



Frobisher Crescent (Residential Levels)

The City of London Corporation

External Fire Risk Assessment

**Prepared by:
Turner & Townsend
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Site information

Building Name Frobisher Crescent
Building Ref
Division Department of Community & Children's Services.
Estate Barbican Estate
Property Name Frobisher Crescent, Levels 7,8 & 9.
Property Ref

Name of the person responsible for fire safety (Premises Controller) on site: -

Name of the person: Estates Supervisor Department name: DCCS

Telephone Number: Mobile:

Email address: estateservices@cityoflondon.gov.uk

Name of the person responsible for liaisons on fire safety matter with third party:

Name of the person: - Estates Supervisor Department name DCCS

Telephone Mobile:

Email address: estateservices@cityoflondon.gov.uk

Person responsible for arranging corrective actions (Competent art 13 RRO):-

**Name of person- Assistant Director, Housing and Barbican Department
name DCCS**

Telephone Mobile:

Email address: housingfiresafety@cityoflondon.gov.uk

Event planner for the site when applicable:-

Direct contact details: - Department name

Office Mobile:

Email address:

Assessor details

**Name of the person: - Paul Boughton
Townsend**

Department name: Turner &

Telephone:

Mobile:

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Date of the assessment : 14.07.2022
Date of first draft reviewed : 30/10/2022
Date when finalised : 02/11/2022
Date sent to premises controller: : 04/11/2022
Date of next assessment : 15/07/2022

Report Signed by Assessor

Signature: *Paul Boughton*

Print Name: Paul Boughton

Date: 04/11/2022

Name of Assessors reviewer:

Printed Name: Russell Peacey

Signature of Assessor reviewer

Signature: *Russell Peacey*

Date of Review

Date: 04/11/2022

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Minor amendment history

Details of minor amendment history between detailed full assessment intervals, carried out. (Attached to rear of the main assessment)

Date of assessment	Department Assessor name	Brief details	Department Manager responsible for actioning

Preamble

This Fire Risk Assessment has been prepared to comply with the requirements of the Articles of the Regulatory Reform (Fire Safety) Order 2005.

The assessment process has been developed to meet the requirements of the City of London (CoL).

This Fire Risk Assessment document reflects the significant hazards associated with the operation of this site and identifies suitable controls to minimise risks to health and safety which need to be actioned by the CoL person responsible for undertaking corrective actions.

Executive Summary

The building has been rated as a moderate risk. This is because the fire stopping/compartimentation works in the communal area and between the flats and the common area have not yet been completed.

Also, the east side of the block, on all residential floors, some of the flats are accessed from a dead-end corridor with a travel distance well in excess of 7.5 m. There does not appear to be any justification provided in the original fire strategy as to why this increased travel distance and the lack of smoke ventilation along the corridor is acceptable.

Overall risk assessment

The overall risk assessment of the building is a **Moderate Risk**.

Overall comment on the Risk Assessment of health and safety. The health and safety arrangements of site were considered appropriate. The site appears to be well managed.

Significant General Safety Issues – None noted.

Survey Methodology

Site information, Specific Site Survey Information and the responses to the Pre-Survey Questionnaire were obtained by email. The response was obtained from David Blane.

A site visit was carried out by Paul Boughton on the 14.07.2022 to undertake a physical survey of the building.

All means of escape were walked to check their availability.

During the initial visit, flat entrance doors were inspected externally to assess their performance, although this did not amount to a full and detailed inspection of the doors and no performance guarantee can be given.

Further checks of a sample of at least 10% of the flat entrance doors will be conducted as part the Type 3 assessment that will be undertaken of the building.

Compartmentation was assessed as far as it was reasonably practicable without carrying out an intrusive survey.

Note – this assessment only covers the residential areas of Frobisher Crescent and there was no access to any plant rooms.

Relevant documentation was inspected to check compliance with recommended testing

Further information was obtained by informal questioning of staff where necessary. This included the provision of a Fire Strategy document (Scott Wilson Rev 0 18th February 2010).

The Regulatory Reform (Fire Safety) Order 2005 does not require the detailed fire safety provisions of an existing building to comply with any particular standard in order to achieve a satisfactory fire risk assessment outcome. Rather, the Order places a duty on the responsible person to take such general fire precautions as will ensure, so far as reasonably practicable, the safety of his employees and relevant persons who are not his

employees.

However, it is good practice to adopt a recognized standard or code of practice to act as a benchmark against which fire precautions should be assessed*.

This particular fire risk assessment made use of the following publications when assessing the suitability of general fire precautions:

- Local Government Association, Fire Safety in Purpose Built Blocks of Flats guidance.
- Approved Document B Volume 1 Dwellings 2019 ed. Incorporating 2020 amendments.
- BS 9991:2015, Fire safety in the design, management and use of residential buildings. Code of practice.
- CP3 Chapter IV Part 1 1971

BS 5839 Part 6:2019, Code of Practice for the Design, Installation, Commissioning and Maintenance of Fire Detection and Fire Alarm Systems in Domestic Premises

City of London Housing residential building fire safety policy.

*Particular care should be exercised when using a design guide for new buildings (such as British Standard 9991 or 9999) as a benchmark for the fire safety of an existing building.

