

**Freedom of Information request reference number:** FOIA4566.1

**Date of response:** 27 August 2019

**Request and response:**

- 1. Please provide copies of correspondence between the London Fire Commissioner and Government Ministers, for the period 14 June 2017 to 31 July 2019, that refer to the Commissioner's concern about government actions following the Grenfell Tower fire.*

We have attached our record of five letters sent to Government Ministers from the London Fire Commissioner, either directly or as a joint signee:

- Letter to Theresa May, Prime Minister, 18 August 2017
- Letter to Kit Malthouse, Minister of State for Housing, MHCLG, 08 August 2018
- Letter to Kelly Tolhurst, Parliamentary Under-Secretary of State, BEIS, 08 August 2018
- Joint letter (signed by the London Fire Commissioner, Deputy Mayor for Fire and Resilience and Executive Member for Housing and Planning, London Councils) to James Brokenshire, Secretary of State, MHCLG. 08 May 2019
- Joint letter (signed by the London Fire Commissioner and Chair, National Fire Chiefs Council) to James Brokenshire, Secretary of State, MHCLG, and Sajid Javid, Home Secretary, 05 July 2019

In addition, the London Fire Commissioner has also presented views to Government in the following consultations:

- DCLG: Independent Review of Building Regulations and Fire Safety (October 2017) – Document attached
  - MHCLG: Approved Document B (fire safety): amendments to statutory guidance on assessments in lieu of tests (May 2018) - Document attached
  - MHCLG: Banning the use of combustible materials in the external walls of high-rise residential buildings (August 2019) - Document attached
  - MHCLG: Approved Document B (March 2019): <https://www.london-fire.gov.uk/media/3491/technical-review-of-approved-document-b-of-the-building-regulations.pdf>
  - MHCLG: Building a Safer Future and Home Office, Regulatory Reform (Fire Safety) Order 2005: a call for evidence (July 2019): <https://www.london-fire.gov.uk/news/2019-news/august/brigade-submits-consultation-response-to-government-s-proposals-to-reform-building-safety-regulatory-system/>
- 2. Please provide the replies on behalf of Government Ministers to the correspondence referred to in 1 above.*

We have attached our record of two response letters received from Government Ministers:

- Reply from Theresa May, 05 September 2017
- Reply from James Brokenshire to the joint letter from the Commissioner and Chair, National Fire Chiefs Council, 23 July 2019

The offices of Kit Malthouse and Kelly Tolhurst contacted the office of the London Fire Commissioner to arrange meetings, as requested in the Commissioner's letters to discuss these issues in more detail. Personal data has been removed from all of the attached documents under section 40 of the FOIA – Personal Information.

*3. Please confirm what date that Dany Cotton publicly announced her resignation and retirement from London Fire Brigade.*

The London Fire Commissioner announced her retirement from London Fire Brigade on 20 June 2019. A press release announcing this can be found here: <https://www.london-fire.gov.uk/news/2019-news/june/london-fire-commissioner-announces-her-retirement/>



Ministry of Housing,  
Communities &  
Local Government

Dany Cotton  
London Fire Brigade

Roy Wilsher  
National Fire Chiefs Council

**Rt Hon James Brokenshire MP**  
*Secretary of State for Housing, Communities and  
Local Government*

**Ministry of Housing, Communities and Local  
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23 July 2019

Dear Dany and Roy,

Thank you for taking the time to write to the Home Secretary and me on 5 July to raise a number of concerns about the pace of remediation of unsafe ACM cladding, other building safety issues and the operational impact of these on Fire and Rescue Services. I am providing a response on behalf of both Departments.

The issues you have raised are important ones and are a personal priority for me. As you know, the Government's action in these areas has drawn heavily on the advice provided to it by the Independent Expert Advisory Panel, of which of course you, Roy, have been a member since its inception. The perspective of the NFCC is a crucial one and I am grateful to have your perspective on the Expert Panel. Given the open and direct channel which you have via membership of the Panel to provide advice on these issues, it was therefore surprising to receive your letter which gives a commentary on so many of the issues which the Panel provided advice on. However, I will respond to each of the points you raise in turn.

I share your concern about the pace of remediation. My priority is that residents should be safe – and feel safe – in their homes. Our advice to building owners, supported by the Expert Panel, has been clear that ACM cladding must be removed as soon as possible.

I agree that temporary measures are no substitute for removal of combustible cladding systems. The Government has consistently been clear that interim safety measures must not be regarded as long-term solutions. For this reason we have recently asked the NFCC to instigate a review of the frequency with which buildings with a waking watch requirement are visited. I would welcome assurance from you that you are confident that robust interim measures are in place for all high rise buildings with known ACM cladding, and that you have plans in place to tackle fire risks in those buildings.

Too many people have been living in fear for too long because of the slow progress being made by those responsible for making their buildings permanently safe. While many building owners have rightly taken action, there are still a number of residential buildings across the public and private sectors with unsafe ACM cladding where remediation has not yet started. This situation is unacceptable and, given the £600 million of funding this Government has made available, there is no further excuse for delay. That is why I set out, in a Written Ministerial Statement on 18 July 2019, my expectations of building owners and the actions this Government is taking to accelerate remediation of unsafe cladding.

In the social sector, other than a small handful of exceptional cases, remediation will be completed by the end of the year. In the private sector, progress has been slower, which is why this Government took action by announcing a £200 million fund. By the end of December 2019, any building in the private sector which I have not been assured is permanently safe should have a clear commitment to remediation, with a start and finish date agreed. Where no such safety assurance or plan has been brought forward by the end of December, building owners can expect enforcement action to be taken. My expectation is that, other than in exceptional circumstances, building owners should complete remediation within six months of agreeing a plan – by June 2020.

In this statement, I also announced the publication of a prospectus for the £200 million remediation fund, setting out the scope and eligibility criteria for the fund, how to apply and the timetable for submitting applications. I also provided clarity around the planning treatment of ACM remediation works.

I also share your concern about reports of other external wall systems not adequately resisting the spread of fire. This is why, having taken advice from our Expert Panel, we have commissioned a series of tests to investigate the fire behaviours of a variety of systems. My Department has also commenced a data collection exercise which will enable the Department to build a complete picture of external wall systems in use on high rise residential buildings. We have asked local authorities and housing associations to identify external wall materials and insulation on all high-rise residential buildings 18 metres and over.

I know that high pressure laminate has been raised in the media as a potential material of concern. On 11 July a fire test in accordance with British Standard 8414 was carried out at the laboratories of the Fire Protection Association. This test was commissioned by my Department on the advice of the Independent Expert Advisory Panel and involved a cladding system consisting of a Class B, fire retardant, high pressure laminate rainscreen with a non-combustible rock fibre insulation. This is part of an ongoing, systematic investigation into the fire risks from non-ACM cladding systems. I can confirm that this system met the relevant pass criteria and that the Expert Panel are satisfied that this specific system does not present a risk to public safety. Detailed advice from the Expert Panel on high pressure laminate cladding systems has also been published by my Department.

You have raised concerns about the impact on Fire and Rescue Services of inspecting additional buildings. It is vitally important that residents should be safe – and feel safe – in their homes. I expect the NFCC, LFB and all Fire and Rescue Services to continue to play a key role in ensuring the safety of residents should any new buildings be identified with confirmed unsafe cladding. Officials from both the Home Office and MHCLG have been working closely with the NFCC to ensure that the data on external wall materials provides the right information to enable Fire and Rescue Services to inspect buildings with confirmed unsafe cladding swiftly. These inspections should not represent an additional responsibility for Fire and Rescue Services – they should be considered part of their existing statutory duties under the Fire Safety Order 2005 and should be funded from existing budgets.

As you are aware, HMI-CFRS has identified the protection capability of Fire and Rescue Services as an area of concern in its tranche 1 and 2 reports. The Government wants to see an overarching plan to improve capacity on protection work. This is one of the reasons why the Minister for Policing and Fire has asked you, Roy, to chair a new Protection Board to ensure that there is a strengthened assurance regime to oversee protection activity.

You also say that HMICFRS (in their tranche 1 and 2 reports) are "reporting that protection work was under-resourced in many of the Fire and Rescue Services inspected and that budget reductions have disproportionately fallen on protection teams." However, the HMICFRS tranche 1 and 2 reports found that out of the 30 services inspected, only two – Northamptonshire and Northumberland – are operating in testing financial environments. The Government has made it clear that it is up to individual Fire and Rescue Services to determine how best to allocate their resources according to the risks in their area. With regards to the overall resources available to Fire and Rescue Services, the Government has also made clear that Fire and Rescue Services have the resources they need to do their important work. As you know, the Home Office is working closely with the sector to develop a resourcing proposition for consideration in a future Comprehensive Spending Review.

Home Office officials have been working closely with the NFCC Building Safety Team to assess the impacts on Fire and Rescue Services of implementing the proposals included in the *"Building a Safer Future: proposals for reform of the building safety regulatory system"* consultation document. As part of this work, they have worked with the NFCC to understand the capabilities required so that Fire and Rescue Services identify and source the necessary skills in advance of the new building safety regime being implemented. The Home Office and MHCLG will continue to work collaboratively with the NFCC on the building safety reform agenda.

You have stated in your letter that Fire and Rescue Services have reported that building control consultations on new buildings about fire safety (including for vulnerable groups) are being "wholly disregarded". I am deeply concerned to hear this. To help the Home Secretary and I to look into this matter further, it would be helpful if you could provide specific examples of these issues occurring.

You have raised concerns about the needs of vulnerable occupants. We take the needs of vulnerable residents living in high-rise residential buildings seriously. In our consultation, as part of a proposal to create a new requirement for the person with responsibility for the safety of a building to engage with residents, we have asked for views on how the person in this role would need to make proportionate special provision for residents who are vulnerable or have additional needs, for example, residents who have a physical or visual impairment, have other disabilities, or who do not speak English. We would welcome your views on this, and on other aspects of the proposed new regulatory system that may need to take the needs of vulnerable residents into account. We would also welcome your input on whether the current requirements for fire risk assessments are sufficient through the Home Office's call for evidence on the Fire Safety Order.

You raised the issue of sprinklers. Sprinklers are already mandated for new build high rise blocks over 30m in height, and we are currently conducting a review of Approved Document B which will consider evidence concerning this height threshold in this context. In 2013, the Department wrote to all local authorities and housing associations, asking them to consider a Coroner's Report recommendation that they should consider retro-fitting sprinklers in existing residential buildings over 30 metres. However for existing buildings, retrofitting sprinklers is not always the answer. It is for building owners to consider, in consultation with their residents, advice from fire safety experts and the Fire and Rescue Services concerning whether fitting sprinklers is the correct solution for each building. The Government has encouraged all social housing landlords (local authorities and housing associations) to consider retrofitting sprinklers in existing high-rise blocks of flats; these landlords have the necessary financial flexibilities to fund this where they believe it is a priority. This Government abolished the Housing Revenue Account borrowing cap in October 2018, giving freedom to local authorities to help finance unforeseen capital repairs programmes,



such as retro-fitting sprinklers, as well as build new homes. As you already know, Fire and Rescue Services have powers to take the appropriate enforcement action if they judge that building owners (as responsible persons) have not complied with their duties under the Fire Safety Order 2005.

The Government is determined to ensure that all steps are taken to remove unsafe cladding, and to address the wider fire safety issues that the Grenfell tragedy has exposed. The Building Safety Programme is working tirelessly to ensure not just the remediation of existing safety concerns, but also that a robust and effective safety regime is created and becomes fully operational within the next few years.

The Government wants to ensure that fire safety risks are managed holistically in multi-occupied residential buildings as recommended in Dame Judith Hackitt's review. In the Government's "*Building a Safer Future: proposals for reform of the building safety regulatory system*" consultation document and the "*Regulatory Reform (Fire Safety) Order 2005: Call for Evidence*", we have asked for views on how the overlapping regulatory frameworks between the Housing Act and Fire Safety Order should be addressed. My officials and those from the Home Office, have proactively engaged with the NFCC, LFB and other key stakeholders on this issue and I look forward to receiving a formal response from you before the consultation and call for evidence closes on 31 July.

I hope the above reminders of our work together on the Building Safety Programme assuage some of your concerns. I would welcome the opportunity to meet with you both to discuss how we can work constructively together to address these critically important issues, which are of tremendous Departmental importance and personal importance to me.

A handwritten signature in black ink, appearing to read 'James Brokenshire', written in a cursive style.

**RT HON JAMES BROKESHIRE MP**

Rt Hon James Brokenshire MP  
Secretary of State for Housing, Communities  
and Local Government  
Ministry of Housing, Communities and Local Government  
2 Marsham Street  
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Dear Secretary of State,

We will never forget the fire at Grenfell Tower and the loss of 72 lives. We are clear that fundamental changes are needed to protect residents living in buildings of all kinds, but especially tall buildings, to ensure such a disaster never happens again.

As the Grenfell Tower Public Inquiry considers its Phase One recommendations and the Government makes plans for reforming systems and rules governing building safety, the time is right to be clear and frank about the urgent need to improve fire safety.

Almost two years on since the Grenfell tragedy, we have not seen enough tangible change. While we believe the outcomes of the Hackitt Review were a step in the right direction, the Government needs to go further and move faster. In this letter we will set out the priorities for action.

Expectations that the industry will solve the issues set out by Hackitt are not realistic. Industry alone won't self-regulate, won't address the current issues and most importantly won't instigate the urgent culture change required to make people safe. Progress to improve fire safety standards in buildings must be stepped up. The Government launched a call for evidence on the technical review of Approved Document B of the building regulations in December 2018.

The Government has not yet released the findings of the call for evidence and we have no confirmed timings or other details for the upcoming review. We need the Government to publish its consultation outcomes as soon as possible, alongside a clear programme for a full review of the guidance and proposals for taking this forward through legislation. This programme should seek to implement 'quick win' proposals as soon as possible and plan to deliver those changes that require further research and development without undue delay.

We need to see significant change in three key areas:

1. Ensuring new regulation covers a wider range of buildings, especially those housing the most vulnerable in our communities, than currently proposed by the Hackitt Review.
2. Mandatory installation of sprinklers in new purpose-built blocks of flats and all homes where vulnerable people live.

3. Measures to address the shortage of skills and competency across the fire safety sector in key roles including Fire Risk Assessors, Fire Engineers and Building Control.

It is vital that we remember that some of the most vulnerable members of our society are the most at risk of having a fire or being injured or dying in a fire. People who are in receipt of care in their own homes, those living in specialised housing, care homes or supported living, those with drink and/or drug dependency, those living alone and those with mobility and or health vulnerabilities all need additional support and consideration in assessing their risk from fire and the environment in which they live. Improving fire safety should be a priority for all of us, but we need to focus our efforts on those who need most support. We want to see a clear strategy from the Government to make sure this happens.

### **New regulation for buildings lower than ten storeys**

The recommendations of the Hackitt Review focused primarily on buildings of ten storeys, or 30 metres, and higher. We believe for the Government to maintain this focus on only the tallest buildings would leave many vulnerable people at risk. The scope of the new regulatory framework should be significantly wider, and based on the inherent risk to building users, not just building height.

The Government should develop and apply a consistent, evidence-based definition of 'high risk' which takes into account the height of residential building as well as the building users. We note that the Scottish Government is seeking to amend its Building Regulations to use 11 metres as the threshold for high-rise, based on the practicalities of fighting fires at this height.

This would also mean extending the remit of the proposed Joint Competent Authority for building safety – bringing together local authority building control, fire and rescue services and the Health and Safety Executive – to all high-risk buildings.

The Government announced a ban on the use of combustible materials on the external walls of new buildings above 18 metres high covering residential buildings, hospitals, schools, care homes and student accommodation. This ban should go further and apply to all new buildings.

We know banning combustible cladding itself is not the only answer – just as important are the ways in which buildings are constructed, maintained and inspected – but for the Government to allow any new building to be constructed with combustible cladding is indefensible.

### **Automatic fire suppression systems (AFSS)**

AFSS, such as sprinklers, are highly effective in detecting fires, suppressing fires rapidly and raising the alarm. While current building regulations mandate their use in new residential blocks above 30 metres, clearly this does not go far enough.

There have never been multiple fatalities from a fire in a fully sprinklered building in the UK. Data provided by 47 Fire and Rescue Services across the UK found that in those premises that suffered a fire that were fitted with sprinklers, the sprinkler system extinguished, contained or controlled fires in 99% of those incidents.

AFSS should be mandatory in all new purpose-built blocks of flats and all homes where vulnerable people live. This should include non-standard residential buildings, such as hotels and student accommodation. AFSS should be mandatory in all new buildings used for care homes, in sheltered housing, where building users may be less able to evacuate quickly, and in schools.

Adding AFSS to existing buildings is equally necessary. A number of London Boroughs have taken steps to begin retrofitting buildings such as high-rise tower blocks, but more resource is



needed. A dedicated fund should be made available for retrofitting AFSS in council and housing association tower blocks, which should also be made available to reimburse those proactive landlords who are already pursuing a retrofitting programme.

### **Skills shortage and competency in the fire safety sector**

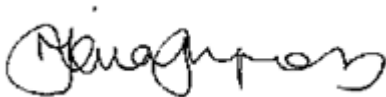
Fire engineers are vital in providing the expertise required to ensure buildings are safe from fire. It is well established that there is a national shortage of skilled fire engineers. The change we need to see in building safety cannot be fully realised unless this is addressed.

The Government should support the implementation of higher standards for fire engineering training and qualifications and provided targeted investment to support providers and trainees. This should be done through demonstrating that fire engineering is a fulfilling and rewarding career.

Serious consideration also needs to be given to improving the competency of building designers, building control bodies and fire risk assessors and other skilled roles within the sector. We would like to see third party accreditation across the fire sector to ensure skills and competencies are being maintained.

Finally, we would like to draw your attention to the significant fire risk caused by faulty white goods. You may be aware that the Mayor of London has written to the Prime Minister on this topic. We understand this is primarily a matter for the Department of Business, Energy and Industrial Strategy, although change in this area is also vital for improving fire safety and we hope you will press this case. A number of simple but effective steps can be taken, including creating a single, publicly accessible register of product recalls which the Government has committed to bringing in by the end of the year, better publicity for recalls, and stronger regulation of second-hand sales. We know that some of this work is underway and would be keen to have an update on progress.

Yours sincerely,



**Dr Fiona Twycross AM**

Deputy Mayor for Fire  
and Resilience



**Dany Cotton**

London Fire  
Commissioner



**Cllr Darren Rodwell**

Executive Member for Housing  
and Planning, London Councils



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Dany Cotton *OPM*  
London Fire Commissioner

The London Fire Commissioner is the  
fire and rescue authority for London

Kelly Tolhurst MP  
Parliamentary Under Secretary of State  
Department for Business, Energy and Industrial Strategy  
1 Victoria St  
London SW1E 5ND

Date: 8 August 2018  
Ref:

Dear Ms Tolhurst,

**Re: Safety of white goods in people's homes**

I am writing to congratulate you on your appointment and to request a meeting to discuss the safety of white goods. London Fire Brigade (LFB) attends on average nearly one fire in London every day where white goods have been involved. We have long had concerns about these issues and in 2016 we launched our Total Recalls campaign which calls for improvements in product recalls in the UK and in the manufacturing standards of white goods used in the home. My officers have discussed these issues with officials and with Margot James when she was the Minister. Officers were also due to meet your predecessor at a meeting in Parliament the day after his resignation, that meeting was understandably postponed. I am keen to keep the dialogue going and would welcome the opportunity to meet as soon as possible.

I was heartened that the Government accepted the recommendations of the Product Recall and Safety Working Group earlier this year and in particular I welcomed the announcement of a database of recalled consumer goods. This is something that LFB has long called for to make it easier for consumers to check if appliances in their home have been subject to a recall.

However, we know that there are still too many white goods in people's homes that are known to be unsafe. As it stands, it is difficult for consumers to find this information and so having a central register to access this information can only be a step forward. We are keen that the Office for Product Safety and Standards moves as quickly as possible on setting this up, to make it as comprehensive as possible and ensure that it is published next year as promised. The sooner the database is ready, the greater ability the public will have to identify faulty white goods in their homes and take actions to keep themselves, their families and their neighbours safe.

This announcement, along with proposals to look at the marking of white goods, and the new guidance for businesses on what they should do if something goes wrong with one of their products, are good steps towards improving consumer safety. LFB fully supports these measures and wishes to continue working with BEIS on them, but there are other issues that need to be addressed.


