Guidance to support a temporary change to a simultaneous evacuation strategy in purpose-built block of flats

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This guidance note provides advice to building owners, their professional advisors and fire and rescue services on issues to consider where a decision is made, based on a comprehensive risk assessment carried out by a competent person, to suspend temporarily a stay put policy and adopt a simultaneous evacuation strategy.

Although written for those responsible for the safety of residents in purpose-built blocks of flats, the principles of this guidance may, in certain circumstances, be applied to other premises.
1. Introduction and scope of document

1.1. NFCC supports the principle of a stay put strategy whenever possible, it reflects the Building Regulations requirement that each flat should be its own fire-resisting compartment, and has proved over many years to be safe for residents of purpose-built blocks of flats.

1.2. This guidance provides fire safety advice in respect of purpose-built blocks of flats where a ‘Stay Put’ policy was part of the original design, but is no longer considered appropriate owing to significant risk issues such as combustible external facades. Where such issues exist a temporary change to a simultaneous evacuation strategy is likely to be necessary until the failings have been rectified.

1.3. NFCC supports the ‘Fire safety in Purpose-Built Block of Flats’ guidance hosted on the Local Government Association’s website (LGA) and developed by a wide range of stakeholders. The guidance remains appropriate for all purpose-built blocks of flats. However, the unique circumstances following the Grenfell Tower fire mean that Section 19 in particular ‘Stay Put policy’, and in particular paragraphs 19.6 and 19.7, should be considered in the context of this additional and complementary guidance.

1.4. In a building that was originally designed for a stay put policy, a change to simultaneous evacuation should only be temporary; NFCC do not consider that a permanent change of this nature is likely to be appropriate, particularly in buildings over 18m in height, in which the number of persons who evacuate simultaneously may be considerable. There are many reasons for this. For example, situations can arise whereby the evacuation of residents results in some risk to them (though lesser risk than remaining within their flats in the circumstances to which this guidance applies). Also, simultaneous evacuation of large numbers of people is likely to be an impediment to access by the Fire and Rescue Service (FRS) (even in a building with multiple stairways, so delaying firefighting and rescue activity. Reliance on simultaneous evacuation is also detrimental to the equality of disabled people, who may be unable to evacuate without assistance. If there are measures that would permit fire spread between floors - or between flats - the appropriate, ultimate solution is to rectify the associated defects, rather than to permanently to change the stay put strategy.

1.5. This guidance, which applies to premises in England and Wales, is produced to support the FRS, building owners/ Responsible Persons and associated fire safety specialists. This includes fire risk assessors at buildings that have been fitted with an external wall system that has failed large-scale tests, whether those were privately carried out or were commissioned by the Department for Communities and Local Government (now: the Ministry of Housing, Communities and Local Government MHCLG) following the Grenfell Tower fire, and that were carried out at the Building Research Establishment (BRE).

1.6. This guidance is principally intended for use in buildings over 18m in height in which the appropriate means for satisfying the requirements of the Building Regulations in relation to external fire spread have not been satisfied (e.g. as a result of the use of insulation and/or cladding materials that are not of limited combustibility and that do not achieve appropriate performance when the wall construction and cladding are tested in accordance with BS 8414). It should be noted that the figure of 18m is somewhat arbitrary (having, historically, been based on equipment that the FRS have not used for many years). Minor variation in the 18m limit need not necessarily have any significant effect; there is little material difference in risk between the use of combustible cladding on an existing building with a topmost floor located at a level of 17.5m above ground level and a similar existing building in which the topmost floor is located at 18.5m above ground level. However, particularly in the latter case, any decision not to follow this guidance should be based only on the advice of a qualified fire engineer and be fully justified.

1.7. The guidance sets out the context and decision-making considerations in moving from a stay put to simultaneous evacuation policy. It includes appendices that set out further guidance on the Waking Watch (Appendix 1) and Common Fire Alarm systems (Appendix 2) that are likely to be appropriate.
The fire safety strategy in purpose-built blocks of flats normally comprises an arrangement whereby only residents from flats directly affected by fire, heat or smoke need evacuate. Residents in other unaffected flats should be protected by general fire precautions provided in the building, such as the structure of the building, the front doors of individual flats, smoke ventilation provisions, etc. Those other residents should therefore be safe to ‘stay put’ during a fire in their building unless otherwise directed by the FRS, and, in many cases, may not even be aware of a fire elsewhere in the building.

