

AlarmCalm

Complete
False Alarm
Management
for Care Homes



Verification



Investigation



Reduction

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AlarmCalm is the Unparalleled False Alarm Management Solution from Advanced.

AlarmCalm is powerful and flexible. Even with complicated cause and effect. It's also easy to install and configure via our DynamixTools software.

It's the best-in-class solution made up of three high performance components that make for perfect False Alarm Management (FAM):



Why Does Your Care Home Need AlarmCalm?

The total flexibility provided by AlarmCalm from Advanced is the perfect way to simplify the complex process of designing effective false alarm management (FAM) systems and strategies for care homes.

Unwanted alarms are disruptive in any building. However, in care homes they can cause real distress. Repeated false alarms not only leave residents confused but can also lead to complacency and a failure to take proper action if/when a real fire occurs. They are also increasingly subject to penalty charges from fire and rescue services across the globe.



A Fast Fire System

Core aspects of FAM are alarm verification, alarm acknowledgement and investigation delays to outputs. AlarmCalm gives users unprecedented control over these elements, but speed is everything.

There's little point in setting a 60-second acknowledgement time if your network takes 15 seconds to process inputs – that's 25% of the time available.

Advanced has built its reputation on the speed and ease of its networking. Our MxPro 5 and Axis EN fire systems are the foundation for complete, high-performance FAM, whatever the size and complexity of your installation.

The Complicated Made Easy

Complete FAM frequently involves complicated cause and effect.

The AlarmCalm option in our DynamixTools Config software makes it simple to set up customised FAM and achieve powerful configurations – often in one click.

For existing customers, the software update is free and so is the training – not that we think you'll need much training as the system's so easy to use.

Intelligent Alarm Acknowledgement Devices

Our AlarmCalm Button is an optional element within the system. It is designed to let building occupants acknowledge and verify false alarms – an important element in false alarm reduction.

The AlarmCalm Button is a fully intelligent loop device offering multiple configuration options.

It's compatible with a standard UK single-gang backbox and installation is quick, inexpensive and looks good.

AlarmCalm System Components

Total Flexibility

AlarmCalm is available on our MxPro 5 multiprotocol panel and Axis EN complete fire system, as well as our Go and AxisGo single loop panels.



Both MxPro 5 and Axis EN come in 1-8 loop panels with a full range of repeaters, including touchscreen option TouchControl. Go and AxisGo are single loop panels for smaller sites that's available in two configurable address sizes. Custom-built 'specials' are also available, designed to meet your exact control, indication and environmental requirements.

AlarmCalm Button



The AlarmCalm Button is an optional element within our AlarmCalm system. It allows trained residents or staff to acknowledge an alarm and initiate a programmable verification time that gives obvious false alarm triggers (like steam or smoke from burnt toast) chance to clear.

Optical / Multisensor / Heat Detector



MxPro 5 panels support up to 254 devices per loop, depending on the protocol chosen.

Full Scalability

Each Advanced MxPro 5 or Axis EN panel supports up to 254 devices per loop depending on the protocol used.



Go or AxisGo supports up to 240 devices depending on the size of panel chosen and protocol used.

In smaller, simpler installations a single panel may be sufficient, while for complicated sites covering large areas, panels can be combined into powerful 200 node networks with tens of thousands of field devices and peripherals. Advanced's networking is high speed and high performance and internationally acknowledged as one of the best solutions available today.

Call Point



Call points provide a simple and effective means of raising an immediate alarm in case of fire.

Sounder Beacon Base



The sounder and beacon are vital elements of care home fire system design as they provide clear notification of a fire alarm to residents who may be visually impaired or hard of hearing.

