

LEED, or Leadership in Energy and Environmental Design, is an internationally-recognized green building certification system. Developed by the U.S. Green Building Council (USGBC) in March 2000, LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.



LEED®  
Project  
Profile

## **GOLDRING/WOLDENBERG BUSINESS COMPLEX ADDITION**

*Tulane University*  
*New Orleans, Louisiana*





## Project Summary

The Tulane University Goldring/Woldenberg Complex Addition is a 46,193 square foot addition to the existing Goldring/Woldenberg Complex. The buildings within the complex consist of Goldring/Woldenberg Hall I and Goldring/Woldenberg Hall II and are the headquarters for the A.B. Freeman School of Business. The addition includes both buildings and is located on McAllister Drive, a pedestrian walkway which passes through the heart of Tulane's Uptown Campus in the Uptown Neighborhood of New Orleans, LA. The new addition includes classrooms, offices, meeting spaces, and common areas.

## Energy Efficiency

The project team estimates that the Goldring/Woldenberg Complex Addition's energy costs will be 20.4% lower than a baseline building's. The Building is equipped with all led light fixtures, occupancy sensors, as well as daylight harvesting systems. All electricity used by the building has been off-set by the purchase of Renewable Energy Certificates (RECs). Tulane has a two year contract with a Green-e certified power provider.

## Efficient Water Use

The GW Complex Addition is equipped with low flow fixtures which are expected to reduce the facility's overall water use by 30.38% as compared to a baseline facility. The fixtures selected include toilets (1.28 gallons/flush), urinals (.5 gallons/flush), public and private lavatory faucets (.1 gallons/minute), a kitchen sink (1.5 gallons/minute), and a shower (1.75 gallons/minute). As part of the project, fixtures in the restrooms of the existing building were upgraded to be more efficient.

## Landscaping and Stormwater

The entranceway to the GW Complex Addition consists of a raised walkway over a vegetated plant bed. The addition created open space at the front of the building by replacing an existing concrete plaza area with a raised walkway over vegetated plant beds. Plantings consist of native wetland species. For a two-year storm, the post-development stormwater runoff at the site is a 25.68% reduction from the pre-development runoff rate. This reduction was achieved by construction of a stormwater drainage network which collects roof runoff and flows to an underground infiltration basin adjacent to the building. Flows are temporarily detained within the infiltration basin and capture the first 1.25" of runoff.

## Recycling and Sustainable Materials

During construction, 1,447 tons of materials were recycled including metal, concrete, wood, drywall, and concrete. The project had an 75% recycling rate.

Many materials were selected for the addition because of their reduced environmental impact. Measured by cost, 11.7% of the materials used for construction were recycled materials. Measured by cost, 23.1% of the materials used came from within 500 miles of New Orleans, cutting down on emissions produced by transporting materials over long distances. 77.79% of the wood used in the project is certified as sustainably grown and harvested by the Forest Stewardship Council.

## PROJECT DETAILS

- Completed: January 2018
- Project Size: 46,193 s.f.
- Total Project Cost: \$35M





The GW Complex Addition has a multi-stream recycling system that accepts paper, paperboard, cardboard, plastic bottles, and metal and aluminum cans. Bottles and cans are collected together and bins can be found in public spaces and eating areas. Paper is collected in office, common areas, and printing areas.

## **Indoor Environmental Air Quality**

During construction, the contractor took proactive measures to protect the building's indoor air quality for future occupants, including protecting the HVAC system from dirt and dust and protecting materials from moisture. Paints, sealants, adhesives, and carpeting were screened to ensure compliance with low-VOC standards (Volatile organic compounds or VOCs vaporize at room temperature and can be harmful to both installers and occupants.)

In order to ensure that harmful chemicals and materials do not travel through the building, 'entryways are outfitted with permanent entryway systems that capture dirt and prevent particulates from entering the building.

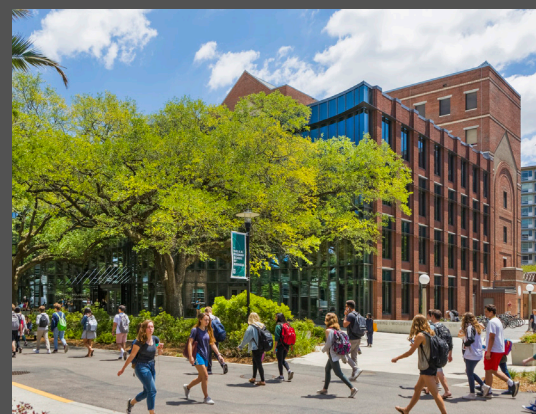
Individual workspaces are outfitted with lighting controls to ensure that each occupant is comfortable in their surroundings. Additionally, 86% of the building's regularly occupied areas are daylighted.

## **Transportation & Community Connectivity**

The GW Complex Addition, located in the heart of Tulane's Uptown Campus, is within walking distance to neighborhood businesses and services such as a bank, daycare, a park, and a library. The Center is also located less than a quarter mile from stops for the NORTA Freret Bus Route as well as stops for six different Tulane University Shuttle lines. These services connect riders to downtown New Orleans as well as various places within the metropolitan New Orleans area.

