FIRE RISK ASSESSMENT

Castellum Apartments

Fowler Road

Aylesbury.

HP19 7BU

Ashdee Limited
Universal Square,
3rd Floor, Building 2,
Devonshire Street North.
Manchester. M12 6JH

Live Safe Ltd
64 The Park,
Ealing,
London.
W5 5NP

Certificate number 12650
ISO 9001
OHSAS 18001

September 2024
FINAL Version

Report Produced For: Ashdee Limited

Report Produced By: Andrew West

Date of Survey: 09/09/2024

Report Date: 17/10/2024

	Name	Signature	Date
Assessed by	A.W.		17/10/2024
Prepared by	A.W.		17/10/2024
Checked & Reviewed by	A.W.		17/10/2024
Issue Status	**FINAL**		
Purpose of Issue	**FINAL Issue**		
Document Reference	MCR/Cast/171024a		
Amendments	11/10/24 – Upgrade to FINAL		
	17/10/24 – Assessment updated to removed e risk assessment and include a action summary.		

Executive Summary

Priority	No. of Actions	SLA
Low	2	3 months from the date of the FRA
Medium	12	1 Month from the date of the FRA
High	6	2 eeks from the date of the FRA

Assessed Risk	**Moderate**

Recommended Review	On or Before 09 September 2025

1. GENERAL INFORMATION

1.1 Scope of the report

This document has been prepared to report on the assessment of risks to life from fire in the common parts of the premises and, where appropriate, to make recommendations to ensure compliance with fire safety legislation. The assessment carried out to inform this report conforms to the description of a Type 1 fire risk assessment, as described in the Local Government Association guide: "Fire safety in purpose-built blocks of flats" in that a non-intrusive visual survey of the common areas of the premises were surveyed. No construction was opened-up during this survey and areas which were secured and therefore not accessible were not assessed. Any such areas are identified in the relevant section of this report.

The report does not address the risk to property or business continuity from fire.

This report constitutes neither a warranty of compliance nor an assurance against risk and represents the best judgement of the consultant who based its preparation in part, on the information provided by others.

There is no previous Fire Risk Assessment.

1.2 Building Details

The Regulatory Reform (Fire Safety) Order 2005 (the FSO) applies to any workplaces within the premises and any parts of the premises shared by the occupants of more than one dwelling, while the Housing Act 2004 applies to the insides of the individual dwellings.

1.3 Guidance documents relevant to the premises

Local Government Association: *Fire safety in purpose-built blocks of flats*. This guidance document is specifically written to help landlords, managing agents, enforcing officers and those undertaking fire risk assessments to understand the legislative requirements relating to blocks of flats and to apply them in a consistent and reasonable manner.

1.4 Legislation

This fire risk assessment has been compiled using the PAS 79 methodology alongside relevant current guidance and best practices. It is designed to help reduce the risks to a tolerable level.

1.5 About the Assessor

Name:	Andrew West
Qualifications:	BEng (Hons), MSc, C.Eng., MICE
Experience	35 years' experience in the Construction Industry in all aspects of the design and construction of both low rise and high rise multi-storey residential buildings together with associated infrastructure. Initially trained and worked as a civil engineer in a Blue-Chip consulting practice. Involved / responsible for the design and construction management of numerous office buildings, the Pepsi Max Big One rollercoaster in Blackpool, numerous power stations all over the works (inc. the design life extension of Hinkley Point A nuclear power station), numerous contamination remediation schemes & expert witness investigations. Design & Management of numerous multi-discipline technical teams, for private developers, delivering both low rise and high-rise multi-occupation buildings. Head of Development & Deliver for two large Housing Associations (each > 50,000 homes). Group Head of Technical responsible for Building Safety for Home Group's portfolio of buildings, including FRA, external wall, internal compartmentation, fire door inspections and building safety cases.

2. The Premises

2.1 Building Details

Name of the Business	Ashdee Limited
Full address	Castellum Apartments, Fowler Road, Aylesbury. HP19 7BU
Number of floors	Ground + 2
Description	The building comprises a former office ground + 3 storey office block. The ground, 1st and 2nd floors were converted to residential accommodation in 2023. The 3rd floor is currently undergoing conversion by MCR Homes and is a construction site. The original office car park at the rear and north of the building is being developed by MCR Homes into 64 houses and is a construction site.
Approximate Gross floor area (m^2):	7,500m^2 (residential areas only)
Construction Type	Brickwork and glazing external walls with concrete floor slabs.
Does the premises have single or multiple occupancy?	Multiple (including the construction site on the 3rd floor)

3. The Occupants

3.1 Occupant Numbers

Approximate maximum number of occupants in the building	342 (assuming 2x persons & 1 visitor per flat)
Approximate number of employees at any one time	Zero.
Maximum number of members of public at any one time	None.
Do external contractors regularly work on the premises?	Yes- construction workers are present on the construction site to the rear and the 3rd floor.

3.2 Use of the Premises

The ground, 1st and 2nd floors are currently being used as residential accommodation. The 3rd floor is currently undergoing refurbishment from redundant office space into additional residential accommodation.

3.3 Associated Times / Hours of Occupation

The accommodation may be occupied on a 24-hour 7 day a week basis.

3.4 Occupants Especially as Risk

Are there any sleeping occupants on the premises?	Yes	
Is the premises used by anyone with a disability?	Unknown	MCR have confirmed that there are no residents present with the building with disabilities.

		A resident profile has not been viewed. Refuge points are not present in any of the stairwells.
Do young persons use the building (younger than 18 years old)	Yes	Families are present in the building.
Are there any other vulnerable persons especially at risk from fire?	Unknown	Please see above.

3.5 Fire Loss Experience

Unwanted fire calls in the past 12 months	Unknown.
Fires related incidents in the past 10 years	Unknown.

4. FIRE HAZARDS AND THEIR ELIMINATION OR CONTROL

4.1 Electrical Sources of Ignition

		Comment
Are reasonable measures taken to prevent fires of electrical origin?	Yes	All electric service rooms and risers are tidy and clear flammable materials. The construction works to the 3rd floor present a risk. The CPP has been viewed and this acknowledges the site and addresses the fire risks.
Are the fixed installations periodically inspected and tested?	Yes	Certificates are available and have been viewed for the electrical installation (whole building), the fire alarms in the flats and the lifts.
Are portable appliances tested (PAT) within acceptable frequencies	N/A	No portable equipment was present during the inspection.
Is there a suitable policy regarding the use of personal electrical appliances?	No	No heating in the communal areas.
Are electrical leads and extension cables well managed and carefully positioned?	N/A	No extension cables were present at the time of the investigation.
General comments:		

4.2 Smoking

		Comment
Is smoking permitted on the premises	No	Smoking is not permitted within common areas of the building.

Does smoking occur in areas that are not designated as smoking areas?	No	
Within designated smoking areas are smokers' materials disposed of safely?	N/A	
General comments:		

4.3 Arson

		Comment
Does basic security against arson by outsiders appear reasonable?	No	Access into the common areas of the building is controlled with a fob. Access to the apartments is by lock and key.
General comments:		

4.4 Fixed & Portable Heating Provisions

		Comment
What fixed heating installations are used to heat the premises?		Electric heating (with MVHR) is provided to all flats. The communal areas are unheated.
Are fixed heating installations subject to regular maintenance?	Unknown	

Are additional portable heating appliances in use?	No	There are no portable heating appliances present. It is possible that temp heating appliances will be used in the 3rd floor construction works. Details of this are not available.
Is their use suitably controlled to minimise the risk of a fire to an acceptable standard?	N/A	The arrangements for maintenance of the heating systems are unknown and no records are available
General comments:		

4.5 Cooking

		Comment
What type of cooking facilities are provided at the premises?		No communal cooking facilities. Kitchens provided in individual apartments
Are reasonable measures taken to prevent fires as a result of cooking?	N/A	
Are suitable extinguishing appliances available in the cooking facilities?	N/A	
General comments:		

4.6 Lightning

	Comment

Do the premises have a lightning protection system?	Yes	Lightening protection is provided to the building. This is being maintained and the maintenance certificate is presented in the appendix.
General comments:		

4.7 Housekeeping

		Comment
Is the standard of housekeeping adequate?	No	The residential communal corridors were clear of any obstructions. The protected staircases and ground floor lobby areas were not, with minor obstacles. There were bikes, prams and construction materials present. Within the MAP lobby there is a reception desk and other reception furniture. If these are not used, then they need to be removed. Post / parcel are left behind the desk. There seems to be a confused strategy regarding tolerance to housekeeping standards. It is not certain if the strategy is 'zero tolerance', or 'managed'
General Comments		

4.8 Furniture & Furnishings

		Comment
Do furniture and furnishings meet FFFSR standards?	Yes	
General comments:		

5. FIRE PROTECTION MEASURES

5.1 Means of Escape from Fire

		Comment
Is the premises provided with reasonable means of escape in case of fire?	No	The as-built GA of the building does not vary from the original fire strategy. There are four signed exists from the building. Once on each boundary. The exit on the on the southern boundary is also being used as a construction entrance / exit for the 3rd floor construction works. The exits to the rear and northern sides are through the house development construction site. The site have ensured that these remain open and have provided signage and routes through the site to rendezvous points.
Are there enough exit routes for the number of people in the building?	Yes	
Are all exits easily and immediately openable where necessary?	No	The exit on the northern boundary is obstructed with a barrier and confusing construction notices. The exit in this area is due to be closed shortly to demolish imminently. Once the annex is demolished then the exit will be re-instated and suitable provision in place for the clear access away from the building. The CPP addresses this closure, and an alternative exit route has been provided during the demolition work. Live Safe have advised on this.
Are escape routes unobstructed?	No.	Please see the above comments.

Are all travel distances within acceptable levels?	Yes	
Are there suitable fire provision for all inner rooms?	N/A	No inner rooms.
Are arrangements for means of escape for disabled people reasonable?	No	Assessed previously in Section 3.4.
Are external escape staircases and gangways subject to a suitable maintenance schedule?	N/A	None present.
General Comments		

5.2 Measures to Limit Fire Spread & Development - Internal

		Comment
Is the compartmentation of a reasonable standard?	Yes	Compartmentation appeared competent. A visual inspection within the risers showed fire stopping was in place. The fire stopping was undertaken by a registered contractor as certificates are present. The fire stopping register has not been provided and this needs to be reviewed. At one door location the door appeared to be incorrectly installed. Additional there appeared to be a breach of compartmentation between the walls and timber floor. Design details and QA records were not available or viewed.

Do walls provide suitable protection to escape routes?	Yes	There are no flammable materials along the escape routes.
Are fire doors in good condition, providing good compartmentation?	Yes	A fire door survey has been undertaken of all the communal and flat front doors. This showed that all the doors did not achieve the required fire resistance, and all need some form of repair.
Are fire shutters in good condition, providing good compartmentation?	Not Applicable	None present.
Do ducts that pass- through fire separating walls have dampers fitted?	N/A	None present.
General Comment		

5.3 Measures to Limit Fire Spread & Development - External

		Comment
Are reasonable measures in place to prevent rapid fire spread across the external surfaces of the building?	No	The external wall construction is traditional masonry with glazing and spandrel panels. The construction of the spandrel panels in unknown.
Has the outer face of the building been provided with an insulating cladding system?	No	
Is the external cladding system in a good state of repair, capable of resisting a fire from an external source?	N/A	

Are there features of the building construction which might assist a fire to spread vertically?	No	The temporary works and the storage of materials from the construction works may assist the spread of fire.
Are balconies present and are they constructed in such a way as to minimise the spread of fire from balcony to balcony?	No	
General comments:		

5.4 Emergency Escape Lighting

		Comment
Has a reasonable standard of emergency escape lighting been provided?	Yes	Emergency lighting provided on all floors at a reasonable spacing sufficient for emergency exit.
Cause & Effect known	Yes	Lighting comes on if there is a power failure,
Testing and maintenance	Provided	The latest commissioning certificate is to be provided in the Appendix.
General comments:		

5.5 Fire Safety Signs & Notices

		Comment
Is there a reasonable standard of fire safety signs and notices?	No	The fire safety signages references manual call points that looks like they have been disabled.

		This is confusing.
General comments:		

5.6 Means of Giving Warning in Case of Fire

		Comment
What alarm system has been installed on the premises.		The residential flats have individual smoke / heat detectors and sounders – LD3. The communal areas do not have a fire alarm. There are fire alarms and clearly redundant fire alarms in store cupboards and areas of high risk. These are from the previous office building and the client confirmed that they are redundant. They should be removed to avoid confusion. The CPP for the 3rd floor construction works addresses the interface between the residential areas and the construction site.
Is the means of giving warning, in case of fire, appropriate for the occupancy and fire risk?[1]	Yes	
Cause & Effect known	Yes	
Are sound levels, of the alarm system, adequate throughout the premises?	Unknown	Test certification not observed.

