



Housing Health and
Safety Rating System
(HHSRS)

Case Studies

Group B
Physiological
Requirements

Hazard B9
Excess Cold

Example B9.2
1946-79
Ground-floor Flat
(Non-HMO)

Vulnerable Group
65 years +

Multiple Locations
Yes

Related Hazards B11
Damp and
Mould Growth



Dwelling

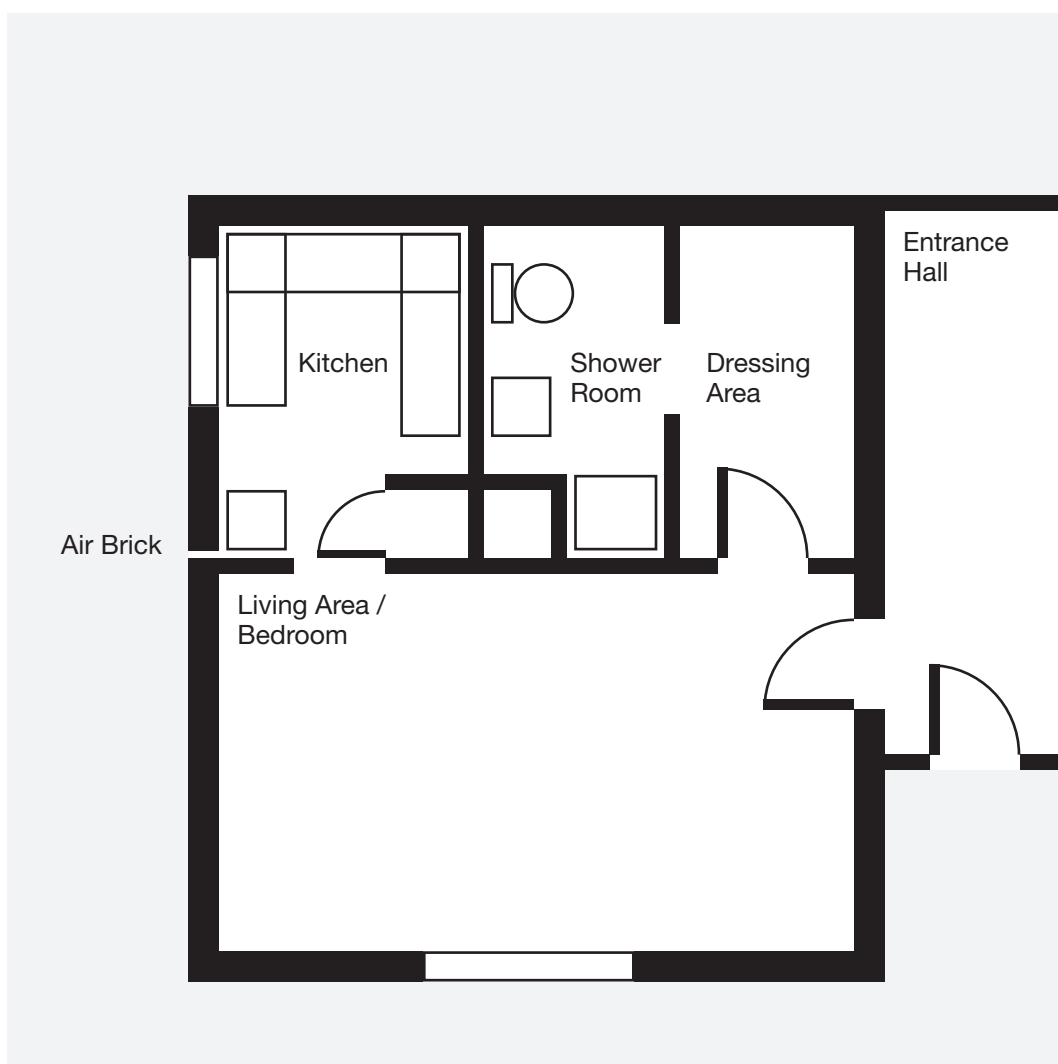
Description

This is an early 1970s ground-floor bedsit flat, with an area of 26m², comprising bedsitting room, kitchen, walk-through cupboard (dressing area) and shower room. There are uninsulated cavity brick walls, a suspended timber floor (also without insulation) and uPVC double glazing (without trickle vents).

There is electric heating from an original storage heater in the bedsitting room, and an electric fan heater in shower (there is no heating provision in the kitchen). The shower room has an extractor fan, and the bedsitting room and kitchen both have openable windows. The immersion is on a standard tariff. The EICR satisfactory and the EPC is E rated.



1
Front elevation of building



2
Floorplan of property

Deficiencies

Description

The bedsitting room is on the north-east corner of the block of flats and is poorly insulated. It has two-and-a-half external walls, and the entrance door to the flat is from a north-facing, unheated lobby. The single electric storage heater is inefficient and has no thermostat or programmer and the tenant has no instructions for its use.

There is a high-level airbrick in the kitchen to the flank wall. The kitchen and the bedsitting room have no door to separate the spaces.



