

**ITEM No ...5.....**

**REPORT TO: NEIGHBOURHOOD SERVICES COMMITTEE – 3 JUNE 2019**

**REPORT ON: MULTI STOREY DEVELOPMENTS - FIRE SAFETY**

**REPORT BY: EXECUTIVE DIRECTORS OF NEIGHBOURHOOD SERVICES AND CITY DEVELOPMENT**

**REPORT NO: 206-2019**

**1 PURPOSE OF REPORT**

1.1 To provide an update on fire safety within Multi Storey Developments (MSDs).

**2 RECOMMENDATION**

2.1 It is recommended that the Committee notes the report. Further reports will follow to update Committee following on from ongoing enquiries and any further relevant legislation or guidance.

**3 FINANCIAL IMPLICATIONS**

3.1 There are no direct financial implications.

**4 MAIN TEXT**

4.1 Multi Storey Development Construction

The independent Grenfell Tower Inquiry, chaired by Sir Martin Moore-Bick, formally opened on 14 September 2017 and has been remitted to examine the cause and means of the fire spread; the design, construction and modification of the building; the adequacy of building and fire legislation; industry practice relating to high rise buildings; whether these regulations were complied with and the fire prevention/safety measures in place at Grenfell Tower prior to the fire. The duration of the inquiry is unclear at this point but it is likely to conclude wide ranging recommendations once published.

In tandem with the Grenfell Tower Inquiry, Dame Judith Hackitt was remitted to undertake a review of Building Regulations and Fire Safety. This report was published in May 2018 and, whilst focusing on the regulations applicable in England, draws some relevance for Scotland. In essence this report set out a strategy for the implementation of a regulatory framework providing an improved focus on building safety during design, construction and refurbishment with a clearly defined Duty Holder role and more effective regulatory oversight.

Immediately following the fire, Scottish Government requested that all local authorities reviewed their own stock and provide assurances on the safety of their buildings, both domestic and education sectors, differentiating between low and high rise developments. A principal enquiry from Scottish Government was to determine if aluminium composite material (ACM) cladding systems, similar to those used in the refurbishment to Grenfell Tower were present within each authority's property asset.

Dundee City Council has 11 high rise properties. In tandem with the enquiries from Scottish Government, these were reviewed and examined to maintain confidence in the safety of the properties.

None of Dundee's high rise housing stock contain a cladding system similar to the ACM used at Grenfell Tower in London. Additionally, none of Dundee's high rise stock uses the same type of polyisocyanurate (PIR) rigid foam insulation as Grenfell Tower, instead utilising fully

certified, non-combustible insulation. It should also be noted that none of Dundee's high rise housing stock has a gas supply service within the block and the district heating plant rooms are in buildings separate to the properties. There is a heat detection system installed in the district heating plant rooms which would trigger a system shut down in the event of a fire as well as raising an alarm.

All of Dundee's high rise housing blocks have had façade treatment applied, the majority in the last five years. All bar one feature the external wall insulation (EWI) system. This comprises an insulation layer directly fixed to the building fabric overlain by a weatherproof render coating. As part of the review requested by Scottish Government, this EWI has been verified as a non-combustible system, designed and installed in compliance with the current Scottish Building Regulations for high rise properties. These installations included assessment and testing of the existing building fabric's capabilities to support the EWI.

Dudhope Court has a rainscreen cladding system which was applied in 1990 in accordance with Building Standards legislation at that time. This comprises an outer cladding of Class O fire retardant timber-based laminate with a non-combustible mineral wool insulation. Although Class O material does not conform to current day standards, appropriate fire stopping and non-combustible insulation have been adopted throughout the cladding system at Dudhope Court which provides an inherent barrier to fire propagation. For assurance, a section of the cladding was removed in June 2017 and it was confirmed that the construction of the cladding system was appropriately installed using the products and details described on the historic installation drawings.

The concrete structures of the blocks are constructed in such a way that each flat is compartmentalised so that in the event of a fire, fire is contained and does not spread.

#### 4.2 Tenant Fire Safety

The safety of our tenants is of paramount importance to the Council.

