

SterilGARD® e3

Leading the way in safety
and reliability



 Baker



The SterilGARD® e3 increases lab productivity & user comfort

SterilGARD® e3
NSF Class II Type A2
Biosafety Cabinet

Our high-performance laboratory equipment is built with you in mind, with industry-leading ergonomics, energy-efficient engineering, and the lowest life cycle costs available. Baker products help you work more comfortably, boost productivity, save money and minimize environmental impact.

The most reliable, comfortable and safe A2 cabinet in the industry.

With the optimum balance of performance and energy efficiency, our biological safety cabinets protect personnel, product and the environment, all while increasing lab productivity and user comfort.



Baker builds it better

As the pioneer and leading innovator of air containment, contamination control and precision cell culture products, Baker doesn't take shortcuts when it comes to protecting you or your research.

RESEARCH APPLICATIONS

- Pharmaceutical Compounding
- Cell Biology & Biomedical Research
- Clinical / Diagnostic Testing



PRODUCT OVERVIEW

- **Safety**
Always our top priority, safety is assured through a variety of features, including an audible and visual sash alarm system, power/processor fault alarm and an exclusive cable port to keep cables and tubing out of the way for proper viewscreen closure.
- **Ease of use**
Packed with convenient features and the largest, unobstructed, usable work area in the industry, there's plenty of room for lab equipment and less hassle when managing controls.
- **Energy efficiency**
From the motor controller to the lighting, new patent-pending innovations provide significant annual cost savings while maintaining superior performance.
- **Comfort**
With eight thoughtful features, from the viewscreen to the work environment and ergonomic design.
- **Containment**
Maximum protection is achieved through six technologies working in concert: our exclusive momentum air curtain, high-velocity return air slots, aerodynamically designed airfoil, optimized downflow, and unique air bypass armrest.
- **Service & certification**
With an innovative electronic controller that provides diagnostic LEDs, detachable side panels, front-loading filters, and uniform downflow air, maintenance is quicker and easier.
- **Cleaning**
An exceptionally reliable membrane-sealed control panel, and a one-piece work surface/air intake grille featuring radiused, coved corners instead of seams, allows for easy and effective cleaning.



SterilGARD® e3

NSF Class II Type A2 Biosafety Cabinet

The SterilGARD® e3 is designed for many applications involving agents of low and moderate risk. Appropriate applications include, but are not limited to, sterile product preparation and biological experimentation.

PRODUCT HIGHLIGHTS

- Multiple energy-saving features equal significant ongoing cost savings.
- Continuously safe work environment with self-adjusting motor technology.
- Comfortable user experience with low noise and heat generation.
- Enhanced productivity with ReadySAFE™ low-flow mode.
- Extended filter life means less user downtime and lower operational costs.
- Easier, faster maintenance.



INDUSTRY-LEADING TECHNOLOGIES PROVIDE SUPERIOR PROTECTION AND MAXIMUM EFFICIENCY

The SterilGARD® e3 offers your lab the highest level of performance, user convenience and comfort, along with energy-efficiency. Our exclusive technologies, including StediFLOW™, ReadySAFE™, and UniPressure™ Preflow Plenum, work together to deliver unparalleled safety and performance, less cabinet downtime for cleaning and maintenance, and increased productivity.

A significant reduction in energy consumption and heat rejection yields a 70% savings in annual operating costs.

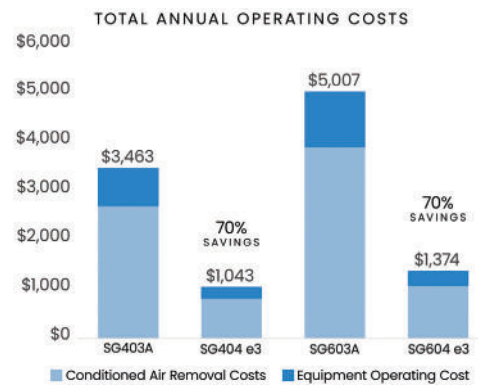
COST OF OWNERSHIP



Check out Baker's Total Cost of Ownership Calculator for Class II Type A2 Biosafety Cabinets.

Ask us how to realize these savings in your own laboratory or visit:

www.bakerco.com/calculator



NOTE: Assumes U.S. Department of Energy national average cost of 17¢ per kilowatt-hour (<http://www.eia.doe.gov/fuelelectric.html>) and \$5/CFM/year. SterilGARD® e3 data based on 8-hour Working Mode, 16-hour ReadySAFE™ Mode of a 115 volt unit.

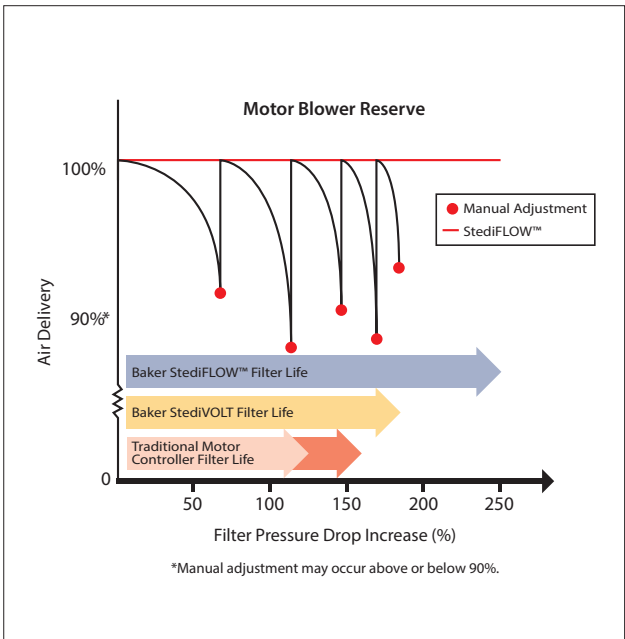
STEDIFLOW™

VFD motor controller automatically achieves optimum performance

Baker's StediFLOW™ variable frequency drive (VFD) motor controller uses less energy, reduces heat output, and operates more quietly. VFD is state-of-the-art technology in HVAC systems for performance and energy savings. The SterilGARD® e3 cabinet can automatically handle an increase in pressure drop of more than 300% across the filter without reducing total air delivery more than 10%.*



