

FIRST MESA ELEMENTARY SCHOOL

Hopi Education Line Office

Executive Summary

First Mesa is a 74,580 square foot elementary school completed in 2004. Funding totaled \$14 million. First Mesa is a LEED Certified school.

Green Features

First Mesa has many green features, including:

- Native drought tolerant plants
- Energy management systems
- Purchased green power
- Three levels of lighting are provided in the classrooms
- Green educational program for students and visitors

Results achieved include:

Water Efficiency: Indoor water consumption was reduced by 34%.

Energy Efficiency: There is a 15% savings in energy use and the purchase of Green Power is the equivalent environmental savings of taking 39 vehicles off the road.

Materials and Resources: Over 1400 tons of materials were diverted from the landfill. The asphalt was reused on site and greatly contributed to reaching the 78% (by weight) construction materials recycled goal.

Indoor Air Quality: During the day, a majority of spaces in the school do not require any artificial lighting, combined with other lighting features; this contributes to increasing the energy performance of the building by 15% above conventional standards.

Sustainable sites: Selected roofing and paving materials decrease the heat island effect. The design also decreases stormwater runoff.

Innovation: Self-guiding building tour to teach about benefits of green buildings.

Savings The Green Design of First Mesa has allowed the school to see a 15% savings in energy use and a 34% reduction in indoor water consumption. It also prevented 1400 tons of materials from being disposed in the landfill.

Benefits First Mesa has seen many benefits from their green design included are a healthy environment to work and learn in, reduced energy and water costs and reduced operating and maintenance costs.

Advice Make sure the project team is aware of LEED benefits before starting. It takes very little upfront cost to achieve LEED basic certification. Keep all team members involved in the LEED process or the project will falter. Keep on top of the project – weekly to make sure you are going in the direction intended.