

LONDON BOROUGH OF HAMMERSMITH AND FULHAM

REGULATORY REFORM (FIRE SAFETY) ORDER 2005

DESKTOP REVIEW OF FIRE RISK ASSESSMENT

Responsible Person (e.g. Employer) or Person having control of the premises:	London Borough of Hammersmith and Fulham (LBHF)
Address of Premises:	Bush Court, Shepherd's Bush Green, London W12 8RB
Person(s) Consulted:	G. Coupar, LBHF M. Matthews, LBHF
Assessor:	A. Fox
Date of Fire Risk Assessment Review:	1 st June 2020
Date of Previous Fire Risk Assessment:	20 th August 2019
Suggested Date for Next Review ¹ :	June 2021

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¹ The original fire risk assessment should be reviewed again by a competent person by the date indicated above or at such earlier time as there is reason to suspect that it is no longer valid, or there have been significant changes in the matters to which it relates, or if a fire occurs.

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INTRODUCTION

About this report

This report is intended to assist you in compliance with Article 9 of the Regulatory Reform (Fire Safety) Order 2005 (the 'Fire Safety Order'), which requires that a risk assessment be carried out and be kept under review.

This report outlines the findings of a review of the previous fire risk assessment. It includes a qualitative assessment of the risk to life from fire.

Recommendations

Our recommendations are outlined in an Action Plan. This sets out the measures it is considered necessary for you to take to satisfy the requirements of the Fire Safety Order and to protect people from fire. It is particularly important that you study the Action Plan, and, if any recommendation in the Action Plan is unclear, you should seek clarification.

You are advised that a risk assessment forms only the foundation for management of fire safety in your premises and compliance with the Fire Safety Order. You should act on the recommendations in the Action Plan and record what you have done. This will demonstrate to the enforcing authority your commitment to fire safety and to fulfilling your legal obligations.

Reviewing your fire risk assessment

The Fire Safety Order requires that you keep your risk assessment under review. A date for the next routine review is given on the front of this report, but you should review the report sooner should there be any reason to suspect it is no longer valid, if a significant change takes place or if a fire occurs.

Disclaimer

The purpose of this report is to provide an assessment of the risk to life from fire, and, where appropriate, to make recommendations to ensure compliance with fire safety legislation. The report does not address the risk to property or business continuity from fire.

We have based our assessment on the situation we were able to observe while at the premises and on information provided to us, either verbally or in writing. Unless stated otherwise, our surveys do not involve destructive exposure, and it is not always possible to see in all rooms and areas, nor inspect less readily accessible areas, such as voids above ceilings. Therefore, it is necessary to rely on a degree of sampling and also on reasonable assumptions and judgement.

The submission of this report constitutes neither a warranty of future results by C.S. Todd & Associates Ltd, nor an assurance against risk. The report represents only the best judgement of the consultant involved in its preparation, and is based, in part, on information provided by others. No liability whatsoever is accepted for the accuracy of such information.

GENERAL INFORMATION

1. Significant changes identified since the time of the previous fire risk assessment in respect of:
 - 1.1 The premises:

Built circa 1970s, the building is a 20 storey, purpose-built tower block of concrete frame construction, with concrete floors, brick exterior walls and a flat, concrete roof.
 - 1.2 The occupancy:

Residential – purpose-built block of flats.
 - 1.3 The occupants (including occupants especially at risk of fire):
 - There are no employees permanently based on the premises.
 - The expectation is that the maximum occupancy will be approximately 350 persons, including visitors, in the residential areas of the building at any one time.
 - 1.4 Fire loss experience:

None since the date of the last fire risk assessment.
 - 1.5 Application of fire safety legislation:

The Regulatory Reform (Fire Safety) Order 2005 applies.
 - 1.6 Progress on previous recommendations:
 - 23 of the previous recommendations are still outstanding. This does not include those where it has been decided to take no action or are no longer applicable due to layout changes.
 - For completeness, previous recommendations, which have not yet been implemented, are reiterated in the Action Plan later in this report.
 - 1.7 Other relevant information:
 - Bush Court is a purpose-built block of residential flats, located over retail and commercial premises, with direct access at ground floor level. The retail shops and commercial premises are located on the ground and first-floor levels, and there are no internal openings between the flats and the retail premises. The flats have their own independent entrance at street level to the front of the block and there is a service area to the rear of the block. There is an open-air amenity deck on the second floor, located over the retail premises, for the use of the residents. There are 17 residential floors above the second floor, with a total of 102 flats. There are six self-contained flats on each floor, which are accessed via a common corridor, with access to the lifts and the single staircase.
 - There is a mix of one, two and three-bedroom flats, most of which are occupied by tenants of LBHF and some are leasehold.
 - This desktop review relates to:
 - Fire precautions within the common parts and other areas controlled by the client.
 - Fire protection systems that are the responsibility of the client.