System Component Key

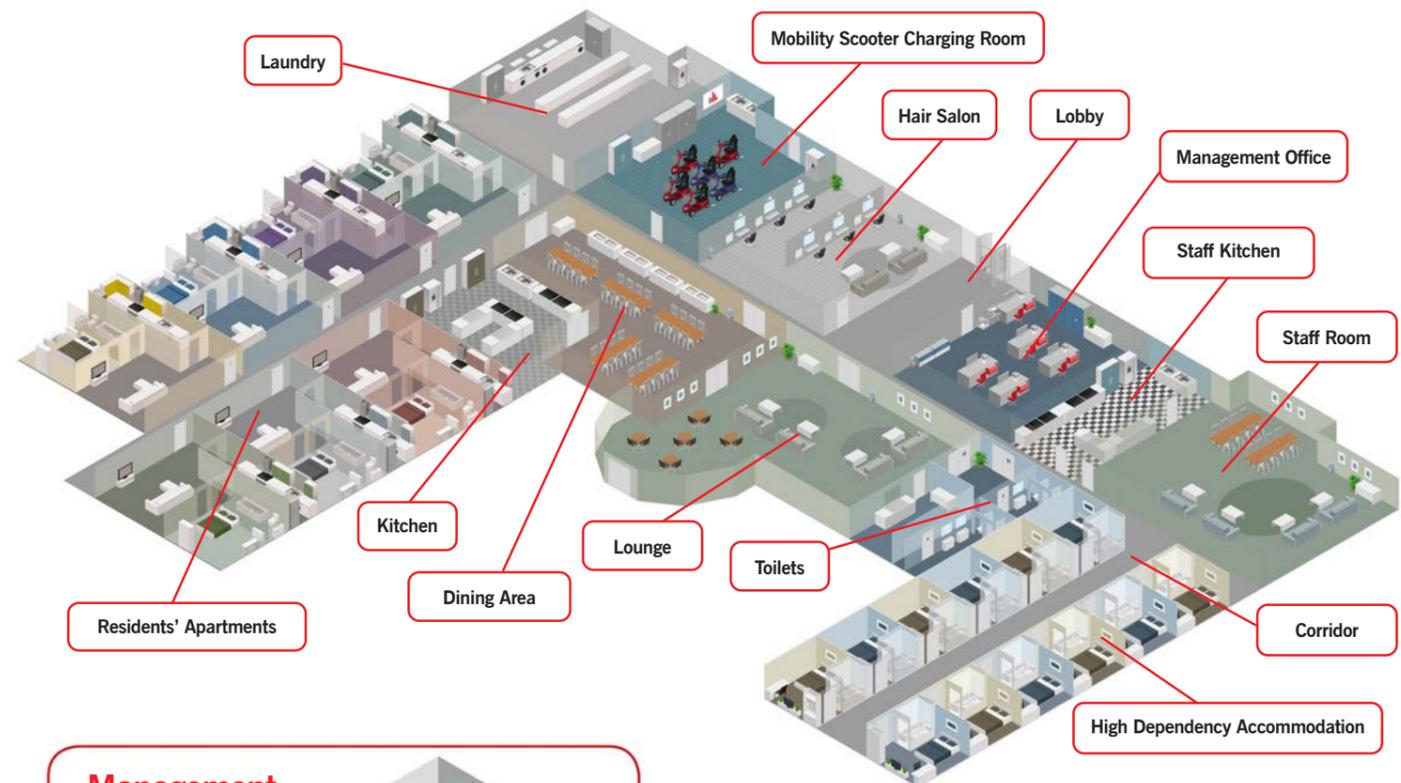


AlarmCalm Care Home Overview

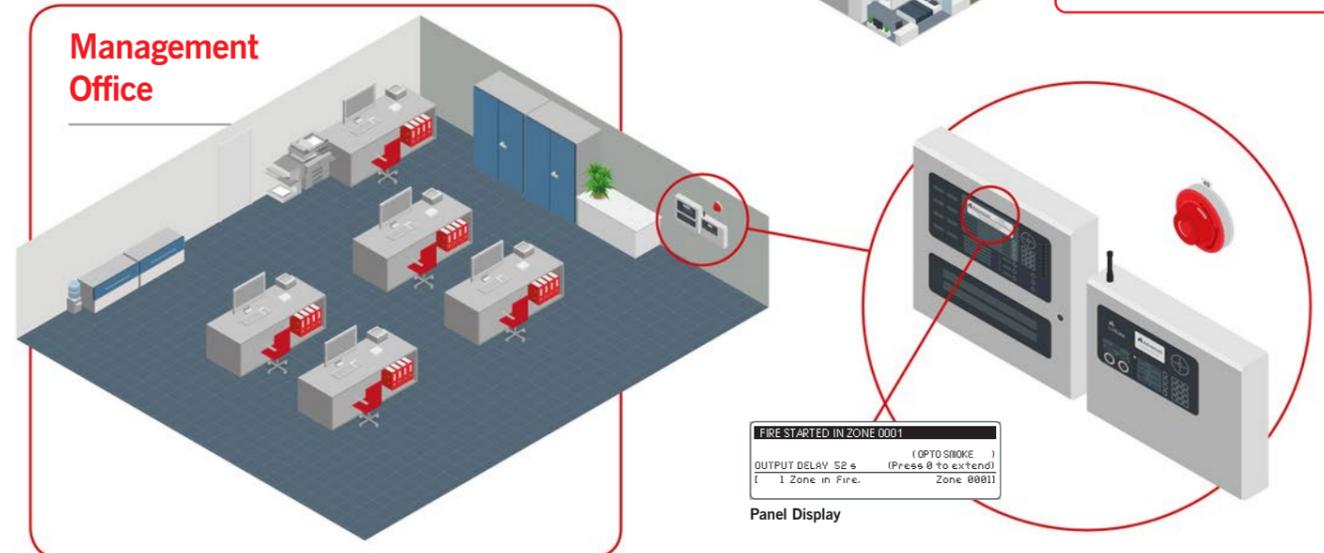
The scenario in this brochure gives just one example of how an Advanced fire system, with AlarmCalm implemented, can be used to vastly reduce false alarms and improve fire safety for those in care or residential accommodation.

AlarmCalm is flexible and easy to configure. It can be used in a wide range of different settings, from small, simple installations to large sites with complicated cause and effect.

An Example Care Home



Management Office

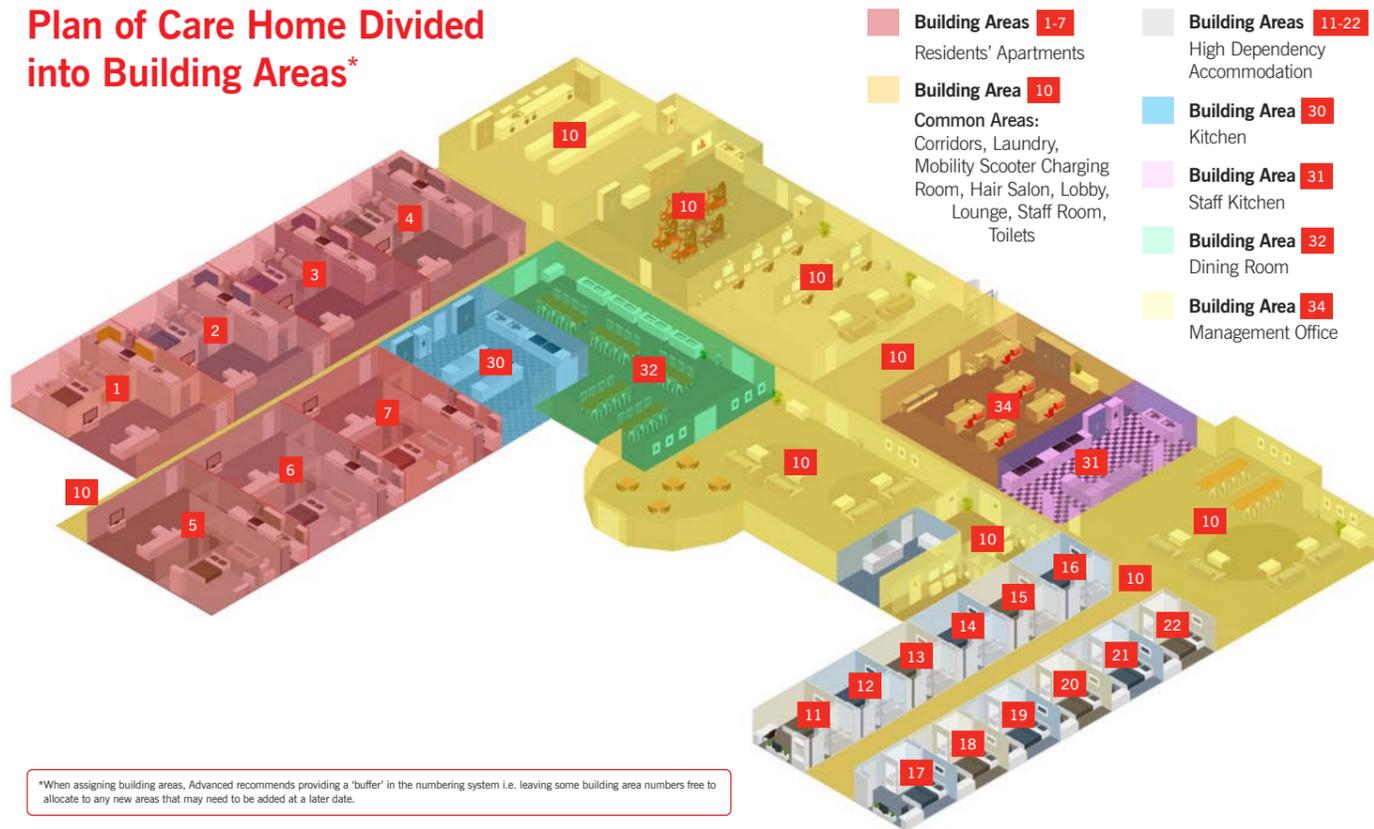


AlarmCalm Building Areas

False Alarm Management Using Building Areas

Advanced allows you complete flexibility over the way you configure your FAM. Our programming allows you to quickly and easily create virtual areas, independent of fire zones, for greater precision in FAM design. We call these virtual areas 'building areas'.

Plan of Care Home Divided into Building Areas*



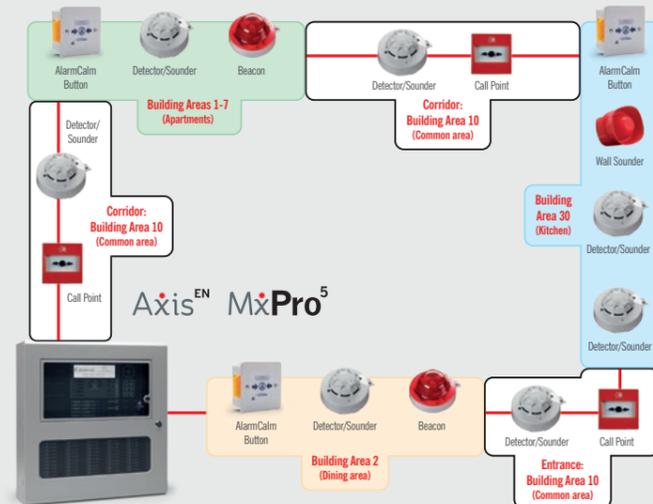
*When assigning building areas, Advanced recommends providing a 'buffer' in the numbering system i.e. leaving some building area numbers free to allocate to any new areas that may need to be added at a later date.

False Alarm Management by Building Area

Building areas are virtual areas** that by default match fire zones but can be specified independently, to cover multiple zones and points, or individual points per panel.

Each Advanced MxPro 5 or Axis EN panel supports 200 building areas, (so up to 40,000 over a large network).

Each building area can have entirely independent FAM strategies, or can be grouped and share common settings.



**Advanced panels show fire locations by zone i.e. the building areas designation is for FAM design and system software programming purposes only.

AlarmCalm Configuration Examples

The Care Home

AlarmCalm works alongside the in-built signal verification technology in modern smoke detectors to offer an unbeatable solution that is ideal for the specific needs of care home residents and staff.

Residents' Apartments

Building Area:

Devices in apartments are assigned to a unique building area number (see page 6: False Alarm Management Using Building Areas). In this example, apartment numbers correspond to building area numbers 1 to 7 and are designated as zone 0001 (see illustration).

