

# DESERT EDGE HIGH SCHOOL PHASE II

Agua Fria Union High School District

## Executive Summary

Desert Edge Phase II is a 90,000 square foot expansion completed in 2005. Funding totaled \$12.7 million, with \$9.1 million SFB funding and \$3.6 million District B bond funding. Even by going LEED (Leadership in Energy and Environmental Design) the project was completed four weeks ahead of schedule and \$450,000 under budget.

### Green Features

Desert Edge has many green features, and was rated LEED Silver.

Green features include:

- Use of low flow fixtures, handwash stations, and waterless urinals which reduced water usage
- Utilizing a meter to track electricity consumption, shading devices and overhangs
- Multiple light switching with daylighting and occupancy sensors all reduced power usage
- Entry way grates and CO2 sensors were used to improve indoor air quality
- Establishment of a program that eliminates harmful chemical use within the building

### Results achieved include:

**Water Efficiency:** Strategies used create savings of more than 1,000,000 gallons of water each year.

**Energy Efficiency:** With the strategies used, projected savings are \$58,000 per year.

**Materials and Resources:** Through recycling 1200 tons or debris or the equivalent of 800 Honda Accords was diverted from the landfill.

**Indoor Air Quality:** Through the use of low VOC products a better learning environment has been created.

**Sustainable sites:** Less pollution was created.

**Innovation:** Harmful chemicals have been eliminated from the building.

**Savings** Desert Edge is 28% more energy efficient than ASHRAE 90.1-1999 with a projected savings of \$58,000 per year. Their water savings is 38% compared to the Energy Policy Act of 1992, saving more than 1,000,000 gallons of water each year. Eighteen percent of materials used had recycled content saving materials from going to the landfill.

**Benefits** The benefits of their green design are many: improved student performance, a healthy environment to work and learn in, optimized life-cycle economic performance, competitive first construction costs, reduced energy and water costs, and reduced operating and maintenance costs.

**Advice** It is a lot easier than people think and it didn't cost that much more even back when going green was a "new" idea. Using CMR (Construction Manager at Risk) is essential to this process; it creates more of a team effort. When it is complete – have a

big party. Celebrate your successes and enjoy the thrill of seeing and knowing the students are learning in a healthy environmentally friendly environment. There are great tools available for you to use.