



NFCC
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The professional voice of the
UK Fire & Rescue Service

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**Housing, Communities and Local
Government Committee
House of Commons
Westminster SW1A 0AA**

25 July 2019

Fire Drills in Purpose-Built Blocks of Flats

Dear Committee Members,

I write regarding Housing, Communities and Local Government Committee oral evidence hearing, the Independent review of building regulations: HC 555, on Monday 8 July 2019 to provide clarification and further information to Committee members about an issue raised during the second panel of the hearing. It was recommended that the professional advice of the Fire and Rescue Service should be sought.

A transcript of the exchange is included below for context:

Q579 Mr Prisk: I accept that, but is it not peculiar that the fire standards for people working in an office, particularly around the way in which regular fire tests are undertaken, are very different, and indeed higher, than when one lives in the property? **Why is it that councils, as part of their housing management policies, are not required to conduct regular fire tests and regular drills?** One test or one fire drill will immediately show whether residents would be able to exit that building. Immediately the policy would be put into focus.

Lord Porter: The vast majority of people who live in unsafe high-rise buildings live in private accommodation; they do not live in council homes. Councils own the fewest high-rise buildings that have not met the standards. Just testing council tenants—"Can you get out of this building?"—would miss the vast majority of people who are at risk at this moment.

Q580 Mr Prisk: If it was extended across tenures, the principle that we should be regularly running fire drills is surely as important as what the standards are for the physical building itself.

Lord Porter: I am not sure you would get people who were living in their own homes to jump out of a building at a time you told them to because you wanted to run a test. We are straying into much more difficult territory than the things we can be dealing with in the immediate future.

Q581 Mr Prisk: I know you are not happy with it, but it seems peculiar still that we do not even attempt to have regular fire drills in people's homes where we know and we have seen that there have been fires before.

Lord Porter: We run a policy in this country that, if you have a fire in a high-rise building, you stay put. You do not evacuate the building. That is the whole point of where we have got to. We have a policy that we thought was the right policy to adopt, but it has now been proven not to be the right policy.

Q582 **Mr Prisk:** You are saying that staying put is not the right policy.

Lord Porter: If compartmentalisation of a building has been compromised, staying put is not the right thing to do. In the chaos of evacuating a 22-storey building with only one access in the pitch darkness of night, with the panic of a fire and the toxicity of the smoke going into that building, I am not qualified to say whether it would have been better or worse for people to stay where they were. I have no idea how you would quantify the number of casualties you would have had if you had evacuated that building as soon as the fire was seen.

Q583 **Mr Prisk:** You would change the current scope.

Lord Porter: I am not qualified to decide that. It is for somebody way above my pay grade, who can work out the logistics of evacuating a building in those circumstances. All I can say is that I am glad I was not there and my family were not there that night

Mr Prisk: It was the drill rather than event itself, but thank you.

The National Fire Chiefs Council would like to furnish the Committee with additional information and clarify that it would not be appropriate for residents in high rise purpose-built blocks of flats to practice fire drills and evacuations because building design principles, specifically, compartmentation mean that it is, usually safer, when buildings have been built and maintained correctly, to “stay put” in the event of a fire, rather than simultaneously evacuate.

Why are fire drills not regularly carried out in high rise residential buildings?

The evacuation strategy of a building is determined by the Responsible Person’s fire risk assessment. This assessment will determine if the usual evacuation strategy for the premises (e.g. Progressive Horizontal Evacuation for a hospital or Stay Put for a purpose built block of flats) is suitable based on a number of factors such as compartmentation, fire alarms, or ventilation.

The "stay put policy" is not a creation of fire services in the UK, but rather a principle of building design which fire services are expected to apply and which underpins the development of fire safety and operational policy for buildings of this kind.

The [Fire safety in purpose-built blocks of flats guidance](#), hosted on the LGA’s website, records that in 1962 the BSI published a new code of practice, ‘CP3 chapter IV part 1’. This code was significant as it was the first national code to advocate, and incorporate, fire safety measures based on, what is now known as a ‘stay put’ policy.

In 1962 this was expressed as a principle whereby those in flats on floors above that in which a fire occurred would be safe to remain within their own flats. (It was acknowledged that flats on the same floor as the fire, or even in the immediate vicinity of the fire, might need to be evacuated.

It is unusual for fires in individual flats to spread beyond the room of room origin. Only 8% (56) of the 714 fires in purpose built blocks of high-rise flats (ie 10 storeys or more) in 2016/17 had spread beyond the room of origin [based on the Home Office's ad-hoc publication on Fires in purpose-built flats, England, April 2009 to March 2017].

It is even more unusual for fires in flats to spread to the other flats. Analysis of Home Office data showed that of the 714 fires in purpose-built high-rise flat in 2016/17 fewer than 2% (13 fires) spread to two or more floors. It is not recorded whether the fire spread was caused by inadequacies in the compartmentation between flats (i.e. walls and ceilings) or through the front door and common corridors.

The regulations which underpin this principle, and govern the design, construction and maintenance of such buildings, often dictate how fire services are expected to carry out fire and rescue operations.

As part of this principle, it can usually be the case that simultaneous evacuation of the building is not factored into its design.

The core of these building design principles is known as "compartmentation" which is intended to inhibit rapid fire spread within the building from one area to another.

Compartmentation is achieved through a variety of passive and active measures such as fire stopping, fire resistant doors, and the use of fire resistant materials in the construction and maintenance of the building.

Similar principles apply to the external envelope of the building which is expected to be designed and constructed in such a way as to resist the spread of flame over its surface.

The express intention of the regulatory regime is that, in the event of fire, the occupants of flats within the building are safe to remain in place (to "stay put") unless there is a fire in their dwelling when they should leave the dwelling or they are directly affected by fire or smoke.

The regulatory provisions concerning the design and construction of such buildings, have been generally successful from a fire safety perspective in the vast majority of cases, and have been shown to be largely effective for decades following the introduction of buildings of this kind from the late 1950s onwards.

Put simply, if these buildings are built and maintained correctly, they are not designed for simultaneous evacuation and therefore fire drills are not required to take place on a regular basis. The single staircase is usually not very wide, 1100mm in the case of Grenfell Tower and will be the route firefighters use to fight any fire. This means firefighters in breathing apparatus and large hoses full of water blocking the staircase which may also be affected by smoke and heat.

It should also be considered that there is no alarm in buildings designed and maintained for a "stay put" strategy to alert all occupants at the same time. There would also be no way for the Responsible Person of the building to ensure that occupants had evacuated, including those with mobility and disability problems or incapacity through any means.

In an office block the employer has a register of who is in the building and there are fire wardens who sweep the floors to ensure they are empty and report to the co-ordinator that everyone is accounted for. This would be impracticable in a large tower block.

I trust that this information has been of use. If the Committee would like further information about fire safety or building design principles, the National Fire Chiefs Council would be happy to meet to clarify or further interrogate any issues you may wish to raise.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'RW', written in a cursive style.

Roy Wilsher
Chair
National Fire Chiefs Council