

WWW.ELPROVIDERS.COM

NSF Certified 4 Ft Class II Type A2 Biosafety Cabinet

ELP- BC-4F.110



Our biosafety cabinet is a critical need product intended to serve special needs markets. Strictly MSRP pricing only applies.

A **biosafety cabinet**, also called a biological safety cabinet or microbiological safety cabinetis an enclosed, ventilated laboratory workspace for safely working with materials contaminated with (or potentially contaminated with) pathogens requiring a defined biosafety level.

The primary purpose of a BSC is to serve as a means to protect the laboratory worker and the surrounding environment from pathogens. All exhaust air is HEPA-filtered as it exits the biosafety cabinet, removing harmful bacteria and viruses. This is in contrast to a laminar flow clean bench, which blows unfiltered exhaust air towards the user and is not safe for work with pathogenic agents. Neither are most BSCs safe for use as fume hoods. Likewise, a fume hood fails to provide the environmental protection that HEPA filtration in a BSC would provide. However, most classes of BSCs have a secondary purpose to maintain the sterility of materials inside (the "product").

Class I cabinets provide personnel and environmental protection but no product protection. In fact, the inward flow of air can contribute to contamination of samples. Inward airflow is maintained at a minimum velocity of 75 ft/min(0.38 m/s). These BSCs are commonly used to enclose specific equipment (e.g. centrifuges) or procedures (e.g. aerating cultures) that potentially generate aerosols. BSCs of this class are either ducted (connected to the building exhaust system) or unducted (recirculating filtered exhaust back into the laboratory.

Class II cabinets provide both kinds of protection (of the samples and of the environment) since makeup air is also HEPA-filtered. There are five types: Type A1 (formerly A), Type A2 (formerly A/B3), Type B1, Type B2 and Type C1. Each type's requirements are defined by NSF International Standard 49, which in 2002 reclassified A/B3 cabinets (classified under the latter type if connected to an exhaust duct) as Type A2, and added the Type C1 in the 2016 standard. About 90% of all biosafety cabinets installed are Type A2 cabinets. PLEASE VISIT OUR SITE AT WWW.ELPROVIDERS.COM OR REACH OUT TO US AT INFO@ELPROVIDERS.COM



Source: Wikipedia



Ai Class II Type A2 biosafety cabinet features

- NSF certified
- Great for COVID-19 specimen handling
- Motorized front glass viewing window with optional foot switch
- Dual HEPA filters with life indicator
- UV light life indicator
- Waterproof in-chamber power sockets
- Large LCD display
- Easy-to-clean stainless steel chamber
- Special treated unit housing with anti-mold and antiseptic coating
- Auto start and stop function (e.g. UV lights)
- Automatic flow speed adjustment
- Pneumatic front panel supports for easy maintenance

Caution! Installation requires a forklift or a crane.

Attention! Steps before and after using the unit.

- Step 1: Fully close the front glass panel, turn on UV light for 30 mins (you can use the timer setting). Users should leave the room during this disinfection period.
- Step 2. Raise the glass panel to recommended opening height, turn on air circulation for 10 minutes.
- After operation is done, fully close the glass panel and turn on UV light for another 30 minutes for decontamination.





IMPORTANT GUIDELINES USING A BSC

- No flammable and explosive substances (Building up of flammable material may cause an internal fire or explosion)
- No volatile chemicals (May cause damage to HEPA filters to the point where it allows particles to leak through)
- No toxic chemicals or materials (May reach room occupants)
- No open flame (Will disrupts air flow patterns)
- Minimal use (10mL or less) of decontaminant, such as 70% isopropyl or ethyl alcohol is allowed.
- We recommend using the following for disinfecting the surfaces of a BSC, depending on the agent to be controlled: Sodium hypochlorite (bleach), Ilodophors (Wescodyne), Phenolics (Hilphene, Vespene) and Quaternary ammonium compounds (Conflikt, EndbacII)
- If gaseous, vaporized or aerosolized chemicals must be generated in a BSC, you should assure yourself that the quantity being generated will NOT cause a flammable or toxic risk.



WWW.ELPROVIDERS.COM

The Public Health and Safety Organization NSF Product and Service Listings

These NSF Official Listings are current as of Wednesday, July 08, 2020 at 12:15 a.m. Eastern Time. Please contact NSF to confirm the

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: http://info.nsf.org/Certified/Biosafety/Listings.asp Company=C0559576&Standard=049&

NSF/ANSI 49

Class II (Laminar Flow) Biosafety Cabinetry

F = Fixed

Cabinet Style C = Console

NSF

A = Bench Unit With Base or Adjustable Legs Provided B = Bench Unit Without Base or Adjustable Legs Provided Window Type Bench Height H = Hinged NA = Not Applicable S = Sliding NP = Not Provided

CBV = Concurrent Balance Value

Due to a change in nomenclature in NSF/ANSI 49 - 2002 "Class II (Laminar Flow) Biosafety Cabinetry," Class II, Type A cabinets are now referred to as Class II, Type A1 and Class II, Types B3 and A/B3 cabinets as Class II, Type A2. Class II, Types B1 and B2 cabinets remain unchanged.

