

## Housing Health and Safety Rating System Case Study – Hazard 24 : Fire in an HMO

**A two-storey, brick-built, mid-terrace house occupied as a bedsit HMO**

**Age of property = pre-1920**

**Vulnerable group = all persons 60 yrs or over**

### **Assessment of top floor bedsit – (Fire Matrix Level 1)**

The subject dwelling is located within a modern conversion, which met all relevant standards at the time of these conversion works.

The ground floor comprises an entrance hallway from the street from which there are doors leading to 2 bedsitting rooms and shared bathroom in rear addition.

The first floor comprises 3 bedsitting rooms. All rooms are singly occupied. All bedsitting rooms are provided with cooking facilities

**All partitions and ceilings are of plasterboard on studwork/joists with plaster skim coat and are considered to provide at least 30 minutes fire resistance within/between bedsits and between bedsits and the escape route.**

**Bedsit entrance doors are purpose-made fire doors, fitted with intumescent strips incorporating cold smoke seals.**

**There is a mains-linked automatic detection and warning system, with detectors in each bedsit and kitchen and within the common parts**

**There are water type fire extinguishers on each landing.**

The whole HMO is provided with a central heating system serviced and in good condition.

There are two, double, wall mounted electric sockets in each living room and bedroom and two doubles in the kitchen in addition to a cooker point – the installation is recent and in good condition. Ovens are electric and hobs are gas.

Primary	Compounding factors	Ameliorating Factors
There is no FFE within the bedsit		There is AFD to all bedsits and common parts There is FFE on each landing
		Short distance of travel and low height of building

		Low fire loading to building
--	--	------------------------------

**The 'average' situation obtained from the Guidance**

**Average** likelihood of an occurrence in next 12 months is 1: 1681

Converted to Representative Scale Point (RSP) this is 1: 1800

**Average range of harm outcomes is:**

	Class 1	Class 2	Class 3	Class 4
Guidance	5.6%	0.0%	27.7%	66.7%
RSP	4.6%	0.0%	31.6%	63.8%

This gives a score of 39, which is band H

Copyright

[www.hhsrs.org.uk](http://www.hhsrs.org.uk)

## IN THIS CASE

Likelihood converted to representative scale point is: 1: 3200

### **Justification for adjusting likelihood:**

Although the bedsits do not have FFE, all bedsits have a high level of structural fire precautions and are protected by AFD. This means that, overall, the likelihood of an occurrence in this case is considered to be less than the average.

Range of harm outcomes is:

	Class 1	Class 2	Class 3	Class 4
RSP	4.6%	0%	31.6%	63.8%

### **Justification for adjusting range of harm outcomes:**

There is no justification for changing the average harm outcomes.

Hazard score for this case:

Class of harm	Weighting		Likelihood		Spread of Harm		
Class 1	10,000	X	1/3200	x	4.6	=	14.4
Class 2	1,000	X	1/3200	x	0.0	=	0.0
Class 3	300	X	1/3200	x	31.6	=	3.0
Class 4	10	X	1/3200	x	63.8	=	0.2
					<b>Total score &amp; Band</b>	<b>=</b>	<b>17.6 Band I</b>