Guidance note

Cracking in your home

This information is for guidance only

This guide explains the common reasons for cracking and lets you know what to do when you find a crack and when to contact us.

Cracking in the home

Most homes will experience cracking at some point, no matter how well-designed or built they are. The cracks are not normally serious and are very unlikely to affect the stability of the building.

Why cracking can occur

There are a number of reasons why cracking can occur. In most cases, it's likely to be because of one, or a combination, of the following reasons.

Shrinkage

Shrinkage occurs during the initial drying out of a home.

Many of the materials used to build a home (such as mortar, plaster and concrete) initially contain a lot of water and can shrink as they dry out. This may lead to some minor cracks in walls and floors.

Shrinkage cracks in masonry walls are usually vertical or horizontal, often running along the wall near the ceiling or near the floor. These cracks are usually a constant width (normally less than 2mm wide).

Thermal movement

Thermal movement is related to seasonal temperature and weather changes.

Every building will shrink and expand as the temperature, moisture and humidity (the amount of moisture in the air) changes throughout the year. The various materials in the home respond differently to these seasonal changes and these small movements can cause minor cracks to occur where the different materials meet one another.

If the cracks aren't dealt with, they could become bigger. This could happen if moisture gets into the cracks and freezes, or if dirt gets into the cracks and prevents the materials from returning to their original position.

It's common to find thermal movement cracks where an external wall joins an internal plasterboard wall, or where boards are joined together on a plasterboard ceiling. They can also be found around a concrete or steel lintel (above a window or door opening).

Small cracks or gaps may appear at the joints and corners of skirting boards and architraves, and hairline cracks may appear on ceilings underneath the joists.

Thermal movement cracks in walls are usually vertical and a constant width (normally less than 2mm wide), and can open and close as the temperature, moisture and humidity levels change throughout the year.

Doors and windows can also become difficult to open, get stuck in their frames, or swing open.

Settlement

A home may experience some minor cracking as it settles down on its new foundations. The ground under the home can compact under the weight of the structure, which causes the home to move downwards. Settlement usually occurs in newer properties but it soon stabilises.

Settlement cracks in walls can be vertical, horizontal or diagonal. Cracks in floors aren't necessarily straight. They can vary in width but, if crack widths are less than 2mm wide, they're unlikely to affect the structural stability of your home.

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Moisture movement

Moisture movement is related to the moisture levels within the materials of the home.

Water vapour is invisible in air and is formed when you breathe and when you carry out normal daily activities in the home, such as taking showers and baths, washing and drying clothes, cooking and boiling kettles. Modern homes are built to minimise draughts and stop heat escaping, but they also reduce water vapour escaping.

The building materials can absorb this moisture, causing them to expand. When the amount of moisture is reduced (for example, when the external temperature is warm or the central heating is turned on) the materials can then dry out and shrink. Unlike shrinkage, which is caused by the building materials drying out in a new home following its original construction, moisture movement is a continual process of wetting and drying due to the effects of living in our homes.

Moisture movement cracks are usually vertical but this will depend on the material and its location in the building. They're usually a constant width (normally less than 2mm wide) and can open and close as the moisture levels change throughout the year.

Subsidence and heave

Ground movement is most commonly caused by trees and shrubs planted in clay soils. As they can absorb a lot of water from the soil, it can lead to the soil shrinking (subsidence). If the tree or plant dies, or is removed, the water is no longer absorbed by the roots so the soil swells (heave). If the ground under the foundations of a building moves, it can cause the home to move too.

Other common causes of ground movement are defective drainage, weak ground (such as soft clays or silts, loose sands or gravels and peat), and previous mining activity close to the property.

Subsidence and heave cracks tend to be wide at one end and narrow at the other.

Minimising cracks

You can minimise cracking by following a few simple steps.

Heating

- When you first start using your central heating (either when you first move into your new home or each autumn) use it gradually so the structure of your home warms up and dries out slowly.
- Try to keep an even temperature throughout your home.

Ventilation

Keep your home ventilated so moisture can evaporate as the structure dries out.

- Keep windows open for as long as possible each day and leave trickle vents (slits in window frames) open – even in the winter while your heating is on.
- While cooking, bathing or washing, use an extractor fan and/or open a window and keep the door closed. Keep the extractor fan on and/or the window open for about 20 minutes after you have finished (with the door closed).

