A X I O M ™

The World's First Type C1 Biosafety Cabinet

Protecting your laboratory environment

LABCONCO®

Only Axiom™ serves up the best of both worlds.

The Best of Both Worlds

Labconco introduces an entirely new type of biosafety cabinet that delivers both safety and flexibility. Until now, there have been two choices of biosafety cabinets, Type A and Type B. A Class II, Type A cabinet recirculates HEPA filtered air into the room so is unable to protect you and your lab from gaseous chemical applications. A Class II, Type B cabinet ducts to the outside so can handle fumes and vapors, yet taxes your building's exhaust system of both air and energy. All Type As and Bs lack flexibility and cannot be converted into the other, leaving many labs without future options. The new Purifier Axiom Type C1* bridges the gap between Type A and Type B cabinets offering the best of both worlds. Only the Axiom is capable of handling every application.

Omni-Flex™ Design

Operational needs change, and until now, biosafety cabinets didn't. The Axiom's Omni-Flex design allows the cabinet to be installed in a recirculating Type A mode when no chemical hazards are present or in a ducted Type B mode for use with hazardous vapors. If your application changes over time, simply connect or disconnect the Axiom from exhaust. In addition, the Type C1 has the added benefit of being programmed to an 8" or 10" sash opening height. Furthermore, the Axiom can be tied into almost any existing appropriate building exhaust system (with sufficient CFM reserve). No costly dedicated remote blower and ductwork are required. Table 1 below shows the significantly lower upfront installation costs compared to a Type B1 or Type B2.

Active Protection Protocol

Utilizing Labconco's own Constant Airflow Profile™ (CAP) to maintain accurate and precise airflow, the Axiom's dual ECM blowers actively maintain airflow **even during building exhaust failure!** With containment programmable from 0-300 seconds, this exclusive fail-safe design provides optimal airflow, allowing you to confidently shut down work and close the sash.

Chem-Zone™ Work Surface

The three-piece work surface with Chem-Zone dished center guides you to organize your work from clean to dirty and to use the dished area when performing critical operations. The Chem-Zone is the dedicated exhaust portion of the cabinet when in ducted Type B mode. Particulates and vapors produced in or near the Chem-Zone are ensured a direct path to the exhaust filter and out of the cabinet. Within this zone, there is no recirculation of air. In the ducted Type B mode, the Chem-Zone safely removes all chemical vapors generated above the dish, guaranteeing operator and laboratory safety. Air outside the zone—downflow air at the ends of the work surface and air taken in at the front grille—is recirculated to save energy in ducted applications. Table 1 below outlines the lifetime savings achieved by the Axiom Type C1 cabinet versus a Type B2 cabinet. The reduced airflow demand of the Chem-Zone area results in savings of more than 50%.

You CAN have it all

A combination of flexibility and safety adds up to a biosafety cabinet that delivers the right mode of operation for your current and future applications. Add energy savings into the mix and your best choice is Axiom.

Find out more at BSCno-brainer.com

Table 1

15 Year Costs	Type A2	Type A2 with Canopy	Type B1	Type B2	NEW Type C1 in A mode	in B mode
Upfront installation	$300	$400	$5,150	$5,150	$300	$400
Lifetime maintenance	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500
Lifetime operation	N/A	$40,500	$40,500	$87,000	N/A	$42,000
ESTIMATED TOTAL COST	$4,800	$45,400	$50,150	$96,650	$4,800	$46,900

Upfront installation costs include labor, ductwork, blower (where applicable) and electrical hook up. Lifetime maintenance costs include HEPA filters and annual certification. Lifetime operation cost is cost of exhausted air of $8/year/CFM for 15 years.

*NSF designation is pending
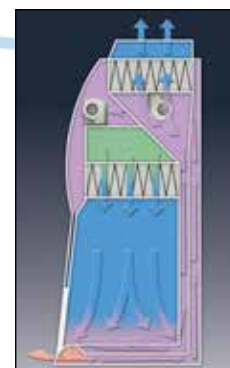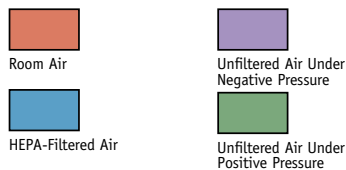
Performance Features

NEW ⚒ Omni-Flex™ two operation mode design: Type A mode for standard microbiological use and Type B mode for connection to exhaust system when handling hazardous chemical vapors or radionuclides

NEW ⚒ Dual Electronically Commutated Motors (ECM)

⚒ Constant Airflow Profile™ (CAP) Technology airflow monitoring system that provides constant and precise volume of air as required and automatically adjusts as filters load without relying on airflow or pressure sensors

- Low static pressure and volumetric rate exhaust requirements when in Type B mode. No dedicated exhaust system per BSC required as compared to contemporary Class II, Type B biosafety cabinets.

⚒ Air-Wave™ Entry System*

⚒ Contain-Air™ Negative Pressure Channel*

- MyLogic™ Operating System that controls Smart-Start™ System for allowing the user to program start up and shut down operations and Night-Smart™ System for idling the blower when the sash is fully closed (Night-Smart operational in Type A mode only)

- Built-in interval or elapsed timer for experiment monitoring, fluorescent light or UV light control (on models with UV light)

- Digital clock

- Bright, 90-150 footcandle, glare-free fluorescent lighting located outside the contaminated work area

- Five year warranty

Safety Features

⚒ LCD information center with "Filter Life Remaining" bar graph for each HEPA filter, status line for alarm conditions and alerts to warn when filter life diminishes to 20% and 0%

NEW ⚒ Active Protection Protocol that operates the exhaust blower for 10 seconds longer than the supply blower and maintains negative pressure during normal shut down, or in the event of exhaust system failure, preventing the flow of air into the laboratory.**

NEW ⚒ Fully scannable exhaust and supply HEPA filters

- Electronic security lock (optional activation) that requires code to operate the cabinet

- Two electrical duplex receptacles, (single outlets on 230 volt models), located one on each side (GFCI on 115 volt models only)

- Intrinsically safe negative pressure design

- Fully-closing, clear 1/4" tempered safety glass sash

- Stainless steel inlet grille with Reserve-Air™ Secondary Airflow Slots*

- Supply and exhaust 99.99+% efficient HEPA filters. Contact Labconco for optional 99.999% efficient ULPA filters.