Specific Site Survey Information

Is there evidence on site that fire deficiencies/ faults are addressed in a timely manner?	Yes – no significant faults identified.
Emergency lighting units are charging (diodes normally green or red are illuminated).	No Much of the emergency lighting in the building is provided by “Standby Lighting” (as defined by BS5266 Part 1). e.g. within the stairways. with an alternative power supply provide by a generator. It was not possible to confirm the full locations and adequacy of these installations as part of the fire risk assessment survey.

	<p>It is understood that CoL are commissioning an emergency lighting survey.</p> <p>Accessed from the North Stairwell there is no EML in the lobby to the smoke shaft. As the manual openable smoke shaft is accessed directly from this lobby, emergency lighting should be present to assist fire fighters when opening the smoke vents. This should be considered as part of the CoL Emergency Lighting Survey.</p> <p>See action 1</p>
<p>Escape routes not blocked & clearly marked.</p>	<p>CoL has confirmed that the management strategy for the secondary means of escape is as follows - <i>All 9 miles of balcony are formally inspected once per year by the House Officer team.</i></p> <p><i>Obstructions are labelled with an orange sticker and residents are given a week to remedy. Items if still present, are then removed. This inspection also reports any faults found.</i></p> <p><i>Additionally, the window cleaning contractors clean all windows every 6 weeks. They are tasked with fault and obstruction reporting as well.</i></p> <p><i>In the resident bulletin</i></p>

	<i>CoL regularly run fire safety messages, these include fault reporting and the importance of obstruction free balconies.</i>
Fire doors with electrical hold open devices are closed by manual operation at 2200hrs (on final walk round in sleeping accommodation or earlier depending on site specifications).	N/A
Are there any restrictions from Building Control, Planning & Heritage that could have an impact of the premises?	Yes - The building is Grade II* listed. It is understood that CoL has commissioned architectural firm to complete a listed building application in relation to planned fire safety works.
Are Salvage & Business continuity plans up to date and suitable and sufficient.	Yes
Is there any neighboring fire risk that could significantly impact on the future fire safety of the building?	None known.
During the inspection did you identified any cladding which was not already provided to you from the client documentation?	Yes. The building has timber sun screens arranged vertically over the rear elevation. No information has been provided for these. Therefore, a PAS9980 Fire Risk Assessment External Wall (FRAEW) is considered necessary. See action 15
Are the onsite PEEPs and GEEPs templates adequate?	Under current guidance relating to Purpose Built Blocks of Flats with a Stay Put strategy there has been no requirement to complete PEEPs in this type of premises. A recent government

	<p>consultation published in May 2022 supports this.</p> <p>It is CoL policy that they write to all residents, and where residents identify themselves as persons who may require assistance in an evacuation, they are generally recorded on a Vulnerability List (see below).</p>
<p>Where there any occupant/visitors identified who could be incapacitated and unable to evacuate safely and were not covered under by a PEEPs and GEEPs?</p>	<p>There were no vulnerability lists found in the Premises Information Boxes (PIBs). It is understood that CoL policy regarding PIBs, and their contents including Vulnerability Lists is currently under review and CoL are monitoring the ongoing consultations / guidance regarding PEEPs and “Emergency Evacuation Information Sharing”.</p>
<p>Are there inductions for staff and contractors?</p>	<p>It is understood that CoL complete inductions for staff and contractors.</p>
<p>Is there arrangement in place for the safe evacuations of visitors?</p>	<p>N/A for a purpose-built residential block of flats.</p>
<p>Is there a Building Fire Strategy and a Fire Management Plan of the building?</p>	<p>A fire strategy for the building is in place however some areas of the building do not appear to be in compliance with the relevant fire safety design guidance.</p> <p>See actions 12, 13 & 14</p>

<p>During the inspection did you identified any current working practices that could be improved to reduce the fire risk to the property, e.g., removing sources of ignition or reduce the amount of fuel stored?</p>	<p>Housekeeping and storage was considered satisfactory. No unsafe practices noted.</p>
<p>Is there evidence of up-to-date electrical PAT testing in place?</p>	<p>N/A, no portable electrical appliances identified.</p>
<p>Is the fire detection & warning system type adequate for the building use?</p>	<p>The building is a purpose-built block of flats with a stay put strategy so is not required to have a communal fire alarm system in the residential areas.</p> <p>The fire detection system in the common areas of the residential block is understood to only operate the hold back devices to the corridor doors.</p> <p>Fire alarm systems within the flats are covered by the Type 3 fire risk assessment.</p>
<p>Are the fire action notices compliant provide the reader with relevant instruction and position correctly positioned?</p>	<p>The Fire Action Notices do not describe the Stay Put strategy.</p> <p>See action 3</p>
<p>Are there adequate sign to maintain the exit routes e.g. keep clear, floor marking etc.?</p>	<p>Some fire doors are not signed e.g. Fire Door Keep Closed, or Fire Door Keep Locked, as applicable. It is understood that this is being address by the estate signage project.</p> <p>Floor level and flat number signs are not displayed in the</p>

	<p>stairways, as will be required by current legislation – the Fire Safety (England) Regulations 2022.</p> <p>See action 4</p>
<p>Are the existing active Fire Protection Measures sufficient for the buildings use</p>	<p>No</p> <p>Current systems include the Emergency Lighting (covered above), OV's at the heads of the central stair.</p> <p>Smoke ventilation in the building does not appear to meet current fire safety guidance</p> <p>See actions 12, 13 & 14</p>
<p>Is there evidence on site of regularly fire door inspections?</p>	<p>It is understood that periodic checks are made of the escape doors from the balconies.</p> <p>It's also understood that the stairway and stairway lobby doors are periodically inspected and where necessary repairs undertaken.</p> <p>It is understood that there is no specific planned preventative maintenance regime for the glazed privacy doors along the linking balconies.</p> <p>See Action 5</p> <p>Flat Entrance Door Inspections</p> <p>It was not confirmed how</p>