- The common parts comprise the entrance lobby, staircase, corridors, lifts, service and electrical riser cupboards, the bin room, plant and service rooms, and the roof level lift motor room.
- The retail and commercial premises do not form part of this review.
- There was no original access available into the main electrical sub-station to the block, access to which is restricted to the supply company.
- The maximum number detailed of residents and employees has not been calculated. However, the expectation is that the maximum occupancy will be around 350 persons, including visitors, in the residential areas of the building at any one time.
- No employees or contractors are normally based in the premises. However, there is a caretaker service available at certain times of the day, Monday to Friday, and the premises are subject to periodic visits by LBHF staff. Fire wardens also undertake regular patrols of the common areas as part of the agreed interim measures with London Fire Brigade (LFB).
- While the occupants of the flats are 'relevant persons', the flats, as domestic dwellings, are outside the scope of the Regulatory Reform (Fire Safety) Order 2005 and, as such, the review was confined to the common parts.
- This is a 'general needs' block, and there may be occupants with varying degrees of physical disability in line with the general population.
- The client has limited control over privately owned leasehold flats within the premises.
- This block has the same composite infill (spandrel) panels fitted to the windows as those fitted in Shepherds Court. Therefore, this review takes account of the subsequent investigations, carried out by LBHF, following the fire on 19th August 2016 at Shepherds Court, and the outcome of small-scale tests to determine the fire performance of the panels.
- Following on from this investigation, a decision was taken by LBHF to remove the composite panels and replace them with non-combustible panels. It is understood that this work has been delayed due to the difficulties of identifying suitable replacement panels and the need to seek the approval of the building owner to undertake the works.
- LBHF has introduced a programme of fire safety initiatives through their 'Fire Safety Plus Programme'. The programme includes the re-introduction of concierges and plans to install sprinklers in high rise blocks. In addition, free fire safety checks are offered to all residents, which include checks on flat entrance doors and, where necessary, the fitting of new FD60S fire resisting doors, the free replacement of domestic appliances that fail a portable appliance check and the fitting of free smoke/heat alarms in flats. The programme also provides practical advice and information on fire safety in the home, supported by LFB.
- It should be noted that it is not normal practice to retrospectively apply the current guidance relating to the design and construction of new buildings when assessing existing buildings, other than where the original design principles are far removed from those acceptable today. Nevertheless, it is appropriate to consider developments in fire safety technology and practice that could be reasonably applied to an existing building. Therefore, we have considered such developments.
- Account has been taken of the guidance supporting the legislation that is relevant to the premises.
- Reference has also been made to the fire risk assessment, dated 20th August 2019, by C.S Todd & Associates (CSTA).
- Unless stated elsewhere, the full titles of British Standards and other specific references used or quoted in the report are given on the last pages.

FIRE HAZARDS AND THEIR ELIMINATION OR CONTROL

2. Significant changes in measures to prevent fire since the time of the fire risk assessment:

None.

3. Are there adequate measures to prevent fire?

Yes No

Comments and hazards observed:

- The main entrance doors to the premises are secured to prevent unauthorised access.
- Refuse bins are stored in a well-ventilated, internal bin room to the rear of the block, which has a separate exit leading to a common service area.
- CCTV is provided to cover the common areas and entrances on the ground and second-floor levels. This is monitored by security staff at the security office, which is located adjacent to Woodford Court. The security office is manned between the hours of 08:00 and 23:30. Outside these hours, access is available to a central, mobile security team.
- Security staff also undertake periodic inspections of the common areas.
- Fire wardens undertake inspections of the common areas, escape routes and external areas as part of the interim measures introduced following the fire in August 2016 at Shepherds Court. Any unauthorised storage in the common areas and escape routes is reported for removal.
- Access onto the open deck amenity area is controlled by security, and the door from the block onto the deck is secured to prevent access between 20:00 hours and 09:00 hours. Residents can access the deck outside of this period by means of a security access fob.
- Smoking is not permitted in the common areas. 'NO SMOKING' signs have been provided in the common areas.
- Residents and visitors are permitted to smoke on the open-air amenity deck. This practice is not considered to present a significant risk.
- Not considered in relation to flats, where it is foreseeable that some occupants will smoke.
- LBHF's policy is to subject the fixed electrical installations serving the common parts of the premises to periodic inspection and test every five years.
- The fixed electrical installations within tenanted flats are subject to periodic inspection and test in accordance with LHBF's policy and on change of tenancy.

- There are no portable electrical appliances within the common parts.
- Portable appliances in flats and the fixed installations within leasehold flats have not been considered.

4. Are housekeeping and maintenance adequate?

Yes No

Comments and deficiencies observed:

- It is important that the common parts that form escape routes from the building are kept free of combustible materials and ignition sources.
- A 'zero tolerance' approach has been introduced, which prohibits the storage of combustible materials and residents' possessions in the common escape routes.
- This policy is communicated to all residents.
- The situation is monitored on a regular basis by LBHF staff, during periodic estate inspections of the premises. In addition, security staff and fire wardens currently undertake regular inspections of the common areas.

FIRE PROTECTION MEASURES

5. Significant changes in fire protection measures since the time of the fire risk assessment:

None.

