



Cromwell Tower

Barbican Estate, EC2Y 8DA

The City of London Corporation

External Fire Risk Assessment

Prepared by: Turner & Townsend

One New Change, London EC4M 9AF

Site information

Building Name Cromwell Tower
Building Ref
Division Department of Community & Children's Services.
Estate Barbican Estate
Property Name Cromwell Tower
Property Ref

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Name of Liaisons managers (FM's) for fire safety matters or (Asset Managers) arranging corrective actions with third party.

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**Not defined in order. Government direction as dame Judith Hackitt; Training, experience and knowledge create competency.

Name of Contractors. N/A

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Assessor details

Name of the person: - Paul Boughton **Department name** Contractor

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Date of the assessment : 10th October 2024

Date of first draft reviewed : 18th November 2024

Date when finalised : 22nd November 2024

Date sent to premises controller: : 27th November 2024

Date of next assessment : (Use aide-mémoire 2) 10th October 2025

Report Signed by Assessor

Signature: *Paul Boughton*
 Print Name: Paul Boughton
 Date: 15/11/2024

Name of Assessors reviewer:

Printed Name: Russell Peacey

Signature of Assessor reviewer

Signature: *Russell Peacey*

Date of Review

Date: 22/11/2024

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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

Relevant Legislation –

- The Regulatory Reform (Fire Safety) Order 2005
- The Fire Safety Act 2021
- The Building Safety Act -2022
- The Fire Safety (England) Regulations 2022

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.
- PAS 79:2 2020 Fire Risk Assessment Part 2 – Housing – Code of Practice.
- 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
- Fire Safety in Section 20 Buildings LDSA 1997
- 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.

The assessment process covers 9 steps listed in the audit example below.

The Fire Risk Assessments document reflect the significant hazards associated with the operation of this site and identify 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 flat entrance doors are not fitted with effective self-closing devices, and due to some compartmentation defects in the service risers and the flats.

In a [REDACTED]
[REDACTED]

Overall risk assessment

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

Survey Methodology

This Fire Risk Assessment has been completed in accordance with the methodology described in PAS79:2 2020 (BSI).

A site visit was carried out by Paul Boughton on 10th October 2024 to undertake a physical survey of the building.

This included a –

Site assessment, to visually inspect all accessible common areas of the building, plant rooms and staff areas, as well as a sample inspection of service risers, all communal means of escape were walked to check their availability. Compartmentation in accessible areas, was assessed as far as it was reasonably practicable without carrying out an intrusive survey.

- A desk top review of any relevant documentation provided by City of London. This included a Retrospective Fire Strategy for Cromwell completed by Arup dated 16th February 2022.

Note – No Pre-Survey Questionnaire was provided by City of London (COL).

No access areas - during the site visit no flats were accessed, and no flat entrance doors were inspected in the open position. This had been agreed with City of London, however information on the specification of the flat entrance doors had previously been provided. It was also not possible to access the flat balconies which are used as secondary means of escape. Individual resident storage “sheds” were not accessed.

Areas not covered by this Fire Risk Assessment –

- The car park – this is covered by a separate fire risk assessment.
- Service tunnels – these are covered by a separate fire risk assessment.
- It is understood that the high voltage electric room at Level 03 (which is protected by CO2 extinguishing system) is not under Barbican Estates control and is outside the scope of this assessment.
- The ground floor external accessed retail unit (Music shop).

Specific Site Survey Information

Is there evidence on site that fire deficiencies/ faults are addressed in a timely manner.

No fire alarm faults present on the day of the FRA.

Emergency lighting units are charging (diodes normally green or red are illuminated).

Much of the emergency lighting in the building is provided by “Standby Lighting” (as defined by BS5266 Part 1) 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. **See action 1.**

The Arup Fire strategy for Cromwell Tower states that “*It has been confirmed by BE that there is no emergency lighting within the storage levels*”. This appears to still be the case. **See action 2.**

Escape routes not blocked & clearly marked.

No - Obstructions were observed in the following areas:

■ Level [REDACTED]

- Level [REDACTED]

For actions relating to obstructions in the communal lobbies, refer to; **Action 5.**

- Level 31, a gate has been installed across the escape balcony. **See action 31.**
- Level [REDACTED] **See action 32.**
- Mezzanine lift lobby, being used as a storage area by the CoL concierge. **See action 34.**
- On the external escape balconies, some of the exits from the flats (believed to be the kitchen exit) may have been overpainted which could make it difficult for these exit doors to be opening internally from within the flat. **See action 38.**
- External, ventilation shaft between carpark and Cromwell house. Leaves have accumulated on top of the ventilation grill. There is as evidence of smoker materials (from street level) being dropped into this area. **See action 35.**

Housekeeping along areas of the external escape balconies visible from the stairway was considered to be satisfactory. It understood that residents are advised not obstruct these balconies and it is understood that the balconies are monitored by Barbican Estates as follows –

CoL has confirmed that the management strategy for the secondary means of escape is as follows – “All 9 miles of balcony are formally inspected once per year by the House Officer team. 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. Additionally, the window cleaning contractors clean all windows every 6 weeks. They are tasked with fault and obstruction reporting as well. In the resident bulletin CoL regularly run fire safety messages, these include fault reporting and the importance of obstruction free balconies”.

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).

Not applicable

- *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 are up to date and suitable and sufficient.*

No information provided but outside the scope of the Type 1 FRA.

- *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?*

No - The building has a concrete façade. Therefore, a PAS9980 Fire Risk Assessment External Wall (FRAEW) is not considered to be required.

- *Are the onsite PEEPs and GEEPs templates adequate?*

The Government has indicated that the position on PEEPs will be confirmed by year end 2024. It is understood that residents with disabilities and impairments will be entitled to a “person-centred risk assessment” to identify appropriate equipment and adjustments to aid their fire safety or evacuation. They will also be entitled to a residential PEEPs statement that records what vulnerable residents should do in the event of a fire. This will be supported by guidance in the forthcoming BS:9792 - Fire risk assessment. Housing - Code of practice. **See action 40.**

- *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?*

Several residents are recorded on the Vulnerability List that is retained in the Secure Information Box.

There are no specific physical provisions in the building for Persons with Restricted Mobility (PRMs). The Arup fire strategy contains advice for provisions that could be made for PRMs. It is understood that this advice is under consideration by CoL.

- *Are there inductions for staff and contractors?*

CoL has confirmed that fire safety training is completed by the building’s Porters. It is understood that the Porters complete Fire Extinguisher Training and mandatory City of London fire training on “City Learning”.

It is understood that the induction and control process for contractors is under review as of September 2023.

- *Is there arrangement in place for the safe evacuations of visitors?*

Not applicable – purpose-built residential block of flats with a Stay Put strategy.

- *Is there a Building Fire Strategy and a Fire Management Plan of the building?*

A retrospective Fire Strategy has been completed by Arup – see Cromwell Tower - Fire Strategy Report dated 16th February 2022 and available from CoL.

