



Professional Opinion

on subsidence risk

LOW RISK

Site address:

School Lane, Chelmsford CM3 1GS

In the professional opinion of Property Assure the level of subsidence risk associated with this site is low as it is equal to or below the insurance subsidence incidence profile for England and Wales. This is based on analysis of historic insurance subsidence incidence data within 0.5 kilometres of this postcode.

The Subsidence Risk Rating – Postcode assesses the risk of subsidence caused by soil shrinkage in England and Wales. This is the largest geohazard in the UK and accounts for over 75% of Building Insurance subsidence incidents. It is particularly related to the influence of tree roots in clay shrinkage soil (60% of the total incidents) or leakage from drains (15% of the total incidents).

The risk of subsidence can readily be reduced:

- Where the property is located within the 'Zone of Influence' of the vegetation, particularly semi mature trees, we recommend that tree management strategies are considered to mitigate any future risk due to growth and that advice is sought in relation to future plantation schemes. The zone of influence is the area from which a tree absorbs significant moisture. The extent of the zone depends upon the type of tree and the location of other trees. A general rule of thumb to determine the zone of influence is to imagine cutting the tree at its base and lying it down would it touch the property?
- Undertake annual visual assessments of the foul and storm drainage systems (including soakaways) to check for signs of leakage or blockage. Prompt maintenance should be carried out to minimise future risks.

This Certificate is not a warranty or guarantee. It is a considered professional opinion and no liability shall attach to us except to the extent that we have failed to exercise reasonable skill, care and diligence in the analysis of the available data. No physical site inspection or survey has been carried out or is proposed. This Certificate does not in any way increase the liability of the Expert beyond that agreed under Property Assure's Terms and Conditions. This Certificate shall be read and construed accordingly. This professional opinion is subject to Property Assure Terms and Conditions of Business in force from time to time. Further information on the datasets examined in formulating this professional opinion can be obtained from us by writing to us at enguires@propertyassure.co.uk.

Certificate Reference: PA03





Thank you for using Property Assure's Subsidence Risk Rating – Postcode in association with Landmark Information Group.

What is Subsidence?

Subsidence is the vertical downward movement of a building foundation caused by the loss of support of the ground beneath the foundations. Subsidence results in cracking and property damage. Subsidence is usually associated with volumetric changes in the sub soil supporting the foundations, e.g.:

- Cohesive soils such as clay and silt vary in their ability to change their volume when wetted or dried therefore when wet they will expand (swell) and when dry they will shrink.
- Non cohesive soils, such as sand and gravel do not exhibit volumetric change, but they are susceptible for the fine particles in their composition to be washed away if subjected to water flow.
- Natural decomposition of organic soils, such as peat, due to oxidisation. Oxidisation occurs when the organic material comes into contact with the air and this is usually when the water table falls.
- Man-made subsidence is mainly caused by consolidation of old in-filled sites and mining activities.

It should be emphasized that all these volumetric changes to the ground usually occur as a direct result of an external factor (either natural or man-made), e.g.:

- Trees or other vegetation removing water from clay soil and increasing shrinkage
- Leaking drains and pipes either softening the ground or washing away fine particles
- Changes in ground water level which exposes organic material to the air leading to oxidisation
- Extremes of weather
- Adjacent excavations around the foundations (e.g. extensions, new drainage or work on adjacent land) which can cause a sideways collapse of the ground beneath the foundations.
- Vibration caused by heavy and constant traffic near properties or pile driving on an adjacent building site.

Please note: Damages can also occur when there is upward movement of the ground supporting the building – this is known as heave. Both subsidence and heave are included within this Subsidence Risk Rating – Postcode. Mining is not covered by this Subsidence Risk Rating – Postcode.

What should I do if I have concerns?

Cracks in houses can be caused by a range of issues other than subsidence – some house cracks are related to normal wear and tear due to the age and construction of the property, and other, non-foundation related structural issues.

If subsidence occurs remedial measures to stabilize the foundations and to repair damage may be required to bring the movement within acceptable limits.

If the property has suffered from subsidence before then the corrective repair works should include a Certificate of Structural Adequacy. This certificate can only be produced by a fully qualified surveyor or engineer who inspects and signs off the corrective works undertaken. A Certificate demonstrates relative stability has been restored.

If there are cracks that you are concerned about, it may be worthwhile having an inspection carried out in order to establish the cause of the damage or structural movement. Please call us on 0844 225 2900.

If you have any questions or concerns regarding subsidence or any of our services please call us on 0844 225 2900 – we are here to help.





