



IsoGARD®

BAKER

Environments For Science™

IsoGARD® Class III Biological Safety Cabinet



IsoGARD® IG-12



IsoGARD® IG-13



IsoGARD® IG-14

Designed to Handle Hazardous Microbiological Agents or Pharmaceutical Potent Compounds

- Integral, full-size HEPA-filtered pass-through chamber with a unique space-saving front-opening glass panel door that allows users to introduce samples into the main working chamber with ease. A built-in gloveport allows the user to manually wipe down and clean the interior of the pass-through as well as aid in the manipulation of samples.
- Pass-through and main chamber incorporate uniform unidirectional airflow to flush away any generated particles while bathing the work surface in HEPA-filtered air.
- Constructed with thick safety glass, solid closed-cell silicone gaskets and supplied with hypalon gloves.
- Stainless steel glove port design with one-piece sleeve-and-glove assembly allows gloves to be replaced or changed without breaking containment.

Advanced Containment for Maximum Protection

Baker's IsoGARD® series Class III glovebox is designed for research involving agents assigned to BSL-3 and -4 facilities, or where a very high level of containment is required because of the nature of the protocol. The cabinets are designed to allow safe handling of hazardous microbiological agents or pharmaceutical potent compounds under contained conditions. IsoGARD meets the very stringent performance, construction and leak-testing requirements of Class III biological safety cabinetry, as defined by the U.S. Federal Register.



An optional top hinged viewscreen allows full opening for loading of instrumentation or equipment.

The State of the Art in High Containment

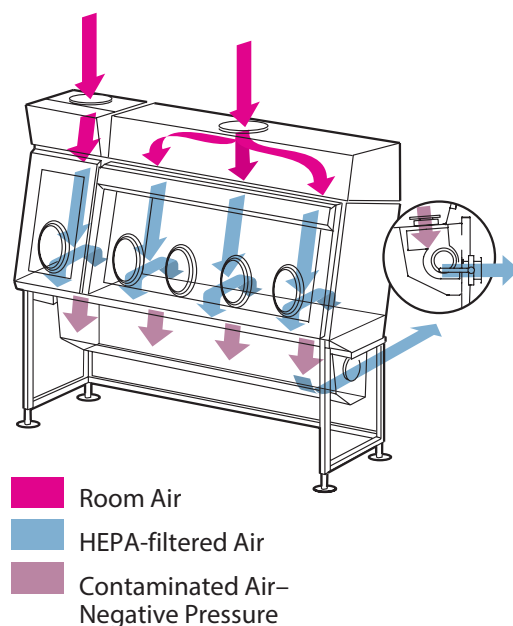
IsoGARD Class III biological safety cabinets are advanced, high-containment equipment, representing more than 60 years of experience in the design and manufacture of Class II biological safety cabinets and other containment and contamination control equipment. This collective knowledge has been applied to our line of Class III cabinets to offer the maximum level of product, personnel and environmental protection. Personnel protection, of utmost importance for Class III applications, is accomplished by placing a primary physical barrier between the laboratory investigator and the biological agent.

- Equipped with full-coverage, ceiling-mounted supply HEPA filters to ensure an ISO Class 4 (FS209E Class 10) operating environment, as well as easily removable, specially designed cartridge-style exhaust HEPA filters to provide environmental protection.
- Gas-tight construction and utilization of a pass-through chamber to move materials into and out of the main cabinet further ensure containment within the primary working area.
- Built-in dual digital DIN style gauges monitor proper operating pressures in both the pass-through and main chambers.
- Ergonomic features such as oval gloveports mounted directly into the 10° tilted viewing window, exhaust plenums located away from a sitting operator's knees and external light canopies positioned above the user's head provide maximum comfort.
- Cabinet construction features combine to make required maintenance and service easy and safe, thus minimizing downtime.

General Design and Performance Features

IsoGARD® is particularly well-suited for aerosolization studies, vaccine research, handling of sterile potent pharmaceutical compounds and inspection of unknown suspected terrorism samples.

