

The Regulatory Reform (Fire Safety) Order 2005 Type 3 Fire Risk Assessment Report at:

Grafton Court, Chorlton Road, Manchester, M15 4AZ



Engineering
Council



PFSS

Fire Safety Consultancy

Company Number:11937208

Prepared by Professional Fire Safety Services

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FOREWORD

Context

The 'Regulatory Reform (Fire Safety) Order 2005' (RRFSO) came into force on the 1st October 2006 and amends and consolidates a significant number of areas of fire safety law that previously were in place such as the Fire Precautions Act 1971 and the Fire Precautions (Workplace) Regulations 1997.

The Order places a general duty of fire safety care on the "responsible person" (employers, occupiers and owners of almost all types of premises) and requires them to provide and maintain adequate fire precautions. Note: The same duty is also imposed on every person, other than the "responsible person" who has to any extent, control of the premises so far as the duty relates to matters within his control (this would normally include, the landlord and/or commercial managing agent)

Article 9 of the Order imposes a requirement to make a suitable and sufficient assessment of the risks to which "relevant persons" are exposed for the purpose of identifying the general fire precautions he needs to take to comply with the requirements and prohibitions imposed on him by the Fire Safety Order (i.e. for the purpose of the Fire Safety Order "relevant persons" are any persons who is or may be lawfully on the premises, and also any person in the immediate vicinity of the premises who is at risk from a fire in the premises, other than fire-fighters at the time of a fire)

Methodology

The methodology used to carry out this fire risk assessment follows the guidance and recommended methodology set out in the 'Publicly Available Specification' PAS 79 (1)

The objective of using PAS 79 for the purpose of conducting a fire risk assessment is to provide a pragmatic and holistic approach towards assessment of fire prevention measures, fire protection measures and management of fire safety in buildings.

The methodology is intended to determine the risk-proportionate fire precautions required to protect building occupants including employees, contractors, visitors and members of the public and to protect people in the immediate vicinity of the building. Note: It is not intended to address protection of property (the building and its contents) or the environment, or to address protection of a business, process or activity against interruption.

(1) *Note: PAS 79 BSI: Fire Risk Assessment - Guidance and a Recommended Methodology*

The Concepts of Fire Risk & Fire Hazard

It is important that within the fire risk assessment process, confusion does not result from loose, inexact or conflicting use of the terminology "fire hazard" and "fire risk"

A “fire hazard” is defined within this document as ‘a source or situation with potential to result in a fire’ (note: examples of fire hazards include ignition sources and accumulation of waste that could be subject to ignition) Thus the presence of uncontrolled fire hazards affects likelihood of fire rather than the consequence of fire.

A “fire risk” is defined within this document as ‘the combination of the likelihood and the consequences of fire’ (note: the relevant consequences are those involving injury to people, as opposed to damage to property) Thus consistent with the broader concept of risk in the field of general health and safety.

The Principles & Scope of Fire Risk Assessments

The fire risk assessment process is a systematic and structured assessment of the fire risk in the relevant building for the purpose of expressing the current level of fire risk, the adequacy of existing fire precautions and determining the need for, and nature of, any additional fire precautions **(2)**

Any additional fire precautions required are set out in the action plan which forms part of this documented fire risk assessment. Note: The objective of the ‘action plan’ is to set out measures that will ensure that the fire risk is reduced to, or maintained at, a tolerable level.

(2) Note: Fire precautions are defined as physical, procedural and managerial measures taken to reduce the likelihood of ignition occurring and/or to mitigate the consequences if ignition does occur.

In accordance with PAS 79 this fire risk assessment includes the following key elements:

- An assessment of fire hazards present on the premises and means for their elimination or their control;
- An assessment of the adequacy of existing fire protection measures;
- An assessment of the relevant aspects of fire safety management;
- An expression of the level of fire risk and;
- An ‘action plan’ unless it is expressly confirmed within the fire risk assessment that no additional fire precautions are necessary.

Structured Approach to Fire Risk Assessment

To promote a structured approach to fire risk assessment PAS 79 sets out nine steps in the ongoing fire risk assessment process.

The nine steps set out below, while in a logical order are not necessarily set out in the chronological order in which the steps are carried out on site. For example, some information relevant to the control of fire hazards, the determination of fire protection measures and the management of fire safety is normally most appropriately obtained at the beginning of the process through consultation and/or a meeting with the management of the premises

Nine Steps to Fire Risk Assessment

Step 1: Obtain information on the building, the processes carried out in the building and the people present, or likely to be present in the building;

Step 2: Identify the fire hazards and means for their elimination and control;

Step 3: Assess the likelihood of fire, at least in subjective terms;

Step 4: Determine the fire protection measures currently in the building;

Step 5: Obtain relevant information about fire safety management;

Step 6: Make an assessment of the likely consequences to people in the event of fire, at least in subjective terms;

Step 7: Make an assessment of the fire risk;

Step 8: Formulate and document an action plan, with prioritization if appropriate and;

Step 9: Define a date by which the fire risk assessment should be reviewed

DOCUMENT VERIFICATION

Declaration:

This report has been prepared following an assessment of the premises and is based on information collated during discussions with management and staff and; on observations made during the assessment process. The report does not reflect any areas, activities or processes that the assessor was not made aware of during this risk assessment.

Authorisation:

This report has been checked and duly authorised by mark Alderson BSc hons MIFireE IEng MIFSM

Signature:



Date: 07-06-2021

REGULATORY REFORM (FIRE SAFETY) ORDER 2005 FIRE RISK ASSESSMENT

Responsible Person: 1)	Name Trafford Housing Trust
Address of Premises:	Grafton Court, Chorlton Road, Manchester, M15 4AZ
Person(s) Consulted:	Brad Walker, Barry Watson
Name of Assessor:	Mark Alderson BSc Hons MIFireE IEng MIFSM
Date of Fire Risk Assessment:	08-06-2021
Date of Previous Fire Risk assessment:	09-06-2020
Suggested Date of Review: 2)	08-06-2022 (but refer to Step 9):

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

1) Responsible person (e.g. employer) or person having control of the premises.

2) This fire risk assessment should be reviewed by a competent person by the date indicated above or at such earlier time as there is reason to suspect that it is no longer valid, or if there has been a significant change in matters to which it relates, or if fire occurs.

As part of your fire safety management arrangements we recommend that a fire audit is carried out once the action points are completed, to monitor and record progress on implementing the Fire Risk Assessment recommendations.

In order to demonstrate good fire safety management practice to any enquiring party we recommend that you document the actions taken in respect of this report. It is recommended that this assessment, together with the completed Action Plan, be kept in a 'Fire Safety Record Book' together with all other fire safety records.

It should be noted that the 'responsible person' must make and give effect to such arrangements as are appropriate, having regards to the size of his undertaking and the nature of its activities, for the effective planning, organisation, control, monitoring and review of the preventive and protective measures.