What does this risk mean and is there anything I can do?

The risk rating is calculated by comparing the insurance subsidence incidence rate for the postcode against the insurance subsidence incidence rate for England and Wales to provide a relative exposure to subsidence risk. This gives the following rating system:

- Low Equal to or below the insurance subsidence incidence rate for England and Wales
- Medium Up to twice the insurance subsidence incidence rate for England and Wales
- High 2-4 times the insurance subsidence incidence rate for England and Wales
- Very High over 4 times the insurance subsidence incidence rate for England and Wales

The two main causes of subsidence are clay shrinkage triggered by vegetation (60% of cases) or leaking drainage (15% of cases) washing away fine particles in the soil or softening the soil. This means that you can reduce your risk significantly through simple planned maintenance.

Trees and Vegetation

Trees and shrubs planted too close to a property are a common cause of problems where buildings are founded on shrinkable clay soils. The table within the ABI publication (obtainable through the link at the end of this document) indicates the maximum suitable planting distances of various trees from houses, garages or outbuildings. You should also consider the proximity of trees to underground drains and buildings belonging to neighbours.

The type of trees / vegetation, height and distance away from a building are therefore the key factors to consider. Although all trees will have an effect, research indicates the trees most often involved are Oak, Willow, Sycamore, Ash, Plane and Poplar. Also Leylandii when grown together will have a significant desiccating effect particularly as these trees are fast growing. We recommend that tree management strategies are considered to mitigate any future risk due to growth and that advice is sought in relation to future plantation schemes. Some key considerations:

- If the trees are too close and were planted after the property was built they might be relocated if of a suitable size. If it is impractical to move the vegetation, ensure it is regularly managed to control the moisture uptake. This can be achieved by crown reduction and crown thinning.
- If the trees are too close and were planted before the property was built manage them by crown reduction and crown thinning. They should not be removed without specialist advice as this could cause uplift of the ground (i.e. heave) which can result in structural damage.
- Never remove or alter a tree with a preservation order or if your property is located within a conservation area seek consent / advice from the relevant Local Authority.

Drainage

General maintenance checks should be carried out around a property. Checks should be made for blocked or leaking drains; dirt and leaves cleared from gutters; and pipes checked to make sure there are no splits.

It is particularly important to carry out these inspections on older properties where the drains comprise of salt glazed clayware pipework. With this type of construction, root ingress at the pipe joints is not uncommon, which over time can cause blockage and hence leakage in the system (i.e. water backs up and leaks through the pipe joints)

As a minimum, we would recommend that manholes are lifted and inspected on an annual basis. If there are concerns over the integrity of the drainage system a specialised CCTV survey can be undertaken to assess its condition.

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Foundations

The depth of foundation will influence the extent of potential subsidence. In some instances it may be prudent to contact the National House Building Council / Building Control department of the Local Council and review the details they hold on their system. The Building Control department should be able to verify what type and depth of foundation were utilised in the house design and this will highlight if the soil conditions dictated that a non-standard foundation detail was required. In this situation it may be possible for any pre-existing trees to be left in situ and allowed to grow to full maturity.

Conservatories are a higher risk as they are usually built on shallow foundations which can move differentially against the deeper foundations of the main building.

What can I do if the risk is from another property?

Neighbours

If the tree is in a neighbour's garden (owned or rented), a sensible and non-confrontational approach is advised, and endeavour to get them to seek and take appropriate action (a letter confirming this would be good practise). Only if your neighbour is uncooperative should you then write to them (recorded delivery) and keep a copy of the letter.

Council or Commercial Property

In the event that the tree is owned by the Local Council or a business then the first stage will be to write to the relevant department or the Company Secretary of the business. The letters should remind the legal owners of the duty of care to ensure that the vegetation is maintained.

We do have a prepared letter for use and can provide individual support.

Further information can also be obtained from www.abi.org.uk/Information/Consumers/General/49588.pdf

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Property Assure Ltd Terms and Conditions for Subsidence Risk Rating - Postcode

DEFINITIONS

In these Terms, the following terms have the following meanings:

- "Agreement" has the meaning set out in clause 1.d.
- "Authorised Reseller" means an agent or reseller who We have duly appointed to resell Our Reports and Service.
- "Consumer" means a natural person acting for purposes other than his trade, business or profession.
- "Content" means any data, computing and information services and software, and other content and documentation or support materials and updates included in the Service developed by or on behalf of Us and Third Party Content.
- "End User" means either: (i) a Consumer or family member who uses the Service provided to the Consumer; (ii) where You are not a Consumer, an employee of Yours who uses the Service provided to You; or (iii) a person identified in clause 2.d or their respective employees.
- "Fees" means any charges levied by us or an Authorised Reseller for the Service.
- "Intellectual Property Rights" means copyright, patent, design right (registered or unregistered), service or trade mark (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right.
- "Order" means the request for Service from Us by You, whether made direct to Us or to an authorised reseller of our Service.

