

Fire Risk Assessment



Property Owner: MCC
Date: 07/11/2024
Assessor: Stephen Brennan GFireE, AIFSM,
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Issue and Revision Record

Revision	Date	Originator	Checker	Description
A	07/11/2024	Stephen Brennan GFireE, AIFSM, DipFD, CFRAR (Tier 2)	Callum McLeod, BEng (Hons), AIFireE, MIFSM, CFRAR	Original Production

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Nomenclature

The following abbreviations have been used within this report, the below table provides a brief description of each abbreviation.

Abbreviation	Description
ADB	Approved Document B
BS	British Standard
EVCS	Emergency Voice Communications System
AFP	Active Fire Protection
AFD	Automatic Fire Detection
PFP	Passive Fire Protection
FD(XX)	Fire door rated to XX minutes, i.e. FD30 – Fire Door rated to 30minutes integrity
FD(XX)S	Fire door rated to XX minutes with cold smoke protection, i.e. FD30 – Fire Door rated to 30minutes integrity with cold smoke protection
MSFD	Motorised Smoke and Fire Damper
RRO	Regulatory Reform (Fire Safety) Order 2005
EL	Emergency Lighting
GEEP	General Emergency Evacuation Plan
PEEP	Personal Emergency Evacuation Plan
MIP	Mobility Impaired Persons
OV	Opening Vent
AOV	Automatic Opening Vent
ASET	Available Safe Egress Time
FRA	Fire Risk Assessment
RAMS	Risk Assessment and Method Statements
RP	Responsible Person
PTW	Permit to Work
DSEAR	Dangerous Substances and Explosive Atmosphere
COMAH	Control of Major Accidents and Hazards
ARC	Alarm Receiving Centre

Document Overview

Section	Content
Executive Summary	Overview of the assessed premises and risk assessment findings
Introduction	States the objectives and approach taken to produce this Fire Risk Assessment
Building Details	States relevant building specifications and relevant people at risk
Estimated Levels of Risk	Details how levels of risk and timescales are determined
Observations and Overview of Assessment	Systematically reviews various fire safety aspects of the buildings' fire safety
Risk Register	Displays risks observed whilst on site, along with recommended actions and timescales
Risk Rating Summary	Provides an overall risk rating for the building

Relevant Fire Safety Standards

Regulation and Guidance

Regulation
The Regulatory Reform (Fire Safety) Order 2005. London: HM Government, 2005
The Fire Safety (Scotland) Regulations 2006
The Building Regulations 2010
The building (Scotland) Regulations 2004
Fire Safety Act 2021
Fire Safety (England) Regulations 2022
Equality Act 2010
Health and Safety (Safety Signs and Signals) Regulations 1996 [3] in regard to safety signs at work
EC Directive 92/58/EEC
Health and Safety at Work etc Act 1974
Housing Act 2004
Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
The Dangerous Substances and Explosive Atmospheres Regulations 2002
The Health and Safety (Safety Signs and Signals) Regulations 1996
Approved Document B Volumes 1 & 2
Approved Document M

Standards and Codes of Practice

Please ensure that the latest version of the required standard is viewed as required.

Standard	BSI Standards and Codes of Practice
BS 5266	Code of practice for the emergency lighting
BS 5306	Fire extinguishing installations
BS 5499-10	Safety Signs, Including Fire Safety Signs
BS 5446-4	fire detection & alarm devices for dwellings
BS 5839-1	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	Fire detection and fire alarm systems for buildings – Part 6: Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises.
BS 5839-6	Fire detection and fire alarm systems for buildings - Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems
BS 6165	Specification for small disposable fire extinguishers of the aerosol type
BS 7273	Code of practice for the operation of fire protection measures
BS 7346	Components for smoke control systems
BS 7671	IET Wiring Regulations
BS 7974	Fire safety engineering
BS 8210	facilities maintenance management code of practice
BS 8214	Timber-based fire door assemblies
BS 8458	Fixed fire protection systems. Residential and domestic watermist systems
BS 8489	Fixed fire protection systems. Industrial and commercial watermist systems
BS 8519	Selection and installation of fire-resistant power and control cable systems for life safety, firefighting and other critical applications.
BS 8629	Code of practice for the design, installation, commissioning and maintenance of evacuation alert systems for use by fire and rescue services in buildings containing flats
BS 9251	Fire sprinkler systems for domestic and residential occupancies
PAS 9980	Fire risk appraisal of external wall construction and cladding of existing blocks of flats. Code of practice
BS 9990	Non automatic fire-fighting systems in buildings
BS 9991	Fire safety in the design, management and use of residential buildings
BS 9997	Fire Risk Management Systems Certification
BS 9999	Code of practice for fire safety in the design, management and use of buildings
BS EN 12101-2	Smoke and heat control systems Natural smoke and heat exhaust ventilators
BS EN 12845	LPC Rules for Automatic Sprinkler Installations
BS EN 1634-1	Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware
BS EN 16763	Services for fire safety systems and security systems
BS EN 62305	Protection against lightning
BS EN 60947	Low-voltage switchgear and control gear
EN 1125	Panic and Emergency Exit Devices

