

## Consultation response:

# Sprinklers and other fire safety measures in new high-rise blocks of flats

**28 November 2019**

---

### Summary:

In our response to the Government's [consultation on sprinklers and other fire safety measures in new high-rise blocks of flats](#), we:

- Welcome the Government's proposals to:
  - Reduce the trigger height at which sprinkler systems are required in new high-rise blocks of flats, from 30 metres to 18 metres. We are calling for a risk-based approach to buildings that fall outside the scope of these proposals, which takes into account other factors besides height when assessing a building's risk.
  - Improve wayfinding signage within blocks of flats.
  - Install evacuation alert systems for use by the fire and rescue services.
- Identify areas where we believe the proposals need further consideration. For example, we call on the Government to consult with the sprinkler industry prior to finalising the transition period. This would help to mitigate the risk of cost and demand spikes that could render some building programmes unviable.
- Outline the challenges our sector could face in adopting these proposals, so that we can work with the Government to overcome these.
- Commit to engaging further with the Government and other partners to achieve effective future regulatory change.

## 1. Introduction

---

The National Housing Federation is the representative body for housing associations in England. Our 800 members own and manage more than two and a half million homes for around six million people, as well as providing vital care, support and community services.

Housing associations are independent, not-for-profit organisations driven by their social purpose – to ensure everyone in the country has the opportunity to live in a quality home that they can afford. The fire at Grenfell Tower has had a profound impact on our sector, and ensuring the safety of residents is the number one priority for housing associations. Housing associations are taking important action on building safety issues, alongside ensuring they remain financially robust and have the resources they need to invest in homes and build new social housing.

In the two years since the fire, housing associations have been working with residents to ensure that they are safe – and, importantly, that they feel safe. This includes reviewing the safety of buildings where their residents live, including those buildings they don't directly own or manage. Our members have been engaging with residents to identify any concerns before taking urgent action to remediate and mitigate any issues they identify. They have also been taking steps in their roles as clients and commissioners of new buildings to ensure the design, specification and build quality of new homes takes into account the latest guidance and key building safety considerations.

We fully [support Dame Judith Hackitt's work](#) to create a new system for building safety that is fit for purpose. Since the publication of the Hackitt Review's final report, our members have been working with the Government either as early adopters of the Hackitt Review recommendations, or independently, to adopt and trial the recommendations and respond to emerging government proposals.

We are committed to working with the Government and other partners to achieve our shared aim of keeping residents safe and ensuring that a tragedy like the fire at Grenfell Tower never happens again. Our members' number one priority is, and always will be, the safety and wellbeing of their residents. Our sector will continue to respond to immediate building safety concerns and take a proactive approach on building safety in advance of a new regulator being established.

## 2. Policy context

---

We support the Government's approach to addressing issues affecting high-rise residential buildings more quickly, where there is a clear case not to wait for policy change.

We welcome the main proposals set out in this consultation:

- To reduce the trigger height at which sprinkler systems would be required in new high-rise blocks, from 30 metres to 18 metres.
- To improve wayfinding signage within blocks of flats.
- To install evacuation alert systems for use by the fire and rescue services.

We also [welcome the Grenfell Tower Public Inquiry Phase 1 Report](#) into the events on the night of the tragic fire at Grenfell Tower. A number of the recommendations in the report are closely linked to these consultation proposals, such as ensuring all floor numbers in high-rise buildings are clearly

marked and visible on each landing in stairways, and in a prominent place in lobbies in normal, low-lighting and smoky conditions.

We agree with the Public Inquiry's considerations of further fire safety measures that could be necessary to protect lives but are mindful that the capital costs of installing sprinklers and evacuation alert systems could be significant for our members. This could have an impact on housing associations' viability and capacity to build new homes. Unlike organisations that simply develop buildings, there are likely to be additional longer-term costs for our members in terms of maintaining systems throughout the life of the building, and it is not clear how these will be paid for.

## **2.1 A risk-based approach to building safety**

---

We support the consultation proposals, including the reduction of trigger heights for sprinkler specification. We believe that a risk-based approach should be applied to buildings that fall outside of the proposed regulation trigger heights to determine whether they too should have sprinklers installed. This would ensure that buildings that fall below proposed regulation trigger heights are subject to the same levels of scrutiny and risk mitigation as those within scope.

More broadly, in our sector [response to the Building a Safer Future Consultation](#), we went a step further and proposed using a risk-based approach to determine which buildings fall into the scope of new building safety regulations. We believe that height should be just one of the factors considered when determining a building's risk profile. Other factors, such as the way in which buildings are designed and managed, should also be taken into account. In addition, assessing risk should be objective and based on actual fire events. This information can easily be captured by extending the data collected by the fire and rescue services as part of their incident recording systems. We are committed to working with the Government to develop effective approaches to regulation, including any future wider review or programme of work.

