
# Housing Health and Safety Rating System Operating Guidance

## Addendum for the profile for the hazard of fire and in relation to cladding systems on high rise residential buildings

**Housing Act 2004**
Guidance about inspections and assessment of hazards given under Section 9

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# 1.0 Introduction

1.01 The Housing Health and Safety Rating System (HHSRS) is a risk-based assessment evaluation tool to help local authorities identify and protect against potential risks and hazards to health and safety from any deficiencies identified in residential premises. The HHSRS assesses 29 categories of housing hazard– including fire - as specified in the HHSRS Regulations[1] on the potential for harm that may result from exposure to the hazard. Guidance on the assessment process can be found in the HHSRS Operating Guidance[2]. Each hazard has a weighting which will help determine whether the property is rated as having risks which are either category 1 or category 2. Where a risk is deemed to be category 1, a local authority has a duty to take enforcement action; where a risk is deemed to be category 2, an authority has the power to take action. The options for enforcement following an HHSRS assessment are detailed in the Enforcement Guidance.[3]

1.02 Following the Grenfell Tower tragedy, independent advice has been provided to the government[4] that high-rise buildings which are over 18 metres tall,[5] with Aluminium Composite Materials (ACM) cladding systems represent a fire hazard. The HHSRS Operating Guidance does not specifically cover assessment of cladding and predominantly focuses on assessing the risk of hazards within individual dwellings, rather than assessing the common parts of the building, including the exterior of building.

1.03 This addendum has been produced to provide guidance on the assessment of high-rise residential buildings with unsafe cladding. It supplements the Hazard Profile for Fire as given in the HHSRS Operating Guidance (see Profile 24, pages 150 to 155) and should be read and used in conjunction with that Operating Guidance. While the addendum deals specifically with high-rise residential buildings (those 18 metres high and over) with such cladding, some aspects will be relevant for other issues relating to the exterior of a building, or to other residential buildings containing flats or apartments.

1.04 The presence of ACM (Category 2 or 3) cladding, or any other cladding and filler or core that is combustible, would be a deficiency that contributes to the Hazard (see sections 2 and 11 below). However, any judgment as to the increased Likelihood and the Spread of Harms (i.e. the severity of risk) will also need to take into account other deficiencies that are identified and that contribute to the Hazard.

1.05 The HHSRS is concerned with assessing the risks arising from hazards attributable to deficiencies or defects in residential premises. The assessment focuses on the probability of an occurrence that could cause harm warranting medical attention in the next 12 months. The presence of unsafe cladding systems will influence the assessment of whether a fire causes harm. The main terms are defined in the HHSRS Operating Guidance, but, for clarity, **occurrence** is defined as “an event or period of time exposing an individual to a hazard”; and **hazard** is “any risk of harm to the health or safety of an actual or potential occupier that arises from a deficiency”.

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1 http://www.legislation.gov.uk/uksi/2005/3208/contents/made
2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/15810/142631.pdf
3 https://www.gov.uk/government/publications/housing-health-and-safety-rating-system-enforcement-guidance-housing-conditions
4 The government appointed an independent expert panel to provide advice to the Secretary of State for Communities and Local Government, on immediate building safety measures following the Grenfell Tower fire. The expert panel’s advice can be found at: https://www.gov.uk/government/collections/building-safety-independent-expert-advisory-panel
5 The height at which relevant and additional fire safety requirements are triggered in paragraph 12.7 of Building Regulations Fire Safety Approved Document B guidance and equates to six storeys.

1.06 This addendum provides guidance on the following areas, which should be considered as part of an assessment:

- Current advice on ACM cladding
- Inspection of common parts
- Working with the local fire and rescue authority
- Inspections and testing of cladding
- Interim measures

1.07 It also provides additional information to the HHSRS Hazard profile for fire, and the following sections should be used in conjunction with that part of the HHSRS Operating Guidance:

- Health effects
- Causes of fire
- Preventative measures and the ideal
- Relevant Matters and Assessment

