

**STATUTORY
FIRE SAFETY
NOTE**

Relative Risk Level System

STATUS
This instruction is mandatory

SUMMARY

This Note provides details on conducting a fire safety audit. It has been developed on a risk based inspection methodology to support the enforcement principles of the Authority.

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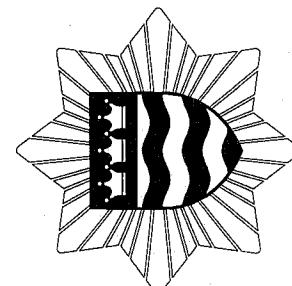
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1.

INTRODUCTION

1.1

This Statutory Fire Safety Note provides details of how to calculate the relative risk level of the premises that have been subject to a fire safety audit in accordance with policy SFS:C015:a1.

2

DETERMINING THE RISK LEVEL

2.1

The Risk Based Inspection Programme forms part of the Authority's overall integrated approach to management by prioritising the inspection of premises. It will initially be necessary to determine the level of risk in the premises in question. This will be determined by the carrying out of an audit, which will, on completion apply a risk level. The risk to individual persons will be of concern to officers carrying out the audit, and it will be the potential for the loss of life or serious injury based on the fire frequency national statistics for buildings taken from real fire data that will have a major influence on the level of risk determined.

2.2

When determining the risk presented by a particular premises the following factors will be considered. The following list is not exhaustive each must be assessed on an individual basis using all relevant factors:

- Type of structure
- Use
- Nature of occupants
- Furniture, fittings and surface finishes
- Processes undertaken/materials stored
- Potential sources of fire (accidental or deliberate)
- Potential fire spread internal and external
- Structural fire protection
- Compliance with parts B1-B5 of Approved Document B
- Fire precautions provided
- Standard of fire safety management
- Location
- Access
- Water supplies
- Operational needs
- Safety of fire-fighters
- Environmental impact of any fire

2.3

When considering these factors it will also be necessary to utilise information from current fire fighting practice, at a national and local level. Current fire intelligence and a review of the historical experience of the premises will be taken into account before a final determination of risk level can be made.

2.4

Professional judgement will be required as part of the overall process, to determine the life and relative risk each premises has. Relative risk is when comparisons are made between different types of premises. From data collected a determination can be made as to the risk of a fire occurring and the risk to persons e.g. a low risk hospital may have a risk rating of 5, the same as a very high-risk office. In the case of the hospital the officers needs only to document the inspection. However in the case of the office, the officers when faced with conditions that present a high risk will need to take immediate enforcement action.

2.5

As increasingly sophisticated community risk models are developed to support IRMP, the audit process for premises must be compatible across all

areas of fire and rescue service activity, particularly a correlation between the levels of risk for a fire safety inspection programme and the Fire Cover Review process.

- 2.6 In order to demonstrate that the Authority is meeting its legislative responsibilities, it is critical that at every stage the processes by which the levels of risk and the resulting inspection activity have been determined are reasonable, recorded, transparent and auditable.

- 2.7 As part of the fire safety audit process the Fire Safety Officer will be required to calculate the Relative Life Risk Score (RRL) for the premises as required on form FS01_10 for building, occupants, management and other issues. To determine the RRL for the premises, the calculation will be carried out with the aid of the Relative Life Risk Score Calculator provided in the Fire Safety pages of Hotwire. The RRL will be used to determine the frequency of future fire safety audits.

3 RISK BASED INSPECTIONS

- 3.1 Use of the Relative Risk Level System will develop a programme of risk based inspections in accordance with Authority policy.
- 3.2 Fire safety audits are carried out under The Regulatory Reform (Fire Safety) Order 2005 and will form the primary inspection. Any areas of non-compliance will be dealt with in accordance with Authority policy.

4 RELATIVE RISK LEVEL SYSTEM

- 4.1 The purpose of these notes is to explain the use of the FS01_10. The form is used not only for the RRL of premises but also as a vehicle for the collection of operational data required for inclusion in the Integrated Risk Management Plan (IRMP).
- 4.2 Fire safety officers will complete form FS01_10 to determine the RRL at the end of the fire safety audit and a copy of this is to be retained on file. This can also be achieved by printing off the Relative Life Risk Score Calculator, signing and dating it and adding the file number.
- 4.3 After a follow up inspection, a new FS01_10 should be completed to satisfy the Fire Safety officers that the Fire Safety Order has been complied with and to re-affirm or amend the RRL.
- 4.4 It is not possible to calculate an RRL for premises in use group "X Unknown". Premises that fall into this category are generally open spaces or otherwise very low risk and are to be recorded as RRL 0. It is not necessary to complete an FS01_10 for "X Unknown" premises.

5 COMPLETING THE FORM AND APPLYING A RELATIVE RISK LEVEL SCORE

- 5.1 Form FS01_10 gathers the information to allow the RRL to be calculated. Notes to assist in the completion of the form are attached as Appendix 3.

