

VENTILATION, DAMP, MOULD & CONDENSATION feature

The right diagnosis

Philip Leach advocates the use of measuring, monitoring and diagnostic equipment for the effective detection of condensation.

The majority of the damp and mould problems specifiers see through the autumn and winter months are due to condensation. The challenge for housing associations, however, may be in convincing tenants and other interested parties that the solution to the problem may require lifestyle adjustments as opposed to, or in addition to, building refurbishment or repair.

An effective way to diagnose the cause of any moisture-related problem is by measuring and monitoring moisture levels in the building, analysing the results and producing a written report. Moisture meters and hygrometers are widely used for this



Protimeter's moisture measurement tool in action. The most credible way to diagnose the cause of any moisture-related problem is by measuring and monitoring moisture levels in the building.

purpose, but they only give a snapshot. As condensation may occur at times of the day when it is not practical for a surveyor to visit the home, the diagnostic process is greatly enhanced by employing condensation telltale devices and data logging systems.

Moisture measurement

GE Sensing Protimeter manufactures a range of moisture meters, hygrometers and monitoring systems specifically designed for measuring moisture in buildings and aiding dampness diagnosis. The Protimeter Moisture Measurement System (MMS) is a highly versatile tool that can be used as a moisture meter and a hygrometer. With this

one instrument the surveyor can measure moisture levels of walls and floors and the relative humidity, air temperature and dew



The Protimeter Moisture Measurement System (MMS) is a highly versatile tool that can be used as a moisture meter and a hygrometer.

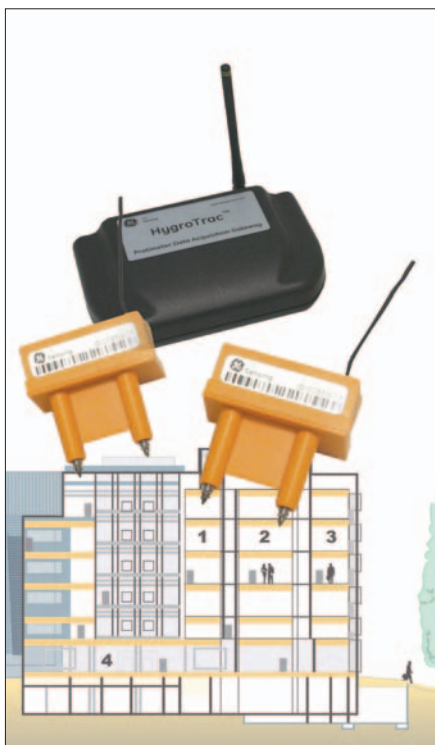


The Building Pathology DVD.

VENTILATION, DAMP, MOULD & CONDENSATION feature

point in each room. Additionally, the Protimeter MMS can be used to confirm whether or not condensation is actually occurring on a surface. The instrument's temperature sensor is held against the surface and the difference between the prevailing dew point and the surface temperature is displayed. A negative value confirms that condensation is occurring whereas a positive value confirms it is not.

The Protimeter HygroTrac is a humidity and temperature monitoring solution for challenging damp diagnosis applications. The system consists of small sensors that transmit, wirelessly, humidity and temperature readings to a Gateway that is connected to the Internet. Using the Internet is key because it enables the surveyor or property manager to monitor conditions in the property from anywhere.



Protimeter's HydroTrac.

Trend graphs and reports can be viewed at the touch of a button and critical thresholds can be set that prompt an alarm email to be sent if the humidity level goes too high.

Working together

GE Sensing are working with other businesses that offer complimentary products or services to professionals



One of Fugenex's moisture and humidity measurement devices.

involved with building management and maintenance. Fugenex produce a range of moisture and humidity telltale devices, including the Dampprotect sensor. These small, low cost devices change colour when exposed to high humidity for extended periods of time. As the colour change is irreversible the user knows that humidity levels were excessive over a given period even if they then return to acceptable levels.

Arguably, the most powerful tool for practitioners in this field is a good understanding of building pathology, the study of the nature and cause of buildings defects and failure. Given that dampness problems in particular can be difficult to diagnose and explain, it follows that surveyors that are competent in this field are able to confirm or eliminate causes of dampness more confidently, reliably and effectively for the mutual benefit of all concerned. Various books on the subject are now available including *Diagnosing Damp* (2003) by Burkinshaw, R. and Parrett, M. and numerous publications by the BRE.

Additionally, there is a DVD series entitled *Building Pathology* (2006) by Parrett, M., that covers the spectrum of building problems in a highly informative and accessible manner.

In essence, effective diagnosis of damp problems in buildings is achieved when surveyors and property managers understand the subject, have the right tools and instruments to make thorough investigations and have had appropriate training in using these tools and instruments.

With thanks to Philip Leach at Protimeter for preparing this article.

For further information on GE Sensing

READERLINK 454

For further information on Fugenex's devices

READERLINK 455

For further information on the Building Pathology DVD

READERLINK 456

For further information on Protimeter's range damp diagnosing equipment

READERLINK 457