It is understood that the recommendations of the Arup Fire Strategy report are currently under consideration by CoL.

- *During the inspection did you identify 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?*

Numerous white goods and other combustible items were observed being stored in the electrical switch room. **See action 16.**

- *Is there evidence of up-to-date electrical In-Service Inspection and Testing of Electrical Equipment in place?*

Items in the caretaker room located behind reception were observed to be missing PAT stickers or out of date. **See action 15.**

Telecoms equipment in plant areas did not appear to be suitably maintained or tested. **See action 17.**

These sockets are located directly below a wastewater pipe. There also appeared to be breaks in compartmentation where pipes pass from the riser into the flat. **See action 28.**

This was reported to CoL on the day of the assessment. **See action 29.**

- *Is the fire detection & warning system type adequate for the building use?*

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. Fire alarm systems in the flats are outside of the scope of the RRFSo and the Type 1 FRA. There is an L5 fire detection and warning system covering the ancillary areas and persons in these areas are expected to simultaneously evacuate. It is understood that the fire alarm is linked to the Estates Office.

- One “Garchey” waste disposal system room is an inner room of the Wet Riser pump room. There is automatic detection installed within the pump room but no obvious fire alarm sounder/beacon covering this area. **See action 6.**

- *Are the fire action notices compliant provide the reader with relevant instruction and position correctly positioned?*

No – fire action notices installed in the lift lobbies have not been completed with site specific information. Additionally, several notices have been removed and are either missing or on the floor of the lobby areas. **See action 7.**

- *Are there adequate sign to maintain the exit routes e.g. keep clear, floor marking etc.?*

No – The majority of the notional fire doors installed within the premises are not signed as fire doors. For example, signed with 'Fire Door – Keep Closed' or 'Fire Door – Keep Locked' signage. **See action 3.**

- The external side of the fire exits from the main stair and from the resident store areas, (spiral stairs) which could potentially be obstructed are not signed Fire Exit Keep Clear. **See action 8.**
- The secondary means of escape from the level 40 plant room is not provided with appropriate directional signage and the fire exit to the escape ladder from the lift motor room is not clearly signed as a fire exit. **See action 3.**
- Rooftop plantroom, the secondary exit door from the penthouse flat is not signed to make it clear that this is a fire exit and must not be obstructed. **See action 4.**
- Floor level signs are installed in the stairway and the lift lobbies (above the lifts) but they do not meet FSER standards – also flat numbering is not included on these signs. Wayfinding signage for firefighters is a legal requirement under the Fire Safety (England) regulations 2022 for residential buildings >18m tall. **See action 9.**
- In the rooftop ventilation plant room, the metal gate between the ventilation plant and the entrance /escape corridor was unlocked/open. **See action 13.**
- *Are the existing active Fire Protection Measures sufficient for the buildings use?*

Current systems include the Fire Alarm and Emergency Lighting (covered above) and also the fusible link fire shutters.

It is noted that the Arup Fire Strategy has recommended additional active systems (automatic opening vents and sprinkler systems) for this building, and it is understood that these are under consideration by CoL.

- Level 39, Lift Lobby Ventilation, the lift lobby is ventilated by a permanently open vent above the exit door to the stairway. It appears that this vent has been partially blocked up. It is understood that the vent is necessary as this is the top accommodation floor, so cannot be ventilated by opening balcony escape doors.

There is only one flat opening into the lift lobby at this level, so the risk is considered low particularly if the flat entrance door is replaced with the proposed FD60S self-closing flat entrance door set. **See action 18.**

- The existing manually openable smoke vents, grills and louvres appear to be contaminated by an historical accumulation of dust / exhaust fumes etc. It is not clear to what extent they have been cleaned / maintained. The effectiveness of the current smoke control could not be confirmed as part of this Type 1 FRA. **See action 10.**
- Communal ventilation system – the building is fitted with a communal ventilation system. It is understood that this links between all flat bathrooms and kitchens and is therefore a potential source of smoke/fire spread between flats. The Arup fire strategy provides recommendations regarding “shunt ducts”. It could not be confirmed if any suitable dampers etc. are fitted or if the system is maintained. **See action 25.**

- *Is there evidence on site of regularly fire door inspections?*

It is understood that periodic flat entrance door and communal fire door inspections are being completed as required by the Fire Safety (England) Regulations 2022 although no asset tags were evident, and no inspection records were demonstrated. **See action 11.**

It was confirmed during the previous fire risk assessment visit that periodic checks are made of the escape doors from the balconies, the stairway, and stair lobby doors and where necessary repairs undertaken.

There did not appear to be an inspection regime of the final fire exit doors from ancillary accommodation carried out. **See action 22.**

No fire door asset number the fire door between the concierge office and the lift lobby. **See action 37.**

- *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)*

The flat entrance doors appear to be of the same type, and based on information previously provided they are considered to be notional fire doors, with no effective self-closing device fitted. In several cases, the flat entrance doors were noted to be poorly fitting with excessive gaps. It was not possible to confirm the fire resistance of top and side panels, the letter boxes do not appear to be a fire resisting type. Therefore, based on the above, the flat entrance doors do not comply with current standards and guidance.

The flat entrance doors appear to be of the same type. Based on information provided they are considered to be notional fire doors, with no effective self-closing device fitted. It was not possible to confirm the fire resistance of top and side panels, the letter boxes do not appear to be a fire resisting type. Therefore, based on the above, the flat entrance doors do not comply with current standards and guidance.

- It is understood that a programme is in place to replace all the flat entrance doors including top and side panels with certified FD60S door sets fitted with external overhead self-closing devices. **See action 12.**
- Each flat has three cupboards accessed directly from the communal lift lobby – these cupboards contain electric meters (top cupboard), post (middle cupboard) and waste materials (bottom cupboard). It is understood that the cupboard doors form part of the compartmentation of the flat and will be replaced as part of the flat entrance door project. **Also see action 12**
- Fire doors into the lift lobbies were observed to not be closing fully into the frame and ground floor doors observed to be propped open. **See actions 13 & 14.**
- During course of undertaking the fire risk assessment it was identified that the existing flat entrance doors are not installed with any effective self-closing mechanism. **See actions 30.**

- *Is there evidence of regularly local checks and annual testing by competent?*

A PPM schedule has previously been provided, to demonstrate that fire safety systems are subject to a suitable maintenance regime.

- *Has the site identified emergency responders' routes and fire hydrants and documented these?*

Fire hydrants and the wet rising mains are appropriately identified on the site plans located within the Premises Information Box (PIB). (PIB is located just off the ground floor reception area)

- *Are there any known neighboring activities that could jeopardy a prompt arrival of the emergency responders?*

None identified.

- *Is there evidence of anti-social behaviour at the site?*

None identified or reported.

- *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?*

None known or expected at this location.

- *Are there any renewable energy source at the site that cannot be readily isolated at source in the event of a fire?*

None observed or reported.

