

sprinkler focus

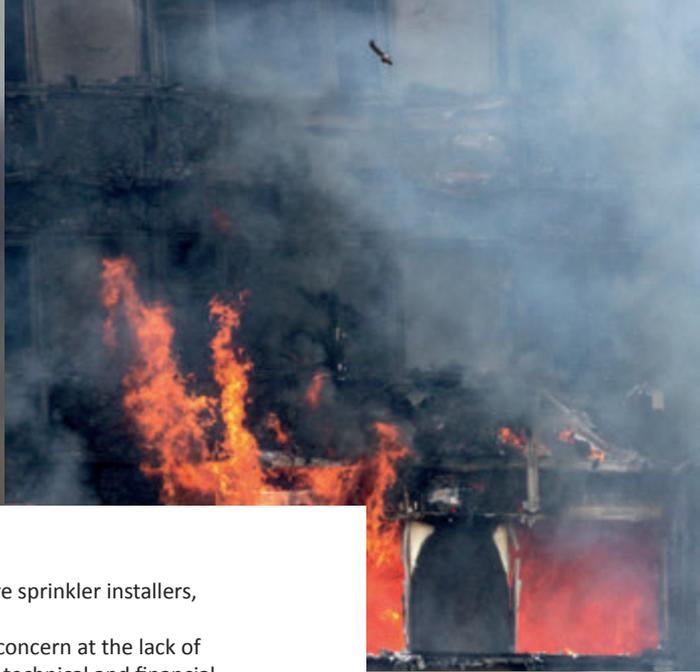
British Automatic Fire Sprinkler Association

bafsa

NOVEMBER 2017

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BAFSA IS THE professional trade association for fire sprinkler installers, suppliers, manufacturers and associated bodies.

As an association, we wish to express our grave concern at the lack of urgency in respect of positive action; together with technical and financial support which is available to housing providers following the unprecedented tragedy at Grenfell Tower.

None of us will ever forget the scenes following this disastrous fire whose death toll may never be fully known.

As an association, we have worked tirelessly for more than forty years to ensure that automatic fire sprinklers are properly designed and installed in all types of occupancies across the United Kingdom. Sprinklers are not new technology having been in use for more than 150 years. Our manufacturers have consistently worked to ensure that the latest innovations are included in all their designs and that these designs pass rigorous testing standards with third party accreditation bodies.

Likewise, our installer members submit their designs and completed installation to the scrutiny not only by the appropriate accreditation bodies, but also by other regulators and the insurers.

As the primary trade body for the sprinkler, industry we have worked with education and qualification bodies so that our members have access to training courses and qualifications that ensure their personnel can meet the rigorous standards imposed on our industry.

The UK sprinkler industry, through this Association have invested heavily in research to ensure we can produce evidence-based data for use by local and national governments – for example, in respect of the wider use of sprinklers in warehouses and schools. It was BAFSA backed research which proved that retrofitting of sprinklers in social housing was indeed feasible and cost effective.

Sadly, until now, much of our research has been ignored or discounted by Whitehall.

BAFSA urges Government to take immediate action to promote actively retrofitting of automatic fire sprinklers in high-rise housing throughout the UK as the only effective measure to compensate for single staircases, combustible external cladding and poor standards of fire compartmentation.

BAFSA also calls for:

- A co-ordinated approach to the provision of financial and technical support to ensure that all housing bodies are able to carry out this work.
- Legislation to ensure that housing providers only install automatic fire sprinklers to the appropriate British Standard using third party accredited installers and approved components.
- Action to prevent the needless number of fire deaths in the UK continuing is needed now.



British Automatic Fire Sprinkler Association

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BAFSA.ORG.UK

From the Chairman

AS WE NEAR the close of 2017, this has been a very busy year for BAFSA.

Early in the year we concluded a very worthwhile consultation exercise on the future direction of the association. This road map puts in place the strategic vision and future direction we will take in the next 5 years. Training is a key part of this vision in addressing a skills gap in our industry. And providing the foundations for a well-trained and competent workforce for our members.

The L2 Sprinkler Installer Certificate continues to flourish. In 2018 West of Scotland College and London will join the existing BAFSA Approved Training Providers in Manchester, South and North Wales. The continued success of this qualification which is a benefit to members will only survive if we continue to support it.

The Grenfell Tragedy once again confirms a need for greater focus on fire suppression in changes to Building Regulations, which no doubt will take place in the future. But of paramount importance now, and in the future, is that those designing and installing these systems have third party certification to demonstrate that they have the skills to do it right.

Our new website has been launched and is now up and running, it provides better access and features, which did not exist before and will be updated on a regular basis.

Welcome to the new BAFSA Focus.



John McCann
Chairman

British Automatic Fire Sprinkler Association

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A failure to protect the innocent



**KEITH MACGILLIVRAY MBE,
CHIEF EXECUTIVE OF BAFSA REFLECTS.**

SATURDAY 31ST OF JANUARY 2004 was the saddest day of my Fire Service career. The previous evening I had attended a Burns Supper and enjoyed first class entertainment in the company of my colleagues. Having dropped them off at their respective homes, as I was the duty Principal Officer thus the designated driver, I returned home to be awakened a few hours later with the news that a serious fire was in progress at a residential home on the outskirts of Glasgow. The tragic deaths of fourteen elderly people in the Rosepark Care Home fire was a defining moment for me; I became a strong supporter and campaigner for automatic fire sprinklers. Never again would I want to witness the needless deaths of helpless people due to fire.

We are now six months on from an even greater tragedy than Rosepark. As I watched

the footage roll on the day of the Grenfell catastrophe, I thought again as I did at Rosepark, that we had failed these innocent and helpless people. The fight for justice both for the victims and the survivors goes on, many waiting to be rehoused in suitable and nearby accommodation. As a former Firefighter, I commend the actions of the personnel of London Fire Brigade, faced with a situation of the scale and magnitude they have never anticipated they carried out their duties with the utmost professionalism.

The cause and development of the fire will be decided by one of the inquiries currently in progress and in a number of years we will finally hear an outcome. But what will be the result of that outcome, will we act on the judgement when it is given, or like so many incidents before, will it be noted

and brought up again when such tragedies occur?

I do fully understand that we require to know what went wrong and why it got to such disastrous proportions. I see that knee jerk reactions are not always the best way to deal with such tragedies.

However, in my view the installation of automatic fire sprinklers into high rise housing is absolutely essential, and although I do support the view that installing sprinklers on their own is not the full solution, it does nonetheless give residents of high rise blocks a chance when all else may have failed.

The installation of automatic fire sprinklers in conjunction with regular fire risk assessments and suitable structural fire protection is what is needed to deal with the current situation until such time as the outcomes of the inquiries are announced.

During the last six months the BAFSA Team has been asked on hundreds of occasions how much will it cost to install these sprinklers in high rise blocks. We can give a rough figure, but always add the rider that it will depend on the location of the building; the layout of the flats and floors; the local water supplies; the access for services etc.

Immediately you give a figure it is challenged by the interviewer. The figure they cite is very seldom the figure quoted by the sprinkler installer, more than likely it will include a large percentage added on by the project management company, together with costs to rectify any other failings in the building and to redecorate the flats after all the work has been completed.

We must continue to give an accurate and reliable figure for installations, ensuring that it is clear to those looking to question our price that some of the variables are not directly related to the sprinkler installation.

Where we have been managing to get our message across is that when automatic fire sprinklers are installed, the use of Third Party Accredited Installers (those that have been through the process of accreditation with LPCB, FIRAS or IFC) is a must. I am pleased to say that more and more housing providers and Building Control Officers do now appreciate what this accreditation means.

We have added to our website a button which takes a visitor directly to an explanation of what Third Party Accreditation means.

Likewise an increasing number of installer companies are going through the Third Party Accreditation process together with putting individual installer employees through the BAFSA Level 2 Certificate of Fire Sprinkler Installation Course in Wales and England. Increasing the level of competence and skills of the sprinkler industry is paramount to our continuing growth; I am pleased to confirm that two further colleges in the West of

Scotland and London will be delivering our Level 2 Course in 2018.

BAFSA needs its Members' support to ensure that these courses can continue in order that we have a well-trained competent workforce for the future.

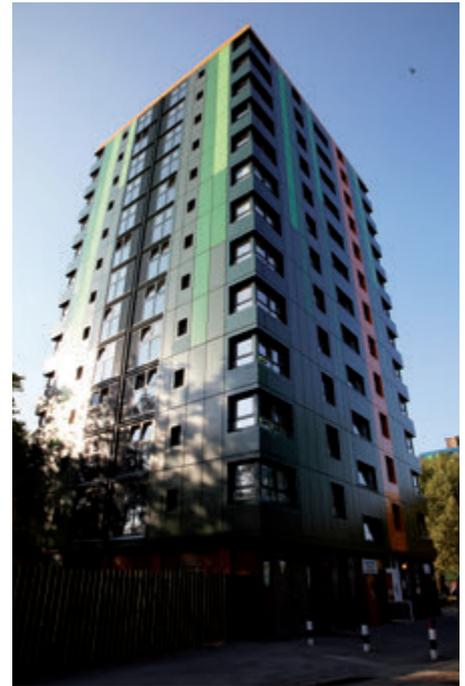
I hope that we learn lessons from the terrible human tragedy that was Grenfell Tower. In particular I hope that we do not just bring in legislation for new buildings as has happened in the past.

Taking the example of residential care homes in Scotland following the Rosepark tragedy, I applaud the then Scottish Government for reacting very quickly and bringing in legislation requiring all new residential care homes and sheltered housing in Scotland to have automatic fire sprinklers fitted. However, nothing was brought in to deal with the existing residential care home and sheltered housing stock in Scotland. It was thought that with new care standards much of the existing stock would have been replaced with new built units; this has not turned out to be the case. Therefore almost fourteen years on from the event we have a two-tier protection system in care homes and sheltered housing in Scotland. Those built prior to the legislation in 2005 with no sprinklers and those built post legislation, which have.

Other countries outside the UK have learned similar lessons and eventually brought in retrospective legislation, we in the UK must learn from this and ensure that a tragedy of the scale of Grenfell Tower does not occur again in the UK.

Throughout the Post-Grenfell period we have had unprecedented access to national media, politicians, councils and governments.

We have used this period to ensure that our message is getting through clearly and concisely, we have listened to the BAFSA membership and refined our messages.



The Callow Mount Sprinkler Retrofit project in 2012 resulted in a successful installation of sprinklers in a 13 storey, 1960s tower block. A subsequent report Safer High Rise Living, published by BAFSA, provided practical advice, technical insight and financial evidence for Local Authorities and Central Government across the UK.

This is now beginning to bear fruit for the fire sprinkler industry. We have a tried and tested product, installed by competent and skilled personnel and it does save lives. Let our product ensure that there is never a disaster on the scale of Grenfell Tower in the UK again.

Automatic fire sprinklers save lives and protect Firefighters.



We must not be complacent

FIRE IS BACK ON THE POLITICAL AGENDA
WRITES THE BUSINESS SPRINKLER ALLIANCE

IN AN EVER-EVOLVING political landscape, uncertainty regarding Brexit and a country still feeling the knock-on effects of the Grenfell tragedy, the long-awaited review of Building Regulations is welcomed, but long overdue. This is where the hard work starts to ensure that the reports, studies and data that we have produced are reviewed, heard and acted upon.

Unfortunately, regulatory reform will, once again, have been driven by tragedy rather than foresight. The outcome is far from certain. We are already seeing people claim that sprinklers are not the answer and that their costs outweigh their benefits. That is why as the BSA we are continuing our work in three core areas; Government, Business and Build Community.

