



**FIRE RISK ASSESSMENT
9-16 GRAHAM HOUSE, BYKER,
NEWCASTLE UPON TYNE.
NE6 1AT**

FEBRUARY 2023

Reference: GH/23/02/23/IC

Prepared by:

Resilience Risk Management Services Ltd
10 Westoe Drive
South Shields
Tyne and Wear
NE33 3EJ

Version: 1

Prepared for:

Karbon Homes
Unit D2
The Waterfront
Newburn Riverside
Goldcrest Way
Tyne and Wear
NE15 8NZ



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1.0 INTRODUCTION

The Client	Karbon Homes
Instruction	This Fire Risk Assessment was undertaken in accordance with an instruction received from Tony Ruddick, Data & Compliance Manager, Karbon Homes.
Responsible Person	Paul Fiddaman, Chief Executive, Karbon Homes.
The Property	9-16 Graham House, Byker, Newcastle Upon Tyne. NE6 1AT.
The Surveyor	The Fire Risk Assessment was carried out by: Ian Cuskin GIFireE.
Survey Date	23 rd 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 as well as the Local Government Group (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 buildings being:

- The Building Regulations 2019 Approved Document B – Fire Safety
- 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 Group - Fire safety in purpose-built blocks of flats (hereafter referred to as the LGA Guide)
- 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 building **annually or when a material change is made to the property.**

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. Resilience Risk Management Services 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 of the areas within the property. We will also comment upon the external construction materials of the building and the area 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-invasive) Fire Risk Assessment (as detailed in LGA Guidance Document Fire Safety in Purpose Built Blocks of Flats) has been conducted in relation to this property.

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 able to access all areas of the building.

Revisit There is no requirement for a revisit at this time.



2.0 THE BUILDING

2.1 The Building The building is a grade II* listed building with Historic England and is constructed from concrete frame, and external brickwork. Windows are aluminium framed double glazed and the flat roof is bitumen as is the fascia and Upvc rainwater goods. Internally, floors in the common parts of the building are concrete, walls are of solid masonry construction with plaster skim ceilings.

The building consists of 16 apartments over five storeys. Eight of the apartments are accessed at ground level individually. Access to the remaining apartments is via two communal entrances with steel composite doors at the east and west (front and rear) of the building. Both open in the direction of travel in an evacuation. The doors have a secure magnetic lock entry system and are unlocked by a pre-programmed key fob. A push button release in the lobby allows residents to leave the building. These doors give access to the lobby area which houses service cupboards and protected stair to the upper floors. The landing on the first floor has access to flats 9 and 10 and the stairs continues to the second-floor landing which gives access to flat 11 and the landlord services room. Access to the remaining external flats is via a FD60S door with fire rated glazing, onto the external balcony walkway which is semi-enclosed with a corrugated polycarbonate roof. To the north of the building there is an access bridge to Dunn Terrace which allows access to a further means of escape.

The building benefits from CCTV and a remote concierge service. It has emergency lighting throughout and has automatic fire detection within the private apartments and landlord service cupboards, connected to a 24/7 monitoring centre.

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



3.0 FIRE HAZARDS

3.1 Sources of Fuel

- Electrical PVC insulation throughout and in particular the meter room.
- Timber construction materials (in particular, within the balcony/walkway construction).
- Refuse stored within the internal refuse store.
- Refuse stored in the wheeled bins within residents' rear gardens.
- Potential for some properties to have a gas supply for cooking.
- Bagged waste and discarded toys on the balcony walkway.
- Pushchair on the ground floor.

It is accepted that there will be sources of fuel located within the individual apartments associated with domestic living such as; timber and foam furnishings, linen, bedding and household clothing and cooking oils and fats within the kitchens.

Karbon Homes are in the process of removing all historic and redundant gas supplies in the Byker Estate, in partnership with Northern Gas Networks, with minimal properties still connected. Any remaining connected properties receive an annual gas safety check, and when they become void the gas supply is removed.

It was noted there is bagged waste on the balcony walkway outside of flat 12. We recommend this is removed and residents are reminded to dispose of household rubbish responsibly to mitigate the risk of fires occurring on the means of escape.

Adjacent to the fire exit to the stair (door 27A / 2.1), there are discarded toys, books and twigs on the balcony walkway. We recommend these are removed and residents reminded to dispose of household items responsibly.

It was noted there is a pushchair in the ground floor entrance hallway. We are unsure if this is being stored or has been discarded. We recommend the client investigates this matter and reminds



residents to keep the means of escape free of obstructions so it can be safely used by all.

