



1 - 112 Cambridge Street, Hull Type 4 Fire Risk

Assessment



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Date:	25/07/2023
Document Reference:	HFS.HCC.CambridgeStreet1.FRA.1.0





















			EXECUTIVE SUR	MIMARY				
	 Significant findings identified in HFS.HCC.CambridgeStreet1.FRA.1.0 & HFS.HCC.CambridgeStreet1.AP.1.0: 12 actions 							
	Proposed next review date:30/06/2024							
	Assessment review type: T3							
 Requirement for additional inspections prior to assessment review: It is advised that work streams are monitored by a competent person to ensure satisfactory performance/installation/levels of remediation. 								
		OV	ERALL BUILDING I	RISK RATII	NG			
Taking into account the fire prevention measures observed at the time of this assessment, it is considered that the hazard from fire (probability of ignition) at this building is:								
	LOW		MEDIUM	X	HIGH			

Taking into account the nature of the building and the occupants, as well as the fire protection and procedural arrangements observed at the time of this assessment, it is considered that the consequences for life safety in the event of fire would be:

SLIGHT HARM	MODERATE HARM	Х	EXTREME HARM	

The overall risk rating for the building is considered to be:

MODERATE RISK



Fire Risk Assessment - Version 3

30 Jun 2023 / John Askew / Cambridge Street Block 1

Complete

Site conducted	Cambridge Street Block 1, Hull City Council T4 FRA programme
Conducted on	30/06/2023 09:30 BST
Prepared by	John Askew

Location

1 - 112 Cambridge Street Hull England HU3 2ED United Kingdom



Photo 1

Inspection Responsible person (e.g. employer) or person having control of the premises: Hull City Council **Address of premises:** 1 - 112 Cambridge Street Hull HU3 2ED **Person consulted:** Mike White **Assessor:** John Askew Report validated by: William Davidson Date of fire risk assessment: 30/06/2023 Date of previous fire risk assessment: HCC To Confirm Suggested date for review:

30/06/2024

1. General information

1.1. Dimensions/footprint:

675m2 per floor / Total 10,125m2

1.2. In accordance with Regulation 3 Fire Safety (England) Regulations 2022, is the premises defined as a 'High-rise Residential' Building?

In accordance with Regulation 3 Fire Safety (England) Regulations 2022, Cambridge Street Flats, Block 1 is defined as a 'High-rise Residential Building'.

1.3. Number of floors at ground level and above:

Ground floor and x14 upper floor levels.

1.4. Number of floors entirely below ground level:

None.

1.5. Floors on which car parking is provided:

None. External parking is provided for residents and visitors.

1.6 Age:

The building is believed to be constructed in the 1980's, however the block underwent renovation in 2011.

1.7. Number of flats:

There are 112 residential dwellings in total with x8 residential dwellings per floor.

These are regarded as general needs (GN) accommodation.

1.8. General description external:

Comprehensive refurbishment was completed in 2011 which included the installation of an external cladding system.

Following surveys completed by Fire Guidance UK LLP, findings from the report confirmed that building had been over clad, however the insulation material behind the cladding is dense mineral wool and the type of cladding used to weather protect the insulation material is a thin-coat render system.

To conclude, Block 1 is not over-clad with an ACM system and the insulation material and over-cladding meets the functional requirements of the Building Regulations.



Photo 2

17020-FSO-R007-RA-20170825.pdf

1.9. General description of basement:

N/A.

1.10. General description ground floor:

The ground floor comprises of external tenant storage and ancillary accommodation which is accessed from communal areas.

Ancillary accommodation consists of a caretakers office, cleaners office, laundry, store rooms and x5 service riser enclosures.

There are two escape stairs which provides access to open air via single final exits doors which open in the direction of travel.

Accessed externally on the ground floor are the refuse collection points (bin store).

22291-CAMB1-01A-22291-CAMB1-00.pdf

1.11. General description of flats:

Residential flats are single and two bed occupancies whereby all habitable rooms discharge onto the internal hallway. Means of escape within flats are typical of diagram 3.3 of ADB B1 which does not require flats to have a protected internal hallway. This principle was based on limiting travel distances to circa 9m which in turn reduces the chance that residents could become trapped in the event of a fire.

1.12. General description of means of escape:

Attached: First Floor Plan.

Means of escape are of simple design and construction whereby all flats are separated from the common escape stairway by self-closing, notional FD30s fire door-sets. Once access is into the common escape stair, ultimate safety is achieved by a single final exit door which opens in the direction of travel.

The building has an unventilated central corridor which serves flats and is separated at the centre by a self-closing, notional FD30s fire door-set.

Means of escape are consistent on all upper floors as ventilation in staircases is achieved by the opening of windows mechanically by the operation of a switch which is located in the south east ground floor lobby above the Secure Information Box.

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1.13. General description of service risers:

Risers are a mix of larger and smaller enclosures which can be described as single & double risers.

All services which serve flats discharge into flats meaning that flats are effectively self-contained compartmented boxes. Double risers serve two flats per floor and single risers serve one flat per floor.

Risers are continuous and extend the full height of the building. Risers contain electrical service cables, soil pipes, non -combustible pipework and combustible pipework. Risers are generally a

sterile environment, however, there are several breaches which are to be addressed and are highlighted in the compartmentation survey.

Risers in common areas are separated from escape routes by fire resisting construction providing 30 minutes, fire resisting doorsets are notional 44mm with some having timber fan-lights, all observed to be in reasonable condition. There are electric service units present in some service risers and electric supply to immersion heaters, however, there are no other combustible items within the area; therefore fire is highly unlikely to spread to adjacent areas.



Photo 3

1.14. General description of ventilation risers:

There are no ventilation risers within the building, however bathroom/kitchen extraction provided within flats discharges into service risers which are located adjacent to each property. Extraction is continuous and is operated by fans which are positioned on the roof. Effluent exits each flat via a vent which travels into service risers before travelling within metal ducting vertically to open air.

Fire dampers are installed within service risers at the point flats meet service risers and they are activated via fusible link.

Following an incident within another of HCC's HRRB, it was identified that residual smoke was identified on upper floor levels following a fire. Efforts have been made to seal around all ductwork using pink polyurethane expanding foam, however its is advised that smoke testing is carried out to confirm that all ductwork is sealed and enclosed throughout its height.







Photo 5



Photo 6

1.15. General description of chute system:

There are x2 refuse chutes provided at Block 1, both are located in permanently ventilated areas and separated from escape routes by fire resisting construction providing 30 minutes fire resistance.

The refuse chute has recently undergone refurbishment and now provides adequate protection at all floor levels with self-closing, intumescent lined hopper disposal points and an automatic isolation shutter which is activated by means of fusible link at the base of the chute. The base of the chute is accessed externally.



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12

2. Floor plans and building plan

In relation to Regulation 6 of the Fire Safety Regulations 2022, the responsible person in relation to a high-rise residential building must prepare a plan for each floor of the high-rise residential building. The floor plans must, together, identify the location of all lifts and identify if the lift is one for use by firefighters or an evacuation lift, and the key fire-fighting equipment in the whole building. Plans must include the following:

 Surrounding area of building detailing points of access, emergency response routes/appliance positionina

Building dimensions

• Confirmation of number of storeys – basement/parking, ancillary, residential floors, roof

· Location of different accommodation types in building – single bed/two bed/maisonette

Inlets for dry riser/wet riser

Isolation valves for active systems Firefighting access points – firefighting shaft

Location of secure information box
Location of smoke control systems

Key points of building – stairway, risers, lobbies (smoke containment locations)

Evacuation alert system location

2.1. Has the responsible person prepared a plan for each floor of the high-rise residential building and do plans meet the requirements of Regulation 6 of the Fire Safety Regulations 2022?

Holistic Fire Safety have prepared a plan for each floor at Block 1. Floor plans identify points of access, means of escape, as well as assisting identify the location of all lifts and key fire-fighting equipment.

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22291-CAMB1-01A-22291-CAMB1-VS.pdf

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3. Construction

3.1. Describe the standard and methods of construction which make up the premises:

Due to its construction being circa 1980's, it is likely that Block 1 was constructed to British Standard Code of Practice `CP3 Chapter IV, Precautions against fire – Fire precautions in flats of 80 feet or above`.

Bryant Bison 340: The industrialised building system consisted of load-bearing precast concrete wall and floor units, jointed on site with in-situ concrete and dry packed mortar after erection. In tower blocks over 12 storeys in height, all of the walls were load-bearing - external and internal.

Wimpey-No Fines: Constructed from cast in-situ concrete, No-Fines was one of the most successful system built houses. The wall construction contains no sand fraction using 1/2" to 3/4" stone aggregate mixed with cement. This creates a honeycomb type structure within the concrete. The construction of the system is similar to that of traditional solid walled masonry properties and offers a high level of robustness.

Whether or not the building was constructed to 'CP3 Chapter IV', Block 1 focuses upon the principle of compartmentation of both the staircore, ancillary accommodation and flats.

Due to reduced travel distances within flats, they are not required to have an internal 'protected' hallway to create a place of relative safety before the flat can be evacuated.

Subsequently, this supports a 'stay put' strategy based on the level of compartmentation together with additional features, including the external fabric. As a result, it was predicted that the block would withhold and minimise any fire situation to a relatively small area.

4. Occupancy

4.1. In relation to Approved Document B Volume 1. 2019, the purpose group is:

1(a) Flats

4.2. In relation to BS 9991:2015 (BS 9999:2017) Fire safety in the design, management and use of (residential) buildings, the risk profile is:

The risk profile for General Needs occupants is considered to be:

'Ci' (long term managed occupancy of mainstream housing of general needs with no special features with `low/medium` fire growth of 0. 012 kJ/s3 by evenly distributed low to mid level fire loading compromising a mix of combustible materials).

4.3. Estimated total occupancy on a normal day to day basis:

Circa 250

4.4. Max number of employees:

<5.

There are no permanent staff working within the building, however the block is provided with a caretaker. HCC operate a caretaker scheme whereby a representative of HCC ensures the day to day running of the block by carrying out tasks such as reporting antisocial behaviour, maintaining housekeeping and liaising with residents to resolve issues.

In addition, housing officers regularly attend site for specific duties such as routine testing and maintenance. Lone working is avoided where possible, however due to the nature of some activities, lone working is inevitable for low risk tasks; therefore staff operate and adhere to the corporate lone working policy.

4.5. Max number of residents and visitors at any one time:

Circa 275

4.6. Vulnerable groups - contractors, lone workers, care workers:

It is possible residents will receive treatment from care and social workers on a periodic basis. All care provided is independent to HCC. Numbers should not exceed 5 at any one time, however it is likely that people providing care are unfamiliar with the premises.

HCC members of staff enter the premises on a regular basis to carry out routine testing and maintenance. Lone working is avoided where possible, however due to the nature of some activities, lone working is inevitable; therefore staff operate and adhere to the corporate lone working policy.

