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Chiefs Council

The professional voice of the
UK Fire & Rescue Service

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Building Bulletin 100: Call for Evidence
Technical Support Division
Department for Education
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Sent via email to: BB100.consultation@education.gov.uk

31 May 2019

To the Department for Education,

Please find attached the National Fire Chiefs Council (NFCC) response to the consultation paper '*Technical review of Building Bulletin 100: Design for fire safety in schools*'. The NFCC welcomes this call for evidence on BB100.

The NFCC is the professional voice of the UK fire and rescue services and is comprised of a council of UK Chief Fire Officers. This submission was put together by the NFCC's Building Safety Programme Team, with input from the NFCC's Fire Engineering and Technical Standards (FETS) Group through the Protection and Business Safety Committee. The Committee is comprised of building fire safety specialists from across the UK fire and rescue services.

In the wake of Dame Judith Hackitt's Independent Review of Building Regulations and Fire Safety, it is vital to examine the shortcomings of the system. We are pleased to see the Department aims to ensure this important guidance will align with changes being considered to the wider suite of fire safety guidance.

The NFCC considers that all new schools, or those undergoing refurbishment should have sprinklers fitted.

We trust the attached submission is helpful and welcome further discussions following the outcome of the consultation.

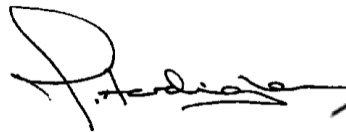
Yours sincerely,

Roy Wilsher



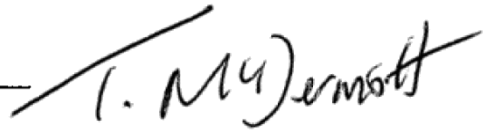
**Chair, National Fire
Chiefs Council**

Mark Hardingham



**NFCC Protection and
Business Safety
Committee Chair**

Terry McDermott



**NFCC lead for
Automatic Water
Suppression Systems**

Introduction

The National Fire Chiefs Council (NFCC) welcomes the technical review Building Bulletin 100 (BB100). We are pleased the Secretary of State for Education is committed, as part of wider work on fire safety across government, to work with the Secretary of State for Housing, Communities and Local Government to join up the reviews of fire safety guidance.

The NFCC recently responded to the call for evidence on the full technical review of Approved Document B. A copy of our full response¹ is available on the consultations page of our website: <https://www.nationalfirechiefs.org.uk/Consultations>

According to UK Fire statistics, in England alone there were 686 fires in schools in 2016/17. The Association of British Insurers has reported² that the most expensive school fires typically cost around £2.8 million to address. Covering a four year period, an average of 24 large loss fires occurred every year totalling £67.2million.

Aside from the financial impact, UK school fires disrupt the education of an estimated 90,000 children and students annually³. Whilst 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. A recent study by the BBC⁴ suggests this is as low as 15% currently.

In 2016/17, the Department worked with the fire sector to update BB100, following concerns regarding a draft revision shared through a closed technical consultation. With only 30% of new schools being built with sprinklers, representations were made from all sections of the fire community including the National Fire Chiefs Council to amend the guidance to address this issue.

This work was paused in June 2017, following the tragic Grenfell Tower fire. The Department has stated an aim to take into account the latest views and positions on fire safety before any further work to revise BB100 continues.

The NFCC believes that all new schools should have sprinklers fitted, and BB100 requires amendment at the soonest opportunity to achieve this.

The NFCC are also suggesting other changes to the document which will make buildings safer for all users.

¹ https://www.nationalfirechiefs.org.uk/write/MediaUploads/Grenfell/Technical_review_of_ADB_-_1_March_2019_-_FINAL.pdf

² <https://www.abi.org.uk/globalassets/sitecore/files/documents/consultation-papers/2016/08/department-for-education-consultation-on-fire-safety-design-for-schools.pdf>

³ <https://www.abi.org.uk/news/news-articles/2017/10/insurers-back-fire-chiefs-call-to-tighten-rules-on-school-sprinklers/>

⁴ <https://www.bbc.co.uk/news/uk-47923843>

Current situation

The Government states that BB100 is the normal means of showing compliance with the building regulations for fire safety design in schools⁵. Currently, BB100 states:

“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”.

Whilst the 2007 edition of BB100 introduced this expectation, the guidance also provided risk assessment tools to help determine the appropriate provision of sprinklers, and 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 or better than that achieved by following the detailed design guidance here.”

