

# 'Checkpoint' alarm confirmation and HMO's Eliminate the problem of false alarms in:

**Twinflex plus** is a patented, 2 wire intelligent fire alarm system suitable for the majority of fire alarm installations. The Twinflex plus also has the option of the added feature of 'checkpoint' alarm confirmation.

Checkpoint alarm confirmation drastically reduces the disruption and cost associated with false alarms, particularly during the settling-in-period following installation.

Introduction of mandatory licensing of HMO's of three stories or more was introduced in April 2006.

Licensing of HMO's is mandatory for all local authorities and all buildings that are registered must comply, amongst other things, with fire regulations contained within BS5839 part 6, the main code of practice for installations within HMO's and in some cases BS5839 Part 1 may also be applicable in communal areas. False alarms are a huge problem in within these types of buildings and installers are constantly looking for an early warning fire alarm system without the disruption of false alarms

There are over 485,000 false alarms attended by the Fire Services each year and hundreds of thousands more that are not recorded, sixty-five per-cent of which are attributed to equipment. In the main, detecting fire when no real fire is present, e.g. cooking fumes, steam etc. Even though these fire detectors are doing what they are designed to do they obviously can't differentiate between a real fire and a false alarm, but the disruption caused and cost to the community is enormous. To tackle this problem Rafiki Protection has developed the Twinflex plus system incorporating 'checkpoint' alarm confirmation.



HOSTELS

NURSING HOMES

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## Extract from BS5839 Part 6 (Clause 12. Limitation of false alarms)

In some (usually larger) houses in multiple occupation, high levels of false alarms sometimes occur, simply as a result of the number different occupants, each of whom carry out activities, such as cooking, that can lead to false alarms. In such circumstances, occupiers have been known to compromise or even cause damage to, the fire detection and alarm system, or to ignore fire alarm signals. This makes it important to minimise, as far as practicable, the extent to which occupiers are disrupted by false alarms in other occupiers' accommodation. This might, for example, be achieved by use of a mixed system (see 9.1.5)\*. Alternatively, other measures might be adopted; for example, in the event of a fire signal in one dwelling unit, a short time delay might be incorporated for the occupier to investigate the cause and, if appropriate, reset the system before a fire alarm signal in other dwelling units.

\* Mixed system BS5839 part 6 and BS5839 Part 1

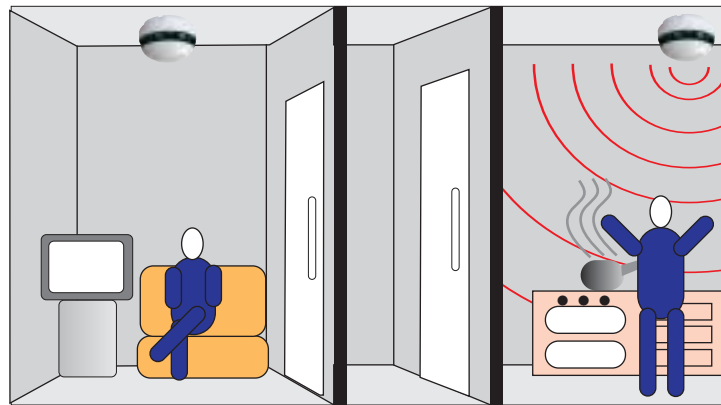
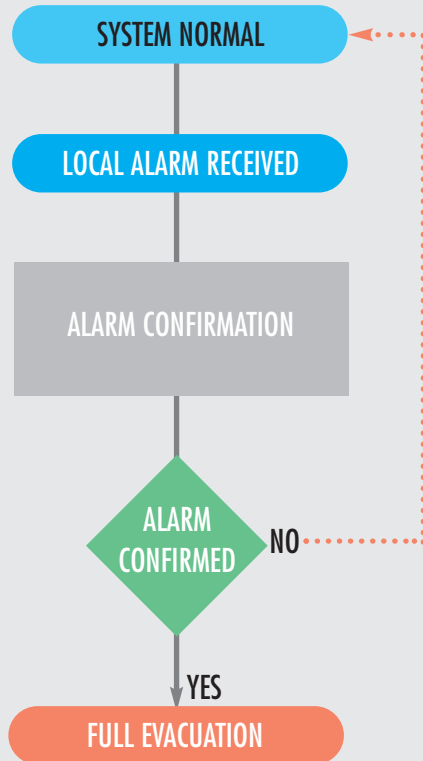
## What is Checkpoint



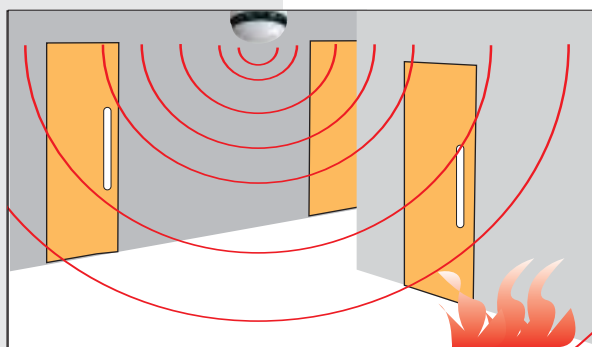
Alarm selection, the main feature of the Twinflex plus is the ability to set a pre-alarm in individual rooms or apartments but at the same time initiate full alarm should fire be detected in any communal area. This is made possible by a detector sounder 'logical link' feature. This is the first time that this feature has been made available on a conventional system and is beneficial where two stage alarms are required.