Testing and maintenance	Yes	Commissioning certificates were available for the residential flat areas.
General comments:		

5.7 Manual Fire Extinguishing Appliances

		Comment
Is there reasonable provision of portable fire extinguishers?	N/R	
Are all fire extinguishing appliances readily accessible?	N/A	
Testing and maintenance	N/A	
General comments:		

5.8 Automatic Fire Extinguishing

		Comment
Is there automatic fire extinguishing on the premises?	No.	
Cause & Effect known	N/A	

Testing and maintenance	N/A	
General comments:		

5.9 Smoke Control

		Comment
Is there a smoke control system installed on the premises?	Yes	AOV at the head of all staircases. Automatic opening windows are present in all the communal corridors. Both of the above are connected to smoke detectors in the communal corridors and lobbies. Details of the interface of the smoke detection / fire alarms on the 3rd floor and the AOV is addressed in the CPP. Activation on the fire alarms in the construction areas will automatically activate the AOV at the head of all the stairs.
What is the purpose of the smoke control system?	Yes	The smoke control system is designed to minimise smoke build up in the common areas of the building. The smoke control is appropriate for the building.
Cause & Effect known	Yes	Unknown
Testing and maintenance	Provided	Commissioning & maintenance are not available.
General comments:		

6. MANAGEMENT OF FIRE SAFETY

6.1 FIRE STRATEGY DOCUMENTATION / PROVISIONS

		Comment
What is the evacuation strategy for the building?		Stay put.
Who is responsible for the management of fire safety on the premises?	Not Known	MCR National Homes Ltd.
Are there suitable arrangements for summoning the fire and rescue service?	Yes	The residents are advised to call the FRS if there see a fire.
What arrangements have been made for ensuring that the premises has been evacuated?	Not Applicable	The building operates a stay put strategy.
Is there a suitable fire assembly point?	Yes.	The fire assembly points are clearly identified on site
Are there adequate procedures for evacuation of any disabled people who are likely to be present?	No	There are no refuges or call points present in any of the stairwells. There are no notices warning visitors that it is their responsibility to ensure that they are to evacuate in the event of a fire.
Are there routine in- house inspections of fire precautions?	Unknown	Details were not provided of the routine inspections.
Is a suitable defect reporting system in place\	Unknown	No details were provided.
General comments:		

7. FIRE SERVICE ACCESS & INFORMATION

7.1 Information for the Fire Service

		Comment
Is an information pack available for handover to the fire service?	No	A fire box was present in the MAP lobby. However, access to this was not possible.
Is information available on the luminous discharge (neon) signs?	N/A	Mo luminous signs are present on site.
Is information available on the photovoltaic generating system?	N/A	No PV.
General comments:		

7.2 Access & Water Supply

		Comment
Is vehicular access for the fire service acceptable?	No.	There are three dry riser inlets on the site. One in the MAP staircase, one on the rear elevation of the building and one on the southern elevation. Access to the Dry Risers is through the construction site and site rules are in place to ensure that access is maintained.
Are local water supplies sufficient for firefighting?	No.	Communication has taken place with the local FRS for them to bring water tankers to the site in the event of a fire as hydrants are un accessible or not working.
General comments		

7.3 Maintenance of Facilities, Equipment & Devices Provided for Firefighting

		Comment
Rising Mains	Yes	Dry risers are present.
Fire-fighting lifts	No	None present.
Testing and maintenance	Provided	A maintenance inspection of all the dry risers was undertaken on 18/03/24. One riser failed and others all have minor defects.
General comments:		

8.0 PREMISES FIRE RISK RATING

The following simple fire risk level estimator is based on a commonly used health and safety risk level estimator:

Likelihood	Potential Consequences		
	Slight harm	**Moderate harm**	**Severe harm**
Low	Trivial	Tolerable	Moderate
Medium	Tolerable	Moderate	Substantial
High	Moderate	Substantial	Intolerable

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

Risk Level	Action and Timescale
Trivial	No action is required and no detailed records need to be kept.
Tolerable	No major additional fire precautions required. However, there might be a need for 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.

8.1 Likliehood of Fire

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:

Medium

There is a low likelihood of fire because of negligible potential sources of ignition.

8.2 Impact of Fire

Considering the nature of the premises and the occupants, as well as the fire protection and procedural arrangement 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:

Moderate Harm

An outbreak of fire could foreseeably result in injury (including serious injury) of one or more occupants, but it is unlikely to involve multiple fatalities.

8.3 Summary of Risk Rating

Accordingly, it is considered that the risk to life from fire at these premises is:

Moderate

No major additional fire precautions required. However, there might be a need for reasonably practicable improvements that involve minor or limited cost.

8.4 Recommended Review

It is recommended that this fire risk assessment is reviewed in 12 months time to assess progress.

Once the various remedial actions are completed, the recommended review period may be extended if appropriate.

9.0 Action Plan

FRA Action Plan

Oxford House, Aylesbury

Date of FRA Survey 17/10/2024

To remedy the deficiences identified in sections 3 to 7, the following recommendations should be implemented in order to reduce the fire risk to, or maintain it at, the following level.

Trivial ☑ Tolerable ☐

Deficiency / Rectification	*Priority*	*Date to be Rectified*	*Date Rectified*	*Action by Whom?*
Resident profile required to determine if there are any residents with disabilties or vulnerabilities	Medium			MCR
Posters to be provided to advise residents that they are responsbile for the evacuation of any visitors with disabilities or vulnerabilities.	Medium			MCR
The fire history to be established - Details of any unwanted fore calls in the last 12 months and any fire related incidents within the last 10 years to be provided.	Medium			MCR
CPP to be monitored to ensure that the procedures for a low risk of electical fires are maintained.	Medium			MCR
Defect fire doors to be reapired.	High			MCR
The elctrical commissioning certificates for the communal areas to be provided.	Low			MCR
Commissioning / maintenance certificates for the residential fire alarms to be provided	High			MCR
The front foor to the building is permanently open and needs to be closed and the entry managed.	Medium			MCR
The fob entry to the residential communal corridors has been disabled and needs to be reinstated.	Medium			MCR
The housekeeping sttratgey - "zero tolerance" or "Manged" needs to be estabioisjhed. Neither look like they are being followed.	Medium			MCR
The compaertmentation looks like it is comprimised at the junctions of the servicerooms and the communal corridprs. This needs o be checked and confirmed / repaired.	high			MCR
Construction of the spandrel panels adjacent to the windows needs to be established to ensiure that there is no risk of fire spread.	Low			MCR
The exiting manual fire alarms are still present - it is not known if these are working. These have the potential to confuse residents	Medium			MCR
Fire alarms and sounders are present in store cupboards and areas of high risk. It is not known how these are connected to the communal alarm. If the alarms are removed how is an fire in these areas managed?	high			MCR
Tenure arrangements to be claried including the use of any apartments as Airbnb.	Medium			MCR
Defets Management / change management process to be provided.	Medium			MCR
Details of routine in-house fire precaution inspections were not available.	Medium			MCR
Contents of the fire box could not be assessed for suitability	Medium			LSLtd
Dry risers have defects identified during routine maintenance. These still apear to be outstanding	High			MCR
Hydrants obstructed - Detailas of locations and protection arrangements to be established.	High			MCR

Appendix A

Fire Door Survey Results

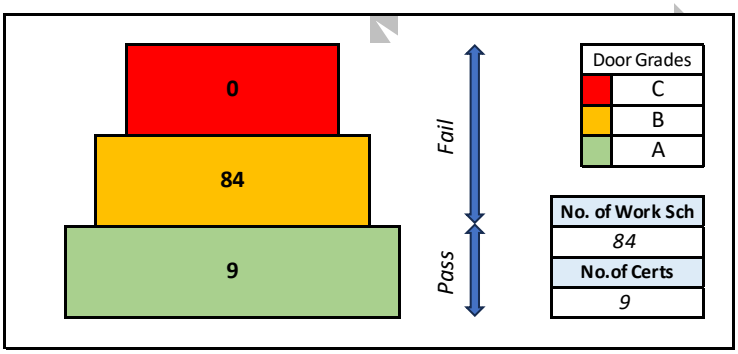
MCR Homes

Fire Door Summary

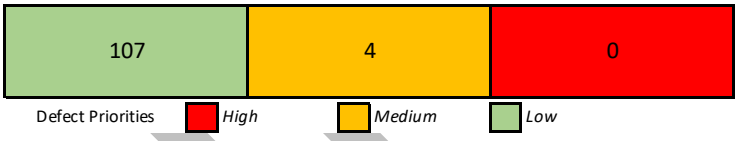
Oxford House, Aylesbury

Total Doors	Surveyed	% Complete	No Access	Not Surveyed
201	93	46%	108	0

Surveyed Door Grade Profile



Defects Profile **Total No. of Defects = 111**



Average No. Defects / Door	1.19

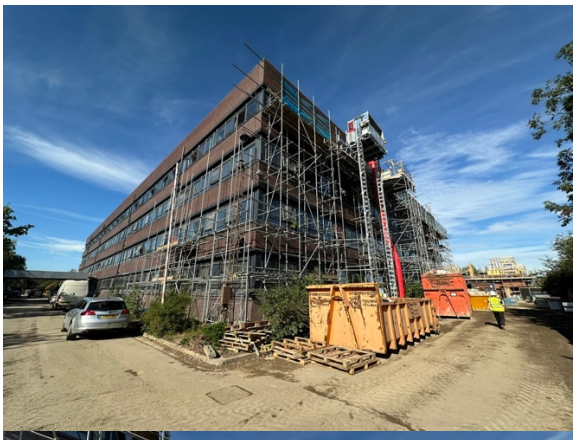
IMPACT	66%
Likelihood	47%

Risk of Fire Spread Due to FD's	Medium	31.3%
Door Type:	*Flat Front Doors*	*Communal Doors*
No.	*114*	*87*
Next Survey Due:	*17/05/2025*	*21/08/2024*

Date of Issue: 04/06/2024

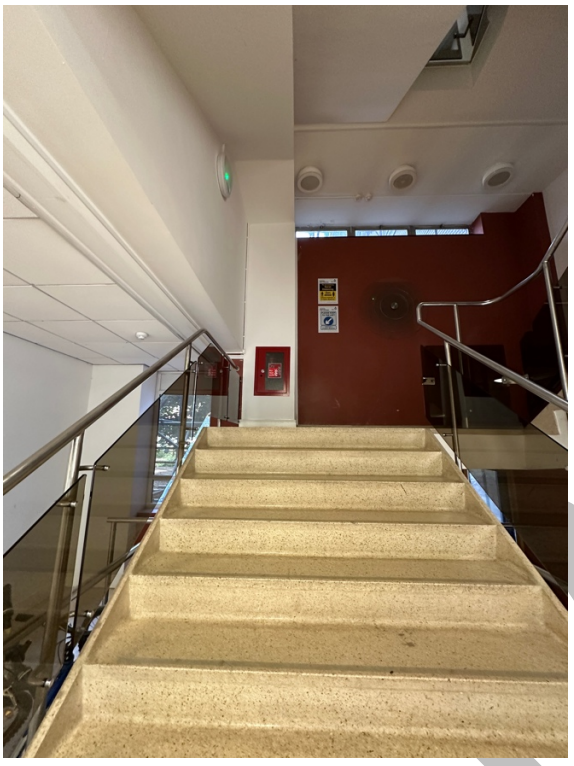
Appendix B

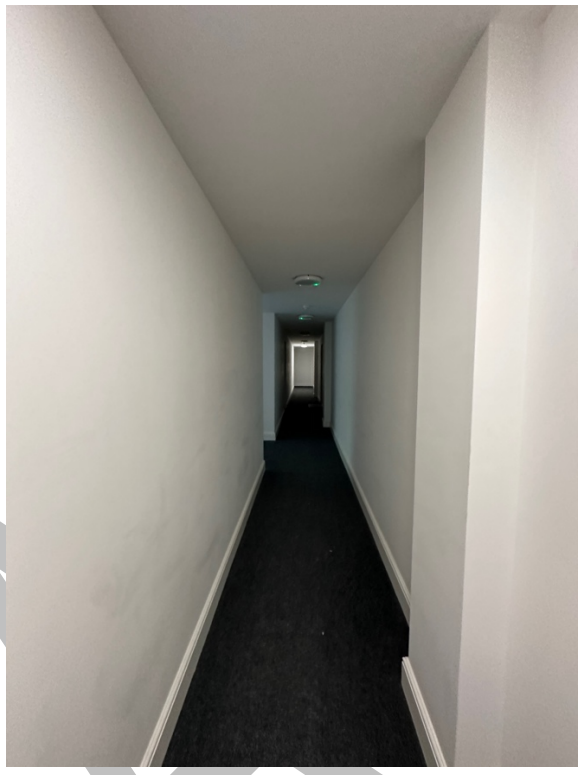
Photographs



Flint
020 845
F2600

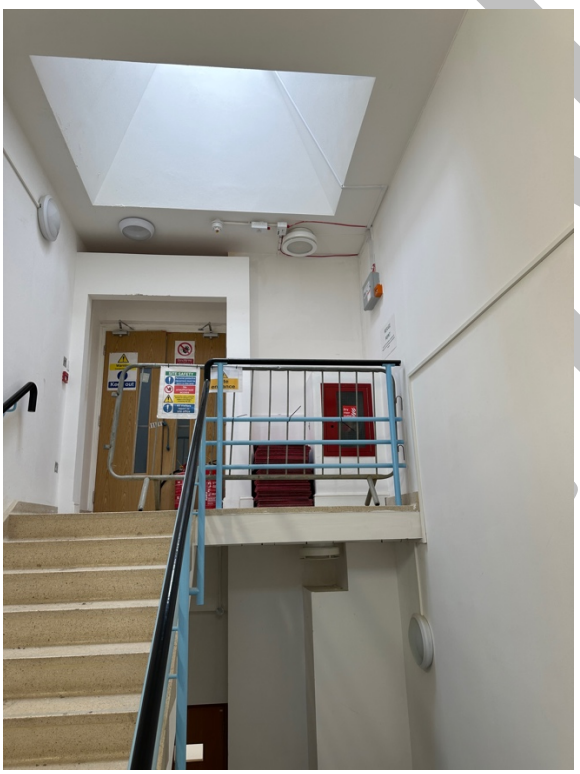





Fire exit


NO CHILDREN TO PLAY IN THIS AREA
Strictly no admittance


Store Room



Appendix C

Fire Strategy & Plans

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Document Author and Approval Sign-Off:

Prepared by:	Dave Saunderson	Senior Surveyor
Checked by:	Craig Smith	Service Manager
Approved by:	Craig Smith	Service Manager

Document History:

Rev No	Comments	Approved	Date
Issue 1	Initial Issue to Client & Design Team	CS	28/09/2018
Issue 2	Issue after comments from design team.	CS	06/12/2018

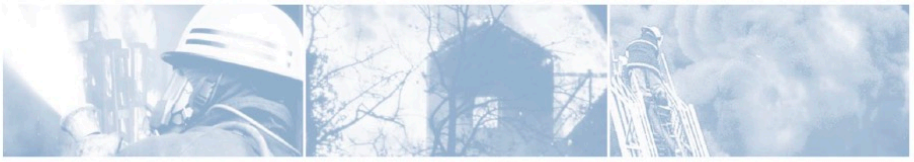
BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Contents

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 1:

Introduction



BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

1.0 Introduction

1.1 General

The objective of this fire safety strategy report is to demonstrate compliance with the Building Regulations 2010. This report outlines the fire safety strategy for the conversion of the ground and second floors of the building from office accommodation to residential flats and is designed to be a summary of the provision incorporated into the design. It should be read in conjunction with the plans in Appendix 1 and listed below.

