

# SCHOOLS

## Sisters High School

Sisters, Oregon



### *Future-Built Sustainable Multi-Function School*

A small town in central Oregon has discovered the key to getting the most for its investment dollar: synergize! The “old West” town of 1,000 mustered up what most folks would call a huge amount of money for constructing a small town high school—\$22,000,000—and with a solid plan for how to put it to best use.

#### A COMMUNITY CENTER THAT HAPPENS TO BE A SCHOOL

Building for multiple uses with a sustainability focus and designed with the future in mind, led to a program that created energy savings of 25% more than the Oregon energy code requires. The 151,000 SF structure, built for future occupancy of 700 students, is 50% larger than the former high school, yet uses just slightly more energy. Part of this success can be traced to its multiple functions: community events, disaster relief (if needed) and—oh yes, a high school.

The other reason for the energy savings is linked to the community’s intention to follow LEED guidelines. The architect selected Interface Engineering for our expertise with LEED projects and our particular experience in designing high schools. Interface assisted the Sisters School District in realizing their considerable savings by using:

- Optimized lighting layout
- Indirect lighting systems
- Operable windows
- Passive shading of windows
- Reflective glass on the west facade to reduce heat gain
- Daylighting strategies in all teaching and common spaces
- Overhangs on the south side of the building to shade windows
- Occupancy sensor lighting along with T5-HO (high-efficiency) dimmable fluorescents
- Demand control ventilation
- Optimal space thermal zoning
- High efficiency HVAC systems with premium efficiency motors, including a chiller providing 300 tons of cooling
- Outside air heat recovery systems with two separate heat recovery loops

In spite of an exceptionally cold winter and the fact that the HVAC system has not yet been optimized, the Sisters High School is operating within five percent of Interface’s estimated energy budget, through the first full school year.

## FAST FACTS

#### **Interface Team Leader**

Dale Stadler, PE  
503.428.3315

#### **Building Type**

Mixed-use school  
New construction

#### **Architect**

Steele Associates  
Architects

#### **Builder**

Kirby Nagelhout  
Construction Co.

#### **Completion**

November 2003

#### **Building Size**

151,000 SF

#### **Awards**

LEED® Registered

#### **Project Cost**

\$18 million

#### **Project Scope**

Single-story multi-functional school in a small town

#### **Contact**

Bob Martin  
Project Manager  
Sisters High School  
541.549.8521