1.08 Lastly, the addendum includes:

- Next steps
- Further reading
- An annex with statistics on risk of fire

# 2.0 Current advice on ACM cladding

2.01 The advice on fire safety is from the Ministry for Housing, Communities, and Local Government (MHCLG) independent expert advisory panel[6]. The expert panel does not believe that any wall system containing an ACM category 3 cladding panel, even when combined with limited combustibility insulation material, would meet current Building Regulations guidance, and it is not aware of any tests of such combinations meeting the standard set by BR135[7]. Wall systems with these materials therefore present a significant fire hazard on buildings over 18m. It is possible that ACM with a fire-retardant filler (category 2) could be used safely with non-combustible insulation (e.g. stone wool), but this is highly dependent on the insulation used, and how it is fitted. Current advice states that ACM with a limited combustibility filler (category 1) can be used safely, but this is also dependent on how it is fitted. The Expert Panel has said wall systems that have met BS8414-1 & 2 2015 (+A1:2017) can be considered safe if they have been correctly installed and maintained (see 10.02 -10.04 below for further details). A local housing authority undertaking an inspection of a high-rise building will need to ascertain that this is the case.

2.02 Any future advice notes, which should be considered, on this or other relevant areas will be added to the Building Safety Programme site[8].

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6 https://www.gov.uk/government/collections/building-safety-independent-expert-advisory-panel
7 Colwell S and Baker T (2013) Fire performance of external thermal insulation for walls of multi-storey buildings: Third edition.
8 https://www.gov.uk/guidance/the-building-safety-programme

# 3.0 Inspection of common parts

3.01 To assess the risk of cladding, common parts of the building will need to be inspected. The usual practice is for individual dwellings (flats) to be inspected and relevant deficiencies in common parts to be considered as part of that dwelling assessment. However, the provisions of the Act permit the inspection and rating of the common parts as separate residential premises (see below). This addendum is intended to complement the guidance given in Profile 24 of the Operating Guidance but applies primarily to the common parts in the building rather than individual dwellings.

3.02 The definition of "residential premises" given in section 1(4) of the Housing Act 2004 includes –

*"(d) any common parts of a building containing one or more flats."*

*Subsection (5) gives details, stating that –*

*'"common parts", in relation to a building containing one or more flats, includes (a) the structure and exterior of the building, and (b) common facilities provided (whether or not in the building) for persons who include the occupiers of one or more of the flats; … [and] "external common parts", in relation to a building containing one or more flats, means common parts of the building which are outside it.'*

3.03 The common parts of a high-rise residential building will include the exterior of the building (as well as any cladding), and the internal common parts of each floor including any corridors, hallways, stairways, facilities and amenities (such as refuse disposal and collection points). Given their role in some reported fires, consideration should also be given to private balcony areas and terraces, service risers and ducting, and also evidence (such as survey reports) that confirm fire stopping is in place. While these may be part of the individual dwelling on leasehold properties, they also form part of the exterior common parts and could be the source of a fire that spreads to the cladding.

3.04 When assessing the common parts, it is not necessary to inspect all dwellings as the Act provides that the common parts of the building can be assessed as separate. However, where an inspection of the common parts also shows evidence of possible deficiencies within individual dwellings that increase the risk of fire, the local housing authority should consider carrying out inspections of some or all individual dwellings within the building.

# 4.0 Working with the local fire and rescue authority

4.01 Identification of matters that can contribute to the hazard of fire under HHSRS in the common parts will, in some cases, also be the responsibility of the local fire and rescue authority under the Fire Safety Order. There should be a local protocol on the liaison between the local housing authority and the fire and rescue authority reflecting the national

protocol issued in 2008[9]. Such a protocol should take account of section 10 of the 2004 Act, which requires that –

*'where a local housing authority –*

*a. are satisfied that a prescribed fire hazard exists […] in any common parts of a building containing one or more flats, and*

*b. intend to take in relation to the hazard one of the kinds of enforcement action mention is section 5(2) or section 7(2)'*

then before taking the enforcement action in question the local housing authority must consult with the relevant fire and rescue authority for the area where the building is situated.

4.02 Where the local housing authority intends to take emergency measures, the duty to consult applies only so far as it is practicable to do so before taking the action. The local protocol between the local housing authority and the fire and rescue authority for the area in which the building is situated should include any agreed procedures in such cases.