ReadySAFE™ mode – Unique bypass armrest allows cabinet to continue operation with closed viewscreen



- Maintains precise airflow – automatically compensates for normal power line variations, air disruptions, and filter loading.
- Provides constant air volume – reduces risk of performance degradation, which can compromise personnel and product protection.
- Extends filter life – minimizes filter replacement and decontamination costs.
- Uses less energy without sacrificing performance.
- Operates more quietly with less vibration.
- No manual speed control required.

READYSAFE™

Low flow mode makes your job easier and reduces energy consumption

Utilizing the exclusive ReadySAFE™ low-flow mode in the SterilGARD® e3 significantly reduces energy consumption. ReadySAFE™ is automatically engaged when the user closes the sash of the biosafety cabinet – the motor switches to a reduced flow mode and the light in the cabinet turns off. Upon opening the sash the motor switches to its normal operating speed and the cabinet light turns back on. Product protection and containment are maintained. This mode can be used during meetings, work breaks and overnight.

- Meets NSF 49 and ISO class 4 criteria in ReadySAFE™ mode.
- Consumes 50–75% less energy than when operating in the standard mode.
- Increases productivity by allowing user to have instantly safe working conditions upon opening the viewscreen and ongoing work can be left in the cabinet without fear of contamination.



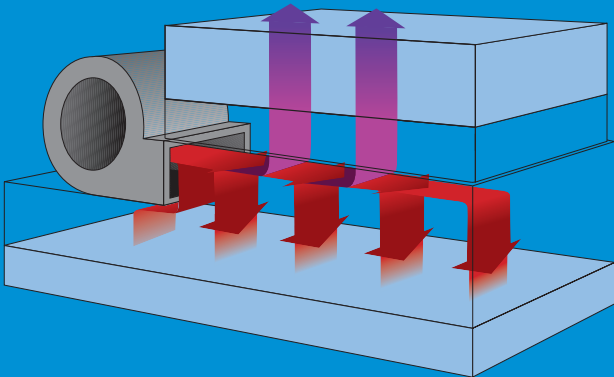
Scan the QR code to download the ReadySAFE™ white paper.

*Manual adjustment may occur above or below 90%. *Performance testing performed on an SG403 (115 V unit) in the Baker laboratory. Data available on request.

**INNOVATIVE UNIPRESSURE™
PREFLOW PLENUM**

The SterilGARD® e3 incorporates Baker's exclusive UniPressure™ Preflow Plenum high-performance airflow system that saves energy and extends filter life by loading filters evenly.

- Creates negative pressure surrounding the positive-pressure plenum to ensure containment; any possible gasket leaks are contained under negative pressure and returned to the HEPA filters.
- Telescoping filter mount provides direct seal of HEPA filters to plenum and simplifies filter replacement.
- Closed-cell neoprene gasket forms airtight seal around filter periphery. Force is applied to full perimeter of filter rather than point force.
- Apportions and distributes air across, then through, the HEPA supply filter, improving downflow uniformity, reducing noise, and increasing reserve blower/motor capacity.
- Internal damper simplifies airflow balance and cabinet sealing for decontamination.



The Baker exclusive UniPressure™ Preflow Plenum provides quieter, more efficient operation.



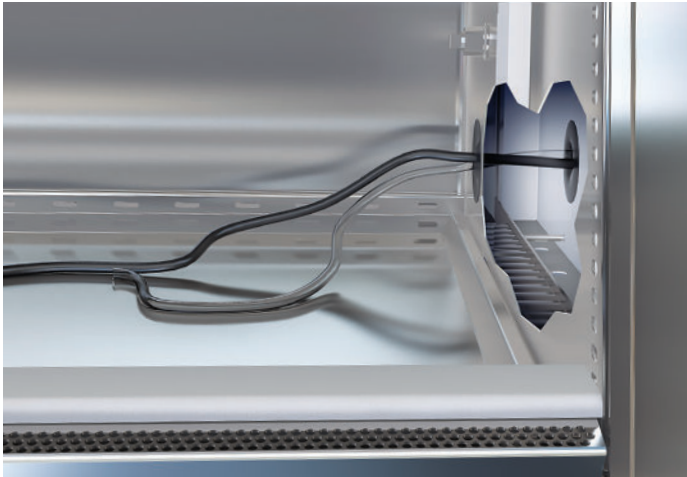
A more efficient, less demanding, and quieter airflow system when combined with StediFLOW™.



NEGATIVE-PRESSURE DOUBLE-WALL PLENUMS WITH CABLE PORTS ENHANCE SAFETY

The unique all-metal, double-wall design of the SterilGARD® e3 cabinet creates base, side, and back wall plenums that capture and contain contaminated air under negative pressure. This prevents contaminated air from escaping into the lab in event of damage to the cabinet walls.

