

PROJECT PROFILE



Green Building Resource Center Houston, Texas

LEED for Commercial Interiors

22% Reused Materials

33% Recycled Content

44% Regional Materials

84% Reused Furniture & Furnishings

94% Construction Waste Diverted

95% Energy Star Appliances

LEED® Facts

City of Houston
Green Building Resource Center
Houston, TX

LEED for Commercial Interiors 2.0
Certification Awarded Jan 15, 2010

Gold **35***

Sustainable Sites 2/7

Water Efficiency 0/2

Energy & Atmosphere 8/14

Materials & Resources 9/14

Indoor Environmental Quality 11/17

Innovation & Design 5/5

*Out of a possible 59 points

PROJECT PROFILE

Green Building Resource Center A New Resource from the City of Houston



PROJECT DESCRIPTION

The City of Houston Green Building Resource Center has been designed as a combination waiting room, showroom, classroom and library of information with the physical space serving as a green building demonstration project itself. Visitors can peruse the shelves and displays, touch and feel samples, and learn about green building options in a relaxed setting where they can browse on their own, use an interactive workstation, or ask questions of the Green Building Resource Center staff.

The public can bring interim plans for review by our Program Director for opportunities to add green strategies to save energy and water, and make their building healthier.

Periodically, the Green Building Resource Center will offer informative programs that are free and open to the public.

SUSTAINABLE SITES (2/7)

The project is located within a ¼ mile of 11 bus lines and the light rail. ■ Located in the Midtown area, it is within ½ mile of residential development, including an area of 86 units per acre, and over 10 basic services.

WATER EFFICIENCY (0/2)

While no plumbing work was required in the space, a 250 gallon Rainwater Harvesting Tank outside the GBRC was installed with a solar panel that powers the pump to irrigate our 6 reclaimed planters as a demonstration project.

ENERGY & ATMOSPHERE (8/14)

A commissioning agent was engaged during design through construction to complete fundamental building systems design. ■ The project follows ASHRAE 90.1 requirements. ■ There is zero use of CFC-based and non-HCFC refrigerants in the mechanical systems that were installed. ■ The lighting power density is reduced by 35% from the baseline. ■ The lighting is controlled by daylight responsive controls as well as motion sensors and a programmable timer. ■ The HVAC system installed was optimized for high performance. ■ 95% of the appliances are Energy Star compliant.

MATERIALS & RESOURCES (9/14)

A recycling area is provided on site. ■ 94% of construction waste was diverted from the landfill, including reclaiming the carpet and the ceiling tile. ■ A multitude of finish materials count 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. ■ 44% of building materials and products are manufactured regionally within a 500-mile radius. ■ 33% of building materials were reused, largely the wood shiplap and the raised floor panels. ■ 84% of the furniture and furnishings were reused and/or repurposed.

INDOOR ENVIRONMENTAL QUALITY (11/17)

The HVAC system is designed to comply with the latest ASHRAE 62 Standards. ■ Smoking is prohibited in the building. ■ A construction air quality management plan was developed and used throughout construction. ■ Low-emitting materials wood & agrifiber products, adhesives, and sealants were installed to meet requirements. ■ Interior latex paints with zero VOC emissions were installed. ■ Low emitting carpets were installed. ■ Indoor pollutant source control measures include an entry mat made from tires, and MERV 13 air filters. ■ Task lighting has been provided for all occupants, and lighting controls are provided in multi-occupant spaces. ■ Over 50% of occupants have individual thermal control. ■ The project space complies with ASHRAE 55 requirements, and a permanent monitoring system is in place. ■ All of the occupants have a direct line of sight to the perimeter glazing.

INNOVATION IN DESIGN (5/5)

All four of the Innovation points are exemplary levels of base points. ■ 940 in lieu of 200 public transit stops are available from ¼ mile of this location. ■ 22% in lieu of 5% of building materials were reused. ■ 84% in lieu of 30% of the furniture and furnishings were reused, many from the Houston Public Libraries. ■ 33% in lieu of 20% recycled content is present in the materials used. ■ Steve Stelzer, LEED AP, the Program Director, chaired the documentation efforts of a volunteer committee of 7 to help them meet the new LEED AP requirement to have worked on a LEED project.

“It was important from the very beginning to make sure this center was a demonstration of a Green building itself. We were determined to show people how it could be done in an existing building, that it could be done on a small scale as a tenant space, and to show that this is what it looks like and feels like to be in a Green building.”

Sheila Blake, MBA, CBO, LEED AP
Assistant Director, City of Houston



Owner: City of Houston Public Works & Engineering
Architect: BNIM, Intexure
Structural Engineer: Apollo BBC
MEP Engineer: Riehl Engineering
Commissioning Authority: Apollo BBC
Interiors: Intexure
Contractor: COH General Services Dept
Project Size: 3145 SF
Project Cost: \$281,764.00
Project Donations: \$288,600.00
Completion: Earth Day 2009
Photography: Only Once Images

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 and the Greater Houston Area Chapter of USGBC at www.usgbc-houston.com to learn more about how you can make LEED work for you.