LEED Profile Patterson Elementary School

Achievements

19% reduction in energy consumption

37% reduction in water use

78% daylighting provided for learning spaces

90% construction waste diverted from landfill



Project Description

Patterson Elementary is a replacement school for the original building, which was built in the 1950s. Patterson is an exceptional school that serves a large community. That merited the building of a slightly larger school to accommodate the larger student body of 946 students. This LEED Silver school continues the tradition of keeping close community ties by providing a Head Start Program for the surrounding neighborhood and helping adults earn a GED.



Sustainable Overview

• The sustainable design strategy was to achieve Green Design features in an economical manner by connecting inherent site-specific features to the appropriate LEED credit points

Water Efficiency

- The design provided for water efficient landscaping by utilizing non-potable water for irrigation. • The project has two high capacity rain water collection cisterns that are used for landscape
- The project has two high capacity rain water collection cisterns that are used for landscap irrigation.



Energy & Atmosphere

- 19% reduction in annual costs and energy consumption compared to baseline standard
- The project provided community connectivity by maximizing open space and joint-use through a vegetated open space twice the size of the building footprint
- 100% of all site paving with a solar reflectance index value of at least 29, with reduced light pollution and reduced heat island effect

Materials & Resources

- 10% in regional materials provided for the entire project based on cost for the actual materials
- 89% of wood is Forest Stewardship Council (FSC) certified, supporting responsible forest
- management
 Low odor-emitting materials used in flooring, paint/coatings, walls, ceiling systems, wood and fiber products



LEED[®] Facts

LEED for Schools (v2007)

Silver	42*
Sustainable Sites	11
Water Efficiency	5
Energy & Atmosphere	5
Materials & Resources	4
Indoor Environmental Quality	12
Innovation & Design	5
* Out of a possible 78 points	

Project Information

Owner: Houston Independent School District (HISD) Address: 5302 Allendale, Houston, TX 77017 Architect: Sustaita Architects, Inc. **Civil Engineer:** Texas Engineering and Mapping **MEP Engineer:** Voe Engineering Structural Engineer: Matrix Structural Engineers Commissioning Agent: Redding, Linden, Burr, Inc. **Contractor:** Cadence McShane Construction Company, LLC. Project Size: 98,444 SF **Project Budget:** \$19,046,167 **Opened:** January 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.