NFCC
National Fire
Chiefs Council

Campaign Toolkit

15th- 21stMay 2023

#ThinkSprinkler

Think Sprinkler

The objectives of the Think Sprinkler campaign are to:

- Spread awareness of the facts about sprinklers
- Promote a greater understanding of fire sprinkler systems in providing business and social continuity, mitigating the effects of fire with environmental and economic cost benefits.
- Support fire and rescue services to promote sprinklers in their communities, businesses, and local authority forums, providing a national picture to assist in promoting fire sprinkler systems.
- The target audience is people who have a responsibility for developments which care for the most vulnerable people in our communities and those whose developments or loss of them impact the social and economic wellbeing of our communities.

NFCC Automatic Fire Suppression Systems Position Statement NFCC's position statement underpins the campaign. The current position statement is being reviewed and will align with NFCC's relevant consultation responses. The revised position statement will be issued in the coming weeks.

NFCC's protection consultation responses can be found on the website. They are produced in consultation with FRSs. These and any response your service has submitted can be used as part of your campaign messaging.

Sprinkler Saves Website – Please share in internal communications.

NFCC is continuing to work closely with the British Automatic Sprinkler Association (BAFSA), and we are actively encouraging fire services to input case studies to the Sprinkler Saves website. The website aims to provide a central and comprehensive record of fire incidents where sprinklers have played their essential role in suppressing or extinguishing fire.

NFCC have a webpage with more information and submission form to download or you can access the site directly and submit on directly on BAFSA website For more information or to discuss how your service may be able to support this site contact Nick.Coleshill@bafsa.org.uk

Why is that useful?

This information is a useful resource for fire and rescue services when promoting the benefits of sprinklers in their own communities. Fire services have access to the case studies.

It will assist NFCC and other organisations when building a national picture and evidence base of the effectiveness of sprinklers. These case studies can help us identify trends and provide robust evidence to influence government and drive change in codes and standards.

Having a record of the fire sprinkler saves provides NFCC with useful data to underpin responses to government consultations and further reaffirms the previous work of NFCC and the National Fire Sprinkler Network (NFSN) into the effectiveness and reliability of fire sprinklers.

How your fire service can help

The site relies on fire services to report instances where fire sprinklers have effectively contained or extinguished firesand provide good case studies for the site. Images that show how sprinklers have contained or extinguished fire or even bodycam footage from your service would be highly valued. Unfortunately, we have a shortage of these types of images – they simply don't make the media – but they are crucial for advocating for fire sprinklers and to help demonstrate their effectiveness.

Share information about the Sprinkler Saves website internally and encourage crews to submit cases or use them in awareness work. Can you develop a protocol in service to share and report saves into the website?

Social media

During the campaign week NFCC will be looking out for any sprinkler saves either from FRS or from the sprinkler saves website. **To support the week your fire service can share any saves on social media in your area using #SprinklerSave #ThinkSprinkler**

Planning Applications in your fire service area

Although the application of approved guidance and enforcement of regulations will give buildings the legally required baseline of fire protection, NFCC's viewpoint is many of these fall short of what we would consider adequate. This is why we campaign for the inclusion of sprinklers.

Has your fire service developed a strong relationship with planning departments in your area? If not, engage with them and ensure they are aware of the fire risk in buildings – particularly those highlighted as part of this campaign. In applications where fire services see an increased risk (or as a business as usual inclusion) it is possible add a recommendation note and goodwill advice specific to that application which can be considered by the developer. Use local information and case studies for similar recent fires to strengthen the ask.

As part of #ThinkSprinkler we are asking services to take a proactive approach in recommending the installation of sprinklers during the planning process.

Buildings where the ability of the occupants to respond to the effects of fire and successfully evacuate is compromised by their circumstances (taking a person-centred approach and considering the needs and abilities of those that occupy the building i.e., limited, or additional cognitive or physical needs). **In advisory notes contact details for relevant departments if your fire service can be included and highlight if any match funding might be available to support developments in installing fire sprinklers.**

Areas of concern

- buildings where a fire can cause an ongoing and detrimental societal impact in the local community (such as schools)
  sites where a fire can have significant impact on business continuity, firefighting operations, and the environment (such as warehouses and waste centres)
- the minimum access requirements for fire service vehicles cannot be met and would have an impact of firefighting operations

Suggested approach to recommendation note

Name of FRS strongly recommend the installation of fire sprinklers as part of this development. A fire with no automatic suppression system in this type of building could have a significant detrimental impact on (note the specific impacts i.e., children's education, local community, employment, business continuity, firefighter safety and resources etc).

