

Roof & Building Leak Detection & Prevention

GUIDANCE & INFORMATION NOTE NO. 6

ROOF & FLOOR VACUUM DEWATERING



What is Dewatering

Dewatering is the process of forcibly extracting water from within a roof, or a floor construction that has become entrapped within it. 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.

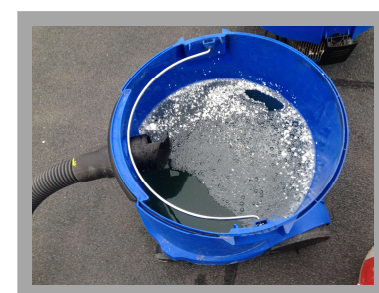
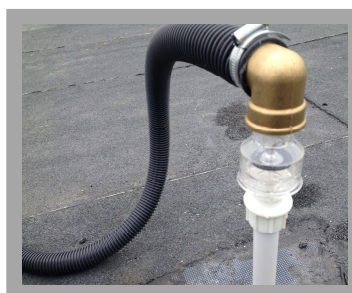
How it works

The area to be dewatered is divided up into a nominal five-meter grid to set the probes with each designed to work a 2.5-meter radius (because of diversity 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 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 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 because 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.

When all the water has been extracted or Instructions to decommission are given all the equipment is decommissioned.

What it Achieves

- The removal of water wetting the insulation or screed negating the expensive option of replacing it.
- The prevention of leaks into the building below the roof or floor.
- Stopping the waterproofing or floor finishes from blistering or bubbling.



Tyrrell & Jenkins Consultancy (TJC) offer a range of services, including:

- Electronic Leak Testing • Leak Investigations
- Floor & Roof Vacuum Dewatering.
- Thermal Imaging. • Expert Witness.

i TJC is an independent specialist Roofing Consultancy and Testing Services Company. We work throughout the UK providing non-destructive electronic leak testing, building envelope leak investigations, independent, specialist roofing technical advisory services to main and roofing contractors, building owners and developers in both the commercial and domestic markets. The company offers an extensive range of testing and investigative surveys that can quickly and accurately identify water entry pathways into and areas of entrapped water within a flat roof construction.

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