

INITIAL TECHNICAL REPORT

Retained

DATE OF ISSUE:	8 th December 2022
OUR REFERENCE NO:	72229022
YOUR REFERENCE NO:	540588175
Ageas PO Box 2958 Stoke on Trent ST4 9EY	Mr Ridler 6 Windrush Close Ickenham Uxbridge UB10 8EJ



General view of property

POLICYHOLDER DETAILS

Policyholder Home tel.:	01895 673525
Policyholder Work tel.:	Not advised
Policyholder Mobile tel.:	Not advised
VAT status	Not registered

POLICY INFORMATION, HISTORY & TIMESCALES

Policy number:	NS0000534
Policy wording:	Ageas - Fairweather Insurance
Authority:	Retained
Date of construction:	1958
Date of purchase:	1958 (built by policy holder)
Date of policy inception:	04 May 2022
Date damage first noticed:	13 July 2022
Date claim notified to insurers:	09 September 2022
Date of our initial inspection:	20 September 2022
Supposed cause:	Subsidence
Start date of main remedial works (est.):	June 2023
Date of claim finalisation (est.)	September 2023

INTRODUCTION

The technical and insurance aspects of this claim are being overseen by our Regional Technical Manager, Ross Lockton BSc, BDMA Ins Tech, Cert CILA, in accordance with our Project Managed Service.

This report has been prepared specifically in connection with the current insurance claim and is not a structural survey. As such, this report should not be relied upon as a statement of structural adequacy. It does not deal with the general condition of the building, decorations, services, timber rot, infestation or the like and does not include any part of the building that is either covered or inaccessible.

DESCRIPTION OF PROPERTY

The risk address is a 3 bedroom detached, domestic dwelling comprising mainly brick, elevations beneath a pitched, tiled, roof.

The property is a bungalow and is believed to have been constructed in 1958 and built by Mr Ridler. It has been well maintained over the years.

TOPOGRAPHY & GENERAL LOCATION

The property rests upon a sloping site which orientates slightly downwards from the rear to the front. The home is surrounded by other domestic dwellings which are all set at different levels. The property is located just off the A40 with some shops and amenities located close by.

GEOLOGY

The precise geology in the immediate area can only be established by undertaking localised site investigations. However, published geological data suggests that the property is underlain by soils from the London clay formation. There is no superficial geology noted on the BGS website.

Our own knowledge and experience of the area would suggest that the property sits in a location where incidences of subsidence are relatively high.

VEGETATION

The following describes the major items of vegetation that are within influencing distance of the property and could therefore be implicated in the current damage:

Type of tree	Fur	Cherry
Approx. height	15m	3-4m
Approx. distance	10m	3m
From where	Front elevation	Front elevation
Ownership (PH or TP?)	Policyholder	Policyholder
If TP - Name of TP	Non applicable	Non applicable
If TP – Address of TP	Non applicable	Non applicable
TPO (if known)	Possibly	No

CIRCUMSTANCES

During the course of our discussions with the policyholder, Mr Ridler, we were advised of the following circumstances which led to the claim being presented:

Mr Ridler has owned the property since it was constructed by him, in 1958 and he has lived at the risk address ever since. No surveys were conducted and there is no mortgage interest.

In the year 2000 the property suffered from ground floor slab movement and the substructure was injected with a geo-polymer. Mr Ridler reports the cracking observed on our initial inspection was also apparent in 2000.

Mr Ridler reports the damage started 3 – 4 months prior to our initial inspection.

The damage has developed into cracking above and around the front door. Internally there are cracks to the internal walls at high and low levels. In the bathroom there are cracks around the window and between the walls and floor. In the front bedroom there are cracks between the walls and ceiling on the front elevation.

As the cracking Mr Ridler observed in 2000 returned, he submitted a claim for subsidence.

DESCRIPTION OF DAMAGE

For all orientation references, they will be described as if one is facing the front of the property. We would draw attention to the photographs attached as Appendix 1.

