

Fire Risk Assessment Guidance and Templates



This guidance and templateis intended to aid State Authorities in the development of a Fire Risk Assessment for the building they occupy.





Preliminary research check-list

2. Walkabout

- •FRA guidance notes
- Observation Sheet

3. Write up of FRA FRA template





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1.0 Preliminary research check-list

Before you complete the fire risk assessment, you will need to do some preparatory work. This mostly involves gathering information prior to conducting a walkabout of the premises. Some of this information is expanded in more detail in the *Fire risk assessment guidance notes* contained in *Section* 2.0 – Conducting a walkabout of is work pack.

General



- Is there a copy of the building plans?
- Did the building receive a fire certificate?
- Is there a Safety File (Safety, Health and Welfare at work (Construction) Regulations 2006)?
- Are there any relevant existing studies or assessments available for the building in question?

Building information



- Number of floors and floor area;
- Brief details of construction;

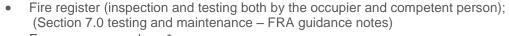


- Use of premises;
- Occupants/persons who use the building (Section 1.0 People at risk – FRA guidance notes);

Local building arrangements and procedures

Review the following:







- Emergency procedures*;
- Fire safety roles and responsibilities*;
- Training details*;



- Records of fire drills*;
 *(Section 6.0 Procedures and arrangements FRA guidance notes)
- Fire incident history; false alarms.







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2.0 Fire risk assessment guidance notes

This document is a guide to the areas that should be considered when conducting the fire risk assessment. It is based on the *PAS 79-2007*¹ *Fire risk assessment - Guidance and a recommended methodology.* This has been summarised and additional information included which relate to Irish standards and requirements.

This guide will help you prepare for the walkabout of the premises and should also be reviewed both before and after the walkabout. The headings used here are the same as those in the walkabout observation sheet. It is not an exhaustive list.

1.0 PEOPLE AT RISK

Approximate number of occupants (employees, contractors, visitors, members of the public):

- Sleeping occupants;
- Occupants with disabilities health, mobility, dexterity, hearing, sight, intellectual, mental health;
- Occupants in remote areas, lone workers, night workers;
- Young persons, children especially if unaccompanied;
- Elderly:
- Detainees.

2.0 SOURCES OF IGNITION/FUEL/OXYGEN

Smoking

- Reasonable measures taken to prevent fires as a result of smoking?
 - Suitable arrangements for those who wish to smoke?
 - o Evidence of compliance?

Electrical Sources of Ignition

- Reasonable measures taken to prevent fires from electrical sources?
 - Fixed installations periodically inspected and tested;
 - Regular housekeeping inspection of electrical items;
 - o Policy regarding the use of personal electrical appliances;
 - Management of trailing leads and adapters

Portable Heaters and Heating Installations

- Is the use of portable heaters avoided as far as practicable?
 - o Is the use of the more hazardous type such as fan heaters avoided?

Equipment in plant rooms, switch rooms, boiler houses

Are these areas kept free of clutter to avoid blocking vents and prevent overheating?

[&]quot;A Publicly Available Specification (PAS) is a sponsored fast-track standard driven by the needs of the client organizations and developed according to guidelines set out by BSI. Key stakeholders are brought together to collaboratively produce a BSI-endorsed PAS that has all the functionality of a British Standard for the purposes of creating management systems, product benchmarks and codes of practice. After two years the PAS is reviewed and a decision is made as to whether it should be taken forward to become a formal British Standard."



Cooking

- Are reasonable measures taken to prevent fires as a result of cooking?
 - o Filters changed and ductwork cleaned regularly?
 - Suitable extinguishing appliances or installations available?

Lightning

- Does the building have a lightning protection system in place?
- Has it been assessed as adequate?
- Is it inspected and tested regularly?

Hot work and roof work

- Are fire safety rules and procedures imposed on outside contractors?
- Is there satisfactory control over works carried out in the building by outside contractors, including "hot work" permits?
- If there are in-house maintenance personnel, are suitable precautions taken during hot work, including use of hot work permits?
- Who controls work carried out of roofs? What equipment is on the roof?