The fire alarm arrangements in purpose-built blocks of flats typically include smoke (and sometimes heat) alarms within each flat to alert the residents of a fire in that flat only. There is generally no common fire alarm system.

Where fire detectors are installed in the common parts, they are likely to be provided only to operate active fire safety facilities such as a smoke control system. The detectors are not provided to give a warning to all residents in the building.

Where there is a significant failing in the general fire precautions and/or other issues such as combustible external facades, a competent fire safety specialist may consider that these failings could contribute to uncontrolled and, potentially, unrestricted fire spread in the building, and therefore the building can no longer support a stay put strategy. A temporary change to a simultaneous evacuation strategy may provide a level of confidence that, while there are clear risks that must be addressed, continued occupation of the building is possible with the adoption of a change to an evacuation strategy and a clear definition of the management strategy of the building, which should be communicated to residents.

While this guidance has been developed specifically for high-rise residential premises that require a change to the evacuation strategy to be adopted until fire safety defects are rectified, some of this guidance may be applied to other building uses (e.g. a hotel or hospital). In those cases, some of this guidance may be of assistance if adapted to those needs.
2. Definitions

Assembly point

2.1. A designated place where people have been told to wait after evacuating a building in the event of a fire or other emergency.

Note: An alternative assembly point that has protection against inclement weather may be required.

Common Parts

2.2. Those areas of a building that are not for the exclusive use of individual residents (e.g. common corridors, stairways, plant rooms, other ancillary areas, etc.).

Common fire alarm system

2.3. A fire alarm system that will give a warning of fire throughout the building, including within all flats and within the common parts.

Competent person

2.4. According to the Regulatory Reform (Fire safety) Order 2005 Article 18 (5), a person is to be regarded as competent for the purposes of this article (Safety Assistance) where he has sufficient training and experience or knowledge and other qualities to enable him properly to assist in undertaking the preventative and protective measures. Guidance on the competency standard for fire risk assessors and guidance on choosing a competent risk assessor is available here: http://www.cfoa.org.uk/19532 In regard to temporary changing from a stay put to a simultaneous evacuation policy please refer to section 3 for further detail.

Evacuation

2.5. A process whereby people leave premises in case of an incident e.g. fire and reach a place of safety.

External wall system

2.6. External construction of a building including external walls, cladding, insulation, filler materials, cavity barriers, etc.

General fire precautions

2.7. This term is used to describe precautions that are provided to reduce the risk of fire and spread of fire, in conjunction with other measures, to keep people safe from fire in a building (see Article 4 of the Regulatory Reform (Fire Safety) Order 2005).

Interim measures

2.8. Urgent temporary measures which are to be put in place to address an unacceptable risk to occupants of a building.

Mitigation Measures

2.9. Measures to mitigate the identified risk until the significant issues are resolved.

Personal Emergency Evacuation Plan (PEEP)

2.10. A documented plan for the evacuation of people who are unable to self-evacuate, and/or require some assistance to do so.
Responsible person

2.11. The person, group, company or other entity on whom duties are imposed by the Regulatory Reform (Fire Safety) Order 2005 to ensure the safety of occupants of a building from fire (see Article 3 of Regulatory Reform (Fire Safety) Order 2005). Note: duties are also imposed on persons other than the Responsible Person (see Articles 5 (3) and 5 (4) of the Regulatory Reform (Fire Safety) Order 2005).

Simultaneous evacuation

2.12. Procedure in which all parts of a building are evacuated in the event of fire at one time.

Smoke ventilation system

2.13. A system to control and/or prevent the spread of smoke in protected routes in the event of fire. The primary objective of a smoke ventilation system is to protect the common parts. These areas may exist on the floor level where the fire has originated and in stairwells, enabling those occupants who feel threatened or who are at greatest risk to escape. Such systems will further assist firefighters to gain access.

Sounder

2.14. A device that will give an audible warning in the event of fire.

Stay Put strategy

2.15. A strategy based on the principle that only the residents of the flat of fire origin need to escape initially, while other residents may remain in their own flats unless their flat is affected by fire or smoke, they feel threatened, or they are instructed to leave by the FRS. A Stay Put strategy does not preclude residents, who are aware of a fire within the building but not affected directly by it, from deciding to evacuate.