EXTERNAL DAMAGE

Front Projection

- Above the front bedroom window there is a stepped crack leaving the front bedroom window and leading to the roof level totalling, 1 linear metre and ranging from 1 – 2.50 mm wide.
- On the front elevation, beneath the window there is an area of brickwork which has been repointed.
- In the right corner there is a vertical crack totalling 1.25 linear metres and ranging from 1 – 9 mm wide.
- Above the front door there is an area of repointed bricks.
- Above the door there is a stepped crack leaving the door and leading to the roof level and the crack has also damaged the soffit totalling 1 linear metre and ranging from 5 – 9 mm wide.
- The door frame has distorted and there is a vertical separation between the door and brickwork totalling, 2 linear metres and ranging from 1 – 9 mm wide.
- On the right elevation of the front projection, there is a vertical crack to the corner totalling 1.25 linear meter and ranging from 1 – 5 mm wide.
- Beneath the bathroom window there is a stepped and vertical crack totalling 2 linear metres and ranging from 1 – 2 mm wide.

INTERNAL DAMAGE

Hallway

- Between the front door frame and wall there is vertical separation crack totalling 2.40 linear metres and ranging from 1 – 11 mm wide.
- Leaving the door opening there is a crack leading forwards totalling, 1 linear metre and ranging from 1 – 5 mm wide.
- Above the front door there is a stepped crack totalling 2 linear metres and ranging from 1 – 3 mm wide.
- There is a horizontal crack leaving the bathroom door and leading to the cupboard totalling 1 linear metre and ranging from 1 – 4 mm wide.
- Above the door serving the front bedroom there is a vertical crack leaving the opening and leading to the ceiling totalling, 1.25 linear metres and ranging from 1 -4 mm wide.

Bathroom

- On the internal wall there is a horizontal crack mirroring the hallway and totalling 1.25 linear metres and ranging from 1 – 4 mm wide.
- There is a separation crack to the ceiling and internal wall totalling 2.50 linear metres and ranging from 1 – 3 mm wide.
- There are two cracks wither side of the window reveal totalling 1 linear metre and 4 mm wide.
- There is a crack between the floor and walls totalling 3 linear metres and ranging from 1 -3 mm wide.

Bedroom

- There is a crack leaving the door opening totalling 0.50 linear metres and ranging from 1 -3 mm wide.
- In the front left corner, there is a separation crack between the front and coving totalling 3 linear metres and ranging from 5 – 11 mm wide.
- In the front right corner, there is cracking and displacement to the coving and internal wall totalling 1 linear metre and 2 mm wide.

CATEGORY OF CRACKING

In accordance with Table 1 of BRE Digest No.251, (as reproduced below), the cracking in the property would be described as category 3.

Category 0	Negligible	Less than 0.1mm
Category 1	Very slight	0.1-1.0mm
Category 2	Slight	1mm to 5mm
Category 3	Moderate	5mm to 15mm
Category 4	Severe	15mm to < 25mm
Category 5	Very severe	> 25mm

CAUSE OF DAMAGE

From our initial visual inspection, we would confirm the following:

It is our considered opinion that the damage is attributable to either one of the following options:

The damage could be attributable to clay shrinkage subsidence, which has been exacerbated by the moisture extraction influence of the surrounding vegetation. The primary vegetative influence is considered to be the policyholder's.

The other is that the damage could be attributable to ground floor slab movement due to the dry, hot summer in 2022 causing the clay soils to shrink.

However, the damage could be due to both of the above.

DISCUSSION

Root induced clay shrinkage subsidence occurs when the action of roots extracts the moisture from the clay which causes the sub-soil below the house to shrink. It is evident that the vegetation to the front of the property have grown over the years without regular maintenance and its root system will have extended to meet the increasing water demand. This in turn allows the structure to drop and rotate slightly which has caused the cracking we can see.

The other cause of damage could be due to the floor slab movement as the prolonged hot summer has dried out the clay soils causing them to shrink and the slab to move down with it.

RECOMMENDATIONS

With insurers agreement we have now recommend that site investigations are undertaken to confirm our initial opinion as to the cause of the damage, with the required investigations consisting of:

- 2 Trial holes / bore holes to the front and left of the property to confirm the depths of the foundations and condition of the bearing soils beneath the foundations.
- A CCTV survey of the drainage runs within close proximity of the area of concern.
- A level monitoring exercise for an initial period of 6- 12 months.