HTM 05-01	Managing Healthcare Fire Safety
HTM 05-02	Fire safety in the design of healthcare premises
HTM 05-03 Part B	Firecode – Fire Safety in the NHS – Operational provisions - Part B – Fire detection and alarm systems
HTM 05-03 Part M	Firecode – Fire Safety in the NHS – Operational provisions - Part B – Fire Safety in Atria
PAS 79	Fire risk assessment
LACoRS	Guidance on fire safety provisions for certain types of existing housing
BS EN 16034	Pedestrian door sets, industrial, commercial, garage doors and openable windows. Product standard, performance characteristics. Fire resisting and/or smoke control characteristics
BS EN 81-20/BS EN 81-72	Safety rules for the construction and installation of lifts
ASDMA BPG	Best Practice Guide to Timber Fire Doors
CP3	British Standard Code of Practice – Precautions Against Fire
BB100	Building Bulletin 100: design for fire safety in schools
BS 5588	Fire precautions in the design, construction and use of buildings. Code of practice for shops, offices, industrial, storage and other similar buildings

Executive Summary

Hughes and Associates Property Services Ltd conducted a fire risk assessment at Polygon Building on 07/11/2024. The fire risk assessment identifies fire risks, the occupants at risk from fire, and provides suitable precautionary measures to develop the fire safety of the premises.

Building Summary

Assessment Details	
Item	Description
Building name	Polygon Building
Full address	Polygon Brunswick Manchester M13 9SG
Date of assessment	07/11/2024
Property owner	MCC
Responsible Person	S4B
Person responsible for fire safety on site	S4B
Local fire safety authority or control	GMFRS
Relevant contact at the time of attendance	Simon Howorth
Assessor name	Stephen Brennan GFireE, AIFSM, DipFD, CFRAR (Tier 2)
Assessment type	Non-invasive Type 1
Areas assessed	S4B office and residential flats
Inaccessible areas & assessment limitations	Ground floor shops There were no limitations on this assessment.

Building Photo



Building Description	
Primary purpose of building	Residential (purpose build block of flats)
Ancillary uses (if any)	Offices and shops on the ground floor
Year/period of construction	2016
Number of blocks (If applicable)	1
Number of total floors (including ground)	3
Approximate height of building (to highest occupied floor) [m]	7.0m
ADB Specified elements of structure FR (above ground)	60 minutes
Number of basement floors	0
Approximate depth of basement [m]	
ADB Specified elements of structure FR (below ground)	
Building Width [m]	20.0m
Building Length [m]	50.0m
Number of stairwells	2 protected stairs with smoke control in the long joining corridor
Number of designated firefighting stairwells	1
Building structure construction (vertical)	Steel
Building structure construction (horizontal)	Poured concrete on metal deck
Floor construction(s)	Concrete
Protected stair construction(s)	Concrete
Firefighting shaft provided	No
Number of lifts	1
Number of firefighting lifts	0
Number of lifts with fireman's override	0
External wall constructions(s)	Various non-load bearing techniques used
External wall photo(s)	
External wall comments	Low risk - No specialist action required. Compliant system
Raised floor construction (if applicable)	No raised floor constructions
Suspended/false ceilings present	Plasterboard non-demountable
Roof covering	Felt, Concrete
Escape route design	Uncomplicated means of escape, multiple routes provided
Number and type of external stairways present	No external stairways present.

Building Occupancy	
Approximate number of occupants	50, 40 residents , 12 staff in office
Persons at risk	Residents, Trained members of staff
Number of flats/units (if applicable)	18
Listed building status	Not listed

Is there an RRO notice on the building?	No
Is there a history of fires?	No known fires
History or arson at the premises?	no
Has the potential for arson been addressed?	yes
Where there are separate occupancy types or tenants, is there suitable cooperation & coordination between occupancies?	yes

Fire Safety Systems/Precautions	
Evacuation policy	Simultaneous on ground floor, flats are stay put
Fire alarm category (if applicable)	Unconfirmed
Emergency alert system (EAS)	No
Fire alarm grade (domestic)	
Is the building sprinklered	No
Other suppressions systems	
Fire mains present	None present
Fixed ventilation systems present	Kitchen extract, Toilet extract
Smoke control system present	Mechanical smoke ventilation system, Automatic opening vents (stairwell)
Lightning protection system present?	N/A
Car park present	External (away from building)
Bin stores	Internal
Are there electric vehicle charging points (if internal)	No
Building security	CCTV, Security lighting, Lockable entrance doors

Recommended Actions

Please see Section '5 Risk Register' for risk register and actions.

The below list displays the general areas where it is recommended that action is taken within the stated timescale. The specifics of the issues and actions are displayed within Section '5 Risk Register'.

The overall risk to life from fire at these premises are estimated to be: Tolerable

Table 1 - Action Summary

Remedial Action	Risk Rating	Timescale to Complete Actions
Carry out a fire door survey and follow the recommendations of that report. Annual inspections are recommended	Tolerable	6 Months

Review

It is the responsibility of the 'Responsible Person' RP (as identified by the RRO) to monitor the action points from a risk assessment. It is also their responsibility review the fire risk assessment. Reviews should take place if the RP suspect the FRA is no longer valid or significant changes have taken place that will affect the fire precautions within the building. Other reasons include, inter alia:

- Changes to work activities and equipment
- Changes to work staff numbers and presence of disabled or young persons
- Change of use or layout of the building
- Change in the storage of [fire] hazardous substances
- Failure of a fire precaution system, e.g. fire alarm
- After any real fire incident

It is recommended that the premises should have its risk assessment reviewed at least annually, or next in **November 2025**.