For the period 2020/21 name of FRS responded to x numbers of fires in type of building. This resulted in x number of total loss or x area of fire damage. The installation of fire sprinkler can mitigate incidents like this and can prevent the loss of this community asset/business. Contact name of person at FRS to advice and/or support on installing sprinklers in this development.

Schools

Deaths and injuries in school fires are rare. While sprinklers would provide additional life safety benefits, the greatest gains to be made are in protecting the property which will in turn secure the continued education of children.

NFCC believe there should be a requirement for all new and substantially refurbished schools to have sprinklers regardless of height to align policy across the UK.

Scotland and Wales have a legal requirement to fit sprinklers in new build schools and those undergoing major refurbishment regardless of height.

As part of the campaign, we encourage the Fire Service in Scotland and Wales to highlight how regulations have saved buildings highlighted both life and property protection. Has this prompted more retrofitting of sprinklers in these buildings as part of them being accepted? Has this prompted a culture change in Scotland and Wales?

NFCC say Government should require all new schools, all new student accommodation, and existing schools and student accommodation undergoing refurbishment, to have sprinklers fitted regardless of height.

How have NFCC pushed for change?

In May 2019 NFCC responded to the technical review on BB100: Design for fire safety in schools

In 2020 NFCC and other leading bodies issue a joint statement calling for sprinklers in schools, ahead of Parliamentary scrutiny on the Building Safety Bill

This was followed with draft revised guidance of BB100 which NFCC responded to in August 2021:

The Department for Education's 2021 consultation 'Building Bulletin 100: Fire Safety Design for Schools' presented an opportunity to close the current loopholes and ensure that schools in England have the same level of fire protection as the rest of the UK. Our response made it clear the new draft guidance falls well short of our expectations as it requires sprinklers only in specific circumstances (proposing the mandatory installation of sprinklers only in new schools over 11 metres in height. As few schools meet this threshold, the benefits of this proposal are likely to be limited) still allowing BB100 to be sidestepped in favour of ADB or BS9999 which do not take into account the impact of school fires on education, community and asset protection.

Feedback is currently being analysed although it has been much delayed – it is hoped the views of NFCC and the organisations we have worked with will close the current loopholes and make schools safer and resilient to fire.

Social media messaging

School fires can be devastating. The use of sprinklers is proven to minimise the disruption to pupils' education, the impact on their families, the community and the wider education establishment. Schools are important community assets that need protecting #ThinkSprinkler

The average fire risk for schools is almost double that of other non-residential buildings.

In 2007 70% of new schools were being built with sprinklers. In 2016 this dropped to 30%. Today it is estimated only 15% of schools are being built with sprinklers #ThinkSprinkler

We want sprinklers in schools for property protection, the continuity of education and the resilience of local communities. School fires disrupt education and communities. Sprinklers along with smoke detection can prevent this #ThinkSprinkler

BAFSA animation – sprinklers in schools

219 primary and secondary schools were damaged by fire in 2021/22 in England. A 35% increase on 2020/21. England should be brought into line with Scotland and Wales, where sprinklers are legally required in all new and major refurbished schools. #ThinkSprinkler

Case studies – please use any local cases to show positive outcomes or impact of fire on these buildings.

Sprinkler Save Cleveland Fire Brigade 2018

Figure 1 Bydales School Sprinkler Save © Cleveland FB

An electrical fault in a washing machine caused a fire at Bydales School in Cleveland. The school had sprinkler installed. While two fire engines responded, the fire had been fully extinguished by two sprinkler heads.

There was minimal fire damage, and the school was able to open as normal for staff and students. Cleveland Fire Brigade praised the school for installing sprinklers which are not mandatory. The installation of sprinklers prevented a significant fire which would have had an impact on students' education, staff and the wider community.

Derbyshire Fire and Rescue Service – Harrington Junior School – May 2020

Figure 2 Harrington Junior School fire May 2020 © DFRS

An accidental fire due to hot works as part of a school refurbishment resulted in a total loss school blaze on 28th May 2020. Crews from Derbyshire, Nottinghamshire and Leicester worked to extinguish the fire. Two firefighters received slight injuries.