4.03 It should be noted that there is a difference between "common parts" in the Housing Act 2004 (see paragraph 4.01) and definitions used in the Regulatory Reform (Fire Safety) Order 2005 (which instead describes areas "used in common by the occupants of more than one such dwelling). In order to comply with the duties imposed by the Fire Safety Order, the responsible person must carry out a fire risk assessment to identify what fire hazards exist at the premises and what measures have been taken (or will be taken) to minimise the risk in the parts of buildings containing flats and maisonettes that are used in common. There is a need for consistent and coherent joint working arrangements between the local housing authority and the fire and rescue authority when applying the two sets of legislation, and as set out above there should be a local protocol in place on liaison between the two authorities.

# 5.0 Inspections and testing of cladding

5 .01 This section outlines how the presence of unsafe ACM should be confirmed. ACM consists of two thin aluminium sheets bonded to a non-aluminium core, typically between 3 and 7mm thick. The panels may have a painted or metallic finish (e.g. copper or zinc effects). It can be differentiated from a solid aluminium sheet by looking at a cut edge which will make the lamination visible. This means that for identification purposes it may be necessary to cut a hole in a panel if a cut edge is not readily accessible. An HHSRS inspection in relation to fire will be non-intrusive, and so it will not be possible to confirm whether some deficiencies exist (for example the form, structure and fixing of cladding and fire cavity barriers), and a rating is likely to be provisional pending either detailed testing or a copy of relevant information, such as an up-to-date testing report. This approach is similar to that which might be the case for Radiation and Electrical hazards – see paragraphs 4.15, 8.29, and 23.19 of the Operating Guidance. In usual circumstances the freeholder or person having control of the common parts would be responsible for undertaking such tests, but establishing precise responsibilities may require sight of leases. As part of the inspection, surveyors should ask to see relevant information such as up-to-date reports or certificates of any testing as the cladding should only be considered not to be a deficiency where there is sufficient supporting evidence. Where there has been testing of the cladding local authorities can require such information to be provided under section 235 of the Housing Act 2004. Similarly, other reports can be required such as fire risk assessments[10], as can

9 Included as Appendix 2 to LACORS – Housing – Fire Safety Guidance on fires safety provisions for certain types of existing housing available at http://www.cfoa.org.uk/11934

10 There are four types of Fire Risk Assessment for purpose-built blocks of flats

records of the testing of dry or wet risers and of detection and alarm systems.

# 6.0 Interim measures

6.01 Where the building management have implemented interim fire safety measures such as waking watches to temporarily mitigate risks, these should not be considered in the hazard assessment under the HHSRS which focuses on the physical structure of the building. The presence of such interim measures could influence action taken under Part 1 of the 2004 Act, for instance the time or times given to carry out repairs or replace cladding, but not the hazard rating.

# 7.0 Hazard Profile

7.01 The HHSRS Hazard profile for fire covers threats from exposure to uncontrolled fire and associated smoke and gas, noting that smoke and gases can pass through a building where there is a lack of effective damping in ventilation systems or where compartmentation is compromised. It also covers flaming droplets and delamination of cladding from the structure that may occur as a result of a fire.

7.02 It does not include threats from clothing catching alight from a controlled fire or flame (on which see The Operating Guidance, Hazard 25 – Flames, Hot Surfaces etc).

# 8.0 Health Effects

8.01 Whilst the following health effects are not specific to high-rise buildings with cladding, they are relevant and provide more information than is in the Operating Guidance. Uncontrolled fire could have a number of health effects, both direct and indirect. Direct outcomes include burn injuries which, when severe, can be life-changing or life-threatening and the most extreme (Class 1 harms) include 80% burn injuries. As the Operating Guidance also states, the most common cause of death from a fire (around 38%) is being overcome by gas or smoke (see paragraph 24.07 of the Operating Guidance).

8.02 There are also mental and social outcomes from fire. There may also be the stress from the loss of, or injuries and/or trauma to, relatives or friends. Social outcomes include the disturbance caused by the dissociation from the local community and support networks.

8.03 There is strong evidence to suggest that surviving victims of fire disasters are at an

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Type 1: Common parts only (non-destructive)
Type 2: Common parts only (destructive)
Type 3: Common parts and flats (non-destructive)
Type 4: Common parts and flats (destructive)

See LGA, 2012, Fire Safety in purpose-built blocks of flats, pp 41-50 available at https://www.local.gov.uk/sites/default/files/documents/fire-safety-purpose-built-04b.pdf and https://fire-risk-assessment-network.com/blog/types-fire-risk-assessment-flats/ and http://www.cfoa.org.uk/19532 (which includes link to guidance on choosing a competent fire risk assessor).

increased risk of adverse psychological effects, including Post Traumatic Stress Disorder and depression. Also, for surviving victims of disasters that result in the total destruction of their home, there is the stress of where to live (whether temporarily or for a long period), and the need to try to re-create a home away from the original home; for all victims there is the pressure and distress of dealing with official organisations, and insurance agencies.[11]

8.04 It is not only victims that are affected. Close family of fire disaster victims are at an increased risk of deteriorating mental and physical health, including cardiovascular health, for several years after the event.

