



**DLUHC**

Consultation on sprinklers in care homes, removal of national classes, and staircases in residential buildings

**Submission from the Chartered Institution of Building Services Engineers (CIBSE)**

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## **About the Chartered Institution of Building Services Engineers (CIBSE)**

The Chartered Institution of Building Services Engineers, CIBSE, is the professional engineering institution that exists to 'support the Science, Art and Practice of building services engineering, by providing our members and the public with first class information'. With its main office in London, CIBSE has over 20,000 members, with around 75% operating in the UK and many of the remainder in the Gulf, Hong Kong and Australasia. CIBSE accredits building services engineering courses in the UK and overseas.

CIBSE is the sixth largest professional engineering Institution, and along with the Institution of Structural Engineers is the largest dedicated to engineering in the built environment. Our members have international experience and knowledge of life safety requirements in many other jurisdictions and work extensively on the systems that control the various engineering systems that keep buildings safe, comfortable and healthy.

CIBSE members design, install, operate, maintain and refurbish life safety and energy using systems installed in buildings. They include specialists in digital engineering, the Society of Digital Engineering, a Division of CIBSE, who specialise in digital information management. We also have a Special Interest Group in IT and Building Controls, which works closely with the Building Controls Industry Alliance (BCIA) to provide events and activities on this topic.

CIBSE publishes Guidance and Codes providing best practice advice and internationally recognised as authoritative. These include the Digital Engineering Series of guidance and templates has been produced to assist the full built environment supply chain in tackling the practical challenges, specifically of the BIM processes, of digital engineering more widely.

The CIBSE Knowledge Portal makes our Guidance available online, where CIBSE members can access the guidance as a benefit of membership. The knowledge portal is the leading systematic engineering resource for the building services sector, used regularly by members to access the latest guidance material for the profession. Currently we have users in over 170 countries, demonstrating the world leading position of UK engineering expertise in this field.

CIBSE operates a number of Special Interest Groups covering a range of technical topics and themes. The CIBSE Electrical Services Group has contributed significantly to the preparation of this response.

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## CONSULTATION RESPONSE

### Executive summary

This is the Institution's formal response to the consultation issued by the government on changes to the provisions for sprinklers in care homes, removal of national classes under BS 476 and provision of second staircases in residential buildings. This has been developed with contributions from our wider membership.

The institution welcomes the intention to require the provision of second stairs in taller residential buildings and we make the case for this to apply to all residential higher risk buildings.

We have concerns about the framing of the transitional arrangements, particularly for second staircases, but we offer suggestions to address these and to avoid significant market disruption.

We also comment on the need for the staircase provisions to be recognised as regulation and not guidance, as provisions that must be met.

### CIBSE Response to consultation questions for the provision of sprinklers

**Question 4** – Do you agree that sprinkler protection should be extended to new care homes of any height?

Answer: Agree. Our understanding is that this would apply to all types of care homes including nursing homes.

**Question 5** – Alternatively, would you agree with the proposal if it included a 10 bed threshold?

Answer: N/A

**Question 6** – We welcome views on whether there are any exemptions you would include, what they are, and your evidence supporting their exclusion.

Answer: CIBSE is not aware of evidence to support a threshold or exemptions from this requirement.

**Question 7** – Do you agree that Approved Document B should remove the current allowances when sprinklers are provided?

Answer: The consultation offers no evidence to suggest that there is a case for removing these allowances from the guidance in AD B. Given that the overall requirement for any new care home will be to demonstrate that the design and construction meet the functional requirements then any instances where it is not appropriate to use the allowances will be picked up at that point. If it has been acceptable to reduce the requirement for door closers and allow multiple beds until now, why is it proposed to remove those allowances now? This does not make clear sense.

**Question 8** – Which allowances do you think should be provided and what evidence do you have to support your view?

Answer: The allowances should be retained. ,

**Question 9** – Do you agree that Approved Document B should recommend sprinklers to the new BS 9251:2021 standard?

Answer: Agree, although alternative provision such as NFPA should also be acceptable. Again, the guidance should be clear that the functional requirement is what **MUST** be met, and that the guidance is just that.