Government

We have made our submission to the Review making the case for the inclusion of property protection within regulation (available on our website). At the same time highlighting the success of the sprinkler industry in terms of system performance and installed quality as exemplars for the fire sector to follow. We have actively worked with our members to

ensure consistent messages are given to the Review on fire resilience and property protection from the Fire Sector as a whole. We have taken this message into the political arena with briefings, party conference attendance and lobbying. As well as pressing the Government in England, the BSA is actively pursuing actions in the devolved powers within Scotland and Wales.

Business

We have continued our media campaigns both in trade and social media platforms to raise awareness of fire issues. We are actively working towards the next iteration of the Sprinkler Save map to further highlight the impact of fire and the benefits of sprinklers. At the same time looking to build business advocates who can speak of the positive benefit of sprinklers.

Build community

A key area for the BSA to influence is within the practices of construction, architects and developers. Our aim is to educate, challenge the common view of cost around sprinklers and help them consider their role in fire



resilience. Our recent report, The Impact of Automatic Sprinklers on Building Design – Commercial Sector, Offices (available to download here), is aimed at just that.

It is the first in a series that will provide the build community with an appreciation of whether the inclusion of automatic sprinklers for a particular scheme is worthy of further consideration.

Our belief is that the evidence and analysis BSA has produced is invaluable and helps set us apart. We need to make the most of it as this will be important in achieving change. More is urgently needed if we are to support our views and secure change and we will be working on this in the coming months.

Now is the time for our government to look at our recommendations with fresh eyes and provide not only additional protection for life, but also fire resilience for the built environment. As a wider fire protection community, it is for us to ensure that we produce the evidence needed, challenge the myths and make our voice heard.



business-sprinkler-alliance.org

The European perspective

PROGRESS WITH REGULATORY CONTROL IS BEING MADE REPORTS THE EUROPEAN FIRE SPRINKLER NETWORK

IN JUNE THE first residential sprinkler system in France was commissioned. More look likely to follow. Meanwhile France has circulated an update to its car park regulations, introducing 30-60 minute relaxations in passive fire protection if sprinklers are fitted and a requirement to fit sprinklers in all new car parks with more than two underground levels. Existing car parks with more than three underground levels must also be sprinklered. The new regulations will take effect in January.

Across the border in Belgium a similar draft regulation has yet to receive ministerial approval. The French advance may help. Flanders, the northern part of Belgium, is about to publish revised diesel engine regulations that exempt engines which run for less than 100 hours per year (such as sprinkler pump drivers).



These regulations could serve as an example should this issue arise in other jurisdictions.

In the UK we have been campaigning for several years for sprinklers to be required in warehouses. In Austria, depending on fire risk, most warehouses larger than 1,800 m² and all which store goods above 9m must be sprinklered. Britain is using more wood in construction but our regulatory guidance has yet to impose sprinklers in such buildings, unlike in countries with more experience of this material.

Finland permits offices and blocks of flats of three to eight storeys to have wooden structures if sprinklers are fitted. This is expected to be extended to hotels and care homes early next year, along with increases in compartment sizes with sprinklers.

 EUROPEAN FIRE SPRINKLER NETWORK

eurosprinkler.org

Response times of sprinkler glass bulbs

A SERIES OF FIRE TESTS ON DIFFERENT SPRINKLER BULBS CONDUCTED BY RISE PROVIDES ESSENTIAL INSIGHT

TRADITIONALLY, MOST COMMERCIAL Traditionally, most commercial residential sprinkler sprinklers are fitted with 3mm glass bulbs having a nominal operating temperature of 68°C. However significantly thinner sprinkler bulbs with lower operating temperatures are readily available.

The fire tests were conducted inside a square compartment which could either be enclosed or have two walls removed to provide a full ventilated scenario and to mimic a larger sized room. A propane gas burner was positioned in one corner with the rate of the gas controlled to mimic slow, medium or fast fire growth rates.

In each test, nine Response Time Index (RTI) and operating temperature glass bulb combinations were tested. The nominal operating temperatures were 47°C, 57°C and 68°C and the RTIs were 14(ms)^{1/2}, 24 (ms)^{1/2} and 32(ms) respectively, and representative of glass bulbs with a nominal diameter of 1.5mm, 2.5mm and 3mm.

As expected the bulb having the lowest RTI and the lowest nominal operating temperature activated first and the sprinkler bulb with the highest, activated last.

Whether the compartment was fully enclosed or open had a significant influence on the time to activation and the corresponding heat release rate, especially for the bulbs having the higher RTIs. With few exceptions, the sprinkler glass bulbs having the same temperature rating and RTI, activated earlier inside the closed compartment as compared to the open compartment. Intuitively this seems valid as the combustion gases built a layer of hot gases inside the closed compartment.

It was also observed that the activation times of the individual glass bulbs varied more in the open scenario, especially for the 'medium' and 'fast' fire growth rate scenarios.

Another observation, from all three fire growth rate scenarios, is that the nominal operating temperatures of the glass bulbs have a stronger effect on the results than does the RTI. In other words, a reduction of the nominal operating temperature of a bulb has a larger effect on the speed of the response than a reduction of its thermal sensitivity.

The use of sprinklers with 3mm, 57°C sprinkler glass bulbs would not violate the recommendations of NFPA 13D and 13R of using sprinklers having a temperature rating between 57°C and 77°C. It appears that the heat release rate is in the order of 15% to 30% smaller as compared to the 68°C

temperature rating. The reduction in heat release rate is the most noticeable for the open compartment condition. When using 47°C sprinkler glass bulbs, the fire is in order of 30% to 50% smaller.

It is notable that by using a specific fluid, some of the 3mm diameter glass bulbs had response characteristics similar to 2.5mm ones. When using 2.5mm 57°C bulbs, the heat release rate is between 25% and 0% smaller compared with 3mm, 68°C bulbs and when utilising 47°C sprinkler glass bulbs, the fire is in the order of 40% to 50% smaller.

Sprinklers glass bulbs with a diameter as small as 1.5mm may typically not be used in regular sprinklers due to their lower mechanical strength, however these bulbs are commonly used for automatic water mist fire protection nozzles. When using 1.5mm, 57°C bulbs, the heat release rate is in the order of 30% to 35% smaller as compared to when using regular 3mm, 68°C ones. When using 47°C sprinkler glass bulbs, the fire is in order of 45% to 60% smaller.

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The nightmare we hoped would never happen

THE ALL-PARTY PARLIAMENTARY FIRE SAFETY & RESCUE GROUP CONTINUES TO WORK TIRELESSLY FOR IMPROVED FIRE SAFETY IN BUILDINGS, AND FOR SPRINKLER PROTECTION. NOW RONNIE KING OBE HONORARY ADMINISTRATIVE SECRETARY OF THE APPFSRG EXAMINES ITS RESPONSE TO THE GRENFELL TOWER FIRE.

WEDNESDAY 14TH JUNE 2017 will be etched in the mind of anyone associated with fire, as we all watched those shocking pictures on our television screens from 0100 onwards, in disbelief at what we were seeing; and for those of us who have spent years attempting to change minds of Ministers and their officials, only to be 'frustrated' by their failure to act positively. This was the 'nightmare' we hoped would never happen... Six days after the General Election and seven days before the State Opening of Parliament.

Following consultation with All-Party Group Chairman Sir David Amess MP, it was agreed that I should position myself in London and begin to participate in the numerous television and radio interviews requesting commentary. During the next three days I managed to get some significant media coverage, including: LBC, 'Good morning Britain', BBC Breakfast TV, Channel 4, channel 5, SKY news, BBC Wales Today, Russian Television, Al Jazeera, CNN, Fox News, Victoria Derbyshire, 'Newsnight', Australian TV, both in the studio and 'live' from North Kensington.

On every occasion I spoke about the benefits of automatic fire sprinklers, and the recent research from 'real' incidents commissioned by the National Fire Sprinkler Network (NFSN) in conjunction with CFOA. I tended to use the phrase: "People don't die in sprinklered buildings", and challenged anybody who wished to disagree! I didn't have one challenge!

All-Party Group MP's Sir David Amess, Jim Fitzpatrick, Mary Glendon and Bob Neill all fronted many of the media interviews which followed.

The Prime Minister herself, issued a statement from the Office of 10 Downing Street on the day of the fire and made numerous statements subsequently, as did her Deputy Prime Minister and Secretary of State for Communities and Local Government, together with Ministers. She separately reported to Parliament on its return; this was followed with several debates in the House,



and in July, a statement said: "where works are necessary to ensure the fire safety of a building, we will ensure that lack of financial resources will not prevent them going ahead." This will be one of the issues which the All-Party Group have asked to discuss with Minister of State for Housing & Planning, Alok Sharma MP at its next meeting.

In representing the Group, I had a one hour personal interview with Dame Judith Hackitt on 23rd August, and provided seven years of correspondence between the APPFSRG and Ministers to both the Public Inquiry and the Building Regulations Review. I am expecting to give evidence to the Public Inquiry in due course.

These key documents clearly identify that all was not well the priority Government attached to fire safety - by not acting upon the repeated warnings, based on evidence. Both the Public Inquiry Team and the Independent Review will now have seen this for themselves. Additionally, copies of all correspondence between the All-Party Group and Education Ministers have been forwarded, which again provides further evidence.

Government Minister for Police and Fire, Nick Hurd MP said: "We may have to confront

an awkward truth. That over many years and perhaps against the backdrop of, as data shows, a reduced risk in terms of fire, in terms of number of incidents and deaths, that maybe as a system some complacency has crept in." This certainly wasn't the case by the All-Party Group.

The Group submitted 'terms of reference' to the Public Inquiry and Building Regulations Review, and similarly responded to Dame Judith's 'call for evidence'. The All-Party Group met on 12th July and 12th September, where it received an update from Sir Ken Knight on the work of the Expert Panel. The Group reiterated its policy on a return to Section 20 London Building Acts, and the need to retrofit sprinklers in all high rise tower blocks.

I will continue to keep everyone informed of the APPFSRG's work and support for improved fire safety in buildings, and for sprinkler protection.

If the Sector doesn't get the changes it considers necessary this time, then in my opinion it never will.

.....
Further information <http://bit.ly/2zndy1J>



A fire in the kitchen of a sprinklered flat in South Ayrshire was extinguished by a sprinkler.

Fire safety strategy



THERE ARE CURRENTLY MANY DISCUSSIONS TAKING PLACE ON HOW TO BETTER PROTECT OUR BUILT ENVIRONMENT AND OCCUPANTS FROM THE RAVAGES OF FIRE, BAFSA'S STEVE MILLS CONSIDERS WHY SPRINKLERS SHOULD FORM PART OF AN OVERALL FIRE SAFETY STRATEGY.

THE DEVASTATION THAT fire can cause to lives and property has been graphically illustrated in recent months but among many there still exists a belief that it is something that is unlikely to happen to them. Perhaps this is why we need to embed fire safety systems into our building stock.

Much mention has been made of the wider use of fire sprinklers but why have calls for these become more prominent and are they based on sound philosophy which is backed up with facts? Let us explore.

Safer for Occupants

There is a huge body of evidence that sprinklers very quickly and effectively reduce fire size, thus limiting fire spread to the room of fire origin. This occurs as the sprinkler droplets cool fire gases and wet the area surrounding the fire, thus preventing pyrolysis and eventual flashover. Photographs of residential and domestic sprinkler saves regularly show fire damage limited to below 5m²!

Recently released research (Efficiency and Effectiveness of Sprinkler Systems in the United Kingdom: An Analysis from Fire Service Data), conducted on behalf of the National Fire Chiefs Council and the National Fire Sprinkler Network, indicates that fires in dwellings where sprinkler systems operated had an average area of fire damage of under 4 sq. m. This compares to an average area of fire damage of 18 to 21m². for all dwelling fires in England between 2011/12 and 2015/16.

Herein lies the crux of the matter. Because sprinklers activate early on in a fire, very often within minutes, they are very efficient in reducing fire size and spread. One important benefit is that it gives any occupants a longer time to escape from the fire, one which is being kept in check. This benefit can be especially important to persons who are restricted in movement. Sprinklers have therefore been chosen for added fire protection in many establishments housing vulnerable persons but they can also be utilised where different evacuation procedure may be more relevant.