Waking Watch (also referred to as a fire watch)

2.16. A system whereby staff continually patrol all floors and the exterior perimeter of the building in order to respond to a fire, assist in calling the fire service and assisting with the evacuation of occupants of the building.
3. Competence

3.1. The complexity of the interactions between people, buildings and fire is such that no single set of criteria can be applied to all types of buildings in all circumstances. Therefore, an assessment - specific to the building in question - will need to be conducted that considers any potential fire spread in conjunction with the evacuation strategy and any modifications to that strategy (i.e. a change from a stay put to a simultaneous evacuation strategy).

3.2. The advice used to inform this assessment must be provided by a competent person, as this is critical for ensuring that an appropriate level of safety is achieved. In some cases, the risk assessment may be straightforward, in which case a competent fire risk assessor may be used (para 2.4). In others, the assessment will be more complex and require advice from a qualified engineer with relevant experience in fire safety, including the fire testing of building products and systems, such as a Chartered Engineer registered with the UK Engineering Council by the Institution of Fire Engineers.

3.3. Even if advice from a qualified fire engineer is required, there remains a need to consider a holistic overview of the general fire precautions. Where to get an appropriate level of competent advice will depend on the nature of the fire precautions being considered.

3.4. The fire risk assessment will need to be reviewed and updated to reflect the risk posed by a non-compliant external wall system. This will require close liaison between fire risk assessors and engineers with competency in the assessment of external wall design.

3.5. The Responsible Person and/or the competent person will need to ensure that those implementing the interim measures have the required level of competency to operate effectively.
4. Changing to a simultaneous evacuation strategy

Reasons for changing to an evacuation strategy

4.1. As detailed in the introduction above, the strategy in a residential building typically comprises a Stay Put strategy. However, in exceptional circumstances it may be necessary to temporarily change the evacuation strategy from stay put to simultaneous evacuation.

4.2. A Stay Put strategy relies on the fire separation between each flat to ensure that the fire and smoke does not spread throughout the building unrestricted and uncontrolled. This fire separation is achieved through different means such as fire-resisting doors, fire-resisting walls, floors and ceilings separating flats, and ensuring that the external walls of the building adequately resist the spread of fire over the walls.

4.3. Buildings that have, for example, been identified as having an external wall system that does not adequately resist the spread of fire over the walls (e.g. ACM identified as hazardous by MHCLG because of large scale fire tests carried out on their behalf) is one example of circumstances where a simultaneous evacuation strategy may be needed.

4.3. In these circumstances, the change to a simultaneous evacuation strategy must not be permanent. It should always be considered as an interim measure, adopted for the safety of residents while works to rectify the identified fire safety failings are carried out. The installation of a temporary fire alarm and detection system is preferred over a continued use of a Waking Watch system.

4.5. In addition, it must be acknowledged that the move to a simultaneous evacuation may not address all the risks identified and be considered to mitigate all general fire precaution failings (e.g. deficiencies in means of escape). The responsible person must always discuss the change of evacuation strategy with a competent person, who can further advise on the proposal, including any limitations of such a change, and evaluate the overall fire safety provisions of a building.

General requirements of a temporary simultaneous evacuation

4.6. Where a temporary simultaneous evacuation strategy is adopted, the responsible person must notify the FRS, as it may need to amend its operational procedures.

4.7. It is expected that FRS operational crews will visit the premises to update their tactical plans.

4.8. The common alarm and/or on-site staff should only be removed when the required remedial works have been completed, a competent fire safety specialist has been consulted and the FRS has been notified that the simultaneous evacuation strategy has ceased and the building has returned to the Stay Put strategy. A communal fire alarm is only a temporary measure and not an alternative to remedial works designed to reduce the risk from a non-compliant wall system.

4.9. A change to a temporary simultaneous evacuation strategy relies on two key essential principles:

- Early detection of a fire and warning of occupants
- Management of the evacuation.

4.10. It is the duty of the responsible person to ensure that both are appropriately considered and addressed as part of the simultaneous evacuation.

4.11. A change in evacuation strategy will require careful consideration of how people are warned of a fire. This means that, at the earliest opportunity, a fire should be detected and warning given throughout the building.