It is anticipated that the fire safety strategy for the buildings will remain unchanged once agreed. Any future changes to the fire safety strategy must be agreed with all statutory undertakers.

This strategy is based on the information available at the time of preparing this report, which includes the following drawings:

2741 – 1101F

2741 – 1102A

2741 – 1103J

2741 – 1004A

There may be design developments that require inclusion, but it includes all known factors as of the date of this report.

1.2 Specific Exclusions

The fire safety strategy addresses life safety under the Building Regulations. It does not specifically address either property protection, or business disruption. Building insurers should be consulted over the proposals since their preferences are sometimes more onerous. However, in that much damage is attributable to the effects of smoke, by addressing the needs of life safety, these other aspects are to some extent also addressed.

1.3 Fire Risk during Construction

The fire strategy report does not address fire precautions during the building works for which the risks and hazards can often by higher. The HSE issues guidance on identifying and managing fire precautions during the works and they should be consulted accordingly. The guidance has particular significance for this project if the building remains occupied during the works.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

1.4 Regulatory Reform (Fire Safety) Order

This report will form part of the information required by the building owner to assist the responsible persons to operate, maintain and use the building in reasonable safety and to meet their statutory duties under the Regulatory Reform (Fire Safety) Order.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 2:

Legislation and Guidance

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

2.0 Legislation and Guidance

2.1 Building Regulations 2010

With few exceptions, all buildings built in England and Wales must comply with the England and Wales Building Regulations 2010.

The principle aim of the Building Regulations is to ensure the health and safety of people in and around a building.

The '*requirements*' set out the broad objectives or functions which the individual aspects of the building design and construction must set out to achieve. They are therefore often referred to as '*functional requirements*' and are expressed in terms of what is '*reasonable*', '*adequate*', or '*appropriate*'.

2.2 Approved Document B – Fire Safety Volume 2.

The department of Communities and Local Government (formerly the Office of the Deputy Prime Minister) has produced a number of guidance documents to assist designers in meeting the relevant requirements of the Building Regulations. These 'Approved Documents' provide guidance on different aspects of the Regulations. Approved Document B Fire safety Vol. 2 (ADB) provides general design guidance on ways in which the functional fire safety requirements can be satisfied. Part B of Schedule 1 of the regulations set out the 'requirements' for achieving a reasonable level of fire safety. These 'requirements' address the following:

- B1 – Means of Warning and Escape.
- B2 – Internal Fire Spread (Linings).
- B3 – Internal Fire Spread (Structure).
- B4 – External Fire Spread.
- B5 – Access and Facilities for the Fire Service.

However, the document is intended to provide guidance on the more common building situation and there is no obligation to adopt any particular solution contained in the Approved Document if you prefer to meet the relevant requirement in some other way.

2.3 BS 9999:2017 Code of practice for fire safety in the design, management and use of buildings

BS 9999 *Code of practice for fire safety in the design, management and use of buildings* came into effect on the 31 January 2017. This guidance supersedes a number of guidance documents in the BS 5588 '*Fire precautions in the design, construction and use of buildings*' series, including BS 5588: Part 11. '*Code of practice for shops, offices, industrial, storage and other similar buildings*'.

The guidance provided in BS 9999 allows for a more flexible and transparent approach to fire safety design through use of a structured approach to risk based design, where designers can take account of varying physical and human factors.

The standard covers four main areas that influence fire safety measures, as follows:

- Fire safety management;
- Means of escape provisions;
- Structural protection of means of escape facilities and the structural stability of the building in the event of a fire;
- Provision of access and facilities for fire-fighting.

The recommendations and guidance given in this British Standard are intended to safeguard the lives of building occupants and fire-fighters.

Whilst some of the recommendations and guidance might also assist in the achievement of other fire safety objectives – such as protection of property, the environment, communities and business/service viability – additional measures might be necessary which are outside the scope of this British Standard.

The British Standard does not cover fire safety design strategies for extreme events such as terrorist actions. It is also not applicable to individual dwelling-houses and residential developments BS 9991;2015 should be used.

2.4 BS 9991:2015 Code of practice for fire safety in the design, management and use of residential buildings

BS 9991 *Code of practice for fire safety in the design, management and use of buildings* came into effect on the 31st October 2015. This guidance supersedes a number of guidance documents in the BS 5588 '*Fire precautions in the design, construction and use of buildings*' series, including BS 5588: Part 11. '*Code of practice for shops, offices, industrial, storage and other similar buildings*'.

The guidance provided in BS 9991 allows for a more flexible and transparent approach to fire safety design through use of a structured approach to risk based design, where designers can take account of varying physical and human factors.

The standard covers four main areas that influence fire safety measures, as follows:

- Fire safety management;
- Means of escape provisions;
- Structural protection of means of escape facilities and the structural stability of the building in the event of a fire;
- Provision of access and facilities for fire-fighting.

2.5 Fire Safety Engineering

Fire safety engineering can provide an alternative approach to fire safety and can be the only practical way to achieve a satisfactory standard of fire safety in large and complex buildings and in buildings containing different uses. Fire safety engineering can also be used to solve a specific problem with an aspect of a design which otherwise follows a design code. Detailed guidance on fire safety engineering is given in BS 7974.

2.6 Regulatory Reform (Fire Safety) Order 2005

The Regulatory Reform (Fire Safety) Order 2005 came into force in October 2006, and with its introduction the Workplace Regulations and the Fire Precautions Act ceased to have effect. The Order deals with buildings in use, and requires fire precautions to be put in place where necessary and to the extent that it is reasonable and practicable in the circumstances of the case.

Responsibility for complying with the Fire Safety Order rests with the '*responsible person*' in a workplace. This is the employer and any other person who may have

control of any part of the premises, e.g. the occupier or owner. If there is more than one responsible person in any type of premises, all must take all reasonable steps to work with each other.

The responsible person will have to carry out a fire risk assessment which must focus on the safety in case of fire of all persons who may be affected by a fire in the building e.g. occupiers, fire-fighters and other members of the public. It should pay particular attention to those at special risk, such as the disabled and those with special needs, and must also give consideration to any dangerous substance likely to be on the premises. The fire risk assessment will help identify risks that can be removed or reduced and to decide the nature and extent of the general fire precautions needed to protect people against the fire risks that remain.

The Order applies to the entire premises and facilities.

2.7 Regulation 38

Regulation 38 of the Building Regulations states that, where building work involves the erection or extension of a relevant building, or a relevant change of use of a building which affects fire safety, it is necessary that the fire safety information for the building shall be given to the responsible person at the completion of the project or when the building or extension is first occupied. The information will facilitate the production of a fire risk assessment which is a requirement of the Regulatory Reform (Fire Safety) Order.

The fire safety information in this strategy may be used to supplement the information required to be given to the responsible person. As a minimum it will be necessary for the occupier of the building to be given the fire strategy document and all the fire safety plans. Further information can be found in Appendix G of Approved Document B Vol. 2.

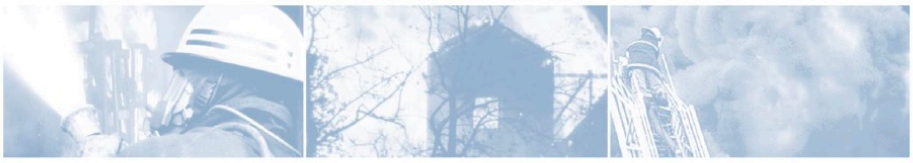
2.8 Principle Design Guidance

On the basis of the information currently made available it is believed an acceptable Fire Strategy can be developed for the scheme using Approved Document B Vol. 2 as the principle design guidance.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 3:

Brief Description of the Building



BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

3.0 Brief Description of the Building

3.1 The Project

The existing building is a four storey office block with a plant room on the roof.

The first and third floors are to remain office accommodation until the current leases expire. The ground and second floors of the building are being converted from office accommodation to residential flats.

Flats are permitted to share access stairs in buildings with not more than three stories above ground level provided both flats and other accommodations are separated from each other by protected lobbies (*see Approved Document B Volume 2 paragraph 2.50*).

3.2 Phased Development

Not considered in this report. Additional reports will be required as and when the remaining floors are converted to residential.

3.3 Storey Heights, Building Geometry and Cladding Materials

The height of the surface of the highest storey (excluding any storey consisting exclusively of plant rooms) above Fire Service access level is approximately 11.5m.

Elevations are brickwork and glazing. There no cladding on the existing building and none is proposed as part of the conversion.

3.4 Building Occupancy

The building is currently office accommodation the ground and second floors are being converted to residential. The office units on the first and third floors will all be provided with lobby protection between them and the four protected stairs.

The occupancy in the existing office units on the first and third floors will remain unchanged and all office accommodations will evacuate in the event of a fire. The ground and second floors will have greatly reduced occupancy and the residential units will have a stay put evacuation policy which will only result in a handful of people having to evacuate following a fire in one of the flats.

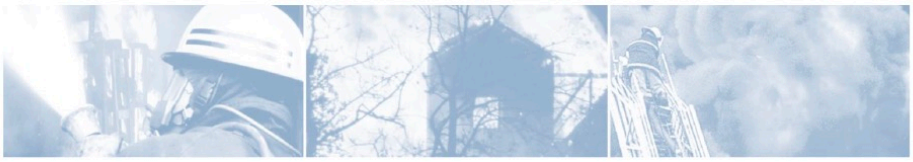
3.5 Perimeter Access

There is fire service access to 80% of the perimeter walls, excluding the courtyards. 50% if outside walls of the courtyards are included.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 4:

Means of Warning and Escape



BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

4.0 Means of Warning and Escape

4.1 Evacuation Regime/Fire Detection

The existing fire alarm system will remain in place for the office units on the first and third floors and they will maintain a one-out-all-out evacuation policy. Any disabled refuge points on the commercial floors will remain in place and will report back to a manned location. The offices fire alarm system(s) will be linked to the new alarm system to BS 5839 - Part 1: 2013 in the flat accommodation corridors and stairwells. In the event of smoke being detected in any of the corridors or staircases, the office accommodation will go into evacuate. In addition, there will be call points at each storey exit from the residential accommodation linked back to the offices fire alarm system(s).

The flats will each have their own residential smoke alarm systems to BS 5839 Part 6, 2004 to at least grade D and at least grade B category LD3 to any flat will a floor area exceeding 200m$^{2.}$

Individual flats will have a one-out-all-out evacuation regime with the house-holders being responsible to ensure everyone evacuates in the event of a fire. The remaining flats which are not directly impacted by the fire will have a stay put regime and will be able to stay put until the fire service arrives and they take control of the situation.

Each flat has its own one hour fire rated enclosure and any further evacuation of additional flats will be managed by the fire service. In the majority of cases, the other occupants are advised to stay put and close their doors and windows.

Each individual household will of course be free to evacuate if they wish. An advisory document should be provided to all tenants making them aware of what to do in the event of a fire (see 4.12 for more detail)

The shape and design of the building ensures there will always be two directional escape from every flat and all stairs exit to the open air.

There is a smoke detection system in the all the protected stair enclosures and associated corridors which in the event of activation will operate the appropriate AOV's at the top of the stairs and the corridors connected to the escape stairs.

If a smoke detector goes off in a corridor, the AOV(s) in that corridor and the two staircases connected to the corridor will also open their AOV's in addition to placing the office accommodation into evacuate. There will not be any sounders in the residential corridors as the system is only there to activate the AOV's in the stairwells and corridors.

There will be security doors activated by an access control system provided from the lift areas to prevent occupiers from the office areas accessing the residential areas. These will open on activation of localized smoke detection which will ensure these areas are still ventilated via an AOV.