Dundee City Council has worked closely with the Scottish Fire and Rescue Service with a MSD Fire Safety Working Group established.

Scottish Fire and Rescue have been very supportive throughout the process and provided the following statement in an earlier report submitted to the Policy & Resources Committee (Minute of Meeting of 19 November 2018, Article V refers):

'In the immediate aftermath of the catastrophic fire at Grenfell Tower in London in June 2017, we established a strategy with three main objectives to provide overt and robust public reassurance; a consistent and timely response to the high volume of information requests received from stakeholders, media and other parties; and to provide detailed information and guidance to our staff to deliver a consistent message.

The following activities were undertaken:

- Conducted 1900 Home Fire Safety Visits in high rise domestic premises
- Carried out in excess of 1500 Operational Reassurance Visits (ORV's)
- Produced and distributed 40,000 leaflets and posters

One of the key priorities identified by the Ministerial Working Group (MWG) was to undertake a fire safety campaign for high-rise domestic properties. This campaign, led by SFRS, was an extension to our reassurance programme but had additional focus on involving key partners and the public to share messaging and tackle misinformation.'

The Scottish Fire and Rescue Service completes safety checks to high rise properties on an ongoing basis to ensure the fire safety of the blocks. Immediately following the incident at

Grenfell Tower, a series of inspections was undertaken by Dundee City Council Technical Officers and the Scottish Fire and Rescue Service. Any areas for improvement identified at that time relating to, for example, door closers, adjustments to fire doors and signage were acted upon.

A regular ongoing programme of Scottish Fire and Rescue Service inspections is in place. This along with the daily caretaker patrols of the blocks ensures the safety of tenants.

The Council works in partnership with the Scottish Fire and Rescue Service to ensure that the fire safety of tenants is assured. Information letters and leaflets were issued and information sessions held for all tenants in MSDs in the aftermath of the Grenfell tragedy. Free fire safety visits continue to be made available for tenants.

For further assurance, Buro Happold Fire Specialists were appointed to provide advice on fire safety in the multi storeys. They have also been commissioned to advise on the feasibility of retro-fitting fire detection alarm and sprinkler systems. There are a variety of possible sprinkler solutions, all presenting significant technical challenges for implementation. Similarly the viability and efficiency of any system will require to be considered in conjunction with any legislative direction and other guidance from Scottish Government.

#### 4.3 Fire Suppression Systems

A sprinkler system is intended to respond automatically to a fire before it has time to spread.

A sprinkler system is a network of pipes running through a building, holding water under pressure and supplying fire sprinklers that discharge water when a fire has been detected. An element within each sprinkler is designed to fail when exposed to particular temperatures, releasing a plug in the pipework and allowing water to flow in a parabolic pattern. Only the sprinklers closest to the fire operate, containing the spread of the fire whilst limiting the extent of water damage. The sprinkler system is connected to a water tank and/or pump which maintains a supply of water when a sprinkler is in operation.

The Council has been proactive in installing fire suppression systems in all of its council new build housing since the development of the Alexander Street new build development so that all new build homes are future proofed. Currently there is no requirement for fire suppression systems to be retrospectively fitted to the MSD buildings.

The retrospective addition of an active fire protection system would have considerable implications on the existing buildings' structure and services. Determining routes for pipework in existing congested service voids and risers will be challenging therefore extensive intrusive surveys would be required or alternative routes formed. Appropriate locations for plant would have to be located and the fire equipment integrated into the existing water and power networks as required with disruption to tenants during these works. Siting of water storage tanks and providing appropriate water pressure are significant obstacles to the delivery of an effective fire suppression system. Ongoing inspection and maintenance requirements would have to be implemented requiring regular access to each flat.

#### 4.4 Scottish Government

The Scottish Government has set up the Building and Fire Safety Ministerial Working Group. The role of this group is to oversee a review of building and fire safety regulatory frameworks, and any other relevant matters, to help ensure that people are safe in Scotland's buildings and make any recommendations for improvement as required.

