

LEED Profile

Atherton Elementary School

Achievements

15% reduction in energy consumption

20% reduction in water use

41% recycled content of materials

62% use of local/regional materials

100% construction waste diverted from landfill



Project Description

Atherton Elementary School is a 86,000-square-foot, two-story facility nestled in the heart of the fifth ward. The previous school, located on a 5.1-acre site, was demolished and replaced with a new state-of-the-art facility. The school, nearly twice the size of the original facility built in 1957, has 30 classrooms with a science lab on each level. It features a comprehensive library and a multipurpose/recreation room. Each level includes a teacher workroom as well as faculty and student restrooms. An outdoor courtyard at the center of the school provides hands-on learning for science lessons.



Sustainable Overview

- **Students in close proximity to school:** More than 80% of the students live within a half mile of the school, which encourages students to walk to school
- **Safety:** All aspects of the facility are secure with fencing and gates around the entire campus
- **Site planting:** The school is two stories, which maximized the green space on the site. Plants are selected to be native/adapted plants, which require less irrigation, less maintenance and fewer pesticides and fertilizers
- **Concrete paving of parking lots:** The concrete paving features a Solar Reflectance Index of at least 29



Water Efficiency

- 20% water savings throughout the building
- 50% water-efficient landscaping reduction



Energy & Atmosphere

- Ventilation air was pre-treated with outside air chilled water VAV rooftop units that utilize integral heat recovery to minimize energy costs associated with the outside air
- The lighting system consists of zone-type lighting control in the classrooms, with multi-level lighting control and occupancy sensors



Materials & Resources

- Nearly 100% of the demolition materials and construction waste was diverted from landfill by recycling
- 62% of the materials were extracted or manufactured within 500 miles of the site
- More than 41.4% of the building products, excluding mechanical, electrical, and plumbing systems, are made with recycled materials
- 75% of wood is Forest Stewardship Council (FSC) certified, supporting responsible forest management
- The use of Owen Corning "Quiet Zone" Sound Attenuation Batt insulation for noise reduction



Indoor Environmental Quality

- Air quality strategies: Ductwork is kept clean and covered, with testing at construction completion
- Building is designed for proper ventilation to keep the air clean and fresh
- Carbon dioxide monitors are provided, and copy machines and chemical rooms have exhaust fans
- Roll up mats at every entry are scheduled for weekly cleaning
- All adhesives, sealants, paints, coatings, flooring systems, and composite wood products meet the requirements for low VOC (Volatile Organic Contaminants)



Innovation and Design

- Recycling is encouraged with the incorporation of three recycling stations

LEED® Facts

LEED for Schools (v2007)

Seeking Certification XX*

Sustainable Sites	9
Water Efficiency	5
Energy & Atmosphere	10
Materials & Resources	7
Indoor Environmental Quality	13
Innovation & Design	5

* Out of a possible 78 points

Project Information

Owner: Houston Independent School District (HISD)

Address: 2011 Solo Street, Houston, TX 77020

Architect: IDG Architects

Civil Engineer: ESPA Corporation

MEP Engineer: Infrastructure Associates

Structural Engineer: ASA/DALLY Consulting

LEED Commissioning Agent: Carol Vick Architects

CMAR: Cadence McShane Corp.

Project Size: 86,000 SF

Project Budget: \$15,859,000

Opened: August 2013

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.