4.12. Flats that do not have their own smoke alarms should be fitted with them, regardless of the other fire safety provisions in the building. These are independent of any communal fire alarm and detection system specified as an interim measure.
4.13. The early detection of a fire may comprise one of the following:

- A suitable Common Fire Alarm system throughout the building with detectors and sounders where necessary is the most appropriate if the interim measures are to be in place for more than a short time (see Appendix 2 for further guidance on this topic);
- A Waking Watch using trained staff to assist with detecting a fire, and raising the alarm, although this should only be used for a short term interim measure (see Appendix 1 for further guidance on this topic);
- Ideally, a combination of both as it is highly likely that assistance will be needed to manage the evacuation.

4.14. NFCC strongly recommends that where a change to a simultaneous evacuation is deemed appropriate and will be required for medium to long periods of time, that a temporary common fire alarm system is installed. This is because a temporary common alarm when designed, installed and maintained appropriately is a more reliable and cost-effective way to maintain a sufficient level of early detection. An appropriate communal fire alarm and detection system will generally provide more certainty that a fire will be detected and warned at the earliest opportunity rather than rely on using trained staff.

4.15. The management of the evacuation is a key part of change to a simultaneous evacuation strategy. On-site staff will be required to facilitate a rapid, effective and coordinated evacuation, contact the FRS to provide an essential link with them during operations. (see section 5 for further information about the management considerations).

4.16. Consideration should be given to the capacity of the staircase and whether it is able to accommodate the expected population in the building. This is not expected to be an issue in most cases.

Information to residents

4.17. It is essential that residents are informed as soon as practicable about the reasons for the change of the evacuation strategy, the purpose of it, and what actions will be taken in the event of a fire. It is unlikely that relying on a simple mail drop or information on communal notice boards will be sufficient. Resident meetings supported with written advice are more appropriate. These should be supplemented by staff (for example, representatives of the responsible person) proactively engaging with residents to ensure that they understand the situation and any subsequent changes/works that might be happening. In engagement with residents, priority should be given to vulnerable people.

4.18. It is important that, as part of this process, occupants understand the evacuation strategy as well as the evacuation procedures and what action they should take upon leaving the building.
5. Management considerations to support the adoption of an evacuation strategy

5.1. As detailed above, any evacuation strategy must be supported by appropriate managerial arrangements. The following paragraphs give further guidance about the management considerations that should be put in place to support this change.

5.2. It is recommended that every building with a temporary simultaneous evacuation strategy should be provided with 24/7 on-site staff. The staff should incorporate a team leader whose role will be to:

- Ensure that the FRS are called as soon as possible and provide key information about the building;
- Ensure the evacuation is managed as necessary, including directing residents to a dedicated assembly point;
- Liaise with the attending FRS to provide information as necessary.

5.3. The number of staff required in individual buildings will vary. Advice should be sought from a competent person to advise accordingly.

5.4. Following the identification of a confirmed fire (see Appendix 1 for further information), the on-site 24/7 staff should:

- Instigate a simultaneous evacuation of all occupants of the building without compromising the personal safety of staff;
- Ensure that the FRS is called immediately; such is the importance of this action that one member of staff should be tasked with ensuring that this action has been taken, whether by that person or one of the other members of staff;
- Reduce as far as reasonably practicable the evacuation time (e.g. supporting residents to leave);
- Facilitate the evacuation of vulnerable people through PEEPs.

Calling the Fire Service

5.5. In the event of fire, the on-site staff will make an immediate call to the FRS by dialing 999, stating:

- The address of the premises;
- The total number of floors of the building;
- Where the fire has started i.e. flat number and floor or externally;
- That a simultaneous evacuation is under way;
- Where known, the number and location of any people who may not be able to self-evacuate
- Any other information as relevant.

5.6. Where possible it is recommended for one member of staff to meet the FRS on arrival to pass on relevant information.
Vulnerable residents

5.7. Where possible all residents should be surveyed in respect of their ability to evacuate the building without assistance. In each case where a resident is identified as being unable to respond to the evacuation signal and/or unable to self-evacuate, the Responsible Person should, subject to the co-operation of the residents, seek to agree a PEEP with each of these residents. The level of on-site staff, training, equipment and evacuation protocols must fully reflect a simultaneous commitment to all the PEEPs, as well as the general evacuation in the building.

5.8. If it is evident that there will be a significant difficulty in being able to evacuate vulnerable persons, it may be possible to use a firefighters’ lift. If this is to be considered, the FRS should be consulted.