- *Are back up generation tested to ensure they provided adequate supplies to fire safety devices?*

Not known - Planned Preventative Maintenance records were not provided as part of this fire risk assessment. **See action 31.**

- *Is the premises controller aware of the CoL guidance on Hot Works?*

Understood that the CoL permit process is under review. A robust permit system must be implemented for hot works undertaken on the building.

- *Are they evacuation procedures for all time the building is in used e.g. out of hours procedures for weekend?*

A fire safety folder is retained behind the reception desk with information for the 24/7 building Porters, including information/keys etc, to provide to firefighters. The building also has a PIB.

- *Upon review of on-site documentations, how long did it take the building to evacuate?*

Not applicable – the building operates 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 24/7 security and CCTV. There is also a terrorism alert system linked to the flats.

External areas are largely kept free of storage; however, a number of wooden pallets were observed stacked against the fabric of the building. **See action 5.**

- *Is large lithium-ion battery charged on site?*

Smaller electric vehicles such a mobility scooters, electric bikes, covered by the electrical safety question above.

- *When was thermographic inspection last undertaken at site?*

Not known - Planned Preventative Maintenance records were not provided as part of this fire risk assessment. **See action 23.**

- *Has the property had any unintentional fires over the last two years if so, please provide details?*

None reported at the time of the FRA.

- *Were there any significant gaps identified in the compartments (please list details)?*

Yes as per previous FRA:

- In several of the bathroom risers (PDA) it was noted that plumbing works have penetrated the compartment walls and floors with no, or inadequate, remedial fire stopping works completed. This could potentially facilitate smoke spread between both the flats and the floor levels. There also appear to be some inadequately fire stopped service penetrations in the stairway riser (EDA) and in the electrical cupboards at, podium level, ground, and levels 01,02 & 03.
- It is understood that City of London have previously identified the compartmentation defects and have commissioned a specialist to complete a compartmentation survey at Shakespeare Tower (of similar design) to provide a specification for remedial works. **See action 19.**
- [REDACTED]
[REDACTED] **See action 21.**

Ventilation Riser / EDA

It is noted that the electrical riser (EDA) and ventilation shaft are joined above Level 37. The shaft opens into a small lobby on these floors. There is a concrete floor on each level of the riser from Level 37 and below. As the shafts are joined, the firestopping of the riser below Level 37, the inspection of 3rd party electrical equipment, and good housekeeping in the riser are considered particularly important. Where necessary, any issues related to this riser are covered elsewhere in the report.

Ceiling Voids

In some areas e.g., stair landings and lower-level lift lobbies, there are false ceilings with cables running through them. The ceiling material appears to be constructed from a composite material (e.g., Asbestos/ACM)) rather than timber, however, though this could not be confirmed, and it was not possible to establish whether that cables in the ceiling void are appropriately secured and any service penetrations fire stopped. **See action 20.**

Retail units

The retail unit [REDACTED] was not inspected as part of this assessment. It was noted from outside that there could be services penetrate through the ceiling slab of the retail unit but the standard of fire stopping could not be confirmed. **See action 24.**

- *How are contractors fire risk controlled locally?*

Understood that contractors are controlled by the CoL site team and a permit process.

- *Is there up to date maintenance records for all fire systems on site?*

- Not known - Planned Preventative Maintenance (PPM) records were not provided. However, an audit of PPM records was completed with help from the Barbican Estates

Property Services Team Manager as part of the 2022 FRA. This involved checking the full records for a sample of buildings, and 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, Sprinklers, Wet Risers, Wet Riser Pumps, Emergency Lighting, Fixed Electrical System, Portable Appliances, Smoke Ventilation, Gas, Firefighting Lifts, Fusible Link Fire Shutters.
- The PPM audit found Barbican Estates were able to demonstrate suitable maintenance regimes for most 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 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 (Smoke) Vents (OVs) and Permanently Open (Smoke) Vents (POV) / smoke shafts. This is also covered by a separate action.

No update has been provided on these issues - **See action 23.**

- *Is the fire logbook in accordance with CoL guidance policy (see appendix)?*

No logbook seen.

Description of site

Cromwell Tower was completed in January 1973. It is a high-rise residential tower located on the Barbican Estate. The building is of “Brutalist” architecture and is Grade II* listed.

The building is of concrete construction (floors, stairways, and walls), and has a flat roof. The premises contains 108 flats and 3 penthouse maisonettes. Flats are arranged in three “wings”, A, B & C.

There is an independent commercial unit located at the ground floor (a music shop).

Flats are accessed off internal lift lobbies. There are three lifts with one being a firefighting lift. The building has a single fire-fighting/escape stair, and the stair is connected to the lift lobby on each floor via a small, ventilated stair lobby.

The building consists of 41 floors with a building height of approximately 108 m measured from ground to the bottom of the topmost occupied storey.

In summary the building comprises of the following:

- Roof level;
- [REDACTED] ventilation plant [REDACTED] and lift machine room [REDACTED]
- [REDACTED] Residential flats (3 flats on most levels) and duplex or triplex at the top level of each wing:
 - Duplex on L39 and L40;
 - Triplex on L37 – L39;
 - Triplex on L35 – L37.
- Podium level: Circulation space; meeting room, old ventilation control room
- Mezzanine Level : Circulation space; cleaners cupboard
- L01 (Street level): reception lobby and main entrance; Lobby Porters office
- [REDACTED] Plant rooms/Switch Gear Rooms/"Garchey" Rooms /residents storage sheds area in addition to car park access;
- [REDACTED] Subway level. [REDACTED] which is known as the 'subway' is connected to Cromwell Tower via one of the plant rooms in [REDACTED] It contains services and extends throughout the Barbican Estate. The area is excluded from the scope of this FRA.

There is an [REDACTED] (EDA) running up through the main stairway. Plant areas for the communal ventilation riser (ventilating bathrooms and kitchens) are accessed on the upper residential floors.

Risers (PDA) are located behind the bathrooms of the flats. These risers are accessed via concrete doors from the lift lobbies, or the main stairway.

Means of Escape:

The principal means of escape from the flats is via the main stair that descends to the Podium Level. [REDACTED] upwards have secondary means of escape via external linking balconies and stairways descending to lower lift lobbies, or directly into the main escape stair. Some flats [REDACTED] [REDACTED] have secondary means of escape via linking balconies and then via an internal escape route which passes internally through the neighbouring flat and then into main escape stair. **See action 26.**

From sub-ground level, the means of escape is up a stairway to the reception lobby, with alternative means of escape from the resident storage areas via spiral staircases that ascend to street level.

The lift motor room is an inner room of the ventilation plant room beneath it, so is provided with an alternative means of escape via a fixed ladder which bypasses the ventilation room and descends directly into the main stairwell. An alternative means of escape is provided from the ventilation plant room via an external stairwell that descends to a lift lobby.

Use of Site

Cromwell Tower is a purpose-built general needs residential block of flats.

