**Sustainable Overview**

- **Safety** – pervading all aspects of the facility with fencing and gates around the entire campus
- **Simple** – both to plan layout and use of construction materials. Circulation within the facility is easily understood, so students and visitors do not get lost inside the building
- **Durable** – a facility planned for 50+ years of use has materials that are easy to clean, maintain, and withstand constant use
- **Flexible** – enabling future adaptation to minimize modification costs
- **Uplifting** – a positive influence on students and the community, which is a source of pride for students, their families, and neighbors
- **Sustainable and High-Performance** – to the extent practical and reasonable, the design has incorporated sustainable design principles

**Water Efficiency**

- 36% less water usage than similarly built non-LEED elementary school
- Irrigation water usage was reduced by 70% from similarly built non-LEED elementary schools

**Energy & Atmosphere**

- 15% savings in total annual energy usage compared to ASHRAE Standard 90.1-2004 baseline

**Materials & Resources**

- Structural-steel frame and low-slope “TPO” single-ply highly-reflective roof
- Exterior brick masonry (with glazed openings in aluminum storefront) that recall the context of the neighborhood
- Interior materials: painted drywall, ceramic tile, acoustic tile ceilings, and vinyl composition floors

**Innovation and Design**

- $134 cost per square foot for the LEED-constructed elementary school versus similarly constructed non-LEED building at $130 to $140 per square foot. The LEED requirements had no appreciable cost impact on the construction cost
- LEED principles considered include:
  -- Natural light usage
  -- Building orientation
  -- Indoor air quality
  -- Landscaping

**Achievements**

- 19% reduction in energy consumption
- 37% reduction in water use
- 22% recycled content of materials
- 23% use of local/regional materials
- 92% construction waste diverted from landfill

**Project Description**

HISD consolidated the original 50-year-old Peck Elementary School with the 50-year-old MacArthur Elementary School, resulting in one new elementary school: Lora B. Peck Elementary School. The new school is positioned on an urban site of 6.9 acres. It is bounded on three sides by single-family homes and on the fourth side by a major thoroughfare, upon which a Metro light rail line is currently under development. Mature trees dot the school site.

All materials were required to pass tests of sustainability, appearance, maintenance and cost. The end result is a beautiful and functional facility that is responsible environmentally and economically, within the budget of $12 million. By carefully considering LEED guidelines, the designers were able to target LEED points beyond the Certified level. These features will assist the district in achieving resource savings over the life of the school.

**LEED® Facts**

**LEED for Schools (v2007)**

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* Out of a possible 78 points

**Project Information**

**Owner:** Houston Independent School District (HISD)
**Address:** 5130 Arvilla Street, Houston, TX 77021
**Architect:** IDG Architects
**Civil Engineer:** ESPA Corporation
**MEP Engineer:** Infrastructure Associates
**Structural Engineer:** ASA/DALLY Consulting
**LEED Commissioning Agent:** Carol Vick Architects
**CMAR:** Cadence McShane Corp.
**Project Size:** 86,000 SF
**Project Budget:** $17,248,586
**Opened:** November 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.