5.9. The staff member designated to meet the FRS on their arrival must be able to report information on each resident for which a PEEP has been agreed but is not yet accounted for, namely:

- The flat number and floor of the resident;
- The assistance required by the resident.

5.10. Vulnerable residents who cannot be assisted to safety may need to be relocated while this simultaneous evacuation strategy is in place. However, this would require the co-operation of the residents in question.

5.11. Information on residents who may need assistance to evacuate should be the responsibility of the team leader to ensure this is available to the fire service e.g. this could be kept in a premises information box that is readily available to a fire and rescue service.

General housekeeping

5.12. Whilst undertaking their patrols, the on-site management staff should:

- Remove any combustible items stored inappropriately;
- Ensure that all fire-resisting doors are kept shut, and locked shut, where required (e.g. riser cupboard doors);
- Provide reassurance to residents of the building;
- Report any concerns to the Responsible Person for the building.

Staff facilities

5.13. Welfare/Toilet facilities should be considered for the well-being of the staff, such as washing, toilet, rest and changing facilities, and somewhere clean to eat and drink during breaks.

5.14. Staff should be clearly identified in high visibility clothing. The different roles (i.e. staff, team leaders) should be identified by the clothing or markings. Staff may also need other equipment such as air horns, a torch etc. to ensure they can perform their role.
Staff training & communications

5.15. Training should be given to staff to ensure they fully understand the purpose of their role and what individual tasks they are responsible for both during normal activities and in the event of a fire. They should also be given general health and safety training, and specific fire training to support safe systems of work.

5.16. Specific instruction should be provided on the communication processes amongst the Waking Watch team, and how to ensure that they do not place themselves or others at risk.

5.17. In the event of a fire the priority for trained staff is to promote the evacuation of the building. Therefore, it is not advisable to expect staff to actively engage in first aid fire-fighting.

5.18. Training will need to be repeated if any of the staff members change and further training if any arrangement changes. All staff should receive regular refresher training.

5.19. It is important that staff can instantly and constantly communicate with each other. The method of communications must be available throughout the building. Radios are often the most appropriate way of achieving this and must be supported by an appropriate radio protocol.

5.20. This should include set words for checking in, raising the alarm etc. Radio traffic should be kept to a minimum to ensure that the system is available for appropriate communications. The adequacy and effectiveness of radio communication throughout the building should be tested and confirmed.

5.21. It is unlikely that mobile phones will provide an appropriate method of communications between staff. These require more than just a single button actuation, and will not be available for the instant and simultaneous relay of messages to multiple staff. Mobile phones also rely on being connected to a network and this may not always be possible.

5.22. Mobile phones may be the most appropriate method of calling the fire and rescue service if no land line is available.

5.23. If mobile phones are to be relied for any of the above purposes, it should be ensured that phones have sufficient charge and they should be tried and tested and its functionality regularly checked.

Test of the process

5.24. The process should be tested in the form of regular staff training exercises to ensure that all staff understand their roles and that the system is appropriate for the specific building. However, where this is required, it will not usually be necessary to sound the evacuation signal (air horns etc.) every time as this may lead to complacency by the residents. Residents should not be involved in these staff training exercises, but should have been made aware of the necessary action if the evacuation signal is given.

5.25. Staff training exercises should be recorded and immediately available on site to the FRS for inspection.

5.26. The Responsible Person needs to ensure that there are arrangements for adequate monitoring of the Waking Watch team.

5.27. In every building where a simultaneous evacuation strategy is adopted, the FRS will make regular visits to ensure that the arrangements in place are being robustly implemented and managed.

Fire risk assessment
5.28. The fire risk assessment for the premises, and its associated evacuation plan must be updated to reflect the issues identified, the role of the Waking Watch and the duration of the temporary mitigation measures in place.

Health and safety

5.29. It is vital that any processes and procedures put in place allow compliance with other applicable legislation such as Health and Safety at Work Act 1974, and the Management of Health and Safety at Work Regulations 1999. The procedures developed must never jeopardise the safety of staff.
6. Responsible Person duties

6.1. The Responsible Person duties are laid out in Part 2 of the Regulatory Reform (Fire Safety) Order 2005.

6.2. The Responsible Person must ensure that the change to a temporary simultaneous evacuation strategy relies on the assessment by a competent person and addresses the risks identified.

