



Housing Health and Safety
Rating System (HHSRS)

Case Studies

Group A
Protection Against
Accidents

Hazard A7
Structural Collapse
and Falling Elements

Example A7.3
Pre-1920
Flat

Vulnerable Group
Persons of all ages

Multiple Locations
Yes

Related Hazard B11
Damp and
Mould Growth

Related Hazard C16
Domestic Hygiene



Dwelling

Description

This is a Victorian terrace house, built around 1900 and in later years split into flats on the basement, ground-, first-, and attic-floor levels.

The site is sloping, meaning the ground floor is at street level at the front whilst the basement opens onto a garden at the rear. The first-floor flat is the subject of the assessment.

The front façade overlooking the street has been refurbished, including the front roof. The original tall chimneys and pots are in place.

Solid brick walls and original windows are in sound condition, as is the small roof terrace and external stairs and balustrades at the rear.

The rear garden is used by all the residents and accessed via a communal hall in the basement.



1
Front exterior



2
Communal rear yard:
stairs to basement flat,
roof terrace garden

Deficiencies

Description

The rear roof is affected by 'nail sickness', with many slipped and some missing slates. The rear eaves gutter is loose. Chimney pots also appear unstable.

Immediately below the rear roof is a roof terrace (accessible from the first-floor flat) and a wide landing (at ground level) to common external stairs leading to the garden at basement level. The hazard affects more than one dwelling.



3
Roof with slipped and missing slates



4
Loose rear eaves gutter



5
Disrepair to chimney

Relevant Baseline Indicators

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
1	Structural Condition	0 1 2 3	1.1
			Externally, every foundation, roof, ridge line, flashing, fascia, soffit and bargeboard, exterior staircase, exterior wall/fence shall be safe to use and capable of supporting the intended design loads and load effects and shall be in a proper state of structural repair.
			Internally, every wall, floor, ceiling, inside stair, porch, accessory structure, door, window and window glass shall be safe to use and capable of supporting the intended design loads and load effects, and shall be in a proper state of structural repair.
2	Drainage	0 1 2 3	2.3
			There shall be adequate provision for surface- and foul-water drainage for the size and maximum occupancy of the dwelling. All drains and gullies shall be covered by a suitable grille or cover to prevent the build-up of debris restricting the natural operation of the system.
4	Sanitary Facilities: Bathroom	0 1 2 3	4.7
			There must be a cleanable, non-absorbent water-resistant material on floor surfaces and extending on bathroom walls at least 300mm above a bath and 1800mm above the floor of a shower or shower tray. Such materials on walls and floors shall form a watertight joint with each other and with the bathtub or shower tray. Any shower shall have a shower screen, curtain or return wall that prevents water spillage to the floor.
13	Guards	0 1 2 3	13.1
			Every stairway, porch, patio, balcony walkway, terrace, landing and hall located more than 600 mm above an adjacent area shall have a structurally sound guard, between 900mm and 1100mm high, measured vertically from the floor. The guard shall be firmly fastened, capable of supporting normally imposed loads and in good condition. Balusters with a minimum thickness of 10mm shall be placed at intervals that do not allow passage of a sphere greater than 100mm in diameter. There shall be no climbable cross-pieces.
17	Moisture and Contaminant Control	0 1 2 3	17.1
			Every foundation, roof, roofing component, exterior wall, floor, door, skylight and window shall be watertight, weathertight, free of persistent dampness or moisture, and in good condition.

Relevant Matters

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Score

Matters affecting Likelihood
of Harm

Score

Matters affecting
Harm Outcomes

0

1

2

3

Loose fittings and fixtures

0

1

2

3

Height above ground

0

1

2

3

Size/weight of element

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
	Example Dwelling 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 20	

Justification of Scoring
Likelihood of Harm

Elements of the building at risk of collapsing or falling include loose slates from the rear roof slope, the pot from the chimney stack and loose eaves guttering, all presenting a risk of harm to occupants. In addition to the risks posed by using the communal areas, in respect of the first-floor flat occupants, there is also risk involved in the use of the private roof terrace at the rear.

An occurrence of falling slates, guttering or chimney pots is most likely during inclement/stormy weather, and during such circumstances, these parts are more likely to fall externally rather than collapse through the roof structure. Although occupants will probably spend less time outside during inclement weather, given the level of disrepair at the rear and slipped slates affected by nail sickness, the likelihood of an incident causing harm over the next 12 months is assessed as likely.

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	89.5	
	30.0		30.0		30.0			
	20.0		20.0		20.0			
Likely	10.0	Likely	10.0	Example Dwelling + National Average	10.0	National Average	89.5	
	5.0		5.0		5.0			
	2.0		2.0		2.0			
Unlikely	1.0	Unlikely	1.0	Unlikely	1.0		These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%	
	Example Dwelling + National Average		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		Score		Score		Score		
0.5%		0.0%		10.0%		89.5%		

Justification of Scoring

Harm Outcomes

There is nothing to suggest the spread of harms will differ from the national averages.

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 20			
Extreme 0.5%	Severe 0.0%	Serious 10.0%	Moderate 89.5%
Category	Band	Score	
1 Legal duty to take action	High	10,000	
2 Discretion to take action	Medium	1,000	
		Example Dwelling	445
	Low	100	
		National Average	2

Score
445

Scenario 2

After works meeting baseline indicators

Likelihood of Harm 1 in 5,000			
Extreme 0.5%	Severe 0.0%	Serious 10.0%	Moderate 89.5%
Category	Band		Score
1 Legal duty to take action	High		10,000
2 Discretion to take action	Medium		1,000
	Low		100
Score	Example Dwelling + National Average		2

Justification of Scoring

After works meeting baseline indicators

If the baseline indicators were met, the rear roof covering would be repaired/replaced making it sound, safe and watertight, the guttering refixed, and the chimney pots secured. That would effectively deal with the defects, reverting the HHSRS scores to the national averages.

Scenario 3

After further improvements

Likelihood of Harm			
Extreme	Severe	Serious	Moderate
Category	Band		Score
1 Legal duty to take action	High		10,000
2 Discretion to take action	Medium		1,000
	Low		100
Score			

Justification of Scoring

After further improvements

N/A

Other Relevant Legislation and Guidance

Leasehold properties

In a leasehold property, there may be restrictions on works that can be carried out without the freeholder and management company's express approval. This could include, for example, alteration of doors and windows as well as maintenance of the structure of the building (e.g. the roof).

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

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.