

# **LGA Response to MHCLG consultation on banning the use of combustible materials in the external walls of high-rise residential buildings**

August 2018



## **About the Local Government Association**

1. The Local Government Association (LGA) is the national voice of local government. We work with councils to support, promote and improve local government. We are a politically-led, cross-party organisation, which works on behalf of councils to ensure local government has a strong, credible voice with national government.
2. We aim to influence and set the political agenda on issues that matter most to councils so they are able to deliver local solutions to national problems. The LGA covers every part of England and Wales, supporting local government as the most efficient and accountable part of the public sector.

## **Introduction**

3. The LGA welcomes the Ministry of Housing, Communities and Local Government's (MHCLG) consultation on a ban on the use of combustible materials in the external walls of high-rise residential buildings. The fire at Grenfell Tower in June of last year exposed systemic failures in the building regulation system. Dame Judith Hackitt's review of building regulations and fire safety made recommendations for the long-term reform of the system to address these failures, but as the consultation points out these will take time to implement.
4. Our immediate priority must therefore be to ensure the safety of those who live, work and visit high-rise residential buildings, so that a fire like that at Grenfell Tower never happens again. Evidence emerging from the public inquiry into Grenfell Tower, and earlier fires at Lakanal House and Garnock Court as well as those in other countries such as that in a block in Rouxbaix in France, show that using combustible material on the external walls of high-rise buildings puts people's lives at risk. The fires in these four blocks resulted in 80 deaths.
5. If we are to put people's lives first we must take the lowest risk approach. Allowing the continued use of combustible materials on the external walls of high-rise buildings means taking a risk with the lives of those who live, work and visit them. The safer approach is to only use non-combustible materials – an approach that the consultation notes Dame Judith Hackitt has indicated is a lower risk option than continuing to allow the use of combustible materials. We also believe the ban should be extended to cover all buildings where vulnerable people sleep.

# **Submission**

## Key issues

6. The LGA therefore supports the proposed ban on the use of combustible materials on the external walls of high-rise buildings, as the presence of flammable cladding and insulation unnecessarily increases the risk of a serious fire and the severity of that fire. Allowing combustible materials on the side of buildings is always a compromise on safety where – as is the case with cladding and insulation systems - there is a non-combustible alternative. In light of the Grenfell disaster, we do not believe there should be scope for such compromises.
7. Moreover, a ban on combustible materials would provide clarity for councils with regards to which materials they can use in the remediation work and any future refurbishment of their own buildings, as well as work on private high-rise residential buildings. In the latter case, councils are the enforcing authority under the Housing Act 2004, and fire authorities – whom the LGA also represents – have a responsibility under the Fire Safety Order. Both of these enforcing bodies have an urgent need for clarity.
8. The consultation points out that the BS 8414 test provides an alternative means of establishing if the materials used in the external walls of a high-rise residential building are safe. However the LGA does not believe that the BS 8414 test is a reliable guide to the safety of external wall systems that use combustible materials, for the following reasons:

6.1 The test does not adequately reflect what happens in real fires in real buildings. The Fire Protection Association (FPA) carried out its own tests on behalf of the Association of British Insurers to establish what actually happens in real fires in cladding systems. As a result of these tests the FPA concluded “the BS 8414 test may not give designers, specifiers or insurers confidence that cladding systems tested to it will ensure the level of building fire safety that is currently inferred by its use.”<sup>1</sup>

6.2 The test fails to reflect how cladding systems are installed in real life on building sites. The BS 8414 test is conducted on a perfectly constructed cladding system, where a pass result may depend on extremely fine tolerances, such as ensuring the gaps between components are the correct number of millimetres apart. We know in reality though that systems are not necessarily perfectly constructed. In particular, the evidence to the Grenfell Tower public inquiry showed that vital safety measures such as cavity barriers were not properly installed. We are aware of evidence suggesting this is a common problem<sup>2</sup>. The entire fire performance of a cladding system is dependent on the effective operation of cavity barriers, and even if everything else has been done correctly, too great a gap between them and other elements of the system can mean they are ineffective.

