NFCC
National Fire
Chiefs Council

The professional voice of the
UK Fire & Rescue Service

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Clarification of Approved Document B
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Sent via email to: ADBconsultation@communities.gsi.gov.uk

11 October 2018

To the Ministry of Housing, Communities and Local Government,

Please find attached the National Fire Chiefs Council (NFCC) response to the consultation paper '*Clarification of Approved Document B and Next Steps for Part B of the Building Regulations'.*

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 through the NFCC's Protection and Business Safety Committee, which is comprised of protection and fire safety specialists from across the UK. All fire and rescue services in the UK have been consulted on this response.

In the wake of the fire at Grenfell Tower, it is vital that we use this time to examine the shortcomings that contributed to the terrible events of 14 June 2017. The NFCC welcomes the consultation on the clarified versions of Approved Document B and the next steps for Part B of the Building Regulations. An urgent, full technical review of the guidance is needed and recommendations made by Dame Judith Hackitt need to be fully considered and implemented.

We note a call for evidence relating to a full technical review will be published Autumn 2018 and therefore we have not submitted detailed technical comments at this stage.

Areas where we will be seeking a full technical review will include the use of sprinklers, firefighting access and facilities, and clarification with regard to fire hydrant requirements and performance in accordance with relevant British Standards.

The NFCC recommends that:

- Sprinklers become a requirement in all new high-rise residential structures above 18 metres.
- Student accommodation should be included.
- Where high-rise residential buildings currently exceed 30 metres there should be a requirement to retrofit sprinklers when these buildings are scheduled to be refurbished.
- Sprinklers should be retrofitted where high-rise residential buildings over 30 metres are served by a single staircase regardless of future refurbishment.

Fires in buildings across the globe have also highlighted the need for sprinklers to protect balconies. Fire can often start on balconies or exacerbate vertical fire spread on the outside of high-rise buildings. Any revision to building regulations should feature balcony coverage as a requirement. Sprinklers on balconies are already required in a number of other countries including Australia, New Zealand, Norway and Dubai.

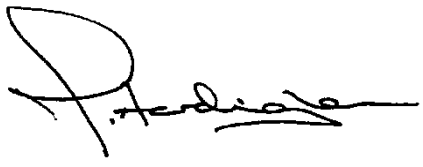
Suppression coverage for warehouses should also be fully reviewed due to the potential risks posed to attending firefighters and the guidance should also point more firmly towards BB100 as the appropriate guidance for fire safety design of schools and reiterate the importance of suppression for these important community assets.

NFCC support the Scottish position that sprinklers become a requirement in all new social housing developments. We also supported the introduction of domestic sprinklers in Wales. NFCC suggests that the standards for provision of AWSS in England be increased to at least the equivalent of those in the devolved administrations, to improve consistency across the UK.

Alongside sprinklers we will naturally seek a full review of firefighting access and facilities particularly for large volume and high-rise buildings to ensure firefighters are offered the highest level of protection and are afforded the best opportunity to preserve life and prevent significant damage to buildings and the environment.

We trust that the attached submission is helpful, and would welcome further discussions with the Ministry following the outcome of the consultation.

Yours sincerely,



Mark Hardingham

NFCC Protection and Business Safety Committee Chair

NFCC National Fire Chiefs Council

The professional voice of the UK Fire & Rescue Service

Clarification of Approved Document B and Next Steps for Part B of the Building Regulations – Consultation response

Executive summary

The NFCC welcomes the consultation on the clarified versions of Approved Document B (the guidance) and discussion around the next steps for Part B of the Building Regulations. We believe that an urgent, full technical review of the guidance is needed and that relevant recommendations made by Dame Judith Hackitt as part of the Independent Review into the Building Regulations and Fire Safety are fully considered and implemented.

The guidance is seen as setting the standard for fire safety used to develop designs for large numbers of new and refurbished buildings, but also being the benchmark for the development of other design standards such as BS9999/BS9991 as well as being used for comparative analysis as part of an approach described by BS7974. Ensuring that the guidance continues to provide the appropriate level of safety for both members of the public and firefighters alike is therefore critical.

