



Replacing single sensing detectors with multi sensing ones could help reduce false alarms by almost 70% - a recent report from the BRE has revealed.

The report, which aimed to uncover the main causes of false alarms within buildings and identify possible solutions to reduce them, looked at false alarm data from King's College London (KCL) between 2010 – 2013.

In total there were 669 alarm incidents at KCL over the three year period, of which 432 were deemed to be false alarms and reviewed further. The 30 most frequent causes of false alarms were outlined, of these 25%, were due to smoke from cooking and 10% caused by steam.

Stephen Bennett, Senior Global Product Manager for Tyco Fire Protection Products said: *“Although this report is not a definitive account of the common causes of false alarms in the UK, the data reviewed from KCL gives a good indication of some of the main sources of false alarms and how to overcome these.*

By switching to a multi or triple sensing detector, such as the 850PH or 850PC from ZETTLER, a device that measures levels of heat and smoke or a combination of CO, heat and smoke, together with advanced algorithms and software at the control panel will increase accuracy in determining whether a real fire is present before sounding the alarm is improved.

The 830PC detector in particular is perfect for use in kitchens and student halls of residence where smoke from cooking, steam or from showers can trigger inconvenient and costly false alarms.”

In the report, six solutions were proposed to resolve the range of false alarms discovered and with the majority of false alarms caused by smoke or steam the most common solution found was to switch single sensing detectors to multi sensors.

The second most common solution, potentially reducing 44% of false alarms, was using the right detector for the type of environment and installing them in the correct locations. This can be a challenge with the range of detector types available in the market and their different installation requirements, however the 850PC 3oTec with multiple ‘virtual’ detector modes can help eliminate this issue. For guidance on this use our [Consultants Guide](#).



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The Building Research Establishment (BRE)
reports using multi-sensor detectors could
reduce false alarms by up to 69%



| Solution Proposed intervention action | Number of potential causes resolved |
|--|-------------------------------------|
| 1. Replace detector with multi-sensor | 69.2% |
| 2. Use of appropriate approved detector/s located correctly | 43.5% |
| 3. Use of protective covers over approved manual call points with adequate signage and CCTV where required | 16.7% |
| 4. Use of EN 54-2 approved analogue addressable panel | 10.2% |
| 5. Better control of contractors | 9.7% |
| 6. More rigorous maintenance of the system | 6.0% |

Read the full report from BRE [here](#).

Check out our range of addressable multi sensors [here](#).