# **High Performance Public Green Building Report 2016**

**B-16** 



## Peninsula College – Maier Hall



## **Project Specifics**

Gross square footage: Construction cost: Project occupied: Energy savings: Water savings: Waste recycled: Added LEED cost: Incentives: LEED Payback: 62,950 sf \$ 27,390,359 2011 \$15,740 / 32.8% yr \$1,325 / 73.5% yr 315 tons / 84% \$402,746/1.5% No incentives 24 years

### **Design and Construction Team**

Owner's representative: Project manager: Architect: General Contractor: Deborah Frazier Rafael Urena, DES Schacht | Aslani Architects McKinstry Essention, LLC

#### Awards:

Masonry Institute of Washington Merit Award, 2012

AIA Seattle Honor Awards Merit Award, 2011

AIA Seattle What Makes It Green? 2010

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

#### **LEED Gold**

During the design and building process, the architects worked closely with college faculty, staff and students to create a facility uniquely fitted to meet the needs of the Peninsula and the college. The result is a building that carefully blends the college's commitment to teaching and learning with the very latest in sustainability features, creating an environment for effective learning both within and outside Maier Hall.

Inside, students and community members can take advantage of a 131-seat performance hall designed for both musical and spoken performances as well as film showings, a learning center with multiple labs, music facilities, a ceramics lab, modern art studios, multiple classrooms, an inviting learning environment for Basic Skills students, and faculty offices, all supported by geothermal energy, daylight harvesting and natural ventilation, as well as an innovative moss roof.

An open-air breezeway allows students and visitors to pass through the building from the campus to a virgin forest and leads to a viewing platform at the wetland edge. By using less energy and water, Maier Hall will save money for the college, reduce greenhouse gas emissions, and contribute to a healthier environment for students, faculty, and the larger community.



Washington State Department of **Enterprise Services** 

Peninsula Dr. Brinton Sprague, Interim President of Peninsula College, says, "Maier Hall is a beautiful, functional and sustainable building that exemplifies the quality of instruction within."

## Sustainable Sites

Land Improvement: The site borders virgin forests, wetlands and an ecologically-sensitive ravine. All new plantings are native species requiring no permanent irrigation system. Rainwater is collected and directed to the adjacent wetland, which is lacking water due to the campus' original stormwater system. An epiphytic roof of native mosses reduces heat island effect, while exterior sun screens reduce glare and unwanted solar heat gain. Heating is provided by a geothermal well field and ground-source heat pumps.



Natural Light: The building features extensive use of natural light, natural ventilation and natural cooling though the use of operable windows. These features bring students into direct contact with the unique environment of the campus and reinforce the College's commitment to sustainability and its expanding programmatic emphasis on environmental issues.

## **Energy and Atmosphere**

**Environment**: The building form wraps around a first-growth grove of tree and serves as an edge to the existing campus and as a gateway to the wetlands and woodlands beyond. An open-air breezeway allows students and visitors to pass through the building from the campus to a virgin forest and leads to a viewing platform at the wetland edge.

Inside, students and community members can take advantage of a 131-seat performance hall designed for both musical and spoken performances as well as film showings, a learning center with multiple labs, music facilities, a ceramics lab, modern art studios, multiple classrooms, an inviting learning environment for Basic Skills students, and faculty offices, all supported by geothermal energy, daylight harvesting and natural ventilation, as well as an innovative moss roof.



## Material and Resources

Occupant recycling: Recycling collection areas were located throughout the building to provide staff and students with the opportunity to divert waste from landfills.

Recycle Materials: 315 tons or 84 percent of construction waste was recycled. This included \$1,160,642 value in recycled materials.

Local Materials: 17 percent of the project materials were obtained regionally, totaling \$923,568 for this construction.



## Total Savings

Electricity: Gas: Total Btus: Water Savings: Energy & Water Savings: \$17,065 per year

625,685 kWh per year 2,749 Therms per year 2,383,363 per year 231,411 gallons per year

