

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

OCTOBER 2020



STORM TEMPEST
PROPERTY CONSULTANCY

Reference: 3888-06-20-PD

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Version: 2

Prepared for:

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1.0 INTRODUCTION

The Client	Byker Community Trust (BCT)
Instruction	This Fire Risk Assessment was undertaken in accordance with an instruction received from Andy Kennedy, Head of Compliance, Karbon Solutions Ltd (KSL).
Responsible Person	Jill Haley, Chief Executive, Byker Community Trust
The Property	Avondale House, 50 Raby Way, Byker, Newcastle upon Tyne, NE6 2FR
The Surveyor	The Fire Risk Assessment was carried out by: Paul Donkin Tech IOSH
Survey Date	28 October 2020
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 and the NFCC Guide for 'Fire Safety in Specialised 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 including, a former warden's house now 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' and owned by the Byker Community Trust.

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; central heating within the communal spaces 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 staff 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 upon the first floor corridor and is fitted with standard glazing to the window onto the means of escape.

The flats are constructed with windows looking onto the circulation corridors which are fixed glazed 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 (FD30) 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) and secured with a lock access door.
- Furniture and furnishings in the communal lounge and offices.
- Large quantities of paper, files and cardboard in the redundant WC on the ground floor.
- Cooking fats and oils in the communal kitchen.
- Small quantity of aerosols within the cleaning stores.

Generally the means of escape routes within the building are good and are kept clear of combustible materials and obstructions.

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 at the time of construction. Generally the cladding is in a condition consistent with the age of the building, with only minor defects noted during our survey which has forced localised sections to become detached from the substrate beneath.



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 this buildings listed status.

The balconies are currently being used by the occupants for amenity purposes. During our inspection we did not observe any 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. However, we did note that various combustible items are stored on the balconies such as timber and plastic garden furniture

A large amount of waste paper and cardboard was stored in a redundant WC adjacent to flat 10. We recommend that this combustible waste is removed from this location.

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.

At the time of the visit there was no evidence to show that the



laundry equipment is subject to regular maintenance. We recommend the client considers the introduction of a maintenance contract for this equipment which includes the cleaning of the drier ductwork.

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

There is labels attached to show the PAT testing for portable electrical equipment which is the responsibility of the Armed Forces and Veterans Launch Pad organisation had last been tested in December 2019.

3.3 Sources of Oxygen

Natural airflow through doors and windows.

3.4 People at Risk

The premises have a maximum number of residents of 66 with up to 4 staff at any one time.

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 along the front elevation on the ground and second floors. In all four corners of the building is a protected stair leading directly to a final fire exit.

The final exit doors are secured with magnetic locks and these locks are interfaced with the alarm panel to “fail safe open” in the event of a fire alarm activation.

Timber push up type loft access panels are located within the means of escape routes x3. We recommend that the hatches are replaced with a fire rated hatch with a fire resistance of 60 minutes.

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) complete with intumescent strips and cold smoke seals.



The doors to the residential apartments also all appear to conform to BS8214 as FD30S fire doors.

At the time of the survey we were able to access flats 14,21, 22, 30 and 34 to inspect the specification of the entrance doors. The entrance doors appeared to be FD30s fire door but had no visible markings; the other flat entrance doors appear to be of a similar specification. The doors were fitted with overhead door closers, intumescent / cold smoke seals hung on 1½ pair of fire rated hinges. We could not confirm if the letter boxes were intumescent rated. The doors had thumb turn locks internally for keyless operation.

We noted that the “rubber fin” type cold smoke seals on the flat entrance doors and doors within the common areas had started to degrade. We recommend that the fire doors are inspected and that the cold smoke seals are replaced as required.

The stairwell door outside flat 26 has damage to the frame where it has been drilled for services. We recommend that the hole in the door frame is fire stopped with suitable fire stopping materials.

Flat 30, the fire door is damaged beyond repair. We recommend that the fire door is replaced with a fire door set with a rating of FD30s.

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.

We were able to access flats 14, 21, 22, 30 and 34, to check for breaches in compartmentation.

The flats have ceiling mounted extract fans that vent out within the ceiling void. We recommend the client ensure that the extract fans have intumescent collars or damper and appropriate ducting where penetrating through the fire compartmentation ceiling.



Loft as accessed from landing outside flat 35 and loft above flat 30, we noted gaps around service penetrations that had not been fire stopped or sealed. We recommend that the service penetrations are fire stopped using suitable fire resistant materials. Fire stopping works to be carried out by a 3rd party accredited contractor.

We would recommend that a passive survey is undertaken to identify any breaches of compartmentation within the loft spaces generally

The server room is fitted with a window onto the means of escape which does not appear to be fire resistant and therefore, could compromise the means of escape. We recommend that the glazing is replaced with fire resistant glass.

In addition, the cupboards outside apartments 5 and 16 are fitted with plywood timber transoms which will not provide a minimum of 30 minutes fire resistance (This is not as vital as would normally be due to the cupboards not being in use as previously described however; the matter should still be addressed within a suitable time frame).

4.4 Fire Alarm and Detection System

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

There is an automatic fire detection and alarm system installed that would appear to be of a LD2/M standard with the fire control panel and zone map located in the lobby at the main entrance.

