

The background of the entire page is a close-up, high-contrast image of bright orange and yellow flames, creating a sense of urgency and danger.

 **wise up**
to fire

Supporting safety
in care homes

www.wiseuptofire.org

bafsa

Fires in care homes: a problem and an answer

Fires in care homes, especially those catering for the elderly and infirm, present their own serious hazards – particularly at night – as the residents may be unable to leave safely without assistance or they may be immobile as a result of disability, mental capacity or medication.

There have been a number of serious fires in care homes in many parts of the world resulting in multiple deaths. Even the UK with its strict fire regulations has not been immune. Yet there is a simple cost-effective way to protect residents, staff and the business: installation of an automatic fire suppression system will minimise damage and put a halt to the enormous misery that fires in care homes can cause.

Each year there are around 800 fires in homes providing care for older persons in the UK. On average, three

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people die each year and a further 84 are injured. In the worst incident for many years, in 2004, one modern care home in Scotland suffered 14 deaths in a fire. (There are also around 350 fires in children's homes with two or three fatalities and around 650 fires in psychiatric hospitals every year).

Apart from the human tragedy that results from death and injuries there are significant losses in respect of property damage. Major fires often result in businesses closing for good, as they never recover. Even where a home is not destroyed there can be significant commercial pressures on the owners and operators resulting from the need to provide alternative accommodation.



There are many indirect costs including:

- Loss of sleeping, communal and housekeeping facilities.
- Disruption to daily life.
- Possible increase in insurance premiums.
- Loss of records and personal information.
- Loss of employment if the premises do not reopen.
- Loss of residents' personal possessions .
- Loss of a place called home.

On top of this is immeasurable emotional damage to residents, disruption of basic living and loss of confidence in the owners and operators.

Automatic fire sprinklers are the common-sense approach to avoiding these problems and costs, and in fact the latest government guidance recommends installation of sprinklers where structural constraints make other fire protection measures cost-prohibitive.

The Regulatory Reform (Fire Safety Order) 2005 which covers all workplaces in England & Wales (including care and nursing homes) came into force on 6 October 2006. (Scotland has similar, but different legislation set out in the Fire (Scotland) Act 2005). This legislation has put the emphasis on preventing fires and reducing risk, and makes it the responsibility of managers and owners to ensure that no one is ever injured or killed in a fire.

Our [Wise up to Fire](#) campaign is working to ensure that all care homes are fitted with fire sprinklers to make certain that they are places of safety and security.



About Wise up to Fire

Wise up to Fire aims to alert all care home managers and premises owners about the importance and benefits of incorporating fire sprinklers into their fire protection measures, and help them provide a safe, worry-free environment for residents and staff alike.

Wise up to Fire is an initiative established by the British Automatic Fire Sprinkler Association to advise and educate all those responsible for the selection and maintenance of fire safety systems in care homes.

Sprinklers are proven to be the most effective way to control or extinguish fires and allow safe escape from buildings. They also have no adverse impact on the day-to-day life of residents, since they are unobtrusive unlike, for example, heavy fire doors. **Wise up to Fire** wants to ensure that all care homes are aware of their obligations under the Fire Safety Order as well as the benefits that can accrue when sprinklers are installed in their properties.

This can only be achieved through awareness of both the legal compliance required and the wider benefits of robust fire prevention measures.

Resistance to sprinkler installation has been due to lack of knowledge or misunderstanding of the facts about sprinklers and their benefits. **Wise up to Fire** aims to de-bunk the myths and

arm those who share our concerns with clear information about how fire sprinklers will save property, facilities, records, and potentially lives.

What you can do

- Ensure you are complying with the latest regulations and undertake the fire risk assessment.
- Find out more about sprinklers.
- Consider the benefits of installing a fire sprinkler system.

Contact us and let us know how we can help you – we can provide you with the right information.

Sprinklers are proven to be the most effective way to control or extinguish fires



Benefits of fire sprinklers

Research by the Buildings Research Establishment (Effectiveness of Sprinklers in Residential Premises BRE Report 204505) has shown that there are sound safety and financial benefits to the installation of fire sprinklers.

- Fire sprinklers can be used as a tool to overcome structural fire protection difficulties: for example, it can be cheaper to install sprinklers rather than to install extensive physical fire separation and compartmentation.
- Evacuation procedures can be difficult and confusing: a sprinkler system will contain a fire and so make for simpler, smaller scale evacuations.
- Older people can have difficulties in opening doors: a sprinkler installation will allow for relaxation on both the number and cost of self-closing doors.
- Sprinklers remove large volumes of the dangerous gases from smoke and reduce the impact of choking and toxic smoke.
- When staff numbers are limited, as is often the case at night, the presence of sprinklers allows valuable time for full assessment of risk and evaluation of next steps.
- Installation of sprinklers means that staff can concentrate on their residents' welfare rather than dealing with the fire itself.