- Three standard models offer two, three and four-glove primary working chambers along with a host of options that allow users to tailor a cabinet to meet the unique needs of their work.
- An integral, full-size HEPA-filtered pass-through chamber with a unique space-saving, front-opening glass panel door allows users to introduce samples into the main working chamber with ease. A built-in gloveport allows the user to manually wipe down and clean the interior of the pass-through as well as aid in the manipulation of samples.
- Equipped with full-coverage, ceiling-mounted supply HEPA filters to ensure an ISO Class 4 (Class 10) operating environment, as well as easy removable, special designed cartridge-style exhaust HEPA filters to provide environmental protection.
- Operates continuously under negative pressure to ensure continued personnel protection in the event of a glove or seal failure.
- Built to the highest leak-tightness specifications to ensure the safety of laboratory workers. Each IsoGARD is factory tested using a Class III Helium leak test prior to shipping.



High Containment Design

IsoGARD is designed to provide the highest level of protection for work with high-risk agents and potent compounds.

- Baker's exclusive "plug-and-seal" canister-style HEPA exhaust filters allow for the safe and convenient changing of loaded filters without complex bag-in/bag-out housings.
- Pass-through and main chambers incorporate unidirectional airflow to flush away any generated particles while bathing the work surface in HEPA-filtered air.
- Operates continuously at negative pressure for maximum personnel and product protection.
- Gas-tight doors and viewscreens maintain air conditions internally.

Cabinet Construction Enhances Performance

IsoGARD® uses heavy 11-gauge, 316L-type stainless steel construction with easy-to-clean, fully welded and polished radius corners to prevent buildup of contaminants and resist corrosion, with no bolt-on end panels to collect contamination.

- Constructed with thick safety glass, solid closed-cell silicone gaskets and supplied with Hypalon gloves.
- Baker polishes the surfaces to a non-glare satin finish. Large radius corners facilitate easy cleaning to help prevent corrosion and buildup of contamination.
- Stainless steel work surface is dished to contain spills.

Ease of Maintenance Minimizes Downtime

Several IsoGARD design features combine to make required maintenance and service easy and safe, thus reducing downtime.

- Fits through standard doorways without disassembly, making installation simple.
- Easy-to-clean radius corners help prevent buildup of contaminants.
- Locking stainless steel ball valve allows efficient drainage of liquids.
- Baker's exclusive "plug-and-seal" canister-style HEPA exhaust filters allow for the safe and convenient changing of loaded filters.
- External micro-bulb light assembly provides 75 foot-candles of illumination to the work surface and is accessible from the exterior to maintain product and personnel protection during service.
- Stainless steel gloveport design with one-piece sleeve-and-glove assembly allows gloves to be replaced or changed without breaking containment.

Specialized Applications

Baker designs and manufactures Class III gloveboxes and isolators to meet specific user applications. Unique requirements for aerosolization studies, vaccine research and handling hazardous biological or chemical agents are all projects that our Special Applications Division manages on a routine basis. All equipment is manufactured and tested to exacting standards to ensure the integrity of your research and safety.

Our engineers are always ready to discuss your unique requirements. Drawing on the company's past experiences with hundreds of special applications, we can often make specific recommendations in minutes as well as provide drawings and quotations.



Baker was commissioned by a customer to build this custom Class III containment line to handle research and work with a Biosafety Level 4 pathogen.

Ergonomic Design

Baker offers an adaptive ergonomic design combined with a unique airflow management system and proven containment technology to improve comfort and increase productivity while ensuring safety.

- A 10° slanted viewscreen provides optimum ergonomic comfort and safety.
- The 3/8" mirror-quality safety glass viewscreen provides maximum safety, reduces eye fatigue, is extremely scratch resistant and is impervious to most common decontamination agents.
- Stainless steel gloveports with one-piece sleeve-and-glove assembly are built directly into the viewscreen for improved visibility and ergonomics.
- Single-piece sleeve-and-glove assemblies are available in neoprene, hypalon and other materials by special order. Baker also can size the gloves to your specifications. Gloves are available in left, right and ambidextrous styles.
- In a standard configuration, IsoGARD® is set up to accommodate a standing worker, but a laboratory stool may be used for extended operations.

