TRADITION+Innovation=
Celebration

FACT SHEET

THE FRENCH FAMILY SCIENCE, MATH, AND TECHNOLOGY CENTER

A LEED Gold Building*

The French Family Science, Math, and Technology Center is the first classroom building in the Southwest to be certified LEED Gold by the U.S. Green Building Council®. This rating distinguishes the new Center as one of the most environmentally sustainable secondary educational facilities in the U.S. Key sustainability features of the new *French Family Center* include:

- **25% lower energy consumption than typical school buildings** constructed to building codes and standards prescribed by ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers), the professional organization that sets standards for all HVAC systems in the U.S. This is a savings of approximately $23,000 per year at today's energy prices – and savings will increase as energy costs rise.

- **50% lower water consumption than typical school buildings** constructed to code and typical professionally prescribed standards. This will save approximately 690,000 gallons per year.

- **Lower carbon dioxide emissions,** which mitigates the building's impact on the ozone layer and global warming. Facilities constructed like the *French Family Science, Math, and Technology Center* typically prevent emission of approximately 585,000 lbs of CO_2 per year.

- **Re-use of construction materials,** such that approximately 77% of waste (about 2,276 tons) from demolition and construction was diverted from landfills toward other uses. Bricks were re-purposed as pavers and as roadbed beneath paving. Copper, steel, concrete, ceilings and piping were all recycled to be re-manufactured as construction materials.

- **Use of recycled** materials for 44% of the total value of construction materials. Examples include ceiling tile re-manufactured from other buildings, flooring made from scrap porcelain and glass, carpeting made from re-manufactured fiber, and acoustic insulation in the KIVA made from recycled product. Steel in the building is made from scrap iron that has been re-processed.

- **Daylight harvesting systems** allow selected lighting fixtures to turn off automatically when natural light is sufficient. Students have views to the outside from 90% of classrooms.

- **Acoustical control**, achieved by specially designed classroom walls and air conditioning systems, buffers noise from adjacent spaces and reduces background sound levels.

- **Use of locally manufactured and extracted materials** for about 46% of the total value of construction materials. Materials such as brick and concrete purchased from plants near Dallas required less fuel for delivery to the job site. The local economy also benefitted.

- **Surfaces on and around the building that are, by design, reflective** for reduced heat absorption. This results in higher outdoor air quality, lower smog, and lower ambient temperatures (which in turn reduces demand on air conditioning systems).

- **Landscaping that uses native and adapted, drought-resistant plants** and a water feature in the courtyard supplied entirely by rainwater captured from the roof of the French Family Center and circulated by a solar-powered pump.

A Better Learning Environment, Too

Not only do green school buildings consume fewer resources and produce less waste, they also foster more effective teaching and learning. Improved indoor air quality and features such as increased use of natural light and effective environmental and acoustical control offer demonstrated health benefits**, including:

- 15% reduced absence rate
- 5% higher test scores
- 12% reduction in sick days used by faculty and staff

***The French Family Science, Math, and Technology Center* will be a profoundly effective teaching tool** for students, especially in addressing 21st century challenges associated with the "energy technology" revolution. Ursuline Academy is adding features to its curriculum in nearly every area of study to address sustainability and the environment, using the building as a teaching tool.

For additional information on the new French Family Science, Math, and Technology Center and LEED, visit www.uafuture.org .

*Leadership in Energy and Environmental Design (LEED)

**According to studies reviewed and summarized in a project for Carnegie Mellon University by Professor Gregory Kats

About USGBC

The U.S. Green Building Council is a nonprofit membership organization whose vision is a sustainable built environment within a generation. Its membership includes corporations, builders, universities, government agencies, and other nonprofit organizations. Since USGBC's founding in 1993, the Council has grown to more than 17,200 member companies and organizations, a comprehensive family of LEED® green building certification systems, an expansive educational offering, the industry's popular Greenbuild International Conference and Expo (www.greenbuildexpo.org), and a network of 79 local chapters, affiliates, and organizing groups.

Source: www.usgbc.org