Our NSF-approved cable ports are an industry exclusive. They can be located in the side walls of the cabinet, and provide a safe and ergonomic way of introducing cables or siphoning tubes into the work area without interfering with the viewscreen opening.



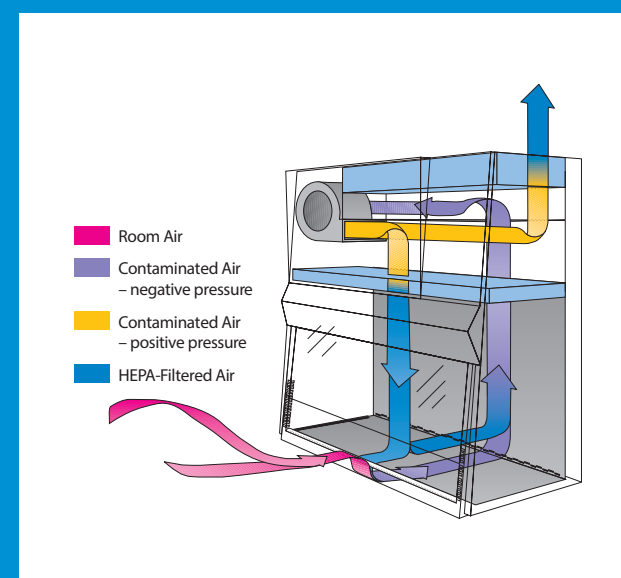
Double-wall construction captures and contains contaminated air under negative pressure.



EXCLUSIVE DESIGNS SIMPLIFY CERTIFICATION AND TESTING

Several SterilGARD® e3 design features help simplify certification and maintenance, reducing downtime and improving life-cycle costs.

- Telescoping plenum assembly puts supply and exhaust HEPA filters within easy reach from the front of the cabinet, and allows filters to be clamped directly to plenum against closed-cell neoprene gasket.
- All components critical to cabinet operation, as well as exhaust and supply filters, are easily accessible from the front panel.
- Internal damper regulates balance between exhaust and supply to maintain proper air circulation ratios. Damper can be adjusted by certifier to compensate for changing resistance of the filters as they load with particles.



BALANCED AIRFLOW AND EXHAUST ENSURE UNIFORMITY

The SterilGARD® e3 cabinet features a unique airflow design that delivers unidirectional downflow air over the work area for maximum containment and protection.

- Filtered air descends from top to bottom of the work area in a unidirectional flow. Near the back of the work surface, the air current divides – a portion of the downflow air is pulled through the back wall grille and the remainder is pulled through the front grille.
- Simultaneously, room air is pulled through the front opening and into the front grille. It does not enter the work area.
- All air combines under the work surface and is pulled under negative pressure through the back and side double walls of the cabinet into the blower/motor, which blows it into the positive-pressure preflow plenum.
- From the positive-pressure plenum, approximately 30% of the air exits the system through the exhaust filter. The remaining 70% passes through the supply filter and re-enters the work area as particulate-free air.





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HIGH-VELOCITY RETURN AIR SLOTS CAPTURE UNFILTERED AIR

Containment and cleanliness are achieved with precise control of airflow volumes and velocities. A unique feature in the Baker cabinet design, the high-velocity return air slots have been proven to maximize the biological safety cabinet's protective capabilities.

- Prevents contaminants from migrating up behind the viewscreen or around the side wall and escaping into operator's environment.
- Prevents room air from migrating down behind the viewscreen or around the side wall and contaminating work area.



High-velocity return air slots capture unfiltered air.

