FIRE RISK ASSESSMENT
4-5 THE CHEVRON,
NEWCASTLE UPON TYNE,
TYNE AND WEAR, NE6 1RP.

FEBRUARY 2023

STORM TEMPEST
PROPERTY CONSULTANCY

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Prepared by:
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Prepared for:
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CONTENTS

1.0 INTRODUCTION

The Client	Karbon Homes.
Instruction	This Fire Risk Assessment was undertaken in accordance with an instruction received from Tony Ruddick, Data and Compliance Manager, Karbon Homes.
Responsible Person	Paul Fiddaman, Chief Executive, Karbon Homes.
The Property	4-5 The Chevron, Newcastle upon Tyne, Tyne and Wear, NE6 1RP.
The Surveyor	The Fire Risk Assessment was carried out by Joe Abbott MSc. BSc (Hons). AIFireE. GradIOSH. DipFD.
Survey Date	20th February 2023.
Scope and Purpose of the Fire Risk Assessment	The Regulatory Reform (Fire Safety) Order 2005 [RR(FS)O] applies to all non-domestic premises, including any voluntary sector and self-employed people with premises separate from their homes. A fire risk assessment is an organised and methodical look at your premises. The fire risk assessment procedure identifies the activities carried out at the premises and assesses the likelihood of a fire starting. The aim of a fire risk assessment is to: ➢ Identify the hazards. ➢ Reduce the risk of those hazards causing harm to as low as reasonably practicable. ➢ Decide what physical fire precautions and management policies are necessary to ensure the safety of people in your premises if a fire does start. The fire risk assessment was carried out in accordance with the Department for Communities and Local Government (DCLG) 'sleeping accommodation' guidance document in addition to the Local Government Association (LGA) document 'Fire safety in purpose built blocks of flats'.

This building has been audited to highlight to the Client, any non-compliant issues with regard to relevant aspects of UK fire safety legislation and best practice. The principal documents relevant to residential buildings being:

- Approved Document B (fire safety) volume 1: Dwellings, 2019 edition incorporating 2020 amendments.
- BS9999 2017 Code of practice for fire safety in the design, management and use of buildings.
- BS9991 2015 Fire safety in the design, management and use of residential buildings – Code of practice.
- Local Government Association - Fire safety in purpose-built blocks of flats (hereafter referred to as the LGA Guide).
- HM government Fire Safety Risk Assessment – Sleeping Accommodation.
- LACORS – Housing – Fire Safety – Guidance on fire safety provisions for certain types of existing housing.

The RR(FS)O does not stipulate the required review period for a particular building; we recommend a review of this type of building on an **annual** basis.

Limitations of the Fire Risk Assessment

The RR(FS)O places a burden of responsibility firmly on the head of a 'responsible person' with regard to the fire safety of the occupants of the premises to which they have been assigned. The responsible person is required to co-ordinate all fire safety related issues including the carrying out of a fire risk assessment and production of associated documentation. The responsible person may nominate a 'competent person' to assist in the implementation of any measures deemed necessary to ensure the fire safety of the occupants of the premises.

There are many factors that impact upon what may constitute adequate measures to assess the fire safety of the occupants. Storm Tempest Ltd are not the responsible person and are unable to determine, on behalf of the organisation, the steps it should or must take to comply with its duties under the RR(FS)O. The fire risk

assessment will cover all communal areas within the property. We will also comment upon the areas surrounding the building.

This report is for the use of the party to whom it is addressed and should be used within the context of instruction under which it has been prepared.

A Type 3 Common Parts and flats (non-destructive) Fire Risk Assessment (as detailed in the LGA guide Fire Safety in Purpose Built Blocks of Flats) was carried out.

We were able to access flat 5 to check the standard of fire doors, means of fire detection and standard of compartmentation to the communal areas on the day of the visit.

No opening up of any part of the structure was carried out nor were any operational electrical or mechanical systems tested. All comments and recommendations are based on visual inspection only.

