



Workplace Fire Precautions Legislation

FIRE RISK ASSESSMENT

Conforming to, and in accordance with, the following legislation:-

The Regulatory Reform (Fire Safety) Order 2005

Address of Property:

Scheme number **231**
Millennium Quay
Llanelli
SA15 2LD

Responsible person having control of the premises: **Adriatic Land 1 c/o Rebecca Eddy EM (Trinity Estates)**

Assessment Undertaken by: **Stuart Watts (Building Surveyor)**

Date of Fire Risk Assessment: **6th June 2016**

Date of Report: **10th June 2016**

Date of Previous Fire Risk Assessment: **26th May 2015**

Suggested Date for Review¹: **Spring 2017**

¹ 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by a competent person by the date indicated above or at such earlier time as there is reason to suspect that it is no longer valid or there have been significant changes.

Introduction

The purpose of this report is to provide an assessment of the risk to life from fire in these buildings, 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.*

The submission of this report constitutes neither a warranty of results of future Fire Risk Assessments, nor an assurance against risk. The report represents only the best judgement of the consultant involved in its preparation, and is based in part on information provided by others. No liability is accepted for the accuracy of such information.

The Assessment was undertaken in accordance with the general risk assessment principles set out in Fire Safety Order in order to identify hazards that could contribute to the injury of relevant persons, including those residing in or visiting the building.

Only the communal areas and systems were assessed. Therefore this Fire Risk Assessment applies only to the common parts including but not limited to - stairways, landings, corridors, communal cupboards (refuse, utility, cleaning, store, cycle etc); all communal external areas including landscaped areas, car parking (underground, external, partly covered etc), refuse bin areas, stores and shelters, footpaths, roadways, designated muster points (where applicable); and any fire prevention and fire protection measures necessary to safeguard the relevant persons using or in the vicinity of these areas. The individual residences accessed from these areas are not included as they fall outside the scope of The Regulatory Reform (Fire Safety) Order 2005, with the exception of any doors that impact directly on the protection of the common escape routes.

Overview of the Regulatory Reform (Fire Safety) Order 2005 (the "Fire Safety Order")

The Fire Safety Order covers general fire precautions and other fire safety duties which are needed to protect "relevant persons" in case of fire in and around most premises. The Order requires fire precautions to be put in place "where necessary" and to the extent that it is reasonable and practicable in the circumstances.

Responsibility for complying with the Fire Safety Order rests with the "Responsible Person". This Fire Risk Assessment has been carried out on your behalf, being the "Responsible Person" as defined in Article 3 of The Regulatory Reform (Fire Safety) Order 2005, being the employer and/or being the person having control, to any extent, of the premises, as occupier or otherwise. It is intended to assist you in compliance with Article 9 of The Regulatory Reform (Fire Safety) Order 2005, which requires a risk assessment to be carried out.

It is important that you study this report and understand its contents. This Assessment has considered fire sources, fire spread, detection, means of escape, and fire extinguishing, and has considered those "relevant persons" at risk. It includes an Action Plan, which sets out the measures considered necessary to satisfy the requirements of the Fire Safety Order and to protect "relevant persons" (as defined in the Order) from fire. Relevant persons are primarily those who are, or may be, lawfully in the building, and certain persons in the vicinity. If any recommendation in the Action Plan is unclear you should request further advice.

The Fire Safety Order requires you to arrange for the effective planning, organisation, control, monitoring and review of the preventative and protective measures that have been identified in the risk assessment as the general fire precautions you need to take to comply with the Fire Safety Order.

You should ensure that there is a record of the fire safety arrangements; adequate to comply with Article 11(2) of the Fire Safety Order, and that it is kept up to date. In carrying out this Assessment, consideration will have been given to the records that have been provided to us. This Assessment is not the record of the fire safety arrangements to which the Fire Safety Order refers, although much of the information contained in this Assessment will coincide with the information in that record.

The Fire Safety Order requires that you appoint "Competent Persons" to assist you. Where there is a "competent person" in your employment, under Article 18(8) of the Fire Safety Order, you must appoint that person in preference to a "competent person" not in your employment.

This Fire Risk Assessment was undertaken by our Assessor whose experience and expertise gives him the status of "Competent Person" as described in The Health and Safety Management Regulations, and in The Regulatory Reform (Fire Safety) Order 2005, which superseded all previous fire safety legislation.

