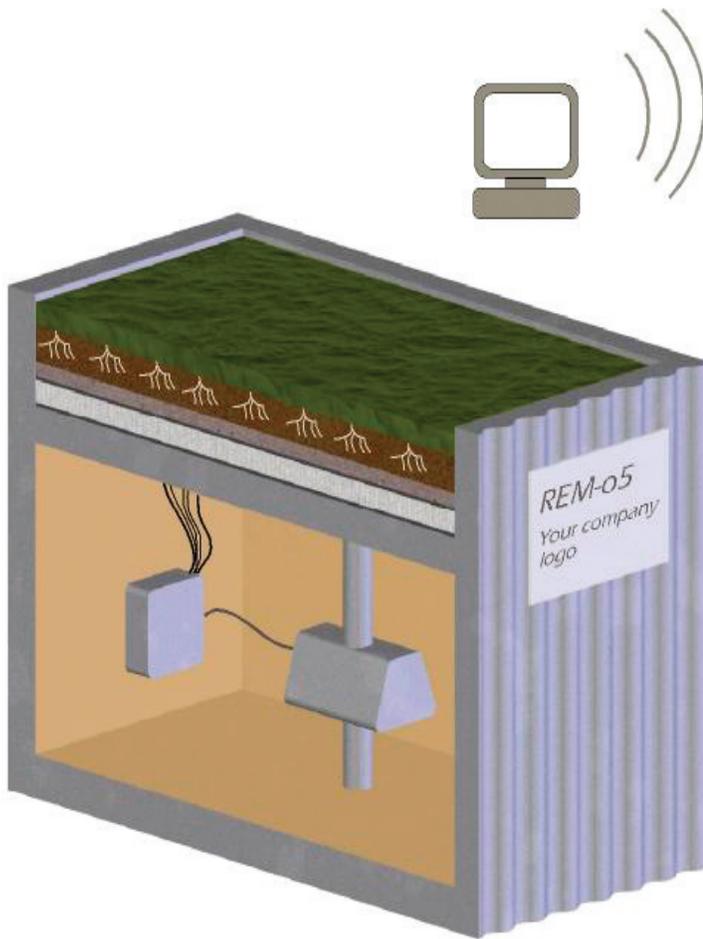


# Introducing REM-o5



The Roofing Evaluation Module (REM) provides a means of gathering real-time performance data on green roof systems and system products.

REM provides manufacturers, architects, landscape architects, developers and community planners with information to determine the effects of a particular green roof system on the building and surrounding area, prior to building construction.

The REM, located at the Green Roof Research Facility, BCIT, is a simulated indoor environment on top of which a wide array of green or conventional roof systems can be placed.

Green roof systems and system products suitable for the evaluation of stormwater mitigation, thermal performance and plant viability include:

- vegetation mats
- growing medium
- vegetation support mats
- drainage mats
- water retention (reservoir) systems
- green roof maintenance programs

The modular construction of the REM make it ideal for testing a wide array of system variables in real-time.

604-456-1007  
info\_greenroof@bcit.ca

Product Information	
size	2 m x 2 m x 1.5 m
weight	variable by system
temperature range	-40°c to +45°c

Gather climate specific performance data on green roof systems and products

- comparative performance data
- quantitative 3rd-party verification
- optimized return on investment
- increased market confidence
- competitive market edge



A POLYTECHNIC INSTITUTION

# Invest in Green Roof Performance Evaluation

## REM components

The Roofing Evaluation Module consists of:

1. A base, which contains data collection instrumentation and environmental controls, including:
  - stormwater runoff monitoring
  - heat flux sensor
  - temperature and humidity controls
  - data logger

Instrumentation and data acquisition equipment is CSA approved.

2. A roof platform which can be constructed to fit the client's desired roof structure.

*A weather station is located onsite.*

## Operation

Regular calibration of the equipment is managed by the Centre for the Advancement of Green Roof Technology.

## Maintenance

The Centre for the Advancement of Green Roof Technology manages the regular maintenance of the roofing system as outlined by the client.

## Performance

REM contains all the instrumentation necessary to measure the performance of the roof system over a two year period:

### Stormwater runoff measurement

Analysis of REM data determines the system's real-time water holding capacity and retention characteristics.

### Thermal performance

REM data analysis determines the reduction in energy consumption provided by the green roof system. Heating and cooling costs are calculated, as well as the reduction in greenhouse gases generated by the building.

### Plant viability documentation

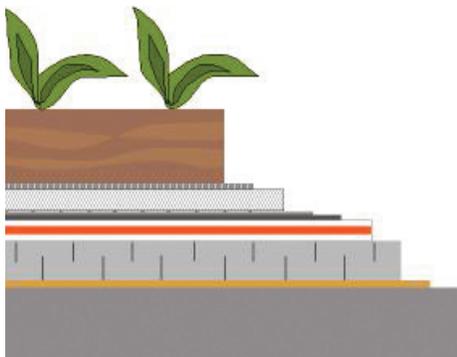
Onsite plant documentation provides an accurate means to judge the viability and maintenance needs of different plant species.

ASTM and FLL testing available upon request.

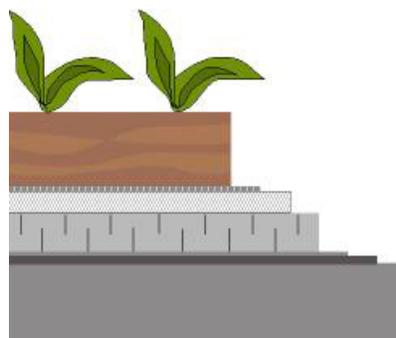
## Reporting

The client receives a hard copy report annually and an electronic final report at the end of the project, detailing roof system performance. All data is confidential.

Applicable to intensive and extensive systems for:



conventional roof systems



protective membrane assembly