I am often asked where is the most effective place to put sprinklers? I sense that behind this question is a desire to reduce costs. This is often expressed in the desire to fit 'partial' systems to cover only limited areas which, in my mind, displays a real reticence in some quarters to use sprinklers in the way they are intended to work, allied to a lack of understanding of both fire and sprinklers.

To be very clear. In order to be most effective sprinklers need to be in the 'Room of Origin' of any fire and so those who wish to cut corners I say.....predict with 100% certainty in which room the fire will start and fit sprinklers in that room! Indeed there are many documented examples of where fires have developed in unsprinklered areas, only to progress to cause destruction and even fatalities.

Where sprinklers are chosen to provide this inherent safety margin, architects, designers and building managers can maximise the use of the building envelope and create spaces which both are enjoyable and safer to use. I am often surprised that many have a desire to 'engineer out' sprinklers from buildings, not recognising their huge benefits! Perhaps ignorance or folly is to blame?

Safer for firefighters

Another benefit of sprinklers is to those who have been mobilised to fight the fire, especially when one considers that it takes time to attend, then to set up equipment and safety procedures even before a fire can be tackled. This can be especially crucial when attending incidents in large premises or high rise buildings where firefighting can be especially onerous and dangerous.

At an incident involving sprinklers, firefighters are highly unlikely to encounter a developing fire requiring commensurate resources and tactics. Indeed in many recorded cases, the familiar 'Out on Arrival' (OOA) message has been sent to say that the sprinklers have indeed extinguished the fire prior to the arrival of the Fire and Rescue Services.

The simple fire timeline graph (below) shows how sprinklers intervene in a fire, bringing it under control and speeding up fire decay.

Safer buildings

There have been persistent calls for Building Regulations in England to be updated so that due acknowledgment can be made to the advances in building technology, materials employed and utilisation of buildings since they were last updated. The Grenfell Tower incident has again highlighted that it can be highly dangerous to make assumptions into a buildings performance in fire when there may be a myriad of imponderable elements, any one of which could have adverse affects. Human decision making can often negate so much of what it considered acceptable or safe. There are also calls for the protection from fire of a building itself to be encompassed in order to introduce a level of sustainability or 'future proofing' to building stock.

Sprinklers can by no stretch of the imagination be described as new technology! They are well tried and tested with over one hundred and fifty years of success in reducing the effects of fire. The fact that a building has a correctly designed, installed and maintained sprinkler system will make it inherently safer for occupants, fire-fighters and passers-by, whilst additionally providing excellent protection from fire for the building itself.

The NFCC/NFSN research shows that the operational reliability of sprinkler systems was 94% and the performance effectiveness was 99% across all building types at incidents attended by the UK Fire and Rescue Services during the period from 2011 to 2016.

What is however clear that there is no 'silver bullet' and making buildings and people 'fire safe' involves a combination of factors. These will include designing buildings to resist the spread of fire, only employing fire resistant building materials, having and

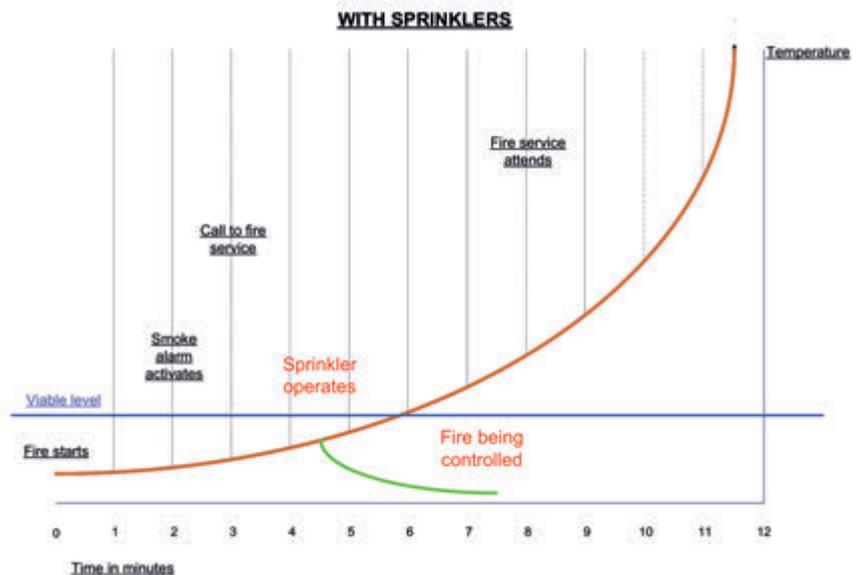


In August 2011 a fire occurred in another Callow Mount block, not the one in which sprinklers were being installed.

maintaining good fire safety precautions in place, educating occupants and managers of how to reduce the risk of fire starting and having a proactive response to any degradation or newly identified risks that may develop.

Fitting sprinklers as part of this overall solution is also dependent on using third party accredited sprinkler installers who work with approved systems and proven designs. These systems like all fire safety equipment require to be regularly maintained to ensure they operate correctly when they are most needed."

I believe that sprinklers must form part of this 'fire safe' approach for protecting the UK from fire in the years ahead.



Sprinkler Saves

MAY



4th - printers : Leicester

Workers were evacuated from a printers in Beaumont Leys in the early hours due to a fire thought to be caused by an electrical fault. One appliance from Western Station, one from Birstall and one from Eastern attended. The fire involving three compressors and one electric motor on a mezzanine floor caused severe fire damage. There was also heavy smoke damage to the first floor and light smoke damage to ground floor of the building. It is reported the fire was out by 0250

A spokesman for Leicestershire F&RS said "Two breathing apparatus were in use. And the fire was extinguished using hose reel jet and the factory sprinkler system."

19th – hotel : Gateshead

Tyne and Wear F&RS reported that three fire appliances were called to a fire which occurred at 0541 when a frying pan had been left unattended on an induction hob at a servery in a hotel at the Metro Centre. The fire alarm activated and the building was safely evacuated. The heat was sufficient however to activate a single sprinkler head which extinguished the fire prior to the arrival of the fire crews. The restaurant reopened to customers that evening.



25th – waste transfer : London

London Fire Brigade received a call to a fire in a concrete storage area containing loose refuse materials at a waste transfer site in Thamesmead. Six pumps were mobilised to what may have been a protracted incident. The fire was in about 400m³ of waste material and three sprinkler heads had activated prior to the arrival of the fire service, helping to control the fire. The fire was extinguished by the London Fire Brigade using main jets and on site mechanical digger.



25th – retail : London

At around 1600 a fire started due to an electrical fault in a drinks chiller cabinet in a 40m x20m retail unit at the Riverdale Shopping Complex in Hither Green. There

were 10 staff and 20 customers in the shop at the time and all told about 150 persons safely evacuated the centre due to the fire.

Upon arrival. London Fire Brigade personnel deployed breathing apparatus wearers with a hose reel but the fire was being controlled by a single sprinkler head in close proximity to the seat of the fire. A stop message was sent after 57 minutes and because of the late hour, the shop reopened the next day.



26th – school : Nottingham

Two fire appliances were called to a fire which occurred at 1538 in a first floor toilet block in a Primary School. The school is a new build and opened in 2016 and is owned by the local authority. The fire alarm activated and the building was safely evacuated. The heat was sufficient however to activate a single sprinkler head above the toilet cubicle involved and this extinguished the fire prior to the arrival of the fire crews. Fire and smoke damaged was restricted to minimal and contained within the toilet block and the school reopened without delay.

“SPRINKLERS PREVENTED DISRUPTION TO THE SCHOOL TIMETABLE”

JUNE



2nd – dwelling : Poole

A fire occurred at about 2330 in a dwelling in Ashley Road when some window drapes were ignited by a lighted candle that had been placed on the windowsill.

Crews from Dorset and Wiltshire F&RS were mobilised but on arrival they found that the fire had been extinguished by a single sprinkler head, located in the room of origin. Their main task was to isolate the water supply to the sprinkler system and assist in remedial action.

“THE TENANT MOVED BACK INTO THE PROPERTY THE FOLLOWING DAY”



9th – factory : Clay Cross

Derbyshire F&RS were called at 0522 to a fire in a factory involved in the production of cardboard packaging. Two appliances from the local fire station attended. The fire occurred in an industrial printing machine whereby a single sprinkler head was activated. This mitigated and contained the fire, preventing the potential fire spread to adjacent machines and stacked cardboard in the building. There was some smoke logging in the buildings.



Photo courtesy of Derbyshire F&RS



11th – flat : Dereham

Following a barbecue meal, residents returned the hot coals to a bag of unused charcoal and placed the bag inside their flat before leaving the premises. A fire ensued but luckily the flat had a BS9251 sprinkler system installed in 2011 and a single head extinguished the fire prior to the arrival of appliances from Norfolk F&RS. The sprinkler system was reinstated the following day

“WITHOUT THE SPRINKLER ACTIVATION, THE WHOLE FLAT WOULD HAVE BEEN LOST”

Sprinkler Saves

JULY



4th – retail : Rotherham

South Yorkshire F&RS were called to the ADSA store when a fire occurred in a cooking range. The store was safely evacuated while one head on the sprinkler system activated. The fire was reported to be out on the arrival of the Fire Service appliances and no fire-fighting action was required. The store reopened two days later following a clean-up operation.



12th – school : Hemel Hempstead

Hertfordshire F&RS received a late fire call to an incident at Longdean School, a Maths and Computing Academy. Upon arrival the fire crews discovered that a small fire had occurred in one of the technology classroom spaces and had been effectively extinguished by the operation of a fixed sprinkler system installed in the school which also prevented the fire from spreading causing further damage to the school structure. All pupils were evacuated safely and the school closed to ensure the safety of pupils and cleanup operations to take place. It re-opened the following day.



13th – historic mill - Macclesfield

A small fire occurred at the Grade 11 listed Regency Mill part of which was built in 1790. This was controlled to room of origin as sprinklers had activated.



19th – multi-use commercial : London

London FB received a call to a fire at the Bussey Building in Peckham at 0146. The former factory building was built circa 1887 but converted to a multiple use commercial building with bars, cafes, offices and small units. In addition, there is an open air bar and cinema situated on the roof of the building. It is fitted with a sprinkler system throughout the building

The fire was located on the 4th floor when the sprinkler system alarm actuated and alerted people to the fire and when the Fire Service arrived, 4 sprinkler heads had operated in the room of origin along with a head in the corridor outside the unit. These had controlled the fire until it was extinguished fully by the Brigade.

“THE SPRINKLERS PREVENTED A PROTRACTED AND DANGEROUS INCIDENT FOR ALL CONCERNED”



31st – flat : Bedford

Bedfordshire F&RS were called to a 5th floor fire in a 14 floor block of flats. The resident had fallen asleep leaving a chip pan on. Fortunately the fire activated the residential sprinkler system and the sprinkler head within the kitchen extinguished the fire as well as raised the alarm. 1 female casualty was escorted from the flat by fire service personnel and handed over to ambulance service.

The building is not cladded but received a fire safety audit from a fire safety officer on the day of the fire as part of the services initiative following the Grenwell Tower fire

“WITHOUT THE SPRINKLER ACTIVATION THERE WAS A REAL POSSIBILITY THAT THE OCCUPANT WOULD HAVE LOST THEIR LIFE”

AUGUST



14th – young offenders institution : Stirling

At just after 0900 Scottish F&RS received a call to a young offenders institution after a report of bedding being on fire on the

ground floor in one of the blocks. There were 31 persons in the premises at the time of the fire.

The premises is fitted with a high pressure water-mist system fed via pump and tank and one head operated in the affected area. This suppressed the fire with final extinguishment being carried out by Fire Service personnel wearing breathing apparatus using 1 hose reel. The fire was extinguished in an estimated 30 minutes to complete from time of call.



