Workplace Fire Precautions Legislation

FIRE RISK ASSESSMENT

Conforming to, and in accordance with, the following legislation:-

The Regulatory Reform (Fire Safety) Order 2005

Address of Property: Scheme number **796**

Northfields
Colchester
CO4 5NF

Responsible person having control of the premises: **Homes and Communities Agency c/o Sarah Rochester (Trinity Estates)**

Assessment Undertaken by: **Alex Brodie (Building Surveyor)**

Date of Fire Risk Assessment: **21st August 2020**

Date of Report: **26th August 2020**

Suggested Date for Review[1]: **Spring 2021**

[1] This fire risk assessment should be reviewed by a competent person by the date indicated above or at such earlier time as there is reason to suspect that it is no longer valid or there have been significant changes.

Introduction

The purpose of this report is to provide an assessment of the risk to life from fire in these buildings, and, where appropriate, to make recommendations to ensure compliance with fire safety legislation. *The report does not address the risk to property or business continuity from fire.*

The submission of this report constitutes neither a warranty of results of future Fire Risk Assessments, nor an assurance against risk. The report represents only the best judgement of the consultant involved in its preparation, and is based in part on information provided by others. No liability is accepted for the accuracy of such information.

The Assessment was undertaken in accordance with the general risk assessment principles set out in Fire Safety Order in order to identify hazards that could contribute to the injury of relevant persons, including those residing in or visiting the building.

Only the communal areas and systems were assessed. Therefore this Fire Risk Assessment applies only to the common parts including but not limited to - stairways, landings, corridors, communal cupboards (refuse, utility, cleaning, store, cycle etc); all communal external areas including landscaped areas, car parking (underground, external, partly covered etc), refuse bin areas, stores and shelters, footpaths, roadways, designated muster points (where applicable); and any fire prevention and fire protection measures necessary to safeguard the relevant persons using or in the vicinity of these areas. The individual residences accessed from these areas are not included as they fall outside the scope of The Regulatory Reform (Fire Safety) Order 2005, with the exception of any doors that impact directly on the protection of the common escape routes.

Overview of the Regulatory Reform (Fire Safety) Order 2005 (the "Fire Safety Order")

The Fire Safety Order covers general fire precautions and other fire safety duties which are needed to protect "relevant persons" in case of fire in and around most premises. The Order requires fire precautions to be put in place "where necessary" and to the extent that it is reasonable and practicable in the circumstances.

Responsibility for complying with the Fire Safety Order rests with the "Responsible Person". This Fire Risk Assessment has been carried out on your behalf, being the "Responsible Person" as defined in Article 3 of The Regulatory Reform (Fire Safety) Order 2005, being the employer and/or being the person having control, to any extent, of the premises, as occupier or otherwise. It is intended to assist you in compliance with Article 9 of The Regulatory Reform (Fire Safety) Order 2005, which requires a risk assessment to be carried out.

It is important that you study this report and understand its contents. This Assessment has considered fire sources, fire spread, detection, means of escape, and fire extinguishing, and has considered those "relevant persons" at risk. It includes an Action Plan, which sets out the measures considered necessary to satisfy the requirements of the Fire Safety Order and to protect "relevant persons" (as defined in the Order) from fire. Relevant persons are primarily those who are, or may be, lawfully in the building, and certain persons in the vicinity. If any recommendation in the Action Plan is unclear you should request further advice.

The Fire Safety Order requires you to arrange for the effective planning, organisation, control, monitoring and review of the preventative and protective measures that have been identified in the risk assessment as the general fire precautions you need to take to comply with the Fire Safety Order.

You should ensure that there is a record of the fire safety arrangements; adequate to comply with Article 11(2) of the Fire Safety Order, and that it is kept up to date. In carrying out this Assessment, consideration will have been given to the records that have been provided to us. This Assessment is not the record of the fire safety

arrangements to which the Fire Safety Order refers, although much of the information contained in this Assessment will coincide with the information in that record.

The Fire Safety Order requires that you appoint "Competent Persons" to assist you. Where there is a "competent person" in your employment, under Article 18(8) of the Fire Safety Order, you must appoint that person in preference to a "competent person" not in your employment.