- With sprinklers it may be possible to reduce the extent and quantity of other fire safety equipment.
- Inclusion of a sprinkler system within the package of fire protection measures gives confidence to both clients and their families. Wouldn't it offer an advantage in advertising to tell prospective residents that a property contains the most effective fire safety measures available?



There are sound safety and financial benefits to the installation of fire sprinklers

The economic argument

Installing automatic fire sprinklers makes good business sense. Research by the international engineering consultancy Arup Fire puts a strong economic case for the inclusion of sprinklers in new and even refurbished buildings (www.bafsa.org.uk/pdfs/publications/00000045.pdf).

Insurers are so confident of the value of sprinklers that they normally allow significant premium discounts (up to 50%) for protected properties. The excess figure is also often reduced to zero.



About sprinklers

- Losses from fires in buildings fitted with sprinklers are one-tenth of those in unprotected buildings.
- In residential buildings protected by sprinklers 99% of fires are controlled by sprinklers alone; 80% of fires are controlled by the operation of fewer than six sprinkler heads.
- The chance of a sprinkler going off accidentally is thought to be less 1 in 10 million. No risk of a toaster setting off a sprinkler system!
- The average maintenance cost for a sprinkler system is around £800 (per annum).
- Sprinkler systems have a very long service life – up to 50 years.
- Sprinklers in care homes discharge significantly less than 5% of the water that would be used by the fire services, so considerably reducing water damage.



Fire sprinklers – the facts

If sprinklers make a difference, why isn't it compulsory for them to be fitted in care homes?

They are compulsory in Scotland in new homes, and recent changes in the Building Regulations for England and Wales make it clear that the Government believes that sprinklers should be seriously considered, and encourages the use of sprinklers by allowing certain trade-offs.

Just how reliable are sprinklers?

Most sprinkler systems are very simple: they have no moving parts, the pipes are filled with water, usually from the mains and in a fire will burst open over the fire when they get hot. They will work as long as they have water in the pipes. Only those sprinklers above the fire will open and accidental discharge of water is almost unheard of. Major research in the US suggests that when sprinklers are operational they have a reliability factor in excess of 98.8%.

Can sprinklers help prevent smoke damage?

Smoke damage is a major cause of loss. Sprinklers wash the larger particles out of smoke reducing its density and toxicity. In addition the water cools the smoke making it less harmful.

Quick response sprinklers are now available that will attack a fire even earlier in its growth. Fast attack dramatically reduces the amount of smoke that a fire can produce.

Isn't water damage costly?

While each firefighter's hose will deluge a building and its contents with more than 2000 litres of water per minute, a sprinkler head only applies between 80 and 100 litres directly on the area of the fire. Long-term research shows that 80% of fires are controlled or extinguished by no more than six and often four or fewer sprinklers opening.

So how much does it cost to install a sprinkler system?

Research work suggests that in a new care home sprinklers can be installed for between 1.9% and 2.3% of the project build costs. The same research shows that in some cases, by using the trade offs mentioned above, installing sprinklers could result in cost savings!

Can sprinklers save lives?

Research and practical experience shows that even people in the room of origin of a fire can be saved if the building is sprinkler protected.

Aren't sprinklers unsightly and easily vandalised?

Sprinklers can be completely concealed by recessing them into false ceilings or can be fitted above picture rails. They are unobtrusive and almost invisible. Vandalism of sprinklers is almost unknown in the UK.

About the British Automatic Fire Sprinkler Association

The British Automatic Fire Sprinkler Association (BAFSA) was founded in 1974 and is the largest and longest established UK sprinkler trade association.

It represents a significant majority of third-party certified sprinkler installers as well as manufacturers, suppliers, contractors, insurers, the fire service and others with an interest in the field.

BAFSA's primary objective is to provide authoritative information on the benefits of sprinkler systems and how sprinklers can play a significant role in saving life and property from the devastating effects of fire.

BAFSA and its members work closely with a range of national organisations involved with fire, its causes, effects and prevention, including the Fire Protection Association, the BRE, National Fire Sprinkler Network, the British Standards Institution, the European Fire Sprinkler Network, Chief Fire Officers' Association, the Fire Brigades Union and the Association of British Insurers.

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