

23RD JANUARY 2014**REPORT OF THE PORTFOLIO HOLDER FOR PUBLIC HOUSING AND VULNERABLE PEOPLE****LANDLORD SERVICES HIGH RISE FIRE SAFETY****EXEMPT INFORMATION**

None

PURPOSE

To set out the Council's response to the Coroners' recommendations issued in 2013¹ concerning the retro-fitting of sprinkler systems to high rise flats, namely the 6 high-rise blocks in Tamworth's town centre.

To set out the options available and estimated costs, noting that the subsequent expenditure will be built into the capital budget setting process as appropriate for 2014/15.

RECOMMENDATIONS

Cabinet are recommended to:-

- 1. Approve retrofit installation of automatic sprinkler system to individual flats and communal landings in the Town Centres 6-high rise blocks as shown at option 3 in the report.**
- 2. Delegate the decision on the final design and product specification to the Director of Housing & Health and the Director of Assets and Environment in conjunction with the Portfolio Holder of Public Housing & Vulnerable People**
- 3. A further report to Cabinet, should the total capital costs of the scheme differ significantly from current estimates and therefore not be met from the £1.1m funding included within the provisional 2014 – 2019 HRA Capital Programme, in the 2014 budget process, for fire upgrades to high rise flats.**

EXECUTIVE SUMMARY

The council's landlord already has robust and effective controls in place to mitigate against fire risks. In March 2012 Cabinet approved investment of £135k to further minimise the risk of fire carrying out various fire stopping and compartmentalisation works to the basement areas of each of the 6 tower blocks. In response to good practice guidance issued at the time, this investment alongside other actions has continued and is checked independently by the council's contractor for fire risk –

¹ 04/2/13 – Rule 43 Issued by Coroners Office

Graham Environmental, as well as through internal audit procedures.

Notwithstanding that, high-rise social housing blocks create a number of specific fire safety and fire-fighting challenges that may not exist in other properties. Following the Lakanal fatalities in 2009, H.M. Coroner issued a recommendation, known as rule 43², stating that Social housing providers should be encouraged to consider the retro-fitting of sprinklers in all existing high rise buildings in excess of 30 metres in height, particularly those identified by Fire and Rescue Services as having complex designs that make fire-fighting more hazardous and/or difficult. (Shown at annex one). The DCLG followed this up in April 2013 reminding the Council of its obligations under the Housing Act 2004, the Regulatory Reform (fire safety) Order 2005 and the Housing Health & Safety Rating System (HHSRS). For information this report details the response to the retro-fitting of sprinklers as the other relevant recommendation referred to in the Coroners letter concerned the removal of all surface mounted plastics which Tamworth has already done and continues to be standard practice.

Staffordshire Fire & Rescue Service (SFARS) support the retro-fitting of fire suppression sprinkler systems generally as referenced here - <http://www.staffordshirefire.gov.uk/1576.asp> In fact SFARS report a sprinkler system is *'like having the equivalent of a fire-fighter, ready and waiting, in your own home'*. Key benefits generally accepted are:-

- ✓ Fire sprinklers protects the individual and not just the property, as with traditional fire stopping protection
- ✓ There have been no reported fatalities where Sprinkler systems have been fitted and maintained properly
- ✓ With fire sprinkler systems the damage is contained and significantly reduces the spread of fire
- ✓ Sprinkler systems are required in new build properties above 30metres
- ✓ Legislation is likely going forward

Landlord Services have a good relationship with Staffordshire Fire & Rescue Service (SFARS) and in 2013 a multi-agency workshop was held to discuss the cost benefits of fitting sprinkler systems. At the time SFARS confirmed Tamworth was the only landlord having the conversation, so there remains limited evidence to compare with others. Consequently Staffordshire FARS has since written to the Council supporting the retro-fitting of sprinklers and this correspondence is shown at appendix two.

Whilst there is no legislative and/or statutory requirement to retro fit sprinkler systems in the high rise the profile of the tenants and leaseholders in the block was assessed to help inform this report and data suggests there *could* be a greater risk of fire and retro-fitting would be prudent.

When looking at Tamworth specifically, the additional benefits were highlighted:-

- ✓ The age and vulnerability of some of the residents in the high rise in Tamworth does potentially increase the risk of fire, i.e. estimated that 45% are smokers, 65% have reduced mobility and there is an increased use of mobility scooters resulting in residents charging batteries
- ✓ Additional fire stopping work would be required if Sprinklers were not fitted at around £40k. This is not needed if sprinklers are fitted.