## **Protection for Birds**

The project earned an Innovation in Design Credit for its Bird Collision Deterrence design and monitoring program. The large glass windows of the GW Complex Addition are outfitted with a frit, which helps to protect passing birds from injuring themselves on the glass. Typically, birds are unable to distinguish glass from open air, however, the patterned frit helps them to detect a difference and deter them from flying into the glass windows. Graduate students are currently monitoring the building grounds in order to determine the effectiveness of the design. Tulane will provide USGBC with feedback from our findings in this study.





## Prerequisites

|   |   |       |  |
|---|---|-------|--|
| C | R | SSp1  | Construction Activity Pollution Prevention               |
| D | R | WEp1  | Water Use Reduction, 20% Reduction                       |
| C | R | EAp1  | Fundamental Commissioning of the Building Energy Systems |
| D | R | EAp2  | Minimum Energy Performance                               |
| C | R | EAp3  | Fundamental Refrigerant Management                       |
| D | R | MRp1  | Storage and Collection of Recyclables                    |
| D | R | IEQp1 | Minimum Indoor Air Quality Performance                   |
| D | R | IEQp2 | Environmental Tobacco Smoke (ETS) Control                |

## Earned Points - 60

### Sustainable Sites

|   |   |        |   |
|---|---|--------|---|
| D | 1 | SSc1   | Site Selection  |
| D | 5 | SSc2   | Development Density & Community Connectivity  |
| D | 6 | SSc4.1 | Alternative Transportation - Public Transportation Access                                     |
| D | 2 | SSc4.4 | Alternative Transportation - Parking Capacity   |
| D | 1 | SSc5.1 | Site Development - Protect or Restore Habitat <i>(achieved Regional Priority Credits, +1)</i> |
| D | 1 | SSc5.2 | Site Development - Maximize Open Space  |
| D | 1 | SSc6.1 | Stormwater Design - Quantity Control <i>(achieved Regional Priority Credits, +1)</i>          |
| C | 1 | SSc7.1 | Heat Island Effect, Non-roof  |
| D | 1 | SSc7.2 | Heat Island Effect - Roof   |

### Water Efficiency

|   |   |      |                             |
|---|---|------|-----------------------------|
| D | 2 | WEc1 | Water Efficient Landscaping |
| D | 2 | WEc3 | Water Use Reduction         |

### Energy and Atmosphere

|   |   |      |   |
|---|---|------|---|
| C | 5 | EAc1 | Optimize Energy Performance (55% savings) |
| C | 2 | EAc3 | Enhanced Commissioning                    |
| C | 3 | EAc5 | Measurement and Verification              |
| D | 2 | EAc6 | Green Power                               |

### Materials and Resources

|   |   |      |   |
|---|---|------|---|
| C | 2 | MRc2 | Construction Waste Management <i>(achieved Regional Priority Credits, +1)</i> |
| C | 1 | MRc4 | Recycled Content  |
| C | 1 | MRc5 | Regional Materials  |

### Indoor Environmental Quality

|   |   |         |  |
|---|---|---------|--|
| C | 1 | IEQc1   | Outdoor Air Delivery Monitoring                                |
| C | 1 | IEQc3.1 | Construction IAQ Management Plan - During Construction         |
| C | 1 | IEQc3.2 | Construction IAQ Management Plan - Before Occupancy            |
| C | 1 | IEQc4.1 | Low-Emitting Materials - Adhesives and Sealants                |
| C | 1 | IEQc4.2 | Low-Emitting Materials - Paints and Coatings                   |
| C | 1 | IEQc4.3 | Low-Emitting Materials - Flooring Systems                      |
| C | 1 | IEQc4.4 | Low-Emitting Materials - Composite Wood and Agrifiber Products |
| C | 1 | IEQc5   | Indoor Chemical and Pollutant Source Control                   |
| D | 1 | IEQc6.1 | Controllability of Systems - Lighting                          |
| D | 1 | IEQc7.1 | Thermal Comfort - Design                                       |
| D | 1 | IEQc7.2 | Thermal Comfort - Verification                                 |
| D | 1 | IEQc8.1 | Daylight and Views - Daylight                                  |

### Innovation in Design

|   |   |        |  |
|---|---|--------|--|
| D | 1 | IDc1.1 | Green Power  |
| C | 1 | IDc1.2 | Education  |
| D | 1 | IDc1.3 | SSp55 - Bird Collisions Deterrence <i>(achieved Exemplary Credits)</i> |
| C | 1 | IDc1.4 | SSc7.1 Heat Island Effect non-roof <i>(achieved Exemplary Credits)</i> |
| D | 1 | IDc1.5 | SSc5.2 Maximize one Open Space <i>(achieved Exemplary Credits)</i>     |
| C | 1 | IDc2   | LEED Accredited Professional   |

### LEED Certification Thresholds

CERTIFIED - 40+ pts. SILVER - 50+pts. **GOLD - 60+pts.** PLATINUM - 80+pts.



## PROJECT TEAM

Architect: Pelli Clarke Pelli, New York, NY  
Local Architect: Manning Architects, New Orleans, LA  
Structural and Civil Engineer: Morphy Makfsky, New Orleans, LA  
Mechanical, Electrical, Plumbing: GVA Engineering LLC, Metairie, LA  
Landscape Architect: Mossop and Michaels, New Orleans, LA  
Construction: Broadmoor LLC, Metairie, LA  
Lighting Designer: Cline Bettridge Bernstein Lighting Design, New York, NY  
Capital Projects, University Planning Office, Office of Sustainability, and Facilities Services  
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