About Furman University

Furman University is a liberal arts university located in Greenville, South Carolina. Furman is known for psychologist John B. Watson, the founder of behaviorism, and the Nobel Peace Prize-winning physicist Charles H. Townes, the inventor of the maser and laser.

Among the university’s scientific pursuits is a dedication to campus environmental sustainability and increased energy efficiency. In support of this endeavor, the university funded a $62.5 million dollar renovation to upgrade The Townes Science Center with state-of-the-art energy efficient features.

The 200,000 square foot building now is LEED Gold certified and incorporates an array of renewable energy components including a solar / aquatic waste water treatment system, hybrid solar concentrators, day-lighting, energy recovery wheels, a chilled-beam cooling system for thermal efficiency, and treated wastewater for toilets.

Another component of the major renovation included installing low flow, high performance fume hoods that could meet the professors’ safety requirements but could also play a key role in reducing energy consumption for the entire facility. Conventional fume hoods consume three and a half times the amount of energy as the average American home (http://fumehoodcalculator.lbl.gov).

Trusted Fume Hood Safety that Works

While energy efficiency is an important aspect for facility managers and university leaders, safety is the key concern for professors.

The chair of the chemistry department at Furman personally conducted tests on a myriad of fume hoods using real-world laboratory scenarios. The patented FlowSafe Stable Vortex® II was the only fume hood to maintain complete containment during each test.

- 120 Stable Vortex® II Fume Hoods
- Met energy efficiency goals
- Chosen for a premiere level of safety
- LEED Gold Certified facility

As a result, 120 Stable Vortex® II Fume Hoods were installed, as they met both criteria of being safe and energy efficient. Post-installation, professors noted that lab spaces could now double as lecture halls because FlowSafe fume hoods operate so quietly compared to conventional fume hoods.
Fume hoods are tested “as manufactured,” “as installed,” and “as used.” The “as used” test is the most important test to pass, as it is a true assessment of whether or not a fume hood will protect the user. The FlowSafe Stable Vortex® technology was designed to continually adjust to real-world laboratory work including heat transfers, user movement within the hood, and room airflow drafts.

FlowSafe’s patented design was put to the test by Furman University, and surpassed expectations for its superior ability to effectively contain while utilizing significantly less airflow when compared to average fume hoods.

Johnson Controls also provides a service contract to Furman which includes service for everything from fume hoods to air handling units, chillers, room controls, and more.

Johnson Controls is making the world safer, smarter and more sustainable – one building at a time. Our technology portfolio integrates every aspect of a building – whether security systems, energy management, fire suppression or HVACR – to ensure that we exceed customer expectations at all times. We operate in more than 150 countries through our unmatched network of branches and distribution channels, helping building owners, operators, engineers and contractors enhance the full lifecycle of any facility. Our arsenal of brands includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Ruskin®, PENN®, Simplex® and Grinnell®, and now the Triatek® line of critical environment controls.

“"I was amazed at how quiet these fume hoods are compared to our previous ones. I can now give lectures in the teaching labs with multiple FlowSafe Fume Hoods running.”

Tim Hanks, Chemistry Department Chair

www.johnsoncontrols.com
or follow us @johnsoncontrols on Twitter