Chair's Foreword

More than a year after the tragedy at Grenfell Tower, the shock does not go away. It is the duty of all councils and councillors to do whatever they can to put measures in place that will protect their residents. I was delighted to lead the work of the task group and to develop with pace a set of recommendations on how the council could proceed to install sprinkler systems in its tall buildings.

We also recognised that more needed to be done to ensure that all front entrance doors were fire resistant for the statutory period of thirty minutes. We have also made recommendations in this area to ensure that the first line of defence against a fire is as good as it can be.

We recognise that this is not a straightforward task and cannot happen immediately, but in proposing the measures that we have set out, a framework has been designed that will enable a comprehensive programme to be developed to ensure that all these works can be done in a timely manner.

Councillor Melvyn Caplan

Recommendations

The task group agreed the following recommendations in relation to fire doors

1. Issue a Front Entrance Door Regulation
2. Ensure a system is developed to record the inspection position of all front entrance fire doors in tall buildings.
3. Build into all major works on blocks that inspections are done of all front entrance fire doors (both tenants and leaseholders).
4. Data on fire safety matters should be presented to the relevant cabinet member and included in reports to the Audit & Performance committee at least on a quarterly basis.
5. Provide a programme of how many CityWest Homes or Westminster City Council personnel can be trained as fire inspectors and the programme to include a timeline for all fire doors to be inspected.
6. Lobby for appropriate bodies to dedicate resources to support local authority building owners to train the staff and carry out the inspections in accordance with the London Fire Brigade's expectations.

The task group agreed the following recommendations in relation to sprinklers

7. Install sprinklers in all properties regardless of tenure, seeking to recover costs from post-1987 lessees only. (option A)
8. Work to establish a legal agreement for the right of access in to lessee properties and for charging post-1987 lessees

9. Carry out section 20 consultation for post-1987 lessees and then undertake the installation of the system to a block, deferring demanding the service charge until completion.
10. Installation of option 1 (Boxed in plastic pipework with concealed heads) sprinklers
11. Work with the London Fire and Emergency Planning Authority and key industry bodies to develop a comprehensive programme of ongoing dialogue and communication with all leaseholders to obtain access to their properties and to document all such individual engagements.
12. Prioritise sheltered housing over tall buildings and establish budget for doing so within the HRA business plan
13. Ensure comprehensive records of fire safety works on each property are kept, including work and inspections undertaken by others such as the fire brigade, as per the recommendations of the Hackitt report.
14. Communicate advantages of sprinklers to private freeholders of tall buildings and to maintain a record of all such communications.
15. Lobby Government (through LGA and London Councils were appropriate) on funding for the retrofitting of sprinklers, especially in cases were the Housing Revenue Account is having to fund such works.
16. Lobby the government to amend regulations ensure retrofitting sprinklers is easier for social landlords.
17. Continue to lobby the Mayor of London so that LFEPA provide specific guidance on the installation of sprinklers to mixed tenure blocks, specifically where leaseholders are able to decide (as is currently their right) whether or not to allow access to their properties for works to be done and to be maintained in the future. Also lobby government for any changes that can be made to regulations to permit the council to enter (by appointment) such properties to carry out the works.

Introduction

Immediately following the Grenfell Tower fire tragedy on 14th June 2017, an informal commitment was made by Westminster City Council and a number of other councils to install sprinkler systems in all tall buildings over 30 metres high, the same threshold at which sprinklers are required in new developments. Following this commitment, CityWest Homes (Westminster City Council's Arm's Length Management Organisation) began reviewing the technical, financial and legal implications to undertake such a task.

On 26th March 2018, the Housing, Finance and Corporate Services Policy and Scrutiny Committee established a task group to consider the practical and legal implications of retrofitting sprinklers in tall buildings. Following the local authority elections on 3rd May 2018, the Housing, Finance and Customer Services Policy and Scrutiny Committee decided to continue the work of the task group.