The lifts are not to be used in the event of a fire. If possible, the activation of the smoke detectors in the lift lobbies and the lift shaft (if fitted) should cause the lift to park on the ground floor with its doors open. Alternatively, the activation signal to the AOV in the stairwell containing the lift should be linked to the lift to cause it to park on the ground floor.

4.2 Protected circuits

All protected circuits will consist of cable to meet the following classification when tested to BS EN 502000:2006:

Fire alarm system: PH30,

Emergency lighting: PH60,

EVC system: PH120

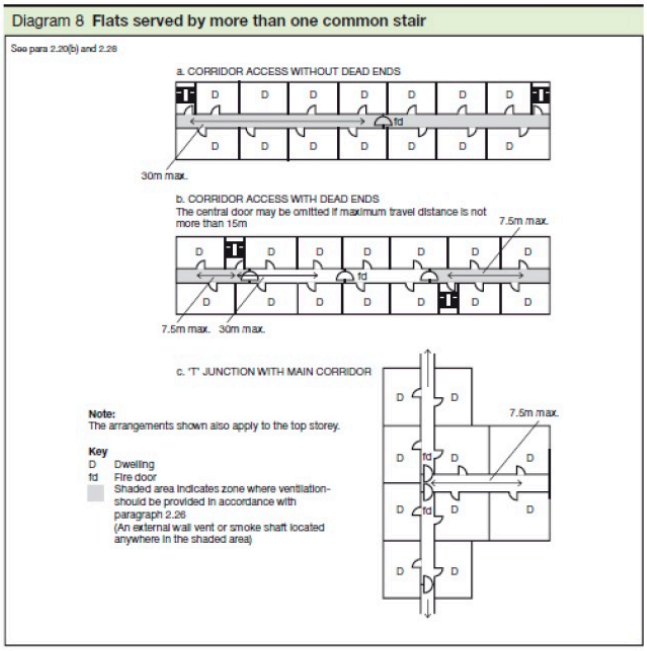
Note: Cable supports will be non-combustible and designed such that the circuit integrity afforded by the cable is maintained. Also, all insulation and sheathing on cables will be Zero Halogen Low Smoke type to minimise the risk from toxic fumes and smoke.

4.3 Travel Distances & Horizontal Means of Escape

Actual escape distances in the corridors are within the distances recommended in Approved Document B volume 2 Diagram 8

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Diagram 8 **Flats served by more than one common stair**



There are no dead-end corridors and the stairs are all within 60m of one another.

All the corridors are vented with AOV's on each floor, no vented corridor is more than 30m from an AOV.

The stairs are separated from the individual flats by a ventilated corridor which provides the lobby protection to the protected stairs.

On the first and third floor levels, lobbies have been formed to separate the office accommodation from the access stair.

There are a few flats with inner rooms which are located on the ground floor. These will be provided with escape windows as they are under 4.5m from outside ground level.

4.4 The Escape Stairs - Capacity

The existing stairs are designed to deal with complete evacuation of the building. The usage has now changed on the ground and second floor with only a handful of people needing to escape at any one time from the flats. There is no change to the occupation numbers in the offices on the first and third floors. The existing stairs are therefore adequate to accommodate the occupants of the newly formed flats.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

4.5 Escape Stairs – Enclosure

Protected escape stairs are provided through out. All protected stairs are enclosed with fire resisting construction of not less than 60 minutes.

4.6 Fire Doors

All fire doors will be FD30S or FD60S, i.e. fitted with combined intumescent and smoke seals and have the minimum clear dimensions within the table in appendix B.

Table B1 **Provisions for fire doors**

Position of door	Minimum fire resistance of door in terms of integrity (minutes) when tested to BS 476-22 [1]	Minimum fire resistance of door in terms of integrity (minutes) when tested to the relevant European standard [2]
1. **In a compartment wall separating buildings**	As for the wall in which the door is fitted, but a minimum of 60	As for the wall in which the door is fitted, but a minimum of 60
2. **In a compartment wall:**		
a. If it separates a flat from a space in common use;	FD 30S [2]	E30 Sa [2]
b. Enclosing a protected shaft forming a stairway situated wholly or partly above the adjoining ground in a building used for Flats, Other Residential, Assembly and Recreation, or Office purposes;	FD 30S [2]	E30 Sa [2]
c. enclosing a protected shaft forming a stairway not described in (b) above;	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum and with suffix S [2]	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum and with suffix Sa [2]
d. enclosing a protected shaft forming a lift or service shaft;	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum	Half the period of fire resistance of the wall in which it is fitted, but 30 minimum
e. not described in (a), (b), (c) or (d) above.	As for the wall it is fitted in, but add S (2) if the door is used for progressive horizontal evacuation under the guidance to B1	As for the wall it is fitted in, but add Sa [2] if the door is used for progressive horizontal evacuation under the guidance to B1
3. **In a compartment floor**	As for the floor in which it is fitted	As for the floor in which it is fitted

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

4. **Forming part of the enclosures of:**		
a. a protected stairway (except as described in item 9) ; or	FD 30S [2]	E30 Sa [2]
b. a lift shaft (see paragraph 5.42b); which does not form a protected shaft in 2(b), (c) or (d) above.	FD 30	E30
5. **Forming part of the enclosure of:**		
a. a protected lobby approach (or protected corridor) to a stairway;	FD 30S [2]	E30 Sa [2]
b. any other protected corridor; or	FD 20S [2]	E20 Sa [2]
c. a protected lobby approach to a lift shaft (see paragraph 5.42)	FD 30S [2]	E30 Sa [2]
6. **Affording access to an external escape route**	FD 30	E30
7. **Sub-dividing:**		
a. corridors connecting alternative exits;	FD 20S [2]	E20 Sa [2]
b. dead-end portions of corridors from the remainder of the corridor	FD 20S [2]	E20 Sa [2]
8. **Any door within a cavity barrier**	FD 30	E30
9. **Any door forming part of the enclosure to a protected entrance hall or protected landing in a flat;**	FD 20	E20
10. **Any door forming part of the enclosure**	FD30	E30
a. to a place of special fire risk	FD30	E30
b. to ancillary accomodation in care homes (see paragraph 3.50).		

Note:
1. To BS 476-22 (or BS 476-8 subject to paragraph 5 in Appendix A).
2. Unless pressurization techniques complying with BS EN 12101-6:2005 Smoke and heat control systems – Part 6: Specification for pressure differential systems – Kits are used, these doors should also either:
   (a) have a leakage rate not exceeding 3m³/m/hour (head and jambs only) when tested at 25 Pa under BS 476 *Fire tests on building materials and structures*, Section 31.1 *Methods for measuring smoke penetration through doorsets and shutter assemblies, Method of measurement under ambient temperature conditions*; or
   (b) meet the additional classification requirement of Sa when tested to BS EN 1634-3:2001 *Fire resistance tests for door and shutter assemblies, Part 3 – Smoke control doors.*
3. The National classifications do not automatically equate with the equivalent classifications in the European column, therefore products cannot typically assume a European class unless they have been tested accordingly.

There will be no excessive gaps around doors (4mm tolerance is acceptable).

4.7 Escape Widths

The minimum widths required for escape routes, staircases and doors are 800mm for stairs doors area minimum 750mm for internal doors.

4.8 Final Exit Widths

Minimum final exit widths to be **850mm.**

4.9 Evacuation of Disabled Users/Occupants

Refuge points should be provided to the floors containing commercial units (first and third floors only).

Each refuge point will require an emergency voice communication (EVC) system designed and installed in accordance with BS 5839-9:2011 or a suitable communication system for the staff who will be responsible for the evacuation of disabled occupants. Suitable signs will also be provided to the disabled refuges.

The evacuation of disabled persons is the responsibility of the *management* and this strategy should be devised by the responsible person and written into the Fire Risk Assessment.

With regards to the floors with residential accommodation each flat is within its own 60 minute fire rated compartment and with the stay-put evacuation policy there is no requirement to have Disabled Refuge points to the stairs. Refuges are not provided in the flats as it remains the responsibility of the individual householders to facilitate evacuation.

Lifts should not be used in the event of a fire. The lift should park at the exit level. Lifts are not required to be evacuation lifts or fire fighters lifts as the height of each building does not exceed 18m.

4.10 Escape lighting

Escape lighting will be provided in accordance with BS5266 Parts 1 and 7 to all common escape routes (including external escape routes), all toilet accommodation with a floor area over $8m^2$, windowless sanitary accommodation with a floor area not more than $8m^2$, plant and electricity rooms or other similar rooms.

4.11 Escape signage

Escape signage will be provided to direct persons to alternative means of escape. The signage will be in accordance with BS5499 Part 1 2002 and BS5499 Part 4 2000.

4.12 Information for tenants and home owners.

The Regulatory Reform (Fire Safety) Order 2005 (RRO) requires the owner/ the management company responsible for the maintenance of the building to make occupants aware of the escape policy and what to do in the event of a fire.

Often this is just verbally relayed to the homeowner or tenant when they move in and left to them to organise their own evacuation policy. Best practice would be to issue them with written advice and or offer to provide sign for them to display. Example notice on next page.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Important Information for all Tenants about Fire Protection

If Fire Breaks Out In Your Home:

- Leave the room where the fire is straight away, then close the door
- Tell everyone in your home and get them to leave. Close the front door of your flat behind you
- Do not stay behind to put the fire out
- Call the fire service
- Wait outside, away from the building

If You See Or Hear Of A Fire In Another Part Of The Building:

- Your building is designed to contain a fire in the flat where it starts. This means it will usually be safe for you to stay in your own flat if the fire is elsewhere
- But you must leave immediately if smoke or heat affects your home, or if you are told to by the fire service
- If you are in any doubt, get out

To Call The Fire Service:

- Dial 999 or 112.
- When the operator answers, give your telephone number and ask for FIRE.
- When the fire service reply give the address where the fire is.
- Do not end the call until the fire service has repeated the address correctly.

==========

I confirm that I have discussed with staff at @@@@ about fire safety and have Also read and understood the above Fire Instructions and confirm I am aware of what actions I need to take in the case of a Fire.

Signed …….... Name in block letters ……

Property: …….. Date ……

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 5:

Internal Fire Spread (Linings)

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

5.0 Internal Fire spread (Linings)

5.1 General requirements

The nature of work means that code-compliancy can be accommodated throughout. Class 0 (B-s3, d2) will be applied to all circulation routes but does not apply to circulation areas that are rooms. It applies to stairs and all protected lobbies and corridors. Class 1(C-s3, d2) will apply to all wall and ceilings elsewhere. Small rooms may be to Class 3 (D-s3, d2).

Table 35 **Classification of linings** [A]

Location	National class [B]	European class [C], [D]
Small room of area not exceeding 4 m² in a residential building and 30 m² in a non-residential building and domestic garages not exceeding 40 m²	3	D-s3, d2
Other rooms (including garages)	1	C-s3, d2
Circulation spaces within dwellings	1	C-s3, d2
Other circulation spaces [D] including the common areas of flats	0	B-s3, d2

NOTE Linings which can be effectively tested for "surface spread of flame" are rated for performance by reference to the method specified in BS 476-7:1987, under which materials or products are classified 1, 2, 3 or 4, with Class 1 being the highest.

Class 0 is better than Class 1. It is not identified in any BS test standard. A Class 0 product is either:

a) composed throughout of materials of limited combustibility; or

b) a material having a Class 1 surface spread of flame and which has a fire propagation index (I) of not more than 12 and a sub-index (i_1) of not more than 6.

The fire propagation index is established by reference to the method specified in BS 476-6.

European classifications are described in BS EN 13501-1.

A) Recommendations are given in Clause **34** for linings of concealed voids.
B) The national classifications do not automatically equate with the equivalent classifications in the European column, therefore products cannot typically assume a European class, unless they have been tested accordingly.
C) When a classification includes "s3, d2" this means that there is no limit set for smoke production and/or flaming droplets/particles.
D) Large rooms such as open plan offices, shops display areas and factories need not be regarded as circulation spaces even though there are circulation routes in them.

Extract of Table 35 from BS9999

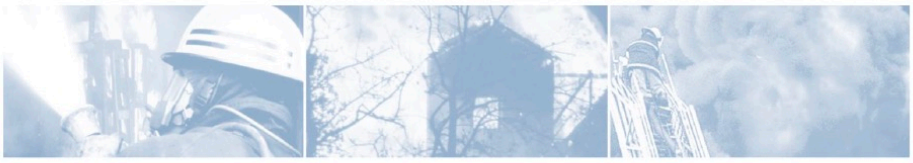
Having said this due to the risk posed by the cookers/hobs within the kitchen/social areas, wall and ceiling surfaces is to be restricted to Class 0 and comply with the food hygiene standards.

Note: Alternatively, European classifications given in the above table may be used.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 6:

Internal Fire Spread (Structure)



BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

6.0 Internal Fire Spread (Structure)

6.1 Fire Resistance to Elements of Structure

Fire resistance to elements of structure will be code-compliant.

Table A2 Approved Document B volume 2 recommends 60 minutes.

Table A2 Minimum periods of fire resistance

Purpose group of building	Minimum periods of fire resistance (minutes) in a:					
	Basement storey [1] including floor over		Ground or upper storey			
	Depth (m) of a lowest basement		Height (m) of top floor above ground, in a building or separated part of a building			
	More than 10	Not more than 10	Not more than 5	Not more than 18	Not more than 30	More than 30
1. Residential:						
a. Block of flats – not sprinklered	90	60	30*	60**†	90**	Not permitted
a. Block of flats – sprinklered	90	60	30*	60**†	90**	120**
b. Institutional	90	60	30*	60	90	120#
c. Other residential	90	60	30*	60	90	120#
2. Office:						
– not sprinklered	90	60	30*	60	90	Not permitted
– sprinklered [2]	60	60	30*	30*	60	120#

6.2 Compartmentation and service ducts

All party walls and service ducts will be provided with 60 minutes fire resistance from each side separately. The enclosures to the staircase/protected corridor/ protected lobbies will be constructed to achieve a minimum of 60 minutes fire resistance from each side separately.

