



COLUMBIA FIRE STATION #9 COLUMBIA, MISSOURI

35% increased levels of energy performance above the baseline.

50% construction waste management diverted from disposal.

Daylight and views for **90%** of spaces.

LEED® Facts

COLUMBIA FIRE STATION #9
Columbia, Missouri

LEED for New Construction
Certification awarded, 2009

Gold 39*

Sustainable Sites 5/14

Water Efficiency 2/5

Energy & Atmosphere 9/17

Materials & Resources 7/13

Indoor Environmental Quality 11/15

Innovation & Design 5/5

**Out of a possible 69 points, LEED v2.2*

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.

COLUMBIA FIRE STATION #9

GOLD Certified for Leadership in Sustainable Design.

Many sustainable features.

PROJECT BACKGROUND

The City of Columbia commissioned PwArchitects Inc. in 2007 to design Fire Station No. 9 at 201 Blue Ridge Rd. in Columbia, MO to improve and maintaining response times in north-central Columbia. Fire Station #9 is occupied continuously by three (3) shifts of three (3) staff, but can meet the needs of up to 8 firefighters per shift.

Amenities include restrooms with showers, an exercise room, kitchen / dining / living space, dormitory , sleeping area, offices, storage and laundry rooms.

The west side of the station is an apparatus bay side large enough to house three fire trucks, a work room, as well as associated storage and mechanical rooms.

STRATEGIES AND RESULTS

- Includes bicycle parking, showers and changing facilities which enable bicycle commuting.
- The site design manages the quality of the storm water runoff via a rain garden and bio- swale landscaped with native plants .
- Native landscaping saves water by eliminating the need for irrigation systems.
- Use of cellulose insulation, geothermal heat pumps, a high-efficiency energy recovery unit for ventilation, high-efficiency water heater, interior and exterior high-efficiency lighting, & shaded south facing glazing work together for overall building energy efficiency.
- Recycled materials (post-industrial and post-consumer) make up over 20% of the total project material cost .
- Regional materials (materials both extracted and manufactured within 500 miles of Columbia) make up over 70% of the total project material cost.
- Of the wood products used on the project, over 60% were FSC (Forest Stewardship Council) Certified.
- All of the adhesives, sealants, paints, coatings & carpet installed on the building interior are low-VOC or no-VOC, reducing the amount of harmful, some even carcinogenic chemicals that can off-gas into the building' s interior.
- All of the wood and agrifiber products installed on the interior of the building contain no ureaformaldehyde resins, a chemical known to cause respiratory irritation, asthma, and may cause cancer.

ABOUT PwARCHITECTS

PwArchitects, Inc. has maintained a mid- Missouri presence working with public and private institutions in our region for thirty-eight years. Offering sustainable architecture and a wide range of services for various building types, PWA interweaves aesthetics, economy, and scheduling to fulfill the needs and desires of our clients.

PWA has been a leader in the sustainable development movement since the U.S. Department of Energy award in 1977. With LEED® Accredited Professionals on staff, PWA strives to meet the needs of our clients while incorporating sustainable design into all of our projects. Through collaboration and teamwork, we work closely with our clients to form strategies that reduce energy usage, conserve water, minimize waste and promote the health and satisfaction of a building' s users and visitors.



Owner: City of Columbia, Missouri
Architect: PwArchitects
Civil Engineer: Trabue, Hansen & Hinshaw, Inc.
Contractor: Little Dixie Construction Co.
Photographs Courtesy of: PwArchitects, Inc.
Project Size: 7,767 GSF
Total Project Cost: \$1,600,000
Cost Per Square Foot: \$206

About USGBC-Missouri Gateway Chapter

USGBC is the nation' s foremost coalition of leaders from across the building industry. Missouri Gateway Chapter members represent all segments of the building industry and work together to promote buildings that are environmentally responsible, profitable, and healthy places to live and work.



Missouri
Gateway
CHAPTER