NUCLEUS
KENTUCKY'S INNOVATION CENTER
LOUISVILLE, KENTUCKY

77% construction waste diverted

90% annual run-off captured

6,000 sf roof garden and patio

LEED® Facts

Nucleus, Kentucky's Innovation Center
Louisville, Kentucky

LEED for Core & Shell v2009
Certification awarded May 8, 2014

Silver	**56 points***
Sustainable Sites	22/28
Water Efficiency	5/10
Energy & Atmosphere	11/37
Materials & Resources	5/13
Indoor Environmental Quality	6/12
Innovation & Design	4/6
Regional Priority	3/5

**Out of a possible 110 points*

NUCLEUS, KENTUCKY'S INNOVATION CENTER

Innovation Now and Then

Taking the LEED from History

PROJECT BACKGROUND

Located in the heart of downtown Louisville, adjacent to the city's burgeoning medical community, the new 197,000 square foot, eight-story building is the first of a four-building masterplan complex consisting of shared green spaces, parking garage and easy access to downtown quality of life. The building offers state of the art adaptable spaces consisting of dry labs and office space. This exciting new development will be a catalyst for economic development and innovation throughout the region.

PROVIDING A LINK TO THE PAST

The project site is located on an existing downtown parking area along Market Street; historically, this was the location for the large Haymarket that was the primary source of fruits and vegetables being sold to local inhabitants. The building's exterior envelope has pre-cast medallions of fruit baskets that remind visitors of the connection to the Haymarket; future phases of the development of the overall site will incorporate farmer's markets in the center of the site. Louisville's slow food movement is gaining momentum; many new restaurants in this area of town are incorporating locally grown produce into their menus. The Nucleus development will reinforce this community-based effort by continuing the tradition of the site's historical place in the local urban environment.

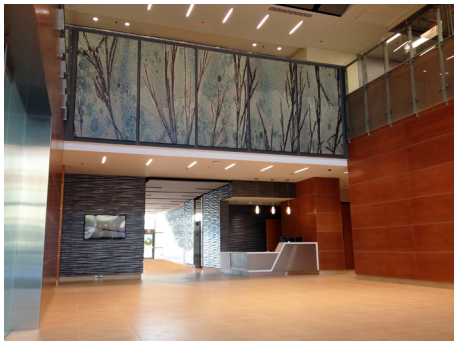
STRATEGIES AND RESULTS

The first floor consists of a combination of retail shops and public meeting areas that are easily accessible to exterior landscaped plazas and contribute to the 55% open space criteria. The 100% reflective roof also contributes to lowering cooling costs while simultaneously reducing the heat island effect on the urban environment in which the Nucleus building is set. There is also a large green roof (incorporating sedum and native plants) and patio space that not only lessens the ground water flow rate but also provides impressive views of the city and Ohio River. In an effort to reduce the building's use of potable water, the project team included high efficiency fixtures to achieve a 35% reduction of water use within the building. Nucleus has partnered with the Metropolitan Sewer District (MSD) to incorporate a large retention basin under the south side of the project. Recent rain events have taxed the storm water infrastructure of the city; Nucleus has developed the retention area to redirect the flow from the storm water system, as well as provided filtering that improves the quality of the storm water, in response to a partnering program offered by MSD to address this issue.

ABOUT NUCLEUS, KENTUCKY'S INNOVATION CENTER

The Nucleus project is a unique nexus for startup companies, business incubators and research and technology businesses centered upon the region's wellness and aging care industry. Moving into a Nucleus facility means not only a state of the art base of operations, but also access to services and shared resources. Tenants are able to take advantage of Nucleus' network of partnerships within the business community, as well as those within the University of Louisville, and enjoy the thriving ecosystem of innovation that is being fostered.

"This is exactly what we had in mind when we launched this idea of a downtown research and innovation park. The Nucleus will provide a "place" to bring entrepreneurs together with those who can get their ideas to the marketplace, just as farmers and consumers gathered in this same place years ago. "
Dr. James R. Ramsey, University of Louisville – President



Architect: Arrasmith, Judd, Rapp, Chovan Inc.
Civil Engineer: Dunaway Engineering Inc.
Commissioning Agent: Sustainable Technical and Commissioning Services
Landscape Architect: Vivian Llambi & Associates Inc.
Construction Manager: Sullivan & Cozart
LEED Consultant: Design submittal – Arrasmith, Judd, Rapp, Chovan Inc.: Construction submittal: Concepts 21
Lighting Designer: Staggs & Fisher Engineering
MEP Engineer: Staggs & Fisher Engineering
Structural Engineer: Rangaswamy & Associates Inc.
Project Size: 197,000 s.f.
Total Project Cost: $ 21,800,000
Cost Per Square Foot: $110/s.f.

Photographs Courtesy of: JM Chovan

ABOUT KENTUCKY USGBC

As a non-profit, volunteer organization comprised of organizational and individual members, 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
"Greening the Bluegrass"

www.usgbckentucky.org
888-KY-USGBC