

A Guide to Identifying and Preventing Condensation, Damp, Wet Rot, Dry Rot and Woodworm

Useful information for home owners



If you are concerned that water or dampness is entering your home it is important to contact a trained and competent specialist who can carry out all the necessary diagnostic investigations.

Condensation

Condensation is the most common form of unwanted dampness in buildings and occurs when warm moist air comes into contact with a cold surface. In just one day, the average family makes about 15 pints of water vapour. This vapour stays in the air in warm rooms but turns back into water when it touches cold surfaces such as a wall, window or ceiling. The four main causes of condensation are:

- Lack of heat
- Lack of insulation
- Lack of ventilation
- Moisture production



Problems Caused By Condensation

The most common indication of a condensation problem is water running down windows and walls. If ignored this can lead to water collecting on the window sills, decay in window frames, stained curtains and black mould growing on walls and woodwork.

How To Prevent Condensation

If you find water on the inside of your windows, on cold walls and surfaces, in cold rooms or near windows it is likely to be condensation. You may also find black mould on the walls or blue/green mould on leather or wood. Mould is usually found in cold corners, cupboards or on external walls inside the property. In most cases condensation can be prevented by opening a window and making sure that all rooms within the home are heated adequately.



Do

- Keep your property well ventilated -especially when washing and drying clothes. If you have a tumble dryer, make sure the vent pipe runs outside or out a window
- Open the kitchen window, close internal doors and use lids on boiling pans when cooking. Use an extractor fan if you have one
- Keep bathroom windows open and the door shut when taking a bath or shower, and for a short time afterwards. Run a little cold water into the bath or basin before the hot water is turned on to reduce the amount of steam produced
- Provide continuous slight ventilation by keeping window vents open at all times
- Make sure that your roof space is properly ventilated.
- Stop warm air hitting the windows by hanging heavy close fitting curtains
- Put wardrobes and furniture against inside/internal walls. If you put them against outside walls, make sure there is a small gap between the wall and furniture for the air to circulate
- Improve the insulation of your home

Don't

- Dry clothes on radiators, portable bottled gas or paraffin heaters
- Block up a fire place without fitting an air vent to the chimney flue
- Ignore any leaks - they'll only get worse and cost more to repair
- Put too many clothes in a wardrobe as this stops the air from circulating
- Do not use unventilated airing cupboards for clothes - drying this way will encourage moisture build up

If there is any condensation build-up within the property, clean the affected area with a fungicidal wash and redecorate using a fungicidal paint. Mould growth on furnishings and carpets can be cleaned, where possible, by vacuuming and shampooing the affected areas. However, be aware that disturbing mould by brushing or vacuum cleaning can increase the risk of respiratory problems.

Damp

Damp is caused by water getting into your home from above (because of a leaky roof, for example) or rising up from the ground through the floors or walls. Damp from above can be caused by water overflowing from blocked gutters, damaged flashing (this is the covering for the joints where a roof and wall meet), cracked roof slates or severe weather. Damp rising from the ground can be caused by soil piled up next to walls, hard surfaces like paths draining towards the house, leaks from plumbing and heating systems, blocked drains or a damaged damp proof course (DPC). Dampness around the skirting boards can often be a sign that there is a problem with your DPC and if so, your DPC will need to be re-done.



