



CROUNSE CORPORATION PADUCAH, KENTUCKY

Leading Edge HVAC System

78% construction waste diverted from landfills

first certified project in **Kentucky**
west of Louisville

LEED® Facts

Crouse Corporation
Paducah, Kentucky

LEED for New Construction
Certification awarded December 2009

Gold 39 points*

Sustainable Sites	10/14
Water Efficiency	2/5
Energy & Atmosphere	5/17
Materials & Resources	6/13
Indoor Environmental Quality	12/15
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.



CROUNSE CORPORATION HEADQUARTERS

River Transportation Co. Extends Efficiency to New HQ

Crouse Corporation Earns Gold Rating in Region's First LEED Certified Building

PROJECT BACKGROUND

The barge/towboat system of transporting bulk material along the Inland Waterway System is the most cost and environmentally efficient method available today. Crouse Corporation, formed in 1948, had outgrown its previous headquarters, constructed in 1965 with a modern and innovative design. The corporate commitment to high quality and innovative design, along with its industry's cost effectiveness, motivated the Crouse Leadership to explore the opportunities of building according to the LEED guidelines. The new site is located adjacent to Paducah's floodwall, overlooking the Ohio River just below its confluence with the Tennessee River, and just a block away from downtown Paducah.

STRATEGIES AND RESULTS

Crouse Corporation already owned the land upon which to build their new headquarters. The available site was linear in a roughly northwest to southeast orientation with project north designated at the northwest end of the building. Consequently, the east and west facades are much longer than the north and south ends. The front of the building faces west. To capitalize on the great views of the river most office functions were located on the 11,212 square foot second floor, while more utilitarian functions remained on the 6,008 square foot first floor. Some parking is also available under the second floor. Views to the river were a high priority, so the east façade is mostly curved curtain wall with vision glazing. Offices and workstations are oriented toward this façade, and the interior office walls are mostly glass. The harsh western sun on the other side of the building was controlled by limiting the amount of vision glazing and utilizing highly reflective curtain wall panels and stone veneer. All of the regularly occupied spaces have access to daylight and views.

The building utilizes a solid thermal envelope, highly efficient mechanical and electrical systems, low flow plumbing fixtures, light and motion activated and controlled light fixtures, and the company promotes a corporate culture of environmental responsibility. The efficient, state of the art, and flexible HVAC system utilizes an air-cooled, direct expansion variable-refrigerant-volume heat recovery, coupled with a variable-air-volume dedicated ventilation-air unit with enthalpy wheel energy recovery which offers substantial energy savings over the traditional Variable-Air-Volume with Reheat systems typically employed in similar office occupancies.

ABOUT CROUNSE CORPORATION

Since 1948, Crouse Corporation has been an industry leader in the river transportation industry. Crouse Corporation is a full service barge line that ships bulk products on the Inland Waterway System with offices in Paducah and Maysville, Kentucky. Their service area includes the Ohio River and its tributaries, as well as the Tenn-Tom and Black Warrior systems. Fleeting and harbor service is also offered in the Maysville, Kentucky area. Crouse Corporation barges over 30 million tons of various commodities annually, the majority of which is coal, but they also transport limestone, sand, gravel, and steel products.

"The so-called Green Movement and the LEED process represents a fundamental shift in the way owners, designers and contractors approach building projects that, I believe, will become standard protocol in the near future whether certified, or not."

J. Richard Coltharp, AIA
Ray Black & Son, Inc.



Architect: Ray Black & Son, Inc./J. Richard Coltharp, AIA
Civil Engineer: Geotech Engineering & Testing, Inc.
Commissioning Agent: Facility Commissioning Group
Landscape Architect: m2d
LEED Consultant: Tara Alsip/Ray Black & Son, Inc.
MEP Engineer: Marcum Engineering, LLC
Structural Engineer: Geotech Engineering & Testing, Inc.
Project Size: 17,220 sf

Photographs Courtesy of: Crouse Corporation
Ray Black & Son, Inc.
Fentress 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

www.usgbckentucky.org
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