	<p>flat entrance doors are inspected. No records were provided.</p> <p>See Action 6</p>
<p>Having checked 10% of fire Door shutters and curtain were any trends identified that could impact the safety of the building (Please list doors and curtain checked)</p>	<p>The flat entrance doors appear to be FD30S self-closing fire doors.</p>
<p>Is there evidence of regularly local checks and annual testing by competent?</p>	<p>A PPM schedule was provided, to demonstrate that fire safety systems other than the manually openable vents to the smoke shafts are subject to a suitable maintenance regime</p>
<p>Has the site identified emergency responders' routes and fire hydrants and documented these?</p>	<p>Hydrants and Rising Mains are identified on site plans located in the PIB.</p>
<p>Are there any known neighbouring activities that could jeopardy a prompt arrival of the emergency responders?</p>	<p>None.</p>
<p>Is there evidence of anti-social behaviour at the site?</p>	<p>None.</p>
<p>Are there any seasonal activities undertaken by the site or naturally occurring events which could affect the fire risk profile of the site e.g., bush fires etc?</p>	<p>None.</p>
<p>Are there any renewable energy source at the site that cannot be readily isolated at source in the event of a fire?</p>	<p>None.</p>
<p>Are back up generation tested to ensure they provided adequate supplies to fire safety devices?</p>	<p>Information provided indicates that the backup generator is under an appropriate maintenance regime.</p>
<p>Is the premises controller aware of the Col guidance on Hot Works?</p>	<p>Understood that contractors are responsible for</p>

	completing a hot works permit.
Are they evacuation procedures for all time the building is in used e.g., out of hours procedures for weekend?	N/A – as a Stay Put strategy.
Upon review of on-site documentations, how long did it take the building to evacuate?	N/A – Stay Put strategy.
Are security and arrangements adequate to deter deliberate fire attempt (e.g. terrorist and arson) in an event?	Yes – the building has secure entrances. External areas are kept free of storage.
Is large lithium-ion battery charged on site?	The car park has electric vehicle charging points. These are outside the scope of this FRA.
When was thermographic inspection last undertaken at site?	None completed.
Has the property had any unintentional fires over the last two years if so, please provide details?	None known.
Were there any significant gaps identified in the compartments (please list details)?	At the time of the assessment compartmentation/fire stopping works between the flats and the common area were being undertaken which meant sections of the internal corridor ceiling and walls had been removed. See action 2
How are contractors fire risk controlled locally?	Understood that contractors are responsible for completing a hot works permit.
Is there up to date maintenance records for all fire systems on site?	To review the planned preventative maintenance (PPM) records, a desktop audit was completed with help from the Barbican Estates Property

Services Team Manager.

This involved checking the full records for a sample of buildings, and also random checks of several individual record types.

The PPM audit maintenance checked records for the following fire safety systems (as relevant to this building): Fire Alarm, Dry Rising Mains, Fire Extinguishers, Back-up Generators, Lightning Protection, Emergency Lighting, Fixed Electrical System, Portable Appliances, Smoke Ventilation, Gas, Firefighting Lifts.

The PPM audit found Barbican Estates were able to demonstrate suitable maintenance regimes for the majority of systems, but also identified the following concerns:

- Fire alarm function tests are currently planned at 2-week intervals but sometimes the tests are not being completed due to resourcing issues. It is understood that this is under review and that COL will require a weekly testing regime.
- No 6-month Visual

	<p>Inspection regime for Rising Mains</p> <ul style="list-style-type: none"> • Several months delay in obtaining certificates for Annual Dry Riser Test, Lightning Protection, and sprinkler systems. • It is understood that approximately 50% of the Barbicans fixed electrical systems (Distribution Boards etc) are considered “unsatisfactory”, and / or have not been electrically inspected for at least 5 years. It is understood that non-compliant systems are being rectified on an ongoing basis but that no formal remedial works programme is in place. <p>No PPM regime for most smoke control systems, i.e. Openable Vents (OVs) and Permanently Open Vents (POV) / smoke shafts. This is also covered by a separate action.</p> <p>See Action 9.</p>
Is the fire logbook in accordance with col guidance policy	No logbook seen.

<p>Additional question for Housing</p> <p>Is there evidence that when a new tenancy is commenced the operation of the smoke alarm is tested?</p> <p>The evidence should show:</p> <ul style="list-style-type: none"> • Date and time of test • Location of detector/s • Outcome of test <p>Name of person undertaking the test</p>	<p>Not at present but should be included in the void checks.</p> <p>Will be completed as part of a Type 3 assessment.</p>
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Description of site

Frobisher Crescent forms part of the Barbican Centre and has a total of 10 storeys plus basement carparking. It links to the Barbican Centre itself on its east side, and some of the Barbican Centre facilities are underneath and form part of Frobisher Crescent. The crescent also straddles the two levels or podia on the north and south of the Barbican Estate.

The residential accommodation which is assessed in this fire risk assessment located on levels 7,8 and 9 and comprises a total of 69 studio, 1-bedroom, 2-bedroom and 3-bedroom apartments over the 3 floors.

The building is of concrete frame/concrete floor construction with brick/block infill.

