

# THE BAKER COMPANY

*Designed for Aseptic Compounding of Hazardous  
Chemotherapy and other Agents and IV Admixtures  
that can be Harmful to Pharmacy Personnel.*

## ChemoSHIELD® Barrier Isolator (negative pressure)



NEGATIVE PRESSURE

*The ChemoSHIELD®  
Barrier Isolator  
(negative pressure)  
Model CS500  
shown with front  
viewscreen closed  
and locked.*

### ChemoSHIELD® Barrier Isolator (negative pressure)

The Baker ChemoSHIELD® Barrier Isolator offers a contained, leak-tight negative pressure work area suitable for hazardous pharmaceutical compounds, chemotherapy agents or IV admixtures that can be harmful to pharmacy personnel. ChemoSHIELD® creates a unidirectional HEPA-filtered airflow of

better than ISO Class 5 (Class 100) air cleanliness conditions within the negative pressure chamber to prevent migration of hazardous contaminants to the outside and to minimize cross-contamination across the direct compounding area.



*Fixed Position, Standing  
Model CS500 shown*



*Fixed Position, Seated  
Model CS500 shown*

*ChemoSHIELD® Barrier Isolator (negative pressure), with adjustable mounting stand can be configured for standing or sitting operation. Hard exhaust to external exhaust system (not shown) is from an 8" exhaust transition flange visible at top left.*



*A viewscreen top hinge allows full opening for loading of instrumentation or equipment. The viewscreen is locked to prevent unauthorized opening*



Constructed to UL standards for performance and safety.



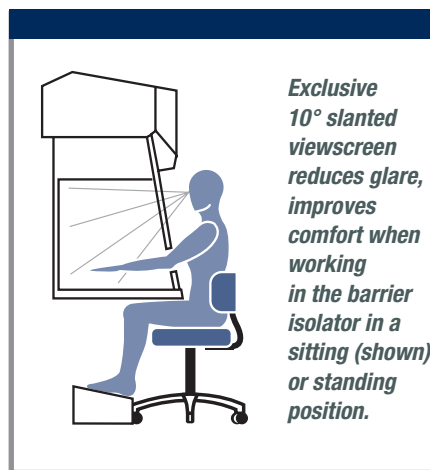
Personnel, Product and Environment. Offers environmental protection from vapors and gases only if exhausted to treated exhaust system.

## Ergonomic Design Combines Convenience and Safety

With the introduction of the ChemoSHIELD® negative pressure barrier isolator, The Baker Company offers an adaptive ergonomic design, combined with a unique airflow management system and proven containment technology, to improve comfort and increase productivity while assuring safety for both patient and pharmacy personnel alike.

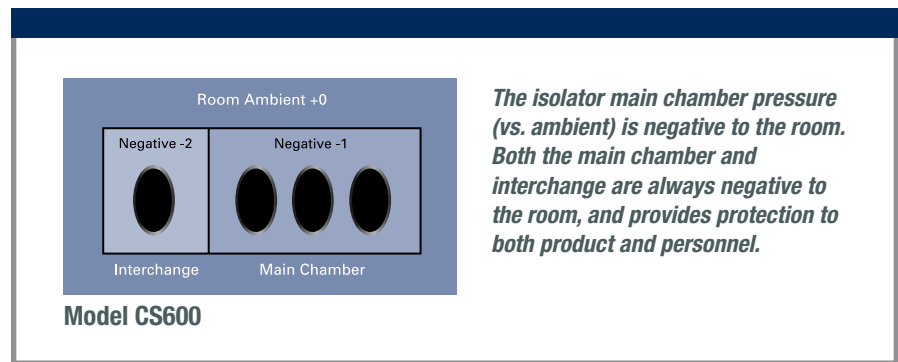
- The adjustable stand permits work surface heights to be fixed at 36" (seated) or 45" (standing).
- The slanted viewscreen is made of shatterproof acrylic plastic, and angled at 10° for optimum ergonomic comfort and safety.

Figure 1



- The viewscreen remains closed and locked during normal operation.
- A spacious, negative pressure interchange (pass-thru chamber) allows safe and easy transfer of materials into or out of the chamber.
- The viewscreen top hinge allows full opening for initial loading of pharmacy instrumentation or equipment.
- Oval gloveports offer maximum reach to all interior surfaces for users of different heights, standing or sitting.

## Pressure Configurations



*The isolator main chamber pressure (vs. ambient) is negative to the room. Both the main chamber and interchange are always negative to the room, and provides protection to both product and personnel.*

- Ambidextrous gloves are positioned in the main chamber to allow total access to the interior. CS600 has three gloves in main chamber. CS500 has two gloves in main chamber.
- The interchange door to the room includes one ambidextrous glove to permit manipulation of contents for surface decontamination of items moved into or out of the main chamber.

## Cabinet Containment, Personnel and Product Protection

The barrier isolator pass-thru interchange and main chamber pressure (vs. ambient) are negative to the room. In the standard configuration the pass-thru interchange is slightly more negative than the main chamber to prioritize cleanliness in the main chamber while ensuring containment of hazardous compounds within the main work area.

The interchange door and interchamber door are mechanically interlocked to prevent both doors from being opened simultaneously.

- Individual supply and exhaust HEPA filters service the main chamber and interchange.