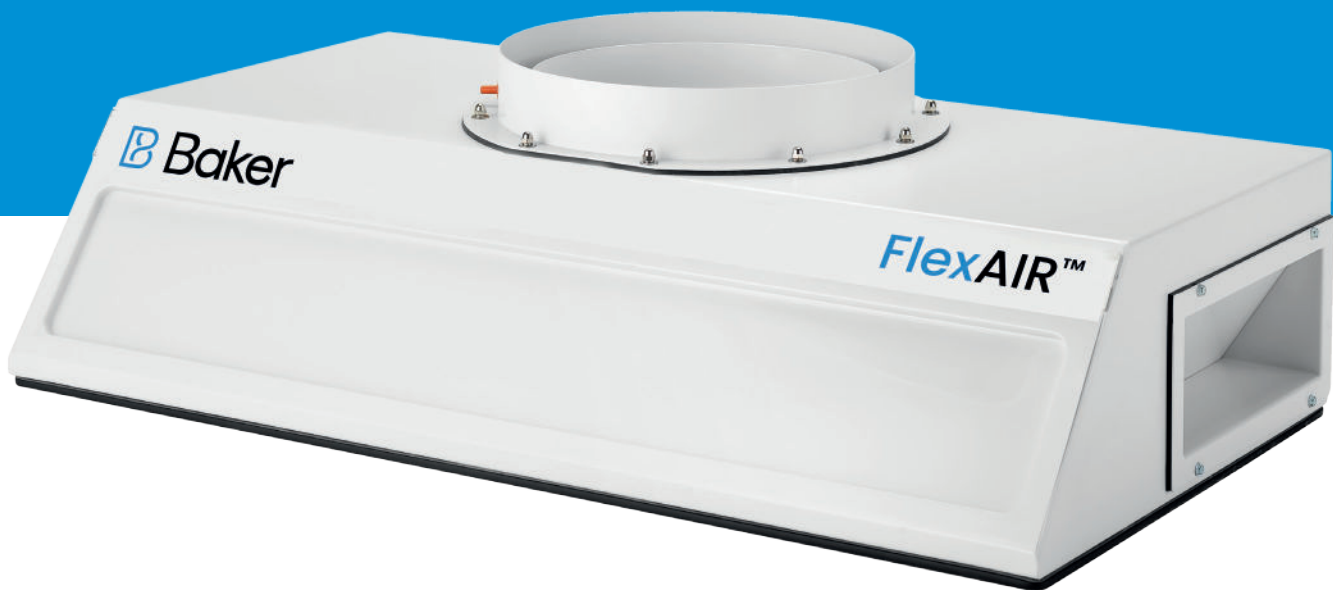
FlexAIR™ Exhaust Connection

**SAVES ENERGY AND
PROVIDES SAFER BIOSAFETY
CABINET PERFORMANCE**

Baker's FlexAIR™ canopy exhaust connection combines the safety of a traditional canopy (thimble) exhaust connection with the lower exhaust flows of a traditional hard exhaust connection. Now, energy savings can be realized without sacrificing safety cabinet performance.

How it works:

Baker's new FlexAIR™ works by having dynamic closure panels. The front panel automatically opens in the event of exhaust system slowdown or failure, allowing the cabinet to maintain Class II, Type A2 biosafety cabinet performance. Only the minimum amount of air necessary to achieve cabinet exhaust containment is used, compared to traditional canopy exhaust connections that exhaust an additional 20% conditioned air from the room. FlexAIR™ reduces exhaust air volume for significant energy and cost savings.



FlexAIR™ system includes an alarm feature to let workers know when the house exhaust system has slowed down or stopped. This may be important if your work includes the use of volatile organic solvents, gases, or vapors (which are not captured by HEPA filters).



Scan the QR code and see the FlexAIR™ in action.





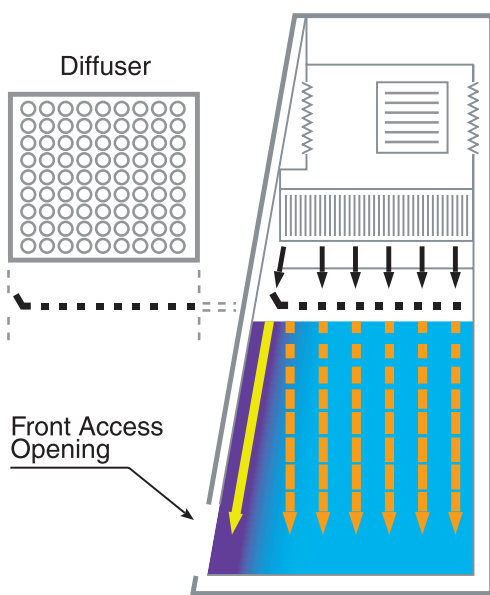
AN INDUSTRY-LEADING APPROACH TO ERGONOMICS CREATES A NEW LEVEL OF PRODUCTIVITY AND USER COMFORT

The SterilGARD® e3 includes design features to improve safety, productivity, user-comfort, and performance throughout a range of tasks performed on a daily basis. Our cabinets are designed with the user in mind so that routine tasks can be done comfortably, efficiently, and with less fatigue.

WORKING ENVIRONMENT OFFERS OPTIMUM EASE OF USE AND COMFORT

- A variety of convenient enhancements make the SterilGARD® e3 one of the most comfortable working environments.
- Unobstructed, usable work area is the largest in the industry and can accommodate more lab equipment.
- Reduced front grille depth moves work surface closer to front for better arm position, which helps improve posture.
- Low-profile, unitized drain pan beneath work surface allows more leg room.
- Air bypass padded armrest provides support and comfort.
- Eye-level control panel offers greater visibility and easier access.
- Non-glare work surface and LED lighting reduce eyestrain.
- Optional stand with telescoping legs allows for an adjustable work surface height.
- Convenient built-in timers for lights and outlets come standard, minimizing risks and reducing energy consumption.
- Plumbing and drainage connections are strategically placed for convenience and proper air management.





MOMENTUM AIR CURTAIN INCREASES PROTECTION

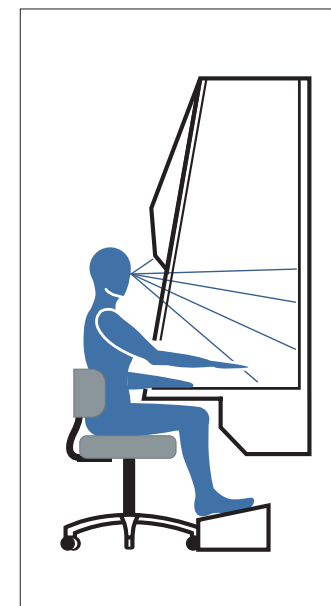
The SterilGARD® e3 cabinet employs a unique momentum air curtain that offers an added measure of containment and protection exclusive to the Baker design.

- Creates strong air barrier, or momentum air curtain, at front of cabinet, increasing protective capabilities for both products and personnel.
- Strategic position of a stainless steel diffuser creates faster airflow at front of work area. Airflow over center of work surface is gentle.
- Resulting air curtain combines with high-velocity return air slots, aerodynamically contoured front-opening surfaces, and optimum air intake velocity to minimize turbulence and prevent migration of airborne contaminants into or out of work area.