Justification for the installation of sprinklers

There is no legal requirement to install sprinklers in existing tall buildings. There is, however, some evidence to justify the retrospective installation of such systems, for example:

- There are almost zero reported deaths that result from a fire in a building with sprinklers installed;
- Reports following fires such as that at Lakanal House (Southwark) and Shirley Towers (Southampton) have all recommended the installation of sprinkler systems in buildings over 30m, and reports suggest that if they had been installed then they would have saved lives;[1]
- Submissions from key organisations such as Royal Institute of British Architects to various inquiries have called for legislation requiring building owners to retrofit such systems in tall buildings.[2]
- Various reports commissioned by the British Automatic Fire Sprinkler Association, the trade body for the fire sprinkler industry, have outlined the potential benefit of retrofitting these installations[3]
- Fire brigades nationally and locally are largely in favour of retrospective installations within tall buildings
- National Fire Chiefs Council and the Business Sprinkler Alliance (supported by the Fire Sector Federation) have both issued a statement supporting sprinkler installation[4]

The building Regulations 2010, Approved Document B refers to the benefit of sprinkler installation:

- *'Sprinkler systems installed in dwellinghouses can reduce the risk to life and significantly reduce the degree of damage caused by fire.'*
- *'If a building is fitted throughout with a sprinkler system, it is reasonable to assume that the intensity and extent of a fire will be reduced.'*

The advantages and disadvantages of sprinklers can be summarised as

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[1] https://www.lambeth.gov.uk/elections-and-council/lakanal-house-coroner-inquest; http://www.fbuscotland.org/sites/default/files/Hampshire_rule43.pdf

[2] https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/%20/-/media/files/grenfell-tower/171017-riba-submission-independent-review-of-building-regs-and-fire-safety-call-for-evidence-web-ver.pdf

[3] https://www.bafsa.org.uk/sprinkler-systems/domestic-residential-sprinklers/

[4] https://www.nationalfirechiefs.org.uk/write/MediaUploads/Position%20statements/Protection/AWSS_Position_statement.pdf; http://www.business-sprinkler-alliance.org/blog/sprinklers-time-retrofit/

Advantage	Disadvantage
• Controls fire in its early stages to prevent the fire developing. Allows time for fire service to act. • UK statistics indicate that there have been zero deaths from fire in residential blocks that have been fitted with sprinklers.[5] • The chance of accidental discharge of water from all causes is 1 in 500,000 and accidental discharge of water due to manufacturing defects is 1 in 14,000,000.[6] • Residents are made to feel safer. • Sprinklers have the potential to reduce significantly the cost of rehousing residents and any necessary major refurbishment work following a fire.	• Capital and operational expenditure. • Inconvenience and disruption to the residents within each demise during the installation period. • Inconvenience and disruption to the residents within each demise required for maintenance and inspections which form part of the maintenance regime. • Inconvenience and disruption to residents during installation works within communal areas, such as corridors. • Some impact on living space.

Issues related to not achieving 100% coverage

Recommendations in all guidance (such as the building regulations, specialist sprinkler organisation (BAFSA) and the London Fire Brigade) suggests that sprinkler installation should be to 100% of properties where looking to install within general needs housing stock, regardless of tenure i.e. systems installed inside the dwelling. The exception to this is sheltered housing blocks, where guidance suggests that systems should be installed within communal areas also.

The council should set the objective of achieving 100% coverage in tall buildings, but it does not have the power to insist on access to leasehold properties. There had been concerns that Building Regulations approval may not be achieved where 100% coverage is not achieved. It now appears however that for retrofit installations, approval could still be achieved without 100% coverage.

Options for installing sprinklers

The task group has considered the most viable type of wet systems available and reviewed the advantages and disadvantages of each. The three systems are:

[5] European Statistics over a 10 year period.
[6] Source; Loss Prevention Council (UK) and FM (USA) statistics.

a. Standalone automatic sprinkler system
b. Standalone automatic misting sprinkler system
c. Automatic sprinkler system fed from domestic boosted cold water service

The task group considers option c the most desirable as it uses the existing buildings services where possible.

