



EdgeGARD®



**BAKER**

Environments For Science™



## EdgeGARD® Clean Benches



EdgeGARD® HF



EdgeGARD® VF

### Where comfort meets industry-leading dependability

Baker's exclusive technology maximizes product protection and helps meet up to ISO Class 4 (Class 10) air cleanliness requirements

- High-performance airflow system provides uniform airflow to the work surface, extends filter life and minimizes maintenance costs
- HEPA supply filter with 99.99% minimum efficiency in capturing 0.3 micrometer particulates
- Spacious, easily accessible work areas accommodate multiple users and a variety of applications and instrumentation
- Ergonomic design increases user comfort and productivity
- Industry's most reliable clean bench means lower life-cycle costs and years of trouble-free operation

# EdgeGARD® HF

## Horizontal Laminar-Flow Clean Bench 3', 4', 5', 6' and 8' Models

The EdgeGARD® HF horizontal laminar-flow clean bench ensures product protection for a variety of life science and industrial laboratory and process applications where product protection is essential. With a brightly illuminated, spacious work area and unique high-velocity air return slots, the EdgeGARD HF offers superior user comfort, product protection and productivity. Equipped with a HEPA supply air filter, airflow across the work area provides a particulate-free work surface. The patented cabinet design of the EdgeGARD HF provides precise control of airflow volumes and velocities, thereby maximizing product protection and ensuring ISO Class 5 (Class 100)\* cleanliness in the work area.

Available in Console and Space-Saver Bench Model.

### Comfortable User Experience

- The 22" work area depth provides ample space for safe, efficient operation; heights vary from 28<sup>1</sup>/<sub>8</sub>" to 34<sup>1</sup>/<sub>8</sub>", depending on model.
- Each EdgeGARD HF clean bench includes fluorescent lamps which provide balanced lighting at the work surface.
- The cool white illumination exhibits better color fidelity.
- Optional adjustable leg risers permit work surface heights of 35 <sup>1</sup>/<sub>16</sub>" to 37 <sup>7</sup>/<sub>16</sub>".
- Satin finish work surface diminishes harsh light reflection.
- Optional isolated/microbalanced blower/motor provides lowest vibration\*\*



EdgeGARD® HF Clean Benches

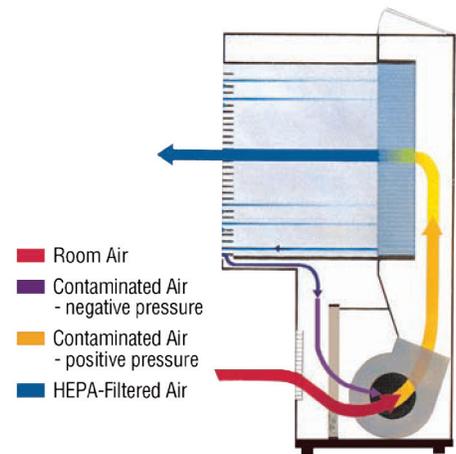
NOTE: EdgeGARD clean benches protect product only. They are not designed to contain aerosols generated in the work area and do not protect personnel or the environment.

\* For 0.5 micrometer particulates

\*\* Not UL listed with this option.

## Baker Builds It Better

- High-velocity return air slots maximize cleanliness and product protection by precisely controlling airflow volumes and velocities.
- Protective HEPA filter screen is easily removed for cleaning or service, and concealed HEPA filter frame eliminates turbulence at the rear wall.
- Washable, reusable Scott Foam® pre-filter extends HEPA filter life.
- Blower/motor system provides a steady volume of air even as filter loads, ensuring consistent performance and further reducing HEPA filter changes.
- Exclusive StediVOLT® motor speed controller automatically compensates for routine voltage fluctuations, maintaining the steady airflow required for cleanliness and product protection.
- Performance-enhancing design features corrosion-resistant stainless steel interior, powder-coat protected cold-rolled steel exterior, and a 1/2" lip at the rear of the work surface to protect the HEPA filter from spills.
- Easy-to-access front hinged panel simplifies cleaning and service.



