MEMBER BUILDING CASE STUDY

Center for Communications & Creative Media (CCM) Building | Champlain College

PROJECT BACKGROUND:
Champlain College’s $24.5 million Center for Communication and Creative Media (CCM) offers students and faculty state-of-the-art facilities for current and emerging fields of study and serves as a campus center in an expanded and renovated structure, in a combined gross floor area of approximately 87,200 square feet.

The CCM building houses all CCM faculty and academic spaces, including Game and Graphic Design labs, Sound Studios, a Filmmaking and Broadcast Media Production Stage, an Art Gallery and a Drawing Studio. In addition to being home to the largest academic division at Champlain College, the building also contains several other strategic initiatives, including the Transit Center, Campus Store/Mail Service, Dining and Events Center, and Alumni Auditorium. Champlain’s CCM Building is one of the first buildings in Burlington to nearly meet the 2030 Challenge of 50% energy reduction below the national average baseline building.

This project has achieved Three Globes under the Green Globes rating system. This third-party certification program, run by the Green Building Initiative, is positioned as an alternative to USGBC’s LEED program. CCM is the first Green Globes project in Vermont. A rating of Three Globes is viewed as equivalent to a Gold target under the LEED system.

INNOVATIVE MEASURES:
• Geothermal heat pump & energy recovery system for central heating & cooling
• Actively managed building automation system (BAS) & lighting control system
• Nighttime setbacks and schedules implemented
• Use of demand controlled ventilation

ENERGY EFFICIENCY:
When presented with choices for HVAC systems, the College decided to expand the capacity of the existing ground source well infrastructure to accommodate the needs of the largest public building on campus. Extended range water source heat pumps are utilized throughout for space conditioning. Large kitchen refrigeration systems reject heat to the water loop providing heat to other areas of the building during winter months and high efficiency cooling during the summer. Champlain now has seven of its larger buildings connected to the ground source system.

Direct digital control of all equipment was provided and all scheduling is integrated into the campus facility scheduling program. All schedules for occupancy and comfort are provided through this single data entry point, resulting in streamlined operations of the facility. A DALI lighting system was employed to optimize operational hours of the building lighting. As part of the project, the Hauke Center received upgrades to its HVAC system, thermal envelope and finishes.

TRANSPORTATION MEASURES:
• Main Campus stop for shuttle. This shuttle transports approximately 160,000 people per year.
• A commuter lounge. A space for commuter students as well as shuttle riders to relax in comfort, including lockers for day use.
• Champlain Transportation office where the Director of Transportation and Parking Coordinator can be found.
• A transportation information brochure wall to distribute information on all things transportation.
• Covered bicycle parking for six bikes with an additional 18 uncovered spaces.
• Publicly accessible Dero Fixit bicycle repair stand and pump
• Secure, indoor bike parking in the adjacent Cushing Hall for 30 bikes

BUILDING STATS:
Owner: Champlain College
Building Type: Education – College/University
Location: 375 Maple Street in Burlington, Vermont
Built/Renovated: 2015
Square Feet: 87,187
EUI: 49 kBtu/ft² (2017)
Baseline EUI: 92 kBtu/ft² (regional average)
Reduction: The property is using 47% less energy than the Education property type baseline
Reduction: 30% below EPACT standards

Learn more about Champlain College:
www.champlain.edu

Learn more about the Burlington 2030 District:
www.2030districts.org/burlington