Ducts or the like which penetrate any of the above structures are to be fire stopped or fitted with fire dampers as appropriate to the areas they pass through.

Note: where gas pipes pass (both supply and distribution pipes) through the building should meet the requirements of the pipelines safety Regulations 1996 SI 1996 No825 and the Gas Safety (installation and use) Regulations 1998 SI 1998 No 2451. The duct must also be adequately ventilated.

On the ground floor, there was a large service duct/trench in the floor approximately 1.3m deep which had the gas main serving the plant room on the roof and a number of redundant services.

It was discovered that the gas main was only serving the boilers on the roof. The duct didn't appear to be vented and it was decided to reroute the gas main from outside the building up the wall and across the roof to reconnect to the boilers in the plant room therefore avoiding any gas pipes having to be ducted and ventilated through the building. The residential accommodation will not have any gas supply the heating etc. as it will be served by electricity.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Eventually the remaining floors will be converted to residential accommodation and the gas can be disconnected.

The service duct/trench is now redundant and will be filled with pea shingle up to the level of the sub-floor.

Each floor in the building has a suspended floor approximately 550mm deep with an open void where various services ran to serve the offices. On the floors being converted the suspended floor will be upgraded to ensure it provides a full 60 minute fire resistance.

Within the void, the ventilation system from each office floor is ducted to central risers. On the ground floor, this poses no problem as it is now redundant and will be removed and all remaining penetrations capped off with two layers of plasterboard to provide 60 minute fire protection.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

The acoustic flooring being laid on top of the existing suspended floor will deliver 60 minutes fire protection. The supplier will provide a guarantee for each apartment.

An intumescent mastic seal is to be provided to the edges of the floor to cover the resilient material to the edge of the floor. This will be applied by trained installers and each apartment will be documented and be provided with an installation certificate.

On the second floor, the ventilation ducts from the first floor are still in use. The majority of the ducts are surrounded in concrete and have a high level of fire protection.

There are however some sections which are just metal ducts. All metal sections are being surrounded in concrete and will be documented and photographed.

The only other service that will run in the floor void on the ground and second floor will be the foul drainage.

The new foul drains will enter the building from soil and vent pipes on the outside of the building and enter the service void. Wherever the pipes penetrated the suspended floor or a fire barrier they will have intumescent collars to protect the void.

On each floor, the drainage system will be vented via vertical vent pipes which will be taken up to ceiling level and run through the ceiling void to re-connect with the external soil and vent pipes, again intumescent collars will be provided wherever they pass through compartment walls.

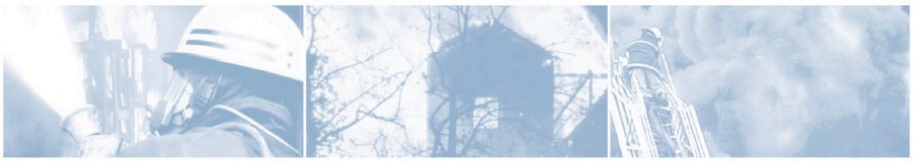
As the subfloor void is fire sterile and has one hour's fire resistance, it is not necessary to provide cavity barriers at the compartment wall lines separating the individual apartments. Cavity barriers are however being provided to split the void into areas not exceeding 40m in any direction.

Suitable fire stopping and dampers will be provided to any other position where a services enter or exit the duct or passes through a compartment line.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 7:

External Fire Spread



BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

7.0 External Fire Spread

7.1 External Walls & Roof

The external walls of the building are brick and glazing. The brickwork and will provide 60 plus minutes fire resistance and all external walls are more than 1m from the boundary.

7.2 Proximity to Boundaries

Due to the increased compartmentation and external wall construction the distance from the boundary is satisfactory.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 8:

Access and Assistance for the Fire Authority

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

8.0 Access and Assistance for the Fire Authority

.

8.1 Access to and into the Building(s)

The total floor are of the building, excluding the plant room on the roof plant room is 11,520m^2 (11,952m^2 with the plant room) therefore access is required to 50 % of the perimeter area.

Table 19 **Fire and rescue service vehicle access to buildings (excluding blocks of flats) not fitted with fire mains**

Total floor area [1] of building m^2	Height of floor of top storey above ground [2]	Provide vehicle access [3][4] to:	Type of appliance
Up to 2000	Up to 11 Over 11	See paragraph 16.2 15% of perimeter [5]	Pump High reach
2000–8000	Up to 11 Over 11	15% of perimeter [5] 50% of perimeter [5]	Pump High reach
8000–16,000	Up to 11 Over 11	50% of perimeter [5] 50% of perimeter [5]	Pump High reach
16,000–24,000	Up to 11 Over 11	75% of perimeter [5] 75% of perimeter [5]	Pump High reach
Over 24,000	Up to 11 Over 11	100% of perimeter [5] 100% of perimeter [5]	Pump High reach

Notes:
1. The total floor area is the aggregate of all floors in the building (excluding basements).
2. In the case of Purpose Group 7(a) (storage) buildings, height should be measured to mean roof level, see Methods of measurement in Appendix C.
3. An access door is required to each such elevation (see paragraph 16.5).
4. See paragraph 16.8 for meaning of access.
5. Perimeter is decribed in Diagram 48.

Fire service access should be provided such that all parts of the habitable accommodation in the flats are within 45m of the closest position an appliance can get to the building. There will be several areas where this is not possible and it will therefore be necessary to provide dry risers to some or all the stairs. The dry risers can be within the protected stair or protected corridor adjacent to the staircase.

With dry risers, the fire service can connect their appliances and pump water directly into the building and connect hoses on any level to start fighting the fire. There must be sufficient dry risers to allow hoses to reach all habitable spaces within 45m. It is likely that two dry risers will be sufficient (marked plan to be provided indicating the distances from dry riser positions to the further most part of apartments within 45m plan to assume the third floor will eventually reflect the second floor to ensure adequate dry risers are installed at this stage to deal with the third floor as and when it is converted to residential accommodation.

The dry risers must have an inlet at ground level. Fire Authority must also have access to within 18.0m (preferably with a line of site) of all inlets. Access and hard-standings need to fully comply with local fire service in terms of load-bearing capability, turning circles, widths, lengths, headroom, proximity to dry riser inlets, etc.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

8.2 First Aid Fire Fighting Provisions

The provision of hand-held first aid fire-fighting equipment will be the subject of a fire risk assessment provided by the end user as required by the Regulatory Reform (Fire Safety) Order 2005.

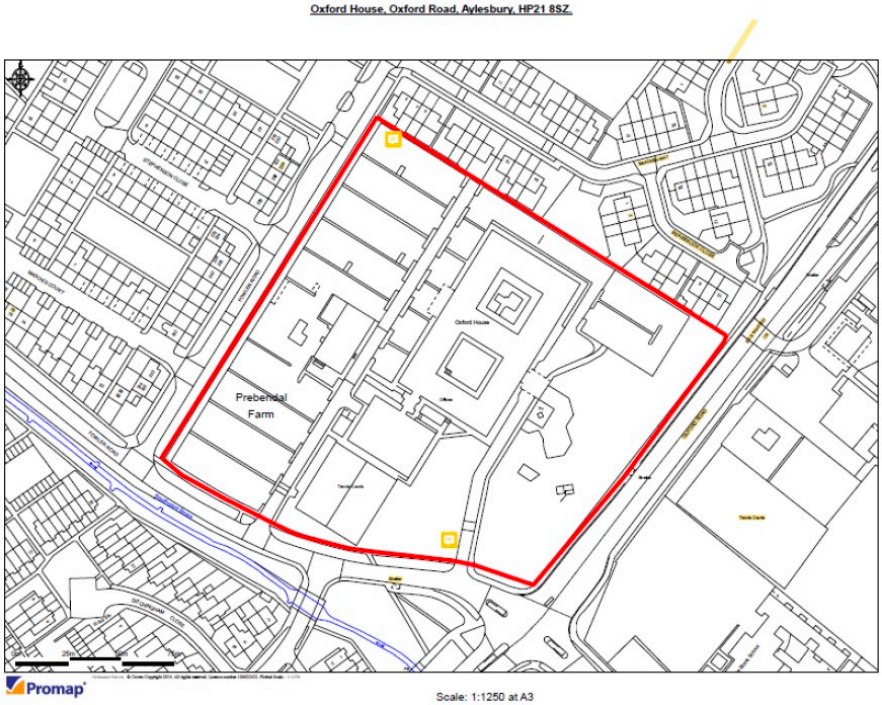
8.3 Fire Hydrants

Buildings being erected more than 100m from an existing fire hydrant are required to provide additional fire hydrants within 90m of fire service access points into the building.

In this instance, the building exists so there is no requirement for private Hydrants.

Fire Hydrants have however been identified within the site and checked. One has been found serviceable and the other will need overhauling to ensure it delivers adequate flows if needed for fire-fighting purposes.

Oxford House, Oxford Road, Aylesbury, HP21 8SZ.



Scale: 1:1250 at A3

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 9:

Summary and Conclusions

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

9.0 Summary and Conclusions

9.1 General

The purpose of this fire safety strategy document (FSS) is to outline the fire strategy and summarise the issues discussed within the design team and with the approving authorities. It will be updated to incorporate the requirements of the Authorities, which are for life safety issues. There may be design developments that require inclusion, but it includes all known factors as of the date of this report.

Note: It has been assumed that all building work will be carried out in accordance with Regulation 7 of the Building Regulations. Therefore, to ensure that the proposed fire safety systems detailed within this report achieve the appropriate fire performance, it is recommended that all products, components, materials or structures relating to the fire strategy are installed using competent companies/persons and, where applicable, third party accreditation/certification.

9.2 Means of Warning and Escape

A fire detection & alarm system to BS 5839 - Part 1: 2013 is to be provided to the common areas and protected stairs to activate the AOV's and the new system will be linked to the existing alarm system(s) in the unaltered office accommodation to warn them of a fire in the residential accommodation and activate their one-out-all-out evacuation policy.

The proposed escape widths and routes are sufficient to accommodate the anticipated occupancy, and satisfy the requirements of Approved Document B Volume 2.

Escape distances are code-compliant. Suitable exit widths are achievable to all rooms, storey and final exits.

Emergency lighting is to be provided in accordance with the recommendations of BS5266 parts 1 & 7 to both internal and external routes.

Escape signage will be provided to direct persons to an alternative means of escape. Such signage is to be in accordance with the Health and Safety (Safety Signs and Signals) Regulations 1996.

9.3 Internal Fire Spread (Linings)

All wall and ceiling surfaces are to be code-compliant.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

9.4 Internal Fire Spread (Structure)

All elements of structure, stairs/ protected shafts, lift shafts, compartment walls and floors, walls and floors to places of special fire risk (Plant rooms and the like) will be provided with 60 minutes fire resistance. FD30S fire doors with fire and smoke seals and self-closing devices will be provided to stairs, corridor doors and flat entrance doors. Doors to service ducts will be provided with FD60 fire doors with fire and smoke seals and signed as Fire Door Keep Locked shut as appropriate.

Ducts or the like which penetrate any of the above structures are to be fire stopped and fitted with fire dampers as appropriate to the areas they pass through.

9.5 External Fire Spread

The proposed elevations meet the requirements of space separation and unprotected areas and therefore, external fire spread between adjacent buildings is satisfactory.

9.6 Access and Facilities for the Fire Authority

Suitable access and facilities for the fire service have been provided. The building is existing so there is no requirement for private fire hydrants.

Adequate dry risers will be provided to serve the new residential accommodation.

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 10:

References

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Build Insight Consulting

Fire Safety Strategy Report

Address of works: Oxford House, Oxford Street, Aylesbury, HP21 8PB

Our Project Reference: BIP 3380

This report deals with fire safety design for the conversion of the ground and second floors of the building from office accommodation to residential flats. The objective of this Fire Safety Strategy report is to outline the requirements necessary to demonstrate that the proposed means of escape will satisfy the functional requirements of BS9999/BS9991/ Building Regulations Approved Document Part B Volume 2

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

10.0 References

The Building Regulations, England and Wales, 2010.

Approved Document B Volume 2 – Buildings other than dwelling houses, 2006.

BS9999:2017 Code of practice for fire safety in the design, management and use of buildings.

BS9991: 2015 Code of practice for fire safety in the design, management and use of residential buildings.

The Regulatory Reform (Fire Safety) Order, 2005.

BS 5839 - 1:2013 Fire detection and fire alarm systems for buildings. Part 1:Code of practice for system design, installation, commissioning and maintenance of systems in non-domestic premises.

BS5266 Part 1:2011 Emergency Lighting - Code of practice for emergency escape lighting of premises.

BS EN 1838:2013 Lighting Applications - Emergency Lighting

BS ISO 3864-1:2011 Graphic Symbols - Safety colours and safety signs. Design principles for safety signs and safety markings

BS 5499 Part 4:2013 Safety signs. Code of practice for escape route signing.

BS7273 Part 4:2015 Code of practice for the operation of fire protection measures. Actuation of release mechanisms for doors.