The school is being rebuilt on the same site at an estimated cost of £5.5million. The original school was valued at £2.7million and following the blaze the insurance pay out was £1.28million.

Sprinklers would have contained or extinguished this fire with minimal disruption to children's education and the community. The estimated cost of installing sprinklers on this site would have been between £65K - £84K.

A £500k temporary school has been built to house the 235 pupils. The new school building will hopefully be completed for September 2022 – with sprinklers!

The children from both schools suffered major disruption – from working at home, to being moved to temporary accommodation. The cost to rebuild Ravensdale Infant School alone will be in the region £8million to rebuild.

Care homes and specialised housing

Residents living in care homes and specialised housing are often some of the most vulnerable people in our communities. Physical or cognitive impairment can present increased fire risk, the ability to react to a fire and/or an alarm, and the ability to respond to and/or escape a fire.

Sprinklers, along with a person-centred fire risk assessment to prevention of and protection from fire, can reduce the impact of fires from a life safety and business continuity viewpoint. Alongside this NFCC have been concerned about fire safety issues within these settings.[1]

Sprinklers can buy firefighters crucial time in firefighting operations. They can also allow more time for evacuation which may be complex in these environments or negate the need for full evacuation. The only control measure likely to prevent the need for full evacuation is fire sprinklers. In Scotland and Wales all new build and converted care homes are required to have sprinklers fitted. In England and Northern Ireland there is no requirement to fit sprinklers.

Some care and specialised housing providers in England and Northern Ireland choose to install sprinklers, to protect their businesses and, importantly, their vulnerable residents. If you have worked with a provider to advise them on installation, provided funding or have sprinkler saves in these premises, please highlight them as part of the week. They can encourage others to consider installing them.

In December 2022 government proposed to make it a requirement to install sprinklers in all new care homes regardless of building height which NFCC welcomed. NFCC would like this to go further and include care homes undergoing extension or refurbishment. The proposals do not take into account the challenges in staffing and evacuation in these settings.

NFCC Consultation Response - Proposal on options to recommend sprinklers in care homes, remove national classifications from Approved Document B, and recommend a maximum height threshold for the use of one staircase in blocks of flats.

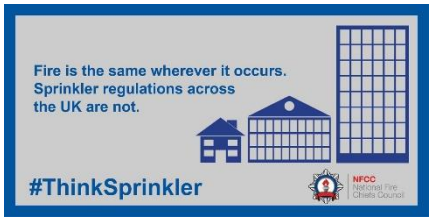
[1] NFCC has serious concerns with what appear to be an increasing number of fire safety issues within care homes. Following several serious fires, in 2017/18 themed inspection programmes were carried out by some FRSs. In London, 57% of care homes inspected received a formal notification to address fire safety failures. In Hertfordshire, a program of inspection found fire safety deficiencies in approximately two thirds of care homes. Recent fires, such as the residential care home in Crewe have demonstrated serious shortcomings in current building standards.

BAFSA animation – Fire Sprinklers in care homes (link)

Can be used on social media or on websites.

Social media messaging

New sheltered and extra care housing must have fire sprinklers installed in Scotland and Wales. But in England and N Ireland this isn't the case. NFCC believe life-saving protection should be given wherever you are in the UK #ThinkSprinkler



In buildings where sprinklers are fitted the risk of death or injury from fire is greatly reduced. That's why NFCC want sprinklers in all care homes. They start fighting fire as soon as they are activated - it is a matter of life and death #ThinkSprinkler

We welcome the proposal from the government in December 2022, to make it a requirement to install sprinklers in all new care homes regardless of height but think this should go further to cover homes undergoing extension of refurbishment. The proposals do not take into account the challenges in staffing and evacuation #ThinkSprinkler

LinkedIn The fire sector has provided overwhelming evidence, lobbying and advice over many years that sprinklers are cost effective and essential to saving lives and preventing the loss of critical community buildings such as Care Homes, hospitals, and schools. However, unlike many other developed nations around the world and other parts of the UK - the Government in England continues to ignore the evidence and the risks by refusing to make sprinklers mandatory in all buildings of this type #ThinkSprinkler

Twitter Sprinklers save lives & prevent the loss of critical community buildings such as Care Homes, hospitals, and schools. The Government in England continues to ignore the evidence and risks by refusing to make sprinklers mandatory in all buildings of this type #ThinkSprinkler

Link to Newgrange social media video

Case Studies

Newgrange Care Home Hertfordshire 2017 (Also see NFCC social media video above)

Figure 3 Newgrange Care Home, 37 minutes after 999 call ©HFRS

In April 2017, a Cheshunt care home in Hertfordshire was the scene of a major fire. The fire broke out in the early hours of the morning. 35 residents occupied the care home. Operational response required 12 fire engines. On arrival crews found residents in their rooms, with many still in bed and unable to move due to their physical condition. Firefighters rescued 33 elderly and immobile residents. Two residents died as a result of the fire.