The wording above has been conveniently interpreted to provide designers with an alternative approach to fitting sprinklers based on a value for money argument. The argument that alternative options provide value for money is fundamentally flawed. School fires in England are occurring at around 600 plus fires a year, and with the biggest of these fires creating costs up to £2.8 million (or £67.2million annually). The provision of a sprinkler system for a medium sized school during the building stage is around £100,000 (or about the same cost as providing carpets).

Recent research⁶ examined fires in educational premises over a five-year period 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, minimising the disruption to education.

The proposed solution

NFCC proposes that the risk assessment toolkit should be retired, and all schools should be fitted with automatic water suppression systems, due to the ongoing choice of designers to either ignore the toolkit or use alternative guidance for the design of these buildings. The use of alternative design guidance, such as BS9999 and BS7974 should only be permitted where AWSS are to be installed, and alternative solutions based on cost reduction should not be permitted.

⁵ <https://www.gov.uk/government/publications/fire-safety-in-new-and-existing-school-buildings/fire-safety-in-new-and-existing-school-buildings>

⁶ https://www.nationalfirechiefs.org.uk/write/MediaUploads/NFCC%20Guidance%20publications/Protection/Optimal_Sprinkler_Report.pdf

Respondent Details

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Please state whether you are responding on behalf of yourself or the organisation stated above	Responding on behalf of the National Fire Chiefs Council (NFCC)

Please indicate whether you are applying to this consultation as:

- Other interested party (please specify) The National Fire Chiefs Council is the professional voice of the UK fire and rescue services, and is comprised of a council of UK Chief Fire Officers.

Sprinklers

Question 1 - We would welcome views and evidence around the design opportunities, or limitations, that sprinklers can provide specifically in school building design for compliance with Building Regulations.

The NFCC does not see any limitations to school design by the introduction of sprinklers. Typically, Automatic Water Suppression Systems (AWSS) allow much more in the way of design freedoms and also cost reductions in other areas.

AWSS can often enable more innovative designs, including open plan and atria features.

AWSS have also been used to allow increased compartment sizes in schools in excess of 2,000 square metres which may provide justifiable cost savings in other areas.

There has been some confusion over the application of the life safety requirements of sprinkler systems. These are required by Approved Document B when sprinklers are used as a compensatory feature allowing flexibility to vary the provisions.

Life Safety⁷ features were originally required to protect shopping centres and other large buildings where continuous operation was required. This enabled redundancy to be built in for water supplies, valving and strict control of sprinkler head zoning. The NFCC believes that where sprinklers are required in schools purely for protection of the school as a community asset then life safety features might arguably be unnecessary. Where sprinklers are being fitted for property protection and / or for life safety as a compensatory feature, the NFCC still believes that most of the life safety requirements would be unnecessary. A risk-assessed approach should be taken and, where necessary, consultation may be required with insurers and other Authorities Having Jurisdiction (AHJ).

The NFCC appreciates that there may be some flexibility around the most appropriate hazard system applicable to schools which may lead to some cost savings being made.

Compartment Sizes

Question 2 - We would welcome evidence on the technical issues associated with compartmentation, specifically related to schools, including whether the maximum compartment size should be reviewed and amended.

The current guidance in BB100 is written in order to protect a school due to its role as a community asset. The size of a fire compartment is limited to 800m² for schools without sprinklers, in order to prevent significant property loss. NFCC believes it is for this reason the Government states BB100 is the normal means of showing compliance with the building regulations for fire safety design in schools.

One of the main technical issues that is encountered is the use of BS9999 instead of BB100 for school design. Depending on the risk profile selected, Table 28 of this standard allows at least double the maximum sprinklered compartment size given in BB100 for a building without sprinklers (with sprinklers BB100 allows a compartment to be a maximum of 2000m² compared with the BS9999 maximum compartment size of 4,000m²).

The NFCC believes that there should be explicit provisions made requiring schools be designed with the fundamental fire design objective to protect them as a community asset. BS9999 should only be used as alternative guidance on the condition that sprinklers are to be included, in order to provide some equivalence to this design objective.

Fire services encounter several issues with the construction of cavity barriers, particularly with respect to the quality of workmanship and installation⁸. There should be greater controls across the wider regulatory system to address this, such as greater

⁷ Although the term 'life safety' still appears in BB100, it has been replaced in the sprinkler standard (BS EN 12845) with: Additional measures to improve system reliability and availability

⁸ http://www.edinburgh.gov.uk/news/article/2245/independent_report_into_school_closures_published and <https://www.fia.uk.com/news/privately-built-schools-plagued-by-fire-safety-issues.html>

use of third-party accreditation and checking, and initiatives to address competency issues in the sector.