Passive Fire Precautions

Flat entrance doors

The flat entrance doors appear to be of a consistent type. The Arup Fire Strategy states *“information on the existing doors for Cromwell Tower. However, based on the information provided on the document ‘The fire resistance performance of a single leaf single acting door set with side screen and over panel, when tested in accordance with BS 476: Part 20/22: 1987’ issued by Exova Warrington Fire on 02/06/2018, the fire doors in Shakespeare Tower have not satisfied the requirements for 30 minutes (EI30) class door”*.

Therefore, they are considered to be “Notional” fire doors (as defined by Fire Safety in Purpose Built Blocks of Flats).

It is understood that the flat entrance doors are fitted with spring-loaded central hinges but that these are no longer effective self-closing devices.

It is understood that City of London will be replacing all the flat entrance doors, including side panels and over panels with certified FD60S door sets.

Communal fire doors.

No information was provided for the communal doors to the stairway and stairway lobby, resident storage areas and plant areas. These doors are considered to be notional fire doors.

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

Construction of flats

The walls between the internally accessed flats and protected means of escape are a concrete/masonry wall which if imperforate should provide at least a notional 60 minutes fire resistance.

Concrete doors provide access to risers between the lift lobbies and the flat bathrooms / W/Cs. From sample checks it appears that works in the risers have disturbed the original compartmentation / fire stopping (appearing to be Asbestos) and in some cases to not appear to have been adequately fire stopped post works.

Communal Ventilation / Shunt Ducts

It is understood from the Arup Fire Strategy and from discussions with City of London, that the communal ventilation ductwork connecting the bathrooms and kitchen of the flats is a shunt duct system.

Protection of stairway.

The stair lobby and stair are constructed from a concrete/masonry wall. There are two notional fire doors between the lift lobbies and single communal/escape stairway.

Smoke ventilation.

The single communal/escape stairway is ventilated by two louvered doors at the head of the stair. There are also open vents at the base of the stair at podium level.

The small lobbies between the lift lobbies and main stairway are ventilated by a smoke shaft.

Other than at the top floor, the lift lobbies do not have permanent ventilation but can be ventilated for firefighting purposes via manually openable louvered vents up to level 5, or by opening the doors from the escape balconies above level 6. The louvered vents are opened via winding handles, the escape doors by striking off the heads of cast securing bolts. In the top lift lobby, there is a permanently open vent above the door to the escape stair.

It is believed that the architects fire strategy at the time of construction would have justified the lack of permanently open ventilation of the lift lobbies (for escape purposes) by using the secondary means of escape that allow residents to bypass the lift lobbies in an evacuation as a compensatory feature.

Facilities for the fire service

Firefighting Access

The main entrance to the building is accessed from Beech Street. It also acts as the main firefighting access point into the building. It should however be noted that whilst fire service access to the building is considered to be at Street Level (providing access to the firefighting lift), the firefighting stair can only be accessed at the podium level. Therefore, fire service will enter the building at Beech Street level via the reception, walk up the internal open stair (which is separated from the residential levels above) and transfer to the firefighting stair at podium level.

Firefighters would be met on site by the 24/7 Lobby Porters, who would facilitate access, and provided information as below.

Site Information / Premises Information Box (PIB)

A cupboard behind the main reception desk contains labelled keys and a folder containing site information, emergency contact numbers, site and building layout plans and a Vulnerability List. This would be provided to the Fire Brigade on attendance by the 24/7 building Porters.

Similar information is also provided in a Premises Information Box (labelled “Fireman’s Plans”) located in the stairway leading down from the main reception.

Within the Premises Information Box, the Vulnerability List had not been updated in the last 6 months. **See action 36.**

Wet Rising Main

The tower is fitted with a Wet Rising Main with outlets in each lift lobby and in the plant rooms. The **pump room is located at level 03 and contains an electric Duty Pump and Diesel back up.**

Level 12, band on dry riser is not securing the valve in the closed position. **See Action 33.**

Firefighting Lift

One lift is signed as a “Fire Fighting Lift”– The Arup Fire Strategy states that one lift is a firefighting lift installed in accordance with BS 5588-5:1986 (the strategy states this was confirmed by City of London).

However, on inspection the lift does not have an obvious escape hatch (a key feature of a fire-fighting lift). It is understood from discussions with City of London that the lift was upgraded toward fire-fighting standards (i.e., BS5588-5), but that full compliance could not be achieved.

The Arup Fire Strategy also states that “the existing firefighting lift and other lifts have been identified with a programming issue which will not allow it to ground upon detection of a fire. The firefighting lift will only ground upon arrival of the fire service when they manually activate the lift to ground. This is not in line with the current guidance”. It is understood that LFB are aware of this issue.

It is understood that City of London are planning a lift replacement project, however, there has been no update on these work since the 2022 FRA.

Fire-fighters information signage

Instructions pertaining to the lift lobby smoke ventilation are provided in the lift cars and on the doors to the shafts at the lower levels.

Floor level signs are provided in the stairway and lift lobbies, but these do not comply with current guidance i.e., Approved Document B – Wayfinding signage for the fire service.

Fire Brigade Liaison

It is understood that LFB regularly undertake familiarization visits of the Barbican Estate. Informed that local fire crews regularly attend the estate.

Fire Safety Signage

In some areas, particularly in the ancillary accommodation, fire safety escape signage is considered 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.

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.

An L5 fire alarm system (as defined by BS5839 Part 1) covers the ancillary accommodation i.e., plant rooms, ventilation plant risers and resident storage areas. The fire alarm panel is located within a cupboard in the main reception and monitored by the 24/7 Lobby Porters.

Fire Shutters

There are automatic fire shutters activated by fusible links protecting the lift lobbies from the resident storage / plant areas and carpark.

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 plant areas.

The adequacy of the emergency lighting could not be confirmed.

Fire Extinguishers

Portable fire aid firefighting equipment is provided in the plant rooms and areas occupied by the concierge.

Plant Room, V.F.L 39, Co2 fire extinguisher requires replacement. **See action 27.**

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 and any portable appliances in the risers is appropriately maintained and the risers are kept sterile this is considered a tolerable risk.

There are power outlets located within the lift lobbies at each level for use by cleaning staff, however these were found to be used by residents for charging of a mobility scooter and as such should be locked off to restrict access. **See action 4.**

In the ancillary accommodation are the electrical and plant / machinery installations. Providing the fixed wiring, any portable appliances and plant/machinery 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.

It is understood that Porters for the building also complete Fire Extinguisher Training and mandatory city fire training on “City Learning”. No evidential documentation was reviewed during the FRA.

