Client

HML PM LTD

Assignment Type

COMPARTMENTATION AND FIRE DOOR SURVEY

CENTRE POINT HOUSE,
St Giles High Street,
London WC2H 8LW

Project Number	Project reference	Date
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1	HML PM Ltd	2.4	PDF	Additional areas were surveyed and further findings provided following supplementary inspection and survey to lift shaft and other areas. Amendments following general discussion included.
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Contents

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1. Disclaimer

Ark Workplace Risk Ltd have provided this report based upon the information gained through documents sighted and provided by the client, during discussions with Client's representatives and site visits, when applicable. Although Ark Workplace Risk Ltd.'s Consultants are experienced and trained to the highest professional standards, they have no powers under any statutory order to demand entry and the production of documents or information. The advice in the report is therefore given in good faith based upon the evidence seen, the information given, and the points discussed at the time of the visits and meetings. No guarantee can be given that during any subsequent visit by inspectors with statutory powers other non-compliance may not be found. Ark Workplace Risk Ltd will not accept responsibility for any loss arising from such a discovery.

Whilst every care is taken to interpret the Acts, Regulations and Approved Codes of Practice, these can only be authoritatively interpreted by Courts of Law.

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3. Executive Summary

HML PM Ltd (HML) have instructed Ark Workplace Risk Ltd (Ark) to complete a compartmentation survey of the residential common parts of Centre Point House and preparation of a report detailing the findings and recommendations.

This compartmentation survey has been undertaken to support the client in meeting the requirements of Article 8 of the Regulatory Reform (Fire Safety) Order 2005 (RRO2005) (as amended by the Fire Safety Act 2021) in respect of ensuring that such general fire precautions is so far as is reasonably practicable are provided and support the building owners and occupiers in ensuring that such general fire precautions, as may reasonably be required are in place to ensure that the premises is safe. In addition, it also supports the need for the building owner to consider the structure of the property in accordance with the requirements of the Fire Safety Act 2021.

It has been recognised during the scoping of the survey that the client intends to undertake a formal consultation process with each of the tenants in relation to any necessary / proposed works deemed necessary and recommended to meet the requirements of the RRO2005, under Section 20 of the Landlord and Tenant Act 1985. It is important, therefore, that any works of repair which are reasonably necessary or required are clearly identified at this stage.

The aim of the survey therefore is to provide information on the state of the fire compartmentation within the communal areas of the residential premises only within Centre Point House. This approach required a survey of the communal corridors, stairwells, laundry rooms, service risers and associated fire doors within the means of escape corridors. The survey was a non-intrusive survey and therefore no opening up works were undertaken of the building construction or elements of structure. Whilst a sample of the retail space was assessed, this did not form part of the scope of the survey and was undertaken purely to identify any possible general faults that may be evident throughout the whole building in scope.

The survey was undertaken in accordance with general fire safety auditing principles to identify hazards that could contribute to injury of persons within the building, against the requirements of the RRO2005 as well as general basic requirements contained with the various Building Regulations applied to the property overtime in respect of securing effective compartmentation and separation in respect of fire.

The findings of the compartment survey undertaken within the property indicate that compartmentation and separation in respect of fire in those areas under scope do not meet the expected requirements necessary to provide adequate compartmentation and fire separation as well as prevent fire spread within the building to a suitable and sufficient degree.

Evidence has been identified of a significant number of breaches of such compartmentation and separation along with poor fire stopping which stem, in the main from what appears to be retrofitting of services, cables and the like.

It was also identified that despite works being undertaken by the landlord to mitigate issues, the means for protecting the means of escape in terms of fire separation and compartmentation is considered unsuitable and will not, in our opinion, prevent the products of combustion impacting on the means of escape or the safety of relevant persons residing within the property.

Recommendations have been made within this survey report in respect of how such breaches can be rectified, to meet the current guidance contained within British Standard BS9999:2017 - Code of practice for fire safety in the design, management and use of buildings (BS9999:2017) regarding the necessary fire protection requirements. These have been based upon the appropriate risk profile developed following the guidance contained within this standard code of practice.

It should be noted that the provision of such compartmentation is essential and should not be considered to be an improvement, rather, bringing the property back into line with the requirements of both the current RRO2005 as well as the Building Regulations which were relevant at the time of original construction and/or refurbishment.

4. Background and Scope

One of the most important elements within any building in respect of fire safety is the degree, extent and veracity of the passive fire protection systems and arrangements installed. Passive fire protection features are generally designed and installed to restrict the spread of fire and smoke through the flammability of linings, compartmentation of the building and protection of the structural integrity of the building.

As stated, such passive fire protection can include the degree of compartmentation installed limiting the spread of a fire and smoke to allow occupants sufficient time to escape using the recognised escape routes as well as prevent fire spread and subsequent property damage/loss along with appropriate fire stopping where compartment walls and floors are intentionally breached with the installation of services and the like.

In addition, intentional breaches through such compartmentation and separation include doorways, and therefore fire doors play a vital role in supporting such compartmentation and separation. They need therefore to be installed, maintained, and operating effectively if the correct level of compartmentation and separation is to be maintained.

Compartmentation therefore forms a key part of the fire safety arrangements within any building and is an important element considered during a fire risk assessment. Properly managed and installed compartmentation and separation is not only a legal requirement, but it also prevents the spread of fire and smoke, sub-dividing buildings into more manageable areas and providing, importantly, the necessary available safe egress time for the occupants to evacuate in safety before conditions and the structure becomes untenable.

With effect from 1 October 2006 the RRO2005 became the primary fire safety legislation in England and Wales and apply to the communal areas of blocks of residential flats. Currently the application of the RRO2005 does not include those areas under the tenants demised. The Fire Safety Act 2021 proposes an extension of the application of the RRO2005 with further requirements relating to properties containing residential apartments and the like. Some owners and agents are starting to consider how this can be incorporated into their existing fire risk assessment processes.

Under the RRO2005 the 'responsible person' is currently required to take such general fire precautions as will ensure, in so far as is reasonably practicable, the safety of any of his employees as well as other relevant persons who are not his employees (which includes those people who are lawfully within the building). In this instance it can be assumed that both HML and the building owner are both considered to be "responsible persons."

To achieve such general fire precautions, including the need to both prevent the spread of fire within the building and secure the means of escape from the premises, an adequate level of fire resistance is required to be provided certain walls and floors.

The level of fire resistance necessary would normally have been determined at the time of construction although the general principles in respect of fire compartmentation and fire resistance have changed little over time.

Where these cannot be definitively determined consideration of the following is appropriate:

- British Standard BS9999: 2017 - Code of practice for fire safety in the design, management and use of buildings.
- British Standard BS9991: 2015 - Code of practice for fire safety in the design, management and use of residential buildings.
- Building Regulations 2010 Approved Document "B" – Fire Safety.

It is noted that all the above documents refer to the option for designers and others to select alternate solutions to both the functional and prescriptive requirements and guidance contained within the above documents; this includes the use of fire safety engineering approaches and options.

From the information provided by the client, it is noted that there have been multiple fire strategies, reviews, surveys, and assessments completed on and for Centre Point House, including:

Fire Strategies

- Grontmjj Fire Strategy completed by AE in 2014.
- Sweco - Fire Safety Strategy Centre Point - Link, House & Affordable Housing, (reference 106610/BG/170331, Revision 8) dated April 2017.
- HML Technical Services – Fire Safety Strategy - dated 30 January 2017.
- Multiplex Fire Strategy Review completed by Gabrielle Worrall in April 2017.
- International Fire Consultants Ltd - Retrospective Fire Strategy Report, reference, FSS/19662/01A, dated 24 June 2019.
- SWECO - Fire Safety Strategy Centre Point - Link, House & Affordable Housing, (reference 106610/BG/220321, Revision 9) dated March 2021.