Prioritisation of Recommendations

To assist in the development of a strategy and action plan for addressing recommendations in the fire risk assessment report, a priority rating is attached to each recommendation. The following is an explanation of each rating:

High Priority: Immediate action required to prevent risk to the health and safety of relevant persons.

Medium Priority: Planned action to improve fire safety within the premises.

Low Priority: Features that comply with current regulations but which the responsible person may consider upgrading.

Identified costs of Recommendations	The report will give a budget costing for recommendations covered in the fire risk assessment for alterations or improvements to physical features to assist the client in developing an Action Plan and improvement programme.
Access Limitations	We were unable to access the integral garages to the ground floor of the west elevation of the building, a small cupboard within the rear lobby of the ground floor or the roof garden opposite flat 5.
Revisit	No, a revisit is not required at this time.

2.0 THE BUILDING

2.1 The Building

The Chevron is a general needs housing scheme located within the Byker Estate. The building is arranged in an 'L' shape, with two wings joined at the northern corner of the building. Flats 2-5 are located within the smaller of the wings on the west side of the building and occupies a footprint of approximately 200m^2.

The property is a wedge shape design, with one side 2-storeys high and the opposite side is 3-storeys high. There are integral garages to the ground floor of the west elevation of the building. The building is of masonry cavity wall construction, with brickwork outer leaf, with a single pitched roof with a standing seem profile metal roof covering and fascia, timber double glazed windows and doors to flats, with glazed metal doors to main entrances.

There is a roof terrace area recessed within the main roof of the building, accessed from the common stairwell. This has timber cladding lining the rear wall of the terrace. To the rear, there is a concrete floor structure balcony to a single property on the 1st floor, which is accessed from the living room of flat 4, which is lined with timber panelled sides and a corrugated PVC roof cover. Having considered the risk to the residents of this property in relation to the identified timber panels, we do not believe this property requires a Fire Risk Appraisal of the External Wall as there is a sufficient early detection and warning system within the properties, there are low occupancy numbers within the block, and the building is approximately 8m in height, and as such we consider the risk to be low.

There is a timber structure with metal roof adjoined to part of the building at the northern elevation. However it is noted that this is not a car port and as such we consider the structure to be low risk.

Internally, floors are concrete as are the stairs, and the internal walls on the means of escape are plain plaster and paint finish. Rainwater goods are UPVC.

The scheme contains 5 one-bedroom flats, each with their own facilities. Flats 2 and 3 are on the ground floor and are accessed directly from street level. Flats 4 and 5 are on the first and second floors respectively and are accessed via a communal staircase.

The electric meters are located within fire rated cupboards within the rear lobby adjacent to the rear exit.

2.2 Fire Loss Experience	Karbon Homes have not made us aware of any fire related incidents at this property.

3.0 FIRE HAZARDS

3.1 Sources of Fuel

The building and means of escape provision have been designed on the assumption that the escape routes and fire exits remain clear.

The sources of fuel within the communal areas of the premises were assessed as follows:

- Timber construction materials to a balcony on the southern elevation of the building including timber side panels and a PVC corrugated roof cover.
- Timber cladding to the rear wall of the roof terrace.
- Timber structure to the north elevation of the building, with metal clad roof.
- Electrical PVC insulation throughout.
- Old style refuse bins within the rear lobby.

Although we were unable to access the private balcony or the roof terrace, a ground level assessment of the balcony and a visual inspection through glazing from the communal stair of the roof garden noted these are being used for amenity purposes by the residents. During our inspection we did not observe any obvious sources of ignition, or items that may present an ignition source such as BBQ's, but we cannot confirm that these are not used at other times. We advise the client to issue the residents with advice regarding the use of the balcony as follows:

- Do not fix fairy lights.
- Do not use fire pits on the balcony or roof terrace.
- Never barbecue on the balcony or roof terrace.
- Do not set off fireworks.
- Do not use the balcony or roof terrace as storage.
- Do not smoke on the balcony or roof terrace.
- Report cracks, defects or other damage to the landlord.

