

The Peter Buck Center for Health and Fitness and LEED Certification

As part of Bowdoin's commitment to the environment, the College strives to meet LEED certification for all new construction projects. By holding to these standards, Bowdoin hopes to set an example for similar institutions of learning and play a role in the development and prevalence of sustainable design.

What is LEED?

Developed by the U.S. Green Building Council in 2000, Leadership in Energy and Environmental Design (LEED) is a voluntary, consensus-based rating system for developing high-performance sustainable buildings. On January 8, 2010, the Peter Buck Center for Health and Fitness became Bowdoin College's fourth LEED-certified building, achieving distinction as a LEED Silver building.



Energy Efficiency

The building's mechanical systems use less energy to provide a comfortable environment through building components such as low-e glass, white TPO membrane roofing for reduced heat gain and reduced heat island effect, heat recovery systems in the locker rooms, and an automated lighting system that adjusts light levels based on natural daylight.

Renewable Energy Credits

Bowdoin College offset 70 percent of the building's power supply for the first two years of the building's operation through the purchase of Renewable Energy Credits from First Wind's wind farm located in Mars Hill, Maine. The REC purchase from the Mars Hill wind project exemplifies the College's support of local renewable energy projects.

Water Use Reduction

The Buck Center landscaping is composed of indigenous plants that do not require irrigation—minimizing maintenance, conserving potable water, and avoiding compromised water quality. Also, the restrooms and locker rooms utilize ultra low-flow showers, faucets, toilets, and urinals, resulting in a 48 percent reduction in water use over typical fixtures.

Sustainable Sites

By building upon a previously developed site, no new open space was cleared and the amount of impervious area was reduced within the site boundary. The square footage of the new building footprint is less than the original building, and walks and driveways are smaller in area compared to previous conditions. This area gained from pre- to post-construction is vegetated, creating a more permeable surface with less storm water runoff.

Green Roof

Bowdoin's first living, or "green," roof on the central heating plant is visible from the third floor. In addition to enhancing the view from the third floor, the green roof—comprising a variety of flowering plants—also reduces the urban "heat island" effect, extends the life of the roof, and absorbs stormwater runoff.

Materials

Thirty-one percent of the building products include pre- and post-consumer recycled material, including the structural steel, aluminum window frames, carpet, floor tiles, gypsum board and foot grills. Additionally, 28 percent of building materials came from within 500 miles of the campus, reducing emissions from transportation while supporting the local economy.

Indoor Environmental Quality

During construction, an indoor air quality plan was followed to limit indoor air quality issues for both construction workers and the eventual occupants of the building. All adhesives, sealants, paints, coatings, and carpet systems used are low in volatile organic compounds, resulting in a safer and healthier environment.