6.3. The Responsible Person must ensure that the mitigation measures put in place always remain appropriate.

6.4. The Responsible Person must ensure that appropriate resources are allocated to address the specific risk identified in the building.

6.5. The evacuation strategy must be re-evaluated periodically as the remedial works are being carried out to ensure that it remains current and addresses the general fire precaution failings.

6.6. For further general fire safety advice, please contact your local FRS fire safety team.

It may be that, even if all the above guidance were to be implemented, the risk is not reduced enough to enable all the persons to remain in the property, and certain uppermost floors might need to be temporarily evacuated. There should be liaison with the FRS in respect of this matter.
Appendix 1: Detecting a fire and raising the alarm incorporating a Waking Watch

A1.1 The system (either primarily an automatic system or by using trained personal) to instigate the simultaneous evacuation must:

- detect a fire in the building;
- detect external fire spread if combustible cladding/insulation materials have been identified as part of the external wall system;
- summon the FRS;
  provide a warning to ensure all residents are alerted to begin simultaneous evacuation;
- take appropriate action as required by the management strategy, including meeting the FRS on arrival.

A1.2 As a benchmark, the objective should be that, when a confirmed fire within a flat necessitates simultaneous evacuation, the time from detection of the fire to alerting all residents (by the Waking Watch staff) and confirming evacuation has started, should not exceed a time of typically 10-15 minutes in the case of an external wall system that represents a significant fire hazard (e.g. a system incorporating polyethylene core ACM, as described by tests 1, 2 & 3 in the Government cladding screening programme). In the case of those buildings that have a notable fire hazard (e.g. ACM with fire retardant polyethylene filler (category 2 in screening tests) with phenolic foam insulation as described in test 7 of Government cladding screening programme) then the 10-15 minutes time limit maybe increased slightly if suitably justified in the assessment by a competent person.

A1.3 There are three possible approaches to detect a fire and give early warning to residents:

a) Installation of a common fire alarm system of the type described in Appendix 2. In this case, the objective of the Waking Watch does not comprise detection of fire, apart from external fire spread, or alerting residents. The role of the Waking Watch is purely to summon the FRS and manage the evacuation process. For this purpose, only a small number of staff is likely to be required in any building; there would not be any need for sufficient staff to patrol the building such that each floor was inspected within any given period. Where a group of affected buildings form an estate under common management, staff who manage the site on a 24-hour basis can perform this role if there is a method of informing them immediately of the fire alarm actuating, and that they can reach any building in a reasonable time. This is the preferable approach where an external wall system that represents a significant hazard on buildings over 18m in height and should be adopted where the external wall system cannot be replaced or removed in the short term. However, based on the competent person’s advice, there may be some individual premises where a common fire alarm system only is adequate.

b) Reliance on the Waking Watch to detect the presence of a fire by hearing a smoke/heat alarm sounding within a flat, and manually to initiate fire alarm sounders that would alert all residents of the need to evacuate. This will initially involve provision of sounders throughout the common parts, but, ultimately, is likely to need a sounder in every flat to ensure that the fire alarm signal is loud enough to rouse residents from sleep. The manual initiation of sounders would comprise, at least, one manual control on the ground floor that triggers operation of all sounders, but could comprise manual controls on additional floor levels. The method of operation of the manual controls should be such that they can only be operated by staff or FRS. In this case, the number of staff on the Waking Watch should be such that they become aware of a fire (e.g. by hearing a smoke alarm operate and immediately investigating) and operate a manual control within 10-15 minutes of operation of a smoke alarm within a flat.
a) Reliance on the Waking Watch to detect the presence of a fire and to take manual action to alert residents of the need to evacuate (e.g. knocking on each flat front door and/or using an air horn to alert residents). In this case, there will, again, need to be sufficient staff on the Waking Watch, such that they become aware of a fire (e.g. by hearing a smoke alarm operate and immediately investigating) and then alerting all residents within 10-15 minutes of operation of a smoke alarm within a flat. This alternative is likely to be the least reliable, most resource intensive, and may not be suitable for the highest risk situations. This is also impracticable for a long-term solution and should only be a short-term measure until either option b) or preferably option a) is adopted

NOTE: Care should be taken (e.g. in the training of the Waking Watch staff) to ensure that they do not initiate a simultaneous evacuation in the event of a false alarm from a domestic smoke alarm, or a small fire that has been extinguished.

