



**Aiken Hall**  
**Champlain College**  
**LEED-Gold Rating**



Aiken Hall is Champlain College’s first LEED certified building, receiving the Gold Rating for New Construction.

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is a third-party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings.

Official LEED v2 scores: Certified: 26-32, Silver: 33-38, Gold: 39-51, Platinum: 52+

LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

A few features contributing to Aiken’s LEED certification include:

- Energy efficient lighting, heating, and elevator installations
- Improved building envelope through insulation upgrades
- Salvaged hard wood floors and re-use of many original building materials
- Slate roofing shingles and the selection of other regional building materials
- Construction waste diverted from landfill and often donated to Re-Cycle North
- Access to alternative transportation options such as CCTA buses and Carshare Vermont

Location: 83 Summit Street, Burlington, VT

Original year constructed: 1885

100% Renovation: 2008

Gross Square Footage: 12,988 ft2

Certification Achieved: Gold

Points Achieved: 47

Certification Date: August 26, 2009

<b>Role:</b>	<b>Individual, Company</b>
Client	Michel George, Champlain College
Contractor	Michael Smith, DEW Construction Corp
Architect	Stephen Smith, Smith-Alvarez-Sienkiewicz Architects
Mechanical/Electrical Engineer	Paul Lekstutis, LN Associates
Civil Engineer	Kevin Worden, Engineering Ventures, Inc.
Energy Consultant	Karen Walkerman, Second Law
Commissioning Agent	Matthew Napolitan, Cx Associates
LEED Administrator	Trica Roy, Smith-Alvarez-Sienkiewicz Architects

## ADAPTIVE REUSE OF A HISTORIC BUILDING

(Excerpted from Project Narrative written by Smith-Alvarez-Sienkiewicz, Architects)



*Aiken Hall, circa 1900*

Aiken Hall is a historic building, originally built as a residence about 1885. Designed in the Queen Anne Style, the building is a 3-story wood framed and masonry building. The residence was purchased by Champlain College in 1981 and converted to dormitory use and now to its current administrative use. The building is listed in the Vermont Historic Sites Register and is a significant symbol of the historic “Hill Section” neighborhood developed from the 1870’s to the early 1900’s.

The project involved interior renovation to restore much of the original fabric that remained while improving the efficiency and building envelope. Exterior work was limited to the re-building of the west porch adjacent to the Morgan Room, installation of a handicap accessible ramp, and a new slate roof. The Aiken renovation commenced in 2008 and was completed in February of 2009. Construction activities were limited to the existing building and surrounding site area of approximately 29,734 square feet.

### TRANSPORTATION

In accordance with Champlain’s comprehensive transportation management plan, limiting the amount of cars on campus and adopting shuttle lots, free bus passes, a bike/walk incentive program, and participation in a car-share program, Aiken Hall provides ample bike storage for its occupants and provides showers in an adjacent building. It also provides low-emitting and fuel-efficient parking spaces for building occupants in an existing nearby lot.

### WATER & ENERGY CONSERVATION

The renovation of Aiken Hall created a more energy efficient building by improving its thermal envelope and mechanical/electrical systems. The thermal envelope includes 7 inches of spray foam insulation at the existing roof rafters, 3 ½ inches of spray foam at the exterior walls, and double glazed low-e argon filled windows. Replacement sashes were chosen for the existing window replacements so the exterior and interior trim and sills could be maintained. The windows are operable to promote flow through ventilation. Energy efficient lighting and controls were selected for all spaces. The building is expected to achieve a 38.9% energy savings and a 35% water savings by the use of low flow fixtures. There is no irrigation for landscape plantings.

### MATERIALS & INDOOR ENVIRONMENTAL QUALITY

During the design process, the team deliberately set out to reuse as much of the existing building elements as possible. A large percentage of hardwood floors were repaired and refinished and historic wainscot and coffered wood ceilings were restored in the Morgan Room, Anteroom and entry foyer. All efforts were made to purchase regional and recycled materials resulting in 49% regional materials and 15% recycled materials purchased. Construction waste materials were closely monitored and a total of 51% of waste was diverted from the landfill. The project encouraged environmentally responsible forest management by using 84% FSC certified wood products.

The project team developed and implemented an Indoor Air Quality Management Plan to insure good air quality during and after construction. To reduce the quantity of indoor air contaminants, low VOC paints and low VOC Green-guard certified carpet assemblies were specified. A quality indoor environment was also addressed by providing the occupants with controllability of thermal comfort and lighting systems and adequately sized windows in regularly occupied spaces to provide views to the outdoors.