



University of South  
Carolina – Green Quad  
Residence Hall &  
Learning Center for  
Sustainable Futures  
Columbia, SC

Architect:  
The Boudreaux Group  
Columbia, SC

Architectural Consultant:  
Little Diversified  
Charlotte, NC

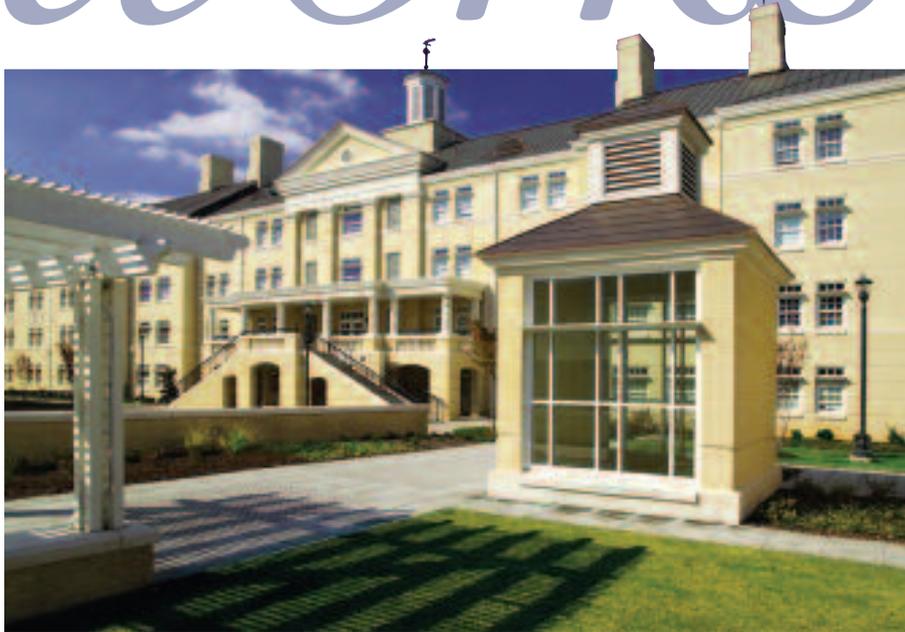
**LEED Silver**  
Rating: U.S.  
Green Building  
Council LEED – NC  
v.2/v.2.1  
Level: Silver  
(33 points)

Builder:  
Contract Construction, Inc.  
Columbia, SC

Masonry Contractor:  
David Voyles Masonry  
Columbia, SC



# works



## Residence Hall Teaches Sustainable Living by Example

Students wanting to live in USC's Green Quad residence hall are in for a long wait. According to R. Randall Huth, project architect, "It has the longest waiting for admission of any residence hall on campus." Its popularity is due, in large part, to heightened consciousness of humans' impact on the environment. Green Quad consumes 45 percent less energy than the residence hall across the street.

The Green Quad Residence Hall and Living Learning Center earned a Silver LEED Certification from the U.S. Green Building Council. It is the first LEED-certified dormitory and the largest to date in the country.

"This project has become a role model for the Southeast of a sustainable community."



*R. Randall Huth, AIA, Executive VP, The Boudreaux Group*



The project features three separate buildings that house students in energy-efficient, apartment-style units. Located in the heart of the quadrangle is the Living Learning Center, which features a turf roof and is fueled by a hydrogen cell. Virtually every facet of student life in the complex is designed to minimize current and future environmental impact. Buildings are oriented for maximum exposure to natural light. Motion sensors control any artificial light. Low-flow plumbing fixtures reduce water usage by 20 percent. Showers and changing rooms are provided for commuter students who cycle rather than drive to class. Student residents track their energy usage throughout the semester and earn cash rewards for using the least amount of energy.

The story of this \$30.9 million, 172,000-square-foot complex dates back to 2001, when USC's Board of Trustees wanted to establish the university

as one of the finest living and learning environments in the country. "When the project was first conceived it was on the cutting edge of sustainable design, and one of its primary goals was to foster awareness about sustainable design and be a showcase for sustainable initiatives," says Huth, who worked with USC's Gene Luna and Michael Koman to turn their vision into reality.

Brick fit the bill for both environmental and aesthetic objectives. It contributed toward LEED Material and Resource credits by meeting the overall goal of building with recycled content, as well as building with regional materials since the brick was manufactured within 500 miles of the building site. In addition, brick produces minimal packaging waste, its small unit size minimizes landfill waste, and its thermal mass makes it an excellent insulator, contributing to improved indoor air quality. An oatmeal-colored brick

Brick  
Industry  
Southeast  
Region

800.62.BRICK

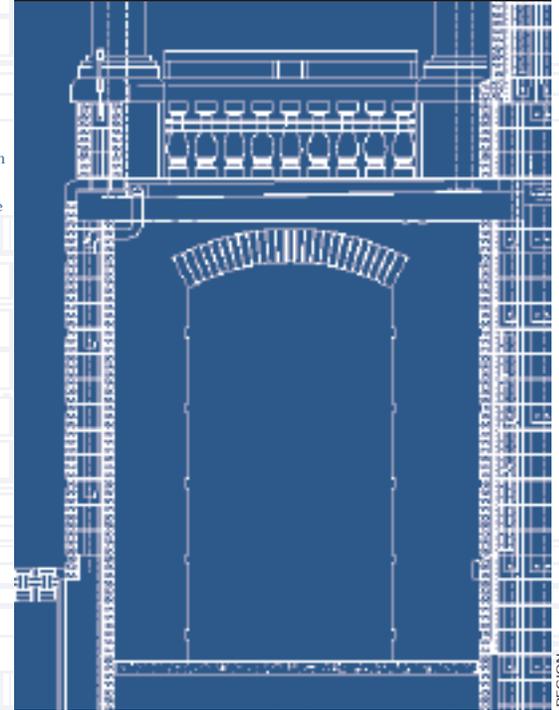
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[www.gobrick.com](http://www.gobrick.com)  
[southeast.com](http://southeast.com)

## The detail file

Take a closer look at how the Architect detailed this section.

Of course, this depiction is not to be construed as an exact detailing recommendation by the Brick Industry.



was used with a matching colored mortar to achieve a monolithic look without painting the brick. "From a distance, it has a uniform look, while up close it still has all the richness, character and residential scale of real brick and mortar," says Huth.

Huth likes how brick ties the entire project together. "We emphasized several facades and entrances with very large brick arches, which gives a massive feeling and provides the proportions appropriate to the large building scale." The Green Quad Residence Hall and Living Learning Center has become a flagship of sustainable design, inspiring campuses across the nation to adopt environmentally conscious building principles. Three years after its opening in August 2004, it remains the largest newly constructed, multi-use living and learning "green" complex on a university campus in the United States.