All contractors adhere to a strict 'control of contractors' policy which includes a selection process, the receipt of RAMS & Insurance, site induction and a permit system where necessary. It is advised that an induction is carried out by all contractors used by HCC. A generic safety pack should be provided to contractors which ensures they are familiar with emergency procedures and actions to be taken in the event of fire. Contractors should read and sign the document; this will ensure HCC are controlling contractors appropriately and meeting the requirements of Article 5(4a).

Fire action notices are displayed prominently to instruct those who are unfamiliar with the building of actions to be taken in the event of an incident.

5. Evacuation strategy

5.1. The evacuation strategy for the building is:

As detailed within the 'Fire Safety in Flats' booklet provided by HCC to residents; flats are designed to delay the spread of fire, therefore occupants should be 'relatively' safe to remain within their flats. HCC currently advise residents to:

- Evacuate the building in the event of a fire in a resident's flat
- Evacuate the building if a resident is aware of a fire in a nearby flat

The simultaneous evacuation of multiple flats/floors could potentially hinder the responding Fire & Rescue Service operational crews as evacuating residents could compromise the means of escape delaying firefighting operations; it is therefore essential that levels of compartmentation meet the necessary requirements to support a 'stay safe, stay put' strategy.

5.2. Have Person Centred Fire Risk Assessments (PCFRA's) been completed on all vulnerable residents?

Sue Houlton & the Housing team have recently completed a significant exercise to establish those residing within the building who required assistance with evacuation. Where necessary, person centred fire risk assessments (PCFRA) and personal emergency evacuation plans are to be created.

None confirmed at Block 1.

5.3. Are Personal Emergency Evacuation Plans (PEEPS's) in place for vulnerable residents?

There are currently no known PEEPS in place at Block 1; however, should any resident's complete an 'Emergency Evacuation Support Request Form', this will trigger a PCFRA and subsequent PEEP.

5.4. Are PEEP's readily available to responding Emergency Services in the Secure Information Box?

Discussions are to be held with Humberside Fire & Rescue Service (HFRS) to confirm how they prefer to receive information. Although traditionally PEEPS are stored on site within the Secure Information Box, it has been highlighted that HFRS may in fact prefer to receive information electronically so that it can be accessed via the appliance mobile data terminal.

5.5. Is the building provided with an 'Assembly Point' / 'Muster Point'. Where applicable, is its location suitable in design and location?

The fire assembly point is located on the grassed area between Blocks 1 & 2.



Photo 13

The assembly point should be located far enough away from the building to afford protection from heat and smoke in a fire situation but not so far away as to discourage people from using it. Fire assembly points should be in positions that do not put staff, visitors and users of the building at risk from emergency vehicles responding to the incident, or from general/other traffic in the vicinity. Therefore, the assembly point should be located away from and off the vehicle access routes leading to the building. Ideally the assembly points should be located so as not to require

the crossing of a road or movement through trafficked areas. The assembly points should be a temporary gathering area where it can be immediately determined if everyone is out of the building. Appropriate decisions should be made with regard to continuance of use for longer durations. This is particularly useful in the event of a 'partial' or 'full evacuation' of the residential areas by the Fire Service using the evacuation and alert system

6. Fire loss experience

6.1. Has there been any incidents involving fire which has resulted in loss/ damage/affected resident safety?

Following discussions with HCC representatives, there have been no incidents in the last 12 months.

7. Relevant fire safety legislation

Regulatory Reform (Fire Safety) Order 2005 The Fire Safety Act 2021 The Fire Safety (England) Regulations 2022 Health and Safety at Work etc Act 1974 (Sections 2,3 & 4) Housing Act 2004 & Housing and Planning Act 2016

References and supporting guidance is detailed at the end of the report.

7.1. The above legislation is enforced by:

The Local Authority Fire & Rescue Service - HFRS.

7.2. Are there any notices in force applicable to the building - Alterations / Enforcement / Prohibition?

None.

8. Electrical sources of ignition

Communal Areas

8.1. Are fixed installations periodically inspected and tested?

Electrical testing and maintenance of the hard wiring of the building has been completed by Kingstown Works Limited (KWL), it was confirmed that all EICR reports for the building are held electronically by nominated HCC representatives.

It was also confirmed that there is an EICR programme in place and a legal action procedure implemented for any customers who are not providing access. Samples taken within communal areas (expiry 06/2028) gave satisfactory test frequencies.

8.2. Are Electrical Installation Condition Report (EICR) labels displayed to indicate the date of the most recent periodic inspection and the date of the next 5-year periodic inspection?

Yes.



Photo 14

8.3. Have all 'C' deficiencies been completed within allocated timeframes?

It was confirmed that all 'C' deficiencies are allocated to KWL for completion.

8.4. Is portable appliance testing carried out:

HCC provide residential flats unfurnished, therefore no electrical appliances are included within the tenancy agreement. There is no control over the use of residents' own electrical equipment within the flats themselves, however, residents are provided with a tenants' handbook which covers electrical safety.

Ancillary accommodation gave evidence of out of date PAT labels.

There is a laundry situated on the ground floor with a number of electrical washing machines and dryers; all of which were confirmed to be periodically inspected.

The scheme has implemented a policy within the laundry which includes the removal of lint build-up from tumble driers.





Photo 15

Whilst portable appliance testing (PAT) is not a legislative requirement, it is a requirement of Health and Safety at Work legislation under the Electrical at Works Regulations 1989, to periodically

check electrical equipment for safe use. Any item which is connected to the main supply falls under Regulation 3 & 5 which places a legal responsibility on the owner, as the duty holder, to ensure that all supplied electrical equipment used within the property is safe and not in a position where they may cause danger to staff or residents.

8.5. Is there a suitable limitation of trailing leads & adapters; and without evidence of overloading?



8.6. Are electrical service cables adequately supported?

Services run extensively within communal areas, however all cabling is encased within conduit and secured by metal connections preventing them from drooping or falling in the event of fire.

All cabling and conduit should be either encased and/or supported by metal connections preventing them to droop or fall. (BS 7671:2018 18th Edition IET regulations), Chapter 52 reg 521-10-202 18th edition).

8.7. Are photovoltaic panels (PV) installed?

None.

Is suitable maintenance carried out on PV system in line with manufacturers instructions. Is the location of inverters indicated on plans and are there adequate provisions in place to mitigate the risk of ignition. Is information on PV systems held within the Secure Information Box and accessible to the Fire Service in the event of an incident.

8.8. General comments/defects:

Combustible items are stored up against fixed wiring installations in the ground floor entrance private meter room.

A sterile area of 2 metres in all directions should be achieved around distribution boards.



Photo 17

Flats

8.9. Are distribution boards non-combustible to BS EN 61439-3 as per BS 7671:2018 (18th Edition IET Regulations) Chapter 42 Regulation 421.1.201(i)?

Yes.



Photo 18

8.10. Are fixed installations periodically inspected and tested?

No flats were available for inspection at Block 1 therefore samples taken within Flat 140 at Block 2 (expiry 04/28) gave satisfactory test frequencies.

Inline with BS 7671:2018 IET Wiring Regulations (18th Edition) rented accommodation (flats) with short term leases are periodically inspected every 5 years and upon change of occupancy.

8.11. Are Electrical Installation Condition Report (EICR) labels displayed to indicate the date of the most recent periodic inspection and the date of the next 5-year periodic inspection?

Yes.

8.12. General comments/defects:

All flats have metal electric meter cupboards which are located in the means of escape outside of flats.



Photo 19

9. Smoking

9.1. Are there suitable arrangements for those who wish to smoke?

Given the general needs occupancy, there is little HCC can do on a daily basis to control/prevent smoking within residents' dwellings other than raising awareness and highlighting consequences of inappropriate discarding of materials.

There are no smoking receptacles provided externally to the premises, therefore there are no provisions for disposal.

9.2. Are "No smoking" signs provided within the common areas?

The building complies with current no-smoking legislation with signage displayed prominently throughout the building at all levels. Signage displayed is clearly visible and complies with the Smoke Free (signs) Regulations 2012.



Photo 20

9.3. Are reasonable measures taken to prevent fires as a result of smoking?

Residents are permitted to smoke within residential flats, however information relating to smoking is contained within tenants' handbooks.

9.4. General comments/defects:

During the assessment, a comprehensive inspection was carried out in all areas; there was a limited number of discarded cigarettes on the floor externally and all internal areas were sterile.

10. Arson, security & housekeeping

10.1. Does basic security against arson by outsiders appear reasonable?

The premises has the following arrangements in place:

- Access doors are provided with resident access controls
- External floodlighting is provided by streetlights
- The caretaker is a visual presence and carries out daily inspections on the premises where necessary significant findings are reported to senior management
- There is a steel security fence which runs along a large percentage of the perimeter of the block
- There is a car park barrier that is controlled entry
- Hull City Council employees require key fobs for access and all contractors require permission before access is authorised
- CCTV is installed internally and external to the building, although it only covers the ground floor, lifts and surrounding areas to the building











Photo 21

Photo 23

Photo 24

10.2. Is there history of / signs of anti social behaviour?

Physical evidence of antisocial behaviour within the block were limited to minor graffiti and the overall condition of internal fixtures and fittings was to a good standard.

Historically blocks of flats are often subject to damage and arson due to the volume of people (general needs) within the building, therefore arson/anti social behaviour will always be a credible threat.

Following liaison with HCC representatives and knowledge of the local area, many of the high rise blocks within the city have been subjected to anti social behaviour, Block 1 is no exception to this.

10.3. Is there an absence of unnecessary fire load in close proximity to the premises or available for ignition by outsiders?

Waste bins were contained within the refuse chute area which is enclosed in a roller shutter and walkways around the block were sterile. Additional waste bins were visible and although they were located clear of the main building, unlike other blocks, they were not chained to an immovable structure which requires addressing to ensure they are not moved too close to the building.





Photo 26

Photo 27

10.4. Are escape routes sterile and free from excessive fire loading?

The block operates a specific zero tolerance approach to housekeeping which is backed up by

comprehensive signage as all communal areas are sterile. It was confirmed that one of the roles of the caretaker was to continuously monitor areas and should be commended for the standard of housekeeping both internally and externally.

10.5. Is the standard of housekeeping within ancillary accommodation acceptable?

All satisfactory.

10.6. Describe arrangements for the handling and storage of waste:

It is understood that the main bins are emptied through local authority contact on a regular and continual basis. Any additional build up of waste is removed on an ad-hoc contractual basis via HCC waste management. All large waste items collected by the caretaker are stored in the waste compound and where possible out of site from passers by.

10.7. General comments / defects:

All satisfactory.

11. Heating system

11.1. Description of heating for communal areas:

There are no heaters within communal areas/means of escape.

11.2. Description of heating for flats:

Heating within flats is provided with electric wall mounted panel heaters which are fixed via a fused spur.



Photo 28

12. Cooking arrangements

12.1. Description of kitchen layout and arrangements:

There are no cooking facilities within common areas or in ground floor areas where Hull City Council employees operate.

