

Curator™ Monitoring Systems

+ H+R Curator

Curator has been proven in a wide range of buildings throughout the world from Singapore to an extensive installation at Windsor Castle. Now Curator brings new facilities and higher performance. Incorporating new software and hardware, Curator alerts clients with audio and visual electronic warnings when urgent action is required. It provides facilities management information and advice on site, handles direct links with central monitoring stations, communicates with other building monitoring systems and dispatches e-mails or SMS text messages to selected addresses for warning and action.

- Vastly more intelligible than conventional leak detectors and data logging system
- Grades potential failures and advises what action to take
- Tracks overall structure – critical to conserving contents as well as fabric of the building
- Install as 'stand-alone' system, or within your existing PC or BMS
- Access on site, remotely by modem, or centrally by H+R experts
- Alerts remote facilities managers via telephone or e-mail

+ Introduction

The Curator system was developed to enable a variety of sensor types to be installed to monitor critical conditions affecting the performance of buildings. These sensors are both used internally and externally, and can monitor moisture content, at the surface or at depth; temperature; water levels; light; vibration and movement; and internal environments. For facilities management, the sensors are checked throughout the day and a report on the buildings performance is

sent to the client or the agent at intervals; typically once a month. Alarm conditions are reported immediately.

+ Applications for Curator

Now installed in some of the world's most valuable buildings, thousands of low cost sensors can be run off a single base station or cloud server. The software scans each sensor in turn and presents a graded response, depending on the severity of its findings (condensation is differentiated from burst pipes). Typical tasks for Curator are the monitoring of gutters and drains for overflow, moisture contents of timbers at high risk of decay such as lintels or joist ends, and in basements. After fire or flood, Curator can be installed to monitor drying and give vital



Discreet/unobtrusive systems.



information for phasing refurbishment. It was used for this purpose at Windsor Castle and in masonry for monitoring rising damp and moisture penetration, particularly applicable to inaccessible areas such as under flat roofs.

+ Reliable

The Curator system comes in two formats: one is hard wired, and powered from an internal base station removing the need to replace power sources at roof to transmit information to the cloud, accessible from anywhere in the world. Both systems have their own benefits, and the choice of systems is usually guided by the clients' needs as well as the building layout.

Sensor heads, designed and built by H+R, are cheap, functional and reliable, and can be deployed in greater numbers, giving rise to a clearer overall picture of potential failure level; and a radio telemetric system which can be used.

+ Economical

Information provide by the Curator system reduces risks for insurance and assists maintenance planning. Property owners and contractors save time, materials and money. Low installation cost means Curator can give rise to significant savings in the cost of maintenance, by enabling preventative action before major damage occurs. Capital cost is less than many of the less sophisticated leak detection systems on the market.

+ Versatile

Most failures in historic buildings are typically caused by unwanted moisture. Low cost sensors are also available for the detection of movement, relative humidity, light and

temperature. Existing runs of leak detection tape can be connected directly into the system. Each sensor can be individually calibrated with pre-set logging interval and alarm limits. When alarm limits are violated, a series of graded responses can be put into action, with an on-screen diagram advising what action is required. The system can be interfaced either through a local PC, cloud server, or directly to the building's heating and ventilation system and it can be linked to other devices such as servos controlling fans or dehumidifiers.



Rainwater downpipe overflow/blockage sensor.



Hutton+Rostron Environmental Investigations Ltd has been concerned with the care and conservation of historic buildings for 35 years.

They employ experts in the investigation of building failures, particularly moisture penetration.