



Sprinklers in schools position statement

NFCC strongly recommends that sprinklers should be fitted in all new and refurbished schools. Government should regulate or provide improved guidance which should be unequivocal and clear in this respect. Such clarity would be in line with the initial findings of the Dame Judith Hackitt review which states 'Regulations and guidance must be simplified and unambiguous'.

The solution would be to standardise the risk assessment process and ensure that designers of all new schools must use the fire risk assessment tools provided in BB100, to determine if sprinklers are appropriate based on risk. Where this indicates that sprinklers are required, an alternative solution which doesn't provide automatic sprinkler protection, should not be permitted.

NFCC believes that this is necessary to prevent unnecessary disruption to our children's education and damage to what can be years of children's hard work. Eliminate the impact of loss and disruption to the community, and of community facilities and drastically reduce the cost to the tax payer of repairs and rebuilds of schools lost to fire.

NFCC is clear that this is not a matter of life safety. There is no evidence that there is an issue with fire-related life safety in our schools. NFCC believes that this is a critical matter of fitting sprinklers for property protection and that an opportunity to eliminate the impact of fire in our schools is being missed.

Background

In England the Building Regulation guidance setting out Fire Safety in Schools is contained in a document named Building Bulletin 100, designed by the Department for Education (DfE), and which has both a life safety and property protection element in it.

Compliance with Building Bulletin 100 is deemed to satisfy the requirements of the Building Regulations. Around a decade ago UK Fire Chiefs and others gave their support to a revision of BB100 calling for the introduction of sprinklers in newly built schools.

As a result, BB100 was amended to include the following commitment from the Government in the Ministerial forward: "It is now our expectation that all new schools will have sprinklers fitted. Any exceptions to this will have to be justified by demonstrating that a school is low risk and that the use of sprinklers would not be good value for money."

In 2016 BB 100 was revised by the Dept. for Education and the above wording was replaced with the following:

"The Building Regulations do not require the installation of fire sprinkler suppression systems in school buildings for life safety and therefore BB 100 no longer includes an expectation that most new school buildings will be fitted with them."

This revised wording was circulated for consultation by the Department for Education. It immediately received heavy objections from across the fire sector, resulting in a decision to pause and further review BB100.

The Education and Skills Funding Agency (ESFA) Director of Capital and officials met with many representatives from across the fire sector, including the National Fire Chiefs Council, Fire Brigades Union, National Fire Sprinkler Network and other groups in late 2016 to better understand the concerns raised during the consultation on BB100.

Following a meeting of the All Party Parliamentary Fire Safety & Rescue Group (APPFSRG), Lord Nash and his officials on 23rd February 2017, DfE officials were charged to speedily produce a further update of the revised BB100 Document which would take account of the concerns raised by the APPFSRG Group.

In April 2017, Sir David Amess received a letter directly from one of the DfE's officials, seeking the All-Party Group's approval to the insertion of one paragraph, as a solution to the concerns raised.

This was declined, on the basis that the evidence provided by fire and rescue services suggested that when a risk assessment confirms that automatic sprinkler protection is appropriate, the client seeks a loophole not to install automatic sprinklers, and the Education Funding Agency is permitting this route to be used, knowing that only Building Bulletin 100 contains both a life safety and property protection element - unlike the alternative, which doesn't have a property protection element.

There followed a period of a further three months without any response from DfE, at which point Sir David Amess sought an update. On 24th July 2017, Lord Nash responded saying that the General Election had delayed the DfE's response and the Grenfell Tower fire had caused DfE to halt its revised draft guidance to take account of any findings from the Expert Panel or the Public Inquiry. Meanwhile the existing BB100 would remain extant and unchanged. In a meeting in December 2017 officials from DfE confirmed that this was still the case.

According to UK fire statistics for England, there were 686 fires in schools in 2016/17. The Association of British Insurers say the most expensive school fires typically cost around £2.8 million to address and, over the last four years, an average of 24 of these large loss fires have occurred every year totaling £67.2million.

Aside from the financial impact, UK school fires disrupt the education of an estimated 90,000 children and students annually. While the Government's expectation was that most, if not all, new schools would be fitted with sprinklers, recent estimations show that the rate has diminished from around 70% of new schools being built with sprinklers in 2007, down to a mere 30% as of December 2016 (The 70% figure came from figures agreed by former Minister Vernon Coaker MP at a meeting with Zurich Mutual Insurance).

The 30% figure was provided by Larry Stokes of Zurich and was acknowledged as correct by Mike Green at the Hon. Admin Sec (APPFSRG)'s meeting with him last December 2016).

Current Situation

During the consultation process to review BB100, strong representation was made from all sections of the fire community, including the National Fire Chiefs Council, to reconsider the removal of the expectation to fit sprinklers in new schools.

As a result, DfE decided that the present BB100 would remain in place until a revised form of words could be found, which deals with the concerns raised. Therefore the wording setting out the expectation of Government remains, pending the Grenfell Tower Public Inquiry and any matters arising.

“All new schools will have sprinklers fitted. Any exceptions to this will have to be justified by demonstrating that a school is low risk and that the use of sprinklers would not be good value for money”.

However, the problem remains; if only 30% of newly built schools are protected with sprinklers, the expectations of Government set out in the guidance clearly are not being met.

Why is this happening? While the 2007 edition of BB100 introduced an expectation that sprinklers would become the norm, and the guidance also provided risk assessment tools to help determine whether the provision of sprinklers is appropriate, the guide also provided an alternative route as follows:

“A designer is not required to follow the guidance in this document, but may adopt an alternative approach, possibly based on fire safety engineering. This is a risk-based approach, with the aim of providing an acceptable level of safety that gives good value for money. The onus is on the designer to demonstrate that the design results in an appropriate safety level, as good as or better than that achieved by following the detailed design guidance here”.

The above paragraph taken from the Executive Summary of the 2007 edition of BB100 provides designers with an alternative approach to fitting sprinklers that they argue is based on providing value for money.

With, typically, school fires in England occurring at a rate of around 600 plus fires a year, and with the biggest of these fires typically creating costs of around £2.8 million (or £67.2million annually), the argument for value for money seems weak given that the provision of a sprinkler system for a medium sized school, during the building stage is around £100,000 (about the same cost as providing carpets!).

Recent independent research establishes that over a five-year reference period there were 83 fires in educational premises where sprinklers were fitted. In each occasion where the sprinklers were expected to operate, they did so. They contained and or extinguished the fires, dramatically reducing fire damage and making reopening of the school much easier, while minimising the disruption to education and the use of schools as community assets.

NOTE: sprinklers are mandatory in new schools in Scotland and Wales.