1 Introduction

1.1 Objective

Hughes and Associates Property Services Ltd were appointed to carry out Non-invasive Type 1 fire risk assessment (FRA) of Polygon Building.

The assessment was undertaken in accordance with the general risk assessment principles set out in The Regulatory Reform (Fire Safety) Order 2005 in order to identify hazards that could contribute to injury of persons working or residing in or near the building. The fire risk assessment was conducted following the recommendations of the UK Government's fire risk assessment guidance suite and PAS 79.

1.2 Approach

The site visit was undertaken on 07/11/2024 by appointed competent person Stephen Brennan GFireE, AIFSM, DipFD, CFRAR (Tier 2), Fire Safety Assessor of Hughes and Associates Property Services Ltd.

An FRA is an assessment of the fire risks to occupants of a building and other people in the immediate vicinity of the building. This is to ensure that those people are safe from the risk of fire and its effects.

It considers the use of, the activities carried out within, and the likelihood that, a fire will start in a premise which could cause harm to the occupants of a building.

An FRA is carried out by a competent person and is reviewed annually thereafter by a responsible person. The responsible person can be an occupant on site, or an appointed individual with the appropriate skill set to undertake an FRA review.

The objectives of the FRA are:

- Identify the fire hazards;
- Reduce the risk of those hazards causing harm to as low as practicably possible;
- Determine which physical fire precautions and management arrangements are required to ensure the safety of the occupants in the building in the event of a fire.

The risk assessment also follows the methodology of PAS 79 and the nine-step method (Table 2).

The non-intrusive survey established any fire hazards, the people at risk from a fire, and any hindrances to the means of (and provisions used to facilitate) escape.

All observations from the survey were noted and given a hazard (anything that has the potential to cause harm) and risk (the chance of that harm occurring) rating to determine their severity, which are to be reported to the management of the building assessed.

Ultimately, the management will implement procedures to eradicate, mitigate, or control any identified risks. This could be proactive management practices or passive fire protection measures.

When considering existing buildings that were constructed prior to the production of modern codes, the following flow chart should be used in the assessment to formulate an effective action plan:

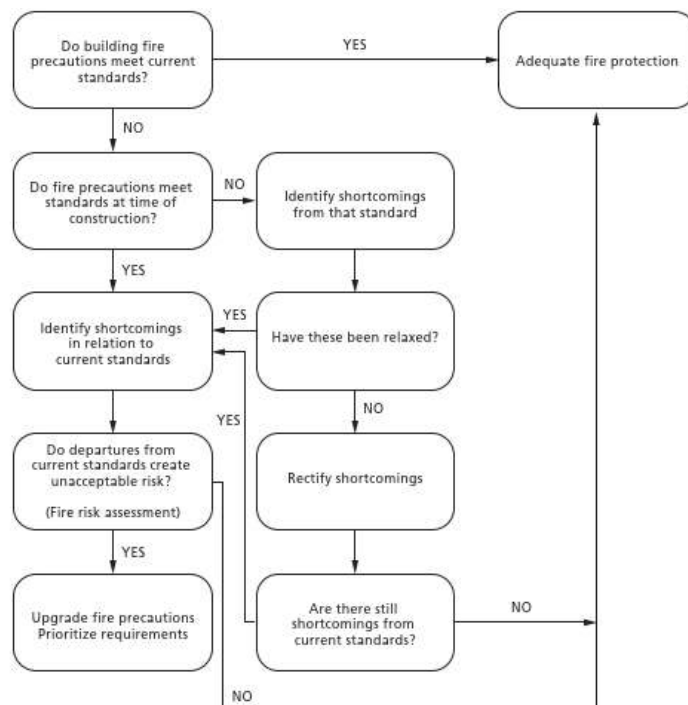


Figure 1 - PAS 79 - Existing Premises Action Plan

Table 2. PAS79 nine steps

Steps	Descriptions
1	Obtain information on the premises, the processes carried out on the premises and the people present, or likely to be present, on the premises.
2	Identify the fire hazards and means for their elimination or control.
3	Assess the likelihood of fire, at least in subjective terms.
4	Determine the fire protection measures currently in the premises.
5	Obtain relevant information about fire safety management.
6	Make an assessment of the likely consequences to people in the event of fire, at least in subjective terms.
7	Make an assessment of the fire risk.
8	Formulate and document an action plan, in which recommended actions are prioritized.
9	Define the date by which the fire risk assessment should be reviewed.

1.3 Scope

The scope of this FRA is limited to the building described in the Building Summary Section.

Clause 9 of the Regulatory Reform (Fire Safety) Order 2005 requires “The responsible person must make a suitable and sufficient assessment of risks to which relevant persons are exposed for the purpose of identifying the general fire precautions he needs to take to comply with the requirements and prohibitions imposed on him by this order.”

This report considers life safety aspects associated with fire risks. Although some of these items will have some inherent property protection characteristics, property protection or business continuity protection will not be addressed specifically unless stated.

This report does not include detailed safety procedures or method statements to eliminate any identified risks. This work should be carried out by separate negotiation or contract with an approved third party.

All recommendations are based solely on the findings during the site-wide survey (within the areas that were available at the time of the FRA) and the information presented by the site managers met on the day.

