



**THINK  
SPRINKLER**



Protecting local  
communities

# THINK SPRINKLER

There is clear evidence that sprinklers are effective in stopping fires spreading, as well as putting them out. Cleveland Fire Brigade plays a key leadership role in promoting better understanding of the benefits of sprinklers as part of a core commitment to reducing the impact of fire on people, property and the environment across Teesside.

## SPRINKLERS CAN:

- Reduce death and injury from fire.
- Reduce the risks to firefighters.
- Protect property and heritage.
- Reduce the effect of arson.
- Reduce the environmental impact of fire.
- Reduce fire costs and the disruption to the community and business.
- Permit design freedoms and encourage innovative, inclusive and sustainable architecture.

# SPRINKLER MYTHS



Sprinklers have been proven to reduce the impact of fire. They are a life saving tool bringing many benefits. However, we have found there are some common misconceptions about sprinklers that are stopping people installing them. These sprinkler myths need to be dispelled.

**Myth:** In a fire all the sprinkler heads go off.

**Fact:** Only the sprinkler head(s) directly affected by the fire is activated.

**Myth:** Water from the sprinkler causes more damage than the fire.

**Fact:** Sprinklers attack the fire quickly and directly so less water is needed. As they also operate the fire alarm, the flow can be quickly turned off when the fire is out.

**Myth:** A smoke detector will always provide enough protection.

**Fact:** Operational smoke detectors do save lives, however they do nothing to extinguish a growing fire.

**Myth:** Sprinklers go off accidentally.

**Fact:** You have more chance of winning the lottery than having a sprinkler malfunction.

We work to encourage building owners and developers to install sprinklers when there is a risk-based case for doing so.

Building without sprinklers



Building with sprinklers



## RESIDENTIAL CARE HOMES

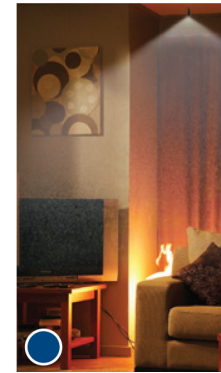
Older people, people with mental health problems and those with mobility issues are groups most at risk from fire. We consider all residential care homes should be fitted with sprinklers. In Scotland there is already a requirement with Building Standards for all new build residential care homes to have automatic fire suppression systems installed and we firmly believe there should be the same level of protection across the whole of the UK.

## SCHOOLS

Hundreds of schools in the UK have a fire each year. The impact of these fires is significant, not just in financial terms, but also in terms of the devastating effect on the communities they serve and the disruption to students, teachers and families. The effects on childrens' education is not confined to lost course work but often includes longer travelling times, disrupted social groups and poorer facilities. If sprinklers were considered at the design stage of building a new school or the refurbishment of existing buildings, the costs can be kept to a minimum (as low as one percent of building costs).

## DOMESTIC PREMISES

Fires in the home still account for the greatest number of fire deaths and injuries each year. While it would be ideal for all domestic premises to have sprinklers, it is recognised that this is not practical or realistic. We advocate the fitting of sprinklers in the homes of people most at risk from fire—younger people, older people, and people with mental health problems. We work in partnership with developers, local councils and social housing landlords to encourage the installation of sprinklers in the homes of the most vulnerable people.



## COMMERCIAL PREMISES

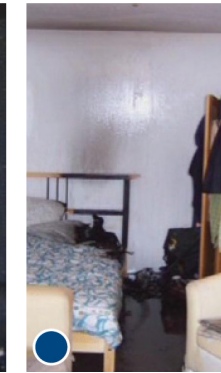
There is a compelling case to be made for sprinklers in any commercial premises on the basis of production or interruption to business. This is a real impediment to business continuity and productivity. It is a recognised fact that 85 percent of small and medium businesses that suffer a serious fire either never recover or cease trading within 18 months. The installation of sprinklers in these types of premises could prevent this. Losses due to fire would reduce and fewer businesses would be forced to relocate.



## DESIGN FREEDOMS

Sprinklers can allow much more interesting use of space. New building codes work on a performance-based approach to the safety of buildings, so by including sprinklers, designers can achieve greater freedom to fulfil their overall vision. They can include features such as:

- Larger compartment sizes.
- More open spatial designs.
- Reducing door widths.
- Reducing periods of fire resistance to elements of structure.
- Reducing constraints such as distances between buildings.



## PREVENTING DAMAGE TO THE ENVIRONMENT

Sprinklers can increase the sustainability and life expectancy of buildings, by limiting fire development and significantly reducing the amount of smoke, CO<sub>2</sub> and other pollutants.

Sprinklers use much less water to put a fire out than fire brigade hoses - and lead to much less water damage.



The timeline below illustrates the progression of a fire in a building both with and without a sprinkler system.

Building without sprinklers  Building with sprinklers 





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Find out more about sprinklers by contacting the  
Fire Engineering Help Desk on 01429 874109  
or [sprinklers@clevelandfire.gov.uk](mailto:sprinklers@clevelandfire.gov.uk)



[www.clevelandfire.gov.uk/sprinklers](http://www.clevelandfire.gov.uk/sprinklers)