As stated previously, residential flats are provided unfurnished. As a result, HCC are not liable for routine test, inspection and maintenance of appliances. Fire safety information relating to kitchen safety and electrical safety is included within tenants' handbooks.

Kitchens are provided with notional FD20 doorsets, heat detection and cooking facilities are remote from the entrance door and do not prejudice the escape route from any point in the flat other than the lounge.



Photo 29

12.2. Are reasonable measures taken to prevent fires as a result of cooking?

It is considered that HCC are doing all that is reasonable to prevent incidents involving fire from occurring within flats.

13. Lightning

13.1. Does the building have a lightning protection system?

Block 1 is one of a number of tall structures in the area and with the projected climate change and increased likelihood of more frequent thunderstorms, the protection of the building as a business and community asset is essential.

Risk against lightning strikes should also include the potential for loss of life and cognisance should also be given regarding the property as sleeping accommodation for circa 180+ individual residents.

It was confirmed verbally and via physical inspection that a lightning protection system (LPS) is in place.



Photo 30

13.2. Has a suitable and sufficient risk assessment (RA) in accordance with BS EN 62305-2:2012 been carried out?

Without any specification to observe, HCC should confirm whether an appropriate assessment of lightning protection has been completed.

The RA would determine if protection is required, the RA should be accurate and site specific. The RA would be measured against:

Sources of Damage:

Lightning current is the primary source of damage, the following sources are distinguished by the strike attachment point:

S1: Flashes to a Structure

S2: Flashes near a structure

S3: Flashes to a line

S4: Flashes 'near' to a line

Types of Damage

Types of damage which may occur as a result of lightning strikes:

D1: Injury to living beings, due to touch and step voltage - electric shock

D2: Physical damage (fire, explosion, mechanical destruction, release of chemicals) due to lighting effects including sparking

D3: Failure of electrical and electronic systems due to LEMP

BSEN 6235-2:2012

R: 1 Risk of loss of human life R 2 Risk of service to the public

R ₃ Risk of loss to cultural heritage

R₄ Risk of loss of economic value

13.3. General comments / defects:

None.

14. Hazards introduced by outside contractors and building works

14.1. Is there satisfactory control over works carried out in the building by contractors?

HCC has its own maintenance personnel which are generally used for basic and low risk maintenance activities, however where required, (specialist projects) HCC use approved contractors which have completed a comprehensive due diligence process - KWL.

KWL generally act as the principle contractor for works such as fire door replacement programmes and passive fire stopping works.

As the building requires maintenance during the lifecycle of use, it is likely to be subject to external maintenance by contractors requiring the use of hot works. Such activities should be subject to specific control measures such as a 'Permit to Work' (PTW) system. The PTW system allows effective control and supervision of externally introduced ignition sources.

PTW's should be the responsibility of an appointed person from HCC and accountable to the works, content of the PTW should include:

- Scope of hot works
- Time and duration of works
- Area of works
- Competence of contractors
- Correct and maintained equipment
- Pre and post fire sweeps

15. Hazardous substances

15.1.Are the general fire precautions adequate to address the hazards associated with dangerous substances used or stored within the premises?

Following this assessment, there were no process risks or situations identified which required any assessment under the dangerous substances and explosive atmospheres regulations (DSEAR) 2002.

Residents are prohibited to use portable paraffin or gas cylinder heaters.

Information relating to dangerous substances and materials should be included within the tenants' handbooks.

15.2. Other significant fire hazards that warrant consideration?

It has been confirmed that some residents engage in substance misuse; such activities significantly increase the risk of fire within the property as not only does it introduce ignition sources but there is also the potential for residents to be under the influence which will affect response and acknowledgement of an incident.

16. Cladding & wall coverings (spread of flames and fire)

Design and materials of external walls

Regulation 5 Fire Safety (England) Regulations 2022: The responsible person in relation to a high-rise residential building must prepare a record of the design of the external walls of the building, including details of the materials from which they are constructed.

The record prepared must include details of the level of risk identified in the risk assessment required under article 9 of the Regulatory Reform (Fire Safety) Order 2005 that the design and materials of the external walls give rise to and any mitigating steps that have been taken in respect of that risk.

The responsible person must prepare a revised record if there are any significant changes to the external walls of the building.

16.1. Do the external walls of the building adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and location of the building?

On 25/08/2017 an initial External Facade and Cladding report and was completed by Fire Guidance UK LLP - See attached.

Findings from the report confirmed that building had been over clad, however the insulation material behind the cladding is dense mineral wool and the type of cladding used to weather protect the insulation material is a thin-coat render system.

To conclude, Block 1 is not over-clad with an ACM system and the insulation material and over-cladding meet the functional requirements of the Building Regulations.

17020-FSO-R007-RA-20170825.pdf

16.2. Is there a requirement for an External Wall Fire Risk Assessment to be carried out in line with PAS 9980?

Findings identified in the External Facade and Cladding report completed by Fire Guidance UK LLP confirmed that the external wall on Block 1 is satisfactory to "adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and location of the building."

It is therefore, the opinion of Holistic Fire Safety that there is no requirement for an External Wall Fire Risk Assessment to be carried out in line with PAS 9980.



Photo 31

16.3. Are records of the design of the external walls and details of the materials from which they are constructed readily available?

Although basic documentation is held, it is the opinion of Holistic Fire Safety that records held by HCC are adequate to detail the make up of external walls.

HCC publish all reports and findings making them accessible to all via the World Wide Web.

Evidence of this was a Briefing Paper produced by HCC to the People and Communities which covered 'Fire Safety in High-Rise' dated 16 November 2017.

16.4. General comments / defects:

To further support information detailed above, the external envelope of a building is not expected to contribute to undue fire spread from one part of a building to another part. This is also achieved by the following;

- The risk of ignition by an external source to the outside surface of the building and spread of fire over the outside surface is restricted by a strict housekeeping policy; and
- The materials used to construct external walls, attachments to them, and how they are assembled do not contribute to the rate of fire spread up the outside of the building.

Previously there has been no specific reference within the Fire Safety Order (FSO) 2005 to external wall systems and fire doors; however, for clarity they are now specifically mentioned within the Fire Safety Order: Article 6 – 'Application to premises'.



Photo 32

Internal Surface Linings

16.5. Do surface linings within the building contribute towards fire growth?

Escape routes at Block 1 are protected through effective compartmentation of REI 30 and the majority of surface lining materials are furnished to Euro Class B- s3, d2 or better to inhibit any lateral fire spread.

All linings of internal walls and floors within protected areas are solid and non combustible, and free of any additions which could be ignited and contribute to surface flame spread.

As a result, surface linings on walls and floors are not expected to contribute towards fire growth.

Protected escape routes should be protected through effective compartmentation of REI 30 with all surface lining materials furnished to Euro Class B-s3, d2 or better to inhibit any lateral fire spread.

16.6. General comments / defects:

All satisfactory.

17. Compartmentation & Fire Separation

The appropriate fire separation and compartmentation of parts of a building are designed to restrict the internal spread and inhibit the damage of fire. This usually takes place between floors/ceilings and rooms/areas of high risk, with the creation of 'designated' or 'protected' routes whereby occupants can make their escape relatively unhindered and unharmed.

17.1. The fire resistance of the structure is as follows:

As per current statutory guidance, the following fire resistance levels are expected for the building:

- 120 minutes: for structural load-bearing elements
- 120 minutes: All compartment walls other than between any flat or firefighting stair, lobby or shaft
- 60 minutes: Separation between residential flats and any other area
- 30 minutes for all protected escape routes within communal areas

17.2. Are there clear and obvious breaches / defects in fire resisting construction?

Protected escape routes and residential dwellings are generally well compartmented with little to no evidence of breaches/defects which could result in injury/ill health of relevant persons.

As the majority of services which supply flats exit horizontally into service risers, should a flat fire occur, the likelihood of it affecting neighbouring dwellings (horizontally and vertically) is remote.

There are multiple defects within service risers where services are not adequately fire stopped as they enter adjacent compartments.

It is not reasonable to identify and advise on remediation for every breach / defect in compartmentation (fire stopping issues) that might exist within a building. Where defects are consistent and it is foreseeable that defects have the potential to affect the safety of those within the building, a specific compartmentation survey should be undertaken. The key principles of a compartmentation survey are to identify routes of heat and smoke transfer within the premises, e.g. service risers, ventilation risers, kitchen and bathroom extraction arrangements, flat entrance doors and breaches in fire resisting construction. The survey should determine whether past alterations / refurbishment on the building have had an impact on existing compartmentation.

17.3. Is a compartmentation survey required / been carried out on the premises?

As part of the T4 fire risk assessment project, Holistic Fire Safety have been commissioned to complete a compartmentation survey on each HRRB. Holistic Fire Safety have appraised the compartmentation of each building and subsequently identified all breaches and defects in fire resisting construction.

Holistic Fire Safety have utilised 'Bolster' which is a digital recording platform to identify breaches and their locations. Each survey will generate a PDF document which can be used to brief Senior Management on findings. HFS's passive fire protection installers who work under the BM Trada Q-Mark scheme have identified each individual penetration and plotted them onto the building layout plans. Each report has identified the surface, substrate and size of each penetration before providing examples of materials which could be used to remediate.

Holistic Fire Safety have provided HCC with methods of satisfying building regulations, and with the intention of complying with test details, supplied by 'Protecta' and other manufacturers.

As all properties are existing buildings, and are to remain occupied for the duration of remediation, it may not always be practicable to install a tested solution; therefore, the principle of 'betterment' and to the 'intention of' will be applied.

Summary of findings from compartmentation survey

17.4. Flats:

No obvious defects present.

Fire dampers are present within ventilation extracts within the bathroom of flats.

At the point services pass into adjacent service risers, fire stopping should be carried out from within risers using tested single sided details supplied by third party certified manufacturers and installers.

HCC should refer to the compartmentation survey for evidence of breaches and methods of remediation.

17.5. Common Areas:

Within the ground floor is a boxed section which runs the full width of the corridor. Penetrations containing metal conduit, service cables and copper and plastic pipes were observed to pass above x3 cross corridor doors with no fire stopping in place and enter service risers through the fan-light at each end of the corridor.

All flats have metal electric meter cupboards which are located in the means of escape outside of flats. The supply from each flat's meter box passes through the cavity wall into the flat; at the point cables run through the wall the use of polyurethane expanding foam was evident.

HCC should refer to the compartmentation survey for evidence of breaches and methods of remediation.



Photo 33



Photo 34



Photo 35



Photo 36



Photo 37



Photo 38



Photo 39



Photo 40

17.6. Ancillary Accommodation:

The standard of compartmentation within the water pump room, lift motor room, store rooms, caretakers office, laundry and cleaners office was generally satisfactory with limited evidence of breaches.

HCC should refer to the compartmentation survey for evidence of breaches and methods of remediation.