3
Storage heater in the
bedsitting room



4
Fan heater in the
bathroom

Relevant Baseline Indicators

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
5 Sanitary Facilities: Kitchen	0 1 2 3	5.6	Suitable facilities for the effective and safe removal of fumes and moisture-laden air to the external air by means of a cooker hood or extractor fan; a cooker hood that only recycles the odour through an active carbon filter would not be acceptable, it must vent to outside. A mechanical extractor would be the normal mechanism for this function in line with Baseline Indicator 16.1.
	0 1 2 3	14.4	All electrical installations, including fixtures and fittings, must be maintained in good repair.
14 Lighting and Services	0 1 2 3	14.5	Gas appliances and flues provided for occupiers are safe for continued use.
	0 1 2 3	15.1	Structural thermal insulation shall be provided to minimise heat loss. Where there is a loft space, insulation shall be provided as detailed: a minimum 250mm of loft insulation (assumed to be mineral wool or similar).
15 Heating and Insulation	0 1 2 3	15.3	If the walls are of cavity wall construction, they must be insulated unless professional examination confirms unfeasible, due to either their condition or location in terms of wind-driven rain, or the width of the cavity being less than 40mm.
	0 1 2 3	15.4	Every dwelling shall have a properly installed heating system in good and safe working condition that is capable of safely and adequately heating all habitable rooms, bathrooms and toilet rooms. The system must be capable of heating the main living area to 21°C and the remaining habitable rooms to a temperature of 18°C when the external temperature is minus 1°C, and the system should not allow the temperature to exceed 25°C in any room during the heating season.
16 Ventilation	0 1 2 3	15.5	Heating and hot water must be capable of being controlled effectively and timed to operate by the occupiers.
	0 1 2 3	16.1	The air exhausted from a bathroom, toilet room, kitchen, clothes dryer or basement must be provided by mechanical ventilation or by a correctly designed and installed natural ventilation system, as required by Part F of the Building Regulations. In addition, it shall not be vented into any other parts of the building's habitable space or an attic; such air shall discharge directly to the outdoors but not near any intake on the building exterior.
	0 1 2 3	16.4	All means of ventilation shall be maintained in good repair and working order.

Relevant Matters

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Score				Matters affecting Likelihood of Harm
0	1	2	3	Thermostatic control provision
0	1	2	3	Insulation settling
0	1	2	3	Ventilation quality
0	1	2	3	Ventilation control
0	1	2	3	Draughtproofing

Score				Matters affecting Harm Outcomes
0	1	2	3	Thermostatic control provision
0	1	2	3	Insulation settling
0	1	2	3	Ventilation quality
0	1	2	3	Ventilation control
0	1	2	3	Draughtproofing

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		1 in 10
		1 in 20
		1 in 30
		1 in 50
Unlikely	Example Dwelling	1 in 100
		1 in 200
		1 in 300
		1 in 500
Very Unlikely	National Average	1 in 1,000
		1 in 2,000
		1 in 3,000
		1 in 5,000

Score

1 in 100

Justification of Scoring

Likelihood of Harm

The lack of cavity wall insulation in a northeast-facing bedsitting room and uncontrollable draught from the air brick, combined with the only heater which lacks adequate controls or thermostat, is likely to result in the dwelling becoming excessively cold.

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	Very Likely	50.0	Example Dwelling 45.0 National Average 45.0 These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%		
Example Dwelling + National Average	30.0		30.0		30.0			
	20.0		20.0	Example Dwelling + National Average	20.0			
Likely	10.0	Likely	10.0		10.0			
	5.0	Example Dwelling + National Average	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			
Very Unlikely	0.1	Very Unlikely	0.1	Very Unlikely	0.1			
	0.0		0.0		0.0			
Score 30.0%		Score 5.0%		Score 20.0%		Score 45.0%		

Justification of Scoring

Harm Outcomes

There is no reason to believe the potential spread of harm outcomes will be any different to the national average.

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 100

Extreme 30.0%	Severe 5.0%	Serious 20.0%	Moderate 45.0%
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Category	Band	Score
1 Legal duty to take action	High	10,000
Example Dwelling		3,115
2 Discretion to take action	Medium	1,000
National Average		311
	Low	100

Score
3,115

Scenario 2

After works meeting baseline indicators

Likelihood of Harm
1 in 1,000

Extreme 30.0%	Severe 5.0%	Serious 20.0%	Moderate 45.0%
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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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Example Dwelling + National Average	311
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Low	100
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Score

311**Scenario 3**

After further improvements

Likelihood of Harm
1 in 2,000

Extreme 30.0%	Severe 5.0%	Serious 20.0%	Moderate 45.0%
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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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National Example Dwelling	311
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156

Low	100
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Score

156**Justification of Scoring**

After works meeting baseline indicators

Installing cavity wall insulation will considerably reduce heat loss. Provision of efficient and thermostatically controlled heating and mechanical extract ventilation to the kitchen should enable the flat to be kept warm at reasonable cost.

Justification of Scoring

After further improvements

Additional work could improve the property to above the national average. Such work would include the removal of the high-level air brick, to eliminate draughts. Installing a door to the kitchen would also enable the bedsitting room to be heated independently of the kitchen. Installing sub-floor insulation to the latest building regulation standard would further reduce heat loss.

Other Relevant Legislation and Guidance

Party walls

A party wall agreement may be needed before works can be undertaken to party structures, party walls that form part of a building, or shared garden boundaries.

Dwelling Perspective

When assessing multiple dwellings in the same building, due consideration may need to be given to the level of risk posed to different flats within a building. The likelihood of an occurrence and harm outcomes resulting from an occurrence may vary significantly for many hazards, depending on the location of the flat within a building.

Minimum Energy Efficiency Standard

The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 (often referred to as the Minimum Energy Efficiency standards/MEES) set a minimum energy efficiency level for domestic private rented properties. Since 1 April 2020, property owners can no longer let or continue to let properties covered by the MEES Regulations if they have an EPC rating below E unless they have a valid exemption in place. The Government has since proposed that all rental properties will need an EPC rating of 'C' or above in the future (which remains a proposal at the time of writing), and it will be in a property owner's interest to consider this when making decisions around conducting works, as it may be more economically efficient to improve a property straight to Band C rather than carrying out graduated works over a period of time.

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 website.