One matter that is yet to be addressed is that information that could help identify fire trends and patterns is not routinely shared between key stakeholders. For example, we understand that insurance fire investigators do not routinely inform Trading Standards when they have fires where white goods may be the cause. We would like to work with the OPSS, private sector investigators and industry to help ensure that the true extent of the possible risk to public safety is identified.

LFB would also like to see changes to the way fridges and freezers are manufactured, so that the backs of the appliances are entirely made of fire-retardant material. The polyurethane insulation used in most refrigeration appliances is highly flammable and when it burns it creates dangerous gases and thick toxic smoke. The doors and side panels of most fridges and freezers are usually covered in metal but many still use a flammable backing, which offers very little protection against the foam inside catching alight if a fire starts. We want a new standard which would mean that fridge and freezer compressor compartments and the entire back panel would have to have a suitable level of flame retardance, such as being able to withstand catching fire.

We also want the reality that people could be sleeping when a fire starts to be included as a factor in risk assessments by manufacturers. Fridges and freezers are left switched on 24/7, which means that they are operating in homes when people are sleeping. We know that if people are asleep when a fire starts in their home, it can be far more dangerous than if they are awake and able to react more quickly.

I am keen to work with you on finding solutions to these issues that will help protect the public, and hope that we can meet soon to discuss them further.

Yours sincerely



**Dany Cotton**  
London Fire Commissioner



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Dany Cotton *MBE*  
London Fire Commissioner

The London Fire Commissioner is the  
fire and rescue authority for London

Kit Malthouse MP  
Minister of State for Housing  
Ministry of Housing, Communities & Local Government  
Fry Building  
2 Marsham Street  
London SW1P 4DF

Date: 8 August 2018  
Ref

Dear Kit

**Re: Fire safety in residential premises**

I am writing to congratulate you on your recent appointment and to request a meeting to discuss issues relating to fire safety in residential premises.

London Fire Brigade has long been calling for changes to building regulations to improve fire safety in residential premises and my officers have been working closely with Dame Judith Hackitt and her team on the Independent Review of Building Regulations and Fire Safety. We publically welcomed the report upon its publication in May and were encouraged to see that many of our concerns and recommendations had been taken on board. We have also publically welcomed the recent announcements from the Secretary of State regarding the review of Approved Document B and the introduction of mandatory electrical safety testing in the private rented sector – both of which we had been calling for.

We agree with Dame Judith that the vast majority of reforms need to apply to all buildings and that there must be strengthened regulatory oversight, more clarity of roles and responsibilities, raised competence levels across the sector and better quality and performance of construction products. This needs to apply to all buildings through their entire lifetime, from initial design, specification and construction right through to later maintenance and refurbishments.

The initial scope of the Independent Review meant that some opportunities were missed – such as a chance to again look at the important role that the use of sprinklers and other automatic fire suppression systems could have in making buildings safer. We hope, therefore, that the implementation of the reforms will look at the whole system and all the possible solutions.

We have a once in a lifetime opportunity to shape the fire safety landscape in a way that has not previously been possible. I believe that Dame Judith's report is a positive first step towards a system that puts public safety first and which provides a framework for meaningful reform. It is essential that the Government now urgently provides the structures and the detail needed to ensure this framework is implemented into a system of building regulations which will ensure a tragedy like the fire at Grenfell Tower never happens again.

I am keen to work with you on these issues, and hope that we can meet soon to discuss them further.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Dany Cotton', with a long horizontal flourish extending to the right.

**Dany Cotton**  
London Fire Commissioner

Dany Cotton MBE  
London Fire Commissioner

Rt Hon Theresa May MP  
10 Downing Street  
London  
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London Fire Brigade is run by the London  
Fire and Emergency Planning Authority

Date: 18 August 2017

Dear Prime Minister,

**Thousands of dangerous white goods are still being used in homes across the UK.**

This week marks the 12 month anniversary of a major fire at Shepherds Court in Shepherd's Bush. The fire destroyed the homes and all the possessions of a number of families living in the tower block. The fire investigation showed that the fire was caused by a faulty Indesit tumble dryer which was subject to the corrective action/safety notice by Whirlpool, the parent company.

A year on people across the UK are still using white goods that pose a serious fire risk and are subject to recall or corrective action. Worse still, some fridges and freezers are still being produced with a flammable plastic backing, which offers very little protection against the insulation foam inside catching alight if a fire starts.

We are deeply concerned that, a year after Shepherds Court, decisive action is still needed to improve product recalls and manufacturing standards for white goods in the UK.

**There are the three fires a day involving tumble dryers in the UK and the devastating fire at Grenfell Tower started in a fridge freezer.**

In 2010 36-year old Santosh Benjamin Muthiah died from the effects of smoke inhalation after saving his wife and two young children from a fire in their Wealdstone home that was found to have been caused by a faulty Beko fridge freezer. The Coroner recommended a series of measures to improve product recalls, but these changes have still not been made.

In 2011 Muna Elmufatish, 41 and five of her children Hanin, 14, Basma, 13, Amal, nine, Mustafa, five and Yehya, two all died in a fire at their home in Sonia Gardens in Neasden which was caused by a Whirlpool chest freezer.

**There has been over three years of reports and recommendations but as yet no action from Government.**

We appreciate that the Government has been looking into these issues and commend the work that Margot James at the Department for Business, Energy and Industrial Strategy has undertaken.

We are extremely concerned, however, that the review of the UK product recall system was first announced in November 2014. This was then launched in March 2015 with consumer champion, Lynn Faulds Wood leading the review which reported in February 2016 with a series of recommendations. A steering group was then set up to take these forward. Following the Shepherds Court fire, a new working group to replace the steering group was set up in autumn 2016 which published its recommendations in July 2017. We are now awaiting a Government response to the report which we understand is due in the autumn.

This means that the process of review has been ongoing for almost three years and as yet there has been no substantial changes made to improve this system. What is needed now is action.



There are some simple things the Government can do. For instance, it is extremely difficult for consumers to check if appliances they have in their home are subject to product recall. We believe there should be one, trusted, searchable place to look up your appliances – this should be set up centrally on gov.uk<sup>1</sup>.

We are also concerned that the review process did not address manufacturing standards for white goods<sup>2</sup>. For example, all fridges and freezers should be constructed to keep flammable insulation material protected from the components in the appliance which could cause a fire. All appliances should be marked with the model/serial number so they can be identified after a fire. There needs to be improvements in the way that producers and distributors undertake assessments of how safe white goods are to specifically take into account the risk of a fire starting while people are asleep.

**We are writing to you now to call for the recommendations of the working group report to be acted upon swiftly and in full, to include a single register for UK product recalls. We also call upon the Government to put its full weight behind bringing about changes in the international standards for how white goods are manufactured and to look at what can be done to bring about these changes more quickly in the UK.**

Yours sincerely,



**Dany Cotton**  
London Fire Commissioner



**Fiona Twycross AM**  
Chair, LFEPA



**Gareth Bacon AM**  
Lead Conservative Member,  
LFEPA



**Rt Hon Sadiq Khan**  
Mayor of London



**Paul Embery**  
Executive Council Member (London)  
Fire Brigades Union



**Stewart Edgar**  
Lead for Prevention  
National Fire Chiefs Council



**Phil Buckle**  
Chief Executive  
Electrical Safety First

Cc.

Home Office: Rt Hon Amber Rudd MP and Nick Hurd MP

Department for Business, Energy and Industrial Strategy: Rt Hon Greg Clark MP and Margot James MP

Department for Communities and Local Government: Rt Hon Sajid Javid MP and Alok Sharma MP

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<sup>1</sup> The current page - <https://productrecall.campaign.gov.uk> - directs people to third party sites and is not easy to search. Margot James has asked if a single central register and the requirement for companies to notify Government of any recalls is needed. The answer is yes.

<sup>2</sup> Work in the BSI committee (CPL/61) is ongoing but five years after concerns were first raised this issue has still not been resolved.



17 October 2017

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Title of consultation

## **Call for evidence for the independent review of building regulations and fire safety**

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Organisation

### **Independent Review of Building Regulations and Fire Safety**

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#### **Introduction**

London Fire and Emergency Planning Authority (LFEPA) runs the London Fire Brigade (LFB). The 17 members of the Fire Authority are appointed by the Mayor of London. Eight are nominated from the London Assembly, seven are nominated from the London boroughs and two are Mayoral appointees. The Policing and Crime Act 2017 includes legislation to bring fire and rescue services in London under the direct responsibility of the Mayor of London by abolishing LFEPA and creating the London Fire Commissioner as a corporation sole. This change is currently expected to happen in April 2018.

LFB is the busiest fire and rescue service in the country and one of the largest firefighting and rescue organisations in the world. We are here to make London a safer city and our vision is to be a world class fire and rescue service for London, Londoners and visitors. We will always respond to fires and other emergencies, but our work has changed over the years with a much stronger emphasis now on fire prevention and community safety.

LFEPA is the enforcing authority for the Regulatory Reform (Fire Safety) Order 2005 in London. The Order applies to virtually all buildings, places and structures other than individual private dwellings and relates to fire safety in parts of blocks of flats which are used in common by more than one flat.

#### **Executive summary**

London is a complex city in terms of risks, density, population and building type. As the fire and rescue service for London, LFB has extensive experience of this complicated built environment and how it is regulated. LFB has a role in the building control process, dealing with new buildings when they are being proposed and constructed. LFB enforces fire safety legislation in occupied buildings across the city and provides emergency response to fires and investigates the causes of fires. Through all these roles LFB has an overview of the current state of building regulations and fire safety in the most complex built environment in the UK.

LFB very much welcomes this independent review. LFB campaigns to influence decision makers and politicians to make choices that improve safety and to challenge changes that would increase fire risks or diminish public safety. LFB has raised concern over the quality of construction of some buildings and for a number of years has been calling for a review of the existing guidance on the building regulations. This review is a once in a generation opportunity to shape the systems in place and the guidance provided to better serve the industry, make the built environment safer and protect people from fire.

Although some modifications would be welcome, overall, LFB finds the level and scope of Building Regulations 2010 themselves to be generally appropriate. Of greater concern is that key parts of the legislation are not being followed or enforced. This leads to a poor system which can ultimately fail to protect members of the public and firefighters from fire.

The guidance to support the legislation is lagging behind common practice and modern construction methods and techniques. LFB would like to see this guidance updated to bring it up to date but would also stress that this guidance should be used by competent fire safety professionals and should be designed with that in mind – it would not be helpful to attempt to over simplify this complex subject area.

The current process for planning and building control consultations can lead to the fire and rescue service being consulted very late in the day, in some cases after the building has been completed and occupied. This can lead to inappropriate solutions in place which may remain in a building for its entire lifetime. These issues could often have been resolved very easily earlier in the process.

There is an unhelpful overlap between housing legislation and fire legislation in purpose built blocks of flats. This overlap results in fire authorities only being able to consider certain parts of buildings in terms of fire safety and local authorities being unlikely to consider fire safety at all under the housing legislation which covers a lot of other things too. LFB want to see this overlap resolved in a way which clearly defines the extent of law in these premises.

The most concerning point highlighted throughout this response is that of competency. LFB has noted a decline in competency and skills in the sector, particularly in the last five years. This competency issue relates to individuals and organisations taking part in initial design stages of premises, those assessing and approving designs (including fire authorities), those undertaking building works and making changes to the original design and those carrying out fire risk assessments once the building is occupied.

This submission aims to put forward information to help answer the questions set out in the call for evidence, point to areas where LFB would welcome improvements and provide suggestions for solutions where possible. The table below provides a summary of the key areas this response covers.

<b>Key points and suggestions put forward by LFB on building regulations and fire safety</b>		
<b>Key points</b>	<b>Suggestion</b>	<b>Section number</b>
Legislative framework overall		
LFB find building regulations to be generally appropriate but are not always followed or enforced	Regulations to remain as present with some modifications and more robust systems in place for enforcement over the lifetime of buildings.	1.1
The Housing Act is the primary legislation for fire safety within dwellings however rarely used for this purpose.	Better definition of the interaction between the current legislation; or Make the Regulatory Reform (Fire Safety) Order (the FSO) the primary legislation for fire in all buildings; or Encourage better use of the Housing Act to address fire failings within individual dwellings where appropriate.	1.47 - 1.55-
The number of fire fatalities across the UK have been falling since the turn of the century.	Care must be taken that complacency does not reverse this downward trend.	1.46
There is a need to maintain independence in the role of approving authorities.	Greater clarification on the separation between the enforcement role of fire and rescue services in PAPs, around conflicts of interest for fire service trading arms and around the licencing/ongoing auditing of Approved Inspectors.	5.6-5.8
The complexity of a building is not determined by a single parameter such as height or occupancy group.	LFB would not want to see the introduction of differentiation in the regulatory system between high rise multi occupancy residential buildings and other complex buildings. More guidance on 'super high rise' buildings would be useful though.	8.1-
Building control consultation process		
When BCBs are consulted on one part of a building the legislation does not provide the scope for them to consider how this will affect another part of the building	Increase scope for BCBs to consider the affect of consultation on other parts of a building in the guidance/legislation	1.11
LFB are sometimes consulted too late in the process to have any meaningful impact on design.	Through guidance/legislation increase use of pre consultation with fire authorities; or Align building control and planning processes.	1.12- 1.16
Information provided to consultees for consideration of a scheme can vary widely and in some cases is not sufficient. . Consultation information	Clear guidance on what should be expected as part of the consultation package	1.17

Modifications and design changes which affect fire safety occur after approval by the FRA through processes such as value engineering. This means they are not fully considered.	A more robust process to ensure late design changes do not adversely affect safety	1.18 – 1.20
Schemes are approved at planning stage which have inherent issues regarding fire brigade access which it is hard to rectify later. LFB are not a statutory consultee for planning.	Align building control and planning processes; or Make fire and rescue authorities statutory consultees for planning applications; or More detailed information about fire service access to be included within any planning conditions.	1.39 – 1.40
There is variation in the governance of building control application between different areas of the built environment (e.g transport infrastructure, which utilises statutory undertakers).	Instigate a formal requirements to consult with fire and rescue authorities at an appropriately early stage; or Require a third party review of proposals.	1.41- 1.45
Building Regulations require fire safety information to be passed to the user of the building once the building is complete (known as Regulation 38) but this is rarely complied with.	Improve enforcement of Regulation 38, possibly by making it an offence to fail to comply.	1.8 – 1.9
There are no mandatory checks for any fire safety elements during building construction making it difficult to ascertain that items such as cavity barriers are present or fitted correctly once the construction is complete.	Consideration of a more robust process of inspection during construction.	5.9
The FSO relies heavily on the building being built appropriately - however when the construction is inadequate there are limited opportunities for a risk assessor to identify hidden issues.	There are several ways to address this, with the most obvious being ensuring that buildings are built correctly. A requirement for more intrusive risk assessments might be a more immediate solution.	5.11
Approved Document B (ADB) and other guidance		
Calls to simplify ADB.	Rather than simplify the guidance, measures should be put in place to ensure that its users are competent fire professionals who meet minimum levels of understanding of the principles of fire safety design before applying the guidance	1.21- 1.23

ADB is not used holistically. LFB see examples where variation from one part of guidance significantly impacts another part of it which is then overlooked.	More clarification in ADB guidance.	1.24
Misunderstanding that ADB is a 'maximum' standard and comparative assessment	ADB should be considered the minimum reasonable standard for safety and more information in ADB to explain why certain solutions are recommended..	1.25 – 1.31
Common misunderstanding that ADB is the actual regulations, rather than guidance.	Improved understanding within the sector is needed.	1.32
Need for a review of ADB	Appendix 1 sets out suggested amendments.	1.33 – 1.35
There are multiple sources of guidance available from industry bodies.	A more regular review of ADB should be considered if BCBs are finding a need to fill an potential gap in guidance. LFB would welcome consideration of the impacts of 'cherry picking' between standards and guidance	1.36 – 1.38
Refurbishment and upgrade of buildings		
Non worsening conditions means that it is hard for. Building Control Bodies (BCBs) insist that when refurbishments occur the general fire precautions are updated to modern standards	Clarify intent and application of this condition in guidance; or Amend condition in light of how it is being interpreted and applied.	1.3-1.7
The FSO can only require maintenance of firefighting facilities but not improvements.	Amend legislation to allow for improvements in otherwise poor firefighting facilities; or Allow increased powers to fire and rescue authority (FRA)/BCB to require improvements in firefighting facilities.	1.10
Skills and competency		
The role of fire risk assessors is vital however their role and competence is sometimes questioned.	Consider how to ensure fire risk assessors are competent which could be by way of a national register.	2.20 4.20- 4.22
Fire safety officers should be appropriately competent.	Fire services have introduced a competency framework however this would benefit from third party quality assurance.	4.2-4.5



There appears to be a large variation in the level of expertise in BCBs. LFB have been used as a free third party validation service during the building control consultation process.	Building control bodies should be competent to understand and review all aspects of a design, or they should employ a competent third party to review on their behalf. Benchmark standards might also help. .	2.14-2.17
A 2017 report by Meecham Associates considered the situation in Scotland. Many of the findings of this report are equally applicable to England.	This review should consider the findings of the Meecham report to determine if those findings and the recommendations are appropriate for England.	4.7-4.8
There is no restriction on who can undertake a detailed fire safety design, and LFB sometimes see evidence of designs undertaken by those who do not appear to be sufficiently experienced or qualified.	Consideration should be given to similar standards such to that of structural engineers being applied to fire engineers.	4.9 – 4.11
The competence of contractors could contribute to failings in compartmentation in buildings.	Consideration should be given to contractor competency and how to raise the standard throughout the industry.	4.12-4.13
Many life safety systems have no requirement for formal qualifications.	A long term aspiration could be to require minimum qualifications for contractors. A short term solution could be for contractors to be part of an appropriate trade/industry body which has an appropriate means of assessing competency.	4.14-4.17
The competency concerns equally apply to statutory undertakers, and could arguably be more critical given there is no requirement to consult with a BCB.	Benchmark standards required for BCBs could also be extended to those providing fire safety guidance for statutory undertakers. Due to the scale and complexity of these projects a requirement for third party review could also be appropriate.	4.18-4.19
Regulatory Reform (Fire Safety) Order (FSO)		
FSO guidance over 10 years old and during this time guidance from elsewhere in the sector has been developed.	Review and brand all current guidance for premises that the FSO applies to, in order to provide clarity. This should be done though consultation with all user groups.	1.56-1.59
It is not always clear who has responsibilities to comply with particular requirements of the FSO.	Consider a requirement to produce a document detailing who has particular responsibilities for life safety in high risk premises.	3.1-3.2

Fire and rescue services use informal notices and/or action plans to work with building owners to improve the safety of their buildings. In London these are called notification of deficiencies and 700 are issued on average each year..	A more statutory footing for this level of notice and for them to be specified on the risk to particular individuals using buildings.	5.16
Building Regulations roles and responsibilities		
There is lack of clarity on who has responsibility for compliance.	Consider the benefits of CDM 2015 framework for detailing roles and responsibilities.	2.1
There is concern regarding design and approve scenario ('one stop shop') used by some Approved Inspectors.	Regulation 9 of the Building (Approved Inspectors etc.) Regulations 2010 seeks to avoid this but stronger guidance is required.	2.2 – 2.11
Building performance standards are not always being adhered to, and those setting the standards are sometimes also responsible for enforcement.	Consider how the building performance standards are being applied, and if the current audit and enforcement model is appropriate.	2.12 – 2.13
Building control bodies do not always have the required knowledge and experience and do not always employ third party specialists when this is the case.	Consideration should be given to formalizing when and where a third party report/review is required, and who is competent to undertake such work.	2.14 – 2.16
Whilst the introduction of Approved Inspectors has provided competition which has advantages, there is also a suspicion that this has led to a reduction in site visits in some cases.	Review the appropriateness of the building performance standards and consider if other requirements would assist.	2.17
There are sometimes parties with responsibilities within the FSO who are not aware or who do not understand their responsibilities.	Consideration should be given to the regulation of the role of a fire risk assessor, particularly for high risk premises and/or additional guidance for responsible persons and the contractors they employ.	2.18- 2.21
Quality assurance and testing of materials		
Products being used which are marketed with claims of passing fire safety tests but without providing detail around the testing.	Products should be clearly identified as to what tests they have passed and the limitations of their applicability. ... Any use of a product in a situation beyond which it has been tested for should be considered and justified by a competent person. All information about products and their use should be included as part of the Regulation 38 package.	7.1
Products are not always tested with the most appropriate test	Consider a national requirement to have products and services tested fully with a national	7.2 – 7.7

and sometimes full assemblies are not tested.	(or international) register of tested and approved fire safety products, including the details and results the testing.	
Many fridges and freezers are now made of plastic and insulated with polyurethane foam and are on 24/7. Flame spread on a plastic back panel could be as fast as one centimetre per second.	Test should take into account the fuel loading that commonly exists in homes.	7.8-7.11

## The overarching legal requirements

**Q1** To what extent are the current building, housing and fire safety legislation and associated guidance clear and understood by those who need to follow them? In particular:

- What parts are clear and well understood by those who need to follow them?; and, if appropriate
- Where specifically do you think there are gaps, inconsistencies and/or overlaps (including between different parts of the legislation and guidance)? What changes would be necessary to address these and what are the benefits of doing so?