- This fire risk assessment should be reviewed if any of the following occur:
- Any physical changes to the premises (structurally or internally);
- Significant changes to the occupancy/use of the premises;
- Substantial changes to furniture and fixings;
- Change of use, or increase in the storage of hazardous substances;
- The failure of fire precautions, e.g. fire-detection systems, and alarm systems;
- Significant changes to type and quantities and/or method of storage of goods;
- Changes to working hours;
- A significant increase in the number of people present; and
- The presence of people with some form of disability.

It should be noted that this list is not exhaustive and, as such, any modification that impacts the FRA should be addressed by the management. The findings in this report were noted at the time of the assessment and may not necessarily be the same at a later date.

1.4 Fire Phenomena

To fully understand the risks and hazards associated with fire, it is essential to have an understanding of what fire is and how fires can start. This knowledge forms the basis for how a fire risk assessment is conducted.

Fire is an exothermic chemical reaction between a combustible material and oxygen. To sustain this reaction, oxygen, heat, and a source of fuel must be present, which gives rise to the concept of the fire triangle (Figure 2).

Without one of the three components of the fire triangle, a fire is not sustainable, and the reaction will terminate. This is the foundation of all fire-fighting concepts and procedures.



Figure 2. The Fire Triangle



Figure 3. Fire caused by burning combustibles

The burning process (Figure 3) thermally decomposes the fuel source, producing volatile gases from the fuel surface. These volatiles mix with oxygen which results in combustion which generates heat. The additional heat produces more volatile gases and the process repeats.

1.5 Identifying Fire Hazards

Any sources of ignition, fuel, and oxygen (such as quantity and air flow) are fire hazards. Identifying these hazards and taking precautionary measures to remove or mitigate their severity help to reduce the likelihood of fire occurring. This is step one of the fire risk assessment.

It should be noted that the lists in this section are not exhaustive and, as such, any other sources of ignition, fuel, and oxygen found will be addressed in the Fire Risk Assessment.

1.5.1 Identifying Sources of Ignition

Sources of ignition are typically heat sources which could become hot enough to ignite a material found in the premises including:

- Naked flames, e.g. candles or gas or liquid-fuelled open-flame equipment;
- Hot processes, e.g. welding by contractors;
- Cooking equipment;
- Faulty or misused electrical equipment;
- Accidental ignition sources left within the refuse, e.g. batteries
- Lighting equipment, e.g. halogen lamps too close to stored products;
- Hot surfaces and obstruction of equipment ventilation, and
- Arson.

1.5.2 Identifying Sources of Fuel

Sources of fuel are anything that may burn easily and readily, and that there is sufficient quantity of, and that may spread to other fuel sources. Some common fuels for this type of facility are:

- Textiles such as sports clothing and equipment;
- Flammable-liquid-based products, such as paints, varnishes, thinners and adhesives;
- Flammable liquids and solvents, such as white spirit, methylated spirit, cooking oils and disposable cigarette lighters;
- Flammable chemicals, such as certain cleaning products, photocopier chemicals and dry cleaning that uses hydrocarbon solvents;
- Packaging materials, stationary, advertising material, decorations and display materials;
- Plastics and rubber, such as polyurethane foam-filled furniture;
- Waste products, particularly finely cut items such as shredded paper and wood shavings, off cuts, and dust;
- Flammable gases such as liquefied petroleum gas (LPG);
- Flammable liquids such as petrol for the motorcycles and scooters.
- Diesel for the outside generators;

Additionally, consideration should be given to the materials used to line walls and ceilings, the fixtures and fittings, and how they could facilitate the spread of fire.

1.5.3 Identifying Sources of Oxygen

The main source of oxygen is in the atmosphere, which, in an enclosed building is provided through the ventilation system. Typically, air is provided either naturally (by natural airflow through doors windows) or mechanically (such as air conditioning systems and air handling units). Usually there will be a combination of these systems which introduce and extract air into the building.

Other sources of oxygen include:

- Some chemicals (oxidising materials) which can provide a fire with additional oxygen and so help it burn. These chemicals should be identified on their container by the manufacturer or supplier who can advise as to their safe use and storage;

2 Building Details

2.2 Relevant Persons

Unless noted otherwise, the risks identified in this report are thought to apply to all potential occupants (relevant persons) of the site. This includes office staff, residents, visitors and mobility-impaired persons, etc.

With reference to BS999, Table 3 provides examples for the different categories of occupants. Table 4 defines fire growth rates and provides examples of conditions and their approximated fire growth rates. The risk profiles are defined in Table 5 and the assessed risk ratings for the occupants of Polygon Building are shown in Table 6. The overall risk ratings are categorised by combining both the occupancy characteristic and the fire growth rate.