A1.4 While the above information is offered as a benchmark, the solution adopted by a competent person should consider many factors, including (but not necessarily limited to) the following:

- The FRS attendance time. This is to be based on the assumption in Approved Document B that there will be fire service intervention in a timely manner. Stay Put requires firefighting intervention. This should not be taken as the time of arrival of the first appliance, but on an assessment of the attendance time of the predetermined attendance. No reliance should be placed on the attendance of high reach appliances as typically these will take longer to mobilise than the initial attendance.

- The general fire precautions in the building. As this document is predominately for buildings that have been fitted with an external wall system that has failed the large-scale tests it should be ensured that the general fire precautions are satisfactory. There may be some minor issues, but anything above an advisory comment in the FRA should be addressed as a matter of urgency.

- The height of the building. This is included to reflect both the difficulty of external fire fighting especially above 30m and the time for evacuation. External firefighting is impractical in the initial stages of an incident at heights above 18m. Firefighting with high reach appliances is unlikely to be available in the initial stages of a fire or at any height greater than 30m.

- Provision of sprinklers or other automatic fire suppression systems. Consideration should be given to the impact this could have on the evacuation strategy

- The number of flats. Consideration should to given to the number of people that could be evacuating and the possible conflict between evacuating people and firefighting operations.

- The type and extent of the cladding. Consideration should be given to the extent of the cladding and disproportionate fire spread. Account also needs to be taken of the proximity of the cladding to windows, vents, stairways and other architectural features that could spread fire.

- The number of means of escape stairways. Consideration should be given to the number of staircases and numbers using them.

- Risk of external ignition of cladding (e.g. considering the height at which the cladding starts, proximity of cars, refuse, etc. to the cladding).

- Risk of internal ignition of cladding (e.g. from fires inside the building via unprotected window reveals and the proximity of ignition sources such as domestic appliances).

- The collective effect of the fire safety measures considered holistically, as opposed to each measure in isolation.
Appendix 2: Common Alarm System: Automatic fire detection and alarm system supporting simultaneous evacuation

Purpose

A2.1 The purpose of the provision of a common fire alarm to support the change of the evacuation strategy from Stay Put to simultaneous evacuation is to ensure early detection and warning of a fire throughout the building (including any accommodation e.g. individual flats).

A2.2 As described above, the common fire alarm system cannot be implemented in isolation and must be provided as part of a package of fire safety measures. The aim of the guidance below is to provide and highlight some of the key considerations about the selection and implementation of a common alarm system.

System design and considerations

A2.3 Considering the specific purpose of this guidance, the common fire alarm system should generally be designed in accordance with the recommendations of BS 5839-1 for a Category L5 system, except that the sound pressure level of the fire alarm signal within flats need only be 85dB(A) at the open doorways of every bedroom in each flat.

A2.4 In every flat, the system should incorporate heat detectors within each room that has a window that overlooks an area of external wall, with an external wall system that results in a significant or notable fire hazard (except possibly toilets and bathrooms). Heat detectors should also be included in any other rooms, such as plant rooms and other ancillary facilities with windows or vents through which a fire could spread and ignite cladding. Consideration might also need to be given to the provision of smoke detectors within common parts, but these detectors should not initiate the general evacuation of the building; they may give a warning only to the Waking Watch team.

A2.5 An immediate evacuation signal should be triggered by the operation of any single heat detector.

It should be noted that the evacuation signal should not rely on the coincident operation of two heat detectors (sometimes described as “double knock”), as such an arrangement would not result in early enough operation of the evacuation signal in the event of a serious fire that might affect cladding.

A2.6 In line with the individual PEEP process, specific measures such as a vibrating pager or beacon may be required if people with hearing impairments have been identified.

A2.7 It is critical that the common alarm system installed in the premises must not have any adverse effect on the other fire safety provisions in the building. For example, the installation of a wired system must not create a route for fire and smoke to spread in fire rated walls which were previously imperforate. If the system is an extension of the smoke detection system provided for a smoke control system care must be taken to ensure that the operation of the smoke control system is not compromised by the new communal system.
This guidance was produced for the National Fire Chiefs Council by a group of sector experts, comprising:

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Sir Ken Knight, representing the MHCLG Independent Expert Advisory Panel

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This guidance will be kept under review and may be updated periodically. Please ensure you have the latest version.