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

26 OCTOBER 2018

STORM TEMPEST
PROPERTY CONSULTANCY

Reference: IR-3474-05-18
Prepared by:
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Version: 1
Prepared for:
Byker Community Trust (BCT)
17 Raby Cross
Byker
Newcastle upon Tyne
NE6 2FF

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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 Mark Mulhern, Support Services Team Leader, Karbon Solution 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: Ian Robertson BA(Hons) MSc CMIOSH MIFireE.
Survey Date	26 October 2018
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, 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, 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 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 upon the first floor corridor.

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.

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. 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.

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 24/10/18.

The electrical distribution should be tested every five years by a registered NICEIC contractor to satisfy compliance with the requirements of the Electricity at Work Act 1989.

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

signage.

There is no record of PAT testing for portable electrical; equipment which is the responsibility of the Armed Forces and Veterans Launch Pad organisation.

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 in 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. 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 however; a number of doors to storage cupboards are not fitted with intumescent strips and seals while many were found to be un-locked and to not be fitted with signs indicating 'fire door, keep locked'. The doors to the residential apartments also all appear to conform to BS8214 as FD60S 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.
No breaches of fire compartmentation were noted with the exception of those identified within the schedule of observations.

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. The alarm system would appear to conform to BS5839-1 and 6 and meet the requirements of an FD1/M system in addition to visual alarms. The last time the fire alarm was subject to a weekly test is recorded as 27/10/18 and the system is subject to an annual inspection and service by ABCA with the last recorded inspection on 31/08/18 (this is carried out 6 monthly).
4.5 Emergency Lighting	There is a 3 hour non-maintained emergency lighting system installed within the means of escape that conforms to BS5266. There is a monthly inspection regime with the last recorded inspection being on 11/10/18 and the last annual service and discharge test by a competent engineer being on 31/08/18.
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 February 2018.
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 hall.
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 10 m of the building.

5.0 MANAGEMENT PROCEDURES

5.1 Fire Evacuation Procedures	The fire and evacuation procedure is for a 'Stay Put' evacuation procedure for those within their own apartments with those in the communal areas or the fire compartment, evacuating the building 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.
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 Ian Robertson BSc (Hons) MSc CMIOSH MIFireE

Signed

REGISTERED ASSESSOR

LIFE SAFETY

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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

		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** [x] **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** [x] **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.)

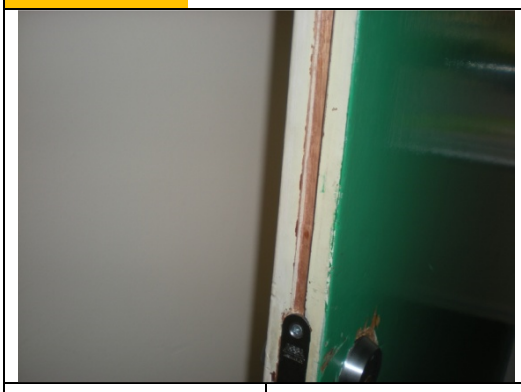
Risk level	Action and timescale
Trivial	No action is required and no detailed records need be kept.
Tolerable	No major additional fire precautions required. However, there might be a need or reasonably practicable improvements that involve minor or limited cost.
Moderate	It is essential that efforts 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

Means of Escape and Fire Doors

MEDIUM	**1**	
		**Assessors Observations:** The door to the hall storage space below the main stairs is not locked. In addition, there is a breach to its ceiling inside from the passing of services through the fire compartment barrier ceiling.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the ceiling in the entrance foyer under stair storage cupboard is fire stopped in order to secure and maintain the compartment ceiling. In addition, this store must be kept locked and fitted with signage indicating 'fire door, keep locked'. Ensure that the door is a fire door rated (FD30)
Rectify Within: (months)	6	
Budget Cost:	£300	

MEDIUM	**2**	
		**Assessors Observations:** The cold smoke seals to the entrance door from lobby to communal lounge are painted over and as a result would fail to operate to their full potential.
Date First Identified:	26/10/18	**Recommended Action:** Replace the cold smoke seals in the entrance door from lobby to communal lounge.
Rectify Within: (months)	6	
Budget Cost:	£35	

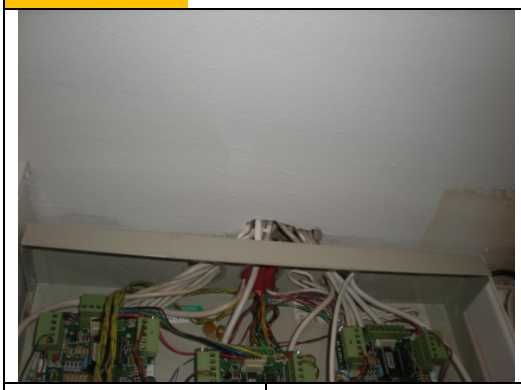
MEDIUM	3	
		**Assessors Observations:** The intumescent strip and seals are missing from the front door to apartment 10.
Date First Identified:	26/10/18	**Recommended Action:** Install intumescent strip and seals that are missing from the front door to apartment 10.
Rectify Within: (months)	6	
Budget Cost:	£100	