### **LFB Response**

The extent to which the current legislation and guidance is clear and understood is highly dependent upon the competence of the user. While this might seem an obvious statement it is important because there is a wide range of levels competence within and between the different parties involved in this area. This is discussed in more detail within Q4 of this response.

#### *Building Regulations overall*

- 1.1. In terms of the Building Regulations there is sometimes a lack of appreciation that satisfying one element of the Regulations can jeopardise another. For example, satisfying requirements for Part L (conservation of fuel and power) needs to be considered in conjunction with Part B (fire safety) so there is no conflict. This means the design needs to be considered holistically. It is LFB opinion that the Building Regulations are clear, this may not be the case for other parts of the industry.
- 1.2. One of the key advantages of the functional requirements of the Building Regulations is that they allow for innovation within the design development. LFB would not like to see this change. The functional nature does however rely on them being competently considered and applied and we are aware of alternative interpretations being placed upon them even amongst Building Control Bodies (BCBs).

#### *'Non worsening of conditions'*

- 1.3. There is a disconnect with the Building Regulations 2010 requirements and the Regulatory Reform (Fire Safety) Order ("the FSO") expectations of continuous improvement through the fire risk assessment process. Regulation 4(3) of the Building Regulations 2010 states that where the work did not previously comply with Schedule 1 that when the new work is complete it should be no more unsatisfactory in relation to that requirement than before the work was carried out.
- 1.4. This is interpreted as allowing fire precautions to be removed and replaced on a like for like basis - effectively meaning a building can be refurbished many times but the general fire precautions may never improved up to modern standards.
- 1.5. Reliance is placed on the FSO, but it may be that the relevant precautions are 'hidden' by construction and never seen post build and so are not included in the FSO audit process.
- 1.6. An example would be a staircase enclosure which as-built (mid 1960's) was provided with a nominal 30min fire resistance. Modern standards would expect two hours fire resistance, yet despite works being undertaken to the partition, no upgrades were considered necessary by the BCB.
- 1.7. In some of the most concerning cases, non worsening is sometimes applied whereby had the building been occupied at the time of the consultation, LFB would have undertaken

enforcement action under the FSO. Despite this, as far as the BCB is concerned, the existing condition is still considered to be the base standard for measuring compliance with the Building Regulations. We believe that this leads to inconsistency and a wide interpretation of the standard that should be met. Issues can be encountered where the traceability on the 'existing' condition can be an issue and therefore a closer alignment between Building Regulations and FSO on this matter would be beneficial. Consideration should be given to the need for a fire risk assessment to be undertaken on any existing conditions and the outcome of this review could therefore be used as the benchmark for any future development.

#### *Regulation 38*

- 1.8. Building Regulations 2010 (Regulation 38) requires that fire safety information is passed from the person carrying out the works to the responsible person once the build is complete. The LFB experience is that this is often not done well, and there is little if any evidence of enforcement action taken when it hasn't been undertaken appropriately. Consideration should be given to make it an offence under the FSO not to pass on suitable and sufficient fire safety information. This would require consideration of the interactions between the different legislations. An alternative would be more enforcement on compliance with Regulation 38 as it stands.
- 1.9. LFB are aware that the BCB, in many cases, does not review or see the content of the Regulation 38 package of information. Their approach is to get a signed undertaking from the person carrying out the work that they will pass this information to the responsible person. LFB are not convinced that the process is robust, nor that there is the appropriate level of compliance with Regulation 38.

#### *Fire service access and facilities –Building Regulations and the FSO*

- 1.10. A further issue that requires consideration is in relation to firefighting facilities and the scope of both Building Regulations and the FSO. Article 38 of the FSO can only ask for *maintenance* of firefighting facilities and cannot require improvements to them due to firefighters not being considered relevant persons under the FSO. Therefore when designs are approved in relation to ADB B5, which do not offer the correct level of protection for firefighters, FRAs have little further power to require changes. If we consider this in context of an expected building's life span, which can be anywhere from several years to several hundred years, this is a long time for the building to have potentially inappropriate firefighting facilities. Firefighting lifts are one example; an older style fireman's lift may not have many of the latest safety features such as dual power supplies yet under Building Regulations, even if a refurbishment were to include changing the lift cars, then the non worsening condition could still be applied. Dependent on the circumstances, these could pose potential ongoing inherent firefighting safety risks due to the loss of opportunity to upgrade facilities to modern standards.

#### *Reach of consultation and impact on general fire precautions*

- 1.11. The reach of consultation can also present an issue in terms of overall general fire precautions within a building. For instance, a BCB may have an application for refurbishment of a percentage of the total floors in a building. While consultation under the Building Regulations may be limited in scope to these floors, from an enforcing authority perspective the LFB interest also includes the impact any changes might have on the rest of the building. An example would be a consultation on the addition of one floor onto a building which results in the need for protected lobbies to be provided

around a protected staircase. In this case the BCB may require that a lobby is provided on that floor being consulted on, but there is no scope to insist on lobby installation on any other floor level if these fall outside the scope of the application.

#### *Consultation process and procedural guidance*

- 1.12. There are areas within the consultation process which, from our experience, do not always achieve the intended aims of the procedural guidance i.e. to seek mutually compatible views and prevent the need for any extra building work to be undertaken at the end of the building project.
- 1.13. LFB are often consulted too late in the design development to have any meaningful influence on the design, however it is noted that procedural guidance suggests that BCBs should consult only once they are minded to approve (unless preliminary design advice has been sought).
- 1.14. A late consultation often manifests itself in issues such as inappropriate access provided for firefighting, which may have been agreed at the planning stage and dependent on any restrictions placed on this stage it may therefore be difficult to change at building regulations stage. For example, some residential schemes are developed at planning stage with no vehicular access within the site. This then poses significant issues for LFB appliances and personnel which should be able to get within a reasonable distance of any accommodation.
- 1.15. LFB have noted and seen late consultation used as a tactic, effectively presenting a fait accompli in an attempt to force LFB to 'accept' that any significant change to the design is not possible or unreasonable.
- 1.16. More use of the pre-consultation informal advice or consultation at planning stage would be beneficial, and/or perhaps the planning and building control process be more closely aligned when there are schemes which will pose issues for fire service access. More engagement at pre-consultation stage would bring new challenges in terms of implementation and resourcing from the fire service perspective which will need to be carefully considered. A cost recovery scheme based on time spent could be introduced.

#### *Consultation information*

- 1.17. The consultation package of information can vary widely in terms of content and this will often relate to the nature of the building works. Simple drawings and a short explanation of proposals can suffice for some projects or for more complex schemes a full fire strategy with detailed drawings might be necessary. There is however no clear guidance on what should be expected as part of the consultation package and while BCBs may be intimately familiar with schemes through their ongoing involvement often the consultation with LFB may only occur once as part of the process. Therefore the information provided needs to have sufficient detail to enable observations and comments to be provided.
- 1.18. LFB have recently developed a guidance note on how we would like to be consulted and are encouraging use of the Building Control Alliance consultation pro-forma document to try and achieve some level of consistency. The pro-forma document provides information from the purpose group through to the height of the building and scope of the consultation being submitted. It also includes detail on the BCB approval status which is important as we have received consultations which the BCB had themselves rejected.
- 1.19. Often the construction method is not identified to LFB during the consultation stage, despite requests for the information. The use of modern methods of construction (in particular cross laminated timber or modern timber construction) are of particular interest



as this can allow us to consider fire risks during the construction phase and involve colleagues from HSE in discussions.

- 1.20. The use of building information modelling (BIM) may offer an opportunity for LFB to better understand the design development and will provide information that currently often missing from the consultation package. There a question as to how fire and rescue services will handle and review information being submitted in this format. Procedural guidance still refers to hard copies and several fire and rescue services, including LFB, are still developing methods of electronic consultation. This does not currently include consideration of BIM.

#### *Modifications and value engineering*

- 1.21. For the majority of cases LFB do not see the 'as built' fire documentation therefore what might have been considered acceptable at Building Regulations consultation stage may have changed significantly at final build and there may have been a lack of further formal consultation. It may be an undue burden to require a process of re-consultation, but there should be a robust process to ensure that any design changes do not adversely affect the fire safety design especially if, for example, 'value engineering' or a site specific security strategy has been adopted at a later stage in the process.
- 1.22. Value engineering is a process of examining alternative products/services to eliminate any unnecessary costs, in order to achieve value for money on a project by amending, changing or updating the design. It is a perfectly appropriate approach but it should never reduce the adequacy of a given solution which often happens by considering elements in isolation.
- 1.23. Value engineering can have a detrimental impact of the fire safety design if done on an ad-hoc basis and without the involvement of a fire safety professional. LFB have seen examples where value engineering has been considered for one property of a given product (e.g. the thermal performance of an insulation material) overlooking, and to the detriment of, the expected fire performance. For example, the use of combustible insulation materials which have provided an economical solution to a thermal performance requirement however has not satisfied the requirements for Schedule 1 Part B4 of the Building Regulation 2010.
- 1.24. Where modifications have occurred then there may be a need to re-consult but right now the parameters on when to re-consultation would be expected are not always clear. LFB would like to see this reviewed, considering circumstances such as substitute materials being used which may be critical to the overall fire safety design strategy.

#### *Approved Document B Volume 2 – Buildings other than dwellinghouses (ADB)*

- 1.25. Approved Document B, Volume 2 was updated in 2013 but its last major technical update was in 2006 and it is in need of a review which considers many areas of the guidance. Consideration needs to carefully be given to the scope and intended users of the guidance prior to any change of the content. This will allow any changes to be undertaken with proper context. Whilst many of the issues below can be linked to the competency of those using the document, a full review of ADB and inclusion of new commentary to deal with emerging issues would improve standards.

#### *Reject calls for oversimplification of ADB*

- 1.26. LFB have seen a desire from architects in particular, to simplify Approved Document B(ADB) to make it more accessible such that it can be used by someone with limited fire safety knowledge. This has been evident in LFB discussions with bodies such as RICS and the Fire Sector Federation. Fire safety and fire engineering is such a complex area

that it should only be undertaken by individuals with the right level of competence and simplification of the guidance is not the right approach. LFB consider competence to be a balance between appropriate qualifications, knowledge and experience. To use ADB properly requires a full appreciation of the principles of fire safety design and an understanding of how the guidance has been developed and should be used.

- 1.27. There are areas within ADB which have been identified as being either misunderstood or misapplied, section B4 (external fire spread) for example, but further clarification - rather than simplification - of those areas is what LFB would welcome.
- 1.28. Having an appropriate level of knowledge is also important in terms of understanding the impact that satisfying one element of ADB may have on another (e.g. for B1 needs to be considered in conjunction with B5).

*Misunderstanding that ADB is a 'maximum' standard and impact of comparative assessment*

- 1.29. In terms of ADB, LFB experience it is often deemed to be the 'maximum' level in terms of benchmarking a fire safety design as it is considered to represent the level of risk acceptable to society.
- 1.30. Due to the nature of the regulations the design may be developed by way of an inappropriate comparison with ADB. This comparative assessment is not always appropriate and in some cases ADB would offer just the minimum reasonable standard. There is a need for professional judgement as part of the design development when considering a comparative assessment.
- 1.31. There are solutions within ADB for which subsequent research has shown to demonstrate potentially less favourable levels of safety than previously thought, or at least results in limitations on where they should be applied. For example, the use of an automatic natural openable vent to ventilate a common corridor. Research has shown that this type of vent may be vulnerable to wind conditions negating their performance in certain circumstances.
- 1.32. In these cases new knowledge/understanding should not be ignored or dismissed and should also be considered when applying a comparative assessment. Often British Standards will address these areas but without a substantial review of ADB, such items as these have remained in that document. For example, BS9999 now places a limitation on the height of a building where a natural automatic vent might be appropriate.
- 1.33. Similarly, some designers are open with their opinion that they are only expected to design to the minimum to achieve compliance with the building regulations, rather than the fundamental expectation of seeking the acceptable level of safety.
- 1.34. Other bad practice has been observed where some take the view that by omission from ADB a solution is appropriate (i.e. ADB doesn't say I *can't* do this therefore I can). LFB does not believe this to be the case.
- 1.35. In certain cases provisions within ADB can be completely ignored such as ADB 1.3 relating to provisions for sheltered housing. Whereby additional detection levels are advised to be considered where it is known that vulnerable persons are likely to be present.

*Misunderstanding about status of ADB*

- 1.36. LFB have seen a misunderstanding that 'compliance' with ADB is all that needs to be demonstrated - without cross reference back to the Building Regulations. This may be a misunderstanding of the Regulations and/or the status of the Approved Documents in relation to these. It is a common mistake for people with differing levels of expertise to consider ADB as being the building regulations rather than a guidance document on how

to comply with the functional requirements of the regulations for common buildings types.

#### *Overall need for a review of ADB*

- 1.37. ADB may also benefit from further explanation as to the basis behind an expected solution in the guidance. LFB officers are often faced with a proposed variation from the guidance which we believe may be linked to the designers lack of knowledge as to why a particular expectation, such as an explicit limitation in height, is recommended. For example it is sometimes not appreciated that such a height limitation is linked to firefighting operational tactics and equipment, and that there is therefore little allowance for extending a height which is linked to the reach of a firefighting ladder for example.
- 1.38. In terms of the content within the guidance itself, Appendix 1 provides a more detailed list on what aspects of Approved Document B Volume 2 (ADB) LFB would like to see reviewed, although this list is not exhaustive. This list has been compiled for some time awaiting the review of ADB and is likely to need further review in light of recent high profile incidents.
- 1.39. During the consultation process for the removal of the local Acts, and in particular London Building Acts (section 20) in 2013, LFB called for a full review of ADB. Of particular concern was that the removal of Section 20 which resulted in a percentage of London buildings being constructed without the sprinkler protection this Act formerly required.

#### *Other industry guidance*

- 1.40. Bodies such as LABC, LDSA, NHBC and BCA publish their own technical guidance which appears to represent interpretations of ADB and suggest routes to compliance. LFB are unclear as to the technical review process for these policy notes and what status these have. A more regular review of ADB might be needed if BCBs are regularly finding a need to fill an potential gap in guidance.
- 1.41. LFB would welcome consideration of 'cherry picking' between standards and guidance. While this can be positive and lead to a fire safety design that has considered multiple sources of information, it could also be a negative driver towards a lesser standard of safety. The wording used in the foreword of BS9999:2017 should be considered in relation to this matter. It currently advocates a method where the impact of a 'pick and mix' approach needs to be evaluated.
- 1.42. In respect of fire safety design it is noted that there are often multiple sources of guidance and related standards this can lead to a complexity which is often unhelpful. Better consolidation and alignment would be very beneficial.

#### *Planning*

- 1.43. As mentioned above, LFB are not statutory consultees for planning applications, however often schemes are approved at planning stage which have inherent issues regarding fire brigade access. These inherent issues are then accepted by the design team when seeking Building Regulations approval, and ultimately presented to LFB very late in the design stage with little scope for design changes.
- 1.44. A solution might be to have further alignment with planning and Building Regulations stages, or alternatively make it advisory to consult the LFB during planning approval stage where fire service access is unlikely to comply with the guidance in ADB B5. Alternatively more detailed information about fire service access needs should be included within any planning conditions.

### *Statutory Undertakers*

- 1.45. There is a significant anomaly within existing fire safety legislation associated with Statutory Undertakers. Statutory Undertakers are responsible for elements of the built environment including (but not limited to) transport infrastructure, utility distribution and public health infrastructure. It is worth noting that at the time of the Building Act 1984, the Statutory Undertakers were essentially government bodies and therefore it could be questioned, following denationalisation, whether the consultation requirements have kept pace with the bodies responsible for this role today.
- 1.46. A key area of concern is associated with transport infrastructure where multi million pound projects (such as Crossrail) are not subject to the same governance associated with the Building Regulations consultation process as other parts of the built environment.
- 1.47. The FSO applies to transport premises when they become operational but the FSO does not explicitly require Statutory Undertakers to consult BCBs or the relevant fire and rescue authority at design stage. As Statutory Undertakers are normally exempt from having to make an application to a BCB there is no formal mechanism for consultation to take place. Statutory Undertakers often opt to consult Fire and Rescue Services direct as a matter of best practice however, this varies in terms of when this is carried out and in the level of detail.
- 1.48. There are a number of factors driving the need for clear legislative direction for Statutory Undertakers to consult with Fire and Rescue Authorities. These include :
  - Key design parameters for major infrastructure projects are often constrained early in the concept design stage due to the site or public opinion during public consultation. A failure to consult the LFB adequately at an early stage limits the possibility of rectifying deficiencies in the fire safety design as a project progresses. This may result in infrastructure that does not adequately facilitate Fire and Rescue Service operations or comply with the Regulatory Reform (Fire Safety) Order 2005 or Fire Precautions (Sub-surface Railway Stations) (England) Regulations 2009. This reflects the same issue experienced within consultations on the general built environment detailed within this report.
  - Under the Fire and Rescue Services Act 2004 the LFB has a duty to obtain information, train firefighters and obtain sufficient personnel, services and equipment. It may be impossible for a LFB to carry out these duties without being adequately consulted on the design of the infrastructure.
  - There is a benefit to the standardisation of key firefighting provisions across all of the built environment to assist firefighters in effectively responding to incidents on transport infrastructure. These recommendations could be conveyed at consultation meetings.
  - LFB can contribute their experience of other projects, including auditing fire safety compliance on existing infrastructure and of emergency response to new projects. This input could assist with effective fire safety engineering design and result in savings of time and cost across a project.
  - The Statutory Undertaker can provide information to the LFB about matters such as innovative construction techniques, fire protection technologies and emerging hazards in the transport environment which can assist the LFB in their objectives of saving life, protecting assets and reducing the impact of emergencies on business continuity.
- 1.49. Due to the lack of a formal consultation process a requirement for an independent third party review of transport infrastructure proposals (such as a BCB) as recommended for the majority of the built environment might also be appropriate due to the scale and

complexity of these projects. While there is evidence of good practice in this respect within this sector the level of engagement is not always consistent.

- 1.50. As the petroleum enforcing authority for London, LFB are also meant to be consulted under the Petroleum (Consolidation) Regulations 2014. There is a timescale detailed within these Regulations however this is not always complied with, or indeed, in some cases, no consultation occurs. These Regulations are due for review in 2019 where representation will be made to make the consultation process more explicit.
- 1.51. This is needed as there is minimal action that can be taken with regards to this issue. At present the only real sanction is for LFB to not issue a certificate for petroleum storage or issue a prohibition notice if the site begins to operate.

#### *Regulatory Reform (Fire Safety) Order (the FSO)*

- 1.52. There is a clear downward trend in non-dwelling fires since 2002 and a clear downward trend in fire fatalities since around 1985. The Fire Precautions (Workplace) Regulations were introduced in 1997 and these ran seamlessly into the FSO which was implemented in 2006. It could be presumed that this legislation led to the downward trends in fires and fatalities, but this is not proven. There are other factors such as reduction in smoking and The Furniture and Furnishings (Fire Safety) Regulations 1988 (as amended in 1989, 1993 and 2010) which could have influenced these trends.
- 1.53. The FSO is written with the aim of allowing the operators of small business, who were familiar with their premises and business operations, to do their own fire risk assessments. However, certain premises, due to their risk and complexity, do need suitably competent people with the appropriate fire safety expertise to be involved.
- 1.54. Since the introduction of the FSO in 2006, successive Governments have had stated policies to reduce red tape with the aim to not allow regulation to hinder growth<sup>12</sup>. This, coupled with the reduction of fires and fire deaths may have led to complacency amongst both business and in some cases fire services and the Government. Care must be taken to ensure this complacency does not lead to a reversal of the reduction in fire deaths/injuries trend.
- 1.55. The issue of a lack of regulation is discussed in a briefing by Professor Tombs for the Centre for Crime and Justice Studies dated April 2016. This briefing note, entitled "'Better Regulation': Better for Whom?", highlights the experience of enforcing authorities in terms of regulation of pollution, food safety and workplace health and safety standards and that parallels with the experience of the fire service.
- 1.56. The biggest gap in this legislation which was designed to look at workplaces is in the protection from fire of those in residential premises including tower blocks, "sheltered accommodation", "extra care" schemes, or vulnerable persons receiving care in their own homes. Most people die or are injured from fires in their own homes, i.e. premises which are not covered by the FSO (as demonstrated by the fire statistics). Even within blocks of flats (and similar properties) it is very rare for people to die in flats other than the flat of fire origin. However, certain fire incidents have demonstrated that if there are failures in compliance then multiple deaths, within, and beyond, the original point of fire origin, can occur.
- 1.57. Further enforcement guidance was due to be produced by the Secretary of State for Communities and Local Government following the Lakanal House Rule 43, but this has not been published. This has meant that the responsible persons for these residential

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<sup>1</sup> <http://www.redtapechallenge.cabinetoffice.gov.uk/themehome/health-and-safety-spotlight/>

<sup>2</sup> <https://www.gov.uk/government/publications/regulatory-reform-fire-safety-order-2005-focus-on-enforcement-review>

premises have been relying on guidance documents for the two regimes; FSO and the Housing Act but without defining the scope of either.