GENERAL INFORMATION

<p>STEP 1</p> <p>The first step is to obtain relevant information about the building, the processes carried out in the building and the occupants of the building.</p>	<p>Guidance:</p> <p>Much of the relevant information can usually be obtained prior to carrying out a physical inspection of the premises.</p>
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1.0	THE PREMISES	Particulars
1.1	Number of Floors:	15
1.2	Floor Area: (m ²)	Approximately 7000 m ² over 15 floors.
1.3	Details of the Construction (Including any external wall systems)	<p>Fifteen storey purpose built residential block of concrete slab and frame structure with brick infill. The building was constructed circa 1965 and in subsequent years has been refurbished internally to include the installation of new fire doors to flats entrances, staircase access doors and corridor doors leading to the central lift lobby. External balconies were enclosed during the refurbishment and render applied to the exterior walls.</p> <p>The internal staircase and floors are in-situ concrete and partitions are generally of solid masonry construction. The property is served by one escape stair with a central lift lobby containing two passenger lifts. The staircase discharges into the lift lobby and has a choice of final exit routes to the front and rear of the premises. There is a stay put stay safe policy in place.</p> <p>Compartmentation is required to the perimeter of each individual flat and to escape route corridors. The compartmentation is provided by means of fire rated doors, partitions and masonry walls which extend to the underside of the structural concrete floor slab above. Significant work has been undertaken to improve the standard of fire stopping in the premises.</p>
1.4	Use of Premises:	The building provides sleeping accommodation within 86 multi occupancy general needs flats. There are 6 flats per floor from floor 1 to floor 14 and 2 flats on the ground floor.

		The ground floor also has an office for the caretaker, WCs, limited domestic cooking facilities and plant rooms. Externally accessed are the electrical intake room, bike store and bin chute room. The roof has plant services for the building including solar water heating plant, 6 boilers and communication equipment.
2.0	THE OCCUPANTS	Particulars
2.1	Occupancy Number:	It is estimated, including visitors, residents and staff, that the total number of people in the building at any one time could be approximately 200.
2.2	Employees:	There is a full-time caretaker employed who occupies the building during the day from 8am to 4pm. A mobile caretaker occupies the building on weekend days from 9am to 12pm. Other THT staff work on the site.
2.3	Members of the Public:	Guests of the residents will be present.
3.0	OCCUPANTS ESPECIALLY AT RISK FROM FIRE	Particulars
3.1	Is there any sleeping accommodation on the premises?	Yes Purpose built residential block containing 86 sleeping accommodation flats.
3.2	Are there any disabled occupants on the premises?	Yes The Premises Information (Gerda) box contains a list of occupants who require assistance in the event of an incident and any subsequent evacuation. A process is in place for the monthly updating of the list by the housing officer to reflect new residents, changes in resident needs.
3.3	Are there any persons in the building who are in an isolated location or working alone?	Yes Suitable THT lone worker policy in place.
3.4	Are there any young persons employed or proposed to be employed (under the age of 18) (Reference Article 9(5) Schedule 1 Part 2 of the RRFSO)	No

3.5	Are there any other persons on the premises who are unable to react quickly to an emergency as a result of their physical or mental state?	Yes Persons have been identified and information recorded in the GERDA box to enable the fire service to provide assistance with evacuation if required.
4.0	FIRE LOSS EXPERIENCE	Particulars
4.1	Have there been any recorded incidents of fires on the premises in recent years?	No
5.0	OTHER RELEVANT INFORMATION	Particulars
5.1	Is there any other relevant information that might have a bearing on the fire risk assessment, fire risk in the building or that may affect the validity of this fire risk assessment?	Yes Attention is drawn to the Ministry of Housing, Communities & Local Government Consolidated Advice Note for building owners of multi-storey, multi-occupied residential buildings, dated January 2020 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/869532/Building_safety_advice_for_building_owners_including_fire_doors_January_2020.pdf (the "Advice Note").
6.0	RELEVANT FIRE SAFETY LEGISLATION	Particulars
6.1	Fire Safety Legislation:	The Regulatory Reform (Fire Safety) Order 2005.
6.2	Name(s) of Enforcing Authority:	Greater Manchester Fire & Rescue Service.
6.3	Other Legislation:	Housing Act 2004
6.4	Are there any outstanding alterations, enforcement or prohibition notices served on the premises?	No None known
6.5	General Comments:	N/A

IDENTIFICATION OF FIRE HAZARDS

<p>STEP 2</p> <p>The second step is fire hazard identification and the determination of measures for the elimination or control of the identified fire hazards.</p>	<p>Guidance:</p> <p>This will normally involve a combination of interviewing the management and inspection of the building.</p>
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7.0	ELECTRICAL SOURCES OF IGNITION	Record of Assessors Findings
7.1	Have reasonable measures been taken to prevent fires of electrical origin?	<p>Yes</p> <p>Approved contractors used, testing and maintenance is conducted in accordance with the current regulations.</p>
7.2	<p>More specifically:</p> <p>a. Have fixed installation(s) been periodically inspected and tested?</p> <p>b. Have portable appliances been tested?</p> <p>c. Is there a policy regarding the use of personal electrical appliances?</p> <p>d. Is there a reasonable limitation on the length of trailing leads and adapters?</p>	<p>Yes</p> <p>In accordance with THT's Periodic Electrical Testing Policy. The policy provides specific guidance and timescales to ensure safety of fixed electrical installations and portable appliances (where applicable). 5 yearly testing completed on the 31-01-2020 and deemed satisfactory.</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
7.3	Comments & hazards observed:	None
8.0	SMOKING	Record of Assessors Findings
8.1	Have reasonable measures been taken to prevent fires as a result of smoking?	<p>Yes</p> <p>In line with THTs smoking policy residents can smoke in their flats and no smoking is allowed in the communal areas of the building.</p>

8.2	<p>More specifically:</p> <p>a. Is smoking permitted in the building?</p> <p>b. Is smoking prohibited in appropriate areas?</p> <p>c. Are there suitable arrangements for those who wish to smoke?</p> <p>d. Is the 'smoking policy' being observed?</p>	<p>Yes Residents' flats.</p> <p>Yes Communal areas</p> <p>Yes See above.</p> <p>Yes</p>
8.3	Comments & hazards observed:	None.
9.0	ARSON	Record of Assessors Findings
9.1	Does basic security against arson by outsiders appear reasonable?	<p>Yes</p> <p>CCTV and electronic door access by fob or intercom control access to the premises.</p> <p>Monthly Arson assessments are being conducted.</p>
9.2	Is there an absence of unnecessary fire load in close proximity to the premises or available for ignition by outsiders?	<p>No</p> <p>Wheeled Eurobins are stored close to the exterior of the building and could be ignited by arsonists. Consideration should be given to locating the bins away from the structure in a secure compound securing the bins to the compound structure.</p>
9.3	Comments & hazards observed:	No incidents of deliberate fire setting have been reported.
10.0	PORTABLE HEATERS & INSTALLATIONS	Record of Assessors Findings
10.1	Is the use of portable heaters avoided as far as practicable?	<p>Yes</p> <p>No portable heaters noted.</p>

