

# Go Platinum With Controls

BY VALERIE STAKES, MANAGING EDITOR

As building owners and managers increasingly see the benefits of high-efficiency, sustainable buildings, they're turning to their architects, general contractors, and HVAC contractors to help them achieve LEED (Leadership in Energy and Environmental Design) ratings for these buildings.

One mechanical contractor that's been actively answering the call for "green" projects is McKenney's Inc., Atlanta, GA.

In business since 1948, McKenney's specializes in HVAC new construction, retrofit, and service, as well as plumbing and building automation and control systems in commercial, medical, and institutional buildings.

During the last two to three years, the company has performed HVAC and controls work in nearly a dozen LEED buildings seeking certification or related require-

ments if you save 60%," Jeffers adds. "With controls, contractors can develop scenarios that reduce the amount of outside air coming into the building and the amount of energy needed to heat or cool it."

Improving the building's atmosphere is also critical, says Leroy Walden, vice president of McKenney's controls division.

"Proper cfm is just the beginning when it comes to LEED requirements for atmosphere. Controls allow you to enhance an existing sequence of operation that also takes into account outdoor air conditions, indoor air quality, humidification, and CO<sub>2</sub> concentration," he says.

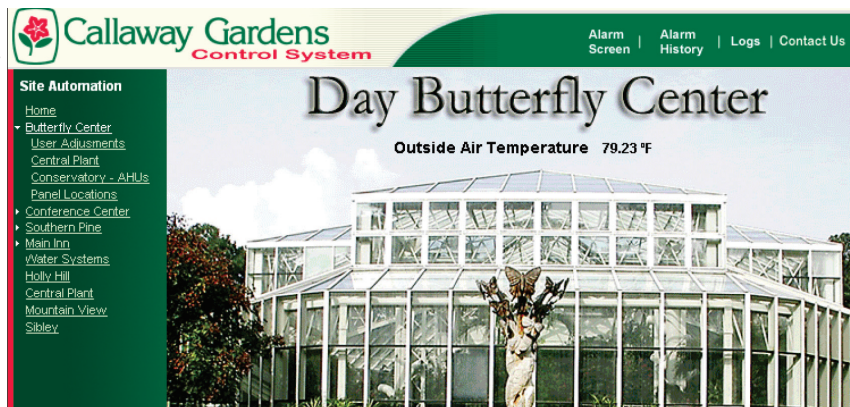
According to Walden, there are ways that an HVAC controls contractor can help owners gain more LEED points by also managing non-HVAC related areas.

"For example, we assist customers with 'daylight harvesting' by designing a comprehensive lighting package that will dim the lights based on the ambient lighting available," he says.

"There's also water management, which is required in LEED projects. Here, we implement controls that take the place of individual timers for irrigation."

Walden adds that the continued customer interest in LEED work has changed the way his division functions.

"We've learned to rethink the order of proceedings in terms of our sequence of operations, and have made LEED



McKenney's updated the controls at the Day Butterfly Center at Callaway Gardens, Pine Mountain, GA, which is in the process of becoming LEED certified.

ments, as a result of increased customer demand and the mandate that all new public buildings in Atlanta be LEED-certified.

According to Gregory R. Jeffers, P.E., LEED AP, a senior project engineer with McKenney's, HVAC contractors have a tremendous opportunity to help customers achieve LEED ratings through the use of controls.

"A big part of the LEED certification process is to ensure and prove that the building operates the way it's supposed to. Controls monitor system performance and provide the data to back it up. Therefore, you really need a good controls system to get a good set of data," he says.

"One of the easiest ways to get more LEED points is through energy savings. In existing buildings, you can gain up to 10 points if you can save 50% of energy compared to baseline usage. The same applies to new build-

ing procedures our standard operating procedures. Therefore, when a customer wants a LEED building, we're ready to meet their needs."

## The Proof is in the Commissioning

Although thorough commissioning is key to any successful commercial project, it's even more crucial when seeking a LEED rating for a building.

The key, Walden says, is not to wait until the job is complete.

"We 'precommission' the building controls as we go along. This means doing a point-to-point checkout, verifying sensor calibrations and actuator responses, and documenting everything," he says.

When it's time to bring a system online, McKenney's has an independent agent to handle the final commis-

sioning and direct any needed adjustments. This procedure is also well-documented.

Jeffers says, "The U.S. Green Building Council mandates that if you say a system works, you need to prove it. Because the group doesn't have an onsite committee that visits buildings, a committee reviews all of your paperwork indicating the pro-

cedures you had in place at the start of the project, the reviews and adjustments made, and the final system performance."

### Words of Wisdom

For contractors interested in performing LEED work, Jeffers advises visiting the U.S. Green Building's website [www.USGBC.org](http://www.USGBC.org), which

has extensive information on the LEED program and lists certified buildings across the U.S. He also suggests having employees become LEED accredited professionals to better anticipate and serve customers' needs.

"While the qualification seminars prepare you to become a LEED accredited professional, nothing beats the experience of doing your first project. You'll learn things you never thought you'd encounter."

Walden adds, "The demand for this type of work is growing daily. Therefore, contractors wanting to stay ahead of the competition need need to be progressive by adopting LEED practices as standard in their company."

## More About LEED

The LEED (Leadership in Energy and Environmental Design) Green Building Rating System® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its evolution. LEED standards are currently available or under development for:

- ▲ New commercial construction and major renovation projects (LEED-NC)
- ▲ Existing building operations (LEED-EB)
- ▲ Commercial interiors projects (LEED-CI)
- ▲ Core and shell projects (LEED-CS)
- ▲ Homes (LEED-H)
- ▲ Neighborhood development (LEED-ND)

LEED assesses building performance based on metrics for sustainability in six areas: site sustainability, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process.

These metrics consist of prerequisites, which must be met for any LEED certification, and "extra credit," which awards points for exceeding the minimum requirements. The number of points earned determines the certification level:

Certified:	26-32 points
Silver:	33-38 points
Gold:	39-51 points
Platinum:	52-69 points

The higher the certification level, the greater the potential environmental and economic benefits. For more information, visit [www.usgbc.org](http://www.usgbc.org).