- Front-loading HEPA filters are 99.99% efficient. They provide better than ISO Class 5 (Class 100) air in both the main chamber and pass-thru interchange.
- Unidirectional (downflow) air removes airborne particulates from the work area and sweeps them to the exhaust HEPA filter.
- Exhaust filters are safely and easily removed via *bag-out* provision to contain hazardous compounds prior to disposal.
- A stainless steel air diffuser in the main chamber and interchange offers additional protection to supply filter.
- Key lock on cabinet front prevents unauthorized opening of fully-hinged front viewscreen that may compromise containment capability or aseptic environment.
- Mass airflow monitor audio/visual alarm system warns the user when the exhaust system has inadequate airflow.

### NIOSH Alert

NIOSH calls for cabinets used to prepare chemotherapy drugs to be exhausted to the outdoors because of the risk of vaporization of hazardous drugs. ChemoSHIELD is designed to comply with the NIOSH alert and requires connection to an externally vented exhaust system.

## ChemoSHIELD® Performance Summary

| For aseptic compounding of hazardous chemotherapy agents and IV admixtures that can be harmful to pharmacy personnel | Pass-Thru Interchange Pressure | Work Chamber Pressure | Protection Profile<br>Not intended for use with biologically hazardous materials |                     |   | Exhaust   |
|--|--------------------------------|-----------------------|--|---------------------|---|---|
|  | Negative To Room               | Negative To Room      | Product Protection   | Operator Protection | Environmental Protection  |   |
| Standard Ratio Product/Personnel   | --                             | -                     | Yes  | Yes                 | Protects environment from particulates. Also protects environment from vapors and gases if connected to a treated exhaust system. | HEPA filter to facility exhaust system through hard connection via 8" collar. |

Both the main chamber and interchange are always negative to the room.

### Interchange

The HEPA-filtered interchange permits secure pass-thru in and out of the work area.

- The clear-view outer interchange door is left-hand swing. The door seals against peripheral gaskets to maintain internal negative pressure. This door is opened only when interchamber door is closed.
- The interchamber pass-thru door to the main work area swings open for easy transfer of materials between the interchange and main chamber while under negative pressure. This door is opened only when outer door is closed.
- Mechanical interlocks prevent both the interchamber door and exterior pass-thru door from being opened at the same time.

### Airflow Plenum

ChemoSHIELD® employs a high performance airflow system that provides optimum protection from particulates, together with extended filter life and reduced cost of ownership.

- The filter configuration creates an internal top to bottom airflow with a uniform *piston effect* to sweep particulates from the work area to the HEPA filter.
- The filter cross-section covers 100% of the work area.

- The unique plenum apertures and distributes air across, then through the HEPA supply filter, improving downflow uniformity and extending useful filter life.
- The filter mount provides a direct seal of the filter to the plenum and simplifies filter replacement.

### Optimizes Interior Space, Simplifies Cleaning

The main chamber work area offers more than 5.1 sq. ft. of work space measuring 31"W x 24"D for the CS500. The CS600 offers more than 7.6 sq. ft. of work space measuring 46"W x 24"D. The interior back wall is vertical for maximum use of interior space.

- All interior surfaces of the main chamber and pass-thru interchange are Type 316 stainless steel for superior corrosion resistance.
- Back and side walls are polished to a non-glare, easy-to-clean finish.
- Interior surfaces can be accessed via gloves for sanitization.
- The interior cabinet  $\frac{7}{16}$ " radius corners permit easy wipe down.
- The sectional work surface trays are fully removable. Trays stack easily to either side to simplify changing of exhaust HEPA filters.
- Exterior, scratch-resistant, PermaWhite™ baked enamel finish provides resistance to demanding pharmacy environments.

### Options and Accessories

Many options, accessories and modifications are factory installed and must be specified when ordering. Commonly requested options are listed below. For detailed information on accessories and modifications, contact The Baker Company.

- Vinyl bags for filter disposal
- Ergonomically adjustable footrest; field installed
- Seismic restraints; field installed
- Replacement gloves

### To Order

For ordering information, terms and conditions of sale, contact The Baker Company or visit the Baker Web site at [www.bakerco.com](http://www.bakerco.com) for the name of your authorized Baker Company representative.

## ChemoSHIELD® Design Features

- 1 Slanted viewscreen sloped 10° for the most comfortable head and elbow position when working; minimizes arm extension required to reach the work surface.
- 2 8" exhaust collar for hard transition to facility exhaust system.
- 3 Fluorescent lamp on/off switch.
- 3a Auxiliary switch for duplex electrical outlet(s).
- 4 Telescoping stand can be configured from 36" to 45" work surface height before glovebox is hard-connected to facility exhaust system.
- 5 Large, easy-to-read magnehelic gauges display negative pressure in interchange and work area with respect to room.
- 6 Fluorescent lighting minimizes heat output and improves eye comfort.
- 7 Hinged viewscreen is closed and locked for normal operation, opens fully for loading equipment or instrumentation.
- 8 Negative pressure interchange permits secure pass-thru in and out of the work area.
- 9 Negative pressure work area.
- 10 Interlocking interchamber pass-thru door restricts opening of inner-chamber outer door when interchamber door is open.
- 11 Oval gloveports permit maximum reach to all interior surfaces.
- 12 Front access to supply HEPA filters (1 each, main chamber and interchange) permits easier filter replacement.
- 13 Individual exhaust HEPA filters, with bag-out design, service the main chamber and interchange.
- 14 Audio/visual mass airflow monitor warns of inadequate airflow.