### *Housing Act*

- 1.58. The Housing Act is the primary fire legislation for domestic premises, through the Housing, Health & Safety Rating System (HHSRS) The LFB experience is that Local Authorities rarely use the HHSRS for fire safety on anything but a House of Multiple Occupation (HMO), often because they have very little experience and expertise in fire.
- 1.59. Examples of this are :
  - Case study 1: Premises was found to have dangerous conditions in the residential areas above a takeaway shop. The situation clearly warranted the issue of a Prohibition Notice. LA enforcement officers who were on site agreed that it was their lead however they didn't have the expertise or, in their opinion, powers to issue immediately. LFB issued notice in this instance.
  - Case study 2: premises is a disused public house that has been adapted for residential use and was being occupied by nine families. The LA would be the lead for this premises as it was wholly residential. Again, due to a lack of action by the LA, enforcement officers LFB used again issued a notice.
- 1.60. There is a need to ensure the overlap and distinction between Housing Act and FSO is much clearer. This will be significantly assisted by the inclusion of a clear definition of what is meant by "used in common". For example, is a wall between two flats covered? What about the external façade? Is the flat front door part of the common parts?
- 1.61. There should also be much better collaboration between regulators including housing enforcers, BCBs, and the Health and Safety Executive (HSE). There should be more formal arrangements established to ensure adequate enforcement takes place. There may also be a need to consider that certain premises should have a single enforcement regime for fire (i.e. not having the overlap between the FSO and the Housing Act).
- 1.62. LFB have also seen a reluctance by Housing Authorities to act and an apparent misunderstanding of their powers which, for several years, were interpreted as only applying to Houses in Multiple Occupation (HMOs). There has also been a reluctance to use the HHSRS due to the view that all 29 hazards (of which one is fire) must be addressed rather than being able to act in a thematic way. This results in the HHSRS being considered cumbersome, time consuming and bureaucratic.

### *FSO Associated Guidance*

- 1.63. The original suite of fire safety guides issued by Government are now over ten years old and have not been reviewed. This has not supported either the responsible person (as defined in the FSO) or other parties that use this guidance.
- 1.64. Since the guidance was first published, the fire sector has produced its own guidance on housing. These include: LACORS – fire safety, Fire safety in purpose built blocks of flats and the National Fire Chief's Council (NFCC) guidance on specialised housing. This raises concern over whether these industry produced guidance is classified as guidance under Article 50 of FSO and if not, whether responsible persons or enforcers have to follow them.
- 1.65. The Purpose Built Blocks of Flats Guidance were published in 2012 by the Local Government Association following the fire at Lakanal House. LFB are aware that the LGA have considered withdrawing this document post the Grenfell Tower fire which would have left the tower block sector with potentially no guidance. If this had been Government issued Guidance, rather than industry sector lead, then this could not have been done.



1.66. It is our opinion that the Government should review and brand all current guidance for premises that the FSO applies to and that this should be done in conjunction with all sector users. In addition, Government need to have independent fire experts to call on for any technical support This could potentially be the role of the new Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS).

## Roles and Responsibilities

**Q2** Are the roles, responsibilities and accountabilities of different individuals (in relation to adhering to fire safety requirements or assessing compliance) at each key stage of the building process clear, effective and timely? In particular:

- Where are responsibilities clear, effective and timely and well understood by those who need to adhere to them/assess them?; and, if appropriate
- Where specifically do you think the regime is not effective?
- What changes would be necessary to address these and what are the benefits of doing so?

### **LFB Response**

- 2.1. Building Regulations provide clarity on what type of work needs to comply with schedule 1 of the regulations but there is a lack of clarity on who has responsibility for compliance. Other legislation, such as The Construction (Design and Management) Regulations 2015, appear to provide a better framework for detailing roles and responsibilities which could be considered for comparison.
- 2.2. There is a need for clarity on roles and responsibilities such that there is no ambiguity and that a reassurance is provided to the client that once a final/completion certificate is issued the building complies with the Regulations. This will then allow the responsible person for FSO to develop their fire risk assessment from a sound starting point.
- 2.3. More engagement of fire safety professionals who developed the design through to the completed construction would be significantly beneficial. This would allow them to not only ensure that their original design was implemented but also to consider any changes or development in the design and assess the impact of these.
- 2.4. Cases such as Priory Hall in Ireland highlight the impact of a system where 'light touch' Building Regulations coupled with poor quality construction. There is now an increased accountability for professionals signing off on new buildings through The Building Control (Amendment) Regulations 2014.
- 2.5. LFB have evidence of projects that can be presented where the quality of the construction undertaken is extremely poor and that this is not isolated to one developer or one BCB. Fire and rescue services across the country are also likely to have similar evidence from discussions with other members of NFCC Fire Engineering and Technical Standards committee.

#### *Building (Approved Inspector etc.) Regulations 2010 (as amended):Regulation 9*

- 2.6. There is a growing concern amongst the fire engineering industry about the independence of Approved Inspectors relating to the possible 'design and approve' scenario which we understand Regulation 9 of the Building (Approved Inspectors etc.) Regulations 2010 seeks to avoid. Stronger guidance and more clarification is needed to ensure the independence of the approving authority.

#### *Design responsibility and independence*

- 2.7. The concerns are primarily related to the grey area which exists when the line between design and approval has been crossed. In this, and the case of a 'one stop shop' scenario, there is a question to answer on how robust the overall approval process is and whether the integrity of the process has been maintained.

- 2.8. One of the key areas that should be clear to all parties is the question of who is responsible for the design (and subsequent liabilities). There are a number of related areas to consider:
- Should an approving authority be making design suggestions themselves and where is the line crossed from advice to actual design?
  - What type of design considerations should be referred back to the design team?
  - Does a 'fire safety appraisal report' constitute a design document if it details departures from the guidance within Approved Document B?
  - Is it acceptable for the Approving Authority to use their own judgement to justify an area of 'non compliance' where there has not been a justification provided from the design team?
- 2.9. LFB experience is of an increasing number of cases where more complex fire safety designs appear to have been created by a team made up of a client, an architect and the Approving Authority with no fire engineer involved. This begs the question of how the fire engineered/alternative design solutions have been reached without any input from a fire safety professional responsible for the design?
- 2.10. This experience is also encountered on more standard consultations where there are certain departures from guidance such as ADB. LFB have been involved in consultations where it appears to be the BCB justifying these departures and, in our opinion, crossing the line in terms of maintain their independence from the design. Because of the grey area that currently appears to exist in terms of design/advice at present questioning this approach is often difficult for LFB.

*The 'one stop shop'*

- 2.11. Other examples LFB have seen relate to where the BCB are within a company group structure that also offers fire engineering services. This poses a real potential for conflict of interest.
- 2.12. LFB have been monitoring the level of third party peer review which takes place on specialist engineering analysis, such as computer modelling submissions. The level of review varies greatly, however a particular practice has become apparent that for some Approving Authorities who are part of a 'one stop shop' that provide in house fire engineering services.
- 2.13. This is where Approved Inspectors employ a third party to provide a technical review on a submission from a fire engineering consultant in many cases *unless* it was a submission from their 'sister' or 'in house' fire engineering company. In these cases an independent review would not be undertaken and a statement from the Approved Inspector (AI) would be provided to say that it was generally satisfactory without any technical commentary.
- 2.14. This brings into question the level of scrutiny applied to design submissions that have been produced by fire engineering consultants that form part of the one stop shop with the Approving Authority and whether this is effectively moving towards a process of self-certification.

Below is an image taken from a website from a company that operates a 'one stop shop' where it specifies one benefit of engaging them as 'No rejections No delays';

**About us**

We aim to establish lasting relationships with our customers by exceeding their expectations and gaining their trust through exceptional service.

Head Projects Building Control Ltd is an independent consultancy with a multi-disciplinary practice utilising the expertise of professional Surveyors, CDM Co-ordinators, Fire Risk Assessors, Party Wall Surveyors, EPC Assessors, Access Auditors, Environmentalists and Structural Engineers to advise clients on projects nationwide.

- Nationwide Coverage
- Proactive approach to projects
- No local authority involvement
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### *Self-certification?*

- 2.15. The risk assessed approach as to what is reviewed on a consultation has also been referenced by certain approving bodies and statements such as 'if the submission has come from 'x' company then we know it will be ok' are also being made. The difficulty with this approach is the actual competence and experience of the fire engineer in question doesn't appear to be checked. LFB fundamentally disagree with this approach. LFB have numerous examples where so called reputable consultancies have made significant errors in their fundamental approach or detailed analysis.

### *Building performance standards*

- 2.16. The risk based approach to reviewing consultations appears to be advocated by BCBs and while we appreciate that the level of knowledge and scrutiny of designs will vary from project to project it is clear to us that the building performance standards are not being adhered to in all cases. We have direct experience of BCBs clearly not having the expertise to understand fire safety designs from projects ranging from more straightforward proposals to complex design proposals.
- 2.17. There is a need to consider if the effectiveness of the building performance standards is impacted by the self-regulation of both local authority building control and Approved Inspectors. The current situation is that those setting the standards can also be responsible for their own enforcement - this should be reviewed.

### *Third party review*

- 2.18. One of the key areas which relates to our point on self-certification above is the failure to employ a suitably competent/qualified third party where the BCB does not have sufficient in house expertise to review a submission. Common examples are the use of computational fluid dynamics (CFD) or structural fire protection which require high level technical understanding to enable an appropriate level of scrutiny. The expectation is then placed on other bodies such the fire and rescue service for advice and guidance and has lead to certain fire services, such as LFB, being seen as a free third party review service.
- 2.19. Similarly, we have noted an inconsistent level of scrutiny by BCBs and seen examples of them accepting calculation method simply based on who has presented it to them, without challenge. A common example is the use of in house spreadsheets which tie together a large number of basic fire calculations - Approving Authorities have accepted the results of these without scrutiny simply because they were presented by a fire engineer.

- 2.20. Third party review is a key area for consideration and could be a potential solution to some of the competence issues within the process. However, caution needs to be applied if a scheme were to be introduced where there is no clear criteria around who is considered competent to undertake this work. Other countries use registration schemes for example and reference could be made to these for elements of best practice e.g. International Fire Engineering Guidelines, 2005.

*Competition and financial impact*

- 2.21. With the introduction in 2005 of Approved Inspectors came a wider choice for applicants as to whom they could engage to review and approve their proposals. While this has its advantages, there are also issues. The competition in terms of driving down price to win business can have an impact on the amount of time spent reviewing proposals and undertaking site visits in a way which means it is driven to a minimum involvement and perhaps, in certain cases, below what would be expected. LFB fire engineering group have been advised on more than one occasion by fire engineers and BCBs themselves that LFB are used as a free third party verification. There have been times LFB have been advised that clients have 'shopped around' for a BCB prepared to agree a design 'if you won't approve it we'll find someone who will'.

*Regulatory Reform (Fire Safety) Order (the FSO)*

- 2.22. The impetus behind the FSO was that those in control of the day-to-day running of a building should also be responsible for its fire safety, which is a day-to-day activity. However, identifying the person in control can be complex when having to examine contracts and leases.
- 2.23. In the independent review carried out by BRE on behalf of LFB it was found that 60% of responsible persons were unclear of their fire safety responsibilities. This could be down to not enough investment on advertising the legislation and that the existing Guidance can be difficult for a responsible person without technical experience to understand.
- 2.24. In addition, the role of the fire risk assessor is completely unregulated. As the role of a fire risk assessor underpins the demonstration of compliance this is unacceptable in high risk premises or where there is greater life risk.
- 2.25. FSO Article 5(3) is to ensure that when a responsible person does not have the requisite skills to undertake a task to ensure compliance with the FSO they must engage appropriate persons to undertake those tasks. An example of this is a fire alarm maintenance contractor therefore has a responsibility to maintain the system correctly and the enforcing Authority can in theory require them to rectify any deficiencies in the works rather than placing that obligation directly on the responsible person. That is not fully understood by all contractors in our experience.

**Q3** Does the current system place a clear over-arching responsibility on named parties for maintaining/ensuring fire safety requirements are met in a high-rise multi occupancy building? Where could this be made clearer? What would be the benefits of doing so?

**LFB response**

*Regulatory Reform (Fire Safety )Order (The FSO)*

- 3.1. Although the current system appears clear to those who are well informed, LFB see many cases where it is not clear to all those who have the duty to comply. In high rise multi occupancy buildings there is no clear way of identifying all the people who have responsibilities around compliance. This includes co-operation and co-ordination , maintenance, reporting, having plans in place for vulnerable people and more.
- 3.2. LFB would like to see a legal requirement to produce a document detailing who has the responsibilities for life safety in all high risk premises. This is not necessarily only related to purpose built blocks of flats, but other building types too. There are clear benefits in this approach whereby responsible persons would be clear on who is responsible, and for what, and enforcing Authorities will easily identify those responsible if things go wrong.

## Competencies of key players

**Q4** What evidence is there that those with responsibility for:

- Demonstrating compliance (with Building Regulations, housing and fire safety requirements) at various stages in the life cycle of a building;
- Assessing compliance with those requirements

Are appropriately trained and accredited and are adequately resourced to perform their role effectively (including whether there are enough qualified professionals in each key area)? If gaps exist how can they be addressed and what would be the benefits of doing so?

### **LFB response**

4.1. In terms of compliance with the Building Regulations during the design and build phase there is wide variation in terms of competence. In 1990 a report was published by Bickerdike Allen<sup>3</sup> which criticised the process of consultation and the competence of both BCBs and fire officers.

#### *Fire safety (prevention and enforcement) officers*

- 4.2. Those that enforce the FSO should be able to demonstrate they have the required competencies to enforce the law - this would improve consistency of enforcement. They should also have sufficient fire safety design knowledge to fulfil the role of reviewing the fire safety consultation submitted as part of the Building Regulations process.
- 4.3. The Bickerdike Allen report set out that fire engineering was a developing industry and that the competence of those reviewing the designs needed to significantly improve. Following that report LFB created the major projects group and committed to ensuring that their specialist officers undertook a fire engineering degree to acknowledge the expected competence. Since then the National Fire Chiefs Council (NFCC) (previously CFOA) have set their own expectations for a fire engineer competence standard which was developed by their Fire Engineering and Technical Standards group in 2013. This was developed to bring in formal qualifications and, dependent on the level of fire engineer, UK Engineering Council registration.
- 4.4. In terms of the fire safety officer role, the NFCC developed a competence framework in 2013 entitled 'Competency framework business fire safety regulators' which specified recommended levels of qualification. LFB made the decision that all fire safety officers would be qualified to a minimum of Level 4 Diploma. This is only part of demonstrating competence, LFB consider that this should quality assured by a independent third party.
- 4.5. While the fire service has introduced a competency framework detailing expectations on their own officers, the changes in the competence standard in the rest of the industry are sometimes difficult to identify.

### *Building Regulations and BCBs*

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<sup>3</sup> Fire and Building Regulation: A Review by Bickerdike Allen Partners for the Enterprise and Deregulation Unit in Conjunction with the Home Office and the Department of the Environment– 31 Dec 1990

- 4.6. While the fire service has introduced a competency framework detailing expectations on their own officers, the changes in the competence standard in the rest of the industry are sometimes difficult to identify.
- 4.7. A 2017 report produced by Meacham Associates and commissioned by the Building Standards division<sup>4</sup> considered the current situation in Scotland. Many of the issues raised are relevant also to the process within England in terms of the concerns over competence levels of those undertaking and reviewing fire safety designs.
- 4.8. As detailed above in relation to building performance standards, LFB have real concerns about the level of expertise of BCBs on, particularly, the more complex fire safety designs. The level of fire safety knowledge is hugely variable between BCBs, dependent on their experience and qualifications.

#### *Building fire safety design*

- 4.9. At present there is no restriction on who can develop a fire safety design. Submissions can be developed by architects with no or very little fire safety training and there is no stipulation on when different levels of competence are needed. If we were to consider the more complex design strategies it would be a reasonable expectation that these should be undertaken by someone who is both qualified and, perhaps, professionally registered as a fire engineer. However, there is presently no protected title for a fire engineer and there is no requirement for checking of experience and/or qualifications of individuals carrying out even complex fire engineering design.
- 4.10. In the last five years LFB have seen a significant increase in complex design strategies being submitted by parties that we do not believe have the appropriate level of competence. LFB want to see this addressed by tighter controls and more robust checking of competence as part of the compliance process. BS7974: Application of fire safety engineering principles to the design of buildings could assist with this (it is currently under review and will be shortly issued for public consultation).
- 4.11. LFB would like to see similar standards to that of structural engineers applied to the fire engineering industry i.e. the expectation that the structural design is completed by a Chartered Engineer qualified in structural engineering. Also where third party reviews are undertaken the competence of these individuals is at the correct level.

#### *Competence of contractors (build and maintenance)*

- 4.12. There is widespread concern over the competency of contractors which is at least partially responsible for identified failings in compartmentation in public and private buildings throughout the country. This can be a contracting company issue where cost or time savings are realised by either;
  - not installing the correct products
  - not installing products correctly
  - the product is not fitted in the right arrangement as detailed in the manufacturers specification
  - By misinformed by product marketing literature
  - not investing in appropriate training of staff.
  - a contractor issue where there is a lack of understanding of what is being installed and how small changes in fixings or products can detrimentally affect the performance of the overall system.

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<sup>4</sup> Competency Criteria for Local Authority Verifiers when checking Fire Engineered Solutions for compliance with Building Standards 10 May 2017



Please note that the above list is not exhaustive.

- 4.13. Another major concern of the LFB is the lack of quality assurance systems in place on site for ensuring compliance with the Building Regulations, particularly in Building Regulations relation to critical life safety elements.

*Fire safety systems designers, installers and maintainers.*

- 4.14. In many of the areas of life safety fire systems (e.g. complex smoke ventilation systems) there is no requirement for formal qualification.
- 4.15. An example of the potential consequences would be when a contractor is charged with maintaining a complex system with little appreciation of the design parameters and limitations of the system and little understanding of the cause and effect analysis originally applied. Following installation this can result in maintenance contractors not maintaining key components, or detrimentally changing or reconfiguring the system without understanding the repercussions. An example of this is mechanical ventilation systems within purpose built blocks of flats.
- 4.16. Introducing minimum qualifications for all aspects of the industry would be time consuming but should be a long term aspiration. An starting point would be an expectation that fire safety systems contractors are members of an appropriately governed trade/industry body which has satisfactory means of assessing it's members competence.
- 4.17. Additionally, these contractors could be FSO Article 5(3) Responsible Persons and therefore competence is a critical issue to demonstrate compliance. More guidance on what this should look like would be another good starting point.

*Statutory undertakers*

- 4.18. The issues associated with appropriately trained and accredited professionals for transport infrastructure is no different than for the rest of the built environment. If benchmark standards are to be outlined for professionals responsible for Building Regulations compliance, this should also extend to those providing fire safety guidance for Statutory Undertakers. It could be argued that the level of competence of professionals, especially fire engineers, working on behalf of Statutory Undertakers is even more critical given that there is no requirement to consult a BCB.
- 4.19. A requirement for an independent third party review of transport infrastructure proposals (such as a BCB) as required for the majority of the built environment would also be appropriate due to the scale and complexity of these projects. This comment also applies to the general built environment.

