

Roof & Building Leak Detection & Prevention

GUIDANCE & INFORMATION NOTE NO. 13

ELECTRONIC INTEGRITY TESTING & ADVERSE WEATHER



To produce accurate and reliable testing results that will find all breaches in the waterproofing relies on for the low voltage testing technique a film of liquid water covering the surface or for the high voltage test technique for the surface to be completely dry.

When certain weather conditions prevail, such as ice, snow, slush or even frost covering the surface either the low or high voltage test methods cannot be used. When these conditions prevail the surface has a layer of solid water covering it.

In addition to the obvious Health & Safety risks associated with working on slippery surfaces the solid water can mask or hide breaches in the waterproofing so the accuracy of the testing is compromised.

To give accurate and reliable results when using the low voltage (wet) test method a film of water covering the waterproofing within the area bounded by the test wire or chain is required. The test voltage within this bounded area is conducted through any breaches in the waterproofing. However, if there is any solid water (snow, slush, ice or frost), as this has electrical insulating properties, the test voltage is not conducted through it and breaches below it and therefore they are not identified as earth leakage pathways and the breach is not found. Similarly, for the high voltage (dry) test method the solid water prevents the test voltage from being conducted through breaches to the electrically conductive layer below the waterproofing.

When these conditions prevail as there is a risk of missing breaches in the waterproofing testing is **not** undertaken.

To summarize, when any conditions occasioning solid water covering all or even parts of the surface to comply with our duties to protect the health and safety of our test engineers and our liability to undertake accurate and reliable testing we do not embark on either low or high (wet or dry) voltage testing.



ERC offer a range of services, including

- Electronic Integrity/Leak Testing.
- Building Envelope Leak Investigations.
- Thermal Imaging.
- Roof & Floor Dewatering.
- Expert Witness.
- Roof Surveys, Defect & Maintenance Schedules.

I ERC is an independent specialist Roofing Consultancy and Testing Services Company. ERC work predominantly throughout the UK* providing specialist specific and/or combination testing regimes to quickly and accurately determine the causes of leaks through any part of the building façade and to identify areas of retained/entrapped water within the construction to main and roofing contractors, building owners and developers in both the commercial and domestic markets. *for inquiries about procuring our services outside the UK please contact head office.

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