



Housing Health and Safety Rating System (HHSRS)

Case Studies

Group A
Protection Against
Accidents

Hazard A8
Electrical Hazards

Example A8.3
1946-79
Ground-floor
Flat

Vulnerable Group
All persons aged
5 years and under

Multiple Locations
Yes

Related Hazard A4
Fire and
Explosions



Dwelling

Description

This dwelling is a self-contained ground-floor flat within a two-storey block, converted into four flats during the 1970s. The original property dates back to 1882. The building is in a low-lying area, designated by the Environment Agency as a Flood Zone 1 (having less than a 1 in 1,000 annual probability of river or sea flooding and considered a low probability).

The walls are solid stone. The ground-floor flat being assessed comprises kitchen, bathroom, living room and one bedroom. There is a gas boiler that provides central heating, with radiators in all rooms, installed in the 1980s. The flat has an E rated EPC.



1
Front exterior

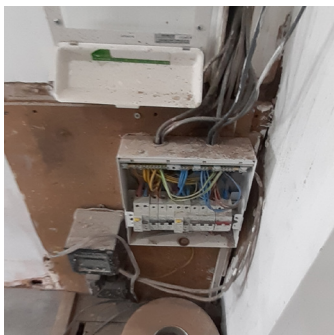
Deficiencies

Description of Deficiencies

There are two consumer units located at low level, one in the living room and one in the kitchen. The covers to both units are missing, and the cable entry point to the unit in the kitchen is unsealed. There are also two broken double power socket outlets in the living room at floor level.

An electrical installation condition report dated 2011 rated the electrics as 'satisfactory' though there were some C3 faults identified that were not resolved.

The tenants complain that the flat smells damp during the winter months. They keep the windows closed to try to keep the flat warm.



2
Consumer unit in kitchen



3
Consumer unit in living room



4
Broken socket in living room



5
Broken socket in living room

Relevant Baseline Indicators

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
14 Lighting and Services	0 1 2 3	14.4	All electrical installations, including fixtures and fittings, must be maintained in good repair.
	0 1 2 3	14.6	Every habitable room shall have at least 2 separate and remote double electric sockets that are suitably located for use. Kitchens shall have at least 4 suitably located double sockets
19 Fire Safety	0 1 2 3	19.2	All electrical equipment supplied by landlords in rented residential premises is safe and compliant with current UK requirements for safety of domestic electrical products; all electrical appliances supplied by the landlord are subject to testing in line with the IET Code of Practice for In-service Inspection and Testing of Electrical Equipment (Fifth Edition) (unless they are under one year old and display a UKCA/CE marking).
	0 1 2 3	19.4	The electrical installation should have been inspected and tested within the last 5 years.

Other Relevant Matters

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

ScoreMatters affecting Likelihood of Harm

0	1	2	3	Fuse and meter location
0	1	2	3	Waterproofing
0	1	2	3	Lightning protection

ScoreMatters affecting Harm Outcomes

0	1	2	3	Fuse and meter location
0	1	2	3	Waterproofing
0	1	2	3	Lightning protection

Likelihood of Harm

Scale Points		
Likelihood of harm from this hazard over the next twelve months		
Very Likely		1 in 1
		1 in 2
		1 in 3
		1 in 5
Likely	Example Dwelling	1 in 10
		1 in 20
		1 in 30
		1 in 50
Unlikely		1 in 100
		1 in 200
		1 in 300
		1 in 500
Very Unlikely		1 in 1,000
		1 in 2,000
		1 in 3,000
	National Average	1 in 5,000

Score

1 in 10

Justification of Scoring
Likelihood of Harm

Both consumer units are positioned at a low level and have missing covers, being easily accessible to inquisitive young children. The missing covers and missing seal to the cable entry point allow access, increasing the risk of contact with live parts. The living room also has two broken double electric sockets mounted at floor level, making it feasible for a child to come into direct contact with live wires. A young child is likely to spend a considerable amount of time in the living room, where these two broken sockets and consumer unit are located. They may often be unaccompanied, which will add to the risk of electrocution. The older consumer unit appears to have no RCD, potentially lengthening the time someone could be in contact with electricity, thereby experiencing harm. With no EICR for over 10 years, it is not known what unauthorised alterations or deterioration to condition may have occurred to the electrical installation.