Safe Evacuation

Question 3 - We welcome views and any evidence on the number and type of staircases, limits on occupation and safe escape approaches in multi- storeyed schools.

The NFCC believes there is a need for evacuation lifts in multi-level premises to account for the inclusivity of pupils with mobility needs into mainstream schooling and out of hours use of school buildings. NFCC supports a review of the means of escape not just for disabled people, but for vulnerable people more broadly. The Children and Families Act 2014 states every child has the right to a mainstream education. As such, it is likely schools will increasingly see a range of diverse mobility needs which should be accounted for in building design. The review of the guidance should consider whether refuge requirements are adequate, as well as the increased use of evacuation lifts.

The review should consider, in greater detail, the variation of needs based on pupils' age, and the general vulnerability of very young children for example; the staff/management required to safely support the evacuation of children at nursery school when compared to those at secondary schools.

Increasingly, school buildings are being used as multi-use community spaces, so school design is likely to have to consider occupants other than the pupils and staff. There should be further consideration for building designs where they are being used out of hours, in terms of the location of escape routes, so as not to compromise security in the unused portion of a school or end up with unsuitable escape routes (e.g. a single means of escape). There should also be a consideration as to the design of hall spaces which may be used for events, such as school plays, as it is likely that evacuation of these areas would differ due to parents wishing to ensure the safety of their children. Guidance for the management of these spaces should also be given.

Emergency Lighting

Question 4 - We would welcome views on the impact of community and out of hours use by school and non-school bodies, on fire safety design.

The existing guidance outlines that emergency lighting should be installed to the British Standard and also addresses the need for consideration of out-of-hours use for the risk assessment required to specify the level of emergency lighting and escape lighting required. The NFCC would support the continuation of this position as emergency lighting and escape lighting are now essential features of school buildings.

Out of hours use is often ignored or denied by designers, leaving it for the School to manage once occupied. BB100 should include this aspect in its guidance. The impact of out of hours use at design would include a consideration of maximum occupation calculations for the main hall and the effects it would have on management levels.

Emergency lighting, fire detection, capacities, travel distances, exit numbers/widths should all reflect these uses thereby removing the burden from management, giving them the confidence that the building has been designed for all intended uses.

Combustible materials for external use

Question 5 - We would welcome views on whether BB100 should recommend that all new school buildings over 18 metres, within the scope of the guidance, should not use combustible materials in the external walls, in line with the terms of MHCLG's ban.

Whilst the NFCC agrees that all schools over 18m should be suitably protected from fire spread this should be extended to all schools regardless of height, and especially for buildings where no AWSS has been installed. The use of combustible materials in walls should be restricted for all school buildings. Arson and management of housekeeping will always be an ongoing problem within Schools and clear guidance on cladding being non-combustible would assist in reducing the potential for fire spread and the disruption that can be caused due to a total building being lost to fire.

Fire Safety Management

Question 6 - We would welcome views on whether we should provide greater guidance, through BB100, on meeting fire safety management long-term, to support school building users to meet the requirements of the Fire Safety Order?

BB100 should outline the expected competence of those undertaking fire safety management in schools. This may have varying levels depending upon the complexity and size of the school building. At present those with responsibility for fire safety are often unaware of their full duties and important fire safety duties are often discharged beyond the responsible person to care takers or building managers. BB100 should outline the expected ongoing management requirements for schools to enable systems to be set up which can then be further monitored as under the Regulatory Reform (Fire Safety) Order 2005. Where management of a school employ the services of a fire safety specialist, such as a consultant, to carry out their fire risk assessment, we believe a minimum standard of competence to carry out this work should be outlined in guidance.

Appendix G already gives details about the information required under Regulation 38 of the Building Regulations; this should be brought forward and emphasised within BB100, and not simply appear as an appendix. There is a need for clearer guidance, better definitions and more terms to be defined. There would be huge benefits to requiring the information to be held digitally.

Clarification is required of what is complex and what is simple. The distinction may discourage necessary information from being provided for some buildings. This could be revised, or better replaced with a requirement to provide an appropriate level of information.

Some of the key issues in our experience between the design and occupation phase have been related to where restrictions have been placed on the use of areas within schools and not marrying up elements of the design such as fire and security. Further guidance, based on stakeholder feedback, which considers how buildings are practically used and managed should be developed.