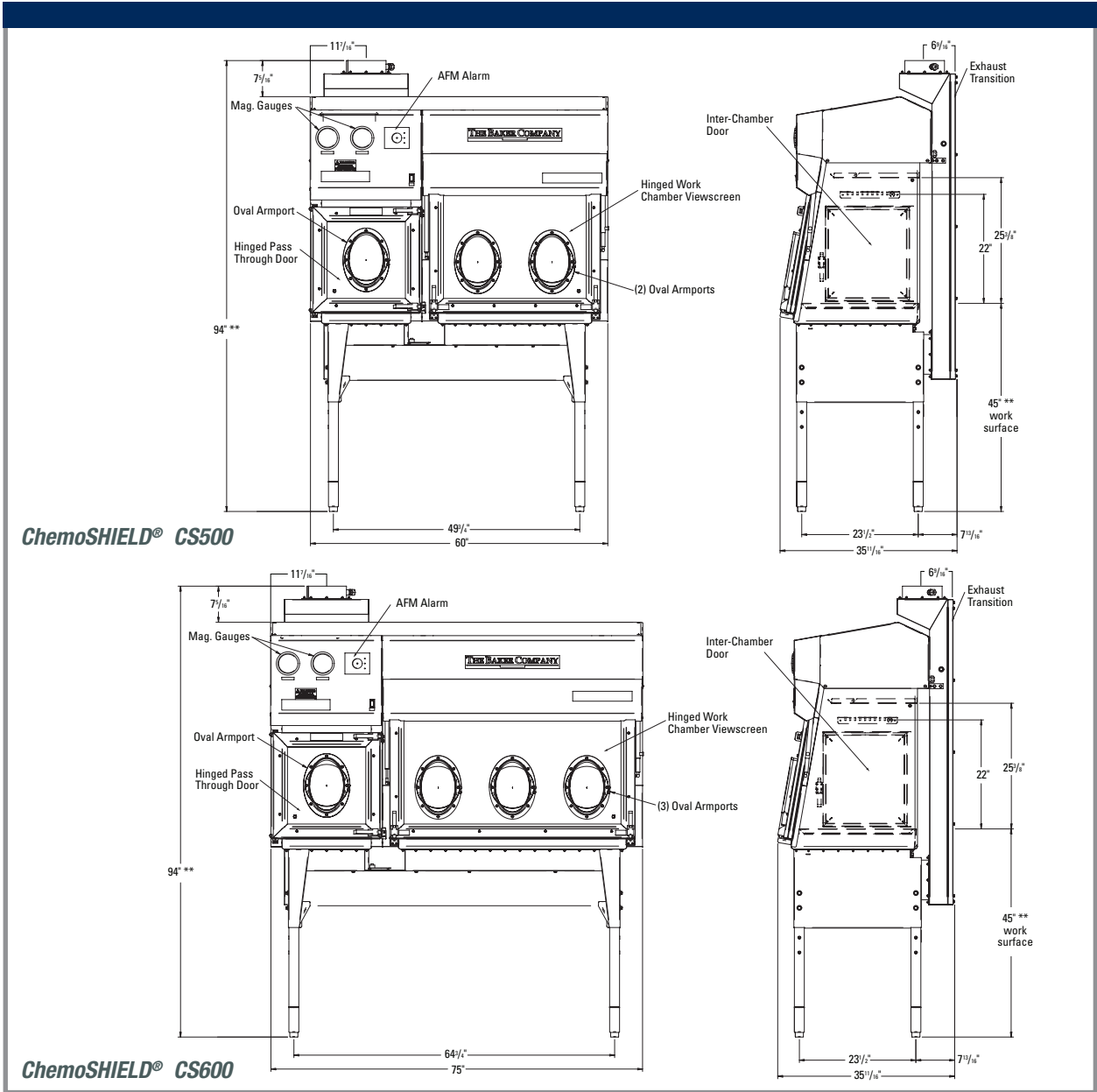
## Controls

Because the cabinet airflow is created by a facility exhaust system external to the cabinet, the need for on-board controls is minimal.

- Large format, easy-to-read independent magnehelic gauges are positioned side-by-side to indicate relative negative pressure in the pass-thru interchange and the main work area with respect to the room.
- The externally mounted fluorescent lamps are controlled by an on/off switch on the main control panel.
- Mass airflow monitor measures airflow in exhaust and warns users of inadequate exhaust airflow (audible/visual)

## Functional Utilities

- A single power cord for electrical connection is included.
- Externally mounted fluorescent lamps illuminate both the pass-thru interchange and work area while minimizing heat buildup in the cabinet.
- An ergonomically styled multi-position IV bar allows hanging of IV bags or bottles.
- Duplex outlet, ground-fault interrupt (GFI), IISV, AC, with weather-proof cover.



**Site Preparation**

**Summary Specification, ChemoSHIELD® Barrier Isolator**

| Model No. | Size | Amps    |       | Exhaust Connection*                            | Interior Dimensions, Nominal |                      | Exterior Dimensions, Nominal | Net Weight | Ship Weight |
|-----------|------|---------|-------|--|------------------------------|----------------------|------------------------------|------------|-------------|
|           |      | Ballast | Total |  | Interchange                  | Main Chamber         |                              |            |             |
| CS500     | 5'   | 1.0     | 1.0   | 310CFM with static pressure -1.8"wc at exhaust | 17 1/2"W x 24"F-B x 25"H     | 31"W x 24"F-B x 25"H | 60"W x 35"F-B x 94"H**       | 570 lbs    | 660 lbs     |
| CS600     | 6'   | 1.0     | 1.0   | 375CFM with static pressure -2.0"wc at exhaust | 17 1/2"W x 24"F-B x 25"H     | 46"W x 24"F-B x 25"H | 75"W x 35"F-B x 94"H**       | 615 lbs    | 815 lbs     |

\* Requires connection to facility exhaust system with minimum 375 CFM for the CS600, 310 CFM for the CS500 and negative static pressure of -2.0" for CS600, -1.8" for CS500 water column at exhaust. Connection via 8" flange. If connected to treated system, offers protection to environment from vapors and gases.