# 9.0 Causes of fire

9.01 There are three main factors involved in assessing the Hazard of Fire.

9.02 First, the ignition of a fire. A fire is most likely to start within a dwelling (see Annex: Statistics on risk of fire below), although it could start within common parts where rubbish has been allowed to accumulate or, in other forms of imposed fire loading, such as wood used to box-in services passing through common areas. However, this Addendum focuses on common parts (as defined in the Housing Act 2004, see paragraph 3.02) of high-rise residential buildings, and the Operating Guidance should be referred to for guidance on the assessment of individual dwellings for the Hazard of Fire.

9.03 Second, the design, materials, construction and maintenance of the building should limit the spread of fire, containing it within the residential premises (whether the common parts, or the individual flat). This function includes the design of the entrance door to the dwelling, which should limit the possibility of the fire spreading into common parts; this includes the whole door set which should fit properly to the adjoining compartment wall. It also includes windows (the frames and openable lights) and ventilation systems, which should reduce the possibility of a fire spreading outwards to ignite possible combustible materials in any cladding system. In addition, if fire takes hold in the cladding it could spread into other flats through a weak point. Should the cladding system catch fire there is also the risk of structural failure and burning materials becoming airborne.

9.04 Sprinkler systems installed in buildings are one measure that can also reduce the risk to life and significantly reduce the degree of damage caused by fire. Since 2007, Building Regulations guidance[12] has stated that all new high-rise residential buildings over 30 metres must have sprinklers.

9.05 Thirdly, there should be a means of escape and a fire safety plan with which occupiers are familiar. While escape within flats is based on similar principles to those for houses, reaching ultimate safety relies on using the common parts. Most blocks of flats are designed on the ‘stay put’ principle, although this relies on there being effective compartmentation (see paragraph 10.06 below). Should the procedure and plan require zonal or full evacuation, with or without instruction from the fire and rescue service, occupiers need to be able to get out as quickly as possible via a safe and protected route. It should be noted that once a fire is being tackled in a flat this will necessitate the entrance door being open, so smoke will enter the escape route.

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11 See, for example – Carroll B, Morbey H, Balogh R, and Araoz G (2008). Flooded homes, broken bonds, the meaning of home, psychological processes and their impact on psychological health in a disaster. Health & Place 15 (2008) 540-547; and Carroll B, Balogh R, Morbey H, and Araoz G (2010). Health and social impacts of a flood disaster. Disasters, Vol 34, No.4, 2010; 1045-1063.

12 Building Regulations Approved Document B: Volume 2 – Buildings other than dwelling houses, see paragraph 8.14, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/441669/BR_PDF_AD_B2_2013.pdf

9.06 The installation of smoke alarms, or automatic fire detection and alarm systems, can significantly increase the level of safety by automatically giving early warning of fire. There should be a working fire detection and fire alarm system (complying with BS 5839 -6) within individual flats / apartments[13] but not necessarily a communal alarm in the common parts of the building (i.e. an alarm that sounds throughout the whole building upon detection). Provided there is effective compartmentation and means of escape, blocks of flats will not normally require a communal fire alarm system.

9.07 A functioning smoke control system – whether naturally or mechanically ventilated – needs to be managed, maintained and in good repair. They are critical elements. Some smoke control systems rely on the provision of smoke detection in the common part of buildings but would not typically be provided with a sounder / alarm. The activation of the smoke detector would only result in the activation of the smoke control system.

# 10.0 Preventative measures and the ideal

10.01 This section is in addition to the preventative measures set out at paragraphs 24.22 to 24.30 of the Operating Guidance.

