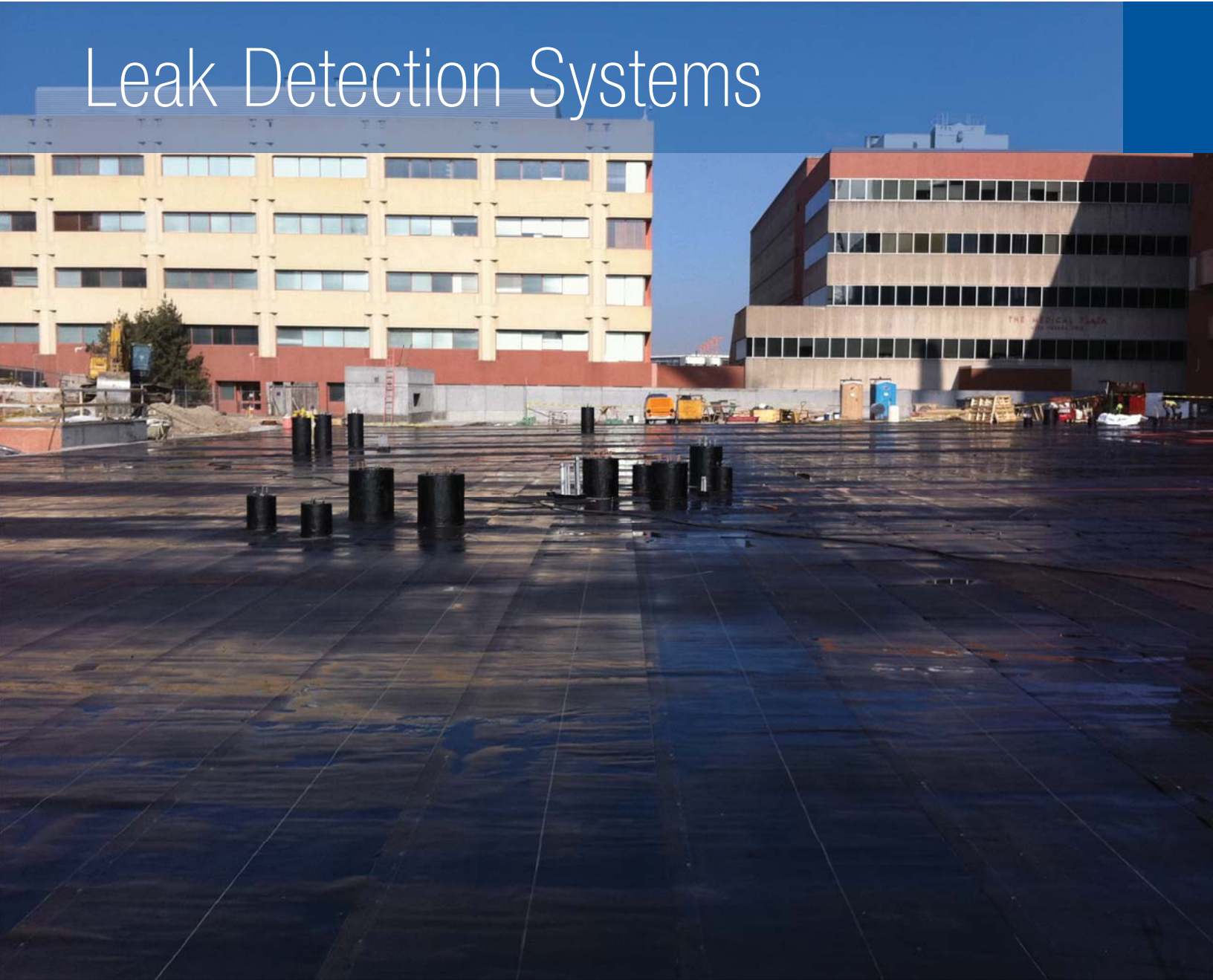


SCIENCE. SERVICE. SOLUTIONS.



# Leak Detection Systems



# Leak Detection Within One Square Foot

What if you could instantly pinpoint a waterproofing membrane defect within a square foot of the breach and bypass the hassle of traditional flood testing methods?

Now you can with testing methods like Electric Field Vector Mapping (EFVM) and Electronic Leak Detection (ELD). These are low voltage electrical tests that validate watertightness through conductor wires attached to a CCW waterproofing membrane. During inspection, an EFVM/

