



How a Fire Alarm Panel Can Reduce Unwanted Alarms

The fire alarm control panel monitors fire detectors and call points and, in the event of fire being detected, activates alarm sounders, fire protection equipment and/or fire signalling equipment, as well as indicating the zone where the fire has been detected.

BS EN 54-2 is the Standard for fire alarm panels and it specifies the requirements that all panels must have. It also discusses optional features that can be used for specific applications, including the suppression of unwanted alarms. This is often called 'filtering'. These fall into groups as listed below.

Disablements – allows parts of the system to be switched off at certain times (e.g. detection only required at certain times of the day) or when specific events are happening (e.g. cleaning process equipment).

Delays – designed for occupied buildings, this allows for manual investigation into the cause of the alarm. On detection of a fire a staff alarm is operated and the delay allows a fire marshal to investigate the zone to confirm the fire. If a fire *has* been detected the delay can be cancelled by operating a manual call point. If the event is a false alarm then the delay time is intended to allow the system to be reset before the rest of the system is activated.

Delays of up to ten minutes can be applied to alarm sounders, fire protection equipment or fire signalling equipment. The delays can be suppressed at specific times e.g. at night when there is no one to check the cause of the alarm.

Dependencies on more than one alarm signal – suitable in certain applications regardless of whether the building is manned.

If a fire is detected the panel does not go into alarm but waits for a confirmation signal. This can be from the same detector or from another one, allowing for different types of detector in a specific area (such as confirmation from a heat detector to an initial smoke detector signal) or just checking that whatever has been detected remains for a specified time.

Other Features - Some fire alarm panels may offer other features, which can be used to help in the suppression of unwanted alarms such as:

- Pre-alarm / local alarm, allowing preliminary investigation of an incident
- Response dependent on whether the building is occupied, e.g. day / night settings
- Variable detector sensitivity
- Coincidence in the same zone or cross zoning
- Two out of three voting
- Confirmation from different types of detector
- Enhanced communication to the alarm receiving centre (ARC) providing more detailed information of the system status

Warning – Filtering is likely to delay the response of a system to a REAL FIRE

Please discuss with your fire alarm system provider whether these unwanted alarm features are available in your current fire alarm panel or whether upgrades are possible and if they are suitable for the risk, e.g. any form of delay is unlikely to be a suitable solution for residential care homes.