10.02 The MHCLG Expert Panel's advice following large scale testing is that ACM with an unmodified polyethylene filler or core (category 3 in screening tests) with any type of insulation presents a significant hazard on buildings over 18m[14]. The issue of partial cladding, such as decorative panels has also been addressed in MHCLG advice to building owners[15] which said that "the clearest way to ensure the safety of residents is to remove all ACM, including small or partial areas of ACM, and replace it with a safe material. This remains the most appropriate remediation solution".

10.03 ACM with a fire-retardant polyethylene filler or core (category 2 in screening tests) provides a hazard in buildings over 18m tall when used with polymeric foam. However, it can be safe on buildings over 18m if used with non-combustible insulation such as stone wool, but materials must have been fitted and maintained appropriately, and the building's construction must meet the other provisions of Building Regulations guidance, including provision for fire breaks and cavity barriers (which are of the utmost importance).

10.04 ACM cladding with A2 filler or core (category 1) can be safe on buildings over 18m with foam insulation or stone wool insulation, if materials have been fitted and maintained appropriately, and the building's construction meets the other provisions of Building Regulations guidance, including provision for fire breaks and cavity barriers. This is subject to the façade system having met the requirements of the BS8414-1 & 2 2015 (+A1:2017) test.

10.05 **The ideal situation would be that no element of the cladding is combustible and that compartmentation within the cladding matches the building compartmentation.**

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13 Building Regulations Schedule 1 Part B1 states that "the building shall be designed and constructed so that there are appropriate provisions for the early warning of fire" and the associated statutory guidance Approved Document B: Volume 2 (see previous reference) states that all new flats should be provided with a fire detection and fire alarm system. The Smoke and Carbon Monoxide Alarm (England) Regulations 2015 also requires private sector landlords to have at least one smoke alarm installed on every storey on which there is a room used wholly or partly as living accommodation of their properties.

14 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/684350/20180228_-_Update_and_consolidated_advice_for_building_owners_following_large-scale_testing.pdf.

15 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/743935/Advice_note_18.pdf.

**This should be complete and not compromised by disrepair or poor workmanship following any alterations or additions that may have been made to the building.** This would include alterations within flats where service risers that pass-through flats have been amended and adequate fire stopping has not been replaced.

10.06 There should be fire protection between each unit of accommodation and between the accommodation and the route of escape (common landing and stairway). That is, there should be adequate compartmentation (fire separation) and no obvious disrepair to walls or gaps around service entry points, pipework or ducting, this includes where services such as wet or dry risers, or other services pass through the floor. Nor should the compartmentation be compromised, for example around door frames, window frames, or around service entry points or ducting. This would also apply within individual dwellings, and ventilation "penetrations" such as extract fans should be considered insofar as this would permit fire to reach the cladding (common parts).

10.07 There should be clear instructions of what (and what not) to do in the case of fire. Such instructions should be appropriate for the residents of the particular building and will depend on the building fire strategy, such as full simultaneous evacuation or a defend in place policy with phased or zonal evacuation. It may be that on any inspection the surveyor should speak with residents to assess the awareness of actions to take in case of fire. The views of residents should be considered when determining the appropriate course of action under Part 1 after the hazard assessment has been completed.

# 11.0 Relevant Matters and Assessment

11.01 In assessing the hazard of Fire in the common parts, the following matters should be considered –

*Matters contributing to the Likelihood of an occurrence that could cause harm*

- Presence of an external cladding system and extent to which the building is covered, and absence of any evidence that this is non-combustible
- Lack of a current suitable and sufficient Fire Risk Assessment
- Outstanding action points from Fire Risk Assessment
- Lack of or non-functioning automatic fire detection and alarm system in individual dwellings (in cases where individual dwellings are being inspected)
- Non-functioning or poorly managed and maintained smoke control system in the common parts (including any associated smoke detection system where relevant)
- Disrepair to the outer surfaces of the building
- Disrepair to the fabric and compromising of compartmentation
- Absence or inadequate record of dry riser (or wet riser if building over 50m) checking (six-monthly)
- Presence of services and service ducts compromising compartmentation
- Services not in fire resistant enclosures

- Non-functioning smoke vents/control systems or no record of weekly testing in accordance with BS 9999:2017)
- Non-fire-resistant doors, or badly maintained doors opening on to common parts
- Disrepair to refuse chute hopper
- Sources of fuel, rubbish or other flammable material whether external or internal
- Inadequate waste storage
- Opportunity for external intentional fire starting
- External unintentional fire starting, e.g. car fire, skip fires, barbecues on balconies
- Lack of controlled access or other security measures to the building allowing unauthorised access or risk of arson