Laminar airflow across the work surface provides a particulate-free environment for maximum product protection

See how Baker's exclusive technologies protect your work from particulates carried by turbulence and cross-contamination.



## Versatile and Productive For Your Lab

- Designed for a variety of industries and applications, such as IV admixture preparation, drug compounding, plant cell culture, media preparation, pharmaceutical procedures, electronic assembly and limited experimental research.
- Exterior GFCI duplex outlet accommodates most commonly used instruments and equipment.
- Optional wide-tread casters provide stable mobility when needed.
- Flexible electrical and plumbing connection options adapt EdgeGARD HF to your lab.
- Optional storage bins help keep lab space organized.
- Flexible electrical and plumbing connection options adapt EdgeGARD HF to your lab.

### Space Saver Model Available!

For applications where space is at a premium, such as IV and nursing stations, satellite pharmacies, intensive care units and other small volume clinical or industrial situations. (Pictured at right.)



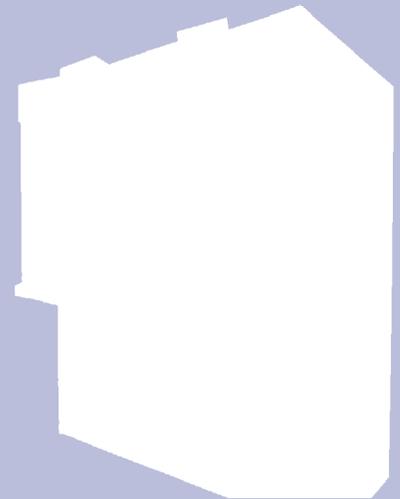
## Options and Accessories

- Adjustable leg risers (for work surface height of 35  $\frac{7}{16}$ " to 37  $\frac{7}{16}$ " )
- Service petcocks (in right or left side wall)
- Stainless steel IV bar (removable)
- Plastic storage bins (below work surface)
- Casters
- Additional duplex outlet
- Isolated blower/motor (for lowest vibration)\*
- Mag gauge
- Germicidal UV light with reflective shade\*
- Seismic restraints\*
- Aluminum framed filters
- Data ports
- Pharmacy diffuser
- Drip Pan

## Phocus Rx® : A Fully Integrated Pharmacy Compounding Validation Software Package

To optimize the validation and documentation of sterile compounding procedures, Baker offers fully-integrated Phocus Rx® software by Grifols in both BioChemGARD and EdgeGARD clean bench products. This fully-embeded solution is safe, reliable and easy to use .

- Built-in Phocus Rx keeps the compounding environment clean with no wires or devices within the hood. Compounding space is not altered.
- Phocus Rx uses a powerful 5 megapixel imaging system that closely focuses in on the names, numbers, labels, color and other details of drugs and syringes.
- Includes image recognition and barcode scanning features.
- Storage and retrieval image system allows documentation of the compounding process for quality purposes.
- Easily accessed from desktops, laptops, tablets, and mobile devices.
- Compounding status dashboard is automatically updated.
- Scalable and modular system is flexible and adaptable to the customer environment.



EdgeGARD® HF with PhocusRX®

\* Not UL listed with this option.

# EdgeGARD® VF

## Vertical-Flow Recirculating Clean Bench 4', 5' and 6' Models

The EdgeGARD® VF is a vertical-flow recirculating air clean bench that provides protection for samples and work procedures where product protection and particulate control are required.

Unlike conventional horizontal flow clean benches, the EdgeGARD VF provides vertical, uni-directional and controlled airflow over the entire work surface, while reducing energy consumption, noise and airflow turbulence.

Recognized as the industry's most reliable clean bench, this extension of Baker's EdgeGARD brand provides lower life-cycle costs and years of trouble-free operation.