The last time the fire alarm was subject to a weekly test is recorded as 21/10/2020. The annual inspection and service by a competent engineer was recorded as 11/08/20.



4.5 Emergency Lighting

A 3 hour non-maintained emergency lighting system is fitted to these premises, no records were held on site to confirm that the monthly function tests of the emergency lighting has been undertaken. We recommend that the client ensures that the relevant inspection and maintenance of the emergency lighting is being undertaken.

The last time the annual service and discharge test was undertaken by a competent engineer was recorded as 26/02/20.

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 January 2020.

4.7 Signage

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

A general fire action notice and no smoking notices are displayed within the communal lounge.

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.

Access to the buildings for fire appliances is acceptable but can be tight due to the narrow approach road however; access is possible to both the east and west from Raby Street and Raby Way and is in line with the requirements of Approved Document B. Access is also available to the rear of each building.



4.10 Access for
Fire appliances

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



5.0 MANAGEMENT PROCEDURES

5.1 Fire Evacuation Procedures The fire and evacuation procedure is for a full simultaneous evacuation policy for all residents in a fire situation. 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 however; staff have all received training in relation to fire and evacuation procedures and the use of portable fire extinguishers.

5.2 Fire Log Book There is a fire alarm log book on site for the weekly fire alarm test held by local management.

Surveyor Paul Donkin Tech IOSH

Signed

.....
On Behalf of Storm Tempest Ltd

Checked Dave Stilling BSc (Hons) MCIOB

Signed

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On Behalf of Storm Tempest 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	
		Assessors Observations: A large amount of waste paper and cardboard was stored in a redundant WC adjacent to flat 10.	
Date First Identified:	28/10/20	Recommended Action: We recommend that this combustible waste is removed from this location.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	No Cost		

MEDIUM		2	
		Assessors Observations: At the time of the visit there was no evidence to show that the laundry equipment is subject to regular maintenance.	
Date First Identified:	28/10/20	Recommended Action: We recommend the client considers the introduction of a maintenance contract for this equipment which includes the cleaning of the drier ductwork.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	No Cost		

Means of escape and Fire Doors

MEDIUM		3	
		Assessors Observations: Timber push up type loft access panels are located within the means of escape routes x3.	
Date First Identified:	28/10/20	Recommended Action: We recommend that the hatches are replaced with a fire rated hatch with a fire resistance of 60 minutes.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	£375		

MEDIUM		4	
		Assessors Observations: We noted that the "rubber fin" type cold smoke seals on the flat entrance doors and doors within the common areas had started to degrade.	
Date First Identified:	28/10/20	Recommended Action: We recommend that the fire doors are inspected and that the cold smoke seals are replaced as required.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6 Month		
Budget Cost:	£25 per door		

MEDIUM		5	
		Assessors Observations: The stairwell door outside flat 26 has damage to the frame where it has been drilled for services.	
Date First Identified:	28/1/020	Recommended Action: We recommend that the hole in the door frame is fire stopped with suitable fire stopping materials.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	£20		

MEDIUM		6	
		Assessors Observations: Flat 30, the fire door is damaged beyond repair.	
Date First Identified:	28/10/20	Recommended Action: We recommend that the fire door is replaced with a fire door set with a rating of FD30s.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	£400		

Compartmentation

LOW		7
		<p>Assessors Observations:</p> <p>The flats have ceiling mounted extract fans that vent out within the ceiling void or loft space.</p>
Date First Identified:	28/10/020	<p>Recommended Action:</p> <p>We recommend the client ensure that the extract fans have intumescent collars or damper and appropriate ducting where penetrating through the fire compartmentation ceiling.</p>
Date of FRA:	28/10/20	
Rectify Within: (months)	12	
Budget Cost:	No Cost	

MEDIUM		8
		<p>Assessors Observations:</p> <p>Loft as accessed from landing outside flat 35 and loft above flat 30, we noted gaps around service penetrations that had not been fire stopped or sealed.</p>
Date First Identified:	28/10/20	<p>Recommended Action:</p> <p>We recommend that the service penetrations are fire stopped using suitable fire resistant materials. Fire stopping works to be carried out by a 3rd party accredited contractor.</p> <p>We would recommend that a passive survey is undertaken to identify any breaches of compartmentation within the loft spaces.</p>
Date of FRA:	28/10/20	
Rectify Within: (months)	6	
Budget Cost:	£100	

MEDIUM		9	
		Assessors Observations: The server room is fitted with a window onto the means of escape which does not appear to be fire resistant and therefore, could compromise the means of escape.	
Date First Identified:	31/10/19	Recommended Action: We recommend that the glazing is replaced with fire resistant glass.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	£100		

Fire Alarm and Emergency Lights

LOW		10	
<p style="text-align: center;">No Photo</p>		Assessors Observations: A 3 hour non-maintained emergency lighting system is fitted to these premises, no records were held on site to confirm that the monthly function tests of the emergency lighting has been undertaken.	
Date First Identified:	28/10/20	Recommended Action: We recommend that the client ensures that the relevant inspection and maintenance of the emergency lighting is being undertaken.	
Date of FRA:	28/10/20		
Rectify Within: (months)	6		
Budget Cost:	No Cost		