

**FIRE RISK ASSESSMENT
AVONDALE HOUSE,
50 RABY WAY, BYKER,
NEWCASTLE UPON TYNE NE6 2FQ**

OCTOBER 2021



STORM TEMPEST
PROPERTY CONSULTANCY

Reference: 4009-04-21-IC

Prepared by:

Storm Tempest Ltd
3 Apollo Court
Koppers Way
Monkton Business Park South
Hebburn
Tyne and Wear
NE31 2ES

Version: 1

Prepared for:

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



CONTENTS

| | | Page(s) |
|-----------------|--------------------------|----------------|
| 1 | Introduction | 1 |
| 2 | The Building | 4 |
| 3 | Fire Hazards | 6 |
| 4 | Means of Escape | 10 |
| 5 | Management Procedures | 14 |
| | | |
| Appendix | | |
| 1 | Fire Risk Assessment | |
| 2 | Schedule of Observations | |



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 | Avondale House, 50 Raby Way, Byker, Newcastle upon Tyne NE6 2FQ |
| The Surveyor | The Fire Risk Assessment was carried out by: Ian Cuskin GIFireE. |
| Survey Date | 28 th October 2021 |
| 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 Lacors - Housing – Fire Safety – Guidance on fire safety provisions for certain types of existing housing.

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:

- The Building Regulations 2012 Approved Document B – Fire Safety
- BS9999 2008 Code of practice for fire safety in the design, management and use of buildings
- BS9991 2011 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 LGG Guide)
- LACORS – Housing – Fire Safety – Guidance on fire safety provisions for certain types of existing housing
- NFCC Guide for 'Fire Safety in Specialised 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 of the areas within the property. We will also comment upon the external construction materials of the building and 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-invasive), Fire Risk Assessment (as detailed in LGG 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.



2.0 THE BUILDING

2.1 The Building

The building consists of a three storey purpose built residential property housing 33 one bed apartments, one bedsit and a former warden's house, housing the site offices. This former care home now houses veterans re-adjusting into society and is managed by the charity 'Armed Forces and Veterans Launch Pad Ltd' and owned by the Karbon Homes.

The building is a grade II* listed building with Historic England and is a complex design in a semi-traditional style consisting of a four sided building set around a garden courtyard complete with ornamental pond built circa 1975.

The construction is brick built cavity load-bearing walls with decorative timber cladding to the exterior and the addition of timber balconies and walkways. Internally, the walls are a mix of brick and timber stud with plasterboard and plaster skim finish, concrete floors and a timber framed flat roof with a bitumen weatherproof covering.

The property benefits from hardwood double glazing; a district heating system providing heating and hot water and has good security in place, including CCTV throughout.

This complex building is set on a slope with a ground floor to the north and west sides only, a first floor on all sides (the first floor is at ground level on the east side where the main entrance is located) and the first floor to the east and south sides only.

The main entrance is on the east side (Raby Way) in the north east corner and opens into an entrance lobby housing the main stair, an under stair store and gives access to the east corridor and to the north side, housing the communal lounge, open plan kitchen and open plan ICT training room. Beyond the lounge the floor continues around the square of the building giving access to further accommodations and storage spaces. In the south east corner of the first floor is the former wardens' house, now home to the administration offices and covering the first and second floors in this corner and is provided with two fire exits one from



the first floor office and one from the small kitchen.

The ground floor on the north and west houses further accommodation in addition to the communal laundry, meter room and equipment store. A second meter room is located upon the second floor in addition to the boiler room also on the second floor.

A communications server room is located within the main entrance foyer.

The accommodation is constructed with windows looking onto the circulation corridors which are secure and fitted with fire resistant glazing.

There is a lift in the north corridor and a protected stair in each corner of the building which leads to a final exit at the foot.

The front doors to each apartment would appear to conform to BS8214 as fire doors (FD60S) and are fitted with intumescent strips and cold smoke seals.

The walls to the corridors and stairs and means of escape consist of brick and/or plasterboard with a plaster skim and paint finish (class 0) with carpets to the floors.

2.2 Fire Loss Experience

BCT have not made us aware of any fire related incidents at this housing scheme.