Flats are accessed from internal corridors on the 7th and 9th level. On the 8th floor most flats are accessed from an external approach balcony.

All floors are accessible via three protected stair cores which also contain passenger lifts.

The flats also have rear balconies which are provide with timber screens for shading. The rear balconies are also understood to provide a secondary means of escape from the flats.

Means of Escape:

Where the flats open into the internal corridor or along the open balcony (8th floor) the principal means of escape from the flats is via the internal corridor or balcony which has two directions of escape.

The internal corridors with two directions of escape are subdivided at multiple points which reduces the travel distances from a flat to a separate fire compartment to approximately 9m meters.

On all floors on the east side of the building there is an internal dead-end corridor from which the flats only have a single direction of escape, and the travel distance is significantly more than 7.5m (approximately 24m on the 7th floor). On the 7th and 9th floor the dead-end corridor is subdivided at approximately 8m intervals. However, none of the compartments which are created are provided with smoke ventilation. **See actions 13 and 14.**

It is understood that all flats also have secondary means of escape via linking balconies that provide access back into the two escape stairways on the west and east ends of the block.

Use of Site

Levels 7, 8 and 9 of the building have been designed a purpose-built general needs residential block of flats.

The levels below the residential accommodation are occupied by the Barbican Centre and are classified as commercial accommodation. This assessment does not consider any of the commercial accommodation with the exception of the staircases which also form the means of escape from the residential accommodation above.

Passive Fire Precautions

Flats entrance doors

Note - Flat entrance doors were not checked in the open position as part of the type 1 FRA.

The flat entrance doors appear to be of a consistent type. The doors based on a visual assessment the entrance doors appear to be an FD30S fire door fitted with a self-closing device. The previous fire risk assessment had not identified any deficiencies with the flat entrance doors.

Construction of flats

The walls between the internally accessed flats and protected means of escape are of light weight construction with some glazed elements. If designed and constructed correctly the construction would be expected to provide at least a notional 60-minute fire resistance. It is understood that since the 2018 fire risk assessments CoL have commissioned intrusive surveys of the communal walls to the flats which identified some deficiencies in the levels of compartmentation/fire stopping and as a result there is a current program of fire stopping works being undertaken to address these issues.

Protection of stairways.

In the South Stair, flats exit directly into the common escape stairway. This does not meet current fire safety guidance as the building is more than 3 storeys above ground level. To reduce the risk of fire affecting the common stairway CoL are proposing to replace the existing notional fire doors with FD60S self-closing fire door sets.

The fire doors / partitions protecting the firefighting stair in the North Stair do not comply with current standards (which require 120 minute partitions with FD60S doors). The stair is lobby protected by two sets of doors which are at best notional fire doors and partitions which are fitted with Georgian wired glass side panels. Several of these door sets have

excessive gaps between the meeting edges.

The also include access to riser cupboard doors which appear to be notional asbestos backed doors.

It is understood that City of London will be replacing all the communal fire doors, including riser doors, with certified fire door sets.

Smoke Ventilation:

On the 7th and 9th floors the access corridors are provided with openable vents or permantely open vents along the length of the corridor. On the 8th floor all of the flats with the exception of those access from the dead-end corridor on the east side of the building are accessed from open approach balconies.

Facilities for fire fighters

Firefighting Access

Firefighting access is at street level via the north Stair (Barbican Centre) or to the south end of the building via the adjoining Andrews House.

Site Information / Premises Information Box (PIB)

There is a PIB containing emergency contact numbers, site and building layout plans, outside the firefighter's entrance.

Dry Rising Mains

Each firefighting stair is fitted with a Dry Rising Main with outlets in the lobbies to the stairs. The inlets are located at the fire service access level or the podium/ground level.

Manually Openable Vents (OVs).

The central (north) firefighting stair has a Manually Opening Vents (OVs) with a fire fighters control switch with the stair at ground level.

Fire Brigade Liaison

It is understood that LFB regularly undertake familiarization visits of the Barbican Estate.

Fire safety signage

In some areas, particularly below podium level in the stairways and in storage areas, fire safety escape signage is considered to be inadequate.

This had previously been identified and a "Barbican Fire Sign Strategy" was completed by BB7 in October 2021. This detailed strategy highlights the deficiencies and provides recommendations for new signage.

Fireman's Lift

The building has at least one fireman's lift which appears to be installed in accordance with the original fire design standards at the time of construction (CP3 Chapter IV).

Active Fire System

Fire Alarms

In accordance with fire safety guidance, as the building is a purpose-built block of flats designed to support a stay put evacuation strategy, a communal fire alarm system is not provided in the residential areas. It is understood that the fire alarm system in the common areas is only provided for the activation of communal cross corridor doors which are held open by hold open devices which will release the doors on the activation of smoke in the common areas. The activation of the call points is understood to raise the alarm in the staircase and the commercial areas of the building.

Emergency Lighting (EML)

Emergency lighting is provided in most areas via "standby lighting" with a backup supply powered by a generator. Self-contained emergency lighting is also provided in some areas.

The adequacy of the emergency lighting could not be confirmed.

Fire Ignition Sources

Within the common parts the most significant ignition sources are the electrics/cabling located within the service risers. Providing the fixed wiring in the risers is appropriately maintained and the risers are kept sterile this is considered a tolerable risk.

Fire Training

It is understood that the Estates Manager and staff in the estates team are required to complete CoL's mandatory fire safety training which includes the use of fire extinguishers.