In terms of the guidance itself, and its purpose to support the functional requirements of the Building Regulations, due to the historic lack of regular review it often lags behind common practice and developing construction methods and techniques, and contains solutions which may in themselves be 'out of date'. We also wish to see a committed move towards a regular review period of the guidance, as recommended by Dame Judith Hackitt, as part of the review of the overall effectiveness of the regulatory framework. We recommend there should be a period of no more than five years between reviews; this aligns with recommendation 6.2b raised by Dame Judith Hackitt. This will ensure that new research or revised information/opinion about the suitability of aspects of the guidance are taken into account in a timely manner.

Clarification of the guidance needs to be coupled with a re-education regarding the intent of the guidance and how it should be used. Experience reported by our members is the guidance is often deemed to be the 'maximum' level in terms of benchmarking fire safety design. Our members also have experience of some designers being under the impression that a solution is appropriate simply because the guidance doesn't explicitly say that it isn't. The guidance itself therefore would benefit from further highlighting over its intent and status.

Fire and Rescue Services have reported a growing interpretation that 'compliance' with the guidance is all that needs to be demonstrated without the need for a final

cross reference back to the functional requirement to ensure that the design proposals satisfy the Building Regulations. This may be through a fundamental misunderstanding of the Regulations and/or the status of the guidance in relation to these. For instance, it is a common mistake for people with differing levels of expertise to consider the guidance as being the Building Regulations. This assumed compliance by following the guidance is a key area that needs to be challenged as part of the cultural change that has been called for by the Independent review.

Competency of users is a key area of concern, and in terms of how the guidance is used, we have noted a growing desire for the guidance to be made more accessible such that it can be interpreted by those without, necessarily, fire safety education or technical understanding. The guidance is not designed to be a text book and nor should it be, while commentary is sometimes beneficial to confirming the intent of aspects of the guidance it should not need to explain the fundamentals of fire safety principles.

A rethink of how the information is presented, and what order the sections are in would be very worthwhile such that it follows a more logical sequence. Greater use of flowcharts or more visual ways of presenting the key pieces of information would make the guidance more user friendly.

However, fire safety is a complex area that should only be undertaken by individuals with the right level of competence and just a ‘simplification’ of the guidance is not the right approach. To apply the guidance properly requires a full appreciation of the principles of fire safety design and an understanding of how the guidance has been developed. The guidance should be used with particular regard for how the different parts of the guidance work with each other and not in isolation.

In terms of the sequence, design information, for example, fire service access into a building is currently located towards the back of the guidance. However, this has a direct impact on where stairs and exits/entrances into a building are located which need to be considered at the beginning of a design development process. Logically B5 (or aspects therein) should feature more heavily at the front of the guidance.

We welcome the new format of the two volumes of the guidance. The inclusion of elements such as the ‘intention’ of each of the requirements is positive and supports clarity in terms of the expectation of satisfying the Building Regulations. These ‘intentions’ have the opportunity of being more readily understandable by the lay person without having to interpret the material in any depth within each section. The approach of trying to use more plain English language is useful and again considered positive however it must be ensured that this has not changed any of the principles of the guidance, or the technical requirements.

What we would like to see, however, is much clearer detail regarding the scope and limitations of the guidance to prevent inappropriate use until such time that the guidance is reviewed in full. Our members have reported experience of the guidance

being applied to super high rise buildings, for example, when we are of the opinion that these should be designed using fire engineering from first principles in terms of fire safety.

At present the guidance gives design information for buildings up to and including 30m in height for areas such as fire resistance periods as just one example. Because the guidance does not provide information as to what to apply for buildings of 60m for example, then the figure detailed for 30m in height is used. While this might be an appropriate figure to use, this is more often than not proposed without any form of supplementary assessment or justification to confirm its suitability. We would therefore suggest that a height limit should be included beyond which the guidance cannot be used.

Height should not however be the only criteria for considering limitations in adopting the guidance and consideration should be given to overall compartment sizes, depth of basements and building use.

In addition, the scope of the guidance should also clearly detail that it is for more common/traditional building methods. This would ensure that more consideration of the structural fire safety design by a competent person is undertaken where a more modern or innovative construction methodology is being utilised.

In terms of the guidance it is noted that the clarified Approved Documents do not include text with regards section 13: Resisting fire spread over external walls.