² Rule 43 – requires that a Coroner who believes that actions should be taken to prevent the re-occurrence of fatalities...

- ✓ Tamworth has a proactive approach to health and safety management and does not support a passive approach to fire risk management.

The British Automatic Fire Sprinkler Association (BAFSA), following the Lakanal disaster and in response to the Coroners recommendation have produced a DVD illustrating the benefits and considerations when fitting fire sprinklers. The Callow Mount Project in Sheffield is particularly useful as the South Yorkshire Fire Service not only highlights the success of these systems in a fire-fighting sense, but tenants also dispel the myths about difficult installations and report increased confidence and higher levels of re-assurance post the works.

The following video clip captures all the key messages and Cabinet are urged to view this short commentary. Areas to note are the stark contrast between two bedrooms with fires started - 1 with a sprinkler and 1 without; additionally the reassurance to tenants and leaseholders that installation can be done whilst they remain at home; likelihood of sprinklers operating accidentally is estimated at 16million to 1 and fire suppression occurring within minutes – time otherwise that would potentially lead to fatalities.

<http://www.bafsa.org.uk/publications/sprinklers-for-safer-high-rise-living.php>

It is considered that all flats should have sprinklers installed, including Leasehold to ensure the blocks are fully protected. Therefore it is essential consultation is carried out with Leaseholders to obtain consent to install the system into individual Leasehold properties and identify potential refusals at an early stage.

This issue has been considered by the Tenant Consultative Group (TCG) and they initially felt that the additional works were not necessary for the reasons outlined later in the report. Primarily because they already have a high level of confidence in the fire measures the council has already put in place. But having watched the video clip from the South Yorkshire pilot, understanding that disruption during installation can be minimised and in fact the water suppression would protect their property as well as themselves are now happy to support the recommendations.

RESOURCE IMPLICATIONS

Cabinet know that preparations are underway to update the HRA Business Plan. Latest stock condition data has been assessed & the HRA base budget makes provision for this investment. Whilst the capital expenditure, estimated at c£1m, could be diverted elsewhere the HRA can sustain this level of expenditure whilst continuing to meet its wider obligations and ambitions. Details of the HRA business plan which will be reported to Cabinet in March 2014.

Estimated Capital & installation costs

Costs are based on the British Automatic Fire Sprinkler Association (Bafsa) project to retrofit sprinklers at Callow Mount Sheffield and costs quoted in the 2004 BRE study which are similar to installations in South Ayrshire and Wales.

There are 14 floors and 58 flats to each of the six high-rise blocks making a total of 348 flats. The cost of installation for option 3 has been estimated at c£145k per block giving an estimated installation cost of c£870k. This allows for up to £2,500 per flat including decoration and other residual works. Clearly final and actual costs are

subject to the procurement and final tender submissions. As part of the budget setting process, the provisional HRA Capital Programme for 2014 -2019 includes an amount of £1.18m for fire upgrades to flats. Should this funding be insufficient then a further report will be submitted to Cabinet once costs are known.

The costs identified above relate to option 3, which is full implementation of sprinklers however, should it be decided that an alternative option be implemented the costs can still be met from the provisional HRA Capital Programme for 2014-2019 with any surplus allocation being returned to the HRA resources for future projects.

Revenue & Maintenance Costs

The sprinkler system would have a life expectancy of at least 30 years without replacement of major components. Routine checks will have to be performed by specially trained members of staff and these will normally be confined to checking water pressures and intervention only if there is a loss of pressure or actuation

The installation will require ongoing maintenance which is estimated to be c£300 per year, per block. The annual maintenance liability is therefore assessed as c£1,800. Based on the assumption that because the system can be designed so access to individual flats is rarely going to be required the cost may be lower, full costing's will be known when the procurement is concluded. Maintenance costs are therefore estimated to be £54,000 over a 30 year period.

Actual costs of sprinkler installation will only be available once the work has been tendered. The above estimated costs are based on information currently available for similar installations and may or may not be indicative of actual costs. If there is a significant difference from the estimate then details will be reported to cabinet as necessary

The Service Charges (Consultation Requirements) (England) Regulations 2003 introduced by Section 151 of the Common hold and Leasehold Reform Act 2002 will be followed to ensure correct consultation and allow Leaseholders share of the costs to be recovered (where the lease allows for recovery of costs for improvement works). The amount to be recovered from each leaseholder will equate to 1/58th of the total installation cost for the block in which their flat is located; this will be recovered in accordance with the terms of the lease. Leaseholders will be invoiced annually for their proportion of the annual servicing costs again equating to 1/58th of the total cost per block. The exact figures will only be known once the works have been tendered and a contract awarded. There are currently 39 leaseholders across the 6 blocks that will be affected by this which could be potentially offset this installation cost by c£97.5k

LEGAL/RISK IMPLICATIONS BACKGROUND

Currently there is no legal obligation to retro-fit sprinkler systems. If Cabinet approve the recommendation then it will be going beyond its statutory duty.