It is accepted that there will be sources of fuel located within the individual flats associated with domestic living such as timber and foam furnishings, linen, bedding and household clothing and

cooking oils and fats within the kitchens. However, this is considered as outside of the landlords control.

We noted two old style garbage containers stored within the rear lobby and although empty on the day of the visit their presence may encourage waste disposal within them. We do not believe these would be emptied as part of the normal refuse collection. We recommend these are removed.

3.2 Sources of Ignition

The sources of ignition within the property were assessed as follows:

- Electrical supply and distribution system.
- Typical household electrical appliances within the flats.
- Residents smoking in the flats.
- Vehicles parked within the garages to the western elevation (unable to access on the day of the visit).

It is accepted that there will be sources of ignition located within individual flats associated with domestic living such as portable electrical goods, cooking and heating appliances, and the possibility of smoking materials and the use of candles. However, we would consider this outside of the landlords control.

All electrical installations are required to be tested regularly to the standards defined by the IET Wiring Regulations (BS 7671). The mains electrical supply and distribution installation and wiring (common areas and rented dwellings) should be tested at least every five years by a registered NICEIC contractor to satisfy compliance with the requirements of the Electricity at Work Regulations 1989 in addition to the IET Wiring Regulations BS7671:2018 18th edition.

We believe the electrical distribution unit for the communal areas is located within a locked cupboard off the rear lobby which could not be accessed on the day of the visit as keys were not supplied. Inspection of the clients compliance data records indicated the last

periodic inspection and test was carried out on 06/09/21, meeting the above regulatory requirements.

We were unable to confirm if the electrical installations within the accessed flat 5 has undergone a periodic inspection and test within the last 5 years, as contractors were currently installing new wiring and bathrooms. The client should confirm all electrical installations within the dwellings have been inspected and tested within the last 5 years.

The communal areas (stairs and landings) of the property are no smoking areas, with the policy re-enforced with the provision of no smoking signage. We did not note any smoking activities taking place either internally or externally.

3.3 Sources of Oxygen	Natural airflow through doors and windows etc. There were no chemicals with oxidising agents noted within the property.
3.4 People at Risk	We believe the flats within the property are 2 bedroomed properties, as such we would envisage a maximum residency figure of 8. In addition, there is the potential for visitors and trades persons to be present.

4.0 MEANS OF ESCAPE

4.1 Escape Routes

The means of escape routes are simple in design and consist of a single protected stair which gives access to all three floors with flats 4 and 5 opening directly onto the stairs.

The stairs terminate at the main entrance with a second final exit also available on the ground floor to the rear of the building, accessed via a protected lobby.

The main front entrance is opened by a press to open facility which is designed to "fail safe to open" in a fire situation. The rear final exit is opened with a single action thumb turn device.

Wayfinding signage and the final exit fire exit signage is appropriate for the property, and the means of escape are fitted with appropriate emergency lighting.

Surface linings of walls and ceilings on the circulation spaces are plaster skim/paint which we believe meet the classifications B-s3, d2 as identified within approved document B of the building Regulations 2019.

The escape routes should remain free from combustible items to reduce the risk of a fire starting in the communal areas and to ensure a clear escape route.

We noted a 'baby bouncer' chair located under the stairs of the ground floor. This may encourage further storage of equipment and obstruct the means of escape. We recommend the item is removed and residents advised accordingly to keep all means of escape clear from any potential obstructions.

All access/egress routes were clear at the time of the inspection and are within the recommended travel distances for this type of premises as detailed with the Building Regulations Approved Document B and DCLG Fire Risk Assessment Guidance.

4.2 Fire Doors

The current benchmark standard is for flat entrance doors to be self-closing, capable of providing 30-minute fire resistance and incorporating intumescent strips and smoke seals FD30S.

We were able to access flat 5 and confirmed the entrance door is a notional FD60S fire door hung on 2 pair hinges fitted with combined intumescent and cold smoke seals and a self-closing device. The door has excessive gaps between the door and the frame which may allow cold smoke and the products of combustion to pass in a fire situation. We recommend the door is adjusted/rehung to ensure the gaps between the door and frame are 3mm ± 1mm and 3mm at the under door threshold for smoke control.