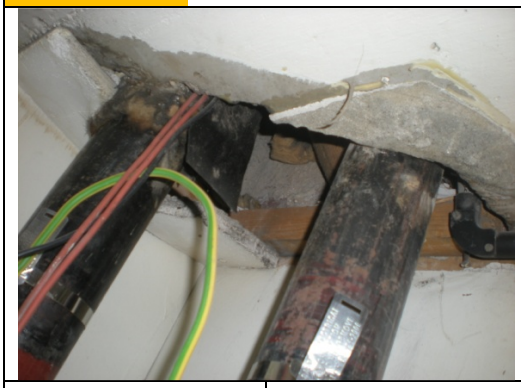
MEDIUM	4	
		**Assessors Observations:** The storage cupboard next to apartment 16 requires intumescent strips and cold smoke seals to be installed, in addition, the panel above is timber ply and does not provide a minimum of 30 minutes fire resistance.
Date First Identified:	26/10/18	**Recommended Action:** Install intumescent strips and cold smoke seals to the cupboard next to apartment 16 in addition to replacing the timber panel above with material affording a minimum of 30 minutes fire resistance.
Rectify Within: (months)	6	
Budget Cost:	£115	

MEDIUM	5	
		**Assessors Observations:** The self closing device to the front fire door at apartment 16 has been disconnected.
Date First Identified:	26/10/18	**Recommended Action:** Replace or reinstate the self closing device to the front fire door at apartment 16 in order that it will closer fully onto the rebate under its own weight and form a fire resistance barrier to protect the means of escape.
Rectify Within: (months)	6	
Budget Cost:	£125	

MEDIUM	6	
		**Assessors Observations:** There is furniture located within the means of escape which do not conform to the Furniture and furnishings (fire safety) regulations 1988.
Date First Identified:	26/10/18	**Recommended Action:** All items of furniture located upon means of escape should be carefully managed in order not to pose an obstruction in an evacuation. In addition, they must conform to the Furniture and furnishings (fire safety) regulations 1988.
Rectify Within: (months)	6	
Budget Cost:	No Cost	

MEDIUM	7	
		**Assessors Observations:** There is a breach of compartmentation in the ceiling of the ground floor equipment store from passing services.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the fire compartmentation is maintained by fire stopping the passing of all services through compartment walls and ceilings in order to maintain the fire resistant rating of the barrier.
Rectify Within: (months)	6	
Budget Cost:	£50	

MEDIUM	8	
		**Assessors Observations:** There is a breach of compartmentation in the ceiling of the 2nd floor meter room from passing services.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the fire compartmentation is maintained by fire stopping the passing of all services through compartment walls and ceilings in order to maintain the fire resistant rating of the barrier.
Rectify Within: (months)	6	
Budget Cost:	£50	

MEDIUM	9	
		**Assessors Observations:** There is a breach of compartmentation in the ceiling of the server room from passing services.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the fire compartmentation is maintained by fire stopping the passing of all services through compartment walls and ceilings in order to maintain the fire resistant rating of the barrier.
Rectify Within: (months)	6	
Budget Cost:	£50	

MEDIUM	10	
		**Assessors Observations:** There are several breaches of the compartmentation in the ceiling of the first floor stores next to the door into the training room from passing services.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the fire compartmentation is maintained by fire stopping the passing of all services through compartment walls and ceilings in order to maintain the fire resistant rating of the barrier.
Rectify Within: (months)	6	
Budget Cost:	£50	

MEDIUM	11	
		**Assessors Observations:** There is a breach of compartmentation in the ceiling of the store next to apartment 5 passing services.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the fire compartmentation is maintained by fire stopping the passing of all services through compartment walls and ceilings in order to maintain the fire resistant rating of the barrier.
Rectify Within: (months)	6	
Budget Cost:	£50	

MEDIUM	12	
		**Assessors Observations:** The panel protecting the shaft in the communal lounge does not provide a minimum of 30 minutes fire resistance in order to protect the shaft from the products of combustion.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that the panel protecting the shaft in the communal lounge; provides a minimum of 30 minutes fire resistance in order to protect the shaft from the products of combustion.
Rectify Within: (months)	6	
Budget Cost:	£250	

MEDIUM	13	
		**Assessors Observations:** There are numerous storage cupboards fitted with fire doors but without intumescent strips.
Date First Identified:	26/10/18	**Recommended Action:** Ensure that all storage cupboards fitted with FD30 fire doors are fitted with intumescent strips. (No smoke seals are required where there is no automatic fire detection within the storage space).
Rectify Within: (months)	6	
Budget Cost:	£1,000	