If the project continues then partners will be involved in the production of a detailed risk assessment, headline risks are summarised below

Risk	Response
Estimated costs significantly less than actual	These are based on a realistic assessment of the market and projects

	undertaken in Yorkshire. Significant variations in cost will be reported back through to Cabinet if appropriate.
Longer-term disinvestment of the high rise	The Town Centre Strategy is currently being developed and there are no short term plans to disinvest. Any subsequent decision will take account of all cost/benefits
Disruption to the tenants and leaseholders	Officers' will risk assess and manage this using the tenant regulatory and involvement team to oversee works has been successfully done elsewhere
Criticism that the Council has undertaken unnecessary works	The council has taken a reasonable and balanced judgement with its partners. Sadly it is only when a fire occurs that this system will ever be fully tested and its value known
Investment of £1m for fire sprinklers does not guarantee the safety of all occupants in the block	Retro-fitting sprinkler fire suppression systems is an option open to the council. Whilst there is no guarantee with any system the council by fitting sprinklers would be doing it all it could to prevent a fatality
Unable to recover costs from leaseholders estimated at c£97.5k	Procedures will be followed in order to maximise the opportunity to recover costs

SUSTAINABILITY IMPLICATIONS

Intrinsic to Tamworth's vision – "one Tamworth perfectly placed" – are its corporate objectives for everyone to aspire, prosper and be healthier and safer. Not only will the letting of this contract bring about added value and secure a social return on its investment through stimulating the local economy but it will ensure a safer living environment for our high rise community.

MATTERS FOR CONSIDERATION

The high-rise blocks which include Strode House, Weymouth House, Harcourt House, Stanhope House, Peel House and Townshend House had extensive fire protection and compartmentalisation works completed in 2012 inline with the recommendations from Staffordshire Fire and Rescue Service (SFRS) fire officer. A recent assessment by a chief fire officer indicated the condition of the high-rise blocks regarding fire safety to be generally satisfactory.

Current fire risk assessments (involving invasive inspection) completed by Graham Environmental indicate some areas of high risk relating to missing fire-stopping between floor levels and access panels into individual flats with some minor recommendations regarding additional fire stopping works. Staffordshire Fire and Rescue Service have indicated that if sprinkler systems were to be fitted it would negate the need to provide fire stopping around access panels into individual flats. If sprinklers are not fitted the fire stopping would be required and has been estimated

at between £30k to £40k. Additional low level signage has been requested by the fire service and this has been completed.

Members should be aware there is no legislative requirement for the retrospective fitting of sprinklers in any of our blocks, however since the Lakanal House fire and subsequent investigations the following recommendations are contained in the Rule 43 letter dated 4 February 2013, this letter made the following statement -

Social housing providers should be encouraged to consider the retro-fitting of sprinklers in all existing high rise buildings in excess of 30 metres in height, particularly those identified by Fire and Rescue Services as having complex designs that make fire-fighting more hazardous and/or difficult. It is noted that current legislation requires that all newly built high rise buildings in excess of 30 metres in height must be fitted with sprinkler systems.

OPTIONS

Retrofitting of sprinklers was considered by the Tenant Consultative Group (TCG) last year and initially was not supported on the basis that:-

TCG View	Councils Response
Installation of sprinkler systems is not a legislative requirement	It is recommended best practice and is actively supported by Staffordshire FARS
Robust procedures already exist in relation to “stay-put” and high rise fire safety	This will continue, the sprinklers will provide further protection and time to affect rescues
Significant investment was made in 2012 (£130k) to improve fire safety and included controlled access and compartmentalisation of the basement areas in all blocks	Annual fire safety inspections are undertaken coupled with the council’s statutory risk assessment undertaking. The sprinklers will act as a further control measure.
The design of the blocks are traditional and differ from blocks where fatalities have occurred such as Lakanal	Whilst it is not retrospective all current building regulations for high-rise blocks above 30metres require sprinklers. The 6 high rise blocks in Tamworth exceed this height.
There is no guarantee that fire sprinklers would prevent a fatality occurring from a fire	Research indicates there is no recorded fatality where a correctly installed & maintained sprinkler system is fitted.
The blocks are all electric and occupied by an ageing tenant base who feels the likelihood of a fire is therefore more remote.	The survey undertaken shows that there is a greater degree of risk of fire due to age group, disability, smoking and use of mobility scooters.
Legislation could follow which would mean additional investment in subsequent years	Any additional investment is likely to be proportionate to any already spent.
There could be a risk that sprinklers would be activated and could be abused causing damage to flats	Statistics highlighted elsewhere suggest this occurs in 1:500,000. This will be mitigated by robust inspection and testing regime which will be a requirement