Photo 41

Photo 42

17.7. Service Risers:

There are circa 70 service risers within the building and breaches/defects extensive and consistent throughout. Two flats per floor contain internal risers. Electrical risers displayed evidence of breaches passing through compartments boundaries at floor/ceiling level. As previously described, the majority of services (soil vent pipes, extraction arrangements, heating services) which supply flats pass freely between risers and dwellings without an effective sealing system in place.

Example breaches consist of:

- Combustible plastic pipework which travels vertically from riser to riser without an effective closing device present.
- Insulated non combustible pipework travelling vertically from riser to riser without an effective closing device present.
- Non combustible pipework entering risers from flats without an effective sealing system
- Cables penetrating floors
- Linear gaps between door frame and substrate and door heads have been filled with polyurethane expanding foam (this is not a suitable/tested solution for backfilling around timber doorsets).

All compartments gave evidence of excessive use of pink polyurethane expanding foam. Most Polyurethane foams are combustible, which means they offer limited fire-stopping properties. Best practise states that polyurethane based foams should not be used unless in limited spaces between 10 and 33mm. (spaces such as bed and side joints to lintels and frames). This filler does not protect larger spaces as it will never achieve satisfactory fire-resistant results. Any PU foam products used must have any fire safety performance determined by testing, to standards BS 476 Part 20/22 and BS EN 1366-4 for linear gaps and BS EN 1366-3 for service penetration seals.

Remediation will primarily consist of sealing defects with an ablative coated fire batt and mastic system applied in conjunction with an intumescent wrap/fire collar for combustible pipework.

Where annular gaps allow, all isolated non combustible services can be sealed using fire rated mastic which is tested to BS EN 1366-3/4 and classified to 13501-2:2017 + A1:2009.

HCC should refer to the compartmentation survey for evidence of breaches and methods of remediation.



Photo 43



Photo 44



Photo 45



Photo 46



Photo 47



Photo 48



Photo 49



hoto 50

17.8. Ventilation Risers:

None.

Extract ducting within bathrooms have fire dampers installed which are activated by fusible link.

17.9. Other:

Metal conduit has penetrated the compartment floor to all levels within the refuse chute area. Breaches were present at the point conduit pass through fire resisting partitions and appear to be filled with foam.

An 80mm plastic pipe is penetrating the ceiling in the same area.

HCC should refer to the compartmentation survey for evidence of breaches and methods of remediation.





Photo 51

Photo 52

Conclusion

17.10. Are levels of compartmentation within the building adequate to separate adjoining flats, flats and the common areas and flats and other ancillary accommodation?

No O&M manuals have been supplied to HCC following previous fire stopping works.

HCC representatives confirmed that current fire stopping measures were carried out as a temporary control measure following initial concerns in a previous assessment; works were not carried out by a third party certified installer. It was confirmed that all future fire stopping works are to be completed by competent third party certified installers following findings of the compartmentation survey.

It can be confirmed that as services travel horizontally into service risers and not horizontally or vertically into neighbouring residential flats; although defects and breaches are present, they are not expected to affect the safety of relevant persons due to the evacuation strategy being stay put.

Providing passive fire protection works are undertaken within a timely manner, using tested solutions and completed by a third party certified installer, levels of compartmentation are considered satisfactory to support the evacuation strategy and its occupancy.

HCC must ensure that handover packs are received from contractors undertaking works to meet the requirements of Building Regulations 2010 - Regulation 38 - Fire Safety Information.

18. Means of escape from flats

18.1. Description of flat layout:

Residential flats are a mix of single and two bed occupancies whereby all habitable rooms discharge onto the internal hallway. Entry into the flat is made via a certificated FD30s fire doorset before the hallway provides access to bedrooms, bathroom, kitchen and lounge. An enclosed balcony is accessed from the lounge.



Photo 53

18.2. Are travel distances within flats restricted to 9 meters? If distances exceed tolerances, are mitigation measures in place adequate to control the risk?

The maximum travel distance within flats is 12m.

Means of escape within flats is typical of diagram 3.3 of ADB B1 which does not require flats to have a protected internal hallway. This principle was based on limiting travel distances to circa 9m which in turn reduces the chance that residents could become trapped in the event of a fire.

Although the travel distance is slightly in excess of 9m, automatic fire detection and warning is provided within the primary risk room (kitchen) and throughout escape routes including the lounge; in addition, existing doors to the lounge and kitchen are notional FD20 doors with Georgian wired fan-lights - both of which are expected to be adequate to provide sufficient time for evacuation.

(Creating a protected route within flats in an occupied legacy building is considered unreasonable given challenges with access, distress to residents and additional works created by the install within properties etc - In addition, should doors be replaced, they would not require a closer and therefore would remain open given the occupancy profile, therefore no benefit would be achieved for the time/money/effort carried out).



ADB B1 Diagram 3.3 Photo 54

18.3. Are flats provided with a protected entrance hall and restricted travel distance? Is the standard of doors and construction adequate to restrict fire growth and facilitate evacuation from the dwelling?

As described above, there is no requirement for the entrance hall to be a protected route as travel distances are acceptable given the level of fire detection and that flats are provided with 30-minute fire-resisting construction and 20-minute fire-resisting doors.

18.4. Are flats provided with an alternative exit?

No.

18.5. Are further mitigation measures required as a result of defects / non compliant provisions?

Provisions within flats appear to be satisfactory to ensure the safety of residents.

19. Means of escape from common parts

19.1. Are flats provided with a balcony approach or deck approach?

No.

19.2. Are flats provided with a corridor or lobby approach?

Yes.

19.3. Is every flat separated from the common escape stairway?

Every flat is separated from the common escape stairway by a notional FD30s fire door.

19.4. Are there reasonable distances of travel where there is escape in a single direction?

The distance of travel between the flat entrance door and the door to the staircase is limited to 5m.

19.5. Are there reasonable distances of travel where there are alternative means of escape?

The ground floor is provided with alternative exits, both of which are within reasonable distances and are separated by fire resisting construction.

Each floor corridor is separated at the centre by a notional FD30s fire door. Travel distance from the flat furthest from the cross corridor door is 14m.



Photo 55

19.6. Are there adequate smoke control provisions to protect the common escape routes?

There is no ventilation to corridors which serve flats.

Current guidance states that vents in lobbies or corridors adjoining stairways should be operated automatically, however the installation of Automatic Opening Vent (AOV's) are not considered reasonably practicable. In addition, although current openings do not provide a minimum free area of 1.5 metres squared (m2), current provisions are considered adequate given other mitigation measures in place.

Means of escape are consistent on all upper floors as ventilation in staircases is achieved by the opening of windows mechanically by the operation of a switch which is located in the south east ground floor lobby above the Secure Information Box.





Photo 56

Photo 57

19.7. Are door widths and escape routes sufficient for the volume of occupants who are required to use them?

Door widths along escape routes are considered to be satisfactory for the evacuation strategy and occupancy.

Approx. widths which form part of the escape route are as follows;

- Stair 1100mm (1000mm Inc. handrails)
- Cross corridor door 940mm
- · Lobby doors between 770-800mm
- Ground floor lobby doors 1260mm
- Final exits 1000mm

There is currently no recorded evidence of challenges faced by residents with regards door widths.

19.8. Do doors along escape routes open in the direction of escape, where necessary?

All doors open in the direction of travel where necessary.

19.9. Do escape routes have a minimum clear headroom of 2m and are escape route floor finishes designed to minimise their impact when wet?

Floor coverings and head clearances are adequate to assist with evacuation.

19.10. Are all routes clearly identified through appropriate signage and lighting which lead residents to a place of ultimate safety?

Provisions for signage and emergency lighting are considered to be adequate to aid and assist relevant persons reach a place of ultimate safety. Refer to section 23 for details of Wayfinding signage.

19.11. Are there adequate provisions of exits which are easily and immediately openable?

Final exits doors are manually operated and fail safe in the open position during a power failure.

Doors fitted with magnetic locks fail safe in the open position during a power failure i.e. the laundry.

Ground floor lobby doors are electrically operated automatic doors. A nearby maintenance sticker indicated these were last inspected in August 2018.

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Photo 58

Photo 59

19.12. Is the fire-resisting construction (including any glazing) protecting escape routes and staircases of a suitable standard and maintained in sound condition?

Escape routes are suitably separated and subdivided by fire rated construction which is made up of automatic and self closing FD30s door assemblies and Georgian wired glazing.







Photo 60

Photo 61

Photo 62

19.13. Is the design and maintenance of the means of escape considered adequate?

The general principles of means of escape applied at Block 1 are:

- Horizontal escape from the flat entrance door to a stairway or final exits; and Vertical escape via a stairway leading to a final exit or place of relative safety
- Corridors and escape routes are clear of significant fire hazards, meaning that the most likely place for a fire to start is within a flat;
- Flats and risk rooms have a reasonable level of compartmentation; therefore, the probability of fire spread from the room of origin will be low; and
- If a fire does occur in common areas, the materials and construction will restrict fire spread and development whilst additional measures are in place to raise the alarm and provide smoke control.

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20. Fire Doors

20.1. Is the fire resistance of doors / curtain walling to staircases and the common areas considered adequate, and are the doors maintained in sound condition? Describe the standard and condition of door sets?

As detailed previously every flat is separated from the common escape stairway by a FD30s fire door. All doors which form part of escape routes are self-closing, FD30 fire doorsets which are considered to be in excellent condition considering their age and usage; however general maintenance and remediation is required.

It is expected that current installations are satisfactory and will prevent the passage of smoke and products of combustion which could compromise escape routes.

Doorsets are provided with:

- · Good condition leaf and frame
- · Good condition polished Georgian wired integrity fire resistant glazing
- x3 100mm BS 1935 Grade 13 CE marked hinges
- Frames have a 25mm stop lat
- Appropriate single strip combination cold smoke and intumescent seals fitted into the leaf
- Gaps between leaf and frame are generally not more than 3mm top and side rails, however there are variations to this and gaps at the bottom threshold are consistently >8mm and will require attention
- A BSEN 1154 CE marked self closing device with a minimum power rating 3 (Grade 1) is fitted to all communal doors. A number of samples were taken on different floors with the majority capable of closing from any angle and not taking longer than 25 seconds to overcome the resistance of any seals to close into their frames.

Defects consisted of:

- Worn / leaking hinges requiring replacement
- Hinges painted over and missing screws
- Strips and seals are consistently over painted and occasionally routered too deep (although gap tolerances are negligible which generally enable brush seals to sit against the frame)
- Some door leaves to staircases were missing 'Fire door keep shut' signs.
- Lobby doors failing to close flush.

All curtain walling and partitions which form escape routes are made up of timber frames which are completed by large Georgian wired glazed apertures. Samples were taken throughout the building, with all floors displaying satisfactory findings.

As a result, it is advised that given minor defects, a specific fire door inspection is undertaken to specify what action is required.







Photo 64



Photo 65



Photo 66



Photo 6



Photo 68

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Photo 69

20.2. Is the fire resistance of doors to meter cupboards/store rooms/plant rooms in the common areas considered adequate, and are they adequately secured and/or fitted with suitable self-closing devices? Describe the standard and condition of door sets?

