

Bryant School District— Bethel Middle School

Alexander, AR

First LEED® Certified School in Arkansas

Bethel Middle School is projected to save Bryant School District \$11.3 Million over the life of the project and is LEED® Silver Certified under the NC 2.0 program.

Challenge

The Bryant School District had already obtained bond funds to construct a new, conventional middle school. However, after school district leadership began studying sustainable building features, with help from the local chapter of the U.S. Green Building Council (USGBC), the school district decided to change from a conventionally designed school to a high performance, LEED-certified green building.



Bethel Middle School, Bryant School District, Alexander, AR



Solution

Trane recommended that the Bryant School District take advantage of Trane's PACT™ (Performance Agreement for Comfort from Trane) performance contracting program that would allow the school district to add green, sustainable building features to the new Bethel Middle School project. The PACT agreement supplemented the already tight conventional construction budget with an additional \$987,000 to cover the cost of all HVAC equipment plus a Trane Tracer Summit™ building automation system, lighting controls, daylight harvesting control, energy modeling, green power credits and all fees associated with LEED certification.



Results

Bethel Middle School was built using the latest in HVAC, building automation, window and lighting systems technology. As a result, Bethel Middle School is projected to save the school district \$11.3 million in energy and operating costs over the life of the building - savings that can be put to use in education. The high efficiency HVAC systems and use of adequate ventilation air, combined with the Tracer Summit automation system provides better indoor air quality and more consistent, comfortable room temperatures for teachers and students - for a positive impact on student learning.

Another recent construction project by Bryant School District, Hurricane Elementary School, also uses Trane HVAC systems.

- \$11.3 Million in Projected Energy and Operating Savings over Life of Building
- USGBC LEED® Certified
- Improved Staff and Student Comfort

"Trane was instrumental in moving us closer to our goal of achieving LEED® certification through the most energy efficient equipment, an integrated control system and a performance contract that helped finance the new construction in accordance with enabling state legislation."

Dr. Richard Abernathy, Superintendent Bryant School District



Bethel Middle School uses a variety of high efficiency Trane Systems like these 16-SEER XL16i condensing units to achieve reduced energy costs and consumption

Systems and Services

- Trane Tracer Summit[™] building automation system for integrated climate, lighting, energy use, scheduling, and other control features.
- Nearly 100 VariTrane[™] VAV terminals include the patented Trane Flow Ring and Trane DDC Controller
- Trane XL16i two-stage condensing units (16 SEER) and variable speed air handlers

About Bethel Middle School/ Bryant School District

In addition to state-of-the-art systems from Trane, Bethel Middle School includes such green features as north-south exposure, combination concrete and steel construction, insulation, large roof overhangs, high-performance window glazing, high efficiency lighting, daylight harvesting and low-impact landscaping.



Harrison Energy Partners is a founding member of:

Alliance for Energy, Economic, and Environmental Building Solutions

About Harrison Energy Partners

Harrison Energy Partners, originally founded in 1983 by Bill Harrison as Harrison Trane Service Company, is the largest provider of commercial and industrial HVAC systems and services in Arkansas. With headquarters in Little Rock and locations in Springdale, Fort Smith, Mountain Home and Texarkana Harrison Energy Partners serves clients in 16 states. 135 Harrison Energy Partners employees provide Trane equipment sales, maintenance and repair services, process and comfort controls, parts and product support.