

Livv Housing Group, Lakeview
Kings Business Park, Prescot
Merseyside, L34 1PJ



Fire Strategy Report

FOR

Livv Housing Group

AT

Property Ref: 002218, 002025, 002205

WAFTA Blocks

Woolton Views

Aston Park

The Fairways

Halewood

Merseyside

L25 9RW



Prepared by
Andrew Hewitson GIFireE
Compliance Officer - Fire

28 April 2020



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This report has been compiled by a representative of LIVV Housing Group, who is a competent person as defined in several Articles of The Regulatory Reform (Fire Safety) Order 2005 and is a true reflection of the fire safety arrangements that have been provided.

Authored by

A handwritten signature in black ink, appearing to read 'Andrew Hewitson'.

Andrew Hewitson
Compliance Officer - Fire

Dated 28 April 2020

Validated by

Paul Clarke
Business Manager – Compliance & Legal

Dated

1 Validity and Guidance

This report is formulated on the basis of the information available at the time of preparation. It is applicable to the three blocks of flats known as **WAFTA Blocks, Halewood, Merseyside, L25 9RW** only, and has been compiled in accordance with the Livv Housing Group's instructions. It is valid provided no other modifications are made.

The purpose of this retrospective fire strategy is to detail the fire safety arrangements within the building, to aid the building operator to understand and implement the fire strategy, and as an aid to Fire Risk Assessors. This document is provided primarily to detail the fire safety arrangements but will also highlight any aspects which should be upgraded in order to ensure that the level of fire safety for the residents is acceptable.

The findings in this report are primarily based on Guidance given in the following publications:

- Approved Document B Fire Safety Volume 1 2019 Edition – Dwellings
- Fire Safety Risk assessment: Sleeping Accommodation (ISBN 978 1 85112 817 4)
- Fire Safety in Purpose Built Blocks of Flats – LGA
- Fire Safety in Specialised Housing - NFCC
- Supplementary Guide: Means of escape for disabled people (ISBN 978 1 85112 873 7)
- Other guidance as necessary – BS 8300, ADM, BS 5588, ADB Vol 2, PAS 911, BS 9991, BS 9999

2 Statutory considerations (Legislation)

2.1 Building Regulations

The building is subject to the operation of the Building Regulations 2000. It will be necessary, therefore, for the building to meet the functional requirements of part B of Schedule 1 of the Regulations.

The Requirements of the Building Regulations relate to:

- a) B1 - means of warning and escape;
- b) B2 - internal fire spread (linings);
- c) B3 - internal fire spread (structure);
- d) B4 - external fire spread;
- e) B5 - access and facilities for the fire service.

Compliance with these requirements is normally achieved by meeting the standards contained in Approved Document B (AD B).

2.2 Regulatory Reform (Fire Safety) Order 2005

The Regulatory Reform (Fire Safety) Order 2005 (The Order) came into force in October 2006 and replaced the Fire Precautions Act and The Fire Precautions (Workplace) Regulations and rationalised other fire safety legislation. The Order places a duty on the owner/occupier of the building (or his/her appointed agent) to, among other things, carry out a fire safety risk assessment and prepare a Fire Strategy Report.

3 Building Description and Occupancy

3.1 Building Description

Premises design	Detached
Design specification	Purpose built
Floor layout	Ground and 8 upper floor levels
Date of construction	1966
Date of renovation	Circa 1990
Ground floor footprint (approximate)	26 by 32 metres
Primary use of premises	Residential
Evacuation Strategy	Stay Put
Construction of floor slab	Reinforced concrete
Construction and type of roof	Flat
Construction of staircases	Reinforced concrete
Premises entrance	The main entrance is from car park into an unstaffed reception. The building is staffed during normal daytime hours
Number of lifts	2 passenger lifts
Lifts serve	All floors
Plant rooms located	The ground floor provides ancillary accommodation such as plant rooms, storerooms for the residents and refuse stores. All with restricted access
Systems or equipment provided for the protection of Firefighters	Dry riser Staircase ventilation Corridor ventilation

The WAFTA development consists of three existing, purpose built, 9-storey residential blocks located in Halewood, Merseyside and accessed via Arncliffe Road to the south of the site or Sherborne Road to the East of the site.