BS EN 54-23:2010 Fire Alarm Devices - Visual Alarm Devices.

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.

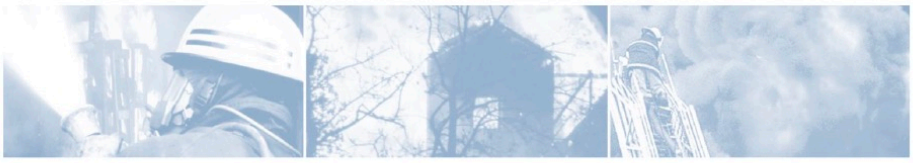
BS 9251:2014 Fire Sprinkler systems for domestic and residential occupancies

BS EN 12845:2015 Fixed fire-fighting systems - automatic sprinkler systems - design, installation and maintenance

BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

Section 11:

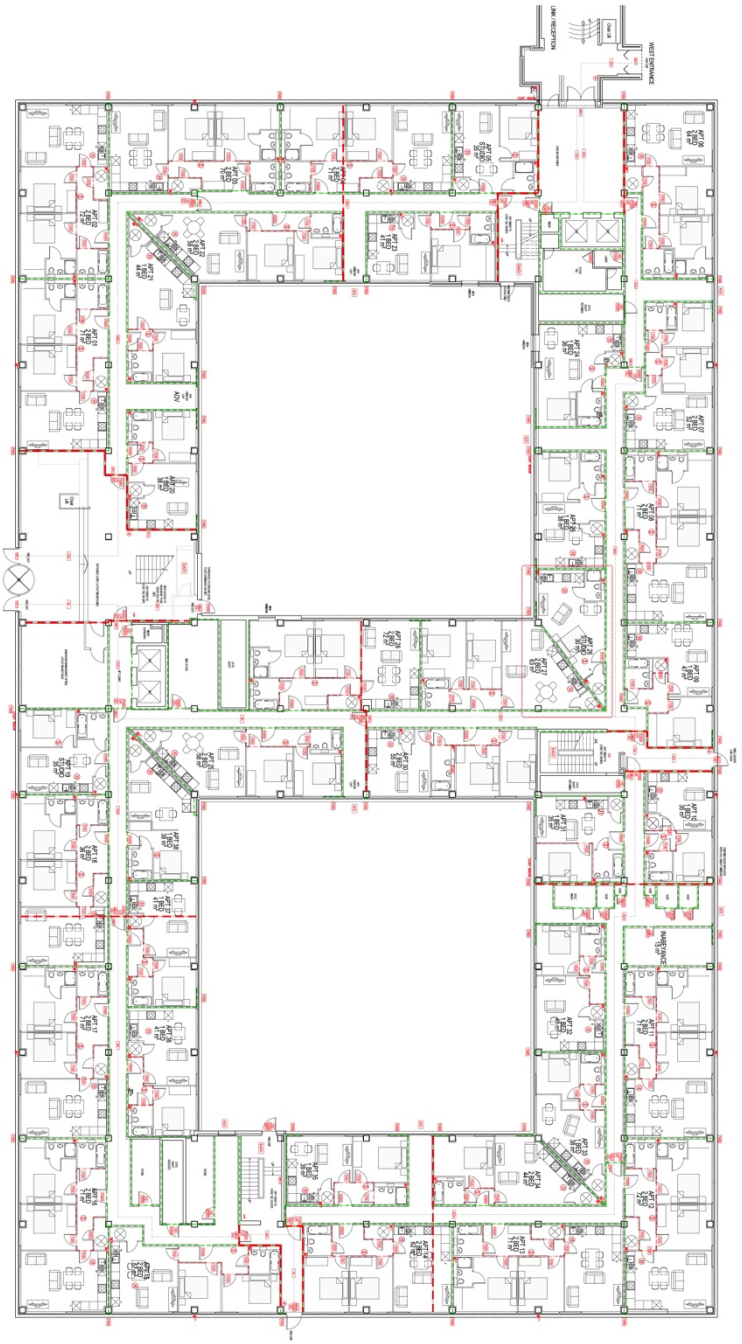
Appendix



BID-3380
Date: 28.09.18
Authorised: CS
Version: V1.0

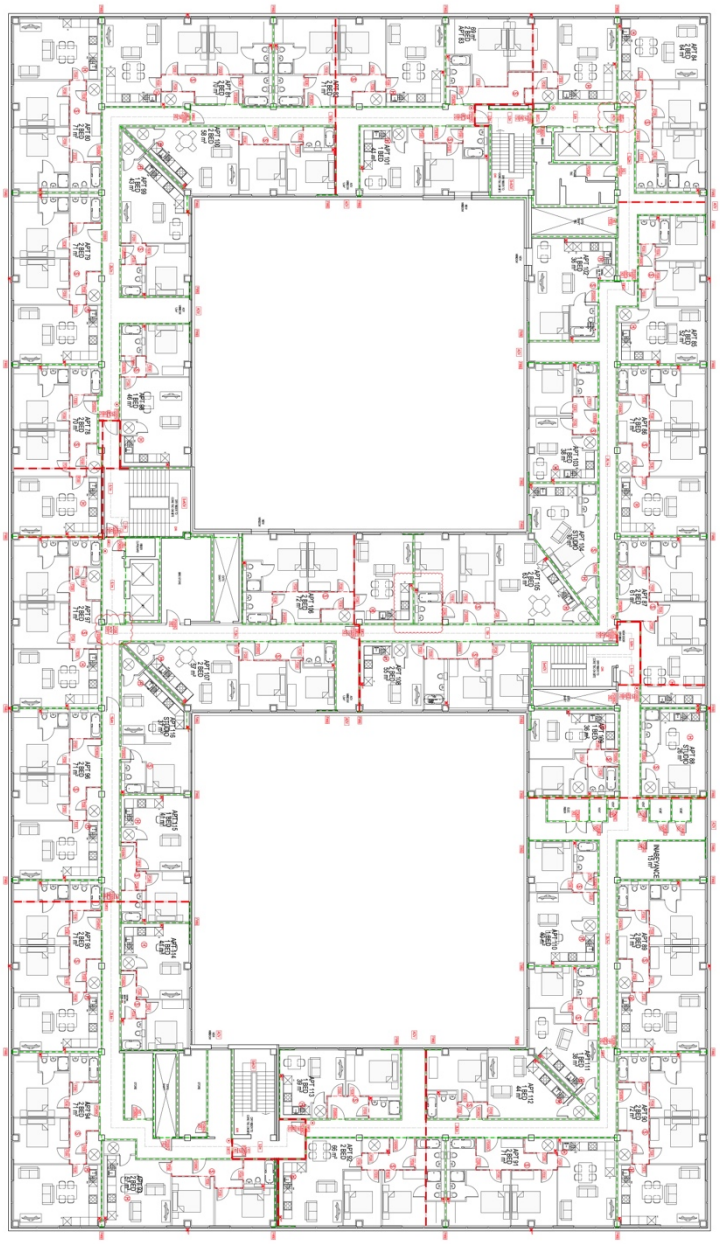
11.0 Appendix

00 GROUND FLOOR PLAN - FIRE STRATEGY
1:100

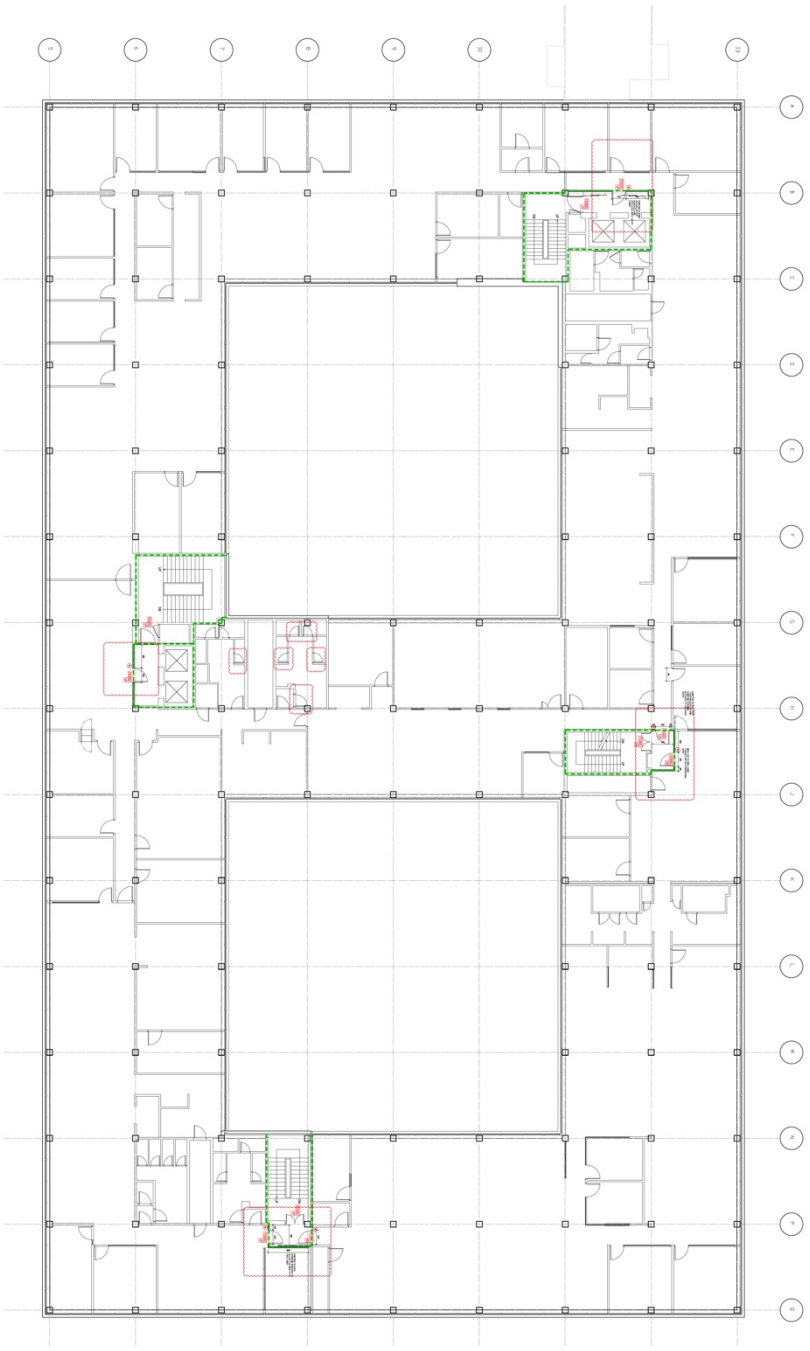


01 FIRST FLOOR PLAN - FIRE STRATEGY
1:100

02 SECOND FLOOR PLAN - FIRE STRATEGY
1:100



03 THIRD FLOOR PLAN - FIRE STRATEGY
1:100



Appendix D

Latest Commissioning Certificates and Management Arrangements

APPROVED CONTRACTOR

This certificate is not valid if the serial number has been defaced or altered **113351** **FIR7**

FIRE DETECTION AND FIRE ALARM SYSTEM INSTALLATION CERTIFICATE

Based on the recommendations given in 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'

Original (to the person ordering the work)

PART 1 : DETAILS OF THE CONTRACTOR, CLIENT AND INSTALLATION

DETAILS OF THE CONTRACTOR
Registration No: 043992 Branch No:
Trading Title: Electrical Plumbing and Gas Services Ltd
Address: 5-6 Nelrose, Princess Road , Manchester
Postcode: M20 2LT Tel No: 0161 8811883

DETAILS OF THE CLIENT
Contractor Reference Number (CRN):
Name: MCR Property Group
Address: B2 Universal Square , Devonshire St North , Manchester
Postcode: M12 6JH Tel No:

DETAILS OF THE INSTALLATION
Occupier: N/A
Address: FLAT 1, OXFORD HOUSE, FOWLER ROAD, AYLESBURY
Postcode: HP19 7BU Tel No: N/A

PART 2 : DETAILS OF THE FIRE DETECTION AND FIRE ALARM SYSTEM COVERED BY THIS CERTIFICATE

Description and extent of the system covered by this certificate:
Installation of Mains connected wireless interlinked Smoke detector & Heat detector - Grade D LD2

The system is - **New:** ☑ or **Modification:** ☐

(See additional page No N/A)

PART 3 : INSPECTION AND TESTING OF WIRING SYSTEM(S)

(tick bracket or insert 'N/A' (Not Applicable), as appropriate)

Wiring has been tested in accordance with the recommendations of Clause 38 of BS 5839-1.

Insulation resistance tests
Between conductors: (✓)
Between live conductors and Earth: (✓)
Between live conductors and screen, if any: (N/A)

Supply circuit(s) tests
Earth continuity: (N/A)
Earth fault loop impedance: (✓)

Test(s) required by manufacturer (if any)
Maximum circuit resistance: (N/A)
Other tests: (N/A)

Test results* recorded on additional numbered pages and provided to: (See additional page No(s))

** The results of all tests must be recorded on additional numbered page(s) and made available to the organisation responsible for the commissioning of the system.*

PART 4 : CERTIFICATION OF INSTALLATION

I/We being the competent person(s) responsible (as indicated by my/our signatures) for the installation of the fire alarm system, particulars of which are set out in PART 2, CERTIFY that the said installation for which I/we have been responsible complies to the best of my/our knowledge and belief with the design specification in PART 5 and with the recommendations of Section 4 of BS 5839-1: 2017, except for the variations (see BS 5839-1, Clause 7), if any, stated in this certificate.