While we understand this due to the timing of recent consultations in relation to this technical area, we believe that there is an urgent need for clarified text and guidance on this matter. At present, there are Responsible Persons that, despite Government advice to remove any non-compliant cladding at the earliest opportunity, have still not done so as they remain unsure as to what to use as a replacement system. This has resulted in delays in works getting underway and buildings remaining under interim measures whereby the evacuation strategy has changed from stay put to a simultaneous evacuation. Therefore, clarified text on section 13 is a critical area for resolution and we are at present unclear how this particular detail will be reviewed when it is not contained in the material presented with this consultation.

The NFCC take this opportunity as part of this consultation to reiterate our feedback as part of the two recent consultations in relation to the use of assessments in lieu of test and banning the use of combustible materials in external walls of high rise residential buildings.

<u>Assessment in lieu of test (Desktop studies)</u>

We submitted that the use of well-prepared assessments in lieu of tests with direct reference to primary test evidence (i.e. extended application and classification report) has a legitimate place within fire safety design and are, in some circumstances, a practical and proportionate step to support a specific design aspect of a building. The

key objective being to ensure that the analysis is undertaken and applied correctly and that poor practice leading to dangerous solutions is eliminated.

We have serious concerns about how assessments have been undertaken and been relied upon in the past, and we advised that to prevent this in the future there was a clear need for:

- A high level of competency and ethical behaviour by those carrying out the tests;
- Strict controls on the application of these assessments and detailed accompanying guidance;
- A regime which applies sanctions to those who do not comply with them.

With poor practice eliminated, and the analysis being undertaken correctly in accordance with appropriate standards/guidance and where the system is installed accordingly, we believe that it will be demonstrated that these assessments could be used safely.

Ban on combustible materials in external wall systems

While we note the announcement on 1 October 2018 that a ban will be implemented, we have yet to see the full details and scope of the ban. The NFCC issues caution though, that a ban should not be considered 'job done' and we are disappointed that the proposals announced last week did not go further.

As mentioned earlier what will be needed is a separate piece of work to agree the text to be used in the clarified guidance while a full technical review is awaited.

In terms of a ban on combustible materials in external wall systems, we urge caution in ensuring this is not seen by some as the primary solution, or the only solution to the issues raised by the Independent review. The banning of combustible materials treats the symptoms, but does not provide the cure, and there is much more to be done to ensure the safety of building occupants, now and in the future so that people feel and are safe. Urgent action still needs to be taken to improve the way buildings are designed, built and also maintained through their life cycle.

We would reiterate that building regulations already restrict or control the use of combustible materials on buildings at 18 metres and above, however we welcome the intention to offer even greater certainty to concerned residents and to the construction industry. That the use of combustible materials has been discovered to be so prevalent, suggests other interpretations have been reached, or that the options provided by guidance have been misused.

We believe buildings below 18 metres in height should be afforded the same protection as those above this height threshold. There may be residents living in buildings which still have materials on them - slightly outside the scope - resulting in people being concerned for their safety.

We look forward to seeing how this ban will be implemented. Whilst we understand this will not be applied retrospectively, we must also take into account recent advice issued by the Independent Expert Panel (September 20th) which states leaving any amount of ACM cladding on a building would continue to pose a hazard to residents and firefighters in the event of a fire. The focus must be on making people feel safe, therefore there must be a plan in place to achieve this.

Any ban must be followed up with a concerted effort to implement other reforms as suggested by the Independent review recommendations to ensure we have a robust regulatory framework and that only competent persons are making decisions about what materials are used in and on buildings in the future.

Call for evidence and further technical review

In terms of the other technical content with the guidance we note that a call for evidence relating to a full technical review will be published Autumn 2018 and therefore we have not submitted detailed technical comments at this stage.

Areas where we will be seeking a full technical review will include the use of sprinklers, firefighting access and facilities, and clarification with regard to fire hydrant requirements and performance in accordance with relevant British Standards.

The NFCC recommends that:

- Sprinklers become a requirement in all new high-rise residential structures above 18 metres.
- Student accommodation should be included.
- Where high-rise residential buildings currently exceed 30 metres there should be a requirement to retrofit sprinklers when these buildings are scheduled to be refurbished.
- Sprinklers should be retrofitted where high-rise residential buildings over 30 metres are served by a single staircase regardless of future refurbishment.