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

Each hazard risk is to be identified in the assessment and is to include the following sections: as the following example: -

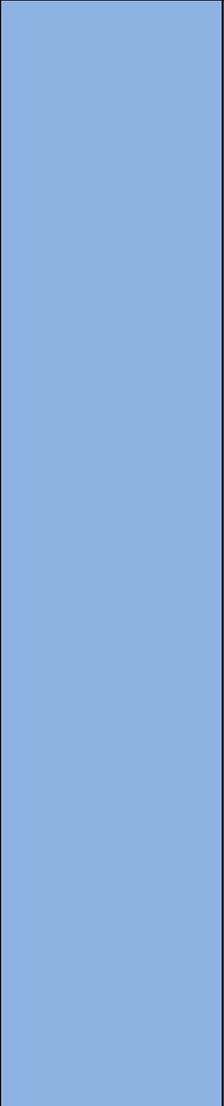
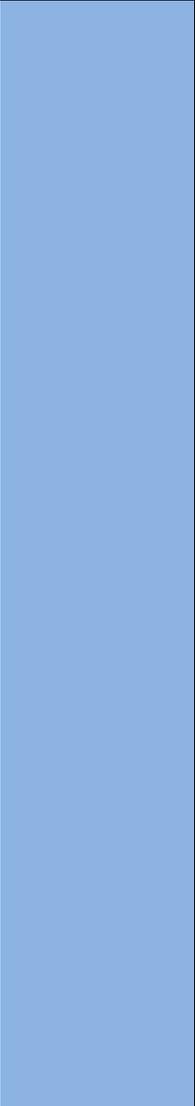
- *Location: Specific to the building area i.e. 2nd floor north wing room A23 (use of the standard door marking for monthly testing is good practice as a location point)*
- *Observations: Controls in Place - a list of what controls are in place to control the fire hazard, subjective appraisal*
- *Missing Controls / Problem - an explanation of any missing controls or safety problems identified during the risk survey to include thumbnail photographs where they help to clarify the problem & further action required - the individual actions that should be taken to control the hazards and put corrective actions in place.*
- *Risk Priority - The assessor's opinion of how urgent the action is, that needs be taken to reduce risk to a tolerable level. This is subjective and is based on the CoL Matrix below.*
- *CoL Service level: Time frame for contractors to attend in hours / days as our service level agreement with service providers.*
- *Actioned by: The CoL member on the site who reports the defects.*
- *PSD: Property service desk number given when reporting (undertaken by CoL staff when assessor informs them whilst on site)*
- *Completed date or date followed up (Maximum 28 days for items to be followed up and recorded in the table)*
- *When possible, the assessor is to place a photo below the concerns A9 size 37mm x 52mm.*

Ref No. Location:	Observations	Recommended further action	Observation Pictures	Risk Rating Low Medium High	Priority Level (please refer to table 1)	Action by Whom & When (Person task with action by premise controller	Date Completed
1.	Much of the emergency lighting in the building is provided by “Standby Lighting” (as defined by BS5266 Part 1) 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.	It is understood that CoL have commissioned an emergency lighting survey, but no further details have been provided– 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		Medium	D		

		<p>as installed standards and those required by BS5266 Part 1 2016.</p> <p>Any installations or enhancements or replacements required should be in accordance with BS5266 Part 1 2016.</p>					
2.	<p>The Arup Fire strategy states that <i>“It has been confirmed by BE that there is no emergency lighting within the storage levels”</i>.</p> <p>Based on a visual inspection there does not appear to any EML in these areas.</p>	<p>Ensure emergency lighting (EML) is installed in the resident storage areas in compliance with BS5266 Part 1 2016.</p>		Medium	D		
3.	<p>The secondary means of escape from the Level 40 plant room is not provided with appropriate directional signage and the fire exit to the escape ladder from the lift motor</p>	<p>Ensure that as part of the fire signage project, all fire exit doors are appropriately signed and the escape signage in ancillary areas including the plant rooms (such as, the Level 40 plant</p>		Medium	D		

	<p>room is not clearly signed as a fire exit.</p> <p>The majority of the notional fire doors installed within the premises are not signed as fire doors. For example, signed with 'Fire Door – Keep Closed' or 'Fire Door – Keep Locked' signage.</p> <p>Thumb turn door releases are also not signed.</p>	<p>room) and resident storage areas is improved in compliance with BS 5499 Part 4.</p> <p>Thumb turn door releases should also be clearly signed (preferably with luminous signs) to indicate the mode of operation.</p>					
<p>4.</p>	<p>Rooftop plantroom, the secondary exit door from the penthouse flat is not signed to make it clear that this is a fire exit and must not be obstructed.</p>	<p>The exit door from the penthouse flat which allows escape through the rooftop plant room should be clear signed 'Fire Exit Keep Clear' from within the plant room.</p>		<p>Medium</p>	<p>C</p>		

<p>5.</p>	<p>Obstructions / storage were noted in the following areas:</p> <ul style="list-style-type: none"> █ █ █ █ █ █ ○ █ █ █ █ 	<p>Ensure that items stored in these areas is removed to prevent obstruction of means of escape or additional fire loading within the building.</p> <p>Residents should be reminded not to store anything within communal areas.</p> <p>Regular inspections of means of escape should be undertaken to check that the communal area/means of escape are kept free of storage at all times.</p>	<p style="text-align: center; font-size: 48px; opacity: 0.3;">COL</p>	<p>Medium</p>	<p>B</p>		
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<p>6.</p>	<p>In the “Garchey” waste disposal system room is an inner room of the Wet Riser pump room. There is automatic detection in the pump room but no obvious sounders / beacons in this area. The connecting door as no vision panel.</p>	<p>In the short term a management arrangement should be put in place to mitigate the inner room condition and lack of a fire alarm sounders. E.g., No lone working, keep Garchey Room door open whilst being worked in the inner room.</p> <p>In the longer term, Alarm sounders and beacons (e.g. Visual Alarm Devices “VADS”) should be installed in the Pump Room Area to provide early warning to those working in the area that their escape route may be compromised.</p>	<p>COL</p>	<p>Medium</p>	<p>D</p>		
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<p>7.</p>	<p>The Fire Action Notices (FANs) had not been completed with the site address. This information is useful to visitors who may need to dial 999.</p> <p>Additionally - a number of the notices have been removed and are either missing or were found on the floor.</p>	<p>It is recommended that the site address is clearly written on the FAN.</p> <p>Fire action notices should be provided at each lift lobby level and suitably affixed to prevent removal.</p>		<p>Low</p>	<p>D</p>		
<p>8.</p>	<p>The external side of the fire exits from the main stair and from the resident store areas, (spiral stairs) which could potentially be obstructed are not signed Fire Exit Keep Clear.</p>	<p>The outside of these exits should be signed "Fire Exit Keep Clear".</p>		<p>Low</p>	<p>D</p>		