\*\*At maximum raised floor stand position of 45" work surface height. Work surface elevation may be reduced to minimum 36" height, reducing exterior height to 85". Removing leg levelers will reduce overall height to 79". Once preferred configuration is determined (standing or seated), cabinet must be hard-connected to facility exhaust system.

## Purchase Specification ChemoSHIELD® Barrier Isolator (negative pressure)

1. Cabinet shall maintain a negative pressure in both the work area and the interchange.
2. Cabinet shall provide better than ISO Class 5 (Class 100) HEPA-filtered air across 100% of the work surface and in the interchange.
3. Filtered unidirectional airflow provides better than ISO Class 5 (Class 100) air cleanliness conditions within the chamber. Gas-tight construction coupled with negative pressure prevents contaminants from the outside from entering the chamber and contaminants from the work area from migrating to the outside.
4. Work surface airflow shall be from top-to-bottom to achieve a *piston effect*, sweeping particulates from the work area to the HEPA filter.
5. Cabinet interchange negative pressure shall be visually verifiable by an independent magnehelic gauge on the main control panel.
6. The cabinet interchange outer door shall be of clear-view, shatter-proof polycarbonate with left- hand swing.
7. The cabinet interchamber door to the work area shall be 12 Ga., 316 SS with hinge for opening.
8. Cabinet work area negative pressure shall be visually verifiable by an independent magnehelic gauge on the main control panel.
9. The hinged viewscreen shall be slanted at an angle of 10° from vertical.
10. The viewscreen shall be capable of fully opening to load equipment or instruments.
11. The hinged viewscreen shall have a key lock to prevent unauthorized opening.
12. Viewscreen shall be constructed of shatter-proof clear polycarbonate.
13. Viewscreen shall have three gloveports for the CS600. Two gloveports for the CS500. Gloves shall be nitrile rubber. Gloves are ambidextrous.
14. Stainless steel gloveports shall be oval to permit easy reach to all work surface areas.
15. The pass-thru interchange shall have one oval gloveport with a nitrile ambidextrous rubber glove.

16. All contaminated ducts, plenums and work area side walls shall be permanent metal construction and maintained under negative pressure.
17. Dimensions of the cabinet interior shall be apportioned as follows:
  - a. work area:
    - CS500 – 31"W x 24"F-B x 25"H
    - CS600 – 46"W x 24"F-B x 25"H
  - b. interchange:
    - CS500/CS600 – 17½"W x 24"F-B x 25"H
18. Cabinet shall employ plenum to provide more uniform airflow to the supply filter.
19. Supply HEPA filters shall be front-loading.
20. Exhaust HEPA filters shall be *bag-out* design.
21. Plenum assembly shall be provided to allow the filters to be directly clamped to the plenum against a closed-cell neoprene gasket. The plenum applies force to full perimeter of filters, rather than point force.
22. Complete unit shall be certified by Underwriters Laboratory (UL) for electrical, fire and personal safety.
23. Cabinet exterior construction:
  - a. seal panels of 16-gauge, cold-rolled steel
  - b. dress panels of 18-gauge, cold-rolled steel, painted PermaWhite™.
24. Cabinet interior (work area) construction shall be one-piece, 16-gauge, Type 316 stainless steel, with a smooth, ⅜" radius between rear and side walls, and easily cleanable, radiused corners on the work surface tray.
25. Work area side walls and rear wall to be one-piece construction.
26. A straight back wall shall be provided to maximize work area and easily accommodate pharmacy equipment.
27. Work area shall be outfitted with protected work area duplex outlet with weatherproof cover and circuit breaker.
28. Cabinet shall have a unitized drain pan with ⅜" radius on all sides and a fully-removable work surface to facilitate cleaning.
29. A Type 316 stainless steel air diffuser and filter protector shall be provided in work area and pass-thru chamber (Interchange).
30. Each unit, before shipping, shall have a complete physical test to assure cabinet meets performance requirements. A copy of this test will be provided with the unit.

31. External adjustable damper provided to compensate for changing resistance of exhaust and supply filters.
32. A single power cord and plug shall be provided for electrical power source.
33. The unit shall have standard HEPA filters for a protection effectiveness of 99.99% when filtering particles of 0.3 micron size.
34. The unit shall be configurable for use while sitting or standing.
35. The unit shall include an adjustable stand with telescoping legs to allow the work surface height to be fixed at 36" or 45".
36. Cabinet shall pass a 30 minute leak test per the American Glove Box Society standard.

## 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 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 which 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.)

# THE BAKER COMPANY

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# THE BAKER COMPANY

*Designed for Aseptic Compounding  
of Non-Hazardous Pharmaceuticals.  
Available in four models ranging from 4' to 8'.*



## **SterilSHIELD®** Compounding Aseptic Isolator (positive pressure)



*SterilSHIELD® Compounding Aseptic Isolator (Model SS600 shown) includes an adjustable mounting stand. The work surface height can be set at 30 $\frac{1}{8}$ " to 38 $\frac{5}{8}$ " depending on preference for sitting or standing.*

### **SterilSHIELD® Compounding Aseptic Isolator (positive pressure)**

The Baker SterilSHIELD® Barrier Isolator offers a contained, positive pressure work area for pharmacy applications. Designed specifically for aseptic compounding of non-hazardous drugs and to meet or exceed the requirements of USP<797>, the

SterilSHIELD® creates a HEPA-filtered unidirectional airflow of better than ISO Class 5 (Class 100) air cleanliness conditions within the direct compounding area to prevent contaminants from the outside entering the chambers.