*Matters affecting the harm outcomes*

- Presence of external cladding system and whether this extends to the whole of the exterior or is a partial decorative finish. Absence of any testing or evidence that this is non-combustible. Surveyors will need to see evidence.
- Non-fire-resistant doors and door sets to one or more flats including lack of door closer or poorly fitting doors
- Absence of or non-functioning fire detection and alarm system in individual dwellings (in cases where individual dwellings are being inspected)
- Non-functioning or poorly managed and maintained smoke control system in the common parts, including any associated smoke detection system where relevant (periodic testing schedule)
- Non-fire-resistant fabric/enclosure of services
- Disrepair to doors forming route of escape to a place of safety including sanctuary for disabled persons
- Single route of escape to a place of safety
- Narrow route of escape to place of safety
- Absence of test certificate for fire lift (if present)
- Obstructions to the route of escape, such as mobility scooters, prams/pushchairs (the presence of much may indicate lack of storage within flats)
- Absence of, or disrepair to emergency lighting (monthly testing)
- Absence of or inadequate record for dry riser (or wet riser if building over 50m) (as in BS 9990:2015) (“fire mains” required in all buildings that are more than 18 m in height)
- Lack of suitable access to building for firefighters
- Absence of fire suppressant or sprinkler system
- Non-functioning smoke vents

- Refuse chute hopper within protected stairways or protected lobbies
- Disrepair or non-fire-resistant doors to refuse chute hopper
- Inadequate external lighting
- Inadequate signage on what to do (or not to do) in case of fire and routes of escape
- Inadequate distance between the building and external place of safety

*Hazard Assessment*

11.02 The HHSRS assessments needs to consider the potential effect of any hazards on a member of the relevant vulnerable age group. In the absence of other data, persons aged 60 or over can be used as the vulnerable group, in line with the fire risk profile in the HHSRS Operating Guidance.

The following matters should be considered when determining a hazard rating:

1) Likelihood

Section 8 of this Addendum considers the factors that influence the Likelihood of a fire that could cause harm. In the buildings of primary concern for this Addendum inspectors should be aware that:

a. The presence of combustible cladding systems will not affect the likelihood of a fire starting. That remains the same as for any other multi-storey block and there is no evidence that the chance of a fire starting in a flat or apartment in a high-rise block is different from a flat in any other block of flats

b. The presence of combustible cladding system (or improperly fitted cladding for example with no cavity barriers mirroring the compartmentation that in the building) however will increase the likelihood of the spread of fire once it has started and increase the potential for harm. Any increase in the Likelihood will depend on other factors such as those listed above such as warning and escape/protection (see paragraphs 9.05 and 9.06 above).

c. For individual flats in multi-storey blocks, there should be means of sensing fire/smoke and this will not change because of the presence or absence of combustible cladding.

d. The means of escape, or the protection plan does not change because of the presence of combustible cladding but will be influenced by the design of the building including the extent of the cladding system, which may be limited to a relatively small area. Also, of relevance, is whether the passive measures have remained adequate and compliant, in accordance with the original design strategy. It should be noted that there could be major fires in blocks of flats without ACM as a result of some other ignition source.

2) Spread of Harms

The existing Spread of Harms was based on pre-2000 evidence (as in the original Statistical Evidence to support the HHSRS reports[16]). There is no further statistical evidence available at this time, but some reported research will influence the Spread of Harm outcomes.

a. In calculating the original Spread of Harm there was little evidence (or accepted evidence)

16 Available at http://www.sabattersby.co.uk/hhsrs.html.

on the mental health impact of fire. Primarily the evidence focused on the impact of fire and/or smoke on physical health.

b. Further, the original Spread of Harm was for all dwellings. It is uncertain whether the Spread of Harms is different for multi-storey blocks compared to non-multi-occupied buildings.

c. There is now more evidence of the mental health impacts. This evidence is unlikely to increase Class I Harm Outcomes over the first 12 months (as relevant for the HHSRS assessment). The mental health impacts will however increase Class II and III Outcomes, so that Class IV Harm will reduce accordingly.

