



**UNIVERSITY OF LOUISVILLE
STUDENT RECREATION CENTER
LOUISVILLE, KENTUCKY**

36% reduction of annual energy use (goal)

35% reduction of annual water use (goal)

45% recycled roof water for site irrigation

95% reduction in stormwater runoff



LEED® Facts

University of Louisville
Student Recreation Center
Louisville, Kentucky

LEED for NC, Version 2.2

Silver* **63 points**

Sustainable Sites	22/26
Water Efficiency	6/10
Energy & Atmosphere	16/35
Materials & Resources	4/14
Indoor Environmental Quality	9/15
Innovation & Design	3/6
Regional Priority Credits	3/4

**Project is targeted for LEED Silver, but is currently on track to achieve Gold (60-79 pts).*

UNIVERSITY OF LOUISVILLE, STUDENT RECREATION CENTER

Student Recreation Center focuses on sustainability inside and out

Geothermal heating & air conditioning comes to the Belknap Campus

PROJECT BACKGROUND

The new Student Recreation Facility will support one of UofL's core mission objectives: to recruit and retain the best students. As student housing is increased and improved, career counseling expands, and student services become more available, the prioritizing of this new Student Recreation Facility as a key element in student life underscores UofL's commitment to providing the range of student experiences and reinforces student pride. In addition to providing state-of-the-art equipment and recreation space, the Student Recreation Center is designed as a social hub with the incorporation of interaction areas such as lounges, food service, study areas, and other program spaces that draw students, faculty and staff together for more than just physical activity.

STRATEGIES AND RESULTS

For the first time, the University will introduce geothermal heating and air conditioning to the Belknap campus. In addition to using the earth to heat and cool the building, a geothermal system will be used to heat the domestic water used in the building.

Demand control ventilation is another University strategy for reduced energy consumption. Occupancy sensors coupled with CO2 sensors provide fresh air directly to the area that needs it based on the level of CO2 in the space. Demand control ventilation prevents the HVAC system from delivering fresh air into an unoccupied space which also saves energy. As soon as the area is occupied or the CO2 levels rise, the HVAC system will begin delivering fresh air.

As air circulates throughout the building, it is eventually exhausted to the outside so fresh air can replace it. Before the building's air returns to the outside, it passes through an energy recovery wheel. This reduces the amount of energy required to heat, cool, and dehumidify the air in the building. A dedicated outside air handling unit pulls fresh air into the building. As it dehumidifies outside air, the moisture removed is captured and will be used for irrigation.

In order to enhance the University's educational mission, the Recreation Center will feature an energy dashboard so students can see in real time the amount of energy the building is using, educating them about how their activities affect the environment.

Sustainable design extends outside the building onto the site which includes dedicated parking for alternative fuel vehicles, bicycle parking racks, and routes to public transportation. Stormwater drainage is treated by significant reductions of discharges to the public storm sewer systems and by reducing particulates in water discharged into the public system. Storm drainage and rainwater is harvested for turf and landscape irrigation, and the use of permeable pavement systems in multiple areas minimizes runoff and maximizes collection for distribution to the stormwater treatment systems.

ABOUT THE STUDENT RECREATIONAL FACILITY

The 128,700 SF facility will include six new gyms, a Multi-Purpose Court (MAC), fitness and weight space, aerobics and wellness studios, a jogging track, four racquetball courts, a sports club, fitness lab, PE classrooms, locker rooms, equipment rooms, administration, healthy foods service, and support spaces. Multipurpose fitness spaces have been configured to accommodate the latest trends in group exercise such as aerobics, dance, yoga, Tai Chi, Zumba, martial arts, spinning, and more.



Architect: Omni Architects, Architect of Record
Cannon Design, Design Architect
MEP Engineer: CMTA, Inc.
Landscape Architect/Civil Engineer: CARMAN
Structural Engineer: Rangaswamy & Associates
Commissioning Agent: Paladin, Inc.
General Contractor: TBD
Project Size: 128,700 SF
Estimated Project Cost: \$28,330,000
Estimated Cost Per Square Foot: \$220

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.



KENTUCKY CHAPTER
Greening the Bluegrass

www.usgbkentucky.org
888.KY-USGBC