Bellevue College Science and Technology Building LEED Gold

BELLEVUE COLLEGE

Project Specifics

Gross square footage:	62,882 sf
Construction cost:	$27,633,886
Project occupied:	12/2008
Energy savings:	$20,600 /14.1%
Water savings:	49.8%
Waste recycled:	98 %
Added LEED cost*:	$129,000.
Incentives:	$62,800
LEED Payback**:	6.3 years
CO_2 savings:	not available
Awarded	LEED Gold - 2010

Design and Construction Team

Owner's representative:	Dave Maxwell, Bellevue College
Project manager:	Bob Colasurdo, DES
Architect:	Miller Hull Partnership
Structural engineer:	AHBL
Mechanical engineer:	Hargis Inc.
Civil engineer:	Coughlin Porter Lundeen, Inc.
Electrical engineer:	Sparling
Landscape architect:	Berger Associates
LEED consultant:	O'brien & Associates
General contractor:	M.A. Mortenson Company

Completed in March 2009 and officially designated the "S Building," the three-story, 62,882 square-foot facility houses five high-tech classrooms for life sciences and chemistry classes.

In awarding the Gold LEED rating, the Council cited the S Building's numerous "green" aspects:

1. Heating loss-reducing designs for roof, wall and window construction, and heats with high-efficiency, water-source heat pumps.
2. Brings natural light into 91 percent of its interior space, and uses room-occupancy sensors to turn lights off when not needed.
3. Low-flow fixtures in laboratories, showers and restrooms, and promotes water quality through a landscaping design that enables water to drain naturally to the Kelsey Creek watershed.
4. Electricity from renewable sources for more than one-third of its power needs, using recycled materials in more than one-fifth of its construction and achieving a 98 percent reduction in the amount of construction waste sent to landfills.
5. Utilizes outdoor air for interior ventilation, a maximum-volume air circulation system, and low-emission paint, carpeting and sealants.
6. Uses cooling and appliance refrigerants that minimize or eliminate emissions that contribute to ozone depletion and global warming.
7. Reflects solar heat back into the atmosphere – through use of low-reflective materials in its roof and sidewalks.

Sidney Hunt, LEED Green Building Advisor
Phone: (360) 407-9357
Email: sidney.hunt@des.wa.gov

Washington State Department of Enterprise Services

Sustainable Sites

Land Improvement: 57 percent of the previously developed site not included in the building footprint has been restored with native plantings.

Alternative Transportation: Bellevue College is served by 4 bus lines with 0.25 miles of the site. Bicycle storage, shower/changing facilities and racks have been provided.

Light pollution Reduction: The project is located in a campus setting and is compliant with LEED-NC for multiple buildings and On-Campus Building Projects.

Water Efficiency

Irrigation: The installed irrigation system reduce potable water consumption by 50.8 percent from baseline.

Water Efficient Fixtures: The project utilizes ultra-low flow urinals, dual flush toilets and low flow lavatories, showers and kitchen sinks for a 50.8 percent reduction from baseline.

Energy and Atmosphere

Natural Light: Direct Line of sight views for 91 percent of all regularly occupied areas has been provided.

Heating and Cooling: Energy efficient methods include an improved thermal envelope, high efficiency glazing, reduced lighting power density, occupancy sensors and high efficiency water source heat pumps.

Lighting: Multi-shared and individual work stations have been provided with occupancy sensors, override on-off switches, and multi-level lighting controls,

Material and Resources

Occupant Recycling: The facility has been provided with appropriately sized dedicated areas for the collection and storage of recycling materials, including cardboard, paper, plastic and glass.

Recycle Materials: Parking lot asphalt demolished for the construction of the building was 100 percent recycled.

Local Materials: 11.6 percent of total building materials and/or products have been extracted, harvested, or recovered, as well as manufactured within 500 miles of the project site.

Indoor environmental quality

Low-Emitting Materials: All indoor paint and coating products comply with the VOC limits of Green Seal and SCAQMD standards. Low emitting materials include adhesives and sealants, paints and coatings, carpet systems, composite woods and Agrifiber.

Innovation in Design

Education: The project includes an educational display highlighting the building's sustainable design features as well as an educational outreach program.

Green Cleaning: The College has committed to LEED –NC v2.1 IDc1.1 CIR ruling for achievement of a Green Housekeeping program.