



OLDHAM COUNTY PUBLIC LIBRARY LAGRANGE, KENTUCKY

50% energy savings over national avg. library site

55 geothermal wells used for energy efficient HVAC

First LEED certified public library in Kentucky



LEED® Facts

Oldham County Public Library
LaGrange, Kentucky

LEED for NC2.2
Certification awarded May 28, 2010

Gold **39 points***

Sustainable Sites 7/14

Water Efficiency 5/5

Energy & Atmosphere 11/17

Materials & Resources 5/13

Indoor Environmental Quality 7/15

Innovation & Design 4/5

**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.

OLDHAM COUNTY PUBLIC LIBRARY - MAIN LIBRARY

Libraries Transform Communities

This Public Library Serves as a Community Benchmark by Appearance as Well as Function

PROJECT BACKGROUND

The Main Library of the Oldham County Public Library system is located on an 8 acre wooded tract only a few blocks from the historic downtown of LaGrange, Kentucky. The Library is a 30,000 square foot building on one level with 109 parking spaces covering fifty-five geo-thermal wells, each roughly 300 feet deep. By reclaiming much of the natural woods and mature trees surrounding the building and adding bridges to span two small streams, the library was able to add a rough walking path where hikers can enjoy native plants and restored habitats throughout the seasons. The building's orientation on its lot maximizes the sun's rays in the winter while reducing heat in the summer. The project began in September, 2007 and opened in January, 2009. It received a Gold rating in the US Green Building Council's LEED program in May of 2010.

STRATEGIES AND RESULTS

Energy and water efficiency were desired goals of the new Main Library. The geo-thermal exchange technology results in lower electricity use, lower utility bills and lower carbon dioxide emissions. Clerestory and floor to ceiling windows allow daylight into the building providing natural lighting throughout the day. An automated lighting system lowers lights in spaces that are not in use and equalizes light throughout the building when night falls. Building modeling achieves an integrated approach for systems used to light, heat, cool and ventilate the building which provides better indoor air quality for the Library staff and its customers. Programmable thermostats and room-by-room climate controls achieve the right level of comfort when and where it is needed without wasting energy.

The Library installed a rainwater harvesting system that directs water to a storage tank where it is filtered and used in toilets within the building. This system is also effective in reducing storm water runoff pollution and flooding. Regional materials were specified in the building specs as well as FSC (Forest Stewardship Council) rated lumber and low VOC finishes for carpeting, flooring, adhesives, paints and coatings.

Bicycle storage, a staff shower to encourage staff to bike or walk to work, dark sky-friendly outdoor lighting that reduces light pollution, Energy Star appliances, non-toxic materials selection and post-consumer recycled content products all contribute to the sustainable qualities of the Library building.

The Library has also instituted more sustainable management decisions concerning how to encourage recycling, what foods are being chosen to serve at kid's events, and how to be more environmentally circumspect about the copies, flyers, newsletters and materials that are printed. If the Library is greener and the staff has been involved in the process, there will be a better work environment. Visitors will be learning, residents will respect the Library even more, and the stage will be set to model even better environmentally responsible behavior for the whole community.

ABOUT OLDHAM COUNTY PUBLIC LIBRARY

The Oldham County Public Library is a non-profit, service-oriented business whose mission is to provide for the educational, recreational and informational interests of county residents. The library's role in Oldham County, as it is historically for libraries throughout the United States, is to acquire, organize and make accessible knowledge and thereby create a culture of literacy in all citizens. The libraries of the Oldham County Public Library system are focal points in the communities they serve, inviting places that people of all ages, interests, and abilities turn to for knowledge, entertainment, information, cultural enrichment, and friendly assistance in finding and using the resources available to them.

“Libraries have the potential to change lives through the resources they provide. We hoped to lead the way in Oldham County to provide a model about how we can all succeed in a reduced-carbon society.”

Susan Eubank, Library Director



Architect: Robert Ehmet Hayes & Associates, PLLC
Civil Engineer: Tetra Tech, Inc.
Commissioning Agent: CMTA Consulting Engineers, Inc.
Landscape Architect: Boone Gardiner Nursery & Landscaping
LEED Consultant: Robert Ehmet Hayes & Associates, PLLC
Lighting Designer: CMTA Consulting Engineers, Inc.
MEP Engineer: CMTA Consulting Engineers, Inc.
Structural Engineer: Tetra Tech, Inc.
Project Size: 30,000 sf
Total Project Cost: \$5 million
Cost Per Square Foot: \$167

Photographs Courtesy of: Moberly Photography

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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