Table 3. Occupancy Characteristics, taken from BS9999

Occupant Characteristics	Description	Examples
A	Occupants who are awake and familiar with the building	Offices and industrial premises
B	Occupants who are awake and unfamiliar with the building	Shops, exhibitions, museums, leisure centres, other assembly buildings, etc.
C	Occupants who are likely to be asleep:	
C _i	Long-term individual occupancy	Individual flats without 24h maintenance and management control on site
C _{ii}	Long-term managed occupancy	Serviced flats, halls of residence, sleeping areas or boarding schools
C _{iii}	Short-term occupancy	Hotels

Table 4. Fire Growth Rate, taken from BS9999:2017

Category	Fire Growth Rate	Examples	Fire Growth Parameter [KJ/s ³]
1	Slow	Banking hall, limited combustible materials	0.0029
2	Medium	Stacked cardboard boxes, wooden pallets	0.012
3	Fast	Baled thermoplastic chips, stacked plastic products, baled clothing	0.047
4	Ultra-fast	Flammable liquids, expanded cellular plastics and foam	0.188

Table 5. Risk Profiles, taken from BS9999:2017

Occupancy Characteristics	Fire Growth Rate	Risk Profile
A (Occupants who are awake and familiar with the building)	1 Slow	A1
	2 Medium	A2
	3 Fast	A3
	4 Ultra-fast	A4
B (Occupants who are awake and unfamiliar with the building)	1 Slow	B1
	2 Medium	B2
	3 Fast	B3
	4 Ultra-fast	B4
C (Occupants who are likely to be asleep)	1 Slow	Ci1, Cii1 or Ciii1
	2 Medium	Ci2, Cii2 or Ciii2
	3 Fast	Ci3, Cii3 or Ciii3
	4 Ultra-fast	Ci4, Cii4 or Ciii4

Table 6. Polygon Building Occupant Risk Profiles

Occupant Description	Occupancy Characteristic	Fire Growth Rate	Risk Profile
Residents	Ci Long-term individual occupancy	Medium	Ci2

2.3 Documentation, Training, Drills and Records

Table 7. Documentation

Documentation	Comments
Previous Fire Risk Assessment Outstanding action points?	Some action points completed from previous FRA
What is the evacuation procedure?	Simultaneous on the ground floor, flats are stay put
Has an Appropriate Emergency Plan been prepared for the premises?	Yes
Fire safety defects system in place?	Yes
Is there a fire log book available?	No
Is the building under any form of licence?	N/A
Is there an RRO notice on the building?	No
Is there a history of fires in the building?	No known fires
Is the building fire engineered? Is there a fire strategy?	Building fire engineered, Fire strategy not provided/not available
Are compartmentation drawings available?	No
Is there policy proving the adequate control of contractors? PTWs, RAMS, inductions?	Yes
Competent person(s) appointed to assist in undertaking the preventive and protective measures (i.e. relevant general fire precautions)?	Competent persons appointed to carry out fire risk assessments., Competent persons appointed to carry out fire system maintenance.
Are there adequate procedures for evacuation of any disabled people who are likely to be present?	GEEPs recorded and made available.
Appropriate liaison with fire and rescue service (e.g. by fire and rescue service crews visiting for familiarization visits)?	Building management contact available.

Table 9.1 Training and Drills

Documentation	Comments
Are staff given adequate fire safety instruction and training on induction?	Staff knowledge appears to be of a good standard and training/induction logs are maintained.
Is there an induction system for any of the following: Fee paying residents, hiring occupants and/or visitors?	Short term occupants are provided with an information pack on first visit.
Is important information passed on to the building's residents regarding fire safety in the building?	Residents provided with a suitable fire safety information pack.
Are all staff given adequate periodic "refresher training" at suitable intervals?	Refresher training is provided, is recorded and up to date.
Does relevant staff training provide adequate information and instruction on the building's policies, procedures and specific risks?	Staff training is satisfactory.
Are staff with additional responsibilities provided with suitable additional training? (PEEPs/GEEPs, use of extinguishers, fire marshals etc.)	GEEPs have been produced for the premises, are maintained up to date and staff are designated to carry these out.
Are fire drills carried out at appropriate intervals?	The building is not known to have been subject to regular fire drills.
When the employees of another employer/contractors work in the premises: Is their employer given appropriate information?	Contractors etc are provided with suitable information prior to attendance. It is unknown whether this information is passed on to their respective employees.
When the employees of another employer/contractors work in the premises, are they provided with suitable induction?	Generic company inductions are provided to all attending contractors.

Table 9.2 Testing and Maintenance

Documentation	Comments
Fixed Main Electrical Installation Inspections in Place?	Fixed mains records provided by the client and are in date.
Is there a suitable regime of PAT in place?	Regime of PAT testing is in place and records are in date.
Gas Checks in Place?	Gas system tests recorded on gas equipment and are in date.
Routine testing and periodic servicing of fire detection and alarm system?	Fire detection and alarm system tests/maintenance recorded within a suitable log book and are in date., Residents responsible for own testing and record keeping in domestic flat purpose group.
Are EVCS subject to regular inspections/maintenance?	N/A

Monthly and annual testing routines for emergency escape lighting?	Emergency lighting system tests/maintenance recorded within a suitable log book and are in date.
Annual maintenance of fire extinguishing appliances?	Portable extinguisher tests/maintenance recorded on appliance and are in date.
Is kitchen extract ductwork subject to regular cleaning to TR19/similar?	N/A
Are any hobs/cookers/fryers regularly cleaned?	N/A
Are any white goods regularly cleaned?	
Are regular fire door inspections/maintenance regimes carried out?	No evidence of fire door maintenance being carried out., Maintenance is recommended.
Periodic inspection of external escape staircases and gangways?	No external escape staircases/gangways present.
Six-monthly inspection and annual testing of rising mains?	N/A
Routine testing, six-monthly inspection and annual testing of fire-fighting lifts?	N/A
Routine testing and periodic inspection of sprinkler/other suppression installations?	N/A
Are fire dampers subject to regular maintenance?	N/A
Are fire curtains/shutters subject to regular maintenance?	There are no fire curtains/shutters within the building.
Are AOVs/mechanical smoke control systems subject to regular inspection/maintenance?	Records provided to prove that AOVs have been subject to regular inspection/maintenance and the records are in date.
Routine checks of fire escape doors and/or security fastenings?	Fire escape doors in a good condition at the time of assessment.
Are fire service access switches (if present), well maintained/operational?	N/A
Are any premises information boxes routinely checked and updated?	No premises information box present.
Annual inspection and test of lightning protection system?	Equipment appeared in good working order. No test evidence to confirm safe working order was available on site.
Other fire systems	