Compartmentation and Fire Door Surveys and Reviews

- B Richards, Fire Protection Consultants Ltd - Survey Report carried out on installed fire compartment lines and associated fire doors in the common parts at Centre Point House, 15A Saint Giles High Street, Camden, London, WC2H 8LW; Reference HLM/04/2018/1/R2,
- B Richards, Fire Protection Consultants Ltd - Survey Report carried out on installed fire doors to the residential apartments, (front doors only), at Centre Point House, 15A Saint Giles High Street, Camden, London, WC2H 8LW; Reference HLM/01/2019/2.
- Ark Workplace Risk Ltd – Draft Compartmentation and Fire Door Survey Review (reference 1035943) dated July 2020.

Fire Risk Assessment

- Fire-X - Fire Risk Assessment (reference Fire-XC3555) dated 22 November 2019.

Centre Point House (CPH) is a 9-storey block to the East of Centre Point Tower, comprising commercial units over ground to second floor with basement, with six floors of residential accommodation (duplexes) above these commercial units which occupy Third to Eighth floors. The duplexes are arranged such that the common residential corridors are located only on Third, Fifth and Seventh Floors.

There are 36 flats in total, 1-12 on the 3rd / 4th floors, 14-25 on the 5th / 6th floors and 26-37 on the 7th / 8th floors. It should be noted that flat 13 does not exist.

The building was constructed in the 1960's (and would have therefore been subject to either The Public Health Acts of either 1936 or 1961 (and the subsequent regulations/by-laws emanating from these Acts) or the Building Regulations 1965. Centre Point House is categorised as a Grade II listed building.

The property is predominantly constructed using concrete with a steel frame. Internally there is a mixture of blockwork walls and lightweight plasterboard partitions. The external façade is a mixture of tiles on render, concrete, and glass, with a masonry structure behind.

The upper floors are served by two stairwells (identified as North and South) at either end of a central corridor and other ancillary accommodation and are surrounded/constructed with Georgian wired glazing surrounding a concrete and steel staircase. The central corridor linking the two staircases is approximately 44m in length, with separation provided via internal door sets which are approximately 18m from the North stairs and 10m from the South stairs.

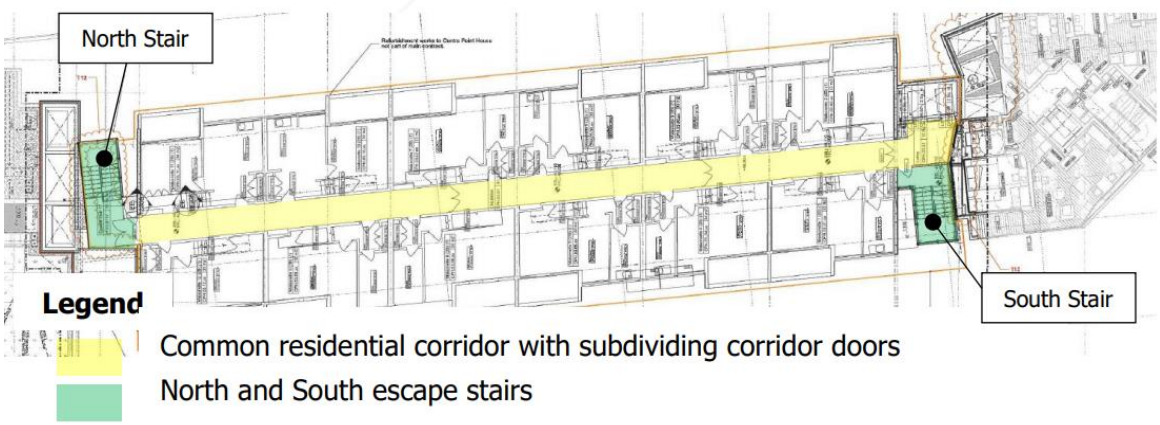


Figure 1 – Typical floor plan of the residential communal areas, - extract from the fire strategy report created by the IFC Group as detailed above.

Services appear to lead down the central communal corridors and into the flats above the entrance doors, or vertically into the duplexes within the suspended ceiling void.

Misting systems are provided in both laundry rooms which are linked directly off the mains water supply.

A refuse chute is located on the North stairs, and is accessible on the 3rd, 5th and 7th floors, however this has been sealed off and is no longer in use. As this chute had been sealed no action is required relating to this other than monitoring the condition of the chute on a regular basis to ensure that it remains sealed.

On the 4th, 6th and 8th floors, the flats adjacent to the stairwells have escape hatches/doors (which are there to provide an alternate means of escape in case of fire from the duplex flats) that lead directly onto the escape route. In terms of the North stairs, escape doors lead into a small lobby area (which was considered at the time of the survey).

There are three retail units on the ground floor of the building. Two of these are currently unoccupied, with Pret-a-Manger occupying the third. Due to Covid-19 and the subsequent restrictions, these were closed at the time of inspection although one of the units was accessed, purely to determine the level of compartmentation across the whole of the building.

A void is noticeable between CPH and White Lion House (WLH). This could not be accessed at the time of the assessment as the access points had been sealed shut. The void is being considered by the landlord/ building surveyor with the WLH contractors and it is recommended that an intrusive inspection of this area is carried out to ensure cavity barriers had been installed although this is a separate workstream being considered by the landlord and its contractors.

A link bridge on the third-floor joins CPH to Centre Point Tower (CPT). This joins the escape route and leads to a place of ultimate safety away from the building via a protected internal stairwell. This link bridge has not been assessed other than the areas immediately adjacent to CPH.

There are two shared communal lifts which access each floor. Even though a firefighting switch is present on the ground floor, the site contact stated that this is out of use and neither are considered as "firefighting lifts." It appears that the original arrangements had these lifts operating as firefighting lifts although it is not known if the original Building Regulation approval/application included/ required these. The lack of firefighting lifts does not adversely affect compartmentation although it could influence firefighting operations and should be considered as part of the review of the fire risk assessment for CPH.

A temporary wireless fire detection and alarm system is currently provided within the communal areas and flats, which, when/if activated aims to ensure a simultaneous evacuation of the full building. This is a temporary measure, which has been put in place due to the known compartmentation issues in line with the guidance issued by the National Fire Chiefs Council (NFCC).

Upgrades to the fire door sets within the communal areas, as well as the individual flats has taken place over the last couple of years as part of the landlord's mitigation measures. Whilst the original door sets have been kept, intumescent strips / smoke seals have been added, along with minor changes to rectified deficiencies.

In accordance with the scope and methodology set out within Ark's proposal (PR204902) the scope of the Compartmentation Survey was as follows:

- The Compartmentation Survey will cover all compartment and separating walls and floors within the residential common parts of Centre Point House.
- The Compartmentation Survey will exclude the compartmentation between residential tenants OR individual flats/apartments. However, where possible the compartmentation between the commercial and residential areas shall be examined although due to COVID-19 restrictions and the lack of access this was limited to just one of the commercial units. The limitations regarding access and inspection of the compartmentation between the commercial and residential areas means that whilst the commercial units are currently not in operation, the risks in relation to any possible breach of compartmentation between the commercial units and the residential apartments is low. The level of risk will clearly increase on the commercial units opening-up operations and it is recommended that these should be checked once open. Any commentary or issues noted regarding the commercial units are for the landlord to consider separately to the works recommended within this report.
- The survey, it is proposed, will be a semi-intrusive survey in so far as access will NOT be made to all concealed spaces, protected shafts, ceiling voids, risers and the like unless Ark's Consultant, where it is considered safe to do so, and is able to lift a sample of ceiling tiles and consider any concealed space that is accessible without the need to undertake any destructive activity.
- Excluded from the survey will be access into all the tenants demised areas; a small sample of flats were included purely to consider the rear of the electrical boxes adjoining the flat entrance doors.
- The report will make recommendations regarding the works that the landlord should carry out to comply with its repairing obligations under the residential leases, (which should include ensuring that the building complies with current regulatory standards and should be mindful of legislation due to come into force imminently) but should not go further than this to improve the building.
- Given the landlord's repairing obligations do not extend to the leaseholders' demises or flat front doors, any commentary or guidance relating to the residential leaseholders' flats or residential leaseholders' flat front doors is purely for information only, to be considered by those responsible for these.