15th – flat : Ipswich

Suffolk F&RS were called to a fire in a 2 storey domestic premises in Kesteven Road Ipswich Road with 2 pumping appliances being mobilised to the incident. Crews were faced with a fire in a 1st floor kitchen, originating in a microwave oven beneath overhead storage units. The Microwave was shielded in the corner of the kitchen. 2 sprinkler heads within the kitchen had operated and controlled the fire, containing it in the room of origin. Operational crews extinguishing the fire with a handheld fire extinguisher. The BS9251 mains fed sprinkler system was fitted in April 2009.



27th – factory : Chesterfield

Derbyshire F&RS received a call at 0044 to a fire at a factory producing insulation panels. The seat of the fire was in processed briquettes made from insulating material. The two storey factory measures approximately 150m x 150m being of portal frame construction with cladding.

The fire activated two sprinkler heads on the factory's wet pipe, tank and pump supplied, system and this controlled the fire before the F&RS attended. About 20m² of the factory were directly affected with fire damage being estimated at £500

“SPRINKLERS AVOIDED THE POTENTIAL FOR TOTAL LOSS AND A LARGE NUMBER OF JOBS BEING LOST”

Sprinkler Saves



28th – school : Livingston

At 0311 Scottish F&RS were advised of a sprinkler activation at Deans Community High school which is a 3 storey PFI school, built 2010, with a total area over all floors 15,000m².

This fire started in a free standing fridge within a first floor classroom that was used to teach home economics. There were wooden cupboards and equipment adjacent to the fire. One concealed sprinkler head on the schools wet pipe, tank fed system had operated to extinguish the fire.

The school operated normally the day after the fire with only the affected classroom being un-usable. The costs associated with the fire is reported to have been in the region of £1000 with about 30m² of the floor being affected.

SEPTEMBER



8th – student accommodation : Wolverhampton

Late in the evening, West Midlands Fire Service received a call to Liberty Heights, a 25 storey student accommodation block where a fire had occurred when a fat pan was left unattended but when F&RS personnel attended the flat, the fire had been extinguished by one head on the buildings sprinkler system.

Previously known as Victoria Hall, Liberty Heights was constructed in 2009 and is a reinforced concrete, clad building with an L shaped plan measuring 10m x 20m.



18th – factory : Cannock

Two appliances from Cannock Fire Station and one Officer were mobilised to a fire at Finning CAT at 0920.

The fire was in a detached single storey pump house, approximately 4m x 4m, caused by a faulty pump supplying water to the main factory. Two firefighters from Staffordshire F&RS wearing breathing apparatus found that 2 pendant sprinkler heads had activated extinguishing the fire. The sprinkler system protecting the main factory was recently extended to the pump house following a previous incident involving a pump.



25th – flat : Ayr

At just before midnight, Scottish F&RS attended a living room fire in a 13 storey block of flats at Riverside Place. 4 breathing apparatus wearers were committed to the fifth floor flat and on arrival they found that the fire, which was in some bedding on the living room sofa, had been extinguished by a single sprinkler head.



25th – factory : Knutsford

Mid afternoon, Cheshire F&RS received a call to fire in ducting at a factory making plastic products on the Parkdale Industrial Estate. Two pumping appliances were despatched to deal with the fire in an extractor unit.

A company spokesperson reported that: "Quick reactions by ALBIS personnel, the response of the fire brigade and our sprinkler system meant that the fire was contained and damage limited@

“THE SPRINKLER SYSTEM CONTAINED THE FIRE IN THE DUCTING FOR THE EXTRACTION SYSTEM”



27th – retail : Paisley

At 0154, Scottish F&RS received a call to a reported fire at the TK Maxx store on Phoenix Retail Park. Two pumps, an aerial appliance and a salvage unit attended.

On arrival it was noted that there was a secondary fire adjacent to a roller shutter door at the store which in turn ignited property cladding at the two storey terraced building.

The fire penetrated to the first floor internal area where 2 heads on the OH3, mains fed sprinkler installation activated within the first floor ceiling void. F&RS crews used one hose-reel jet and the fire was extinguished in 12 minutes leaving fire damage of between 10 to 15 m².

Business interruption and costs were estimated at 5 hours and £20k respectively.

OCTOBER



15th – mill : Burnley

Two pumping appliances were mobilised at 0334 by Lancashire F&RS received following a call to a fire at Stanley Mill which is a three storey stone built heritage building configured into multi occupied industrial units.

The fire occurred in wooden waste products in a ground floor unit but fortunately one upright head on the buildings tank fed sprinkler system activated to keep the fire in check prior to the arrival of the Fire Service. Crews spent 90 minutes ensuring the fire was fully extinguished and ventilating the area. Damage was reported as being 50m².



18th – warehouse : Bolton

Firefighters spent the early hours tackling a blaze after smoke was reported coming from a single storey warehouse in Folds Road. Firefighters using breathing apparatus, hose reels and fans to put out the blaze, which involves cardboard bed pans and urine bottles. It is understood the fire was confined to one corner of the building where the cardboard products were stacked on pallets.

Crew manager Phil Dearden said "Because the sprinklers had activated it had suppressed the fire. But with it being cardboard and paper, it expands when water gets on it and the stacks had become unstable and collapsed. We fought the fire from as close as we could do so safely and used positive pressure fans to clear the smoke and with it being paper and cardboard burned in the middle." A fork lift truck was utilised to help firefighters.

“I WOULD ENCOURAGE ALL BUSINESSES TO INSTALL SPRINKLERS TO PROTECT THEIR PREMISES AND STAFF, THE GENERAL PUBLIC AND FIREFIGHTERS”

IF ONLY ...

AUTOMATIC FIRE SPRINKLERS HAD BEEN FITTED

Avenue Primary School, Warminster, Wiltshire

Early in the morning of January 3rd 2017 fire crews from Dorset and Wiltshire Fire and Rescue Service attended a serious fire at the Avenue Primary School. On arrival crews found a well-developed fire within a temporary classroom block.

Fire crews from Warminster attended supported by fire engines from Westbury and Frome. Sadly, the fire damage was extensive but crews were able to stop the spread of fire to the nearby main school buildings. The school was closed for the day and alternative arrangements had to be made for 60 students following the Christmas break.

Nationally over 635 fires occur in schools each year in the UK, more than one a day.

“SPRINKLERS WITHIN A SCHOOL BUILDING LIMIT THE SPREAD AND GROWTH OF FIRE AND ALLOW FOR QUICK EVACUATION OF CHILDREN AND STAFF.”

Chief Fire Officer Ben Ansell

Community Hospital, Weybridge, Surrey

Late in the evening of 11th July, fire crews from Surrey F&RS called to a blaze at a three-storey all-purpose medical centre housing GP practices, physiotherapy and other services including a walk-in day centre. People living

near the scene of the fire were evacuated from their homes for safety reasons and offered refuge inside St James' Parish Church.

The roof was engulfed by flames and there were also reports of several explosions, heard from up to a mile away.

Surrey F&RS said they had eight pumps, two aerial ladder platforms and three water carriers at the scene at the height of the blaze.

North Surrey Clinical Commissioning Group, community health provider CSH Surrey, and Ashford and St Peter's Hospitals subsequently announced "Unfortunately the building has been severely damaged. The centre will not be re-opening in the near future."



Parnham House, Beaminster Dorset

This 16th century mansion and valuable 18th and 19th century paintings were destroyed by fire after a suspected arson attack. Twenty fire crews attended the blaze.

Forth Bay Nursing Home, Kincardine, Fife

Residents and staff were forced to flee after their nursing home went up in flames on the afternoon of 22nd August.

Around 60 firefighters were called out to battle the blaze while people in surrounding buildings were also evacuated and roads in the immediate vicinity closed.

The fire service brought most of the blaze under control by around within 4 hours, but the roof at the east side of the building was completely destroyed.

Firefighters thanked locals who helped the nursing home's residents to safety.

Blochairn Fruit Market, Glasgow

A Huge warehouse blaze in Glasgow brought under control.

Firefighters were called to the two-storey Blochairn Fruit Market in the north east of the city when the alarm was raised at 0344. At the height of the fire widespread flames could be seen across the site and more than 70 firefighters were in attendance. The Scottish F&RS said despite extensive damage, much of the building had been saved.

The British Hospitality Association has predicted that the blaze would affect local restaurants, flower shops and cafes which rely on daily deliveries from Blochairn.

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SCHOOLS

Fire safety in schools to be streamlined

FIRE & RESCUE SERVICES CO-ORDINATOR FOR BAFSA AND SECRETARY OF THE NFSN, STEVE MILLS EXAMINES THE DCLG'S LATEST PROPOSALS

IN 2016 THE Department for Community and Local Government (DCLG), in conjunction with the Education Funding Agency (EFA) issued their proposals for a 'streamlining' of Building Bulletin 100, Design for Fire Safety in schools. The consultation period ended in August of that year with an unprecedented response resulting in a period of 'reflection' by those parties and several meetings with interested parties, particularly on the removal of the 'expectation' that all but the lowest risk schools would be fitted with sprinklers.

After the turn of 2017 things seemingly slowed and all went quiet from the DCLG and EFA whilst they presumably digested the numerous calls for more sprinkler provision in new schools and analysed the large amounts of data on sprinkler efficiency and actual 'saves' in schools that had been submitted. The pressure on them to produce a meaningful document did not however subside.

The horrific fire at Grenfell Tower in June 2017 has, sadly but fortuitously, helped to re-focus the minds of Government officialdom on the often poor levels of fire safety in the UK building stock and schools too have come under scrutiny.

There continues to be a concerted effort to reinvigorate the spirit of the original BB100, particularly regarding the provision of sprinklers. This comes after the Governments own admission that levels of sprinkler provision in new schools has dropped from the

pre 2010 level of 70% to a paltry 35% in recent years.

BAFSA has been among the leading proponents of calling for sprinklers to be used more widely in new schools and the Chief Executive, and others within BAFSA, have attended several meetings with the CLG and EFA on the subject.

It is encouraging to realise that this call is from across the wider fire community and not just from those who provide sprinkler protection. The newly formed National Fire Chief's Council (NFCC), which is the body which speaks for every Fire Service Chief Fire Officer/ CEO in the country, has added strong support for the wider provision of sprinklers. The National Fire Sprinkler Network, in conjunction with the NFCC, produced a compelling report (<http://bit.ly/2y8C8zW>) in May 2017 on sprinkler efficiency and effectiveness with data taken from every sprinkler incident attended by the F&RS in the past 5 years and this data has been submitted as part of the argument.

It is also perhaps unsurprising that lobbying and pressure continues to be placed upon representatives from all political parties in an effort to show clearly that sprinklers are a necessary, efficient and cost effective fire safety addition to new school buildings. One of the main ways this is being done is through the APPFRSG which consists of MP's from all political sides.



THE HORRIFIC FIRE AT GRENFELL TOWER IN JUNE 2017 HAS, SADLY BUT FORTUITOUSLY, HELPED TO RE-FOCUS THE MINDS OF GOVERNMENT OFFICIALDOM ON THE OFTEN POOR LEVELS OF FIRE SAFETY IN THE UK BUILDING STOCK AND SCHOOLS TOO HAVE COME UNDER SCRUTINY.



The group has been particularly vociferous in support of sprinklers and has been in many high level meetings with ministers, questioning government fire safety strategies and pressing for higher levels of safety with respect to fire.

And so the battle to gain a greater recognition for sprinklers in new schools continues. The most recent deliberations for the DCLG/EFA have yet to be revealed but rest assured, proponents of sprinkler provision from right across the fire safety spectrum will be watching closely and be ready to confront, should any 'watering down' of BB100 continue to be proposed.