Make an assessment of the fire risk

Likelihood of fire occurring at the property

	Medium	
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Likelihood of fire spreading through the building

	Medium	
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Likelihood of loss of life due to fire

	Medium	
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Formulate and document an action plan

If it is considered that the fire risk and existing fire precautions are such that no improvements are necessary, this should be recorded within the fire risk assessment. The action plan should address both physical fire precautions, managerial issues and should normally prioritise measures so that the appropriate effort and urgency is clear. The measures within the action plan should both practically implement and maintain, taking into account the nature of the building and its occupants. With the best solution to bring about improvement with a possible pragmatic solution.

CoL Specific Hazard identification and Action plan template

Ref No. Locatio n:	Observations	Recommended further action	Risk Rating Low Mediu m High	Priorit y Level (pleas e refer to table 1)	Action by Whom & When	Date Comple d
1.	<p>Much of the emergency lighting in the building is provided by “Standby Lighting” (as defined by BS5266 Part 1) e.g. within the stairways. with an alternative power supply provide by a generator. It was not possible to confirm the full locations and adequacy of these installations as part of the fire risk assessment survey.</p> <p>It is understood that CoL are commissioning an emergency lighting survey.</p>	<p>It is advised that a site wide survey should be undertaken of the emergency lighting systems in the building (and along external means of escape) by a competent person, to assess their adequacy with a “gap analysis” between the as installed standards and those required by BS5266 Part 1 2016.</p> <p>Emergency Lighting Survey. Any installations or enhancements or replacements required should be in accordance with BS5266 Part 1.</p>	Mediu m	D		

2.	At the time of the assessment compartmentation/fire stopping works between the flats and the common area were being undertaken which meant sections of the internal corridor ceiling and walls had been removed.	Ensure that all the fire stopping works between the flats and the common areas are completed (and snagged) using appropriate proprietary fire stopping materials, and the walls/ceiling's are reinstated as per the fire strategy/fire stopping/compartmentation survey undertaken following the 2018 fire risk assessment.	Medium	C		
3	The Fire Action Notices do not describe the Stay Put strategy	<p>The Fire Action Notices (FANS) should be replaced with signs that describe the Stay Put Strategy.</p> <p>FANS should at least be displayed at all the entrances to the building.</p> <p>It is understood this will be completed as part of the CoL signage project.</p>	Low	D		
	Floor level and flat number signs are not displayed in the stairways, as will be required by current legislation – the Fire Safety (England) Regulations 2022.	<p>As part of the signage project, it is advised that floor level number and flat number signage is brought in line with current standards i.e. Approved Document B 2019 ed. incorporating 2020 amendments – “Wayfinding signage for the fire service”.</p> <p>The requirement is: To assist the fire service to identify each floor in a block of flats with a top storey</p>	Low	D		

more than 11m above ground level, floor identification signs and flat indicator signs should be provided.

The floor identification signs should meet all of the following conditions.

- a. The signs should be located on every landing of a protected stairway and every protected corridor/lobby (or open access balcony) into which a firefighting lift opens.
- b. The text should be in sans serif typeface with a letter height of at least 50mm. The height of the numeral that designates the floor number should be at least 75mm.
- c. The signs should be visible from the top step of a firefighting stair and, where possible, from inside a firefighting lift when the lift car doors open.
- d. The signs should be mounted between 1.7m and 2m above floor level and, as far as practicable, all the signs should be mounted at the same height.
- e. The text should be on a contrasting background, easily legible and readable in low level lighting conditions or when illuminated with a torch

5.	<p>It is understood that there is no specific planned preventative maintenance regime for the glazed privacy doors/screens along the linking balconies.</p> <p>Weather conditions can affect the door and fixings, and therefore the ease of operation of escape device.</p>	<p>It is advised that a planned preventative maintenance regime is put in place to ensure that the glazed privacy doors/screens always remain openable i.e., fixings / bolts remain in a good and easily openable condition. It is recommended the doors are inspected at least annually.</p>	Low	D		
6	<p>It was confirmed that there is no current flat entrance door inspection regime. The Fire Safety Act 2022 has confirmed that Flat Entrance Doors fall within the scope of the Regulatory Reform (Fire Safety) Order 2005.</p>	<p>Ensure that a long-term programme is in place for the completion of:</p> <ul style="list-style-type: none"> • quarterly communal fire door inspections, and • annual flat entrance door inspections (where leaseholder cooperation will need to be sought) <p>in accordance with the Fire Safety (England) Regulations 2022, which come into effect January 2023 and any associated guidance.</p> <p>Inspections should ensure that the doors remain in good condition and an effective self-closer is in place.</p>	Low	D		

7.	8 th floor, electrical intake cupboard on the east side of the block, there appeared to be a minor fire stopping deficiency in the floor to the electrical intake riser.	<p>It is advised that the communal service risers and any electrical switch gear rooms are surveyed by a fire stopping specialist and where defects are identified appropriate fire stopping works are undertaken to maintain 60 minutes fire separation.</p> <p>It is understood that CoL have commissioned a fire stopping/compartmentation survey of the building.</p>	Medium	D		
8.	7 th floor, central stair core, smoke seals are missing from the FD60S fire doors to the electrical intake cupboard (to the left of the lifts).	Replace smoke seal(s) in the fire door to the electrical intake cupboard.	Medium	D		
9.	The PPM audit found Barbican Estates were able to demonstrate suitable maintenance regimes for the	Barbican Estates should review their planned preventative maintenance arrangements to ensure suitable cleaning, inspection, test and	Medium	C		