We noted flat 5 is fitted with a keyed locking mechanism internally to the flat entrance door. Guidance within the LACORS document states 'It is strongly recommended that the exit door from each unit of accommodation (bedsit or flat) is openable from the inside without the use of a removable key' (LACORS 16.2). We recommend the client follows this guidance and ensures all opening devices on the means of escape, including flat entrance doors are openable without a key to mitigate against misplaced or lost keys delaying or preventing egress during an emergency evacuation requirement.

The rear lobby door is fitted with an FD60S fire door with overhead self-closing device and intumescent and cold smoke seals. It was noted the door does not fully close to its rebate unaided. We recommend the self-closing device is adjusted to ensure the door closes fully, unaided to its rebate to ensure compartmentation is maintained to this area as and when required.

We believe doors to the electrical distribution cupboard within the rear lobby are FD30 with intumescent strips and fire rated hinges, however we were unable to gain access on the day of the visit as keys were not provided.

The Fire Safety (England) Regulations 2022 have implemented new legal requirements for all multi-occupied residential buildings in England with storeys over 11 metres in height. This includes

undertaking quarterly checks of all fire doors and self-closing devices in the common areas. There will also be a new expectation to carry out annual checks "on a best endeavour basis" of all flat entrance doors (including self-closing devices) that lead to a building's common areas. Whilst this building is less than 11 metres in height, the client should consider routine in-house checks of the fire doors as described.

4.3 Fire Compartmentation

The means of escape routes within the building are protected by fire resistant walls, ceilings, and doors, which provide a minimum 30-minute fire protection. These include solid brick walls with a plaster finish, ceilings with plaster skim, and concrete floors.

It was previously noted (29/03/22), there were two breaches within the electrical cabinet walls. The client has advised these have been appropriately fire stopped with the work undertaken by approved contractors on 25/07/22 (c365).

We were unable to access what we believe to be two garages belonging to residents accessed to the west elevation of the building. We would advise the client to arrange access to have these checked to ensure there are no compartmentation breaches between the garages and properties above or behind.

4.4 Fire Alarm and Detection System

The is no fire detection and warning system within the communal areas of the building, which is acceptable for this construction design.

Current guidance requires dwellings to have automatic fire detection located within all principle habitable rooms, with heat detection located within the kitchen in order to comply with the current BS5839-6 standard to Grade D1 LD2 category. The flat inspected, flat 5 has smoke detection within the entrance hallway, smoke detection in the hall beside the lounge, smoke detection within the lounge and heat detection within the kitchen, which we believe complies with this requirement.

Residents are advised to test their smoke alarms on a monthly basis as per the related guidance.

4.5 Emergency Lighting	There is adequate 3-hour non-maintained emergency lighting installed in appropriate locations throughout the building that appear to conform to BS5266. The emergency lighting is required to be tested and maintained in accordance with BS 5266 which requires monthly short duration functional tests and annual full discharge tests which should be detailed in a Fire Logbook. Records within the fire logbook show the annual service and discharge test was carried out on 29/11/22, however there are no monthly testing records within the fire logbook. We recommend the emergency lighting system is tested in accordance with BS 5266 and records held on site within the fire logbook.
4.6 Fire Fighting Equipment	The premises are not supplied with Portable firefighting equipment on site, which is appropriate for this property.
4.7 Signage	All signage should satisfy the requirements of BS 5499-5 and be installed in accordance with the recommendations of BS 5499-4. General fire action notices are on display in appropriate positions throughout the property and the wayfinding signage and fire exit signage fitted within the building is appropriate to the layout of this building. All final exits, which are fitted with a thumb turn opening device should also have an appropriate accompanying directional 'turn to open' sign fitted beside the opening device. We recommend appropriate signage is fitted beside the door opening mechanism where required.