BB100 should also be clear that building information requires updating on an ongoing basis. Additionally, the information needs to flow through to all people with responsibility for the building, not just the owner/responsible person. This could be further reinforced within the management and risk assessment requirements for buildings, such as within the Fire Safety Order.

To these ends, some of the recommendations made by the Independent Review may be worth considering for schools (in addition to buildings within scope of the potential new building safety regime) for example, by having a clearly identifiable dutyholder.

Modern Methods of Construction (MMC)

Question 7 - We would welcome views on whether there are any school specific issues in relation to MMC. We appreciate that there are elements of both life safety and property protection in relation to MMC and would welcome views on both.

The NFCC support the principle of encouraging innovation through the use of MMC; BB100 needs to be cognisant of changing building technologies. However, new products and designs must be fit for purpose and fully understood before they are used.

This should be underpinned by:

- Robust testing regimes to understand fire performance, with suitable tests being available for new types of products.
- Competent actors in the system, including those testing products, interpreting results, and those designing and installing systems.
- A robust system of building control, third party checks and accreditation.
- Strong sanctions to enforce compliance with the Building Act, particularly regulation 7
- Sufficient building records, so that the design and materials of a building and how they impact on the fire safety strategy is fully understood by those managing the building.
- Where MMC's are utilised, the associated fire strategy must make clear how such materials are to be maintained across the life of the building, so that they are not compromised by future actions e.g. future running of services which may involve compromising the structure in some way.

Fire services have experienced many instances of products being used without being adequately understood, examples include:

- Use of cross-laminated timber to construct unlined smoke shafts.
- Products being used for purposes where currently no tests exist to establish their safety.
- Installation of concrete blocks against timber frames resulting in unseen cavities.

Property Protection Measures

Question 8 - What school specific property protection measures should BB100 cover in addition to the topics covered below in questions 9 to 13?

Arson should continue to be emphasised in the guidance document whether through the risk assessment toolkit or through guidance on Arson Vulnerability Assessments, which have been historically carried out by some FRSs.

Further guidance is needed on how the construction phase of a new building on a school site can impact existing buildings. Phased or partial occupation of sites need to be carefully planned and risks relating to this need to be addressed e.g. the effects of construction areas on existing escape routes or assembly areas. This can also lead to various difficulties in terms of fire service access.

There should also be further guidance for existing buildings which have previously had a different use, being converted into schools (e.g. the use of office buildings as 'free schools'). This should involve the requirement of the existing building to be surveyed in order to establish that the correct compartmentation and structural fire resistance is in place.

The guidance on wall linings and notice boards in classrooms and circulation spaces should be reviewed to ensure that it is still relevant and practicable in modern classroom environments. There is a drive towards providing an enriched classroom environment which relies on an increased use of display materials. The provision of an appropriately designed AWSS may help to mitigate the risk that such displays pose. Additionally, further guidance on ensuring appropriately fire resisting wall lining should be given.

Fire Suppression Systems for Property Protection

Question 9 - We would welcome views on which fire suppression systems, (including sprinklers, misting systems etc.), are most effective in a school environment and any supporting evidence.

There is no firm evidence that 'water-mist' systems or sprinklers in schools demonstrate any significant variance in performance. If systems are chosen, designed and installed for the correct use, by properly accredited installers, then there is no reason why either system should be any more or less effective. The guidance for AWSS should take a pragmatic approach to system design, which considers aspects such as:

- Schools in remote locations which may lead to prolonged fire service attendance times;
- Business continuity;
- The protection of a school as a community asset;
- Minimising disruption to schools where pupils have special educational needs or disabilities;
- The presence of alternative fuel boilers (e.g. biomass);
- The likely presence of combustible materials on walls in classrooms and circulation spaces.

Compartment Floors

Question 10 - We would welcome evidence relating to the effectiveness of compartment floors in schools.

Passive fire protection in schools helps to restrict the spread of fire and smoke in a building and greatly assists firefighting operations which can minimise further damage to buildings.

School can often be built in remote locations that may have prolonged fire service attendance times, therefore the additional compartmentation is necessary to limit fire spread in these buildings to preserve them as a community asset.

It is also important to have passive fire separation in schools to restrict fire and smoke spread. Where passive fire protection is intact it greatly assists firefighters in minimising further damage to the building. Effective compartmentation is likely to offer a degree of protection for working firefighters against possible collapse.

