



Targeting LEED Silver

ENNIS HALL REHABILITATION

ART'S DEPARTMENT
GEORGIA COLLEGE & STATE UNIVERSITY
MILLEDGEVILLE, GEORGIA



LEED® Facts	
Ennis Hall Renovation Milledgeville, Georgia	
LEED for New Construction v2.2 Certification Pending 2014	
Silver	49 points*
Sustainable Sites	20/20
Water Efficiency	0/0
Energy & Atmosphere	2/7
Materials & Resources	7/9
Indoor Environmental Quality	12/12
Innovation & Design	5/6
Regional Priority	3/3
*Out of a possible 57 points	

A Strategic Green Renovation

The Greenest Building is One That Isn't Built

PROJECT BACKGROUND

Georgia College & State University (GCSU) is committed to creating a sustainable and environmentally friendly campus. When a historic building no longer met the college's needs, the University opted to recycle the outdated but historically significant building into a new green facility, for the Art's Department. The University challenged the design team to pursue the University's first LEED certification for a rehabilitation project, setting a target of Silver level certification.

Listed on the National Register of Historic Places (NRHP) Ennis Hall is a 4-story, 29,000 sq ft classical revival building at the heart of the GCSU campus. The building is located in walking distance to transit stops, campus amenities and services. Sustainable landscaping considerations provide a shaded environment for the building and its occupants. The design included reduction of onsite parking by 100% and the use of highly reflective pervious pavers where hardscape was required. Hazardous materials were also remediated during the rehabilitation.

RECYCLING A LEGACY BUILDING

Energy use by existing campus buildings represents the single-largest portion of the campus' carbon footprint. Recycling outdated, inefficient campus buildings into efficient green buildings offers an effective strategy for both reducing operational costs and reducing greenhouse gas emissions. In the case of Ennis Hall, recycling an existing building also maintain a significant piece of the GCSU campus history.

Originally built in 1918 as a women's dormitory, the Ennis Hall mechanical and electrical systems and finishes had outlived their useful life. Decades of additions had masked the building character and history. The design team was tasked with preserving the building historically significant features while reconfiguring the interior to meet the needs of GCSU growing Art's Department. Included in the planning process as a key point, were upgraded mechanical, electrical, plumbing and information technology systems to meet new building standards.

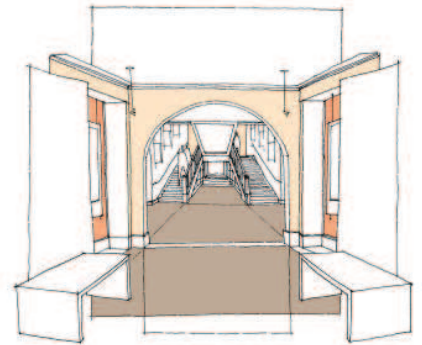
STRATEGIES AND RESULTS

Building systems and controls have been fine tuned for maximum equipment performance. Mechanical and electrical systems are continuously monitored for efficiency. Heating is provided by the hot water system. Hot water is distributed to heating coils in the air handling units, terminal units, and unit heaters. The hot water system consists of an electric boiler, variable speed hot water pumps, and piping. Cooling is provided by the chilled water system. Chilled water is provided from the existing central plant chilled water system and distributed to cooling coils in the air handling units. Chilled water pumps are variable speed. A direct digital control system has been provided to control and monitor the central HVAC equipment.

Energy efficient lighting fixtures and occupancy sensors provide greater reduction in power requirements. Task lighting is provided to offset larger quantities of general space lighting. LED track lighting has been used for gallery and studio spaces which require exhibit lighting. LED stencil face aluminum or recessed edge-lit type exit signs were used throughout the rehabilitation. Exterior lighting will be controlled by a combination of a photosensor and time switch.

Green Power initiatives are supported by the GCSU and the credits used to contribute to energy consumption offsets. The building provides dedicated areas for the collection and storage of recycling materials. During construction, waste and debris were managed and/or recycled. Carpeting, resilient flooring, ceiling tiles, countertops, and furnishings contain the highest available percentages of recycled content. Large quantities of new materials were manufactured and/or sourced within a 500 mile radius of Milledgeville.

The renovation reused nearly 100 percent of the structure, including exterior walls, roof decking and structural floor. Perhaps more importantly, the project demonstrates that existing campus legacy buildings can be successfully recycled into new green buildings.



Architect of Record: Lord, Aeck & Sargent
Civil Engineer: Robert & Company
Contractor: Garbutt Construction Company
Landscape Architect: Robert & Company
LEED Consultant: Lord, Aeck & Sargent
MEP Engineer: Newcomb & Boyd
Structural Engineer: Palmer Engineering Company
Project Size: 29,000 sf
Total Project Cost: \$9 million
Cost Per Square Foot: \$310



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LEED® Facts

Ennis Hall Renovation
Milledgeville, Georgia

LEED for New Construction v2.2
Certification Pending 2014

Silver 48 points*

Sustainable Sites 20/20

Water Efficiency 0/0

Energy & Atmosphere 2/7

Materials & Resources 7/9

Indoor Environmental Quality 12/12

Innovation & Design 4/6

Regional Priority 3/3

**Out of a possible 57 points*

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