

# Electronic Leak Detection



Nationwide Coverage  
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## Project Method

Electronic leak detection (ELD) is a method for locating pinhole penetrations in roofing membranes. The method does not detect the extent of damage to a roof – only where holes are located. ELD is a dry test method using high voltages (40,000V).

The roof must be dry and be non-conductive. The equipment consists of a brush with conductive bristles. One end of the brush is earthed to the building. The brush is then charged to 40,000V and the roof surface

swept. Where a penetration is located, the voltage is earthed and a spark is visible along with an audible tone from the equipment. The surveyor then marks the defect on the roof.

Often the defects discovered during an ELD, are repaired at the time of the survey. Once repairs have been undertaken a second ELD test can be performed and if no positive signals are detected

an IRT Certificate of Waterproofing Integrity can be issued.

ELD is often used in conjunction with infrared thermography; so not only can

## Survey results

The Roof Plan seen below is the typical format provided to a client, each defect found is highlighted on the roof plan with a red X and numbered to make the anomalies easy to locate. Each defect is also highlighted on site and a visual image taken to be included in the report, see sample visual above.



Certificate of Waterproofing Integrity