The Fire Safety Order requires you to inform any employees, temporary or contract workers, or contractors operating on the premises, about the risks to them, and provide them with clear and relevant information about the fire safety procedures for the premises. You should provide your employees with appropriate information, instruction and training.

The Fire Safety Order also requires you to co-operate and co-ordinate with other "responsible persons" in multi-occupied or neighbouring premises.

Other Legislation

In addition to the Fire Safety Order this Fire Risk Assessment has taken into consideration the following legislation and regulations:

Electricity at Work Regulations 1989

Gas Safety (Installation and Use) Regulations 1998

Health and Safety at Work etc. Act 1974

Health and Safety (Signs and Signals) Regulations 1996

Management of Health and Safety at Work Regulations 1999

Workplace (Health, Safety and Welfare) Regulations 1992

The **Housing Act 2004** applies to the whole of the premises, and additional fire safety measures may be required under the Housing Act in areas not within the scope of The Fire Safety Order. This Assessment does not comment upon or assess such requirements.

This Assessment has considered dangerous substances that are used or stored in your premises, but only to the extent necessary to determine the adequacy of the general fire precautions as defined in Article 4

of the Fire Safety Order. This Assessment does not consider the special, technical or organisational measures required to be taken or observed in connection with the use or storage of “dangerous substances” as defined in the Dangerous Substances and Explosive Atmospheres Regulations 2002. If dangerous substances are used or stored in your premises, you should ensure that a separate risk assessment of the relevant work activities has been carried out to enable you to comply with the **Dangerous Substances and Explosive Atmospheres Regulations 2002**.

Other Relevant Information

It is not normal practice to retrospectively apply current guidance on the design and construction of new buildings when assessing existing buildings, except where the original design principles are so far removed from those acceptable today, that an unacceptable risk is present. As such it is appropriate to consider developments in fire safety technology and practice that could be reasonably applied to an existing building. Therefore such developments have been considered in the preparation of this Assessment.

The general fire precautions, which are part-existing with recommendations for improvement set out in the Action Plan below, are considered to be reasonably practicable, and will provide an adequate degree of fire safety for the relevant persons.

NB It is recognised that it may not be possible to rectify all deficiencies noted in the times recommended due to financial and other constraints; where this is the case action should be taken to reduce the risk as far as possible pending final rectification. In these circumstances you should request further advice.

Relevant standards and codes of practice:

Emergency Escape Lighting

- BS 5266-1: 2005 Code of practice for the emergency lighting of premises.
- BS 5266-7: 1999 Lighting applications – emergency lighting.
- BS 5266-8: 2004 Emergency escape lighting systems.

Fire Detection and Fire Alarm Systems for Buildings

- BS 5839-1: 2002 Code of practice for system design, installation, commissioning and maintenance.
- BS 5839-6: 2004 Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.
- BS 5839-8: 2008 Code of practice for the design, installation, commissioning and maintenance of voice alarm systems.
- BS 5839-9: 2003 Code of practice for the design, installation and maintenance of emergency voice communication systems.

Fire Extinguishing Installations and Equipment on Premises

- BS 5306-1: 2006 Code of practice for hose reels and foam inlets.
- BS 5306-2: 1990 Specification for sprinkler systems.
- BS 5306-3: 2003 Code of practice for the inspection and maintenance of portable fire extinguishers.
- BS 5306-8: 2000 Code of practice for the selection and installation of portable fire extinguishers.
- BS 9990: 2006 Code of practice for non-automatic fire-fighting systems in buildings.
- BS EN 3 Portable fire extinguishers.
- BS EN 1869: 1997 Fire blankets.

Fixed Fire Fighting Systems

- BS EN 671-3: 2000 Hose systems.
- BS EN 12845: 2004 Automatic sprinkler systems – design, installation and maintenance.

Fire Safety Design and Management

- BS 9999: 2008 Code of practice for fire safety in the design, management and use of buildings.

Fire Safety Signs

- BS 5499-1: 2002 Specification for geometric shapes, colours and layout.
- BS 5499-4: 2000 Code of practice for escape route signing.
- BS 5499-5: 2002 Signs with specific safety meanings.
- BS 5499-10: 2006 Code of practice for the use of safety signs, including fire safety signs.

Protection Against Lightning

- BS EN 62305-1: 2006 General principles.
- BS EN 62305-2: 2006 Risk management.
- BS EN 62305-3: 2006 Physical damage to structures and life hazard.
- BS EN 62305-4: 2006 Electrical and electronic systems within structures.

