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# **Trigger height options**

**Question 1** – Do you agree or disagree that the height threshold for sprinkler provision in new blocks of flats should be reduced? Agree

**1b** - If you agree that the height threshold should be reduced, what should the new threshold be and what is the evidence for this particular threshold?

The recommended threshold of 18m is supported however 11m (or 4 floors) should be considered as a minimum. Notwithstanding, Automatic Fire Suppression System would be beneficial in all buildings containing a sleeping risk irrespective of the overall height. Consistency and harmonization of the requirements with other parts of the UK should also be encouraged.

## Design for sprinkler provision

**Question 2** – Do you agree or disagree that these systems should be designed in accordance with the relevant guidance in BS 9251? **Agree** 

2b - If you disagree, what specifications and performance should be required?

## **Transitional provisions**

**Question 3**– Do you agree or disagree that there should be a transitional period of six months? **Disagree** 

3b - If you disagree, how long should the transition period be?

Previous transitional requirements have been used extensively by developers submitting applications to delay the need to build to new regulations. The recent introduction of the ban on combustible materials appears to have been accommodated by the industry where the transitional period was only two months so a lesser period than six months would be desirable.

#### Wayfinding signage for fire and rescue services

**Question 4** – Do you agree or disagree that there should be a more consistent approach to wayfinding signage for fire and rescue services in Approved Document B? **Agree** 

The Grenfell Tower Inquiry Phase one report has now recommended that 'in all high-rise buildings floor numbers be clearly marked on each landing within the stairways and in a prominent place in all lobbies in such a way as to be visible both in normal conditions and in low lighting or smoky conditions'.

Wayfinding signage can offer significant benefits for navigating buildings during the firefighting stage of a fire, particularly where this is likely to take place in areas where smoke is likely to obscure high-level lighting luminaires. A uniform application of wayfinding requirements would aide firefighting operations in terms of identifying floor levels and helping to wayfind through buildings.

The guidance within the current version of ADB makes no reference to the provision of wayfinding signage for fire and rescue services. Inclusion of guidance, in a standardised format, for this including recommendations for the type of purpose groups/occupancies where wayfinding systems should be installed would help to give a consistency of approach. This enhancement to building safety should also be extended to other buildings with sleeping accommodation, e.g. hotels.

**Question 5** – Are there any existing standards or guidance which should be introduced to the guidance provided in Approved Document B? Please specify.

There are a range of existing British and International Standards which are applicable to this area:

5266-2:1998 Code of practice for electrical low mounted way guidance systems for emergency use.

BS5266-6:1999 Code of practice for non-electrical low mounted way guidance systems for emergency use – Photoluminescent systems.

BS ISO 16069:2017 Graphical symbols - Safety signs - Safety way guidance systems (SWGS)

ISO 3864-1, Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings

ISO 3864-3, Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs

ISO 3864-4:2011, Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials

ISO 7010:2011, Graphical symbols — Safety colours and safety signs — Registered safety signs

BS ISO 23601, Safety identification — Escape and evacuation plan signs

These standards give guidance on the performance criteria of such systems.

**5b** – Does this guidance need to be supplemented or amended for inclusion in Approved Document B? If yes, please specify how.

Yes. The standards referred to in Question 5 are significantly out of date and do not take account of the more modern photoluminescent materials and their properties. Further research and review of these standards should be undertaken to establish a consistent and updated format.

Consultation stage assessment of impact

Question 6 - What views exist on the benefits of each signage option set out above?

Vinyl lettering - if installed to a standard would have the advantage of aiding the identification of floor levels and flat numbers. However, this may be reliant upon additional lighting in order to see it, particularly if installed at low level without additional powered lighting luminaires, which may be necessary in order to meet the requirements of BS5266-1. There may be additional issues regarding the maintenance of vinyl lettering and its longevity.

Photo luminescent lettering – this would have the advantage that it would be usable in low light situations and if installed as part of a low-level wayfinding system, could still be used when smoke obscures high-level emergency lighting luminaires. Photo luminescent lettering and wayfinding systems may have additional benefits for highlighting escape routes for persons with visual impairments. However, with the current British Standard, the full benefits of these systems may not be realised. These systems may also require additional lighting to be installed to ensure that the photo luminescent materials receive enough energy to excite them.

Emergency powered lighting luminaires – emergency lighting luminaires have all the benefits of existing emergency lighting units. However, the use of powered lighting luminaires would incur additional costs if additional units needed to be installed at low-level in order to achieve the maximum benefits.

**6b** - What is the preferred option set out above for wayfinding signage? Vinyl lettering, photoluminescent lettering, emergency powered lighting luminaries, other (please specify).

In order to take account of the effects of poor visibility due to smoke, a combination of powered luminaires and photoluminescent lettering affording a minimum low-level visibility is likely to be the most reliable option to ensure there would be a benefit to firefighters.

At present this would involve emergency powered lighting luminaires highlighting vinyl lettering or photoluminescence.

Suitability of wayfinding signage in combination should be subject to further research.

## **Evacuation alert systems**

**Question 7** – Should Approved Document B include a requirement for an emergency evacuation system, which could support fire and rescue services operational response by alerting residents if they need to evacuate? **No** 

A stronger emphasis needs to be placed on ensuring buildings are safe and that such a system would never need to be required.

7b – For each response, what views exist on the benefits and risks of such an approach?

**Question 8** – If this requirement was introduced to Approved Document B, above what height threshold should this system be required?

Whilst not supporting this proposal, in terms of consistency if introduced the trigger height should be the same as that for all other measures.

**8b** – For each response, please provide evidence to support your answer.

## Assessment of impact

**Question 9** – Please provide any additional evidence on costs, risks and benefits which should be considered in an assessment of impacts in the following areas.

- a) Sprinkler provision in new high-rise blocks of flats
- b) Wayfinding signage for fire and rescue services
- c) Evacuation alert systems

**Question 10** - 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.