10.2	If portable heaters are used: a. Is the use of the more hazardous type (e.g. radiant bar fires or LPG appliances) avoided?	N/A
	b. Are suitable measures taken to minimise the hazard of ignition of combustible materials?	N/A
10.3	Are fixed heating installations subject to regular maintenance?	Yes In accordance with the THT Gas Servicing and Maintenance Contract. Tested 28-01-2021.
10.4	Comments & hazards observed:	Portable heaters may be used by residents in their flats.
11.0	COOKING	Record of Assessors Findings
11.1	Are reasonable measures taken to prevent fires as a result of cooking?	Yes
11.2	More specifically: a. Filters changed and ductwork cleaned regularly? b. Suitable extinguishing appliances available?	N/A Yes
11.3	Comments & hazards observed:	Very limited domestic cooking facilities are provided and deemed low risk.
12.0	LIGHTNING	Record of Assessors Findings
12.1	Does the building have a lightning protection system?	Yes
12.2	Comments & deficiencies observed:	THT have confirmed that there is an annual lightning protection system maintenance and testing regime in place in accordance with BS EN 62305-3.

		The lightning conductor test has failed. The system should be repaired and certification of system obtained.
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13.0	HOUSEKEEPING	Record of Assessors Findings
13.1	Is the standard of housekeeping adequate?	<p>No</p> <p>The communal areas were free of combustible materials at the time of the assessment except for a small number of prams and cycles that do not pose a significant risk.</p> <p>Cycles on floor 9 and 10. Pram on floor 2.</p>
13.2	<p>More specifically:</p> <p>a. Are combustible materials separated from ignition sources?</p> <p>b. Avoidance of unnecessary accumulation of combustible materials or waste?</p>	<p>Yes</p> <p>Yes</p>
13.3	Comments & hazards observed:	A very high standard of housekeeping was observed at the time of the assessment.
14.0	CONTRACTOR HAZARDS	Record of Assessors Findings
14.1	Are fire safety conditions imposed on outside contractors?	Yes – All controlled by THTs permit to work policy
14.2	Is there satisfactory control over works carried out in the building by outside contractors?	Yes
14.3	If there are 'in-house' maintenance personnel are suitable precautions taken during 'hot work' including the use of hot work permits?	Yes
14.4	Comments & hazards observed:	None

15.0	DANGEROUS SUBSTANCES	Record of Assessors Findings
15.1	If dangerous substances are, or could be used, has a risk assessment been carried out, as required by the Dangerous Substances and Explosive Atmospheres Regulations 2002?	N/A
15.2	Comments:	No DSEAR substances noted at the time of the assessment.
16.0	OTHER SIGNIFICANT FIRE HAZARDS	Record of Assessors Findings
16.1	Are there any other significant fire hazards that warrant consideration including process hazards that impact on general fire precautions?	No
16.2	Comments:	N/A

ASSESSMENT OF THE LIKELIHOOD OF FIRE

<p>STEP 3</p> <p>The third step is to make a (subjective) assessment of the likelihood of fire.</p>	<p>Guidance:</p> <p>This will be based on the findings of step two (hazard identification) and any relevant information obtained in step one.</p> <p>Note: If likelihood of fire is judged to be typical for buildings of this type in question, it is normally appropriate to ascribe to the building the middle category (MEDIUM). The higher category (HIGH) is used to indicate serious shortcomings in the elimination or control of fire hazards, while the lower category (LOW) is used in the cases where the likelihood of fire is abnormally low. (i.e. because the building is secure and not normally occupied)</p>
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<p>Considering the fire prevention measures observed at the time of this assessment, it is considered that the hazard from fire (likelihood of fire) at these premises is:</p> <hr/> <p>In this context, a definition of the above terms are as follows:</p> <p><u>Low Risk</u> Unusually low likelihood of fire as a result of negligible potential sources of ignition</p> <p><u>Medium</u> Normal fire hazards (e.g. potential ignition sources) for this type of occupancy, with fire hazards generally subject to appropriate controls</p> <p><u>High Risk</u> Lack of adequate controls applied to one or more significant fire hazards such as to result in significant increase in likelihood of fire</p>	<p>Medium</p> <hr/> <p>MEDIUM (typical fire hazards, all suitably controlled)</p>
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ASSESSMENT OF FIRE PROTECTION MEASURES

<p>STEP 4:</p> <p>The fourth step is to determine the physical fire protection measures relevant to protection of people in the event of fire.</p>	<p>Guidance:</p> <p>Although some of the information on fire protection measures may be obtained from discussion with management it is primarily obtained through physical inspection.</p>
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	17.0 MEANS OF ESCAPE FROM FIRE	Record of Assessors Findings
17.1	Is the building provided with reasonable means of escape in case of fire?	<p>Yes</p> <p>Designed and constructed to the Building Regulations in place at the time of construction.</p>
17.2	<p>More specifically:</p> <p>a. Is the design of escape routes adequate?</p> <p>b. Is there an adequate provision of exits?</p> <p>c. Are exits easily and immediately openable where necessary?</p> <p>d. Do fire exits open in the direction of escape where necessary?</p> <p>e. Is there an avoidance of sliding or revolving doors as fire exits where necessary?</p>	<p>Yes</p> <p>The building has a concrete staircase serving the block suitably sized and located. Travel distance from the flats to the staircase is suitable. A central shaft contains two lifts that are protected by fire resisting doors and partitions.</p> <p>Yes</p> <p>The building is provided with adequate final exits at ground floor. The staircase discharges via a single exit width door to the lift lobby. The ground floor lobby has exits to the front and rear of the premises.</p> <p>Yes</p> <p>The doors leading from the front and rear ground floor lobby area have electronic access doors, the door should release on actuation of the fire alarm system should fail to the open position. Overrides are fitted.</p> <p>Yes</p> <p>Yes</p>

	<p>f. Is there a satisfactory means for securing exits?</p> <p>g. Are travel distances considered reasonable where there is single direction escape?</p> <p>h. Are travel distances considered reasonable where there are alternative means of escape?</p> <p>i. Is there suitable protection afforded to escape routes?</p> <p>j. Are there suitable fire precautions for all inner rooms?</p> <p>k. Are escape routes unobstructed?</p>	<p>Yes</p> <p>Yes Single direction travel from the flats is suitable.</p> <p>Yes Alternative travel distances are suitable.</p> <p>No No test data or certification available for installed fire doors. Confirmation that the doors meet the standard contained in the latest MCLG guidance should be sought or the doors replaced with suitable fire resisting doors as part of the door replacement program.</p> <p>N/A</p> <p>Yes</p>
17.3	Is the building provided with reasonable arrangements for means of escape for disabled persons?	<p>Yes General needs block of flats with occupants requesting assistance to escape if there is a need to evacuate their flat. Information is updated by the housing team and made available to responding fire crews in the Gerdabox located in the ground floor lobby.</p>
17.4	Comments & deficiencies observed:	The building is designed for a 'stay safe stay put' policy and this should be adopted by the building users. In the event of a fire an evacuation would be controlled by the Fire and Rescue Service.