3 Estimating Levels of Risk

3.1 Risk Profiling

The UK Health and Safety code, BS 8800, provides a means of assessing the level of risk in terms of severity by determining the likelihood of a fire occurring and any associated potential harm. This provides the management of the building with a hierarchical list of key areas to address for the purposes of enhancing the fire safety of the building.

A list of terms used in this report to describe the levels of harm and the likelihoods are summarised in Table 8.

Table 8. Risk Profile Term Definitions

Term	Definition
Slightly Harmful	Fire outbreak is unlikely to cause serious injury or death to occupants
Harmful	Fire outbreak could result in injury of one or more occupants though unlikely to cause multiple fatalities
Extremely Harmful	Significant potential for serious injury or death of one or more occupants
Highly Improbable	Hazard is unlikely to cause or impact outbreak of fire, or impede occupant fire egress
Improbable	Hazard may cause or impact fire outbreak or impede occupant fire egress
Probable	High potential for hazard to cause or impact fire outbreak, or impede occupant fire egress

To quantify the levels of harm, Table 9 outlines the criteria for what shall constitute Slightly Harmful, Harmful, and Extremely Harmful.

Table 9. Levels of Harm

Level of Harm	People	Assets	Environmental	Reputation
Extremely Harmful	Fatalities	Major Damage	Long-Term Harm	Considerable Impact
Harmful	Major Injury	Localised Damage	Short-Term Harm	Localised
Slightly Harmful	Lost Time Injury	Minor Damage	Low-Impact	Limited Impact

Tabulating these six terms provides a concise means of assessing the risk of any hazards found on site, ranging from “Trivial Risk” to “Intolerable Risk” (as shown in Table 10).

Table 10. PAS 79 Risk Estimation Table

Likelihood of Harm from Fire	Severity of Harm		
	Slightly Harmful	Harmful	Extremely Harmful
Low	Trivial Risk	Tolerable Risk	Moderate Risk
Medium	Tolerable Risk	Moderate Risk	Substantial Risk
High	Moderate Risk	Substantial Risk	Intolerable Risk

3.2 Required Action and Timescales

Table 11 gives priority ratings, actions, and appropriate timescales to resolve these risks. The management should then use this as a basis targeting and prioritising key areas of development for fire safety within the premises.

Table 11. Priority, Actions, and Timescales to Resolve Risks

Priority	Action	Timescale
Trivial Risk 5	No action is required, and no detailed records need be kept.	No action required for less harmful items. Items which are addressed should be resolved by next risk assessment or in the timespan specified.
Tolerable Risk 4	No major additional controls required. However, there might be a need for improvements that involve minor or limited cost.	Items should be addressed and completed within timespan specified.
Moderate Risk 3	Efforts must be made to reduce this risk within the associated timescale. Further assessments should be made for levels of moderate risk which are considered Extremely Harmful to determine the likelihood of harm occurring.	Items should be addressed and completed within the timespan specified.
Substantial Risk 2	Considerable resources might 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.	Should be addressed as soon as practicable and works should be completed within the short timespan specified.
Intolerable Risk 1	Building (or relevant area) should not be occupied until the risk is reduced.	Should be addressed immediately and works should be completed within the short timespan specified.

4 Observations and Overview of Assessment

4.1 Occupants

Line Item	Observation	Comments
4.1.1	Sleeping occupants	Residents
4.1.2	Disabled occupants	Disabled occupants possible.
4.1.3	Young persons (under 18s)	Under 18s may be present within the building.
4.1.4	Lone workers	Lone working staff possible.
4.1.5	Other groups	

4.2 Fire Hazards and Controls

Line Item	Observation	Comments
4.2.1	Have reasonable measures been taken to prevent fires of electrical origin?	Evidence observed on site that PAT testing have been carried out., Evidence observed on site that fixed mains electrical installation checks have been carried out.
4.2.2	Have reasonable measures been taken to prevent fires because of smoking?	'No smoking' signage displayed at the premises.
4.2.3	Have reasonable facilities been provided for people who smoke?	There is a designated smoking area on site.
4.2.4	Have security measures been implemented to address unauthorised access to the premises to mitigate the risk of arson?	CCTV, Security lighting, Lockable entrance doors
4.2.5	Is the use of portable heaters avoided as far as is practicable?	Portable heaters have not been identified throughout site.
4.2.6	Are there reasonable measures taken to avoid fires as a result of cooking?	Kitchen appliances are cleaned regularly.
4.2.7	Is the standard of housekeeping adequate?	Good housekeeping noted throughout site at the time of assessment.