Special Schools

Question 11 - What measures, if any, should BB100 provide guidance for around property protection for special schools? Do these measures differ for types of special school or particular pupil needs?

BB100 should provide additional guidance for special schools as the evacuation procedures for these premises may not be as straightforward as mainstream schools and will be dependent upon the needs of those present. Due to the specialist nature of the facilities provided in these schools and the lack of ability for mainstream schools to cater for some pupils' needs, it is even more important the highest standard of property protection is applied to these schools, given the difficulties finding appropriate alternative placements for affected pupils.

The existing guidance should be reviewed to include parts of BB102 and BB104 that would provide necessary guidance on designing school buildings in a way that includes consideration of those with special education needs and disabilities.

NFCC believe that all special schools should be designed with AWSS and compartmentation in order to minimise the risk of total building loss.

If there is a fire, then the inclusion of sprinklers will suppress it, thus allowing staff to affect a full evacuation of pupils safely.

Additionally, disruption to business continuity or the total loss of a special school can have a devastating effect on pupils. These facilities are also highly specialised by their nature and cannot be easily replaced and, moreover, temporary facilities are unlikely to be readily available or nearby. The need for sprinklers is therefore evermore necessary.

It may also be that the design of these buildings should consider an alternative system of evacuation, in order to minimise disruption to pupils, depending upon their needs. Additional guidance may be needed on managing such buildings, which could take the form of an annex to the main text.

Schools on Constrained Sites

Question 12 - What issues, if any, should BB100 provide guidance for schools on constrained sites? Alternatively, should the guidance simply refer to the relevant section of AD B on buildings over 18 metres and deep basements?

The requirements and flexibility available in ADB, and reflected in BB100 for boundary conditions, when sprinklers are included are still relevant.

BB100 should not include a straight reference to ADB for buildings over 18m and deep basements, as this guidance has not been written with the needs of schools in mind. Guidance on these areas should only be written following additional research to support appropriate solutions.

BB100 should however consider providing more guidance on constrained sites. Fire and rescue services have reported projects that have included amenity space and playing areas on the roof level. The implications of areas where larger numbers could be congregated needs to be included and catered for within the guidance. This is of particular relevance where there is out of hours etc. use of the building.

Another issue for school buildings on constrained sites is where an existing school expands on to playing fields. This can lead to issues for appliance and firefighting access with extended access distances often occurring. Further guidance on this area should be provided with additional requirements for AWSS protection for those areas/buildings where extended access distances are present.

Residential Schools

Question 13 - We would welcome views on whether guidance, in addition to what is covered by AD B, is required for residential schools and whether any specific measures are required for residential schools.

At present BB100 does not apply to residential schools due to the less common nature of this design and the introduction of a higher level of risk for those sleeping on site.

The NFCC believes that this is the correct position for the guidance. Specific measures that should be referenced when designing such buildings are the need to seek specialist advice from a competent person, such as a qualified fire engineer, when considering such designs to ensure that all aspects of the design and management of such buildings are considered.

Wider Issues

Access and Facilities for the Fire and Rescue Services

Question 14 - We would welcome views on whether there are any school specific changes to the guidance we should consider, in addition to what you may be recommending to MHCLG in their review of AD B.

Access and facilities for the fire service require a fundamental review. Many of the assumptions within BB100 are based on those from ADB, based on post-war building studies, and do not take account of modern building trends, current operational deployment and tactics, and possible variations between fire services such as in attendance times or available resources. All areas require careful consideration to consider if they are still fit for purpose. Examples where changes are needed include firefighting shafts, curb distances and horizontal access.

In common with the example in Question 12 on building on constrained sites, BB100 needs to recognise that firefighters may need to conduct rescues or firefighting activities from anywhere on site. For instance, horizontal mains are not an appropriate building solution, as they do not take account of the need for the fire service to move equipment. The same wording as in BS 7974 (PD 5, 7.7.2.6) should be used to restrict the use of horizontal mains.

The focus should be kept on the guidance striving to keep fire and rescue service access simple, intuitive, and consistent between properties.

The NFCC responded to the call for evidence on the full technical review of Approved Document B. A copy of our full response⁹ is available on the consultations page of our website: <https://www.nationalfirechiefs.org.uk/Consultations>

Provisions for water for firefighting

NFCC recommends the provisions for water for firefighting are fundamentally reviewed, including consideration for:

- An explicit requirement that all buildings, no matter the size or usage, have an adequate water supply for firefighting. This would normally be provided by the provision of hydrant(s) attached to a suitable size main delivering an appropriate flow rate for firefighting, but may also be complemented or provided by suppression systems, storage tanks, open water sources, or a combination.

