

## **Green Building Construction and Renovation Requirements**

Revised: 8/17/2017

### **Applicability**

New construction or renovation projects permitted after September 1st, 2015.

### **Background**

*Florida Statue 255.2575 Energy-efficient and sustainable buildings.-*

*(2) "All county, municipal, school district, water management direct, state university, Florida College System institution and state court buildings shall be constructed to comply with a sustainable building rating system, or national model green building code. The section applies to all county, municipal, school district, water management district, state university, Florida College System institution, and state court buildings the architectural plans of which are commenced after July 1, 2008."*

As the second largest higher-education institute by enrollment, the University of Central Florida continues to make substantial commitments to being excellent stewards of environmental resources. The Department of Utilities and Energy Services (UES) have established *minimum* standards for design, construction and operations of high-performance green buildings. Buildings are UCF's primary contributor to CO<sub>2</sub> emissions on campus. In strong pursuit of the President's Climate Action Plan; the university strives to balance environmental responsibility, resource efficiency, occupant comfort and wellbeing, in addition to community sensitivity; with an overall goal of becoming carbon neutral in 2050. Established by the US green Building Council (USGBC), UCF will adhere to the latest version of the *Leadership in Energy Efficiency and Development* (LEED) program for all new construction and renovations projects regardless of funding source. Each project shall strive to achieve the highest level of certification, with emphasis on conserving our precious water resources and improving energy efficiency.

### **Objective**

All new construction and renovations projects will be registered with the US Green Building Council (USGBC), and meet a minimum Leadership in Energy and Environmental Design (LEED) Gold rating, utilizing version four, or (latest) with ANSI/ASHRAE/IES Standard 90.1 2010 as the building baseline. To ensure both design and quality meets the owner's intent, both the design and construction teams shall adhere to the latest ASHRAE Standard for Building and System Commissioning.

### **Implementation**

The A/E will be solely responsible for ensuring the mandatory credits are incorporated into each design and updated at all UCF design milestone workshops. The approved LEED scorecard must be accepted by UCF by 100% contract documents.

In addition to the project narrative, evaluation of product or approach technology life cycle cost, and LEED scorecard; a progressive energy model will be developed by the A/E, demonstrating compliance with the mandatory green building requirements with regards to energy and atmosphere. This energy model will be presented to the department of UES at

50% and 100% Design Development, and 50% and 95% Contract Document phases respectively. Further review may also be warranted by the VP and AVP of Administration and Finance, AVP of Sustainability Initiatives, the Director of Facilities Planning and Construction, Director of Environmental Health and Safety, Director of Facilities Operation, Department of Resource Management and / or the Director of Landscape and Natural Resources.

The A/E shall also identify and make recommendations to promote and incorporate efficient construction designs, techniques, products or other design or construction related methods and principles, which will further enhance operational sustainability, and reduce energy consumption of the construction project. If the project scope does not meet the prescribed credits below, it shall be the responsibility of the A/E to submit these requests as deviations to the UCF standards committee for further review and acceptance.

Furthermore, the following 49 points and 22 credits shall be required (not optional) on all new construction and renovation projects where the cooling requirement is greater than 40 tons.

| Points | Credit | Credit Description                                     |
|--------|--------|--|
| 3      | LT     | Surrounding Density and Diverse Uses                   |
| 1      | LT     | Bicycle Facilities <sup>1</sup>                        |
| 1      | LT     | Reduced Parking Footprint <sup>1</sup>                 |
| 1      | LT     | Green Vehicles   |
| 2      | SS     | Credit Site Development - Protect or Restore Habitat   |
| 1      | SS     | Credit Open Space <sup>2</sup>                         |
| 2      | SS     | Credit Rainwater Management                            |
| 2      | SS     | Credit Heat Island Reduction                           |
| 1      | SS     | Credit Light Pollution Reduction                       |
| 1      | SS     | Site Master Plan                                       |
| 2      | WE     | Credit Outdoor Water Use Reduction <sup>2</sup>        |
| 3      | WE     | Credit Indoor Water Use Reduction                      |
| 1      | WE     | Cooling Tower Water Use <sup>3</sup>                   |
| 1      | WE     | Credit Water Metering                                  |
| 4      | EA     | Credit Enhanced Commissioning                          |
| 10     | EA     | Credit Optimized Energy Performance                    |
| 1      | EA     | Credit Advanced Energy Metering                        |
| 1      | EA     | Credit Enhanced Refrigerant Management                 |
| 2      | EA     | Credit Green Power and Carbon Offsets                  |
| PR     | MR     | Storage and Collection of Recyclables <sup>2</sup>     |
| PR     | MR     | Environmental Tobacco Smoke Control <sup>1</sup>       |
| 2      | MR     | Credit Construction and Demolition Waste Management    |
| 2      | EQ     | Credit Enhanced Indoor Air Quality Strategies          |
| 1      | EQ     | Credit Construction Indoor Air Quality Management Plan |
| 1      | EQ     | Credit Indoor Air Quality Assessment                   |
| 1      | EQ     | Credit Thermal Comfort                                 |
| 1      | IN     | Implemented a Green Housekeeping program <sup>1</sup>  |
| 1      | IN     | Credit Innovation                                      |

<sup>1</sup> Partial credit has been pre-approved under the *University of Central Florida Main* LEED V4 Master Site BD+C. Additional design and/or documentation is required.

<sup>2</sup> Full credit has been pre-approved under the *University of Central Florida Main* LEED V4 Master Site BD+C.

<sup>3</sup> Full credit has been pre-approved under the *University of Central Florida Main* LEED V4 Master Site BD+C, for buildings on the main campus chilled water system.

All projects at the UCF Main Campus (Orlando Campus) must be registered under the *University of Central Florida Main* (1000073725) Master Site. Contact your Project Manager, or the Department of Utilities and Energy Services if you need a project created.