This Fire Risk Assessment was undertaken by our Assessor whose experience and expertise gives him the status of "Competent Person" as described in The Health and Safety Management Regulations, and in The Regulatory Reform (Fire Safety) Order 2005, which superseded all previous fire safety legislation.

The Fire Safety Order requires you to inform any employees, temporary or contract workers, or contractors operating on the premises, about the risks to them, and provide them with clear and relevant information about the fire safety procedures for the premises. You should provide your employees with appropriate information, instruction and training.

The Fire Safety Order also requires you to co-operate and co-ordinate with other "responsible persons" in multi-occupied or neighbouring premises.

Other Legislation

In addition to the Fire Safety Order this Fire Risk Assessment has taken into consideration the following legislation and regulations:

Electricity at Work Regulations 1989
Gas Safety (Installation and Use) Regulations 1998
Health and Safety at Work etc. Act 1974
Health and Safety (Signs and Signals) Regulations 1996
Management of Health and Safety at Work Regulations 1999
Workplace (Health, Safety and Welfare) Regulations 1992

The **Housing Act 2004** applies to the whole of the premises, and additional fire safety measures may be required under the Housing Act in areas not within the scope of The Fire Safety Order. This Assessment does not comment upon or assess such requirements.

This Assessment has considered dangerous substances that are used or stored in your premises, but only to the extent necessary to determine the adequacy of the general fire precautions as defined in Article 4 of the Fire Safety Order. This Assessment does not consider the special, technical or organisational measures required to be taken or observed in connection with the use or storage of "dangerous substances" as defined in the Dangerous Substances and Explosive Atmospheres Regulations 2002. If dangerous substances are used or stored in your premises, you should ensure that a separate risk assessment of the relevant work activities has been carried out to enable you to comply with the **Dangerous Substances and Explosive Atmospheres Regulations 2002**.

Other Relevant Information

It is not normal practice to retrospectively apply current guidance on the design and construction of new buildings when assessing existing buildings, except where the original design principles are so far removed from those acceptable today, that an unacceptable risk is present. As such it is appropriate to consider developments in fire

safety technology and practice that could be reasonably applied to an existing building. Therefore, such developments have been considered in the preparation of this Assessment.

The general fire precautions, which are part-existing with recommendations for improvement set out in the Action Plan below, are considered to be reasonably practicable, and will provide an adequate degree of fire safety for the relevant persons.

NB It is recognised that it may not be possible to rectify all deficiencies noted in the times recommended due to financial and other constraints; where this is the case action should be taken to reduce the risk as far as possible pending final rectification. In these circumstances you should request further advice.

Relevant standards and codes of practice:

Emergency Escape Lighting

BS 5266-1:2016	Emergency lighting. Code of practice for the emergency lighting of premises
BS EN 1838:2013	Lighting applications. Emergency lighting*
BS EN 50172:2004, BS 5266-8:2004	Emergency escape lighting systems

Fire Detection and Fire Alarm Systems for Buildings

BS 5839-1:2017	Fire detection and fire alarm systems for buildings. Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises
BS 5839-6:2019	Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises
BS 5839-8:2013	Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of voice alarm systems
BS 5839-9:2011	Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems

Fire Extinguishing Installations and Equipment on Premises

BS 5306-1:2006	Code of practice for fire extinguishing installations and equipment on premises. Hose reels and foam inlets
BS EN 12845:2015	Automatic sprinkler systems. Design, installation and maintenance**
BS 5306-3:2017	Fire extinguishing installations and equipment on premises. Commissioning and maintenance of portable fire extinguishers. Code of practice
BS 5306-8:2012	Fire extinguishing installations and equipment on premises. Selection and positioning of portable fire extinguishers. Code of practice
BS 9990:2015	Non automatic fire-fighting systems in buildings. Code of practice
BS EN 3-7:2004+A1:2007	Portable fire extinguishers. Characteristics, performance requirements and test methods
BS EN 1869:2019	Fire blankets

Fixed Fire Fighting Systems

BS EN 671-3:2009	Hose systems. Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose
BS EN 16925:2018	Automatic residential sprinkler systems. Design, installation and maintenance

Fire Safety Design and Management

BS 9991:2015	Fire safety in the design, management and use of residential buildings. Code of practice
BS 9999:2017	Fire safety in the design, management and use of buildings. Code of practice

