

# LEED Profile

## Crockett Elementary School

### Achievements

- 15%** reduction in energy consumption
- 31%** reduction in water use
- 30%** recycled content of materials
- 21%** use of local/regional materials
- 93%** construction waste diverted from landfill



### Project Description

Crockett Elementary School is located at 2112 Crockett on the west side of downtown Houston. The one- and two-story building serves about 557 elementary school students and 31 staff members. The existing campus is made up of one building, including main administration, library, classrooms and student dining area. Originally constructed in 1980, except for the Title I wing, which was built in the mid-1960s, there have been no previous additions.



### Sustainable Overview

- Estimated 10-year payback for mechanical, lighting and plumbing improvements, including LEED and commissioning fees
- Energy savings achievable through direct digital controls system, high-efficiency mechanical systems, reduced lighting power wattage, occupancy sensors, and efficient domestic water heating systems



### Water Efficiency

- Anticipated annual water savings of 90,790 gallons
- Water efficiency improvements save \$653.68 per year (at cost of \$7.20/1000 gallons)
- 30.7% less water consumption using low-flow and sensor operated lavatories, sinks, and urinals



### Energy & Atmosphere

- Energy savings of 44,769 KWh
- The energy efficient improvements save \$3,581.52/year (at cost of \$0.08/KWh)
- 14.8% in annual energy cost savings compared to an ASHRAE Standard 90.1-2004 standard building



### Materials & Resources

- A bioswale, using restrictor pipes placed in each outfall to the city drainage system maintaining the existing flows; treatment through settling of pollutants with percolation/filtration of storm water runoff through vegetation and soil media



### Indoor Environmental Quality

- Efficient mechanical systems designed to improve the indoor air quality of the building



### Innovation and Design

- Maximize natural lighting, while protecting with awnings at western exposures
- A sloping roof at the library with a curtain wall facing true north provides indirect natural light

### LEED® Facts

LEED for Schools (v2007)

**Certified 32\***

Sustainable Sites	8
Water Efficiency	2
Energy & Atmosphere	3
Materials & Resources	6
Indoor Environmental Quality	11
Innovation & Design	2

\* Out of a possible 78 points

### Project Information

**Owner:** Houston Independent School District (HISD)

**Address:** 2112 Crockett, Houston, TX 77025

**Architect:** NATEX architects

**Civil Engineer:** Rekha Engineers

**MEP Engineer:** DBR Engineers

**Structural Engineer:** ASA Dally

**Commissioning Agent:** DBR Engineers

**Contractor:** COMEX Corporation

**Project Size:** Additions 23,860 SF

**Renovation:** 26,650 SF

**Project Budget:** \$7,876,477

**Opened:** April 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](http://www.usgbc.org) to learn more about how you can make LEED work for you.