**Question 10** – If you disagree, what other standards would you suggest, and what is your evidence to support using the alternative standards?

Answer: NFPA has extensive experience in this field and should be allowed.

**Question 11** – Do you agree that there should be a transitional period of 6 months?

Answer: If the transitional arrangement is based on the new more demanding definition of commencement then six months could lead to some schemes needing to be redesigned. Whatever period is adopted it is important that there is early and clear communication to the care home sector that this change is coming and that any projects in development should be incorporating sprinklers now because they are unlikely to be able to commence under the new definition unless they are already well advanced. This needs engagement with the industry.

**Question 12** – If you disagree, how long should the transition period be?

Answer: The transition period also depends on the speed with which the revised guidance is issued. For reasons given below the second staircase requirement needs to be confirmed very quickly to give clarity to the market. If the revised guidance is issued quickly then it may be appropriate to allow a longer transition period. If the guidance is going to take time to finalise, publish and come into force then a shorter formal transition period between coming into force and application may be appropriate. The key timeline is the full process of consulting, deciding, publishing the revised guidance, coming into force and then the transition. If the revised AD B were to be released in July 2023 with a coming into force date of 6th April 2024 and a six month transition, and if the care home sector start being made aware NOW that sprinklers are very likely to be required in new care homes starting after 1 October 2024, then that gives an 18 month lead in time.

### **CIBSE response to consultation questions for the removal of national classifications**

**Question 13** – Do you agree that the national classifications for reaction to fire should be removed from Approved Document B?

Answer: There needs to be some clarity provided here. There are two current sets of standards covering fire classification. One is BS 476, which is in many parts, and one is BS EN 13501. CIBSE would support the withdrawal of reference in AD B to BS 476 wherever it is superseded by BS EN 13501. There should be a single standard for consistency. However, it is our understanding that there are parts of BS 476 for which there is no other standard at

present. Whatever the flaws in BS 476 series, removing reference to it where there is simply nothing to put in the place of that reference cannot be a good move.

We understand that about 16 parts of BS 476 are still current and do not have an equivalent in BS EN 13501. These standards remain important to the testing and certification of products such as doors, ironmongery and passive fire protection.

These issues must be fully understood before changes are made to the guidance. It is vital that the construction products and fire protection sectors are involved in the resolution. Withdrawing any reference to BS 476 from AD B at this time will cause significant problems,

Several product groups will struggle to get retested and certified and in some cases new tests may be needed, in turn requiring new product testing arrangements, facilities and investment, assuming that the testing and certification sector is prepared to invest given the current uncertainty created by the lack of clear policy direction, disappearance of the independent review and the continued lack of clarity around the practical delivery of UKCA marking.

CIBSE fully supports the review and updating of standards, including BS 476, but this needs to be managed carefully and in full consultation with BSI as the National Standards Body, and with the industry experts who sit on the standards committees (which should include the relevant representatives of DLUHC and relevant regulators).

**Question 14** – Do you agree that the national classifications for fire resistance should be removed from Approved Document B?

Answer: See above.

**Question 15** – If you disagree, what evidence can you provide that outlines why the national classifications are still required.

Answer: See above. The onus is on the Department to bring forward evidence that they have alternative standards to include in the guidance at a level of detail, bit for government to propose a wholesale removal of references to BS 476 and then ask industry to explain the consequences.

**Question 16** – Do you agree that there should be a transitional period of twelve months?

Answer: See above. Also a transitional period for what? There is far too much detail in this for a single transitional arrangement.

**Question 17** - If you disagree, how long should the transition period be and what is your evidence to support a longer or shorter transition period?

Answer: See above, and again, the onus is on government to demonstrate that its proposals are evidence based.

**Question 18** – Please outline any concerns you have about the withdrawal of the national classification with regards to fire resistance including potential impacts, such as on the fire door industry.

Answer: CIBSE's concerns are outlined in the answers above but can be summarised as being that the complete removal of reference to BS 476 from AD B may have significant unintended and undesirable consequences and we see no evidence that government has considered these before bringing forward the proposals in this consultation.