3.2 Sources of Ignition

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

- Electrical supply and distribution system.
- Electrical CCTV equipment within the landlord services room.
- Potential for arson, in particular, to the wheelie bins stored to the rear of the building within residents' gardens (away from the building).
- Sources of ignition located within individual apartments associated with domestic living such as electrical goods, cooking / heating appliances, and the possibility of smoking materials / candles.
- Potential for lightning strikes.

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. The mains electrical supply and distribution system was subject to a fixed wiring inspection by a competent engineer which is recorded within the records held by Karbon Homes as 06/09/21, satisfying the above requirement.

Residents electrical meter cupboards on the means of escape are protected by fire rated enclosures.

Records held centrally by Karbon Homes confirmed the lightning conductor for the building was last subject to an annual inspection and test by a competent person to BS EN 62305 on 02/02/23.

The servers/CCTV equipment within the landlord services room are connected via standard electrical plugs. We recommend the client



confirms these are subject to inspection and test (PAT) by a competent person on an annual basis.

The communal areas (stairs and landings) of the property are no smoking areas and there were no signs of smoking taking place.

3.3 Sources of
Oxygen

Natural airflow through doors and windows.

3.4 People at Risk

The residents within the building and ground floor flats as well as the potential for visitors, housing staff and trades persons.



4.0 MEANS OF ESCAPE

4.1 Escape Routes The means of escape routes within the building are sterile apart from an occasional planter and/or fixed bench seating outside several individual properties. These are low risk and due to the size, layout, available exit routes and number of residents within the building pose a minimal risk of impeding evacuation in the event of a fire. Karbon Homes are also aware of these and this is part of their "managed use" policy of the building to keep these to an acceptable level and at the same time encourage residents to have a sense of pride and value in their home environment.

The protected escape route is accessed by two communal entrance doors (front and rear of the building) leading directly into the entrance lobby, with resident's bin store and electrical service cupboard. Stairs from the lobby lead to the first-floor landing which has access to flats 9 and 10. Stairs continue to the second floor which has access to flat 11, and a landlord services room. A FD60S fire door with marked fire rated glazing and self-closing device gives access to the communal walkway and flats 12-16.

Ground floor flats exit directly to a place of ultimate safety. Flats 9, 10 and 11 entrance doors are within the protected stairway, and all other flats exit onto a balcony / walkway. From the walkway, residents are able to access a second means of escape via the Dunn Terrace entrance to the north via an adjoining bridge. All exits allow residents to leave by means of a single action mechanism.

All access/egress routes 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 Regulatory Reform (Fire Safety) Order 2005 / Fire Safety Act 2021 makes it a legal requirement to ensure that fire resisting doors and escape doors are correctly installed and adequately maintained in order for them to be fit for purpose. BS9999 states that all fire doors should be inspected every six months. However, depending



on the type of building the “responsible person” is required to influence the frequency of fire door inspections subject to their use. The responsible person should ensure an adequate routine for inspections and maintenance is in place and should be undertaken by a competent person. 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 FD30(S) and where key operated mortice locks are provided they should be fitted with the means to override the lock from the inside without having to rely on the key. We advise the client examines their installation records to confirm the flat entrance doors meet the current benchmark standard (BS8214). Where this cannot be confirmed, or the doors do not meet the current benchmark standard we advise the doors are replaced with door sets meeting the current benchmark standard. Failure to do so could result in the door not achieving the expected fire resistance and allowing fire and smoke spread into the means of escape.

Notwithstanding the above, we were able to gain access to flats 11 and 13 in order to check the specification and action of the flat entrance doors. Externally all doors on the protected stair appear to be the same. The entrance door to flat 11 on the protected stair is a FD60S door with a fire rated letterbox, door viewer, internal thumb turn device and self-closing mechanism and conforms to BS8214.

All refuse store and service cupboard doors (kept locked) have recently been upgraded and are FD60S SC doors to BS8214. Doors onto the balcony walkways appear to be FD30S part glazed and / or solid timber fire doors.

We were able to gain access to flat 13 which is located on the balcony walkway. It was noted this particular door does not have a self-closing device attached to the door and is secured internally via a key. We recommend a self-closing device is attached to this door in order to contain any fire within the flat following any evacuation. In addition, we recommend the locking mechanism is replaced with a thumb turn device internally. This will allow the



occupants to evacuate the dwelling speedily without the need to search for keys to unlock the door.

4.3 Fire Compartmentation

The means of escape routes within the building are protected by fire resistant walls, ceilings, and doors, which provide 60-minute fire protection. These include solid brick walls with a plaster finish, ceilings with plaster skim finish, and concrete floors. There were no obvious signs of breaches in compartmentation within the flats inspected (flats 11 and 13). Recent fire stopping / compartmentation works have been undertaken by "Ogilvie Fire Protection" contractors and this appears to be of a good standard. No compartmentation issues were noted.

