

WALLACE MCCAIN LEARNING COMMONS



OWNER: Dalhousie University | ARCHITECT: Harvey Architecture

MECHANICAL & ELECTRICAL CONSULTING ENGINEERS: Dumac Energy Limited | LEED CONSULTANT: MMM Group Limited

GENERAL CONTRACTOR: Bird Construction | PROJECT MANAGER: Dalhousie University

THE \$6 MILLION DOLLAR WALLACE MCCAIN LEARNING COMMONS (WMLC),

is located on Lord Dalhousie Drive, off of Coburg Rd. Halifax, NS. It is a one-story, 1,265 square metre facility. The WMLC provides space for students, faculty, staff and the surrounding community to come together and collaborate, study and access Internet media.

GREEN BUILDING FEATURES

TRANSPORTATION

The WMLC is conveniently located near local transit with three bus routes servicing stops within a 300 m distance. 40 bike parking spots are prominently located at the front of the building, acting as a bike parking hub for the Commons and the Life Science Centre. Ride Share spots are made available in any of Dalhousie parking lots including the lot beside the WMLC.

ENERGY EFFICIENCY

Key energy efficiency measures used in the building are projected to save 56% of the energy compared to a typical building.

Measures include:

- Being the first building on campus to use all LED lighting inside and out.
- Variable Refrigerant Flow (VRF) heat-recovery heat-pump system is used in the building. VRF systems are more than twice as efficient as fossil fuel based heating systems. System compressors can be controlled to match the exact load of the room conditions as opposed to running in either off or on mode. This system also utilizes heat recovery by removing energy from one zone that doesn't need it, and applying it to a different zone that does.
- CO2 sensors have been installed to enable more accurate control over ventilation.



FINISHES

Forest Stewardship Council (FSC) certified wood was used in finished carpentry and architectural woodwork. Most building finishes have zero or low emissions. These materials reduce the release of significant pollutants, such as volatile organic compounds (VOCs), into the indoor environment. As well, all manufactured wood products are produced with no added urea formaldehyde (NAF). These measures make for a healthier indoor environment.

NATURAL ENVIRONMENT

50% of the roof has an accessible green roof consisting of a seed mix considered adaptive and drought tolerant in our climate. Some trees on the site in front of the building were protected. Of the trees that were cut the university biomass replacement guideline will be used to replace an equivalent amount.

WATER: LOW-FLOW FIXTURES AND BOTTLE FILL FOUNTAIN

This facility utilizes low-flow faucets (1.9 liters per minute) and 4.8 liter low-flow toilets. A shower is located nearby in the Life Science facility. A refillable bottle station and fountain are prominently displayed.

CONSTRUCTION AND DEMOLITION (C&D) WASTE

On the full project, including construction and demolition (C&D), over 75% of C&D materials were diverted from landfills. This includes aggregates, wood, metals, cardboard, glass, and salvaged building components. These materials were delivered to local recycling facilities.

GREEN CLEANING AND WASTE MANAGEMENT

Green cleaning products and practices outlined in Dalhousie's green cleaning policy are used in the building. Four-bin waste management systems are used throughout the building (paper, recyclables, organics, and waste).

GREEN BUILDING EDUCATION

WMLC green features will be outlined in the Campus Sustainability Tour map. In addition green building tours will be provided for this building accompanied by a two-page fact sheet.

ONGOING ENERGY MANAGEMENT

Utility meter information from the building will be used for ongoing energy and water management. Also, allowances were made for future installation of sub-metering equipment.

For more information on Dalhousie Green buildings and Sustainability Projects visit:

dal.ca/dept/sustainability/programs/Built_Environment.html

For more information on campus development visit:

dal.ca/dept/facilities/campus-development.html



DAL.CA