Taking on board the comments from TCG a survey was undertaken over Christmas to assess the level of risk in the blocks and the following identified

Average Age	72 years
Registered Disabled	25%
% with reduced Mobility	65%
% Smokers	45%
Use of mobility Scooters	35%
% Charging batteries in the flats	35%

When balancing risk the following conclusions were also drawn when considering the above

- From the survey the % smoking and/or with limited mobility is such that this presents a higher degree of risk in the event of a fire.
- Under the Regulatory Framework, the Home standard requires all landlords to ensure the health and safety of all its tenants and leaseholders and pay particular attention to risk
- Tamworth FARS actively support the fitting of sprinkler systems following Lakanal and the workshop held in Tamworth
- There is a history of attempted arson within the blocks and whilst this has not re-occurred since the controlled access to the basements was installed, town centre blocks inevitably attract opportunist crime
- Should there be a fire, then the fitting of sprinklers together with the other package of measures adopted, means the council has done all it can to protect its residents, even if that subsequently results in a fatality

As a result the TCG considered the report again early January 2014 and having seen the video from the Sheffield Project, and learned the results of the survey done over Christmas, are more minded to support the recommendations before Cabinet.

Options Table Option	Estimated Cost	Advantages	Disadvantages
1.Do not fit sprinkler system	£0	Zero cost for sprinklers but note that £30k - £40k of fire stopping works would be required	Insurance premiums remain the same. Difficult for SFARS to tackle fires on the upper floors Greater risk to residents on upper floors in the event of fire Greater potential for fire to spread to adjoining flats and stairwell Damage in the event of fire is likely to be major Extensive repair and refurbishment costs following a fire No reduction in the need to re-house tenants following a fire

			Should there be a fire then the council would face adverse publicity around its decision to not install sprinklers
2. Fit sprinkler system to all flats with one head inside front door	£626,500	<p>Lower cost than full system. Stops spread of fire onto landing / lobby area Reduces the risk of death and injury to fire-fighters Potential for reduced insurance costs Minimum impact of fire which would reduce the need to re-house tenants following a fire Tenants feel safer knowing they are better protected Note that £30k - £40k of fire stopping would still be required</p>	<p>Offers protection to landing / lobby area only Only protects front door / hall and not other areas in the flat Would not extinguish fire at source so considerable damage could occur Offers limited protection to residents</p>
3. Fit sprinkler system to all flats with multiple heads	£870,000	<p>All main areas covered by sprinklers so reduction in damaged caused in the event of fire Greater protection for residents Greatly reduces risk to fire-fighters Potential for reduced insurance costs Minimum impact of fire which would reduce the need to re-house tenants following a fire Tenants feel safer knowing they are better protected Relaxation of the need to fit heat</p>	<p>Some increase in installation and maintenance costs</p>

		detectors in kitchens Relaxation of the need to fit and maintain intumescent door seals on those leading to escapes routes Note that the £30k - £40k of fire stopping would not be required	
4. Fit sprinkler system to floors nine (9) to fifteen (15)	£390,000	Reduced cost Covers floor levels that SFRS cannot reach by access ladders etc Note reduced level of fire stopping works would still be required for all flats not sprinklered	Not all areas covered Tenants on protected floors still at risk of fire on lower floors as with disadvantages above

Research indicates that automatic sprinkler systems are used more than any other fixed fire protection system and over 40 million sprinklers are fitted world-wide each year.

The provision of a sprinkler system not only provides benefits in terms of life safety and protection of property it can also reduce the impact a fire has on the environment by limiting the production of carbon dioxide and other products of combustion.