There are a number of different ways that such a system could be installed with different finishes which affect cost, aesthetics and how protected the installation is from interference.

Option 1 – Boxed in plastic pipework with concealed heads

- Pros – Widely accepted as a good standard for retrofit sprinkler systems. Many authorities are currently installing systems to the same of similar specification.
- Cons – Generally more expensive due to the levels of builders work and associated decoration.

Option 2 – Exposed plastic pipework and sprinkler heads

The variance from option 1 is that the boxing surrounding the pipework has been omitted creating a saving in the builders work cost.

- Pros – Cost saving of 23%, easier access to pipework and heads for leaks, less material to replace and maintain. Minimal impact on surrounding features.
- Cons – Residents might not be as accepting of the system due to the aesthetics. This option is more susceptible to tampering and malicious damage; dust can build up on the pipework and sprinkler heads.

Option 3 – Exposed stainless steel pipework and sprinkler heads

The variance from option 1 is that the boxing has been removed and the plastic pipework has been replaced with stainless steel creating a feature of the pipework.

- Pros – Cost saving of 18%, easier access to pipework and heads for leaks, less material to replace and maintain. Minimal impact on surrounding features. More aesthetically pleasing in raw material form and could potentially negate need for decoration.
- Cons – Residents might not be as accepting of the system due to the aesthetics. The system is more susceptible to tampering and malicious damage; dust can build up on the pipework and sprinkler heads.

Option 4 – Concealed heads in a new plasterboard ceiling

The variance from option 1 is that the boxing has been removed and a false ceiling installed to conceal the pipework. Existing services such as lights and smoke detectors will have to be relocated.

- Pros – The new sprinkler system would be more concealed, more aesthetically pleasing and potentially less intrusive
- Cons – There is a cost increase of 31%, the floor to ceiling height is reduced creating less space, residents might not be as accepting of the system due to the higher cost and reduction of space, services such as lights would have to be relocated creating an increase in project risk.

	Option 1	Option 2	Option 3	Option 4
Cost	***£1,392,000***	**£1,071,000**	**£1,136,800**	**£1,828,000**
% Saving	**0%**	**23%**	**18%**	**-31%**
Estimated City-wide Budget (inc. leasehold cost)	**£22,500,000**	**£17,325,000**	**£18,450,000**	**£27,675,000**

Table 1: Cost of each installation option in Polesworth House on the Warwick & Brindley Estate and estimated citywide budgets are based on those costs estimates.

Technical Hurdles

CityWest Homes' feasibility reports confirm that there are no major issues to overcome with regard to the actual works and the installation of the systems. CityWest Homes has carried out installation in a pilot flat that has enabled any potential issues to be identified and resolved.

Leaseholders

The most significant challenge to retrofitting sprinklers in Westminster City Council properties is gaining permission and access for installation in leasehold properties. Leaseholders represent 41% of total properties in tall buildings. Westminster City Council has two types of lease, pre-1987 and post-1987. Pre-1987 leases do not include a right for the council to installs sprinkler systems.

Options for installing sprinklers

Taking into account the different types of tenure, there are five possible approaches to carrying out the installation of sprinklers:

Option A – Install in all properties regardless of tenure, seeking to recover costs from post-1987 lessees only

This option proposes the system is installed in all properties and complies with all the current building regulations and guidance.

Advantages/Benefits

- The system will be fully aligned with industry guidance as it will be installed in all properties.
- No issues or complications when selling a tenanted flat under the right to buy.

Disadvantages/Risks

- There may be challenges for access to carry out the works.
- Risk of legal challenge on appropriateness or reasonable cost of works.

Option B – Install in tenanted properties only, with the option for leaseholders to opt in:

It is technically possible to install this system but it will only operate if there is a fire in the protected area.

