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Date

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HEALTH, SAFETY & LICENSING
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BY: TO: COMPLETION

Dear Mr. Rich

#### FIRE SAFETY IN SOCIAL HOUSING

In the light of a number of recent fires in social housing blocks I am seeking your help in bringing fire safety issues to the attention of your tenants and staff and as an enforcing authority we thought it would be helpful to draw your attention, as a social housing provider, to a number of significant issues relating to your responsibilities under the Regulatory Reform (Fire Safety) Order 2005.

#### Storage and security

Recent fires have involved combustible materials left in common parts (e.g. stainwells and corridors) of blocks of flats and houses converted to flats. These materials can be prone to deliberate fire setting and as they occur in the means of escape can quickly block the means of escape. In addition they can provide sufficient heat to ignite multi-layer paint systems.

We have also encountered electrical and gas riser cupboards (and others) that are not secured. These have become used as storage and/or a place to dump rubbish which can be ignited deliberately or accidentally and again prevent the means of escape from being used.

# Fire doors being wedged open resulting in both smoke spread and damage to self closing devices

Poor adjustment of self closing devices (or inappropriate choice of closer type) has been found to have caused fire doors to close very quickly and so loudly 'bang' into their frame disturbing nearby residents. Because of this, residents wedged the fire doors or placed materials at the foot of the frame to stop the door fully closing (and so avoiding the loud 'bang'). Repeated wedging of doors in this way was found to have weakened some types of door closers (mainly those contained within the door structure) to the extent that they failed to fully close even when not wedged. These circumstances have allowed smoke to easily spread through blocks of flats and ultimately to enter flats which would otherwise have been reasonably protected from the effects of fire and smoke.

# Empty properties (including those undergoing refurbishment)

Empty or vacant properties can be readily targeted by vandals and others who may deliberately or accidentally cause a fire. Often the properties contain a significant fire loading from possessions of a former tenant or from materials that are being used or stored in the premises for refurbishment purposes. Fires in such properties can grow undetected for some time and may even overcome inbuilt fire precautions such as fire resisting doors (especially if fire resisting doors have been replaced with doors of a lesser standard by tenants).

In addition to the issues mentioned above each of the following issues have resulted in significant levels of risk to occupiers and also contributed to levels of fire damage.

## Multi-layer paint

Some years ago, it was recognised that where decorative paint in common areas is allowed to build up into multiple layers, this can allow very rapid fire spread as the paint delaminates and burns. The risk predominantly arises where there is poor paint adhesion / flaking paint. Recent fires and audits of premises have shown that this problem still exists in some blocks of flats.

### Replacement windows

We have noted cases where replacement windows, particularly uPVC window units, are of a shorter depth to the original units/window sets. This has resulted in the gaps being covered with non-fire resisting materials which, in the event of fire, distort and allow fire into the wall cavity. Although the latest amendments to the Building Regulations require fire stopping around the window, the problem may exist in many properties with windows that were replaced before April 2007.

We have also noted that panels on the exterior of flats have been replaced with non-fire resisting uPVC panels as part of replacement of window units. This may have contributed to total failure of the windows during a fire and consequently contributed to fire being able to pass upwards across the exterior wall to the windows of flats above, causing them to fail and fire to spread to those flats.

## Lack of fire stopping barriers in wall cavities

Lack of fire stopping in wall cavities has been noted in a number of fires, particular those involving older timber frame construction. Although such structures are safe if correctly constructed, the lack of fire stopping in some 1960s and 1970s structures is a cause for concern as it has allowed unrestricted rapid fire spread through the building. In more than one case this has resulted in total loss of the building. Although required by Building Regulations the same problem has been found in some more modern properties.

#### Lack of fire stopping in service risers

Lack of fire protection to service riser ducts and fire stopping from these ducts into corridors (and sometimes from the corridors to the residential flats) has been found on a number of occasions, notably in comparatively new build properties. This lack of fire stopping has resulted in rapid fire spread through blocks of flats, trapping some residents who were unable to evacuate due to smoke logging and high temperatures in the means of escape. Lack of fire stopping between the means of escape and individual flats has also meant residents have been trapped in flats where they should be safe but which in fact filled with smoke and residents had to be rescued by the brigade using ladders and hydraulic platforms.

## Frost protection and thermal insulation in roof voids

Cases have come to light where electrical heaters have been installed in roof voids as a frost protection measure and, with an ever increasing emphasis on reducing heat emissions, these voids have also been insulated. Problems have arisen where the insulation has been placed over the heater. This has caused the heat to be contained and reflected into roofing timbers to which the heaters are fixed. Over time the beams have charred, significantly weakening them and ultimately resulting in the beams igniting, causing significant damage and risk to persons in the flats.

#### Conclusion

The issues identified above are all of direct relevance to emergency arrangements and general fire precautions for blocks of flats and houses converted to flats.

As enforcing authority for the Regulatory Reform (Fire Safety) Order 2005 we consider that:-

- the structure of the building and changes that have been made to it;
- levels of fire resistance (e.g. fire stopping and working fire doors);
- · the availability of locations and sources of fuel for deliberate fire setting; and
- · ignition sources that are introduced to the premises

are matters that should be considered as part of a suitable and sufficient fire risk assessment. I am sure that you, as a responsible provider of social housing would agree and I would urge you to ensure that these matters are considered as part of your ongoing programme of fire risk assessment and reviews of those assessments.

Yours sincerely

**Steve Turek** 

Assistant Commissioner Fire Safety Regulation

Reply to Steve Turek

Assistant Commissioner (Fire Safety Regulation)

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