

Columbia's wide ARRAY OF CERTIFIED green buildings

Building owners, architects and contractors have collaborated on a variety of construction and renovation projects in the city that earned the US Green Building Council's highest ratings.

The system has an array of metrics including energy savings, water efficiency, carbon dioxide emissions linked to the building process and indoor air quality.

The Green Building Council, a nonprofit organization, provides owners and operators a framework for identifying and implementing what it describes as practical and measurable green building design, construction, operations and maintenance solutions.

The green building movement is gaining momentum. Fast Company cited statistics from an industry research group that the US green building market value will jump from \$71 billion now to \$173 billion by 2015. Commercial green building is expected to grow by 18 percent annually during the same time period to \$83 billion.

The trend is attributed both to a growing recognition of green building's potential cost-savings as well as financial incentives from the government.

The LEED certified buildings include a college hall, a fire house, the city hall, a schoolhouse, a bus station and a mixed-use building with lofts and offices. Several more buildings are in the process of being certified.

LEED is the Green Building Council's standard for rating the energy and resource efficiency of new and renovated structures. It stands for Leaders in Energy and Environmental Design. Gold is the second highest rating, followed by silver and platinum.



PHOTO COURTESY OF PECKHAM & WRIGHT

COLUMBIA FIRE STATION NO. 7

Green Meadows and Bethel roads
Owner: City of Columbia
LEED Certification Level: Applied for Silver
Architect: Peckham & Wright Architects
Contractor: GBH Builders Inc.
Completed: 2010

Features:

- Paved with porous asphalt for storm water collection
- Installed rain garden and bio-retention basin for cleansing storm water runoff
- Landscaped with native plants to minimize need for irrigation
- Used certified sustainable wood for rough carpentry, doors, cabinetry and trim
- Extensively used regionally available materials from concrete to roofing
- Used recycled building materials throughout
- Re-used materials from existing Fire Station No. 7
- Installed ground-source heat pumps for heating and air conditioning
- Used passive solar elements such as clerestory windows
- Recycled construction waste

COLUMBIA FIRE STATION NO. 9

North Providence and Blue Ridge roads
Owner: City of Columbia
LEED Certification Level: Gold
Architect: Peckham & Wright Architects
Contractor: Little Dixie Construction Co.
Completed: 2009

Features:

- Used lumber certified by the Forest Stewardship Council for the project
- Recycled construction waste
- Used low-VOC sealants and paints
- Used recycled content for flooring and siding
- Filters storm water runoff through an on-site rain garden and bio-swale

MISSOURI HALL COLUMBIA COLLEGE

1011 Rogers St.
Owner: Columbia College
LEED Certification Level: Silver
Architect: Simon Oswald Associates
Contractor: Reinhardt Wilson Joint Venture
Completed: March 2007

Features:

- Reused 95 percent of existing building shell
- For nearly 15 percent of project, materials salvaged, refurbished or reused (For instance, the original wood floors were removed and remanufactured and refinished into ceiling panels.)
- Building envelope, HVAC and lighting designed to maximize energy performance



PHOTO COURTESY OF COLUMBIA COLLEGE

(Building performs 40 percent better than standard.)

- Individual temperature controls in all offices
- Day lighting achieved for 75 percent of spaces occupied for critical tasks
- Installed low-flow toilets and sinks
- Re-use ground water from the heat exchanger to convey the sewage
- Purchased nearly 40 percent of the building materials from manufacturers within 500 miles of the site
- Used recycled materials for 5 percent of building materials
- Landscaped with native plants to reduce irrigation needs
- Used adhesives, paints, carpets and wood products with low VOC

FAY ST. LOFTS

Wright Brothers Mule Barn, 501-505 Fay St.
Owner: Hinkson LLC., Brian and Joy Pape, principals
LEED Certification Level: Applied for Silver
Architect: Brian Pape
Contractor: Wesbury Construction Co., Brent Westbury and Denny Walkup
Completed: 2008-Phase 1, 2009-Phase 2, November 2010-Phase 3 scheduled



PHOTO COURTESY OF WOODRUFF SWEITZER

Features:

