



Housing Health and
Safety Rating System
(HHSRS)

Case Studies

Group A
Protection Against
Accidents

Hazard A1
Falls on the Level

Example A1.1
Pre-1920
Semi-detached House
(Non-HMO)

Vulnerable Group
All persons aged
60 years and over

Multiple Locations
Yes

Related Hazards
No



Dwelling

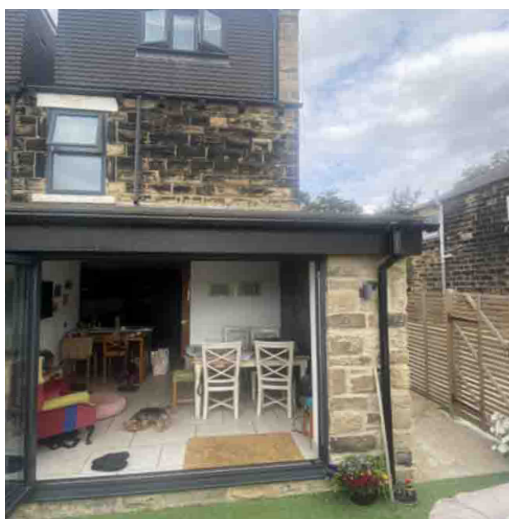
Description

This is a three-storey, stone-built, end-of-terrace house with slate roof. It has uPVC doors and double-glazed windows. Bi-fold doors into the rear garden are a recent installation, using safety glass. The ground floor comprises a lounge, kitchen and utility room; the first floor comprises two bedrooms and a bathroom; and the second floor comprises an attic bedroom with ensuite shower room. The property was refurbished in 2019, with extensions to rear and dormer in accordance with current building regulations.

It has a new gas central heating system with combi-boiler, a recent electrical installation condition report (carried out in 2019), mains-wired smoke detection and alarm system (Grade D, LD2). There is a valid energy performance certificate for the property, with an EPC rating F (dated 2012); however, this is likely to be out of date following the property refurbishment in 2019. There is an enclosed rear garden with side yard. There is no external lighting to the dwelling, but open-slatted fencing allows light and ventilation down the side of the property.



1
Front elevation of property
and front exit door

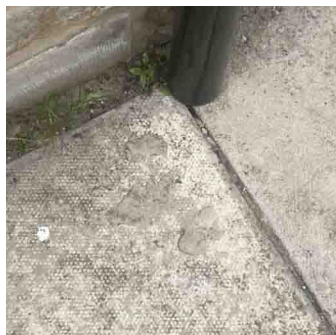


2
Rear elevation of property
and rear exit door

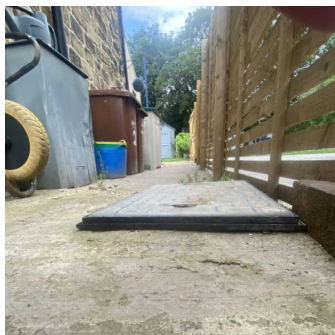
Deficiencies

Description

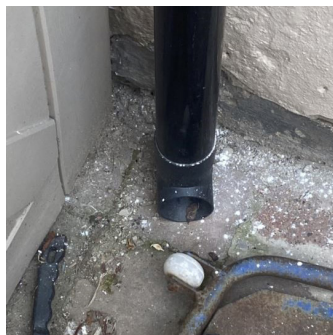
Two downpipes discharge straight onto concrete surfaces: one by the front door and one at the side of the property. There is a raised inspection chamber cover at the side of the property, close to where the wheeled refuse bins are stored. The second floor ensuite shower has a slight raised edge, and the glass shower screen does not full surround the shower, leaving potential for spray to escape onto the tiled floor causing potential slips. The shower room / WC is small, with a sloping ceiling height of just over 1.8 metres.



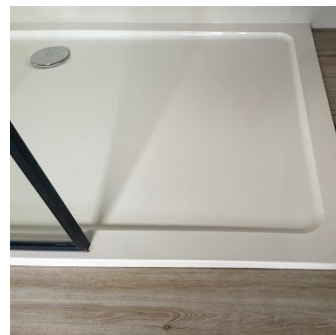
3
Downpipe to the side of the front door discharging straight to concrete



