

Hampshire Fire and Rescue Authority

10 September 2014

Item: 11

Sprinklers Position Statement – Update

Report by the Chief Officer

Contact: Stewart Adamson - Telephone: 07918 887596

1 Summary

- 1.1 In September 2012, Hampshire Fire and Rescue Authority (HFRA) agreed a position on sprinklers and published a position statement (Appendix A). This was agreed in 2012 as the HFRA sprinkler strategy.
- 1.2 The correct use of sprinklers can vastly increase public safety and following the Authority strategy, “Increasing community safety with sprinklers” is an objective within the current 2013-2018 HFRS Improvement Plan.
- 1.3 This paper provides an update demonstrating the effectiveness of the Authority strategy and member involvement.

2 Recommendations

- 2.1 That the sprinkler strategy of 2012 remains the position of Hampshire Fire and Rescue Authority.
- 2.2 That Members continue to advocate and promote the position statement and in doing so actively contribute to achieving risk reduction via the promotion of sprinkler installations within identified risk premises.

3 Introduction and background

- 3.1 In September 2012, members led two debates to confirm a position on sprinklers and produce a position statement. This member led strategy for sprinklers is a unique position within the UK Fire and Rescue Services. The 2012 position statement is attached at Appendix A.
- 3.2 The use of sprinklers to protect people and property is well founded and provides an effective means to reduce risk. 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;
 - Enable design freedoms and flexibilities that encourage innovative, inclusive and sustainable architecture .
- 3.3 However, there is limited legislation to mandate the use of sprinklers within buildings. This background led to the HFRA position for sprinklers being one which considers their use to protect people who are most at risk, and for use in the highest risk buildings. Those HFRA considered the highest risk are:
- Schools;
 - Residential care buildings;
 - High rise buildings;
 - Large commercial buildings;
 - Timber framed buildings;
 - The homes of the most vulnerable in the community.
- 3.4 Concentrating on these high risk areas, rather than a widespread call for sprinklers, has enabled Hampshire Fire and Rescue Service (HFRS) to be more targeted in it's efforts, thereby making best use of our resources to influence a reduction in the risk within our communities.
- 3.5 We continue to develop evidence to support the targeted use of sprinklers and the recent fire (8th August) in the Rank Hovis building in Southampton is yet another example of effective sprinkler system preventing a fire becoming serious. In this case a sprinkler operated and stopped a small fire from developing, saving significant damage to this historic and iconic building.

4 Progress

- 4.1 HFRS continues to seek to influence significant developments to have sprinklers in line with the Authority strategy. These include:
- Retro fit of high rise buildings in Portsmouth and Southampton;
 - New care homes and residential care homes across the county;
 - Student halls of residence in Southampton and Portsmouth;
 - Iconic developments such as the Ben Ainslie Racing building in Portsmouth and the National Motor Museum at Beaulieu;
 - New HCC schools in Fleet and Eastleigh;
 - Supporting the most vulnerable to remain safe whilst living within their own homes.

The ability to influence developers is challenging. HFRA Member involvement assists greatly in this and has proved instrumental and effective.

- 4.2 Such involvement, which has seen the outcome of sprinklers being installed where previously not planned to do so, includes:

Mayflower Point, Southampton:

This is a series of three high rise buildings for student accommodation in the heart of Southampton. By HFRA influencing the University, the owner and developer, HFRS officers were able to bring about substantial changes to the design to include sprinklers. This will provide enhanced safety for students for many years to come.

Park Community School, Havant:

This large secondary school had not been planned to be sprinklered. HFRS officers had not managed to convince HCC or the developers otherwise. HFRA Members were able to influence the design team to change the plans. This enabled HFRS officers to help create a safer building but using creative thinking to offset some costs, to keep the project on budget.

- 4.3 The system being commissioned at Park Community school is a new type of system. This “Asset Protection” system, developed by HFRS officers, protects the community buildings in a manner which makes sprinklers cost effective. There has been national and industry interest in this specific approach as an innovative method to use sprinklers. It helps in controlling costs and demonstrates the value of the HFRA risk based approach to the use of sprinklers. HFRS is continuing to work with leading industry organisations to gain technical proof of concept and make it available for its widespread use across the UK.

5 Future

- 5.1 The combination of a targeted early approach to specific high risk buildings and the weight of influence HFRA Members can exert, make it much more likely that new Hampshire buildings will have sprinklers fitted.
- 5.2 It is unlikely that new legislation will mandate a wider use of sprinklers in the UK and therefore the ability to influence developers and architects to install sprinklers, should remain a key objective to help maintain the delivery of the HFRA sprinkler strategy.
- 5.3 HFRS continues to influence the sector at a national level through the Chief Fire Officers Association (CFOA) and the National Fire Sprinkler Network, where HFRS is well represented.

6 Supporting our corporate aims and objectives

- 6.1 Sprinklers are an effective means to make people and buildings safer and greatly contribute to risk reduction.
- 6.2 “Increasing community safety with sprinklers” is an objective within the current 2013-2018 HFRS Improvement Plan. The HFRA strategy assists by providing clarity and focus to both officers and stakeholders.