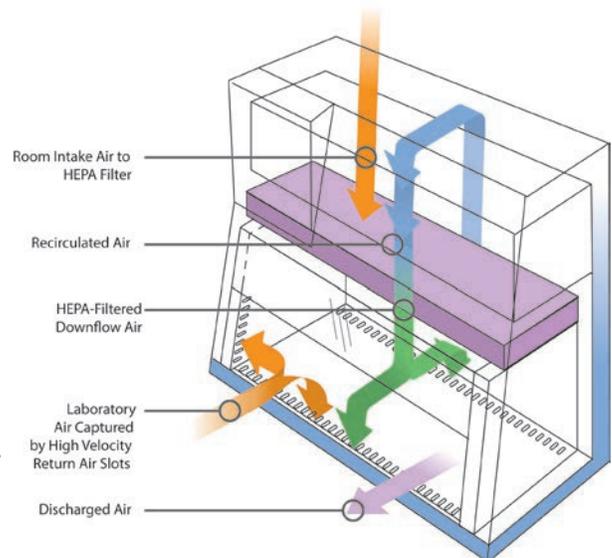


### Comfortable User Experience

- Slanted 10° viewscreen for operator comfort and direct line-of-sight viewing.
- Low noise level improves operator comfort and reduces effect of ambient noise in the lab.
- Well-lighted workspace reduces eyestrain.
- Provides ISO Class 4 (Class 10)\* protection by delivering HEPA-filtered air to the work surface.

### Baker Builds It Better

- Microbiologically challenged for product protection in accordance with NSF International 49.
- Exclusive high-velocity momentum air curtain to help ensure product protection without restricting access.
- One-piece stainless steel work surface helps prevent surface contamination.
- Designed for serviceability — includes access panels for all electrical components, while the primary HEPA supply filter is removed through the front plenum area.
- An additional pre-filter below work surface helps capture large particles and prolongs HEPA filter life.



Precision engineered for optimal airflow

\* For 0.5 micrometer particulates



## Versatile and Productive for Your Lab

- 14" high access opening accommodates a variety of application and instrument needs, and offers a wide work area for multiple users.
- Fits through standard doorways and down laboratory aisles.
- Easy to move and maneuver when configured with mobile stand, casters and pull bars.
- Hinged viewscreen opens to 30 <sup>3</sup>/<sub>8</sub>" allowing access to work area.

Available as a benchtop model or on a channel stand (with or without casters).

## Options and Accessories

- Plumbing: One petcock on right-hand side (option for more); petcock connection choices located on bottom, back and top for channel stand option
- Stationary stand
- Optional wide-tread, stainless steel casters, 5" diameter x 1", with brakes.

## Console Models

MODEL NUMBER	EG3252	EG4252	EG4320	EG5252
Electrical	115V, AC	115V, AC	115V, AC	115V, AC
Amps	12	16	16	16
Required Breaker	15 amps	20 amps	20 amps	20 amps
Exterior Width	38"	50"	50"	62"
Interior Width	34½"	46½"	46½"	58½"
Interior Height	28⅛"	28⅛"	34⅛"	28⅛"
Interior Depth	22"	22"	22"	22"
Exterior Height	64" to 66"	64" to 66"	70" to 72"	64" to 66"
Net Weight / Ship Weight	360 / 485 lbs	440 / 590 lbs	460 / 610 lbs	520 / 695 lbs
Filter Size	36"x30"x6"	48"x30"x6"	48"x36"x6"	60"x30"x6"

MODEL NUMBER	EG6252	EG6320	EG8252
Electrical	115V, AC	115V, AC	115V, AC
Amps (with/without outlet)	24/16	24/16	24 or 2x16
Required Breaker	24A	24A	24A
Exterior Width	74"	74"	98½"
Interior Width	70½"	70½"	95"
Interior Height	28⅛"	34⅛"	28⅛"
Interior Depth	22"	22"	22"
Exterior Height	64"	70"	64"
Net Weight / Ship Weight	680 / 880 lbs	720 / 920 lbs	800 / 1050 lbs
Filter Size	72"x30"x6"	72"x36"x6"	48"x30"x6" (2)

Note: Models EG4252, EG4320 and EG5252 include 11-foot line cord with 3-prong plug (7-foot cord on Model EG3252).

Models EG6252, EG6320 and EG8252 require a hard wire connection to junction box located in the lower inside right hand corner of the cabinet.

\*Exterior heights are listed as minimum dimensions, for maximum height add 2 inches.