### **CIBSE response to consultation questions for the inclusion of a new threshold for use of single staircases**

**Question 19** – Do you agree that Approved Document B should include a maximum threshold for the provision of a single staircase in residential buildings?

Answer: One of the criticisms of the current system of regulation which the Building Safety Act is intended to address is the widespread confusion between the regulations and functional requirements and the statutory guidance, as described by Dame Judith Hackitt in the independent review. Requirements B1 and B5 relate to provision of adequate means of escape and of access for firefighting. What reasonable provision might look like is now being defined in terms of a threshold height. If the intention is to prescribe a maximum height at which a single staircase is permitted in certain building types and there is intended to be no scope to adopt an alternative to two staircases, then that is not guidance. That is regulation and should be set out as such, not allowed to masquerade in a piece of "guidance" that is actually a prescriptive requirement.

The functional requirements are already clear about reasonable or adequate means of escape and of firefighting access, and AD B provides guidance for common building types. But higher risk buildings as now defined by the Act and eponymous regulations are not a common building type – there are no more than 500 of them built each year. And if the threshold is set at 30m then there are even fewer. Is it appropriate to tackle this particular issue through AD B when what is actually required is a clear statement that residential apartments over a certain height require two stairs.

Therefore the accurate answer to Q19 is that CIBSE does not agree with including a prescriptive threshold in AD B. However, we support an explicit and clear statement about those residential buildings that are required to have multiple means of escape.

There is clear international precedent for this as well as significant societal pressure to adopt this approach and the fact that government has to intervene reflects poorly on those who should be looking at the functional requirements, seeing that multiple means of escape/access are reasonable and needed for adequacy and then doing it.

For the avoidance of any doubt, CIBSE supports a clear requirement that certain residential buildings should be required to have multiple independent means of escape and firefighting access.

**Question 20** – Do you agree with our proposed threshold of 30 metres+?

Answer: CIBSE disagrees with this threshold. The case for a 30m threshold is not clearly made and appears to be largely driven by the cost benefit analysis. But the consultation does not grapple with several consequences of adopting a 30m threshold. If adopted, this would create two distinct classes of HRB. What is the rationale for that? What behaviours might that drive? Will we see a move to nine or ten storey HRBs with single stairs?

And then there is the gaming aspect – the HRB definition relates to height AND number of storeys – this threshold simply has to do the same. If it is to be 30m then it would need to be 30m or 11 storeys or more.

And then there is the consumer/social response. What will residents think? Given that the Building Safety Regulator has just stood up the Resident's Panel under the Building Safety Act, it seems quite bizarre not to have a view from that Panel and indeed from the new regulator on the threshold.

For all these reasons CIBSE is of the view that the requirement for multiple independent means of escape should apply to all HRBs – so over 18m or seven or more storeys. This is clear and simple and aligns with the wider move to regulation of HRBs.

Our proposal is that requirements B1 and B5 should be amended to require two independent means of escape (B1) and firefighting access (B5) in all HRBs. This is a requirement, not guidance, and should be implemented as such.

In calling for this CIBSE is broadly in line with many other industry bodies, although that is not our main concern, and we believe that this approach reflects societal expectations.

**Question 21** – If you disagree with the proposed threshold, at what height do you think the threshold should be set?

Answer: As stated above, CIBSE proposes that all new residential HRBs should be required to have two independent means of escape and firefighting access.

**Question 22** – What evidence do you have to support this threshold?

Answer: Our arguments for this threshold are set out above

**Question 23** – Do you agree that additional measure should be provided to ensure sufficient separation between staircases?

Answer: We agree and that is why we propose “multiple independent means of escape and firefighting access.

**Question 24** – What additional measures should be provided to ensure the appropriate separation between staircases? Please provide any additional evidence to support your view

Answer: Each staircase should be contained with a concrete core, to provide sufficient long term resilience during a fire, with lobbied approach to each from connecting corridors.

**Question 25** – Do you have a view on how long the transitional should be, and what evidence do you have to support your proposed transition?