<p>9.</p>	<p>Floor level signs are installed in the stairway and the lift lobbies (above the lifts) but they do not meet current standards – also flat numbering is not included on these signs.</p> <p>Wayfinding signage for firefighters is a legal requirement under the Fire Safety (England) regulations 2022 for residential buildings >18m tall.</p>	<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:</p> <p>To assist the fire service to identify each floor in a block of flats with a top storey more than 11m above ground level floor identification signs and flat indicator signs should be provided.</p> <p>The floor identification signs should meet all the following conditions.</p>		<p>Medium</p>	<p>C</p>		
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		<p>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.</p> <p>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.</p> <p>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.</p> <p>d. The signs should be mounted between 1.7m and 2m above floor level and, as far as practicable, all the</p>					
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		<p>signs should be mounted at the same height.</p> <p>e. The text should be on a contrasting background, easily legible and readable in low level lighting conditions or when illuminated with a torch.</p>					
<p>10.</p>	<p>In general, the smoke vents, grills and louvres etc. appear to be contaminated by an historical accumulation of dust / exhaust fumes etc. It is not clear to what extent they have been cleaned / maintained.</p> <p>The smoke ventilation in the staircase lobby appears to be open shaft with the potential to allow</p>	<p>It is advised that CoL commission an expert appraisal of the smoke control systems for the escape phase and fire-fighting phase i.e., smoke shaft(s) and permanently open smoke vents (POVs), to review their function, adequacy, condition/ status, and their planned preventative maintenance regime.</p> <p>Note – it is anticipated that such</p>		<p>Low</p>	<p>E</p>		

	<p>smoke to pass between lobbies. The effectiveness of the current smoke control could not be confirmed as part of this Type 1 FRA.</p> <p>Also, at podium level the original door between the lift lobby and the stair appears to have been removed. The smoke ventilation shaft which on the upper floors only ventilates the lobbies however on this floor also now ventilates the lift lobby.</p>	<p>an appraisal may be considered necessary as part of the Safety Case required under the Building Safety Act 2022. This should consider if the removal of the door at podium level has any detrimental impact on the original smoke ventilation strategy.</p>					
<p>11.</p>	<p>It is understood that periodic flat entrance door and communal fire door inspections are being completed as required by the</p>	<p>It is advised that fire doors (including flat entrance doors) are asset tagged with electronic inspection records maintained to</p>		<p>Low</p>	<p>D</p>		

	<p>Fire Safety (England) Regulations 2022 although no asset tags were evident, and no inspection records were demonstrated.</p>	<p>demonstrate compliance with the Fire Safety (England) Regulations 2022.</p> <p>Communal fire doors requiring evidence of inspection the include the stairway doors, plumbing risers (concrete doors), PDA riser, ventilation plant rooms, mezzanine room, and basement level door to the carpark, store areas, pump room etc.</p>					
12.	<p>The flat entrance doors appear to be of the same type, and based on information previously provided they are considered to be notional fire doors, with no effective self-closing device fitted. In several cases the flat</p>	<p>Flat entrance doors are to be renewed as part of CoL's door replacement programme which is replacing the existing notional fire doors with certified FD60S, self-closing, fire door sets.</p>		Medium	D		

	<p>entrance doors were noted to be poorly fitting with excessive gaps. It was not possible to confirm the fire resistance of the top and side panels and the letter boxes do not appear to be fire resisting. Therefore, based on the above, the flat entrance doors do not comply with current standards and guidance. The level of risk is considered to be reduced to a degree, by the presence of the secondary means of escape from the flats.</p> <p>It is understood that a programme is in place to replace all the flat entrance doors including top and side panels with</p>						
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	certified FD60S door sets fitted with external overhead self-closing device						
13.	<p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p>	<p>When not in use, this gate must be secured to ensure that if residents escape through the plant room, they do not access the plant areas.</p> <p>Advised that any contractors accessing this area are briefed that this must be locked when leaving the site. CoL should also check this as part of their ongoing fire safety audits of the building.</p>		Medium	C		

14.	The fire doors into the lift lobby and into the caretaker's room at L01 were propped open which could allow the spread of smoke and flames into escape routes and protected lobbies.	The Porters should be instructed to keep these fire doors closed and any door wedges disposed of. The carpark door hook should also be removed. Alternatively, as a long-term solution, these doors should be fitted with hard wired hold open devices linked to automatic detection in compliance with BS7274 Part 4 2015.		Medium	B		
15.	Whilst some appliances have up to date PAT labels, some appliances checked have no labels or what appear to be out of date labels.	Confirm that all portable appliances are subject to an appropriate inspection regime in accordance with CoL policy and HSE guidance. Reception desk – cables should be rationalised / tidied up and ensure		Medium	D		

		appliances have been PAT tested.					
16.	There are what appear to be redundant white goods stored in Switch Gear 3A.	It is advised that redundant appliances should be removed from site and appropriately disposed of to minimise any unnecessary fire loading. Switch gear room should not be used for storage.		Low	D		
17.	There was no evidence to confirm that 3 rd party telecoms equipment noted in the Ventilation Plant areas and stairway electrical riser (EDA) is under an appropriate inspection and test regime	CoL should have arrangements in place to confirm that where 3 rd parties (e.g. Telecoms) have electrical equipment (or other work equipment) installed within the building, that the equipment is subject to an appropriate maintenance regime.		Low	D		

<p>18.</p>	<p>L39 Lift Lobby Ventilation</p> <p>The lift lobby is ventilated by a permanently open vent (POV) above the exit door to the stairway. It appears that this vent has been partially blocked up. It is understood that the vent is necessary as this is the top accommodation floor, so cannot be ventilated by opening balcony escape doors.</p> <p>There is only one flat opening lift lobby at this level so the risk is considered low and should be partially mitigated by the installation of an FD60S self-closing flat entrance door.</p>	<p>It is advised that the original ventilation to the top accommodation floor is reinstated to return to the original standard of construction.</p> <p>If a POV is deemed undesirable, then consider the viability of installing an automatic opening smoke vent (AOV) which would only open on activation of automatic smoke detection which would need to be installed in the flat access lobby.</p>		<p>Low</p>	<p>E</p>		
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<p>19.</p>	<p>In several of the bathroom risers (PDA) it was noted that plumbing works have penetrated the compartment walls and floors with no, or inadequate, remedial fire stopping works completed.</p> <p>This could potentially facilitate smoke spread between both the flats and the floor levels.</p> <p>(Note CoL confirmed that where recent and ongoing plumbing works take place, the penetrations are sealed with double plaster board to achieve 60 minutes fire resistance).</p> <p>There also appear to be some inadequately fire stopped service penetrations in the</p>	<p>Ensure that compartmentation defects identified in the risers are sealed/fire stopped with appropriate proprietary substances in accordance with the remedial works specification so that there is a minimum of 60 minutes fire separation between the flats and the riser, and at floor/ceiling levels within the riser.</p> <p>This should include bathroom risers, stairway riser and electrical cupboards located on the Podium levels, reception area, and levels 01-03</p>		<p>Medium</p>	<p>E</p>	<div style="background-color: #4F81BD; width: 100%; height: 100%;"></div>
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	<p>stairway riser (EDA) and in the electrical cupboards at Podium Level at ground level and levels 01,02 & 03.</p> <p>It is understood that City of London have previously identified the compartmentation defects and have commissioned a specialist to complete a compartmentation survey at Shakespeare Tower (of similar design) to provide a specification for remedial works.</p> <p>.</p>						
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<p>20.</p>	<p>Ceiling Voids</p> <p>In some areas of the towers e.g., stairway landings, lower-level lift lobbies, there are false ceilings with cables running in them. The ceiling material appears to be a composite material (e.g., Asbestos/ACM)) rather than timber, though this could not be confirmed, and it was not possible to confirm that cables in the void are appropriately secured.</p>	<p>CoL should confirm that:</p> <ul style="list-style-type: none"> • The ceiling material is non-combustible. • The paint is rated B-s3, d2 for surface spread of flame. • Any cables are above the false ceiling suitably secured with fire rated fixings. • Where any cables in the ceiling void pass through a compartment wall or ceiling that they are appropriately fire stopped. 		<p>Low</p>	<p>D</p>	<div style="background-color: #4F81BD; width: 100%; height: 100%;"></div>
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<p>21.</p>	<p>[REDACTED]</p> <p>This compromises the compartmentation between the risers and the lift lobbies.</p>	<p>Ensure all bathroom riser access doors are kept locked shut and any broken locks are repaired/replaced as required.</p> <p>These doors should be routinely monitored to ensure that they are kept locked shut.</p>		<p>Medium</p>	<p>C</p>		
<p>22.</p>	<p>It could not be confirmed if the fire exit doors from the ancillary accommodation (plant rooms and resident storage areas which are seldom used, are appropriately inspected).</p>	<p>The operation of all emergency and panic escape devices, especially on external doors not used for other purposes, should be checked once a month for ease of operation and opening of the door. Weather conditions can affect the door and frame relationship, and therefore the ease of</p>		<p>Medium</p>	<p>C</p>		