Advantages/Benefits

- Fully enforceable for tenanted properties.

Disadvantages/Risks

- The London Fire Brigade and building control have indicated a preference for 100% coverage within blocks;
- Such an installation would not provide as effective fire protection;
- A partially installed system would not directly align with any industry guidance and 'may' fall short of future changes to building regulations;
- Unless a lease is changed, maintenance responsibilities in leasehold properties would fall to lessees, which may prove problematic in the future;
- Full maintenance costs would not be able to be recharged as it would not benefit the whole block;
- Installing a communal system in a selected number of properties is contrary to the recharging mechanism of the lease and would require a separate legal agreement.

Option C – Install in all properties and free issue the works to all lessees;

This option is something being considered by other housing providers.

Advantages/Benefits

- The system will be fully aligned with all building regulations and industry guidance as it will likely be installed in all properties
- No issues or complications when selling under the right to by
- No changes to the lease required

Disadvantages/Risks

- The council has a fiduciary duty with regard to the Housing Revenue Account.

- There may still be challenges to access to carry out the works.
- Will result in reduced funding in HRA for other projects.
- Future recovery of maintenance costs uncertain, and questions over a right of access to maintain.
- Offers of free installation of sprinklers to leaseholders by other local authorities have not always resulted in 100% coverage.[7]

Option D - Apply to the First-tier Tribunal to vary the leases

An application could be made to the first-tier tribunal to vary the leases in order to allow the council access to both install and maintain the system in lessee units.

Advantages/Benefits

- It could achieve an express right of access and recovery that is fully enforceable.

Disadvantages/Risks

- The outcome is uncertain;
- That the chance of varying pre-87 leases are low.
- The likelihood of opposition is strong;
- The legal fees would be high and unrecoverable
- Slow process as counsel has advised that a maximum of two blocks should be the subject of an application at any one time);
- The time it would take to obtain a determination is long (in excess of 12 months) and ill-defined as decisions can be appealed.

Option E - A combination of options A and C e.g. part funded by WCC

This option is a combination of options A and C where the installation is part funded. For example, a nominal percentage reduction could be applied to all bills with the short fall being funded by HRA account.

Advantages/Benefits

- The system will be fully aligned with all building regulations and industry guidance as it will be installed in all properties.
- No issues or complications when selling under the right to by
- No changes to the lease required
- Could increase the number of lessees who take up the offer of sprinklers

Disadvantages/Risks

- Will result in reduced funding in HRA for other projects.

[7] http://www.hackneygazette.co.uk/news/installing-sprinklers-in-hackney-tower-blocks-could-cost-council-20m-and-would-mean-not-doing-other-things-1-5195183

- ‘Free to issue’ infrastructure with ‘lessee recharged’ in flat pipes and sprinklers would not be possible under the current leases, and would jeopardise future recovery of maintenance.

Due to the nature of the works proposed, and that some blocks have either had works recently or completed or planned in the near future, the council may wish to consider extending or deferring the payment options for leaseholders. This may also include waiving the interest on any deferred payments.

Financial implications

The government has confirmed that it will not be providing funding for retrofitting sprinklers in tall buildings.[8]

The estimated cost of installing sprinklers (option 1 in table 1) in all flats (including leaseholders’) in Westminster City Council’s tall buildings is £22.5million. The cost of retrofitting sprinklers in tenanted properties would have to be borne by the Housing Revenue Account (HRA).