6.3 Test reports may not reflect the system that was actually tested. Dr. Barbara Lane’s report to the public inquiry demonstrates that there is no guarantee that any BS 8414 test can be relied on, as it might not have been conducted on the system described in the test report:

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<sup>1</sup> <https://www.abi.org.uk/globalassets/files/publications/public/property/2018/04/abi-cladding-systems-research-report-2018-04-19.pdf>

<sup>2</sup> Do we have a reference for this?

- 6.3.1 In Appendix E<sup>3</sup> of her report, she demonstrated that a system that passed the BS 8414 that was very different in its actual construction from the system described in the test report.
- 6.3.2 As tested on the BS 8414 test rigs, the system had significantly more cavity barriers and non-combustible material at crucial points in its construction than were described in the test report published afterwards. As a result anyone using the test report would not have been able to replicate the system that had been tested. It is not yet clear what motive lay behind this discrepancy. However, it is clear that there is the possibility that the reports describing BS 8414 test reports do not accurately reflect the system as installed on the BS 8414 rigs.
- 7 Given the unreliability of these tests, the LGA's view is that the risk of excessive fire spread via cladding systems would be most effectively addressed by using only non-combustible materials in cladding systems. Taking the lowest-risk approach of banning the use of combustible materials in cladding systems would render the existing system of BS 8414 tests and assessments in lieu of tests redundant.
- 8 It might be still be necessary to test the performance of cavities in cladding systems with a view to ensuring against the possible chimney effect in a fully non-combustible system. However, in the absence of combustible materials in cladding systems, we think this would be a far simpler and more reliable process, with the result not only that residents are safer but that they feel safer too.

### Question 3

- a. **Do you agree that combustible materials in cladding systems should be banned?**
- 9 Yes. The LGA believes that all combustible materials should be banned from external cladding systems and only non-combustible materials used, except where there is no non-combustible substitute available. In the case of insulation and cladding panels, there are non-combustible substitutes available.
- 10 The Health and Safety Executive's (HSE) advice on the hierarchy of controls for managing risks in the workplace states that the first step in managing risk is "Elimination - Redesign the job or substitute a substance so that the hazard is removed or eliminated."<sup>4</sup>
- 11 The HSE take the view that mitigation of risk should only be considered if it is not reasonably practicable to eliminate the risk. The LGA's view is that the risk of excessive fire spread via cladding systems can be almost entirely removed by using only non-combustible materials in cladding systems.
- 12 However, there may be some elements of systems that need to be exempted as set out in our answer to question 7 below.

<sup>3</sup> [https://www.grenfelltowerinquiry.org.uk/file/361/download?token=cL\\_IHqqr](https://www.grenfelltowerinquiry.org.uk/file/361/download?token=cL_IHqqr)

<sup>4</sup> <http://www.hse.gov.uk/risk/faq.htm#hierarchy>

**b. Should the ban be implemented through changes to the law?**

- 13 Yes. We do not believe that changing the guidance to building regulations, i.e. Approved Document B, would be sufficient in itself to implement a ban, as there is no absolute compulsion on industry to adhere to the guidance. We believe it would be preferable to introduce the ban through an amendment to the Building Act 1984 to ensure that any move to reverse the ban was subject to parliamentary scrutiny and debate.

**c. If no, how else could the ban be achieved?**

- 14 See above.

**Question 4**

**Do you agree that the ban should apply:**

**a. To buildings 18m or over in height?**

- 15 The definition of higher risk residential buildings (HRRBs) in Dame Judith's report is too narrow. The LGA's view is that HRRB's should be defined as all buildings over 11m (the height at which Scotland proposes to define high-rise buildings, based on the practicalities of fighting fires at height). The definition should also include all buildings in which vulnerable people will sleep (other than private dwellings), including hotels, student accommodation and Houses in Multiple Occupation.
- 16 We acknowledge that work will be necessary to establish the precise meaning of vulnerable in this context but consider the essential principle to be that a building should be classed as an HRRB where the nature of its occupation means it would take significantly longer to evacuate than would usually be the case and where this delay significantly increases the risk to life.