## Partnerships

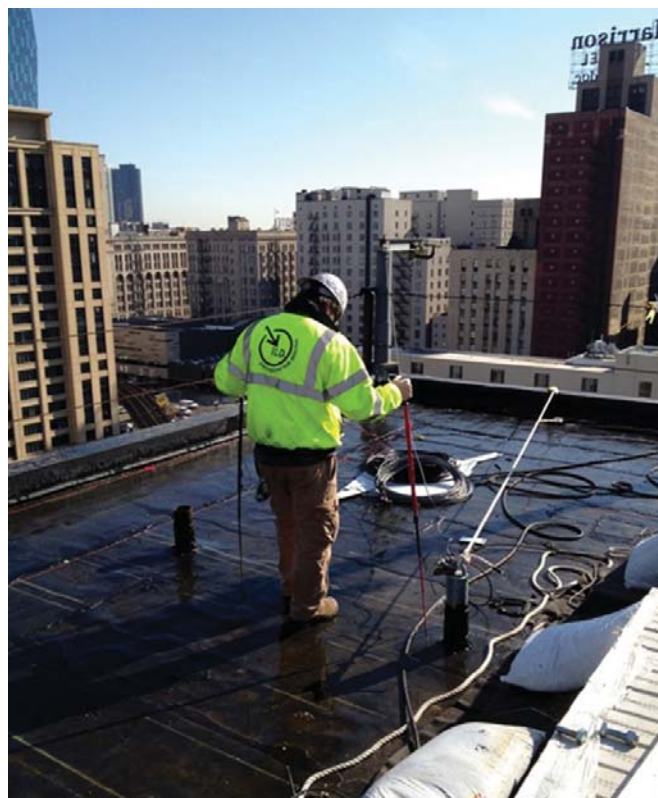
Carlisle Coatings & Waterproofing Incorporated (CCW) has partnered with four highly reputable companies to offer these best in class methods of detecting membrane defects. International Leak Detection (ILD), Pie Consulting & Engineering, Innovative Roof Services, and Infra-red Analyzers, Inc. have extensive backgrounds in this particular technology and offer the necessary experience to give building owners the confidence to know that their waterproofing membranes will not fail. By combining CCW's waterproofing systems with the technologically advanced testing methods offered by ILD, Pie, Innovative Roof Services, and Infra-red Analyzers, building professionals using the system can save time and money over traditional flood testing methods. The system also gives them greater control of protecting buildings from leaks both during and after construction.



ELD inspector sprays the test area with water and applies current. He then uses special high-tech probes that read electric flow across the membrane. When the probe detects a ground fault connection, technicians can immediately isolate the leak within one square foot of its location. After inspection, the technician generates detailed CAD files to facilitate easy repairs on future leaks.

## International Leak Detection

ILD's expertise is the outcome of a global presence and exposure to more roofs and membranes – 250 million sq. ft. Since 2001, International Leak Detection (ILD) has been the leading provider of roofing and waterproofing integrity testing. Its success is based on 30 years of experience, ILD's proprietary Electric Field Vector Mapping (EFVM) testing method, and the company's commitment to exceptional service. They have earned their leak-proof reputation by getting the job done right every time.





## Pie Consulting & Engineering

Pie has over 10 years experience in self-performing building enclosure specific assembly and system testing, as well as performance diagnostics enabling this company to aid in the implementation of corrective measures. Pie is recognized nationally for their building enclosure expertise, and are frequently asked to present and train others on these disciplines at regional and national venues for AIA, The Construction Specifiers Institute, National Institute of Building Science, Army Corps of Engineers, ASHRAE, Department of Energy, U.S. Green Building Council, and the Building Commissioning Association.

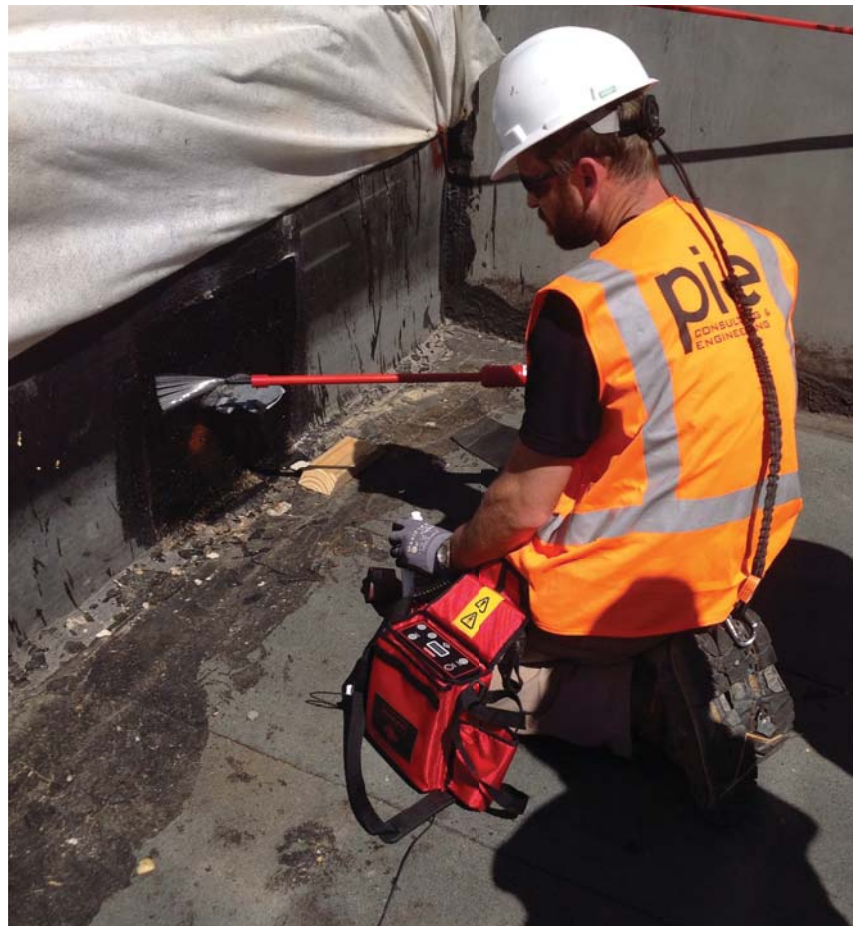
## Advanced Technology Surpasses the Competition