5. Review Methodology and Criteria Adopted

Ark, using one of its competent Fire Compartmentation Specialists, (Dean Morris BSc (Hons), MIFireE, MIFSM) has, in accordance with the proposal (PR204902), undertaken an initial orientation site visit and document review to consider/determine in the absence of a definitive compartmentation plan, any assumptions as to compartmentation and separation arrangements in order that the required survey of the compartmentation and fire stopping arrangements can be completed.

In addition, the orientation survey has also considered where any semi-intrusive works could be undertaken.

Where there are areas not available these have been recognised within this report and the Consultant has made recommendations based on the risks associated with the general findings.

Ark's Consultant then, using endoscope technology where possible/appropriate, inspected such compartment walls and floors to determine where possible the nature of the construction and confirm any breaches/perforations through the said assumed compartment walls and floors without causing distress to the fabric of the building.

Types of materials utilised for fire stopping etc. if available/known, have been determined along with how effective any installed fire stopping arrangements are.

The Consultant has also inspected and reviewed all the common fire doors within the building (where these are available for such inspection) having due regard to the scope of the survey.

For the purpose of the survey, the Consultant has assessed the fire resistance arrangements and provisions against the functional requirements of BS9991 and BS9999, which are also referred to within the IFC Retrospective Fire Strategy Document.

Particular emphasis is considered on the following elements:

- Means of escape.
- Internal fire spread (linings).
- Internal fire spread (structure).

In respect of the levels / degrees of fire resistance considered for the various types of wall/floor, the Consultant has considered the guidance The fire resistance performance of compartment walls and floors (or any other parts of the building which are required to prevent fire spread) should be not less than that specified within the tables below (when tested in accordance with the relevant part of BS 476: Parts 20 to 24 or classified in accordance with BS EN 13501 Parts 2, 3 or 4).

This applies to:

a) Load-bearing walls, for load-bearing capacity, integrity, and insulation from either side.

b) Non-load-bearing walls and partitions, for integrity and insulation from either side.

c) Fire doors for integrity from either side, with the exception of doors to lift wells where performance is in respect of exposure of the landing side only.

d) Floors, for load-bearing capacity, integrity, and insulation with respect to exposure of the underside only.

In accordance with BS9999:2017 (as detailed above) a risk profile has been developed for the areas of the property in scope to determine the minimum appropriate package of fire protection measures and arrangements for Centre Point House.

This risk profile reflects the occupancy characteristic and fire growth rate for the specific areas of the building and is expressed as a value combining these two elements. The occupancy characteristic is principally determined according to whether the occupants are familiar or unfamiliar with the building and whether they are likely to be awake or asleep. Occupancy characteristics are to be determined in accordance

with Table 2 of BS9999:2017. The fire growth rate is the rate at which it is estimated that a fire will grow. Such fire growth rates are determined in accordance with Table 3 of BS9999:2017.

Therefore, using BS9999:2017 the risk profile for the property is considered to be as follows:

Occupancy Characteristic	Fire Growth Rate	Risk Profile
Ci C - Occupants who are likely to be asleep: i - long term individual occupancy – without 24h maintenance and management control on site	2 Medium evenly distributed low to mid-level fire load comprising of a mixture of combustible materials	**Ci2** **Shortened to C2** *in accordance with BS9999.*

Table 1 – Risk Profile – taken from Tables 2 and 3 to BS9999:2017

As stated/recommended within BS9999:2017, a risk profile has been established for the residential use of the property to determine the appropriate design features of the building for life safety (including compartmentation and fire resistance requirements) within that area.

The risk profile reflects the occupancy characteristic and fire growth rate for CPH and is expressed as a value combining these two elements. Using the risk profile of C2, as defined within Table 1 above, the following levels of fire resistance for the various elements of compartmentation and separation have been determined as follows within Table 2:

Element	Fire Resistance Requirements
Compartment Floors	90 mins
Compartment walls separating residential units from non-residential areas	90 mins
Compartment walls separating residential units from each other	60 mins
Compartment walls separating residential units and common residential corridors and lobbies	60 mins
Enclosure around a firefighting stair	120 mins (with FD60S doors)
Enclosure around a firefighting core	120 mins (with FD60 doors)
Enclosure of a service riser	90 mins (with FD60S doors)
Enclosure around a Laundry Room	60 mins

Table 2 – Fire Resistance requirements for the structure (selected) – taken from BS9999:2017, BS9991:2015 and the IFC Fire Safety Strategy for Centre Point House.

Account has taken of the fact that different uses within the same building can have different occupancy characteristics and fire load densities.

Fire resistance is defined within Approved Document B, Fire Safety, Volume 2, Buildings other than dwellinghouses (2019 edition) to the Building Regulations 2010 (as amended) as the "…*ability of a component or a building to satisfy, for a stated period of time, some or all of the appropriate criteria given in the relevant standard.*'

Fire resistance is a measure of one or more of the following:

- Resistance to collapse (loadbearing capacity), which applies to loadbearing elements only.
- Resistance to fire penetration (integrity).

- Resistance to the transfer of excessive heat (insulation).

The survey was undertaken in accordance with general fire safety auditing principles to identify hazards that could contribute to spread of fire within the building that would have an adverse effect on the occupants.

The report was then reviewed by Ark's Senior Director (David Hills, FRICS, FIIRSM, MIFireE, MSFPE, RSP) before publishing.

6. Exclusions

In accordance with the scope and methodology as detailed within the proposal (PR204902), the individual flats did not form part of the scope and so were not inspected other than a small sample of flats purely to consider the construction of the electrical boxes located adjacent to the flat entrance doors. The retail units were not accessible, due to being closed at the time of survey and COVID-19 restrictions, although one unit was accessed and considered to obtain a general understanding of the separation throughout the building.

The onsite contact stated that the CPH occupancy, whilst linked to the adjacent buildings, forms only the upper residential floors and the reception area that services these floors. In this respect, the basement was not considered in full, with limited areas only inspected to the extent that it is accessed by residents.

The plant room on the 2nd floor was not accessible during the survey – with the on-site manager explaining that no keys were available at the time; subsequent to the survey and further discussions, video and photographic evidence was provided providing evidence of the condition of the walls and ceiling of the plant room. This evidence does suggest that there are services which pass through what appears to be both compartment walls and floors although there appears to be some form of fire stopping to these services although the extent and condition should be further investigated. As such therefore the client has indicated that this area will be subject to a physical inspection by the landlord and considered under a separate report

7. Definitions

The following terms have been used throughout this report and these should be considered using the following definitions.

Compartment (fire) – *"A building or part of a building, comprising one or more rooms, spaces and stories, constructed to prevent the spread of fire to or from another part of the same building or an adjoining building".*

Compartment wall or floor – *"A fire resisting wall or floor, used in the separation of, one fire compartment from another".*

Fire Door Set – "*A door provided for the passage of persons, air or objects which, together with its frame and furniture is intended (when closed) to resist the passage of fire, products of combustion and is capable of meeting specified performance criteria*".

Fire resistance – *"The ability of a component or a building to satisfy, for a stated period of time, some or all of the appropriate criteria given in the relevant standard.".*

Means of Escape – "A *structural means whereby a safe route or routes is/are provided for persons to travel from any point to a place of safety*".

Structural element – "*A member forming the structural frame, column or beam; a loadbearing part of a wall or floor or a compartment wall that is common to one or more buildings".*

8. Findings

It was identified during the survey that the fire resistance of the elements of structure and subsequent fire compartmentation appears to conform to the basic requirements as stated above although it was apparent that due to the fact that over the years a number of adjustments/repairs have been made to communal areas, services and systems, with the retrofitting / repair of services, power supplies and the like, these compartment walls have been breached and have not been appropriately fire stopped.

The Consultant noted the use of inappropriate materials (not meeting the fire resistance requirements) and in some areas a complete lack of fire stopping material provided.

Some areas of fire stopping were noted to have been completed by 'Gunfire' over various dates between 2017 and 2019. This is predominately within the adjacent buildings; however, sections were noted within the CPH areas, which were showing deficiencies identified later in the report. This is being considered by the landlord/ building surveyor with its contractors so that works can be addressed separately to the works to be undertaken by the landlord as part of the Section 20 consultation.