	General access communal fire doors have appropriate fire door keep shut signage as required. Although the electrical distribution cupboards were locked on the day of the visit, they should also be fitted with fire door keep locked signage. We recommend appropriate fire door keep locked signage is fitted to the doors.
4.8 Disabled Persons Egress	The property is not suitable for disabled occupants as both flats 4 and 5, accessed off the communal parts of this building are only accessible via stairs.

5.0 MANAGEMENT PROCEDURES

5.1 Fire Evacuation Procedures	There is a "full simultaneous" evacuation policy for all occupants in a fire situation. When residents are first inducted to the premises, they are given a briefing on what to do in the event of a fire within the building. This is reinforced by the provision of General Fire Action notices. The assembly point is to the front of the building, a safe distance away from the entrance.
5.2 Fire Logbook	There is a fire logbook located within a secure premises information box within the entrance lobby, however this contained only emergency lighting annual servicing. We have recommended that emergency monthly testing is also recorded within the fire log book.
5.3 Training	Not applicable for this general needs living scheme.
5.4 Access & Facilities for the Fire Service	Access to the buildings for fire appliances is good and is in line with the requirements of Approved Document B.
5.5 Arson	The risk of an arson attack is considered low. Access to the premises is controlled.

Surveyor	Joe Abbott, MSc. BSc (Hons). AIFireE. GradIOSH. DipFD.
Signed	
	…… On Behalf of Storm Tempest Ltd
Checked	Dave Stilling, BSc (Hons), MCIOB, FSIDip, AIFireE
Signed	
	…… On Behalf of Storm Tempest Ltd

APPENDIX 1
FIRE RISK ASSESSMENT

FIRE RISK ASSESSMENT

		Potential consequences of fire		
Liklihood of fire occuring		***Slight Harm (1)***	***Moderate harm (2)***	***Extreme harm (3)***
	Low *(1)*	**Trivial Risk**	**Tolerable Risk**	**Moderate Risk**
	Medium *(2)*	**Tolerable Risk**	**Moderate Risk**	**Substantial Risk**
	High (3)	**Moderate Risk**	**Substantial Risk**	**Intolerable Risk**

Taking into account the fire prevention measures observed at the time of this risk assessment, it is considered that the hazard from fire (likelihood of fire) at these premises is:

Low ☐ **Medium** ☒ **High** ☐

Low: Unusually low likelihood of fire as a result of negligible potential sources of ignition.

Medium: Normal fire hazards (e.g. potential ignition sources) for this type of occupancy, with fire hazards generally subject to appropriate controls (other than minor shortcomings).

High: Lack of adequate controls applied to one or more significant fire hazards, such as to result in significant increase in likelihood of fire.

Taking into account the nature of the premises and the occupants, as well as the fire protection and procedural arrangements observed at the time of this fire risk assessment, it is considered that the consequences for life safety in the event of fire would be:

Slight harm ☐ **Moderate harm** ☒ **Extreme harm** ☐

In this context, a definition of the above terms is as follows:

Slight harm: Outbreak of fire unlikely to result in serious injury or death of any occupant (other than an occupant sleeping in a room in which a fire occurs).

Moderate harm: Outbreak of fire could foreseeably result in injury (including serious injury) of one or more occupants, but it is unlikely to involve multiple fatalities.

Extreme harm: Significant potential for serious injury or death of one or more occupants.

Accordingly, it is considered that the risk to life from fire at these premises is:

<u>Moderate Risk</u>

(Note that, although the purpose of this section is to place the fire risk in context, the above approach to fire risk assessment is subjective and for guidance only. All hazards and deficiencies identified in this report should be addressed by implementing all recommendations contained in the following action plan. The fire risk assessment should be reviewed regularly.)

Risk level	Action and timescale
Trivial	No action is required, and no detailed records need be kept.
Tolerable	No major additional fire precautions required. However, there might be a need or reasonably practicable improvements that involve minor or limited cost.
Moderate	It is essential that efforts are made to reduce the risk. Risk reduction measures, which should take cost into account, should be implemented within a defined time period. Where moderate risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the priority for improved control measures.
Substantial	Considerable resources might have to be allocated to reduce the risk. If the premises are unoccupied, it should not be occupied until the risk has been reduced. If the premises are occupied, urgent action should be taken.
Intolerable	Premises (or relevant area) should not be occupied until the risk is reduced.