### Eliminate the problem of false alarms

#### Checkpoint flow chart



At the planning stage of installation fire zones are designated as 'dwelling' or 'communal'. Detectors in dwelling zones (e.g. apartments, hotel rooms etc.) are enabled with the 'logical link' feature by way of a dil switch in the detector. This then allows the control panel to be, simply, programmed with a variable time alarm confirmation period (1-5 minutes at one minute increments). In the event of a fire being detected in a dwelling only the local (room) sounder will operate to alarm occupants of that particular dwelling. The control panel will then carry out a number of checks over this period (which may be 2 minutes, for example ) to confirm the detector is still in alarm and is a genuine fire, not a false alarm generated by cooking fumes, steam etc. If at the end of this checking period the detector ceases to signal alarm the control panel will automatically reset the detector/sounder and the system will revert to its normal state.



If, however, at the end of the confirmation check the detector is still generating an alarm signal the control panel will instantly sound all alarms in the building for full evacuation. Detectors sensing fire, or, call point activation (in any zone) in communal areas instantly generate a full alarm throughout the building.

The control panel meets all the requirements of EN54-2 and EN54-4:1997. The detector meets the requirements of EN54-5 and EN54-7 :2000. The sounder meets the requirements of EN54-3:2001.

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PROTECTION

Intelligent Fire Technology

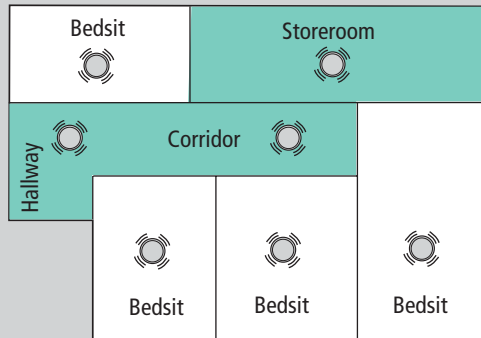
NOTE: Twinflex Plus panels are configured to have 'Dwelling' or 'Communal' zones at the time of commissioning. Dwelling zones are then set with the 'checking' period - between 1 and 5 minutes. Rafiki advises that this panel should only be installed and configured by qualified fire alarm installers or equivalent personnel.

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## How to use the Twinflex Plus system in an installation

At the planning stage, fire zones are designated as either 'Dwelling' or 'Communal'. Multipoint detectors in the dwelling zones have the facility to use 'checkpoint' technology. By simply enabling the logical link dil switch in the detector.

'Checkpoint' technology is the ability to select a checking period for individual detectors to confirm the smoke/heat detected as a genuine fire not an false alarm.

This checking period can be selected between 1 – 5 minutes at commissioning stage after consultation with fire officers or other authorised bodies.

### Communal Zone

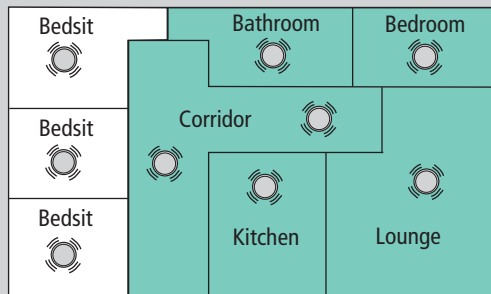
Communal area, e.g. hall/stairway; kitchen; lounge.

When a detector alarm is activated on this type of zone, the control panel enters the fire state and the alarms are activated immediately in all zones throughout the installation.

### Single Dwelling per Zone (Zonal confirmation alarm)

eg flats with more than one room

When a detector alarm is activated on this type of zone, all sounders on the zone are activated and then the control panel carries out the configured number of confirmation checks. If the detector alarm is confirmed, the control panel enters the fire state and the alarms are activated throughout the installation; if the detector alarm is rejected, the sounders on the zone are silenced, and the detector in alarm is reset.



### Multiple Dwellings per Zone (Local confirmation alarm)

Dwellings requiring a single detector/sounder, e.g. hostel; hall of residence; hotel rooms; bedsits.

When a detector alarm is detected on this type of zone, the integral sounder in the detector that generated the alarm signal is activated and then the control panel carries out the configured number of confirmation checks. If the detector alarm is confirmed, the control panel enters the fire state and the alarms are activated throughout the installation; if the detector alarm is rejected, the sounder is silenced, and the detector reset.

Note: Activation of any manual call point will override alarm confirmation