## Filtration System

- Supply filter, zero-probed HEPA filter, 99.99% efficient on all particles 0.3 micron by DOP test
- Pre-filter, washable Scott Foam®
- Dust count, leak test and particle count by single particle monitor or cold DOP photometer which conforms to requirements of FS290b and U.S.A.F. T.O. 00-25-203

## Space-Saver Model

MODEL NUMBER	EGBIV22
Electrical	115V, AC
Amps	11.2
Required Breaker	15 amps
Net Weight / Ship Weight	200 / 325 lbs
Filter Size	24"x24"x6"

Note: This model includes a 9-foot line cord with 3-prong plug.

## Illumination

- Console models, 200 foot-candles at work surface
- Space-Saver model, 75 foot-candles at work surface

MODEL NUMBER	EG4VF	EG5VF	EG6VF
Size (nominal)	4'	5'	6'
Exterior Dimensions w/ Stationary Stand (w x d x h [min to max])	53 1/2" x 32" x [89 1/16" - 97 9/16"]	65 1/2" x 32" x [89 1/16" - 97 9/16"]	77 1/2" x 32" x [89 1/16" - 97 9/16"]
Interior Dimensions (w x d x h)	46" x 25 1/8" x 31 13/16"	58" x 25 1/8" x 31 13/16"	70" x 25 1/8" x 31 13/16"
Shipping Weight			
Benchtop model	435 lbs.	499 lbs.	564 lbs.
With channel stand	507 lbs.	576 lbs.	646 lbs.
Access Opening (working position)	14"	14"	14"
Access Opening (loading/cleaning position)	30 3/8"	30 3/8"	30 3/8"
Electrical Requirements	115 V, AC	115 V, AC	115 V, AC
Amps / Breaker	16 / 20	16 / 20	16 / 20

## General Specifications

- Interior workspace made from 16-gauge stainless steel.
- ISO Class 4 (Class 10)\* air cleanliness in the workspace.
- 16-gauge cold-rolled steel exterior construction with white powder coated finish.
- HEPA filters with 99.99% minimum efficiency in capturing 0.3 micrometer particles.
- Separate switches for blower and light; if blower is not on, light switch will not work.
- Large, easy-to-read magnehelic gauge confirms cabinet operation.
- Washable pre-filter extends HEPA filter life.
- One duplex on left-hand side (option for one on right-hand side).

## EdgeGARD® Horizontal Laminar-Flow Clean Bench

1. High-velocity return air slots to be located at the leading edges of work surface and side walls. Return air slots protect against backwash of dirty air entering the work area when items are placed within the air stream on the work surface.
2. Unit shall be all steel construction, 18-gauge, cold-rolled steel, with a white powder coated finish, stainless steel work surface and stainless steel inner work area side walls.
3. Unit shall be provided with permanent split capacitor type motor and special blower which automatically compensates for increasing pressure drop across filter in excess of that which is required by existing standards.
4. Complete unit shall be listed as certified by Underwriters Laboratory (UL) for cULus electrical, fire and mechanical safety.
5. All joints and seams offering a possible path of contaminated air from outside to the inside of the work area shall be sealed.
6. Framing for the filter seal shall be of rigid aluminum construction and only the filter media shall be exposed to the work area opening, to eliminate picture frame effect.
7. Unit shall have washable, reusable Scott Foam® pre-filters.
8. Each unit, before shipping, shall have a complete test to assure clean bench meets all requirements of ISO 14644. A copy of this test will be provided with the unit.
9. The unit manufacturer must be able to provide evidence that this unit has been tested by an independent laboratory or research organization.
10. Speed controller shall automatically compensate for voltage change to maintain constant voltage to motor while allowing for manual adjustments during filter loading.
11. Unit work surface shall feature 5/8" Spill Guard at rear to prevent accidental spillage into HEPA filter area.
12. The unit shall have standard HEPA filters for a protection effectiveness of 99.99% when filtering particles of 0.3 micron size.
13. A removable HEPA filter protective screen shall be provided.
14. Shall be provided with externally mounted GFCI-protected duplex outlet with circuit breaker.