3.0 FIRE HAZARDS

3.1 Sources of Fuel The sources of fuel within the premises were assessed as follows:

- Electrical PVC insulation throughout.
- Timber construction materials (in particular, within the roof space, fascias and some external cladding).
- Refuse stored within the wheelie bins within the purpose built area to the north of the property (away from the building).
- Furniture and furnishings in the communal lounge and offices.
- Large quantities of paper, files and cardboard in the offices associated with administrations.
- Cooking fats and oils in the communal kitchen.
- Small quantity of aerosols within the cleaning stores.
- Large quantities of combustibles throughout the means of escape, previously removed from flats such as mattresses, wardrobes, and chairs.

At the time of the inspection, combustible materials and obstructions were present in numerous locations throughout. This included items such as mattresses, bedding, wardrobes, sofas, upholstered chairs, ovens, washing machines, cardboard packaging and more. We have requested the staff on duty at the time to remove these items as soon as practicable to ensure there is no fire loading on the means of escape and it is available for use at all times. Notwithstanding this, should there be a need for the removal of furniture etc from any flat on a temporary or permanent basis, either, arrangements should be made for the collection and removal in advance, or the items should be stored elsewhere off the means of escape until they can be returned to the room they belong to.

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.



We have no evidence or information to indicate that the timber cladding extensively present on parts of the building's exterior walls has previously been treated with fire retardant material during construction however; it is unlikely that this would now remain as effective as when applied even if it was present. In relation to the cladding however; due to the buildings height and layout and the internal arrangement of the means of escape and fire exits, it is not considered that the timber cladding would pose a significant risk in relation to the evacuation of the occupants with alternative means of escape available. There are also, no additional exposure risks within 1000mm of an external wall which would require additional protection for the external walls as included within the Building Regulations 2010.

Following a number of high profile incidents involving timber cladding and timber balconies, the Ministry for Housing, communities and Local government has issues new guidance that recommends to removal or replacement of timber cladding or balconies with that which is EU class A1 or A2-S1 d0 however; this is advice rather than regulations and should timber cladding and/or balconies remain on buildings less than 18m in height, then the risks of fire and fire spread must be reduced by controlling combustible items and storage upon them and the prevention of ignition sources such as BBQs and smoking. In addition to this advice, consideration must also be taken with regard to the buildings listed status.

The gas supply to the premises is from a communal system however; we are informed that BCT are in the process of removing all historic and redundant gas supplies to properties in the Byker Estate in partnership with Northern Gas Networks.

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 Communications server room.



- Electrical cooking appliances and white goods in the communal kitchen.
- Tumble dryers and washing machines within the communal laundry (procedure in place for the routine cleaning of the filters).
- Portable electrical equipment to the lounge associated with domestic living such as TVs and music system.
- ICT equipment including PCs in the training area.
- Possible Arson attack, in particular, to the wheelie bins stored at the north within the purpose built storage bays which are away from the main building and have automatic fire detection installed.
- Smoking within individual accommodation and at the exterior smoking point in the central courtyard. (Smoking receptacle attached to timber wall outside lounge).

It is also accepted that there will be sources of ignition located within individual apartments associated with domestic living such as portable electrical goods, cooking and heating appliances, and the possibility of smoking materials and the use of candles.

The last time that the mains electrical supply and distribution system was subject to a five year fixed wiring inspection by a competent engineer is recorded as 24/07/18.

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 communal areas (hall, stairs and landings) of the property are no smoking areas and are accompanied with the appropriate signage.

The laundry equipment is subject to a maintenance contract with



"JTM" and the tumble dryer filters are cleaned daily by the cleaner as part of her work routine.

PAT testing for portable electrical equipment which is the responsibility of the Armed Forces and Veterans Launch Pad organisation, is being undertaken with the last PAT testing carried out on 02/12/20.

3.3 Sources of Oxygen

Natural airflow through doors and windows.

3.4 People at Risk

Residents and staff. Currently only 24 of the 33 flats are occupied but the premises have a maximum number of residents of 66 with up to 4 staff on duty during the day, Monday to Friday (on call to respond after 4 pm and at weekends).

In addition, there is the potential for visitors, housing staff and trades persons to be present.



4.0 MEANS OF ESCAPE

4.1 Escape Routes The premises consist of a main front entrance door accessed from Raby Way leading directly into the entrance lobby and into the main stairs.