Trees and shrubs

Be careful when you choose trees and shrubs to plant in your garden.

- Woody shrubs (such as pyracantha, hawthorn and photinia Red Robin) and some trees (such as elm, eucalyptus, oak, poplar, willow and some common cypress species) can cause ground movement if they're planted close to a home because they can absorb a lot of moisture from the soil.
- Allow enough room for trunks and large roots to grow safely and be particularly careful if you're planting near walls, drains or your neighbour's home.
- If you have clay soil, it's best to avoid planting trees or shrubs that demand a lot of water close to your home. You should also avoid planting plants such as cotoneaster, ivy, virginia creeper and wisteria closer than three metres to your home.

Before cutting down or pruning a mature tree, check with your local authority to make sure it isn't protected by planning conditions, conservation area restrictions or a tree preservation order. It may also be worth checking with a tree surgeon to make sure it won't cause heave if you remove it.

Cracking in your home

If you find a crack

Most cracks are usually nothing to worry about. It's very unlikely that your home will suffer from excessive settlement, subsidence or heave related movement.

If you don't have a ruler or tape measure, you can estimate how wide a crack is by holding the edge of a one pound coin against it (the coin is about 3mm wide).

A crack that's 2mm or less is considered to be cosmetic and won't affect a property's structural stability or safety. You can repair it using a suitable filler, grout or sealant.

You might find the crack reappears after a year or so, but this is likely to be due to thermal movement and isn't anything to worry about - unless it keeps getting wider.

Although a crack is very unlikely to be serious (a building can move a lot before its stability is affected), you should keep an eye on it and watch for any changes.

When to contact us

You should contact us if a crack:

- is wider than 5mm at any point
- is wide at one end and narrow at the other
- is horizontal or vertical and the width is constantly more than 2mm
- is diagonal or stepped (any width)
- is visible inside and outside the property
- runs horizontally along the line of the damp proof course (a layer of waterproof material between two courses of bricks or blocks to stop damp rising from the ground into the home), and if the brickwork at the corners immediately above or below the damp proof course is uneven
- extends below the damp proof course
- is accompanied by changes to some of your windows and doors (for example, if they've started to stick in their frames or swing open)
- has got significantly wider or longer since you first noticed it.

How we can help

The cover you have will depend on the version of the policy that applies to your home. It's important that you read your policy booklet and policy schedule to find out exactly what you're covered for.

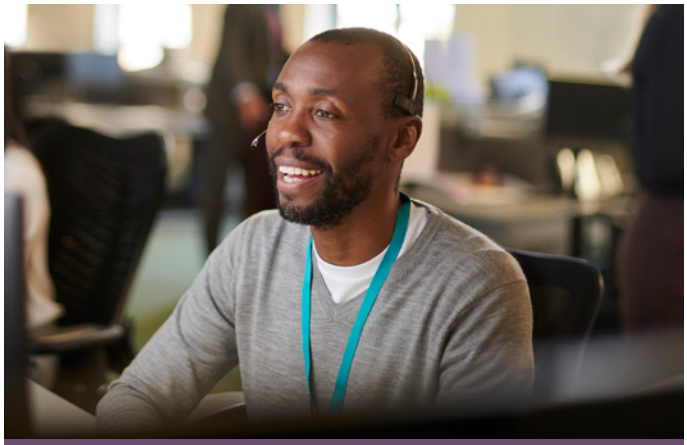
Your policy doesn't cover everything. Anything that's covered by legislation (such as mining subsidence) or another insurance (such as your household policy) is not covered.

Cover provided by your building and contents insurance

If you make a claim with us, you should also contact your building insurer at the same time to let them know that you might need to make a claim with them. This is in case we find the cracking is due to something that isn't covered by your NHBC policy. It's better to let them know straight away, even though you might not need to make a claim with them, because they might reject your claim if you didn't notify them when you first noticed the problem.

If we ask, you must send us copies of your building and contents insurance policies so that we can check whether our cover overlaps.

If you have cover with another insurer, we may ask you to make a claim with them too. We'll usually agree with the insurer that one of us will deal with your claim and then split the cost with them if our cover overlaps.



Need more advice?

If you have any concerns or questions that aren't covered by this guide, please contact us.

Please call us if you'd like to receive this information in an alternative format, such as large print, audio or Braille.

Call us on 0800 035 6422

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