Miscellaneous

- BS 7176: 1995 Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites.
- BS 7273-4: 2007 Code of practice for the operation of fire protection measures – Actuation of release mechanisms for doors.
- BS 7671: 2008 Requirements for electrical installations. IEE Wiring Regulations – 17th edition.

Property Overview

Millennium Quay is a development of 262 leasehold units, situated on the sea front Llanelli, South Wales. The large development incorporates several blocks, with 29 separate staircases in total, varying from four to eight flats per staircase.

The blocks are of timber construction and are all low-rise (Maximum of four storeys), situated across the estate amongst the freehold units. There are no lifts or integral car parks, externally residents have access to communal parking areas, and bin stores.

Fire precautions include; Automatic smoke vents, mains smoke alarms and emergency lighting. All ground floor riser cupboards include smoke detectors linked to the alarm.

General information	
1.The Building/s	
Number of blocks	29
Number of floors (including ground)	3 /4
Approximate floor area	n/a
Brief details of construction	Timber Frame
2.Building/s users	
Sleeping Occupants	Occupants of 262 Leasehold flats
Non ambulant persons	None advised
Sensory impaired persons	None advised
Young persons (unsupervised)	None advised
Persons with psychological / learning difficulties	None advised
Occupants in remote areas	n/a
Others	n/a
Comments and Hazards observed	
Fire loss experience	None advised
Other relevant information:	
Fire Hazards and their elimination or control	
3.Electrical sources of ignition	
Reasonable measures taken to prevent fires of electrical origin	Yes
Fixed installation periodically tested and inspected	Yes
Date of last periodic inspection:	July 2012
Portable Appliance Testing carried out	n/a
Date of last inspection:	n/a
Is there a suitable policy restricting use of personal electrical appliances	n/a
Where applicable are trailing leads/adaptors limited	n/a
Are there any 'visible' signs of damage or faults to switches, sockets, light fittings and other associated components of the fixed electrical installation.	Yes
Comments and Hazards observed:	

<ul style="list-style-type: none"> • Testing of the fixed electrical installation was carried out in July 2012 and will be next due 2017. • 8-15 Novella; Repair junction box cover, and investigate leak damage before damage is caused to electric installation. • 11-17 Naiad; Replace cover to junction box. • 1-7 Myrddin Damage to control panel on ground floor. • 25-31 Mary Welch – replace cover to junction box. 	
4.Smoking (prohibited by law in workplace)	
Are there reasonable measures to prevent smoking within the building e.g. prohibitive signage	Yes
Is there evidence of breaches of law relating to smoking in the workplace	No
Are there suitable arrangements for those who wish to smoke	n/a
Comments and Hazards observed:	
5.Arson	
Does basic security against arson from outsiders appear reasonable	Yes
Is there any unnecessary fire load in close proximity to the building or available for ignition by outsiders	No
Comments and Hazards observed:	
6.Portable Heaters and Heating installations	
Is the use of portable heaters avoided as far as is practical	n/a
Are fixed Heating installations subject to regular maintenance	Yes
Date of last service:	July 2012
Comments and Hazards observed: <ul style="list-style-type: none"> • Testing of the fixed electrical installation was carried out in July 2012 and will be next due 2017. 	
7.Cooking	
Are reasonable measures taken to prevent fire as a result of cooking	n/a
Filters changed and ductwork cleaned regularly	n/a
Suitable fire extinguishing appliances available	n/a
Comments and Hazards observed:	
8.Lightning Protection Systems (Lightning Conductors)	
Does the building/s have a Lightning Protection System	No
Comments and Hazards observed:	
9.Housekeeping	
Is the standard of housekeeping adequate	Yes
More specifically:	
Combustible materials separated from ignition sources	Yes
Is there unnecessary accumulation of combustible materials or waste	No
Are there any flammable materials such as oil based paints, petrol/oil/solvents etc stored/kept	No
Comments and Hazards observed:	
10.Hazards introduced by outside contractors and building workers	
Is there satisfactory control over works carried out in the building by outside contractors including 'hot work' permits	Yes