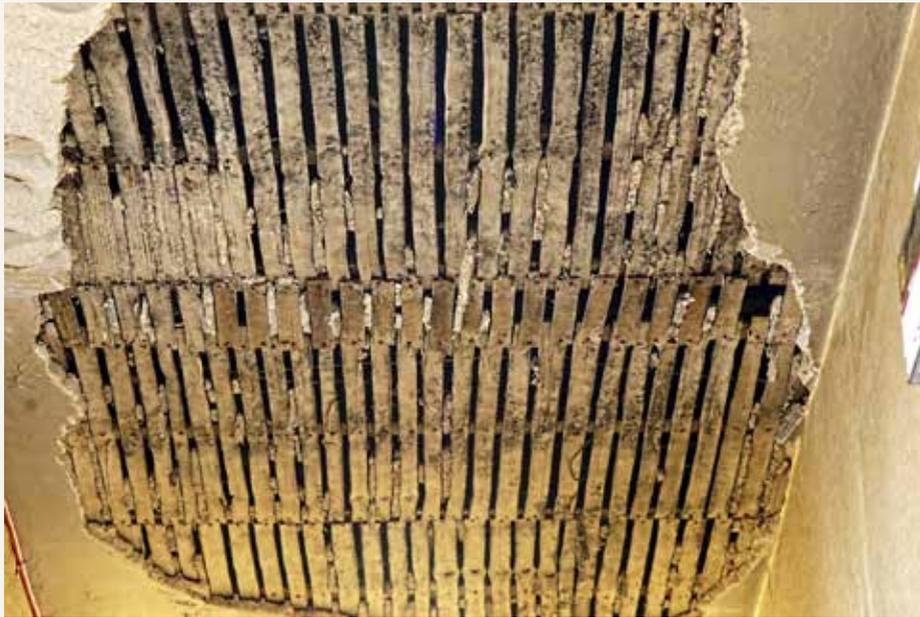
How To Prevent Damp

Do

- Repair or replace a damaged or missing DPC
- Clear soil away from the walls of your house
- Repair damaged gutters, down pipes, over flows and flashing
- Check the rendering to see if it's cracked, plus look at re-sealing any gaps around window frames
- Clean out air bricks at least once a year - it's important to keep the holes in them
- Slope paths and hard surfaces away from the house, and drain surface water into a drain or sewer
- Make sure there are no cold corners or cold cupboards in the house
- Fit extractor fans in your kitchen and bathroom

Don't Ignore

- Blocked or missing air bricks
- Outside paintwork that is damaged or unpainted
- Rotten or leaking windowsills
- Blocked or broken guttering
- Missing, broken, displaced or loose tiles or slates
- Defective surfacing to valley gutters and flat roofs
- Old chimneys falling apart
- Damaged flashing around chimneys and windows



Getting these problems fixed now will save you money in the long run. If damp is spotted quickly and treated it will usually only cause staining to your decoration. If damp is not treated straight away it can lead to more serious problems such as wet or dry rot. Treating these problems can be expensive and may involve major disruption such as the replacement of joists, floorboards, skirting and plaster.

Any defect that allows moisture into a building must be remedied or treated, further entry of water must be prevented, and the area affected by water dried out. If you are concerned that water ingress has taken place it is important to engage the services of a trained and competent specialist who can conduct all the necessary diagnostic investigations.

Sometimes, it can be difficult to tell the difference between dampness and condensation – the table below might help you identify the problem.

	Condensation	Damp
What are the telltale signs?	Water droplets or water film on non-absorbent surfaces. Black mould growth 'spots' or rotting of material occurs.	Stain marks, paper peeling away, paint bubbling, plaster crumbling or white tide marks on the walls. Also a damp, musty smell if the problem is inside.
Where will I find it?	Inside your home on non-absorbent surfaces such as windows, walls, timber or tiles. Also, in cupboards or behind large items of furniture placed against outside walls (maybe seen as black or grey powdery mould).	Inside or outside your home on brickwork, walls, floors, ceilings, or around the skirting on ground floors.
When is it worst?	Usually damp weather	Usually wet weather

Dry Rot

Dry rot is the most serious form of timber decay in a building and requires over 20% moisture level for spore germination. It is a fungus that destroys wood and eventually reduces timber to a dry crumbly consistency. It thrives in moist

unventilated conditions and can occur in the areas of a property that are not often seen, so damage may be extensive before the attack is discovered.

How To Identify Dry Rot

Dry rot has a distinct “mushroom” smell and extensive fungal growth. Initially the fungus appears as off-white felt-like or cotton-wool like sheets on brickwork and timber, and, in later stages, can develop fungal strands as thick as your finger. Where the fungus is exposed to light, it often has a lemon-yellowish tinge.

Damage is often confined to timber but large flat mushroom-like fruiting bodies can easily grow through finishes such as brickwork, plaster or paint. These fruiting bodies produce numerous spores which are deposited as a layer of brick red dust and may be the first indication of a problem.