6. Are the means of escape from fire adequate?

Yes No

Comments and deficiencies observed:

- This is a purpose-built block of flats, and it is our understanding that the design principles embodied in the relevant building legislation/regulations applicable at the time of construction included adequate compartmentation, protected escape routes and the provision of smoke ventilation.
- On this basis, the occupants of the flats, other than those in which a fire occurs, should be able to remain in their flats in relative safety, unless, subsequently, their flat becomes affected by fire or smoke, in which case they should leave, or until directed to leave by the fire and rescue service.
- The means of escape consist of a single protected, central core staircase. The staircase is accessed off a common circular corridor on each floor level. The flat entrance doors open directly onto the common corridors, which also contain the lifts.
- The staircase discharges into a protected lobby at ground floor level, which provides access to the lift lobby, and the main entrance doors to the block at street level. Access is also available from the lobby to the rear refuse area, which has a further exit available into the rear service area.
- The main entrance doors and rear exit door are easily openable from the inside without the use of a key.
- Smoke ventilation in the staircase is provided in the form of a vertical, natural ventilation shaft. The shaft has an external opening at ground floor level and an external vent at roof level. There is an open vent into the shaft at the head of the staircase to vent smoke from the staircase into the shaft. On each of the other residential floor levels, there are openings into the vertical shaft from the staircase. The openings are fitted with solid, metal doors that would allow the fire and rescue service to vent individual floors. It was not possible to confirm whether all the doors can be opened.
- Smoke ventilation in the common corridors is provided in the form of permanently open vents. There are two permanent vents provided, one in each of the two external walls to the corridors.

- The flat entrance doors appear to be a mix of notional fire-resisting doors, without intumescent strips, smoke seals or protected letter boxes; some are replacement, upgraded notional fire-resisting doors, with intumescent strips and smoke seals but have unprotected letter boxes, and there are a small number of new FD30S doors, fitted with protected letter boxes and external self-closing devices. In our view, all these doors, other than the specific flat entrance doors mentioned below, would provide an adequate notional period of fire resistance.
- However, we are informed that all flat entrance doors and doors to the escape staircase in the block will be replaced with new FD60S doors as part of the 'Fire Safety Plus' initiative introduced by LBHF. The door replacement programme will, we understand, begin in August 2020.
- The flats also have inner hallways, with notional fire-resisting doors fitted to the kitchens and lounges opening onto the hallway.
- The small sample of flats previously accessed had internal self-closing devices fitted to the flat entrance doors. However, it was not possible to confirm whether self-closing devices are fitted to all flat entrance doors.
- The fire-resisting doors to the staircase are fitted with intumescent strips, smoke seals and overhead self-closing devices.
- The fire-resisting doors to the electrical meter cupboards on each floor level are fitted with intumescent strips, smoke seals and overhead self-closing devices. The doors to the meter cupboards are not kept locked, as residents need access to the meters. It is understood that the doors will be replaced with new FD60S self-closing doors as part of the recently agreed door replacement programme due to begin in August 2020.
- The access doors to the service riser shafts in the common corridors are fire-resisting and are fitted with locks that allow residents to access the services in the risers. However, several of the access doors were open at the time of the survey, several of the locks were broken and some doors had been removed.
- The staircase is safe for use as a refuge by disabled people evacuating from the flat of fire origin. It is not normal practice to provide refuge signage or communications systems in these circumstances, and those needing assistance would be expected to seek help from other residents, or to use mobile telephones to contact the emergency services.
- Residents and visitors who access the open deck area are required to re-enter the block on the first floor, as there are no alternative means of escape available from the open deck. Although it is possible

for people to make their way clear of the block to access the deck area in the adjacent block (Shepherds Court), the residents' security fob would not allow them access into Shepherds Court. However, there is an external intercom and residents can contact the security office staff, who can remotely open the doors to both blocks in an emergency.

7. Are compartmentation and linings satisfactory²?

Yes No

Comments and deficiencies observed:

- This is a purpose-built block of flats, and it is our understanding that the design principles embodied in the building legislation/regulations applicable at the time of construction included adequate compartmentation.
- The floors, staircase and corridors are of concrete construction.
- There was no evidence to suggest that the existing compartmentation would not support a 'stay put' strategy.
- It was not possible to confirm whether the enclosed gas supply pipework in the common corridors is adequately fire stopped where the pipework passes through the compartment floors.
- There are common service risers, typically serving two flats, that contain utility services, including water, soil pipes and ventilation extract ducts from bathrooms and toilets. On the 11th floor, there are full height inspection openings provided to each riser, which are fitted with new fire-resisting access doors. On every other residential floor level, there are small inspection openings, fitted with fire-resisting access doors. The floors in the riser shafts appear to be adequately fire stopped at each floor level, with no apparent visible openings. The fire stopping appeared to be original, possibly provided at the time of construction.
- There was a large opening in one of the riser shafts on Floor 12, which, we are informed, was caused by contractors repairing a problem with the water supply. The door to this shaft was not secured locked shut.
- In a small number of the riser shafts, there are openings in the walls between the flats and the shafts, following works carried out in the flats to install new pipework and services.
- Inspection panels are fitted in the walls between the flats and the riser shafts. It was not possible to

² This fire risk assessment review will not necessarily identify all minor fire stopping issues that might exist within the building. If you become aware of other fire stopping issues, or are concerned about the adequacy of fire stopping, you may wish to consider arranging for an invasive survey by a competent specialist.

confirm whether all panels are adequately fire protected to restrict the passage of fire and smoke from a fire in a flat into the service risers.