### **Unidirectional Airflow**

- Immediate removal of contamination.
- Rapid recovery to ISO Class 5.
- Shorter wait time for ingress/egress of materials.
- HEPA-filtered pass-thru chamber allows better process flow.
- Combination door sash facilitates removal of outer packaging and wipe down.

### **Ergonomic Design**

- The slanted viewscreen is made of shatterproof acrylic plastic, and angled at 10° for optimum ergonomic comfort and safety.
- The viewscreen with top hinge allows full opening for loading and unloading of pharmacy instrumentation or equipment.



*A viewscreen top hinge allows full opening for loading of instrumentation or equipment.*

- Oval gloveports offer easy reach to interior surfaces for users of different heights.
- Three glove positions (SS600); 2-glove (SS500 and SS400), 4-glove, 2 on each side (SS800); in main chamber allow total access to the interior.
- Spacious, positive pressure interchange (pass-thru chamber) allows clean and easy transfer of materials in or out of the chamber.
- An adjustable stand allows users to configure the cabinet for use standing or sitting.



Not intended for use with biologically hazardous materials.

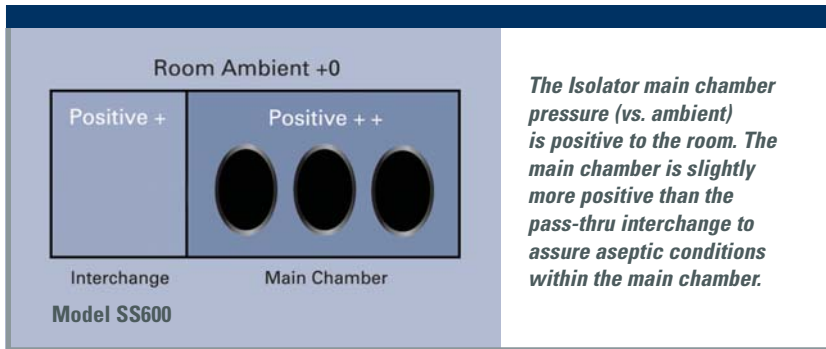


Constructed to UL standards for performance and safety.



StediVOLT®





### Product Protection

The Isolator main chamber pressure (vs. ambient) is positive to the room.

- The main chamber is slightly more positive than the pass-thru interchange to maintain aseptic conditions in the main chamber.

- The pass-thru interchange is positive, but slightly less positive than the main chamber to assure aseptic conditions within the main working chamber.
- Full-ceiling, front-loading HEPA supply filter is 99.99% efficient; provides better than ISO Class 5 (Class 100) air within the pass-thru and main working chambers.

- Unidirectional (downflow) airflow purges airborne particulates from the work area.
- Stainless steel air diffuser in main chamber and interchange provides unidirectional airflow and protects the HEPA filter.

## SterilSHIELD® Performance Summary

| For aseptic compounding of non-hazardous pharmaceutical compounds | Pass-Thru Interchange Pressure | Work Chamber Pressure | Protection Profile<br>Not intended for use with biological or chemical hazards |                     |                          | Downflow | Exhaust        |
|---|--------------------------------|-----------------------|--|---------------------|--------------------------|----------|----------------|
|   | Positive To Room               | Positive To Room      | Product Protection   | Operator Protection | Environmental Protection |          |                |
| <b>Pressure Ratio</b>   | <b>+</b>                       | <b>++</b>             | Yes  | NA*                 | No                       | HEPA     | Vented To Room |

Both the main chamber and interchange are always positive to the room. The Baker SterilSHIELD® cabinet provides protection to product in the work chamber.  
 \* Cabinet is not designed to be used with hazardous substances.

### Plenum Design

SterilSHIELD® employs a unique, high performance airflow system that provides optimum protection from particulates, extends filter life and reduces cost of ownership.

- The filter configuration creates internal airflow from top to bottom for unidirectional *piston effect* to sweep

particulates from work area to HEPA filter. The filter cross section covers 100% of the work area.

- The unique plenum apertions and distributes air across, then through the HEPA supply filter, improving down-flow uniformity, extending useful filter life and reducing noise.
- The filter mount provides a direct seal of the filter to the plenum and simplifies filter replacement.



*SterilSHIELD® Model SS600 shown configured at 30" work surface height for sitting position.*

## Construction

A telescoping stand adjustable from 30<sup>1</sup>/<sub>8</sub>" or 38<sup>5</sup>/<sub>8</sub>" work surface height is standard. An optional electric-over-hydraulic ergonomic lift system is available.

- The main chamber work area offers ample work space.
  - SS400, 31<sup>3</sup>/<sub>8</sub>"W x 21<sup>1</sup>/<sub>8</sub>"D, 4.5 sq.ft.
  - SS500, 39<sup>3</sup>/<sub>8</sub>"W x 24"D, 5.5 sq.ft.
  - SS600, 57<sup>3</sup>/<sub>8</sub>"W x 24"D, 7.1 sq.ft.
  - SS800, 30<sup>3</sup>/<sub>8</sub>"W x 21<sup>1</sup>/<sub>8</sub>"D, 4.5 sq.ft., each side
- Interior back and side walls are stainless steel, polished to a non-glare, easy-to-clean finish. Separate work surface tray is fully removable.
- Exterior, scratch-resistant PermaWhite™ baked enamel finish provides resistance to demanding pharmacy environments.
- Interior surfaces of the main chamber can be accessed for initial and/or periodic sanitization by gloved hand.
- The interior cabinet and work tray have radius corners for easy wipe down.