	<p>majority of systems, but also identified the following concerns:</p> <ul style="list-style-type: none"> • No 6-month Visual Inspection regime for Rising Mains • Several months delay in obtaining certificates for Annual Dry Riser Test, Lightning Protection, and sprinkler systems. It is understood that approximately 50% of the Barbicans fixed electrical systems (Distribution Boards etc) are considered “unsatisfactory”, and / or have not been electrically inspected for at least 5 years. It is understood that non-compliant systems are being rectified on an ongoing basis but that no formal remedial works programme is in place. • No PPM regime for most smoke control systems, i.e. Openable Vents (OVs) and Permanently Open Vents (POV) /smoke shafts. This is also covered by a separate action. 	<p>maintenance (as relevant) regimes are in place for the following:</p> <ul style="list-style-type: none"> • Six-monthly visual inspection of Rising Mains (per BS9990) • It is advised that a PPM regime is developed for Smoke control systems i.e. Openable Vents (OVs) and Permanently Open Vents (POV) / smoke shafts • It is advised that a programme of remedial works is developed for fixed electrical systems that are considered to be unsatisfactory. • It is advised that Barbican Estates liaise with their suppliers to ensure PPM certificates are provided in a timely manner, to demonstrate compliance to relevant stakeholders 				
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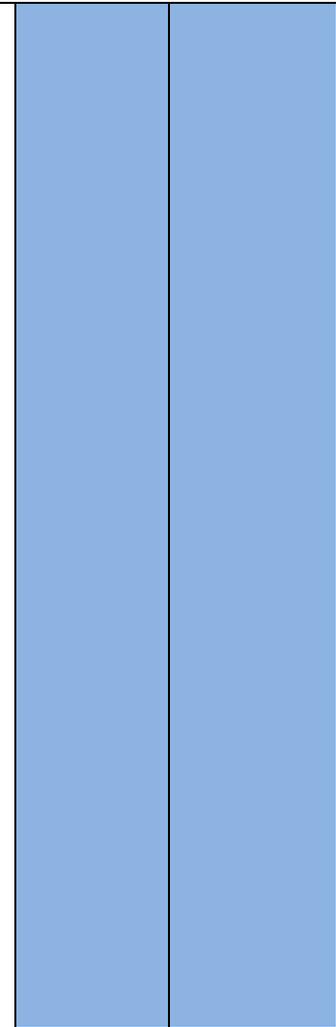
10.	<p>The Fire Safety (England) Regulations 2022 place additional requirements on CoL as a Responsible Person under the Regulatory Reform (Fire Safety) Order 2005.</p>	<p>CoL should ensure that they have suitable arrangements in place to discharge their responsibilities under the Fire Safety (England) Regulations 2022.</p> <p>The regulations will come into force on 23 January 2023 following the publication of supporting guidance which is due later in 2022.</p> <p>In summary –</p> <p>For high-rise residential buildings (a multi-occupied residential building at least 18 metres in height or 7 or more storeys), responsible persons must:</p> <ul style="list-style-type: none"> • share electronically with their local fire and rescue service (FRS) information about the building's external wall system and provide the FRS with electronic copies of floor plans and building plans for the building • keep hard copies of the building's floor plans, in addition to a single page orientation plan of the building, and the name and UK contact details of the responsible person in a secure information box which is accessible by firefighters 	Medium	D		
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For multi-occupied residential buildings over 11 metres in height, responsible persons must:

undertake quarterly checks on all communal fire doors and annual checks on flat entrance doors

In all multi-occupied residential buildings, responsible persons must:

- provide residents with relevant fire safety instructions and information about the importance of fire doors
- The Fire Safety Act (FSA) clarifies the scope of the Fire Safety Order to make clear it applies to the structure, external walls (including cladding and balconies) and individual flat entrance doors between domestic premises and the common parts.



11.	<p>The firefighting access door is fitted with a lock (there is no firefighter drop key access to minimise the delay in accessing the building).</p> <p>No keys are provided in the Premises Information Box (PIB)</p>	<p>As the firefighter access door do not have drop key access to facilitate access, it is advised that keys for any openable windows which can be utilised as smoke vents are provided in the new secure premises information box.</p> <p>For clarity, it is also recommended the PIB's at the firefighter access points should be labelled with the building name (this is particularly useful where the PIB contain plans for more than one building).</p>	Low	D		
12	<p>The smoke ventilation within the three escape/firefighting stairs appear to not meet the requirements of current fire safety guidance.</p> <p>Where provided the smoke ventilation/openable windows within the stairs appears to have a free area of less than 1m².</p> <p>The justification for the reduced or no smoke ventilation in the stairs does not appear to have been considered in the building original fire strategy.</p>	<p>A smoke ventilation specialist should evaluate the smoke ventilation in the escape/firefighting stairs as part of a retrospective fire/smoke ventilation strategy for the building.</p>	Low	E		