7 Risk analysis

7.1 None

8 People Impact Assessment

8.1 The proposals in this report are considered compatible with the provisions of the equality and human rights legislation.

9 Resource implications

9.1 Progress in supporting the HFRA position statement on sprinklers continues to be a HFRS priority and resources to progress this come from within existing and planned Service Delivery staffing and budgets.

10 Conclusion

10.1 Since its inception, the HFRA position statement on sprinklers has provided clarity and focus to the Service strategy for sprinklers.

10.2 Whilst officers continue to engage with developers and architects of new planned developments, influencing their decisions remains very challenging. Members have proved to be in a strong position to help influence the wider use of sprinklers.

10.3 HFRA continue to be at the front of new developments and seeking to influence national stakeholders.

11 Background papers

11.1 The following documents disclose the facts or matters on which this report, or an important part of it, is based and has been relied upon to a material extent in the preparation of the report:

1. 2012 HFRA statement

Note: The list excludes: (1) published works; and (2) documents that disclose exempt or confidential information defined in the Act.



We make life safer

Hampshire Fire and Rescue Authority (HFRA) Position Statement for Sprinklers – September 2012

Sprinklers

Hampshire Fire and Rescue Authority play a key leadership role in promoting a better understanding of the benefits of sprinkler systems. Accordingly, the Authority works to encourage building owners and developers to install these systems where there is a case for doing so, for example, where there are risks to people, or where there is a clear business case in terms of cost and benefit.

Sprinklers can add clear value and are proven to save lives and property; they improve firefighter safety; minimise environmental damage and reduce the economic cost of fire. Hampshire Fire and Rescue Authority proactively endorses the installation of sprinkler systems.

Refurbished Buildings (Retro Fit)

Where significant refurbishment or upgrade is being planned in buildings which are occupied by vulnerable people, we advocate the installation or retro fitting of sprinklers. In older buildings, built to earlier standards, the level of risk may no longer be acceptable and the retro fitting of sprinklers may be appropriate to overcome the risks.

HFRA will promote and campaign for the use of fire sprinklers in high risk premises to enhance and improve public and firefighter safety.

Sprinklers in Schools

The prevention of fires in educational establishments remains a priority for us because of their standing as a public and community asset and their importance for the educational well-being of children. Moreover the loss of course-work, the implications in terms of wider economic and social costs, property protection and environmental damage means fires in schools have far reaching consequences. Schools also tend to be a target for arsonists.

HFRA recommends that new schools should have sprinklers fitted. In exceptional circumstances, where the risk is determined to be low, alternative fire precautions may be considered.

Sprinklers in Residential Care Premises

Fire deaths and injury data indicates that those most at risk are children, older people, people with mental health problems, and particularly those with mobility problems who are unable to leave buildings easily. These buildings are an asset to the community due to their importance in looking after those most vulnerable and remain a priority for us to protect.

HFRA strongly recommends that all new residential care homes should be fully fitted with sprinklers for the protection of residents from fire.

Sprinklers in High Rise Buildings

Fires in this type of building can present additional risks and considerations for the occupants and firefighters. The design and construction of these buildings delay intervention by the fire service meaning fires can escalate.

HFRA will campaign for sprinklers to be a mandatory requirement in all buildings above 30 metres in height..

Sprinklers in Commercial Buildings

The risks to fire-fighters in large commercial buildings are substantial due to the size and potential for rapid collapse of the building. This is particularly relevant when considering modern methods of construction. Sprinklers would assist to reduce risks associated with firefighting operations. The presence of more large commercial buildings with sprinklers will aid growth in the economy as it will reduce business losses from fire as fewer businesses will financially fail or be forced to relocate. It has been recorded that the carbon footprint of a building increases by a factor of 3 when destroyed by fire. The environmental impact of fires in commercial premises is great. Using sprinklers to control fires will reduce this impact on the environment.

HFRA will promote the installation of sprinklers in all large commercial buildings on the basis of improved fire-fighter safety.

Sprinklers in Timber Framed Constructed Buildings

Unlike traditionally built property, a timber framed building is at the greatest risk of fire during the construction phase due to the amount of exposed and unprotected combustible elements. Fires in timber framed buildings have resulted in very rapid fire development leading to early structural collapse, and the severity of radiant heat generated has caused fire spread to neighbouring buildings up to 30 metres away.

HFRA recommend that substantial timber framed buildings are installed with sprinklers and installation should be completed early to protect the building during the highest risk construction phase.

Sprinklers in Domestic Premises

Fire safety measures such as smoke detectors may sometimes not be sufficient to protect the most vulnerable when there is a fire within their home, due to their inability to evacuate themselves. This vulnerability can be due to a number of factors including lifestyle characteristics and physical mobility. The ageing population and changes in social care policy mean that more vulnerable people are remaining in their own homes.

HFRA recommends that sprinklers should be installed in people's homes, such as Social Housing, where those people are more likely to be vulnerable from fire.