

# LEED Profile

## Gregg Elementary School

### Achievements

**26%** reduction in energy consumption

**40%** reduction in water use

**30%** recycled content of materials

**27%** use of local/regional materials

**90%** construction waste diverted from landfill



### Project Description

The new Gregg Elementary School replacement is an 84,704-square-foot, single-story, free-standing elementary school for 750 students from pre-kindergarten through fifth grade. The new school replaces a 50-year-old elementary school (now demolished) that had 55,000 square feet and occupied an urban site of 7.8+ acres surrounded by single-family homes, a neighborhood park and light-industrial manufacturing facilities. Grade levels are organized into "wings" and in proximity to all grade level wings are laboratories for art, computer and science. The staff offices serve as the primary point of secure entry into the facility. The school has a full-service kitchen and auditorium-dining spaces, also in close proximity to other functions.



#### Sustainable Overview

- Selection of interior and exterior materials recall the context of the neighborhood and fulfill benchmarks for materials: regional manufacturing, recycled materials, "renew-ability," low or no chemical odors, and creativity in development
- Provided enhanced acoustics within gathering spaces
- Protected site amenities and mature trees
- An environmentally responsible, economically responsible, and user-responsible facility



#### Water Efficiency

- Maximize water efficiency inside and outside through the use of low-flow plumbing fixtures, proximity sensors, and high-efficiency irrigation controllers



#### Energy & Atmosphere

- Management of construction process to recycle construction debris
- Curriculum created to utilize LEED process and school building as a teaching tool for the students



#### Materials & Resources

- Ceilings are predominantly acoustic ceiling tile
- Site paving is concrete – an HISD standard – for durability



#### Indoor Environmental Quality

- Air-cooled chillers with individual variable air volume (VAV) boxes; 2-pipe system with electric re-heat in the main building
- Mechanical ducts kept clean during construction and flushed-out prior to occupancy
- The cafeteria and library have a 4-pipe system for cooling and heating
- Interior finished flooring is a combination of vinyl composition tile (VCT), carpet tiles, and terrazzo
- Use of construction materials with low Volatile Organic Compounds (VOC) along with lighting, enhanced commissioning of the mechanical and energy systems, HVAC controls, and the CO2 level monitoring



#### Innovation and Design

- One-story steel-frame structure over a concrete slab with drilled and under-reamed concrete piers

### LEED® Facts

LEED for Schools (v2007)

**Silver 39\***

Sustainable Sites	6
Water Efficiency	4
Energy & Atmosphere	8
Materials & Resources	5
Indoor Environmental Quality	10
Innovation & Design	6

\* Out of a possible 78 points

### Project Information

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

**Address:** 6701 Roxbury Rd, Houston, TX 77087

**Architect:** Hermes Architects

**Civil Engineer:** Sunland Group

**MEP Engineer:** Bovay Engineers, Inc.

**Structural Engineer:** Matrix

**Commissioning Agent:** Redding,

Linden, Burr, Inc.

**Contractor:** Anslow Bryant Construction, Ltd.

**Project Size:** 84,704 SF

**Project Budget:** \$16,603,500

**Opened:** December 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.