Compared to traditional flood testing methods, the advantages of utilizing ILD's Electric Field Vector Mapping and Pie's Electronic Leak Detection are obvious:

- Early leak detection prior to overburden placement.
- Greatly reduces waste and cost of using large volumes of water required by other test methods.
- Identifies water entry point versus exit location.
- Test efficiencies with less time and cost to complete.
- Increased accuracy in identifying defective areas.
- Ability to re-test repairs immediately.
- Keeps job on schedule saving money on labor costs and materials.
- Detects leaks within one square foot of breach location.
- Uses insignificant amounts of water, conserving resources and minimizing additional rooftop damage caused by standing water on unfinished surfaces.
- Generates detailed CAD files after initial inspection to aid in future inspections and repair.

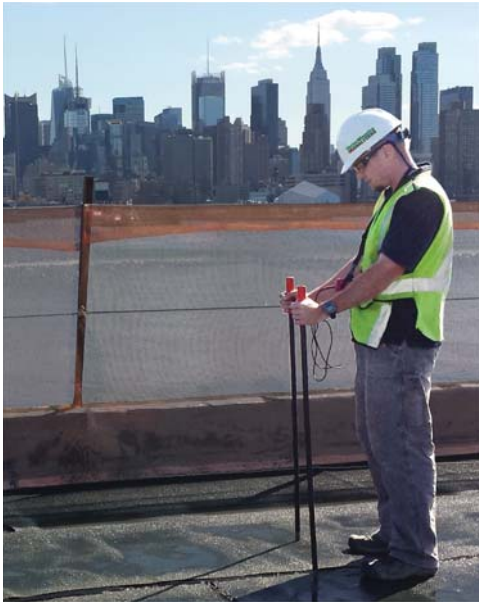
## Innovative Roof Services

Innovative Roof Services is a roof consulting company specializing in the design, replacement and maintenance of low slope roofing assemblies and construction safety training. They understand the difficulties that owners typically experience with low slope roofs and choose to focus on that single aspect of the building envelope. When it comes to low slope roofing assemblies, Innovative Roof Services brings innovative and cost effective solutions for one of a building's most troubling components. Innovative Roof Services is a valuable addition to any project team, whether it is new construction or replacing an existing roofing assembly or trying to find ways to extend the life of a current roof.



## Infra-red Analyzers

Founded in 1984, Infra-red Analyzers has earned a reputation for delivering the highest quality service and accurate, unbiased information. Today the company provides Nondestructive Testing Services throughout the United States. Their thousands of satisfied customers include such Fortune 500 companies as GE, IBM, General Dynamics, Cushman and Wakefield, Georgia Pacific, Weyerhaeuser, Nextel, Wyeth, and Anheuser-Busch, as well as federal, state, and local governments and many of the nation's leading colleges and universities.



**Low-Voltage Vector Mapping**



**High-Voltage Electronic Leak Detection**

**= ELD Fusion<sup>®</sup>  
Complete Coverage**

## Get Complete Coverage with ELD Fusion<sup>®</sup> with Infra-red Analyzers

Infra-red Analyzers offers a unique fusion system that combines High- and Low-Voltage Electronic Leak Detection methodologies. ELD Fusion combines traditional Low Voltage Vector Mapping (wet testing) on large horizontal areas with High Voltage ELD (dry testing) on vertical surfaces, curbs, transitions, and other areas not tested with the low voltage technique. ELD Fusion<sup>®</sup> gives you 100% coverage – and 100% peace of mind that your membrane will be leak free.

Low Voltage Vector Mapping is an accurate and reliable technique for integrity testing on larger horizontal areas. By adding High Voltage ELD to test the parapets and curbs, flashings, and transitions from horizontal to vertical surfaces - the areas that often require the most careful and conscientious work, customers are assured complete coverage.

## Prepare for the Unpredictable

Failures and callbacks on waterproofing jobs are unpredictable, so smart building professionals prepare for the possibility by investing in technology like EFVM and ELD provided by CCW and its partners. Don't trust your building to a leap of faith required when using flood testing methods. Save time and money over the life of your building by specifying the most advanced waterproofing system available today. Ask for EFVM and ELD provided by CCW, ILD, and Pie. Contact your local sales representative for more details.

## Guarantee

CCW's waterproofing systems are second to none when it comes to quality materials and design integrity. Combined with the EFVM and ELD technology, CCW can assure all building professionals — from owners to installers — that they are getting the most advanced building leak detection systems available on the market today.

## Carlisle Coatings & Waterproofing

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