

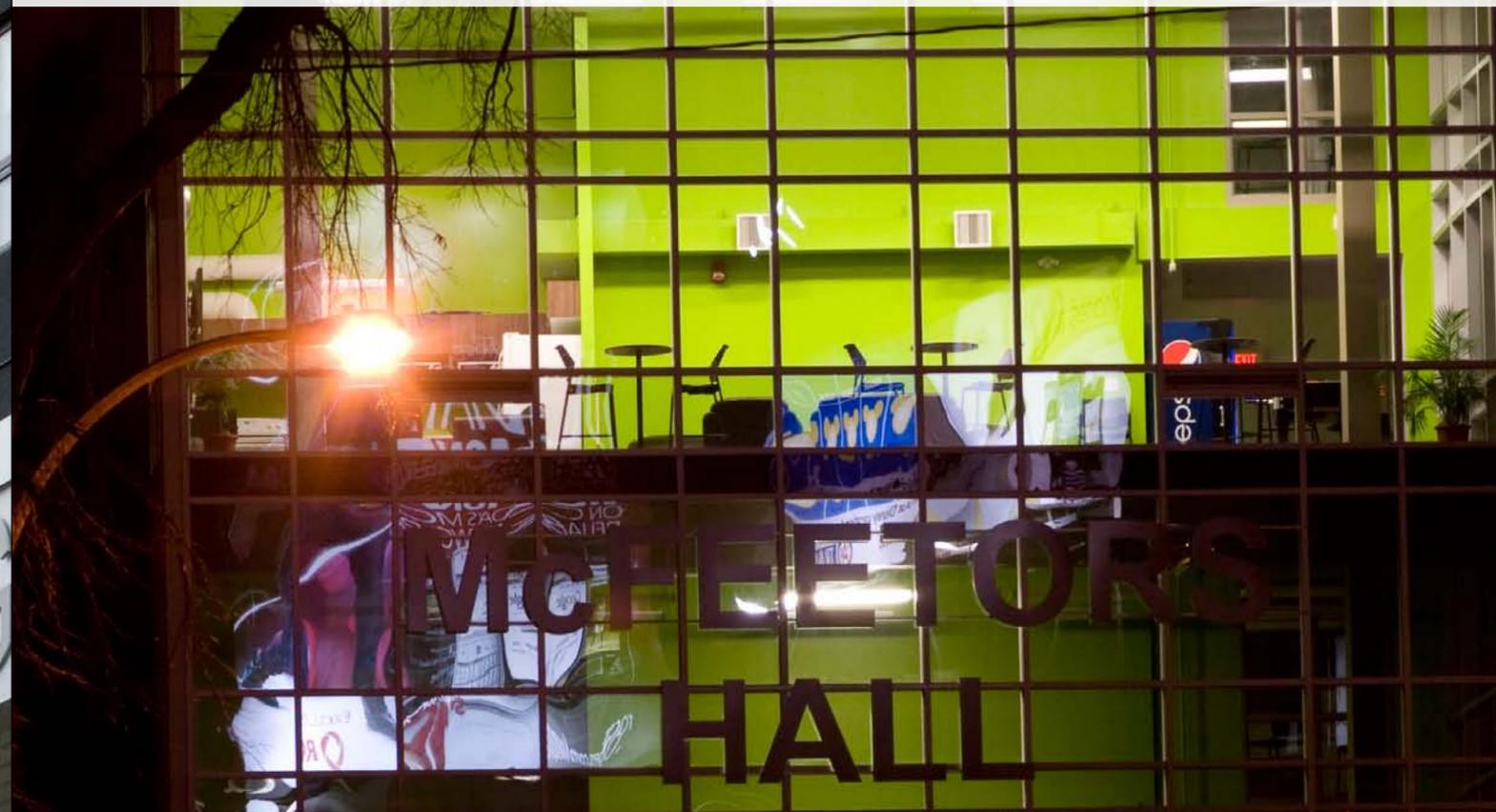


THE UNIVERSITY OF
WINNIPEG

McFeetors Hall

GREAT WEST LIFE STUDENT RESIDENCE

Investing in Sustainable Community



THE UNIVERSITY OF
WINNIPEG

The building is certified LEED®
by the CaGBC Silver.



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The new complex is part of a new development for the University near the existing campus. Prairie was commissioned to provide a new student residence for 175 students, 24 townhouses for community single parents attending post secondary education, a new daycare for 120 children for the students association. The final design creates townhouses for the community on the lower two levels of the building with front doors onto the street and a separate entrance in the middle of the block; four stories of student residences are designed in a curve for views and informality and are located above the community housing with a bold new entrance located at the south end the building; a 12,000 sf daycare is designed as a separate building to the west of the complex. The complex is designed using geothermal heat/cool system and is certified LEED Silver facility. The \$19 million opened in August 2009



Eco•Facts

McFeetor's Hall

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Investing in Sustainable Community

The following is a summary of the health, performance and environmental features of the building based on the LEED (Leadership in Energy and Environmental Design) criteria:



Sustainable Sites

The University of Winnipeg Student Housing is constructed on a **previously developed site** on campus located close to **6 bus routes** that serve the campus. **Covered bicycle storage** has also been provided for students living in the residence to store their bicycles as well as staff working in the facility.