There are potential options that the council could pursue to recover costs of installing sprinkler systems from post-87 leaseholders:

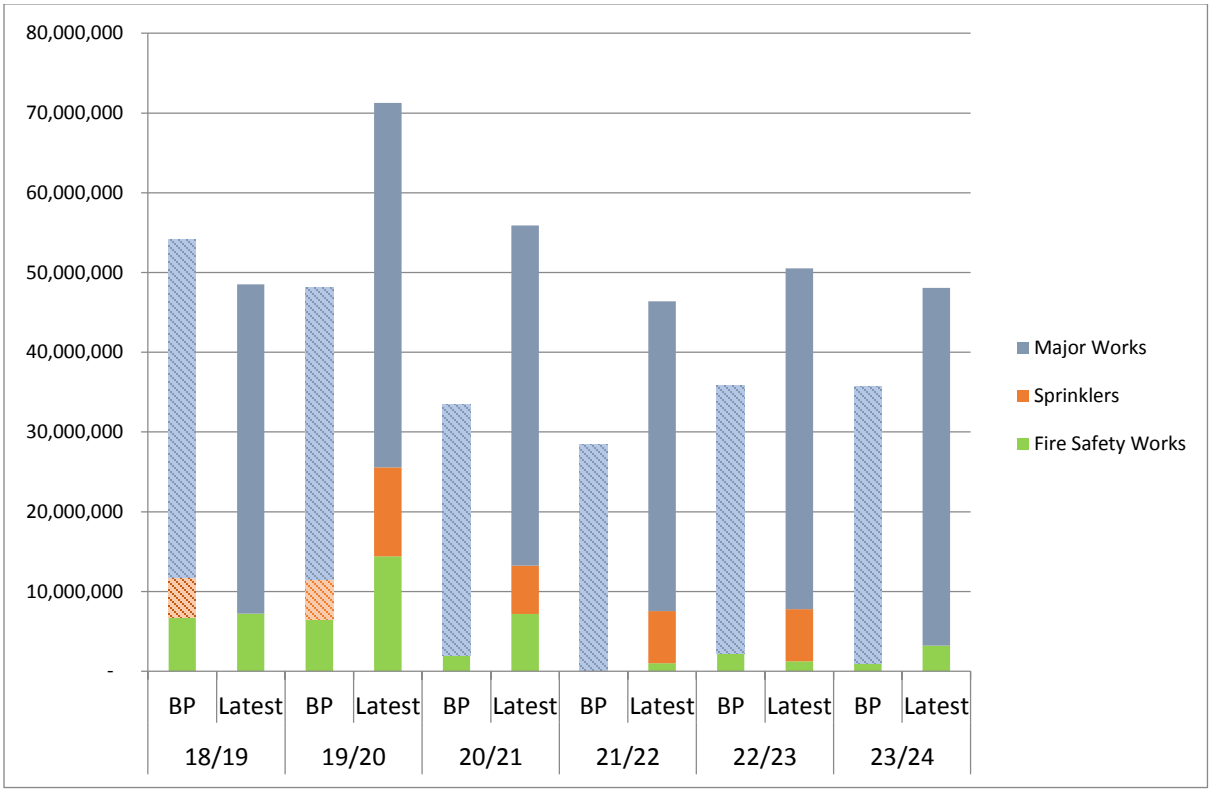
- Carry out a consultation under section 20 of the Landlord and Tenant Act 1985 and install sprinklers in a block, deferring demanding the service charge until completion. If a post-1987 leaseholder objects to sprinklers being installed in their flat and will not grant access, the council could bring proceedings in the County Court seeking access. Alternatively, the flat could be excluded from the programme. This was the preferred approach of the task group.
- The council could apply to the First Tier Tribunal under section 27A Landlord and Tenant Act 1985 to seek clarity the council’s right of access, right to recover and right to maintain and bill maintenance costs to post-1987 lessees. This would have to be done in relation to a single block, would likely take 6-8 months, and cost in the low tens of thousands of pounds. The task group did not support this approach.
- The Council could opt to install the sprinklers without charging post-1987 leaseholders. This could increase the potential take up of sprinklers; however, it is unclear, at present, where the £8.4 million necessary to fund this option would come from. The task group did not support this approach.