SLANTED VIEWSCREEN OFFERS COMFORT AND SAFETY

The SterilGARD® e3 cabinet has a slanted sliding viewscreen that minimizes glare and makes the cabinet easier to use and more comfortable to work in.

- Allows operator more comfortable head and elbow position, reducing fatigue.
- Provides safe, highly visible and easily accessible work area for wide range of procedures.
- Rugged, easy-to-use counterweight allows easy opening and closing of viewscreen.
- Maximum opening simplifies equipment and instrument loading and unloading.
- Integrated alarm audibly and visually warns of improper viewscreen position.
- Viewscreen-level mute button silences alarm for 5 minutes when viewscreen is raised for cleaning, loading, or unloading.
- Laminated safety-glass construction.
- Stainless steel edge protector prevents chipping and cracking.





CRAFTSMANSHIP ENSURES QUALITY

Baker cabinet designs represent many years of experience in stainless steel fabrication and craftsmanship. Design considerations such as wide radius corners, aerodynamically shaped surfaces, and glare-reducing satin-finish interiors combine to improve comfort, simplify cleaning, and maintain proper containment.

- Work surface and walls are one-piece, corrosion-resistant, stainless steel with smooth radius corners for easy cleaning. White powder finish protects cold-rolled steel cabinet exterior.
- Work surface and supports are easily removed to facilitate cleaning drain pan.
- Stainless steel air diffuser/filter protector shields downflow filter in work area and provides uniform downflow and momentum air curtain.
- Protective grille under negative-pressure side walls prevents wipes and other paper materials from being inadvertently drawn into blower system, eliminating costly servicing, decontamination and downtime.
- Entire cabinet is airtight. Each component is welded, gasketed, or assembled with hermetically sealed joints. Each cabinet is bubble-tested under pressure – at the factory prior to shipping – to verify integrity of seals.

OPTIONS AND ACCESSORIES

Most options, accessories, and modifications are factory installed and should be specified when ordering. Common options are listed below.

- Viewscreen sash opening: 10" or 12" (8" is standard on all models)
- Stainless steel IV bar
- Additional petcocks
- Ultraviolet germicidal lamp with safety interlock and programmable timer
- FlexAIR™ canopy exhaust connection
- Reinforced work surface
- Seismic restraints (California OSHPD pre-approved per CBC 2013)
- Stands available with telescoping legs, casters, or electric hydraulic lifts
- Remote-controlled petcocks
- Auxiliary wiring package (for monitoring blower switch, sash alarm, power loss alarm, and ReadySAFE™)
- ULPA filters
- Plastic storage bins
- Plumb to back
- Ergonomic adjustable footrest
- Available in 100 V (50/60Hz) and 220 V (50/60 Hz) models

For additional information, contact Baker or your local sales representative.



MORE RESOURCES

If you are interested in learning more about the SterilGARD® e3, a variety of resources are available at www.bakerco.com including:

- Purchasing, technical and master specifications
- Revit® files and standard details
- Videos, white papers and more!



Scan the QR code to access all the SterilGARD® e3 resources

Technical Specifications – 115 Volt

Model Number	SG304	SG404	SG504	SG604
Nominal Size	3'	4'	5'	6'
Interior Dimension (w x d x h)	27 3/4 x 22 9/16 x 27 7/16"	46" x 24 9/16" x 27 7/16"	58" x 24 9/16" x 27 7/16"	70" x 24 9/16" x 27 7/16"
Usable Workspace (w x d)	25 3/4 x 17 5/8"	44" x 19 5/8"	56" x 19 5/8"	68" x 19 5/8"
Exterior Dimensions (w x d x h)	35 5/8 x 30 11/16" x 61 3/4"	53 3/4" x 30 11/16" x 61 3/4"	65 3/4" x 30 11/16" x 61 3/4"	77 3/4" x 30 11/16" x 61 3/4"
Cabinet Weight (lbs)	397	582	714	771
Shipping Weight (lbs)	497	785	940	1,020
Opening Max.	20"	20"	20"	20"
Working Access Opening Height (8" standard)	8" / 10" / 12"	8" / 10" / 12"	8" / 10" / 12"	8" / 10" / 12"
Operating Amperage†				
Normal Operating Mode (Amps)	2.4 / 2.0 / 1.1	3.6 / 4.0 / 4.2	4.1 / 4.7 / 5.2	5.6 / 6.4 / 6.8
ReadySAFE™ Mode (Amps)	1.1	1.8	1.9	2.1
Power Consumption††				
Normal Operating Mode (Watts)	240 / 230 / 242	414 / 460 / 483	472 / 541 / 598	644 / 736 / 782
ReadySAFE™ Mode (Watts)	126	207	219	242
Heat Generation‡				
Normal Operating Mode (BTU/hr)	819 / 785 / 826	1,413 / 1,570 / 1,649	1,612 / 1,845 / 2,042	2,199 / 2,512 / 2,670
ReadySAFE™ Mode (BTU/hr)	432	706	747	826
Electrical Service Requirements‡‡	115V AC, 20 A, 60 Hz	115V AC, 20 A, 60 Hz	115V AC, 20 A, 60 Hz	115 V AC, 20 A, 60 Hz
Noise (dBa)	59	61 / 62 / 65	64 / 65 / 66	65 / 67 / 67

Exhaust and static pressure requirements (with FlexAIR® Canopy Exhaust Connection)