With a total of 48 units each, all three residential blocks consist of single storey flats from the 1st to the 8th floors and were built of traditional construction of brick and concrete.

All three blocks are served by a single staircase, extending from ground level to the 8th floor. The layout and height of all three buildings are almost identical.

The flats on all levels access the central stair core through corridors. The building height measured from ground level to the finished floor of the highest occupied level is expected to be above 18m but below 30m (22m). The 1st floor layout in the appended drawings is tantamount to the upper floor layouts on the 1st - 8th floor.

The buildings' construction was completed in 1966 and enclosing of the open balconies took place in approximately 1990.

3.2 Occupancy

The premises have been provided with appropriate means of escape for all persons who are likely to be in the premises at any time. The occupancy numbers of each floor have been considered and the means of escape is regarded as being satisfactory for that number of persons. The occupancy based on an assumption of 2 persons per flat.

Floor	Occupiers	Number of persons
Ground Floor	Staff	1
First Floor	6 Flats	12
Second Floor	6 Flats	12
Third Floor	6 Flats	12
Fourth Floor	6 Flats	12
Fifth Floor	6 Flats	12
Sixth Floor	6 Flats	12
Seventh Floor	6 Flats	12
Eighth Floor	6 Flats	12
Total		97

The block is 'individual living' as defined in Purpose Built Blocks of Flats and Specialised Housing Guides, and, based on AD B Vol. 1, refuges or evacuation lifts are not required to be provided in residential buildings.

With the stay-put evacuation strategy for the WAFTA Blocks, it is expected that occupants will evacuate their flats, as necessary, without assistance. Given the high levels of compartmentation, the individual apartments serve as places of refuge in the event of a fire anywhere else. Should a fire occur in a flat with a mobility impaired occupant, they will be in a place of relative safety once in the protected staircase.

Livv Housing Group has prepared a Personal Emergency Evacuation Plan (PEEP) for each resident that requires it. PEEPs are formulated in consultation with the resident and are updated regularly or when changes are required.

Only the flat of fire origin needs to be evacuated (at least in the first instance). If a resident of that flat is unable to evacuate themselves, rescue by the fire and rescue service may, ultimately, be necessary. This is no different from the situation that would arise if that resident were living in a flat in a general needs block or a bungalow.

4 Compartmentation

Each floor is provided as a compartment floor.

Each flat is provided with structural fire separation with Self closing FD30S Doors.

Protected lobbies are provided on each floor leading to the staircases with structural separation and Fire Doors FD30S.

The premises and any fire rating to the stair core were installed to the Fire Safety standards at that time.

The fire resistance to the stairs is via 2 separating partitions and a minimum of 2 fire doors (Doors to flats have been upgraded).

The blocks' staircases are protected staircases, the 8th floor discharging to the ground floor, then to the external of the premises to the front or to the rear.

The common corridors serving the flats should be upgraded to achieve 60 minutes fire resistance including any glazing (between flat and corridor).

The doors to the staircase from the common corridor should be upgraded to achieve 60 minutes fire resistance. FD30S doors are currently provided onto the staircase but are due to be replaced by FD60S.

Any deficiencies identified are noted in Appendix A of the report

5 Means of detection and Alarm Systems

5.1 Residential Units

The residential units are provided with an automatic fire detection and alarm system, designed and installed in accordance to BS 5839-6:2013, to a Category LD2 Grade D1 with smoke and heat alarms in circulation areas, living room and kitchen of the residential units.