Fire Safety Signs

BS ISO 3864-1:2011	Graphical symbols. Safety colours and safety signs. Design principles for safety signs and safety markings
BS 5499-4:2013	Code of practice for escape route signing
BS EN ISO 7010:2012+A7:2017	Graphical symbols. Safety colours and safety signs. Registered safety signs**
BS 5499-10: 2014	Guidance for the selection and use of safety signs and fire safety notices

Protection against lightning

BS EN 62305-1:2011	General principles***
BS EN 62305-2:2012	Risk management**
BS EN 62305-3:2011	Physical damage to structures and life hazard**
BS EN 62305-4:2011	Electrical and electronic systems within structures**

Miscellaneous

BS 7176:2007+A1:2011	Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites
BS 7273-4:2015	Code of practice for the operation of fire protection measures. Actuation of release mechanisms for doors
BS 7671:2018	Requirements for Electrical Installations. IET Wiring Regulations Eighteenth edition

(under review); (work in hand** - there is work being undertaken on the standard and there may be a related draft for public comment available); (project underway*** - review of this standard has been started. No draft standard is currently available for public review and comment at this time)*

Property Overview

Northfields currently comprises 286 freehold houses and 81 Leasehold units. The blocks are surrounded by external parking areas to the rear which are accessed via undercrofts. Block A consists of a single stair core with separate lift lobby and accessed via the front and rear entrances. The bin store is beneath the undercroft and there are cycle stores to the rear. Block J consists of 3 stair cores with similar access provisions to Block A.

Externally the blocks are clad in fair-faced brick and cementitious render, with timber cladding. the balcony structure are metal and glass with some timber panels. As there are no details of the external wall materials behind the render and timber cladding is present it is recommended that a full independent cladding inspection is carried out and is to include the completion of EWS1 forms for each block.

Fire precautions Include; AOV's, Emergency lighting, and Dry risers

General information	
1.The Building/s	
Number of blocks	4
Number of floors (including ground)	5 & 4
Approximate floor area	n/a
Brief details of construction	Modern
2.Building/s users	
Sleeping Occupants	Residents of Flats
Non ambulant persons	None advised
Sensory impaired persons	None advised
Young persons (unsupervised)	None advised
Persons with psychological / learning difficulties	None advised
Occupants in remote areas	n/a
Others	n/a
Comments and Hazards observed	
Fire loss experience	None advised
Other relevant information:	
Fire Hazards and their elimination or control	
3.Electrical sources of ignition	
Reasonable measures taken to prevent fires of electrical origin	No
Fixed installation periodically tested and inspected	No
Date of last periodic inspection:	See below
Portable Appliance Testing carried out	n/a
Date of last inspection:	n/a
Is there a suitable policy restricting use of personal electrical appliances	No
Where applicable are trailing leads/adaptors limited	No
Are there any 'visible' signs of damage or faults to switches, sockets, light fittings and other associated components of the fixed electrical installation.	Yes
Comments and Hazards observed: Periodic inspection of the fixed electrical installation is now due as the buildings are 10 years old, it will be due every 5 years thereafter External	

- Inappropriate personal appliances mounted to balcony railings of some blocks

49-73 Stanford Road
- 4th floor electric riser – PV inverter displaying fault – requires investigation and repair

107-151 Turner Road
- External EIC – landlord fuse damaged or loose from backing board – repair required to ensure equipment is secure
- 3rd floor electric riser – inappropriate extension cable in use

187-223 Turner Road
- 1st floor electric riser – unauthorised **plug-in air freshener –** these get very hot and create flammable vapours and are therefore not permitted for use in common areas under any circumstances

4.Smoking (prohibited by law in workplace)	
Are there reasonable measures to prevent smoking within the building e.g. prohibitive signage	No
Is there evidence of breaches of law relating to smoking in the workplace	No
Are there suitable arrangements for those who wish to smoke	n/a
Comments and Hazards observed: • 'No Smoking' signage required to block 49-73 Stanford Road	

5.Arson	
Does basic security against arson from outsiders appear reasonable	Yes
Is there any unnecessary fire load in close proximity to the building or available for ignition by outsiders	No
Comments and Hazards observed:	

