



Environments For Science™



ChemGARD® Fume Hoods



ChemGARD

ChemGARD® fume hoods are designed for unparalleled safety for critical laboratory applications.

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

ChemGARD® Design Features

- 1. Combination horizontal/vertical sash enhances both operator safety and energy savings.
- 2. Sight-tight continuous bypass duct minimizes contaminant concentrations near the edge of the sash, reducing potential exposure hazard to personnel.
- 3. Airwatch II airflow monitor provides for customized alarm/monitor configurations.
- 4. Angled entrance, airfoil and radius work surface for undisturbed airflow into work area.
- 5. Color-coded service fixtures with convenient remote control valves, positioned outside the air stream.
- 6. Counterbalanced vertical sash for smooth, single-handed operation.
- 7. Recessed work surface confines spills.
- 8. All stainless steel construction for durability and easy cleaning.
- 9. Optional general purpose, solvent, or acid base cabinet provides storage area.



Industry-Leading Technologies Provide Superior Protection and Maximum Efficiency

The aerodynamic ChemGARD® design employs fixed air slots at maximum safety configuration to alleviate the need for cumbersome operator adjustments.

- ChemGARD® construction materials are flame resistant.
- Top-suspended, 12" wide safety plate glass sash panels are easily removed for cleaning.
- Unique internal baffle location minimizes retained vapors in work area.
- ChemGARD® fits through standard doorways and, once installed, requires only a 2" aisle overhang.
- Radius bottom airfoil minimizes turbulence.

ChemGARD® General Purpose Models

- Stainless steel bolted, 16-gauge, Type 304 stainless steel liner provides long-term durability, easy cleaning and resistance to corrosion (can be epoxy coated as an option).
- A molded, dished epoxy resin work surface confines spills.
- Recessed work surface encourages proper placement of potentially hazardous chemicals.

ChemGARD® RI Radioisotope Models

- Formed radii, precision-engineered, 16-gauge, Type 304 stainless steel, coved corners, water-tight welded and polished seams.
- Coved corner stainless steel work surface, 3/4" deep, continuously welded to interior.
- Reinforced work surface accommodates lead shielding, supports maximum 200 lbs/sq.ft., to work surface weight of 1,000 lbs.
- Stainless steel provides long-term durability, easy cleaning and resistance to corrosion.



Learn More!

Scan the code to the right or visit http://hubs.ly/y03_8s0 to learn how continuous-flow bypass technology improves fume hood safety and performance.



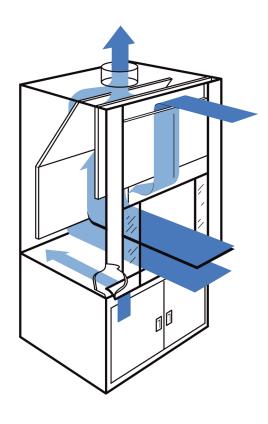
Airwatch II Airflow Monitor and Controls for Customized Operation

The microprocessor-based Airwatch II airflow monitor is fully programmable, offering a range of features for safety, convenience and easier integration into the overall laboratory safety plan.

- The Airwatch II airflow monitor activates an audible alarm if operating conditions deviate from preset parameters.
- The programmable display can be set for analog and digital, or analog only readout.
- Airflow can be measured in feet per minute (FPM) or cubic feet per minute (CFM).
- The alarm probe monitors either face velocity or exhaust duct velocity. The face velocity probe is located at the front of the cabinet for easy access and improved accuracy with horizontal sash positions.
- Lock-out options for alarm set points and calibration eliminate unauthorized disabling of alarm system.
- Integrated controls include flush membrane switches that are easy to operate and easy to clean.
- Independent light and duplex electrical outlet switches are included on the main control panel.
- Remote alarm contacts allow integration with existing laboratory monitoring systems.

Horizontal/Vertical Sash Offers Advantages

- The ChemGARD® incorporates a combination horizontal/vertical sash designed for energy savings, operator safety and convenience.
- Combination horizontal / vertical sash provides a protective physical barrier with full vertical access to the work area when using either horizontal or vertical configuration.
- Full vertical access allows easy installation of experimental apparatus.
- Top suspended 12" wide safety plate glass panels are easily removed for cleaning.
- Side panels are flush with bell mouth inlet for streamlined airflow; the radiused bottom airfoil minimizes turbulence.
- Sliding glass panels can be positioned for increased operator safety.
- Ball bearing, top hung horizontal sash support provides smoother sash operation.
- Hood face opening is reduced 50% for energy savings.



Lighting and Electrical System

 A sealed, fluorescent light fixture is located above gasketed safety-plate glass; fluorescent lamps are replaced from the front.

- Solid-state lamp ballasts reduce heat output and improve efficiency.
- Two GFCI duplex outlets are protected by a single 10-amp self resetting circuit breaker to protect personnel and minimize tripping of breakers.