Domestic smoke alarms are connected to the social alarm system, that results in transmission of alarm signals, from pull-cord and pendant devices as well as smoke alarms, to a Telecare-equipped alarm receiving centre (ARC).

It should be noted that the latest version of BS 5839-6 (2019) recommends the provision of an LD1 Grade D2 detection in all rooms other than those with negligible sources of ignition, such as toilets, bathrooms and shower rooms in sheltered accommodation. Therefore, the system should be upgraded, on any internal flat refurbishment.

5.3 Common Escape Routes

The common escape routes on all floors are provided with a Category L5 (detection provided for a specific reason) automatic fire detection system in accordance with BS 5839-1:2017, This system will not sound the fire alarm but will trigger the corresponding common corridor ventilators and the AOVs in each block. No sounders or manual call point should be provided in these areas.

Any deficiencies identified are noted in Appendix A of the report

6 Means of escape

The means of escape from upper floors is via a single staircase in the building, then via the ground floor main entrances to the front of the building onto the carpark, away from the building. The assembly point is at the front of the building where the Fire Service will attend the main entrance. The means of escape from the ground floor accommodation is into the ground floor main entrance lobby then to the front car park.

6.1 Internal Flat Escape Routes

The internal layout of all flats is that they are provided with one of the following:

- An alternative means of escape from the flat.
- The travel distance from the furthest point in the flat to the flat entrance door is within 9m.
- Provided with a 30 minute protected entrance hall and the internal travel distance is within 9m.

6.2 Common Escape Routes

The single direction of travel from the flat entrance door to the stair door should not exceed 7.5m. The travel distance from the furthest away flat entrance door to the stairs is approximately 21m or 15m to the staircase lobby. Therefore, a smoke ventilation system is to be provided in the common corridors serving the flats.

6.2.1 Stairs

There is a single protected staircase, discharging at ground floor level, provided with ventilation.

6.3 Means for securing the means of escape

Emergency Lighting is installed in all of the escape routes from the blocks. The system is installed, commissioned and tested to BS 5266-1:2016 Code of practice for the emergency escape lighting of premises. The emergency lighting system is tested monthly by the end user and annually by a competent person. The results are recorded, and certification kept electronically.

Any deficiencies identified are noted in Appendix A of the report

7 Internal and external fire Spread (linings and External construction)

The exposed walls in the common areas are constructed of materials that will limit fire spread, made of painted concrete and brick.

The flights and landings of escape stairs are constructed of concrete, limiting fire spread. External walls are constructed using materials that will limit fire spread to the standard at the time of construction. As there is no requirement to comply with current guidance, it must be ensured that the level of fire resistance is maintained when any work affecting the building structure is carried out.

External walls are constructed using materials that will limit fire spread to the standard at the time of construction, 60 minutes.

The outer wall and balconies are made of brick, concrete and metal, therefore risk of fire spread from the external wall is limited.

Any deficiencies identified are noted in Appendix A of the report

8 Means for fighting fire

Where necessary, portable fire extinguishers are installed according to the premises Fire Risk Assessment.

The type of extinguishers include water, spray foam, CO₂, wet chemical and powder; all are suitable for use on the specific risks in their locations.

Any deficiencies identified are noted in Appendix A of the report

9 Notices and signs

Notices are installed in the common area notice boards providing information and instruction on the fire and evacuation procedures.

Each fire extinguisher is provided with a fire extinguisher sign, where its location is not immediately obvious.

Emergency exit and other fire signs are provided as appropriate.

All signs conform with the Health and Safety (Safety Signs and Symbols) Regulations 1996.

Any deficiencies identified are noted in Appendix A of the report

10 Fire Procedures

10.1 Evacuation Strategy

The evacuation strategy for each area is as follows:

- **Residential units – Stay-put** – Occupants will be expected to evacuate if they hear the fire alarm in their own flat. It is expected that only the flat of fire origin will activate due to the fire alarm and fire compartmentation. Hence, only persons in the flat of fire origin would typically be expected to have to evacuate.
- **Ancillary areas – Simultaneous** – All ancillary areas will receive an alarm to evacuate simultaneously should a fire be detected within these areas. Sounders should not be provided within the common circulation areas on the residential floors or in the flats. Sounders are required in ancillary areas only.

