Advancing Laboratory Ventilation Technology

Protecting your laboratory environment

LABCONCO®

Above: *Three Protector Fiberglass Walk-In Laboratory Hoods and two Protector Fiberglass Laboratory Hoods line one wall of the Class 10 clean room at Heraeus, Inc., Cermalloy Division, West Conshohocken, Pennsylvania. The hoods' front panels were custom painted to match the laboratory's burgundy casework.*

Right: *Four Paramount® Carbon Filtered Enclosures are mounted back-to-back on this casework island at Romer Laboratories, Union, Missouri. Paramount Filtered Enclosures require no ducting to the outside.*

Ventilation Equipment Designed To Meet Laboratory Needs

Labconco Corporation has been building safe and reliable laboratory safety ventilation equipment for more than 60 years and has the broadest product line in the industry. Perhaps no one understands better than Labconco the importance of proper ventilation in ensuring the health and safety of laboratory workers. Whether you need a light duty enclosure for nuisance vapors, a sophisticated hood system for toxic fumes, a biological safety cabinet for infectious agents or specialized ventilation equipment for unique applications, you can rely on Labconco.

Ventilation Ventures Team — A Dedicated Resource

Starting a new laboratory construction or renovation project is intimidating. Even selecting a single fume hood and all of its component pieces can be confusing. Labconco engineers, product specialists and technical service representatives comprise a focused group dedicated to helping customers find solutions to their laboratory ventilation problems.

Above: *At Stowers Institute for Medical Research, Kansas City, Missouri, two six-foot Purifier® Delta™ Series Class II Biological Safety Cabinets provide containment and protection from biological hazards and procedures appropriate for Biosafety Levels 1, 2 and 3. These Type A/B3 cabinets recirculate air to the room or may be canopy- or hard-ducted to the outside.*
Right: *A Protector 72 and Protector 48 Fiberglass Laboratory Hood are mounted side-by-side in this laboratory at HMT Technology, in Fremont, California. Neutral-colored metal casework complements the glacier white front panels.*

Our Ventilation Ventures Team members share their extensive expertise and resources so they can quickly act upon your requests for ventilation products including unique, custom-designed fume hoods. From the beginning to the end of your project, we can serve you in many other ways as well. Below are some of the project elements we can assist you with:

- product selection
- laboratory space planning
- ventilation equipment layout/placement recommendations
- identification of cost and energy saving alternatives
- consultation with your project manager or architect
- submittal packages with CAD drawings
- detailing and specification of Labconco products
- referral to reliable, time-proven vendors for products and services to complete your project including casework, installation and performance certification
- training for your workers on the proper, safe use of your Labconco products
- follow up contact throughout the life of the project and after installation is complete to ensure satisfaction

