

## Project Highlights



### Donald Bren School (*Platinum*)

The Donald Bren School's Laboratory Ventilation System uses more than 100 Phoenix Controls Valves. These valves control room pressurization and exhaust for fume hoods, snorkels and biosafety cabinets. The facility optimizes energy savings by using a Variable Air Volume (VAV) system and taking advantage of Phoenix Controls valve's accuracy across a wide flow range, with pressure zones having up to an 8:1 supply air turndown.



### Yale University Chemistry Research Building (*Silver*)

Yale University installed more than 380 venturi valves in its chemistry facility in addition to Phoenix Controls Fume Hood Monitors and Zone Presence Sensors. With the aid of Phoenix Controls products, Yale University was able to reduce energy use by an additional 40% through the reduction of exhaust levels when the floor area in front of the hood was unoccupied.

## Phoenix Controls

Founded in 1985, Phoenix Controls is a recognized leader in the design and manufacture of precision airflow control systems for use in critical room environments. Our customers include the leading pharmaceutical companies, universities, hospitals, government research facilities and global corporations. We offer innovative airflow control solutions that combine unparalleled safety and performance with value and energy savings.

The Phoenix Controls Quality Management System is registered to ISO 9001:2008.



For additional information and a listing of our global offices, please visit our Web site at [www.phoenixcontrols.com](http://www.phoenixcontrols.com) or call (800) 340-0007.

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ensuring environmental integrity

...and enhancing sustainability too!

Phoenix Controls array of airflow solutions can help any facility in the Wet Chemistry, Life Science, or Healthcare industries achieve the goals set forth by **Leadership in Energy and Environmental Design (LEED)** and the **Green Guide for Healthcare (GGHC)**. Through innovative design and best in class quality no other airflow control solution can offer the energy savings and sustainability benefits of a Phoenix Controls system.



## Here is how...

LEED and the Green Guide for Healthcare (GGHC) are governing bodies with a mission to promote “cost-efficient and energy saving green buildings”<sup>1</sup>. Buildings can achieve various levels of LEED rating by obtaining a certain number of points through sustainable practices as outlined by the U.S. Green Building Council. LEED ranks buildings on six different performance categories under which minimum standards need to be met and exceeded in order to earn points towards recognition. The GGHC borrows its structure from LEED, but currently has no rating system. The GGHC is designed to be a “self-certifying, best practices toolkit”<sup>2</sup> for healthcare.

Phoenix Controls products can help buildings achieve these goals by contributing to a number of the different categories and practices outlined by LEED and the GGHC. From energy savings to indoor air quality (IAQ), here is how...

## Energy and Atmosphere

### Fundamental Commissioning

- Valves leaves Phoenix Controls calibrated to ensure quick and accurate commissioning

### Energy Performance Optimization

- With the ability to accurately turndown airflow at ratios of up to 20:1 energy savings are optimized
- Occupancy and CO<sub>2</sub> sensors ensure systems are working efficiently

### Equipment Efficiency (GGHC)

- Total Room Control that works consistently from one manufacturer.

## Materials and Resources

### Design for Flexibility/Durability (GGHC)

- No minimal duct requirements allows for flexibility in design
- Built to last with minimal maintenance makes the product more durable than the competition

## Environmental Quality

### IAQ

- Phoenix Controls provides optimal IAQ through...
  - Airflow assurance by flow metering vs. measuring
  - Carbon Dioxide Monitoring
  - Thermal Comfort, Compliance with ASHRAE 55-1992
  - Thermal Comfort, Permanent Monitoring System

## Design Excellence

### Innovation in Design

- Novel fume hood decommissioning sequences
- Venturi Valve and flow metering for optimal turndown (GGHC)
- Pandemic Mode: HVAC design sequence for multi-purpose spaces (GGHC)

## ...and, here is where.

Phoenix Controls has been contributing to the energy savings and sustainability of building for the last 25 years. Innovation in design and product has been the difference. A number of Phoenix Controls installs have achieved LEED recognition, including those listed below

Project Name	Owner	City	State	LEED Rating
Donald Bren School of Environmental Science and Management	University of California Santa Barbara	Santa Barbara	CA	Platinum
EPA Science and Technology Center	Kansas EPA Laboratory, LLC	Kansas City	KS	Gold
McGowan Institute for Regenerative Medicine	University of Pittsburgh	Pittsburgh	PA	Gold
PA DEP Bureau of Laboratories	Vartan Enterprises	Harrisburg	PA	Gold
S.T. Dana Building Renovations	University of Michigan	Ann Arbor	MI	Gold
Clemson University's Advanced Material Research Laboratory	Clemson University	Anderson	SC	Silver
Vermeer Science Center Renovation and Addition	Central College	Pella	IA	Silver
Whitehead Biomedical Research Building	Emory University	Atlanta	GA	Silver
Yale University Chemistry Research Building	Yale University	New Haven	CT	Silver
Earth and Planetary Science Building	Washington University	St. Louis	MO	Certified
Harvard School of Public Health at Landmark Center	ABBKEY Group	Boston	MA	Certified
Mount Holyoke College Science Center	Mount Holyoke College	South Hadley	MA	Certified
Pfizer La Jolla Campus, Buildings 4-7	Slough Estates USA, Inc.	San Diego	CA	Certified
Russell T. Tutt Science Center	Colorado College	Colorado Spring	CO	Certified

<sup>1</sup> <http://www.usgbc.org/>

<sup>2</sup> Green Guide for Healthcare Version 2.2 2007