

# Library West

## University of Florida



### *Green Studies*

Library West, the University of Florida's newly renovated study hub, achieved a Leadership in Energy and Environmental Design (LEED) NC 2.1 Gold certification, becoming the second building on the campus to achieve the designation. The library, a campus hotspot, implemented a variety of sustainable measures to achieve the second highest rating for the U.S. Green Building Council's (USGBC) LEED Green Building Rating system.

*Simply by increasing insulation in the walls and roof and installing occupancy controls, Library West's energy savings are 30 percent above ASHRAE standards.*

### *Quiet Conservation*

Library West was redesigned to include added insulation on the walls and on the roof, as well as occupancy controls throughout the building. These activity sensors helped decrease the amount of energy wasted on powering lights when nobody was utilizing them. These two features alone – increased insulation and occupancy sensors – led to an energy savings for the building 30 percent higher than the American Society of Heating, Refrigeration and Air-Conditioning Engineers' (ASHRAE) 90.1 standard.

Features for water efficiency were also included in this renovation. Library West now utilizes waterless urinals and low-flow plumbing fixtures. Thanks to these measures, water use has been dramatically reduced and now exceeds



*Library West's front entrance*



*Front exterior of the University of Florida's Library West*

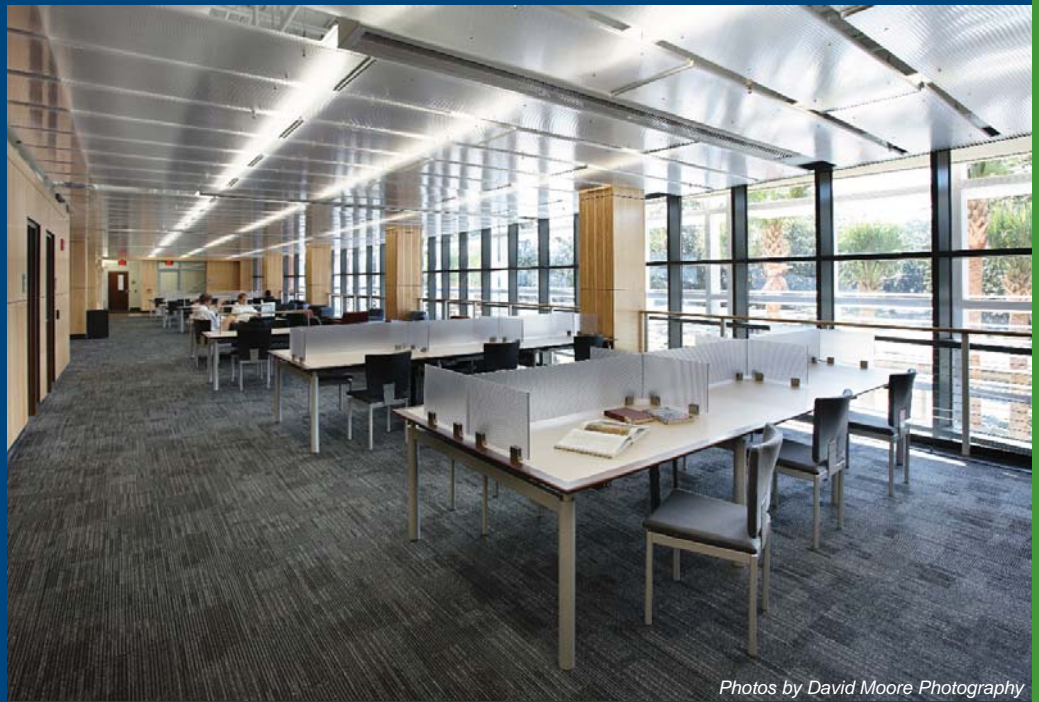
the standards of the Energy Act of 1992 by 30 percent. Even greater conservation occurs outside. The landscaping around the building was strategically designed to decrease the amount of irrigation by almost 50 percent.

## LEED Certification

Leadership in Energy and Environmental Design, or LEED, is the U.S. Green Building Council's third party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas.

### Certification Qualification Categories

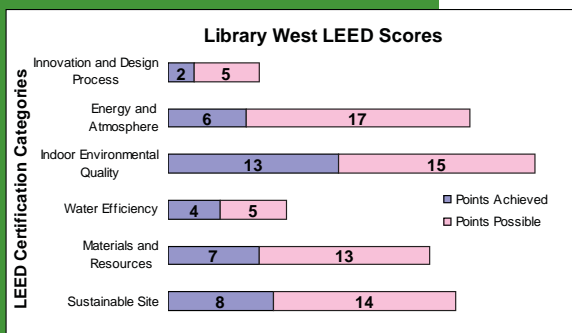
- Sustainable Site
- Energy & Atmosphere
- Water Efficiency
- Materials & Resources
- Indoor Environmental Quality



Photos by David Moore Photography

## Research that Works

The University of Florida is heavily involved with USGBC and is dedicated to promoting LEED nationally and in the state of Florida.



## High Quality Learning Environment

Creating a high quality indoor environment was a key element in the renovation designs for Library West. Carbon dioxide monitors were installed throughout the building, and all interior materials, such as sealant, adhesives, paint, and carpet, contained little to no volatile organic compounds (VOCs), which can evaporate over time and create toxic fumes.

Perhaps one of the most unique qualities Library West showcases is the amount of daylight allowed into the space, with windows and views of the campus available throughout 90 percent of the building. Studies have shown that natural daylight exposure increases productivity and improves performance, both in the workplace and among students.

## Key Green Features

- 10 percent recycled content used in construction
- Encourages visitors to use alternative transportation by providing bike racks, frequent bus routes and limited parking
- Daylight and views available throughout 90 percent of building
- CO<sub>2</sub> monitors, high quality ventilation system
- Low-VOC materials
- Low-flow plumbing fixtures and waterless urinals
- Added insulation on roof and walls
- Occupancy controlled lighting
- 20 percent of the materials used were manufactured locally/regionally

## Project Contributors

*Architect: Long & Associates  
Construction Manager:  
Biltmore Construction Inc.*