



UNIVERSITY OF LOUISVILLE
SCHOOL OF DENTISTRY
LOUISVILLE, KENTUCKY

32% reduction in potable water use

30% improvement in indoor air quality

2,370 tons
of on-site generated waste
diverted from landfill

LEED® Facts

University of Louisville School of
Dentistry Louisville, Kentucky

LEED for New Construction
Certification awarded May 9, 2011

Silver 35 points*

Sustainable Sites 7/14

Water Efficiency 4/5

Energy & Atmosphere 2/17

Materials & Resources 7/13

Indoor Environmental
Quality 12/15

Innovation & Design 3/5

*Out of a possible 69 points

The information provided is based on that stated in the LEED® project certification submittals. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.



UNIVERSITY OF LOUISVILLE SCHOOL OF DENTISTRY

Dental School Builds Silver

UofL invests in the future

PROJECT BACKGROUND

Located in the heart of the University of Louisville's Health Sciences Center campus, the School of Dentistry is regarded as one of the top dental programs in the country with a great tradition and history. In order to meet future needs and ensure the university could continue its mission to deliver the highest level of dental education and attract students and faculty at the national level, a major renovation and addition to this 40-year-old facility was required.

The School of Dentistry committed \$45 million dollars to their vision and pursuit of excellence in teaching, delivery of care, and pioneering efforts in research. The focus of the 235,000 SF renovation and new construction was to enhance the patient care experience and incorporate new digital technology.

BUILDING AND SITE USE AND PROGRAM

The newly renovated School of Dentistry represents an unparalleled commitment to educate the clinician of tomorrow, which will have a direct impact on the oral health of communities across the country. Modern changes to the facility complemented contemporary curriculum changes in general dentistry, dental hygiene, oral surgery, diagnostic imaging, endodontics, periodontics, orthodontics, and pediatric dentistry.

In order to accomplish the project goals, clinical spaces were consolidated and re-organized and new dental equipment was incorporated to provide better patient care. To achieve increased levels of energy performance and improve the indoor environment, an overhaul of the existing mechanical and electrical infrastructure was completed. The exterior design concept was developed around the theme of defining the future by honoring the past, which incorporated features and elements of the existing structure.

One unique feature of the project was the complexity of creating a design that could be executed while the School of Dentistry remained fully operational at all times. The project required 45 phases of construction, across 38 different areas of the facility, with construction activities taking place 24 hours a day / six days a week.

STRATEGIES AND RESULTS

With the completion of the renovation and modernization, the School of Dentistry will grow their student enrollment by 50%. The improvements also will have a far reaching effect on the school's capacity for innovation by fostering a practice based network. Enhanced collaboration between departments and disciplines can lead to better treatment and solutions for complex oral diseases.

The University of Louisville chose to be an environmental leader by developing a high performance, energy efficient and environmentally sensitive building. The project required a holistic design solution which addressed the unique demands of health care facilities such as 24/7 operation, energy and water usage, infection control issues and the increased sensitivity to chemicals and pollutants.

The project achievements resulted in diverting over 90% (2,370 tons) of debris from landfills, over 25% combined recycled content, 24% use of regional resources, and 534,455 gallons of water saved each year. The project also featured a 7% increase in energy efficiency above the minimum energy performance requirement, 69% of wood used on the project is from FSC certified forests, and a 97% building reuse of the existing envelope.

"If we are to provide the education and training for the next generation of health care providers for Kentucky, we must remain on the leading edge of teaching and training practices, which requires the appropriate investment in new technology. This renovation will enable our students to have the best possible learning environment."

James Ramsey, PhD
President, University of Louisville



Architect: Lockett & Farley
Civil Engineer: Lockett & Farley
Commissioning Agent: FTC&H
Interior Design: Lockett & Farley
Contractor: Messer
Landscape Architect: Lockett & Farley
LEED Consultant: Lockett & Farley
Lighting Designer: Lockett & Farley
MEP Engineer: Lockett & Farley
Structural Engineer: Lockett & Farley
Project Size: 235,000sf
Total Project Cost: \$45,000,000

Photographs Courtesy of: Lockett & Farley

ABOUT KENTUCKY USGBC

Our goal is to improve the health and welfare of all Kentucky citizens through a sustainable and responsible built environment. Through education and awareness we encourage the use of sustainable practices that provide our residents with a healthy environment in which to live, work and learn.



www.usgbckentucky.org
888-KY-USGBC