- The bathrooms and toilets are provided with small cross-sectional, steel mechanical extract ducts, at high level, that pass into the riser and extend into a common vertical shaft, which discharges at roof level. The extract ducts at roof level are fitted with mechanical fan units. The vents in the bathrooms and toilets are fitted with internal, hinged metal flaps that are designed to close when the fans are not pulling air in from these rooms.
- The kitchens have external opening windows.
- Originally, the flats were fitted with gas-fired, ducted warm air heating systems. The heater units were fitted in the kitchens and were vented into sealed, 'SE-duct' shared vertical flues. These ducts have an open inlet at the base on the amenity deck and are open at roof level. The ducted warm air systems have been removed and replaced with individual central heating systems, incorporating room-sealed, gas-fired boilers that vent directly to an external wall. It was not possible to confirm whether the openings into the common 'SE-duct' flues, from the individual flats, have been adequately fire stopped to restrict the vertical spread of fire and smoke between flats.
- The meter cupboards in the common corridors have services that pass through the floors inside the cupboards. The openings around the services, where these pass through the floors, have, in most risers, been fire stopped using expanding foam. A programme of fire stopping has been commissioned to replace the existing foam around the openings with approved fire-rated materials and to fit fire-resisting collars to provide adequate compartmentation. The above programme of works will also extend to address any openings around services that pass-through compartment floors or walls in the main electrical intake room and other service/plant rooms.
- A cupboard at the base of the staircase was noted to have a hole in the top.
- External wall construction falls outside the scope of the Regulatory Reform (Fire Safety) Order 2005 and it is commonly accepted that the risk of external fire spread does not form part of the fire risk assessment required under the Order. It is generally assumed that, unless there is evidence to the contrary, external wall construction, including any external cladding, would comply with the Building Regulations applicable at the time of construction, or at a later date, involving changes or refurbishment to the external construction, including any changes to external cladding.

- The fire in Shepherds Court on 19th August 2016 did result in external fire spread involving the composite infill panels fitted to the windows. The panels are a composite material, comprising a thin steel outer casing, polystyrene core mounted on plywood, with metallic taped edges. The infill panels fitted to some of the windows in Bush Court are of the same design.
- Following on from this, a decision was taken by LBHF to remove the composite (spandrel) panels and replace them with non-combustible panels. It is understood that this work has been delayed due to the difficulties of identifying suitable replacement panels and the need to seek the approval of the building owner to undertake the works.
- Where panels are replaced, they would need to be of a type that, as a minimum, provide National product performance classification of Class 0 (in respect of surface spread of fire) and with an inner core of “limited combustibility”, as defined in Approved Document B.
- A separate external fire risk assessment exercise was undertaken by CSTA at the request of LBHF in 2019. The purpose of the exercise was to evaluate the potential risk of external spread of fire in high-rise blocks of flats over 18m in height. A risk matrix methodology was adopted to determine a risk profile for each block and assign a priority for the removal of combustible infill (spandrel) panels that could be adopted by LBHF (spreadsheet dated 11th April 2019). LBHF subsequently forwarded a replacement programme, based on the risk matrix, which was assessed and, with two modifications, accepted by CSTA in a letter to LBHF dated 2nd August 2019. The CSTA report identified that the spandrel panels fitted to the four high rise blocks on the Charecroft Estate, which includes Bush Court, should be removed as a priority.

8. Is there reasonable emergency escape lighting³?

Yes No

Comments and deficiencies observed:

Emergency escape lighting is provided throughout the common escape routes, staircase, corridors, and plant and service rooms.

9. Are there adequate fire safety signs and notices?

Yes No

Comments and deficiencies observed:

- ‘FIRE EXIT’ signs are provided in the common escape routes, staircase and corridors.

³ Based on visual inspection only.

- 'FIRE DOOR KEEP SHUT' signs are provided on the doors to the staircase and to meter and service riser cupboards.
- Fire action notices are provided in the communal areas, with information provided to support the 'stay put' policy.
- Signs, detailing the number of each floor, have been provided in the staircase and in the corridors opposite the lifts. However, of minor note, on some floors, the signs have faded.
- A fire and rescue service premises information box is provided in the entrance foyer to the block.

10. Are the means of giving warning of fire adequate⁴?

Yes No

Comments and deficiencies observed:

- A fire detection and alarm system is not provided within the common parts of the block of flats, which is consistent with the design and construction of residential flats of this type.
- However, consideration is being given to the installation of an evacuation system for use by the fire and rescue service, pending the removal of the spandrel panels. The system would incorporate heat detectors and alarm sounders fitted in each flat. The operation of a heat detector in any one flat would trigger an alert signal at the control and indicating panel and remotely alert the security team of a potential incident. The alarm signal would be automatically transferred to an alarm receiving centre, which would pass the call onto the fire and rescue service. The audible alarm would not be configured to sound automatically. However, the fire and rescue service would have the ability to manually activate the sounders fitted in the flats, at the panel, to initiate a floor-by-floor evacuation, or a full evacuation of the block in the event of a fire. If, following discussions and agreement with LFB, such an evacuation system is installed, the role of fire wardens, introduced as part of interim measures pending the removal of the spandrel panels, could be reviewed.
- Although outside the scope of the Regulatory Reform (Fire Safety) Order 2005, it is important that all flats are provided with adequate smoke/heat alarms.
- It is understood that LBHF has liaised with its tenants to ensure the flats are provided with a minimum of one working smoke alarm. Ideally, smoke alarms in each flat should be provided in accordance with the recommendations of BS 5839-6 for a Grade D1, Category LD3 system, incorporating mains-wired alarms with a battery back-up or other form of standby supply. Consideration should also be given to fitting linked heat alarms in kitchens/lounges, where not already provided, in accordance with the recommendations for a Category LD2 system.

11. Is the provision of fire extinguishing appliances adequate?

Yes No

⁴ Based on visual inspection only.

Comments and deficiencies observed:

- There are no fire extinguishers provided in the common parts, which is consistent with the general approach typically taken within blocks of flats of this type.
- Extinguishers have been provided in plant and service rooms.

12. Comments on other fixed fire protection systems:

- A dry rising main is fitted to the block and outlets are provided on each floor level within the common corridors.
- The fireman's lifts are the original lifts installed at the time of construction and are fitted with a fire control switch that returns the lifts to the ground floor on activation of the switch. It is understood that one of the existing lifts will be upgraded to meet, as far as practically and technically possible, the recommendations for a modern fire-fighting lift in accordance with the recommendations of BS 9999 and the requirements of BS EN 81-72. We are advised that these works are due to commence in 2020.
- Permanently open smoke vents are fitted in the corridors to the flats and a vertical smoke shaft is fitted to the single staircase.

MANAGEMENT OF FIRE SAFETY

13. Significant changes in management of fire safety since the time of the fire risk assessment:

None.

14. Are arrangements for management of fire safety adequate?

Yes No

Comments and deficiencies observed:

LBHF has a generic fire safety policy document that incorporates fire safety arrangements in purpose-built blocks of flats.

15. Are fire procedures adequate?

Yes No

Comments and deficiencies observed:

- A 'stay put' evacuation policy is considered appropriate.
- In the event of a fire within an individual flat, the occupants would be expected to alert others in the flat, make their own way out of the building using the common escape routes, and summon the fire and rescue service.
- Consistent with residential flats of this type, all other occupants of flats not directly affected by a fire should be able to remain in their flats in relative safety, unless, subsequently, their flat becomes affected, or until they are directed to evacuate the building by the fire and rescue service.
- This does not imply that residents not directly affected, who become aware of a fire, should not evacuate if they are in any doubt about their safety and wish to leave, and it is safe for them to do so.
- It is understood that LBHF have provided tenants and leaseholders with fire safety advice and information on the action to take in the event of a fire.
- If an evacuation system, for use by the fire and rescue service, is installed, the existing fire procedures would need to be reviewed and the fire safety advice provided to residents modified accordingly.

16. Are the arrangements for staff training and fire drills adequate?

Yes No

Comments and deficiencies observed:

- There are no staff or contractors permanently employed on the premises.

- However, the fire wardens have received external training to support their role in undertaking fire safety inspections of the common areas, as part of the agreed interim measures. This training included the identification of fire hazards and risks in the common areas, the inspection of fire-resisting doors and the action to take on discovering a fire.

17. Are the arrangements for testing and maintenance of fire protection systems and equipment adequate?

Yes No

Comments and deficiencies observed:

- There is no common fire detection and alarm system provided in the residential block.
- Residents are responsible for testing their own smoke alarms on a regular basis.
- Monthly and annual tests of the emergency escape lighting are carried out by an external contractor.
- The date of the last annual test was 16th September 2019, as confirmed by records forwarded to us following the site visit.

18. Are there adequate records of testing, maintenance, training and drills?

Yes No

Comments and deficiencies observed:

- The rising fire main is subject to annual inspection and test by an external contractor.
- We are informed that the lifts are subject to relevant inspections and test. However, there were no records available to audit.
- It is understood that the lightning protection system is subject to annual inspection and test by an external contractor. However, there were no records available to audit.

FIRE RISK ASSESSMENT

On the basis of the criteria set out in the original fire risk assessment, it is considered that the current risk to life from fire at these premises is:

Trivial Tolerable Moderate Substantial Intolerable

Comments:

- Although the overall design of the means of escape and standard of protection to escape routes was considered reasonable, there were several issues identified that need to be addressed as a priority. The main risk remains the potential for external fire spread with the external composite spandrel panels fitted to the windows on some elevations. The original panel replacement programme, mentioned in previous fire risk assessments, has been delayed due, in part, to the identification of suitable replacement panels that comply with current Building Regulations and the receipt of the necessary approvals to undertake the works from the building owner.
- There are other issues identified in the assessment that, in our view, present a potential risk to life. Several of these were identified in our previous fire risk assessment reports, carried out in 2017 and 2018, and have either yet to be completed or we have not received confirmation that they have been completed. These include the following:
 - Some flat entrance doors are not fitted with self-closing devices.
 - Some flat entrance doors do not appear to be fire-resisting, and several are damaged.
 - Some doors to the escape staircase are not closing effectively and are a poor fit.
 - Some access doors to service risers are not adequately maintained fixed shut.
- At the time of this review it is understood that the contractors undertaking the replacement door programme for the doors to the escape stairs and the flat entrance doors are on site fitting FD60S doors.
- Notwithstanding the classification of the building as a 'moderate risk', CSTA considers that:
 - Overall, measures to manage fire hazards and control risk in the block are considered reasonable, as are general fire protection and management measures.
 - Given that there are reasonable levels of compartmentation and means of escape provided in the block, that external composite spandrel panels to windows are not on all elevations of the block, that interim measures remain in place, that LBHF have introduced a 'Fire Safety Plus Programme' and that assurances that priority actions from the risk assessment will be given priority over other works, CSTA are of the opinion that it is appropriate to continue to occupy the premises while the improvement works are completed.

ACTION PLAN

Have all previous recommendations been satisfactorily addressed?

Yes

No

† Priorities:

1. **Breach of legislation, having the potential for serious injury to relevant persons.**
2. **Breach of legislation, but not considered to constitute a serious threat to relevant persons.**
3. **Necessary for best practice, but existing situation unlikely to constitute a serious threat to relevant persons.**

†† Suggested Timescale:

- A. **Immediately or as soon as reasonably practicable. In the case of items that require capital work, steps should be taken as soon as reasonably practicable to progress the work.**
- B. **Short term. In the case of items that require capital expenditure, steps should be taken in the short term to progress the work. (Suggested timeframe, within 3 months.)**
- C. **Medium term. (Suggested timeframe, within 6 months.)**
- D. **Long term (e.g. at time of upgrading or refurbishment).**

The full titles of British Standards and other references are given on the last pages of this report.

Item	Requirement	† Priority	†† Timescale
1.	<p>An electrical supply cable has been run from the meter cupboard on 14th floor in the common corridor into Flat 70. The section of cable in the corridor has been enclosed in a plastic flexible conduit. It is not clear if this work has been carried out in accordance with current IET wiring regulations. A similar electrical supply from the meter cupboard on another floor has also been run within the common corridor into one of the flats. The section of cable in the corridor has, however, been protected in a metal armour sheave. Again, it is not clear if this work has been carried out in accordance with current IET wiring regulations. Confirmation should be sought that both the above electrical supplies have been inspected by a competent electrician and, where necessary, that any remedial works have been carried out. <i>(This is an outstanding item from the previous report.)</i></p>	2	A
2.	<p>The small cupboard at the base of the staircase contained combustible materials and waste and the top of the cupboard, which is accessible from the staircase, is damaged, which could allow residents to discard cigarettes or additional waste into this area. The top of the cupboard should be repaired, and all combustible materials and waste should be removed from the cupboard. <i>(This is an outstanding item from the previous report.)</i></p>	2	B
3.	<p>There is an external, high-level isolation valve fitted to the main gas supply. The wheel to the valve has been removed, presumably to prevent unauthorized persons from tampering with the supply and/or in accordance with gas safety regulations. However, this would prevent or delay the fire and rescue service from isolating the supply to the block in the event of a serious fire. Contact should be made with the gas supplier and the fire and rescue service, to ensure that suitable arrangements are put in place to enable the gas supply to be isolated in the event of a fire and emergency. <i>(This is an outstanding item from the previous report.)</i></p>	3	B
4.	<p>The central core staircase is fitted with a natural smoke shaft, which vents to open air at roof level. On each of the other residential floor levels, metal access doors have been fitted to the smoke shaft, presumably to allow the fire and rescue service to vent smoke from different floor levels in the staircase. Discussions should be held with the fire and rescue service to determine whether they would need to open any, or all, of these doors in the event of a fire. If required by the fire and rescue service, the doors should be inspected to ensure that they are suitably secured and are fitted with locking mechanisms that can be opened by the fire and rescue service on all relevant floors. Consideration should also be given to fitting additional security measures to the shaft, to prevent persons from accidentally falling into the shaft when any of the access doors are open. <i>(This is an outstanding item from the previous report.)</i></p>	2	B

