

Housing Health and Safety Rating System (HHSRS)

Case Studies

Group D
Psychological
Requirements

Hazard D21
Lighting

Example D21.1
Pre-1920
Flat

Vulnerable Group
Persons of all ages

Multiple Locations
Yes

Related Hazard B11
Damp and
Mould Growth

Related Hazards B14
Excess Heat

Related Hazards B13
Indoor
Air Pollutants

Dwelling

Description

This is a pre-1919, one-bedroomed basement flat in a Georgian building that has commercial use on the ground floor and flats on the three floors above the ground floor. It is located in a city centre, close to the night-time economy.



1
Front exterior



2
Rear exterior wall



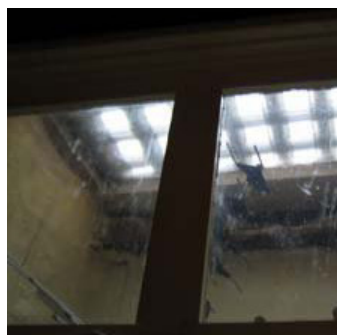
3
Close up of glass blocks

Deficiencies

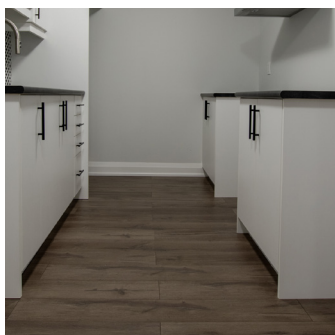
Description

The basement flat has no windows direct to the outside and no natural ventilation. The only natural light is via two sets of opaque glass blocks in the public pavement on the rear elevation of the building. These provide borrowed light via lightwells into the living room and bedroom only. There is no natural light at all in the kitchen or bathroom.

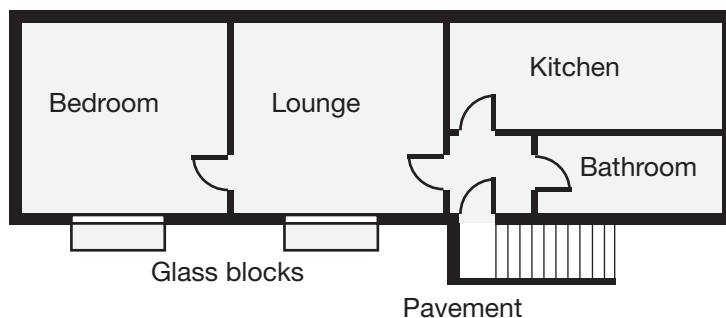
The flat is dark, and whilst there are no defects to the artificial lights, they are required at all times for normal household tasks and activities. It is not possible to see the outside environment at all from within the flat.



4
View from bedroom
window



5
Kitchen with no natural
light



6 Floorplan

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	14.1	Every habitable room shall have adequate natural lighting.
	0 1 2 3	14.2	Every hall, stairs and landing within the house, and every room used, or intended for use, by the occupant of the house shall have a suitable and adequate means of artificial lighting that is controllable and accessible which can allow lighting to be turned on and off and bulbs/ fixtures to be changed and maintained safely. Two-way or PIR-activated lighting shall be provided to any internal staircase.
	0 1 2 3	14.3	Light switches that control ceiling- or wall-type electric light fixtures shall be located conveniently in each room for safe use.
16 Ventilation	0 1 2 3	16.2	All habitable rooms must have at least one window, door or skylight which opens to the outside and can be fixed in an open position. In addition, ventilation may also be provided by the presence of trickle vents, air bricks or passive stack ventilation.
	0 1 2 3	16.3	In each habitable room, the size of the openable windows, doors and skylights together must be at least 5% of the floor area of that room.