Detection & Devices per Apartment:

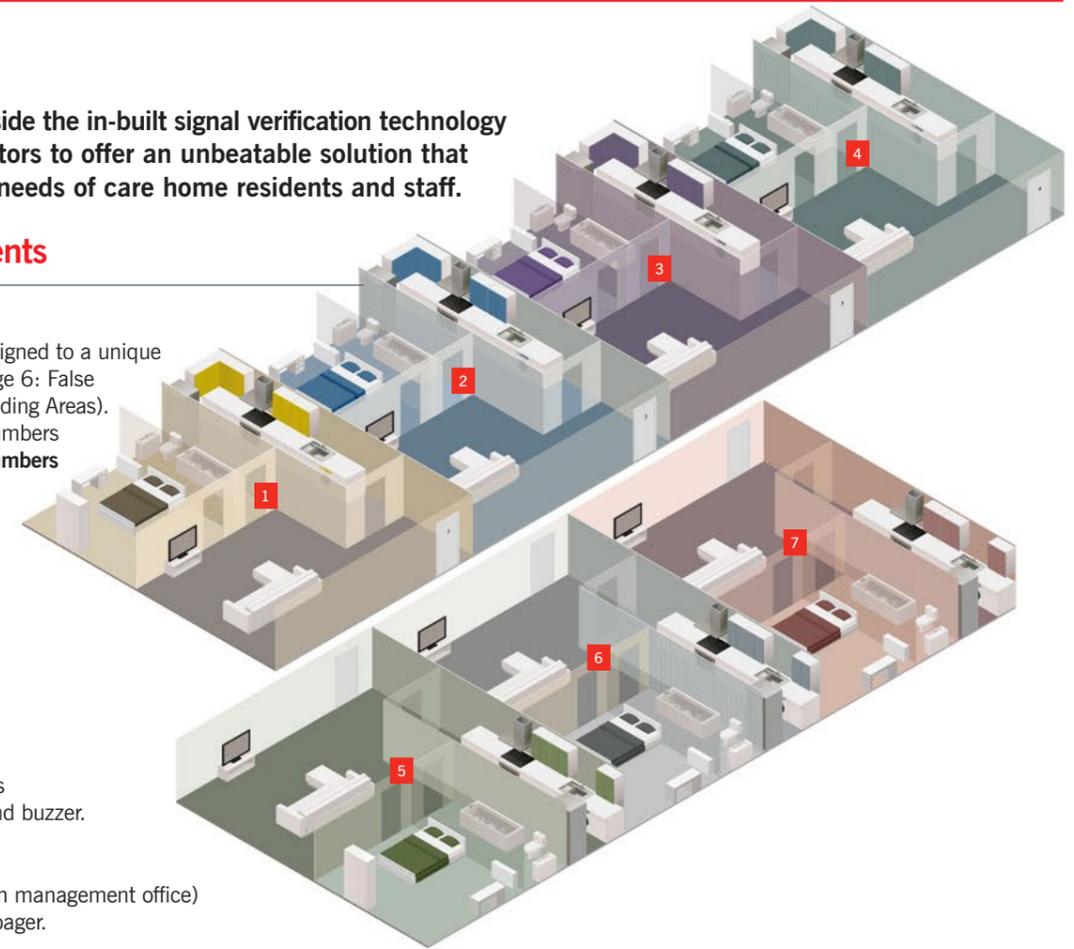
- 3 x optical smoke detectors
- 1 x heat detector
- 3 x sounder beacon bases
- 2 x AlarmCalm Buttons.

Verification Outputs:

- Local sounders and beacons
- AlarmCalm Button's LED and buzzer.

Other Outputs:

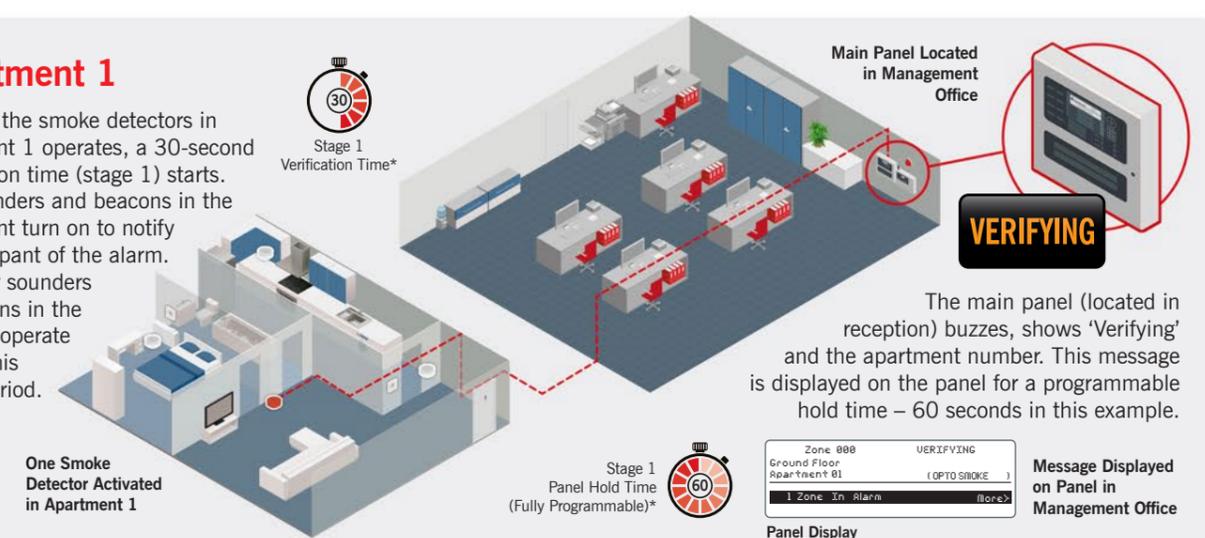
- Message to panel (located in management office)
- Message to fire manager's pager.



AlarmCalm Cause and Effect

Apartment 1

If one of the smoke detectors in apartment 1 operates, a 30-second verification time (stage 1) starts. The sounders and beacons in the apartment turn on to notify the occupant of the alarm. No other sounders or beacons in the building operate during this initial period.



*Times are programmable and shown here for representative purposes. Verification times should be agreed with all relevant parties at design stage.

There are six possible scenarios following stage 1 verification:

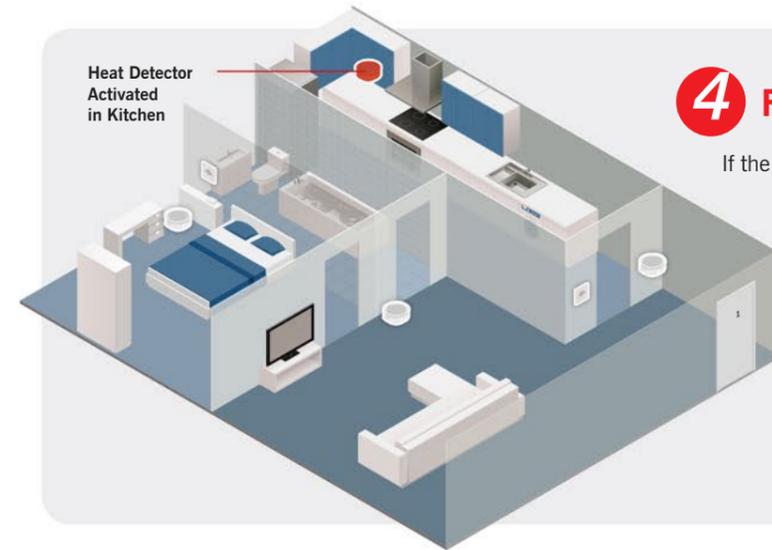
1 System Reset (Unwanted Fire Signal)

If, during the 30-second verification time, the alarm condition appears not to be the result of a real fire, the occupant of apartment 1 can press an AlarmCalm button within the apartment.

This silences the local sounders and beacons and extends the verification period by a further 90 seconds (stage 2). This gives the occupant time to remove the source of the unwanted signal and allows the detector to return to normal.



AlarmCalm Button Activated



4 Full Alarm (Heat Detector Activated)

If the heat detector in the kitchen of apartment 1 operates at any time, no verification is allowed, a full fire alarm condition is immediately raised and the evacuation strategy for the building commences.



