



GREEN BUILDING TOURS

MARCH 31, 2009



LOOSCAN NEIGHBORHOOD LIBRARY

Houston, Texas

LEED for New Construction

14% Local / Regional Materials

26% Recycle Content

42% Energy Cost Savings

LEED® Facts

Looscan Neighborhood Library
Houston, TX

LEED for New Construction

Certification Awarded Nov 25, 2008

Certified 26*

Sustainable Sites 6/14

Water Efficiency 2/5

Energy & Atmosphere 7/17

Materials & Resources 3/13

Indoor Environmental Quality 7/15

Innovation & Design 1/5

*Out of a possible 69 points



Looscan Neighborhood Library

Turning a new page in the Public Library System

PROJECT DESCRIPTION

This City of Houston neighborhood library is a dynamic community gathering space for all ages. The program includes Community Meeting Rooms, a Garden Club Reading/Meeting Room, and an Internet Cafe with wireless technology. Upon entry through a vestibule, the open Lobby, with monumental stairs to the second level, welcomes the visitor and provides a clear sense of organization. The Circulation and Reference Counter is centrally located promoting convenience as well as visual control. Within the large unified reading room there are distinct areas serving the needs of adults, children, and young adult readers. Exterior walls contain large expanses of glass not only to bring in natural light but also to expose the interior to people walking by. The new Looscan Library houses approximately 100,000 items in 21,175 gross square feet and achieved LEED Certification for sustainable, environmentally conscious design.

SUSTAINABLE SITES (6/14)

The project is located within a ¼ mile of two bus lines. ■ A bike rack and staff restroom with shower and changing area help promote biking and alternative forms of commuting to work. ■ To reduce the heat island effect, a roofing system meeting the Energy Star and high emissivity requirements has been installed. ■ For the site, high cut off and downward directional lighting has reduced light pollution.

WATER EFFICIENCY (2/5)

A high-efficiency irrigation system has been specified to achieve greater water efficiency for the site. ■ The use of low flow fixtures, automatic flush sensors, automatic faucets, and trap guards in the floor drain pipes are used throughout the building, minimizing waste and better controlling water consumption.

ENERGY & ATMOSPHERE (7/17)

A commissioning agent was retained during design development through construction to complete fundamental building systems design. ■ The project follows ASHRAE 90.1 requirements. ■ There is zero use of CFC-based refrigerants in the building and non-HCFC refrigerants in the mechanical systems were installed. ■ The owner has also agreed to a minimum two-year contract with a renewable energy company which is anticipated to be further extended.

MATERIALS & RESOURCES (3/13)

A recycling area is provided on site. ■ Rubber flooring counts toward the recycled content credit which stipulates that at least 10% of the total value of materials in the project must be post consumer recycled content plus half post-industrial recycled content. ■ At least 20% of building materials and products are manufactured regionally within a 500-mile radius. ■ And of this 20% of building materials documented, a minimum of 50% of building materials and products have been extracted, harvested, or recovered (as well as manufactured) within 500 miles of the site.

INDOOR ENVIRONMENTAL QUALITY (7/15)

The HVAC system is designed to comply with the latest ASHRAE 62 Standards. ■ Smoking is prohibited in the building. ■ The building is outfitted with CO2 sensors in the air return spaces to control the outside air supply to the building at the minimal level to comply with ASHRAE and LEED requirements. ■ The building ventilation effectiveness has been increased to meet ASHRAE and LEED's standards. ■ Low-emitting materials, adhesives, and sealants were installed to meet requirements. ■ PPG Pure Performance Interior Latex Paint with zero VOC emissions was installed. ■ An energy management system capable of permanently monitoring the building's mechanical and electrical systems to the extent necessary for LEED compliance was installed. ■ And ultimately, a Daylight Factor of 2% in over 75% of all space occupied for critical visual tasks has been achieved.

INNOVATION IN DESIGN (1/5)

To reduce electrical billings, automatic, power-factor correcting capacitors on the electrical systems have been put in place to maximize energy efficiency. ■ GSD's Energy Management group has assigned a Green Power provider to the Looscan Library site. ■ The building management is involved in sustainable education to the public it serves.

"When the City of Houston began planning the Looscan Neighborhood Library, going green was a definite priority. As a public building that functions as a community gathering place, we wanted this facility to set an example for future development. This library has helped turn a new page in the City of Houston's efforts to Go Green!"

Issa Z. Dadoush, P.E., MBA
Director of General Services Department



Owner: City of Houston General Services Department, Houston Public Library
Architect: Jackson & Ryan Architects
Engineer: Walter P. Moore & Associates
MEP Engineer: I.A. Naman and Associates
Structural Engineer: Ingenium, Inc.
Interiors: Bennett Design Group
Contractor: Gilbane Building Company
Project Size: 21,175 SF
Total Project Cost: \$5,576,500
Cost PSF: \$263
Completion: March 2007

Photography by Hester + Hardaway

ABOUT LEED

The LEED Green Building Rating System is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's Web site at www.usgbc.org to learn more about how you can make LEED work for you.