Model Number	SG304	SG404	SG504	SG604
8" Working Access Opening Height				
Concurrent Balance Value (CFM min/max)	260 / 370	290 / 663	360 / 750	460 / 845
8" Exhaust Duct Diameter (* W.G. min/max)	-0.02 / -0.08	-0.10 / -0.32	-0.15 / -0.62	-0.15 / -0.74
10" Exhaust Duct Diameter (* W.G. min/max)	-0.01 / -0.06	-0.04 / -0.17	-0.05 / -0.16	-0.07 / -0.18
12" Exhaust Duct Diameter (* W.G. min/max)	-0.01 / -0.06	-0.03 / -0.08	-0.04 / -0.12	-0.06 / -0.13
10" Working Access Opening Height				
Concurrent Balance Value (CFM min/max)	N/A	360 / 701	450 / 820	550 / 945
8" Exhaust Duct Diameter (* W.G. min/max)	N/A	-0.15 / -0.62	-0.18 / -0.60	-0.20 / -0.78
10" Exhaust Duct Diameter (* W.G. min/max)	N/A	-0.05 / -0.18	-0.09 / -0.35	-0.11 / -0.24
12" Exhaust Duct Diameter (* W.G. min/max)	N/A	-0.04 / -0.10	-0.05 / -0.16	-0.09 / -0.16
12" Working Access Opening Height				
Concurrent Balance Value (CFM min/max)	N/A	415 / 871	560 / 850	644 / 1,114
8" Exhaust Duct Diameter (* W.G. min/max)	N/A	-0.17 / -0.75	-0.22 / -0.74	-0.30 / -0.79
10" Exhaust Duct Diameter (* W.G. min/max)	N/A	-0.07 / -0.30	-0.09 / -0.24	-0.14 / -0.36
12" Exhaust Duct Diameter (* W.G. min/max)	N/A	-0.05 / -0.25	-0.07 / -0.17	-0.11 / -0.30





Scan the QR code to access all the SterilGARD® e3 specifications

Purchase Specifications

SterilGARD® e3 Class II, Type A2 Biological Safety Cabinet, Vertical Flow, 115 V, 110V, and 220 V versions

Performance

1. Manufacturer shall provide a certified copy of the personnel, product, and cross-contamination (biological) tests, equivalent to or more demanding than as specified in NSF International Standard 49, performed on the unit selected from the corresponding statistical sample. Tests may be witnessed by a representative of the purchaser.
2. Cabinet shall have momentum air curtain downflow velocity profile – a higher velocity of downflow behind the viewscreen relative to downflow velocity over the work surface – for added personnel and product protection.
3. High-velocity return air slots shall be located at each end of the front access opening. These slots help to prevent contaminated air from being drawn into the work area along the edges of the side wall and from escaping the work area to the ambient environment.
4. High-velocity return air slots shall also be located behind the viewscreen on the top edge for enhanced containment and product protection.
5. Cabinet shall be capable of automatically handling a 300% minimum increase in filter loading without reducing total air delivery by more than 10%. Test data to verify these capabilities shall be available upon request.
6. Intake velocity through the front access opening shall be a minimum of 105 FPM. Standard opening for all models is 8" (203 mm); 10" (254mm) and 12" (305mm) openings are also available.
7. Each unit, before shipping, shall have a complete physical test to assure cabinet meets Class II requirements. A copy of this test will be provided with the operator's manual shipped with the unit.
8. The unit shall have standard HEPA filters for a protection effectiveness of 99.99% on 0.3 micron size particles by DOP test. Filters shall be serviceable from front of cabinet.
9. The cabinet shall have a low flow mode (ReadySAFE™), which is active when the viewscreen is closed. This mode of operation shall reduce energy consumption by at least 50% and still meet the product and personnel protection testing requirements of NSF/ANSI 49. Particle testing while the cabinet is in this mode shall exceed the requirements for ISO Class 5 conditions for 0.3 micron particles. A connection shall be provided for indicating the ReadySAFE™ status to the facility building management system.

Construction

1. The vertical sliding viewscreen shall be slanted at an angle of 10° from vertical, capable of moving to a fully closed position during shutdown periods.
2. Viewscreen shall be constructed of ¼" (6.35mm) UV-resistant laminated safety plate glass, with a maximum opening of 20" (508 mm) for equipment loading.
3. All biologically contaminated ducts, plenums, and work area side walls shall be permanent metal construction and maintained under negative pressure or enclosed within a negative-pressure zone.
4. Interior work area shall be 27 1/16" (697 mm) high.
5. Cabinet shall have Baker's exclusive UniPressure™ Preflow Plenum, designed to provide more uniform airflow to the supply filter.
6. Supply and exhaust filters shall be front-loading.
7. A telescoping plenum assembly shall be provided to allow the filters to be directly clamped to the plenum against a closed-cell neoprene gasket. Plenum applies force to full perimeter of filters, rather than point force.
8. The unit will feature an audible alarm and flashing LED to warn of an unsafe viewscreen position. An alarm mute switch on the front cabinet panel allows temporary muting. The alarm resets after 5 minutes if the viewscreen remains unsafe. The cabinet will also signal power loss with visual and audible alarms.
9. Cabinet exterior construction: seal panels and dress panels of 16-gauge cold-rolled steel, powder coated finish, painted PermaWhite.™
10. Cabinet Interior (work area) construction: one-piece, 16 gauge, Type 304 stainless steel, with a smooth, 7/16" (11mm) radius between rear and side walls, and easily cleanable, radiused corners on the work surface tray.
11. Work area side walls and rear wall to be one-piece construction. A straight back wall shall be provided to maximize work area and easily accommodate laboratory equipment.
12. Cabinet shall be double-wall construction with negative-pressure airflow between the walls, from drain pan to top, surrounding the sides and back of work area and cable port.
13. Bottom of access opening shall be aerodynamic airflow design directing airflow into the front grille to improve access opening containment capability and bypass armrest.
14. Cabinet shall have a unitized drain pan with 7/16" (11mm) radius on all sides and a fully removable work surface and work surface supports to facilitate cleaning.
15. Cabinet shall be equipped with a stainless steel ball valve to allow safe and effective draining of spills.