13.	<p>On the 8th floor, the enclosed dead-end corridor at the east end of the block has a travel distance of approximately 24m and is not provided with any smoke ventilation.</p> <p>It appears this corridor may have been originally intended to be accessed from an open balcony which was then changed to an enclosed corridor (all other flats at this level are accessed from open balconies).</p> <p>The windows between these flats and the balconies also appear that they may be openable however this could not be confirmed.</p> <p>The justification for the increased travel distances does not appear to have been considered in the 2010 fire strategy provided, and it is unclear how this arrangement complies with any current or historic fire safety guidance.</p>	<p>A fire engineer should evaluate the access to the flats along this dead-end internal corridor taking into consideration the extended travel distance, lack of smoke and possible reduction in 60 minutes fire separation between the flats and the access corridor.</p> <p>Also see action 14</p>	Medium	D		
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14	<p>On the 7th and 9th floors, in the dead-end corridor to the east stair end of the block the corridor is sub-divided into three sections.</p> <p>However, none of the lobbies are provided with smoke ventilation so they do not appear to meet the requirements of current fire safety guidance where there is a single direction of escape along a communal access corridor.</p>	<p>A fire engineer should evaluate the access to the flats along this dead-end internal corridor taking into consideration the extended travel distance and the lack of any smoke ventilation in any of the sub-divided section of the corridor.</p> <p>Also see action 13</p>	Medium	C		
15	<p>To the building rear of the building there are timber shades along the external balconies which could potentially provide a means for vertical fire spread between flats.</p> <p>No information provided to determine if the risk of fire spread via these timber screens has been considered</p>	<p>A PAS9980 Fire Risk Assessment External Wall (FRAEW) is considered necessary to determine the risk of external fire spread posed by the timber shades to the rear balconies to the flats.</p>	Low	D		

16.	8 th floor, cleaner's cupboard toward the east stair is unlocked.	It is advised that the cleaner's cupboard is kept locked when not in use.	Low	D		
17.	Many of the original lobby door (metal notional fire doors) have gaps in excess of 4mm and are not signed 'fire door keep shut'.	<p>Where possible the original metal doors to the stair lobbies should be eased&adjusted/recondition ed to minimise the gap to reduce the risk of smoke passing through the door.</p> <p>The doors should also be signed 'fire doors keep shut'.</p>	Low	D		

Action time frame in accordance with CoL service level agreements

Table One

Priorities for remedial action listed below;

Recommend priority code & time frame

Priority Action AA	Immediate action taken whilst on site	(P1) 2 hour attendance
Priority Action A	Immediate action required	(P2) 24 Hours
Priority Action B	Action required in the short term	(P3) 4 Days
Priority Action C	Action required in the short term	(P4) 28 Days
Priority Action D	Remedial action required in the long term	3 Months
Priority Action E	Action to be consider when refurbishing	Project Planning Stage
Priority Action H/S	Health & Safety Information	(P2) Action 24 hrs.
P3A over weekend when attendance will wait until Monday for attendance not warranting a 24hr P2		

Additional Comments to the assessment:

Fire Risk Assessment reviews (CoL use only)

This Fire Risk Assessment should be reviewed annually and whenever there is a material change in the use of the premises or part of the premises (including numbers of occupants) or when significant structural or layout changes to the premises are proposed or carried out. The table below is provided for the 'Responsible Person' at the premises to maintain a record of reviews and provides space for simple comments. If the review indicates significant change then a new complete Fire Risk Assessment by our professional assessment providers should be carried out and fully documented.

Date	Reason for review	Results / Comments	Name, Position & Signature

Appendix One

Pre-Survey Questionnaire

Information Required Pre-Site Visit (21 days)

Not provided.

Annex A – Actions outstanding from previous fire risk assessment

<p><i>RefNumber:</i></p> <p><i>Location:</i></p>	<p><i>Previous/Outstanding Action</i></p>	<p><i>Turner & Townsend Comments</i></p>
<p>2.4</p>	<p>Evidence was not available to confirm that the fixed wiring insulation is subject to an appropriate programme of periodic testing.</p>	<p>50 percent of the fixed wiring on the Barbican estate has been found to be unsatisfactory.</p> <p>See Action 9 in this FRA</p>
<p>14.1</p>	<p>It was not possible to determine the standard of compartmentation/fire stopping between the flats and the common areas within the false ceilings.</p>	<p>CoL have undertaken an extensive compartmentation survey of the building and identified areas within the false ceiling and between the walls of the flats and the communal areas where fire stopping/compartmentation works are necessary.</p> <p>See Action 2 in this FRA</p>
<p>16.1</p>	<p>It was noted that in some instances lobby doors do not close effectively</p>	<p>Several of the lobby doors still have large gaps.</p> <p>See action 17 in this FRA.</p>
<p>17.2</p>	<p>It was noted that Lobby doors, are not provided with 'Fire door keep shut signs'.</p> <p>Cross corridor doors are not provided with 'automatic fire door keep clear' signs.</p> <p>FAN are not displayed adjacent to all MCPs</p>	<p>Fire door keep clear shut signs were present. Most lobby door are not appropriately signed, and FAN's require replacement</p> <p>See Actions 3 and 17 in this report.</p>