18.0	MEASURES TO LIMIT FIRE SPREAD	Record of Assessors Findings
18.1	<p>It is considered that there is:</p> <p>a. Fire separation, compartmentation and fire barriers of a reasonable standard?</p>	<p>No</p> <p>The riser cupboards on both sides of the building at some levels have poor compartmentation and fire stopping around the access door casings.</p> <p>A type 4 invasive FRA has been completed and remedial work identified and completed. THT advised all work has been third party certified. Certification records were not available for the assessor to view at the time of inspection.</p> <p>There are risers to each protected escape corridor and stairwell at each floor level:</p> <p>The two gas risers are constructed of blockwork and have a fire rated board frontage which is screw-fixed and sealed with a white fire rated intumescent sealant. A sample of gas risers were opened and inspected on the previous type 4 risk assessment. Within the risers pipes penetrate through the floor and ceilings. The service penetrations had been made good with a white fire rated intumescent sealant. Larger penetrations had been sealed using a white fire batt material and white fire rated intumescent sealant. The fire proofing works to the service penetrations have been certified by a FIRAS accredited contractor.</p> <p>The electrical riser is constructed of blockwork and has a fire rated board frontage which is screw-fixed and sealed with a white fire rated intumescent sealant. A sample of risers were opened and inspected on the previous type 4 risk assessment. Within the riser cables penetrate through the floors and ceilings. The service penetrations had been made good with a white fire rated intumescent sealant. Larger penetrations had been sealed using a white fire batt material and white fire rated intumescent sealant. The fire proofing works to the service penetrations have been certified by a FIRAS accredited contractor.</p> <p>Brick slip cladding and exposed polystyrene insulation materials are still in place on the building. They should be removed as soon as practicable as they pose a significant target for deliberate fire</p>

setting.

Riser doors outside Flats 146 and 136 require replacing following water damage.

CCTV box is obstructing the outlet vent at the head of the stairs. The box should be removed.

Floor 3 cross corridor door not fully self-closing into the rebate. Repair the door to ensure it fully closes into the rebate.

Flat front doors were all inspected externally and seen to be well fitting fire doors. Certification was not available. THT has a door replacement program ongoing, and the doors are programmed for replacement.

Extract from previous type 4 inspection.

The entrance doors and door sets to the flats doors were fire rated including intumescent strips, smoke seals, door closers and fire rated letterboxes. A sample of the flat entrance door surrounds were opened and inspected, the uPVC architrave was removed to expose a partially sealed gap to both the head and sides of the door frame where it abuts the masonry wall. The gaps had been sealed with either pink or yellow polyurethane expanding foam.

The flue shaft serving the old warm air heaters had been boarded over during the removal of the warm air heaters, this flue shaft runs vertically through the building and discharges via a chimney at roof level. THT should identify the flats if warm air heaters are still present and make arrangements for the removal of the appliances and boarding over of the combined flue with fire rated material.

The 1st risers serving the bathrooms to the 2-bedroom flats are constructed from blockwork and either a fire rated cement board or a fire rated timber access panel. The access panel is not visible at low level due to the boxing in of services. A sample of the boxing in and risers were opened and inspected. The opening of the boxing-in identified a breach to the riser access panel at low level that should be fire stopped. The riser houses the kitchen waste pipe, water services and a redundant soil and vent pipe. The surround to the soil and vent pipe and water service penetrations at floor and ceiling were found to be inadequately sealed. The surround to

the waste and water service penetrations to the riser walls were also found to be inadequately sealed.

The 2nd masonry riser serving the bathrooms could not be opened up and inspected without the need for opening up masonry behind decorated walls to the kitchens or tiled walls to the bathrooms. It could be established however that the combined bathroom and kitchen extract upvc pipe passes through the riser at high level. A sample of the timber plywood boxing-in to the upvc pipe were opened and inspected. The masonry wall to the riser in each case had been core drilled for the upvc pipe insert, however, the surround to the upvc pipe penetrations were found to be inadequately sealed and no intumescent collars fitted to the upvc pipe to prevent the spread of fire and smoke within the riser and to other flats.

The 3rd riser to the bathrooms are constructed of timber stud and plywood. A sample of the risers were opened and inspected. The risers houses the upvc soil and vent pipe. The soil and vent pipe is fitted with an intumescent collar at ceiling level, however, the surround of the pipe is inadequately sealed with none fire rated expanding foam.

Within the 1-bedroom flats there is a riser in the kitchen that is accessed from the bathroom. The riser is constructed from blockwork and an access panel. The riser access panels were found to be a mixture of cement board and fire rated MDF and plywood construction. A sample of the risers were inspected. The riser houses a redundant cast iron soil and vent pipe and water services. The surround to the soil and vent pipe and water service penetrations to the floor, ceiling and walls were found to be inadequately sealed.

The penetrations to the walls where the waste and services penetrate the compartment wall between the bathroom and kitchen were also inadequately sealed.

There is also a 2nd riser to the 1-bedroom flats within the bathroom where a newly boxed-in UPVC soil and vent pipe is located. The boxing-in is constructed from plywood and is screw-fixed. The soil and vent pipe is fitted with an intumescent collar at ceiling level, however, the surround of the pipe is inadequately sealed with none fire rated expanding