Item	Requirement	† Priority	†† Timescale
5.	It was not possible to confirm if all flat entrance doors are fitted with internal self-closing devices. If self-closing devices are not already fitted to these doors, as a matter of priority, the doors should be fitted with suitable self-closing devices. Ideally, the self-closing devices should be fitted externally. <i>(This is an outstanding item from the previous report.)</i>	2	A
6.	It was not possible to confirm, from a visual inspection, whether the entrance doors to Flats 10, 12, 33, 44, 67, 68 and 74 would provide, as a minimum, a notional 30 minutes' fire resistance. These doors should be inspected by a competent person and, if it is considered that the doors would not provide 30 minutes' fire resistance, the doors should be replaced with new FD60S doors as a priority, outside the flat entrance door replacement programme due to begin in 2020. <i>(This is an outstanding item from the previous report.)</i>	2	A
7.	The entrance door to Flat 1 appears to be a composite door. The door should be inspected and, if the fire resistance of the door cannot be confirmed as 30 minutes' fire resisting, then the door should be replaced with a new FD60S door as a priority outside the flat entrance door replacement programme. <i>(This is an outstanding item from the previous report.)</i>	2	A
8.	The entrance door to Flat 81 has excessive gaps at the top and sides of the door and the frame. Action should be taken to reduce the gaps between the door and the frame to not more than 4mm. <i>(This is an outstanding item from the previous report.)</i>	2	A
9.	The entrance door to Flat 101 has been damaged and should be repaired or, alternatively, replaced with a new FD60S door and/or frame, as a matter of priority, outside of the door replacement programme. <i>(This is an outstanding item from the previous report.)</i>	2	A
10.	The missing letter plate to the entrance door to Flat 95 should be replaced. <i>(This is an outstanding item from the previous report.)</i>	2	A
11.	Several of the fire-resisting doors to the staircase are not closing effectively. The doors to the staircase on all floors should be inspected, and action taken to ensure that the doors close effectively under the action of the self-closing devices fitted, that the doors remain a good fit within their frames and that intumescent strips and smoke seals are in place and in good condition. <i>(This is an outstanding item from the previous report.)</i>	2	A

Item	Requirement	† Priority	†† Timescale
12.	<p>Several access doors to the service risers to the flats in the common corridors were open at the time of the survey. In addition, some of the locks fitted to the doors were broken and, on several floors, the doors to risers had been removed. All service riser access doors should be inspected to ensure that the doors are in place, remain a good fit and are kept locked shut. Missing doors should be replaced.</p> <p>It is understood that the residents of the flats were given individual access keys to these doors and LBHF does not have duplicate keys. Consideration should be given to changing the access arrangements to these service risers, to prevent the doors from being left open and/or damaged by residents. A lock fitted with a standard, budget key, common to all access doors, may be an option.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	A
13.	<p>It was not possible to confirm whether the enclosed gas supply pipework in the common corridors is adequately fire stopped where the pipework passes through the compartment floors. The openings in the floors should be inspected and, where necessary, infilled with materials providing a fire resistance of 60 minutes.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	C
14.	<p>The large opening in the riser shaft on the 12th floor should be repaired and the door to the riser shaft should be kept locked shut.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	B
15.	<p>In a small number of the service riser shafts to the flats, there are openings in the walls between the flats and the shafts, following works carried out in the flats to install new pipework and services. All riser shafts should be inspected, and any openings in walls, separating the flats from the riser shafts, should be infilled with fire-resisting materials to provide a minimum of 30 minutes' fire resistance.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	C
16.	<p>Inspection panels are fitted in the walls between the flats and the service riser shafts, and it was not possible to confirm whether all panels are adequately fire protected to restrict the passage of fire and smoke from a fire in a flat from passing into the service risers. The panels between the flats and the service risers should be inspected, and, where necessary, upgraded or replaced with materials affording a minimum fire resistance of 30 minutes. Ideally the panels within the flats should be fixed shut.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	C

Item	Requirement	† Priority	†† Timescale
17.	<p>The bathrooms and toilets within the flats are provided with mechanical extract ducts that extend vertically within the service riser and which discharge at roof level. There is potential for fire and smoke to spread between flats via these open ducts. Although this situation is not considered to present a significant risk, it is recommended that, in the long term, these extract ducts within the flats are fitted with intumescent grilles, to restrict the spread of fire and hot gases.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	C
18.	<p>It was not possible to confirm whether the openings into the original ‘SE-duct’ gas flues in the kitchens of individual flats are adequately fire stopped to restrict the vertical spread of fire and smoke, when the original gas, warm air heaters were removed. Confirmation should be sought that all openings into the vertical flues from flats are adequately fire stopped with materials providing 60 minutes’ fire resistance. If not, remedial works should be undertaken to ensure adequate fire stopping is provided.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	C
19.	<p>Confirmation should be sought that the dry rising fire main is subject to an annual pressure test. If not, arrangements should be made to test the rising main.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	C
20.	<p>Confirmation should be sought that the fireman’s lifts are subject to relevant inspections and test, which should include weekly checks on the operation of the fire control switch fitted to the lifts for the use of the fire and rescue service. If this is not the case, periodic inspections and tests should be carried out in accordance with the recommendations of BS 9999, and records maintained for audit purposes.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	2	A
21.	<p>Confirmation should be sought that the lightning protection system is subject to annual inspection and test. If this is not the case, the system should be inspected and tested in accordance with the recommendations of BS EN 62305, and records maintained for audit purposes.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	3	C
22.	<p>It is recommended that information be given to residents on fire safety and the action they should take in the event of a fire. Residents should be reminded to test their smoke alarms on a regular basis, close internal doors within flats at night, and not to store combustible materials or items within the common staircases.</p> <p><i>(This is an outstanding item from the previous report.)</i></p>	—	B