5.2 The score for each section of form FS01_10 is then entered into the Relative Life Risk Score Calculator to produce an RRL. The calculation may not provide a definitive result with a decimal of 0, .25, .5, or .75. In these instances the result will need to be rounded up or down to the closest figure. Rounding up or down is to be calculated as follows:

Decimal Result of Relative Risk Calculation	Decimal to be applied
Between .875 - .124	.0
Between .125 - .374	.25
Between .375 - .624	.5
Between .625 - .874	.75

5.3 The definitive result should be entered on the FS01_10 form. This score will determine the re inspection time in accordance with current policy and this score will be entered on FARYNOR.

6 ADDITIONAL NOTES FOR ALTERATIONS NOTICES AND PREMISES OF SPECIAL INTEREST

6.1 There will be times when the relative risk level score does not give a reinspection period that satisfies the Authority that the risk can be monitored. Although the duty to comply lies solely with the responsible person the Fire Authority may choose to inspect when they deem necessary.

Alterations Notices.

6.2 These premises have been deemed by the AC Community Safety to be high risk and the re inspection period will be agreed at the issue.

Premises of Special Interest.

- 6.3 Any deviation from the result of the risk calculator must be discussed with CS Policy to give a consistent approach across the authority.
- 6.4 In these cases a higher relative risk level score and corresponding reinspection period than that determined by the risk calculator, may be assigned to the premises and entered on Farynor. Relevant discussions and justification agreed with CS Policy must be documented and retained on file.
- 6.5 Where a higher relative risk level score is agreed, this cannot exceed the appropriate "Very High" score for the premises use.

7 PETROLEUM AND SUB SURFACE RAILWAY PREMISES

- 7.1 Petroleum and Sub Surface Railway premises are dealt with by dedicated specialist teams within the Community Safety Department. As a result of the different and special risks presented by these types of premises they are subject to separate inspection regimes outside the RRL system.
- 7.2 In order to allow these regimes to fit into the main Risk Matrix, risk scores of 6 and over have been provided under the Premises Use Groups "Shop" and "Other Premises Open to the Public". These are indicated on the Matrix by the prefix "P" or "T" and are only to be used by the Petroleum and Transport Fire Safety Teams respectively.

APPENDIX 1: RELATIVE RISK LEVEL MATRIX

FSEC Group	Premises Use Group	Risk Score											
		A	B	C	D	E	F	G	H	I	J	K	L
Healthcare	Hospital	7.25	7.5	7.75	8	6	6	12	12	12	12	12	12
Residential	House Converted to Flat	6.75	7	7.25	7.5	6	6	12	12	12	12	12	12
Commercial	Purpose Built Flats → 4 Storeys	6.25	6.5	6.75	7	6	6	P6	T6	T12	T12	T12	T12
Industrial	Factory or Warehouse	5.75	5.5	5.25	5.25	24	24	24	24	24	24	24	24
Transport	Office	5.25	5.5	5.75	18	18	18	18	18	18	18	18	18
Storage	Other workplace	6	6	6.25	6	6	6	P6	T6	T12	T12	T12	T12
Risk	Unknown	X	X	X	X	X	X	X	X	X	X	X	X
Risks headed P and T are ONLY for use by Petroleum and Transport Fire Safety Teams respectively.													
Risks (Numbers indicate reinspection period in months):													
Sample Levels:													
Very High High Medium Low Very Low													
A - 7% B - 5% C - 3% D - 1%													
0													

APPENDIX 2: PREMISES SIZE BY OCCUPANCY TYPE

FSEC Group	M ²						
	Extremely Small	Very Small	Small	Medium	Large	Very Large	
-5	-4	-2	0	2	4	5	
Hospitals	< 500	500 to 650	651 to 2000	2001 to 10000	10001 to 50000	50001 to 100000	> 100000
Care Homes	< 200	200 to 350	351 to 640	641 to 1500	1501 to 2500	2501 to 4500	> 4500
Houses in Multiple Occupation	< 30	30 to 80	81 to 300	301 to 700	701 to 2300	2301 to 20000	> 20000
Purpose Built Flats	< 1400	1400 to 3000	3001 to 5000	5001 to 8300	8301 to 10300	10301 to 12600	> 12600
Hostels	< 123	123 to 220	221 to 350	351 to 750	751 to 1900	1901 to 4000	> 4000
Hotels	< 201	201 to 350	351 to 650	651 to 1300	1301 to 3600	3601 to 9500	> 9500
Houses Converted to Flats	< 251	251 to 300	301 to 400	401 to 500	501 to 600	601 to 1000	> 1000
Other Sleeping Accommodation	< 51	51 to 90	91 to 140	141 to 360	361 to 1500	1501 to 4200	> 4200
Further Education	< 331	331 to 560	561 to 2000	2001 to 6000	6001 to 15000	15001 to 32000	> 32000
Public Buildings	< 101	101 to 200	201 to 350	351 to 950	951 to 2700	2701 to 7500	> 7500
Licensed Premises	< 151	151 to 250	251 to 400	401 to 700	701 to 1200	1201 to 2300	> 2300
Schools	< 201	201 to 400	401 to 1000	1001 to 2500	2501 to 6000	6001 to 13000	> 13000
Shops	< 61	61 to 130	131 to 200	201 to 500	501 to 1400	1401 to 6000	> 6000
Other Premises Open to the Public	< 101	101 to 175	176 to 300	301 to 1000	1001 to 3300	3301 to 8000	> 8000
Factories and Warehouses	< 101	101 to 260	261 to 715	716 to 2400	2401 to 7000	7001 to 15000	> 15000
Offices	< 100	100 to 200	201 to 400	401 to 1000	1001 to 2700	2701 to 9400	> 9400
Other Workplaces	< 51	51 to 100	101 to 300	301 to 600	601 to 700	701 to 800	> 800

APPENDIX 3 – NOTES ON COMPLETION OF FORM FS01_10.