 References to "We", "Us" and "Our" are references to Property Assure Limited (registered in England under number 7374444 whose registered office is Glaston Hall, Spring Lane, Glaston, LE15 9BZ).
- "Property Site" means a land site in relation to which We provide a Service.
- "Service" shall mean the provision of the Subsidence Risk Rating Postcode.
- "Supplier" means any third party organisation that provides services, software, data, information and other content or functionality of any form to Us.
- "Terms" means these terms and conditions.
- "Third Party Content" means the services, software, data, information and other content or functionality provided by Suppliers and linked to or contained in the Service.

References to "You", "Your" and "Yourself" refers to whoever places an Order with Us.

"Website" means any website hosted by Us.

1. Basis of Contract

- a) These Terms govern the relationship between Us and You where You use or purchase Service from Us. Where these Terms are not expressly accepted by You, they will be deemed to have been accepted by You, and You agree to be bound by these Terms, when You place any Order, or pay for any Service provided to You by Us.
- b) You shall take all reasonable steps to check that the details that You provide in relation to Your Order are complete, accurate and correct and that the Service has been prepared for the correct location and property type. Neither We nor any Suppliers shall have any liability for errors or omissions in information provided by or on behalf of You or from Your failure to check that the Service relates to the correct location or property.
- c) We may modify these Terms, and may discontinue or revise any or all other aspects of the Service at Our sole discretion, with immediate effect and without prior notice, including without limitation changing the Service available at any given time. Any amendment or variation to these Terms shall be posted on Our Websites. You acknowledge that it shall remain Your responsibility to check Our Website from time to time for any such amendments or variation to these Terms.
 Continued Orders of the Service by You shall be deemed an acceptance by You to be bound by any such amendments to the Terms.
- d) These Terms together with any Order You make (if applicable), the Fees (if applicable) and delivery details in relation to the Order and Our privacy policy, which is available on the Website, constitute the entire agreement between the parties relating to the supply of Service to You by Us ("Agreement"). You acknowledge that You have not relied on any statement, promise or representation made or given by or on behalf of Us which is not set out in the Agreement or delivery details. Nothing in this clause 1.d shall limit or exclude any liability for fraud.
- e) These Terms shall prevail at all times in relation to the Service to the exclusion of all other terms and conditions including any terms and conditions which You may purport to apply even if such other provisions are submitted in a later document or purport to exclude or override these Terms and neither the course of conduct between parties nor trade practice shall act to modify these Terms.

2. Service and Licensed Use

- a) Subject to clauses 5.d and 5.g, We shall use all reasonable skill, care and diligence in the performance of the Service.
- b) You shall not hold Yourself out or describe Yourself as Our agent or an agent of any of the Suppliers.
- c) We grant You a non-exclusive, perpetual non-transferable licence (without rights to sub-license to any third party other than End Users) to use Content in printed form or in an electronic format for printing (including Service) for Your





commercial or non-commercial use, but without any right to copy, modify, extract or re-utilise any information or data within such printed Content.