*Regulatory Reform (Fire Safety) Order – risk assessors*

- 4.20. As previously stated there is no legal requirement to be competent to carry out a fire risk assessment. The Fire Risk Assessment Competency Council (part of the Fire Sector Federation) set up a requirement following the fire at Lakanal House which details the competencies required for a fire risk assessors.
- 4.21. The current regime is not effective in terms the role of the fire risk assessor as this is a completely unregulated life safety function. As this underpins the demonstration of compliance this is unacceptable in high risk premises.
- 4.22. There is a need to consider a register for competent persons to assist those responsible for the fire risk assessment and the prevention and protection measures for certain high risk premises. e.g. anyone without any qualification can be a fire alarm engineer, fit fire doors and other fire safety equipment.

4.23. There is no distinction at present between a fire risk assessor who works on different types of buildings or buildings which are considered to be of a higher life safety risk. Schemes should consider if progressive competencies should be linked to building complexity and/or more vulnerable occupants.

*Regulatory Reform (Fire Safety) Order – Article 5(3) persons*

4.24. There are currently no formal qualifications required for the installation or maintenance of life safety systems such as fire alarms emergency lighting, smoke control systems and suppression systems.

## **Enforcement & sanctions**

**Q5** Is the current checking and inspection regime adequately backed up through enforcement and sanctions? In particular

- Where does the regime already adequately drive compliance or ensure remedial action is always taken in a timely manner where needed?
- Where does the system fail to do so? Are changes required to address this and what would be the benefits of doing so?

### **LFB response**

#### *Independence as part of the Building Regulations process*

- 5.1. Some issues about independence in the Building Regulations process have been highlighted above. A further important aspect is the appropriateness of a BCB approving work within their own enforcement jurisdiction and offering fire safety advice whilst receiving payment or having a vested interest in the outcome. The need to maintain independence in the role of the approving authority is clearly critical to the integrity of the process.

#### *Primary authority partnerships (PAPs)*

- 5.2. The Regulatory Enforcement and Sanctions Act 2008 (RES Act) came into effect on 1 October 2008 and amongst other things it made provision for more consistent and coordinated regulatory enforcement by local authorities and fire and rescue authorities who are the enforcing bodies for one or more of the pieces of legislation listed in RESA, by establishing the Primary Authority scheme. It is administered by the Better Regulation Delivery Office (BRDO).
- 5.3. The scheme was introduced to address businesses concerns regarding how authorities apply legislation relating to trading standards, environmental health and licensing. It was to deal with concerns about contradictory advice, wasted resources, duplicated effort and lack of effective dispute resolution when authorities disagree.
- 5.4. A Primary Authority Partnership (PAP) is available to a single business that is regulated by multiple local authorities, or to a business that is part of a group of businesses that are collectively regulated by multiple local authorities, where these businesses share an approach to compliance. A shared approach to compliance might be demonstrated through membership of a trade association that provides regulatory guidance or through a franchisee relationship with a business that specifies compliance controls.
- 5.5. The Primary Authority scheme allows an eligible business to form a statutory partnership with one fire authority and that authority becomes the Primary Authority. This Primary Authority provides assured advice, ensures consistency of regulation across the country, co-ordinates relevant regulatory enforcement activity in relation to that business and reduces the duplication of paperwork and inspections.
- 5.6. LFB would welcome greater clarification on the separation between the enforcement role of fire and rescue services in PAPs and their partnership working agreements to prevent conflicts of interest. Conflicts can arise, for example, where there is a request for product/company endorsement or where the fire and rescue service are acting in the role of a consultant outside of the intended framework.

#### *Fire service trading subsidiaries*

- 5.7. Some fire and rescue services have trading companies. These subsidiaries can offer a range of services including training, fire risk assessment through to fire engineering design consultancy. There has been concern raised by parts of the fire sector around the potential for conflict of interest e.g. where a fire service trading arm offers fire engineering design services within this own enforcement area.

*Industry enforcing their own standards*

- 5.8. The development of the performance standards and the licencing/ongoing auditing of Approved Inspectors are all undertaken by those within the industry. LFB would welcome a review of whether this is an effective process or not.
- 5.9. Currently we understand that there are no mandatory checks for any fire safety elements during building construction. It is difficult to ascertain items such as cavity barriers are present or fitted correctly once the construction is complete. LFB would welcome serious consideration of a more robust process of inspection practice. The impact on fire safety measures of follow on works also needs careful attention, particularly how to stop instances where e.g. compartmentation is completed and then breached by later utility installation.
- 5.10. For more complex schemes perhaps the fire professionals who developed the original fire strategy would need to be involved at all stages of the building's development (concept design to sign off stage) to ensure that the occupied building fulfils the original design objectives. This approach is adopted in other countries e.g. Australia, and creates a level of responsibility on this individual.
- 5.11. The FSO order relies heavily on the building being built appropriately – this allows the responsible person to engage a risk assessment with some assumptions in terms of things like suitability of the construction. However when the construction is inadequate there are limited opportunities for a risk assessor to identify hidden issues. There are several ways to address this, with the most obvious being ensuring that buildings are built correctly. A requirement for more intrusive risk assessments might be a more immediate solution.

*Regulatory Reform (Fire Safety) Order*

- 5.12. Although the FSO is a self regulating piece of legislation, this needs to be backed up with robust enforcement and those who do not comply need to know there will be consequences.
- 5.13. LFB operates a risk based FSO inspection programme. Estimates show there are some 850,000 properties that the FSO applies to in London. LFB have carry out around 14,000 inspections each year which results in around 350 Enforcement notices and 10 prosecutions annually.
- 5.14. The courts have unlimited powers to deal with those who are prosecuted however there have been issues with taking a prosecution against those undertaking building work or against BCBs due to a lack of historic case law.
- 5.15. Fire and rescue authorities have three formal notices they can issue to ensure compliance. These are:
- **Alterations notice (Article 29 Regulatory Reform (Fire Safety) Order 2005)**  
An alterations notice requires the responsible person to notify the LFB of any proposed changes which may increase the risk in the premises. They are issued where the LFB considers that the premises constitute a serious risk or may constitute a risk if changes are made. An alterations notice does not mean that the responsible person has failed to comply with the Regulatory Reform (Fire Safety) Order 2005.

- **Enforcement notice (Article 30 Regulatory Reform (Fire Safety) Order 2005)**

An enforcement notice is issued where the responsible person has failed to comply with the Regulatory Reform (Fire Safety) Order 2005 and details corrective measures that they are legally obliged to complete within a set timescale, to comply with the law.

- **Prohibition notice (Article 31 Regulatory Reform (Fire Safety) Order 2005)**

A prohibition notice is issued where the use of the premises may constitute an imminent risk of death or serious injury to the persons using them. This may be a restriction of use, for example imposing a maximum number of persons allowed in the premises, or a prohibition of a specific use of all or part of the premises, for example prohibiting the use of specific floors or rooms for sleeping accommodation. The issue of a Prohibition Notice under the Regulatory Reform (Fire Safety) Order 2005 is the most serious enforcement option available to the LFB other than prosecution.

- 5.16. Before the introduction of the FSO, the Chief Fire Officers Association (CFOA, now NFCC) issued guidance to fire services on the introduction of informal notices and/or action plans. However, fire services have introduced this in different ways. These "notices" have no legal standing and therefore are only used for minor non compliance. In London these are called notification of deficiencies and around 700 are issued on average each year.. LFB would welcome a more statutory footing for this level of notice and for them to be specified on the risk to particular individuals using buildings.

#### *Housing Act*

- 5.17. As detailed in the response to Question 1, there is a need to ensure the overlap and distinction between Housing Act and FSO is much clearer. This would be significantly assisted by a clear definition of what is meant by "used in common".
- 5.18. More collaboration between regulators including FRSs, housing enforcement bodies (LA), BCs, and the Health and Safety Executive (HSE) would be welcomed by the LFB, as would more formal arrangements to ensure adequate enforcement takes place.
- 5.19. LFB would welcome consideration of whether if certain premises should have a single enforcement regime for fire. It should also be considered whether it is appropriate that enforcing bodies can't enforce on their own premises e.g. LA on their own stock and LFB on LFB properties. Consideration should be given that these admissions need to have a third party review.

#### *Public register*

- 5.20. Consideration should be given to a public register of enforcement undertaken by agencies, including building control. This will reflect schemes like LFB and LA food hygiene ratings which will provide a more transparent system for the public.

## **Tenants and residents voice in the current system**

**Q6** Is there an effective means for tenants and other residents to raise concerns about the fire safety of their buildings and to receive feedback? Where might changes be required to ensure tenants'/residents' voice on fire safety can be heard in the future?

### **LFB response**

- 6.1. LFB investigate any referral of concerns in fire safety issues. Where there is serious concern this is normally done within three hours. Other referrals are dealt with on a risk based approach.
- 6.2. LFB publish contacts details for fire safety on our website.<sup>5</sup> Fire safety can be contacted for advice and guidance, and this is available for all members of the public. For queries without a 'risk to life' LFB officers will deal with fire safety queries via telephone or email, or book an inspecting officer visit at a convenient time. Where there is a 'risk to life' (e.g. locked fire exits which occupants of the building should rely on) LFB will have someone attend site within a defined time period of being notified. This service is available at any time during the day or night.
- 6.3. Whilst with the majority of the queries LFB deal with are genuine concerns, some of those are not appropriate for the LFB to deal with – for example a neighbour dispute involving a well controlled BBQ but one which allows smoke onto a neighbours washing line. In those cases the LFB will attempt to direct the query to the appropriate person/body.
- 6.4. For those queries which are reported to the LFB this an effective means of response. LFB is aware that there might be instances of fire safety issues which are spotted and not referred.
- 6.5. Various central methods for dealing with members of the public to deal with issues are in use such as:
  - Reporting fly tipping: <https://www.gov.uk/report-flytipping>
  - Example of Local Authority reporting for various issues: <https://www.westminster.gov.uk/report-it>
  - Reporting hate crimes: <http://www.report-it.org.uk/home>
- 6.6. A similar system, if well publicised, might be useful to allow members of the public to report fire safety issues, although that should not necessarily be restricted to tenants/residents but more widely available for members of the public to report fire safety issues. Any such system would have to interact with both fire authority and local authority IT systems to be effective.
- 6.7. In most cases, for existing blocks the first contact should be with the managing agent of the property who should rectify issues causing concern.

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<sup>5</sup> <http://www.london-fire.gov.uk/FireSafetyRegulationTeams.asp>

## Quality assurance and testing of materials

**Q7** Does the way building components are safety checked, certified and marketed in relation to Building Regulations requirements need to change? In particular:

- Where is the system sufficiently robust and reliable in maximising fire safety and, if appropriate
- Where specifically do you think there are weaknesses/gaps? What changes would be necessary to address these and what would be the benefits of doing so?

### **LFB Response**

- 7.1. LFB is aware of products which are marketed with claims of passing fire safety tests without providing detail around the scope, applicability and the limitations on the testing undertaken. Products should be clearly identified as to what tests they have passed and the limitations of their applicability. Any use of a product in a situation beyond which it has been tested for should be considered and justified by a competent person. All information about products and their use should be included as part of the Regulation 38 package.
- 7.2. Through a misunderstanding of ADB some manufacturers have made incorrect claims of compliance with the guidance. An example is some ACM manufacturers have claimed their products comply with the requirements of B4 when they have achieved Class 0 surface spread of flame requirements but have not achieved the limited combustibility requirements. Product specifications should be clear and disclose performance in terms of all relevant aspects of Building Regulations. Another example where this is not the case would be thermal insulation products only giving U-values but not fire performance data
- 7.3. Some products are being used having passed standard fire tests however there is a question as to whether these fire test itself needs further development for these particular products (i.e. furnace tests for structural steel/concrete members being used for Cross Laminated Timber members).
- 7.4. Fire tests should be undertaken on complete assemblies (e.g. a fire door with associated frame and all door furniture). A small change in door furniture, in theory, negates the certificate, although that doesn't necessarily mean that the small change renders the assembly as not fit for purpose. It is unlikely (and costly) for a manufacturer to test with all possible door furniture, however significant changes (such as installation in an inappropriate frame) will not only negate the certificate but might compromise the fire integrity of the door.
- 7.5. Some fire protection products (e.g. fire doors) are covered by a British Standard which requires labelling and certifying as having passed the appropriate fire test. However many other products don't which is a significant inconsistency within the industry. It should also be noted however that a label or certificate does not, in isolation, demonstrate that the product complies in full with the regulations.
- 7.6. The Loss Prevention Certification Board (LPCB) operated by BRE is a privately operated testing regime and publishes it's results online in Redbook live (<http://www.redbooklive.com/index.jsp>) However there is no national requirement to have products or services assessed by this route. A national (or international) register of tested and approved fire safety products would be of assistance.
- 7.7. Through a misunderstanding of the Building Regulations guidance (AD-B) some manufacturers have made incorrect claims of compliance with the guidance. An example is some ACM manufacturers have claimed their products comply with the requirements

of B4 when they have achieved Class 0 surface spread of flame requirements but have not achieved the limited combustibility requirements. Product specifications should be clear and disclose performance in terms of all relevant aspects of Building Regulations. An example where this is not the case would be thermal insulation products only giving U-values but not fire performance data

- 7.8. Fake fire resisting glazing, fire doors and cladding materials are known to have been produced. To determine if a product is legitimate or not would usually require removing a product and subjecting it to expensive fire testing. It is unclear if Trading Standards in most areas have the capacity and/or appetite to consider concerns such as those above.

#### *White goods*

- 7.9. It is important to consider the fuel loading in homes and the affect this can have on the structure and its fire safety measures. Many white goods are now made of plastic and insulated with polyurethane foam. Domestic refrigeration has been of particular concern to LFB, as it is normally on 24/7 and many appliances have combustible plastic backs which in turn covers combustible polyurethane foam. There have been several deaths in London alone in recent years due to refrigeration fires and the fire at Grenfell Tower also started in a fridge freezer.
- 7.10. Research carried out by LFB with our scientific advisers, has shown that flame spread on a plastic back panel could be as fast as one centimetre per second and in reality, as the fire develops to involve the polyurethane foam, this rate of flame spread will increase (as seen at further tests carried out at BRE).
- 7.11. On the basis of the research, it has been calculated that if just the back insulation panel of a typical refrigeration appliance was consumed by fire, it could produce heat at a rate of some 320 kW. This is the same rate of heat produced by 320 one bar electric fires all switched on together (please note: this figure is based on the back panel only. In reality the fire will develop to involve the insulation which covers every side of the food compartments).
- 7.12. One part of LFB Total Recalls<sup>6</sup> campaign, supported by NFCC, is calling for improved manufacturing standards for white goods to make them safer.

#### *Home energy generation*

- 7.13. A further area for consideration, is around home energy generation and storage. Roof structures which may be fitted with solar arrays, should incorporate an adequate level of protection from fire. A large fire in Erith in 2016 started in the solar panel array on the roof of a six storey block and resulted in fire spread through the building, with all residents needing to be rehoused.
- 7.14. The expected major increase in home energy storage solutions, which could involve technologies such as banks of lithium-ion batteries (which can fail violently), should also be considered as a potential future risk.

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<sup>6</sup> [Fires in White Goods and Product Recalls Action Strategy - FEP 2572](#)



## Differentiation within the current Regulatory system

**Q8** What would be the advantages/disadvantages of creating a greater degree of differentiation in the regulatory system between high rise multi occupancy residential buildings and other less complex types of residential/non residential buildings?

What specifically do you think further differentiation might assist in ensuring adequate fire safety and what would be the benefits of such changes?

### **LFB Response**

#### *Building regulations*

- 8.1. LFB do not see a benefit or need in providing a differentiation between high rise residential buildings and other types of residential or non residential buildings in building regulations. The functional nature of the Building Regulations 2010 provides a suitable framework upon which the designs should be developed for any type of building and if done correctly should afford the right level of safety.
- 8.2. Purpose built blocks of flats can be a relatively straightforward design and a lower rise, multi purpose group building could pose more complex considerations in terms of the fire safety design. The complexity of a project is not determined by a single parameter such as height or occupancy purpose group.
- 8.3. Within LFB internal guidance consultations are classified into three broad categories SIMPLE, STANDARD, or COMPLEX.
  - **SIMPLE**  
This includes minor alterations not affecting means of escape and Building Regulations applications for small premises.
  - **STANDARD**  
This will be the normal, mainstream consultation work where prescriptive solutions have been applied (e.g. compliance with the Approved Document or provision of acceptable Means of Escape as prescribed in the relevant British Standard Code of Practice).
  - **COMPLEX**  
This category includes all other consultation work which falls outside the 'simple' and 'standard' categories (i.e. where it is not proposed to adopt conventional prescriptive standards or where relaxations are being sought on account of the incorporation of active fire protection or suppression measures). The term 'complex' should also be taken to include innovative building designs and other circumstances in which it is proposed to adopt fire safety engineered packages to satisfy the requirements of Part B of the Building Regulations.
- 8.4. Although we do not feel that the Building Regulations require a differentiation, LFB would welcome more guidance on 'super high rise' buildings (including residential) as Approved Document B Volume 2 currently does not include a distinction between a building 51m in height and 200m in height. While ADB makes reference in its introduction to being applicable to 'more common building situations' LFB regularly see the guidance being used beyond the limitations of certain aspects of the guidance. LFB would recommend that the scope of ADB is considered and limitations on its use being clearer.

#### *Regulatory Reform (Fire Safety) Order (the FSO)*

- 8.5. LFB would like to see a greater level of differentiation in the guidance on how the FSO is applied in high rise multi occupancy residential buildings. There are other types of

premises that require a greater level of scrutiny too. These include premises which house some of the most vulnerable people in society e.g. hospitals, residential care homes, specialised housing, hostels and HMOs. The advantage of having a different regime for these building types is that there would be a stronger emphasis on protecting the most vulnerable by ensuring those who are responsible for any life safety elements of these premises are suitably qualified and registered.

- 8.6. There is a requirement for everyone engaged in preventive and protection life safety measures in high risk premises to demonstrate competence through qualification and or registration. It would be useful to also consider an annual sign off of these buildings by an independent third party to demonstrate compliance, although consideration would have to be given to who would undertake this role, LFB would not advocate a return to fire certificates.

## International comparisons and other sectors

**Q9** What examples exist from outside England of good practice in regulatory systems that aim to ensure fire safety in similar buildings? What aspects should be specifically considered and why?

### **LFB Response**

#### *Regulatory Reform (Fire Safety) Order and Housing Act*

- 9.1. The reduction in fire deaths and fire injuries in the UK over the past 30 years show that UK fire safety has had successes but tragic events show we cannot be complacent. The FSO is predominately drafted to meet two European directives; 89/654 workplace regulations and 89/391 framework directive. Therefore, legislation and standards throughout Europe should be similar but there are distinct variations. For example; the FSO is to primarily to protect employees from fire, and the interpretation applied when drafting the FSO was that an employee (e.g. a cleaner) could be within the common parts of a block of flats, therefore the legislation needed to consider those areas. However both Scotland and Northern Ireland do not have the common areas of blocks of flats included in their regulations although it is unclear if that stance is actually in accordance with the expectations set out in the European directives.
- 9.2. The current regime has the flexibility to be a successful system however it needs to ensure the most high risk premises have the robust scrutiny to ensure the chance of tragedies are greatly reduced, and it needs to be clear regarding the overlaps of the two pieces of legislation (RR(FSO)O and HA).

#### *Other countries*

- 9.3. Whilst LFB do not hold extensive knowledge of regimes or guidance in other countries, we have some observations which might assist:
- 9.4. Northern Ireland through their Care Quality Commission only allow those who are on a fire risk assessors registration scheme to carry out a fire risk assessment in a care home. Such an approach goes a long way towards appropriate competence and may be worth considering for higher risk occupancies.
- 9.5. Standards in the United States of America use prescriptive codes which have been adopted in several countries, though they can be inflexible.
- 9.6. LFB understand that in the Middle East the use of a third party reviewer is more common.
- 9.7. Some countries (e.g. Australia and New Zealand) require the design of a building to be agreed (and approved) with regulatory bodies at an early design stage. This type of approach could alleviate LFB concerns relating to the timing of the consultation/approvals process.
- 9.8. Some countries, such as New Zealand, require the evacuation strategy to be formally agreed with the fire service as a regulatory requirement. A change such as this removes the self regulation for fire safety (which is similar to other H&S requirements) and places additional workload on fire and rescue services. However it does place a greater emphasis on persons to have an appropriate strategy in place, and one which is externally verified.
- 9.9. Some countries also have defined points in a build which have a formal site inspection requirement, such as foundations complete, or roof on. Under these regimes it is common that works cannot progress without the formal site inspection. For example, LFB understand that in Australia the fire engineer who developed the strategy has

responsibility for signing off the building at the end of the construction phase to ensure that the original design intent has been met.

