



**TUCKER BOOKER DONHOFF + PARTNERS OFFICE BUILDING
LOUISVILLE, KENTUCKY**

30.5% water use reduction

20.6% recycled building material content

6.3% rapidly renewable resources used

LEED® Facts

**Tucker Booker Donhoff + Partners
Louisville, Kentucky**

LEED for NC 2.2
Certification awarded July 16, 2007

Certified	30 points*
Sustainable Sites	8/14
Water Efficiency	4/5
Energy & Atmosphere	4/17
Materials & Resources	3/13
Indoor Environmental Quality	10/15
Innovation & Design	1/5

**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.



TBD+ OFFICES

Architecture Firm Chooses Sustainability for New Offices

PROJECT BACKGROUND

When the 34 year old architectural firm Tucker Booker Donhoff + Partners (TBD+) decided to buy property and design a new office in downtown Louisville's east gallery district, the firm's partners tried an experiment in sustainable design. "Every architect dreams of designing a space for his or her own firm, and we were given the chance to showcase our design talents," said TBD+ CEO Rob Donhoff, AIA.

CHOOSING THE SUSTAINABLE PATH

TBD+ has seen increasing client interest in sustainable design, specifically regarding LEED Certification. The LEED (Leadership in Energy and Environmental Design) Green Building Rating System of the US Green Building Council comprises a consensus-based sustainability criterion for building design and construction.

STRATEGIES AND RESULTS

The building is located near public transportation, and the design incorporates a bike rack and shower for employees who want to ride their bike to work. These design features decrease dependence on automobiles for transportation. TBD+ used a highly reflective roof membrane to reduce the heat island effect – an environmental issue involving urban areas as "hotspots" contributing to global warming.

TBD+ installed low flow shower heads, low flush toilets and infrared automatic lavatory faucets. These items helped increase the project's water efficiency by 30%.

The firm added insulation above and beyond code requirements for both the walls and the roof, increasing the thermal efficiency of the building while decreasing the firm's utility bills. A higher reflectance on the interior paint scheme reduced lighting requirements. The contractor also used highly energy efficient air conditioning equipment with environmentally friendly refrigerant to reduce greenhouse gas emissions and lower utility costs. The HVAC engineer commissioned the building to ensure that all systems would work properly for maximum efficiency.

The studio area is on a raised access floor which serves as a plenum for the air conditioning system. Initially, the design/build contractor bid roof top HVAC units which were sized 10 tons larger than the units eventually used. This savings in HVAC costs permitted the installation of the raised access floor with no overall additional construction cost for the project.

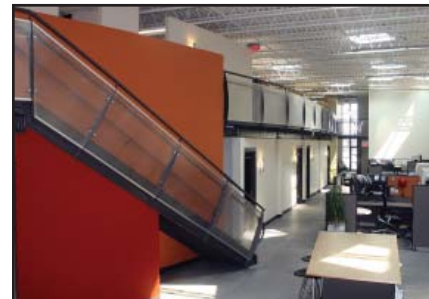
TBD+ established a recycling program to reduce the amount of garbage the firm sends to the landfill each week. The firm reused 75% of the existing building shell, which limited the use of new building materials. High-recycled-content building materials included the structural steel, ceramic tile, and raised access floor. They used rapidly renewable materials such as sunflower and agrifiber panel material for countertops, flooring material and toilet partition. The firm incorporated MDF (medium density fiberboard) painted with a zero-VOC finish for the custom casework. A corn-fiber based carpet was used for all carpeted areas and a soy based concrete stain was used for the exposed concrete in the conference room and lobby areas.

The building is a smoke-free workplace. Formaldehyde-free carpeting, low- or zero- VOC adhesives, sealants, and paint products were used throughout the building. Occupancy sensors were used on all lighting, along with daylight dimming in the main studio space to save electricity. Thirteen new skylights were added to the existing roof structure in the studio space to increase natural light and create a more pleasant atmosphere.

The project has been a tremendous success. TBD+'s associates look forward to coming to work every day; and the building itself has become a showplace for the firm and sustainable architecture.

"Going through the development of a LEED project ourselves gives us the ability to help owners and developers make cost effective sustainable design choices."

Patrick D. Nall, AIA, LEED AP BD+C
TBD+ Principal



Architect: Tucker Booker Donhoff + Partners
Civil Engineer: Dunaway Engineering
Commissioning Agent: Kerr Greulich Engineers
Lighting Designer: Brian Baumgartle
MEP Engineer: Kerr Greulich Engineers
Structural Engineer: SCA Consulting Engineers
Project Size: 9100 sf
Total Project Cost: \$850,000
Cost Per Square Foot: \$93.41

Photographs Courtesy of: Tucker Booker Donhoff + Partners

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

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