

## VALENCIA'S COMMITMENT TO BUILDING AND BEING "GREEN"

As of 2010, Valencia College has three LEED (Leadership in Energy and Environmental Design) certified buildings. Features of all of these are:

**Sustainable Sites** All three of Valencia's LEED Gold buildings have received points in this area for site selection and development density, reduced site disturbance, storm water management and for reducing heat island effect and light pollution.

The Allied Health Sciences Building (AHS) and Special Events Center received points for promoting alternative transportation since both buildings have nearby showers for people who choose to bicycle to work or school. The Special Events Center received points for parking capacity because we did not add any parking for that building.

Natural areas have been preserved around all the buildings to provide homes for animals and to promote biodiversity. To prevent light pollution, which can disturb nocturnal species, all lighting outside the buildings is directed downward.

Light-colored, reflective roofing and light-colored paving were used to reduce the potential for heat island formation.

**Water Efficiency** All the buildings use drought-tolerant landscaping, which reduces irrigation usage.

Water-efficient faucets are installed in all of the restrooms. Motion sensors help use about 75 percent less water than a conventional faucet, saving about a half-gallon of water.

The Special Events Center received a perfect score in this Water Efficiency category, including a point for innovative wastewater technologies for its rainwater recycling system that filters roof water for flushing the building's toilets.

**Energy and Atmosphere.** Out of a possible 10 points for energy performance, the Special Events Center and AHS get four and the Joint-Use Facility received six because of the addition of solar arrays on the roof. The Joint-Use Facility also received up to three points for on-site renewable energy. Green power/Renewable Energy Certificates that were purchased for the building will offset about 35 percent of the electricity consumption in building common areas over the next two years. All buildings received points for enhanced commissioning, refrigerant management and measurement and verification. The buildings also use energy efficient lights, windows, roof and wall insulation and air conditioning system parts.

**Materials and Resources** For this category, all three buildings received points for diverting construction waste and for using recycled content and regional materials. The AHS received one point for the use of wood certified by the Forest Stewardship Council, which recognizes responsible forest management.

In the AHS, 99 percent of the construction waste (1,450 tons) was recycled instead of being sent to a landfill and more than 33 percent of the materials used in the construction of the building contain recycled content, including the ceiling tiles, floor tiles and carpeting.

**Indoor Environmental Quality.** Low Volatile Organic Compounds (VOCs) are used throughout, as well as green cleaning products. In fall of 2012, the college enacted a no-smoking policy.

## ALLIED HEALTH SCIENCES (AHS) BUILDING—LEED GOLD CERTIFIED 2009

One of Central Florida's first LEED certified buildings is the 80,000-square-foot Allied Health Sciences Building on Valencia's West Campus. Construction began in August 2007 and was completed in August 2008. This building provides a technology-enhanced teaching and learning environment to produce highly trained graduates for dental

## Green Features of Our New Buildings

hygiene, radiology, sonography, respiratory therapy and cardiovascular technology positions as well as prepare students who wish to further their education in biology & chemistry.

Some of the green features are:

- White roof material
- Daylight and Views
- Horizontal Shading Devices
- Bike racks
- 99% of construction waste was recycled instead of being sent to a landfill.
- 33% of materials contain recycled content
- 12% of construction materials were locally produced
- Low volatile organic compounds for adhesives, sealants, paints, and carpet
- Water saving faucets and toilets
- Advanced Humidity Controls
- Maintained with Green Housekeeping

Baker Barrios Architects, Inc. was the architect of record, and Welbro Building Corp. served as general contractors.

### **SPECIAL EVENTS CENTER—LEED GOLD CERTIFIED 2010**

Valencia's Special Events Center, located on the West Campus is a 17,000-square foot building designed to hold special events, receptions, conferences and meetings. It opened in January of 2009. The facility also includes a commercial kitchen for the culinary program, a 40-seat classroom and a 320-seat assembly area.

The building faces beautiful Lake Pamela and features lake views from its large conference area. Landscaping is all drought-tolerant natives. It has a 9000 gallon underground cistern that provides water for flushing on the low-volume toilets.

Welbro Building Corp. served as general contractor for the building and Hunton Brady Architects were the designers. The building won the 2011 AIA Orlando Chapter Award of Excellence for Sustainable Design and the 2010 FEFPA Architectural Showcase Award of Merit – Community Colleges.