In many instances the Consultant has noted the significant use of pink (fire rated) PU Foam and other PU Foam products; it is unknown when these materials were installed. Generally, the use of fire rated PU foam as a sealant in those areas identified within the tables below is not considered suitable unless the gap is a small linear gap/crack (less than 10mm in width) such as bed and side joints to lintels, frames and small penetrations in blockwork walls and has been subject to independent third-party attestation to BS 476 Part 20/22 and BS EN 1366-4 for such linear gaps/cracks. The use of fire-resistant PU foam around timber structures is not likely to achieve satisfactory fire-resistant results.

PU foams may also affect certain cables or plastic pipes (PU may soften CPVC and PB plastic pipes) causing failure.

Removal of such PU foam must be undertaken with care and subject to the appropriate COSHH risk assessment due to the inherent risks associated with such materials.

This survey has identified multiple failures in compartmentation including.

- It has been recorded that there are a number of breaches to the fire compartment lines through the soffits above the communal corridors and along the corridor walls.
- It has been noted that there are also breaches of the fire compartment walls along these corridors and in the service areas such as the washrooms, service risers.
- There are a number of instances where the walls of the riser cupboards appear to be incomplete in construction. Most significantly, of the dry riser within the corridor is assumed to be of fire rated construction, to all 4 walls, then the walls to the corridor side do not appear to provide this; and
- In a number of instances, the construction of the building does not appear to give the required fire resistance, however, there appears to be a false wall along some corridors and only timber studs can be seen.

These breaches have been identified in the following areas:

Third Floor:

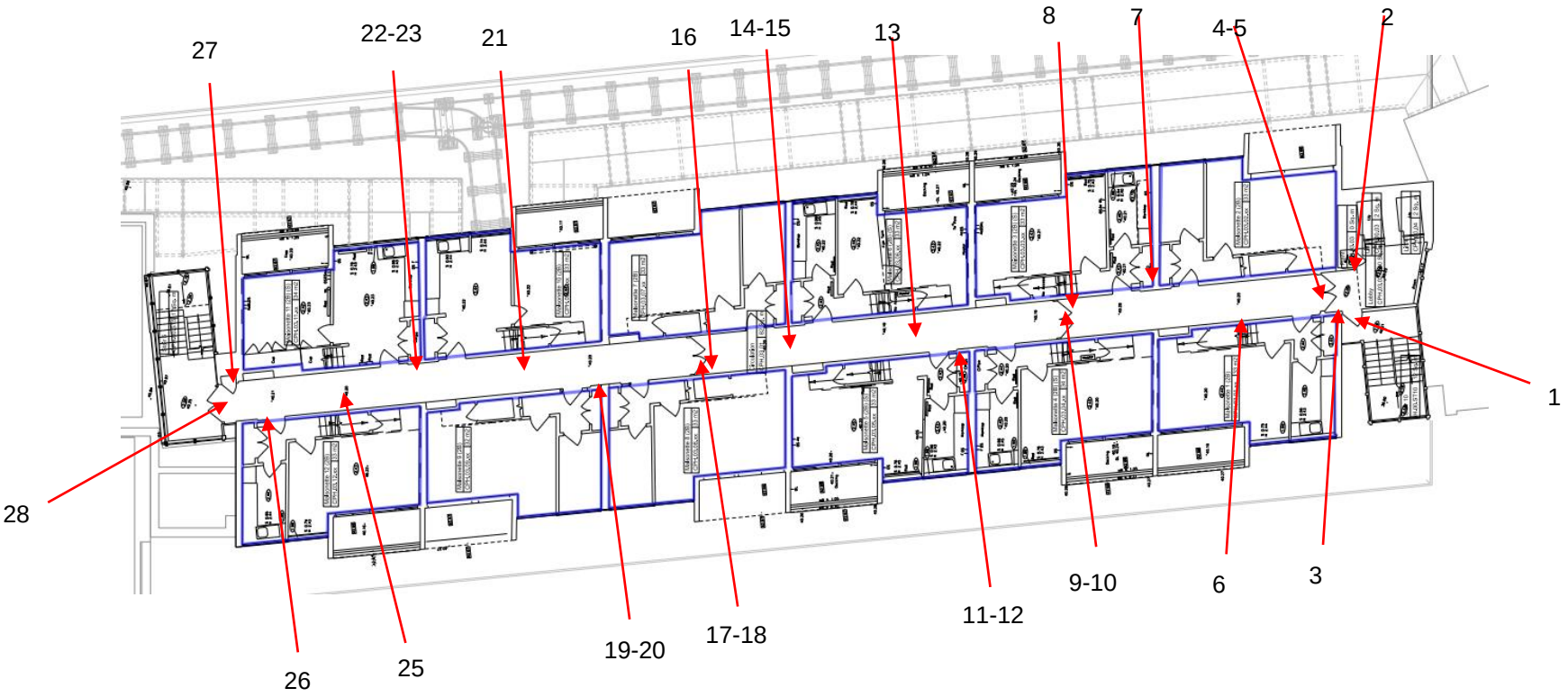


Figure 1 – Location of identified breaches and issues on the 3rd Floor

Fifth Floor:

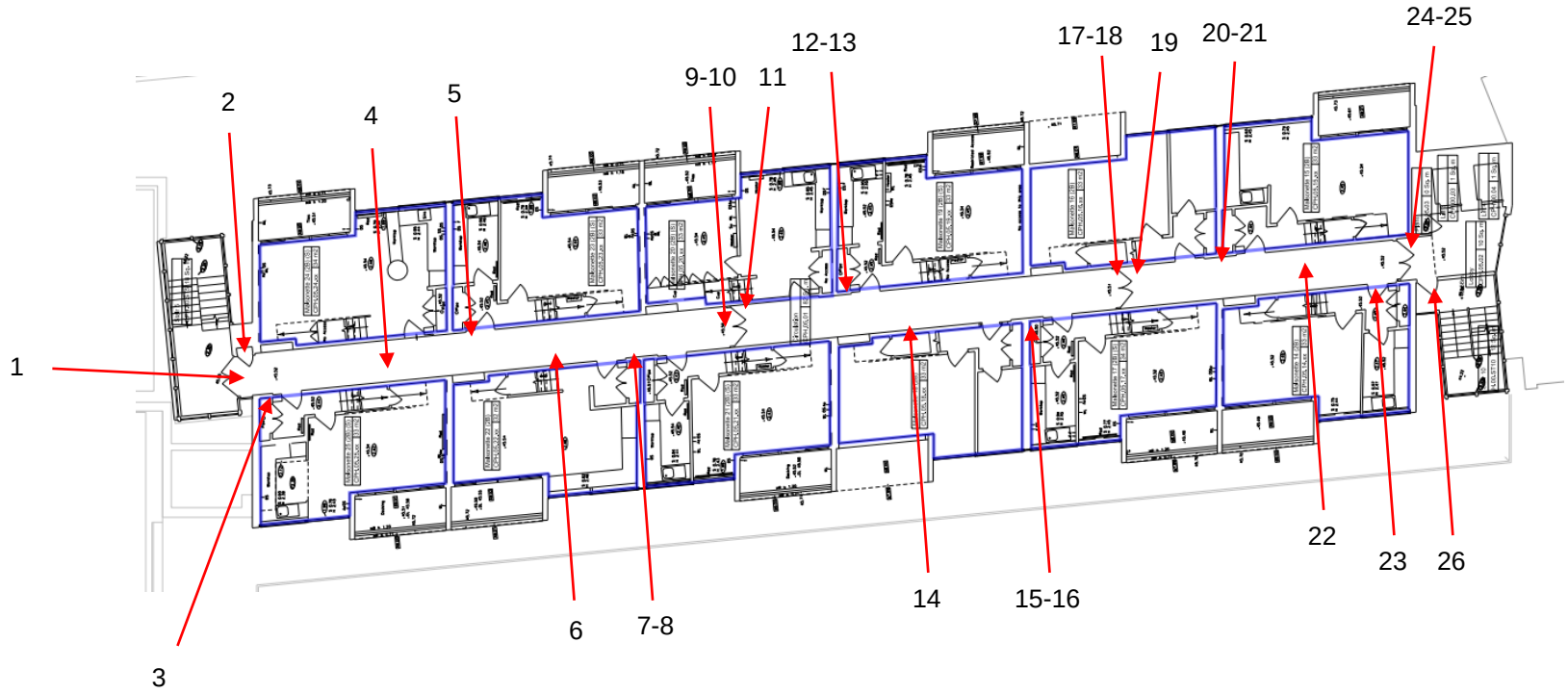


Figure 2 – Location of identified breaches and issues on the 5th Floor

Seventh Floor:

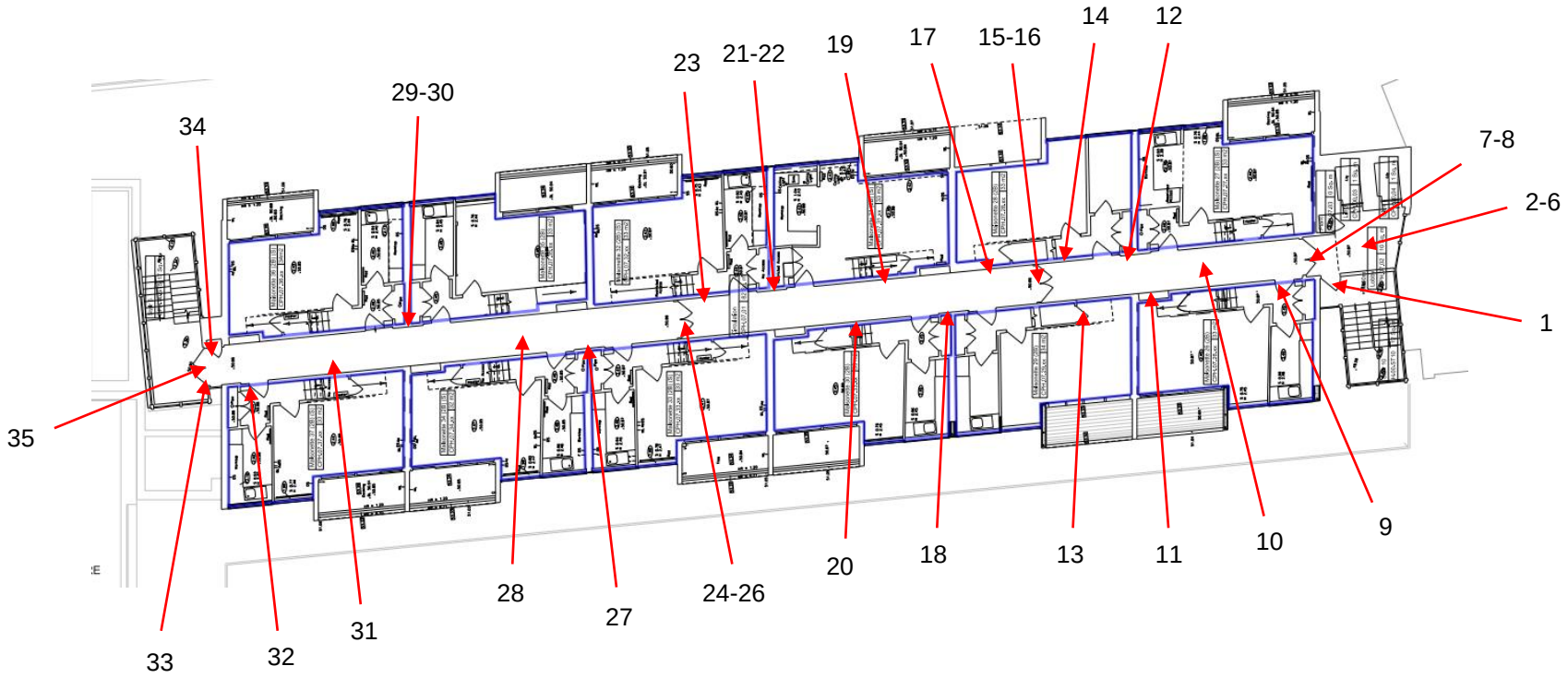


Figure 3 – Location of identified breaches and issues on the 7th Floor

As detailed within the methodology, the Consultant has identified those areas of concern and the following tables provides an outline of the findings. Where the status has been identified in **RED** the Consultant is of the opinion that the issue(s) or breach noted is of a **HIGH fire risk**, requiring urgent action. Where the status has been identified in **AMBER,** the Consultant is of the opinion that the issue(s) or breach noted is of a **MEDIUM fire risk**. Due to the nature of the subject and the importance of compartmentation, no LOW risks are identified or categorised.

It is recognised that the landlord has undertaken some interim, temporary measures, designed to deal with some of the high-risk life safety issues previously identified by others including adjustments to some fire doors, flat entrance doors and the installation of a temporary fire detection and alarm systems. The works identified within the tables provided below are required and need to be considered/completed as soon as is reasonably practicable in accordance with the landlords repairing obligations under both the residential leases as well as Article 17 of the RRO2005.

MISC LOCATION FAULTS – NOT IDENTIFIED ON THE ABOVE DRAWINGS				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**Ground Floor** Cupboard under the stairs has unsealed cable penetrations			This area has a high risk from the electrical installation that leads onto the main escape route from the premises. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
2	**Second Floor** Podium roof to main building is believed to have been converted into plant area. This has Georgian wired glazing providing separation			The Georgian wired glazing is likely to only have a notional 30 minutes of fire resistance, which is inadequate compartmentation from the stairwell. *Recommendation – It is recommended that consideration is given to upgrading the Georgian wired glass to achieve a minimum of 90mins fire resistance.*
3	**South stairs to White Lion House** Georgian wired glazing providing separation into void between buildings			No access could be provided to this area to identify separation behind and if any cavity barriers are present. Georgian wired glazing will only provide a notional 30 minutes of fire resistance, which is inadequate compartmentation from the stairwell. *Recommendation – It is recommended that further investigations are undertaken to determine the sub-strata and fire resistance. It is understood*

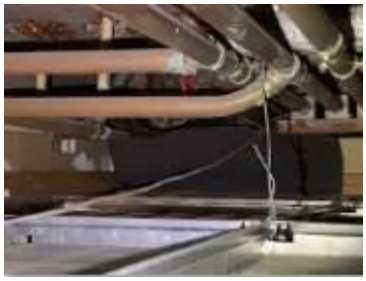
				that this is being considered by the landlord/ building surveyor with its contractors.
4	**Eighth Floor** Lift motor room fire door has multiple faults that will unlikely provide adequate fire resistance			The door set itself is of an unknown fire resistance, has only two hinges, hinges are not fire rated and is showing areas of damage. *Recommendation – It is recommended that either the door is upgraded or repaired (including adding further fire resisting hinges) etc. or the door set is replaced with a FD60S rated door set.*

Table 3 – Miscellaneous location faults (Centre Point House) not identified on the figures above.

THIRD FLOOR				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**South Stairs (Fire door)**		n/a	Only 2 hinges fitted. *Recommendation - It is recommended that the door is repaired (including adding further fire resisting hinges) etc.*
2	**Riser cupboard by South stairs** Unsealed cable penetrations through floor slab		 	Unsealed cable penetrations through floor slab require suitable mastic seal, with correct width to depth ratio. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

3	**South stairs lift lobby.** Unsealed cable penetration			Unsealed cable penetrations require suitable mastic seal, with correct width to depth ratio. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 60mins fire resistance.*
4	**Lift lobby to corridor (Fire door)**			Door frame unsealed – requires an intumescent mastic seal with sufficient width to depth ratio. *Recommendation - It is recommended that these areas are sealed with a suitable fire-resistant sealant providing a minimum of 60mins fire resistance.*
5	**Cross corridor to lift lobby.** Wall header unsealed with incomplete plasterboard separation		 	Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 60mins fire resistance.*
6	**Corridor vertically between flats 1/2** Non-compliant foam used to seal vertical openings through floor slab			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

			    	
7	**Corridor leading into flats 2/3** Unsealed services and combustible pipework leading into flat without intumescent device fitted			Unsealed penetrations through compartment wall with combustible pipework fitted without intumescent material added to close opening in fire situation. *Recommendation - It is*