6.1 External Contractors

Livv Housing Group prepares contracts for all contractors with information about fire safety measures and procedures of the premises. If a significant (intolerable) fire risk occurs, contractors are given advice about the risk, and the preventative and protective measures taken by the Client. The Client issues suitable "Permits to Work" documentation which includes safety procedures that the contractor must follow.

Any deficiencies identified are noted in Appendix A of the report

11 Training

All relevant staff understand the fire safety and evacuation control procedures for which they are responsible.

Livv Housing employs persons to work on site, all receiving sufficient fire safety training including premises risk and procedures specific to these premises. All employees who may visit the premises receive appropriate fire awareness training and instruction from on site staff on their expected actions in case of an evacuation.

Livv Housing provide fire awareness training for all staff at the time they are first employed, and refresher training is provided regularly. All fire safety training is recorded on individual staff training files.

Any deficiencies identified are noted in Appendix A of the report

12 Maintenance and Records

The Fire Safety Provisions in the premises are subject to a comprehensive maintenance programme as recommended in the appropriate British Standards, Codes of Practice and HM Government Fire Safety Guides.

All records are kept centrally and are available for inspection on request.

Any deficiencies identified are noted in Appendix A of the report

13 Maintenance of Measures provided for the protection of firefighters

Livv Housing Group ensures that any facilities, equipment and devices for the use of and protection of Fire-Fighters are subject to suitable maintenance system and kept in efficient working order and in good repair.

All records are kept centrally and are available for inspection on request.

Each of the WAFTA blocks are provided with a single protected stairway. The buildings were not designed with firefighting stairs, firefighting lifts or firefighting shafts. The dry risers were not provided due to the height of the building or the need to provide firefighting shafts but provided to meet the requirements of the limits on the distances a hose would need to be laid.

As these premises are existing and have not been installed with a firefighting stair, a firefighting lobby or a firefighting lift, the existing arrangements are acceptable.

Any deficiencies identified are noted in Appendix A of the report

14 Any other comments

The premises fixed electrical system will be installed and tested in accordance with IET Wiring Regulations BS 7671:2018, 18th edition. Certification is kept electronically.

All portable electrical appliances in common areas are tested and inspected at regular intervals in accordance with the electricity at work regulations with results recorded centrally.

All gas installations are tested by a Gas Safe Engineer in accordance with the Gas Safety (Installation and Use) Regulations 1998, annually. All records are kept centrally, available for inspection

Any deficiencies identified are noted in Appendix A of the report

Appendix A - Action Plan – Further control measures Necessary

The following Action Plan is a summary of the failings and the action recommended to remedy those failings.

Any deficiencies relating to the above articles are recorded in the action plan with the appropriate part of Section referenced.

Item	Observation	Recommendations	Location	Priority	Section Reference
1.	The glazing in the common escape routes (common corridors) provides unknown fire resistance	The common corridors should be upgraded to achieve 60 minutes fire resistance, for stability, integrity and insulation and should include any glazing (between flats and corridors).	Floors 1-8	Within 12 months	4
2.	The doors to the staircase provide unknown fire resistance.	The doors to the staircase from the common corridor should be upgraded to achieve 60 minutes fire resistance. FD30S doors are currently provided onto the staircase but are due to be replaced by FD60S.	Floors 1-8	Within 12 months	4
3.	The single direction of travel from the flat entrance door to the stair door exceeds safe limits	A smoke ventilation system is to be provided in the common corridors serving the flats.	Floors 1-8	Within 12 months	6.2

Appendix B - Plans



Ground Floor Layout



Typical Upper Floor Layout