# **LEED Profile**

# **Almeda Elementary School**

## **Achievements**

**18%** reduction in energy consumption

**42%** reduction in water use

**13%** use of local/regional materials

**87%** construction waste diverted from landfill





## **Project Description**

Almeda Elementary School is an 86,000-square-foot school, serving students from pre-kindergarten through the fifth grade. The new school is positioned on a rural site of 8.282 acres, which is bounded on four sides by single-family homes. The exterior of the building consists of brick, metal panels, and split-face concrete block. Interior materials were selected using building products that are available within a 500 mile radius of the site, rather than materials that require longer distance shipping. The building has been sited to allow a high percentage of spaces to have views and receive natural light. The new school is more environmentally responsible, more healthful for occupants, and more economical to operate.



#### Sustainable Overview

- Daylight at entry and classrooms, recycled content and high-efficiency windows
- 18% reduction in energy consumption
- Recycling collection area



# Water Efficiency

- Low water consumption water closets, urinals and low-flow reduce water use by 42% versus industry standard plumbing fixtures
- Highly efficient landscape irrigation equipment reduces water use for plants by 69.6%
- Plant materials are native to Gulf Coast, with low water requirements and rapid growth
- Turf irrigation limited to most critical and visible areas
- Perimeter trees on large open play turf areas use efficient bubblers for irrigation
- Hardwood mulch for ground cover area allows for preservation of established trees



#### **Energy & Atmosphere**

- 9-foot high classroom ceilings reduce noise reverberation
- 100% of the ceiling tile in the classrooms have a minimum Noise Reduction Coefficient of 0.70



# Materials & Resources

 Low-sloped roof with a minimum SRI of 78 installed at a minimum of 75% of the roof surface to reduce the heat island effect.



#### **Indoor Environmental Quality**

 Building finishes include low Volatile Organic Compounds (VOC) paints, gypsum board, and carpet -CRI Green Label Plus Carpet

# **LEED® Facts**

Leed for Schools (v2007)

Certified	30*
Sustainable Sites	6
Water Efficiency	4
Energy & Atmosphere	4
Materials & Resources	3
Indoor Environmental Quality	10
Innovation & Design	3
* Out of a possible 78 points	

# **Project Information**

Owner: Houston Independent School

District (HISD)

Address: 14226 Almeda School Road, Houston, TX 77047 Architect: Architechnics/3, Inc. Civil Engineer: ESPA Corp. MEP Engineer: DBR Engineering

Consultants, Inc.

**Structural Engineer:** Ingenuim, Inc.

**Commissioning Agent:** Wylie

Associates

**Contractor:** Satterfield and Pontikes

Construction, Inc. **Project Size:** 86.07

Project Size: 86,073 SF Project Budget: \$18,295,533

Opened: June 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.