2 Full Alarm (Persistent Smoke in Apartment)

If the AlarmCalm Button is *not* pressed at the end of the 30-second verification period and the smoke detector in apartment 1 is still in alarm condition

OR

If the AlarmCalm Button is pressed, and at the end of the 90 second (stage 2) verification period the smoke remains: the panel buzzer in the management office continues to sound (or re-sounds if it was previously muted) and displays 'Fire Started in Zone 0001' and the apartment number. This fire condition is now latched until reset by a responsible person and the evacuation strategy for the building commences.

Smoke Persists beyond Verification. Full Alarm Condition Activated



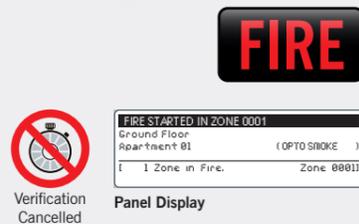
3 Full Alarm (Second Detector Activated in Apartment)

If a second detector in apartment 1 operates at any time (during stage 1 or stage 2) the verification period is cancelled.

The panel immediately displays a latched fire alarm condition and the evacuation strategy for the building commences.



2 Detectors Activated



5 Full Alarm (Multiple Building Areas)

If a smoke detector in apartment 1 operates at the same time as a detector in another area*, no verification is allowed, a full fire alarm condition is immediately raised and the evacuation strategy for the building commences.

Additional Smoke Detector Activated



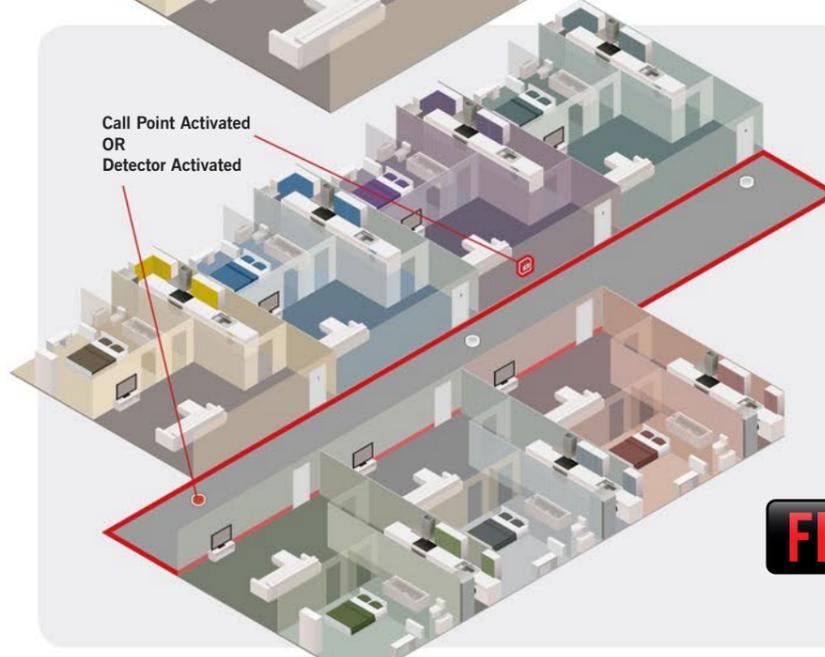
No Verification Allowed



6 Common Area Alarm

If any call point or any detector in an area with no verification settings (typically common areas e.g. corridors) is activated, no verification is allowed and a full fire alarm condition is immediately raised.

No Verification Allowed



Call Point Activated OR Detector Activated



IMPORTANT: According to BS 5839-1:2013, all residential care home premises are now required to have automatic transmission of fire alarm signals to an alarm receiving centre to allow fast and reliable summoning of the fire and rescue service. A staff alarm should not incorporate any delay in summoning the fire and rescue service when the fire alarm system operates. As such, when any latched fire signal is displayed, the signal to the alarm routing equipment should be operated without delay.

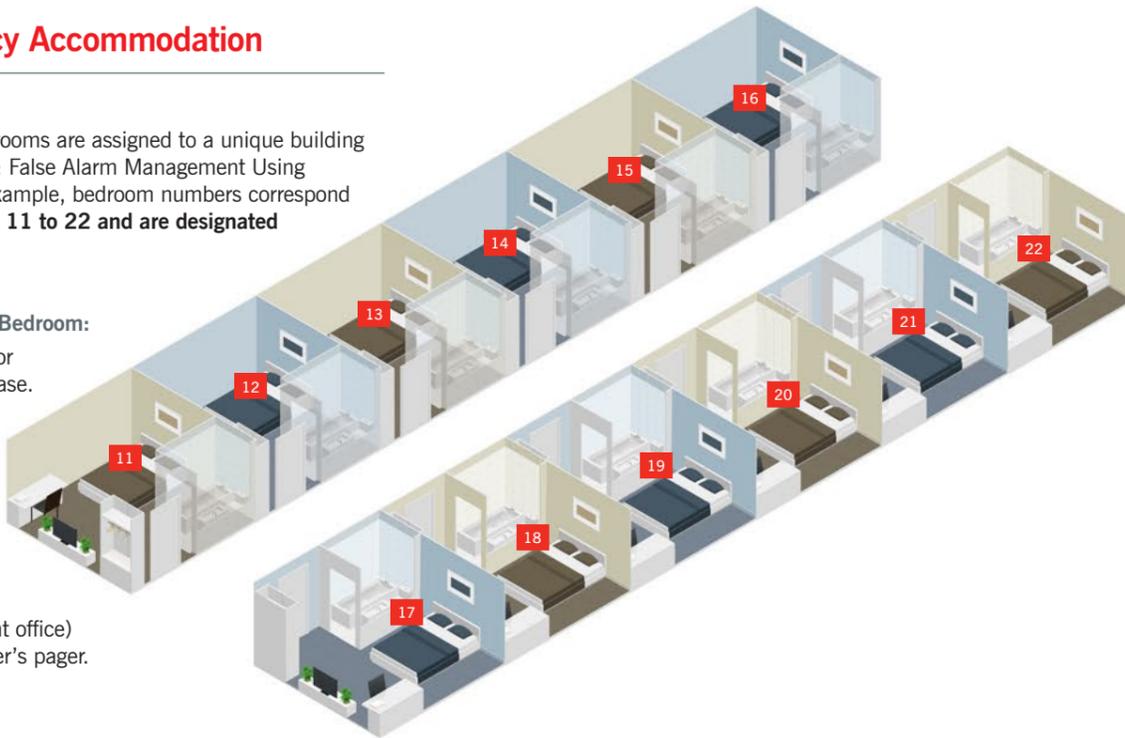
*The maximum number of building areas in alarm in this example is set to one. If this is exceeded, no verification is allowed. The maximum number of building areas allowed in verification at the same time is programmable and should be agreed with all parties at design stage.

AlarmCalm Configuration Examples

High Dependency Accommodation

Building Area:

Devices in residents' bedrooms are assigned to a unique building area number (see page 6: False Alarm Management Using Building Areas). In this example, bedroom numbers correspond to **building area numbers 11 to 22 and are designated as zone 0101**.



Detection & Devices per Bedroom:

- 1 optical smoke detector with sounder beacon base.

Verification Outputs:

- Sounder and beacon in management office.

Other Outputs:

- Message to panel (located in management office)
- Message to fire manager's pager.

AlarmCalm Cause and Effect

Bedroom 1

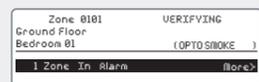
If the smoke detector in bedroom 1 operates, a 60-second verification time (stage 1) starts.

The sounder and beacon in bedroom 1 do not activate to avoid causing any distress to its occupant.