9.10. In Europe, there are three basic types of plan approval and site inspection regimes:

- Public authorities are responsible for plans approval and site inspections (e.g. Ireland and the Netherlands).
- Public and private authorities share responsibilities: usually one for plans and one for site inspections;
- The applicant can chose to have plans approval and site inspections conducted by either a public or private authority (e.g. as is the case in England now).

9.11. Whilst there are benefits and drawbacks to each of the three regimes, there might be changes to the current financially competitive process between those who can deliver these services. As described above, that financially competitive process can lead to a reduction in services (e.g. frequency of site visits) to cut costs and therefore gain business.

9.12. In Scotland all new residential care homes, sheltered housing and high rise domestic accommodation above 18 metres are fitted with sprinklers. In addition, sprinklers are required in all covered shopping centres. New schools in Scotland are also fitted with a sprinkler system.

9.13. In Wales The Domestic Fire Safety (Wales) Regulations 2013 was introduced into the Building Regulations and require sprinklers to be fitted in all new or converted:

- Care homes
  - Children's Homes
  - Hospices
  - Student accommodation
  - Boarding Houses
  - Hostels (other than those used for short stay leisure accommodation)
- The second stage, implemented on the 1st January 2016, mandated the provision of (AWSS) in all new houses and flats, including:
- Registered group homes
  - Adult placements
  - sheltered housing

**Q10** What examples of good practice from regulatory regimes in other industries/sectors that are dependent on high quality safety environments are there that we could learn from? What key lessons are there for enhancing fire safety?

**LFB Response**

- 10.1. The Health & Safety At Work Act has been the pillar of health and safety legislation for over 40 years, however in that time subordinate legislation has been introduced to make risk critical stages clearer e.g. working at height or confined spaces.
- 10.2. In the same way, Article 24 of the FSO gives the Secretary of State powers to introduce such Regulations. This has already been used for the introduction of sub surface regulations which are around a special class of premises. Subordinate legislation could therefore be introduced but only within the confines of the original Order. That subordinate legislation could not change the extent the Order could be applied – e.g. it cannot change this FSO to include the inside of a flat. However, clarification might be provided in respect of matters such as the application for compartmentation between flats and the external façade of a residential building.
- 10.3. National agencies such as Food Standards Agency and HSE sit above local authority enforcer. LFB would welcome consideration of whether something similar is appropriate for fire safety enforcement.

## **Appendix 1: Approved Document B (Volume 2) Buildings other than dwellinghouses**

Below are areas within the above guidance that LFB are of the opinion should be reviewed.

### **General comments**

1. The guidance would benefit from clearer definition about what 'more common building situations' are as this has significantly changed in the past ten years. LFB have heard tall single stair towers approaching 250m tall described as common building type and arguments that their height is irrelevant – and disagreed on both points.
2. Modern methods of construction such as the extensive use of cross laminated timber (CLT) should be considered and their suitability in high rise developments reviewed in conjunction with latest research.
3. It would be helpful to place a height limit on either the applicability of the guide, or limitations for the applicability of certain aspects. For example – an extremely tall residential tower could use openable windows for venting without any consideration for the wind effects - the wind effects for a 150m tall tower will be quite different from those of 30m.
4. Cross referencing requires updating including to current standards (e.g. BS 9999 rather than BS 5588), and where new systems are available (e.g. residential/domestic sprinkler and watermist systems).
5. Would benefit from stating that the documents are intended for use only by fire safety professionals, or those competent in its application.
6. Would benefit from guidance around competency of individuals and companies undertaking design and construction works.
7. Would benefit from stating that the document should be read holistically so that a specific solution does not compromise guidance from another section. An example of something that should not happen is a solution is proposed to satisfy B1 that compromises firefighting access (e.g. by reducing corridor protection in a block of flats).

### **General Introduction**

8. 0.12 – Reg 16B should be updated to Reg 38. Appendix G references Reg 38.
9. This should state that the newer version of a standard 'should' rather than 'may' be used as guidance.

### **B1 – Means of warning and escape**

10. V2 para 2.9 on emergency egress windows requires control of the area below the window to ensure the space is appropriate to escape down to. This has been proposed in flats dropping to a commercial area below (e.g. restaurant), or to a balcony below, but at height in a block of flats (e.g. over 50m). Further clarification would be

appropriate. The use of escape windows as a concept may conflict with the ethos of lifetime homes and this should be considered.

11. The correlation between height of top floor and the expectations of Paragraph 2.10-2.12 are unclear.
12. Where restrictions such as 11m small single stair building height are discussed, further explanation as to why the restriction is proposed would assist (i.e. limitations on firefighting access).
13. Similar to explaining the 11m height would be stating that the small single stair residential requires access to at least one window in an accommodation room to allow rescue. Designs have been proposed whereby one flat is at the front and one at the rear which is not accessible for attending fire crews. If the stair is compromised due to the lack of protection, then occupiers may not be able to cross the stair and access the neighbours flat to be rescued – thus the small single stair building may not be appropriate in that application.
14. Purpose built blocks of flats – balcony escape is not covered and should be included.
15. Current popular designs such as open plan flats, large open plan flats and multi level open plan flats are not covered and this would be beneficial.
16. Flats internal travel distance (e.g, para 2.13 and diagrams 2 and 3). It is unclear why there is a limitation of 9m in either the protected hall or total distance without protected hall, yet with a protected entrance hall there is no limitation to the travel distance within a room. This is commonly interpreted that ADB does not protect the occupants of the room in which the fire develops. Further clarification would be beneficial.
17. There should be a limitation on height of the building whereby the external wall vent (para 2.26(a)) is appropriate.
18. Table 4 – minimum exit widths should be updated to comply with DDA requirements.

### **B3 Internal fire spread (structure)**

19. An ultimate height restriction on timber framed buildings should be considered.

### **B4 External fire spread**

20. External fire spread up the façade is commonly misunderstood, and is often considered as just spread to adjacent buildings. Further guidance is required discussing façade materials (e.g. insulation combustibility).
21. Consideration should be given to whether it remains appropriate to accept combustible façades on buildings below 18m in height given recent BRE test results for cat 3 cladding materials.
22. Similarly, recent incidents show that consideration must be given to materials and structural design to mitigate the risk of a balcony fire spreading to other parts of the building. There is currently no specific fire design guidance for balconies, except when

they act as a means of escape. This effectively means that there are no requirements accounting for external fire spread from the incorporation of balconies in a structure, leaving their resolution open to interpretation. BRE has produced a report recently addressing this matter.

## **B5 Access and facilities for the fire and rescue service**

23. An update on fire service access would be beneficial, particularly regarding modern design trends such as podium access (usually flats above commercial such as shopping centre or supermarket) which provide complications for firefighting (e.g. wayfinding, line of sight, communications, excessive hose distances, lack of protection).
24. There is currently a disconnect with external firefighting capabilities and firefighting facilities expected by the guidance. The 18m requirements supported equipment which is no longer in operational use. A review of firefighting access should be undertaken to consider if 18m is still the appropriate minimum height for a firefighting shaft (other than purpose groups 4,5 and 6 where 7.5m is used).
25. Firefighting water provisions are often misunderstood – paragraphs 16.1-16.3 and 17.8-17.10 would benefit from further explanation and clarity.

## **Tables**

26. A2 – it is unclear why a 'residential other' purpose group building (e.g. student accommodation, hotel) should not require suppression over 30m.
27. Further to the above, the guide would benefit from additional commentary regarding the expectation of suppression in buildings over 30m. Sometimes the importance of suppression in tall buildings is lost on users with this information solely in the table.
28. B1 - The minimum fire resistance for a door (as in AOV door) opening to a smoke shaft is often misinterpreted. Often users chose a 'service shaft 2(d)' (half the wall in which it is fitted) rather than the correct 'not described 2(e)' above (as for the wall in which it is fitted). Logic tells us that in terms of retaining compartmentation, half the wall in which it is fitted works for a service shaft – for example in a residential building with 60min FR walls, a fire would need to breach a 30min door into the shaft and a 30min door out of the shaft of the floor above to compromise the compartmentation. However, for a smoke shaft, its very nature means the hot products of combustion will be carried within the shaft itself. Therefore for a fire on a floor, with the smoke shaft AOV door open on that floor, there will only be single door protection to the floors above – therefore they should be the same as the wall it is contained in (60min in this example). The table could do with a specific entry for smoke shafts stating that they should be as per the wall they are in.

## **Appendix C**

29. Diagram C6 – this would benefit from showing that the top floor measurement should include the top floor of a flat of more than one floor, or the top floor of a flat with accommodation above the access level.



## **Appendix G**

30. Would benefit from discussing where the handing of fire safety information is appropriate for refurbishments as well as erection, extension or change of use.

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LACORS: Housing – Fire Safety

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Fire and Building Regulation – A review by Bickerdike Allen & Partners for The Enterprise and Deregulation Unit in conjunction with the Home office and the Department for the Environment. Published 1990, ISBN 0 11 515238 5

Meacham Associates 'Competency criteria for Local Authority verifiers when checking fire engineered solutions for compliance with building standards' dated 30<sup>th</sup> March 2017

<http://www.gov.scot/Topics/Built-Environment/Building/Building-standards/publications/pubresearch/researchfire>

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[www.cfoa.org.uk/22122](http://www.cfoa.org.uk/22122)

International Fire Engineering Guidelines 2005

<https://www.building.govt.nz/...fire/.../international-fire-engineering-guidelines/downloads>

14 August 2018

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Subject

## **Banning the use of combustibile materials in the external walls of high-rise residential buildings: a consultation paper**

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Organisation

**Ministry of Housing, Communities and Local Government (MHCLG)**

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### **Introduction**

London Fire Brigade (LFB) is London's fire and rescue service - one of the largest firefighting and rescue organisations in the world and we are here to make London a safer city. Decisions are made either by the London Fire Commissioner (the statutory fire and rescue authority for Greater London), the Mayor of London or the Deputy Mayor for Fire and Resilience. A Fire, Resilience and Emergency Planning Committee of the London Assembly holds the Commissioner, Mayor and Deputy Mayor to account.

### **Executive summary**

In principle, LFB is supportive of an initial ban on combustibile materials in external wall systems, however we urge caution in ensuring this is not seen by some as the primary solution, or the solution which will address all the issues raised in Dame Judith Hackitt's Independent Review of Building Regulations and Fire Safety ("The Independent Review"). We see the banning of combustibile materials as treating the symptoms but not providing the cure, and there is much more to be done to ensure the safety of building occupants now and in the future.

We also caution that such a ban requires careful consideration to ensure there are not unintended consequences. Regardless of what a ban covers or if it applies retrospectively, the focus should be on making people safe and ensuring that they feel safe, and there must be a plan in place to achieve this alongside a ban.

We wish to highlight that such a ban will affect a significant number of buildings in some way and therefore a significant number of residents. Those residents may either live in buildings might now be covered by a ban, or in buildings just outside the scope of a ban and still feeling concerned for their safety. Significant resource from central Government is needed to support and reassure the public about the implementation of a ban, whatever its scope.

LFB understands that the proposed ban would:

- retain the same acceptable categories (classifications) of products as an indication of combustibility;
- retain the same height threshold;

- instigate this through a change in the Building Regulations - so not relying on guidance, as is the case now.

And in doing so it is:

- removing one of the methods of showing compliance with Approved Document B (AD-B) specifically the BS 8414 tests; and
- removing another method of compliance which has been used from other external guidance (the assessment in lieu of test –'desktop studies'); and
- applying the changes to residential buildings only.

We would like to see these changes to the proposed ban:

- further refining the acceptable categories (classifications) of products; and
- acknowledging and addressing the potential for rapid external fire spread in buildings below 18m in addition to what is currently proposed; and
- extending the scope of the ban to incorporate all occupancy groups, in particular those who are the most vulnerable.

## **Preface**

While we are broadly in agreement with the aim of banning combustible materials we have concerns about some of the proposals in this consultation. LFB believes that there are some refinements and additional measures needed to support the ban.

### **The ban only addresses a small part of the problem (Questions 3 and7)**

As identified by The Independent Review, there are problems with fire safety and building regulations which are systemic - Dame Judith Hackitt described the design and build process as a 'broken system'.<sup>1</sup> There were many required solutions and we reiterate that banning combustible items should not be considered 'job done'. While we agree a ban has obvious benefits as a short term solution, there remains the possibility of dangerous long term complacency. Some within the industry may consider a ban sufficient to addresses the immediate issues, and the more difficult issues to address (e.g. competency throughout the entire system, the complexity of the system itself and unhelpful and overlapping legislation) may receive less attention impetus as a result.

### **The focus must be on ensuring people are safe and feel safe (Question 9)**

Notwithstanding our comments above, we support a ban, and we suggest further extending it so that fire spread is appropriately restricted for buildings below 18m and for all occupancy types. Introducing a ban could give the impression that regardless of what testing has taken place, all products still pose an immediate fire risk. It is unclear how it can be demonstrated to occupants that either their building is safe because it is under a particular height threshold or that it is safe because it was built or refurbished prior to a ban being implemented, regardless of what justification or analysis has taken place. This is a matter warranting serious consideration as we know that the public are worried - we have extensive evidence of residents seeking advice and reassurance from LFB about cladding and whether they are safe within their homes.

### **Limitations on fire brigade resources (Question 8)**

While we suggest the ban should be applied retrospectively to buildings where work has started, and on a risk assessment basis to existing ones, we recognise that this will apply to many more buildings.

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<sup>1</sup> Building a Safer Future – Independent Review of Building Regulations and Fire Safety: Final Report

If our recommendations (in terms of building occupancy and building height) are incorporated, this may number in the many thousands of buildings across the country. However, the number of buildings affected should not, in itself, be a barrier to applying the appropriate standard required to ensure people are safe from a rapidly spreading external fire.

What this highlights is the need for specific support for residents of buildings to which the ban would apply, or for those in buildings with similar materials but for which the ban has not been applied. Fire and Rescue Services (FRS) across the country have been very active since the fire at Grenfell Tower, inspecting buildings which have been identified as having combustible Aluminium Composite Materials (ACM) as part of their external walls. There are limited enforcement options available to FRSs specifically related to external walls, so our remit has been limited to checking existing general fire precautions<sup>2</sup>, and encouraging owners or those in control to follow Government advice in terms of interim measures required to support continued occupation of the buildings.

Alongside this we have provided support and guidance to residents and owners to ensure they feel safe. That level of interaction for a potentially very large number of affected buildings that would come under the ban is not possible within existing resources. It is vital that the Government assigns sufficient resources to implement and support such a ban without relying on FRSs to provide that reassurance and support to owners and residents.

### **The appropriate classification (Question 5)**

We welcome that the proposed ban goes further than some previous discussions that were focused only on ACM. In our opinion it is more appropriate to ban all combustible products (with some itemised exceptions such as fixings) rather than just ACM. If a single product only was banned it is possible this combustible product might be replaced with an alternative combustible product which is not a desirable result.

However, in our opinion the category including A2 might be too broad. As is discussed in the consultation documentation, the European classification system set out in BS EN 13501 has sub categories A1 and A2 and then has additional classifications for smoke production (s1, s2 or s3) and flaming droplets (d0, d1 or d2). Setting the threshold at A2 implies the least stringent version of that - A2, s3, d2 (which is the current classification suggested by AD-B). While this assumes little contribution to fire, it offers no restriction on smoke production or flaming droplets. As is highlighted, both in real fires and in large scale testing, the smoke production and flaming droplets present a hazard and we think these should be controlled. We therefore believe that the classification of the materials warrants much closer scrutiny with particular attention being made to both the smoke production and flaming droplets.

While we have made suggestions in terms of smoke and flaming droplet classifications we further recommend that any classification chosen is subjected to a programme of large scale testing to ensure it is appropriate.

### **The 18 metre threshold (Questions 4, 8 and 9)**

We note the intention to introduce a ban to control the combustible items in a wall system on a residential building over 18m. While we agree with the principle, we would urge that buildings of use other than residential, and buildings below 18m should also be considered.

In terms of the threshold itself, we are suggesting further consideration is given to how appropriate the proposed 18 metre threshold is. While this aligns with current guidance (AD-B and British

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<sup>2</sup> General fire precautions are those defined by the Regulatory Reform (Fire Safety) Order 2005

Standards) in respect of areas such as firefighting shafts, it is an historical height which does not reflect modern firefighting equipment and practices. Therefore 18m could be considered, at best, to be out of date, but perhaps more appropriately an arbitrary threshold.

It may be more appropriate to either adopt a threshold of 11m which aligns with current operational equipment carried on front line fire appliances, or to consider banning combustible items for any building of any height. We have recommend the latter (implement the ban at any height for any building) on the basis that:

- recent experience has shown that anything other than a binary approach where something is either appropriate or not appropriate lends itself to being misinterpreted or misused. This is supported by The Independent Review's report which references a systemic failure and a culture of monopolising loopholes in a system. In our opinion a proposal to ban combustible items on any height building will be the least risky option in this respect, at least until systemic and cultural change within the industry is achieved and the trust is rebuilt.
- it is also common for LFB we see a design which has been intentionally as close to a threshold as possible to avoid fire safety measures required above that threshold. In some cases this has been presented to us explicitly with fire strategies setting out that the building height is 17.96m to avoid the need for additional fire safety measures. We have little reason to doubt that same thinking would be applied to the proposed 18m threshold for combustible products.

We see no justification for controlling or restricting fire spread on buildings above 18m, yet providing no control or restriction for buildings below that threshold. It should be remembered that the functional requirements of the Building Regulations are about the external walls of the building adequately resisting the spread of fire. Those functional requirements are not limited to building height, and we are of the opinion that nor should any solutions adopted (by either law or guidance).

If the threshold (of 18m, or a more appropriate one) is retained we suggest that some control over combustible items on buildings below this height is should be instigated. An option to achieve this may be to require items below the threshold to undergo large scale testing in accordance with BS 8414/BR 135 and make amendments to that testing/classification to incorporate measures for smoke production and flaming droplets.

### **What buildings should be covered? (Questions 4 and 9)**

Similar to our thoughts on the height threshold proposed, we are concerned that limiting a ban to high rise blocks of flats is too limiting.

While there is an appropriate argument to suggest that people are most at risk from fire while they are sleeping, there are several sleeping risks not covered by this proposal. For example hotels, student accommodation and residential care homes are not within the proposed scope. It is acknowledged that these occupancies have a different evacuation strategy than the usual 'stay put' policy applied to a purpose built residential, and in most tall buildings they will also have access to more than one stairway. However, people will still be at risk from a fire which has the potential to involve large portions of the exterior of the building by spreading rapidly.

Similarly, there are some very tall office blocks in which the evacuation is on a phased basis by which some floors (which are not the floor of fire origin) are not immediately evacuated. In a phased evacuation building the stair size has been calculated on the occupants from a limited number of floors evacuating at any one time. This is an appropriate strategy for a tall office building, however it is not intended to account for a fire spreading rapidly up the outside of a building and affecting

multiple floors. In many cases a building designed for phased evacuation is unlikely to have sufficient staircase capacity to simultaneously evacuate all the building's occupants.

We therefore recommend that either the ban is applied to all building occupancies, or it is at least applied to consider vulnerable people in occupancy types other than purpose built blocks of flats (e.g. care homes and hospitals).

### **Other items we suggest could be included in the ban (Question 6)**

We strongly support the suggestion to include areas not traditionally considered to be part of the 'wall' but which contribute to external fire spread. Balconies are a good example and we see these involved in fires which spread from floor to floor rapidly, and into flats above the original fire flat. There is currently little guidance on the construction of balconies in purpose built blocks of flats and in some cases these are constructed using combustible materials.

In addition we also think that green/living walls should be considered as we have seen these contribute to rapid fire spread in several recent fires. We suspect this might be as the designers are considering them to be separate from the traditional 'wall' and therefore not in need of protection against rapid external fire spread.

We have also noted an emerging design trend of incorporating solar panels on the outside wall of buildings rather than the traditional roof location. In some cases these run the entire height of the building. This should not be detrimental to the appropriate fire performance of the building. We are of the opinion that the potential for fire spread via these vertically located solar panels should be considered as part of this consultation.



## Introduction

The following paragraphs provide the LFB opinion and commentary about each of the questions raised in the consultation. These are summarised in the executive summary above.