This complex layout is very simple in relation to means of escape with a circular corridor running around the building fully on the first floor and around the outside of the building on the ground and second floor where presented. In all four corners of the building is a protected stair leading directly to a final fire exit.

All final exits, the access doors off the entrance foyer, and to the head of the stair off the foyer have mag locks with fob access. There are overrides in place should these fail to open on actuation of the fire alarm.

The corridors and stair are protected by a series of cross corridor doors and lobby doors to stairs with class 0 finishes.

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

The fire assembly point is located at the front of the property on Raby Way, a safe distance from the front doors.

4.2 Fire Doors All fire doors situated upon Means of Escape and within the communal areas would appear to conform to BS8214 and meet the standard required as Fire resistant doors (FD30S & FD60S) complete with intumescent strips and cold smoke seals.

It was noted almost every flat entrance door has had its self-closing device disconnected or removed. These devices are essential in ensuring flat entrance doors close effectively in order to contain any fire within, and allow other residents to use the means of escape safely. We recommend a full survey of all flat



entrance doors is undertaken and ensure each door has a working self-closing device. In addition, we recommend staff undertake regular safety tours of the premises to ensure means of escape are available and flat entrance doors are maintained adequately.

The door to flat 23 has been subject to impact damage and is unlikely to perform as it should in a fire. We recommend this door is replaced with a FD30S SC door to BS8214.

With the exceptions above noted, the remaining doors to the residential apartments appear to conform to BS8214 as FD30S fire doors.

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 plaster finish and concrete floors with plaster skim coatings to the ceilings.

Numerous breaches were noted within the server room on the entrance foyer. We recommend these breaches are addressed using a suitable fire stopping material to ensure a minimum 30 minutes fire resistance.

4.4 Fire Alarm and Detection System

The building is fitted with a wireless automatic fire detection and alarm system installed within the means of escape and communal areas of this property. In addition, automatic detection is fitted within the residential apartments.

The alarm system would appear to conform to BS5839-1 and 6 and meet the requirements of a Grade A LD1/M system in addition to visual alarms.

Records supplied by BCT indicated weekly tests utilising a different manual call point are being undertaken with the last test recorded as 27/10/21. The fire alarm and detection system is subject to an annual inspection and service by a competent person with the last recorded inspection on 16/08/2021.



At the time of the inspection the fire alarm panel was showing a "Fault" indicator. We recommend this is investigated to ensure the fire alarm and detection system is working correctly.

4.5 Emergency Lighting

There is a 3-hour non-maintained emergency lighting system installed within the means of escape that conforms to BS5266.

The last recorded date for the monthly functional test of the luminaires was on 18/10/2021 and the last annual service and discharge test by a competent engineer was carried out on 11/02/2021.

The emergency lighting is required to be tested and maintained in accordance with BS5266 which requires monthly short duration tests and annual full discharge tests which should be detailed in a Fire Logbook.

4.6 Fire Fighting Equipment

The premises are supplied with Portable fire fighting equipment on site which is appropriate for these properties and were subject to an annual service by a competent engineer during March 2021.

4.7 Signage

There are fire exit signs and directional signs throughout the property located where appropriate which conform to BS5499.

The general fire action notice in the hall is not completed. We recommend the location of the assembly point is added to the notice. "No Smoking" notices are displayed at appropriate locations.

4.8 Disabled Persons Egress

The property is suitable for disabled access with a level approach and a resident's lift.

4.9 Arson

The risk of an arson attack is considered moderate. The premises are located within a residential side street in a moderate risk area



and the refuse containers are stored to the north of the building away from the main building.

4.10 Access for Fire appliances

Access to the buildings for fire appliances is adequate and is in line with the requirements of Approved Document B. Access is also available to the rear of each building.

A fire Hydrant is located nearby in Raby Way within 10 m of the building.



5.0 MANAGEMENT PROCEDURES

5.1 Fire Evacuation Procedures The fire and evacuation procedure is a 'Full Simultaneous' policy for all residents in a fire situation which is communicated to all residents on induction. The fire assembly point located at the front of the building on Raby Way a safe distance from the building.

There is no record on site of fire drill being undertaken at any time, and we would recommend a fire drill takes place on an annual basis.

When questioned, staff informed us they have not received any fire hazard awareness or training in the safe use of fire extinguishers. We recommend all staff undergo the above training.