16. Stainless steel air diffuser and filter protector provided in work area. Filter protector on top of cabinet is cold-rolled steel with powder coat finish.
17. Externally adjustable internal damper shall be provided to compensate for changing resistance of exhaust and supply filters during certification.
18. One petcock and one plugged penetration are provided as standard on the right side wall. Left side wall is prepunched for optional/additional plumbing connections.
19. All external plumbing connections to the petcocks shall be made through the bottom or back of the cabinet and not the sides, allowing zero clearance between the unit and the building walls or equipment to its right and left.
20. The unit has 3 optional stands available.
21. Channel Stand with adjustable legs for work surface elevations from 27" [686mm] to 38 5/8" [981 mm]
22. Channel Stand with 4" [102mm] diameter casters and wheel locks with a work surface elevation maximum at 31 ½" [800mm]
23. Electric Hydraulic Lift for a continuously adjustable work surface elevation from 20" [508mm] to 38 5/8" [981 mm]. Custom upper and lower heights available.
24. Viewscreen guide design shall be a counterweighted pulley system allowing ease of movement up and down.

Electrical

1. Complete unit shall be listed as certified by Underwriters Laboratory (cULus) for electrical, fire, and personal safety.
2. Cabinet shall have a microprocessor-based control system with an easy-to-clean membrane control panel mounted on the front of the cabinet.
3. Cabinets shall have adjustable timers for LED lights, outlets, and optional UV lights. Timers operate in 15-minute intervals.
4. Work area shall be provided with two GFCI-protected duplex outlets, with drip-proof covers and shall be protected by a self-resetting circuit breaker.
5. A single 14' power cord and plug (NEMA 5-20P) shall be provided for electrical power source. For 100V model, a single 4 m power cord and plug (listed for the destination country) shall be provided for electrical power source.
6. If equipped with optional UV light, includes a shutoff safety feature when the viewscreen is raised.
7. If equipped with UV light, unit shall have electric ballasts for UV lighting to provide longer life and lower heat output. If Japan model, unit shall have ballasts for fluorescent lighting as well.
8. Unit shall be equipped with LED lamp, UL Type B. Japan models use fluorescent lights. The UV light and work area light are interlocked to prevent simultaneous operation.

Caution

A Class II, Type A2 biological safety cabinet is suitable for work with agents in the absence of volatile toxic chemicals and volatile radionuclides per NSF 49.

With proper ventilation to the outside, a Class II, Type A2 biological safety cabinet is suitable for work with agents assigned to biosafety levels 1, 2 or 3, treated with minute quantities of volatile toxic chemicals and trace amounts of radionuclides required as an adjunct to microbiological studies, that will not interfere with the work when recirculated in the downflow air (as stated in NSF/ANSI #49).

Note: The adequacy of this containment cabinet for the user's personal safety, as with any containment cabinet, should be determined by an industrial hygienist or safety officer. Site preparation information, architectural drawings, detailed dimensions and purchase specifications are available.

72 Month Warranty

The Baker Company, Inc., expressly represents and warrants all goods (a) to be as specified (and described) in The Baker Company catalogs and literature, and (b) to be free under normal use, service, and testing (all as described in The Baker Company catalogs and literature) from defects in material and workmanship for a period of seventy-two months from the invoice date. Seventy-two month warranty is only available in the United States; international warranty is twelve months.

The exclusive remedy for any breach or violation of this warranty is as follows: The Baker Company, Inc., will F.O.B. Sanford, Maine, furnish without charge repairs to or replacement of the parts or equipment that proved defective in material or workmanship. No claim may be made for any incidental or consequential damages.

This warranty is expressly in lieu of all other warranties, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose unless otherwise agreed in writing signed by The Baker Company. (The Baker Company shall not be responsible for any improper use, installation, service, or testing of the goods.)



SterilGARD® e3
Leading the way in safety
and reliability

SafeGARD Solutions

NCB™ e3

Class II Type B1 Biosafety Cabinet. Developed to exceed the National Cancer Institute's Expectations... and yours.

- 1. All exhaust air is removed directly from the work area and pulled through a dedicated exhaust duct into the facility's separate exhaust system
- 2. Vapors and gases emitted from vessels or work behind the air split approximately half way back from the cabinet front - are removed and not recirculated
- 3. Dual supply HEPA filters assure that all positive pressure areas are free of particulate contamination. Recirculated air is HEPA-filtered immediately below the work surface before it is passed through a HEPA supply filter above the work area



BioChemGARD® e3

Class II Type B2 Biosafety Cabinet. The most energy efficient, comfortable and safe B2 cabinet in the industry.

- 1. A 70% reduction in electrical power compared to traditional B2 cabinets
- 2. Increased motor blower reserve extends filter life for less downtime
- 3. Continuously safe work environment with self-adjusting motor technology enhances productivity
- 4. Optional fume hood package for versatile laboratory design



IsoGARD®

Class III Glovebox. Designed to Handle Hazardous Microbiological Agents or Pharmaceutical Potent Compounds.

