GREEN CIRCLE SHOPPING CENTER
Springfield, MO

70% less energy usage than typical similar-sized shopping center

70% less water usage from rain harvesting & high efficiency fixtures

50% lighting cost reduction from photosensitive day lighting design

LEED® Facts
Green Circle Shopping Center
Springfield, MO

LEED Core and Shell v2.2
Certification awarded Jan 16, 2008

Platinum 46*
Sustainable Sites 12/15
Water Efficiency 5/5
Energy & Atmosphere 10/14
Materials & Resources 5/11
Indoor Environmental Quality 9/11
Innovation & Design 5/5

* Out of a possible 61 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 design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.
Eco-Friendly Shopping Center

Appeals to Customers & Tenants

PROJECT BACKGROUND
Green Circle is the first shopping center in the country to achieve LEED Platinum status. Prior to Green Circle, Springfield featured only pre-manufactured strip malls. Green Circle was built and detailed around the LEED system. For example, the site location was chosen with the intention of preserving as many trees and as much green space as possible. Additionally, its footprint is slightly deeper than the area’s 60-foot average to spare a stand of trees at the front of the site.

STRATEGIES AND RESULTS
Structural steel and storefront aluminum contain a high percentage of recycled content, windows are double-glazed, and composite wood cladding meets standards for solar reflectivity. Interior technologies include 40 geothermal wells paired with an energy and heat recovery ventilator, and dual-flush toilets that utilize rainwater collected in a 10,000-gallon rooftop cistern. Other parts of the roof have been planted intensively with indigenous, drought-resistant species and open to the public as a restaurant and green learning center.

Matthew Hufft, the Project Architect, said that the project has already done its share of teaching—with the local building department. A pervious concrete parking lot and bioswale system was the hardest sell, so the project team worked with the building department to develop the current system design. From the storm water that enters the property, to the energy saved from utilizing new, sustainable building techniques, each aspect of the building was examined by experts in the field. The buried cistern holds collected rainwater that is used for flushing toilets. The large bank of energy efficient windows lets natural light in year-round, while the angle is designed to take advantage of the passive solar heat gain in the winter. Storm water penetrates the pavement, rather than running off, which helps to recharge the ground water. The rooftop garden insulates the building while minimizing the heat island effect. All of these measures contribute to the site’s success.

Each of these measures not only creates a lighter footprint, it creates a heavier wallet. For instance, the overall cost of energy used is reduced by 70%. The exceptional efficiency of the lot at processing storm water means more retail space, because none of the area had to be sacrificed for a detention pond. Retailers also benefit from the exclusive, eco-chic location. Staff is happier with a daily dose of sunshine inside and natural light promotes a happier shopping experience for consumers as well. As the cost of energy rises, businesses will look at ways to best minimize their bottom line. Reducing operating expenses is a major factor and buildings like Green Circle will have a distinct advantage in their ability to offer more efficient space.

ABOUT GREEN CIRCLE
Before construction of the Green Circle Shopping Center was complete, 100% of the space was leased. With vacancy rates in the Springfield area averaging approximately 20%, this exceeded expectations. With a unique mix of retail stores, an environment is set where the customers of one tenant are invariably the customers of all of the tenants. This internal synergy is a realm of sustainability that has yet to be studied, but is certain to contribute to increased customer flow and sales, as well as healthier tenants.