State-of-the-Art Airflow Test Laboratory

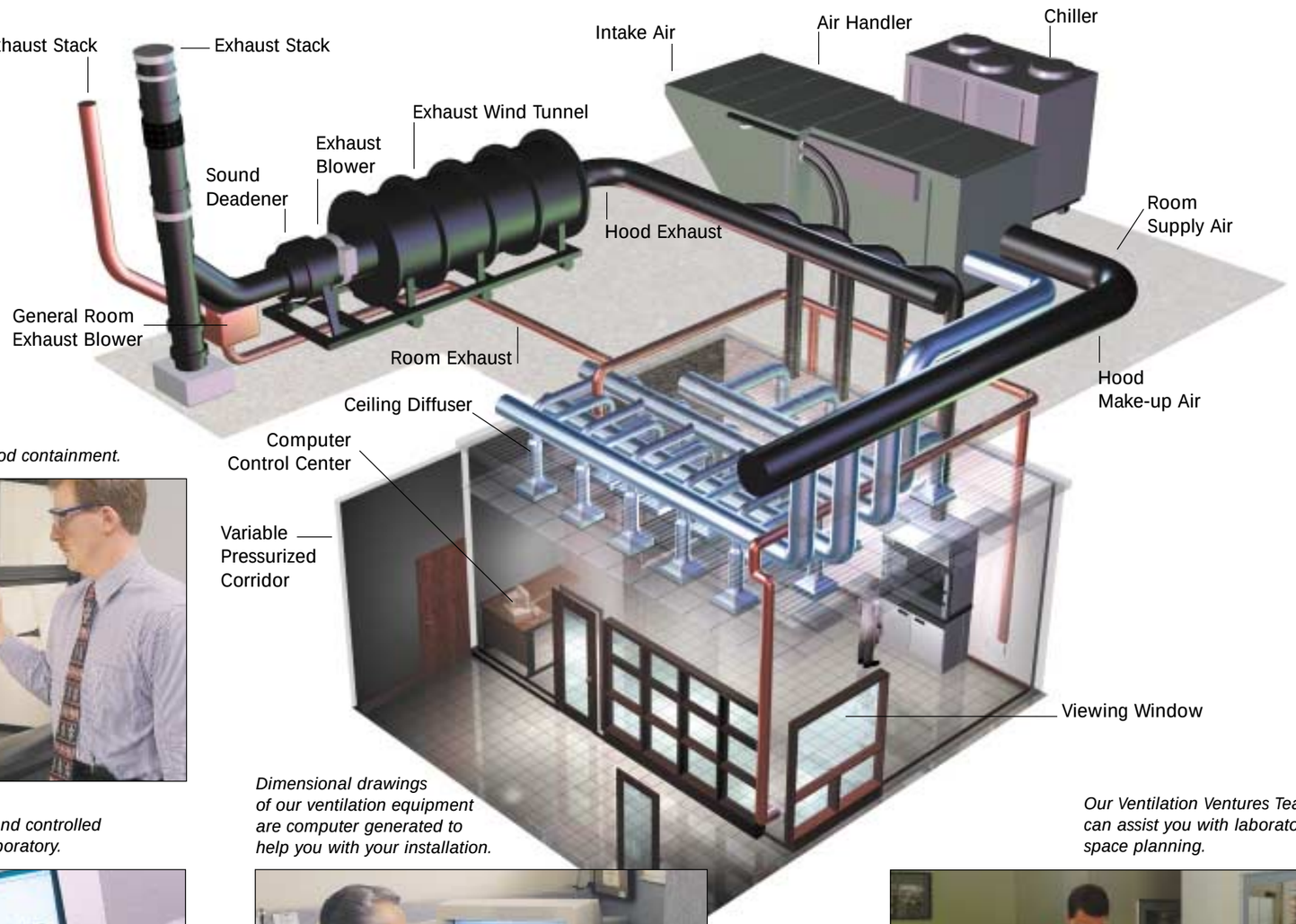
Following several years of planning and consulting with industry experts, construction was completed on our Airflow Test Laboratory in 1997. The facility enhances our capabilities to serve our customers with innovative ventilation products, ASHRAE testing, and replication of specific situations or field conditions.

Measuring over 500 square feet, the facility can accommodate a single custom fume hood up to 16 feet wide or four 4-foot fume hoods simultaneously. It has the capacity to handle air volumes of 8000 cubic feet per minute. Sophisticated software and direct digital controls allow us to monitor and regulate airflow conditions from a computer screen. The entire room is sealed, creating its own "microenvironment" so that a customer's laboratory conditions can be recreated to troubleshoot existing ventilation problems or to anticipate possible future ventilation scenarios. One hundred percent non-recirculated air to the room is provided from the outside after passing through both HEPA and carbon filters to ensure removal of contaminants which could interfere with sophisticated containment testing. The room supply air is heated and/or cooled to exact pre-set temperature requirements. Humidity may also be controlled and monitored.

As part of ASHRAE 110-1995, a tracer gas is released inside the hood and monitored in the breathing zone of a mannequin.

Smoke tests demonstrate fume hood containment.

Airflow conditions are monitored and controlled from a computer located in the laboratory.



Dimensional drawings of our ventilation equipment are computer generated to help you with your installation.

Our Ventilation Ventures Team can assist you with laboratory space planning.

The Airflow Test Laboratory has fourteen laminar flow ceiling diffusers which introduce the supply air to the laboratory and can be individually controlled to provide the ultimate in supply air flexibility. We can shift supply air volumes toward or away from selected diffusers. Direct digital controls allow us to vary the number of room air changes and create positive or negative pressure relative to the outside corridor.

Located at Labconco's headquarters in Kansas City, the Airflow Test Laboratory is designed for research as well as to showcase our ventilation capabilities to visiting customers. Its range of performance is best demonstrated in person, so we encourage you to be our guest in the near future. Your visit will include hands-on work in the Airflow Test Laboratory and tours of Labconco design and production departments. You'll also have an opportunity to inspect a wide array of Labconco laboratory equipment in our Demonstration Laboratory and Auditorium.

The Auditorium at Labconco's Kansas City headquarters accommodates small and large groups for instruction and demonstrations.