Inherent in the environmental benefit of quick and reliable suppression of fires is the prevention of the need to replace and repair buildings, resulting in significant savings in respect of the energy and resources that have to be expended in buildings, which could include the following:

- Extent of post-fire demolition or refurbishment and repair to buildings
- Extent of fire-resisting glazing / windows and external panelling
- Exposure to harmful materials and substances that can be released in large fires
- Risk of polluting ground, air and water sources
- Cost and impact of treating water used by the fire and rescue service which could be 20 times more than the water used by a sprinkler
- Removes the need to relocate residents to temporary or permanent accommodation by preventing major destructive fires
- Facilitating the continued use of the building
- Reduction in the exposure of fire-fighters to danger
- Less water damage using sprinkler than conventional method
- In the event of a fire, life threatening conditions are greatly reduced in sprinklered buildings

Evidence shows that while sprinklers are primarily intended to contain or control fires, they can also be instrumental in saving the lives of people in the room of origin of a fire. There are no cases on record where multiple fire deaths have occurred in buildings with working sprinkler systems, where those systems have been appropriately designed for the intended purpose and have been properly installed and maintained. The evidence provided by the fire and rescue service and confirmed 17/12/13 also shows that no lives have been lost in the UK due to fire in homes fitted with domestic sprinkler systems.

Moreover, where a sprinkler system has been installed:

- Fire deaths (including fire-fighter deaths) have been almost eliminated
- Fire injuries reduced by 80%
- Significant improvement in fire-fighter safety achieved
- Property damage reduced by over 80%
- Effects of arson reduced
- Reduction in the environmental impact of fire
- Reduction to the economic cost of fire

The average time taken for the fire and rescue service to reach an incident and be in a position to intervene is 10 minutes. Most people will have succumbed to the effects of fire within the first five minutes. A sprinkler will activate within the first three minutes and have the fire controlled by the fifth minute. Smoke damage is a major cause of loss in fires and in serious cases smoke is the main cause of death. Sprinklers wash the larger particles out of smoke reducing its density and toxicity. In addition the water cools the smoke making it less harmful.

Losses (life, income, uninsured contents/structure and insurance excess) from fires in buildings protected with sprinklers are estimated to be 1/10 of those in unprotected buildings.

In buildings fully protected by sprinklers:

- 99% of fires were controlled by sprinklers alone
- 60% of fires were controlled by the spray from no more than 4 sprinklers

Source: European statistics over 10 year period

- Accidental discharge of water from all causes is 1 in 500,000 (per year of service)

Source: LPC

- Accidental discharge of water due to manufacturing defects is 1 in 14,000,000 (per year of service)

Source: FM (USA) and LPC (UK) statistics

Next Steps

If approved then the capital allocation will be built into the 2014 medium term financial budget setting process and it is envisaged works would be completed over 2

year period. The necessary works would have to be procured and works tendered in line with the councils standard financial regulations and procurement rules. Update and progress will be reported via the Portfolio Holder for Public Housing & Vulnerable People with delegated decisions in relation to the design and final specification to ensure value for money.

REPORT AUTHOR

If members would like further information or clarification prior to the meeting please contact Tina Mustafa on .Ext 467 or John Murden Ext 406.”

LIST OF BACKGROUND PAPERS

1. Shirley Towers Letter 4th February 2013
2. Rule 43 Covering Letter 10th April 2013
3. Riverside High Rise Flats Health and Safety Guide

APPENDICES

Annex one – Coroners Recommendation

Annex Two – Tamworth fire officer recommendation

Annex Three – Major Incident log country wide



Department for
Communities and
Local Government

10 April 2013

To:

***Housing Directors of stock-owning local authorities
Chief executives of Private Registered Providers***

In April 2010, two Hampshire FRA firefighters – Alan Bannon and James Shears - died fighting a fire on the 9th floor of Shirley Towers, a council-owned high rise block of flats in Southampton. The Coroner has written to the Chief Fire and Rescue Adviser and to DCLG Ministers to highlight actions which he considers should be taken to prevent a similar tragedy occurring in the future.

The Coroner's letter included two recommendations directed particularly at social housing providers, along with a recommendation that the Minister should disseminate the Coroner's recommendations to every social housing provider. I am therefore attaching a copy of the Coroner's letter and would ask you to actively consider them.

The relevant recommendations are numbered 5 and 7 in the Coroner's letter. You will wish to consider these recommendations carefully when considering your responsibilities under the Housing Act 2004, the Regulatory Reform (Fire Safety) Order 2005, and the Housing Health and Safety Rating System (HHSRS).

Yours sincerely,

A handwritten signature in cursive script that reads "Terrie Alafat".