- Saved former 90-year-old Diggs Meat Packing Plant from demolition
- Kept exterior brick walls and windows, many interior timber frames, trusses, walls
- Re-used historic brick, metal roof
- Installed Columbia's first live-plant-covered roof
- Used light coloring for nearly all roof surfaces to deflect heat
- Paved parking lot with pervious material on rock retention base
- Used local timbers, wood, concrete flooring
- Recycled wallboard painted with low VOC paint
- Used formaldehyde-free wood and finishes
- Installed granite countertops, Energy Star stainless steel appliances
- Used energy-efficient lights, sensors to turn lights off when rooms unoccupied
- Restored building placed on National Register of Historic Places

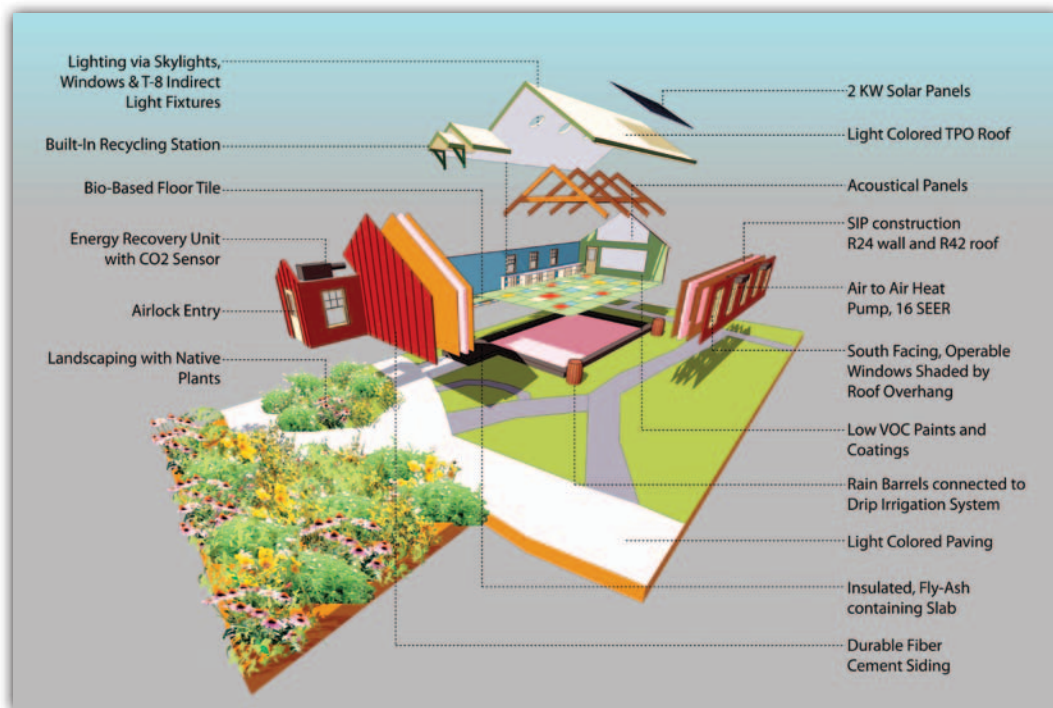


ILLUSTRATION COURTESY OF PECKHAM & WRIGHT



PHOTO COURTESY OF PECKHAM & WRIGHT

ECO SCHOOLHOUSE GRANT ELEMENTARY SCHOOL

Broadway and Garth
Owner: Columbia Public Schools
LEED Certification Level: Gold
Architect: Peckham & Wright Architects
Contractor: Alpine Builders. Many subcontractors donated labor.
Completed: 2008



PHOTO COURTESY OF CITY OF COLUMBIA

WABASH STATION

10th and Ash streets
Owner: City of Columbia
LEED Certification Level: Certified
Architect: ThreeSixty Architecture
Contractor: Sircal Contracting, Inc.
Completed: 2007

Features:

- Restored at least 50 percent of existing facility
- Used energy-efficient fixtures
- Installed energy efficient heating system
- Facilitated alternative transportation, including bike racks
- Used certified building materials



PHOTO BY SHAWN BRANT

COLUMBIA CITY HALL ADDITION

Broadway and Eighth streets
Owner: City of Columbia
LEED Certification Level: Applied for Silver
Architect: Chiodini Associates, Inc.
Contractor: K&S Contractors, Inc
Completed: 2010

Features:

- Building materials use 29 percent less energy than conventional.
- Installed low-flow plumbing fixtures to save an estimated 44 percent in water use
- Used no-VOC or low-VOC building materials
- Extensively used recycled materials, such as concrete countertops made from recycled beer bottles, bamboo ceiling tiles and wall panels and woven grass wallpaper