



World Class Leaders in Fire Detection Since 1918

Care Homes Overview

How Hochiki can help you



Your Safety, Our Technology

WHY DOES YOUR CARE HOME NEED A FIRE ALARM SYSTEM?

- To comply with legislation
- To provide a duty of care
- For business continuity
- For the early warning of fire
- For the early and controlled evacuation of residents
- To protect premises and staff

Care homes in general have their own distinct set of requirements and potential problems that need addressing from the design stage right through to the day-to-day operations. By their nature care homes protect the frailest and most dependant members of our society and should therefore be designed and maintained as safe, comfortable and hazard-free environments.

When designing and installing fire protection for a care home, the potential disabilities of residents should have been taken into account. The design should feature:

- Additional visual alarms
- Manual call points fitted at lower heights for wheelchair users
- Pagers for key staff
- Vibrating pillow devices in sleeping accommodation for deaf residents

Even though the fire safety system in a care home has to be robust and dependable we should bear in mind that these premises are not detention centres and that these systems should seek to not impair further the quality of life of the residents. Both the equipment provided and the management procedures put in place must be wholly appropriate.

FIRE RISK ASSESSMENT

The Fire Safety Order requires your staff and occupants to be aware of the fire precautions present and will also stipulate an annual evacuation drill and the appointment of a Responsible Person (BS 5839-1). As part of your fire risk assessment, you will need to identify those at risk if there is a fire, including residents, staff (either working at permanent workstations or at occasional locations around the premises), visitors, visiting contractors etc.

You should pay particular attention to people who may be especially at risk such as:

- Employees who work alone
- People who are in isolated areas of your premises
- People who are unfamiliar with the premises

RESPONSIBLE PERSON

As a person responsible for providing care services you are likely to have considerable experience in assisting disabled people to move about. You should therefore carefully assess the practicalities of undertaking an emergency evacuation in the event of fire. If you



have disabled employees you may also need to discuss their individual needs. Under the Disability Discrimination Act, if disabled people could realistically expect to use the service you provide then you must anticipate any reasonable adjustments that would make it easier for that right to be exercised. Accordingly, if disabled people are going to be in your premises then you must also provide a safe means for them to leave if a fire occurs.

FALSE ALARM MANAGEMENT

In any building unwanted alarms are disruptive and not without risk if people panic in the ensuing evacuation. In a care home, false alarms are extremely distressing to its residents, many of whom will be confused by having to evacuate the building quickly only to be told there is no emergency. Additionally, if large numbers of false alarms occur it also creates an environment of complacency,



HOCHIKI - THE LEADER IN INNOVATIVE LIFE SAFETY SOLUTIONS

For almost 100 years Hochiki has led the way in design and manufacture of innovative life safety solutions. Its cutting edge commercial and industrial fire detection and emergency lighting products have acquired global acceptance as the benchmark for high integrity and long-term reliability.

Hochiki's vision is to provide products and systems that achieve the highest levels of quality. Its range of products virtually eliminates unwanted alarms and, combined with ease of installation, results in unsurpassed dependability and the lowest total cost of ownership possible.

With a global annual sales turnover exceeding £400m Hochiki is a wholly independent, multinational, publicly listed company with over 1,500 employees working across five manufacturing plants, 31 sales offices and 18 subsidiaries.

Its ongoing commitment to manufacturing innovation ensures customer satisfaction and its production facilities in Japan, the USA and Europe offer international continuity in quality, service and supply.

EXCELLENCE AS STANDARD

Hochiki offers complete solutions for all fire detection and emergency lighting requirements. The Enhanced Systems Protocol (ESP) is a digital communications solution for intelligent fire detection and fully integrated systems, while the CDX range provides solutions for most conventional fire detection applications.

The company also has a range of solutions suited to more specialised environments. This includes the FIREwave wireless fire detection system for use in locations where minimum disturbance to the fabric of the building is important, the FIRElink aspirating solutions and the FIREvac voice evacuation system. These are perfectly complemented by FIREscape, Hochiki's pioneering LED based emergency lighting system.

The company's manufacturing plants are accredited to ISO 9001 and through objectives and targets outlined within its corporate environmental policy and ISO 14001 certification, Hochiki is constantly developing new ways to reduce its environmental impact.

which may cause people to delay taking action when a real fire occurs – something that could prove to be fatal.

Hochiki has taken its mission to eliminate unwanted alarms to a whole new level by redesigning the chamber structure within its photoelectric smoke detector range. The result is a high performance optical chamber that is equally responsive to all smoke types and helps to reduce the possibility of unwanted alarms. Hochiki's addressable fire detection equipment is controlled by ESP (Enhanced System Protocol), a high integrity communications platform ensuring virtually error-free communications between the fire alarm control panel and the fire sensing equipment located in the protected areas.