**Terrie Alafat
Director
Housing Growth and Affordable Housing**

Annex Two

Email correspondence from Dave Thorpe (FRS Fire Safety Officer)

Good morning John,

I refer to your email below and would like to clarify the position regarding sprinklers in the high rise blocks in Tamworth.

As you are aware there is no legislative requirement for the retrospective fitting of sprinklers in any of the blocks. Our original discussions took place on 13 June 2013 following the recommendations contained in the Rule 43 letter dated 4 February 2013 this letter made the following statement -

Social housing providers should be encouraged to consider the retro-fitting of sprinklers in all existing high rise buildings in excess of 30 metres in height, particularly those identified by Fire and Rescue Services as having complex designs that make fire-fighting more hazardous and/or difficult. It is noted that current legislation requires that all newly built high rise buildings in excess of 30 metres in height must be fitted with sprinkler systems.

During our discussion on 19 September 2013 the issue of cost effectiveness was raised and the figures contained in the report on the retro-fitting of sprinkler in the Callow Mount development were also discussed (Attached). It is my experience locally that the costs have been quoted at around £2,500 per flat. However, this was for a much smaller number of flats. I would expect the cost to be lower for the high rise in Tamworth where I understand that there are approximately 400 flats.

I am also aware that locally sprinklers have been installed retrospectively into smaller blocks. This proved to be a cost effective solution due to their age and condition, and when compared with additional work that was required to bring them up to a satisfactory standard the cost of retro-fitting sprinklers was favourable.

With regards to the condition of the high rise flats in Tamworth, the general condition appears to be satisfactory; however this is based on my visit to one block only (Harcourt House) on the 7 August 2013. Although, some items were identified (copy of email attached with items noted) that do require attention.

However, this should not distract from the Rule 43 letter that encourages the retro-fitting of sprinklers and one we would generally support in Tamworth.

To assist you with any decisions Staffordshire Fire & Rescue employs a fire engineer, his name is Andy Brown, and can be contacted through myself in the first instance.

Regards,

Dave Thorpe
Fire Safety Officer
Eastern Service Delivery Group
Lichfield Community Fire Station
Birmingham Road

Appendix Three

Major high rise incidents noted during the Callow Mount Sprinkler Retrofit project between November 2010 and November 2011

Time/Date	Location	Building Height	Floor of Origin	Rescues/Injuries/Fatalities
30 November 2010 – 1825hr	Marie Curie House Southwark	14 floors	13 th floor	60 people self evacuated
20 December 2010 – 1450hr	Omega Way Somers town Portsmouth	8 floors	5 th floor	One male fatality, other residents evacuated to local community centre by police
19 January 2011 – 0540hr	Adamson Court Lochee Dundee	15 floors	14 th floor	One male fatality and one other person treated for smoke inhalation. Fire-fighters evacuated 12 people from six nearby flats
29 January 2011 = 2340hr	Acre Road Maryhill Glasgow	8 floors	5 th floor	Elderly couple and adult son died
4 February 2011 – 1445hr	Marine Tower Abinger Close Deptford	16 floors	16 th floor	Two female residents died, paramedics treated 4 other residents one of whom taken to hospital. ^ people rescued and 35 had to move out
10 February 2011 – 0645hr	Overtoun Court Swinton Street Clydbank	14 floors	4 th floor	1 male fatality
14 July 2011 – 1620hr	Tinwald Path Cardonald Glasgow	7 floors	5 th floor	1 female fatality, 2 others taken to hospital and residents trapped on top floor affected by smoke
15 July 2011 – 0300hr	Salamanca Place Lambeth	17floors	4 th floor	Nine people rescued externally, ten more led to safety down internal staircase and five fire-fighters treated for smoke inhalation
2 August 2011 – 2215hrs	Parkfield Calow Mount Sheffield	13 floors	12 th floor	Limited structural damage, no injuries or loss of life
12 August 2011 – 0030hr	Andrew Reed House Linsted Way Wandsworth	15 floors	9 th floor	One person taken to hospital. Fire crews rescued five people using stairs and four people from 10 th floor using turntable ladder. 150 people evacuated
13 September 2011 – 1340hr	Clem Attlee Estate Fulham	17 floors	6 th floor	25 residents evacuated

18 September 2011 – 0800hr	Cambria House Lerner Road Erith	14 floors	14 th floor	Nine people rescued
26 September 2011 – 1100hr	Markham Tower Bowers Avenue Norwich	10 floors	8 th floor	Residents from all 44 flats had to move to temporary accommodation

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