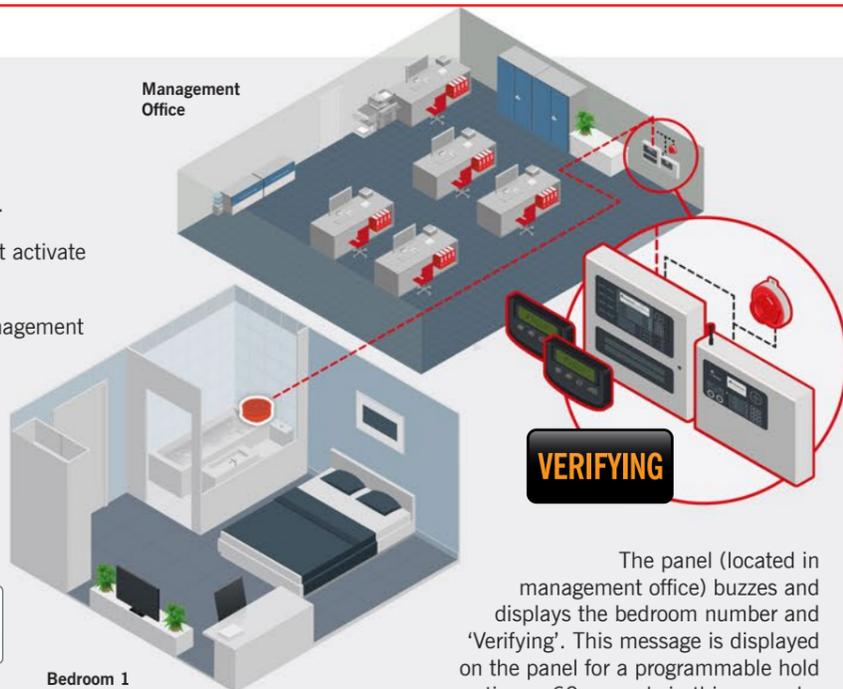
However, the sounder and beacon in the Management Office activate to notify staff of the alarm.

A message is relayed via the Advanced LifeLine system to all staff pagers showing the location of the detector.

No other sounders or beacons in the building go off during this initial verification period.



Panel Display – Panel Hold Time (Fully Programmable)



The panel (located in management office) buzzes and displays the bedroom number and 'Verifying'. This message is displayed on the panel for a programmable hold time – 60 seconds in this example.

*Times are programmable and shown here for representative purposes. Verification times should be agreed with all relevant parties at design stage.

There are four possible scenarios following stage 1 verification:

1 System Reset (Unwanted Fire Signal)

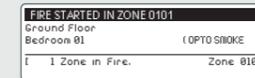
If, after the 60-second verification period, the alarm condition is not the result of a real fire, and the cause of the alarm activation has cleared, the fire panel will return to its normal condition.



Panel Display

2 Full Alarm (Persistent Smoke in Bedroom)

If, at the end of the 60-second verification period, the smoke detector is still in alarm condition, the buzzer on the panel in reception continues to sound (or re-sounds if it was previously muted) and the panel displays 'Fire started' and the bedroom number. This fire condition is now latched on the panel until reset by a responsible person and the evacuation strategy for the building commences.



Panel Display

3 Full Alarm (Multiple Building Areas)

If a smoke detector in bedroom 1 operates, followed by a pre-determined maximum number of other detectors in the wider building*, verification is cancelled, a full fire alarm condition is immediately raised and the evacuation strategy for the building commences.



Panel Display



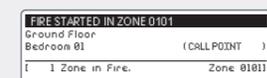
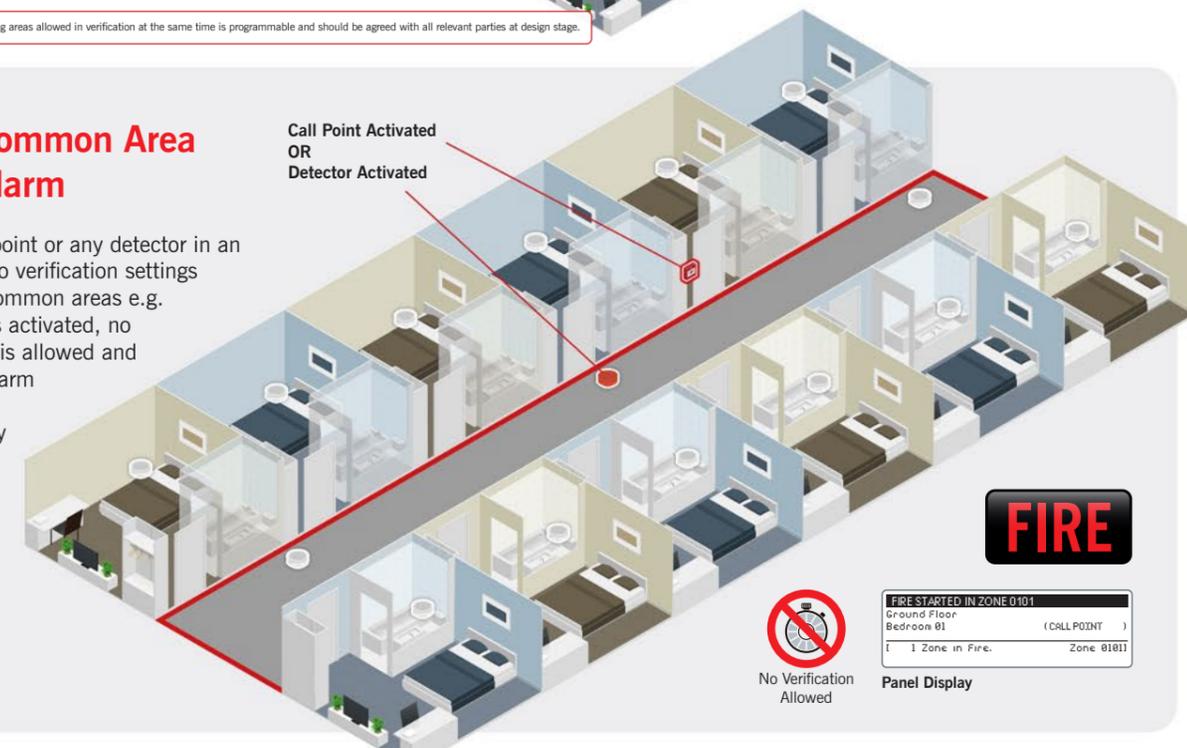
Additional Smoke Detectors Activated

*The maximum number of building areas allowed in verification at the same time is programmable and should be agreed with all relevant parties at design stage.

4 Common Area Alarm

If any call point or any detector in an area with no verification settings (typically common areas e.g. corridors) is activated, no verification is allowed and a full fire alarm condition is immediately raised.

Call Point Activated OR Detector Activated



Panel Display

IMPORTANT: AlarmCalm caters for a range of evacuation strategies - from 'all-out' systems with single stage evacuation, to phased evacuation which allows the fire system to be programmed dynamically to evacuate those most in danger first, sometimes to an adjoining protected area where they are able to remain for a time in reasonable safety, allowing for safe and more efficient evacuation.

AlarmCalm Configuration Examples

Kitchen

Building Area:

In this example, the kitchen has been designated as **building area 30 but allocated zone 0198**.

Detection & Devices:

- 2 heat detectors
- 2 sounder/beacon bases
- 1 AlarmCalm Button.

Verification Outputs:

- Sounders and beacons in kitchen.

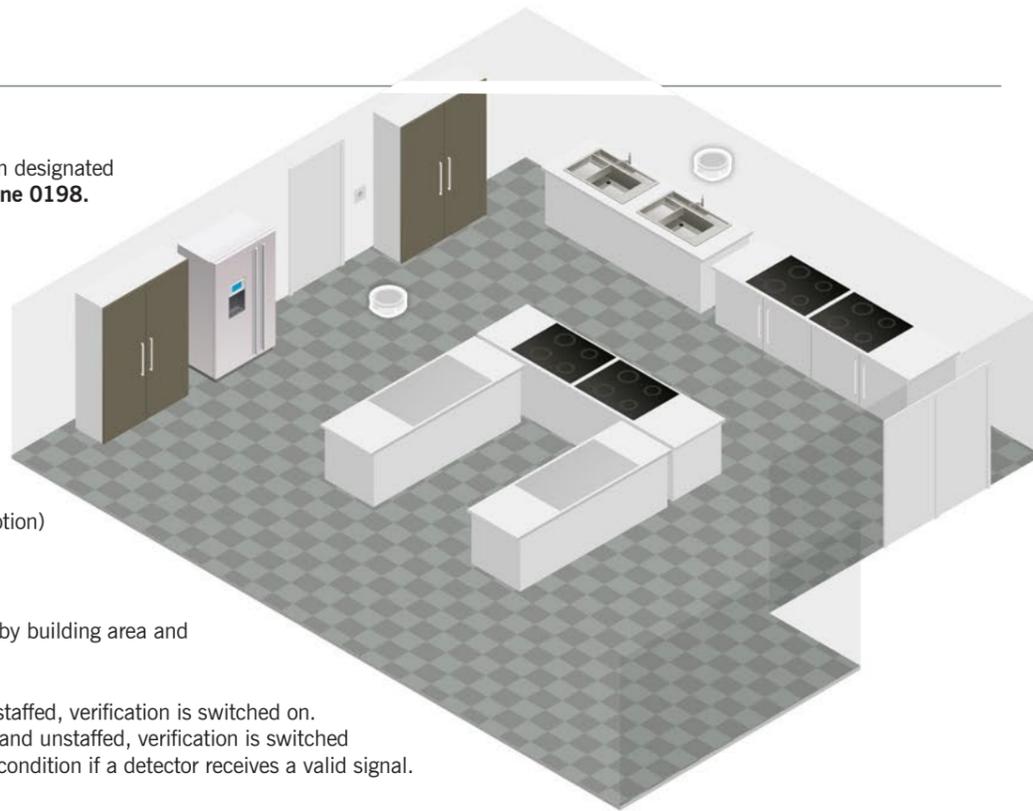
Other Outputs:

- Message to panel (located in reception)
- Message to fire manager's pager.

Day/Night Verification Settings:

- Verification can be set to on or off by building area and day/night settings.

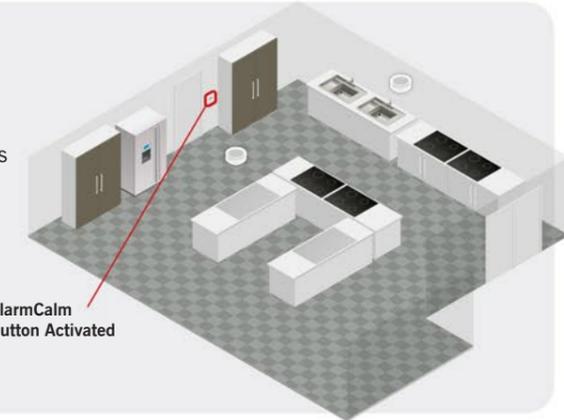
During the day, when the kitchen is staffed, verification is switched on. At night, when the kitchen is closed and unstaffed, verification is switched off and the system goes into full fire condition if a detector receives a valid signal.



There are four possible scenarios following stage 1 verification:

1 System Reset (Unwanted Fire Signal)

If a member of staff in the kitchen believes the signal is not due to a fire that requires a full evacuation, they can press the AlarmCalm button. This silences the local sounders and beacons and extends the verification period by a further 90 seconds (stage 2). This gives the occupant time to remove the source of the unwanted signal and allows the system to return to normal.



AlarmCalm Button Activated

2 Full Alarm (Persistent Smoke in Kitchen)

If, at the end of the 60-second verification period, the heat detector is still in alarm condition, the panel buzzes and displays 'Fire Started in Zone 0198 Kitchen' and the evacuation strategy for the building commences.



3 Full Alarm (Second Detector Activated in Kitchen)

If a second detector activates, verification ends, a full fire alarm condition is immediately raised and the evacuation strategy for the building commences.



Second Heat Detector Activated



AlarmCalm Cause and Effect

Heat Detector Activated in Kitchen (Daytime)

If either of the heat detectors in the kitchen reaches an alarm threshold, a stage 1 verification time of 60 seconds starts.

During verification, the sounder and beacon in the kitchen activate and the care home manager receives a pager message via Advanced's LifeLine system. A beacon flashes in the management office and the panel buzzes and displays the kitchen as 'Verifying'.



VERIFYING

Heat Detector Activated



4

Call Point Activated OR Detector Activated

If any call point or any detector in an area with no verification settings (typically common areas e.g. corridors) is activated, verification ends and a full fire alarm condition is immediately raised.



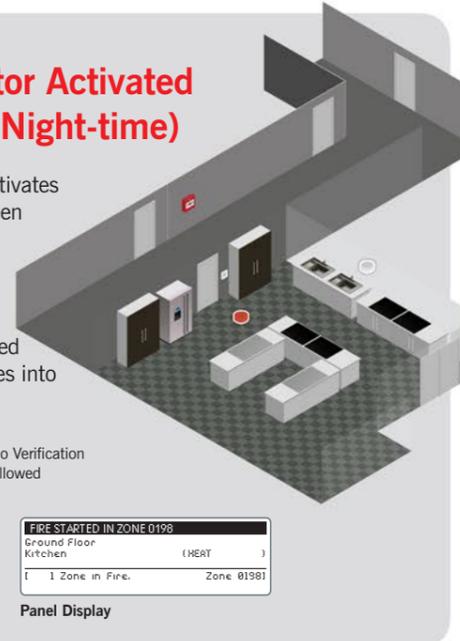
Panel Display

Heat Detector Activated in Kitchen (Night-time)

If a detector activates at night (between the hours of 20:00 and 07:00 in this example) no verification is allowed and the system goes into full fire condition.



Panel Display



*Times are fully programmable and shown here for representative purposes. Verification times should be agreed with all relevant parties at design stage.

AlarmCalm Configuration Examples

Residents' Dining Room

AlarmCalm gives you total control over your False Alarm Management design, thanks to the flexibility of Advanced's unique programming by building area.

Building Area:

In this example, the dining room has been designated as **building area 32** and **designated zone 0200** (see page 6: False Alarm Management Using Building Areas).

Detection & Devices:

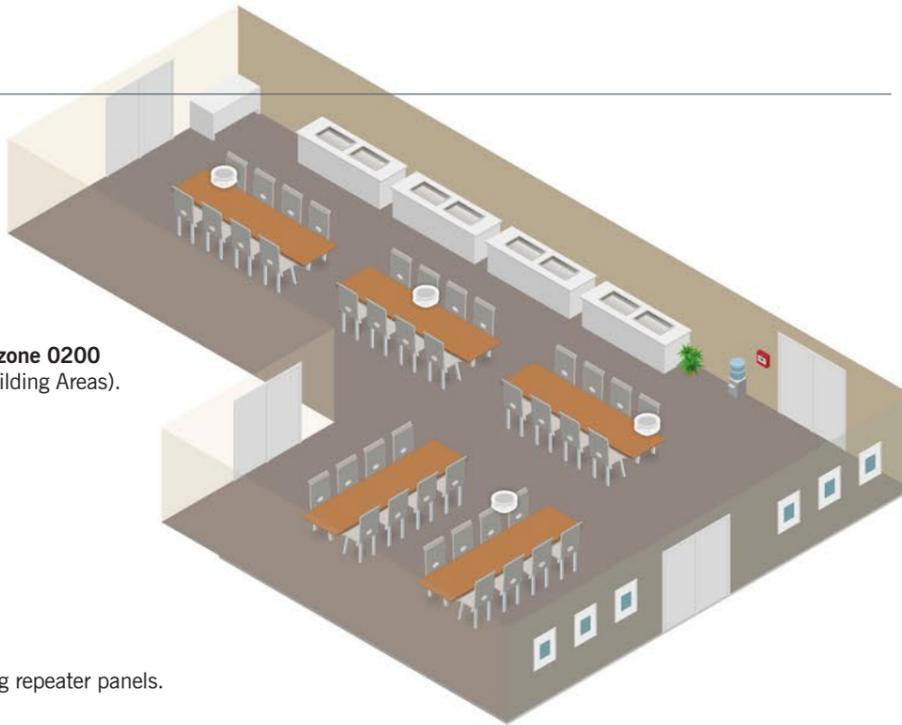
- 4 Multisensors
- 1 Manual call point
- 2 Sounder beacon bases.

Verification Outputs:

- Sounders and beacons in dining room
- Sounder in staff room
- Beacon in management office
- Buzzers on main panel and east and west wing repeater panels.

Other Outputs:

- Message to panel (located in management office)
- Message to fire manager's pager.



There are six possible scenarios following stage 1 verification:

1 System Reset (Unwanted Fire Signal)

If by the end of the verification period, the smoke clears, and no other detector is activated, the system will reset and all sounders, beacons and buzzers will be cancelled.