Communal riser doorsets are 44mm, of notional fire resistance with some having timber fan-lights. Leaves were generally observed to be in good condition and fitted with two none fire rated hinges which were often painted over and noted to be leaking.

Gaps between the leaf and frame are generally within acceptable tolerance at <4mm and <8mm at thresholds.

Door frames are fitted with strips and seals however, some were either damaged, missing or painted over. There was evidence of a lack of backfilling/fire stopping between the frame and substrate.

A large number of doors were missing appropriate signage or had redundant or outdated signage.

As a result, it is advised that given minor defects, a specific fire door inspection is undertaken to specify what action is required.











20.3. Are suitable self-closing devices fitted to doors which discharge into common areas?

The caretakers office and cleaners office on the ground floor are not provided with self closing devices. Although doors are due for replacement, in the interim they should be fitted with a self closing device.

All doors other than those locked shut which form part of, and discharge onto escape routes are provided with overhead, scissor self closing devices and electronic open/closers to cater for mobility impaired residents.



Photo 75

20.4. Is the fire resistance of flat entrance doors considered adequate, and are doors maintained in sound condition? Describe the standard and condition of door sets?

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All flat entrance doors have been replaced with third party certified FD30s fire doorsets, which meet the requirements detailed in the ADBVol: 1 Appendix C1 2a for fire resistance and smoke control from both sides, and are fitted with an appropriate positive action self-closing device (BS 1154) and a single action mechanism which does not require the use of a key.

No evidence of certification has been provided, however handover packs are expected to be held by HCC compliance teams.

Door-sets have BM Trada Manufacturers plugs installed within the edge of the door leaf, however there is no evidence to suggest that doorsets have been installed by BM Trada certified installers.

It was noted that flats 36 and 112 were fitted with timber doors.









Photo 76

oto 77 F

Photo 79

20.5. Are suitable self-closing devices fitted to flat entrance doors and, where fitted, maintained in good working order?

All flat entrance doors are fitted with an appropriate overhead BS 1154 self closing device.



Photo 80

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21. Means of warning

21.1. Is a fire detection and fire alarm system provided within the common areas of the building? Where applicable, confirm the category of system and describe provisions.

Block 1 does not have a communal fire alarm system, nor is one considered necessary given its occupancy and preventative and protective measures in place.

Single point battery smoke detectors are provided within isolated areas of ancillary accommodation, however there are no provisions within the laundry or areas with specific risk (lift motor room). The detector in the caretakers office did not have a battery in place.



Photo 81

21.2. Where applicable, is control indicating equipment provided and positioned in a suitable location?

N/A.

21.3. Where applicable, has a fire alarm zone plan been provided? This should consist of 'a diagrammatic representation of the building, showing building entrances, the main circulation areas and the division into zones. The diagrammatic representation should be printed, correctly orientated and provide an accurate zone plan.'

N/A.

21.4. Where applicable, are manual call points provided at suitable locations? Describe provisions.

N/A.

21.5. Where applicable, are sounders including visual alarm devices suitable for the occupancy and considered adequate in raising the alarm?

N/A.

21.6. Where applicable, is the system connected to an alarm receiving centre?

N/A.

21.7. Where applicable, are there adequate arrangements in place for silencing and resetting an alarm condition?

N/A.

21.8. Are provisions within communal areas adequate to meet

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Yes.

Detection and alarm systems within residential accommodation

21.9. Are provisions within residential accommodation adequate to meet the purpose group and occupancy of the property? Describe the standard/category along with provisions.

Each residential flat is provided with a Grade D1 LD2 (BS 5839:2019 + A1:2020) system which comprises of smoke detection throughout all circulation areas that form part of the escape route from [within] and heat detection within areas of high fire risk to occupants (kitchen).

Upon activation of a detector, the alarm will sound locally to the flat of origin and it will be the responsibility of occupants / neighbouring residents to notify Humberside Fire & Rescue to request their attendance. Actions to be taken are confirmed by Fire Action Notices and information contained within residents' handbooks.

Residents with specific impairments should be provided with individual devices in the form of pendants and vibrating pads. Again, such provisions should be considered as part of the PCFRA.

HCC confirmed that as part of future proofing of their HRRB's, as a baseline install within void properties, a Grade D1 LD2 fire alarm system is installed. HCC are also working on a system which sends key information to the cloud. e.g. the system will identify issues in the event of an activation - HCC will be automatically notified. HCC do not currently have sufficient resources to monitor activations however, plans are being put in place to achieve this.





Photo 82

Photo 83

Evacuation alert system

Inline with recommendations made in Phase 1 of the Grenfell Tower report (Executive Summary) Section 12, 33.22 (d). If the property is defined as a high rise residential building, it should be equipped with an evacuation and alert system which meets BS 8629:2019.

21.10. Is an Evacuation alert system provided and does it consist of the following:

- Evacuation and alert control indicating equipment (EACIE) within additional SIB accessible to the attending Fire and Rescue Service
- Signage to indicate EACIE
- Sounders for evacuation and alert system within each residential flat
- EACIE to be on toggle switches
- Ability for the Fire and Rescue service to control evacuation by individual floor or whole building

There is no evacuation alert system provided at Block 1.

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Photo 84

Photo 85

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22. Emergency escape lighting

22.1. Has a reasonable standard of emergency escape lighting been provided? Is emergency escape lighting adequate to enable occupants to locate, and move safely along defined routes and escape via final exits? Describe arrangements and deficiencies observed.

Although emergency lighting was not tested, an inspection of luminaires and their locations has determined that provisions are adequate to enable occupants to locate, and move safely along, defined routes and escape via final exits.

Emergency lighting installed consists of wall and ceiling mounted luminaires which are located directly outside flats, lobbies and the stairwell; all luminaires are low voltage LED.

The building is provided with a mixture of maintained (X 1 180) luminaires and non maintained (X 0 180) luminaires with a three hour battery back up. Final exits are maintained units. Internal and external provisions appear satisfactory, although there are some small rooms such as the cleaners store which are not provided with luminaires, however based on risk assessment, the risk within these areas has determined current provisions as satisfactory.

Luminaires are provided with test switch keys which are located at various places and are tested monthly internally.

Provisions appear to be in accordance with BS 9999 Table 8





Photo 86

Photo 8

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23. Fire safety signs and notices

23.1. Is there a reasonable standard of fire safety signs and notices?

Fire safety signage is generally to a satisfactory standard both internally and external to the premises with reasonable provisions for hazard warning signs (risk rooms), mandatory signage for fire doors, information signage detailing emergency arrangements and prohibition signage for smoking. Fire safety signage is generally in accordance with the Health and Safety (Signs and Signals) Regulations together with BS 5499-4: 2013 and BS EN 7010.

23.2. Are Fire Action Notices provided and displayed in appropriate locations?

Residential floors are provided with comprehensive instruction on actions to be taken in the event of fire. Fire action notices are displayed prominently opposite/adjacent lift doors.



Photo 88

23.3. Is emergency evacuation/safe condition signage provided within communal areas?

The expectation is that all residents are familiar with the layout of the building and its communal areas, although some signage is technically incorrect in places, current safe condition signage provided is considered to be satisfactory and it is expected that all relevant persons using the building will understand signage in place.

Should changes be made to escape route layouts, it is advised that escape route signage consists of the following:

- \bullet A combination of a BS EN ISO 7010 emergency exit sign including a directional arrow and supplementary text
- The use of supplementary text should be in accordance with BS 5499-4 clause 4.7 and state either 'Exit' or 'Fire Exit'
- For any sign suggesting a 'straight ahead' an up arrow is required (meaning 'progress forward and through here' as per BS 5499-4:2013 Table 1). A down arrow suggests a change in level downwards.

It is advised that all replacement safe condition escape route signage should be photo luminescent as manufactured by Jailite. Signs should be rigid or semi rigid PVC fixed by 4 x screws in each corner of the sign or with appropriate adhesive.







Photo 89

Photo 90

Photo 91

23.4. Is suitable and adequate signage in place to notify relevant persons of actions taken in relation to lifts?

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Information relating to the use of lifts in the event of fire is contained within fire action notices.

23.5. Is 'Fire exit, keep clear' signage in place at appropriate locations?

To prevent persons from obstructing emergency exit doors on the external side of the building, 'Fire exit keep clear' signs that comply to BS 5499-4 have been displayed on the outside of final doors.

23.6. Is hazard warning signage provided at appropriate locations?

Hazard warning signage is in place on the external face of risk areas such as the lift motor room and the external electrical substation. Each individual ESU within the building is also provided with hazard warning signage to warn both occupants and responding fire crews.



Photo 92

23.7. Is mandatory signage prescribing a specific behaviour in place at appropriate locations?

Mandatory signage prescribing a specific behaviour is displayed mostly on fire doors where necessary (including flat entrance doors) throughout the building.

• The majority of fire doors which are accessible from either side have 'Fire door keep shut' signs attached to both sides of the door leaf

A number of doors were observed to be missing appropriate fire safety signage e.g. 'Fire door keep locked' 'Fire door keep shut'.



Photo 93



Photo 94



Photo 95

23.8. In relation to Regulation 8 of the Fire Safety Regulations 2022, has the responsible person ensured that the building contains clear markings of floor identification and identification of domestic premises in the form of Wayfinding Signage?

Block 1 is provided with basic timber signage which does identify both floor number and flat numbers; there is also printed signage within the stairwell which identifies floor numbers.

Although emergency lighting is provided, current signage is not considered adequate to be visible in lowlighting or smoky conditions.

It is a requirement that floor numbers be clearly marked on each landing within the stairways and in a prominent place in all lobbies in such a way as to be visible both in normal conditions and in lowlighting or smoky conditions.

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ADB Vol 1. 15.14 states that floor identification signs should meet all of the following conditions:

A. The signs should be located on every landing of a protected stairway and every protected corridor/lobby (or open access balcony) into which a firefighting lift opens.

B. The text should be in sans serif typeface with a letter height of at least 50mm. The height of the numeral that designates the floor number should be at least 75mm.

C. The signs should be visible from the top step of a firefighting stair and, where possible, from inside a firefighting lift when the lift car doors open.

D. The signs should be mounted between 1.7m and 2m above floor level and, as far as practicable, all the signs should be mounted at the same height.

E. The text should be on a contrasting background, easily legible and readable in low level lighting conditions or when illuminated with a torch.

ADB Vol 1. 15.15 states the floor number designations should meet all of the following conditions: F. The floor closest to the ground level should be designated as either Floor 0 or Ground Floor. G. Each floor above the ground floor should be numbered sequentially beginning with Floor 1. H. A lower ground floor should be designated as either Floor –1 or Lower Ground Floor. I. Each floor below the ground floor should be numbered sequentially beginning with Floor –1 or Basement 1.

ADB Vol 1. 15.16 states the flat indicator signs should meet all of the following conditions:

J. The signs should be sited immediately below the floor identification signs, such that the top edge of the sign is no more than 50mm below the bottom edge of the floor identification sign.