	<p>b. Is the building supplied with an external wall system and what is it constructed of?</p> <p>c. Reasonable limitation of linings that might promote fire spread?</p>	<p>foam.</p> <p><i>In the flats accessed the integrity of the doors to rooms was assessed. The doors to the living room, kitchen and store door are solid timber doors, the doors to other rooms are of the hollow core type construction. These arrangements are consistent with guidance for existing blocks of flats. Although the flats accessed identified the presence of such doors, it was noted in flats to other neighbouring blocks that the doors to the kitchen and lounge had been removed by the tenant. THT should make arrangements to inspect all flats and ensure the necessary doors are in-situ.</i></p> <p>No evidence has been provided to indicate the defects found in 2017 within the flat units have been rectified and it is highly likely heat and smoke will breach the current compartmentation.</p> <p>Brick slip cladding and exposed polystyrene insulation materials are still in place on the building. They should be removed as soon as practicable as they pose a significant target for deliberate fire setting.</p> <p>Assessment of the fire risks of external walls and any cladding are excluded from the scope of this current fire risk assessment, as this is outside our expertise. Accordingly, it is strongly recommended that you obtain advice from qualified and competent specialists on the nature of, and fire risks associated with, the external wall construction, including any cladding, of this building.</p> <p>An external wall report is required for the building that includes the external wall system, spandrel panels and balconies.</p> <p>Yes Fire resisting paint is used in the circulation spaces.</p>
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18.2	As far as can reasonably be ascertained, are fire dampers provided as necessary to protect critical means of escape against the passage of fire, smoke and combustion products in the early stages of a fire?	<p>Yes</p> <p>A fire damper is present to the waste chute at ground level within the locked bin store. In the event of a fire, the waste chute can be accessed by the residents at each floor level within a fire rated enclosure and discharges into the bin store at ground level.</p> <p>Fire shutter in bin chute room serviced 01-08-2020</p> <p>The euro bin at the base of the chute needs to be located under the fusible link until the system is replaced with a shutter operated by smoke detection.</p>
18.3	Comments & deficiencies observed:	<p>Fire retardant paint used in the circulation spaces.</p> <p>100mm waste pipe runs through the balconies and is subject to an engineer's report that has not been reviewed.</p> <p>An engineer's report has been completed into the suitability of the staircase vents at the head of the stairs. It should be confirmed that the vents are suitable.</p>
19.0	EMERGENCY ESCAPE LIGHTING	Record of Assessors Findings
19.1	There is a reasonable standard of emergency escape lighting installed throughout the premises?	<p>Yes</p> <p>Emergency lighting is provided in the internal escape routes.</p> <p>Escape lighting is not provided outside the final exit doors. Suitable street lighting is in place.</p>
19.2	Comments & deficiencies observed:	None
20.0	FIRE SAFETY SIGNS & NOTICES	Record of Assessors Findings
20.1	There is a reasonable standard of fire safety signs and notices provided throughout the premises?	<p>Yes</p> <p>Adequate fire signs and notices are provided.</p>

20.2	Comments & deficiencies observed:	Amendments to the Building Regulation require new build residential buildings to provide wayfinding signage to the buildings. Consideration should be given to the installation of wayfinding signage on refurbishment or redecoration of the communal areas.
21.0	MEANS OF GIVING WARNING IN CASE OF FIRE	Record of Assessors Findings
21.1	<p>Arrangements for detecting fire:</p> <p>Is there an electronically operated manual fire alarm system provided?</p>	<p>Yes</p> <p>A BS 5839 Part 1 wireless interlinked system is provided throughout the communal areas. The system has one call point in the caretaker's office. The system is set to silent and remotely monitored. The system can be sounded when required by the fire service to initiate an evacuation of the building.</p> <p>A BS 5839 Part 6 system is fitted to each flat unit.</p> <p>Smoke detection is provided on the flat landings to operate the landing AOVs.</p>
21.2	Is there automatic fire detection provided?	<p>Yes</p> <p>Smoke and heat detection is provided throughout the building.</p>
21.3	Is the extent of the automatic fire detection generally appropriate for the occupancy and fire risk?	Yes
21.4	Is there remote transmission of the fire alarm signal?	Yes
21.5	Comments & deficiencies observed:	The fire alarm system in the communal areas would not normally be required but the current system and the way it is being managed supports the safe occupation of the building.

22.0	MANUAL FIRE EXTINGUISHING	Record of Assessors Findings
22.1	Reasonable provision of portable fire extinguishers (type and number)?	Yes Suitable firefighting equipment is provided. Tested maintained and suitably located.
22.2	Are all fire extinguishers readily accessible?	Yes
22.3	Are fixed hose reels provided?	N/A
22.4	Comments & deficiencies observed:	None
23.0	AUTOMATIC FIRE EXTINGUISHING SYSTEMS	Record of Assessors Findings
23.1	Automatic fire extinguishing systems that are relevant to life safety and this risk assessment (as opposed purely to property protection)	Type of System A non-standard sprinkler system is installed in the bin storage room and its function is currently under review.
23.2	Comments:	Update when decision is taken on sprinkler installation.
24.0	FIXED SYSTEMS & EQUIPMENT	Record of Assessors Findings
24.1	Fixed systems and equipment that are relevant to the safety of fire fighters	Type of System Dry riser installed with outlets at each level of the building. The outlets are within suitable distances from all flat doors. The building has two lifts not firefighting lifts but they can be controlled by the fire service.
24.2	Comments:	None

25.0	ACCESS PROVISIONS	Record of Assessors Findings
25.1	<p>What is the capability of the local fire and rescue service to attend, control and extinguish a fire at the premises?</p>	<p>Vehicle access is readily available to the building with a signed fire hydrant present outside Grafton Court.</p> <p>The keys for the various building areas are contained within the Gerda box in the entrance lobby. The Fire and Rescue Service will be familiar with its location through ongoing consultation and familiarisation visits.</p> <p>Additional landing access key should be placed in the Gerder boxes to enable the fire service to access different floors at the same time.</p>

ASSESSMENT OF FIRE SAFETY MANAGEMENT

<p>STEP 5</p> <p>The fifth step is to determine relevant information about fire safety management.</p>	<p>Guidance:</p> <p>This will primarily involve discussion with management, but might also involve examination of documentation, such as records of testing, maintenance, training, fire drills etc</p>
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	PROCEDURES & ARRANGEMENTS	Record of Assessors Findings
26.1	Fire safety is managed by:	Fire Safety arrangements are managed by THT
26.2	Are competent person(s) appointed to assist in undertaking the preventative and protective measures (i.e. relevant general fire precautions)?	Yes Brad Walker Fire Safety Advisor.
26.3	Is there a suitable record of the fire safety arrangements?	Yes There are fire action notices present to the lift lobby at each floor level. A fire safety advice notice is present to the notice board to the entrance lobby and a copy of the notice has been distributed to the residents.
26.4	Are appropriate fire procedures in place? More specifically: <ul style="list-style-type: none"> a. Are procedures in the event of fire appropriate and properly documented? b. Are there suitable arrangements for summoning the fire and rescue service? c. Are there suitable arrangements to meet the fire and rescue service on arrival and provide relevant information, including that relating to hazards to fire fighters? 	<p>Yes Advice to residents is recorded and displayed in the foyer notice board</p> <p>Yes Monitored fire alarm system and residents and staff are advised to call 999 in the event of a fire.</p> <p>Yes The caretaker is nominated and trained during normal working hours. Out of normal working hours THT have 24/7 mobile personnel (Trust Call) that can be contacted either directly by the fire service or by the alarm receiving centre in order that input and/or assistance is required by the fire service.</p>