Line Item	Observation	Comments
4.2.8	Are the premises free from an accumulation of combustible waste (refuse)?	Yes - Premises is clear of combustible waste and appears to have good systems in place.
4.2.9	Are there any open fires such as fireplaces within the premises?	No open fireplaces within the premises.
4.2.10	Are any flammable substances/flammable gases stored adequately?	No flammable gases/substances stored on site.
4.2.11	Are there any other significant hazards that warrant consideration?	No

4.3 Means of Escape

Line Item	Observation	Comments
4.3.1	Is the escape route layout deemed satisfactory and uncomplicated?	Escape routes simplistic and uncomplicated., Multiple routes of escape available.
4.3.2	Are there any dead-end situations within the premises?	Dead end situations noted within the premises; however, these appear to be in accordance with building code guidance.
4.3.3	Are there alternative routes of escape sufficiently separated by either direction or space?	Alternative escape routes are sub-divided by fire resisting constructions.
4.3.4	Are travel distances deemed satisfactory?	Travel distances appear to be in accordance with building codes.
4.3.5	Are there any inner room situations?	No inner room situations noted within the premises.
4.3.6	Does the building's emergency lighting coverage appear to be satisfactory and in accordance with BS 5266?	Good emergency lighting coverage noted within the premises.
4.3.7	Is it considered that the premises are provided with reasonable arrangements for the means of escape for disabled persons?	Suitable arrangements for means of escape of disabled persons have been noted on site.
4.3.8	Have any PEEPS or GEEPS been produced for the premises?	Adequate and documented GEEPs/PEEPs have been produced.
4.3.9	Are there any refuge points within the premises? If yes do these contain an EVS?	Refuge points are provided but there are no EVCS systems in place.
4.3.10	Are doors used for means of escape purposes provided with emergency locking devices that can be easily and immediately opened without the use of a key?	Emergency locking devices on doors used for means of escape appears to be compliant and is easily operable.
4.3.11	Are doors on escape routes that are fitted with electronic locking systems fitted with automatic door release mechanisms that will disable in a fire?	Advised by the client that electronically lockable doors disengage on fire.
4.3.12	Are internal, exterior and final exit fire escape doors in good condition and regularly inspected with compliant hardware? Suitable fire assembly point?	At the time of assessment, fire escape doors appeared to be in a good condition and are provided with compliant hardware.

Line Item	Observation	Comments
4.3.13	Is there a suitable assembly point, adequately lit and signposted as required?	A suitable assembly point has been designated, is well lit, signed and noted on fire action notices.
4.3.14	Does directional escape signage appear to comply to BS 5499?	Signage appears to be satisfactory throughout the premises at the time of assessment.
4.3.15	Is there any wayfinding signage within the building for the fire service including floor numbers and flat numbers?	The premises is out of scope for the requirement of wayfinding signage.
4.3.16	Is there a reasonable standard of fire safety signs and notices?	Fire action notices and other fire safety signs appear to be adequate at the time of assessment.
4.3.17	Are there external stairwells in place? If yes, are these in a good condition and free from trip/slip hazards?	The premises does not contain any external stairwells.

4.4 Measures to Limit Fire Spread/Development

Line Item	Observation	Comments
4.4.1	Are there reasonable limitations of lining materials that may promote fire?	Linings appeared to be satisfactory at the time of assessment.
4.4.2	Do the building's fire doors appear to be in an acceptable condition?	Fire doors within the premises are in a mixed condition, recommend a fire door inspection/maintenance.
4.4.3	Are self-closing devices provided on fire doors where required, if so are they in working order?	Positive closing devices have been noted to be in a good condition and operable at the time of assessment.
4.4.4	Does fire compartmentation within the premises appear to be satisfactory?	Fire compartmentation in general appeared to be in a good condition throughout site at the time of assessment.
4.4.5	Are there fire dampers in place where required? If yes, is there any maintenance documentation in place?	No fire dampers identified within the premises.
4.4.6	Does the suppression system appear to be in a good state of repair and has been subject to regular maintenance?	The premises is not provided with any suppression systems.

4.5 Firefighting Systems

Line Item	Observation	Comments
4.5.1	Do the existing smoke clearance provisions appear to be satisfactory?	Yes, all smoke clearance provisions are functioning and appear adequate.
4.5.2	Is there sufficient number and type of extinguishers?	Yes, extinguishers are adequately distributed and of the correct types.
4.5.3	Are extinguishers in date and have wall mounted signage?	Yes, all extinguishers are in date with clear signage.
4.5.4	Are there fire blankets in kitchens? Are these adequately placed?	Yes, fire blankets are present and correctly located.
4.5.5	Do any hose reels or other systems appear to be appropriate for the required task and appear to be well maintained?	Not applicable/No hose reels or similar systems present.

4.6 Fire Detection and Alarm

Line Item	Observation	Comments
4.6.1	Are the capabilities of the installed fire alarm and detection system considered satisfactory?	The capabilities of the fire detection and alarm system appears to satisfy minimum requirements based on premises type and risk, no faults have been identified on visual only inspection and therefore performance/capabilities appear to be adequate.
4.6.2	Is the alarm automatic detection and warning?	Yes, the system is fully automatic.
4.6.3	What is the current fire alarm category (L1, LD3, P1, M etc.)	Dwelling fire detection system not assessed as part of this fire risk assessment
4.6.4	What is the fire alarm grade? (A, B, C, D etc.)	Grade D: Basic battery-operated smoke alarms, Additional comments: Office areas are L3, communal resi parts have aov detection only. shops have independent system
4.6.5	Is the extent and coverage of alarm system deemed satisfactory?	Yes, coverage appears to satisfy BS 5839 minimum specification with respect to the premises type and risk.
4.6.6	Have any detector faults been noted?	No faults identified at the time of assessment on either panel or detectors, system appears to be operational.
4.6.7	Is the building fire alarm connected to an Alarm Receiving Centre (ARC)?	Yes, the system is monitored by an ARC.

