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## ORLANDO BUSINESS JOURNAL

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### LEED lab

Central Florida green group to measure impact of using eco-friendly building techniques

Orlando Business Journal - by [Bill Orben](#) Associate Managing Editor

Robyn Dowsey is going back to school, but she won't be hitting the books.

Instead, a trade group she heads up, the Central Florida chapter of the **U.S. Green Building Council's** Leadership in Energy and Environmental Design (LEED) for Schools committee, will turn a Central Florida school renovation project into a "green" test laboratory.

The goal: To prove to commercial real estate developers, owners and tenants that using eco-friendly elements produces measurable, beneficial results.

Dowsey believes showcasing one school renovation — which has yet to be selected — will:

- Provide engineers, architects and others involved in commercial and school building a front-row seat on how the process works so they will be more adept at using green elements in their own projects.
- Reveal whether the extra cost of sustainable materials and methods actually results in lower operating costs.
- Determine whether optimal environmental conditions in a building result in greater employee productivity and reduced absenteeism.

The school district's renovation project selected by the local chapter for the "test lab" will get more than \$30,000 worth of free consulting services and the \$6,000 application fee for seeking LEED certification for an existing building.

The intention of the project is to go beyond low-flow toilets and compact fluorescent light bulbs, said Dowsey, the manager of sustainable design and construction for **Wharton Smith Inc.**, a Sanford-based construction firm.

The project will examine outside factors that can affect the energy use of a building. For example, if a cleaning crew works at night, that means electricity is being used day and night, diminishing any savings from energy-saving devices.

And a large, dark parking lot built too close to a building will cause excess heat to be reflected on the structure and drive up energy usage, said Dowsey.

A mechanical engineer will put the green school "test lab" project under the microscope to ensure its design will deliver the energy savings being sought by the school district renovating the building.

One consultant will ensure the design's sustainable elements actually are incorporated into the building, while another will determine whether the products ordered are green.

For the project to succeed, it must show there's a benefit to the extra cost of incorporating green elements into renovations, said Scott Stegall, director of facilities planning and construction at the **University of Central Florida**.

After all, some LEED building elements aren't cheap. A traditional roof installed by Orange City-based General Works LLC would cost \$10 to \$15 per square foot for materials and labor. In comparison, a green roof, which uses soil and plants to absorb heat and manage stormwater, costs another \$7 to \$10 per square foot, said Nicole Eisenhardt, service manager for General Works.

Of the 140 projects the company did in 2009, two were green roofs and three incorporated solar collection systems into the roofs, said Eisenhardt, who's also on the LEED for Schools committee with Dowsey.

Despite the higher cost of some LEED building elements, the project also can use inexpensive elements that reduce water or electric usage, which can lead to cost savings, she said. "The little things can add up."

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#### MEDIA



#### How schools can apply

To be eligible, the project must be:

- In Seminole, Orange, Osceola, Lake, Brevard or Volusia county
- Less than 100,000 square feet
- Fully funded
- Started for 2010 or 2011

In addition, the school district must agree to open the process to construction-related professionals and other school districts.

**Deadline for application:** March 31  
**Contact:** Robyn Dowsey, 407/402-5214, or email [rdowsey@whartonsmith.com](mailto:rdowsey@whartonsmith.com)

#### Why build green?

- Green buildings save \$60,000 per year — enough to buy 150 new computers or 500 new textbooks.
- Although building a green school costs 2 percent more than a conventional school, a typical school saves about \$100,000 a year in direct operating costs.
- If new school construction and school renovations were built to LEED standards, the energy savings would approach \$20 billion over the next 10 years.

Source: U.S. Green Building Council