Are fire safety conditions imposed on outside contractors	Yes
Comments and Hazards observed: <i>N.B. Trinity Estates Policy is to obtain method statements prior to instructing contractors to carry out any maintenance and/or repair works.</i>	
Fire Protection Measures	
11.Means of Escape from Fire	
Is it considered that the building is provided with reasonable means of escape in the event of fire	Yes
More specifically:	
Adequate provision of Exits	Yes
Exits immediately and easily openable where necessary	Yes
Avoidance of sliding or revolving doors as fire exits where necessary	Yes
Satisfactory means of securing exits	Yes
Reasonable distance of travel:	
Where there is a single direction of escape	Yes
Where there are alternate means of escape	Yes
Suitable protection of escape routes	Yes
Suitable fire precautions for all inner rooms	Yes
Escape routes unobstructed and free from other hazards	Yes
Is it considered that the building is provided with reasonable arrangements for means of escape for disabled persons	Yes *To ground floor only
Comments and hazards observed: <ul style="list-style-type: none"> Ensure common parts are clear of obstacles. 	
12.Measures to limit fire spread and development	
Is it considered that the compartmentation is of a reasonable standard	No
Is it considered that linings would reasonably prevent fire spread	Yes
Comments and hazards observed: <u>General</u> All riser doors and under stair cupboards are left unlocked, consider changing locks to the standard FB2 key and distribute amongst tenants with instructions to lock after use. 1-4 Nairad – Missing intumescent strip to under stair fire door. 7-15 Afon Lleid – Fire stopping improvement required to ceiling of under stair cupboard where compartment is penetrated. 1-7 Novella – Lateral fire stopping improvement required within water riser; ground floor. 1-8 Cambria – Fire stop (Intumescent foam) to gaps around ceiling plasterboard. 1-7 Westfa – Swap insulation bags with compartmentation improvements as carried out in other blocks; ground floor water riser. 17-24 Westfa - Damaged plaster around MCB within under stair cupboard. 1-7 Myrddin – Fire stopping improvement to under stair ceiling around penetrating services. 1-7 and 8-16 Mary Welch – improve compartmentation within water riser with plaster board.	
13.Reasonable standard of escape lighting	No
Comments and hazards observed: <ul style="list-style-type: none"> 1-7 Pandora; Emergency lighting out on the 2nd and 3rd floor. 	
14.Reasonable standard of fire safety signs and notices	Yes
Comments and hazards observed:	

15.Means of warning in case of fire	
Manually operated fire alarm provided	No
Automatic fire detection provided	Yes
Remote transmission of fire alarm signal	No
Comments and hazards observed: <ul style="list-style-type: none"> Battery to detector in Block 1-7 Naomi, 1st floor requires replacement. 	
16.Manual Fire extinguishing appliances	
Relevant portable fire extinguishers provided	No
Hose reels provided	No
Other relevant fire extinguishing systems	No
Automatic opening smoke vents fitted	Yes
Comments and hazards observed: <ul style="list-style-type: none"> New covers are required to AOV call points at 1-7 Naomi, 7-24 Naomi, 25-31 Naomi, 1-7 Myrddin 	
17.Procedures and Arrangements	
Are appropriate fire procedures communicated effectively to building users e.g. fire instruction notice/s	Yes
Evacuation strategy for building users inside flats, and other areas, with minimum 60 minute-rated fire compartmentation, in the event of fire in common parts, or other flats	Delayed evacuation* (aka "stay put", "defend in place")
Evacuation strategy for building users inside flats in the event of fire inside the same flat	Immediate evacuation to place of safety
Evacuation strategy for building users in common parts, in the event of fire in any part of the building	Immediate evacuation to place of safety
Has there been any specific liaison with the fire service in production of this buildings assessment	No
Are there regular fire precautions inspections carried out by in house staff	Yes EVR reports inspection
Date of last inspection:	25/05/2016
Comments and hazards observed: *Delayed evacuation = stay put in protected space unless that space becomes untenable (e.g. due to heat, smoke, flame or fume ingress) or until instructed to evacuate by the emergency services. <i>NB As this is a private residence there is no requirement to provide individual evacuation plans, as such the above comments do not constitute anything other than general advice on evacuation procedures.</i>	
18.Training and Drills	
Are all staff given induction training on fire safety / procedures	n/a
Are staff given 'refresher' training at suitable intervals	n/a
Are fire wardens / marshals given additional training	n/a
Are fire drills carried out at appropriate intervals	n/a
Comments and hazards observed:	
19.Testing and Maintenance	
Adequate maintenance of workplace	Yes
Testing and periodic servicing of fire detection and alarm system	See below
Date of last inspection:	11/03/2015
Sufficient testing routines for emergency lighting	See below
Date of discharge test:	23/03/2016
Annual maintenance of fire extinguishing systems (including portable extinguishers, sprinklers, suppression systems)	n/a