2a Full Alarm (Heat also Detected by Multisensor)

If heat is also detected at any point during the verification period, verification is cancelled, and a full alarm condition is raised.



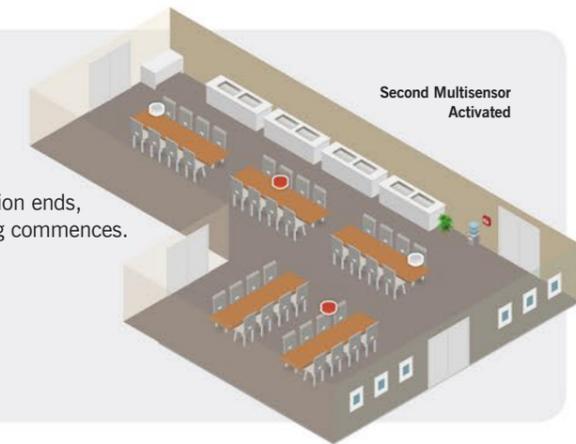
2b Full Alarm (Persistent Smoke)

If smoke is still present at the end of the verification period, verification is cancelled, and a full alarm condition is raised.



3 Full Alarm (Second Detector Activated in Dining Room)

If smoke/heat is detected by a second multisensor in the dining area, verification ends, a full fire alarm condition is raised and the evacuation strategy for the building commences.



AlarmCalm Cause and Effect

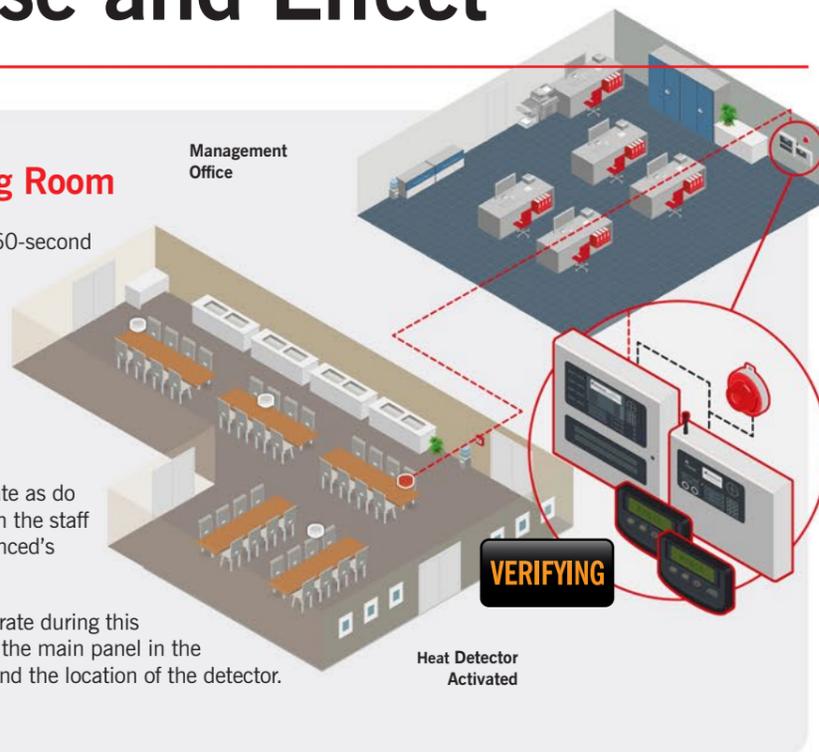
Multisensor Activated in Dining Room

If a multisensor in the dining room is activated, a 60-second (stage 1) verification time begins. The multisensor switches to detecting heat only.



The sounder/beacon bases in the dining room activate as do the beacon in the management office and sounder in the staff room. A message is sent to all staff pagers via Advanced's LifeLine system confirming the activated device.

No other sounders or beacons in the care home operate during this initial period. Throughout the verification hold time, the main panel in the management office buzzes and displays 'Verifying' and the location of the detector.



4 Full Alarm (Multiple Building Areas)

If the maximum number of building areas allowed in verification is exceeded at any time, a full fire alarm condition is immediately raised.



5 Common Area Alarm

If any call point or any detector in an area with no verification settings (typically common areas e.g. corridors and reception) is activated, verification ends and a full fire alarm condition is immediately raised.



*The maximum number of building areas allowed in verification at the same time is programmable and should be agreed with all relevant parties at design stage.

AlarmCalm Configuration Examples

Common Areas

Reception, Residents' Lounge, Offices, Staff Room, Laundry, Mobility Scooter Charging Room, Hair Salon, Toilets and Corridors.

In this example, no verification delay is set in the common areas. Instead, an investigation delay is used to allow:

- Any signal to be latched to the panel
- A programmable time for the cause of the signal to be investigated (a countdown timer is displayed on the panel)
- The option to reset the panel if the fire signal is unwanted.

Building Area:

In this example, all devices in the reception, lounge, offices, staff room, laundry, mobility scooter charging room, hair salon, toilets and corridors are designated as **building area 10 and allocated zone 0100**.

Detection & Devices:

- Manual call points along escape routes and at all final exits
- Optical smoke detectors
- Sounder beacon bases.

Investigation Outputs:

- Buzzers on main panel and east and west wing repeater panels
- Sounder in staff room
- Beacon in management office.

Other Outputs:

- Message to panel (located in management office)
- Message to fire manager's pager.

Day/Night Investigation Delay Settings:

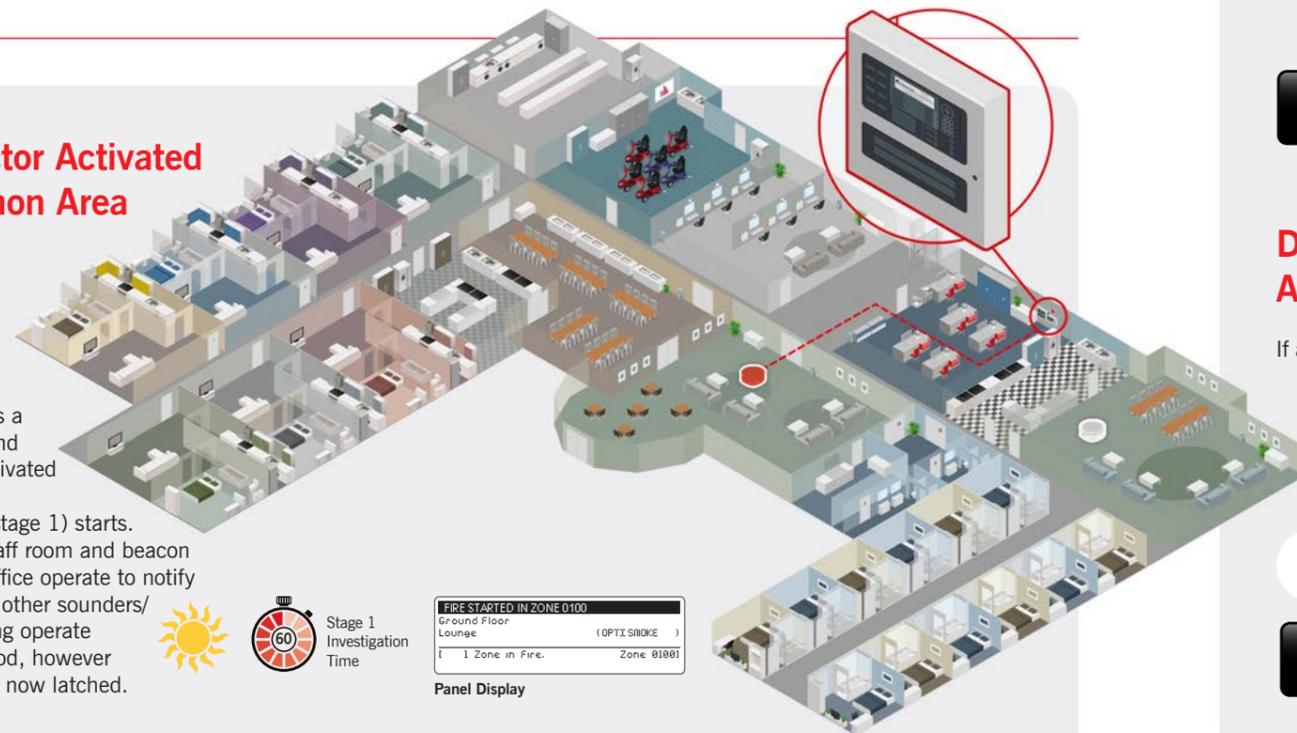
- Investigation delays can be set to on or off using day/night settings. Between 07:00 and 20:00 hours, when the care home is fully staffed, investigation delays are in use. The panel and repeaters show 'Delayed' status by means of an illuminated LED.