				*recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
8	**Vertical openings by cross corridor** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
9	**Above cross corridor** Wall header unsealed with incomplete plasterboard separation		 	Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 60mins fire resistance.*
10	**Cross corridor (Fire door)**		n/a	Doors does not close flush into frame and unknown beading used (not believed to be fire rated). *Recommendation – It is recommended that either the door is repaired,*

				allowing the door to close fully to the stops and the beading replaced with a fire resisting beading system or the door is replaced with a FD60 fire door set.
11	**Corridor leading into flats 4/5** Unsealed services and combustible pipework leading into flat without intumescent device fitted		  	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
12	**Vertical openings between flats 4/5** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

13	**Vertical openings between flats 5/6** Unsealed opening and non-compliant foam used to seal vertical openings through floor slab		  	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
14	**Corridor leading into flats 6/7** Unsealed services and combustible pipework leading into flat without intumescent device fitted		  	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

			 	
15	**Vertical openings between flats 6/7** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
16	**Vertical openings by cross corridor** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

			 	
17	**Above cross corridor** Wall header unsealed with incomplete plasterboard separation		 	Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 60mins fire resistance.*
18	**Cross corridor (Fire door)**		n/a	Doors warped and do not close flush together. Unknown beading used (not believed to be fire rated). *Recommendation – Due to the nature of the issues noted it is recommended that this door is replaced with an FD60S rated door set.*

19	**Corridor leading into flats 8/9** Unsealed services and combustible pipework leading into flat without intumescent device fitted		  	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
20	**Vertical openings between flats 8/9** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
21	**Vertical openings between flats 9/10** Non-compliant foam used to seal vertical openings through floor slab			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently*

			   	*fire-stopped and sealed providing a minimum of 90mins fire resistance.*
22	**Corridor leading into flats 10/11** Unsealed services and combustible pipework leading into flat without intumescent device fitted		 	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

			 	
23	**Vertical openings between flats 10/11** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
24	**Meter cupboard example** Non-fire rated meter cupboards located outside each flat on this floor			*Recommendation – It is recommended that the meter cupboard is replaced with a fire rated cupboard providing a minimum of 90mins fire resistance.*

25	**Vertical openings between flats 11/12** Non-compliant foam used to seal vertical openings through floor slab		   	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.
26	**Corridor leading into flat 12.** Unsealed services and combustible pipework leading into flat without intumescent device fitted			Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

27	**Old Hosereel riser** Wall edging left unsealed into void to stairwell			Unsealed wall edge requires suitable mastic seal, with correct width to depth ratio. *Recommendation - It is recommended that this area is fire-stopped and sealed providing a minimum of 90mins fire resistance.*
28	**North stairs (Fire door)**		n/a	Doors do not close flush together in frame. *Recommendation – It is recommended that either the doors are repaired to enable them to close fully flush to the stops or that the doors are replaced with an FD60S door set.*

Table 4 – Third floor faults (Centre Point House)

FOURTH FLOOR – NOT IDENTIFIED IN THE FIGURES ABOVE				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**Laundry (Fire door)**		n/a	Excessive gaps around door edge (above the 4mm tolerance). *Recommendation – It is recommended that either the doors are repaired/adjusted to reduce the gap around the door edges or that the doors are replaced with an FD60S door set.*
2	**Electrical cupboard** Unsealed services and combustible pipework leading into flat without intumescent device fitted			Unsealed services leading through floor slab. Fire stopping required to provide adequate compartmentation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum*

				*of 90mins fire resistance.*

Table 5 – Fourth floor lobby faults (Centre Point House)

FIFTH FLOOR				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**North Stairs (Fire door)**		n/a	Door is slightly warped and does not close flush into its frame. *Recommendation – It is recommended that the due to the issues with the door that this door is replaced with a FD60S rated door set.*
2	**Old Hosereel cupboard** Not sealed through concrete floor slab.			Services left unsealed with opening through the concrete floor slab. *Recommendation – It is recommended that this area is either repaired or is fire-stopped and sealed providing a minimum of 90mins fire resistance.*
3	**Above entrance to flat 25** Unsealed cable penetrations and combustible pipe penetration without closer			Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

				
4	**Corridor vertically between flats 25/24** Non-compliant foam used to seal vertical openings through floor slab		    	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

5	**Corridor leading into flat 23.** Combustible pipework leading into flat without intumescent device fitted			Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
6	**Corridor vertically between flats 23/22** Non-compliant foam used to seal vertical openings through floor slab		   	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

7	**Corridor vertically between flats 22/21** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
8	**Corridor leading into flat 22/21** Unsealed services and combustible pipework leading into flat without intumescent device fitted		 	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
9	**Above cross corridor door** Wall header unsealed with incomplete plasterboard separation		 	Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
10	**Cross corridor (Fire**		n/a	Doors warped and not

	door)			closing flush, unknown material used for beading (not believed to be fire rated) and doors showing signs of damage. *Recommendation – Due to the nature of the issues noted it is recommended that this door is replaced with a FD60S rated door set.*
11	**Vertical pipes by cross corridor** Non-compliant foam used to seal vertical openings through floor slab		   	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 60mins fire resistance.*

12	**Corridor vertically between flats 20/19** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
13	**Corridor leading into flat 20/19** Unsealed services and combustible pipework leading into flat without intumescent device fitted		  	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
14	**Corridor vertically between flats 18/19** Non-compliant foam used to seal vertical openings through floor slab			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed*

			  	*providing a minimum of 90mins fire resistance.*
15	**Corridor leading into flat 17/18** Unsealed services and combustible pipework leading into flat without intumescent device fitted		  	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

16	**Corridor vertically between flats 17/18** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
17	**Above cross corridor door** Wall header unsealed with incomplete plasterboard separation		 	Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
18	**Cross corridor (Fire door)**		n/a	Door damaged with unknown beading (not believed to be fire rated) and doors do not close flush together. *Recommendation – It is recommended that the doors are either repaired to ensure that they fit flush or replaced with a new FD60S rated door set*

19	**Vertical pipes by cross corridor** Non-compliant foam used to seal vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 60mins fire resistance.*
20	**Corridor vertically between flats 16/15** Unsealed services and non-compliant foam used to seal vertical openings through floor slab		  	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
21	**Corridor vertically between flats 14/15** Non-compliant foam used to seal vertical openings through floor slab			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is*

			  	*removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
22	**Corridor leading into flat 14.** Unsealed cable penetrations leading into flat			Unsealed cable penetrations require suitable mastic seal, with correct width to depth ratio. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
23	**Above lift lobby door** Wall header unsealed with incomplete plasterboard separation			Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

				
24	**Lift lobby (Fire door)**		n/a	Doors do not close flush into frame. *Recommendation – It is recommended that the doors are adjusted / repaired to ensure that they close fully to the frame / stop.*
25	**South stairs (Fire door)**		n/a	Door does not close flush into frame, only 2 hinges, hinges badly fitted. *Recommendation - It is recommended that the doors are adjusted / repaired to ensure that they close fully to the frame / stop and that the hinges are replaced to ensure that 3 fire rated hinges are provided per door*
26	**Corridor leading into South stairs.** Unsealed cable penetrations and combustible pipework fitted without closer		 	*Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

Table 6 – Fifth floor faults (Centre Point House)

SIXTH FLOOR – NOT IDENTIFIED ON THE FIGURES ABOVE				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**Laundry (Fire door)**		n/a	Door does not close flush in frame. *Recommendation – It is recommended that the doors are either repaired to ensure that they fit flush or replaced with a new FD60S*

Table 7 – Sixth floor lobby faults (Centre Point House)

SEVENTH FLOOR				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**South Stairs (Fire Door)**		n/a	The door does not close flush into its frame, it has only two hinges, unknown fire rating of door set. *Recommendation – It is recommended that the doors are either repaired to ensure that they fit flush or replaced with a new FD60S and are provided with 3 fire rated hinges per door.*
2-3	**Lift lobby** Unsealed cable penetrations leading into stairwell.		 	Unsealed openings through plaster walls into means of escape stairwell. *Recommendation – It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*