## EdgeGARD® VF Vertical-Flow Recirculating Clean Bench

1. EdgeGARD® VF vertical flow clean bench is available in 4', 5' and 6' work surface widths. Each unit shall be provided with a certified copy of the factory tests showing that filter leak checks, electrical tests, down flow velocities, smoke patterns, and airflow balancing have been performed. Tests to prove Class 10 (ISO Class 4) air cleanliness for 0.5 micrometer particles for model design shall be available if requested.
2. Hinged view screens shall be constructed of ¼ inch shatterproof scratch and chemical resistant polycarbonate, with a maximum opening of 30" for equipment loading. To decrease glare and offer the best ergonomics, the view screen shall be mounted at a 10° angle from vertical.
3. Supply filters shall be front loading and meet the zero-probed HEPA 99.99% efficiency requirements on all particles 0.3 micron in size. System shall have washable pre-filters to extend HEPA filter life. Magnehelic pressure gauge(s) are provided to monitor filter loading and as a secondary means of monitoring mass airflow.
4. The cabinet body shall be double walled. The exterior walls shall be constructed of a single sheet of #16 gauge cold-rolled steel with a white powder coated finish. Internal side and back walls, as well as the work surface, shall be constructed of #16 gauge 304 stainless steel. The side wall and the back shall be of one-piece construction formed with radius 7/16" corners. Either a stainless steel air diffuser or filter protector is provided in the work area.
1. Interior Dimensions:
  - a) EG4VF – 46" L x 25 1/8" D x 31 13/16" H
  - b) EG5VF – 58" L x 25 1/8" D x 31 13/16" H
  - c) EG6VF – 70" L x 25 1/8" D x 31 13/16" H
5. High-velocity return air slots shall be located at the leading edges of the work surface and side walls. Return air slots protect against the backwash of dirty air entering the work area when items are placed within the air stream on the work surface.
6. Cabinet shall have a momentum air curtain down flow velocity profile, which provides a higher airflow velocity of 100 FPM nominal behind the view screen relative to a down flow velocity of 50-65 FPM nominal over the work surface.
7. Cabinet shall have a welded, full perimeter drain pan with 7/16" radius corners for cleaning ability with a 1" drain valve to capture any cleaning liquids or spills.
8. Each cabinet work area shall be provided with an internally mounted GFCI duplex 120V outlet with drip-proof cover and circuit breaker (mounted on the left), fluorescent lighting providing 100 foot-candles of illumination at work surface and electronic ballasts. The cabinet shall have separate switches for the blower and the light; if the blower is off, the light switch shall not work.
9. The cabinet shall be capable of automatically handling a 40% minimum increase in pressure drop across the filter without reducing total air delivery by more than 10%. A manual speed controller shall be capable of handling a minimum 112% increase in pressure drop across the filter. Test data to verify these capabilities shall be provided upon request.
10. Cabinet design shall utilize a steel plenum provided to allow 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. Service of the system shall be accessible from the front.
11. System shall be factory pre-wired and have a 17-foot external length power cord with 20 Amp plug (type NEMA 5-20P). System design shall have easy access to electrical panel.
12. All system components shall be certified by Underwriters Laboratory (UL61010-1 2<sup>nd</sup> Edition) for electrical, fire and personal safety.
13. Noise levels should meet 67 dBA or lower to provide operator comfort and reduce effect of ambient noise in the laboratory.
14. System shall be capable of moving through a standard 80" high doorway.
15. Cabinet shall have permanently affixed label located directly above the viewing window that has the following phrase: "Do not use for biological, chemical or radiological work where hazardous materials are present."
16. The system shall be warranted for three (3) years, parts and labor.

## Caution

A clean bench is not designed to protect personnel or the environment from potentially harmful agents. The adequacy of this product for the user's personal safety, as with any clean bench, should be determined by an industrial hygienist or safety officer. Site preparation information, architectural drawings, detailed dimensions and purchase specifications are available.

## 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 thirty-six months for units sold in the United States and twelve months for units sold internationally from the invoice date.

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.

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PROUDLY MADE IN THE U.S.A.



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