Windows opening onto the communal walkway are double glazed units set into aluminium frames and do not appear to be fire rated. These windows are also part of the listed status of the building. However, as there are alternative escape routes available from each flat entrance along the open balcony, these flat entrance doors and windows are not required to be fire-resisting (LGA Fire Safety in Purpose Built Blocks of Flats Sec 59.4).

4.4 Fire Alarm and Detection System

There is no fire detection (or a requirement to do so) within the communal stairs. The bin store and landlord services cupboards have mains powered smoke detection to BS5839-1 within, linked to the concierge.

We inspected the detection within flats 11 and 13 and noted that the fire detection system within each property appears to be a Grade D1 category LD2 system covering the circulation spaces within the dwelling, living room and heat detection in the kitchen, which appears to conform to BS5839-6. This comprises of interlinked mains powered smoke detectors which are also linked to the concierge system. The last time the automatic fire detection was subject to a six-month service by a competent engineer is recorded as 08/02/2023 and the last weekly test of the system was on 21/02/2023.



It was noted, within flat 13, the resident has put a plastic cover over the detector head in the hall. On questioning the resident stated it was too sensitive and has suffered repeated false alarms when cooking. We advised the resident to remove the cover. We recommend the client investigates this matter with a view to changing the smoke detector head if it is defective, or repositioning it with a view to ensuring a working smoke detector in the hall and also preventing false alarms occurring.

4.5 Emergency Lighting

The premises have 3-hour non-maintained emergency lighting installed at key points on the escape routes throughout the building that conform to BS5266. These were last subject to an annual full discharge test 08/02/2023. Weekly functional tests were last carried out by on-site electricians' and recorded as 31/01/23. The emergency lighting is required to be tested and maintained in accordance with BS5266 which requires monthly short duration tests and annual full discharge test.

4.6 Fire Fighting Equipment

There is no portable firefighting equipment on site in the communal areas. Landlords are not required to provide such equipment in residential properties and some fire authorities discourage installing firefighting equipment as they would rather the residents leave the building than attempt to fight a fire with equipment they have not been trained to use.

4.7 Signage

Generally, there is inadequate fire exit and directional signage fitted within the building due to current improvement works where some signs have been removed.

There is no "Fire Exit" sign above both final exit doors within the ground floor entrance hall. We recommend one such sign is affixed above each of these doors.

It was noted there are no directional fire exit signs in place within the premises. We recommend directional exit signage is installed above the door from the balcony walkway (door 27A/2.1). In



addition, the directional signage temporarily removed on the means of escape on the stair, from flat 11 downwards, should be reinstated onto the wall at the changes of direction, to indicate the direction to the final exits on the ground floor.

There is no signage on the landlord services door adjacent to flat 11 (door 27/2.2) to indicate the requirement to keep this door locked. We recommend a "Fire Door Keep Locked" sign is attached to the facing side of this door.

There are no "General Fire Action" notices or "No Smoking" notices displayed within the block, with one "No Smoking" sign painted over. We recommend these notices are displayed in the ground floor entrance hall area as well as in a conspicuous location outside of flat 11.

Should the client be in any doubt about the type and location of signage required, we would advise a full signage survey is undertaken at the completion of refurbishment works.

All signage should satisfy the requirements of BS 5499-5 and be installed in accordance with the recommendations of BS 5499-4.

4.8 Disabled Persons Egress

The property is suitable for persons with limited mobility on the ground floor. It is the Responsible Person's duty to ensure suitable provision is made for disabled persons within the property to ensure that they can escape in the event of a fire.



5.0 MANAGEMENT PROCEDURES

- 5.1 Fire Evacuation Procedures There is a "Full Simultaneous" evacuation policy for this premises 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 should be reinforced by the provision of General Fire Action notices.
- 5.2 Fire Log Book There is a fire log book held within the red fire documents box in the entrance lobby (27b) which was accurately completed.
- 5.3 Training There are no staff in general needs accommodation.
- 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 medium. The premises have secure access and entry is controlled, with the addition of a concierge service when needed. CCTV is also installed at key points within and external to the building. On the ground floor, generally, residents wheeled bins are stored to the rear of their gardens away from the building. See also earlier comments regarding the waste being left on the balcony walkway.
- 5.6 Previous Recommendations Karbon Homes have provided us with the previous fire risk assessment for this building. Should any significant issues be outstanding, we will highlight these in Appendix 2 – Schedule of Observations of this report.