Utilities

- Color-coded service fixtures for air, gas, vacuum, cold or DI water and steam, include convenient remote control
 valves.
- The cabinet includes one fixture and one petcock standard, plus seven plugged penetrations for additional optional fixtures.
- Pre-studded exhaust outlet, 10" diameter, accepts flanged exhaust connection.
- Airwatch II airflow monitor.

General Purpose Base Cabinet

The general purpose base cabinet has removable front and side panels, plus a 10" deep chase at the rear to allow room for services. Other features include:

- Reinforced shelf, adjustable on 1" centers.
- Dual panel doors, 1 ½" thick, secured with 3" wide continuous hinge, 3-point latch.
- 18-gauge, cold-rolled steel bottom pan, recessed 1½", liquid tight. 2½" riser with 3/8" leveling feet.
- 16-gauge, cold-rolled steel side panels.
- Epoxy powder coated throughout.

Acid Storage Base Cabinet

The acid storage base cabinet has an acid-resistant polypropylene drip tray, shelf liner and (optional) vent assembly with flexible polypropylene hose designed to "T" into the fume hood exhaust plenum.

- 2" diameter plugged penetrations in back wall, and removable side and rear panels with a 10" deep chase at the rear to allow for installation of the optional vent package.
- The vent package offers from 10 to 15 air changes per hour, depending on cabinet size.
- Reinforced steel shelf, adjustable on 1" centers.
- Dual panel doors, 1½" thick, secured with 3" wide continuous hinge, 3-point latch.
- 18-gauge, cold-rolled steel bottom pan, recessed 1½", liquid tight. 2½" riser with 3/8" leveling feet. 16-gauge, cold-rolled steel side panels.
- Epoxy powder coated throughout.

Solvent Storage Base Cabinet

- Exhaust Plenum
- Double wall construction creates a minimum 1½" air gap throughout the cabinet.
- Interior back and side panels are 18-gauge stainless steel monolithic construction welded to top and bottom panels to form a unitized inner cabinet.
- The 18-gauge stainless steel bottom pan is recessed 2" and welded liquid tight.
- 2" diameter plugged penetrations in back wall, and two front removable rear panels provide access to the 10"deep chase at the rear to allow for installation of the (optional) vent package.
- Access panels are located at each end of the chase.
- An optional vent package offers from 10 to 15 air changes per hour, depending on cabinet size; the vent assembly with flexible hose is designed to "T" into the fume hood
- A reinforced Type 304 stainless steel shelf is adjustable on 1" centers.
- Dual panel doors, 1½" thick, with 3" wide continuous hinge, and secured with a 3-point latch; optional louver doors are available.
- 2½" riser with 3%" leveling feet.
- 16-gauge, cold-rolled steel side

MODEL NUMBER	FH4	FH5	FH6
Dimensions			
Nominal Size	4'	5'	6'
Fume Hood (W x D x H)	48" x 33 ¾" x 59"	60" x 33 ¾ " x 59"	72" x 33 ¾" x 59"
	[1,219 x 857 x 1,499 mm]	[1,524 x 857 x 1,499 mm]	[1,829 x 857 x 1,499 mm]
Base Cabinet (W x D x H)	48" x 29" x 35"	60" x 29"x 35 ¾"	72" x 29"x 35 ¾"
	[1,219 x 737 x 908 mm]	[1,524 x 737 x 908 mm]	[1,829 x 737 x 908 mm]
Interior Dimensions (W x D x H)	38 %" x 18 ½"x 24 ¾6"	50 %" x 18 ½" x 24 ¾6"	62 5/8" x 18 ½" x 24 ½"
	[981 x 470 x 621 mm]	[1,286 x 470 x 621 mm]	[1,591 x 470 x 621 mm]
Useable Work Surface (W x D)	38 %" x 18 ½"	50 %" x 18 ½"	62 %" x 18 ½"
	[981 x 470 mm]	[1,286 x 470 mm]	[1,591 x 470 mm]
Exhaust and Static Pressure Requirements - Combin	ation Horizontal/Vertical Sa	sh	
Exhaust Airflow Rate (vertical sash at max width)	865 CFM [408 L/Sec]	1204 CFM [568 L/Sec]	1286 CFM [607 L/Sec]
Exhaust Airflow Rate (horizontal sash at max width)	374 CFM [164 L/Sec]	405 CFM [191 L/Sec]	623 CFM [293 L/Sec]
Electrical			
Electrical Service Requirements	115V AC, 15A, 60 Hz	115V AC, 15A, 60 Hz	115V AC, 15A, 60 Hz
Operating Amperage	1.1 A	1.1 A	1.2 A
Power Consumption	126.5 W	126.5 W	138 W
Heat Generation	431.6 Btu/Hr	431.6 Btu/Hr	470.9 Btu/Hr

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

- Additional service fixtures (air, gas, vacuum, cold or DI water, steam)
- Cold water gooseneck faucet

Options and Accessories

- Distilled/DI water gooseneck
- Vacuum breakers
- Aspirator
- Epoxy resin sink
- Base cabinet (see below)
- · Stainless steel peg board
- Tubular base stand
- · Vertical only sash
- Cup sink
- Stainless steel work surface

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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