		operation of escape devices.					
23.	Planned Preventative Maintenance (PPM) records were not provided as part of this fire risk assessment.	<p>Barbican Estates should review their planned preventative maintenance arrangements to ensure suitable, inspection, test and maintenance (as relevant) regimes are in place for the following:</p> <ul style="list-style-type: none"> • Fire safety systems (as relevant to this building): Fire Alarm, Wet rising Mains, Fire Extinguishers, Back-up Generators, Lightning Protection, Wet Risers, Wet Riser Pumps, Emergency 		Medium	D		

		Lighting, Fixed Electrical System, Fixed Wiring and Portable Appliances, Smoke Ventilation, Gas, Firefighting Lifts, Fusible Link Fire Shutters,					
24.	<p>Retail unit.</p> <p>A retail unit [REDACTED] were not inspected as part of this assessment (as they are under the control of different Responsible Persons). It was noted that there are possibly service risers which penetrate the ceiling slab of the retail unit but the standard of</p>	<p>Col should check the compartmentation between the externally accessed retail unit to ensure that where any services pass through the compartment walls/ceilings of the residential parts of the building, that they are appropriately fire stopped, to meet the fire resistance of the compartment</p>		Medium	C		

	fire stopping could not be confirmed.	wall/ceiling which they pass through.					
25.	<p>Communal ventilation system – the building is fitted with a communal ventilation system. It is understood that this system links between all flat bathrooms and kitchens and is therefore a potential source of smoke/fire spread between flats. The Arup fire strategy provides recommendations regarding “shunt ducts”. It could not be confirmed if suitable dampers etc. are fitted in the system and maintained.</p>	<p>It is advised that a survey of the communal ventilation system is undertaken by a competent person to appraise whether the system incorporates suitable features to restrict the risk of smoke spread between flats.</p> <p>The recommendations of the Arup fire strategy should be considered as part of this exercise.</p> <p>Note – it is anticipated that such an appraisal may be considered necessary as part of the Safety Case required under the Building Safety Act 2022.</p>		Low	D		

<p>26.</p>	<p>On levels, █████, it is understood that the secondary means of escape from some of these flats is via an internal escape route which passes through the neighbouring flat. CoL has confirmed that a standard letter is periodically sent to residents on these floors explaining the escape routes and how they should be maintained. However, this type of secondary means of escape (internally through a neighbouring flat) is no longer considered to be suitable as the escape route as it cannot be guaranteed as always being available.</p>	<p>Ideally the escape routes via the flats on levels █████ should be periodically monitored to provide assurance that they are viable.</p> <p>If this is not possible in leasehold flats, and it cannot be assured that the exit routes are viable, then an alternative measure(s) may need to be implemented to provide an equivalent level of safety.</p> <p>Also refer to the Arup Fire Strategy Report.</p>	<p>Medium</p>	<p>D</p>	<p></p>
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27.	Plant Room, V.F.L 39, Co2 fire extinguisher requires replacement.	The expired Co2 fire extinguisher should be replaced with a maintained extinguisher.		Low	D		
28.	<p>██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████</p> <p>There also appeared to be breaks in compartmentation where pipes pass from the riser into the flat.</p>	<p>Given the proximity of these additional power sockets below a wastewater pipe, it is advised the CoL to undertake an electrical survey the riser to determine if the socket is in accordance with the relevant electrical regulations.</p> <p>Any fire stopping defect in the riser should be appropriately fire stopped to provide a minimum of 60 minutes fire separation between the flat and the communal service riser.</p>		Medium	C		

29.	<p>██████████ ████████████████████ ████████████████████ ██████████████████ ██████████████████ ██████████████████</p> <p>This was reported to CoL on the day of the assessment</p>	<p>Contractors working within the flats should not be taking power from the communal sockets as this requires trailing a power cable across the communal lobby and the flat entrance door to remain open whilst works within the flat are undertaken.</p> <p>This was reported to CoL on the day of the assessment.</p>		Medium	B		
30.	<p>During course of undertaking the fire risk assessment it was identified that the existing flat entrance doors are not installed with any effective self-closing mechanism.</p> <p>At the time of the assessment the</p>	<p>Although it is understood that all the flat entrance doors are to be replaced with FD60s self-closing fire door sets as part of CoL's fire door replacement program across the Barbican estate.</p>		High	C		

	entrance door to [REDACTED] [REDACTED]	The existing notional fire doors must be self-closing to minimise the risk of fire spread into the lift lobby. It is suspected that the original flat entrance doors would have been self-closing, possible via a rising butt hinge					
31.	Level [REDACTED], a gate has been installed across the escape balcony.	CoL should check that installation of the gate across the escape balcony has been authorised and it does not impact on the means of escape, i.e., it should be immediately openable.		Low	C		
32.	[REDACTED] [REDACTED] [REDACTED] [REDACTED]	CoL should liaise with the resident to make them aware that at all times there should be a clear exit route		Low	C		

		along the escape balcony.					
33.	Level 12, band on dry riser is not securing the valve in the closed position.	The leather dry riser bands should all be inspected and where necessary adjusted so that they secure the dry riser outlet in the closed position.		Low	D		
34.	Mezzanine lift lobby, being used as a storage area by the CoL concierge.	The Mezzanine lift lobby should not be used as a storage area. The lobby provides access to the lifts including the fire-fighting lift so at all times must be kept as a sterile area.		Medium	C		