Housing associations are already taking a holistic risk-based approach to assessing building safety and risk mitigation, enabling them to take action to make all their buildings safer – and we believe a future regulatory system should reflect this. It also aligns with the Government's objective of driving culture change in building safety across the entire built environment.

## **3. The Federation's response**

### **3.1 Sprinkler provision in high-rise blocks of flats**

---

We support the Government's preferred option of a reduction in trigger height for sprinklers in new homes from the current 30 metres to 18 metres. This would be consistent with the ban on combustible materials in external walls and the proposed scope of the building safety regime.

In addition, we advise adopting a risk-based approach to sprinkler provision in new buildings that fall outside this trigger height. We remain committed to working with the Government to shape wider regulatory review outcomes.

We have concerns about the suggested transition period of six months prior to the application of the new requirements. These relate to the current capacity and availability of competent qualified sprinkler designers and installers, as well as an adequate supply of the materials needed to ensure our members can meet demand. We urge the Government to consider this issue prior to setting the

transition period. There would also need to be a clear judgment in the application of the transition period for multiple-phase projects and the impact on building regulation registration dates for such projects.

The sprinkler industry will also be under pressure due to the commitment by some housing associations and other landlords to retrofit sprinklers in existing buildings, as well as any forthcoming regulatory conditions regarding sprinkler installation that may be put in place by the new building safety regulator. We know from some of our members that the current increase in demand for sprinklers has skewed quotes and estimated costs, with actual costs doubling following installation.

The Government should consult with the sprinkler industry directly to gauge its capacity to fulfil these obligations before agreeing the transition period. This would help to mitigate the risk of spikes in demand and cost that could render some building programmes unviable.

As part of developing a risk-based approach, some of our members are trialling misting fire suppression systems as an alternative to sprinklers. This solution could be adopted more widely in the future and we would welcome support for its potential inclusion in regulation as appropriate. Our members have cited some of the advantages of installing misting systems compared to sprinklers:

- Environmentally sound – they use less water than sprinkler systems.
- Minimised water damage – not only do the systems use less water, the suppression/cooling action is through evaporation, meaning a lot of the water turns to steam and therefore does not douse the property.
- Smoke scrubbing – the process of smoke particles adhering to the fine water droplets effectively cleans the air.
- Smaller bore pipework offers potentially easier retrofit installation.
- Smaller tanks offer installation advantages.

### **Existing buildings**

---

Although the consultation scope doesn't extend to retrofitting sprinklers in existing buildings, our members have shared views on retrofitting and the use of sprinklers in existing homes that the Government may wish to consider:

- A risk-based approach should be used when assessing whether to fit sprinklers in existing buildings.
- Further consultation with our sector would be needed to discuss and understand retrofit limitations, such as structural issues, access and cost. This would help develop a deliverable outcome-focused approach.

### **3.2 Wayfinding signage for fire and rescue services**

---

We support the proposals to require better wayfinding signage for fire and rescue services in stairways. This will significantly improve fire and rescue services' ability to locate firefighting equipment and safety features such as firefighting shafts, hydrants and smoke control switches, improving the pace of operational response.

We support the need for building regulations to be prescriptive in this area, and the accompanying Approved Document should contain annotated diagrams. In addition, we would like to see a clear set

of industry-approved standards, generated and led by the fire and rescue service. These standards should include national guidance on floor level numbering.

Our members have set out their proposed options for wayfinding signage:

- Our members' preferred option is photo luminescent lettering, due to its cost-effectiveness, lack of maintenance requirements, and greatest levels of visibility through smoke.
- We do not consider emergency powered lighting luminaires to be cost-effective. They are more likely to fail or be damaged, require a high level of maintenance, have higher running costs, and require periodic testing – all of which will have cost implications. .
- Our least favoured option is vinyl lettering, as it is too cheap and is easily vandalised.

### **Existing buildings**

---

Although the consultation scope doesn't extend to retrofitting wayfinding signage in existing buildings, our members support the provision of wayfinding signage in existing buildings, and we're calling for national guidance to cover this.

### **3.3 Evacuation alert systems**

---

We support the inclusion of a requirement for an emergency evacuation system in Approved Document B, which could support the operational response from fire and rescue services by alerting residents if they need to evacuate.

This is consistent with the recommendation in the Grenfell Tower Public Inquiry Phase 1 Report. The report states that all high-rise residential buildings should be equipped with facilities for use by the fire and rescue services enabling them to send an evacuation signal to all – or part of – the building by means of sounders or similar devices.

The provision of evacuation alert systems in new buildings could:

- Enable evacuations to take place more quickly.
- Support the management of a staged response.
- Provide peace of mind for residents, who will be warned quickly if they need to leave their building, should the fire and rescue service consider this appropriate.