Answer: This is the most challenging aspect of the proposal. The consultation notes that:

*“58. Recognising that many schemes are in development, and this change would represent a significant change, we are proposing a very short transition period before implementing the changes.”*

This is quite perverse. A concrete core is a fundamental part of the structure and so a building designed for a single stair core would need to be redesigned from the foundations up to include a second stair. Taller buildings generally take longer to design, consent and build. So rushing this will cause huge market dislocation. Due to the significant implications the transition for this proposal should be long. But that is not to advocate a period in which developers can rush to build single staired towers.

The consultation continues:

*“59. The transition period will allow time for schemes to be completed but should not allow the opportunity for developments to get off the ground ahead of the new requirements coming into effect.”*

Whilst the spirit is right – we don't want a dash to build single staired towers before the new rules apply. But there are other levers in the regulatory toolbox. Some HRB developments can take many years to move from the initial conception to being built. There is already a pipeline of new projects that are already well advanced and have single stairs. Too short a transition period will lead to them being stalled and may render them unviable, causing a further delay in the provision of much needed housing. However, by adopting the HRB definition for the threshold, it means that all of these buildings will come under the regulator.

Where they are already in development then the Regulator will certainly be responsible for them in operation. And for those schemes coming through the development pipeline in any more than 18 months they will be very likely to come under the oversight of the Regulator earlier than completion. So for those developments that are already being designed with single stairs and would need to be redesigned, then the regulator will be able to assess whether they meet the functional requirements of adequate means of escape and firefighting access.

It does not need a short transition to force changes – the Regulator can deal with projects coming forward and can be very clear, for example at Planning Gateway One applications now, that two stairs are going to be required and that anything that is only at PGO now would be expected to adopt a two stair solution unless there are very exceptional circumstances (potentially an air rights development over a piece of infrastructure that has already been built to support an intended single stair building above, but this will only apply in at most a handful of cases. So a short transition is not needed to drive this as it falls to the BSR to oversee these buildings.

The consultation also says:

*60. We would encourage all developments to prepare for this change now.*



We could not agree more – but that means that government needs to decide and announce what the change is as quickly as possible so that stakeholders such as CIBSE and IStructE can begin to support professional preparation for the change.

### **Clarification of paragraph 10.6 and 10.7**

**Question 26** – Do you agree further consideration is needed to clarify the paragraph?

Answer: Agree

**Question 27** – If you agree, please outline what materials would you cover in the paragraphs and what is your evidence to support this?

Answer: CIBSE and the Society of Façade Engineering has undertaken considerable work in this area and has provided guidance to the façade industry on materials for use in external walls, A review of that guidance will indicate that areas of concern and potential misunderstanding in the industry and should inform the clarification process.

**Question 28** – Please provide any additional evidence on costs, risks and benefits which should be considered in an assessment of impacts in the following areas.

- a) Sprinklers in Care Homes and in housing for vulnerable people, regardless of building height
- b) removing the national classification (BS 476 series) from Approved Document B
- c) Residential Buildings above 30m in height being recommended to include 2 staircases.

Answer: It is essential to consider the transitional costs of the 2 staircase and Sprinkler provisions.

**Question 29** - Are you aware of any particular equalities impacts for these proposals? How could any adverse impact be reduced and are there any ways we could better advance equality of opportunity or foster good relations between people who share a protected characteristic and those who do not? Please provide evidence to support your response.

It is essential that the Department considers the relationship between the two stair discussion and the future of evacuation lifts. With the new British and European standard BS 81-76 likely to be published within the next few months it is essential to consider the scope of evacuation lifts to improve the evacuation strategy for those who may be less mobile. With some local authorities already introducing planning guidance that will require evacuation lifts, it is essential that this topic is addressed. Arguably and impact assessment that does not will be wide open to judicial review. A failure by DLUHC to address industry advances in this area will send a clear signal that in practice the needs of the less mobile are not being treated equally.

**END**

Please do not hesitate to contact us for more information on this response. CIBSE would be willing to assist in the development of any of the issues raised in this response.