APPENDICES

Attention is drawn to the following appendices:

- Appendix 1: Photographs
- Appendix 2: Site Plan

APPENDIX 1: PHOTOGRAPHS

	<p>Photograph 1 Front elevation.</p>
	<p>Photograph 2 View of the vegetation to the front.</p>
	<p>Photograph 3 View of the vegetation to the front.</p>
	<p>Photograph 4 View of the rose bush</p>
	<p>Photograph 5 View of the vegetation to the front. Also showing the front elevation.</p>



Photograph 6
View of the cracking beneath the front bedroom window.



Photograph 7
View of the low-level cracking to the front right corner on the front elevation.



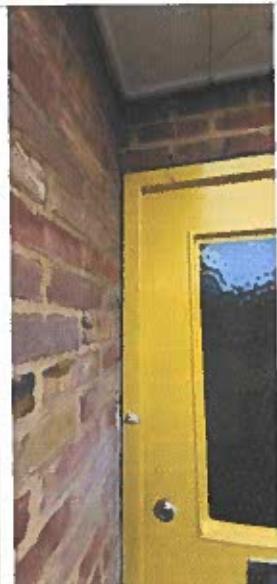
Photograph 8
View of the cracking to the front right corner on the right elevation.



Photograph 9
View of the stepped cracking to the front left corner of the front elevation, at high level.



Photograph 10
View of the front door and cracking above the door.



Photograph 11
View of the vertical separation crack to the front door.



Photograph 12
View of the cracking above the front door.



Photograph 13
View of the cracking above the front door and showing the different colour mortar.



Photograph 14
View of the minor cracking beneath the front bedroom window.



Photograph 15
View of the path to the right side of the property showing the path moving away from the main building.



Photograph 16
View of the drop to the door.



Photograph 17
General view of the hallway.



Photograph 18

View of the distortion to the door frames and showing the internal doors not closing properly.



Photograph 19

View of the cracking to the internal walls in the hallway.



Photograph 20

View of the cracking to the internal walls in the hallway.



Photograph 21

View of the cracking to the internal walls in the hallway.



Photograph 22

View of the cracking above the front door.



Photograph 23
View of the separation between the wall and door frame.



Photograph 24
View of the separation between the wall and door frame.



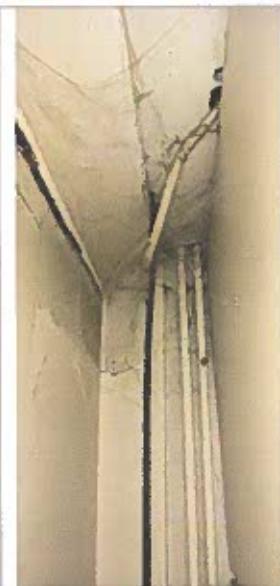
Photograph 25
View of the separation between the wall and door frame.



Photograph 26
View of the front bedroom.



Photograph 27
View of the cracking above the door into the bedroom.



Photograph 28
View of the high-level cracking to the front bedroom in the front left corner.



Photograph 29
View of the high-level cracking to the front bedroom, in the front left corner.



Photograph 30
View of the high-level cracking to the coving in the front bedroom.



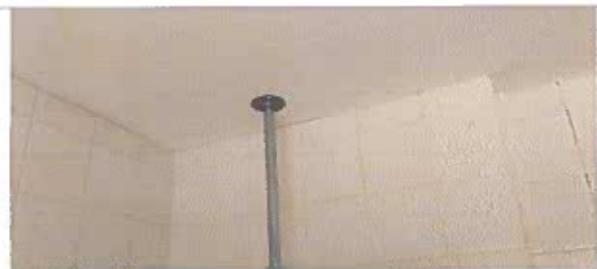
Photograph 31
View of the high-level cracking to the coving in the front bedroom.



Photograph 32
View of the cracking and displacement to the bathroom tiles on the external wall.



Photograph 33
View of the cracking and displacement to the bathroom tiles on the external wall.



Photograph 34
View of the cracking to the wall and ceiling junction in the bathroom.