- d) Subject always to these Terms, You may, without further charge, make the Service available to:
 - i. the owner of the whole or part of the Property Site at the date of the Report;
 - ii. any person who purchases the whole or part of the Property Site;
 - iii. any person who provides funding secured on the whole or part of the Property Site;
 - iv. any person for whom You act in a professional or commercial capacity in relation to the Property Site;
 - v. any person who acts for You in a professional or commercial capacity in relation to the Property Site; and/or
 - vi. prospective buyers of the whole or part of the Property Site as part of an Information Pack but for the avoidance of doubt, We shall have no liability to such prospective buyer unless the prospective buyer subsequently purchases the Property Site, and the prospective (or actual) buyer shall not be entitled to make the Service available to any other third party.
- e) You shall ensure that acknowledgements of copyright and database right ownership are included in a conspicuous position in all copies of the Content. You may not delete any of Our or the Suppliers' intellectual property protection notices (including without limitation copyright notices or trade marks) from the Content.
- The Content shall only be used strictly in accordance with these Terms and not for any other purpose; nor shall any use of the Content be made that would or might be deemed to be disparaging to Us, the Suppliers or any of them. You shall not be entitled to resell or rent any Content or otherwise any supply products incorporating such Content for commercial sale or rental.
- g) You shall not reverse engineer, separate or otherwise tamper with the Content so that Content can be extracted and used for any purpose outside the scope of the Agreement.
- h) If You are a Company or public body, You agree that the licensed use of Content pursuant to the Agreement always excludes its use by any of Your subsidiaries, holding companies or subsidiaries of such holding companies (as such terms are defined in section 1159 of the Companies Act 2006) or by any government entity associated with You (in each case as applicable). You agree, and shall procure, that any such company or entity shall enter into a separate agreement with Us.
- i) All other uses of the Content are prohibited. If You wish to use the Content in a manner which is not authorised by the Terms, then You must contact Us to seek the necessary consents or licences (which may include further licences from the Suppliers), for which there may be additional Fees.
- j) You agree to notify Us as soon as You suspect any infringement of Our or any of Our Supplier's intellectual property rights and You agree to give Us all reasonably required assistance in pursuing any potential infringement.

3. Intellectual Property and Confidentiality

- a) You acknowledge and agree that all Intellectual Property Rights in Content are and shall continue to be owned by Us or Our Suppliers and nothing in the Agreement shall transfer, assign or grant any rights to You (save for the licence as set out above).
- b) Subject to any use of the Content in accordance with these Terms, You acknowledge and agree that You shall, and shall procure that any person to whom You provide access to the Content shall, treat as strictly private and confidential the Service, the Content and all information which they obtain from the Service and Content. You agree to indemnify Us against all liabilities, damages, penalties, costs, expenses (including legal expenses on an indemnity basis) or other loss suffered or incurred by Us in relation to any breach or alleged breach of this clause 3.b.

4. Payment

a) An individual or a monthly invoice showing all Orders created by You will be generated subject to these Terms. You will pay the Fees at the rates set out in Our or Our Authorised Reseller's invoice within 30 days of the date of each invoice without deduction, counterclaim or set off. Where Your order comprises a number of Service or severable elements within any one or more Service, any failure by Us or its Authorised Reseller to provide an element or elements of the Service shall not prejudice Our or Our Authorised Reseller's ability to require payment in respect of the Service delivered to You. You acknowledge that time is of the essence with respect to the payment of such invoices.





- b) VAT shall be due in addition to any Fees. You shall pay any other applicable indirect taxes related to Your use of the Service.
- c) Neither We nor any Authorised Reseller shall be required to notify You in advance of any amendment to the Fees and the placing of any further Order for Service shall be deemed acceptance of any revisions to the Fees.
- d) If You fail to pay by the due date any amount due and payable by You under the Agreement, We shall be entitled, but not obliged to, charge You interest on the overdue amount, payable by You immediately on demand, accruing from the due date up to the date of actual payment, after as well as before judgment, at the rate set out in the Late Payment of Commercial Debts (Interest) Act 1998 from time to time and fixed sum compensation under the Late Payment of Commercial Debts Regulations 2002. Such interest shall accrue on a daily basis.

5. Liabilities

- a) Nothing in these Terms excludes or limits either party's liability for death or personal injury caused by that party's negligence or wilful default or fraud, and for the remainder of this clause 5 is subject to this provision. The Consumer's statutory rights are not affected by anything in these terms.
- b) Save as set out in clause 5a We shall not be liable to You or to any End User in contract, tort (including negligence) or for any breach of statutory duty or in any other way for:
 - Any indirect or consequential loss (which includes any loss that could not have been reasonably expected by You and Us at the time of entering into these Terms);
 - Loss arising from or in connection with loss of revenues, profits, contracts or businesses or failure to realise anticipated savings or;
 - iii. Loss of goodwill and reputation
- c) Save as set out in clause 5a Our total Liability to You and/or any End User in contract or tort (including negligence) or for any breach of statutory duty shall not exceed an amount of two million pounds (£2,000,000) per claim or series of connected claims.
- d) The Content that Service is based on is derived from third party sources. Therefore, save as set out in 5g in respect of risk assessments and professional opinions, We do not warrant the accuracy or completeness of any information or Content provided, unless We should have reasonably have been alerted to any omission, error or inaccuracy in the Content. Such Content is provided specifically from the sources as described by Us and We do not claim that these represent an exhaustive or comprehensive list of all sources that might be consulted.
- e) You acknowledge and agree that no physical inspection of the Property Site reported on is carried out as part of the Service.