APPENDIX 2
SCHEDULE OF OBSERVATIONS

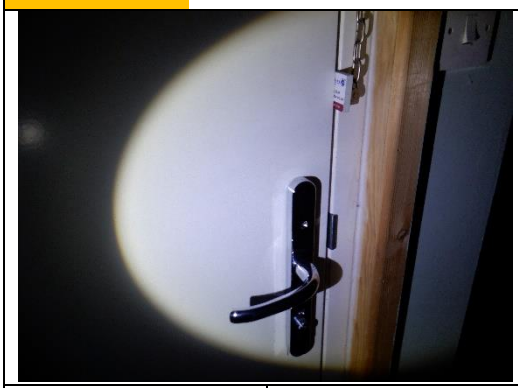
Fire Hazards.

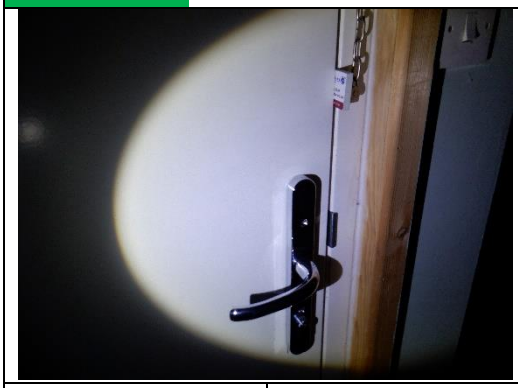
MEDIUM	**1**	
		**Assessors Observations:** We noted two old style garbage containers stored within the rear lobby and although empty on the day of the visit their presence may encourage waste disposal within them.
Date First Identified:	20/02/23	**Recommended Action:** We do not believe these would be emptied as part of the normal refuse collection. We recommend these are removed.
Date of FRA:	20/02/23	
Rectify Within: (months)	6	
Budget Cost:	No Cost	

LOW	**2**	
No Photo		**Assessors Observations:** We were unable to confirm if the electrical installation within the accessed flat 5 has undergone a periodic inspection and test within the last 5 years, as contractors were currently installing new wiring and bathrooms.
Date First Identified:	20/02/23	**Recommended Action:** The client should confirm all electrical installations within the dwellings have been inspected and tested within the last 5 years.
Date of FRA:	20/02/23	
Rectify Within: (months)	12	
Budget Cost:	No Cost	

Means of Escape.

LOW	3	
		**Assessors Observations:** The escape routes should remain free from combustible items to reduce the risk of a fire starting in the communal areas and to ensure a clear escape route. We noted a 'baby bouncer' chair located under the stairs of the ground floor. This may encourage further storage of equipment and obstruct the means of escape.
Date First Identified:	20/02/23	**Recommended Action:** We recommend the item is removed and residents advised accordingly to keep all means of escape clear from any potential obstructions.
Date of FRA:	20/02/23	
Rectify Within: (months)	12	
Budget Cost:	No Cost	

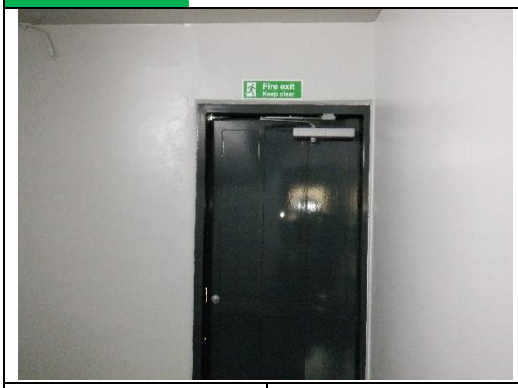
MEDIUM	4	
		**Assessors Observations:** We were able to access flat 5 and confirmed the entrance door is a notional FD60S fire door hung on 2 pair hinges fitted with combined intumescent and cold smoke seals and a self-closing device. The door has excessive gaps between the door and the frame which may allow cold smoke and the products of combustion to pass in a fire situation.
Date First Identified:	20/02/23	**Recommended Action:** We recommend the door is adjusted/rehung to ensure the gaps between the door and frame are 3mm ± 1mm and 3mm at the under door threshold for smoke control.
Date of FRA:	20/02/23	
Rectify Within: (months)	6	
Budget Cost:	£35	

