



Housing Health and Safety
Rating System (HHSRS)

Case Studies

Group B
Physiological
Requirements

Hazard B15
Asbestos and
Manufactured
Mineral Fibres

Example B15.2
1946-79
Pre-fabricated
Bungalow

Vulnerable Group
Persons of all ages

Multiple Locations
Yes

Related Hazard A4
Fire and
Explosions

Dwelling

Description

This is a 1950s prefabricated semi-detached bungalow. The bungalow has a new lightweight roof and fully insulated loft. Internally, the property has been improved over the years, with modern electrics and a gas-fired central heating system added. It is rented by an elderly couple.



1
Front exterior



2
Close up of property front
door

Deficiencies

Description

The external asbestos sheet wall panels have been damaged in several places, causing pieces to fall off and break down. Where the base of the wall panels has broken or is missing, fibrous material has accumulated on the ground. This has occurred in several places on the ground and paths around the bungalow, including near the front door.

There are no Artex ceilings or other sources of asbestos in the bungalow. There is no asbestos register for the building, and none of the asbestos present is labelled as such.



3
Damaged wall panel and
asbestos fibres



4
Close up of damaged wall
panel and asbestos fibres

Relevant Baseline Indicators (BI)

0

Satisfactory
or N/A

1

Not
Satisfactory

2

Defective

3

Seriously
Defective

Subject	Score	BI	Baseline Indicator
1	<div>0</div> <div>1</div> <div>2</div> <div>3</div>	1.1	Externally, every foundation, roof, ridge line, flashing, fascia, soffit and barge board, 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.
		1.2	All asbestos-containing material shall be maintained non-friable and free from any defects such as holes, cracks, tears and/or looseness that may allow the release of fibres into the environment. Any friable or damaged asbestos identified shall be removed. An asbestos register for each dwelling shall be created and kept up to date.
17	<div>0</div> <div>1</div> <div>2</div> <div>3</div>	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.

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

Date of construction

Asbestos

0 1 2 3

Accessibility

0 1 2 3

Sealing

0 1 2 3

Labelling

0 1 2 3

State of repair

MMF

0 1 2 3

Accessibility

Score

Matters affecting
Harm Outcomes

0 1 2 3

Date of construction

Asbestos

0 1 2 3

Accessibility

0 1 2 3

Sealing

0 1 2 3

Labelling

0 1 2 3

State of repair

MMF

0 1 2 3

Accessibility

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		1 in 1,000
		1 in 2,000
		1 in 3,000
	National Average	1 in 5,000
Score		
1 in 100		

Justification of Scoring

Likelihood of Harm

There is exposed, unlabelled and damaged asbestos in several locations which is likely to continue to deteriorate if left. The damage to the asbestos panels is such that there is loose and friable asbestos material, which significantly increases the likelihood of an event resulting in harm.

Although the loose material is located externally, it is in several places including close to the front door. As a consequence there is an increased risk of inhaling asbestos fibres from damaged wall panels and the base plate when entering and leaving the property as well as while gardening or undertaking external home maintenance tasks. There is also an increased risk of inhalation when sweeping up fibres that have accumulated on paths around the perimeter of the property, although fibres will disperse in the external air. There is a risk of disturbed fibres entering the property through open windows and doors, including being walked into the property on footwear or asbestos-containing materials carried in, thereby increasing exposure. Whilst the risk of contracting lung disease within 12 months is low, exposure to asbestos fibres throughout the year could cause disease to occur later in life as there is no safe level of exposure.

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	79.0
	30.0		30.0		30.0	National Average	79.0
	Example Dwelling + National Average		20.0		20.0	These scores are simply calculated as the sum of the other three harm outcomes subtracted from 100%	
	10.0	Likely	10.0	Likely	10.0		
	5.0		5.0		5.0		
	2.0		2.0		2.0		
Unlikely	1.0	Example Dwelling + National Average	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		Example Dwelling + National Average	0.0	
Score		Score		Score		Score	
20.0%		1.0%		0.0%		79.0%	

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 20.0%	Severe 1.0%	Serious 0.0%	Moderate 79.0%
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Category	Band	Score
1 Legal duty to take action	High	10,000
Example Dwelling		2,018
2 Discretion to take action	Medium	1,000
	Low	100
National Average		40

Score
2,018

Scenario 2

After works meeting baseline indicators

Likelihood of Harm
1 in 3,000

Extreme	Severe	Serious	Moderate
20.0%	1.0%	0.0%	79.0%

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	67
National Average	40

Score

67**Scenario 3**

After further improvements

Likelihood of Harm
1 in 5,000

Extreme	Severe	Serious	Moderate
20.0%	1.0%	0.0%	79.0%

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 Dwelling + National Average	40
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Score

40**Justification of Scoring**

After works meeting baseline indicators

The baseline indicators require that all asbestos-containing material shall be maintained, non-friable and free from any defects such as holes, cracks, tears and/or looseness that may allow the release of fibres into the environment. This would therefore require the arrangement of a competent person to sample the external wall panels and base pates, confirm the type of asbestos and prepare and undertake a suitable remedial action plan, which should require works to the damaged wall panels via appropriate sealing of existing panels (if possible) and removal of all fibres and contaminated material around the dwelling. Any remaining asbestos would be labelled and an asbestos register provided to the building owner. If work is completed to address the baseline indicators, this will significantly reduce the likelihood of an event that will result in harm.

Justification of Scoring

After further improvements

Total removal of the ACMs from the building and replacement with another building material would reduce the property to the national average.

Other Relevant Legislation and Guidance.

Asbestos legislation

There are no specific laws covering asbestos and domestic property. The Control of Asbestos Regulations 2012 place a duty on landlords to manage the risks of asbestos of generally non-domestic property but does apply to the common areas of residential property such as stairwells in blocks of flats or houses in multiple occupation. Other legislation that may cover asbestos in domestic property includes the implied contractual rights under the Landlord and Tenant Act 1985 (keeping in repair the structure and exterior of the property applicable if asbestos is present in the roof or some other part of the building structure and is not maintained), and the obligation on landlords to keep tenants and visitors safe from personal injury or disease that might reasonably be caused by a breach of the landlord's repairing obligations under the Defective Premises Act 1972. Whilst these provisions exist, for domestic property, enforcement action would usually be taken under the Housing Act 2004 or Environmental Protection Act 1990.

Asbestos nuisance

Asbestos at a private residential property may also be considered a statutory nuisance under the provisions of the Environmental Protection Act 1990 if deemed prejudicial to health. In such cases, the local authority shall serve an abatement notice on the person responsible for the premises (e.g. the landlord) which orders that person to abate the nuisance. Asbestos that is in good condition and has not been disturbed is unlikely to constitute a nuisance.

Asbestos safe practice

Safe practice for removal: In a notice schedule it is appropriate to draw attention to the need for landlords to carry out a risk assessment due to the health risks associated with asbestos. Contractors undertaking works have a responsibility under the Health and Safety at Work etc. Act 1974 to provide a safe system of work. They should be advised that all possible care must be taken to minimise dust when cutting or drilling asbestos insulating board; this work must be carried out in the open air using hand tools with the product dampened. The operator should wear suitable respiratory protection. All waste should be sealed in labelled, dust-proof bags and must be disposed of at an authorised disposal site. Landlords should also be advised that there may be a requirement for such work to be carried out by licensed contractors only.

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.