⁹ https://www.nationalfirechiefs.org.uk/write/MediaUploads/Grenfell/Technical_review_of_ADB_-_1_March_2019_-_FINAL.pdf

- Better specification of appropriate pressures and flow rates.
- Direct reference to water supply and details of hydrants included on completion certificates.
- Clarification of suitable hose laying routes within ADB.

BB100 quotes section B5 of the Building Regulations which states that, 'The building shall be designed so as to provide reasonable facilities to assist firefighters in the protection of life'. This is open to interpretation as it does not qualify what is reasonable or if this requirement extends beyond the fabric of the building to hydrants, fire suppression systems, water storage tanks and open water supplies.

With its focus on property protection measures, BB100 should further define the design objectives for these facilities in order to provide facilities for the protection of building stock on school sites. The lack of clarity in this area coupled with a lack of responsibility on developers to provide appropriate water provisions creates a significant challenge for fire services.

It is noted with great concern that there is no requirement to assess the suitability of the existing hydrant for firefighting, feeding a dry riser, etc. The presence of a hydrant within 100m is deemed to be enough to meet the standards, whereas the reality is it may not deliver the required flow rate as outlined in the national guidance document on water for firefighting 2007.

Another area of ambiguity is the requirement for access for a fire appliance within 45m of the building. Guidance is required within BB100 on hose laying distances to avoid convenient interpretations and should stipulate suitable routes for firefighters to lay a hose (for instance, not point to point on a map).

Fire Engineering

Question 15 - We are interested in views and evidence on the effectiveness of fire engineering approaches in school building design.

BB100 gives guidance which outlines the process for using fire engineering in the design of schools; rather than give detailed guidance, a reference to BS7974 would be more appropriate. The guidance contained in BB100 should stipulate that the property protection of a school, to preserve it as a community asset, should be stated as one of the requirements of the design brief. Without specifically mentioning this, designers and fire engineers will only look to prove an equivalent life safety standard, which will lead to the omission of measures designed to protect buildings. This is currently a method which is used to engineer out the need for sprinklers.

In new schools, BB100 is often not being used as developers are utilising BS9999, which allows the building to be built without having to use the sprinkler assessment toolkit. This Standard allows for buildings of a similar size and use as schools to be built without AWSS. Equivalence to BB100 cannot be demonstrated through this route, as the property protection criteria are not part of BS9999 i.e. maximum compartment sizes and the requirement for AWSS. This needs to be clarified in any update of BB100

with the possibility that BS999 is permitted to be used for school design, only if sprinklers are present. NFCC proposes the risk assessment toolkit should be retired, and all schools should be fitted with AWSS, due to the ongoing choice of designers to either ignore the toolkit or use alternative guidance for the design of these buildings.

Overall Guidance Format

Question 16 - We would welcome evidence or views on whether a revised guidance should continue to replicate advice provided elsewhere.

It is our suggestion that BB100 is amended to ensure it is clear on both the application of Approved Document B and BS9999. We believe that, within the text of BB100, it should clearly state that compliance with BB100 is a requirement and that it is the specific standard for compliance with life safety requirements for schools, where Approved Document B and BS9999 provide a generic minimum standard for compliance for a broad range of buildings.

We believe that BB100 should also state that Approved Document B and BS9999 do not go far enough in respect of protecting the buildings and operation of schools. It should state that compliance with BB100 is required to make sure that schools are built with the necessary standard of property protection.

Historically sign-posting to other design guides (such as BB100 for Schools) has been ineffective from a property protection perspective as practitioners ignore those parts which are not deemed mandatory (life safety) issues. As a means of addressing this issue, we believe that there should be consideration given to incorporating the content of design guides, such as BB100 as explicit volumes of ADB, which would mean that compliance or equivalence with this standard would be the expected norm in school design.

Consideration may need to be given to the impact of s.7(1)(b) of the Building Act 1984 (the Act) if the suggestion to incorporate other design guides is adopted. Currently design guides, such as BB100, cannot be relied upon in the same way as proof of compliance tending to negative liability, as these other guides are not currently approved documents. NFCC does not offer a view at this stage on s.7(1)(b) or on the status of such guides but recommends that as part of a wholesale review of the guidance this is considered.