Written evidence submitted by the Business Sprinkler Alliance (BSB16)

The Building Safety Bill - BSA comment

Proposed amendments

1. Part 1 (1) of the Building Safety Bill provides that *This Act has 6 Parts, and contains provisions intended to secure the safety of people in or about buildings and to improve the standard of buildings*.

2. The Building Act 1984 provides a series of purposes for which the Secretary of State can make Regulations. The Building Regulations 2010 limit the power for Fire Safety (Part B) to the first purpose listed in the Building Act: *securing the health, safety, welfare and convenience of persons in or about buildings and of others who may be affected by buildings or matters connected with buildings*. This is referred to as the "life safety limitation". The other purposes currently are: furthering the conservation of fuel and power; preventing waste, undue consumption, misuse or contamination of water; furthering the protection or enhancement of the environment; facilitating sustainable development; and furthering the prevention or detection of crime.

3. The proposed amendments to the Building Safety Bill detailed below would enhance measures to secure the safety of people in or about buildings and additionally provide social, economic and environmental benefits by allowing a proportionate application of a consideration of property protection for the fire safety Building Regulations to ensure that buildings are more resilient to fire so that in the event of a fire, damage is limited.

Proposed amendments
Schedule 5 (part 1 amendments of the Building Act 1984)
2 (3) In Subsection 1 insert new point (g) *furthering the protection of property*

82 (6) (c) In sub-paragraph (5A)

(a) after "in section 1(1)(a)," insert *"(d), (e) and (g)"*
(b) *after* "in respect of flooding" insert *"and fire".*

Rationale for the amendments

Safety of people:

4. The fire safety design and standard of construction of a building determines the safety of occupants in the event of a fire.

5. The life safety limitation means that if all occupants escape safely from a fire, the outcome is a "success" (even if the building is destroyed). However, newer methods of construction are

leading to challenging and larger fire incidents – this requires a new approach to make buildings safe and to reduce the impact of such events on the occupants.

6. In recent years there have been a number of large fires in residential buildings where loss of life was only narrowly avoided: the Barking flats fire, the Worcester Park fire, the Cube Bolton fire and the Beechmere care home fire. Each of these buildings contained newer construction methods and the fires resulted in extensive damage.

7. Furthermore, a recent report[1] has challenged the Government's statement to the House in July that there is "no systemic risk from fire in blocks of flats" saying that their analysis of fire incident data shows that flat dwellers "are exposed to a much greater probability of their building experiencing a fire… and are more than twice as likely to die and just under twice as likely to be injured in a fire". Of further note is that the data used in this study is based on the existing built environment and so most of the incidents considered were not in buildings using these newer methods of construction.

8. Increasing compartment sizes of industrial and commercial buildings are also leading to an increasing scale of large fires. Large fires are inherently more dangerous for occupants and firefighters than smaller/contained fires and in the case of warehouses/factories commonly result in the destruction of the building because the danger to firefighters commonly dictates defensive tactics. This danger was highlighted in 2007 when 4 firefighters sadly lost their lives having entered an Atherstone warehouse to actively fight a fire from within. Just last week, a fire destroyed a 4,000m2 factory in Leamington Spa and one occupant remains missing.

9. When a building is designed and built to the appropriate standard to be resilient to a fire incident, the likelihood of rapid fire growth and spread is significantly reduced – so the building is inherently safer for occupants than one built to a minimum standard under the life safety limitation because the likelihood of safe evacuation of occupants is significantly enhanced. Furthermore, firefighting for the attending FRS will be safer.

10. The means to ensure that buildings are more resilient to fire and so safer for occupants is to provide a property protection consideration alongside the life safety consideration.

11. Installation of automatic fire sprinkler systems is an effective means to ensure a building is resilient to fire as sprinklers activate automatically above a fire source and extinguish or control the fire until the FRS arrive. Of note is that fact there has not been a recorded multiple loss of life in a sprinklered building anywhere in the world.

[1] The Fire Risks of Purpose-Built Blocks of Flats: an Exploration of Official Fire Incident Data in England by Dr Stuart Hodkinson and Andy Turner of the University of Leeds with fire safety consultant Phil Murphy, d3bbcf_637ac7cb24b547828ff1952056dd60a3.pdf (usrfiles.com)

Additional benefits of a property protection consideration: limiting fire damage

12. Because the life safety limitation means that a fire event is a "success" if all occupants evacuate safely even if the building is destroyed, it in effect results in the design of "disposable" buildings.

13. Broadening the locus of fire safety Building Regulations to allow a proportionate consideration of protection of property would mean that more buildings would survive fire events. When buildings survive fire events, there are significant positive and cost-saving benefits:

    a. Social benefits: homes, schools/institutions and workplaces can continue to be used after a fire: pupils' education is not negatively impacted, jobs are not lost

    b. Economic benefits: activities are not interrupted; productivity is not impacted and jobs are not lost

    c. Environmental benefits: smaller fires mean less air and water pollution, and avoids the need to rebuild destroyed property

    d. FRS benefits: firefighting is not only safer, it is also easier and cheaper.

14. The effect of allowing a consideration of property protection for the fire safety Building Regulations would therefore be safer and more sustainable buildings.

++++

15. To ensure a proportionate application of the above provision for the fire safety Building Regulations (and hence Approved Document B and BB100), the Building Regulations 2010 should subsequently be amended as below:

Limitation on requirements

8 (1) *Delete reference to "Part B"*

8 (2) *Part B of Schedule 1 shall not require anything to be done except for the purpose of securing reasonable standards of health and safety for persons in or about buildings (and any others who may be affected by buildings, or matters connected with buildings and in particular firefighters), for the purposes of furthering the protection of property, for facilitating sustainable development and for furthering the protection or enhancement of the environment to protect against disproportionate damage.*

September 2021
