# LEED Profile

# Berry Elementary School

## Achievements

**25%** reduction in energy consumption

**38%** reduction in water use

**22%** recycled content of materials

**35%** use of local/regional materials

**87%** construction waste diverted from landfill

## Project Description

Berry Elementary is an environmental sciences magnet school designed for 750 students from pre-K through fifth grade. The school is designed to support the environmental science curriculum, allowing the faculty to teach yearlong programs around air, water, light, energy and earth. Each grade level has an open, shared classroom utilized for group projects and display. The school features a three-sided courtyard that includes an outdoor classroom and garden areas for additional science projects. Rainwater from the roofs is collected in cisterns that allow for garden irrigation and water studies. This sustainable design assists in creating a healthy environment for student success.

## Sustainable Overview

- Two-story design, versus traditional one story, to allow increased open space and natural water percolation to reduce runoff
- Preservation of natural habitat to save old growth trees; native species are part of the educational programs

## Energy & Atmosphere

- Provides grade-level team project areas to serve as group environmental study
- Display areas are aligned with the environmental sciences curriculum
- The team area concentrating on the study of energy has showcased open wall sections showing the layers of construction and a variety of insulation materials for educational purposes
- The students are studying the subjects surrounding the environment in alignment with LEED
- "Designed for Energy Star Award" model shows 24.5% energy savings over the LEED model standard

## Materials & Resources

- Finish materials are high in recycled content, easily maintained and aesthetically pleasing
- Selection of materials as a single finished material versus layering of materials
- The brick, stone, and stucco exteriors assist to minimize yearly maintenance of the building exterior
- Terrazzo floors for the ground-floor public corridors and stained concrete floors in the cafeteria, teaming and science classrooms minimize floor maintenance over the life of the building
- Rainwater collects in cisterns for science class gardens, reducing overall water use

## Indoor Environmental Quality

- Efficient locating of mechanical units
- Efficient air-distribution devices

## Innovation and Design

- Acoustic separation between corridors and classrooms with enhanced partition types increasing mass and insulation

## LEED® Facts

LEED for Schools (v2009)

| **Silver** | **39*** |
|---|---|
| Sustainable Sites | 8/16 |
| Water Efficiency | 3/7 |
| Energy & Atmosphere | 6/17 |
| Materials & Resources | 7/13 |
| Indoor Environmental Quality | 10/20 |
| Innovation & Design | 5/6 |

* Out of a possible 79 points

## Project Information

**Owner:** Houston Independent School District (HISD)
**Address:** 2310 Berry Road, Houston,TX 77093
**Architect:** Gensler
**Civil Engineer:** Gooden Consulting Engineers, Inc.
**MEP Engineer:** Jones Engineers, LP
**LEED Commissioning Agent:** Reihl Engineering
**Contractor:** Gamma Construction Company
**Project Size:** 86,000 SF
**Project Budget:** $14,872,940
**Opened:** Fall 2011

## 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.