

DAVIDSON ELEMENTARY SCHOOL

Tucson Elementary School District

Executive Summary

Davidson is a 40,000 square foot elementary school completed in 2006. Funding totaled \$5 million. Davidson is a LEED Certified school.

Green Features

Davidson has many green features, and was rated LEED Certified.

Green features include:

- Metered faucets and waterless urinals
- Efficient HVAC system using Heat Recovery Units
- Minimized the use of finish materials and used insulation made from recycled blue jeans
- Used non-toxic materials and provided daylight and connection to exterior spaces
- Partnering with Pima County Neighborhood Reinvestment Program and the City of Tucson to create a natural resource park on the school grounds

Results achieved include:

Water Efficiency: Waterless urinals are saving approximately 160,000 gallons per school year and total indoor water consumption is almost 6000 gallons less than a school in a similar area.

Energy Efficiency: The HVAC system saves about 25% in energy costs per year over typical buildings.

Materials and Resources: Supported local companies for products and used materials made from recycled materials.

Indoor Air Quality: Student and staff absenteeism has decreased.

Sustainable sites: Both the library and the multipurpose room are used as Community Space.

Innovation: The school is used extensively as an educational tool.

Savings: Energy innovations are saving Davidson 39% or \$57,093 over comparable TUSD schools. Using low flow water fixtures are saving 40% compared to using standard fixtures.

Benefits: The benefits of Davidson's green design are many. The community has additional meeting and performance space through the shared use of the library and multipurpose room. E Attendance of students and staff has improved.

Advice: Sub and General Contractor cooperation and understanding of the goals is very important to attain desired results. If they understand the goals, they will be more apt to meet them. After completion, training for occupants and maintenance personnel is very important to ensure that the building continues to operate at peak efficiency.