35.	<p>External, ventilation shaft between carpark and Cromwell house.</p> <p>Leaves have accumulated on top of the ventilation grill. There is as evidence of smoker materials (from street level) being dropped into this area.</p>	<p>The ventilation grill between these two areas should be regularly cleaned to prevent a build up of leaf litter and any other combustible rubbish.</p>		Medium	C		
36.	<p>In the premises information box there is no review date on resident vulnerability list</p>	<p>In line with CoL policy the vulnerability list should be reviewed at 6 monthly intervals.</p>		Medium			
37.	<p>No fire door asset number the door between the concierge office and the lift lobby</p>	<p>CoL should review the asset register for common area fire doors to check that the concierge office door is recorded as a fire door and is periodically inspected.</p>		Medium	D		

		Where necessary the door should be added to the list of common area fire doors which should be regularly inspected.					
38.	On the external escape balconies some of the exits from the flats (believed to be the kitchen exit) may have been overpainted which could make it difficult for these exit doors to be opening internally from within the flat.	CoL should inspect these exits from the kitchens of the flats onto the external balconies to determine if overpainting of these exit doors would make them difficult to open in an emergency. Where necessary measure will need to be implemented to ensure these exit doors are immediately openable.		Medium	D		
40	The Government has indicated that the position on PEEPs	CoL should ensure that when issued they consider the new		Medium	D		

	<p>will be confirmed by year end 2024. It is understood that residents with disabilities and impairments will be entitled to a “person-centred risk assessment” to identify appropriate equipment and adjustments to aid their fire safety or evacuation. They will also be entitled to a residential PEEPs statement that records what vulnerable residents should do in the event of a fire. This will be supported by guidance in the forthcoming BS:9792 - Fire risk assessment. Housing - Code of practice.</p>	<p>government requirements on PEEPs in residential blocks of flats.</p>					
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Action time frame in accordance with CoL service level agreements

Table One Priorities for remedial action listed below; - & time frame.

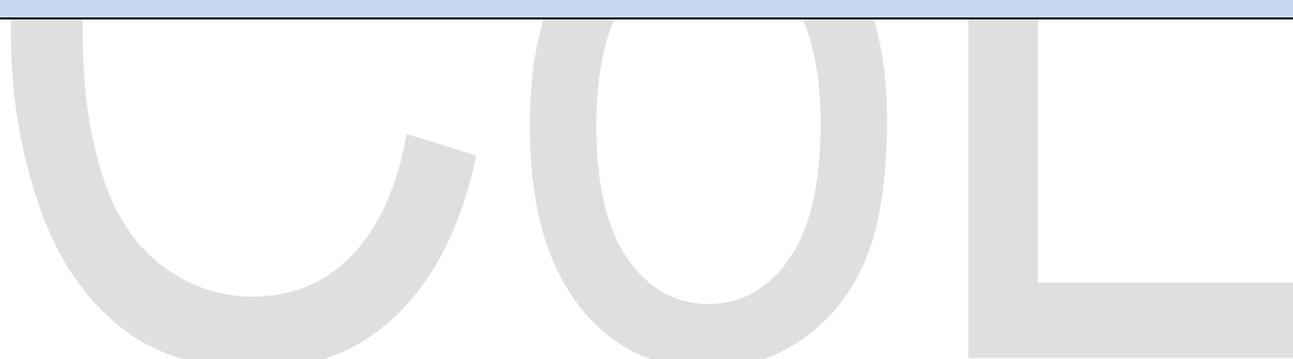
Recommend priority code

Priority Action AA	Immediate action taken whilst on site attendance.	(P1) 2-hour
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:

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)

List of restriction applied by Building Control, Planning & Heritage interest impinging on the risk assessment.	
Salvage and Business Continuity of the building	
Structural alteration of the property, any project works being undertaken at the time of the assessment which could impinge on the assessment decision.	
Change of use of the property/process undertaken.	
Planning permission for new structures nearby.	
Structural use of decorative timber cladding/aluminum.	
Change in use of activities of the premises.	
Alcohol use on site by staff off duty or visitors.	
Unfamiliar surrounding for staff or visitors.	
Number of disabilities of staff/visitors.	
Surrounding risks which have the likelihood to affect business continuity of the premises.	
<p>Building Fire Strategy for the site:</p> <ul style="list-style-type: none"> • Means of Warning and Escape • Emergency lighting and Signature • Internal Fire Spread (lining) • External Fire Spread (structure) • Fire Service Access 	
<p>Fire Management Plan covering:</p> <ul style="list-style-type: none"> • How you manage fire safety day-to-day • PEEPS, particularly in housing the procedures for residents to follow in the event of Fire (stay put policy) • Number of Safety/Fire Marshall to cover site. • Method of calling the Fire Service • Full site evacuation plans, gas escape, planned and unplanned power failures. • Route for emergency service personnel and vehicles to the premise's day & night with the expected pre-determined attendance time from local authority fire station and works fire service i.e. Heathrow Animal Reception Centre. (HARC). 	
<p>Security onsite covering:</p> <ul style="list-style-type: none"> • anti-social behaviour • Protection from the threat of arson • CCTV-log 	
Secondary/Life Safety power generation on site.	
Permit to work system:	

<ul style="list-style-type: none"> Hot work permits to (CoL guidance note) Roof Access Fire Stopping Register for (internal & external contractor works/repairs) Hazards introduced by contractors (<i>Acetylene cutting is not permitted on sites</i>). 	
Occupants in satellite buildings under the control of the site.	
Commercial Shop Units to detail areas of: <ul style="list-style-type: none"> Location Floor area Activities undertaken. 	
Listed building (grade 1 or 2 or code ABC)?	
Entertainment licences in force <ul style="list-style-type: none"> Seasonal activity undertaken by the site which affects the fire risk assessment 	
Fire Detection & Alarm Systems installed. Type and description including operation, fire detection and alarm interfaces with zone plan.	
List of enforcement/deficiency actions out-standing matters.	
AFA automatic fire alarms, AFA History of calls in rolling 12-month period of unwanted fire signals.	
Salvage /disaster recovery plans.	
Floor marking of wheelchairs in seating areas.	
Previous history of fires on the site over 20-year period	
Fire Safety arrangements which are in place including compromised fire safety due to external safety related event occurring (Terrorist Marauding) improvised devices.	
Fire Assembly Points suitable with alternative secondary available.	
Firefighting systems incorporated within the premises e.g. Pressurised staircases, Fixed installation water or gas systems, firefighting mains, Protection for Fire-Fighters	
COMAH sites within 800m	
COSHH cabinet on site Cleaning products	
Acetylene cylinders used within 250M	