

## Evolvement



The revolutionary EVOLVEMENT LEAK DETECTION system

CALL: 0468 787 071

EMAIL: rob@greenlook.com.au

# green roofs

## The revolutionary EVOLVEMENT LEAK DETECTION system:

accurate and efficient



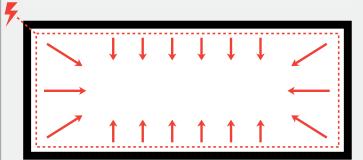




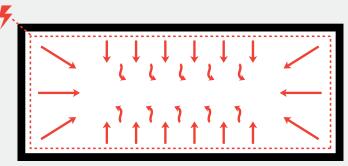
## **How Evolvement Leak Detection Works**

Our equipment delivers a pulsating potential difference between the roof surfacer and the structural deck. A watertight membrane isolates the potential difference from connecting. However, breaches in the membrane will cause an electrical connection to occur.

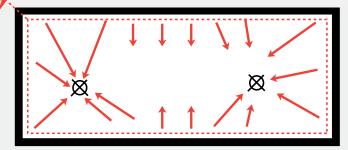
The technician reads the directional flow of the current with sensors and locates the point of entry with pinpoint accuracy.



Small electrical pulses are directed into the membrane. The electricity is searching for a ground earth connection.



If the membrane is watertight, the electricity is isolated and does not find a ground earth connection.



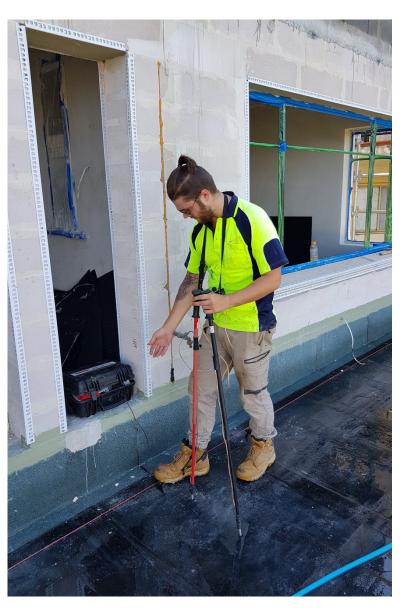
If the membrane is not watertight, the electricity makes a ground connection and is pulled towards the positive pole.

## When Evolvement Leak Detection can be utilised

- Upon completion of the installation or repair of the waterproofing membrane
- Prior to the expiration of warrantied membranes
- Annually, to detect any membrane defects at an early stage to prevent costly water damage.

## **Technicians reports**

Our trained technicians complete the ELD integrity test conducting a visual inspection of wall junctions, perimeter details and membrane penetration, then provide CAD drawings , picture documentation and a written report detailing the location of the breaches.





## **EVOLVEMENT PTY LTD GREEN ROOF LEAK DETECTION SYSTEMS (ELD)**

## A COMMON PROBLEM

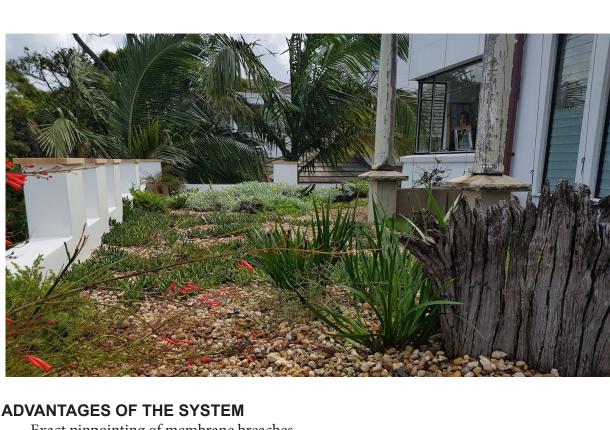
- Waterproofing membrane defects can be caused during or after installation, i.e. mechanical damage caused by others, workmanship defects, material defects, design faults, weather related defects or membrane deterioration.
- We provide a system that is unique in its ability to test the integrity of waterproof membranes without needing to remove the overburden.
- This non-destructive method is important for green roof systems because the waterproof membrane is effectively fully submerged in water posing a greater risk of a breach.

## THE SOLUTION

- Our system is a low voltage test method that creates an electrical potential difference between a non-conductive membrane surface and a conductive substrate, which is earthed or grounded.
- By applying water on the membrane surface and using the water as a conductive medium, an electric field is created and a breach in the membrane creates a vector (ground fault connection).
- Our technician reads the electric flow travelling across the membrane mapping the breaches with pin point accuracy.



green roofs



# green roofs

- Exact pinpointing of membrane breaches
- Non-destructive to the membrane
- Can be performed on sloped structural decks
- Membrane defects can be repaired and retested without delay to the construction schedule
- Limited use of water required for the ELD test
- Eliminates unnecessary removal of the overburden to locate a membrane breach
- Membrane performance can be monitored during its lifespan through the overburden

## WHERE AND WHEN TO USE

- Garden Roofs
- Roofs with ballast
- Roofs with paving stones
- Upon completion of the installation or repair of the waterproofing membrane
- Prior to the expiration of warranties
- Annually, to detect any membrane defects at an early stage to prevent costly water damage.

Our fully trained and certified technicians complete the ELD integrity test by conducting a visual inspection of all wall junctions, perimeter details and membrane penetrations, then providing CAD drawings, picture documentation and a written report detailing the locations of the breaches.

Leaks happen.

Whether your property is new or old, have it checked by **Evolvement Leak Detection today to prevent costly** water damage tomorrow.