**b. Throughout the entire height of the wall, i.e. both below and above 18m?**

- 17 Yes, the ban should apply to the entire height of the walls of a HHRB. Irrespective of the height limit imposed on the definition of HRRBs – which we have proposed as over 11m – the presence of flammable materials below this limit could allow a fire to take significant hold on the parts of the building above this height limit.

**c. To high-rise residential buildings only?**

- 18 Please see the answer to question 4a.

**d. To all high-rise, non-residential buildings e.g. offices and other buildings, as well as residential buildings?**

- 19 There may be some non-residential buildings which need to be subject to the same regulatory approach due to the difficulty in effecting evacuation in the event of fire.

**Question 5**

**a. Do you agree that the European classification system should be used and do you consider that Class A2 or better is the correct classification for materials to be used in wall construction?**

- 20 The LGA agrees that the European classification system should be used.

- 21 We believe that only non-combustible materials should be used in cladding systems and that non-combustible must mean non-combustible. This implies that an A1 classification may be necessary. Recent allegations that two non-combustible systems have failed a BS 8414 test and about Vitacore G2 cladding (rated A2 s1 d0) raise serious questions about the suitability of products of this rating. Building owners need to be given clear information as to what is safe to put in buildings and, if this is not possible, the requirements around energy performance may need to be adjusted to permit the removal of cladding systems until their safety can be guaranteed.
- 22 We need to understand properly whether A2 materials can be relied upon to achieve the aims of the building regulations and why apparently flammable products can be found within A2 rated products. We also need to understand whether a honeycomb structure or other arrangements can seriously affect the combustibility of a product.
- 23 Until these questions are answered only an A1 rating appears to provide the certainty we believe residents need.

**b. If no, what class should be allowed in wall construction and why?**

- 24 Only the European classification system should be used as this will provide consistency, clarity and a classification system that is in line with that in use in Scotland.

**Question 6**

**a. Do you agree that a ban should cover the entire wall construction?**

- 25 Yes, the ban should cover the entire wall construction. Dr. Barbara Lane, in her report<sup>5</sup> to the Grenfell inquiry, gave evidence illustrating several different routes, and the range of materials involved, by which the fire spread along the external walls of Grenfell Tower. As the use of combustible materials, such as uPVC window frames or wooden balconies, can potentially play a significant role in allowing the fire to spread from flat to flat in a high-rise residential building thereby breaching compartmentation, it is important the ban covers the entire wall construction and all the materials used on the external walls and not just rainscreen cladding panels or insulation.
- 26 In addition some insulation products generate cyanide gas when they burn – the role this gas may have played in the death toll at Grenfell is as yet unclear, and the toxicity of the smoke and fumes produced when products burn is not currently considered in any of the testing criteria. However, there is not the same risk from using non-combustible material, and banning combustible materials from the entire wall construction would aid in addressing this risk.

**b. If no, what aspects of the wall should it cover?**

**c. Should a ban also cover window spandrels, balconies, brise soleil, and similar building elements?**

- 27 Yes. The LGA would like to see all combustible materials banned from use on the external walls of high-rise residential buildings. However, we recognise that there may be some components which cannot be immediately substituted by non-combustible materials, such as vapour membranes and gaskets and seals. These should be dealt with by specific exemptions, which phases out

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<sup>5</sup> <https://www.grenfelltowerinquiry.org.uk/evidence/dr-barbara-lanes-expert-report>

their use to allow the development of non-combustible products, and they should never be used where a non-combustible alternative is available.