6.Portable Heaters and Heating installations	
Is the use of portable heaters avoided as far as is practical	n/a
Are fixed Heating installations subject to regular maintenance	Yes
Date of last service:	See below
Comments and Hazards observed: Periodic inspection of the fixed electrical installation is now due as the buildings are 10 years old, it will be due every 5 years thereafter	

7.Cooking	
Are reasonable measures taken to prevent fire as a result of cooking	n/a
Filters changed and ductwork cleaned regularly	n/a
Suitable fire extinguishing appliances available	n/a
Comments and Hazards observed:	

8.Lightning Protection Systems (Lightning Conductors)	
Does the building/s have a Lightning Protection System	No
Comments and Hazards observed:	

9.Housekeeping	
Is the standard of housekeeping adequate	No
More specifically:	
Combustible materials separated from ignition sources	No
Is there unnecessary accumulation of combustible materials or waste	Yes
Are there any flammable materials such as oil based paints, petrol/oil/solvents etc stored/kept	Yes
Comments and Hazards observed: 49-73 Stanford Road • 1st floor lift lobby – unauthorised storage including bike	

- 2nd floor lift lobby – unauthorised storage of bikes and shoes
- 3rd floor cupboard – unauthorised storage
- 4th floor lift lobby – unauthorised storage including bikes
- 4th floor cupboard – unauthorised storage
- External bin store – dumped bulky items

107-151 Turner Road
- External EIC – dumped rubbish
- 1st floor corridor for flats 117-121 – unauthorised storage of shoes
- 1st floor corridor for flats 123-127 – unauthorised storage
- 2nd floor corridor for flats 129-133 – unauthorised **reed diffuser** – these create **flammable vapours** and are not permitted in common areas under any circumstances

159-185 Turner Road
- 1st floor corridor – unauthorised storage of bike
- 1st floor gas riser – unauthorised storage
- Integral cycle store – unauthorised additional storage

187-223 Turner Road
- 2nd floor lift lobby – unauthorised storage and **plug-in air freshener** – these get very hot and create **flammable vapours** and are not permitted in common areas under any circumstances

External
- Multiple balconies have excessive storage and unauthorised combustible screens mounted to railings

10.Hazards introduced by outside contractors and building workers	
Is there satisfactory control over works carried out in the building by outside contractors including 'hot work' permits	Yes
Are fire safety conditions imposed on outside contractors	Yes
Comments and Hazards observed: *N.B. Trinity Estates Policy is to obtain method statements prior to instructing contractors to carry out any maintenance and/or repair works.*	

Fire Protection Measures

11.Means of Escape from Fire	
Is it considered that the building is provided with reasonable means of escape in the event of fire	Yes
More specifically:	
Adequate provision of Exits	Yes
Exits immediately and easily openable where necessary	Yes
Avoidance of sliding or revolving doors as fire exits where necessary	Yes
Satisfactory means of securing exits	Yes
Reasonable distance of travel:	
Where there is a single direction of escape	Yes
Where there are alternate means of escape	Yes
Suitable protection of escape routes	Yes
Suitable fire precautions for all inner rooms	Yes
Escape routes unobstructed and free from other hazards	No
Is it considered that the building is provided with reasonable arrangements for means of escape for disabled persons	Yes *To ground floor only
Comments and hazards observed: • Ensure escape routes are kept clear of obstructions as per list in section 9	

12.Measures to limit fire spread and development	
Is it considered that the compartmentation is of a reasonable standard	No

Is it considered that linings would reasonably prevent fire spread	Yes

Comments and hazards observed:

Externally the blocks are clad in fair-faced brick and cementitious render, with timber cladding. the balcony structure are metal and glass with some timber panels. As there are no details of the external wall materials behind the render and timber cladding is present it is recommended that a full independent cladding inspection is carried out and is to include the completion of EWS1 forms for each block.