	<p>d. Are there suitable arrangements for ensuring that the premises have been evacuated?</p> <p>e. Is there a suitable fire assembly point?</p> <p>e. Are there adequate procedures for evacuation of any disabled people who are likely to be present?</p>	<p>Yes The building operates a 'stay safe stay put' policy. Any evacuation would be controlled by the fire and rescue service.</p> <p>Yes There is a fire assembly point indicated on a notice within the building.</p> <p>Yes There are no specific procedures required for any of the residents in occupation, however, the Premises Information (Gerda) box contains a list of occupants who require assistance during an incident/evacuation.</p>
26.5	<p>Nominated Persons:</p> <p>a. Are persons nominated and trained to use fire extinguishing appliances?</p> <p>b. Are persons nominated and trained to assist with evacuation, including evacuation of disabled people?</p> <p>c. Is there appropriate liaison with fire and rescue service (e.g. by fire crews visiting the premises as part of a familiarization visit)?</p> <p>d. Do routine 'in-house' inspections of fire precautions take place (e.g. in the course of health and safety inspections)?</p>	<p>No A limited number of extinguishers are provided but staff training in the use of firefighting equipment is not undertaken.</p> <p>No General needs block of flats operating a stay put policy. Information is recorded and stored to assist the fire service in identifying more vulnerable residents if the need for evacuation arises.</p> <p>Yes</p> <p>Yes Monthly fire safety inspections are conducted and recorded.</p>
27.0	TRAINING & DRILLS	Record of Assessors Findings
27.1	Are all staff given adequate fire safety training and instruction of induction?	Yes

27.2	Are all staff given periodic 'refresher training' at suitable intervals?	Yes
27.3	<p>Does all 'staff training' provide information, instruction or training on the following:</p> <p>a. Fire risks in the premises?</p> <p>b. The fire safety measures in the building?</p> <p>c. Action in the event of fire?</p> <p>d. Action on hearing the fire alarm signal?</p> <p>e. Method of operation of manual call points?</p> <p>f. Location and use of fire extinguishers?</p> <p>g. Means for summoning the fire and rescue service?</p> <p>h. Identity of persons nominated to assist with evacuation?</p> <p>i. Identity of persons nominated to use fire extinguishing appliances?</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Observations: Training plan documented and in place.</p>
27.4	Are persons with special responsibilities (e.g. fire wardens) given additional training?	<p>N/A</p> <hr/> <p>Observations: The caretaker has undergone fire safety training.</p>
27.5	Are fire drills carried out at appropriate intervals?	<p>No</p> <hr/> <p>Observations: General needs block of flats stay safe policy fire drills not conducted.</p>

27.6	<p>When the employees of another employer work in the premises:</p> <p>a. Is their employer given appropriate information (e.g. on fire risks and general fire precautions)?</p> <p>b. Is it ensured that the employees are provided with adequate instructions and information?</p>	<p>Yes</p> <p>Yes</p> <p>Observations: Contractor procedures are in place controlled by the onsite caretaker.</p>
28.0	TESTING & MAINTENANCE	Record of Assessors Findings
28.1	Is the workplace itself adequately maintained in order to avoid certain fire hazards?	<p>Yes</p> <p>Observations: Testing and maintenance arrangements are in place.</p>
28.2	<p>Is there a suitable arrangement in place to test and maintain fire protection systems?</p> <p>More specifically:</p> <p>a. Weekly testing and periodic servicing of fire detection and fire alarm system?</p> <p>b. Monthly and annual testing routines for emergency escape lighting</p> <p>c. Annual maintenance of fire extinguishing appliances?</p> <p>d. Periodic inspection of external escape staircases and gangways?</p> <p>e. Six-monthly inspection and annual testing of rising fire mains?</p> <p>f. Weekly and monthly testing, six monthly inspection and annual testing of fire-fighting lifts?</p>	<p>Yes</p> <p>Yes Last tested 21-01-2021.</p> <p>No</p> <p>Yes 19-03-2021</p> <p>N/A</p> <p>Yes Last record 19-03-2021</p> <p>N/A</p>

	<p>g. Weekly testing and periodic inspection of sprinkler installations?</p> <p>h. Routine checks of final exits and/or security fastenings?</p> <p>h. Annual inspection and test of lightning protection system?</p>	<p>N/A</p> <p>Yes Monthly tests are recorded.</p> <p>Yes 01-10-2020</p>
28.3	Other relevant inspections or tests:	None.
29.0	RECORDS	Record of Assessors Findings
29.1	<p>Are there appropriate records of:</p> <p>a. Fire drills?</p> <p>b. Fire training?</p> <p>c. Fire alarm tests?</p> <p>d. Emergency escape lighting tests?</p> <p>e. Maintenance and testing of other fire protection systems?</p>	<p>Not required</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
29.2	Comments:	All records are held on Riskwise or other electronic storage systems.

ASSESSMENT OF LIKELY CONSEQUENCE OF FIRE

STEP 6

The sixth step is to make a (subjective) assessment of the likely consequences to occupants in the event of fire.

Guidance:

This assessment is principally based on the fire risk assessor's findings in step four and five but will take account of information obtained in the first step.

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

In this context, a definition of the above terms are as follows:

Slight Harm

Outbreak of fire unlikely to result in serious injury or death of any occupant (other than an occupant sleeping in a room in which fire occurs)

Moderate Harm

Outbreak of fire could foresee-ably result in injury (including serious injury) of one or more occupants, but is unlikely to involve multiple fatalities.

Extreme Harm

Significant potential for serious injury or death of one or more occupants.

SLIGHT HARM / MODERATE HARM / EXTREME HARM

MODERATE

ASSESSMENT OF FIRE RISK

STEP 7

The seventh step is to assess the fire risk and to decide if the fire risk is tolerable.

Guidance:

The fire risk is assessed by combining the likelihood of fire (step three) and the consequences of fire (step six)

Likelihood of Fire + Potential Consequences of Fire = Assessment of Fire Risk

Likelihood of Fire	Potential Consequences of Fire		
	Slight Harm	Moderate Harm	Extreme Harm
Low	Trivial Risk	Tolerable Risk	Moderate Risk
Medium	Tolerable Risk	Moderate Risk	Substantial Risk
High	Moderate Risk	Substantial Risk	Intolerable Risk

ASSESSMENT OF FIRE RISK

<p>By combining the likelihood and consequences using the matrix it is considered that the risk to life from fire at these premises is:</p> <hr/> <p>The following risk based control plan is based on one advocated for general health and safety risks:</p> <p><u>Trivial</u> No action is required and no detailed records need to be kept. <u>Tolerable</u> No major additional controls required. However, there might be a need for improvements that involve minor or limited cost.</p> <p><u>Moderate</u> It is essential that efforts are made to reduce the risk. Risk reduction measures should be implemented within a defined time period.</p> <p>Where moderate risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the improved control measures.</p> <p><u>Substantial</u> Considerable resources might have to be allocated to reduce the risk. If the building is unoccupied, it should not be occupied until the risk has been reduced. If the building is occupied, urgent action should be taken.</p> <p><u>Intolerable</u> The building (or relevant area) should not be occupied until the risk is reduced.</p>	<p>TRIVIAL TOLERABLE MODERATE SUBSTANTIAL INTOLERABLE</p> <hr/> <p>MODERATE</p>
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Although the purpose of step seven is to place the fire risk in context with the above approach to fire risk assessment is subjective and for guidance only.