Competent & compliant



SENIOR TECHNICAL ADVISER TO BAFSA, STEVE SEABER STRESSES THAT THOSE SPECIFYING SPRINKLERS SYSTEMS MUST ENSURE THAT THE COMPONENTS ARE COMPLIANT WITH THE STANDARD AND THAT THOSE DESIGNING AND INSTALLING THE SYSTEM ARE COMPETENT

IN THE IMMEDIATE aftermath of the fire in Grenfell Towers a number of authorities and housing providers announced their intention to retrofit sprinklers into their high-rise tower blocks.

When considering how to implement these plans it would be beneficial to consider the lessons learned by those housing providers who already have experience of retrofitting sprinklers to such premises.

Following the Lakanal House fire Sir Ken Knight, the Government's Chief Fire Advisor suggested that:

"IT IS NOT CONSIDERED PRACTICAL OR ECONOMICALLY VIABLE TO MAKE A REQUIREMENT FOR THE RETROSPECTIVE FITTING OF FIRE SUPPRESSION SYSTEMS TO ALL CURRENT HIGH-RISE RESIDENTIAL BUILDINGS"

In fairness there was no evidence to the contrary, as a result BAFSA with the support of the Sprinkler Coordination Group and South Yorkshire Fire and Rescue Service sponsored a pilot project. The retrofit of a 13 storey tower block in Sheffield was completed in four weeks at a cost of £1130 per flat. The resulting report 'Safer High-Rise Living' provided supporting evidence to assist housing providers in considering the retrofitting of sprinklers in their high-rise stock.

Authorities were advised to consider the retrofitting of sprinklers by Coroners following inquests into both Lakanal House and Shirley Towers fires.

Since the Safer Living report a number of authorities have retrofitted sprinklers which, has provided a body of evidence in terms of technical issues, solutions and costs. A number of authorities have carried out risk assessments on individual blocks and concluded that retrofitting sprinklers was the most appropriate solution. These include three blocks in Hampshire, including Shirley Towers of a specific design. Some authorities have developed a rolling programme, Oxford five blocks in 3 years and Brighton 52 blocks in 25 years.

Also the fire and rescue service have in a number of areas part or total funding where premises or occupants are considered be of higher risk.

The industry now has significant experience in retrofitting systems and the average costs are between £1500 and @2500 per flat depending on the number of rooms. The flats in Callow Mount were one bedroom units.

Post Grenfell Towers the number of authorities have stated they are going to sprinker all of their high-rise blocks has risen dramatically. BAFSA and local fire and rescue services have given assistance to a number of authorities on how to approach developing a strategy for those installations.

Standards and Third Party certification

Authorities need to consider the most suitable system for their needs. To ensure that the system is fit for purpose they should require it to comply with one of the two British Standards for Residential and Domestic suppression systems.

BS 9251:2014 – Sprinkler Systems for Residential and Domestic Occupancies – Code Of Practice

BS8458:2015 - Fixed fire protection systems. Residential and domestic watermist systems. Code of practice for design and installation

There is a need for those specifying systems to also seek to ensure that the components are compliant with the standard and that those designing and installing the system are competent. This is best achieved by requiring third party certification.

BAFSA membership policy requires new associate installer members to be registered with a third party approval body and to achieve accreditation within two years or their membership is withdrawn.

The concept of a third party certification scheme is to provide confidence to regulators, specifiers, industry and the public at large that the manufacturer, contractor, etc. has been subject to assessment of their competence against recognised industry or



Lakanal House

product standards and has satisfied these requirements.

In the UK third Party Certification (although widely recommended by many regulators and endorsed by Part B of the Building Regulations and guidance documents issued to support the current fire safety regulatory regime) is not mandatory with the exception of „Gas Safe“ certification for those involved in the installation of gas appliance

On successful completion of a contract, a contractor who is a member of a third party certification scheme is able to issue a “Certificate of Conformity” thus verifying compliance with the defined installation standards.

Contractors who are members of a third party scheme are regularly audited to various degrees depending on their standing within the scheme and usually have to be quality assessed to ISO 9001: 2008. Design personnel have to demonstrate full competence in their field of work to the satisfaction of the scheme operator.

Currently, there are three accredited bodies that operate such certification schemes for sprinkler installations. All three are UKAS accredited which means that they themselves are subject to audit and inspection.

The Loss Prevention Certification Board operates the LPS 1048 scheme for commercial automatic sprinkler installations and the LPS 1301 scheme specifically for Residential & Domestic sprinkler installations.

Warrington Certification Ltd operates separate FIRAS schemes for commercial & industrial sprinkler installations and Residential & Domestic sprinkler installations.

International Fire Consultants have product and installation and installation schemes.

Therefore by choosing a third party certificated contractor with certification from a UKAS Accredited certification body they have the confidence that in addition to the contractor having been competence assessed in their activities by the certification body, the certification body are themselves subject to assessment of their competence and abilities by UKAS.

Consequently, it is of the utmost importance that any selected contractor employed to undertake the work is fully conversant with the design practises of the correct relevant standard and can demonstrate competency within that particular scope of work.

The independent third party is confirming that the certificated company/ organisation is competent and suitable to undertake a certain type of work within recognised scope parameters.

Tested or Approved – An important question

There are a number of ‘innovative’ products in the market place many of which claim some



form of equivalency to the existing standards. It is important that specifiers are confident that the product or system the being offered is, approved by a third party body. The language used to indicate compliance can be misleading, and includes phrases such as ‘tested’, ‘witness tested’, ‘endorsed’ and ‘complies with’.

Some of these products may have been tested by one of the UKAS approved third party approval bodies, but are not included on their approved products list.

The general public, specifiers and sadly some regulators see the phrase tested by xxxx as an indication they are approved Therefore, it is important that specifiers seek confirmation of compliance as part of the tendering process, if in any doubt clarification can be sought from the third party approval body.

Competence Training and Qualification

In conjunction with OFQAL recognised qualification bodies BAFSA has developed training and qualifications, which are now being delivered at a number of colleges in the UK.

BAFSA has agreed to establish a requirement for its member companies to have a minimum proportion of its own employees and sub contractors initially of 10%

with incremental increases in future. It is also intended to develop a Level 3 qualification and to seek to embed the training requirement into the third party approval schemes.

Those specifying systems should also consider asking potential contractors for evidence of this training as an indication of competence.

Summary

The sprinkler industry now has a body of experience in retrofitting sprinklers into high-rise and low-rise residential premises. This experience means that contractors are well versed in the installation of such systems and the importance of related activities such as tenant liaison.

When developing their specification to install sprinklers housing providers should consider the following:

- Do the components and system comply fully with an appropriate British Standard?
- Is that compliance supported by certification from a UKAS accredited third party approval body?
- Is the installer certified by a UKAS accredited third party approval body to install systems?
- Can the installer provide evidence of the competence of staff?

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SKILLS AND QUALIFICATIONS

The qualification trap



RUTH OLIVER, BAFSA'S OWN SKILLS AND QUALIFICATIONS EXPERT, EXPLAINS THE KEY FACTS ABOUT RECOGNISED QUALIFICATIONS

FIRE SPRINKLER INSTALLERS face a myriad of courses, with many titles, which often presents confusion and on occasions leads to choosing and obtaining a qualification that they later discover isn't nationally recognised. So how can this be avoided?

A qualification is intended to show employers, clients, contractors, insurers and the general public what someone has learned and can do as a result of that achievement. In the sprinkler sector current and future Regulators may require a nationally recognised qualification.

Training providers can and do deliver their own training and award their own personal 'qualification' and it is important for a potential student to understand the difference between a qualification a training provider awards themselves and one delivered by an accredited training provider.

There are two types of qualifications.

- A personal qualification e.g. a provider who does not deliver an awarding organisation qualification.
- A qualification that has been delivered by a provider who is accredited by an awarding body and whose qualification is nationally recognised i.e. IQ Level 2 Certificate in Fire Sprinkler Installation,

What is the difference?

Number one above means that while the training may be excellent and recognised by the provider if it is NOT on the Qualifications & Credit Framework then it may not be recognised by key stakeholders in the industry.

A qualification as number two describes is definitely recognised and in some cases recognised in Europe and often in other countries worldwide.

If your provider's qualification is NOT on the Qualifications & Credit Framework it will not be nationally recognised.



What does this mean?

An Awarding Organisation is an 'Organisation' that has complied with a criteria laid down by Government to deliver qualifications. The 'Organisation' develops a qualification that goes through a process and if successful is placed on the Educational Framework. This means that a student who enrolls on such a course can be confident that their qualification will be recognised.

To ensure that you access a nationally recognised qualification undertake research and ask questions of the potential training provider and follow the steps below:

- If you wish to undertake a course go to <https://www.gov.uk/find-a-regulated-qualification>. You will be able to undertake a search on the subject you wish to study.
- If you have seen a course advertised check to see:
 - full title of the course
 - name of the awarding organisation e.g. IQ, Agored
 - provider is a current provider with Ofqual.
- If after looking at the information you are still unclear, contact the provider and ask for clarification.

Contact BAFSA, qualifications@bafsa.org.uk, for further advice or guidance.



HOT OFF THE PRESS

We are delighted to announce the appointment of a fourth Approved Training Provider to deliver certified sprinkler training courses. West College Scotland will be the first and only college in Scotland to deliver courses leading to a national qualification in fire sprinkler installation and maintenance.

Andrew Fogarty, WCS Head of Energy & Engineering, said: "There's an important need within the building services industry for workers to get certified in the installation and maintenance of automatic fire sprinklers. We are offering courses not only targeted at training current or new installers but also at upskilling people working in the wider industry such as plumbers or building maintenance workers. Our courses will enable them to acquire the practical skills for installing and maintaining fire sprinkler systems as well as to gain qualifications recognised nationally and supported by the BAFSA."

West College Scotland will deliver the IQ Level 2 certificated course in fire sprinkler installation and the Level 3 upskilling award in installation and maintenance of automatic fire sprinklers in domestic dwellings. The first sessions are set to start week beginning 15th January 2018 and each cohort will count only 10 participants. To find out more and book your place, contact WCS Energy & Engineering department on 0141 581 2241 or at energy@wcs.ac.uk

In England, The Manchester College and in South Wales, Neath Port Talbot College continue to offer the IQ Level 2 Certificate in Fire Sprinkler Installation with 2018 courses also commencing on 15th January. Llandrillo College in North Wales will start their 2018 timetable on 12th February. Download the registration form here bafsa.org.uk/bafsa_qual_0711/

The non-compliant conundrum



BAFSA IS INCREASINGLY BEING ASKED TO EXPRESS VIEWS ON THE USE OF AUTOMATIC FIRE SUPPRESSION SYSTEMS THAT DO NOT COMPLY WITH RECOGNISED DESIGN AND INSTALLATION CODES OF PRACTICE
REPORTS IAN GOUGH, BAFSA'S SENIOR TECHNICAL ADVISER.

USUALLY THESE ENQUIRIES relate to residential and domestic occupancies but recent examples are being unearthed of products being installed in commercial properties such as offices.

Moreover, in the light of the Grenfell Tower disaster, while housing providers appear eager to provide better fire protection for tenants – especially those in high rise blocks – BAFSA members report growing fears that a 'rush to install something quickly' may result in systems being provided that are not fit for purpose.

Those specifying systems and authorities having jurisdiction (e.g. building control and fire & rescue authorities) must therefore appreciate the risks - and possible liabilities - involved.

Superficially attractive, these systems appear to combine innovation with convenience and, if sales brochures are to be believed, lower installation costs – particularly in comparison to traditional sprinklers. Moreover, strong claims are made as to their effectiveness. However, evidence as to the overall reliability of these products in both the short and long term appears scant; and there are questions to be asked as to the validity of some of the claims being made.

In many ways this should be seen a welcome trend. It is after all, no doubt, the result of the advances made since the mid 1990s by UK fire and rescue services and organisations such as BAFSA, to encourage better and wider use of automatic fire suppression as a useful tool to protect both people and property from the effects of fire.