Occupancy:

Enter one of the 17 FSEC codes to that relate to the premises.

Building Size:

Obtained by reference to the "Floor Area Sizes By Occupancy Type" table attached as Table 2. This refers to the size of the individual occupancy in square metres. E.G. A single storey, single occupancy building 10m x 10 m is 100 square metres. If the building has 3 floors all in the same occupancy then the building size is 300 square metres. In the case, for example, of a shop unit in a shopping centre the area recorded here is that of the unit only, not of the whole centre. If auditing the owners/common parts of a multi occupied building then use the size of the whole building.

Description of Occupants: Predominant Type:

"Atypically mobile", "Average mobility" or "Un-typically vulnerable" for this type of occupancy.

The information required is whether the predominant type of occupant is more or less vulnerable than the type of person most commonly found in the type of premises being assessed. For example:

In an ordinary older persons care home you would expect a normal mix of ambulant and non-ambulant older person residents who would be of "average mobility for this type of occupancy". However if the majority of residents were bedridden, the occupants would be "Un-typically vulnerable". In an ordinary school you would expect a normal mix of ambulant and non-ambulant children of "average mobility for this type of occupancy". However if it was a school for the blind the occupants could be considered "Un-typically vulnerable". If it was a school for gymnasts the occupants could be considered "atypically mobile".

Fire Warning System:

"More than Adequate", "Adequate" or "Less than Adequate".

"Adequate" does not necessarily mean an electrical fire alarm system to a relevant British Standard. In a small single occupier single storey premises, a shouted warning or a hand bell may be "Adequate" fire warning and an electrical fire alarm system could be considered "More than Adequate". Consider what level of fire warning is appropriate for the premises/building when completing this section.

Is there an extract or positive pressure smoke control system covering means of escape and / or common areas?

"Yes" or "No". Consider maintenance issues. If a system is present but there is no evidence that it is working or alterations have been carried out without consideration to their effect on the system, the answer to this question should be "No".

Is there an operable sprinkler system installed and maintained in working order?

"Yes" (with %age coverage) or "No system". If a system is present but there is no evidence that it is working or alterations have been carried out without consideration to their effect on the system, the answer to this question should be "No system".

History of Fires:

Either "None" or "1 or more in the last three years". The easiest source for this information is to ask the responsible person. If unknown, use "None". It is not expected for the Fire Safety Officer to trawl through data that is not readily available.

Unwanted Fire Signals:

Either "None" or "1 or more in the last three years". The easiest source for this information is to ask the responsible person. If unknown, use "None". It is not expected for the Fire Safety Officer to trawl through data that is not readily available.

Known Fire Setting Activity in the Area:

"None" or "Yes". Consider entering yes if the area has a known problem with abandoned vehicle or refuse fires, or incidence of arson against businesses. The easiest source for this information is to ask the responsible person. If unknown, use "None". It is not expected for the Fire Safety Officer to trawl through data that is not readily available.

Features which may assist fire spread:

"None" or "Yes". Consider features such as atria, open staircases, ventilation ducting, lack of compartmentation etc.

Fire Loading which is likely to assist with fire spread:

"Lower than Average", "Average" or "Higher than Average" for the Occupancy. Consider the level of flammable storage. For example a fresh fish market may be Lower than Average for a shop occupancy due to the fact that there is no highly flammable storage and possibly lots of ice. Conversely a DIY shop may be Higher than Average for a shop occupancy due to the presence of paints, solvents, timber etc.

Access for firefighting:

"Better than Average", "Average" or "Poorer than Average" for the Occupancy. Firefighting access will generally have been considered at planning stage, however consider the impact of car parking arrangements and the installation of bollards, gates or other security features.

Water Supplies:

"Better than Average", "Average" or "Poorer than Average" for the Occupancy. Adequate water supplies to premises in London are agreed at planning stage with the involvement of the Water Office and the majority of premises will generally fall into the "Average for the occupancy" category. A "Better than average" premises may be provided with additional private fire hydrants and conversely a "poorer than average" premises may be in a remote rural location not provided with nearby fire hydrants.

Total number of people in premises at peak time:

"Less than 20", "Between 100 and 20" or "More than 100". Consider all building occupants including staff and public where applicable.

Fire Safety Management (Compliance Level) Score:

This is the initial enforcement expectation score obtained from Audit form FS01_09. This will be a score of 1-5.

- 1 Very Good for Occupancy
- 2 Good for Occupancy
- 3 Average for Occupancy
- 4 Poor for Occupancy
- 5 Very Poor for Occupancy