Biosafety cabinet models Listed under NSF/ANSI 49 are approved for use with a power supply of 115V/60Hz, unless otherwise noted. If biosafety cabinets have been approved for use with additional power supplies, the power supply will be indicated in the Official Listing.

Across International LLC 111 Dorsa Aven

Livingston, NJ 07039 United States 888-988-0899 Visit this company's website



U.V. Light

Model Cabinet Inflow Downflow CBV (cfm) Cabinet Window Bench Acceptable Velocity at Static Number Type/Style Velocity Width Ht/Type Ht Options Pressure (fpm) (fpm) ft. in. Max (in w.g.) in. BC-3F[1] 27 A2 Α 100 - 110 60 - 70 N/A 3 10S Canopy Connection I.V. Pole U.V. Light BC-4F[2] A2 100 - 110 60 - 70 N/A 4 10S 27 I.V. Pole Α U.V. Light Canopy Connection BC-4FB2[1] B2 100 - 110 60 - 70 949 @ 2.1 8S 27 I.V. Pole А 4 U.V. Light BC-6F[3] A2 А 100 - 110 60 - 70 N/A 6 10S 27 I.V. Pole Canopy Connection

[1] Beginning with serial number 3FA18060001. Inflow nominal set point of 105 fpm was established with a direct airflow reading instrument. This nominal set point was confirmed using the manufacturer's recommended alternate method with thermal anemometer in a constricted (3 inch high) access opening (consult manufacturer's operator's manual for appropriate correction factor) without adjusting cabinet airflow balance. Downflow nominal set point of 65 fpm was established with I.V. Pole and U.V. Light removed. This cabinet model was Certified to NSF/ANSI 49-2016. Biobase canopy model CY-3FA2-I was evaluated as a part of the NSF Certification testing procedures. Certified for use with power supplies of 115V/60Hz, 230V/50Hz and 230V/60Hz. [2] Inflow nominal set-point of 105 fpm was established with a direct airflow reading

- instrument. A corresponding inflow nominal set-point of 105 fpm (corrected to local air density) was confirmed using manufacturer's recommended alternate method with thermal amemometer in a constricted (3 inch high) access opening and applying appropriate correction factor without adjusting cabinet airflow balance. The downflow nominal set-point of 65 fpm was established 4 inches above the bottom of the sash with the I.V. Pole and U.V. Light removed. This cabinet model was Certified to NSF/ANSI 49-2014. Certified for use with power supplies of 115V/60Hz, 230V/50Hz and 230V/60Hz.
- [3] Inflow nominal set-point of 105 fpm was established with a direct airflow reading instrument. A corresponding inflow nominal set-point of 105 fpm (corrected to local air density) was confirmed using manufacturer's recommended alternate method with thermal anemometer in a constricted (3 inch high) access opening and applying appropriate correction factor without adjusting cabinet airflow balance. The downflow nominal set-point of 65 fpm was established 4 inches above the bottom of the sash with the I.V. Pole and U.V. Light removed. This cabinet model was Certified to NSF/ANSI 49-2014. Certified for use with power supplies of 115V/60Hz, 230V/50Hz and 230V/60Hz.

CONNECT WITH NSF

©2012 NSF International. All rights reserv

PLEASE VISIT OUR SITE AT WWW.ELPROVIDERS.COM OR REACH OUT TO US AT INFO@ELPROVIDERS.COM



Optional Top Vent Connector (included, 70% recirculated internally, 30% discharged from top vent)



Controller Screen

I	\$	嶽		Ť	
	Exhaust filter	108 Pa	Inflow	104 fpm	
	Downlow filtera				
	Filter life 🚪	888	Ш		
	UV life 🖁	888	System v	ork 88888 h	(

Remote Control



PLEASE VISIT OUR SITE AT WWW.ELPROVIDERS.COM OR REACH OUT TO US AT INFO@ELPROVIDERS.COM



WWW.ELPROVIDERS.COM





INTERESTED IN A BIOSAFETY HOOD, PLEASE REACH OUT TO ELITE PROVIDERS.

WWW.ELPROVIDERS.COM OR EMAIL US AT INFO@ELPROVIDERS.COM

DIRECT LINE:248-781-8700 OR FAX 1-877-745-9943

TO SET UP ACCOUNT, PLEASE EMAIL ARSERVICES@ELPROVIDERS.COM

PLEASE VISIT OUR SITE AT WWW.ELPROVIDERS.COM OR REACH OUT TO US AT INFO@ELPROVIDERS.COM