#### **Question 7**

**a. Do you agree that a limited number of wall system components should, by exception, be exempted from the proposed ban?**

28 Yes. The legislation used to implement the proposed ban should list specific components by exception, and allow the Secretary of State to make others. However, the exemption for any wall system components should not be permanent. The exemption should expire after a set period of time, which would encourage the development of non-combustible alternatives, and provide time for them to be brought to market. In addition the exemption should only be allowed where no non-combustible alternatives exist.

**b. If yes, what components should be included on an exemption list and what conditions should be imposed on their use?**

29 As above, components should only be included on an exception list where no non-combustible alternatives exist, and the exemption should not be permanent, instead allowing for the phasing out of the use of combustible materials in favour of non-combustible products.

30 The LGA is open to the possibility that expert advice may conclude there needs to be some form of testing or other safety verification for cladding systems to take account of unavoidable use of combustibles. This testing system, if used, will require both independent third party verification of the system tested and robust random sampling of product samples used in the system's construction, and should also involve the testing of all the materials to be used on the external wall together.

**c. Would you recommend an alternative way of achieving the policy aims stated above?**

31 No comment.

#### **Question 8**

**Do you agree that:**

**a. A risk-based approach is appropriate for existing buildings?**

32 Yes. In line with the approach recommended by the Hackitt review, retrospective action should be undertaken on a risk-based rather than prescriptive basis. However, as set out in our answer to question 4 of this consultation, this approach should be applied to residential buildings over 11m in height, as well as buildings in which vulnerable people sleep.

**b. the ban should apply to alterations to existing buildings, including over-cladding?**

33 Yes. Without this stipulation, the ban will be significantly less effective, with existing buildings in effect being excluded from having to operate the ban, leaving the residents of existing buildings at risk.

**c. The ban should extend to projects that have been notified before the ban takes effect but work has not begun on site?**

34 Yes. Building owners will have sufficient notice in advance of the ban being implemented to change their construction plans as necessary.

**d. The ban should not affect projects where building work has already begun?**

35 We recommend that the proposed ban only affects projects where the building work began before a specified date. We further recommend that this date is shortly after the outcome of this consultation is published – 31 December 2018.

36 This approach will allow building owners sufficient flexibility to commence construction as scheduled without being unfairly impacted by a new ban. At the same time, it will prevent the system from being “gamed” by creating an excessive window of time in which building owners can begin construction work in a token or arbitrary way in order to circumvent the ban.

**Question 9**

**a. Which wall elements are likely to be affected by the proposed change – i.e. where they would pass as part of a cladding system in a BS8414 test but would not meet the proposed Class A2 or better requirement (e.g. sheathing boards or vapour barriers)?**

**b. We understand that since the Grenfell tower fire, a high proportion of relevant building work is already using elements which meet Class A2 or better. How frequently are elements which do not meet the proposed requirement, as identified in question 3, currently being used on buildings in scope?**

**c. What the impact of removing access to the BS8414 for those buildings affected by the ban test is likely to be?**

**d. What types of buildings 18m or over are likely to be affected by this change (e.g. hotels, residential, student accommodation)? What proportion of each type would likely be affected by the proposed change?**

**e. How much extra cost would typically be involved in meeting the proposed new requirements over and against a building which meets the current requirements? (Please provide any further details.)**

**f. Please provide any further comments on the likely impact of this change for construction (e.g. supply chains)**

37 We have not responded to the above questions in detail.

38 However, as a final point, we would like to emphasise that the system for ensuring cladding systems are safe has failed catastrophically. As a result, many people have died or suffered greatly, and residents in over 300 further blocks have been put at risk.

39 In fixing the system we must err on the side of safety, if we are to err at all. This is not simply a question of what is safe, but of what makes people feel safe in their homes, which we consider a basic human right.

40 We consider that a ban on the use of combustible materials on the external walls of high-rise and high-risk residential buildings would be the lowest-risk option of ensuring this safety. Its impact, all told, will be that we will be

significantly less likely to see another tragedy on the scale of the Grenfell tower fire – this should be the prime consideration of the government's response to the consultation.