4	**Lift lobby** Unknown timber hatch above false ceiling,			Unknown timber hatch above false ceiling believed to lead into lift motor room. Intrusive inspection required to identify fire resistance above. *Recommendation – It is recommended that further intrusive investigations are undertaken to determine the sub-strata construction and ensure that a minimum period of fire resistance of 90mins is provided.*
5	**Lift lobby** Unsealed cable penetrations leading into stairwell.			Unsealed openings through plaster walls into means of escape stairwell. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
6	**Lift lobby** Duct work sealed with paper through wall			Non-compliant seal around ductwork. *Recommendation - It is recommended that this area is fire-stopped and sealed providing a minimum of 90mins fire resistance.*
7	**Lift lobby to corridor (Fire Door)**		n/a	Glazing is cracked, hinges worn and leaking oil, door slightly warped and does not close flush into frame. *Recommendation – Due to the issues noted, it is recommended that the lift lobby doors are replaced with an FD60 rated door set.*
8	**Lift lobby to corridor** Header above door set providing inadequate seal.			Plasterboard partitions inadequately fitted and unsealed. No intumescent material around combustible pipework and a damper appears to be fitted around ductwork without being

				fixed in position or sealed. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance and the damper fixed in position and sealed.*
9	**Entrance to flat 26** Unsealed cable penetration			Unsealed opening into flat entrance. *Recommendation - It is recommended that this area is fire-stopped and sealed providing a minimum of 90mins fire resistance.*
10	**Corridor between flats 26 / 27** Unsealed pipe penetrations leading vertically through floor slab and non-compliant foam used to seal vertical openings		   	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

				
11	**Display unit in the corridor opposite flat 27** As per all these identified sections there appears to be a plasterboard partition at wall header			Recommend intrusive inspection behind all of these units throughout the floors. The compartmentation is likely to be at the wall header behind the plasterboard partition. *Recommendation –It is recommended that further intrusive investigations are undertaken to determine the sub-strata construction and ensure that a minimum of 90mins fire resistance is provided.*
12	**Communal corridor into flat 27** Non-compliant foam used to seal vertical openings through floor slab and into flat 27		  	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

13	**Communal corridor opposite flat 28** Unsealed service openings			Unsealed openings through blockwork wall into flats. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
14	**Communal corridor by cross corridor doorset** Unsealed cable penetration and non-compliant foam used to seal vertical openings through floor slab		  	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
15	**Cross corridor separation** Header above door set providing inadequate seal.		 	Plasterboard partition inadequately fitted and unsealed. Services leading through it do not have closers or intumescent seals and a loose fit mineral fiber material has been used to seal an opening. *Recommendation – It is recommended that these areas are fire-stopped and sealed providing a minimum of 60mins fire resistance.*

				
16	**Cross corridor (Fire door)**		n/a	Excessive gaps between doors, unknown fire rating of beading used to seal glazing. *Recommendation – it is recommended that either the doors are repaired/adjusted to ensure suitable gaps (below 4 – 5 mm) are provided and a fire rated beading provided or alternatively the door is replaced to provide a FD60S rated door set.*
17	**Opposite flats 29/30** Unsealed cable penetration			Unsealed openings through blockwork wall into flats. *Recommendation – It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
18	**Entrance between flats 29-30** Non-compliant foam used to seal openings into flat 29-30			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

				
19	**Between display area and flat 31** Non-compliant foam used to seal openings between display area and flat 31. Pipe penetrations appear to lead behind plasterboard partition but cannot identify if these have been fully sealed behind.		  	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. Intrusive investigation required behind plasterboard to identify if has been adequately sealed. *Recommendation - It is recommended that further investigations are made in this area and that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
20	**Between display area and flat 30** Non-compliant foam used to seal openings between display area and flat 30. Pipe penetrations appear to lead behind plasterboard partition, but cannot identify if these have been fully sealed behind			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. Intrusive investigation required behind plasterboard to identify if has been adequately sealed. *Recommendation - It is recommended that further investigations are made in this area and that the PU foam in these areas is removed and subsequently*

			  	*fire-stopped and sealed providing a minimum of 90mins fire resistance.*
21	**Entrance between flats 32-31** Non-compliant foam used to seal openings into flats 32-31		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
22	**Meter cupboard by flat 32** A sample of the meter cupboard			Timber non-fire rated door and missing seal / damaged openings from meter cupboard into flat. *Recommendation – It is recommended that the meter cupboard be replaced with a FD90S rated cabinet and the gaps between the cabinet and*

				*the flat are sealed to provide a minimum of 90minutes fire resistance.*
23	**Vertical services by cross corridor door sets** Non-compliant foam used to seal openings vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*
24	**Cross corridor separation** Header above door set providing inadequate seal.		 	Plasterboard partition inadequately fitted and unsealed. Services leading through it do not have closers or intumescent seals. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 60mins fire resistance.*
25	**Vertical service openings by cross corridor separation** Non-compliant foam used to seal openings vertical openings through floor slab			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently*

				fire-stopped and sealed providing a minimum of 90mins fire resistance.
26	**Cross corridor (Fire door)**		n/a	Excessive gap in middle of doors, unknown material used for beading to seal glazing. *Recommendation – It is recommended that either the doors are repaired/adjusted to ensure suitable gaps (below 4 – 5 mm) are provided and a fire rated beading provided or alternatively the door is replaced to provide a FD60S rated door set.*
27	**Entrance between flats 33/34** Combustible pipes unsealed through blockwork wall		 	Combustible pipes unsealed and missing intumescent mastic seals to allow closing during a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
28	**Corridor by flat 34** Non-compliant foam used to seal openings vertical openings through floor slab		 	PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

29	**Services between flats 36/35** Combustible pipework sealed through walls without intumescent mastic		 	Intumescent seals are required around combustible pipes in order to seal them in a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
30	**Meter cupboard by flat 36** A sample of the meter cupboard		 	Timber non-fire rated door and missing seal / damaged openings from meter cupboard into flat. *Recommendation - It is recommended that the meter cupboard be replaced with a FD90S rated cabinet and the gaps between the cabinet and the flat are sealed to provide a minimum of 90minutes fire resistance.*
31	**Services between flats 37/36** Services leading into flats 37/36 sealing with non-compliant foam and combustible pipe without intumescent seal			PU foam provides inadequate fire resistance and should be replaced by suitable fire resisting materials. *Recommendation - It is recommended that the PU foam in these areas is removed and subsequently fire-stopped and sealed providing a minimum of 90mins fire resistance.*

			 	
32	**By entrance to flat 37** Combustible pipework sealed through wall without intumescent mastic			Intumescent seals are required around combustible pipes in order to seal them in a fire situation. *Recommendation - It is recommended that these areas are fire-stopped and sealed providing a minimum of 90mins fire resistance.*
33	**Above door to North stairs** Incorrectly installed damper			Damper installed away from wall without seal and unknown fixings. *Recommendation – it is recommended that the damper is fixed and secured with an appropriate seal provided providing a minimum period of 90mins fire resistance.*
34	**Old Hosereel cupboard** Services unsealed between floor levels			As it's a low-risk riser cupboard without any electrical risks, separation is only required between floors. This is inadequate as the slab has unsealed openings around pipe penetrations. *Recommendation – due to the lack of fire resistance it is recommended that these areas are sealed and secured to provide a minimum of 90mins fire*

			 	*resistance.*
35	**North stairs (Fire Door)**		n/a	Door does not close flush in frame, hinges badly fitted, different sections of intumescent strip / smoke seals used, doors warped. *Recommendation – Due to the nature and extent of the issues raised it is recommended that the doors are replaced with an FD60S rated door set.*

Table 8 – Seventh floor faults (Centre Point House)

LIFT SHAFTS – NOT IDENTIFIED ON THE FIGURES ABOVE				
Survey Report ID#	Survey Report Description and Recommendation	Status	Photograph	Comment
1	**Internal lift shaft (left side only)**			Unsealed cable penetration leading through concrete shaft.