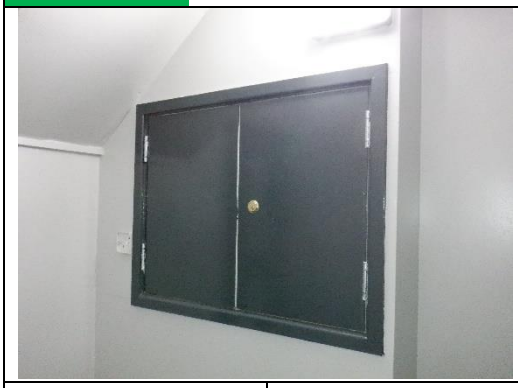
LOW	5	
		**Assessors Observations:** We noted flat 5 is fitted with a keyed locking mechanism internally to the flat entrance door. Guidance within the LACORS document states 'It is strongly recommended that the exit door from each unit of accommodation (bedsit or flat) is openable from the inside without the use of a removable key' (LACORS 16.2).
Date First Identified:	20/02/23	**Recommended Action:** We recommend the client follows this guidance and ensures all opening devices on the means of escape, including flat entrance doors are openable without a key to mitigate against misplaced or lost keys delaying or preventing egress during an emergency evacuation requirement.
Date of FRA:	20/02/23	
Rectify Within: (months)	12	
Budget Cost:	£20	

MEDIUM	6	
		**Assessors Observations:** The rear lobby door is fitted with an FD60S fire door with overhead self-closing device and intumescent and cold smoke seals. It was noted the door does not fully close to its rebate unaided.
Date First Identified:	20/02/23	**Recommended Action:** We recommend the self-closing device is adjusted to ensure the door closes fully, unaided to its rebate to ensure compartmentation is maintained to this area as and when required.
Date of FRA:	20/02/23	
Rectify Within: (months)	6	
Budget Cost:	£35	

LOW	7	
		**Assessors Observations:** We were unable to access what we believe to be two garages belonging to residents accessed to the west elevation of the building.
Date First Identified:	20/02/23	**Recommended Action:** We would advise the client to arrange access to have these checked to ensure there are no compartmentation breaches between the garages and properties above or behind.
Date of FRA:	20/02/23	
Rectify Within: (months)	12	
Budget Cost:	No Cost	

LOW	8	
No Photo		**Assessors Observations:** Records within the fire logbook show the annual service and discharge test was carried out on 29/11/22, however there are no monthly testing records within the fire logbook.
Date First Identified:	20/02/23	**Recommended Action:** We recommend the emergency lighting system is tested in accordance with BS 5266 and records held on site within the fire logbook.
Date of FRA:	20/02/23	
Rectify Within: (months)	12	
Budget Cost:	No Cost	

LOW	9	
		**Assessors Observations:**
		All final exits, which are fitted with a thumb turn opening device should also have an appropriate accompanying directional 'turn to open' sign fitted beside the opening device.
Date First Identified:	20/02/23	**Recommended Action:**
Date of FRA:	20/02/23	We recommend appropriate signage is fitted beside the door opening mechanism where required.
Rectify Within: (months)	12	
Budget Cost:	£20	

LOW	10	
		**Assessors Observations:**
		Although the electrical distribution cupboards were locked on the day of the visit, they should also be fitted with fire door keep locked signage.
Date First Identified:	20/02/23	**Recommended Action:**
Date of FRA:	20/02/23	We recommend appropriate fire door keep locked signage is fitted to the doors.
Rectify Within: (months)	12	
Budget Cost:	£20	