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	Window obstruction
0	1	2	3	Window form and position
0	1	2	3	Artificial lighting position
0	1	2	3	Glare
0	1	2	3	Window view
0	1	2	3	Outlook

Score

Matters affecting
Harm Outcomes

0	1	2	3	Window obstruction
0	1	2	3	Window form and position
0	1	2	3	Artificial lighting position
0	1	2	3	Glare
0	1	2	3	Window view
0	1	2	3	Outlook

Likelihood of Harm

Scale Points

Likelihood of harm from this hazard over the next twelve months

Very Likely		1 in 1
	Example Dwelling	1 in 2
		1 in 3
		1 in 5
Likely		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 2

Justification of Scoring

This flat is positioned below ground level and has no windows direct to the outside. The only natural light is via two sets of opaque glass blocks in the public pavement on the west elevation of the building, which provide borrowed light via lightwells into the living room and bedroom only. These will get dirty and could be obstructed by litter, refuse bins or even illegal parking, and anyone walking over them will cast shadows.

The limited daylight afforded by the two lightwells means that the dwelling is naturally dark, and artificial light is required at all times for normal household tasks and activities. During a power cut, there would be minimal light to the flat, possibly total darkness. Additionally, there is no outlook, as it is not possible to see the outside environment at all from within the flat.

The lack of natural lighting can lead to adverse psychological impacts, potentially impacting on duration and quality of sleep and the overall well-being of an individual. The lack of any view or outlook would also have a negative impact on the occupant, giving a feeling of isolation and a lack of connectivity with the surrounding environment due to the inability to see what is happening in the outside world. Over a 12-month period, it is likely that such conditions will have a significant impact upon the mental health of any occupiers, promoting feelings of isolation, interfering with circadian rhythms and ultimately leading to depression. The risk of a harmful exposure or occurrence over a 12-month period is increased to very 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	88.9		
	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	88.9		
	5.0		5.0		5.0				
	2.0		2.0		2.0				
Unlikely	1.0	Example Dwelling + National Average	1.0	Unlikely	1.0		These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%		
	0.5		0.5		0.5				
	0.2		0.2		0.2				
Example Dwelling + National Average	0.1	Very Unlikely	0.1	Very Unlikely	0.1				
	0.0		0.0		0.0				
Score		Score		Score				Score	
0.1%		1.0%		10.0%				88.9%	

Justification of Scoring
Harm Outcomes

There is nothing to suggest that the spread of harms would differ from 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 2

Extreme 0.1%	Severe 1.0%	Serious 10.0%	Moderate 88.9%
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Category	Band	Score
1 Legal duty to take action	High	10,000
Example Dwelling		2,945
2 Discretion to take action	Medium	1,000
	Low	100
National Average		12

Score
2,945

Scenario 2After works meeting
baseline indicatorsLikelihood of Harm
1 in 2

Extreme 0.1%	Severe 1.0%	Serious 10.0%	Moderate 88.9%
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Category	Band	Score
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1 Legal duty to take action	High	10,000
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Example Dwelling	2,945
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2 Discretion to take action	Medium	1,000
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Low	100
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Score	National Average	12
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2,945**Scenario 3**After further
improvementsLikelihood of Harm
1 in 2

Extreme 0.1%	Severe 1.0%	Serious 10.0%	Moderate 88.9%
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Category	Band	Score
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1 Legal duty to take action	High	10,000
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Example Dwelling	2,945
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2 Discretion to take action	Medium	1,000
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Low	100
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Score	National Average	12
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2,945**Justification of Scoring**

After works meeting baseline indicators

BI 14.1 requires that every habitable room shall have adequate natural lighting. Adequate natural lighting would allow a newspaper to be read and tasks and activities to be undertaken during daylight hours without strain or the need for artificial lighting.

Compliance with the baseline indicators would reduce the likelihood of harm. However, installing windows to provide much-needed natural light, ventilation and an unobstructed view of outside is not practicable. As such, the dwelling cannot comply with the lighting (and probably ventilation) BIs. There are no other improvements required to comply with other BIs that would mitigate the hazard.

Justification of Scoring

After further improvements

Where dwellings are below ground level, remedial works to improve daylight penetration (such as modern light-enhancing wells) may not be reasonably practicable or within the landlord's control. Also, the ability to provide a view of the surroundings may be impracticable or even impossible.

In such instances, the Inspection and Assessment Manual confirms that alternative uses of the dwelling may need to be considered. In this case, the obligatory works to provide natural light and a view of the surroundings are not achievable. It may be necessary to consider prohibiting use of the basement flat for living and sleeping purposes.

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 website.