Flammable and other Dangerous Substances

- Is there a procedure to control the purchase, storage and use of potentially flammable and other dangerous substances?
- If so, does this include risk assessments? Have these been carried out?
- Have all flammable substances been identified?
- Are there procedures and facilities, such as flameproof cabinets, for the storage of flammable substances?
- Are there procedures prohibiting the storage of extremely flammable materials such as petrol in occupied buildings?
- Are there any chemicals which might act as sources of oxygen, such as peroxides, or fireworks? Also oxygen cylinders?
- Are there procedures for inventory management and disposal of obsolete chemicals?

Arson

- Has the building envelope been secured against intruders and arson by outsiders, for instance doors, windows, roofs?²⁾
 - Intruder alarms
 - Security patrols or other arrangements
 - o CCTV
- Minimisation of fire load, for instance is there refuse in close proximity to the premises or the perimeter?

Housekeeping

- Is the standard of housekeeping adequate?
 - o Are fire escape routes, exits and equipment
 - o Are combustible materials separated from ignition sources?
 - Minimal combustible materials or waste including packaging waste, recycling materials and refuse bins?
 - o Housekeeping in remote areas, plant and switch rooms.

Previous incidents fires/ false alarms

• Details of previous fire incidents fires and also false alarms. Note: these can highlight hazards and corrective actions taken and also lessons learned.

²⁾ Reasonable only in the context of this fire risk assessment. If specific advice on security (including security against arson) is required, the advice of a security specialist should be obtained.



3.0 MEASURES TO LIMIT FIRE SPREAD AND DEVELOPMENT

Compartments/ protected areas (where identified) ³

- No openings/gaps in compartment walls, doors, floors or protected areas (stairs/corridors)?³
- Minimal materials/linings that might promote fire spread³?
- Fire safety design features considered when conducting modifications, refurbishments or minor maintenance (including choice of materials)?

Fire doors

- No openings/gaps in doors from alterations (e.g. locks removed)?³
- Fire doors are not wedged open?
- Door closers are present and in full operation (door shuts completely)?
- Intumescent seals are in good condition and have not been painted over?
- Signage in place?
- Programme in place to inspect door condition regularly?

4.0 FIRE DETECTION AND PROTECTION EQUIPMENT

Fire detection and alarm system

- Automatic fire detection provided?
 - o Extent of automatic fire detection appropriate for occupancy and fire risk?
 - Remote transmission of alarm signals (out of office hours)?
 - Appropriate location of panel and repeater panel?
- If there is not automatic detection, what procedures are in place to alert people to a fire (only allowed in special circumstances)?
- Are manual call points available?
- Are there adequate number of sounders/alternative alarms, taking into account all people at risk?
- Are all areas served by alarms?

Manual Fire Extinguishing Appliances

- Are suitable (portable) fire extinguishers provided?
- Hose reels?
- Are all fire extinguishing appliances readily accessible?
- Are fire blankets provided in kitchens?

Other Relevant⁴ Fixed Systems and Equipment

- Gaseous extinguishing systems in IT server, communications or similar rooms?
- Sprinkler system?

5.0 MEANS OF ESCAPE FROM FIRE

Design³

- Is it considered that the building is provided with reasonable means of escape in case of fire?
- Adequate provision of exits minimum 2 per floor normally (some exceptions allowed)?
- Are all doors on escape routes free from locks or have simple fastenings readily opened from side of escape?
- Fire exits open in direction of escape where necessary?
- Satisfactory means for securing exits push-bar etc.
- Reasonable distances of travel:

⁴ Relevant to life safety and this risk assessment (as opposed purely to property protection).



³⁾ Based on visual inspection of readily accessible areas and knowledge available. This is not intended to be a assessment of compliance with Technical Guidance Document B- Fire Safety or equivalent.

- Where there is a single direction of travel (e.g. 18m office premises)?
- Where there are alternative means of escape (e.g. 45m office premises)?
- Suitable protection of escape routes fire doors, no combustibles in fire protected areas (e.g. stairs, lobbies?
- Suitable fire precautions for all inner rooms (office only, detection, vision panel, <20people)?
- Escape routes unobstructed?
- Are there reasonable arrangements for means of escape for disabled people?

Emergency Escape Lighting

- Is there emergency escape lighting in the building
 - o On escape routes?
 - o Open areas?
 - Other high risk areas?
 - o Located near signage?

