \mathrm{~cm}) \end{gathered}$ |
| 12' Hood | $\begin{gathered} 144.0^{\prime \prime} \\ (243.8 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 134.1^{\prime \prime} \\ (340.6 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} \text { 41.0" (104.1 } \\ \text { cm) } \end{gathered}$ | $\begin{gathered} 62.0^{\prime \prime} \\ (157.5 \mathrm{~cm}) \end{gathered}$ |
| 16' Hood | $\begin{gathered} 192.0 " 1 \\ (487.7 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 182.1^{\prime \prime} \\ (462.5 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 24.0^{\prime \prime} \\ (61.0 \mathrm{~cm}) \end{gathered}$ | $\begin{gathered} 48.0^{\prime \prime} \\ (121.9 \mathrm{~cm}) \end{gathered}$ |

FRONT ( $3^{\prime}, 4^{\prime}, 5^{\prime}, 6^{\prime}, 7^{\prime} \& 8^{\prime}$ Hoods)

| E | F |
| :---: | :---: |
| $31.7^{\prime \prime}(80.5 \mathrm{~cm})$ | $23.6^{\prime \prime}(59.9 \mathrm{~cm})$ |
| $37.7^{\prime \prime}(95.8 \mathrm{~cm})$ | $29.6^{\prime \prime}(75.2 \mathrm{~cm})$ |
| $43.7^{\prime \prime}(111.0 \mathrm{~cm})$ | $35.6^{\prime \prime}(90.4 \mathrm{~cm})$ |



Contact Labconco at (800) 821-5525 or (816) 333-8811 or visit labconco.com for BIM Revit ${ }^{\circledR}$ and detailed AutoCAD® drawings. See page 21 for trademark information.


[^0]:    * Labconco exclusive feature

[^1]:    *16' hoods have four sashes.
    **Hoods with GFCI electrical duplex are rated at 20 amps . 8 ', 10 ', 12 ' and 16 ' Hoods have two GFCI electrical duplex receptacles, one mounted on each side, 20 amps each.