Variations from the specification and/or Section 4 of BS 5839-1: (See additional page No N/A)

The extent of liability of the signatory is limited to the system described in PART 2.
Name (capitals): JAMIE BROOKS
Signature:
Position: ELECTRICIAN
Date: 17/06/2019

The results of the inspection and testing reviewed by Qualified Supervisor.
Name (capitals): DANIEL HALL
Signature:
Position: ELECTRICAL DIRECTOR
Date: 17/06/2019

PART 5 : RELATED REFERENCE DOCUMENTS

Design Specification: (Ref No N/A)
Design Drawings : (Ref No N/A)
'As Fitted' Drawing: (Ref No N/A)

Electrical Installation Certificate: (Ref No DCR18/134735)
Fire Alarm Design Certificate: (Ref No N/A)
Unless supplied by others, the 'as fitted' drawings have been supplied to the person responsible for commissioning the system see Clause 36.2m) of BS 5839-1: 2017

Operating and Maintenance Instructions: (Ref No N/A)
Log Book: (Ref No N/A)
Purchase Specification: (Ref No N/A)

This certificate is based on the model in Annex G of BS 5839: Part 1: 2017
Published by Certsure LLP Certsure LLP operates the NICEIC & ELECSA brands
Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, LU5 5ZX

Please see the 'Notes for Recipient' Page 1 of 6

APPROVED CONTRACTOR

This continuation sheet is not valid if the serial number is not the same as the corresponding certificate. 113351 FTR1

TEST RESULTS:
FIRE DETECTION AND FIRE ALARM SYSTEM INSTALLATION CERTIFICATE

Based on the recommendations given in 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'

Original to the person ordering the work)

PART 3 : INSPECTION AND TESTING OF WIRING SYSTEM(S) – TEST RESULTS *(Insert 'N/A' (Not Applicable), as appropriate)*

Item No.	Description	Supply Circuit Tests		Insulation Resistance Tests		
		Earth Continuity (Ω)	Earth Fault Loop Impedance (Ω)	Between Conductors (MΩ)	Between Live Conductors and Earth (MΩ)	Between Live Conductors and Screen, if any (MΩ)
1	AICO SMOKE DETECTOR	N/A	1.16	200	200	N/A
2	AICO HEAT DETECTOR	N/A	1.16	200	200	N/A

(See additional page No. N/A)

ADDITIONAL TEST(S) REQUIRED BY MANUFACTURER OR OTHER *(If any, insert 'N/A' (Not Applicable), as appropriate)*

Item No.	Description	Test Result (enter value and unit of measurement)	Comments, where applicable
1	INTERLINK CONNECTION - VERIFICATION	N/A	VERIFIED

(See additional page No. N/A)

APPROVED CONTRACTOR

113351 FIR7

FIRE DETECTION AND FIRE ALARM SYSTEM INSTALLATION CERTIFICATE

Original to the person ordering the work)

ADDITIONAL NOTES

(See additional page No. N/A)

Page 3 of 6

Cuttings.
Lightning Protection & Earthing Engineers

LIGHTNING PROTECTION REPAIR CERTIFICATE

Site Address
OXFORD HOUSE, BLOCK A, OXFORD ROAD, AYLESBURY, HP21 8SZ
Client
POLYTECK BUILDING SERVICES, 143 LEMAN STREET, LONDON, E1 8EY
Property No. 5306
Repairs completion date 11/01/2023

R. C. Cutting & Co. Limited – Lightning Protection & Earthing Engineers
10-12 Arcadia Avenue, Finchley Central, London, N3 2JU
Tel: 020 8371 0001 Email: info@cuttings.co.uk

Cuttings.
Lightning Protection & Earthing Engineers

1.0 QUALITY MANAGEMENT

1.1 ISSUE HISTORY

Issue history		
ISSUE	**DESCRIPTION**	**DATE**
1	**2022 Certificate**	**11.01.23**

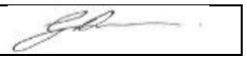
11.2 CALIBRATION

Instrument	Serial Number	Last Calibration
Robin	N/S/N	17.06.22

1.3 PERSONNEL INVOLVED

Title	Qualification	CSCS Number
Engineer – S. Quirk	NVQ3 Test & Inspection Engineer	248 4078

1.4 VALIDATION

Approved by:	**Graham Blackwell**	
Date:	**18.01.23**	

R. C. Cutting & Co. Limited – Lightning Protection & Earthing Engineers
10-12 Arcadia Avenue, Finchley Central, London, N3 2JU
Tel: 020 8371 0001 Email: info@cuttings.co.uk

2.0 REPAIR CERTIFICATE

CERTIFICATE

This is to certify that the remedial works were carried out to the existing system at the above and the system left in good order. The system comprises of the following;

Air Termination System	
Air Termination	Copper
Air Termination Colour	Bare
Air Termination Details	Copper 25x3
Roof Type	Flat

Down Conductor System	
Down Conductor	Use of structure & aluminium conductor
Down Conductor Colour	Black
Down Conductor Details	PVC sheathed
Down Conductor Material	Aluminium 25x3

Earth Termination System	
Earth Termination	External
Earth Termination Details	Earth Rod with polymer pit
Joined to Earth Bar	Unable To Verify
Surge Arrestors	Unable To Verify

The following resistances to earth were recorded:

Test No	Resistance	Ground Type	Tested From	Test Type	Inspection Pit	Repair Required	Remarks
1	3.46Ω	Grass / soft	Wall Clamp	Dead Earth	Yes	No	
2	63.0Ω	Paving slabs	Pit	Dead Earth	Yes	No	
3	10.33Ω	Paving slabs	Pit	Fall of Potential (FOP)	Yes	No	Continuity fault to be monitored
4	4.87Ω	N/A	Pit	Dead Earth	N/A	No	
5	4.23Ω	Grass / soft	Pit	Dead Earth	Yes	No	Metal circular pit
6	5.75Ω	Grass / soft	Pit	Dead Earth	Yes	No	
7	Unable to Test	Tarmac	Pit	Dead Earth	No	No	Unable to locate
8	Unable to Test	Tarmac	Pit	Dead Earth	No	No	Unable to locate

Please note: The system installed does not appear to comply to the standard that we believe it was installed to as it appears to be missing 6no down conductors and earth terminations. It is possible that some of the system has been removed during renovations or is installed internally, if you have any further information regarding the extent of the system installed such as the as installed drawing or commissioning certificate, please could this be provided to us for further investigation.
Please note, we have investigated the continuity fault at position 3 and changed/cleaned all accessible joints but have been unable to resolve the continuity issue. We therefore deem this faults impractical to repair and have issued a PASS certificate with a view to monitoring this for further degradation on future test visits

R. C. Cutting & Co. Limited – Lightning Protection & Earthing Engineers
10-12 Arcadia Avenue, Finchley Central, London, N3 2JU
Tel: 020 8371 0001 Email: info@cuttings.co.uk

Cuttings.
Lightning Protection & Earthing Engineers

The overall resistance of the above is below 10 Ohms in accordance with current British Standards.

The earth resistance test method used in all cases unless stated otherwise was: Dead Earth

The installation is consistent with one installed to: CP326

This is not compliant with the current British Standard (BS EN 62305:2011).

The system meets with its original design intent and is a PASS

This certificate will expire 12 months from issue.

DATE FOR RE-TEST/INSPECTION: October 2023

R. C. Cutting & Co. Limited – Lightning Protection & Earthing Engineers
10-12 Arcadia Avenue, Finchley Central, London, N3 2JU
Tel: 020 8371 0001 Email: info@cuttings.co.uk

Cuttings.
Lightning Protection & Earthing Engineers

3.0 CALIBRATION CERTIFICATE

275

CERTIFICATE OF CALIBRATION

Customer: Cuttings | Date of issue: 17/06/2022

Order No: CL1553-1 | Due date: 17/06/2023

The equipment specified below has been tested for calibration on all ranges and the results were found to be within the manufacturer's current specification limits at the measurement points recorded.

The tests were undertaken on equipment for which the company maintains traceability to national standards through calibration of the equipment by means of certificates issued by a UKAS Laboratory.

Equipment Description

Manufacturer: Robin Amprobe | Model: KMP7010

Serial No: N/S/N | Job No: K203042

Tests performed by: AO | Certificate No: 728763

Authorised by:

instrotech
A WORLD OF TEST EQUIPMENT

Instrotech Limited, Unit 12, Imperial Park, Imperial Way, Watford, WD24 4PP.
Telephone: (01923) 442244 Fax: (01923) 252959

R. C. Cutting & Co. Limited – Lightning Protection & Earthing Engineers
10-12 Arcadia Avenue, Finchley Central, London, N3 2JU
Tel: 020 8371 0001 Email: info@cuttings.co.uk

Cuttings.
Lightning Protection & Earthing Engineers

4.0 QUALIFICATION CERTIFICATES

Repairs Manager – Graham Blackwell

ATLAS

BS EN 62305: 2011 - Protection Against Lightning
Certificate of Third Party Accreditation of Competence
Presented to

Graham Blackwell

Of

Cuttings

For successfully demonstrating an industry recognised level of knowledge of:

Part 1 – General Principles
Part 2 – Risk Management
Part 3 – Physical Damage to Structures and Life Hazard
Part 4 – Electrical and Electronic Systems within Structures

Pass

Course Tutor – Sean Passant

Sean Passant
DEHN UK
Certificate Number: 332
Date Issued: 22 May 2019

NOTE: This certificate is valid until 5 years after the date of issue after which refresher training will be required and a new certificate will be issued.

Engineer – Sam Quirk

citb
Cskills Awards

This
Cskills Awards
Level 3 NVQ Diploma
in
Accessing and Rigging (Construction) - Lightning Protective Systems Inspecting and Testing (QCF)
(600/6844/9)
is awarded to
Sam Quirk

Regulated by Ofqual

Issued Date: 30-04-2014 1502397 Registration No: 2484078

R. C. Cutting & Co. Limited – Lightning Protection & Earthing Engineers
10-12 Arcadia Avenue, Finchley Central, London, N3 2JU
Tel: 020 8371 0001 Email: info@cuttings.co.uk

ATLAS TRAINING GROUP Achilles BuildingConfidence Audited

Fire Safety Solutions (UK)
Fire Protection Specialists .....

Dry Riser Systems Service/Inspection Report No 01051

Tel: 0121 792 0565

Related Documentation:

Customer Name:	Kings Fire	**Site Name:**	Oxford House
Invoice Address:	Unit A10, Manor Farm, Meppershall Rd, Upper Stondon, Lower Stondon, Henlow	**Site Address:**	Oxford House Castellum Apartments Fowler Road Aylesbury
Postcode:	SG16 6LJ	**Postcode:**	HP19 7BU
Telephone:		**Telephone:**	

Valve Type: PN16 ☐ **Table D** ☐ **Screwed** ☑ **Service Type: Major** ☑ **Minor** ☐

Location: Front entrance — ✔ = Fitted and in good order ✕ = Faulty or missing

Floor	Inlet/Outlet	Cabinet	Valve	Blank Cap	Padlock	Washer	Pipework	Sign
G	Inlet		X	✔		✔	X	X
1	Outlet	✔	✔	✔		✔	✔	X
2	Outlet	✔	✔	✔		✔	✔	X
3	Outlet	✔	✔	✔		✔	✔	X

Test Pressure:		**Gauge Reading:**		**PASS** ☐	**FAIL** ☑

Notes: Stack is leaking from behind inlet valve. Unable to locate the leak due to pipe work being concealed by plaster board boxing. Email to follow

Client Name:	**Technician Name:** Tom Gray
Client Signature	**Technician Signature:** TGray
Position:	**Date:** 18 March 2024

ALL WORK SUBJECT TO FIRE SAFETY SOLUTIONS (UK) LTD TERMS & CONDITIONS
Fire Safety Solutions (UK) Ltd. Registered in England & Wales – No. 09177446

Fire Safety Solutions (UK)
Fire Protection Specialists .....

Dry Riser Systems Service/Inspection Report No 01052

Tel: 0121 792 0565

Related Documentation:

Customer Name:	Kings fire	**Site Name:**	Oxford House
Invoice Address:	Unit A10, Manor Farm, Meppershall Rd, Upper Stondon, Lower Stondon, Henlow	**Site Address:**	Oxford House Castellum Apartments Fowler Road Aylesbury
Postcode:	SG16 6LJ	**Postcode:**	HP19 7BU
Telephone:		**Telephone:**	

Valve Type: PN16 ☐ **Table D** ☐ **Screwed** ☑ **Service Type: Major** ☐ **Minor** ☐

Location: Rear left hand side — ✓ = Fitted and in good order ✗ = Faulty or missing

Floor	Inlet/Outlet	Cabinet	Valve	Blank Cap	Padlock	Washer	Pipework	Sign
G	Inlet	✔						X
1	Outlet	✔						X
2	Outlet	✔						X
3	Outlet	✔						X

Test Pressure: | **Gauge Reading:** | **PASS** ☐ **FAIL** ☐

Notes: Unable to test. Inlet valve is 96 meters from nearest vehicle access. Outlet signage are incorrect, all cabinets say inlet rather than outlet.