Fires in buildings across the globe have also highlighted the need for sprinklers to protect balconies. Fire can often start on balconies or exacerbate vertical fire spread on the outside of high-rise buildings. Any revision to building regulations should feature balcony coverage as a requirement. Balcony coverage is already required in other countries including:

- Dubai: Sprinklers are required to cover balconies due to referencing the NFPA 13 code in the Dubai Code.
- New Zealand: sprinkler standard NZS4541 requires sprinklers over balconies wider than 1.5m.
- Norway: Sprinklers have been required in all flats since 2010. This includes sprinklers on balconies. This is particularly relevant as there may be concerns around external sprinkler coverage in colder months.
- Australia: Melbourne mandates sprinklers over all balconies.

Suppression coverage for warehouses should also be fully reviewed due to the potential risks posed to attending firefighters; and the guidance should also point more firmly towards BB100 as the appropriate guidance for fire safety design of schools and reiterate the importance of suppression for these important community assets.

NFCC support the Scottish position that sprinklers become a requirement in all new social housing developments. We also supported the introduction of domestic sprinklers in Wales. NFCC suggests that the standards for provision of AWSS in England be increased to at least the equivalent of those in the devolved administrations, to improve consistency across the UK.

Alongside suppression we will naturally seek a full review of firefighting access and facilities particularly for large volume and high rise buildings to ensure that firefighters are offered the highest level of protection when entering these types of buildings and are afforded the best opportunity to preserve life and prevent significant damage to buildings and the environment. This review should include the vehicular access arrangements, water provision (including fire hydrants) and when firefighting shafts are provided in terms of an appropriate height or depth of a building.

The NFCC look forward to the opportunity to feed into the call for evidence and to proactively support the review process in creating new guidance material that seeks the right level of fire safety provision for both members of the public and firefighters.

Questions

Respondent Details

Question 1	**Respondent details**
Name	Mark Hardingham
Position (if applicable)	Protection and Business Safety Committee Chair
Organisation (if applicable)	National Fire Chiefs Council
Address (including postcode)	99 Vauxhall Road, Birmingham, B7 4HW
Email address	mark.hardingham@suffolk.gov.uk
Telephone number	07827 281979
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)

Question 2	**Select one**
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.	

Question 3	Yes/No/Don't Know
A Do you agree that the volumes of ADB should be split between dwellings and non-dwellings?	Yes. This provides a clear delineation and should support proposals where, for example, student accommodation is being designed on the principles of stay put without a declaration as to which purpose group they are using.
B If no, how else could they be split?	

Question 4	Yes/No/Don't Know
A Do you agree that flats should be included in the same volume of ADB as dwellings?	Yes. This is a logical location.
B If no, please give a reason for your answer	

Question 5	Yes/No/Don't Know
A Do you think there are sections of the guidance where amendments have gone beyond providing clarification?	Not at this time however text has been omitted at the front end of the document which we feel should be reintroduced to strengthen our opportunities to raise concerns where we feel the guidance is being misused
B If yes, please tell us where and the reasons for your answer	

Question 6	Yes/No/Don't Know
A Is the signposting to standards and other documents clear in ADB?	Yes – particularly the use of Bold type.
B If no, please tell us how you think it could be presented in a clearer manner	

Question 7	Yes/No/Don't Know
A Do you think there is any guidance in ADB which should be in an industry standard instead?	No – guidance can be included in industry standard as well but we believe that this should remain as government guidance.
B If yes, please tell us which sections/s and the reason for your answer.	

Question 8	Yes/No/Don't Know
A Does the "Assessment of impact" in Appendix B provide a proportionate presentation of the likely impacts of the proposed change?	Don't know however it has not acknowledged the potential impact of the lack of further guidance in regards to external fire spread which was one of

	the primary areas identified as needing clarification. This will not only have a potential financial impact but a potential safety impact while responsible persons await clear guidance on recladding their buildings which have ACM present that has not been shown to pass the BS8414 tests.
B Please provide any additional evidence you may have available on the impact of the proposed change	