## Interchange

The HEPA-filtered interchange permits secure pass-thru in and out of the work area.

- The outer interchange door is clear-view shatter-proof acrylic plastic with left-hand swing. (The SS800 has doors on both ends. Left door swings left; right door swings right.)
- A convenient lift-up sash opens to 8" to permit quick transfer of small items without opening the door, and allows users to remove outer packaging and wipe down.
- The outer door seals against peripheral gaskets to maintain internal positive pressure; this door is opened only when interchange door is closed.
- The internal pass-thru door is vertical lift for maximum use of space and permits easy transfer of materials in or out of the positive pressure work area.

## Microprocessor Controls

The microprocessor controller with touchpad membrane control offers simple, reliable operation without relays or switches.

- The unique moisture-proof membrane control surface is easily cleaned.
- Large format, easy-to-read independent magnehelic gauges are positioned side-by-side to indicate relative positive pressure in main work area and interchange with respect to the room.

## StediVOLT® Motor Speed Controller

The Baker exclusive StediVOLT® motor speed controller reduces the risk of performance degradation due to line voltage fluctuations.

- StediVOLT® minimizes changes in cabinet performance due to routine voltage fluctuations, as well as voltage changes caused by high-demand or brownout conditions.
- StediVOLT® reads incoming voltage, automatically compensates for low and high voltage, and maintains proper blower speed to prevent periods of unbalanced airflow which may contribute to loss of aseptic conditions (product protection).



## Functional Utilities

- A single power cord for electrical connection is included.
- A fluorescent lamp with ballast illuminates the work area.
- An adjustable, ergonomically styled multi-position IV bar allows hanging of IV bags or bottles.
- The ½" ball valve drain is located front left, to simplify cleaning.
- An exhaust connection is not required; exhaust air is vented to room.

## Options and Accessories

For convenience many options, accessories and modifications are factory installed and must be specified when ordering. Commonly requested options are listed below. For detailed information on accessories and modifications, contact The Baker Company.

- Duplex outlet, ground-fault interrupt (GFCI), 115V, AC, with weather-proof cover; specify when ordering (main working chamber). Iris port and duplex outlet are standard on SS800.
- Single petcock located right wall, center; specify when ordering (option for 2 on right hand side).
- Ergonomically adjustable footrest; field-installed
- Seismic restraints; field installed
- Electronic-over-hydraulic ergonomic lift stand. Allows infinite adjustments of work surface height from 22<sup>7</sup>/<sub>8</sub>" to 40<sup>3</sup>/<sub>8</sub>".
- IRIS ports to allow data cables to connect with exterior devices (standard on SS800).
- Stainless steel work trays to help organize work and facilitate ingress/egress.
- Glove liners
- Gloves and glove sleeves (nitrile)

## To Order

For ordering information, terms and conditions of sale, contact The Baker Company or visit the Baker Web site at [www.bakerco.com](http://www.bakerco.com) for the name of your authorized Baker Company representative.

## SterilSHIELD® Design Features



**1** Slanted viewscreen sloped 10° for the most comfortable head and elbow position when working; minimizes arm extension required to reach the work surface.

**2** Magnehelic gauges face the user for greater visibility.

**3** Microprocessor controller with touchpad membrane control panel simplifies operation.

**4** Optional hydraulic mobile stand (shown) goes infinitely from work surface height of 22<sup>3</sup>/<sub>8</sub>" to 40<sup>3</sup>/<sub>8</sub>". Standard mounting stand (illustrated elsewhere) is set from work surfaces of 30<sup>3</sup>/<sub>8</sub>" to 38<sup>3</sup>/<sub>8</sub>".

**5** StediVOLT® voltage regulator automatically adjusts for low and high voltage situations to maintain proper airflow.

**6** Large, easy-to-read magnehelic gauges display positive pressure in interchange and work area with respect to the room.

**7** Fluorescent lighting minimizes heat output and improves eye comfort.

**8** Non-glare work surface improves visual comfort.

**9** Hinged viewscreen opens fully for loading equipment or instrumentation.

**10** New twin door interchange design permits secure pass-thru in and out of the work area through two methods. The full-swing interchange door offers maximum capacity. A convenient lift-up sash opens to 8" for quick transfers without opening the outer door.