General

- Gas risers are vented into common areas with some only vented at the at top of the doors, some are also vented into internal rooms with no manual windows and self-closing doors – suitability of provisions are at the discretion of a Gas Safe registered engineer
- Foam used as firestopping throughout all blocks on estate – this is not appropriate for this application and requires replacement with suitable alternative by FIRAS registered installer – foam is not to be used in application listed below
- Steel riser door lintels are exposed between risers to some areas of blocks – these require firestopping
- Multiple doors throughout the estate have excessive gaps around and are missing seals – recommend full fire door survey is carried out with recommendations to be adopted

49-73 Stanford Road

- Ground floor electric intake cupboard – insulation exposed to wall cavity by external door
- Ground floor water riser – unable to secure as lock misaligned
- 3rd floor cupboard – vented fire door but no gas pipes present – recommend remove vent and repair or replace door
- 4th floor cupboard – vented fire door but no gas pipes present – recommend remove vent and repair or replace door

107-151 Turner Road

- Integral cupboard to alleyway – no access as no key available
- General – firestopping improvements required to multiple risers

159-185 Turner Road

- General – scaffolding poles and boards have been incorporated into the riser structures – recommend request firestopping engineer carries out an inspection to confirm these are suitable to remain in situ

13.Reasonable standard of escape lighting	Yes

Comments and hazards observed:

14.Reasonable standard of fire safety signs and notices	No

Comments and hazards observed:

Escape signage required to blocks:

- 49-73 Stanford Road
- 187-223 Turner Road

15.Means of warning in case of fire	
Manually operated fire alarm provided	No
Automatic fire detection provided	Yes
Remote transmission of fire alarm signal	No

Comments and hazards observed:

16.Manual Fire extinguishing appliances	
Relevant portable fire extinguishers provided	No
Hose reels provided	No
Other relevant fire extinguishing systems	No
Automatic opening smoke vents fitted	Yes

Comments and hazards observed:

AOVs faulty to some blocks:

- 49-73 Stanford Road

- 159-185 Turner Road
- 187-223 Turner Road

17.Procedures and Arrangements	
Are appropriate fire procedures communicated effectively to building users e.g. fire instruction notice/s	Yes
Evacuation strategy for building users inside flats, and other areas, with minimum 60 minute-rated fire compartmentation, in the event of fire in common parts, or other flats	Delayed evacuation* (aka "stay put", "defend in place")
Evacuation strategy for building users inside flats in the event of fire inside the same flat	Immediate evacuation to place of safety
Evacuation strategy for building users in common parts, in the event of fire in any part of the building	Immediate evacuation to place of safety
Has there been any specific liaison with the fire service in production of this buildings assessment	No
Are there regular fire precautions inspections carried out by in house staff	Yes EVR reports inspection
Date of last inspection:	21/07/2020

Comments and hazards observed:
*Delayed evacuation = stay put in protected space unless that space becomes untenable (e.g. due to heat, smoke, flame or fume ingress) or until instructed to evacuate by the emergency services.
NB As this is a private residence there is no requirement to provide individual evacuation plans, as such the above comments do not constitute anything other than general advice on evacuation procedures.

18.Training and Drills	
Are all staff given induction training on fire safety / procedures	n/a
Are staff given 'refresher' training at suitable intervals	n/a
Are fire wardens / marshals given additional training	n/a
Are fire drills carried out at appropriate intervals	n/a

Comments and hazards observed:

19.Testing and Maintenance	
Adequate maintenance of workplace	No
Testing and periodic servicing of fire detection and alarm system	No
Date of last inspection:	13/08/2019
Sufficient testing routines for emergency lighting	Yes
Date of discharge test:	29/05/2020
Annual maintenance of fire extinguishing systems (including portable extinguishers, sprinklers, suppression systems)	n/a
Date of last service:	n/a
Sufficient servicing/testing of dry risers	Yes
Date of last service:	18/06/2020
Sufficient servicing/testing of automatic smoke vents	No
Date of last service:	13/08/2019
Routine checks of final exit doors and/or security fastenings	Yes
Date of last inspection:	21/07/2020
Sufficient servicing/testing of Lightning Protection System	n/a
Date of last service:	n/a

Comments and hazards observed:
- Servicing of some fire equipment is overdue or certificates are unclear – recommend all servicing is carried out at correct intervals and clear certificates are kept on file

FIRE RISK ASSESSMENT

The following simple risk level estimator is based on a more general health and safety risk level estimator contained in BS 8800.

