

# Roof & Building Leak Detection & Prevention

## GUIDANCE & INFORMATION NOTE NO. 14

### ROOF & FLOOR DEWATERING



#### What is Dewatering

Dewatering is the process of forcible extracting water from within a roof, podium terrace or even a floor that has become entrapped within the underlying construction. It is achieved by at strategic points connecting a vacuum pump to a probe inserted into the damp, wet or saturated component so the water can be extracted.

#### How it works

The area to be dewatered is divided up into a nominal five-metre grid to set the probes with each designed to work a 2.5 metre radius (because of diversity on roofs some variance can be expected). Each probe is inserted to the bottom of the level where the water is entrapped (top of vcl in case of wet roof insulation) and a waterproofing collar formed. A dewatering unit, coupled by air feed pipes to the collection churn, is connected to the probe by means of a connecting elbow. The dewatering unit is then connected to an electricity supply and the dewatering process started. It is then normal practice as probes run dry for the dewatering unit to be moved onto the next available probe and the process continued until such time that all probes run dry and all the entrapped water has been extracted. As units become available they are returned to the previous dewatering points for re-connection so that complete dewatering is ensured and no more water has either drained to the location or has penetrated into the roof during inclement weather. During the dewatering the rates of extraction are monitored as it may become evident that fluctuations in the volume of water being extracted could be as a result of a topping-up situation due to continued water penetration. If this is suspected, the parties will be informed to enable measures to be taken to investigate. However fluctuations can occur, which are not attributable to further water ingress.

Either when all the water has been extracted or when instructions to decommission are given all plant and equipment is decommissioned.



#### 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.*

#### Energy Roofing Consultancy Limited

14 Hawks Hill House  
Guildford Road  
Leatherhead  
Surrey KT22 9GS

Tel: 01372 388358

Email: [info@energyroofingconsultancy.co.uk](mailto:info@energyroofingconsultancy.co.uk)

Web: [www.energyroofingconsultancy.co.uk](http://www.energyroofingconsultancy.co.uk)