

**WEST MIDLANDS FIRE AND RESCUE AUTHORITY**

**16 SEPTEMBER 2013**

1. **ONE VOICE: A NATIONAL SPRINKLER PROMOTION STRATEGY**

Report of the Chief Fire Officer.

RECOMMENDED

THAT the Authority accept and endorse 'One voice: a national sprinkler promotion strategy'.

2. **PURPOSE OF REPORT**

This report is submitted for Members to accept and endorse 'One voice: a national sprinkler promotion strategy' ('National Sprinkler Strategy') produced by the Sprinklers Campaign Group, Local Government Association for all Fire and Rescue Services.

3. **BACKGROUND**

- 3.1 West Midlands Fire Service (WMFS) is fully committed to promoting the installation of automatic fire suppression systems in all premises where their inclusion will support the vision 'Making West Midlands Safer'.
- 3.2 The Sprinklers Campaign Group of the Local Government Association (LGA – 'the national voice of local government') have developed and publicised the National Sprinkler Strategy (Appendix 1). They state the National Sprinkler Strategy 'represents the Fire and Rescue Service's vision and direction on the issue of mandatory sprinklers for the vulnerable groups of our society.'
- 3.3 This National Sprinkler Strategy forms part of the LGA 'Sprinkler Local Campaign Toolkit' developed by the Sprinklers Campaign Group which aims to provide a support base for local campaigning.

- 3.4 The current WMFS Automatic Fire Suppression System Strategy encompasses other suppression systems in addition to sprinklers and broadly includes the content of the National Sprinkler Strategy, which ‘proactively endorses the installation of sprinkler systems in domestic, educational and residential premises where the most vulnerable people live or regularly visit’. The National Sprinkler Strategy seeks to do this by ‘closer working relationships with stakeholders, through education and through influencing a change in culture within the wider building industry’.
- 3.5 WMFS continues to proactively support the installation of sprinklers and other automatic fire suppression systems. WMFS current involvement includes information on our web site (e.g. ‘Firms urged to fit sprinklers’), Fire Safety letters containing a standard paragraph promoting the benefits of fitting sprinklers, providing support to the National Fire Sprinkler Network and by Councillor John Edwards, Chair West Midlands Fire and Rescue Authority also being Chair of the LGA Sprinklers Campaign Group.
- 3.6 By accepting and endorsing the National Sprinkler Strategy West Midlands Fire and Rescue Authority reaffirms our commitment to promoting the benefits of sprinklers to protect life, property, heritage and the environment from the effects of fire.

#### 4. **EQUALITY IMPACT ASSESSMENT**

In preparing this report an initial Equality Impact Assessment is required and has been carried out. The initial Equality Impact Assessment did not raise issues which required a full Equality Impact Assessment to be completed. The matters contained in this report will not lead to a policy change.

#### 5. **LEGAL IMPLICATIONS**

The course of action recommended in this report does not raise issues which should be drawn to the attention of the Authority’s Clerk and Monitoring Officer.

## 6. **FINANCIAL IMPLICATIONS**

There are no direct financial implications arising from this report.

## **BACKGROUND PAPERS**

Authority Paper, 26<sup>th</sup> September 2005, approval of Policy, 'West Midlands Fire Service – Automatic Fire Suppression System'  
WMFS The Plan Making West Midlands Safer 2013-2016  
WMFS Community Safety Strategy 2013-2016

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VIJ RANDENIYA  
CHIEF FIRE OFFICER

LGA, 'One voice: a national sprinkler promotion strategy'

([http://www.local.gov.uk/web/guest/fire-and-rescue-services/-/journal\\_content/56/10171/3795362/ARTICLE-TEMPLATE](http://www.local.gov.uk/web/guest/fire-and-rescue-services/-/journal_content/56/10171/3795362/ARTICLE-TEMPLATE))

### **One voice: a national sprinkler promotion strategy**

This strategy represents the Fire and Rescue Service's vision and direction on the issue of mandatory sprinklers for the vulnerable groups of our society. The Chief Fire Officers' Association (CFOA) play a key leadership role both nationally and locally in promoting a better understanding of the benefits of sprinklers.

