

Designed by Zeidler Partnership Architects

CERTIFIED JUNE 2016

The Mount Allison University's Purdy Crawford Centre for the Arts is a 3-storey, 4,784 m² institutional building in Sackville, New Brunswick. The building houses the university's Fine Arts and Drama Programs, and offers workshop and studio space, lobby, offices and classrooms.

A sustainable contribution to the community

The Purdy Crawford Centre for the Arts project was able to incorporate many energy-efficient and environment-friendly features including a naturalized landscape with native vegetation, energy-efficient lights and sensors, low-flow faucets and toilets, HVAC energy management, and more. Through a partial Integrated Design Process (IDP), the project was able to bring together various stakeholders and prepare strategies that successfully reduce waste, conserve energy, and minimize the environmental impacts of the construction. Site and building orientation were carefully designed to improve both the outdoor and indoor environments. Through recognition of the site topography and microclimate conditions, the design was optimized to provide shelter against wind and snow deposition. From an indoor environment perspective, windows and wall orientation were strategically placed to maximize natural cross-ventilation. Window-to-wall ratios for various parts of the building were also optimized to allow for sufficient daylight – reducing the need for artificial light. Motion sensors were then added to further reduce the need for unnecessary energy consumption.

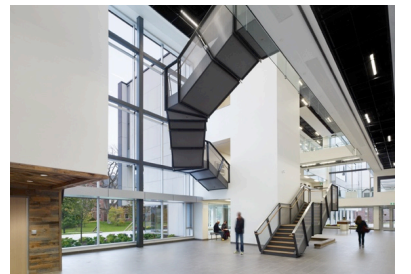
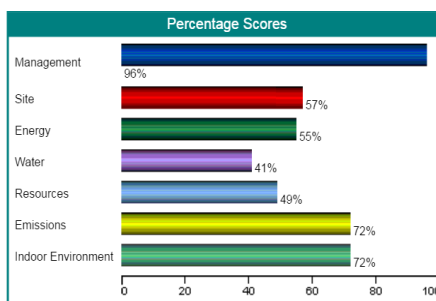
Meeting future needs

As water becomes one of the fastest growing utility rates, it is important to recognize when projects are trying to address these issues. This project has an on-site graywater collection, storage and distribution system. Water-efficient technologies also include low-flow toilets and faucets, as well as a high-efficiency irrigation system.

Knowledge of the microclimate of a site can influence decisions regarding building placement and orientation, building design, and landscape features. This can include measures to reduce the urban heat island effect or "light pollution" of the night sky. Obtrusive aspects of exterior lighting such as light trespass and sky glow were meticulously avoided to preserve the nocturnal sky.

Overall energy consumption is an important initiative and is in line with Canada's national energy targets for coming years. The Purdy Crawford Centre for the Arts has been designed to perform 31% better than the Model National Energy Code for Buildings reference, and has an estimated energy use of 3,041 GJ/yr.

Percentage of points achieved by The Purdy Crawford Centre for each module:



The project by Mount Allison University used the *Green Globes® Sustainability Assessment and Rating System* to guide and evaluate the design and construction based on energy and environmental best practices.

Project Highlights

- Environmental Emergency Response Plan
- Large naturalized landscape with native vegetation
- Operable windows and atrium with natural cross-ventilation strategy
- Optimized building and window orientation for maximum daylight potential
- Energy-efficient mechanical systems including Variable Speed Drives
- Graywater collection, storage and distribution system