Harm Outcomes

Extreme		Severe		Serious		Moderate	
Death, permanent paralysis, etc.		Heart attack, serious fractures, etc.		Chronic stress, severe concussion, etc.		Broken fingers, moderate cuts, etc.	
Very Likely	50.0	Very Likely	50.0	Example Dwelling + National Average	50.0	Example Dwelling	39.5
	30.0		30.0		30.0		National Average
	20.0		20.0		20.0		39.5
Likely	10.0	Example Dwelling + National Average	10.0		10.0	These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%	
	5.0		5.0		5.0		
	2.0		2.0		2.0		
Unlikely	1.0	Unlikely	1.0	Unlikely	1.0		
	0.5		0.5		0.5		
	0.2		0.2		0.2		
Example Dwelling + National Average	0.5						
	0.2						
Very Unlikely	0.1	Very Unlikely	0.1	Very Unlikely	0.1		
	0.0		0.0		0.0		
Score		Score		Score		Score	
0.5%		10.0%		50.0%		39.5%	

Justification of Scoring
Harm Outcomes

There is no reason to think the spread of harm outcomes will be any different from the national average, which does not differentiate between property age or property type.

Safety Ratings

Scenario 1
As described in this document

Key

Category	Band	Score
1 Legal duty to take action	High	10,000
2 Discretion to take action	Medium	1,000
	Low	100

Likelihood of Harm
1 in 10

Extreme 0.5%	Severe 10.0%	Serious 50.0%	Moderate 39.5%
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Category	Band	Score
1 Legal duty to take action	High	10,000
Example Dwelling		3,040
2 Discretion to take action	Medium	1,000
	Low	100
National Average		6

Score
3,040

Scenario 2

After works meeting baseline indicators

Likelihood of Harm
1 in 3,000

Extreme 0.5%	Severe 10.0%	Serious 50.0%	Moderate 39.5%
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Category	Band	Score
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1 Legal duty to take action	High	10,000
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2 Discretion to take action	Medium	1,000
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	Low	100
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Example		9
National Average		6

Score

9**Scenario 3**

After further improvements

Likelihood of Harm
1 in 5,000

Extreme 0.5%	Severe 10.0%	Serious 50.0%	Moderate 39.5%
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Category	Band	Score
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1 Legal duty to take action	High	10,000
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2 Discretion to take action	Medium	1,000
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	Low	100
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Example		6
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Score

6

**Example
Dwelling +
National
Average**

Justification of Scoring

After works meeting baseline indicators

Compliance with 14.4 and 19.4 would ensure there is an up-to-date electrical inspection test that is satisfactory, with the installation in good repair. This will address the broken sockets, replace the consumer unit covers and seal the cable entry points, reducing the risk of harm. However, the consumer units may remain in their current positions. Given the risk from flooding (albeit low) and damp, and how they remain at an accessible height to young children, this is still considered slightly worse than average.

Justification of Scoring

After further improvements

Repositioning the consumer units so the switches are at a height of 1350–1450mm above floor level (as suggested by Building Regulations Approved Document P), to reduce the risk of access by the vulnerable age group, should reduce risk to the national average. To reduce this risk further, along with those associated with potential flooding, the sockets could be raised higher – to at least 1 metre above floor level.

Other Relevant Legislation and Guidance

Electrical Safety Standards

The Electrical Safety Standards in the Private Rented Sector (England) Regulations 2020 require landlords to have the electrical installations in their properties inspected and tested by a person who is qualified and competent, at an interval of at least every 5 years. Landlords must provide a copy of the electrical safety report to their tenants and, if requested, to their local authority.

Updates

Matters for consideration listed in this section were correct at the time of publication. For the most up-to-date legislation and guidance in these areas, please visit the [gov.uk](https://www.gov.uk) website.