- 1. Pass-through and main chamber incorporate uniform unidirectional airflow to flush away any generated particles while bathing the work surface in HEPA-filtered air
- 2. Constructed with thick safety glass, solid closed-cell silicone gaskets and supplied with hypalon gloves
- 3. Stainless steel glove port design with one-piece sleeve-and-glove assembly allows gloves to be replaced or changed without breaking containment



AeroPROTECT 360°

Aseptic Contamination Enclosure. Optimum personnel & environment protection.

- 1. 360° visibility to the work area for easy monitoring
- 2. 8" [203mm] sash opening allows access to the work surface and is the primary means of access to ensure user protection
- 3. Front facing controls and gauges within easy reach when standing from both sides
- 4. Dual force hinged front view screen and rear access, offering easy equipment loading



BioPROTECT® e3

Walk-in Equipment Containment Enclosures. Designed expressly for high volume robotic and equipment applications.

- 1. Flexible modular design for high-volume robotic and automated equipment applications
- 2. Accommodates high-through put robotic systems (including ancillary devices), ultra-centrifuges, flow cytometers, aerosol generators and other large laboratory equipment
- 3. Ideal for high-throughput screening, combinatorial chemistry, immunology, tissue culture, clinical research, drug discovery, molecular biology, and quality control assays



AniGARD® e3

Animal Transfer Station. Confidence you can rely on.

- 1. Spacious, easily accessible work areas accommodate a variety of cage sizes and activities
- 2. Ergonomic design with efficient lighting increases user comfort and visibility
- 3. Designed for easy movement and maneuverability throughout the laboratory
- 4. Offers up to ISO Class 4 (Class 10) protection by delivering HEPA-filtered, particulate-free air



The Best Protection

EdgeGARD® HF

Horizontal-Flow Clean Bench designed with you in mind. Baker's exclusive technology maximizes product protection and helps meet up to ISO Class 4 (Class 10) air cleanliness requirements.

- 1. High-performance airflow system provides uniform airflow to the work surface, extends filter life and minimizes maintenance costs
- 2. HEPA supply filter with 99.99% minimum efficiency in capturing 0.3 micrometer particulates
- 3. Spacious, easily accessible work areas accommodate multiple users and a variety of applications and instrumentation



EdgeGARD® VF

EdgeGARD® Vertical-Flow provides vertical, unidirectional and controlled airflow over the entire work surface, while reducing energy consumption, noise and airflow turbulence.

- 1. ISO Class 4 (Class 10) cleanliness (for 0.5 micrometer particles)
- 2. One-piece stainless steel work surface helps prevent surface contamination
- 3. Easy to move and maneuver when configured with mobile stand, casters and pull bars
- 4. Slanted 10° viewscreen for operator comfort and direct line-of-sight viewing
- 5. Well-lighted workspace reduces eyestrain



SteriISHIELD®

Compounding Aseptic Isolator (CAI). Designed specifically for ultimate product protection of non-hazardous drugs.

- 1. Offers a contained, pressurized work area for pharmacy applications
- 2. One of the most comfortable isolators in the industry, with oval gloveports that offer easy reach to interior surfaces, and adjustable height stand
- 3. HEPA-filtered, unidirectional airflow with better than ISO Class 5 (Class 100) air cleanliness conditions to prevent contaminants from entering the work area



ChemoSHIELD®

Compounding Aseptic Containment Isolator (CACI). Offers a contained, pressurized work area for pharmacy applications.

- 1. One of the most comfortable isolators in the industry, with oval gloveports that offer easy reach to interior surfaces, and adjustable height stand
- 2. Slanted, top-hinged view screen allows for full opening for loading and unloading of pharmacy instrumentation or equipment
- 3. HEPA-filtered, unidirectional airflow with better than ISO Class 5 (Class100) air cleanliness conditions to prevent contaminants from entering the work area



Air Sentry Chemical Fume Hood POWERED BY LAB CRAFTERS

Fume hoods designed for unparalleled safety for critical laboratory applications.

- 1. Substantially reduces roll effect (fluctuations in the airflow that may cause harm to the worker)
- 2. Offers a streamlined, unobstructed work area
- 3. Minimizes lingering concentrations above and behind the view screen
- 4. Reduces contaminant concentrations near the edge of the sash (window), reducing potential exposure hazard to personnel



Baker's portfolio of contamination control solutions can be found within many industries, for a wide variety of applications in research and clinical care. Please consult your biosafety professional to understand what is right for you and your application.



93
Sales Professionals



675
Service Technicians



74
B2B Partners



3
Locations



No Minimum Anything

Our global headquarters houses our core operations: manufacturing, engineering and design, research, testing, quality control, technical support, and customer service.

No Shortcuts

The construction of Baker laboratory equipment is marked by a focus on function, user comfort, durability – and always safety. Testing is rigorous, setting us apart in the industry.

We take it Personally

Our employees, from our engineers to our customer service representatives, are motivated by the trust our customers have placed in us to protect life – your life, the life of your research, and ultimately the lives you save through discovery and healing.

Make the World a Better Place

In research and clinical care, you are dedicated to making the world a better place. We not only share your passion for your work, but the wider mission of dedication to principles of sustainability and responsibility.

A Passion for Real value

Baker products have earned a reputation for maximum return on investment through lower life cycle costs and more years of trouble-free operation than those of any other manufacturer.



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