4
Raised inspection chamber lid in the yard area at the side of the dwelling



5
Downpipe to the yard area at the side of the property discharging straight to concrete surface



6
Raised edge to shower and short width shower screen

Relevant Baseline Indicators

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
2 Drainage	0 1 2 3	2.4	All rainwater pipes shall discharge properly into the drainage system or soakaway. Rodding or access points shall be available to allow the clearance of any blockage.
	0 1 2 3	2.5	All access covers to drainage and other services shall be fitted with suitable flush-mounted covers adequately marked to indicate purpose.
4 Sanitary Facilities: Bathroom	0 1 2 3	4.5	Where a shower is fitted separate to the bath, a purposely designed shower tray must be fitted so that the step into the tray is no greater than 150mm. All waste outlets and connections shall be sealed and free from defects.
	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.
9 External Space	0 1 2 3	9.1	External yards, paths, steps, access ways and surrounds within the curtilage of the dwelling shall be in good repair, even and well drained. Accessways must be suitable non-slip surfaces, have adequate lighting, and should not have slopes of sufficient gradient to present a falls risk. This includes consideration to unevenness, trip risks and poor slip resistance, to any steps or surfaces within external space that is provided, to the front door, yard and garden. Where there are drops of more than 300mm from paths, patios, steps, terraces, or garden areas guarding will be necessary where there are high risks of falling. All boundaries should be clearly defined and enclosed by well-maintained and suitable walls or fences. This also applies to structure, access ways, security doors and lifts.
11 Security	0 1 2 3	11.1	Adequate external lighting shall be provided to all means of access including entrances and external refuse stores providing good visibility when there is no daylight.
17 Moisture and Contaminant Control	0 1 2 3	17.2	The building's drainage system, such as footing or foundation drains, gutters, downspouts, rainwater collection containers, or other elements, shall direct water away from the structure.

Other 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		Drainage
0	1	2	3		Space
0	1	2	3		Lighting
0	1	2	3		Thresholds
0	1	2	3		Friction
0	1	2	3		Siting of taps and controls
0	1	2	3		Handles and grab rails
0	1	2	3		Appliance stability

Score					Matters affecting Harm Outcomes
0	1	2	3		Surfaces
0	1	2	3		Projections and edges
0	1	2	3		Nature of area and activities
0	1	2	3		Space

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
Unlikely	National Average 1 in 50
	1 in 100
	1 in 200
	1 in 300
Very Unlikely	1 in 500
	1 in 1,000
	1 in 2,000
	1 in 3,000
	1 in 5,000
Score 1 in 20	

Justification of Scoring
Likelihood of Harm

The two downpipes discharge water directly to the concrete surfaces, which are likely to ice over during winter. Over a 12-month period, the surface remains constantly damp and is likely to cause the growth of green algae which will be slippery. Both downpipes are in areas of the garden which will be frequently accessed, one being next to the front door and the other being in the vicinity of the most suitable refuse storage area. The presence of a raised inspection-chamber lid in the vicinity of the refuse storage increases the likelihood of an occurrence that will cause harm to a member of the vulnerable age group, particularly given that when accessing the bins, people are likely to be distracted if carrying rubbish.

Both the raised edge to the second-floor ensuite shower, and the short width of the shower screen (that allows spray to escape onto the tiled floor) will increase the risk of slips occurring on the wet surface.

Consequently, the likelihood of an occurrence resulting in harm to a member of the vulnerable age group over the next 12 months is increased above the average for this age and type of property.

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	50.0	Example Dwelling	39.5
	30.0		30.0				
	20.0		20.0				
Likely	10.0	Example Dwelling + National Average	10.0	National Average	30.0	National Average	59.5
	5.0		5.0		20.0		These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%
	2.0		2.0				
Unlikely	1.0	Unlikely	1.0	Likely	10.0	Unlikely	
					5.0		
					2.0		
Example Dwelling + National Average	0.5	Example Dwelling + National Average	0.5	Unlikely	1.0	Unlikely	
	0.2		0.2		0.5		
Very Unlikely	0.1	Very Unlikely	0.1	Very Unlikely	0.1	Very Unlikely	
	0.0		0.0		0.0		
Score		Score		Score		Score	
0.5%		10.0%		50.0%		39.5%	

Justification of Scoring

Harm Outcomes

The presence of deficiencies contributing to this hazard externally means that the vulnerable group is likely to fall on a hard, unforgiving surface, particularly in wintry conditions. The severe harm outcomes were not increased because the property is overlooked to a considerable degree, and someone who has fallen is unlikely to remain undiscovered for long.

Serious harm outcomes are increased by 1 RSP to 50% to reflect the external surfaces, particularly, but also in consideration of hazard within the small ensuite on the second floor, namely the increased harm associated with falling in a restricted space and onto a glass shower screen.

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 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		1,520
2 Discretion to take action	Medium	1,000
National Average		492
	Low	100

Score
1,520

Scenario 2

After works meeting baseline indicators

Likelihood of Harm
1 in 50

Extreme 0.5%	Severe 10.0%	Serious 30.0%	Moderate 59.5%
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Category	Band	Score
1 Legal duty to take action	High	10,000
2 Discretion to take action	Medium	1,000
		Example Dwelling + National Average 492
	Low	100

Score

492

Scenario 3

After further improvements

Likelihood of Harm
1 in 100

Extreme 0.5%	Severe 10.0%	Serious 30.0%	Moderate 59.5%
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Category	Band	Score
1 Legal duty to take action	High	10,000
2 Discretion to take action	Medium	1,000
		National Average 492
	Low	Example Dwelling 246
		100

Score

246

Justification of Scoring

After works meeting baseline indicators

Meeting the baseline indicators will require connection of the downpipes to the drainage system and alteration of the inspection chamber to provide an even surface, reducing the likelihood of a fall externally. This will result in the likelihood and harm outcomes being reduced to the national average. Given the deficiencies associated with the ensuite, namely the lack of space, the trip associated with the shower and the glass shower screen, the hazard would still exist, albeit as a Category 2 hazard.

Justification of Scoring

After further improvements

Works could also be requested for the glass shower screen to be replaced. Reconfiguration of this room could be required as a means of improving the usable space.

Other Relevant Legislation and Guidance

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.