



**FOSSIL RIDGE HIGH SCHOOL
FORT COLLINS, COLORADO**

60% more energy efficient

\$11,500 in annual
water savings

\$0 additional cost for LEED

LEED® Facts

*Fossil Ridge High School
Fort Collins, CO*

*LEED for New Construction
Certification awarded July 12, 2005*

Silver 36*

Sustainable Sites 7/14

Water Efficiency 1/5

Energy & Atmosphere 13/17

Materials & Resources 5/13

**Indoor Environmental
Quality 5/15**

Innovation & Design 5/5

**Out of a possible 69 points*



FOSSIL RIDGE HIGH SCHOOL

Energy Savings = Classroom Spending

PROJECT BACKGROUND

When building a new high school in Fort Collins, Colorado, Poudre School District's primary goal was to provide students with the healthiest, most comfortable learning environment possible. Poudre also wanted the school to be flexible and adaptable; to make it a teaching tool for environmental stewardship; and to build it for no added cost. To achieve these goals, the district chose to pursue LEED® certification for the new Fossil Ridge High School. The result is a state-of-the-art, 290,000-square-foot building with capacity for 1,800 students—all of whom will learn in an environmentally responsible, healthy building that's saving the school district money.

ENERGY SAVINGS EQUAL CLASSROOM SPENDING

Poudre had built two high performance schools in the past, but wanted LEED certification for Fossil Ridge because of the added benefits of third-party validation. LEED gave the district confidence that its new school would perform as expected, and enabled the district to benchmark the building's performance. LEED also helped justify green practices by demonstrating to building operators how their actions can have a positive impact throughout the building.

Like all school districts, Poudre has to make decisions based on a tight budget. LEED delivered a higher quality building for no added cost: at \$179 per square foot, including design fees, furnishings and equipment, Fossil Ridge's cost compares favorably with other school building projects in the region. And that doesn't include the significant savings from reduced water and energy use. "Fossil Ridge's energy bills will be about one-third less than the newest high school in the district of the same size," said Stu Reeve, energy manager for the district. "And the dollars saved go right back into the classroom."

STRATEGIES AND RESULTS

Poudre's success was a result of involving not just architects and engineers, but also teachers, maintenance staff, and others from the very beginning. Making sure that everyone at the school was committed to achieving LEED goals helped the project team build a school that met the district's goals for student health, operating efficiency, and environmental stewardship, at no additional cost.

Many studies show that natural lighting improves students' reading and math scores, so the team focused on daylighting strategies such as placing windows on multiple sides of classrooms, roof monitors, and Solatubes to bring light into interior spaces. Superior indoor air quality is also a primary concern for schools, so the building features operable windows to let in fresh air; carbon dioxide sensors; and paints and furnishings with low volatile organic compounds (VOCs).

Fossil Ridge is 60% more energy efficient than comparable buildings because of innovative measures including lighting occupancy sensors; connecting HVAC coils to occupancy; and heat wheels for heat recovery. Ice is made and stored during off-peak nighttime hours to cool the building during the day, and energy use is offset by wind power purchases. Water conservation is a key concern across Colorado, so Fossil Ridge uses a raw water pond for campus irrigation; installed low-flow faucets and toilets; and has artificial turf for the athletic field.

The project team saved fuel and transportation costs by using regionally manufactured materials whenever possible, and gave priority to products with high recycled content. Nearly 75% of the construction waste was diverted from landfills through recycling. Fossil Ridge is also a living educational tool, showing the next generation the importance of environmental stewardship and how it can be achieved.

ABOUT POUDRÉ SCHOOL DISTRICTS

The Poudre School District comprises 45 schools and nearly 22,500 students around the city of Fort Collins, Colorado. The District has won awards for outstanding student test scores and graduation rates, and strives "to support and inspire every child to think, to learn, to care, and to graduate prepared to be successful in a changing world."

"Building a LEED certified school is the right thing to do, the right thing to teach kids, and the right message to send to the community. And it doesn't cost more."

Michael Spearnak
Poudre School District



Owner: Poudre School District
Architect: RB+B Architects
Contractor: Haselden Construction, Inc.
Project size: 290,000 square feet
Total Project cost: \$179 per square foot; \$28,889 per student

Photography courtesy of RB+B Architects, Inc.

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's Web site at www.usgbc.org to learn more about how you can make LEED work for you.



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