SterilSHIELD® SS400



SterilSHIELD® SS500



SterilSHIELD® SS600



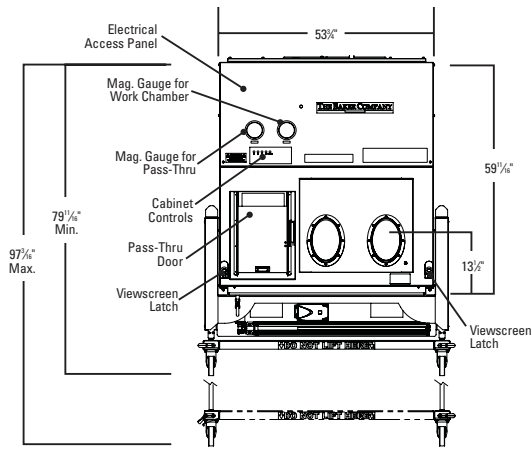
SterilSHIELD® SS800

## Site Preparation

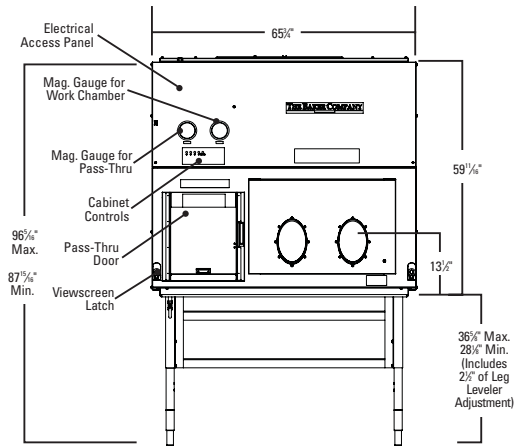
### Summary Specification, SterilSHIELD® Glovebox

| Model No. | Size | Electrical | Amps         |         |       | Interior Dimensions, Nominal  |   | Exterior Dimensions, Nominal  | Net Weight | Ship Weight |
|-----------|------|------------|--------------|---------|-------|---|---|---|------------|-------------|
|           |      |            | Blower Motor | Ballast | Total | Pass-Thru   | Main Chamber  |   |            |             |
| SS400     | 4'   | 115V, AC   | 6.6          | 1.1     | 7.7   | 14 <sup>1</sup> / <sub>16</sub> "W x 21 <sup>1</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H            | 31 <sup>1</sup> / <sub>16</sub> "W x 21 <sup>1</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H            | 53 <sup>3</sup> / <sub>4</sub> "W x 33 <sup>1</sup> / <sub>4</sub> "F-B x 87 <sup>3</sup> / <sub>4</sub> "H – 96 <sup>1</sup> / <sub>16</sub> "H  | 650 lbs    | 850 lbs     |
| SS500     | 5'   | 115V, AC   | 6.6          | 1.1     | 7.7   | 18 <sup>1</sup> / <sub>16</sub> "W x 20 <sup>3</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H            | 39 <sup>3</sup> / <sub>16</sub> "W x 20 <sup>3</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H            | 65 <sup>3</sup> / <sub>4</sub> "W x 33 <sup>1</sup> / <sub>4</sub> "F-B x 87 <sup>3</sup> / <sub>4</sub> "H – 96 <sup>1</sup> / <sub>16</sub> "H  | 700 lbs    | 900 lbs     |
| SS600     | 6'   | 115V, AC   | 6.6          | 1.1     | 7.7   | 18 <sup>1</sup> / <sub>16</sub> "W x 20 <sup>3</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H            | 51 <sup>1</sup> / <sub>16</sub> "W x 20 <sup>3</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H            | 77 <sup>3</sup> / <sub>4</sub> "W x 33 <sup>1</sup> / <sub>4</sub> "F-B x 87 <sup>3</sup> / <sub>4</sub> "H – 96 <sup>1</sup> / <sub>16</sub> "H  | 800 lbs    | 1000 lbs    |
| SS800*    | 8'   | 115V, AC   | 6.6          | 1.1     | 7.7   | 14 <sup>1</sup> / <sub>16</sub> "W x 21 <sup>1</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H, each side | 30 <sup>3</sup> / <sub>16</sub> "W x 21 <sup>1</sup> / <sub>8</sub> "F-B x 26 <sup>1</sup> / <sub>2</sub> "H, each side | 109 <sup>1</sup> / <sub>2</sub> "W x 33 <sup>1</sup> / <sub>4</sub> "F-B x 87 <sup>3</sup> / <sub>4</sub> "H – 96 <sup>1</sup> / <sub>16</sub> "H | 1270 lbs   | 1700 lbs    |

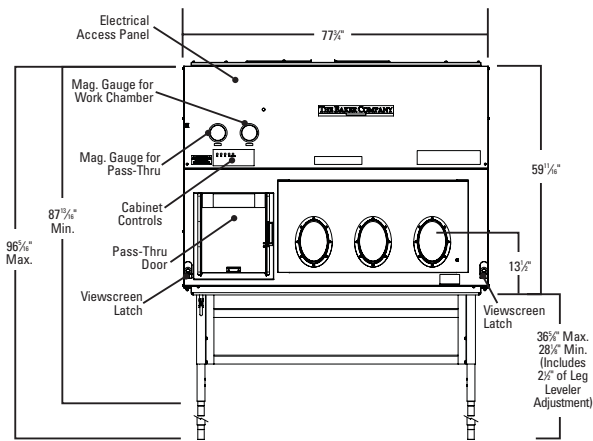
\*SS800 is comprised of two SS400 models with a tunnel, is shipped in two pieces, and is assembled on site.