The danger of course is that these hard won advances could be undermined by equipment that has not undergone the same rigorous testing and scrutiny as more established products. In short, persons could be injured, or worse, despite investing in systems they confidently expected would protect them.

Innovative Products

There are available on the market a number of automatic fire suppression systems that purport to comply with or 'provide an equivalent degree of protection' as those installed to British Standards. Such products may be designed to other standards - or to none - but it is BAFSA's belief that these are unlikely to provide the same degree of certainty of reliable operation and levels of protection as systems designed and installed in accordance with established codes of practice.

Such non-standard-compliant or innovative systems include 'low-cost sprinkler protection' where the sprinkler heads are fed directly

from the property's internal cold water distribution system, 'pre-action' or 'double-knock' sprinkler systems.

Recent developments in the provision of stand-alone 'personal protection' systems which provide a free-standing, fire suppression system covering a small room or part of a larger room can now be used with confidence for the safety of immobile people provided equipment certificated to LPS 1655 by the LPCB is used. The scope for this equipment will be covered in a future British Standard.

One particular product, growing in popularity with building control officers, comes with the claim that it meets the performance standards of BS 92521 and BS 84582. On the face of it, this looks impressive; however, these tests only relate to the nozzle – not the system. It therefore seems bizarre that something installed in a building to protect life can obtain approval simply on the basis that a single component has passed a laboratory test.

With regard to 'grey water' sprinkler systems and 'rainwater harvesting' systems, BAFSA believes that unless and until such systems are specifically provided for in a British Standard care should be exercised in their use. Such systems will only discharge – and hence use water – in exceptional circumstances and so it is difficult to discern any substantive benefits at the present time.

BAFSA also takes the view that certain proprietary systems, actuated by heat or smoke sensors, providing water spray protection in kitchens and other spaces cannot be said to comply with BS 9251 or BS 8458. Nevertheless, as a risk reduction measure for a specific hazard there are indeed some useful products on the market but again, care should be exercised in specifying such systems and those involved made well aware of their limitations.

It should also be noted that all sprinkler systems supplied from a direct mains connection should, in addition, comply with the water regulations and it is BAFSA's opinion that where such systems are fed from a domestic appliance or where a WC or appliance is supplied by the sprinkler pipe network, such systems are unlikely to comply with current regulatory provisions.

British Standards

The current design and installation standards for automatic fire suppression systems in residential and domestic premises are: BS 92512 (sprinklers or BS 8458 (watermist)² Codes of Practice.

Both of these standards have undergone a significant period of gestation and critical scrutiny by a wide audience – including the fire regulator at DCLG and in the devolved governments (Scotland and Wales showing particular interest), water suppliers and UK fire & rescue services. Indeed, the current residential and domestic sprinkler code of practice, BS 9251: 2014 can trace its origins back to the American NFPA 13R and 13D codes of the 1980s; and can therefore be said to be 'well tried and tested'.

Importantly, for equipment that is usually intended to be connected to domestic water supplies, representatives from the water industry have, understandably, taken a close interest in the development of these standards and assisted with technical input. The quality of our domestic water supply must be safeguarded so this involvement has been most welcome. Indeed, it would be fair to say that without the support of organisations such as Water UK, the wider acceptance of domestic fire sprinkler systems here would not have taken place.

Nevertheless, it has to be understood that there is no legal obligation to comply with these codes or indeed any other standard, unless such requirement is written into law – as for example in the Technical Handbooks to the Scottish Building Standards.

Potential Liabilities

Specifiers, or those involved in providing guidance on the procurement of non-standard systems (including the fire and rescue services), should also be aware that at the time of writing, none of the UKAS-accredited fire certification bodies (ICFC, Warrington Certification Ltd or LPCB/BRE Certification Ltd) will allow a certificate of compliance or conformity to be issued for a non-compliant system. Those who propose or support the use of systems which do not comply with an appropriate standard should understand that they may incur an assumption of liability should such a system be discovered to be unfit for the purpose for which it was installed. It should also be noted that at the time of writing only the LPCB maintain schemes for testing the components of automatic fire suppression systems.

It is BAFSA's opinion that since reliability and efficacy is a paramount issue for such occupancies, only systems designed and installed to the British Standards should be specified for residential and domestic premises. Furthermore, owners and 'responsible persons' should seek to employ competent contractors with the appropriate third party accreditation to both design and install sprinklers or watermist systems and ensure that arrangements are put in place for future servicing and maintenance. Where component standards exist then these should also be complied with.





Warehouses & modern logistics facilities

BAFSA BELIEVES THAT AUTOMATIC FIRE SPRINKLERS ARE AN ESSENTIAL IMPLEMENT IN THE BUSINESS RESILIENCE TOOL KIT

RECENT RESEARCH HAS shown that there are 621 fires in warehouses in England and Wales each year. This means that one in five warehouses in England and Wales will have a fire, requiring the attendance of firefighters, over the course of its lifetime. In Scotland 39 warehouses were affected by fire during 2013-2014.

While there may be fewer fires in warehousing than in manufacturing, the impact on business in financial terms can be disproportionately higher through loss of property, stock and the costs of business interruption. All of these fires have economic, social and environmental costs for the locale, the country, as well as industry.

Making warehouses fire safe

Experience has shown that the most cost effective approach to protect property from

fire is to fit an automatic fire sprinkler system. This will provide reliable detection, alarm (local and remote) and fire suppression at all hours of the day and night, 365 days a year and statistics show that 97-99% of fires in sprinkler-protected buildings are controlled or extinguished by the systems.

This success is in part due to the simplicity of a sprinkler system: there are no computers or wiring – so no false alarms. The cost of maintenance is extremely low – running to less than £1000 per year on average and sprinkler systems have a very long service life. This is due to strict adherence to standards for components, design and installation. Systems in the UK are most often installed to BS EN 12845: 2015, an exacting standard which has evolved over the years.

Systems may also be installed to NFPA or FM Global standards when requested by the client or insurer. When systems are installed

by Third Party Certificated companies, the client will be provided with a Certificate of Conformity under one of the industry's third party certification scheme.

How do they work?

Sprinkler heads are strategically positioned at roof level, and if appropriate, within storage racking. These heads are connected to the water supply via a network of hydraulically balanced supply pipes, which are distributed throughout the warehouse. Once the sprinkler installation has been activated, the fire is usually brought under control quickly. The system can also operate local alarms to aid evacuation and through an Alarm Receiving Centre alert the fire and rescue service to the fact that there is a fire on the premises.

Only the sprinklers closest to the seat of the fire will operate and in many cases only

one or two sprinklers will actually activate. The water discharged by these few sprinklers is invariably less than the water which would have been used by the fire brigade.

It is essential that the supply of water needed by automatic fire sprinkler systems is reliable and guaranteed. This means that water should be supplied directly from a suitably sized service main or other approved sources of water. This could be a river, canal or water storage tank.

However, due to the size, height and fire load in today's warehouses it is likely that in most cases the public water supply will not be able to provide the necessary pressure and flow rates for the system and therefore it is common for pumps and tanks to be required for reliability.

Cost Benefits of Sprinkler Protection

The installation of sprinklers must be considered at the start of any building project. Why? Because by doing so, developer and business owners can gain a significant return on investment. Sprinklers allow a developer or business owner to:

- Enhance the project design with more open space, extended fire escape travel distance
- Increase the design density of the overall development
- Reduce building costs due to a reduction in passive fire protection elements and ratings

- Increase revenue and profit due to a greater number of units developed
- Increase the sustainability credentials of the building
- Make the project more marketable as it offers a unique selling point to the customer
- Reduce the cost of the sprinkler systems themselves if considered early
- Allow the units to be more insurable with premium reductions in most cases

Environmental issues

There are a number of other reasons for reducing fire incidents and losses attributable to fires in unsprinklered warehouses.

IN 2011, A STUDY BY BUREAU VERITAS ASSESSING THE ROLE FOR FIRE SPRINKLERS SHOWED A REDUCTION IN WATER WASTAGE AND CARBON EMISSIONS IF SPRINKLERS ARE INSTALLED IN SINGLE-STOREY COMMERCIAL AND INDUSTRIAL PREMISES.



IN THE NEWS

APRIL 2017

A fire at a delivery warehouse near Worcester was declared a major incident by police as 70 firefighters from West Midlands Fire Service battled to stop the blaze from spreading. Flames spread rapidly through the 170,000 square-foot warehouse. Households were advised to keep windows closed as police and fire services attend the scene, evacuating workers and closing roads.

SEPTEMBER 2017

25 fire engines and around 140 London Fire Brigade firefighters were called to a fire at a warehouse on White Hart Lane in Tottenham where half of a single storey warehouse and storage units were alight, with the back of the warehouse building collapsing during the blaze. Traffic chaos ensued as local roads were closed due to the risks of explosion from cylinders.



With the ever-increasing awareness of the impact on the environment of the products of combustion and of contaminated firefighting water, a reduction of any kind would be beneficial. Products of combustion can travel extensively in the water used for firefighting, and the contaminants in smoke may be deposited several miles downwind. Likewise, water used may enter domestic or agricultural water supplies and the effects experienced over a wide area.

One of the issues which most concern the fire and rescue service is the storage of high-risk materials – especially those involving flammables, toxic chemicals or substances, which can produce serious environmental damage. Modern warehouse/logistics management often demands quick turnaround of consignments and it is possible that the warehouse managers may not be aware of exactly what is being stored.

Recent cases have pointed out the dangers to which fire fighters are exposed – especially in very large single storey buildings. Sprinklers control or extinguish fires before the fire service arrives and allow safer access for crews to extinguish any residual burning.

Download BIF 5: <http://bit.ly/2yaeAeg>

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About Marioff and HI-FOG®

Marioff is a leading developer of water mist fire protection technology and supplies system solutions worldwide. The company's innovative HI-FOG® water mist fire protection system safely controls and suppresses fire using significantly less water than conventional sprinkler systems, reducing water damage, clean-up time and operational downtime. Marioff is part of UTC Climate, Controls & Security, a unit of United Technologies Corp, a leading provider to the aerospace and building systems industries worldwide.



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THOUGHTS FROM "TEAM BAFSA" POST GRENFELL

How the Grenfell tower incident has changed the Sprinkler Industry



I BECAME AWARE of the unfolding events at Grenfell Tower courtesy of Emirates Airways, as Cheryl and I headed off on our summer holiday; so for me, the first seven days after the fire felt rather strange considering the huge impact the tragedy made on the country. We returned home to volumes of emails and an overflowing telephone voicemail system.

One of the first events I was invited to was the Housing Conference in Manchester on 28th & 29th June. This was a two-day event that BAFSA had sought to attend in previous years but without success. I gave a short talk on the value of sprinklers and took part in a group discussion that was well attended. I was supported by Sam Webb (who had to take time out to do TV interviews) and fielded a lot of good questions from an audience that included many local councillors.

Subsequently, BAFSA has received large numbers of enquiries from housing providers about the issues surrounding sprinklers in both new and existing buildings and a number have invited me to give CPD presentations to their management teams. To date these include: The Guinness Partnership, Accord Housing and Places for People. In addition, I have met representatives of Birmingham City Council (the largest housing authority in Europe) who wish to explore the implications of retro-fitting sprinklers in all their high rise blocks.

BAFSA was back in Birmingham in October, this time to the NEC and 'Construction Week'. Together with Ritchie O'Connell we gave two presentations on each of the three days of the show.

However, interest in sprinklers has certainly not been confined to the housing sector alone and I've given CPD talks to Wiltshire Building Control and Sefton Council in Merseyside. Furthermore, I was pleased (albeit at rather short notice) to give a talk to the 'Storage Equipment Manufacturer's Association' (SEMA) at their Combined General Meeting on the 14th Sept. In view of BAFSA's significant interests in the warehouse and storage industry this should be a useful contact and I look forward to firming up our relationship with SEMA.