<b>Question 3</b>	<b>Yes/No/Don't Know</b>
a. Do you agree that combustible materials in cladding systems should be banned?	Yes -because they are already restricted or controlled at 18m and above in guidance such as AD-B, and we would support this position being strengthened. Please also refer to 3 c. below.
b. Should the ban be implemented through changes to the law?	Yes
c. If no, how else could the ban be achieved?	While we have answered yes above, we also note that in our opinion the functional requirements of the Building Regulations are clear, and the associated guidance supports appropriate means to achieve the functional requirements. However, the use of combustible materials has been shown to be so prevalent which suggests other interpretations have been reached, or that the options provided by guidance have been misused. Therefore, a clarification in the law may be an effective means of ensuring people do not take other interpretations. We caution however that a ban should not be considered 'job done' and that this should not distract industry and government from the other vital work identified by The Independent Review.

<b>Question 4</b>	<b>Yes/No/Don't Know</b>
Do you agree that the ban should apply:	
a. to buildings 18m or over in height?	No - because we do not agree that buildings below 18m should continue to be afforded no protection against rapid external fire spread. Please refer to 4 e. below.
b. throughout the entire height of the wall, i.e. both below and above 18m?	Yes
c. to high-rise residential buildings only?	No
d. to all high-rise, non-residential buildings e.g. offices and other buildings, as well as residential buildings?	Yes
e. Please provide any further information in relation to your answers above.	We suggest that consideration should be given to how appropriate the 18m height threshold is. In our experience there are many blocks built with the uppermost occupied

	<p>floor being just under 18m (sometimes heights such as 17.96m), principally to save cost on the increased fire safety provisions expected above that 18m threshold. It is therefore anticipated that this will continue or may even increase to avoid the combustibility limitations proposed. We question if 18m is the most appropriate threshold if there is to be one. This is largely a historical figure which correlated with firefighting equipment which has not been in service for many years.</p> <p>On the basis that there is concern over these products, it might be equally appropriate to consider them unsuitable for a building of any height.</p> <p>Regardless of the consideration of building height we feel the ban should also apply to all other building occupancies. If this inclusion of all occupancies is not adopted we suggest that the ban at the very least should apply to where vulnerable people reside and sleep such as hospitals and care homes. In our view this should apply to all external walls no matter what the height in these cases.</p>
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<b>Question 5</b>	<b>Yes/No/Don't Know</b>
<p>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?</p>	<p>No</p>
<p>b. If no, what class should be allowed in wall construction and why?</p>	<p>We are of the opinion that A2 should be further refined than the current AD-B expectation of A2-s3, d2 or better. This classification allows for high smoke production and flaming droplets and we recommend that these aspects should be further controlled. We recommend consideration is given to restricting to A2-s1, d0.</p> <p>While we are recommending A2-s1, d0, we do so on the basis that we also recommend that the proposed rating is subjected to large scale testing and analysis. This is to ensure it is suitably robust in achieving the aim of restricting fire spread and therefore is an appropriate standard to adopt.</p> <p>If this refinement of the classification is not</p>

	adopted we suggest that the route to compliance should also require a test in accordance with BS 8414/BR 135 (if an A2 material is used) and that the testing regime should be amended to include pass/fail criteria which specifically account for smoke production and flaming droplets.
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<b>Question 6</b>	<b>Yes/No/Don't Know</b>
a. Do you agree that a ban should cover the entire wall construction?	Yes (please also refer to 6 d. and Q7 below)
b. If no, what aspects of the wall should it cover?	N/a
c. Should a ban also cover window spandrels, balconies, brise soleil, and similar building elements?	Yes
d. Please provide any further information in relation to your answers above.	<p>While we are of the opinion that all principle elements of the wall construction should be covered therefore we agree with the description of the 'entire wall' as covered in point 23 in the consultation documentation. We are also of the opinion that there should be exceptions which will not contribute to fire spread – see Q7 below.</p> <p>The interaction between the frame and the wall system may require consideration – for example in timber framed construction.</p> <p>While we agree that the entire wall should be considered, the discussion around items such as brise soleil and balconies are not usually considered to be part of the 'wall'. We have seen items such as those listed in 6 c. above contribute to rapid fire spread in real fires and therefore we agree that these should be considered as requiring control in terms of their contribution to rapid external fire spread. Therefore, the wording of such a vehicle to 'ban' combustible items might need to extend further in definition than what is traditionally considered the 'wall'.</p> <p>Other examples of items attached to a wall which we think are worthy of consideration are:</p> <ul style="list-style-type: none"> <li>• we have seen items such as 'green wall' or 'living wall' components which have contributed to rapid fire spread;</li> </ul>

	<p>and</p> <ul style="list-style-type: none"> <li>we also have concerns regarding extensive use of solar panels attached to the outside of a building. In some cases these are running the full height of a tall residential tower and we suggest these should be considered as materials requiring control as well.</li> </ul>
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<b>Question 7</b>	<b>Yes/No/Don't Know</b>
a. Do you agree that a limited number of wall system components should, by exception, be exempted from the proposed ban?	Yes
b. If yes, what components should be included on an exemption list and what conditions should be imposed on their use?	Fixings, membranes.
c. Would you recommend an alternative way of achieving the policy aims stated above?	<p>While in principle enacting the proposals from The Independent Review should prevent combustible items on buildings by addressing the issue at source; this is subject to correcting the systematic issues, achieving competency throughout the industry, preventing 'gaming' of the system and convenient interpretations – all of which will take time to correct or implement.</p> <p>We therefore understand the desire to 'ban' combustible items as an immediate solution. However, as mentioned in Q1 above, care should be taken in order to ensure that a ban on combustible items does not dilute the effort or focus required to fix what Dame Judith Hackitt has described as a 'broken system'.</p>

<b>Question 8</b>	<b>Yes/No/Don't Know</b>
Do you agree that:	
a. a risk-based approach is appropriate for existing buildings?	Yes
b. the ban should apply to alterations to existing buildings, including over-cladding?	Yes
c. the ban should extend to projects that have been notified before the ban takes effect but work has not begun on site?	Yes
d. the ban should not affect projects where building work has already begun?	No
e. Please provide any further information in	We suggest existing buildings with systems

<p>relation to your answers above.</p>	<p>that have previously passed a full scale test (BS8414/BR 135 classification) should not be required to make alternations.</p> <p>For existing buildings we suggest the risk based approach should consider both the building itself (e.g. buildings with a single stair) and the vulnerability of residents (e.g. a care home). This is sector risk well understood by fire and rescue services so we may be able to assist in the development of a risk based approach.</p>
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<b>Question 9</b>	<b>Free text answer</b>
<p>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)?</p>	<p>LFB is not best placed to answer this question so those with more experience and knowledge in this area will be able to provide more comprehensive detail.</p> <p>However one material we do recommend is considered is timber items such as timber cavity barriers, and timber framed windows in which the frame itself forms the closure around windows. These are used in some designs and careful consideration should be given to if these are intended to be banned or will be so unintentionally.</p>
<p>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?</p>	<p>LFB is not best placed to answer this question.</p>
<p>c. What the impact of removing access to the BS8414 for those buildings affected by the ban test is likely to be?</p>	<p>LFB is not best placed to answer this question.</p>
<p>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?</p>	<p>As per our answer to 4 c. above we consider that this should apply to all occupancy types.</p>
<p>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.)</p>	<p>LFB is not best placed to answer this question.</p>

<p>f. Please provide any further comments on the likely impact of this change for construction (e.g. supply chains)</p>	<p>We suggest consideration should be given to both how safe occupants of these buildings are, but also how safe they feel. For example if the ban was applied to an 18m threshold, how do occupants perceive their safety at 18.1m with the ban in place, against 17.9m with combustible facades allowed by virtue of not being within the scope of the ban. This applies to both new and existing buildings.</p> <p>Similarly, consideration should be given to not creating undue concern to the occupants of existing buildings with items of the type which might be subject to this ban, yet have previously passed a BS 8414/BR135 assessment.</p> <p>Furthermore, while we are suggesting the risk assessed approach, this will require careful consideration so that occupants feel safe in their buildings while these products remain in situ. There might be several thousands of buildings which have some form of combustible items in the external wall system.</p> <p>Even with keeping with the 18m height threshold this will remove the application of BS 8414 tests (as the ban is currently proposed), and remove the use of assessments in lieu of tests. While that will reduce one potential bottleneck in the supply chain, the proposed ban will obviously have an effect on other areas of the supply chain.</p> <p>Notwithstanding our suggestion that the building height threshold is further considered - alongside that attention might also be given to how any such ban will influence property values of individuals with properties either side of any threshold. Safety has got to be the primary factor, but government should also be cognisant of how to minimise any unintended impacts, in particular on potentially impacted residents.</p>
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25 May 2018

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Subject

**Approved Document B (fire safety): amendments to statutory guidance on assessments in lieu of tests**

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Organisation

**Ministry of Housing Communities and Local Government (MHCLG)**

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## Introduction

London Fire Brigade (LFB) is London's fire and rescue service - one of the largest firefighting and rescue organisations in the world and we are here to make London a safer city.

## Executive summary

Assessments in lieu of tests, also known by the colloquial term "desktop studies" are used to describe an assessment of a material, product or system. This can include different types of assessments, some of which are undertaken proficiently and some which are not. It is important to note that these assessments are not only confined to cladding materials and external facade products, which are clearly a focus of attention at the moment, but to a wide range of fire safety products such as fire dampers, etc.

LFB's opinion is that the use of well prepared assessments in lieu of tests with direct reference to primary test evidence (i.e. extended application and classification report) have a legitimate place within fire safety design. Similarly we are of the opinion that well informed engineering judgement (i.e. engineered approach) have an important role in the building regulations regime in the UK and consider there might have been benefit in this consultation covering both.

Assessments in lieu of tests are, in some circumstances, a practical and proportionate step to adapt test results to the specific design of a building. The key objective should be to ensure the analysis is undertaken and applied correctly and that poor practice leading to dangerous solutions is eliminated.

We have serious concerns about how both of these types of assessments have been undertaken and been relied upon in the past. To prevent this in the future there is a clear need for:

- A high level of competency and ethical behaviour by those carrying out the tests;
- Strict controls on the application of these assessments and detailed accompanying guidance;
- A regime which applies sanctions to those who do not comply with them.

The overarching principles should be that the controls, guidance and sanctions prevent assessments in lieu of tests based on unsubstantiated opinion or conjecture. These should be applied to both extended application with their accompanying classification report and the engineered approach.

If poor practice is eliminated, and the analysis is undertaken correctly in accordance with appropriate standards/ guidance and the system is installed accordingly, we believe that it will be demonstrated that these assessments can be used safely. We further believe that a ban itself may lead to, or encourage poor practice for example where products are potentially substituted without fully understanding the system and the impact on the building. We suggest the focus should be on ensuring the system eliminates bad practice and punishes those who do not undertake assessments appropriately.

## **Preface**

For clarity, we note that assessments in lieu of tests, also known by the colloquial term "desktop studies", commonly refer to two different types of assessment:

- Extended application and classification report – which should only be based on existing test results in lieu of a fire test (for example BS 8414/BR135 for external facades), whereby an analysis of test(s) results is carried out to determine whether it is possible to replace one product with another without negatively affecting the expected performance of such a test and demonstrate that it achieves the appropriate classification.
- Engineered approach - studies of the overall fire safety provisions in a building relying on fire engineering opinions and appropriate technical analysis. These may have also been referenced as 'fire engineering studies' which is an approach considered by Approved Document B and British Standards such as the BS 7974 *Application of fire safety engineering principles to the design of buildings - Code of practice*. The engineering approach should be an holistic assessment of fire safety for the building.

It is important to note that assessments in lieu of tests are not only confined to cladding materials and external facade products, which are clearly a focus of attention at the moment, but to a wide range of products used during construction for fire safety products.

In our opinion these two types of assessments should only be the only two assessments in lieu of tests which should be permitted. It is apparent to the LFB that there is a lack of clarity among industry professionals with regards to the remit of each of these assessment methods.

These are two very different assessments, both of which need to be strictly regulated, only carried out by individuals with a high level of competence and be under significant control and oversight in a regime which includes sanctions for non-compliance.

This consultation is mainly proposing text changes to Approved Document B in relation to extended application with their accompanying classification report, not to the engineered approach. We believe that steps should be taken to ensure that the engineered approach is not used as a way to widen the limitations placed by new standards for extended application.

The engineered approach should be equally considered to determine when it is appropriate or not and how can it be better regulated. For example, if there is a small amount of decorative combustible facade which does not breach compartmentation and/or does not interact with an escape route then an appropriate engineering analysis should be able to adequately consider this.

LFB does not advocate the banning of assessments in lieu of tests (either extended applications or engineered approach) but strongly urges that significant steps be taken to ensure that they are carried out in a defined number of cases, by competent individuals who are appropriately supervised,



with sufficient level of competent oversight and for extended application, to be based on reliable and available test evidence of the performance of a product.

LFB also believes that banning assessments in lieu of tests for all product types would create an unnecessary burden on new development as well as inhibit innovation. This is because carrying out testing is a time consuming and expensive process which can only be done by a small number of organisations, and which in itself may not provide the adaptability to required changes during design and construction. Assessments in lieu of tests are, in some circumstances, a practical and proportionate step to adapt test results to the specific design and construction of a building. The key objective should be to ensure the analysis is undertaken and applied correctly.

This approach would require considerable coordination and leadership in the form of Government policy. The changes proposed in the consultation alone do not provide sufficient safeguards to ensure assessments in lieu of tests are carried out and used properly.

Sufficient safeguards would include:

- **A high level of competency and ethical behaviour**
  - We want to see steps to ensure that the overall competence of each organisation involved in assessments in lieu of tests is controlled and that high levels of competence are maintained.
  - We believe that the proposed changes in the consultation provide a potential overall improvement. However, we believe that competence of the individual(s) carrying out the analyses is also critical to the outcome. Steps must be taken to ensure that the person undertaking the analysis and the person checking the result/conclusions of the analysis have a minimum level of knowledge, qualifications and experience – these levels should be set and provided as a definition of competence.
  - In addition, steps should be undertaken to ensure that ethical behaviour is promoted and maintained. We would welcome further guidance on competency and ethical behaviour for organisations and individuals undertaking these assessments in lieu of tests, including guidance on whistleblowing.
  
- **Strict controls on the application of assessments in lieu of tests and detailed accompanying guidance**
  - Where fire safety products are substituted during construction, the substitute materials must be reassessed against all relevant regulations and this should be considered by the Building Control Body.
  - Every extended application should rely on specific test evidence which should be made available in the report produced as a result of the analysis and to any party reviewing the assessments in lieu of tests. A third party review of all assessments in lieu of tests should be required to assist the Building Control Body in their decision. Third party reviews would need to be carried out by an independent and competent person. The test evidence should be made available during the review process.
  - Steps should be undertaken to ensure that all products are installed as per the limitation of the assessment. Further assessment and or testing may be required if site constraints did not allow the product to be used in the appropriate configuration.
  - An important step of any construction project is the handover of all the fire safety information on completion to the responsible person - this is required under Regulation 38 of the Building Regulations 2010. It is critical that any assessments in lieu of tests used in the construction of a building should also be included in this package of information and that the Building Control Body should enforce this.

- **A regime which applies sanctions to those who do not comply**

- In the current system there is no clear mechanism to ensure that assessments in lieu of tests are competently undertaken, other than on a project-by-project basis. If assessments in lieu of tests are to be acceptable under certain circumstances they need to be adequately controlled by meaningful enforcement powers. This would require a competent authority (which would likely be separate from the Building Control Body) to provide oversight supported by appropriate sanctions.
- There should be an enforceable requirement for a final inspection of completed buildings by a competent assessor to ensure that in all cases the products assessed (and approved by the relevant body) are the ones installed and that they are installed as per the strict limitation(s) of the assessments in lieu of tests.

As set out in the MHCLG consultation document, the Government response will also take into account findings and recommendations made by Dame Judith Hackitt's final report on the Building Regulations and Fire Safety system. LFB therefore makes reference to our submission to the call for evidence for the Independent Review of Building Regulations and Fire Safety in October 2017 and ask it be considered in conjunction with this response<sup>1</sup>.

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<sup>1</sup> <https://www.london-fire.gov.uk/media/2844/lfb-response-independent-review-of-building-regulations-and-fire-safety-17oct2017.pdf>

## Introduction

The following paragraphs provide the London Fire Brigade opinion and commentary about each of the questions raised in the consultation. These are summarised in the executive summary above.

### Question 3

**Do you agree with the recommendation in Dame Judith Hackitt's interim report to restrict the use of desktop studies to ensure that they are only used where appropriate and with sufficient, relevant test evidence by people with suitable competence?**

Yes

LFB supports the recommendation of Dame Judith Hackitt's interim report published in December 2017 as part of the independent review into Building Regulations and Fire Safety. We believe that assessments in lieu of tests do have a place in the current legal framework as they allow the necessary flexibility to support the functional nature of the Building Regulations, but that they must be carried out by competent **individuals** and must be appropriately regulated.

In our opinion, the changes proposed to Approved Document B (Appendix A) in isolation are not sufficiently robust to address the issue, and should not be the only measures taken to ensure that the aim expressed by Dame Judith Hackitt's review is achieved.

To tackle the issue additional action/changes/measures must be undertaken within the industry, supported by the appropriate regulatory bodies and further guidance is required. The appropriate competent authority could be one of the parties already involved in the process or a new authority. We believe that a newly formed authority would have significant benefit.

Additional guidance needs to include:

- The author and reviewer's technical competence to undertake the assessment; and
- The differences between the tests and the onsite build – i.e. how the closing around windows/vents etc. are detailed and constructed; and
- How any variances after the assessment are dealt with – i.e. re-assessment.

For example, we welcome the reference to BS EN 15725 as it provides some guidelines for best practice. It must however be noted that although not referenced in Approved Document B, this guidance has been available since 2010. The fact that this guidance is not widely referenced and used by those undertaking extended applications highlights a clear need for oversight of these studies.

The legal framework should be updated to guarantee that there are robust control and enforcement measures. Roles and responsibilities must be appropriately distributed such that it ensures that industry best practice and appropriate standards are upheld in the long term.

### Question 4

**Do you agree with the proposed amendment to the text on how to undertake an assessment in lieu of test as outlined in Annex A?**

Yes

We agree with the proposed change however the proposed text would benefit from being written in plain English to provide additional clarity. These should be restricted to three possibilities:

- A direct test report: whereby the system installed is the same as to the system tests (A1 a.); or
- A classification report based on a strict extended application: whereby the system designed is assessed to have variations permitted by an extended application standard. (A1 b.) It is our opinion that classification reports should only be based on extended applications and test evidence; or
- A fire engineering assessment: whereby an holistic review of the fire safety provisions is carried out (A1 c.). As discussed above, further guidance is required on this type of assessment in lieu of test.

These should however be tightly controlled and reviewed periodically to ensure that they are used as intended.

In addition, LFB have reviewed a number of assessments in lieu of test reports where extended application of results has been undertaken and it is often the case that test reports referenced are not provided as part of the assessments in lieu of tests report. This creates potential complications in reviewing the report in terms of obtaining the necessary information to understand the limitations of the test. Test reports referenced, and or relied upon for the overall assessment conclusions, should be provided as part of the extended application and classification report.

Our recent programme of inspections of high rise blocks where ACM cladding has been identified has highlighted that all too often the information is not adequately recorded and passed onto the responsible person on building work completion. This leads to the data not being available for review when required.

The recording and handing over of the information is a critical step in the construction process. This step is already addressed under Regulation 38. However, LFB's experience is that it is often not appropriately undertaken or appropriately enforced. Steps must be taken to ensure that this information is appropriately recorded and, most importantly, given to the responsible person after construction. There should be oversight of this and penalties applied for non compliance with Regulation 38 (or any future requirements which may be put in place following implementation of proposals from Dame Judith Hackitt).

## Question 5

**Do you agree with the proposed amendment to the text on who is permitted to undertake an assessment in lieu of test as outlined in Annex A?**

No

We recognise that the proposed changes reflect a step in the right direction. However, the competency to carry out assessments in lieu of tests relies on an individual's training and experience, as well as the quality of the information available to them.

The text should be strengthened to require a minimum level of training and experience for the individuals. This could reflect, for example, the Passive Fire Protection guidance with a tiered approach including certified individuals and reviewer.

This could also be further enhanced by the creation of a competency and ethical behaviour framework for the industry to ensure that the highest levels of ethical conduct are maintained in the industry. We are aware that competency is a key issue already highlighted by Dame Judith Hackitt as part of her report, and as such must be considered as part of this consultation. Guidance is also

needed to provide information for potential whistle blowers and an appropriate system by which to raise concerns.

## Question 6

**Do you agree with the proposed amendment to the text on the circumstances under which an assessment in lieu of test may be carried out, as outlined in Annex A?**

Yes

We note and agree with the circumstances for which the assessment in lieu of tests may be carried out. We would recommend that this is reviewed periodically to ensure that the amendment reflects current guidance and/ or available scientific knowledge.