User-Friendly Controls

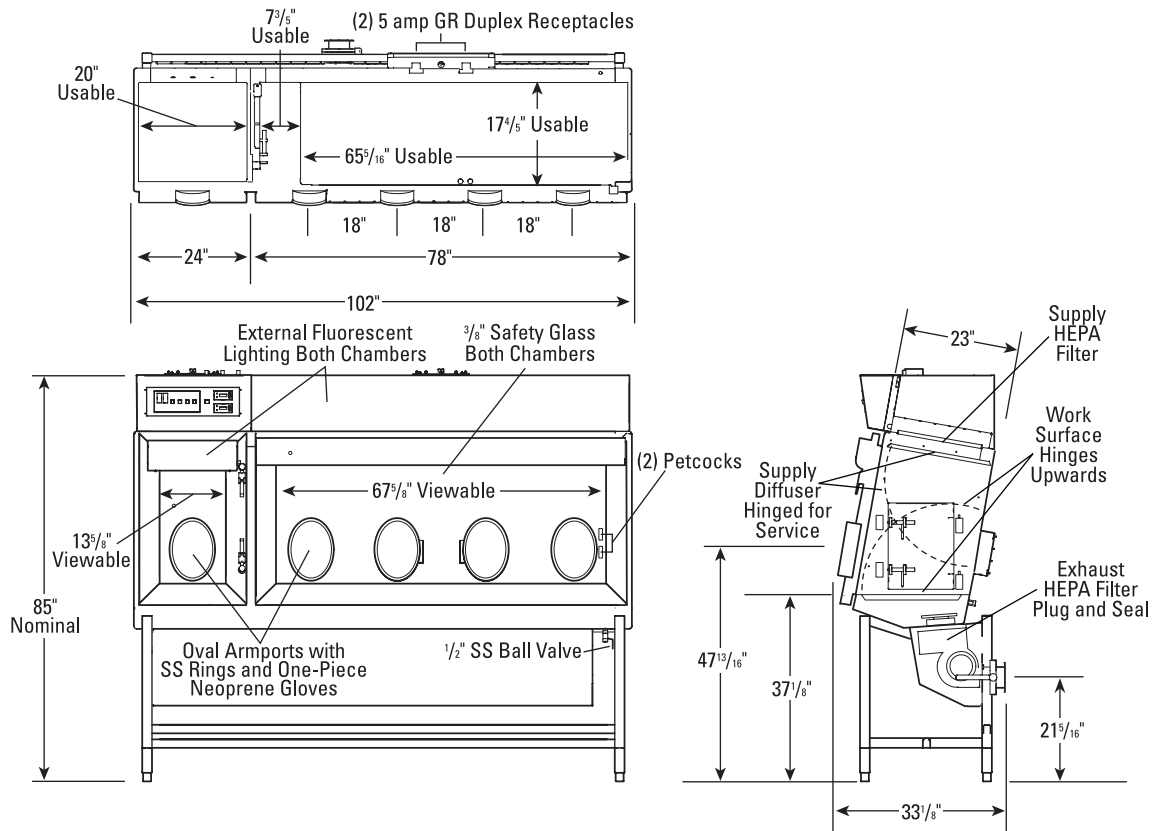
The control panel for IsoGARD is conveniently positioned to allow the operator to monitor and control the glovebox for optimal operating conditions.

- Built-in dual digital magnehelic gauges monitor proper operating pressures in both the pass-through and main chambers.
- Audible and visual alarms alert the operator of potentially unsafe conditions.
- Easy-to-reach external switches control lights and power outlets.

| Site Preparation* | | | |
|----------------------------------|--|---|---|
| Model | IsoGARD® Model IG-12 | IsoGARD® Model IG-13 | IsoGARD® Model IG-14 |
| Electrical System | 115 V AC, 20 amps, 1-phase using supplied 12' power cord or a hard connection with supplied junction box | | |
| Exhaust Requirements | 250 CFM at -2.5" static w.c. | 300 CFM at -2.5" static w.c. | 350 -2.5" static w.c. |
| Glove/Working Chamber Dimensions | 2-glove, 42" working chamber, 2' pass-through | 3-glove, 60" working chamber, 2' pass-through | 4-glove, 78" working chamber, 2' pass-through |

*Note: Following installation, Class III equipment must be tested in place by a qualified third party technician prior to use. Tests include tracer gas leak testing and other performance verification as recommended by the manufacturer.

IsoGARD® Model IG-14



Options and Accessories

- Disinfectant dunk tank
- Built in motor/blower
- Hinged gull-wing door on primary working chamber
- Bag-in/bag-out exhaust HEPA filtration system with dual HEPA filters
- Butyl gaskets to replace standard silicone gaskets (for chemical containment)
- 220 V AC, 50 Hz electrical system

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 twelve 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 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.



Environments For Science™

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