In general therefore, the sprinkler message has certainly been well received and many of the enquiries I've handled, very sensibly, relate to design and installation standards and competent contractors. However, with these new opportunities also comes a number of challenges and an area that I believe BAFSA will need to address will be in helping responsible persons to test and maintain systems as many contacts have expressed an interest in enabling in-house teams to carry out this work.

IAN GOUGH





WHILST THE GRENFELL Tower incident will, undoubtedly change the sprinkler industry, as it will change the fire sector as a whole. I do not believe that the industry has changed because of this incident...yet!

What has changed, and will continue to change, is the environment within which the sprinkler industry operates, and the industry will need to adapt to this changed fire safety landscape.

A PESTLE analysis of the operating environment shows, in my opinion, changes in several factors at this moment in time, with the possibility of further changes in the mid to long term.

Whilst it is reasonable to assert that there is, so far, little change in the economic technological and environmental facets of PESTLE, crucially the political and sociological factors are in the process of change, and the shift in these factors may bring about change in the legal outlook.

The political component has historically been problematic for the sprinkler industry, particularly in the domestic and residential sector. However, the pressure being brought to bear on both local councils and Governments across the UK is likely to bring about, if not greater acceptance of sprinklers by politicians and civil servants, then certainly an increased willingness to discuss sprinklers as a viable solution. The previous reticence to legislate for sprinklers in England may give way to an increased willingness to do so in the harsh light of public interest. Politicians are, above all survivors, and public perception of sprinklers is changing.

This change in public perception, forming part of the sociological factors of PESTLE affecting the industry, is a key driver for the political change discussed above. In the UK the common perception of sprinklers amongst the general public has largely been informed by television and films, where sprinkler actuations almost invariably involve system wide operation, often accompanied by klaxons and strobe lights! Regrettably, it is this perception which has fuelled the negative sprinkler myths of which we are all too aware, the Grenfell incident has dragged sprinkler systems into the spotlight. Fortunately, sprinkler systems are more than capable of withstanding this increased scrutiny and can only benefit from greater public visibility. There has, as a direct result of the tragic incident at Grenfell Tower, been a shift towards domestic and residential sprinklers being viewed as an aspirational product by householders.

The reluctance of successive UK governments to legislate for sprinklers is well documented, in recent years we have seen this reluctance replaced in the devolved administrations by an increased willingness to legislate for sprinklers in the domestic and residential environment. This places the Government at Westminster in an increasingly isolated position. As a result, we may, in the mid to long term see UK wide legislation for sprinklers within certain types of accommodation, and whilst this is unlikely in the first instance to be as far reaching as the Welsh legislation, it is certainly to be hoped that high rise accommodation would be required to be fitted with sprinklers.

It is this changing environment to which the sprinkler industry needs to adapt, sprinklers are in the process of moving from being a niche product, trusted and valued by those in the know, to a more widely accepted and desirable product. This will bring about increased demand and the industry must gear up to meet this increase.

RITCHIE O'CONNELL





SINCE THE TRAGEDY at Grenfell, Scotland like many areas throughout the country, has seen a major interest in the value that sprinklers can offer to bring safety and reassurance to the public.

Although there has not been the same pressing issue around cladding on high rise social housing in Scotland, local authorities have been under considerable pressure from the public to ensure their safety. To this end the Scottish Government have set up a high level 'Ministerial Building Standards Review Group' and a 'Building Standards Review Panel' to examine a wide-ranging series of issues. This will undoubtedly will shape the future of fire safety in Scotland for some considerable time with hopefully sprinklers playing a major role. David Stewart MSP for Highlands and Islands also plans to bring a private members bill to Holyrood to look at extending the adoption of sprinklers to at least new build social housing. To this end I am now scheduled to present to the Cross Party Group on accident prevention at the Scottish Parliament this month (November).

We recently spent three days at the SNP's annual conference in Glasgow, where along with the Business Sprinkler Alliance we could meet face to face with many of the MP's and MSP's from Scotland and able to enlighten them on the value sprinklers can bring to the built environment. Many thanks to Tom Roche from FM Global for supplying the virtual reality glasses that were extremely popular.



Kirsty Blackman Blackman, MP for Aberdeen North and Deputy Westminster Leader, watching a Virtual Reality side by side burn on the BSA/BAFSA stand at the SNP Conference in Glasgow.

DANNY DOHERTY



THE GRENPELL TOWER has had a major effect on the industry providing great opportunities for the wider use of but equally some serious and major challenges.

In the short term it has created a demand from housing providers for something in excess of 600 additional high-rise installations, some with unreasonably short timeframes. This demand exceeds the current capacity of sprinkler installers as highlighted by the BBC survey with some installers reporting a potential backlog of work and some closing order books. It is relatively easy to access components to meet the increase demand, which is likely to require in the region of 400,000 heads (worldwide sales are in excess of 80 million per year The UK currently use 200,000 residential heads and 2 million commercial heads per annum). However, there are real challenges for the installation side of the industry in meeting housing provider expectations. These include, growing capacity and maintaining quality, the latter important to maintain the reputation of the industry.

BAFSA members need to ensure their workforce and any new employees are able to demonstrate competence. This will be best achieved by utilising the Level 2 training courses delivered by colleges in the UK. To deal with the immediate need it may be most appropriate to use the "Upskilling Award" developed for Wales to recruit existing appropriately qualified plumbers to address the shortfall.

A key message that I have been giving to housing providers is the importance of using components and installers who have third party approval. I have highlighted that there are a number of unscrupulous people who have identified an opportunity offering to provide sprinklers and water mist systems. Some of these claim to be using products that have been "tested" which is interpreted as approved. BAFSA will need to be proactive in countering these claims.

This is a time of great opportunity for the industry. In the immediate aftermath there is the immediate reaction from many housing providers to retrofit their high-rise blocks. It is also inevitable that there will be some legislative change requiring the wider use of sprinklers. The continued growth in the requirement for suppression systems will in my opinion provide a positive future for the industry, which it must be prepared to fulfil.

STEVE SEABER

Members' News

BAFSA Trainee of the Year 2017

Keith Taylor
DOMESTIC SPRINKLERS
Neath Port Talbot College

Citation : 'Keith is an exceptionally hard working, committed and dedicated student who has demonstrated significant enthusiasm towards his studies. Keith enjoys excellent working relationships with his peers and tutors and uses his considerable industrial experience to contribute to teaching sessions. It has been a pleasure teaching Keith and the industry can feel secure that it has such a talented and skilled person working within it.'

George Chambers
FVS
The Manchester College

Citation : 'George started at The Manchester College in November 2016 on the day release programme for the level two qualification. George works for FVS Rochdale, when George started the course his role within the company was an apprentice fitter, he has since worked his way up to the servicing and installation side of the company. George has been a willing and able student whilst studying the qualification. George has actively carried out installations in the workshop. George has also demonstrated his servicing skills to the other learners in the group. The portfolio of evidence that George has produced is exemplary and the IQA of the College has praised his efforts. Overall, George deserves the accolade of being the student of the year and if he continues in this manner, he will be a credit to his company and the industry.'

Jonathan O'Neill, managing director of BAFSA member, the FIRE PROTECTION ASSOCIATION was awarded in the Queen's Birthday Honours for services to fire safety. He received his OBE on Tuesday 31 October at Buckingham Palace from Prince William, Duke of Cambridge.

VIKING PLASTICS has updated their UL Listing for BlazeMaster CPVC piping for use in unfinished basements in accordance with

NFPA 13D. Viking BlazeMaster CPVC is now Listed for exposed composite I-Joists and solid wood joists up to 16" in depth. Additionally blocking requirements have been expanded to 40 ft., and sprinkler spacing has been expanded to 16 x 16 ft. Will Robinson is the new Market Development Manager - UK and Europe for BlazeMaster CPVC Piping System.

The executive team at TRIANGLE FIRE SYSTEMS would like it noted that a lot of London Boroughs and County Councils have been taking steps to sprinkler protect their buildings following the recommendations made from the Lakanhall enquiry. They have prioritised buildings that house the most vulnerable which typically are low rise but there is a good argument for that as these residents are more likely to have a fire and have difficulty in evacuating the building in the event of fire.

The media seem to portray that Boroughs/Councils have taken no heed of the recommendations to install sprinklers which is not actually the case. We have and still are installing to buildings for the following London Boroughs, Barking and Dagenham, Lewisham, Southwark, Hackney as well as to Council properties in Brighton, Coventry and Bedford.

Interestingly Chelmsford decided to sprinkler protect their one and only high rise building and the following link gives detail of that installation.



FIRE PROTECTION SERVICES LTD has installed a sprinkler system for a special Children in Need episode of DIY SOS: The Big Build. The BBC's flagship home renovation programme; which has been running for 18 years, and attracts up to 5 million viewers per episode in its prime time slot on BBC One. The award winning show, presented by Nick Knowles and his team of Billy, Mark, Chris and Jules, takes on extremely Big Builds across the country in just nine days.

TANDI SPRINKLERS are now accredited with FIRAS for commercial/industrial as well as domestic/residential installations.

A petition on change.org calling the Prime Minister to make it a legal requirement for all high rise buildings to have adequate fire safety measures, including sprinklers, installed has received over 228,500 signatures. A 38 Degrees petition entitled Grenfell Tower : never again – improve fire safety in tower blocks to make sure the tragedy in Grenfell Tower is never repeated has in excess of 203,500 signatures.

BAFSA members TYNE AND WEAR FIRE AND RESCUE SERVICE welcomed the news that sprinklers costing £1.4m are to be retro-fitted in tower blocks owned by South Tyneside Council. Council lead member for housing, Allan West, said "We have done a huge amount of work in recent years to make sure our tower blocks are safe. The cladding systems are fireproof and comply with building and planning regulations but, as an extra reassurance to residents, we want to take action to retrofit sprinklers in all four blocks."

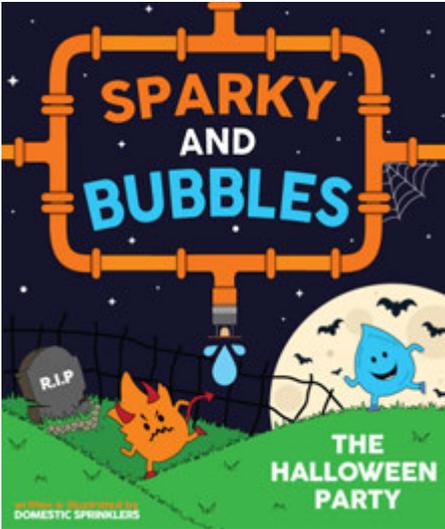
Tyne and Wear Fire and Rescue Service assistant chief officer Alan Robson welcomed the move and said "sprinklers save lives".

From the 1st December, HENDERSON INSURANCE BROKERS LTD will become Henderson, an AON company and with the official company name of AON Henderson Ltd.

New website

Rapidrop has launched its new website focusing on customer experience, improved functionality, and easy navigation with a clean and modern design. The new responsive site has improved search functions, project list builder, and knowledge base. Visit www.rapidrop.com

Members' News



DOMESTIC SPRINKLERS have produced a book which is currently being used as an education programme and also for the Shirley Towers project. The original Sparky and Bubbles characters were designed and sculpted by Penny Taylor, a past employee at Domestic Sprinklers. In early 2017 Connor Saddington a design employee of ours, went about transforming these two vinyl toy form characters in to a children's seasonal fire safety book, using computer illustrating software.

Through distributing the series of Sparky and Bubbles books, we hope to educate an upcoming generation. As they grow into adults and consider owning their own homes they will hopefully already be aware of Fire Sprinklers and their benefits.