- Leak-tight stainless steel interior

Comfort Features

⚒ Interior-mounted, line-of-sight, full color LCD information center with easy-to-understand MyLogic™ programming

NEW ⚒ 22.6" (58 cm) maximum sash opening height and 27.0" (69 cm) viewing height

Room Air

HEPA-Filtered Air

Unfiltered Air Under Negative Pressure

Unfiltered Air Under Positive Pressure

NSF. ETL CE

Side View: Airflow Diagram

⚒ Waterfall design curved inlet grille forearm support*

NEW ⚒ Removable, type 304 stainless steel 3-piece work surface (including 2 flat sides and 1 dished center) with lift out knobs and clearly delineated working area (when handling chemicals)**

NEW ⚒ Latch to hold center dished Chem-Zone™ work surface in upright position for easy cleaning of catch pan and sump area

- 10° Angled sash with counterbalanced, anti-racking mechanism for ease of lifting and lowering

⚒ ADA-compliant touchpad control on right-hand side post for manual activation of blower, light(s), timer, electrical receptacles, audible alarm mute and menu selection

⚒ Flush-mounted stainless steel electrical receptacle covers with dampened hinges

NEW ⚒ Two operational ADA-compliant sash heights. BSC can be programmed on location to have either 8" or 10" sash height.**

Specifications

NEW ⚒ Chem-Zone™ work area with dedicated direct exhaust for use with hazardous vapors or radionuclides**

- Nominal inflow velocity of 105 feet per minute (fpm) (0.53 m/sec)

- Nominal downflow velocity of 65 fpm (0.33 m/sec) for 4' models and 55 fpm (0.28 m/sec) for 6' models

- Powder-coated steel exterior

- NSF International-Listed and modified ASHRAE 110 compliant

- ETL listed

- CE conformity marking (230 volt models)

- Class 5 conditions per ISO 14644-1 and -2 (formerly Class 100)

Options

- Unassembled, NSF-Approved, powder-coated steel telescoping base stand with fixed feet

- Accessory Package: 254 nm UV lamp, ADA-compliant service fixture(s) with ball-type valve(s), and NSF-Approved Vacu-Pass™ Cord & Cable Portal

- 10" diameter stainless steel air-tight manual damper (recommended if connected to exhaust in Type B mode)

- Bag-In Bag-Out Exhaust Filter for use with radionuclides or harmful pharmaceutical compounding ingredients

Required Accessory

- Supporting base if unassembled stand option is not selected

*U.S. Patent No. 6,368,206   **Patent pending

⚒ Exclusive Labconco feature

♿ Complies with Americans with Disabilities Act Standard for height of controls and receptacles

Use this key to configure the **nine digit catalog number** to order your Purifier Axiom Class II Biosafety Cabinet. For example, a 304411100 is a 4' Purifier Axiom Class II Biosafety Cabinet with 10" sash opening, service fixture, UV lamp, Vacu-Pass Portal, unassembled base stand and North America, 115 volt electrical receptacle and plug.

STEP 1: Select the width of your cabinet. This number is the fourth digit of your catalog number.

4 = 4' (Actual width = 54.3"/138 cm)

6 = 6' (Actual width = 78.3"/199 cm)

STEP 2: Select the sash opening height. This number is the fifth digit of your catalog number.

1 = 10" (25.4 cm)

8 = 8" (20.3 cm)

3 0 4

STEP 3: Select the Accessory Package option: service fixture(s), UV lamp and Vacu-Pass™ Cord & Cable Portal. This number is the sixth digit of your catalog number.

0 = None

1 = Includes a right-side mounted factory-installed service fixture (two on 6' models, one on each side), UV lamp with timer, and right-side wall Vacu-Pass Portal.

STEP 4: Select non-welded telescoping base stand option. This number is the seventh digit of your catalog number.

0 = None

1 = Includes an non-welded telescoping base stand shipped with the cabinet.

STEP 5: Select the electrical receptacle and plug type. This number is the eighth and ninth digits of your catalog number.

00 = North America, 115 volts, 20 amps

10 = North America, 230 volts

20 = Japan, 100 volts, 20 amps

30 = Schuko, 230 volts

40 = China/Australia, 230 volts

50 = British (UK), 230 volts

70 = India, 230 volts

Technical Specifications

Nominal Width	4'	6'
Actual Width	54.2" (138 cm)	78.2" (199 cm)
Depth	32.7" (83 cm)	32.7" (83 cm)
Overall Height	64.2" (163 cm)	64.2" (163 cm)
Shipping Weight (Cabinet only)	750 lbs. (340 kg)	1075 lbs. (488 kg)
Shipping Weight (Cabinet with Base Stand)	835 lbs. (379 kg)	1175 lbs. (533 kg)
Power Consumption	200 watts	325 watts
Exhaust Volume, 10" Sash Opening*	480 CFM @ 0.2" s.p.	684 CFM @ 0.2" s.p.
Exhaust Volume, 8" Sash Opening*	387 CFM @ 0.2" s.p.	556 CFM @ 0.2" s.p.

*Concurrent balance values