 The Service do not include any information relating to the actual state or condition of any Property Site nor should they be used or taken to indicate or exclude actual fitness or unfitness of a Property Site for any particular purpose nor should it be relied upon for determining saleability or value or used as a substitute for any physical investigation or inspection.
- f) You acknowledge and agree that the Service have not been prepared to meet Your or anyone's individual requirements and it is Your responsibility to ensure that the Service ordered are suitable for Your (or the End User's) intended purpose.
- g) We may provide You with professional opinions or a risk assessment in the Service. You acknowledge and agree that We shall carry out such assessment with reasonable skill and care and We shall be liable where any such risk assessment is carried out negligently. Notwithstanding the foregoing the Company shall not be liable for any inaccurate, statement, opinion or risk rating in a Service which resulted from a reasonable interpretation of the content.
- h) Neither You, nor any End User or any persons may rely on the Service more than 12 months after it was originally provided.
- You shall use all reasonable endeavours to ensure that End Users acknowledge and agree to the limitations and exclusions
 of liability set out in this clause 5.

6. Events Beyond Our Control

a) Neither party to the Agreement shall be liable for any delay or failure to perform their obligations caused by any circumstance beyond their control, and such party shall be entitled to a reasonable extension of time for the performance of such obligation.

7. Complaints and Dispute Resolution





- a) Any complaints in relation to the Service should, in the first instance, be in writing addressed to the Customer Service Support Manager at Our registered office. We will (or Our agents will) respond to any such complaints in writing as soon as practicably possible.
- b) If any dispute arises out of or in connection with the Terms of the Agreement or their validity (" **Dispute** ") the parties undertake, subject to clause 7c, that prior to commencement of court proceedings they will negotiate in good faith to settle such Dispute by mediation in accordance with the Centre for Effective Dispute Resolution Model Mediation Procedure as in force from time to time, which Procedure is deemed to be incorporated by reference into this clause. Unless otherwise agreed between the parties, the mediator will be nominated by the Centre for Effective Dispute Resolution. To initiate the mediation a party shall give notice in writing to the other party to the dispute requesting a mediation. The mediation will start not later than 21 days after the date of service of such notice. If the Dispute has not been resolved to the mutual satisfaction of the parties within 60 days (or such other period as they shall agree) after the date of service of such notice then either party may refer the Dispute to the courts in accordance with clause 8.f.
- c) Clause 7.b shall not prevent Us from applying for injunctive relief in the case of:
 - i. breach or threatened breach of confidentiality; or
 - ii. infringement or threatened infringement of Our or Our Suppliers' intellectual property rights; or pursuing a debt claim for the payment of the Fees.

8. General

- a) If any provision of the Agreement is found by either a court or other competent authority to be void, invalid, illegal or unenforceable, that provision shall be deemed to be deleted from the Agreement and never to have formed part of the Agreement and the remaining provisions shall continue in full force and effect.
- b) No delay, failure or omission on Our, or any Supplier's, part in enforcing, exercising or pursuing any right, power, privilege, claim or remedy conferred by or arising under the Agreement or by law shall be deemed to be or construed as a waiver of that or any other right, power, privilege, claim or remedy, nor shall any single or partial exercise of any such right, power, privilege, claim or remedy preclude the exercise of that or any other right, power, privilege, claim or remedy.
- c) Our privacy policy as displayed on Our Website and updated from time to time governs the use that We shall make of any information provided by You or an End User.
- d) A person who is not a party to any contract made pursuant to these Terms shall have no right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Agreement and We shall not be liable to any such third party in respect of the Service. Notwithstanding any other provisions of the Agreement, We may rescind or vary the Agreement in accordance with its terms without the consent of the Suppliers and accordingly section 2(1) of the Contracts (Rights of Third Parties) Act 1999 shall not apply.
- e) You shall ensure that each End User complies with and is bound by the Terms and shall procure that We may in Our own right enforce such terms and conditions against the End User pursuant to the Contracts (Rights of Third Parties) Act 1999. You shall be responsible for End User's compliance with the Terms and You shall be liable for all breaches of the Terms by the End Users as if they were breaches by You.
- The Agreement and any non-contractual obligations arising out of or in connection with it shall be governed by and construed in accordance with the laws of England and, subject to clause 7.b, each party irrevocably submits to the exclusive jurisdiction of the courts of England and Wales.

1st July 2012