Client Name:	**Technician Name:** Tom Gray
Client Signature	**Technician Signature:** TGRAY
Position:	**Date:** 18 March 2024

ALL WORK SUBJECT TO FIRE SAFETY SOLUTIONS (UK) LTD TERMS & CONDITIONS
Fire Safety Solutions (UK) Ltd. Registered in England & Wales – No. 09177446

ALL WORK SUBJECT TO FIRE SAFETY SOLUTIONS (UK) LTD TERMS & CONDITIONS
Fire Safety Solutions (UK) Ltd. Registered in England & Wales – No. 09177446

Fire Safety Solutions (UK)
Fire Protection Specialists .....

Tel: 0121 792 0565

Dry Riser Systems Service/Inspection Report No 01053

Related Documentation:

Customer Name:	Kings Fire	**Site Name:**	Oxford House
Invoice Address:	Unit A10, Manor Farm, Meppershall Rd, Upper Stondon, Lower Stondon, Henlow SG16 6LJ	**Site Address:**	Oxford House Castellum Apartments Fowler Road Aylesbury
Postcode:		**Postcode:**	HP19 7BU
Telephone:		**Telephone:**	

Valve Type: PN16 ☐ **Table D** ☐ **Screwed** ☑ **Service Type: Major** ☑ **Minor** ☐

Location: Rear right hand side — ✓ = Fitted and in good order ✗ = Faulty or missing

Floor	Inlet/Outlet	Cabinet	Valve	Blank Cap	Padlock	Washer	Pipework	Sign
G	Inlet	✓	✓	✓		✓	✓	✓
1	Outlet	✓	✓	✓		✓	✓	X
2	Outlet	✓	✓	✓		✓	✓	X
3	Outlet	✓	✓	✓		✓	✓	X

Test Pressure:	12 Bar	**Gauge Reading:**	11 Bar	**PASS** ☑	**FAIL** ☐

Notes: Outlet signage are incorrect, all cabinets say inlet rather than outlet.

Client Name:	**Technician Name:** Tom Gray
Client Signature	**Technician Signature:** TGRAY
Position:	**Date:** 18 March 2024

ALL WORK SUBJECT TO FIRE SAFETY SOLUTIONS (UK) LTD TERMS & CONDITIONS
Fire Safety Solutions (UK) Ltd. Registered in England & Wales – No. 09177446

Fire Safety Solutions (UK)
Fire Protection Specialists .....

Dry Riser Systems Service/Inspection Report No 01054

Tel: 0121 792 0565

Related Documentation:

Customer Name: Kings fire	**Site Name:** Oxford House
Invoice Address: Unit A10, Manor Farm, Meppershall Rd, Upper Stondon, Lower Stondon, Henlow	**Site Address:** Oxford House Castellum Apartments Fowler Road Aylesbury
Postcode: SG16 6LJ	**Postcode:** HP19 7BU
Telephone:	**Telephone:**

Valve Type: PN16 ☐ **Table D** ☐ **Screwed** ☑ **Service Type: Major** ☑ **Minor** ☐

Location: Right Hand Side — ✓ = Fitted and in good order ✗ = Faulty or missing

Floor	Inlet/Outlet	Cabinet	Valve	Blank Cap	Padlock	Washer	Pipework	Sign
G	Inlet	✓	✓	✓		✓	✓	✓
1	Outlet	✓	✓	✓		✓	✓	X
2	Outlet	✓	✓	✓		✓	✓	X
3	Outlet	✓	✓	✓		✓	✓	X

Test Pressure:	12 Bar	**Gauge Reading:**	11.5 Bar	**PASS** ☑	**FAIL** ☐

Notes: Outlet signage are incorrect, all cabinets say inlet rather than outlet.

Client Name:	**Technician Name:** Tom Gray
Client Signature	**Technician Signature:** TGRAY
Position:	**Date:** 18 March 2024

ALL WORK SUBJECT TO FIRE SAFETY SOLUTIONS (UK) LTD TERMS & CONDITIONS

Fire Safety Solutions (UK) Ltd. Registered in England & Wales – No. 09177446

LiveSafe

- Intruder
- Fire
- Access
- CCTV
- Design
- Installation
- Maintenance
- Monitoring

AMTHAL
FIRE & SECURITY

1 Executive Park, Hatfield Road
St Albans, Hertfordshire
AL1 4TA
info@amthal.co.uk
+44 (0) 1727 854231

CUSTOMER JOB NO. 60892 - 71239 - James Chapman
Service - EML

Site Details	
Name	Castellum Apartments/Oxford House *
Address	Castellum Apartments/Oxford House Fowler Road Aylesbury HP19 7BU
Contact	Steve Wrigley
Telephone	07875 281853
Mobile	07875 281853
Fax	
Email	etrimltd@hotmail.co.uk

Customer Details	
Name	ETRIM Limited
Address	25 Baileys Meadow Hayle Cornwall TR27 4FA
Contact	Steve Wrigley
Telephone	07875 281853
Mobile	07875 281853
Fax	
Email	etrimltd@hotmail.co.uk

Site Notes

16:44 27/03/2024 Jason Edes
Engineer's must complete a post audit called ETRIM additional tests (Monthly) in order to evidence the below. Please attach to the jobsheet. Thank you.

For monthly testing - Monthly Flick Test of the Emergency Lighting System in the communal areas of the block - approx 240 lights.

- During the site walk around for the Emergency Light flick test our engineer will visually inspect the communal fire doors for any obvious visual damage and to ensure the doors sit within the frames correctly and have not been damaged or vandalised Please note this is not a full fire door inspection but a visual as an interim measure between the full annual inspections as quoted for elsewhere in this proposal.
- During the site walk around for the Emergency Light flick test our engineer will visually inspect and check that each of the Emergency Exit doors fitted with push bar are opening and closing correctly.
- During the site walk around for the Emergency Light flick test our engineer will provide a timestamped photograph the dry risers for the customer to review the straps, padlocks and doors of each Riser

Work Requested

Asset Type Emergency Lighting - Service Level Monthly - Quantity 1
Asset Type Fire Doors - Service Level Monthly - Quantity 1
Asset Type Natural Smoke Ventilation - Service Level Monthly - Quantity 1

Schedule

Date Schedule	Date Performed	Actual Start	Actual Finish	Total
12/04/2024	12/04/2024	08:00	08:15	0.25 hrs
12/04/2024	12/04/2024	09:00	10:30	1.50 hrs

Work Completed

monthly flick test of emergency lights carried out with the following lights found to be failed

- E/L 40 near room 14

LiveSafe

• Intruder • Design
• Fire • Installation
• Access • Maintenance
• CCTV • Monitoring

AMTHAL
FIRE & SECURITY

1 Executive Park, Hatfield Road
St Albans, Hertfordshire
AL1 4TA
info@amthal.co.uk
+44 (0) 1727 854231

CUSTOMER JOB NO. 60892 - 71239 - James Chapman
Service - EML

- E/L 48 near room 32
- E/L 84 near room 113
- E/L 14 near room 24
- E/L 24 near room 29
- E/L 2 near room 59
- E/l 6 near room 3
- E/L 18 near room 9
- no emergency lighting between rooms 59-41

unable to gain access into 2nd Floor visor cupboard to test emergency lights

core stairwell lighting is still unknown to where the test switches are

Asset Register - Emergency Lighting

Asset ID	Asset Status	Asset Agreement Type	Key Switch Locations	Specialist Service Partner	Annual Service Due Month	Service Level	Date Tested	Pass / Fail
25261	COMPLETION	Service		No		Monthly		Not Tested

Test Readings	Log book available and up to date:	Activate all test points:
	Are all luminares clean and secure ?:	All test switches returned to normal operation ?:
	Power restored and lights returned to normal operation ?:	Log book been updated ?:
Notes		

Work Completed Notes

Materials Used

Description	Location	Used

The above works have been supplied and installed to my complete satisfaction.

Customer: Steve Wrigley (Print Name) — (Signature)

The above works have been supplied and installed as per relevant United Kingdom Standards.

Technician: James Chapman (Print Name) — (Signature)

APPROVED CONTRACTOR

This certificate is not valid if the serial number has been defaced or altered **113351** **FIR7**

FIRE DETECTION AND FIRE ALARM SYSTEM INSTALLATION CERTIFICATE

Based on the recommendations given in 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'

Original (to the person ordering the work)

PART 1 : DETAILS OF THE CONTRACTOR, CLIENT AND INSTALLATION

DETAILS OF THE CONTRACTOR
Registration No: 043992 Branch No:
Trading Title: Electrical Plumbing and Gas Services Ltd
Address: 5-6 Nelrose, Princess Road , Manchester
Postcode: M20 2LT Tel No: 0161 8811883

DETAILS OF THE CLIENT
Contractor Reference Number (CRN):
Name: MCR Property Group
Address: B2 Universal Square , Devonshire St North , Manchester
Postcode: M12 6JH Tel No:

DETAILS OF THE INSTALLATION
Occupier: N/A
Address: FLAT 1, OXFORD HOUSE, FOWLER ROAD, AYLESBURY
Postcode: HP19 7BU Tel No: N/A

PART 2 : DETAILS OF THE FIRE DETECTION AND FIRE ALARM SYSTEM COVERED BY THIS CERTIFICATE

Description and extent of the system covered by this certificate:
Installation of Mains connected wireless interlinked Smoke detector & Heat detector - Grade D LD2

The system is - **New:** ☑ or **Modification:** ☐

(See additional page No N/A)

PART 3 : INSPECTION AND TESTING OF WIRING SYSTEM(S)

(tick bracket or insert 'N/A' (Not Applicable), as appropriate)

Wiring has been tested in accordance with the recommendations of Clause 38 of BS 5839-1.

Insulation resistance tests
Between conductors: (✓)
Between live conductors and Earth: (✓)
Between live conductors and screen, if any: (N/A)

Supply circuit(s) tests
Earth continuity: (N/A)
Earth fault loop impedance: (✓)

Test(s) required by manufacturer (if any)
Maximum circuit resistance: (N/A)
Other tests: (N/A)

Test results* recorded on additional numbered pages and provided to: (See additional page No(s))

** The results of all tests must be recorded on additional numbered page(s) and made available to the organisation responsible for the commissioning of the system.*

PART 4 : CERTIFICATION OF INSTALLATION

I/We being the competent person(s) responsible (as indicated by my/our signatures) for the installation of the fire alarm system, particulars of which are set out in PART 2, CERTIFY that the said installation for which I/we have been responsible complies to the best of my/our knowledge and belief with the design specification in PART 5 and with the recommendations of Section 4 of BS 5839-1: 2017, except for the variations (see BS 5839-1, Clause 7), if any, stated in this certificate.

Variations from the specification and/or Section 4 of BS 5839-1: (See additional page No N/A)

The extent of liability of the signatory is limited to the system described in PART 2.
Name (capitals): JAMIE BROOKS
Signature:
Position: ELECTRICIAN
Date: 17/06/2019

The results of the inspection and testing reviewed by Qualified Supervisor.
Name (capitals): DANIEL HALL
Signature:
Position: ELECTRICAL DIRECTOR
Date: 17/06/2019

PART 5 : RELATED REFERENCE DOCUMENTS

Design Specification: (Ref No N/A)
Design Drawings : (Ref No N/A)
'As Fitted' Drawing: (Ref No N/A)

Electrical Installation Certificate: (Ref No DCR18/134735)
Fire Alarm Design Certificate: (Ref No N/A)
Unless supplied by others, the 'as fitted' drawings have been supplied to the person responsible for commissioning the system see Clause 36.2m) of BS 5839-1: 2017

Operating and Maintenance Instructions: (Ref No N/A)
Log Book: (Ref No N/A)
Purchase Specification: (Ref No N/A)

This certificate is based on the model in Annex G of BS 5839: Part 1: 2017
Published by Certsure LLP Certsure LLP operates the NICEIC & ELECSA brands
Warwick House, Houghton Hall Park, Houghton Regis, Dunstable, LU5 5ZX

Please see the 'Notes for Recipient' Page 1 of 6

APPROVED CONTRACTOR

This continuation sheet is not valid if the serial number is not the same as the corresponding certificate. 113351 FTR1

TEST RESULTS:
FIRE DETECTION AND FIRE ALARM SYSTEM INSTALLATION CERTIFICATE

Based on the recommendations given in 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'

Original (to the person ordering the work)

PART 3 : INSPECTION AND TESTING OF WIRING SYSTEM(S) – TEST RESULTS *(Insert 'N/A' (Not Applicable), as appropriate)*

Item No.	Description	Supply Circuit Tests		Insulation Resistance Tests		
		Earth Continuity (Ω)	Earth Fault Loop Impedance (Ω)	Between Conductors (MΩ)	Between Live Conductors and Earth (MΩ)	Between Live Conductors and Screen, if any (MΩ)
1	AICO SMOKE DETECTOR	N/A	1.16	200	200	N/A
2	AICO HEAT DETECTOR	N/A	1.16	200	200	N/A

(See additional page No. N/A)

ADDITIONAL TEST(S) REQUIRED BY MANUFACTURER OR OTHER *(If any, insert 'N/A' (Not Applicable), as appropriate)*

Item No.	Description	Test Result (enter value and unit of measurement)	Comments, where applicable
1	INTERLINK CONNECTION - VERIFICATION	N/A	VERIFIED

(See additional page No. N/A)

APPROVED CONTRACTOR

113351 FIR7

FIRE DETECTION AND FIRE ALARM SYSTEM INSTALLATION CERTIFICATE

Original to the person ordering the work)

ADDITIONAL NOTES

(See additional page No. N/A)

Page 3 of 6