Light coloured pavers used on the site will help to reduce the heat island effect on campus. Heat island effects are detrimental to site habitat, wildlife and migration corridors. Reduction in heat islands lowers the cost of cooling and HVAC equipment needs. Interior and exterior lighting has been **designed to reduce light pollution** into the night sky or adjacent properties.



Water Efficiency

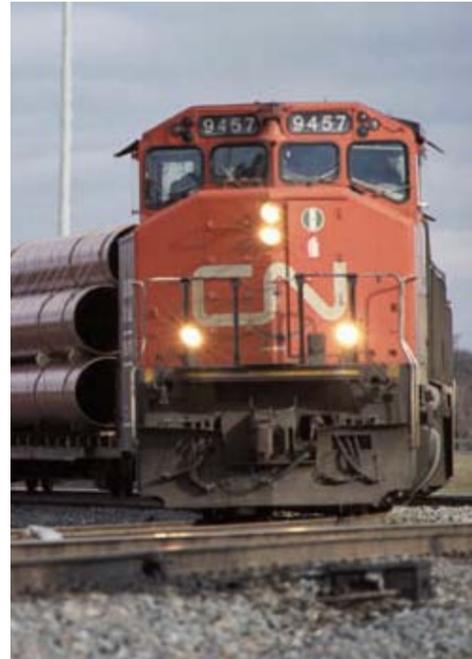
The building has 150 suites for students and 24 suites for families from the community. Each suite is designed with **dual-flush Caroma toilets, aerator faucets and low flow showers**. These measures contributed to a total water use reduction of **55%**, and save approximately 3,325,000 gallons of potable water annually.



Energy & Atmosphere

A **well insulated building envelope, ground source heat pump, energy recovery ventilators, energy efficient light fixtures, and occupancy sensors** were used to achieve an energy cost savings **39%** better than the Model National Energy Code for Buildings.

To minimize the impact of the building on the depletion of the ozone layer, **all systems are CFC and HCFC free and the fire suppression system contains no halons**. Increased energy efficiency reduces environmental impact in relation to energy production and building systems emissions. Our EE4 energy simulation indicates that the energy efficient fixtures will save the university \$33,685 annually.



Materials & Resources

The University of Winnipeg has an **extensive recycling program and storage for recyclables** has been provided throughout the residence. During construction, **80% of construction wastes were recycled or salvaged**. **11.32%** of materials used in this project, including carpet, concrete and steel, contained recycled content and **32% of building materials used were extracted and manufactured within an 800km radius of the project site or transported by rail** within a 2400km radius.

A durable building ensures the selection of durable materials and components, quality control during construction, and increasing the service life of the building.



Indoor Environmental Quality

The student housing is a non-smoking building and has been designed with optimal ventilation to provide excellent indoor air quality for staff and students. **There is fresh outside air ducted directly to each suite**. All adhesives, sealants, paints, coatings, and carpet used in the building were specifically chosen to have **low levels of Volatile Organic Compounds (VOC)**. VOC's can cause irritating effects or health issues for the installers as well as the building occupants.

Over **90% of occupied spaces have a direct line of site to the outdoors**. This reduces the requirements for electrical lighting during the day and provides occupants with a connection to the outdoors, improving the well-being of the residents. **All occupied spaces have operable windows and lighting control** so residents can adjust the comfort of their suites.

During construction measures were taken to protect the indoor air quality of the building such as covering openings in ductwork, keeping a clean work site, and scheduling. After construction was complete a building flush was performed to ensure a high level of indoor air quality prior to the occupants moving into the building.

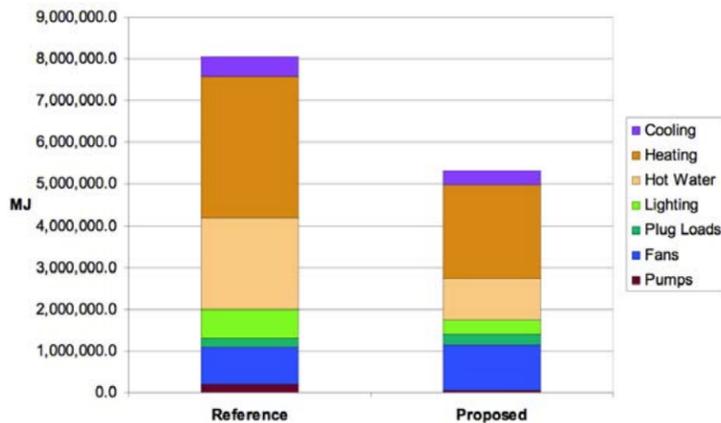


Innovation & Design Process

The University of Winnipeg is committed to sharing the importance of sustainable building and communicating the features they adapted in this project with the academic community and general public. The environmental education program will include tours, complementing signage, and information on the website.

This project received an innovation in design credit for achieving exemplary performance in the **regional materials** credit. The point threshold following the current credit requirement of **20%** was greatly surpassed by the project's **32%** of materials being regionally extracted and manufactured.

University of Winnipeg Student Housing Energy Usage



University of Winnipeg Student Housing Typical floor plan (floors 3-5)