### **THE UNIVERSITY CENTER—LEED GOLD CERTIFIED 2010**

The University Center on Valencia's West Campus has received LEED certification at the Gold level for the building's environmentally friendly design, construction and energy-saving features.

The University Center is a three-story, 100,000-square-foot \$23 million facility that houses classes for the University of Central Florida (UCF) and Valencia students. The building includes more than 40 classrooms, a state-of-the-art testing center, computer labs, study rooms, faculty offices and a café.

## Green Features of Our New Buildings

- The lights, windows, roof and wall insulation and air conditioning system are energy efficient. The University Center is 28 percent more efficient than a conventional building, which results in about \$35,000 in annual energy savings.
- Solar panels installed on the roof provide 10 percent of the electricity that powers the building.
- The lights inside each room automatically adjust to the brightness needed to illuminate the room.
- Faucets use about 75 percent less water than conventional faucets, saving about a half-gallon of water with each use.
- More than 600,000 pounds of construction waste were recycled instead of being sent to a landfill.
- The ceiling tiles, floor tiles and carpets all contain recycled materials. The counter of The Little Bean Café is made of shredded aluminum cans.

The building opened for classes in August 2010 when 775 UCF students began studying there. The University Center has allowed UCF to offer more programs and classes in West Orlando, creating more opportunities for students to study close to home.

C.T. Hsu was the architect of record. PPI Construction Management served as general contractors.

### LAKE NONA CAMPUS

Valencia at Lake Nona is a new campus for the college in Southwest Orlando, Florida. Designed by SchenkelShultz Architecture, the \$21.7 million project includes design of the first Academic Building on this campus to house classroom and support spaces, student services, book store, café, library, offices, biology, and chemistry labs. The 82,280 SF building is designed to create a sense of place offering a unique experience for students, faculty and visitors. The initial master plan study of the 23-acre campus allows for additional buildings in the future.

The campus opened August 27, 2012 for the fall school year, and was certified Three Green Globes. The Green Globes system is operated in the United States by the Green Building Initiative (GBI).

### WEST CAMPUS, BLDG. 10

The Valencia College West Campus Building 10, designed by SchenkelShultz Architecture, was featured among eight international projects in Building Design + Construction magazine (June 2012). The magazine's three-page "On the Drawing Board" feature cited the \$13.3 million, 59,511-square-foot facility's high-tech "collaboratory," an approximately 12,000-square-foot space designed to promote creative discourse for groups ranging in size from three to 80 participants. The intent of the collection of spaces is to provide a place for idea generation, strategic planning, and execution of ideas, faculty, staff, and visiting members of the business community.

The three-story facility will house Valencia's Continuing and International Education, as well as the Office of Information Technology. Building 10 will also offer classrooms, a testing center, administrative offices and additional meeting rooms.

It opened December 2012 and received Level 3 Green Globes Certification. The St. Johns River Water Management District also certified building 10 as Florida Water Star Commercial under the pilot of this program.

## Green Features of Our New Buildings

### **OSCEOLA CAMPUS, BLDG. 4**

This is Valencia College's largest building to date at four stories and 150,000 square feet. Slated to open in the spring of 2013, it will hold the campus library, cafeteria, bookstore, classrooms, science labs and a learning-support center containing tutoring stations, computer, and small-group study rooms. The building has two wings joined by a four-story atrium. The library also features a curved, two-story space with windows overlooking the lawn and commons area.

Energy efficiency features include: high-efficiency air conditioning, dual-flush toilets, and green materials used in the floors, walls and ceilings. Building 4 has a cistern storing 10,000 gallons of rainwater for flushing toilets.

It is designed by Hunton Brady Architects. The general contractor is Clancy & Theys, based in Raleigh, N.C. It was certified by the U.S. Green Building Council as LEED Gold in fall 2013.

### **OTHER**

Valencia College is piloting a LEED Existing Buildings Operations and Maintenance (EBOM) project on East Campus and will be remodeling several facilities following LEED for Commercial Interiors.

For more information on building "green" and other sustainability efforts, contact Allen Bottorff, Assistant Vice President of Facilities, at [ebottorff@valenciacollege.edu](mailto:ebottorff@valenciacollege.edu) or 407-582-1701.