Item	Requirement	† Priority	†† Timescale
23.	<p><u>Smoke/heat alarms within flats</u></p> <p>The provision of smoke/heat alarms in flats is outside the scope of the Regulatory Reform (Fire Safety) Order 2005. As this is a Type 1 fire risk assessment, we have not considered the safety of residents in the event of a fire in their own flat, which would require a Type 3 fire risk assessment. However, we would draw your attention to the importance of smoke/heat alarms within flats to alert residents in the event of a fire in their own flat; residents should be reminded to test their smoke/heat alarms on a monthly basis to ensure they are in working order. The provision of smoke alarms within flats is a legal requirement imposed on landlords of private sector rented flats under the Smoke and Carbon Monoxide Alarm (England) Regulations 2015. Guidance on the type and coverage of smoke/heat alarms in flats can be found in BS 5839-6.</p>		

REFERENCES

[Insert References pages here]

Guidance in Support of Fire Safety Legislation

England and Wales

HM Government Guides to Fire Safety Risk Assessment, DCLG:

- Offices and Shops.
- Factories and Warehouses.
- Sleeping Accommodation.
- Residential Care Premises.
- Educational Premises.
- Small and Medium Places of Assembly.
- Large Places of Assembly.
- Theatres, Cinemas and Similar Premises.
- Open Air Events and Venues.
- Healthcare Premises.
- Animal Premises and Stables.
- Transport Premises and Facilities.
- Means of Escape for Disabled People.

Scotland

Scottish Government: Practical Fire Safety Guidance:

- Existing Non-Residential Premises.
- Existing Premises with Sleeping Accommodation.
- Care Homes.
- Healthcare Premises.
- The Evacuation of Disabled Persons from Buildings.

Northern Ireland

DHSSPS Sector Specific Guidance Documents:

- Sleeping Accommodation.
- Offices and Shops.
- Healthcare Premises.
- Theatres, Cinemas and Similar Premises.
- Small and Medium Places of Assembly.
- Open Air Events.

Guidance in Support of Building Regulations

England and Wales

Approved Document B Vol 2, 2006 edition (as amended).

Scotland

Technical Handbook 2019, Non-Domestic – Fire.

Northern Ireland

Technical Booklet E 2012.

Fire Safety Design and Management

BS 9991:2015. *(Incorporating corrigendum No. 1.) 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.*

Fire Detection and Fire Alarm Systems

BS 5839-1:2017. *Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises.*

BS 5839-6:2019. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises.*

BS 5839-8:2013. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation, commissioning and maintenance of voice alarm systems.*

BS 5839-9:2011. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems.*

Fire Extinguishing Appliances

BS 5306-1: 2006. *Code of practice for fire extinguishing installations and equipment on premises - hose reels and foam inlets.*

BS 5306-3:2017. *Fire extinguishing installations and equipment on premises. Commissioning and maintenance of portable fire extinguishers. Code of practice.*

BS 5306-8:2012. *Fire extinguishing installations and equipment on premises - Selection and positioning of portable fire extinguishers - Code of practice.*

BS EN 3. *Portable fire extinguishers.*

BS EN 671-3:2009. *Fixed fire-fighting systems. Hose systems. Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose.*

BS EN 1869:2019. *Fire blankets.*

Emergency Escape Lighting

BS 5266-1:2016. *Emergency lighting - Code of practice for the emergency lighting of premises.*

BS 5266-8:2004. (BS EN 50172: 2004). *Emergency escape lighting systems.*

BS EN 1838:2013. *Lighting applications – Emergency lighting.*

Fire Safety Signs

BS 5499-4:2013. *Safety signs. Code of practice for escape route signing.*

BS ISO 3864-1:2011. *Graphical symbols. Safety colours and safety signs. Design principles for safety signs and safety markings.*

BS EN ISO 7010:2020. *Graphical symbols. Safety colours and safety signs. Registered safety signs.*

BS 5499-10:2014. *Guidance for the selection and use of safety signs and fire safety notices.*

Fixed Fire Extinguishing Systems and Equipment

BS EN 12845:2015+A1 2019. *Fixed fire-fighting systems. Automatic sprinkler systems. Design, installation and maintenance.*

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

Lightning

BS EN 62305-1:2011. *Protection against lightning. General principles.*

BS EN 62305-2:2012. *Protection against lightning. Risk management.*

BS EN 62305-3:2011. *Protection against lightning. Physical damage to structures and life hazard.*

BS EN 62305-4:2011. *Protection against lightning. Electrical and electronic systems within structures.*

Miscellaneous

BS 7176:2007+A1: 2011. *Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites.*

BS 7273-4:2015. *Code of practice for the operation of fire protection measures. Actuation of release mechanisms for doors.*

BS 7671:2018/A1:2020. *Requirements for Electrical Installations. IET Wiring Regulations. Eighteenth Edition.*

BS 8899:2016. *Improvement of fire-fighting and evacuation provisions in existing lifts. Code of practice.*

PAS 79:2012. *Fire risk assessment - Guidance and a recommended methodology.*

Published Guidance on Control of Contractors

Standard Fire Precautions for Contractors Engaged on Crown Works, Department of Environment, HMSO.

Fire Prevention on Construction Sites. Fire Protection Association.

Fire Safety in Construction. HSG168 (2nd edition) HSE.

PLANS

There are no plans included in this report.

PHOTOGRAPHS

There are no photographs included in this report.