

Flint Wm R Murchie Science Bldg Expansion



Project Description

The University of Michigan-Flint is proposing a project to construct an approximately 65,000-gross-square-foot addition to the William R. Murchie Science Building. The purpose of this addition is to address immediate space limitations; meet growing demand for instructional, research, and collaborative spaces for the science, technology, engineering, and math (STEM) disciplines; and create engineering-specific instructional and research laboratories. As regional, state, and national labor markets call for greater numbers of qualified STEM graduates, the proposed expansion will enable the University of Michigan-Flint to deliver the highest-quality education to ever-increasing numbers of students pursuing degrees in STEM disciplines.

Energy Efficiency Measures

- The building's design and systems include a number of energy efficient features that will allow for an estimated 24% energy savings compared with an energy code compliant building as defined in ASHRAE 90.1-2007 Appendix G
- Active chilled beams reduce overall building energy consumption used to condition the interior of the building
- High Efficiency Condensing Boilers used to reduce hot water heating costs and building heating costs
- High Efficiency Air Cooled Chillers used to reduce costs of air conditioning
- Energy Recovery Wheel
- Energy Recovery Run-A Round loop
- Increased R-Value of wall and roof insulation
- Improved exterior glazing system performance
- Reduced watts per square foot dedicated to lighting
- LED lighting used throughout the facility, LED lamps are significantly more efficient than florescent lamps

Other Sustainability Features

- This project is LEED® certified to the Silver level and achieved 59 points under the LEED for New Construction v2009 rating system.
- The location of the building on an existing urban campus promotes development density and community connectivity
- Public Transportation Access - the building's location allows users and occupants to utilize public transportation, which reduces single use vehicles on campus
- Storm water collected from the roof of the building will be directed to a new rain garden to which will naturally filter storm water
- Designed to reduce water consumption by nearly 36% beyond Michigan Plumbing Code; savings obtained through the use of low-flow plumbing fixtures
- 93% of the waste generated during demolition and construction has been diverted from landfills and either salvaged for reuse, or recycled
- 39% of the total building material content used contain recycled content
- 13% of the total building materials and products were extracted and manufactured within 500 miles of the project site
- Low-VOC paints, coatings, adhesives and sealants

