

Lexington Medical Center builds South Carolina's first "green certified" medical complex

Hospitals have traditionally lagged behind other industries in "green" building initiatives that employ environmentally friendly materials and construction methods. One recent industry report by the American Society for Healthcare Engineering (ASHE) found that many hospitals have even less interest in green building certification than companies in other industries.

There are many reasons for this; for one thing, dollars are scarce and costs are skyrocketing. For those institutions able and willing to make the investment in green design, however, the paybacks in energy savings and community and patient health can be substantial.

And according to the U.S. Green Building Council (USGBC), green building initiatives do not necessarily cost more than traditional construction. A recent USGBC report, in fact, concluded that that an added investment of 2 percent on top of normal construction costs yielded life-cycle savings of over 10 times the initial investment.

Fewer than 50 U.S. hospitals currently have "green certified" buildings, meaning they have earned the Leadership in Energy and Environmental Design (LEED) designation in meeting the highest standards in five key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

One of them is Premier member Lexington Medical Center, West Columbia, SC, which recently finished construction of a five-story, 175,466-square foot medical office building that is the first in the state to earn the prestigious LEED designation.

"The primary benefits of LEED designation are creating a better place to work for our employees and being environmentally conscious in our community," said Kevin Stanley, director of engineering services for Lexington Medical Center. "We constantly work toward energy efficiency, but this is the first time we had an opportunity to work for a LEED designation. It means that we are saving energy, which is cost saving, that we are helping to preserve our environment, and it creates a better overall atmosphere for our patients and employees."



Lexington Medical Park 2, South Carolina's first LEED designated health care facility, was completed in August 2007.

LEED designations are granted by the U.S. Green Building Council and are the nationally accepted benchmark for the design, construction and operation of high-performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. Additional points must be earned by exploring new technologies and environmental solutions to receive higher designations.

Green design features

Stanley said Lexington Medical Park 2 is not only energy efficient, but also contributes to overall employee health and productivity by having features such as increased natural lighting and CO2 monitoring. "Our goal is to maintain the high level of social and environmental responsibility that LMC has always strived to achieve," said Stanley, adding that new construction will be evaluated for LEED certification as Lexington Medical Center continues to expand.

The hospital incorporated a host of environmentally friendly design elements into the office building that have resulted in substantial efficiencies in energy and water use. Stanley estimates that the building will save 30 percent in energy costs with improved insulation, energy-efficient windows and lights, and a state-of-the art heating, ventilation, and air conditioning system.

Among the building's environmentally friendly features are:

- Construction materials containing about 25 percent recycled products.
- A "white roof," which reflects solar heat and can cut a building's energy use by as much as 20 percent.
- Motion sensors that automatically control lights when not in use.
- Water conserving fixtures.
- High-efficiency heating and cooling systems.
- A two-story atrium with a monumental winding staircase made from recycled steel and glass.
- Low VOC (volatile organic compound) emitting paints, carpeting and adhesives.

For more information about LEED certification programs for health care, contact the U.S. Green Building Council at 800.795.1747, info@usgbc.org, or visit its Web site at www.usgbc.org.

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