17.5	Fire action notices are inconsistently displayed In communal areas and the guidance Is ambiguous in respect of a 'stay put' evacuation strategy. Consideration should be given to replacing this signage with more definitive instructions.	Fire action notices are still considered to be inadequate. See action 3 in this FRA.
19.4	It was noted that portable fire Priority extinguishers are provided within the communal areas. Typically fire extinguishers are not provided within this type of property as residents are unlikely to have been appropriately trained. Consideration should be given to their removal.	Fire extinguishers had been removed from the communal areas.
20.2	As part of the fire risk assessment process a documentation audit was undertaken In respect of the specific premises. The brief was to randomly sample 6 categories from a detailed list. In this Instance the only records available at the Estate Office were as follows; • Whilst it is evident that Allied Protection are maintaining fire alarm systems: contractors are not updating documented records. • Records were not available to evidence the recently implemented program of fire door inspections. • Fire stopping registers are not in place; this has specific relevance in respect of PDA's & EDA's. • Portable firefighting equipment Is out of test date; this situation is expected to be resolved in response to relevant guidance provided elsewhere in this report. • Records of fire brigade operation attendances are not maintained. • Various Col FS guidance notes. Priority C 12 It Is recommended that robust arrangements be Implemented to ensure the requirements of Col Guidance Note on Fire Log Books on Col premises are achieved.	See action 9 in this FRA
20.6	The emergency services box contained; 1) Estate block plan map. 2) Useful telephone numbers list. 3) Block plan. Consideration should be given to Liaising with London Fire	The contents of the PIB boxes are under review by COL.

	Brigade to rationalize / standardize the Information contained within boxes.	Also see action 11
22.4	It was noted that portable fire extinguishers within communal areas and plant rooms (provided for use by competent persons) have not been subject to servicing within the past 12 months.	No fire extinguishers identified. However, the boiler room/lift motor room were not accessible at the time of the assessment.

Annex B - Unintentional fires during the last two years

None known.

Annex C – maintenance records of fire systems

Fire Safety Documentation		
Documentation	Available to view	Evidence viewed
Fire Safety Strategy Report	No	No Fire Strategy available.
Updated Fire Safety Strategy Report and/or Fire Safety Strategy Technical note (reflecting any changes, refurbishments)	No	See above
Fire Compartmentation Drawings	No	None provided.
Fire Risk Assessment report	Yes	The previous FRA was undertaken by Frankham RMS in January 2018.
Building (floor plan) drawings	Yes	Available in the PIB boxes.
BS 9999:2017 – Fire safety in the design, management and use of buildings. Code of practice	N/A	BS 9999 is not applicable to residential blocks of flats.
BS 9997:2019 Fire Risk Management system.	N/A	
Third-Party Statutory Examination/Testing Certification		
Equipment	Available to view	Contractor / Issue date(s) / Frequency
Automatic Fire detection and alarm	N/A	No communal fire alarm installed.
Emergency and exit	Yes	Annual duration testing.

lighting		Back up Generator. Periodic testing in accordance with BS5266 Part 1
Fire extinguishers and fire blankets	Yes	The fire extinguishers should be maintained annually. Ongoing renewal and maintenance plan demonstrated.
Sprinklers	N/A	There are no sprinkler in Gilbert House
Fire dampers	N/A	No fire dampers identified
Gas suppressant systems	N/A	No gas suppression systems in the CoL controlled areas of the building – Any CO2 systems are under 3 rd party control.
Lightning protection system (LP)	Yes	Annual Lightning Protection Test and Inspection.
Gas heating/boiler plant safety checks	N/A	No communal gas system.
Gas cooking appliances	N/A	No gas cooking facilities within the common areas.
Fixed mains electrical installation	No	5-Year Fixed Electrical Inspection. See action 9
Portable appliance testing	N/A	No portable electrical items identified in the common area.
Fire rated shutters	N/A	No fire shutters observed
Evacuation aids	N/A	There are no evacuation aids.
Firefighter's Lifts	Yes	No firefighters lifts only a Fireman's lift within the firefighting stairs.
AOC control system	N/A	
Fire Hydrant testing (within the curtilage of the premises)	N/A	The hydrants are located on the public highway
Wet risers	N/A	No Wet Riser

Dry risers	No	6- Monthly Visual Inspection and Annual Pressure Test. No 6M Visual Inspection Record– See Action 9
In-House Documentation		
Equipment	Available to view	Who by / Date(s) / Frequency
Fire alarm call point activations	No	No fire alarm
Internal fire rated doors	No	Per Fire Safety (England) Regulations 2022 - Quarterly Inspection of communal fire doors and Annual Inspection of flat entrance doors.
Fire exit doors	No	3-Monthly check of fire exit doors, especially on external doors not used for other purpose.
Emergency lighting	Yes	3- Monthly emergency lighting 1 hour duration test.
Fire extinguishers	Yes	Fire extinguishers Routine check (location, pressure gauge and tags)
Fire sprinklers pump set weekly checks	N/A	No sprinkler in the residential block of flats
Fire dampers	N/A	No dampers identified with the building
Fire evacuation drills	N/A	Not applicable in a residential block of flats
Evacuation aids	N/A	Not applicable in a residential block of flats

Fire Safety Training Records		
Equipment	Available to view	Evidence
Duty Holder – Fire (Scotland) Act 2005 duties and responsibilities	N/A	
Competent Person – Fire (Scotland) Act 2005 duties and responsibilities	N/A	
Fire Incident Controller	N/A	
Fire Warden / Marshal	N/A	
Use of fire extinguishers/blankets (Article 21-Training of the Regulatory Reform Fire (Scotland) Act 2005))	Yes	It is understood that this is covered as part of CoL periodic fire safety training which all employees must complete.
Employee fire safety	Yes	No records were seen on site as these are held centrally. However, it is understood that periodic fire safety training is undertaken.
New employee – fire safety induction	Yes	It is understood that that all employees must complete online fire training as part of the induction process.
Fire sprinkler operational checks	N/A	No sprinklers in the residential block of flats.
Evacuation Aids	N/A	