All hazards and deficiencies identified in this report should be addressed by implementing all recommendations contained in the following action plan.

FORMULATION OF AN ACTION PLAN

STEP 8

The eighth step is to formulate an action plan. The action plan comprises recommendations that are intended to ensure that the fire risk is reduced to, or maintained at a tolerable level. If the fire risk is already tolerable, there is still often a need to address minor deficiencies in fire precautions and/or low cost changes to the managerial arrangements etc.

Guidance:

The action plan is an inventory of actions often prioritized to devise maintain or improve controls. Ideally the inventory will include measures to eliminate or control hazards (e.g. better separation of combustible materials and ignition sources) A blend of physical and procedural measures is often needed.

DEFINITION OF PRIORITIES WITHIN THIS ACTION PLAN

Definition of Priorities:

A: Serious breach of legislation, having the potential for serious injury to occupants

Short Term: Should be implemented immediately including, where relevant, interim measures necessary to ensure the safety of occupants until permanent measures can be implemented.

B: Matters that breach legislation but are not considered to constitute a serious threat to life safety

Medium Term: Should be implemented within, say three months.

C: Matters that should be addressed as good practice, but that do not constitute any threat to occupants

Long Term: Should be implemented as and when the opportunity arises.

Under the relevant fire safety legislation, a breach of the legislation constitutes a criminal offence if, inter alia, the breach results in the risk of serious injury or death of one or more persons who are lawfully on the premises, or in the immediate vicinity of the premises, in the event of fire.

FIRE RISK ASSESSMENT ACTION PLAN for Grafton Court

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

Premises Defects:

No:	Section Ref:	Action	Priority	Date Action Taken	Action By Whom
12.2		The lightning conductor test has failed. The system should be repaired, and certification of system obtained.	B		
18.1	a	The riser cupboards on both sides of the building at some levels have poor compartmentation and fire stopping around the access door casings.	B		
18.1	a	No evidence has been provided to indicate the defects found in 2017 within the flat units have been rectified and it is highly likely heat and smoke will breach the current compartmentation.	B		
18.1	a	Brick slip cladding and exposed polystyrene insulation materials are still in place on the building. They should be removed as soon as practicable as they pose a significant target for deliberate fire setting.	B		
18.1	b	An external wall report is required for the building that includes the external wall system, spandrel panels and balconies.	C		
18.2		The euro bin at the base of the chute needs to be located under the fusible link until the system is replaced with a shutter operated by smoke detection.	B		
18.3		An engineer's report has been completed into the suitability of the staircase vents at the head of the stairs. It should be confirmed that the vents are suitable.	C		

21.1		Additional landing access key should be placed in the Gerder boxes to enable the fire service to access different floors at the same time.	C		
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Operational Practices:

No:	Section Ref:	Action	Priority	Date Action Taken	Action By Whom
28.2	b	No records were available for the monthly emergency lighting tests. Tests should be conducted, and records kept.	C		

Observations:

No:	Section Ref:	Action	Priority	Date Action Taken	Action By Whom
20.2		Amendments to the Building Regulation require new build residential buildings to provide wayfinding signage to the buildings. Consideration should be given to the installation of wayfinding signage on refurbishment or redecoration of the communal areas.	C		

PERIODIC REVIEW OF FIRE RISK ASSESSMENT

STEP 9

The ninth step is the periodic review of the fire risk assessment.

Guidance:

Review of the fire risk assessment is necessary after a period defined in the fire risk assessment or, at an earlier time if changes take place, or if there are other reasons to suspect that the fire risk assessment is no longer valid.

The fire risk assessment is likely to cease to be valid when, for example:

- a. a material alteration takes place;
- b. a significant change occurs in the “given” factors that were considered when the fire risk assessment was carried out;
- c. a significant change in fire precautions occurs;
- d. a fire occurs on the premises

Significant changes in the “given” factors could be for example:
an increase in the number of occupants in the building or the introduction of a much more

Comments:

TERMS & DEFINITIONS

1. **access room:** room that forms the only escape route from an inner room (see 31)
2. **action plan:** measures identified in the course of a fire risk assessment that need to be implemented to ensure that the required level of fire safety is achieved or maintained
3. **alternative escape routes:** escape routes sufficiently separated either by direction and space, or by fire-resisting construction, intended to ensure that one is still available if the other one is affected by fire
4. **class A fires:** fires involving solid materials, usually of an organic nature, in which combustion normally takes place with the formation of glowing embers
5. **class B fires:** fires involving liquids or liquefiable solids
6. **class C fires:** fires involving gases
7. **class D fires:** fires involving metals
8. **class F fires:** fires involving fats and cooking oils
9. **combustible:** capable of burning in the presence of oxygen
10. **compartmentation:** subdivision of a building by fire resisting walls and/or floors for the purpose of limiting fire spread within the building
11. **dead end:** area from which escape from fire is possible in one direction only
12. **emergency escape lighting:** part of the emergency lighting that provides illumination for the safety of people leaving a location within the building
13. **emergency lighting:** lighting provided for use when the supply of normal lighting fails
14. **escape route:** route forming part of the means of escape from any point in a building to a final exit
15. **final exit:** termination of an escape route from a building, giving direct access to a street, passageway, walkway or open space, where people are no longer in danger from fire
16. **fire audit:** systematic and whenever possible, independent examination to determine whether standards of fire safety conform to those required in order to achieve the organisation's fire safety policy and objectives.
17. **fire door:** door or shutter provided for the passage of people, air or objects which, together with its frame and furniture as installed in a building, is intended (when closed) to resist the passage of fire and/or gaseous products of combustion, and is capable of meeting specified performance criteria to those ends.

18. **fire drill:** rehearsal of the evacuation procedure involving participation of the occupants of a building
19. **fire equipment sign:** safety sign that indicates the location or identification of fire equipment or how it should be used.
20. **fire hazard:** source or situation with potential to result in a fire.
21. **fire identification:** process of recognizing that a fire hazard exists and defining its characteristics.
22. **fire load:** quantity of heat that could be released by the complete combustion of the combustible materials in a volume, including the facings of all bounding surfaces.
23. **fire precautions:** physical, procedural and managerial measures taken to reduce the likelihood of ignition occurring and/or to mitigate the consequences if ignition does occur.
24. **fire prevention measures:** measures to prevent the outbreak of fire.
25. **fire procedure:** pre-planned actions to be taken in the event of fire.
26. **fire protection measures:** design features, systems, equipment or structural measures to reduce danger to people and property if fire occurs.
27. **fire resistance:** ability of an item to fulfil for a stated period of time the required load-bearing capacity and/or integrity and/or thermal insulation, and/or other expected duty specified in a standard fire resistance test.
28. **fire risk:** combination of likelihood and consequence(s) of fire.
29. **fire risk assessment:** overall process of identifying fire hazards and evaluating the risks to health and safety arising from them, taking account of existing risk controls (or in the case of a new activity, the proposed risk controls)
30. **fire safety engineering:** application of scientific and engineering principles to the protection of people, property and the environment from fire.
31. **fire safety management:** task(s) carried out by defined individual or individuals with appropriate powers and resources to ensure that the fire safety systems, passive, active and procedural measures, within the building are working properly at all times.
32. **fire safety policy:** documented strategy that sets out the standards of fire safety that an organization is committed to maintaining.
33. **ignition:** initiation of combustion.
34. **ignition source:** source of energy that initiates combustion
35. **inner room:** room from which the only escape route is through another room (see 1)
36. **integrity:** ability of a separating element, when exposed to fire on one side, to prevent the passage of flames and hot gases or the occurrence of flames on the unexposed side, for a stated period of

time in a standard fire resistance test.