Above: *Eighteen, two-foot Protector® VS Ventilation Stations fill this chemistry laboratory at Berry College, Mount Berry, Georgia. Glass sashes, sides and tops offer excellent visibility. In this unique installation, overhead ductwork was eliminated by ducting the Ventilation Stations through the casework, further enhancing visibility.*

Right: *Ceiling panels hide exhaust ductwork creating a seamless, finished appearance at Metro Wastewater Reclamation District, Denver. Two Protector 72 Fiberglass Laboratory Hoods used for Kjeldahl digestion feature Pacific Blue front panels to complement the laboratory's pale blue steel casework and white countertops. The hoods were customized with Phoenix Controls monitors and European-style service fixture fittings.*

Above: *Kemet Electronics, Greenville, South Carolina, created a wall of Protector 72 Fiberglass Laboratory Hoods with Guardian Air Monitors. All hoods are supported by Protector Acid and Solvent Storage Cabinets. "A-style" sashes offer the advantages of both sash options — sashes may be raised vertically for loading equipment and may be opened horizontally during use, which limits the volume of air exhausted, resulting in energy savings.* Right: *An undercounter SteamScrubber® Laboratory Glassware Washer cleans a wide variety of glassware and plasticware in this central storage laboratory at Edmonds Community College, Lynnwood, Washington. A Protector 60 Fiberglass Laboratory Hood aids reagent mixing.*

Choose Labconco As Your Ventilation Partner For Your Next Laboratory Project

Whether you're selecting a single hood, renovating an existing laboratory or starting from the ground up, you can rely on Labconco for assistance. At no obligation to you, a ventilation specialist from our Ventilation Ventures Team and a casework manufacturer representative of your choice will meet with you or your architect/facility planner to offer advice on layout, safety, energy savings and budgeting.

In this brochure, we have featured some completed laboratories. Please use them to generate ideas for your next laboratory project. If you would like to schedule a meeting with our Ventilation Ventures Team, challenge Labconco's Airflow Test Laboratory, or receive technical assistance from our ventilation experts, call 800-821-5525, 816-333-8811 or FAX 816-822-3786.

Protector ClassMate Hood

Paramount Filtered Enclosure

Purifier Delta Series Class II Safety Cabinet

SteamScrubber Glassware Washer

WaterPro Water Purification System

Labconco's Line of Ventilation Products

Chemical Fume Hoods
- Protector® Fiberglass Hoods
- Protector® XL Benchtop Hoods
- Protector® XL HOPEC Hoods
- Protector® XL Walk-In Hoods
- Protector® Fiberglass Walk-In Hoods
- Protector® Stainless Steel Perchloric Acid Hoods
- Protector® Stainless Steel Radioisotope Hoods
- Protector® PVC Perchloric Acid Hoods
- Protector® PVC Acid Digestion Hoods
- Protector® PVC and Polypropylene Hoods
- Protector® ClassMate™ Hoods

Carbon-Filtered Enclosures
- Paramount® Filtered Enclosures
- Protector® Work Stations
- Fume Adsorbers

HEPA-Filtered Enclosures
- Purifier® Delta™ Series Class II Safety Cabinets
- Purifier® Class I Safety Enclosures
- Purifier® HEPA-Filtered Enclosures
- Purifier® PCR Enclosures

HEPA-Filtered Clean Benches
- Purifier® Horizontal Clean Benches
- Purifier® Vertical Clean Benches
- Purifier® Trace Metals Work Station
- Purifier® Forensic Enclosure
- Purifier® Class 100 Chemical Station

Glove Boxes
- Protector® Controlled Atmosphere Glove Boxes
- Protector® Multi-Hazard Glove Boxes

Blowers and Ductwork
- Coated Steel Blowers
- Fiberglass Blowers
- PVC Blowers
- PVC Ductwork

Supporting Work Surfaces, Base Cabinets and Stands
- Protector® Acid Storage Cabinets
- Protector® Solvent Storage Cabinets
- Protector® Standard Storage Cabinets
- Protector® PVC and Polypropylene Storage Cabinets
- Protector® Vacuum Pump Storage Cabinets
- Base Stands
- SpillStopper™ Solid Epoxy Work Surfaces
- Flat Solid Epoxy Work Surfaces

Other Laboratory Products from Labconco

SteamScrubber® Glassware Washers
FlaskScrubber® Glassware Washers
WaterPro® Water Purification Systems
Rotary Evaporators
RapidVap® Evaporation Systems
CentriVap® Centrifugal Concentrators and Cold Traps
FreeZone® Freeze Dry Systems
Kjeldahl Apparatus
Goldfisch Fat Extractors
Crude Fiber Apparatus
Digital Chloridometers
Blood Drawing Chairs
Laboratory Carts and Benches
Vacuum Desiccator

On the Cover: *At the University of California-Riverside, each Protector® XL HOPEC Laboratory Hood is outfitted with sixteen service fixtures, including a gooseneck faucet and turret. Distillation grids are mounted to the hood walls to provide ample areas for apparatus and glassware. Customized with Phoenix Controls monitors, the HOPEC hoods feature combination A-style sashes to conserve energy and safety yellow air foils with flush sills to contain spills.*

VENTILATION VENTURES TEAM

Protecting your laboratory environment
LABCONCO®

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