Potential consequences of fire→ Fire hazard↓	Slight harm	Moderate harm	Extreme harm
Low	Trivial risk	Tolerable risk	Moderate risk
Medium	Tolerable risk	Moderate risk	Substantial risk
High	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 (probability of ignition) at this building is:

Low ☐ **Medium** ☒ **High** ☐

Taking into account the nature of the building and the occupants, as well as the fire protection and procedural arrangements observed at the time of this 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 bedroom in which a fire occurs).

Moderate harm: Outbreak of fire could result in injury of one or more occupants, but it is unlikely to involve multiple fatalities

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

Accordingly, it is considered that the risk to life from fire at this building is:

Trivial ☐ **Tolerable** ☐ **Moderate** ☒ **Substantial** ☐ **Intolerable** ☐

A suitable risk-based control plan should involve effort and urgency that is proportional to risk. The following risk-based on one advocated by BS 8800 for general health and safety risks:

Risk level	Action and timetable
Trivial	No action is required and no detailed records need to be kept.
Tolerable	No major additional controls required. However there may be a need for consideration of improvements that involve minor or limited costs.
Moderate	It is essential that efforts are made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where moderate risk is associated with consequences that constitute extreme harm, further assessment may be required to establish more precisely the priority for improved control measures
Substantial	Considerable resources may have to be allocated to reduce the risk. If the building is unoccupied, it should not be occupied until the risk has been reduced. If the building is occupied, urgent action should be taken.
Intolerable	Building (or relevant area) should not be occupied until the risk is reduced.

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 section. The risk assessment should be reviewed periodically.

ACTION PLAN

It is considered that the following recommendations should be implemented in order to reduce fire risk to, or maintain it at, the following level:

Trivial [X] **Tolerable** [ ]

Definition of priorities (where applicable)
Immediate- Should be implemented immediately
Short term- Should be implemented within two months
Long term- Should be implemented as and when the opportunity arises

Action/recommendation	Priority
Carry out testing of the fixed electrical installation as per sections 3 and 6	Short term
Undertake repairs and modifications to fixed electrical installation as per section 3	Short term
Remind residents about personal appliances as per sections 3 and 9	Immediate
Install missing signage as per sections 4 and 14	Short term
Ensure common areas are kept clear of storage and waste as per section 9	Short term
Remove flammables as per sections 3 and 9	Immediate
Ensure escape routes are kept clear of obstructions as per section 11	Short term
Undertake independent cladding inspection as per section 12	Short term
Undertake firestopping and joinery repairs as per section 12	Short term
Carry out fire door survey as per section 12	Short term
Undertake repairs to AOVs as per section 16	Immediate
Ensure routine testing is carried out and clear certificates recorded on file as per section 19	Short term

RECOMMENDED REVIEW

The progress of the work undertaken to rectify the deficiencies noted in the Action Plan above should be monitored by the responsible person to ensure completion by the timescales given.

A follow up inspection should be undertaken when all work is complete to ensure it is to the correct standard.

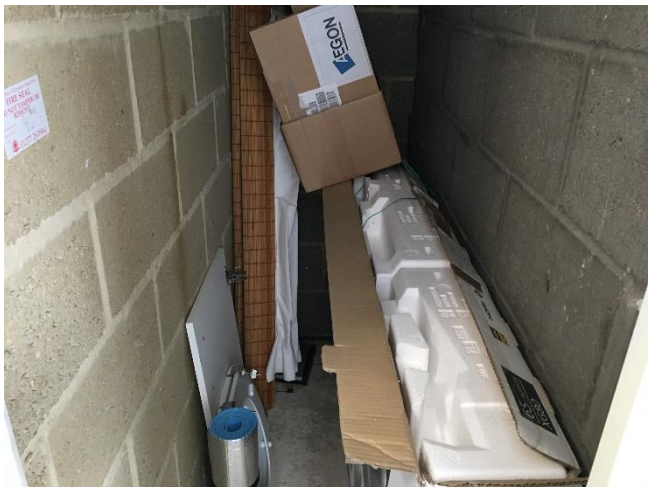
A Fire Risk Assessment review should generally be undertaken annually, and therefore this Assessment should be reviewed in **Spring 2021**

APPENDIX – PHOTOGRAPHS

Exposed cavity insulation

Damaged main landlord fuse

Inappropriate use of foam



Unauthorised storage