Surveyor Ian Cuskin GFireE

Signed 

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On Behalf of Resilience Risk Management Services Ltd

**APPENDIX 1
FIRE RISK ASSESSMENT**

FIRE RISK ASSESSMENT

		<i>Potential consequences of fire</i>		
		<i>Slight Harm (1)</i>	<i>Moderate harm (2)</i>	<i>Extreme harm (3)</i>
<i>Likelihood of fire occurring</i>	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:


Tolerable Risk


(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	<p>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.</p> <p>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.</p>
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
		<p>Assessors Observations:</p> <p>There is bagged waste on the balcony walkway outside of flat 12 as well as discarded toys, books and twigs adjacent to the fire exit to the stair (door 27A / 2.1).</p>
Date First Identified:	23/02/23	<p>Recommended Action:</p> <p>We recommend these items are removed and residents are reminded to dispose of household waste items responsibly to mitigate the risk of fires occurring on the means of escape.</p>
Date of FRA	23/02/23	
Rectify Within: (months)	6	
Budget Cost:	No Cost	


MEDIUM		2
		<p>Assessors Observations:</p> <p>There is a pushchair in the ground floor entrance hallway. We are unsure if this is being stored or has been discarded.</p>
Date First Identified:	23/02/23	<p>Recommended Action:</p> <p>We recommend the client investigates this matter and reminds residents to keep the means of escape free of obstructions so it can be safely used by all.</p>
Date of FRA	23/02/23	
Rectify Within: (months)	6	
Budget Cost:	No Cost	

LOW		3	
		Assessors Observations: The servers/CCTV equipment within the landlord services room are connected via standard electrical plugs.	
Date First Identified:	23/02/23	Recommended Action: We recommend the client confirms these are subject to inspection and test (PAT) by a competent person on an annual basis.	
Date of FRA	23/02/23		
Rectify Within: (months)	12		
Budget Cost:	No Cost		


Fire Doors


MEDIUM		4	
		Assessors Observations: The flat entrance door to number 13 does not have a self-closing device attached to the door and is secured internally via a key.	
Date First Identified:	23/02/23	Recommended Action: We recommend a self-closing device is attached to this door in order to contain any fire within the flat following any evacuation. In addition, we recommend the locking mechanism is replaced with a thumb turn device internally. This will allow the occupants to evacuate the dwelling speedily without the need to search for keys to unlock the door.	
Date of FRA	23/02/23		
Rectify Within: (months)	6		
Budget Cost:	£150		


Fire Alarm and Detection System


MEDIUM		5	
		Assessors Observations: Within flat 13, the resident has put a plastic cover over the detector head in the hall. On questioning the resident stated it was too sensitive and has suffered repeated false alarms when cooking.	
Date First Identified:	23/02/23	Recommended Action: We recommend the client investigates this matter with a view to changing the smoke detector head if it is defective, or repositioning it with a view to ensuring a working smoke detector in the hall and also preventing false alarms occurring.	
Date of FRA	23/02/23		
Rectify Within: (months)	6		
Budget Cost:	No Cost		

Signage

LOW		6	
		Assessors Observations: There is no "Fire Exit" sign above both final exit doors within the ground floor entrance hall.	
Date First Identified:	23/02/23	Recommended Action: We recommend one such sign is affixed above each of these doors.	
Date of FRA	23/02/23		
Rectify Within: (months)	12		
Budget Cost:	£20		

LOW		7
		Assessors Observations: There are no directional fire exit signs in place within the premises.
Date First Identified:	23/02/23	Recommended Action: We recommend directional exit signage is installed above the door from the balcony walkway (door 27A/2.1). In addition, the directional signage temporarily removed on the means of escape on the stair, from flat 11 downwards, should be reinstated onto the wall at the changes of direction, to indicate the direction to the final exits on the ground floor.
Date of FRA	23/02/23	
Rectify Within: (months)	12	
Budget Cost:	£40	

LOW		8
		Assessors Observations: There is no signage on the landlord services door adjacent to flat 11 (door 27/2.2) to indicate the requirement to keep this door locked.
Date First Identified:	23/02/23	Recommended Action: We recommend a "Fire Door Keep Locked" sign is attached to the facing side of this door.
Date of FRA	23/02/23	
Rectify Within: (months)	12	
Budget Cost:	£10	

LOW		9
		<p>Assessors Observations:</p> <p>There are no "General Fire Action" notices or "No Smoking" notices displayed within the block, with one "No Smoking" sign painted over.</p>
Date First Identified:	23/02/23	<p>Recommended Action:</p> <p>We recommend these notices are displayed in the ground floor entrance hall area as well as in a conspicuous location outside of flat 11.</p>
Date of FRA	23/02/23	
Rectify Within: (months)	12	
Budget Cost:	£60	