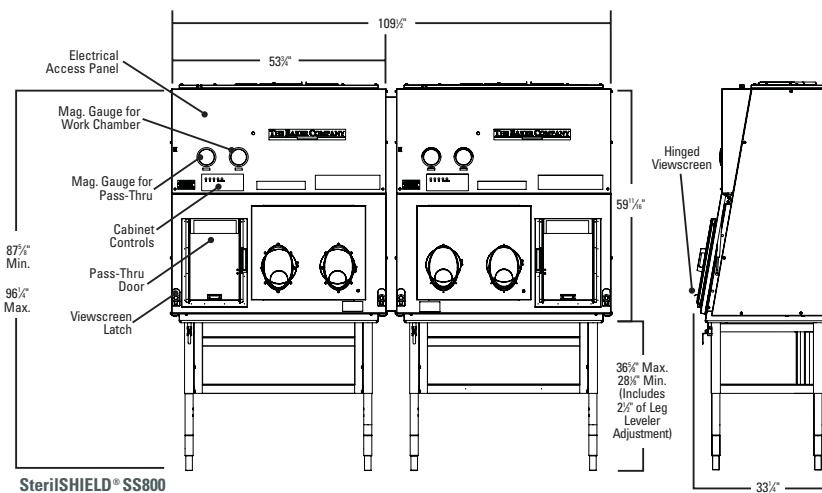
SteriSHIELD® SS400



SteriSHIELD® SS500



SteriSHIELD® SS600



SteriSHIELD® SS800

### Purchase Specification SterilSHIELD® Barrier Isolator Isolator (positive pressure)

1. Cabinet shall maintain a positive pressure in both the work area and the interchange.
2. Cabinet shall provide better than ISO Class 5 (Class 100) internal air cleanliness conditions within main chamber and the interchange.
3. Filtered unidirectional airflow of better than ISO Class 5 (Class 100) air cleanliness conditions within the chambers prevents ingress of contaminants from the outside of entering the chambers. Factory test reports are shipped with the cabinet.
4. Work surface airflow shall be from top-to-bottom to achieve a *piston effect* sweeping aerosols and particulates from the work area.
5. Cabinet interchange positive pressure shall be visually verifiable by an independent magnehelic gauge on the main control panel.
6. The cabinet interchange outer door shall be of clear-view plastic, ¼" Lexan®, with left hand swing. (The SS800 has two doors, one on each end. The left side swings left and the right side swings right.)
7. The cabinet interchange inner door to the work area shall be solid clear-view plastic, ¼" Lexan®, with a vertical lift door for maximum use of work space.
8. Cabinet work area positive pressure shall be visually verifiable by an independent magnehelic gauge on the main control panel.
9. The hinged viewscreen shall be slanted at an angle of 10° from vertical.
10. The viewscreen shall be capable of fully opening to load equipment or instruments.
11. Viewscreen shall be constructed of shatter-proof clear-view plastic, ¼" Lexan®.
12. Viewscreen shall have three gloveports (SS600), two gloveports (SS400, SS500), four gloveports (SS800). Gloves are ambidextrous.
13. Standard gloves are 2-piece nitrile. Sleeve is a thick 15 mil and hand piece is thin and offers good dexterity. Hand piece is disposable.
14. Gloveports shall be oval to permit easy reach to all work surface areas.

15. Dimensions of the cabinet interior (wall to wall) shall be apportioned as follows:
  - a. work area:
    - SS400 – 31½"W x 21½"D x 26½"H
    - SS500 – 39¾"W x 20¾"D x 26½"H
    - SS600 – 51¾"W x 20¾"D x 26½"H
    - SS800 – 31¾"W x 21½"D x 26½"H, each side
  - b. interchange:
    - SS400 – 14¾"W x 21½"D x 26½"H
    - SS500/SS600 – 18¾"W x 20¾"D x 26½"H
    - SS800 – 14¾"W x 21½"D x 26½"H, each side
16. Cabinet features a unique plenum design to provide a unidirectional airflow system that provides uniform airflow to the supply filter and provides optimum protection from particulates, extends filter life and reduces cost of ownership.
17. Supply filter shall be front-loading.
18. A plenum assembly shall be provided to allow the filter 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.
19. Complete unit shall be listed by Underwriters Laboratory (UL) for electrical, fire and personal safety.
20. Cabinet shall have a microprocessor-based membrane control panel mounted on the front of the cabinet.
21. Cabinet exterior construction:
  - a. seal panels of 16-gauge, cold-rolled steel
  - b. dress panels of 18-gauge, cold-rolled steel, painted PermaWhite™.
22. Cabinet interior (work area) construction: one-piece 16-gauge, Type 304 stainless steel, with a smooth, ⅜" radius between rear and side walls, and easily cleanable, radius corners on the work surface tray.
23. A straight back wall shall be provided to maximize work area and easily accommodate pharmacy equipment.
24. Work area shall be capable of being outfitted with a GFCI protected duplex outlet with weather-proof cover and circuit breaker.
25. Work area shall be capable of being outfitted with a petcock, right wall.
26. Cabinet shall have a unitized drain pan with ⅜" radius on all sides and a fully-removable work surface and work surface supports to facilitate cleaning.

27. Stainless steel air diffuser that provides unidirectional airflow and helps protect the HEPA filter shall be provided in work area.
28. Prior to shipping, each unit shall have a complete physical test to assure cabinet meets performance requirements. A copy of this test will be provided with the unit.
29. Speed controller shall automatically compensate for voltage change to maintain constant voltage to motor while allowing for manual adjustments during filter loading.
30. External adjustable damper shall be provided to compensate for changing resistance of supply filter.
31. A single power cord and plug shall be provided for electrical power source.
32. External plumbing connections for the optional petcocks shall be made through the back, bottom or top of the cabinet and not the sides, allowing zero clearance between the unit and the building walls or equipment to its right and left.
33. The unit shall have a standard HEPA filter for a protection effectiveness of 99.99% when filtering particles of 0.3 micron size.
34. The unit shall include an adjustable stand with telescoping legs to allow the work surface height to be set from 30½" to 38½".

### 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 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 which 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.)

## THE BAKER COMPANY

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