A new player comes onto 'green' construction scene

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The longtime standard for constructing energy-efficient buildings - LEED certification - is no longer the only option in the "green"-construction business.

The U.S. Green Building Council's certification has long been championed as evidence that a building has passed rigorous energy-efficiency tests and environmental reviews. But the lesser-known Green Globes certification has emerged as a less-costly and more flexible way to prove that a building makes the most of available efficiencies.

Valencia College in Orlando, Fla., has several buildings certified as LEED (short for "Leadership in Energy and Environmental Design"), but it shifted to the Green Globes certification for its new, $21.7 million Lake Nona campus in southeast Orlando.

"I would say the Green Globes is definitely a more-flexible system. You work directly with an assessor, so if you have questions, then you can pick up the phone and get answers. You don't have to wait for a month for a response," said Johnnie Lohrum, an architect for SchenkelShultz Architecture's Orlando office. "They are striving to get your business. Their biggest benefit is common sense, to be honest with you."

Lohrum has experience in both LEED and Green Globe certifications. He worked on Valencia College's Lake Nona facility. The three-story, 88,821-square-foot building won three Green Globes, which is comparable to getting a high-level LEED certificate.

Certifications are attractive to developers and building owners because they can generate tax breaks and better position the property in the sales and leasing markets. For almost 15 years, the U.S. Green Building Council's LEED program has defined environmentally sound construction standards. More than 7,000 projects in about 30 countries have used it.

Green Globes, meanwhile, has been emerging in Canada since 1996. The environmental assessment, education and rating system is promoted in the United States by the Green Building Initiative, a nonprofit based in Portland, Ore. In the U.S., Green Globes has worked with the federal government to evaluate Department of Veterans Affairs hospitals and is also used by Whole Foods Inc.

Located on 23 acres adjacent to Lake Nona High School, the anchor building of Valencia's Lake Nona campus includes classrooms, support space, student services, a bookstore, library, cafe, offices, a dean's suite and laboratories.

"The key thing about it that is beloved by the faculty, students and staff there is the daylighting," said Deborah Green, Valencia's director of sustainability. "Every interior space faces windows or a hallway with windows. It's very light with natural light."

The windows are insulated and have low emissivity coatings. They also have interior solar shades and exterior shading devices. Other features include high-efficiency chiller plants; heating, ventilation and air conditioning; a water-treatment cooling tower; and dual-flush commodes and pint-flush urinals. Most of the construction waste was recycled, and parts of the building, including the steel, cabinetry and wall board, consist of recycled material.

Sustainable features are not the only efficiencies afforded by Green

Globes. The certification process costs about half what the LEED process does, Green said. In 2008, LEED registration cost about $900 to $3,000 and the certification cost about $1,875 to $20,000. A Green Globes self-assessment cost $500, and the certification runs from $3,000 to $6,000.

But cost wasn't the primary reason Valencia switched from LEED to Green Globes, according to school officials. Valencia wanted to use a bipolar-ionization system to treat its indoor air, in hopes of reducing the amount of energy needed to cool and dehumidify the interior, Green said. The U.S. Green Building Council would not accept the ionization treatment, but Green Globes would.

"To avoid sick-building syndrome, you want to bring in some outside air," Green said. "LEED has specs on how much to bring in. In a humid climate like Florida, you're bringing in humidity, moisture and heat, and so you have to run HVAC more."

With bipolar ionization, indoor air is treated to a high standard with filtration systems that address air-quality issues. The bottom line, she said, is that less energy is needed.

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