To ensure that the application and use of these systems is successful, our members maintain the need for a greater focus on achieving high-quality compartmentation, together with suppression systems, providing layers of fire protection which could support a stay put policy where appropriate.

We would like to see a clear standard that sets out how evacuations – both full and staged – would be managed in an emergency. We know that often, in the event of a fire, people will try to exit the same way they entered a building – even though this may not be the closest or best escape route.

Our members have also highlighted that variations in the quality of systems specified in buildings they acquire could have implications for long-term maintenance costs.

## **Working with residents**

---

Our members are committed to working with their residents, resident representative groups and the fire and rescue services to understand what residents need to feel confident of their responsibilities in an emergency. This is particularly important for vulnerable residents. Our members understand the need to work in partnership with residents, who play a vital role in ensuring building safety.

When considering how to implement a resident engagement strategy in practice, our [Together with Tenants](#) work provides a useful point of reference. Together with Tenants is the Federation's initiative to build a more collaborative and balanced relationship between housing association landlords and residents. Emerging findings from this work show that residents want to work with their landlord on decisions that affect their home, including on building safety issues.

## **Points for further consideration**

---

Our members have also identified a number of key areas for further consideration in relation to this proposal:

- The need to ensure the safety of residents who have an impairment issue that will hinder their evacuation. Guidance should set out the best approach for these individuals, recognising the need for additional resource to ensure resident safety. We are committed to working with the Government to develop guidance on evacuation procedures (as recommended by the Public Inquiry) and are clear that adequate resourcing would need to be provided.
- Housing associations are keen to work with the fire and rescue services to develop good practice for the effective use of evacuation systems when managing buildings in occupation, ensuring residents' needs are taken into account.
- The control panel for the system must be secure, as there is potential for the system to be vandalised, or used by opportunist thieves as a means to evacuate all residents.

## **Existing buildings**

---

While the scope of the consultation doesn't extend to retrofitting evacuation alert systems in existing buildings, our members have shared views on what the proposals could mean for existing buildings.

The internal layouts of existing high-rise blocks, including varying provision of stairways, may mean it would be unsafe to change an evacuation procedure for these buildings. It is also important to consider the width of fire doors and staircases when requiring residents to evacuate a building and how this could affect the fire and rescue services.

## **4. Conclusion**

---

We support the proposals in this consultation. To summarise the key points we would like the Government to consider in applying the proposals:

- The capital costs of installing sprinklers and evacuation alert systems could have an impact on housing associations' viability and capacity to build new homes. There will also be additional longer-term costs relating to maintaining and checking systems throughout the life of the building, and differing specification quality. Unlike organisations that simply develop buildings,

these costs will have an impact on our members and their residents and we have concerns about how these will be paid for.

- The Government should consult with the sprinkler industry directly to gauge capacity before finalising the transition period. This is necessary to mitigate the risk of spikes in demand and cost that could render some building programmes unviable.
- Building regulations should be prescriptive in relation to the wayfinding signage proposals, and the accompanying Approved Document should contain annotated diagrams. We would also like to see a clear set of industry-approved standards, generated and led by the fire and rescue service. These standards should include national guidance on floor level numbering.
- For the application and use of evacuation alert systems to be successful, there needs to be greater focus on achieving high-quality compartmentation, together with suppression systems, which could support a stay-put policy where appropriate.
- There should be a clear standard setting out how evacuations – both full and staged – would be managed in an emergency.

While we support the consultation proposals, our [sector response to the Building a Safer Future Consultation](#) advocates a risk-based approach to all buildings in scope of the new building safety regime and building safety regulations. We believe that height should be just one of the risk factors considered when determining a building's risk profile, and that other considerations should also be taken into account, such as how a building is designed and managed.

We have also [welcomed the Grenfell Tower Public Inquiry Phase 1 Report](#) into the events on the night of the tragic fire at Grenfell Tower. We are carefully considering the key points and recommendations in the report and ensure that as a sector we are taking all action necessary.

The safety of residents is the number one priority for housing associations. Our members are already engaged in a major programme of activity to identify and address potential safety risks in their stock and ensure that residents are, and feel, safe in their homes.

We remain committed to working with the Government to shape future regulatory change, with our primary focus on keeping residents safe and ensuring that a tragedy like the fire at Grenfell Tower never happens again.

## **5. Further information**

---

- Amy Simmons, Head of Policy, [amy.simmons@housing.org.uk](mailto:amy.simmons@housing.org.uk), 07775 722258
- Tommy Collins, Policy Officer, [tommy.collins@housing.org.uk](mailto:tommy.collins@housing.org.uk), 01179 529916