



**ROSS TARRANT ARCHITECTS  
OFFICE RENOVATION  
LEXINGTON, KENTUCKY**

**98%** workstations provided with natural daylighting

**33%** less energy use

**28** LEED accredited professionals on staff

**LEED® Facts**

RossTarrant Architects Office Renovation  
Lexington, Kentucky

LEED for Commercial Interiors 2.0  
Certification awarded August 19, 2009

**Gold 37 points\***

Sustainable Sites	5/7
Water Efficiency	1/2
Energy & Atmosphere	8/14
Materials & Resources	6/14
Indoor Environmental Quality	13/17
Innovation & Design	4/5

\*Out of a possible 59 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.



## ROSSTARRANT ARCHITECTS OFFICE RENOVATION

# Leading by Example: How One Architectural Office Became a Teaching Tool

## PROJECT BACKGROUND

RossTarrant Architects' new office was originally built in 1957. The two-story, 13,000-square-foot building was designed to serve as IBM's Lexington, Kentucky typewriter showroom. When RossTarrant Architects purchased the building, it had most recently served as classroom and office space for the National College of Business.

A long-term promoter of sustainable design practices for its clients' projects, RossTarrant was uniquely attuned to the potential within its own new walls. By incorporating a wide range of sustainable design features, RossTarrant sought to maximize the building's ability to educate others about the benefits of building green.

The finished product is a comfortable, creative environment that has earned LEED Gold certification and was recognized with an ENERGY STAR label from the US Environmental Protection Agency. RossTarrant Architects was the first architectural firm in Kentucky to earn either an ENERGY STAR or LEED Gold for its own office.

## THE SUSTAINABILITY OF RENOVATION

Reusing an existing building is the most basic way possible to conserve natural resources and is the ultimate example of sustainability. As staunch advocates of sustainable design and environmental responsibility, RossTarrant knew right away that its new office would seek LEED certification.

Water conservation features like low-flow and automatic faucets and dual-flush, water saving toilets were installed. A unique groundwater collection system was designed to eliminate the use of municipal water for irrigation and mitigate our burden on the city storm sewer system.

All of the building's systems and materials were carefully selected to ensure good indoor air quality. Sensors that detect carbon dioxide levels signal the HVAC system to introduce additional fresh air when CO<sub>2</sub> levels get too high. Products were carefully selected—such as paints, adhesives, and caulks—to limit or eliminate the volatile organic compounds (VOC's) that would off-gas into the atmosphere.

Particular attention was paid to the source of materials used in the renovation. Many existing materials in the building were reused or donated to others, such as Habitat for Humanity. When new materials were required, such as carpet and ceiling tile, materials fabricated with recycled content were selected. All construction waste was carefully managed and sorted to recycle as much as possible and divert waste from landfills.

And, of course, energy efficiency was a major focus. The HVAC system and appliances were all chosen for their energy efficiency. Highly efficient lighting fixtures kick on to supplement the abundant natural daylighting only when daylight sensors indicate they are needed. Occupancy sensors make sure lights are turned off in any spaces that are not in use. All of the building's hot water is heated by two solar panels.

When the firm opened its doors in May 2007, they were immensely pleased with the results. The bright, comfortable, attractive space instantly reaffirmed RossTarrant's commitment to environmentally sustainable design. The building has been embraced by the community and visited by countless interested neighbors, business colleagues, and clients.

## ABOUT ROSS TARRANT ARCHITECTS

RossTarrant Architects is a Lexington-based design firm offering architecture, interior design, civil engineering and landscape architecture. The firm is solely focused on serving educational clients, and has served more than 50 P-12 school districts and 18 colleges and universities across Kentucky. RossTarrant Architects is uniquely committed to sustainable design. It offers a staff of 45 individuals, and more than two-thirds of its professional staff is LEED Accredited.

"When we moved into our new space, we saw it as more than just an opportunity to create a better environment for ourselves. We knew we had a real opportunity to educate the community regarding the benefits of green design and to show people how easy it can be to make a real difference."

Martha Tarrant, President of RossTarrant Architects



**Architect:** RossTarrant Architects, Inc.  
**Civil Engineer:** RossTarrant Architects, Inc.  
**Commissioning Agent:** Paladin, Inc.  
**Landscape Architect:** RossTarrant Architects, Inc.  
**Lighting Designer:** RossTarrant Architects, Inc.  
**MEP Engineer:** CMTA, Inc.  
**Structural Engineer:** Structural Design Group, Inc.  
**Project Size:** 13,000 s.f.  
**Total Project Cost:** \$1.27 million  
**Cost Per Square Foot:** \$98

Photographs Courtesy of: Moberly Photography, Inc.

## 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.usgbckentucky.org](http://www.usgbckentucky.org)  
**888-KY-USGBC**