37. ***maintained emergency lighting***: lighting system in which all emergency lighting lamps are illuminated at all material times.
38. ***mandatory sign***: safety sign that indicates a specific course of action is to be taken.
39. ***manual call point***: component of a fire detection and fire alarm system that is used for the initiation of a fire alarm signal.
40. ***means of escape***: structural means whereby a safe route in the event of fire is provided for persons to travel from any point in a building to a place of safety (without external assistance)
41. ***non-maintained emergency lighting***: lighting system in which all emergency lighting lamps are illuminated only when the supply to the normal lighting fails.
42. ***place of safety***: place in which people are in no danger from fire.
43. ***products of combustion***: solid, liquid and gaseous materials resulting from combustion.
44. ***protected corridor, route or staircase***: corridor, route or staircase enclosed in fire-resisting construction.
45. ***refuge***: area that is both separated from a fire by fire resisting construction and provided with a safe route to a storey exit, thus constituting a temporarily safe space for disabled occupants to await assistance for their evacuation.
46. ***smoke alarm***: device containing within one housing all the components, except possibly the energy source, necessary for detecting smoke and for giving an audible alarm (normally reserved for devices intended for domestic uses)
47. ***smoke damper***: mechanical device which when closed, prevents smoke passing through an aperture within a duct or structure.
48. ***structural fire protection***: features in layout and/or construction that are intended to reduce the effects of a fire.
49. ***tolerable level***: level at, or close to, that is acceptable to an organization, taking into account the requirements of fire safety legislation, the fire safety policy of the organization, the nature of the building, the fire hazards in the building, the nature of the occupants, the cost of additional fire precautions and any other relevant factors.
50. ***travel distance***: actual distance to be travelled by a person from any point within the floor area to the nearest storey exit, having regard to the layout of walls, partitions and fixings.

Principles of Prevention

The principles are:

- *Avoiding risks;*
- *Evaluating the risks which cannot be avoided;*
- *Combating the risks at source;*
- *Adapting to technical progress;*
- *Replacing the dangerous by the non-dangerous or less dangerous;*
- *Developing a coherent overall prevention policy which covers technology, organisation of work and the influence of factors relating to the working environment;*
- *Giving collective protective measures priority over individual protective measures; and*
- *Giving appropriate instructions to employees.*

Definition of a Dangerous Substance

A substance or preparation which meets the criteria in the approved classification and labelling guide for classification as a substance or preparation which is explosive, oxidising, extremely flammable, highly flammable or flammable, whether or not that substance or preparation is classified under the CHIP Regulations;

A substance or preparation which because of its physio-chemical or chemical properties and the way it is used or is present in or on the premises creates a risk; and

Any dust, whether in the form of solid particles or fibrous materials or otherwise, which can form an explosive mixture with air or an explosive atmosphere.

Definition of an Explosive Atmosphere

A mixture, under atmospheric conditions, of air and one of a more dangerous substance in the form of gases, vapours, mists or dusts in which, after ignition has occurred, combustion spreads to the entire unburned mixture.

NOTE

Prior to commencing to use and/or store flammable liquids in a workplace, a risk assessment must be carried out by a competent person. Flammable liquids pose a fire and/or explosion risk and **must not be stored on the premises unless a suitable fire risk assessment has been undertaken.**

EMERGENCY PLANNING

An 'emergency plan' must be prepared and its purpose is to ensure that all persons in the premises know what to do in case of an emergency, including a fire, so that the premises can be safely evacuated.

It is good practice to have a written emergency plan in any case.

The 'emergency plan' should be based on the outcome of this fire risk assessment and be available for your employees, their representatives, residents and the enforcing authority.

Note: In residential care premises, the 'emergency plan' will need to be more detailed.





In small premises the emergency plan may be exactly the same as the fire action notice.

The 'emergency plan' should be appropriate for the premises and may include the following:

1. The means of warning if there is a fire.
2. What action staff/employees should take if they discover a fire
3. Details of how the evacuation of the premises should be carried out.
4. Any individual/specific needs or risks associated with any individual residents/employees.
5. Identification and use of protected areas, refuges etc. used for horizontal and partial evacuation.
6. The location of the assembly point, the procedures to take a roll call and for checking that the premises have been evacuated.
7. Identification of key escape routes, how people can gain access to them and escape from them safely.
8. Arrangements in place for firefighting.
9. The duties and identities of staff/employees who have specific responsibilities e.g. fire wardens, fire marshals etc.
10. Arrangements for the safe evacuation of people who are identified as being especially at risk e.g. residents, those with disabilities, contractors, visitors etc.
11. What machines/processes/appliances/power supplies etc. - that need to be stopped or made safe if there is a fire and the role of any persons who have been designated to do this.
12. Any specific arrangements that have been made especially for high fire risk areas.
13. Contingency plans for when any of the safety systems are out of order.
14. Details of how fire and rescue services will be called and the responsible person(s) for doing this.

15. *Procedures that are in place for meeting the emergency services upon their arrival and passing over information to them.*
16. *What training employees/staff need and arrangements to ensure that training is given on a regular basis.*
17. *Plan for the accommodation of any residents both during the fire, immediately after and long term and also the storage of any valuables etc.*

PHOTOGRAPHIC DETAILS

P1 – Exposed polystyrene.	P2 – Insulation surrounding gas main.
 A photograph showing a corner of an exterior wall. The wall is covered in dark grey horizontal siding. A section of the wall is missing, revealing a thick layer of white polystyrene insulation. A window with a dark frame is visible to the right.	 A close-up photograph of a vertical pipe, likely a gas main, surrounded by grey mineral wool insulation. The pipe is wrapped in a yellowish-brown material, possibly a vapor barrier or another layer of insulation. The background shows a brick wall.
P3 – Plastic SVP.	P4 – Wall bricked up.
 A photograph of an interior wall. The wall is covered in a white plastic vapor barrier (SVP). A white pipe runs horizontally across the wall. The ceiling is made of concrete and has a fluorescent light fixture.	 A photograph of a utility room. A wall is bricked up with red bricks. There are pipes and electrical conduits running across the ceiling. A fluorescent light fixture is visible. A door is partially visible on the left.