Impact of increased and accelerated expenditure on the current HRA business plan

The additional funding required for the proposed sprinkler installations (and further anticipated fire safety works), would require an estimated increase in funding for fire safety works of approximately £38m and an estimated increase in major works funding

[8] PMQs 18th October 2017

of approximately £40m. This could require either additional funding being diverted from other areas within the HRA (e.g. development), or some programmes being delayed.



Graph 1 – Entire capital works contained within the HRA business plan vs the estimated increased expenditure associated with both sprinklers and fire safety works.("BP" = Approved HRA Business Plan 18/19; "Latest" = current estimates as at July 2018)

Sheltered Housing

Following the Grenfell Tower fire tragedy attention was initially focused on sprinklers in tall buildings. Subsequent investigations and reviews have expanded their focus to include sheltered housing and have recommended that sprinklers be retrofitted in these buildings as well. The London Fire Brigade is also calling on all existing care homes and sheltered accommodation to be retrofitted with sprinklers. The cost for retrofitting Westminster City Council's sheltered housing would be approximately £7.8million.

Fire Doors

"The flat entrance doors are critical to the safety of the common parts in the event of a fire within a flat. The doors must be self-closing and afford an adequate degree of fire resistance".

Fire doors are an important part of ensuring that the compartmentalisation of a building is maintained and that individual compartments slow the spread of fire. To be effective they must be self-closing and resist fire for an adequate amount of time. [9]

CityWest Homes has raised concerns about its ability to require doors to be replaced in leaseholders' flats to ensure they are FD30s (able to resist fire for 30 minutes) compliant. There are also issues surrounding CityWest Homes' ability to inspect doors to identify those that are not FD30s compliant.

There is a national scheme for qualified fire door inspectors. CityWest Homes currently have a provider for inspections whilst CityWest Homes staff are being trained to carry out inspections.

There are a variety of options for ensuring doors are FD30s compliant:

- Install FD30s doors when carrying out repairs to existing doors
- Rely on leaseholders' duties under the Regulatory Reform (Fire Safety) Order 2005
- Serve an improvement notice under the Housing Act 2004
- Utilise the council's regulation making powers under the leases

Repairs

Where a Door is in a state of disrepair, this must be proven under the lease covenants and associated implementation sort via the courts, this is a lengthy process. Alternatively, if WCC Environmental health team assess the disrepair of the door to be a Category 1 or 2 hazard under HHSRS, WCC is entitled to replace it with an FD30s compliant door, and charge the costs through the service charge.

Flat entrance doors are responsibility of leaseholders who have a duty to keep them in good condition. Not meeting the current building regulations requirements does not mean that a door is in disrepair, as disrepair is relative to the state of the door when it was installed. Therefore, Westminster City Council cannot install FD30s doors as a repair; however, there is nothing to prevent the council from installing an improved door when carrying out any repairs if a door is in a state of disrepair. If a door were to be replaced it would be required to meet current buildings regulations as noted within approved document B.

Regulatory Reform (Fire Safety) Order 2005

Where fire doors would need to be replaced to comply with duties under the Regulatory Reform (Fire Safety) Order 2005, the duty falls on leaseholders. However, this duty is not to Westminster City Council, and the council is unable to enforce it. London Fire and Emergency Planning Authority is the body that would have to enforce this duty.

[9] 2012 Local Government Association ("LGA") publication Fire Safety in Purpose-Built Blocks of Flats

Housing Act 2004

It is possible that Westminster City Council's Environmental Health Officers could consider that the front door of a flat not being FD30s compliant is a Category 1 or 2 hazard under the Housing Act 2004. If this were the case, Westminster City Council could issue an improvement notice under the Housing Act 2004 to the leaseholder, requiring them to bring the door to standard.

WCC's regulation-making powers

Westminster City Council has the power to impose regulations on those lessees that are for the benefit of the owners of the flats. The legal has received is that, because a regulation requiring the installation of fire doors would be to increase fire protection for all flats Westminster City Council can use its regulation making power to make this particular regulation.