Further industry consultation may be required to understand the limitations placed by the current list.

## Question 7

**Do you agree with the impact assessment? (Please see Annex B of the consultation document)**

Don't Know

Consideration should be given to publishing an impact assessment of a ban on assessments in lieu of tests. This would assist understanding the impact of such a change.

## Question 8

**The impact assessment is principally focused on external wall construction. Do you consider it will impact any other building features?  
If yes, please specify.**

Yes

The changes proposed will, in all likelihood, impact other materials used in buildings for fire safety purposes such as fire stopping materials including fire doors, collars, sleeves, fire and smoke dampers, etc.

Due consideration should be given to the impact on the use of these products. LFB has reviewed assessments in lieu of tests carried out for items such as fire dampers and other fire stopping products and have seen a varied quality of assessment. This broadly reflects the issues highlighted with the external wall construction - such as lack of transparency and reliance on test data, last minute replacement of products and deficiency in the appropriate installation of the products.

## Question 9

**Do you think that making this change will achieve the desired outcome expressed in Dame Judith Hackitt's interim recommendation?**

No

As discussed previously we believe a more robust approach supported by appropriate guidance and sanctions is required to prevent assessments based on unsubstantiated opinion or conjecture.

In addition, many extended application reports include a statement that the results of the report will be superseded if new test evidence comes to light. Although we fully support the fact that test evidence should supersede extended application and classification reports, a mechanism should be put in place to ensure that when this happens the owner/Responsible Person of a building should be informed of the change so that they can take appropriate action.

## Question 10

**Do you consider that the use of assessments in lieu of fire tests should be prohibited for all construction products?**

No

We do not support an overall ban on the use of assessments in lieu of tests (extended application and engineering analysis) but advocate the introduction of controls, guidance and sanctions that prevent assessments based on unsubstantiated opinion or conjecture to ensure that bad practice is eliminated.

## Question 11

**Do you consider that the use of assessments in lieu of fire tests should be prohibited for wall systems tested to BS 8414?**

No

If undertaken correctly assessments in lieu of tests are appropriate, however more guidance is required. Considering the two types:

- Extended Application – work has commenced on an extended application standard (BS 9414) for the BS 8414 tests, and LFB are part of the drafting committee for this. We believe using an extended application process should be the only way possible to demonstrate that a proposed arrangement is achieving the appropriate classification.
- Engineering assessment – further consideration should be given to the production of additional guidance for these.

Facade system design is a complex issue and BS 8414 tests provide important information with regards to the elemental performance of a system within their scope. In order to ensure that the functional objectives of the Building Regulations are achieved, a more holistic view of the full facade system (as installed) is required. This is because the BS 8414 tests only provide information on the elemental performance of the system and in isolation the tests do not provide an holistic demonstration that the facade system achieves compliance with the functional requirement of the Building Regulations.

There are facade fire spread issues which are not covered by the BS 8414 series. For example, we have case studies showing that fires where balconies were involved have spread rapidly vertically. It is, however, very rare for the impact of balconies to be considered when assessing external fire spread. This vertical spread has also been recently noted in instances including window spandrel panels.

The current focus is on external facade systems, but it is important to remember that assessments in lieu of tests are used for other fire safety elements. The right controls, guidance and sanctions around assessments would benefit all critical fire safety elements in a building. These measures should be applied for all construction products as, from our experience, similar issues for facade systems have been known in other construction products (e.g. fire damper installations).

## **Question 12**

### **Do you have further comments?**

Meeting the functional requirements of the Building Regulations is the minimum obligation of the designers. Prohibiting assessments in lieu of fire tests will not ensure these functional requirements are met. In fact the opposite may be true as a 'ban' may lead to lesser understanding of the systems by diluting the expertise and experience.

We believe that any proposal to ban assessments in lieu of fire tests would have to be carefully considered so that the ban itself did not negatively impact the safety of residents. For example, if the ban was strictly relating to extended applications and classification reports, this might allow poor fire safety practice without appropriate engineering judgement. In addition, a ban may remove the incentive for design teams to improve systems which provide better performance in favour of tested but less robust systems.

If a blanket ban on assessments of facade systems in lieu of tests was introduced this would potentially remove the necessary focus for design teams to understand the impact of their decisions on achieving the functional requirements of the Building Regulations.

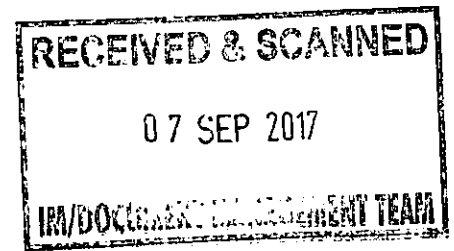
Similarly, if a ban on assessment of a single material (e.g. ACM cladding) was introduced this would not address poor assessments considering other key aspects of a system (e.g. such as closures around windows or insulation materials).

There is currently insufficient capacity in UKAS accredited testing houses to enable the necessary flexibility in the built environment which was also identified in the review undertaken by Dame Judith Hackitt.

**Notwithstanding the technical arguments above we do not believe that a ban of the assessments in lieu of tests (including for facade systems) would be practicable or reasonable.**



10 DOWNING STREET  
LONDON SW1A 2AA



5 September 2017

THE PRIME MINISTER

*Dear Commissioners Cotton*

Thank you and your co-signatories for your letter of 18 August about the safety of white goods.

Every death caused by a fire is a tragedy-for the families and friends of those involved. The terrible events at Grenfell Tower have brought this to the forefront of our minds and the Government is determined to take all possible steps to prevent anything like this from happening again.

Improving the safety of white goods and the recalls system is a priority for the Government and we are committed to ensuring people can have confidence in the electrical products they buy.

Product safety legislation already ensures manufacturers have a responsibility to put only safe products on the market. As appliances and white goods evolve, we must ensure that the safety of the products keeps up with those technical and manufacturing advances. We must also continue to improve the effectiveness of the system for recalls. As you know, last October, Business Minister Margot James MP set up a Working Group on Product Recalls and Safety to develop credible options to do that. The Working Group made their initial recommendations within three months of being set up and their final report was published on 19 July.

While the Government expects to issue its formal response to their report in the autumn, we recognise the need to act swiftly. Action is already being taken by the Department for Business, Energy and Industrial Strategy (BEIS) to implement a number of the Working Groups' recommendations, one of which is for more central capacity and as a result officials at BEIS are considering the framework for a national body to support consumers on product safety.



We also recognise that it can be difficult for consumers to check if appliances they have in their home are subject to a product recall. The Government's recalls website at [www.productrecall.campaign.gov.uk](http://www.productrecall.campaign.gov.uk) has been upgraded so that consumers can quickly check for the latest safety recalls and register their appliances to allow them to be contacted directly about any future recalls of their products. We know that there is still more to be done on access to information on recalls and we will be considering how best to take this forward.

You have also raised the specific issue of the safety of fridges with plastic backs. BEIS officials are working with both industry representatives and the Fire Services to ensure that International and European standards, which are used to demonstrate conformity with legal safety requirements, are kept up to date and reflect modern safety practices. It is important that the standard for domestic refrigeration ensures protection for all the relevant areas of the fridge and that the protection material for insulation, whether it is plastic or metal, is sufficient. We will continue to work with colleagues, including the London Fire Brigade, to ensure the European standard is updated and addresses any issues as soon as possible.

*Yours sincerely*  
*R. M.*

Commissioner Dany Cotton QFSM

Rt Hon James Brokenshire MP  
Rt Hon Sajid Javid MP  
Ministry of Housing, Communities and Local Government  
and the Home Office  
2 Marsham Street  
London SW1P 4DF

5 July 2019

Dear Secretaries of State,

We are writing to express our concerns at the pace of change to improve building safety, particularly in residential high-rise premises, following the Grenfell Tower fire which took place over two years ago.

This letter is sent from the National Fire Chiefs Council and London Fire Brigade as the attending service for the Grenfell Tower incident, and that with the largest proportion of 'at risk' buildings. Although this letter has particular relevance to England, the letter has support of UK Chief Fire Officers.

Preventing such a catastrophe from ever occurring again must be paramount for all parties responsible for housing and the regulatory framework. It is unacceptable that despite our efforts, two years after the fire, thousands of people are still living in buildings fitted with Aluminium Composite Material (ACM) cladding. The excuses and lack of urgency demonstrated by those responsible for these buildings is placing people across the country at risk.

The safety of buildings is the most fundamental element in ensuring the safety of residents. It is imperative that those with a responsibility for the design, construction and maintenance of buildings do not assume that fire and rescue services are able to provide a safety net, whenever those responsibilities are not met. Though the safety of buildings is the responsibility of building developers, owners and managers, we stress that government has the central responsibility for the safety of its citizens and has to take action when these obligations are not being fulfilled. We acknowledge the finances that have been made available, and the advice provided through the Independent Expert Advisory Panel and are now calling upon the government to increase the pace of remediation as a matter of urgency.

**We must reiterate our professional opinion, that if buildings are not designed, constructed and maintained in a safe condition, fire and rescue services cannot accurately predict the development or lessen the impact of a fire in circumstances similar to those at the Grenfell Tower fire. This leads to the very real risk of another incident involving a similarly large loss of life.**

We wish to raise the following matters which are of particular concern.

## Cladding and remediation and the impact on fire and rescue services

While we welcomed the announcement of funding to support the remediation of buildings with dangerous ACM cladding systems, we remain extremely concerned at the lack of urgency among building owners. Less than a quarter of identified premises have been fully remediated at the time of writing<sup>1</sup>. Homeowners and tenants around the country are continuing to experience the emotional strain, uncertainty and fire safety risks from the fallout of this tragedy. There is a significant risk of a further serious incident, potentially resulting in another large loss of life, unless unsafe materials are removed from these buildings and active and passive fire safety measures maintained to the required standard.

There is also the possibility that not all buildings with dangerous ACM cladding have been identified and, as such, have not had the necessary interim safety measures, such as a waking watch, implemented. We are also concerned about the potential to discover substantially more buildings with unsafe, non-compliant systems, should other construction products fail ongoing testing. The Barking fire that took place in early June has also demonstrated that this issue is not confined to residential buildings above 18 metres. Interim measures, and waking watch in particular, were only ever meant to be a relatively short-term measure, whereas in many cases these have now been in place for nearly two years.

With hundreds of buildings already identified as non-compliant, we are concerned that the results of the current testing being undertaken could require further buildings to be visited by fire and rescue services to check their general fire precautions and consideration of Advice Note 14<sup>2</sup> published by the Ministry of Housing, Communities and Local Government (MHCLG).

Fire and rescue services are already stretching available resources to cover reactive work, such as checking the safety measures in buildings identified as being at risk. This comes at a time when Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services has found that protection departments in many fire and rescue services are struggling to maintain existing risk-based inspection programmes. The first two tranches of inspections are reporting that protection work was under-resourced in many of the fire and rescue services inspected and that budget reductions have disproportionately fallen on protection teams.<sup>3</sup> The possible task of checking further buildings will present a significant and unmanageable load on already stretched operational and fire safety resources within all fire and rescue services.

Services, including London Fire Brigade, have raised serious concerns with the NFCC about the severe difficulties recruiting and retaining staff with the right skills to undertake fire safety roles, particularly in specialist positions such as Fire Engineering. There is huge competition for these skills in both the private sector and among fire and rescue services, both nationally and internationally. Training these staff to the requisite level internally can take years.

In addition, a significant increase in the number of 'at risk' buildings attracting an enhanced 'pre-determined attendance' to a report of a fire would, if needed, impact on the time available for the operational training, community safety and other activities undertaken by firefighters and other

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<sup>1</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/807417/Building\\_Safety\\_Data\\_Release\\_-\\_May\\_2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/807417/Building_Safety_Data_Release_-_May_2019.pdf)

<sup>2</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/765761/Expert\\_Panel\\_advice\\_note\\_on\\_non-ACM.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765761/Expert_Panel_advice_note_on_non-ACM.pdf)

<sup>3</sup> <https://www.justiceinspectors.gov.uk/hmicfrs/wp-content/uploads/fire-and-rescue-service-inspections-2018-19.pdf>  
<https://www.justiceinspectors.gov.uk/hmicfrs/wp-content/uploads/fire-and-rescue-service-inspections-2018-19-tranche-2.pdf>

operational personnel. Prevention activities undertaken by firefighters have been instrumental in reducing fire deaths and injuries.

**Each of these issues is having a significant impact on fire and rescue services and the ability to deliver services which are essential to keeping people safe.**

#### **Ability of fire and rescue services to be able to respond to a comparable incident**

We remain deeply concerned about the ability of fire and rescue services nationally to respond effectively to another Grenfell Tower-type incident.

London Fire Brigade was able to mobilise a large number of operational resources in a short period to the Grenfell Tower fire, including 40 whole-time fire appliances. This speed and weight of response enabled numerous resource-intensive rescues to be undertaken during the incident. However, the level of operational resources in London is simply not available to other fire and rescue services. It is, therefore, questionable whether other fire and rescue services would be able to respond to a major fire such as that at the Grenfell Tower with a similar speed and weight of resources, even when relying on mutual aid arrangements.

Dr Barbara Lane's report to the Public Inquiry stated that "*[in] approximately 12 minutes the fire spread up 19 storeys on the outside of the building*". There are other high-rise buildings with similar systems as installed on Grenfell Tower, that are served by fire and rescue services that do not have the resources to match the level of response provided at Grenfell Tower. Any tactical plan outside London could not rely on sufficient resources to carry out the number of rescues London Fire Brigade were able to undertake at the Grenfell Tower fire.

Fire and rescue services are resourced with the expectation that a residential high-rise fire will generally be contained to a single flat, and there should be no, or limited, reliance on external rescue. This expectation is underlined by building regulations guidance, which requires a high degree of compartmentation, and external walls that must adequately resist the spread of fire. The expectation that buildings will perform in a certain way in the event of fire also impacts upon other firefighting provisions such as water supply and the operational tactics deployed by the Incident Commander.

This is a completely different scenario from the Grenfell Tower fire where the building had been fitted with non-compliant combustible cladding, which supported rapid external fire spread, undermining compartmentation and overwhelming the firefighting provisions within the building. As you are aware, these circumstances may exist to a greater or lesser degree in many other buildings across the country. It is for this reason that a number of these buildings have now implemented a simultaneous evacuation strategy as a temporary control measure, pending the urgent remediation of the building. Even when moving to simultaneous evacuation there has been no research to identify how this would be done practically when faced with the issues of mobility, disability, incapacity through drink and drugs and refusal to move.

We strongly caution against any notion that the immediate mass rescue of all occupants of an 'at risk' building by the fire and rescue service in circumstances similar to those at the Grenfell Tower fire is feasible; a view accentuated by the points made previously about a fire outside of London. Similarly, if the building has no temporary control measures in place, having not been identified as 'at risk', it is inconceivable that all residents could be rescued safely from similar circumstances to those encountered by London Fire Brigade at Grenfell Tower.

In these circumstances, fire and rescue services cannot mitigate fully the effects of such a fire, thus presenting a serious risk to people living in such premises. Dr Lane states in her report *"I do not consider it reasonable that in the event of the installation of a combustible rain screen on a high-rise building, the fire brigade should be expected to fully mitigate any resulting fire event. That is particularly so in circumstances where the fire brigade had never been informed that a combustible rain screen system had been installed in the first place."*

We also note recent consideration by the Independent Expert Advisory Panel as to whether there are any further measures fire and rescue services could implement to tackle these types of external cladding fires in high-rise buildings, and the outcome that *"[the] Panel agreed that there was nothing else firefighters could do that wasn't already procedure"*.

**The failure of those responsible for these buildings to step up to their obligations is putting residents and firefighters at risk. Fire and rescue services cannot be expected to fully mitigate fire events beyond the expectations of the building regulations, and we reiterate that fire and rescue services are not able to provide a safety net where buildings are inherently unsafe.**

#### **Emerging risks posed by long-term use of temporary measures**

Waking watches must not be regarded as a long-term solution for those buildings identified as 'at risk' owing to the presence of combustible cladding and/or compartmentation issues. The guidance and the measures contained within it do not negate the need for urgent remediation by building owners. We urge the government to consider additional actions to increase the pace of remediation to prevent another appalling and avoidable loss of life.

The use of a waking watch is a necessary but imperfect solution, subject to human error and complacency over time, and evidence of this is being experienced by fire and rescue services across the country. The NFCC's guidance states clearly that a waking watch should only be used as a temporary measure and adopted for the safety of residents while works to rectify fire safety failings are completed.

Some buildings have now had waking watches for two years, in some cases with little assurance as to when such measures will no longer be required. The expectation when developing the guidance was that those responsible for buildings would remove the non-compliant cladding as soon as possible. We are anxious that waking watches are being used as a long-term alternative to remediation.

**The only wholly effective means to reduce the risk to residents, is the remediation of the building and responsible persons maintaining the active and passive fire safety measures in the building adequately.**

#### **Vulnerable people**

The continuing practice of housing vulnerable people, particularly those with limited mobility, in 'general needs residential high-rise premises' without proper means to evacuate, cannot continue. Simply alerting those with limited mobility to a fire in an 'at risk' building is not sufficient. Plans must exist and be tested to assist vulnerable people to evacuate immediately to a place of safety. We urge the government to consider this issue with some urgency.



Evacuation strategies must ensure equity in terms of disabled and vulnerable people and consider individuals' rights to no further deterioration in their health and dignity. Those with limited mobility require homes suitable for their physical needs. Maintaining buildings to rely on simultaneous evacuation and rescue tactics, designs vulnerable people out of housing.

Despite the Hackitt report, fire and rescue services are still reporting that they are receiving building control consultations on new buildings where fire safety, particularly for some vulnerable groups, is wholly disregarded, and are based on a false assumption that the fire and rescue service will provide the complete safety net referred to previously.

**The government and others responsible for housing must build trust in the community and ensure that people feel safe and are safe in their homes. The government should require building owners to consider the needs of occupants by including a person-centred risk assessment.**

### Opportunities for urgent action, and automatic fire suppression systems (sprinklers)

The NFCC and London Fire Brigade have each met recently with the Minister of State for Housing to present the evidence for sprinklers with research into their reliability, effectiveness and positive impact in reducing injury and harm. Despite all the evidence that sprinklers are a 'no-brainer' in detecting and suppressing fires, we continue to be dismayed and frustrated to find that developers are consistently ignoring the advice of fire and rescue services in respect of sprinklers in new builds. We are calling, once again, on the government to make urgent changes to the building regulations to require the use of sprinklers and other suppression systems in buildings where the risk is greatest.

We note the progress already being achieved in similar jurisdictions in response to the Grenfell Tower fire, such as decisions to extend mandatory sprinkler requirements in Scotland<sup>4</sup>, or new cladding laws in Queensland<sup>5</sup> which require building owners to report about the material on the exterior of their buildings. We ask Government to consider what additional requirements, including emergency powers, could be introduced as a matter of urgency to support the removal of unsafe cladding systems, or improve the fire safety arrangements in 'at risk' buildings. We also note recommendations that are yet to be acted on. Following the fire at Lakanal House, the Coroner<sup>6</sup> made a specific recommendation *"to provide clear guidance on the definition of "common parts" of buildings containing multiple domestic premises."* Dame Judith Hackitt published an interim report in December 2017, in order to present timely recommendations to improve the safety of residential buildings. One of the findings (para 1.70) was that: *"the assignment of responsibilities in blocks of flats, where there are boundaries between areas which are the responsibility of residents and those which fall to landlords or owners, must be clarified."*

**There is overwhelming public demand for sprinklers, and clear evidence that sprinklers would significantly reduce the risk to members of the public (especially those considered to be the most vulnerable in society) and to firefighters. Self-regulation is clearly not working – developers are not stepping up to their responsibilities and so we feel compelled to ask the government to step in.**

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<sup>4</sup> <https://www.gov.scot/news/building-and-fire-safety-5/>

<sup>5</sup> <https://www.qbcc.qld.gov.au/blog/industry-today/do-you-need-complete-safer-buildings-combustible-cladding-checklist>

<sup>6</sup> <https://www.lambeth.gov.uk/sites/default/files/ec-letter-to-DCLG-pursuant-to-rule43-28March2013.pdf>

We look forward to receiving an urgent response to the concerns set out above and would welcome the opportunity to discuss these issues more fully as soon as possible.

Yours sincerely,



**Dany Cotton**  
London Fire Commissioner



**Roy Wilsher**  
Chair, National Fire Chiefs Council

Cc: Kit Malthouse MP  
Rt Hon Nick Hurd MP