Accordingly, the CFOA and the Fire and Rescue Service ('the Service') continue to work to strongly encourage architects, developers, local authority planning teams, building control officers and building owners to install these systems on every occasion unless there is compelling evidence to suggest otherwise. The Local Government Association (LGA), as advocates of localism and Fire and Rescue Authority members, have worked closely with CFOA to establish this strategy to unify the voices of Fire and Rescue Services on this issue.

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#### **Background**

Sprinklers are proven to save lives and property; they improve firefighter safety, minimise environmental damage and reduce economic loss. In support of these aims the Service proactively endorses the installation of sprinkler systems in domestic, educational and residential premises, where the most vulnerable people live or regularly visit.

There is clear evidence that sprinklers can be effective in the rapid suppression of fires and can therefore play an important role in achieving a range of benefits, 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 firefighters
- protect property and heritage
- reduce the effects of arson
- reduce the environmental impact of fire
- reduce fire costs and the disruption to communities and businesses
- permit design freedoms and encourage innovative, inclusive and sustainable architecture.

While sprinklers play a positive role in reducing the human, economic and environmental costs of fire in any building they are installed in, we believe that our primary focus should be directed to those properties where the greatest losses can be avoided. These are sites and buildings where the most vulnerable inhabit and regularly frequent. For example schools, residential care homes, domestic/high rise premises housing the most vulnerable and premises that present a significant risk due to their size, construction or use.

We intend to achieve this locally, through closer working relationships with stakeholders, through education and through influencing a change in culture within the wider building industry. Fire and Rescue Services, using the power of our unique brand, passion and energy, can promote the cause. We will consider historical data regarding deliberate fires in the vicinity of any development to reinforce the need to install sprinklers. We will take every opportunity to raise awareness of all new safety innovations as they are developed.

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### **Schools**

The importance of sprinklers in schools has been recognised for many years. The impact of fire incidents is significant not just in financial terms, but also in terms of the devastating effect on the communities they serve. The environment is also affected and the disruption to students, teachers and families is great. The effects on children's education are not confined to lost coursework but often include longer travelling times, disrupted social groups and poorer facilities. Schools themselves are evolving beyond the traditional scope of education into thriving social community hubs. Any loss of these facilities will undoubtedly impact on a larger user group.

Sprinklers considered at an early design stage of building a new school or the refurbishment of existing buildings, will keep costs to a minimum (between 1.7 per cent and 4.5 per cent of the capital build costs of primary and secondary schools).

We will continue to work closely 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. Where any other building standard is employed (such as British Standard 9999), the Service also expects a full risk assessment to have been completed.

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### **Residential homes and sheltered accommodation**

Fire death and injury data indicates that those most at risk are children, older people, people with mental health problems, and particularly those with mobility problems as they are unable to leave buildings easily.

These premises may rely on either stayput, horizontal evacuation strategies or full evacuation when responding to alarms and fires. However, as we have an ageing population, many more people are less mobile (and in some cases immobile). Stayput or full evacuation strategies may no longer be appropriate for providing adequate protection for people living in this type of premises. This is particularly important given the increased numbers of older people living longer with increasing demands placed on carers due to these vulnerabilities.

This is captured in revised guidance from 2011. It recognises that consideration should be given to mitigating the risk to vulnerable older people by the adjustment of other appropriate factors to complement traditional fire safety measures. We, therefore, strongly recommend that all residential homes should be fully fitted with sprinklers for the protection of residents.

In Scotland, there is already a requirement within Building Standards for all new build residential care buildings to have sprinkler systems installed and we strongly advocate this approach.