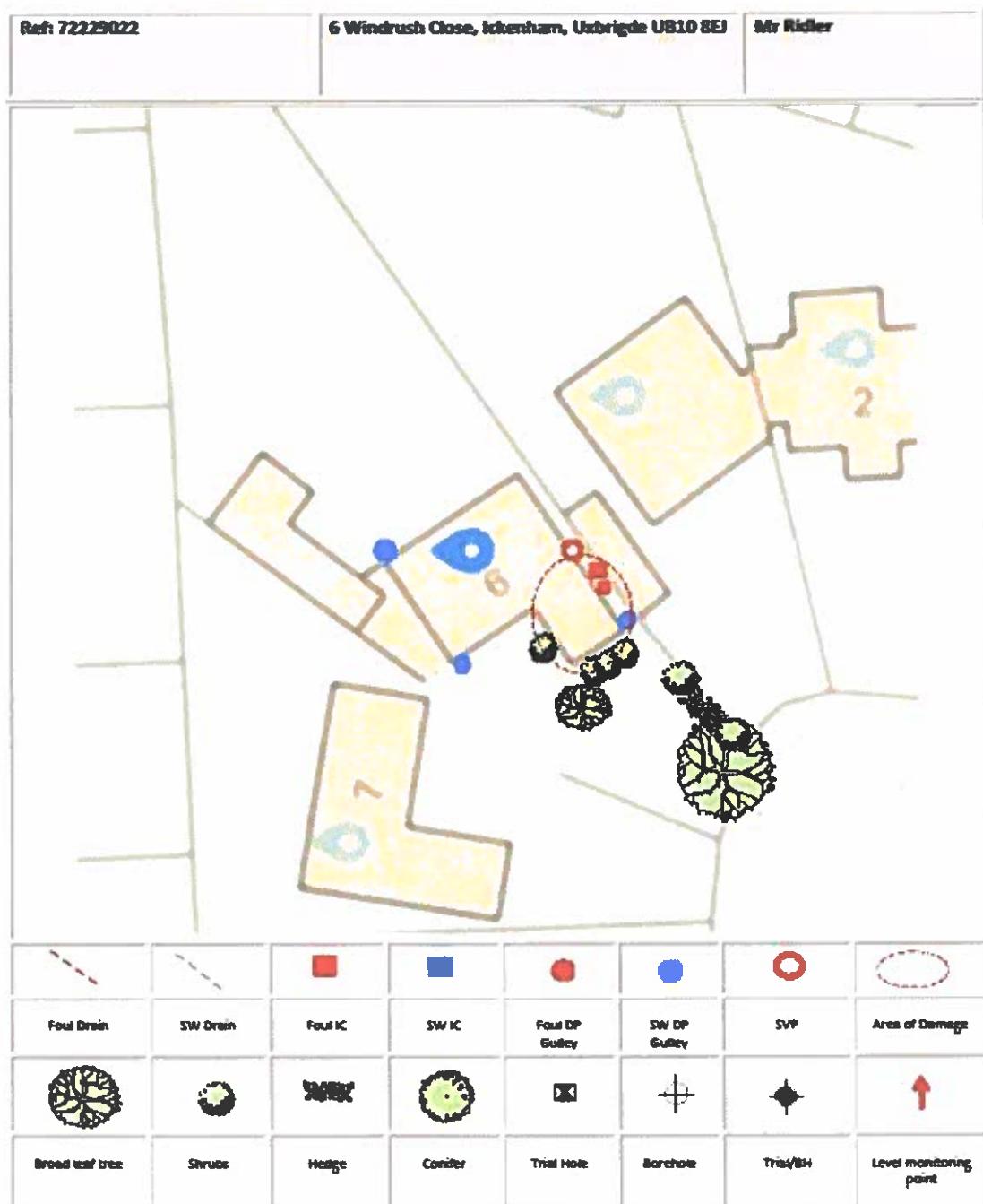
Photograph 35
View of the drop and gap between the floor and wall tiles in the bathroom.



Photograph 36
View of the gap between the floor and wall tiles in the bathroom.

APPENDIX 2: SITE PLAN

SITE PLAN



NOT TO SCALE

This plan is diagrammatic only and has been prepared to illustrate the general position of the property and its relationship to nearby drains and trees etc. The boundaries are not accurate, and do not infer or confer any rights of ownership or rights-of-way.