

# CLEVELAND FIRE AUTHORITY

## POSITION STATEMENT: INSTALLATION OF SPRINKLER SYSTEMS AND/OR OTHER SUPPRESSION SYSTEMS



1. Cleveland Fire Authority is committed to reducing the impact of fire on people, property and the environment. It has been proven that sprinklers and other forms of automatic fire suppression systems can be effective in the rapid suppression of fires and therefore play an important role in achieving an improvement in safety for both individuals and the community in general.

This is because sprinklers can significantly help to:

- Reduce death and injury from fire
  - Reduce the risks to fire-fighters
  - Protect property and heritage
  - Reduce the effects 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
2. The Authority will play a key leadership role in promoting the better understanding of the benefits of sprinklers and will strongly encourage building managers, owners, developers and other interested parties to install sprinklers.
  3. While sprinklers play a positive role in reducing the human impact and economic and environmental cost of fire in any building they are installed in, we believe that Local Authorities should consider the Fire Authority a statutory consultee **and**, via building planning consent, recognise that the following properties are those where the most significant impact can be achieved and require the installation of sprinklers, where there is a risk-based case for doing so:

- Schools
  - Residential care homes
  - Domestic premises housing the most vulnerable
  - Houses in multiple occupation
  - Commercial premises that present a significant risk due to their size, construction or use
4. Wherever it is able to influence, the Authority will lobby for the creation of a legal requirement to fit sprinklers in domestic dwellings, high rise premises, care homes, schools and other buildings where the risk to life and property from fire are most significant.
5. The Authority will commit to install fire sprinklers into all newly built and refurbished Fire Authority premises.

Signed:

A handwritten signature in black ink, appearing to read "Jan Brunton Dobson". The signature is written in a cursive style with a large initial "J" and "B".

CLLR JAN BRUNTON DOBSON, CHAIR

## **FIRE SPRINKLER POSITION STATEMENT – SUPPORTING INFORMATION**

1. The greatest impact of installing fire sprinklers is likely to occur within particular properties such as schools, residential care homes, premises housing highly vulnerable residents, and certain large commercial premises. The following sections describe how the Authority will work with designers, planners, managers and others in promoting fire sprinklers within these properties.

### **Schools**

2. The importance of, and therefore the requirement for, sprinklers in schools has been recognised for many years. Recent reports suggest that the impact of fires in schools and other educational establishments is greater than ever and fire losses are increasing accordingly. This impact is significant, not just in financial terms, but also in terms of the devastating effect on the communities they serve, the environment and the disruption to students, teachers and families. The effect on children's education is not confined to lost course work but often includes longer travelling times, disrupted social groups, poorer facilities etc.
3. Sprinklers should always be considered at the design stage of building a new school or the refurbishment of existing buildings. This way, the costs can be kept to a minimum (normally 1-2% of build costs). By engaging with designers and architects schools could be designed to inspire learning, address the broadening requirements being placed upon them as community resources and incorporate this essential fire safety system as standard within their design and build.
4. To this end the Authority will work with schools, colleges and education authorities to ensure that the benefits of sprinklers are fully considered. In new and refurbished schools we expect that the Department for Children, Schools and Families risk assessment tool and policy are used and that sprinklers are installed when recommended.
5. **We will continue to work with schools, colleges and education authorities to ensure that the benefits of sprinklers are fully considered. In new and refurbished schools we expect that the Department for Education risk assessment tool and policy are used and that sprinklers are installed when recommended.**

### **Residential Care Homes**

6. Fire deaths and injury data indicates that those most at risk of serious harm from fires are younger people, older people, people with mental health problems and particularly those who have mobility problems who are unable to leave buildings easily. The Authority therefore considers that all residential care homes should be fully fitted with sprinklers for the protection of residents from fire. In Scotland there is already a requirement within Building Standards for all new-build residential care buildings to have automatic fire suppression systems installed and we strongly

advocate that this should be the case in Hartlepool, Middlesbrough, Redcar & Cleveland, and Stockton.

**7. We are of the opinion that all residential care homes should be fully fitted with suppression systems for the protection of residents from fire.**

## **Domestic Premises**

- 8.** Fires in the home still account for the greatest number of fire deaths and injuries each year and therefore the installation of sprinklers in domestic premises would have a significant impact in reducing fires in the home. The Authority will actively lobby developers, local authorities and other interested parties to promote and encourage the installation of fire sprinklers into any new homes built in the Authority's area.
- 9.** The Authority will work in partnership with developers, local authorities and social housing landlords to encourage the installation of sprinklers in new homes. We will actively seek to ensure that developers, local authorities and social housing landlords fully understand and appreciate the benefits of sprinklers by providing information and education to those responsible.
- 10.** The Authority will also actively seek to work with developers, local authorities and social housing landlords to encourage the retro-fitting of sprinklers into high risk residential housing, such as high-rise flats and those premises where vulnerable people reside.
- 11.** The Authority will work with developers, local authorities and social housing landlords to retro-fit fire sprinklers in to high-risk, high-rise social housing. We will seek to influence key decision makers and explain the virtues of using sprinklers in such housing blocks. We will actively seek opportunities to support developers, local authorities or social housing landlords financially, technically and in any other way that we can.
- 12.** Where the risk is extreme and the business case can be made, then the Authority will provide self-contained sprinkler systems for use in the homes of people that are considered to be exceptionally vulnerable due to age, disability or other relevant factors. Such systems can be re-used and relocated when the risk changes.
- 13.** The provision of social housing within The Fire Authority's area must be safe and sustainable for both the occupants and the building owners. CFA believes that a true partnership approach to housing with social landlords is needed to ensure that homes provide and maintain a high degree of safety from fire. The installation of domestic sprinklers will help to ensure a 'home for life'. We will actively encourage and work with RSLs to fit domestic sprinklers into:

- all newly built homes
- all refurbished homes

## **Commercial and Industrial Premises**

- 14.** Some type of commercial and industrial premises already require sprinklers to be fitted to comply with national Building Regulations, such as high-rise buildings over 30m in height and large warehouse buildings in excess of 20,000m<sup>3</sup>.
- 15.** Irrespective of size however there is a compelling case to be made for sprinklers in any commercial or industrial premises on the basis of supporting business growth and minimising the loss of production or interruption to business as this is a real impediment to business continuity and productivity. It is a recognised fact that 80% 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 will aid growth in the economy as fewer businesses will cease to trade, losses due to fire will reduce and fewer businesses will be forced to relocate often destabilising and affecting whole communities.
- 16.** The Authority will work to actively encourage building owners and occupiers to consider installing sprinklers in cases where they are not obliged to do so by the Building Regulations. Major new developments and future proofing
- 17.** It is recognised that despite best efforts we will not always be successful in persuading developers to install sprinkler systems, however there are still benefits to be gained in future proofing the building by including basic sprinkler infrastructure (for example adequate supply pipework), so that sprinklers can be more easily retro-fitted if there is a significant increase in risk.
- 18.** **We will continue to work with commercial organisations in order to promote the inclusion of sprinklers or other types of suppression system.**

## **New and Refurbished Buildings**

- 19.** Where new developments are being considered and when a significant refurbishment and upgrade of an existing building is being planned, especially involving buildings with vulnerable people the Authority will strongly advocate the installation or retrofitting of sprinklers. In older buildings, built to an earlier standard, the level of risk may no longer be acceptable and in these cases the Authority will also advocate the retro-fitting of sprinklers to mitigate these risks.

## **Design Freedoms**

- 20.** Even where not required by building regulation guidance, the Authority strongly supports the inclusion of sprinklers to achieve the many benefits they provide. We encourage developers to use them to allow design freedoms, where it can be demonstrated that there is an equivalent level of safety and that the functional requirements of the regulations are met.
- 21.** In today's challenging built environment, there is a will and motivation to construct innovative buildings that often require design solutions that depart from traditional fire safety approved codes of practice. This approach allows stakeholders to demonstrate that sprinklers can offer an equivalent level of fire protection and life safety, resulting in greater freedom to fulfil their overall vision for such buildings. The installation of sprinklers allows for such flexibility and includes such features as larger compartment sizes, more open spatial designs and extended travel distances.
- 22.** The Authority will encourage and support proposals for such design freedoms for both commercial and residential developments where it can be robustly justified that the functional requirements of the building regulations can be met.

## **Preventing damage to the environment**

- 23.** 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. Because only the sprinkler head or heads immediately above the fire actuate, less water is used and there is a significant reduction in the amount of water run off carrying pollutants into the water system.

## **Affordability of sprinklers**

- 24.** Often, one of the perceived barriers to the more widespread use of sprinklers is the initial cost of the systems. The Authority will support the development of new and innovative suppression systems and encourage the provision of cost effective water supplies.

## **Communication and Public Education**

- 25.** The Authority will continue to develop its communication methods in order to increase its influence with decision makers and stakeholders at every level regarding the benefits of the more widespread use of sprinklers, as well as educating them where misconceptions exist relating to the facts and performance of sprinklers. Communications will target the following groups:

- Architects and designers
- Developers and associated consultants
- Researchers, trade associations, and manufacturers
- Building control and approving authorities
- National and Local Government departments, policy makers, and forums
- Social and private landlords
- Insurers
- Water authorities/providers
- Building occupiers/users
- The general public

**26.** By improving communications and working with these groups the Authority will promote a better understanding of sprinklers as an effective and reliable fire protection measure, be it from specific local development projects to national initiatives and legislative frameworks.

### **Commitment by Cleveland Fire Authority**

**27.** The Authority strongly supports the benefits of sprinklers and commits to install fire sprinklers into all newly built and refurbished Fire Authority premises.

**28.** To this end, the Authority will work closely with the local housing and planning authorities in order to influence building, planning, design and development at every stage so that the benefits of automatic suppression can be considered before the design and costing decisions are so far advanced that it is too late to include sprinklers.