4.7 Fire Precaution Records

Line Item	Observation	Comments
4.7.1	Are test and maintenance records available to confirm that the fire alarm and detection system is in full working order?	Yes, all records are up-to-date and accessible.
4.7.2	Has an appropriate written emergency plan been developed for the building?	Yes, a suitable and sufficient written emergency plan is in place.
4.7.3	Is the evacuation strategy simultaneous, defend in place, phased?	Combination: Uses elements of more than one strategy.
4.7.4	Is there any investigation period on detection?	No, the alarm immediately triggers evacuation.
4.7.5	Is there suitable contact with the fire service? Are fire brigade wallet and keys available?	Yes, all necessary contacts and keys are readily available and are stored within a PIB or with staff.

4.8 Fire Service Facilities

Line Item	Observation	Comments
4.8.1	Are the facilities for firefighters adequate?	Yes, all facilities meet or exceed requirements.
4.8.2	Is access to the building's interior considered to be suitable for firefighters?	Yes, access is fully suitable for firefighters.
4.8.3	Is the access for fire appliances to the workplace/premises satisfactory?	Yes, fire appliances can access the site without any issues.
4.8.4	Is there suitable supply of firefighting water?	Yes, water supply is provided within suitable distance of the premises, although flow rates are unconfirmed.
4.8.5	Does the building contain any firefighting shaft?	No, there are no firefighting shafts.
4.8.6	Does the building contain a fire main?	No, there is no fire main present.
4.8.7	Is there a firefighting lift? If so is there any maintenance documentation in place displaying that the lift is fit for purpose?	No firefighting lift present.
4.8.8	Are other switches and control devices such as automatic opening vents, mechanical smoke ventilation systems, fuel shut off in place? If yes, is there maintenance documentation for these systems?	Yes, systems are in place and are assumed to have been specified to provide adequate smoke ventilation per building codes. Maintenance records provided.
4.8.9	Are firefighting systems provided with adequate power redundancy such as UPS systems or generators?	Yes, adequate power redundancy is in place.
4.8.10	Does the building contain a fire command centre?	No, there is no fire command centre.


4.9 External Walls

Line Item	Observation	Comments
4.9.1	What is the building's external wall construction?	Exact construction not confirmed., Composite materials
4.9.2	Has the building been subject to an EWS1/PAS9980 assessment?	Not applicable/Assessment not required.
4.9.3	If EWS/FRAEW has been carried out, state the result of this survey, if no, is one required?	Not applicable/EWS not required.
4.9.4	Are there any clear non-compliances / damage to the external wall system?	No clear damage or non-conformities observed on visual only inspection.
4.9.5	Is there a lighting protection system? If yes, does it appear to be in a good condition and undamaged?	Yes, a system is in place and appears to be in a good condition.

4.10 Other

Line Item	Observation	Yes/No/N/A	Comments
4.10.1	Is the site COMAH or DSEAR 2002?	No	
4.10.2	Were there any unchecked areas in the building due to access restriction?	Yes	Shops
4.10.3	Do the fire precautions in place appear to meet the standards of the time of construction?	No	No, see risk register.

Table 12 - Additional Findings

Comment(s)	Photograph
Solar panels on the roof	 An aerial photograph showing a modern, multi-story building with a flat roof. The roof is covered with a grid of solar panels. The building is situated in an urban area with other buildings and streets visible in the background.

5 Risk Register

RISK 1 DESCRIPTION

Communal fire doors showing minor defects. There is no evidence of routine inspection or maintenance

RISK CATEGORY

4.4 Measures to Limit Fire Spread/Development

REMEDIAL(S) DESCRIPTION

Carry out a fire door survey and follow the recommendations of that report. Annual inspections are recommended

RISK RATING

Tolerable

REMEDIAL(S) TIMESCALE

6 Months

RELEVANT STANDARDS / LEGISLATION

LEGAL: Regulatory Reform (Fire Safety) Order 2005 - 17.Maintenance

PHOTOGRAPHIC EVIDENCE



6 Risk Rating Summary

Taking into account the fire prevention measures observed at the time of this risk assessment, it is considered that the risk of fire occurring is;

The likelihood of a fire occurring has been assessed to be **Low**.

The consequences for life safety in the event of fire are estimated to be **Harmful**.

The overall risk to life from fire at these premises are estimated to be **Tolerable** .

The purpose of this section is to place fire risk into context. The ratings above are subjective and are for guidance purposes only. The hazards and deficiencies identified in this report should be addressed by implementing all the recommendations contained in the following section.

Using the estimation of risk levels in Section 3, and the observations in Section 4, and the Risk Rating Summary in section 5; the number of risks (categorised by their priority rating) can be created.

The risk register is shown in Section 5 and shows observations from the site visit. Providing photographic evidence from the survey of the risks and offer proposed risk reduction methods for management to help improve/resolve these issues.

END OF REPORT