The Sparky & Bubbles books are free to assist installations in multiple housing units in addition to offering local fire and rescue free copies. If the wider market would like a copy of the books, we would be more than happy to provide them at the cost of printing them. online.flipbuilder.com/qwpt/hadn/

Have your say

The Scottish Government set up a Ministerial Working Group (MWG) to oversee a review of building and fire safety regulatory frameworks in Scotland.

The MWG will be considering wider proposals for actions to reduce the risk of fire and will look at fire safety in other types of building (such as schools and hospitals).

As a first step, the MWG agreed that this consultation concerning fire and smoke alarms in Scottish homes should be prioritised.

bit.ly/2zzZCCF
Closing date 1st December.



New members

- Churches Fire :
Level 3 Installer
- Dorset Fire Sprinkler Systems :
Level 1 Installer
- Evalve :
Supplier
- Falcon Fire :
Level 1 Installer
- Lincolnshire Fire & Rescue Service :
Associate organisation
- Project Fire Products :
Supplier
- Sprinkler Tech :
Level 1 Installer
- West College Scotland :
Associate organisation



On Friday 8th September HRH Edward visited Staffs FRS HQ and NATIONWIDE FIRE SPRINKLERS put on a live fire sprinkler demonstration for his royal highness. HRH was interested in the demonstration and remarked upon its performance. He asked questions about the types of sprinklers on display and despite the rain, enjoyed the display.

A NEW BAFSA banner is included in Nationwide Fire Sprinklers sprinkler demonstration unit. Members may like to use it on their correspondence, corporate livery or website. Email marketing@bafsa.org.uk for a hi res version.



BAFSA CHALLENGE 2017

Fierce competition fights off damp spirits

IT WAS WITH heavy heart many of the 2017 BAFSA Challengers arrived to compete in this year's series of Challenges. The skies were leaden, the drizzle persistent and it was cold. Nonetheless after a bacon buttie, the nine teams took to the field of play with a wry smile and waterproofs.

Fortunately the weather did not deteriorate and enthusiasm for beating one's opponents overcame disheartenment...

2 years of perfect weather conditions had made some complacent.

After an afternoon of Challenges rounded off by a heavily contested football final, the final results were calculated. With only 5 points dividing the top three teams it was a close run thing right up to the wire.

With the results in and the various trophies and medals awarded, hunger and thirst were assuaged by a barbecue and a well stocked bar.



RESULTS

BAFSA Challenge 2017

- WINNERS : SPP Pumps
- SILVER MEDALLISTS : API Vipond
- JOINT BRONZE MEDALLIST : A&F Sprinklers
- Halls Angels
- Individual Challenge Winners
- SEGWAY : A&F Sprinklers
- LASER CLAY PIGEON SHOOTING: A&F Sprinklers
- ARCHERY : Applications Engineering
- HUMAN TABLE FOOTBALL : A&F Sprinklers
- CORNHOLE : SPP Pumps
- QUIZ : Hall & Kay
- BLINDFOLD SHEPHERDING : Halls Angels
- Notable Challengers
- Chloe Bale
- James Billingham
- Jason Griffiths
- NO LIMITS award
- Halls Angels

These BAFSA members enabled the BAFSA Challenge Day to be enjoyed by over 100 members. Thank you for your support





BAFSA 2017 Golf Day

WITH AN EARLY and very wet start, even the great bacon butties and hot mugs of coffee could not bring a smile to many of the golfers who tee'd off from 0700 for the 2017 BAFSA Golf tournament.

The seasoned golfers came well prepared but less experienced had to lay hands on any waterproofs available to protect them from the dismal weather.

Despite the gloom, some excellent golf was played (some of the golfers even admitted to enjoying their 18 holes) and everyone completed in time to join the Challenge in the afternoon.

The results were skillfully (and thankfully) calculated by the Mottram Hall Golf Pro and prizes awarded as follows:

- Individual : Andrew Cable
- Team : SPP Pumps
- Yellow Ball : SPP Pumps (team 2)
- Nearest the Pin : Jamie Grantham
- Nearest the Pin in 2 shots : Steve Pilling
- Longest Drive 18th Hole : Steve Pilling



Seminars & conferences

2017 HAS BEEN an exceptionally busy year for the BAFSA team who for 6 weeks in the summer were constantly responding to media interviews and requests for presentations. Nonetheless 3 well attended seminars went ahead in different regions of the country.

In March we were once again in London, hosted by London Fire Brigade and skilfully chaired by Nicholas Coleshill. More than 115 delegates were registered to attend this event which focussed on protecting the elderly and vulnerable from fires in residential care premises and specialised housing.

Cambridge F&RS invited us to collaborate on an event at their HQ in the centre of Cambridge at the beginning of May. This proved to be well received with over 85 delegates listening to a packed and varied programme concentrating on new developments and the elderly and vulnerable.

What has now become an annual event in Staffordshire, BAFSA and Staffordshire F&RS hosted a packed seminar entitled "Sleeping risks and new developments" in the very comfortable surroundings of Branston Golf Club.

The aim of all of our 2017 seminars was to demonstrate the increasing evidence that people who live in buildings with sprinklers enjoy a much higher level of protection from fire than those who lack this additional safety system. The programme highlighted new build and retrofit projects and practicalities.

Calendar

4th December

Fire protection in multi storey, multi-use buildings. London Fire Brigade HQ, London

7th March

Sprinklers as a robust means of fire protection and risk management. West Midlands Fire Service HQ, Birmingham

13th & 14th June

EFSN Fire Sprinkler International Conference & Exhibition, Stockholm

28th June

BAFSA Golf Tournament & BAFSA Challenge Day 2018, Mottram Hall

13th November

BAFSA AGM & BAFSA Annual Dinner, Marriott Forest of Arden Hotel

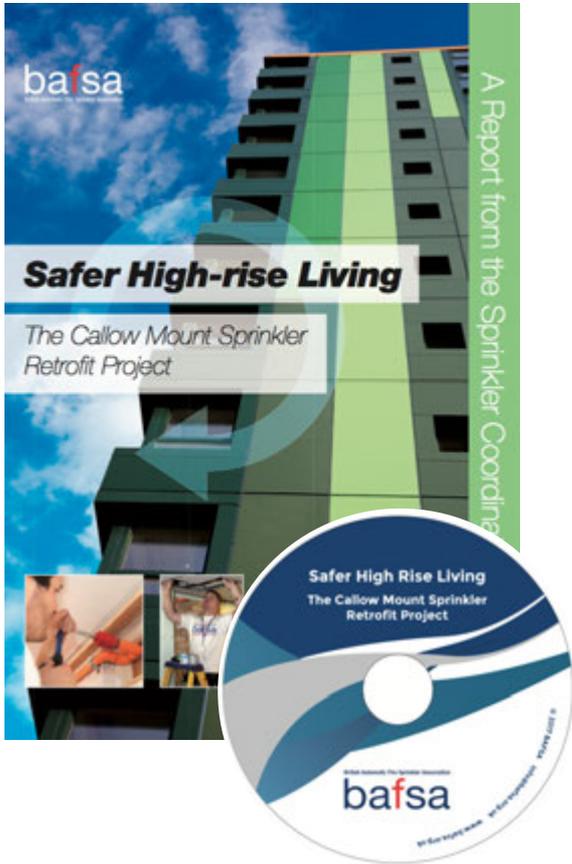
14th November

BAFSA Fire Sprinkler Conference & Exhibition, Marriott Forest of Arden Hotel

We would enjoy hearing from any of our Fire & Rescue Service colleagues who would like to host a seminar during 2018 in order to further promote local and national sprinkler awareness. Email marketing@bafsa.org.uk or call 0179553011 if you would like to discuss the possibilities.



PUBLICATIONS



SOON AFTER THE tragic fire in Grenfell Tower, BAFSA reprinted “Safer High Rise Living – The Callow Mount Sprinkler Retrofit Project”. We believe that this case study is as relevant in 2017 as when it was written. The accompanying DVD was also republished to contain an electronic version of the report.

In the ensuing months it became apparent that BAFSA needed to take the sprinkler message to a wider audience... those people living in properties without robust fire protection systems. As a result an eight page pamphlet, entitled ‘Fire sprinklers will protect my family & the things we love’, was commissioned and published in November 2017. We believe this will assist Local Authorities, Fire & Rescue Services and other fire professionals when discussing sprinklers with the general public.



British Automatic Fire Sprinkler Association

bafsa



Certificate in Fire Sprinkler Installation

Course Dates and Venues

Neath Port Talbot College, South Wales

Block Release Course

15th January 2018 (induction) (10 places)
followed by college attendance on:
15th and 16th Jan
12th and 13th Feb
19th and 20th March
23rd and 24th April
21st and 22nd May

The training sessions incorporate theory and practical aspects of the qualification.

All sessions must be attended.

Variety of grant funding available to minimise cost*

Small Company Cost £225, Medium Company Cost £300, and Large Company Cost £375

*If you would like further information on establishing eligibility, please contact NPTC direct on 01639 648143

Llandrillo College, North Wales

Block Release Courses

Monday 12th February 2018 (induction) (6 places). College attendance required at ALL the following sessions:
12th – 16th February
26th – 30th March
28th May – 1st June
25th – 29th June
9th July – 13th July (completion)

Additional distance learning will be required.

The Manchester College, England

Block Release Course

Monday 15th January 2018 (induction) 12 places.
Followed by college attendance on:
15th - 19th January 2018
12th -16th March 2018
23rd - 27th April 2018
4th - 8th June 2018
10th -14th September 2018
8th -13th October 2018
12th - 16th November 2018

The training sessions incorporate theory and practical aspects of the qualification. All sessions must be attended.

The Manchester College

Day Release (1 courses)

Monday 15th January 2018 (12 places)
Training to take place every Friday (36 weeks)

West College, Paisley, Scotland

Block Release

Monday 15th January 2018 (induction) 10 places.
Followed by college attendance on:
16th – 19th January 2018
12th – 16th March 2018
23rd – 27th April 2018
4th – 8th June 2018
10th – 14th September 2018
8th – 13th October 2018
12th – 16th November 2018

The training sessions incorporate theory and practical aspects of the qualification.

All sessions must be attended (7 x 1 week blocks) and distance learning may be involved.

Day Release

Commences Week Beginning Monday 15th January 2018, 10 places.

Training to take place every Thursday (36 weeks)

Course Fees

A College Course Fee of £1200, to include registration and all learning materials, is applicable to each candidate. BAFSA are pleased to inform their members that they have negotiated a fee reduction for their members reducing the fee to £1050.

Government funding

The Manchester College has now secured government funding for the IQ L2 Certificate in Fire Sprinkler Installation. This is national recognition that BAFSA's IQ L2 Certificate in Fire Sprinkler Installation is a qualification of note. It also achieves a significant reduction in course fees at The Manchester College:

Non members : £500
BAFSA Members : £450

BAFSA will be accepting candidate registrations for onward forwarding to the respective College in time for course commencement. To secure a place, please complete the booking form below and in the first instance return it to qualifications@bafsa.org.uk.

Registration form (complete one for each Learner)

I wish to register a candidate for IQ L2 Certificate in Fire Sprinkler Installation course



at	<input type="checkbox"/> Manchester College, England	<input type="checkbox"/> Day Release	<input type="checkbox"/> Neath Port Talbot, South Wales	<input type="checkbox"/> Day Release	<input type="checkbox"/> Llandrillo College, North Wales	<input type="checkbox"/> Day Release	<input type="checkbox"/> West College, Paisley, Scotland	<input type="checkbox"/> Day Release
	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release	<input type="checkbox"/> Block Release
	date		date		date		date	

ORGANISATION	<input type="text"/>	<input type="checkbox"/> BAFSA member	<input type="checkbox"/> Non-member
AUTHORISED BY	<input type="text"/>	NAME OF CANDIDATE	<input type="text"/>
EMAIL	<input type="text"/>	EMAIL	<input type="text"/>
TEL	<input type="text"/>	TEL	<input type="text"/>