Figure 4 Fire damage to Newgrange Care Home ©HFRS

If sprinklers had been fitted in this care home, it is highly likely that no residents would have lost their lives. As a result of this fire the coroner raised concerns that sprinkler systems are not mandatory in care homes. Hertfordshire Fire and Rescue Service recommended sprinklers be installed. The home was rebuilt – without fire sprinklers installed.

Sprinkler Save - Northamptonshire 2022

Northamptonshire Fire and Rescue service reported an incident involving an industrial tumble dryer which caught fire in a residential care home. The fire started in the laundry room located on the ground floor.

The fire was contained to the room of origin by the sprinkler system that activated and supressed the fire before the arrival of the fire service. There was no smoke or fire damage to the surroundings meaning minimal impact on business continuity, residents, and the fire service.

Figure 5 Tumble dryer following a sprinkler save in Wellingborough care home ©NFRS

Warehousing and storage

Fires in these facilities can lead to very large ongoing incidents which take huge amounts of fire service resource to bring under control and extinguish. Even then the devastation the fire causes to these sites impact local communities, the environment, the economy, and business continuity, not only directly but along the supply chain.

Many of these types of buildings are getting larger – both in footprint and in terms of employees working in them – a knock-on effect of changes in the retail market, which has led to larger distribution centres, use of automation and greater fire loading.

In England and Wales, fire sprinklers only need to be installed in new single storey warehousing greater than 20,000m2. NFCC would like to see reduce to 4,000m2. This would also offer some protection to firefighters responding to fire in such large structures.

On average there are 43 warehouse fires per month in England, Scotland, and Wales.

Fire crews in England attend an average of 336 warehouse fires every year

Zurich Insurance data shows the average cost of a large warehouse fire is £5.9million

BAFSA animation – warehousing (Link)

Case Studies

Greater Manchester Fire and Rescue Service produced the two following videos of sprinkler saves – Biffa and Love 2 Sleep – both highlight the effectiveness of having sprinklers installed.

Biffa - https://www.youtube.com/watch?v=y7AqAYL17M0 Love 2 Sleep - https://www.youtube.com/watch?v=-1UtvgJ-97Q

Social media messaging

NFCC would like the suppression coverage for storage and warehouses in England reduced from 20,000m2 to 4,000m2. This will help to prevent commercial property loss and help firefighters rescue people if a fire incident occurs #ThinkSprinkler

The increased storage capacity of modern warehouses can result in large fire incidents, which make manual firefighting operations difficult. These types of fires can have negative impacts on supply chain and the environment. Sprinklers reduce these impacts #ThinkSprinkler

Sprinklers in storage buildings and warehouses should not just be about size. They can contain hazardous materials. In Scotland different thresholds for sprinklers apply depending on what is stored. This helps firefighters and gives people more time to evacuate #ThinkSprinkler

Many businesses don't think fire will happen in their premises. In fact, fire is one of the leading causes of commercial property loss. Business can safeguard against loss by installing and maintaining a sprinkler system (include link to your FRS website for information) #ThinkSprinkler

What is the cost of a sprinkler system?
It is estimated the cost of a sprinkler system can be recovered over a period of about 10 years through reduced insurance premiums and a less disruption to business continuity if a fire occurs. #ThinkSprinkler

Link to benefits of sprinklers animation

There are a quite a few myths about sprinkler systems, but correct installation and maintenance mean they are very reliable and proven to provide life and property protection if a fire should start. Find out more truths and #ThinkSprinkler

Link to myths and misconceptions of sprinklers animation

There are many misconceptions about how sprinkler system works. See this video from @BizSprinklerAll to find out how they operate and why we want more businesses to #ThinkSprinkler https://www.youtube.com/watch?v=a8ncP9nCryY&t=7s