

Mr Clive Betts MP  
Chair  
Housing, Communities and Local Government Select Committee  
House of Commons  
London SW1A 0AA

12<sup>th</sup> July 2018

Dear Clive

### **Independent Review of Building Regulations**

Thank you for the opportunity for the Local Government Association to provide evidence to the Committee on 2 July. You kindly extended an offer at the end of the session to provide the Committee with further information.

#### **Public safety**

The principle reason for setting up Dame Judith Hackitt's independent review of building regulations was to improve public safety. As we consider the recommendations from Dame Judith's final report the primary objective in the forefront of our minds must be to ensure that those who live, work and visit high-rise and high-risk buildings are safe. Everything else must be subordinate to that goal.

#### **BS 8414**

During its evidence session on 27 June, the Committee heard arguments from some of the witnesses that the best way of determining if a cladding system was safe was to rely on the BS 8414 testing regime. The LGA continues to believe there are fundamental flaws with the BS 8414 test, which mean it cannot be relied on to guide us as to what is safe to put on high-rise and high-risk buildings. In our view there are three significant problems with the test:

1. **It does not reflect what happens in a real fire in a real building.** I will not rehearse here all the points the LGA and Association of British Insurers raised in their session with you on 2 July, especially as the Committee recently received additional written evidence that sets out at some length the problems with BS 8414 test. The crucial points are that the test does not reflect the intensity of the fire that results from materials commonly found in flats; and it does not model vital details of the whole cladding system such as the role of windows, vents and the updraft created by the 'chimney effect' in the cavity between the cladding and the insulation.
2. **It does not reflect what happens on a real building site.** The systems installed on BS 8414 test rigs are erected under ideal conditions. The difference between a pass or a fail result in a BS 8414 test can literally be measured in millimetres. If the gap to be filled by a cavity barrier or intumescent strip, or the gaps between individual cladding panels are out by as little as 10-20 millimetres the performance of a system that has passed a BS 8414 test can be adversely affected to the point it is no longer safe. A tower block like Grenfell Tower can

be out of true by as much as a foot (or 300 millimetres) between the top and bottom. Maintaining the correct size of gaps across the facade of a block to ensure it is safe is therefore very difficult, if not impossible, and that is without issues created by poor workmanship. As the public inquiry has heard key safety features in the cladding system on Grenfell Tower, such as the cavity barriers, were incorrectly installed. The evidence provided to the Committee by the British Board of Agreement suggests issues with the quality of workmanship on high-rise buildings are quite widespread.

3. **It is not a real independently verified test.** BS 8414 tests are paid for and conducted by the companies making the products that go on the test rigs. They decide where the tests are conducted, they select the products that are tested, and they install the materials on the test rigs. They also decide whether the test results are made publicly available. The test centres themselves merely record the temperature of the fire during the test and how high the flames reached on the test rig. This leaves the testing process open to manipulation, and it is noteworthy that in the expert evidence Dr Lane provided to the public inquiry, she pointed out that the pictures from one BS 8414 test showed more cavity barriers had been installed on the test rig than had been recorded in the description of the system installed on the test rig.

The recent controversy over whether non-combustible cladding systems have failed the BS 8414 test further demonstrates the flaws with the testing process. A number of claims and counter claims have been made about the performance of A2 rated panels following a report in the BBC Newsnight programme broadcast on 6 July. In the absence of any independent evidence about the performance of the panels, the one clear point we have been able to take from this is that the same product was tested at two different facilities, by two different companies, with two different results; suggesting that it is possible the results obtained from a BS 8414 test depend on the objectives of those conducting the test.

### **Ban on the use of combustible materials**

Fortunately we do not need the BS 8414 test to tell us what to do; we all know that using non-combustible materials is safer than using combustible materials. This common sense approach was taken by Parliament in 1666 after the Great Fire of London, and 350 years of experience tells us they were right.

The use of combustible materials on the outside of Garnock Court, Lakanel House and Grenfell Tower killed 79 people. The use of combustible materials on high-rise blocks in other countries has also demonstrated the risks associated with them, including the fire at Lacrosse tower in Melbourne and the fire in a block in Roubaix in France, which resulted in a death. Irrespective of what BS 8414 tests show us, the evidence from real fires in real tower blocks show that using combustible materials on the external walls of high-rise buildings kills people.

It flies in the face of this evidence, the testimony of the expert witnesses at the public inquiry and the Expert Panel's advice last summer, for anyone to argue that it might be more appropriate for the ban on combustible materials to focus on banning ACM panels with a polyethylene core (ACM PE) while allowing the continued use of other combustible materials in cladding systems.

Both in its advice in response to the results of specific full scale tests, and its consolidated advice published in September 2017, the Expert Panel was clear that combining combustible cladding with combustible insulation presents a significant fire hazard on buildings over 18 metres. To focus on just ACM PE panels also contradicts the Expert Panel's advice from December to building owners about the need to seek advice on the suitability of other metal composite material and high pressure laminate panels.

It is just as perverse to argue, as some have to the Committee, that the possibility a fire might spread through a non-combustible cladding system means we should continue to allow the testing and use of combustible materials. The only rationale for such a line of argument is one where commercial profit is put before people's lives. If there is a possibility that fire might still spread through a cladding system where only non-combustible materials have been used, then the safest option would be to consider whether we should prohibit the use of any cladding systems on the outside of high-rise and high-risk buildings.

It therefore remains the LGA's view that the safest option is to ban the use of any combustible materials (including cladding panels, insulation and other materials) on the external walls of high-rise and high-risk buildings.

### **Approved Document B**

In the evidence the Committee heard some of the witnesses were of the view that the use of ACM PE and other combustible materials is already clearly banned by Approved Document B. The LGA is not of this view. Regulatory systems work best when it is clear and unambiguous what is and is not permitted. Approved Document B does not provide that clarity.

It sets out multiple routes for compliance (using materials of limited combustibility, passing a BS 8414 test or taking a fire engineering approach), Diagram 40 allows the use of European Class B materials (which are combustible) on the external wall surfaces of buildings over 18 metres in height, and there are differing views on whether paragraph 12.7 applies to cladding panels or not. The fact that we have been arguing for a year about whether the word 'filler' in paragraph 12.7 applies to the core of an ACM panel, and there continue to be differing views among the experts giving evidence to the public inquiry perfectly demonstrates the flaws with the current version of Approved Document B. Had Approved Document B been better written, with for example the word 'filler' clearly defined, we would not be arguing over its meaning.

Implementation of the recommendations from Dame Judith's final report, and the culture change she seeks in the construction industry will take time. However building owners, the construction industry and regulators need about clarity now about what they can and cannot put on the side of the buildings. The safest and most unambiguous way of providing that clarity is to ban the use of combustible materials on the external walls of high-rise and high-risk buildings.

If it would assist the Committee I would of course be happy to appear before it to discuss these and other points in more detail.

Best wishes

A handwritten signature in black ink, which appears to read "Porter of Spalding". The signature is written in a cursive, flowing style.

Lord Porter of Spalding CBE  
Chairman