The principal conclusions emanating from the Working Group announced at the end of 2018 include for **new** buildings:

- The current structure of mandatory functional standards supported with performance based or prescriptive guidance in the Building Standards Technical Handbooks works and should be retained.
- A better mechanism is required for the verification of fire safety engineering solutions for complex buildings and this might be in the form of a national "hub" to verify such applications.
- Changes are needed to the simple guidance on external cladding, cavities and fire spread on external walls. In particular, the restrictions on the use of certain materials should be applied to all buildings with a storey at a height of over 11m, rather than 18m as at present.
- Changes are needed to the simple guidance on escape. In particular, in domestic buildings over 18m there should be two stairways and fire service activated evacuation sounders in each flat.
- The requirement for automatic fire suppression systems should be extended to some additional building groups. In particular, Houses in Multiple Occupation (HMOs) used for "care" 24/7 and HMOs with 10 or more residents.
- The Scottish Government will be taking forward these recommendations to introduce the necessary legislation and guidance for implementation.

So far as it is understood at this time there will be no requirement for the retrospective installations of fire suppression systems in existing multi storey developments.

The most recent consultation launched by the Scottish Government in April 2019 is on Strengthening Fire Safety for High Rise Domestic Buildings. The main areas within the consultation relate to Fire Safety Information for People who live in High Rise Domestic Buildings, Fire safety Campaigns regarding common areas and Fire Safety in Existing High Rise Domestic Buildings. This consultation closes in July 2019.

#### 4.5 Smoke and Fire Detection

Following a Scottish Government consultation on fire and smoke alarms, the existing tolerable standard of housing will be amended and will apply to all homes across Scotland. The Scottish Government has now made Scottish Statutory Instrument 2019 No 8 - The Housing (Scotland) Act 1987 (Tolerable Standard) (Extension of Criteria) Order 2019. This Order was made on 16th January 2019 and comes into force on the 1st February 2021.

This includes the requirement for at least one smoke alarm installed in the room most frequently used for general daytime living purposes, at least one smoke alarm in spaces such as hallways and landings and at least one heat alarm in every kitchen. These alarms require to be interlinked.

The Council has approved a contract for the installation of the necessary smoke and fire detection systems in a programme over a 23 month period to ensure that the Council is compliant with the legislation by 1<sup>st</sup> February 2021 and tenant safety is assured.

#### 4.6 Conclusion

Fire suppression systems are only one part of the fire safety of a building that is made up of the fabric, layout, management and operation of the building. Such systems cannot be considered as a stand-alone solution to make a building safe, this would be a function of how

such systems would work in conjunction with other active and passive measures as part of an overall fire strategy.

The retrospective addition of an active fire protection system would have considerable implications on the existing buildings' structure and services.

The Council has undertaken surveys of all MSDs. The insulation and cladding systems have found to be compliant with the required standards.

The Council in conjunction with the Scottish Fire and Rescue Service has in place ongoing inspections and measures to ensure effective housekeeping and tenant safety within the MSDs. Reactive and cyclical maintenance systems are in place to ensure that the required repairs are undertaken timeously.

The Council has a programme to install the required upgrades to smoke and fire detection in all Council houses, including the MSDs, by 2021.

The Council will continue to review and consider all possible enhancements to improve fire safety in Multi Storey Developments including detection, management and fire suppression as further guidance and legislation emerges alongside continuing to implement ongoing and cyclical maintenance.

From the developments to date it does not appear that the review of Building Standards in Scotland will make retrofitting of fire suppression systems a requirement. The Council will continue to monitor new guidance and legislation as this emerges.

Tenant safety remains of paramount importance to the Council, and we will continue to ensure that we implement the combination of measures outlined within this report to ensure tenant safety within our Multi Storey dwellings.

## **5 POLICY IMPLICATIONS**

- 5.1 This Report has been screened for any policy implications in respect of Sustainability, Strategic Environmental Assessment, Anti-Poverty, Equality Impact Assessment and Risk Management.

There are no major issues.

## **6 CONSULTATIONS**

- 6.1 The Councils Management Team were consulted in the preparation of this report.

## **7 BACKGROUND PAPERS**

- 7.1 None.

Elaine Zwirlein  
Executive Director of Neighbourhood Services

Robin Presswood  
Executive Director of City Development

GB/EH

27 May 2019