K. The wording should take the form Flats X–Y, with the lowest flat number first.

L. The text should be in sans serif typeface with a letter height of at least half that of the floor indicator sign.

M. The wording should be supplemented by arrows when flats are in more than one direction. N. The text and arrows should be on a contrasting background, easily legible and readable in low level lighting conditions or when illuminated with a torch.





Photo 96

Photo 97

For the purposes of the paragraph above "markings" means an identification designed and located in accordance with the guidance in Volume 1 of Approved Document B(1) on each landing within the stairways and in the lift lobbies of the floor level marked in such a way as to be visible both in low level lighting conditions or when illuminated with a torch.

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24. Extinguishing media and fixed systems

24.1. Is Automatic Water Fire Suppression Systems (AWFSS) provided within communal areas/ancillary accommodation? Where applicable, describe arrangements and deficiencies.

None provided.

24.2. Is Automatic Water Fire Suppression Systems (AWFSS) provided within residential accommodation? Where applicable, describe arrangements and deficiencies.

Cognisance of the structure and use of the building, together with its long term future planning, consideration should be given to the additional protection afforded by engineering solutions such as retro-fitted AWFSS sprinkler system.

The recent amendment to ADB Vol 1. (May 2020) with regard to the lowering of the trigger height for sprinkler requirements in relevant buildings to 11 metres only emphasises this is a proactive approach to the direct safety of the sleeping residents.

24.3. Is suitable portable firefighting equipment provided at appropriate locations? Where applicable, describe arrangements and deficiencies.

Extinguishers are not present within means of escape.

The caretakers office is provided with a dry powder extinguisher. The use of dry powder extinguishers within small and under ventilated compartments should be avoided - this principle should applied applied across HCC's housing stock.

The use of dry powder extinguishers indoors can lead to:

- impaired visibility
- issues with inhalation
- damage to plant and property.

Dry powder extinguishers should be removed from the premises and replaced with an appropriate equivalent. E.g. CO2.

Extinguishers were in date (09/2022).

HCC should also consider reviewing fire extinguisher provisions within the building with a view of converting extinguishers to composite P50 extinguishers; benefits include environmental and financial savings.







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25. Other relevant fixed systems and equipment

25.1. Where applicable, are there appropriately sited facilities for electrical isolation of any photovoltaic (PV) cells, with appropriate signage, to assist the fire and rescue service?

There is no PV system installed at Block 1.

25.2. Other fixed systems including arrangements and deficiencies.

Fire dampers are provided in ductwork at the point extraction exits residential dwellings and enters service risers. It was confirmed that dampers are subjected to inspection and testing to ensure that they will still operate in a fire every four years.

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26. Access and facilities for the fire service

26.1. Are the following provisions provided for the premises:

- External access which enables fire appliances to be used near the building
- Access into the building for firefighters to search and rescue people
- Access into the building for firefighters to fight any fires

Access roads are generally free from obstruction and depending on route taken are not compromised by parked vehicles even though surrounding areas are heavily populated by residential accommodation.

HFRS are provided with key fob access and crews regularly carry out familiarisation visits.

In line with Regulation 4 & 6 of the Fire Safety Regulations 2022, Holistic Fire Safety have provided HCC with information to include within the secure information box e.g. accurate building and floor plans to assist HFRS search and rescue people and fight fires.

26.2. Are provisions for fire appliance approach and positioning satisfactory to facilitate and assist emergency response? Describe arrangements and deficiencies - widths, heights, weight tolerances, distance from dry riser/building etc.

Access to Block 1 is via Icehouse Road to Cambridge Street and leads directly to the front of the building.

Current provisions provide a minimum of 3.7m in width and 4m in height to allow for unrestricted access for pumping and high reach appliances (ADB Vol 1. B5 Table 13.1).

There are no obvious signs of weight restrictions or anything that could impact appliance approach and positioning. The nearest point at which a fire appliance could position to the building is <18 meters; however as described above the location of appliance positioning will be dynamic and confirmed by the Officer In Charge.







Photo 100

Photo 101

Photo 102

26.3. Water main: Describe arrangements and deficiencies observed.

All immediate hydrants are within 90 metres, and are 100mm diameter and are the responsibility of the local water authority undertaking, via Humberside Fire and Rescue Service, who maintain each hydrant on a two year flow test programme.



Photo 103

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26.4. Dry riser: Describe arrangements and deficiencies observed.

Block 1 is provided with two dry risers. The dry risers serve all floors and it is estimated that all points within each flat of the block are in the region of 45m from the nearest landing valve.

The inlet valves are located externally to the east side of the building and landing valves are located in each staircase.





Photo 104

Photo 105

26.5. Other / defects:

Lifts at Block 1 are not designated firefighting lifts, however there is an agreement in place that lifts would be utilised by HFRS in the event of an incident.

Signage within communal areas clearly states that lifts are not to be used in the event of an incident by relevant persons.

Secure information box

In relation to Regulation 4 of the Fire Safety Regulations 2022, the responsible person in relation to a high-rise residential building must install and maintain a secure information box in or on the building

26.6. Is the secure information box positioned at a location in or on the building which is readily accessible to the fire and rescue authority?

The SIB is located in the entrance within the south east ground floor lobby. It has been agreed by all relevant parties that its location is the most suitable - internally.



Photo 106

26.7. Is the secure information box capable of containing documents required by these Regulations and is it reasonably secure from unauthorised access and vandalism?

HCC are currently reviewing the content of the SIB.

Content is to include the following:

- 3 laminated plans of each floor including flat numbers + arrangements to meet Regulation 6
- Details of vulnerable residents PEEPS (Personal Emergency Evacuation Plans)
- · Evacuation plan for the block
- Details of "essential fire-fighting equipment"
- Location of utility `shut off` valves
- · Location of service risers

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- Location of fire fighting lifts (where applicable)
- Location of EACIE (if/when installed)
- · Copies of building access keys
- Copies of lift engagement key
- Copy of SSRI & Ops Pre plan
- Copy of appliance pump pressure convertor
- Location of utility `shut off` valves

The responsible person must ensure that the following information is contained within the secure information box (Assessor to confirm)

26.8. Is the name, address and telephone number within the United Kingdom of the responsible person present?

Under review.

26.9. Is the name and contact information of such other persons within the United Kingdom who are provided with the facilities to and are permitted to access the building as the responsible person considers appropriate present?

Under review.

26.10. Has the responsible person provided the local fire and rescue authority with everything required to enable it to access the secure information box and are arrangements in place to as soon as reasonably practicable notify the local fire and rescue authority if there are any changes to those requirements?

Holistic Fire Safety are to complete an audit/assessment of the management of HRRBs - this audit/assessment will confirm HCC are meeting all the requirements of the Fire Safety Regulations 2022.

It can be confirmed that arrangements are in place to notify the local fire and rescue authority if there are any changes which affect their ability to gain access to the building, carry out search and rescue or carry out firefighting operations.

https://humbersidefire.gov.uk/your-safety/business-safety/fser



Photo 107

Floor plan and building plans

26.11. Are plans provided adequate to assist emergency response and meet the requirements of Regulation 6 of the Fire Safety Regulations 2022?

HCC have produced plans to meet Regulation 6 of the Fire Safety Regulations 2022. Refer to 2.1

Confirmation of Regulation 11 of the Fire

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Safety Regulations 2022

26.12. Has the responsible person provided the local fire and rescue authority adequate documentation relating to Regulation 5 (design and materials in external walls)? This information must be communicated via electronic means.

It can be confirmed that HCC have provided HFRS with the necessary documentation which meets the requirements of Regulation 5 (design and materials in external walls). Initial surveys were carried out on 25/08/2017.

Following surveys completed by Fire Guidance UK LLP, findings from the report confirmed that the building had been over clad, however the insulation material behind the cladding is dense mineral wool and the type of cladding used to weather protect the insulation material is a thin-coat render system.

To conclude, Block 1 is not over-clad with an ACM system and the insulation material and over-cladding meet the functional requirements of the Building Regulations.

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26.13. Has the responsible person provided the local fire and rescue authority adequate documentation relating to Regulation 6 (floor plans and building plan)? This information must be communicated via electronic means.

HCC to confirm.

Refer to 2.1

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27. Resident and stakeholder engagement - communication & information

Regulation 9 of the Fire Safety Regulations 2022, the responsible person must display fire safety instructions in a conspicuous part of any building:

- which contains two or more sets of domestic premises; and
- which contains common parts through which residents would need to evacuate in the case of an emergency.

Fire safety instructions must be in a comprehensible form that the residents can be reasonably expected to understand; they must also contain instructions relating to the evacuation strategy for the building, how to report a fire to the fire and rescue authority, and any other instruction that tells residents what they must do when a fire has occurred.

The responsible person must provide a copy of the instructions to a new resident of domestic premises within the building, as soon as reasonably practicable after that resident moves into the premises; and to all residents of domestic premises within the building within each period of 12 months beginning with the date these Regulations come into force.

After any material changes to the instructions, the responsible person must display the fire safety instructions and provide a copy to residents which relate to evacuation, how to report an incident and any other instruction of actions to be taken in the event of a incident.

Yes

27.1. Are arrangements in place to meet the requirements of Regulation 9?

HCC confirmed that significant efforts are being made to improve engagement and communication with residents; a clear and defined example of this is the creation of the Tenancy Management High Rise Team. In addition, HCC have created various steering and residents groups which undertake monthly surgeries who are to be attended by emergency services - police, fire, anti social groups etc.

HCC are currently in the process of producing a 'Welcome Pack / Resident Information Pack'; these safety packs are to cover the contents stated below along with resident duties, HCC obligations, key contacts within HCC and how to report defects / incidents etc.

HCC have committed to community drop in's to assist engagement along with producing periodic briefing letters which provide updates - good and bad & feedback forms.

Another clear and defined demonstration of engagement is installing smart tv's on landings which are to be used for communicating with residents.

Consulting and notifying residents is critical to the safety of the building. The points below should be cross-referenced with information provided to residents to ensure adequate communication is in place. BS 9991:2015 Annex F Figure F.1 provides a suitable example of such advice, or residents may be provided with specific information in the form of a bespoke document. The term 'They' refers to Residents.

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• How they can prevent fires in their own home and in the common parts.

• The importance of maintaining the security of their block (making sure doors close behind them when they enter or leave) and being vigilant for deliberate fire setting.

• that they should never store or use petrol, bottled gas, paraffin heaters or other flammable materials in their flats.

what action they should take if they discover a fire.

• how they can ensure they can make their way safely from their flats and how to exit the building once they have left their flat.

• what 'stay put' means if there is a fire elsewhere in the building.

• what they must do to safeguard communal escape routes, especially taking care to make sure fire doors self-close properly and are not wedged, tied or otherwise held open.

• what the policy on the use of common parts requires of them.

- how they can avoid inadvertently damaging the buildings fire protection when making changes to their flat. what is involved in testing their smoke alarms and how often they should do it.
- ways they can assist the fire and rescue service by not blocking access when parking, and by keeping fire main inlets and outlets, where provided, clear.
- how they can report essential repairs needed to fire safety measures in their flat and elsewhere in the block.