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### **Domestic premises**

It is important to ensure that new housing and other social infrastructure projects consider the benefits of sprinklers. Fires in the home still account for a large number of fire deaths and injuries each year. We believe that the installation of sprinklers in domestic premises would have a significant impact in reducing these. We therefore advocate that in those domestic premises where our most vulnerable residents live, sprinklers should be fitted in addition to smoke alarms and other appropriate assistive technology. This would further reduce the risks.

To achieve this we will work in partnership with developers, local authorities and social housing landlords to encourage the installation of sprinklers in the homes of the most vulnerable people. This could be done either by retrofitting them where possible, or as part of the construction of new builds.

More and more vulnerable people with less mobility are remaining in their own homes. The evacuation policy of "get out, stay out, call us out" is becoming increasingly less appropriate as a result of an ageing demography. Providing sprinklers in all new build homes will go some way to addressing the challenges.

In Wales there is already a requirement for all new domestic premises to be fitted with automatic fire suppression systems. The Service will support the call for similar legislative change in England. Locally, we will seek to work closely with the local building control and planning authorities to influence building, planning, design and development at every stage to ensure benefits of sprinklers are considered from the outset.

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### **Major new developments and future proofing**

In the first instance, we should strive to be at the forefront of influencing developers to install sprinklers into new developments by highlighting the benefits that can be gained. It is recognised that despite our best efforts we may not be successful in persuading developers to install sprinkler systems in every case. However, there are still benefits to be gained in future proofing the building by including basic sprinkler infrastructure (for example adequate water supply pipework), so that sprinklers can be more easily retrofitted. Nonetheless we will strive to change the culture of traditional builders and designers until sprinklers are recognised as cost effective means of protecting properties and offering resilience in terms of future change of use and occupancy.

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### **Refurbished buildings**

Where significant refurbishment and upgrade of an existing building is being planned, especially involving buildings with vulnerable people, we 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 we also advocate the retrofitting of sprinklers to overcome these risks.

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### **Design freedoms**

We will continue to encourage and support proposals for design freedoms, for commercial, educational and residential developments.

In today's challenging built environment there is a will and motivation to construct innovative and aesthetically exciting buildings. These often require design solutions that depart from traditional fire safety approved codes of practice. The application of a performance-based approach using more specialised building codes, for example British Standard 9999, allows stakeholders to demonstrate that sprinklers can offer an equivalent level of fire protection and life safety. This would result in greater freedom to fulfil their overall vision for such buildings. The installation of sprinklers allows for such flexibility and helps enable features such as:

- larger compartment sizes
- more open spatial designs
- extended travel distances
- reduced exit door widths
- reduced periods of fire resistance to
- elements of structure
- reduced space separation constraints for example, distances between buildings
- overcoming firefighting access constraints
- allowing more flexible building management plans for the end user.

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### **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, carbon dioxide and other toxic gases, and pollutants. As only the sprinkler head or heads immediately above the fire actuate, less water is used than conventional fire-fighting methods. There is also a significant reduction in the amount of water run off carrying pollutants into the water system.

As the carbon footprint of a building will increase by a factor of three when destroyed by fire, the environmental impact of fire in commercial premises is considered to be great. As such, we feel that sprinklers would be advantageous to both the economy and the environment.

With a national drive to reduce waste to landfill to zero, sprinklers potentially reduce unnecessary volumes of fire waste material from ultimately being disposed of in landfill sites. This reduces the amount of methane and other greenhouse gases which result from decomposition of waste and which further contribute to global emissions.

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### **Affordability of sprinklers**

One of the perceived barriers to the more widespread use of sprinklers is the initial cost of the system. This is despite a cost benefit analysis clearly showing sprinklers to be beneficial through the lifetime of the building. Through CFOA's participation and involvement in organisations such as British Automatic Fire Sprinkler Association (BAFSA) and the National Fire Sprinkler Network (NFSN), we will support the development of new and innovative suppression systems and encourage the provision of cost effective water supplies.