At night, when fewer staff are on duty, investigation delays are switched off and the system goes into full fire condition if a detector receives a valid signal.

AlarmCalm Cause and Effect

Smoke Detector Activated in Any Common Area (Daytime)

If a smoke detector in any common area (e.g. the lounge) is activated, the fire panel buzzes, displays a fire alarm condition and the location of the activated detector. A 60-second investigation period (stage 1) starts. The sounder in the staff room and beacon in the management office operate to notify staff of the alarm. No other sounders/beacons in the building operate during this initial period, however the alarm condition is now latched.



FIRE STARTED IN ZONE 0100
Ground Floor Lounge (OPTX SMOKE)
1 Zone in Fire. Zone 0100

Panel Display

There are two possible scenarios following stage 1 investigation:

1 System Reset (Unwanted Fire Signal)

During stage 1, if staff suspect the fire signal is unwanted, they can extend the investigation period by up to 120 seconds (stage 2) by pressing the 'Acknowledge' button at either the main fire panel or at the east and west wing repeaters.

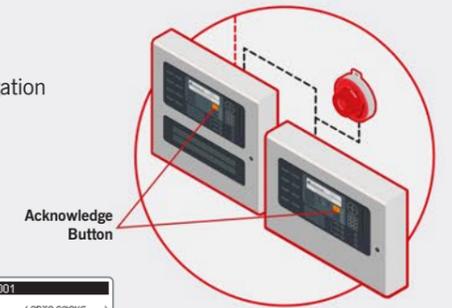
If the fire signal is obviously unwanted, a responsible person must reset the panel before the investigation period (stage 1 and/or 2) has elapsed otherwise all sounders and beacons in the building will activate to notify occupants of a fire and trigger an evacuation.



Investigation Delay Countdown from 120 Seconds

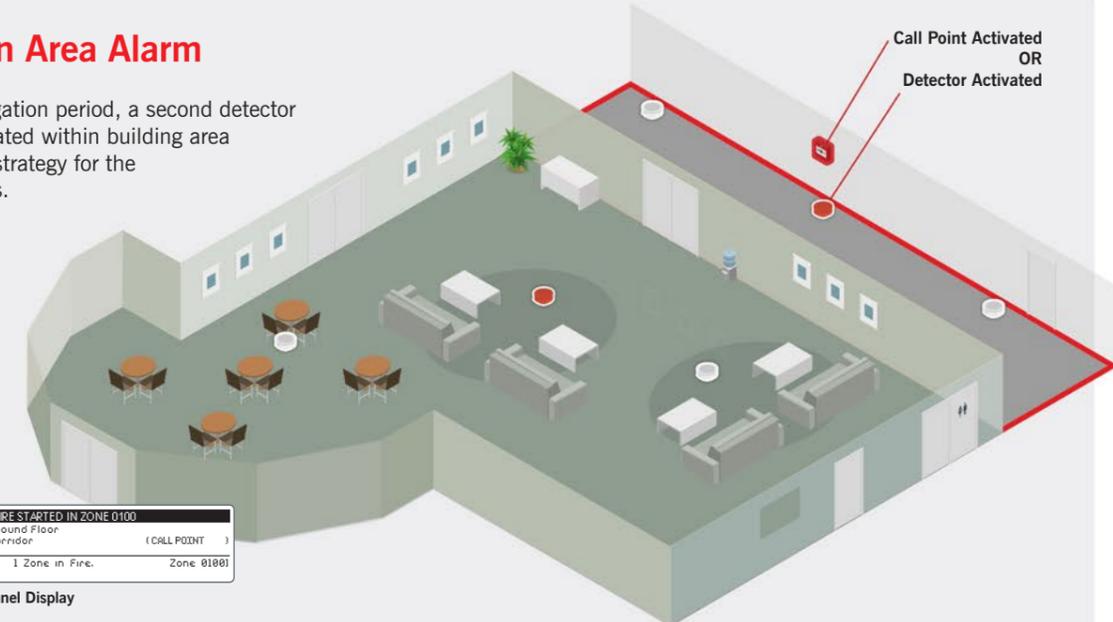
FIRE STARTED IN ZONE 0001
(OPTX SMOKE)
OUTPUT DELAY 52% (Press 0 to extend)
1 Zone in Fire. Zone 0001

Panel Display



2 Common Area Alarm

If during the investigation period, a second detector or call point is activated within building area 10, the evacuation strategy for the building commences.



FIRE

FIRE STARTED IN ZONE 0100
Ground Floor Corridor (CALL POINT)
1 Zone in Fire. Zone 0100

Panel Display

Detector Activated in Common Area (Night-Time)

If any detector activates between 20:00 and 07:00, no investigation period is allowed and a full fire condition is immediately raised.



Verification Cancelled

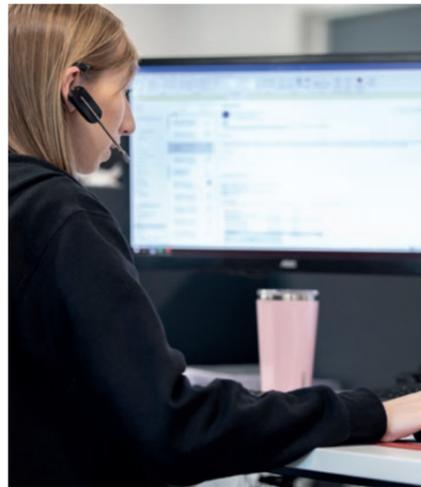
FIRE

FIRE STARTED IN ZONE 0100
Ground Floor Lounge (OPTX SMOKE)
1 Zone in Fire. Zone 0100

Panel Display



IMPORTANT: According to BS 5839-1: 2013, all residential care home premises are now required to have 'automatic transmission of fire alarm signals to an alarm receiving centre' to allow fast and reliable summoning of the fire and rescue service. A staff alarm should not incorporate any delay in summoning the fire and rescue service when the fire alarm system operates. As such, when any latched fire signal is displayed, the signal to the alarm routing equipment should be operated without delay.



Technical support

Advanced **360***

Highly rated customer support. Available by telephone and online.

When you set up an Advanced360 account, you gain access to a host of helpful advice and support.

An account also gives you access to a wealth of online information, from 'how to' videos to datasheets and detailed product manuals. And everyone with an Advanced360 account can benefit from our dedicated monthly newsletter, packed with useful hints and tips.

Services include:

- **Technical support** – available by phone and online from one of our experienced technical support engineers
- **Support history** – open and view your live support tickets and see your full support history – enabling you to refer back to previous advice where required



- **Training** – view and book training slots (direct customers only), and download your training certificates at any time
- **Software** – download software and save your software packages by installation/site
- **Literature** – download manuals, specifications, approved partner certificates, technical information and more
- **Warranty certificates** – download warranty certificates for your sites.



Sign up now at advancedco.com



Go

The powerful, flexible, single-loop fire panel

Designed to be fast to fit, quick to configure and easy to use, Go saves install time whilst bringing you complete peace of mind that your single-panel site has the highest levels of fire protection.

Offering cost-effective access to popular premium features from our MxPro 5 range in a simpler, non-networkable format, Go provides powerful protection for a wide range of smaller sites.

Packed with future-proof technology and flexible features – including false alarm management, built-in zonal LEDs and a handy service tool – Go's ready to become your Go-to!

Creating a safer future

Advanced – made in the UK. Trusted around the world.

Discover more: advancedco.com | enquiries@advancedco.com | +44 (0)345 894 7000



Email: enquiries@advancedco.com
Web: www.advancedco.com

 @advancedlive

 Advanced

 Advanced Fire

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