27.2. Are arrangements in place to provide residents with sufficient information to meet guidance provided in BS 9991:2015 Annex F Figure F.1?

As described above.

Fire doors

Regulation 10 of the Fire Safety Regulations 2022, the responsible person, in relation to a building which contains two or more sets of domestic premises and which contains common parts through which residents would need to evacuate in the case of an emergency, must provide the required information about fire doors to the residents of the building.

Required information includes:

- Fire doors should be kept shut when not in use;
- Residents or their guests should not tamper with the self closing devices; and
- residents should report any faults or damages with doors immediately to the responsible person;

The required information must be provided by the responsible person to a new resident of domestic premises in the building, as soon as reasonably practicable after that resident moves into the premises; and to all residents of domestic premises within the building, within each period of 12 months beginning with the date these Regulations come into force.

The responsible person, in relation to a building which contains two or more sets of domestic premises and which is above 11 metres in height, must use best endeavours to undertake checks of fire doors at the entrances of individual domestic premises in the building at least every 12 months.

The responsible person in relation to a building which contains two or more sets of domestic premises and which is above 11 metres in height, must undertake checks of any fire doors in communal areas of the building at least every 3 months.

The responsible person must keep a record of the steps taken to comply with the obligation including in any case where access to the domestic premises was not granted during any 12 month period, and the steps taken by the responsible person to try and gain access. The checks required must include ensuring that the self-closing devices for the doors are working.

27.3. Are arrangements in place to meet the requirements of Regulation 10?

HCC are currently reviewing a number of internal arrangements and processes in attempt to meet the requirements of the Fire Safety Regulations 2022. As described previously Holistic Fire Safety are to complete an audit/assessment of the management of HRRBs - this audit/assessment will confirm HCC are meeting all the requirements of the Fire Safety Regulations 2022.

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28. Management of fire safety

28.1. Fire safety at the premises is managed by:

Fire Safety in HCC's HRRB's is managed by Hull City Council with the Assistant Director seen as the most appropriate and senior role responsible for Fire Safety.

28.2. To meet Article 18 of the Fire Safety Order - Safety assistance and inline with recommendations made by WG8 and

Hackitt report (Building A Safer Future) Recommendation 3.1c), have those in control of the building nominated a 'Building Safety Manager' (BSM). This role should be nominated as the 'named individual' who is the single point of contact responsible for all safety issues in the premises. The BSM must have the 'relevant skills, knowledge, experience and behaviours, to carry out the day to day management of the fire and structural safety of the building, having regard to the statutory functions of the BSM'.

HCC have not yet nominated an individual/role as the Building Safety Manager (BSM); a comprehensive recruitment drive has taken place, however they have been unable to fill the position.

28.3. Safety assistance continued: Are competent person(s) appointed under Article 18 of the Fire Safety Order to assist the responsible person in undertaking the preventive and protective measures (i.e. relevant general fire precautions)?

The structure of the organisation at HCC is complex and it is currently unclear from a third party's point of view who is responsible for each area associated with Fire Safety. As with any Local Authority, different departments are responsible for different areas of the organisation, it is the opinion of Holistic Fire Safety that HCC should document the organisational structure and roles responsible for fire safety.

See the attached as guidance:

There should be a formal agreement between duty holders and key roles such as Assistant Director, Head of Service, Families & Neighbourhoods etc. Their roles and responsibilities should be documented in the form of a matrix. The matrix should clearly identify the agreed responsibility for every key aspect of fire safety management specific to HCC.

(duty holders include anyone who, "under a tenancy or contract, has a responsibility for maintenance or repair of the premises, maintenance or repair of anything in or on the premises, or for the safety of the premises". This can include a wide variety of people, including, third party contractors on short and long term agreements, along with fire risk assessors and service engineers who maintain fire protection equipment; roles who may commit offences if they do not carry out their work properly.)



Photo 108

28.4. Do those in control of the building have a Fire Safety

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Management Plan in place which demonstrates how fire safety is managed across the organisation. The management plan should be a single and central document which provides evidence of compliance with Article 11 of the Fire Safety Order - Fire safety arrangements.

Verbal discussions with HCC representatives confirmed that HCC have a number of policies and procedures in place which confirmed compliance with Article 11 of the Fire Safety Order.

TCW is the electronic recording database which is defined as the buildings fire safety manual.

As described previously Holistic Fire Safety are to complete an audit/assessment of the management of HRRBs - this audit/assessment will confirm whether current provisions are satisfactory.

28.5. Does the premises have a fire safety design strategy document?

- A complete and thorough consideration of the fire safety requirements and its occupants
- To widen the consideration of fire precautions with respect to broader objectives including life safety, business continuity and property protection
- To assist in the review of fire system design criteria prior to the preparation of the designs
- To ensure that fire protection system designs support the strategy
- To provide a framework for all future fire safety and protection works

There is no fire strategy design document in place for Block 1.

28.6. Does the property have a database/fire safety manual which contains the following information?

- Building design information
- Building plans inc. locations of isolation points, fire hazards & hydrants
- Drawings of the building identifying the fire alarm zones and compartment boundaries
- Drawings defining levels of fire-resistance in accordance with the fire strategy
- Fire Risk Management Plan
- Fire risk assessment
- Routine test inspection and maintenance of passive and active systems
- Details of fire safety training
- Record and action plan of any fire safety audit and programme of works to remedy defects and deficiencies
- Evacuation procedures
- Business continuity plans
- Emergency Plan
- Safe working procedures

TCW is the electronic recording database which is defined as the buildings fire safety manual.

28.7. Are those who occupy the premises as a 'place of work' provided with fire safety training specific to the building? In

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relation to Article 11 of the Fire Safety, fire safety training should cover:

- The premises fire safety strategy and procedures and their personal responsibilities to prevent and protect against outbreaks of fire
- What action to take if they discover a fire
- How to raise the alarm, the location of manual call points, and the procedure for contacting the Fire Service
- What action to take immediately on hearing the fire alarm
- The location and safe use of portable or other fire extinguishing equipment (if authorised to do so)
- The location of escape routes from their place of work including those routes not used regularly for normal access and egress
- Their responsibility to direct or escort visitors and contractors in their charge to escape routes (and in the case of disabled persons to the nearest useable escape route)
- The importance of keeping closed all fire doors and windows to limit the spread of fire, heat or smoke
- How to safely isolate or shutdown process plant or equipment, where appropriate
- The importance of good housekeeping in preventing the outbreak of fire and limiting its effects.

It has been confirmed that HCC representatives are provided with fire safety training upon induction and at periodic intervals.

Regulation 7 of the Fire Safety Regulations 2022, relates to routine test, inspection and maintenance of lifts and essential firefighting equipment. It is important to demonstrate to the legislative enforcing authority and Building Safety Regulator that the building has a comprehensive testing and recording programme of passive and active protection relating to the overall functioning of the building; such demonstration of planned preventative maintenance provides for a good fire safety culture and reduce the possibility of ignition.

28.8. Are arrangements in place to inspect, test, and maintain lifts and essential fire fighting equipment within the premises?

TCW is the electronic recording database which is defined as the buildings fire safety manual and this is where all records associated with all HCC's HRRB's are stored.

Verbal discussions confirmed that compliance plans & maintenance programmes are in place which detail test, inspection and maintenance frequencies for lifts and all essential fire fighting equipment.

Management audits should view records and ensure compliance with the appropriate British Standards.

It can be confirmed that arrangements are in place to notify the local fire and rescue authority if there are any changes which affect their ability to gain access to the building, carry out search and rescue or carry out firefighting operations.

https://humbersidefire.gov.uk/your-safety/business-safety/fser Regulation 7 of the Fire Safety Regulations 2022, relates to routine test, inspection and maintenance of lifts and essential firefighting equipment. It is important to demonstrate to the legislative enforcing authority and Building Safety Regulator that the building has a comprehensive testing and recording programme of passive and active protection relating to the overall functioning of the building; such demonstration of planned preventative maintenance provides for a good fire safety culture and

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reduce the possibility of ignition.

Where the responsible person identifies any fault with a lift for use by firefighters, evacuation lift or piece of essential fire-fighting equipment, are arrangements in place for the responsible person to rectify the fault?

Where a fault identified cannot be rectified within a 24-hour period beginning with the time the fault is identified, the responsible person must, as soon as reasonably practicable report the fault to the local fire and rescue authority by electronic means; and subsequently report the rectification of the fault to the local fire and rescue authority by electronic means when it has been rectified

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Media summary



Photo 1



Photo 3



Photo 2



Photo 4

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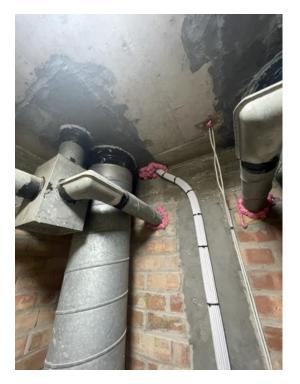


Photo 5



Photo 7

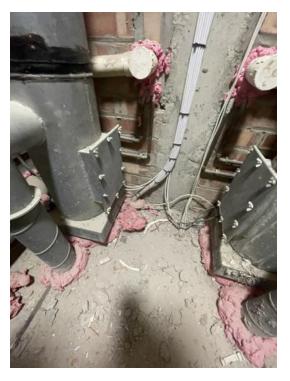


Photo 6



Photo 8

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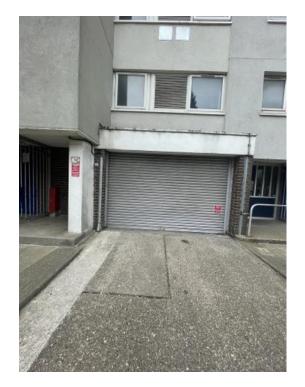


Photo 9





Photo 10



Photo 12

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Photo 13



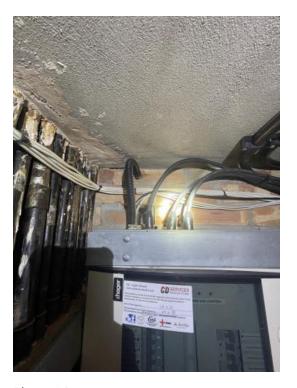


Photo 14



Photo 16



Photo 17



Photo 19



Photo 18



Photo 20

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Photo 21



Photo 23 Photo 24

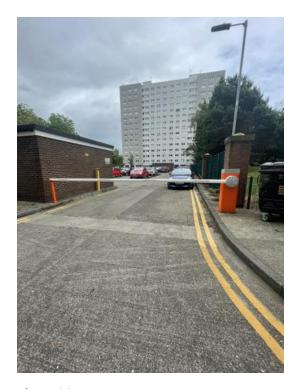


Photo 22



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Photo 25



Photo 27



Photo 26



Photo 28

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Photo 29



Photo 31



Photo 30

The FSA 2021 makes amendment to article 6 of the Fire Safety Order 2005

1. Premises to which the Fire Safety Order applies
In article 6 of the Regulatory Reform (Fire Safety) Order 2005 (S.1. 2005/1541) (application to premises)
(a) In paragraph (1)(a) (excluded premises), after "except to the extent mentioned in" insert "paragraph (1A) or";
(b) After paragraph (1) insert —

"(A) Where a building contains two or more sets of domestic premises, the things to which this order applies include—
(a) the building's structure and external walls and any common parts;
(b) All doors between the domestic premises and common parts (so far as not falling within sub-paragraph (a)).