Fire Safety Signs and Notices

- Is there signage in place for the following:
 - Indication of escape routes/ emergency escape signs;
 - doorways or exits;
 - o Stairs;
 - o Fire fighting equipment and fire alarm call points;
 - Fire doors:
 - o Other e.g. action notices.
 - Is the signage clear and unambiguous (in particular directional signage)?

6.0 PROCEDURES AND ARRANGEMENTS

- Are all staff given fire safety instruction/training on induction? Are there records available?
- Are all staff given adequate periodic refresher instruction/training at suitable intervals?
- Does staff instruction/training address the following:
 - Any special fire risks in the premises:
 - o The fire safety measures in the building:
 - o Action on hearing the fire alarm signal:
 - o Action in the event of fire or discovery of a fire:
 - How to raise the alarm;
 - Means for summoning the fire and rescue service;
 - Location and use of fire extinguishers;
 - o Identity of persons nominated to assist with evacuation;
 - o Identity of persons nominated to use fire extinguishing appliances;
- What instructions are given to visitors or contractors?
- Are staff with special responsibilities such as fire wardens given additional training? What level of training is given to management?

Drills

- Are fire drills carried out at appropriate intervals (minimum 2 per year)?
- Is there a record of drills conducted?
- When the employees of another employer work (service providers, contractors etc.) in the premises, are they provided with adequate safety instructions and information?
- Are fire drills conducted in co-ordination with other businesses or occupiers in the building?
- Are debrief meetings held with fire wardens? Are records kept of meetings and follow-up actions?

7.0 TESTING AND MAINTENANCE

- Arrangements for the inspection and testing of fire equipment and systems by the occupier?
- Arrangements for maintenance and testing of fire equipment/systems by a competent person?
- Appropriate records of both of these?





	Date Location	Sheet of
Are	ea/Floor	
1.0	People at risk	
	·	
2.0	Sources of ignition fuel and oxygen	
•	Electrics	
•	Heaters, cooking	
•	Smoking	
•	Lightning	
•	Other- Hot works/contractors	
•	Flammables	
•	Storage – materials and, waste	
•	Arson	
•	Housekeeping	
• N//	Oxygen easures to limit fire spread and develor	amont.
IVIE	Fire doors	oment
	Condition- closers, seals	
	o Signage	
	○ Locks	
•	Compartments/protected areas (stairs)	
	Linings/materials/obstructions	
	Openings/Gaps	
Fir	e detection, alarm and protection syst	ems
•	Fire Detection and alarm system	
	o Alarm Panel – location, repeater	
	o Detectors	
	Call pointSounders	
•	Fire Extinguishers	
	o Type	
	o Condition	
	o #/location	
•	Hose reel	
•	Sprinkler	
•	Gaseous extinguishing system	
N/I	eans of escape	
IVIC	Design Design	
	No. escape routes	
	o Unobstructed	
	 Locks on escape routes 	
•	Emergency Lighting	
	o Location	
	o LED indicator	
•	Signage	
	Escape routesFire fighting points/equipment	
	Fire fighting points/equipmentStairs	
	Exits/doorways	
	Fire action notice	





			Fire Risk Assessment - Observation Shee
2	Date	Location	Sheet of
rvations o	continued		







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Location:

Date of Inspection:

Building Description:

Hazards and risks associated with:	Controls in place	Issues identified	Additional Controls /Actions required	Responsibility/ Date Completed
People at risk	•	•	1.	
Sources of ignition/fuel/oxygen	Designated smoking areas	 It was observed that smoking areas are not being used and there was a recent smoking incident, where the fire alarms were activated. 	 The smoking policy should be circulated to staff members – emphasising that smoking will not be tolerated in non designated areas. 	FK 20/02/11
Measures to limit fire spread and development ¹	•	•	3.	
Fire detection, alarm and protection equipment		•	4.	







Hazards and risks associated with:	Controls in place	Issues identified	Additional Controls /Actions required	Responsibility/ Date Completed
Moons of occapa from			-	
Means of escape from	•	•	5.	
Procedures and arrangements	•	•	6.	
Festing and Maintenance	•	•	7.	
	ance with TCD R or equivalent. It is based on t			

¹ This is not an assessment of compliance with TGD-B or equivalent. It is based on the knowledge available and visual assessment of the area.