LEGISLATION

A new requirement under BS5839-1 which came into effect in March 2013 especially to address care homes is the requirement for an analogue addressable fire detection system to be installed at any premises where there are sleeping facilities for more than 10 dependent residents, where those residents will need assistance from staff to safely evacuate the building. This new clause was added to the BS5839 standard after an enquiry into an incident in January 2004. A fire at the Rosepark care home in Uddingston, South Lanarkshire, broke out in a cupboard, spread through the building and led directly to the deaths of 14 elderly residents. The inquiry concluded that this tragedy could have been prevented by a suitable fire safety plan and that some residents may have been saved if the fire

and rescue service had been called sooner. The updated standard includes emphasis on the existing need for a zone plan, and calls for these types of premises to be connected to an alarm receiving centre (ARC) so that when a fire alarm activates the Fire & Rescue Service can be summoned immediately.

VISUAL ALARMS

Visual alarms are required in certain environments to aid in the alerting of a fire condition, particularly any building that houses an area of high background noise – a factory floor for example. But visual alarms are also essential in care homes, where a large proportion of residents may be hard of hearing or indeed completely deaf. Motorised bells and electronic sounders are not an adequate indication of an alarm condition in these circumstances. Instead a combination of audible and visual alarm indicators such as beacons and/or strobes should be used.

Following the mandatory introduction of EN54 Part 23 on December 31st 2013, all visual alarm devices (VADs) such as beacons, strobes and indicators must adhere to strict light level outputs and you will need to ensure the manufacturer of your devices has compliant products. Hochiki's new VADs, the **CHQ-WSB2** Wall Sounder Beacon, the **YBO-BSB2** base Sounder Beacon and the **CHQ-CB** range of Ceiling Beacons all meet the new standard.

AUDIBLE ALARMS

Alarm devices such as electronic sounders are also strictly regulated in regards to their audio output and manufacturers need to prove the effectiveness of their equipment by way of third party approvals to EN54 Part 3. Hochiki offers a range of compliant audio alarm devices suitable for many different environments. The **YBO-BS** base sounder provides an audible alarm at the same location as a sensor and the **YBO-BSB** base sounder beacon provides both an audible and visual alarm.

As an alternative to conventional sounders, a specially designed voice-alarm may be suitable for some premises. Voice alarm systems, such as Hochiki's **FIREvac^{EV}** can provide significant benefits in terms of reduced response time and improved information dissemination: factors that are critical to staff and visitors in a care home.

HELP FOR PEOPLE WITH SPECIAL NEEDS

By their nature, premises that provide care will often have residents who, in addition to being elderly, or very young, or in need of specialist care, will also have some other disability. The Disability Rights Commission estimates that 11 million people in this country have some form of disability. This may impact on their ability to leave a building speedily in the event of fire or make them entirely dependent on others to escape.

Some common forms of disability that you may need to take account of in your risk assessment include:

- Mobility impairment, which can limit speed of evacuation
- Hearing impairment, which can limit the response to an alarm
- Visual impairment, which can limit the ability to escape
- Learning difficulties, which can affect the response to an alarm

In premises with many severely disabled residents, you may also wish to contact a professional access consultant or take advice

from disability organisations. Whilst many people with special needs wish to and are able to facilitate their own escape, there may be a significant number of people in premises that are severely disabled and only able to move or react adequately with assistance from carers or staff.

These will include residents who are confined to bed and receiving medical interventions by way of attached medical devices. You may conclude that the current levels of assistance available in your premises, and the layout and construction means that the evacuation of some people (most likely residents) cannot be guaranteed within an acceptable time. You will then need to consider some additional method of ensuring their safety (e.g. an automatic fire suppression system). In such cases you should seek specialist advice from a competent person.

Guidance on removing barriers to the everyday needs of disabled people is contained in BS 830014. Much of this advice will also assist disabled people during an evacuation. You should ensure that your emergency plan has a record of where disabled people are located in the building and includes a plan of action to assist them in the event of a fire.

Further advice can be obtained from the Disability Rights Commission at www.drc-gb.org.

EMERGENCY LIGHTING

For most care homes, a more comprehensive system of fixed automatic emergency escape lighting is likely to be needed, especially in larger, more complex multi-storey premises, particularly in those with extensive basements or where there are significant numbers of residents, staff or members of the public. You will have identified the escape routes when carrying out your fire risk assessment and need to ensure that they are all adequately lit. For further information on the emergency lighting standard, BS5266, refer to Hochiki's BS5266 Guide booklet, available free from our web site.

Hochiki's **FIREscape** Emergency Lighting System is the UK's first fully intelligent, LED based lighting system designed to be easily installed and provide a BS5266 compliant system. The system is robust as it uses the same ESP communications protocol as used in Hochiki's fire detection systems. As well as its reliability **FIREscape's** extremely low cost of ownership means it is perfect for those care home owners looking to reduce their running costs. An LED based emergency lighting system will use less than 5% energy to run than a traditional fluorescent tube system. We have calculated that this could save you £186,534 and 26 tonnes of CO₂ over 10 years*.

* Based on 1000 luminaries, 80% non-maintained, 20% maintained.

Parts of this document have been adapted from the HM Government Advisory Leaflet "Fire Safety Risk Assessment – Residential Care Premises", which is available on the DCLG website: www.firesafetyguides.communities.gov.uk
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