5.2 Fire Logbook There is a fire alarm logbook on site for the weekly fire alarm test held by local management.

Surveyor Ian Cuskin GIFireE

Signed 

.....
On Behalf of Storm Tempest Ltd

Checked Dave Stilling BSc (Hons) MCIQB, FSIDip, AIFireE, DipFD, CMAPS



Signed

.....
On Behalf of Storm Tempest Ltd

**APPENDIX 1
FIRE RISK ASSESSMENT**

FIRE RISK ASSESSMENT

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

Substantial 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

| | | | | |
|---|----------|--|--|--|
| HIGH | | 1 | | |
|  | | Assessors Observations: | | |
| | | <p>At the time of the inspection, combustible materials and obstructions were present in numerous locations throughout. This included items such as mattresses, bedding, wardrobes, sofas, upholstered chairs, ovens, washing machines, cardboard packaging and more.</p> | | |
| Date First Identified: | 28/10/21 | Recommended Action: | | |
| Date of FRA | 28/10/21 | <p>We have requested the staff on duty at the time to remove these items as soon as practicable to ensure there is no fire loading on the means of escape and it is available for use at all times. Notwithstanding this, should there be a need for the removal of furniture etc from any flat on a temporary or permanent basis, either, arrangements should be made for the collection and removal in advance, or the items should be stored elsewhere off the means of escape until they can be returned to the room they belong to.</p> | | |
| Rectify Within: (months) | 1 | | | |
| Budget Cost: | No cost | | | |
| | | | | |

Fire Doors

| HIGH | | 2 |
|---|----------|--|
|  | | <p>Assessors Observations:</p> <p>Almost every flat entrance door has had its self-closing device disconnected or removed. These devices are essential in ensuring flat entrance doors close effectively in order to contain any fire within, and allow other residents to use the means of escape safely.</p> |
| Date First Identified: | 28/10/21 | <p>Recommended Action:</p> <p>We recommend a full survey of all flat entrance doors is undertaken and ensure each door has a working self-closing device. In addition, we recommend staff undertake regular safety tours of the premises to ensure means of escape are available and flat entrance doors are maintained adequately.</p> |
| Date of FRA | 28/10/21 | |
| Rectify Within: (months) | 1 | |
| Budget Cost: | £2000 | |

| MEDIUM | | 3 |
|---|----------|---|
|  | | <p>Assessors Observations:</p> <p>The door to flat 23 has been subject to impact damage and is unlikely to perform as it should in a fire.</p> |
| Date First Identified: | 28/10/21 | <p>Recommended Action:</p> <p>We recommend this door is replaced with a FD30S SC door to BS8214.</p> |
| Date of FRA | 28/10/21 | |
| Rectify Within: (months) | 6 | |
| Budget Cost: | £700 | |

Fire Compartmentation

| | | | | |
|---|----------|---|--|--|
| MEDIUM | | 4 | | |
|  | | Assessors Observations: | | |
| | | <p>Numerous breaches were noted within the server room on the entrance foyer.</p> | | |
| Date First Identified: | 28/10/21 | Recommended Action: We recommend these breaches are addressed using a suitable fire stopping material to ensure a minimum 30 minutes fire resistance. | | |
| Date of FRA | 28/10/21 | | | |
| Rectify Within: (months) | 6 | | | |
| Budget Cost: | £75 | | | |

Fire Alarm and Detection System

| | | | | |
|---|----------|---|--|--|
| MEDIUM | | 5 | | |
|  | | Assessors Observations: | | |
| | | <p>At the time of the inspection the fire alarm panel was showing a "Fault" indicator.</p> | | |
| Date First Identified: | 28/10/21 | Recommended Action: We recommend this is investigated to ensure the fire alarm and detection system is working correctly. | | |
| Date of FRA | 28/10/21 | | | |
| Rectify Within: (months) | 6 | | | |
| Budget Cost: | No Cost | | | |

Signage

| LOW | | 6 |
|---|----------|--|
|  | | <p>Assessors Observations:</p> <p>The general fire action notice in the hall is not completed.</p> |
| Date First Identified: | 28/10/21 | <p>Recommended Action:</p> <p>We recommend the location of the assembly point is added to the notice.</p> |
| Date of FRA | 28/10/21 | |
| Rectify Within: (months) | 12 | |
| Budget Cost: | No Cost | |