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This is a sample - The issues identified are for training purposes only

Location: Treasury Building (Ground and Fourth floors only)

Date of Inspection: February 2012

Building Description: A five-storey building built in 1989. The building is occupied by a number of businesses each of which has responsibility for fire safety management

and security control within their own area. A facilities management company is contracted by the building owner to manage the overall building, including security, and shared utilities and services such as HVAC systems, water supply etc. Risky Business occupies the ground and fourth floors

and these floors have a mixture of large open-plan office areas, individual offices and meeting rooms. There are a number of passenger lifts.

Hazards and risks associated with:	Controls in place	Issues identified	Additional Controls /Actions required	Responsibility/ Date Completed
People at risk • Employees (one person with impaired mobility) • Visitors	 Visitor/contractors have to report to building Security, located in the lobby and manned by a minimum of two people, and are then directed to Risky Business Reception where they sign in (used in evacuation roll-call) and are accompanied by a member of staff at all times. Security keeps a daily list of employees/contractors working outside normal office hours in the case of emergencies. 	 There is a person with reduced mobility building in the premises who uses the 4th floor on occasions. There is no PEEP in place for evacuation from the fourth floor. 	Review arrangements for evacuation of the person with impaired mobility from the fourth floor and prepare a PEEP. Alternatively, arrange meetings for ground floor locations.	
Sources of ignition/ fuel/ oxygen • Electrics • Heaters, cooking • Smoking • Lightning • Other- Hot works/contractors • Storage – materials and, waste • Arson • Housekeeping	 Fixed electrical installations, boilers, gas and air conditioning units and other building services are periodically inspected and tested. This is arranged by the facilities management company, copies of service dockets are available on-request. Smoking is prohibited in the building. Kitchen equipment is limited to kettle, toaster and microwave. Where portable heaters are used they are oil filled electric (less hazardous) type. There is lightning protection in the building. Arson is considered a low risk as there is security present on the premise 24/hrs a 	 Housekeeping was adequate; however there was a considerable amount of obsolete equipment/items stored in the back area of the fourth floor. Included in these items were a number of containers including: one which was unmarked, one which contained oil and an old paint can which was marked as flammable. There were some visible frayed wires and trailing cables: including a toaster in the kitchen and an overloaded socket and an electric fan located in office area 1. 	 House keeping should be improved. An inspection schedule with simple check-sheet should be introduced for all areas. All actions should be identified and tracked to closure. The container contained in the 4th floor should be removed, disposed off or marked and stored appropriately. A chemical risk assessment should be conducted where there are chemicals present in the building.(e.g. office, kitchen and cleaning products) A procedure should be put in place 	



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Hazards and risks associated with:	Controls in place	Issues identified	Additional Controls /Actions required	Responsibility/ Date Completed
	 day. As well as frequent collections of refuse. Contractor work (including hot work permits), are coordinated through the facilities management company. Risky Business has an active policy of using electronic document storage to reduce paper storage. 	Some of the refuse bins are located in the open area car-park and do not appeared to be locked.	to control use of electrical equipment, including the prohibiting the use of personal electrical items and removing damaged or obsolete electrical equipment from use. 5. Consider relocating the refuse bins in open air car park or securely lock these bins.	
Measures to limit fire spread and development ¹ • Fire doors	 Fire doors were present in the building, the majority being located at exits to protected stairwells. The separation between the fourth floor open plan areas are not compartments (the partitions are not fire resistant and there are large openings in some areas). The building pre-dates the requirement for a fire certificate. If there are changes to building design or layout (include the selection of materials/linings), the facilities Management Company are consulted the competent persons are engaged to carry out the work. There were no issues identified during the review with regards to the selection of linings or openings/voids in compartments/protected areas. 	 A fire door sign was placed on a door in the 4th floor office areas, which was not a fire door. The fire doors near the washrooms on the 4th floor lobby area were propped open. 	6. Conduct a review of all fire doors in the premises: where a door is not a fire door the sign should be removed (see action 11). Staff should be made aware that fire doors should not be propped open, if they are required to be open magnetic hold open devices or similar should be considered.	
Fire detection, alarm and protection equipment • Fire detection and alarm systems • Fire extinguishers/blankets • Sprinkler system	 An addressable fire detection system was present in all of the areas inspected, including plant, switch and boiler rooms. Heat detector in kitchen area. There is a strobe light in the 4th floor area for those who have impaired hearing. There is adequate provision of suitable fire extinguishers for the 4th floor area. Sprinkler system throughout the building, 	 The fire alarm panel is located at the security desk in the main building lobby. Risky Business has no access or knowledge of this system. There was an alarm sounder in the upper end of 4th floor open plan area, which had some loose wiring attached 	7. Risky Business should be familiar and have responsibility for their fire alarm system. A repeater fire alarm panel should be provided to Risky Business- one on each floor they occupy or one at their reception area. A procedure should be introduced whereby designated members of Risk Business staff are	