# 12.0 Next Steps

12.01 Once the hazard assessment has been completed, the local housing authority will need to consider, whether there is a duty (Category 1 hazards) or power (Category 2 hazards) to use the provisions in Part 1 of the Housing Act 2004. In any event it will be necessary to consider which of the courses of action is available and which is the most appropriate. Where there is a discretion to take action under Part 1 it will be necessary to show how this discretion has been used.

# 13.0 Further reading

BS 9991: 2015 Fire safety in the design, management and use of residential buildings – Code of practice

BS 9999:2017 Fire safety in the design, management and use of buildings – Code of practice

BS 9990:2015 Non-automatic fire-fighting systems in buildings. Code of practice

# Annex: Statistics on risk of fire

1. The presence of cladding will influence whether a fire causes harm. However, for reference we have included statistics on the likelihood of fire and resulting harm. Home Office statistics record that a total of 27,525 accidental (and 3,219 deliberate) dwelling fires were attended by the fire and rescue services in England [17]. This is a similar number of accidental to the previous year (27,237). There were 553 dwelling fires per million people in England in 2017/18[18]. Taking a total housing stock of 23.7million dwellings[19], these figures indicate 1 in every 861 dwellings had an accidental fire attended by the Fire and Rescue Service.

2. In England in 2016/17 (prior to the Grenfell Tower tragedy in June 2017), the English Housing Survey (EHS) reported there were 221,000 (1 in 107) households that had fires in their dwelling in the previous year. Some 86% of fires started within the dwelling, and two thirds of these started in the kitchen. The EHS has also reported that 4% of homes in England have a significantly higher than average risk of fire; of which, 0.4% (1 in 250) had a category 1 fire hazard[20]. Of those households who experienced a fire in the previous two years, 89% reported having no injury, while 7% reported smoke inhalation and 5% reported burns/scalds. Home Office statistics indicate the majority, 263 (79%) of fire-related fatalities, were in dwelling fires in 2017/18. This compares with 214 (81%) in 2016/17, 210 (73%) five years previously in 2012/13 and 275 (77%) ten years previously in 2007/08[21] .

3. Turning specifically to purpose-built blocks of flats, in England in 2016/17 Home Office statistics showed that of the total of 30,296 dwelling fires (accidental and deliberate) attended by the fire and rescue service some 6% (1,848) were in purpose-built block of flats of 4 to 9 storeys and 2% (714) were in purpose-built high-rise blocks of 10 storeys or more. In 2016/17 there were 139 non-fatal casualties in purpose-built flats of 10 storeys or more, and 300 non-fatal-casualties in purpose-built flats in blocks of 4 to 9 storeys[22]. Over the three years 2014/15 to 2016/17 the average number of non-fatal-casualties in blocks of 10 storeys or more was 145 and in flats of blocks **of 4 to 9 storeys, the annual average was 311**. For those three years, figures indicate an average of 3 fatalities a year in blocks of 10 storeys or more and average of 11 fatalities a year in blocks of 4 to 9 storeys. The EHS indicates that 2% of those flats in low-rise blocks have a serious fire hazard. Taking EHS figures showing 408,000 households in purpose-built flats in high-rise buildings,[23] (at least six storeys high) that would indicate between a 1 in 868 (taking all blocks over four storeys) and 1 in 2,757 (casualties in blocks of 10 storeys or more) chance of a fatal or non-fatal injury in a fire attended by the local fire and rescue service. Given the differences in definitions these figures should be treated with extreme caution but provide some indication of the the chance of a fire that could cause harm.

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17 Home Office, Fire Statistics Table 0201: Dwelling fires attended by fire and rescue services by motive, population and nation at https://www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables#dwelling-fires-attended
18 Fire statistics data tables fire 0201 -aug 2018 ibid
19 MHCLG, English Housing Survey 2016: stock condition, July 2018
20 MHCLG, English Housing Survey 2016 to 2017: Fire and Fires Safety, July 2018
21 Home Office, National Statistics, Detailed analysis of fires attended by fire and rescue services, England, April 2017 to March 2018, Statistical Bulletin 17/18, 5 September 2018
22 Home Office, Fires in purpose=built flats, England April 2009 to March 2017, Statistical Bulletin 12/17 (27 June 2017)
23 MHCLG, EHS Annex Table 2.3: Stock Profile, 2016 (https://www.gov.uk/government/statistics/english-housing-survey-2016-to-2017-headline-report)