	Date of last service:	n/a
Sufficient servicing/testing of dry risers		n/a
	Date of last service:	n/a
Sufficient servicing/testing of automatic smoke vents		Yes
	Date of last service:	23/03/2016
Routine checks of final exit doors and/or security fastenings		Yes
	Date of last inspection:	25/05/2016
Sufficient servicing/testing of Lightning Protection System		n/a
	Date of last service:	n/a
Comments and hazards observed: <ul style="list-style-type: none"> • Testing of the fixed electrical installation was carried out July 2012; the next test will be due 2017. • Monthly flick test of the emergency lighting is carried out by an on-site Caretaker, records are kept next to the distribution board. 		

FIRE RISK ASSESSMENT

The following simple risk level estimator is based on a more general health and safety risk level estimator contained in BS 8800.

Potential consequences of fire→ Fire hazard↓	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

Taking into account the fire prevention measures observed at the time of this risk assessment, it is considered that the hazard from fire (probability of ignition) at this building is:

Low
Medium
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 risk assessment, it is considered that the consequences for life safety in the event of fire would be:

Slight harm
Moderate harm
Extreme harm

In this context, a definition of the above terms is 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 bedroom in which a fire occurs).

Moderate harm: Outbreak of fire could result in injury of one or more occupants, but it is unlikely to involve multiple fatalities

Extreme harm: Significant potential for serious injury of one or more occupants.

Accordingly, it is considered that the risk to life from fire at this building is:

Trivial Tolerable Moderate Substantial Intolerable

A suitable risk-based control plan should involve effort and urgency that is proportional to risk. The following risk-based on one advocated by BS 8800 for general health and safety risks:

Risk level	Action and timetable
Trivial	No action is required and no detailed records need to be kept.
Tolerable	No major additional controls required. However there may be a need for consideration of improvements that involve minor or limited costs.
Moderate	It is essential that efforts are made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where moderate risk is associated with consequences that constitute extreme harm, further assessment may be required to establish more precisely the priority for improved control measures
Substantial	Considerable resources may 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.
Intolerable	Building (or relevant area) should not be occupied until the risk is reduced.

Note that, although the purpose of this section is to place the fire risk in context, 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 section. The risk assessment should be reviewed periodically.

ACTION PLAN

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

Trivial

Tolerable

Definition of priorities (where applicable)

Immediate- Should be implemented immediately

Short term- Should be implemented within two months

Long term- Should be implemented as and when the opportunity arises

Action/recommendation	Priority
Carry out joinery repairs, fire stopping improvements and compartmentation as detailed in section 12	Short term
Carry out repairs to emergency lighting system as described in section 13	Short term
Carry out electric repairs and Replace covers to BT junction box as per section 3	Short term
Consider replacing current riser/under stair cupboard locks with FB2	Long term
Replace battery for fire detector as per section 15	Short term
Replace covers to AOV call points	Long term

RECOMMENDED REVIEW

The progress of the work undertaken to rectify the deficiencies noted in the Action Plan above should be monitored by the responsible person to ensure completion by the timescales given.

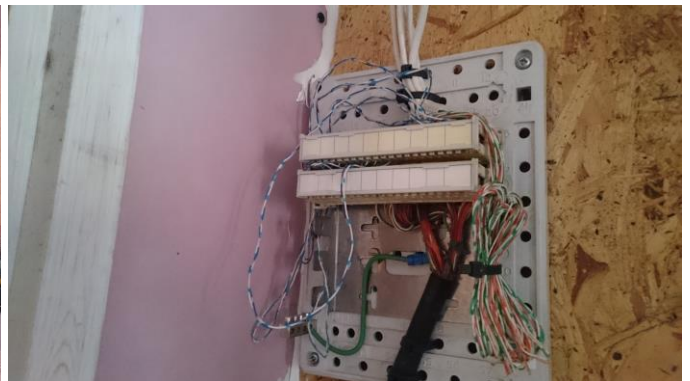
A follow up inspection should be undertaken when all work is complete to ensure it is to the correct standard.

A Fire Risk Assessment review should generally be undertaken annually. Therefore this Assessment should be reviewed **Spring 2017**

APPENDIX - PHOTOGRAPHS



Block Overview



Replace cover to junction box



Example of fires topping required



Replace insulation for plasterboard



Fire stopping to ceiling



Repair damage to plaster