2	**Internal lift shaft (left side only)**			Unsealed conduit penetration leading through concrete shaft.
3	**Internal lift shaft (left side only)**			Unsealed opening leading through concrete shaft.
4	**Internal lift shaft (left side only)**			Unsealed cable penetration leading through concrete shaft.
5	**Internal lift shaft (left side only)**			Unsealed cable penetration leading through concrete shaft.
6	**Internal lift shaft (left side only)**			Unsealed cable penetration leading through masonry wall.
7	**Internal lift shaft (left side only)**			Unsealed cable penetration leading through masonry wall.

8	**Internal lift shaft (left side only)**			Unsealed openings leading through concrete shaft into flats. Exposed side of wall lining visible.
9	**Internal lift shaft (left side only)**			Unsealed openings leading through concrete shaft into flats. Exposed side of wall lining visible.
10	**Internal lift shaft (left side only)**			Unsealed openings leading through concrete shaft into flats. Exposed side of wall lining visible.
11	**Internal lift shaft (left side only)**			Unsealed openings leading through concrete shaft into flats. Exposed side of wall lining visible.
12	**Internal lift shaft (left side only)**			Unsealed cable penetration leading through masonry wall.
13	**Internal lift shaft (left side only)**			Unsealed pipe penetration leading through blockwork wall.

14	**Internal lift shaft (left side only)**			Expose steelwork and opening leading through concrete wall.
15	**Internal lift shaft (left side only)**			Unsealed conduit penetration leading through masonry wall.
16	**Internal lift shaft (left side only)**			Unsealed opening leading through masonry wall.

Table 9 – Lift Shaft faults (Centre Point House)

In respect of items 1-16 identified within Table 9 , it is recommended that all of these areas are fire-stopped and sealed with a suitable material providing a minimum of 90mins fire resistance.

9. Conclusions and Areas of Consideration (Recommendations)

It is acknowledged that Centre Point House would have been designed to meet the requirements of Building Regulations applicable at the time of construction although this cannot be a guarantee that it both met those regulations nor do any subsequent works within the property, including the retrofitting of services or replacement of pipes and ducts etc. meet the requirements. Such works do appear to have degraded the compartmentation and separation arrangements. It is not known when such works have been undertaken or if any statutory approval for such works was obtained.

This report has considered the levels of fire resistance and subsequent compartmentation within the building (areas under scope) based upon the principles contained within British Standard BS 9999: 2017 Code of practice for fire safety in the design, management and use of buildings and British Standard BS 9991:2015 Code of practice for fire safety in the design, management and use of residential buildings to assess the means of escape and compartmentation provision based upon a risk profile of C2 (Ci2).

In assessing the compartmentation provision and the need to undertake work (along with the provision of certain risk ratings for the areas identified as of being of some concern) the following factors have been considered:

- The anticipated probability of a fire occurring.
- The anticipated fire severity.
- The ability of the structure to resist the spread of fire and smoke.
- The consequential danger to persons in and around the building.

Fires do not normally start in two different places in a building at the same time. Initially, a fire will create a hazard only in the part in which it starts and is unlikely, at the early stages to involve a large area. The fire may subsequently spread to other parts of the building, usually along the circulation routes. It is less likely that the fire will originate within the structure of the building itself and the risk of it originating accidentally in circulation areas is limited, provided that the combustible content of such areas is restricted.

In the assessment of the visible and accessible fire stopping, the stopping and subsequent compartmentation arrangements noted within the areas of scope within the building are unlikely to meet the requirements and guidance of British Standard 476 (stability, integrity, and insulation). and ensure that adequate protection is afforded to allow occupants in the event of a fire an appropriate amount of time to enable safe egress.

Multiple deficiencies were found with the compartmentation in the premises, including:

- The persistent use of non-compliant PU foam has been used to seal openings throughout the property.
- The riser cupboards at each end of the corridor were noted not to provide adequate fire resistance. These should provide a minimum of 60min fire protection around the external face, with any openings leading through them sealed with suitable fire stopping materials.
- Combustible pipe penetrations have been sealed through compartments without closers or intumescent materials used.
- Cross corridor headers are incorrectly sealed with open plasterboard. The plasterboard is unsealed, or loose fit mineral fibre material.
- Dampers have been incorrectly installed. They are incorrectly positioned, inadequately sealed and installed without the required fixings.
- Fire doors have multiple faults; all fire doors should be fire rated and fitted with a serviceable self-closing device and an intumescent strip / cold smoke seal with either a minimum of a 30 or 60-

minute fire rating, depending upon location and the required fire resistance. (These should all meet the required standard as stated (serviceable self-closing device and an intumescent strip / cold smoke seal with an appropriate fire rating installed into either the door edge or doorframe) conforming to BS 476 part 20:22 and BS476 part 31:1. BS 476 - Fire doors and doorframe, BS EN 1154 – Self-closers, BS EN 1154 – Hinges, BS EN 1906 and BS EN 12209 – Door handles and locks. It is acknowledged that interim works on some of the fire doors has been undertaken in 2019 which have mitigated, in part some of the issues. That being said the fire doors must be repaired / installed and maintained in accordance with BS 8214:1990.).

It is noted that this survey did not consider the tenants fire doors which will be subject to separate inspection, audit and evaluation recommended within the Grenfell Tower Fire Inquiry - Phase 1 Report as well as part of the new requirements within the new Fire Safety Act 2021, recently passed through Parliament. It is understood that as part of a separate programme of works being undertaken the flat entrance doors are to be replaced which would appear to be appropriate based on reviewing a small sample of the entrance doors whilst accessing the electrical meter cupboards and noting a number of issues. These doors will also now have to be included as part of the consideration of any new fire risk assessment.

- The 'Bob Richards' report completed in November 2019 states that during a destructive survey, the architrave was removed on sample flat entrance doors and a seal wasn't present between the door set and wall face. Providing remedial works for this has not, we understand yet taken place, this detail should be upgraded to ensure all fire doors on site are correctly sealed.

- Letterboxes next to flat front entrance doors do not appear to be fire rated. The 'Bob Richards' report completed in November 2019 noted that during a destructive survey, this was also the case.

- Electrical meter cupboards by front entrance doors are not fire rated and have unsealed openings leading internally within the flats. Whilst a sample of these cupboards were considered, it would be fair to assume that the issues relating to the electrical cupboards can be extrapolated across all of the electrical meter cupboards due to the appearance of the doors opening onto the common areas.

Taking into consideration the nature of the issues, it is recommended that the additional compartmentation and fire door issues identified are attended to, to ensure effective compartmentation within the building, including those areas identified within the tables above.

It should be noted that the provision of such compartmentation is essential and should not be considered to be an improvement rather bring the property back into line with the requirements of both the current RRO2005 as well as the Building Regulations relevant at the time of construction/refurbishment or amendment.

Access could not be provided at the time of the assessment to multiple areas as detailed below:

- To the retail units, due to them being closed as part of the Covid-19 lockdown. This area would be important to inspect as they consist of higher risk commercial units with cooking facilities that are located directly against the means of escape and residential aspects.

- To the plant room off the South stair (no access was available). The site contact informed the assessor that this used to be an office but has now changed into a plant room, which looks from the stairs side to be protected by a single pane of Georgian wired glass, which would provide only a notional 30 minutes of fire resistance. Further investigation is required to identify if an additional compartment wall has been added to the inside of the plant room (which the landlord has indicated will be undertaken under a separate report).

- Individual flats (which do not form part of the initial scope, however, a small sample of flats were included purely to consider the rear of the electrical boxes adjoining the flat entrance doors). It is

recommended that any empty flats are inspected on a sample basis in order to identify any breaches in compartmentation between the flats and / or leading into the means of escape. This would be particularly beneficial regarding any risers leading through the floor slab and to investigate behind the electrical meter within the communal hallway.

The fire stopping that had been completed by 'Gunfire' between 2017-2019 was noted to have a number of faults and non-compliances. Whilst areas of fire stopping are limited within the residential area, a vast majority appeared to separate the retail units and basement, which would have a direct impact on the residential aspect of the building via its means of escape, this is being addressed by the landlord and its contractors as part of a separate workstream. **Further intrusive investigation is recommended to this fire stopping works in order to confirm if the installations have been installed correctly which should be addressed by the landlord and its contractors.**