(1B) The reference to external walls includes—
(a) Doors or windows in those walls, and
(b) Anything attached to the exterior of those walls (including balconies).";
(c) In paragraph (2), for "paragraph" substitute "provisions"

Photo 32

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Photo 33



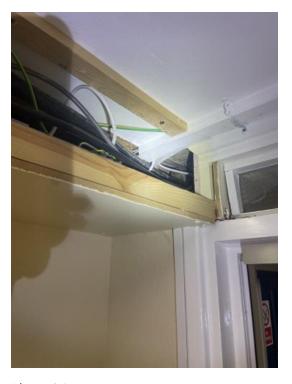


Photo 34



Photo 36



Photo 37



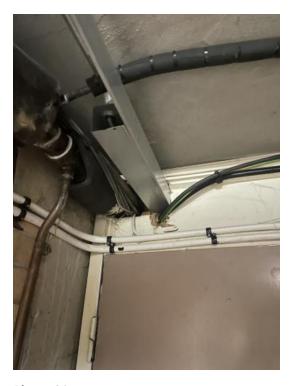


Photo 38

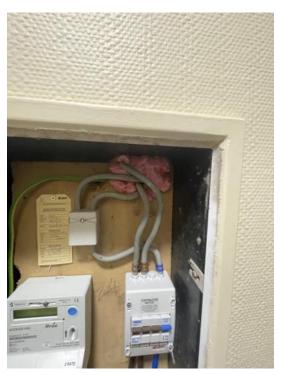


Photo 40

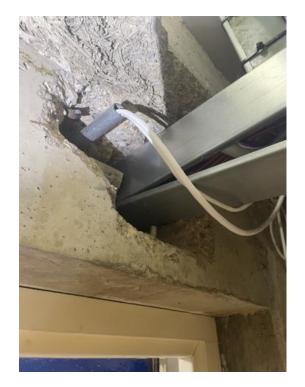


Photo 41



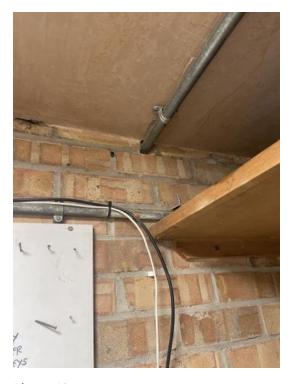


Photo 42



Photo 44



Photo 45





Photo 46



Photo 48



Photo 49



Photo 51 Photo 52



Photo 50



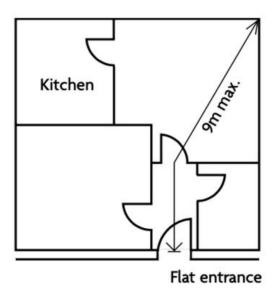
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Photo 53



Photo 55



ADB B1 Diagram 3.3

Photo 54



Photo 56

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Photo 57

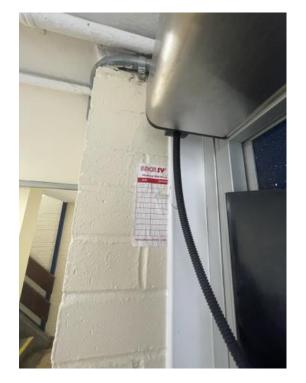




Photo 58



Photo 60



Photo 61



Photo 63



Photo 62



Photo 64

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Photo 65



Photo 67



Photo 66



Photo 68

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Photo 69



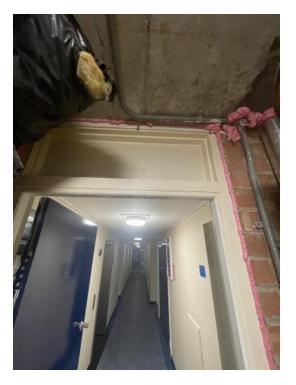


Photo 70



Photo 72

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Photo 73





Photo 74



Photo 76

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Photo 77



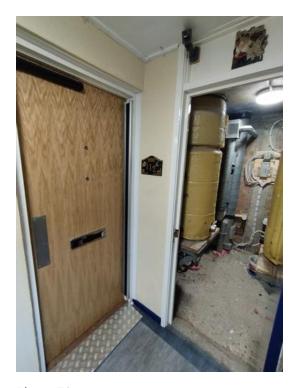


Photo 78

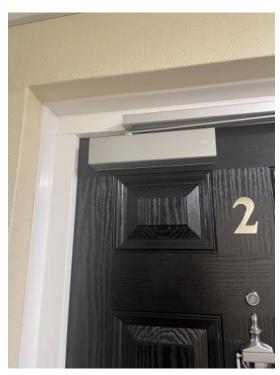


Photo 80



Photo 81 Photo 82



Photo 83 Photo 84





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characteristic	Areas needing energency escape lighting		
A	Underground or windowless accommodation		
	Stairways in a central core or serving storey(s) more than 18 m above ground level		
	Internal corridors more than 30 m long		
	Open-plan areas of more than 60 m ²		
B A)	All escape routes (except in shops of three or fewer storeys with no sales floor more than 280 m ² provided that the shop is not a restaurant or bar)		
c	All common escape routes ⁸³ , except in two-storey blocks of flats		
Any use	All sanitary accommodation with a floor area over 8 m ²		
	Windowless sanitary accommodation with a floor area not more than 8 m ²		
	Electricity and generator rooms		
	Switch room/battery room for emergency lighting system		
	Emergency control room		
A) In areas of s	hops where the public are not admitted use occupancy characteristic A.		
8) Including ex	ternal escape routes.		

Table 8 Provisions for emergency escape lighting

BS 9999 Table 8

d. that all high-rise residential buildings (both those already in existence and those built in the future) be equipped with facilities for use by the fire and rescue services enabling them to send an evacuation signal to the whole or a selected part of the building by means of sounders or similar devices;

Photo 85



Photo 87

Photo 86



Photo 88

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Photo 89



Photo 91



Photo 90



Photo 92

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Photo 93





Photo 94

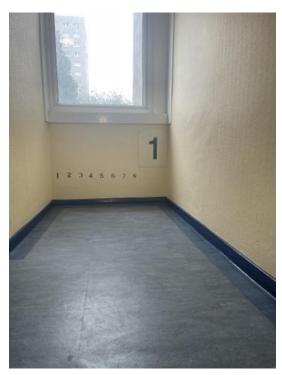


Photo 96

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Photo 97



Photo 99



Photo 98



Photo 100

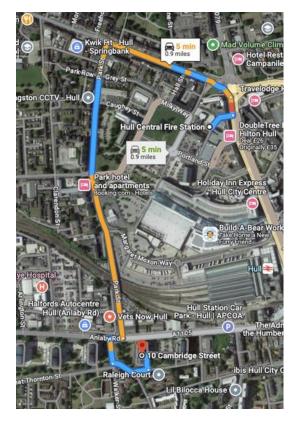




Photo 103

Hull Central Fire Station

Hull HU2 8BP

Head north-east on Pearson St towards Ferensway/A1079

11 sec (213 ft)

> Take Spring Bank to Park St

2 min (0.2 mi)

← Turn left onto Park St

2 min (0.5 mi)

Turn right onto Anlaby Rd/A1105

8 sec (105 ft)

> Follow Icehouse Rd to Cambridge St

54 sec (0.1 mi)

Photo 102

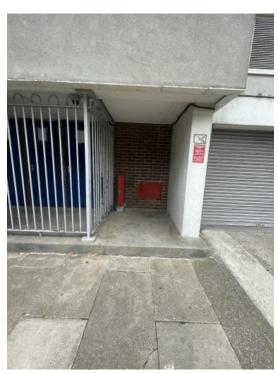


Photo 104

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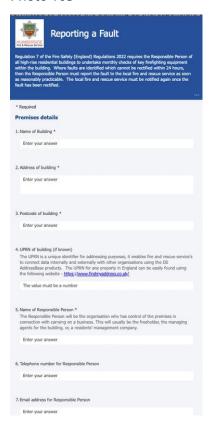


Photo 107

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Photo 106

Aspect of Fire Safety Management	Agreed Responsibilities						
	Ownerlandlord	Housing Provider	Managing Agent or Facilities Managers (# different from housing provider)	Care Provider	Commissioner of Services		
Lead duty holder ¹²			-				
Building fire risk assessment							
Person-centred fire risk assessment (where appropriate)							
Testing of fire alarm system							
Maintenance of fire alarm system							
Testing of emergency lighting							
Maintenance of emergency lighting							
Testing of sprinkler system							
Maintenance of sprinkler system.							
Testing of smoke vents							
Maintenance of smoke vents							
Testing of door release mechanisms							
Maintenance of door release mechanisms							
Testing of social alarm system							
Aspect of Fire Safety Management	Agreed Responsibilities						
	Ownerfandford	Housing Provider	Managing Agent or Facilities Managers (if different from housing provider)	Care Provider	Commissioner of Services		
Maintenance of social alarm system							
Routine housekeeping inspections, including checking fire doors, fire exit doors and condition of fire extinguishers, etc.							
Maintenance of fire doors							
Maintenance of fire extinguishers							
Maintenance of rising mains							
Maintenance of lightning protection system							
Provision of fire safety information to new residents							
Ongoing engagement with residents regarding fire prevention							
Ongoing engagement with residents to remind them of fire procedures							
Fire drifts (if applicable)							
Maintaining a record of the fire safety arrangements							
Ereuring that fire procedures are up to date							
Lisison with local fire and rescue service crews							
Training of staff							
Aspect of Fire Safety Management	Agreed Responsibilities						
	Agreed Responsibilities Ownerlandlord Housing Managing Agent Care Provider Commissioner						
		Provider	or Facilities Managers (if different from housing provider)		of Services		
Inspections during contractors' works							
Provision of information to outside contractors							
Recording false alarms							
Holding of relevant records re testing maintenance, training, drills, etc.							

Source: Fire Safety in Specialised Housing

Photo 108

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22291-CAMB1-01A-22291-CAMB1-01.pdf

22291-CAMB1-01A-22291-CAMB1-02.pdf

22291-CAMB1-01A-22291-CAMB1-03.pdf

22291-CAMB1-01A-22291-CAMB1-04.pdf

22291-CAMB1-01A-22291-CAMB1-05.pdf

22291-CAMB1-01A-22291-CAMB1-06.pdf

22291-CAMB1-01A-22291-CAMB1-07.pdf

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