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Hazards and risks associated with:	Controls in place	Issues identified	Additional Controls /Actions required	Responsibility/ Date Completed
Means of escape from fire 1 • Emergency lighting • Signage	 which communicates with the fire alarm panel. The building has four escape routes available from each floor, all via a protected stairwell. Emergency lighting is located on escape routes and in the open plan area. Directional signage and notices were in place along escape routes. 	to it. This appeared to indicate that it may not be in operation. No fire blankets present in the kitchen (appears to have been removed). Fire extinguishers were not located in designated e.g. fixed stand/tray and signage. There was no signage in place for the secondary (additional) means of escape, although these are indicated on the evacuation plan drawing. As well as this there are locks on some of the door on these additional means of escape. There were some signs indicating fire equipment which was not present and in other locations, there was no signage for equipment that was present e.g. break glass units. There was a fire door sign at the entrance to the room from lobby area which did not comply with the Health and Safety at Work Regulations.	responsible for responding to the panel in event of an alarm etc. (see action 14) 8. Confirm that this sounder is in operation - if it is out of use it should be removed is damaged sounder to be tested and where necessary replaced. 9. Replace the fire blanket in kitchen area. 10.Put fire extinguishers in a fixed position (fire point). These should be on escape routes with appropriate signage and lighting. 11. Conduct a review on the provision of means of escape from the 4 th floor open plan area. As a minimum there should be two exits available from this area. Directional signage should be provided for the whole length of escape routes up to the place of safety for all available exits. 12. Remove non-compliant or misleading signage install signage in all areas where it is deficient.	





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Hazards and risks associated with:	Controls in place	Issues identified	Additional Controls /Actions required	Responsibility/ Date Completed
Procedures and arrangements Designated personnel Training Fire drills	 There are designated fire wardens for each floor occupied by Risk Business. Action notices and fire safety procedures are located at exits and fire points. There is designated assembly point for the building which is marked on the evacuation plan drawings and there is appropriate signage in place at this location. 	 There have been no fire drills since 2010. Note: a false alarm is not considered as a fire drill. There is little interaction with the other businesses in the building, including joint fire drills or notifying relevant parties of fire incidents or issues. Fire wardens have not been given formal training. 	 13.Review emergency procedures in line with the fire risk assessment and ensure that fire drills are conducted at least twice a year. 14.Implement formal communication arrangements with the other business in the premises on fire and other common safety issues. This should include joint (total building evacuation) drills. 15.Review roles and responsibilities and training needs to ensure that there are adequate numbers of designated personnel to implement fire safety arrangements. Training should include familiarisation with fire equipment: fire detection and alarm system, extinguishers etc. 	
Testing and Maintenance Inspection and testing by occupier Fire register Competent person inspections	 The facilities management company has contracts in place for the inspection, testing and maintenance of the fire detection and alarm system, emergency lighting, gas extinguishing systems and sprinklers. The service record has to be signed off by the facilities management manager and a copy of the service records is provided to the Risky Business. Risky Business has a contract in place for annual inspection and servicing of fire extinguishers. A designated fire warden is responsible for keeping the fire register, which was available for review. 		(Note: This will be covered in more detail in Part 2 of the Fire Safety Management seminar)	

¹ This is not an assessment of compliance with TGD-B or equivalent. It is based on the knowledge available and visual assessment of the area.





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