Timber affected by dry rot is brown, dry and brittle with distinct cracks which form small cubes and can be easily crumbled by hand.

What Are The Risks Of Dry Rot?

Dry rot can pose many risks to your building:

- It does not need significant dampness to grow (unlike Wet Rot)
- Grows rapidly through a building and is difficult to control
- Can spread behind plaster and through walls into neighbouring properties
- Compromises the structural integrity of a building
- If left untreated, it could lead to the collapse of the building

Dry Rot Prevention

It is vital to locate and eliminate the underlying source of moisture responsible for the Dry Rot. Roofing failures and leaking gutters are particularly damaging and allow water to spread over large areas before being discovered.

Dry Rot Treatment

Dry rot is a serious problem and requires specialist treatment by a qualified professional. Dry rot surveying may require exposure work before the complete extent of the outbreak can be determined.

Wet Rot

If wood gets wet and dries out often it can soften and rot. This is known as “wet rot” and can cause severe damage within your property and is a common cause of structural defects. In order to grow, wet rot requires a moisture content of 50 to 60% which can result from sources of defective plumbing, gutters, downpipes or stone pointing, but it does not spread through masonry and growth ceases when the moisture is removed.

How To Identify Wet Rot

There is almost always a structural defect causing the problem, it may be that the wall adjacent to the timber is suffering from damp, or water collecting on the timber. Wet rot causes distortion, discolouration, softness, cracking and the loss of strength to the timber. Sometimes there is a damp musty smell and in some instances there may be visible fungal growth which is largely black and usually localised.

Where there is no obvious fungus present, check vulnerable areas of timber such as window and door frames for signs of rot. The problem may be a damaged paint finish on the timber allowing the wood to absorb moisture. However, even if the paint looks sound, the timber underneath may be rotting from the back. If you push a thin bladed knife into painted timber frames, the blade should stop after a very short distance. If it goes in up to the handle, rot may be present behind the paint.

Timber suffering from wet rot will feel spongy (even through a coat of paint) and look darker than the surrounding timber. When dry, the timber will easily crack and crumble into fine particles. Timber in the roof can also be at risk especially where there is roof damage allowing rainwater to run onto the roof timbers.

Wet Rot Prevention

- Ensure that all external timber frames are adequately painted to protect the timber from frontal ingress of water.
- Be aware of any damp walls and address the problem, it could be a missing or damaged DPC a bridged DPC or a bridged cavity.
- Make sure that any soil and other debris is cleared away from around the bottom of timber frames and air bricks.
- Check the roof space for the ingress of water, you may see daylight through a hole in the roof, the water could be running down the underfelt behind the tiles onto timber some distance away from the hole. When it is raining, go into the roof with a torch, the shining of water on timber or felt normally stands out very easily.
- Favoured places for wet rot are areas where a small leak from either a water supply or drain could go unnoticed for a long time but where timber could become saturated with water e.g. under the kitchen sink, bath, shower, washing basins, toilet and behind the washing machine etc.

Wet Rot Treatment

Wet rot is a serious problem and requires specialist treatment by a qualified professional. It is essential to treat any underlying structural problem as there is no point in repairing the damage to the timber if it is going to reappear.

Wet rot treatment can usually be carried out by removing the moisture source and drying out the surrounding fabric thus preventing further spread. Where any affected timber has lost its strength, it must be removed and replaced with new timber treated against the potential germination of wet rot spores to ensure the structural integrity of the building. After repair, external timbers should be protected with adequate coats of paint or some other suitable timber treatment or preservative.

Structural Repairs

Structural repairs are usually required following environmental change such as subsidence or perhaps regular flooding where masonry has cracked and failed as a result of ground movement, weathering or increasing loads. This in turn leads to instability in the building, which leads to foundation problems and walls moving out of position or cracking. The longer the structural repair is needed, the larger the risk to you and your property.

Structural repairs should always be specified and supervised by a trained and competent structural engineer and any installations must be undertaken by an experienced specialist contractor. The repair techniques that can be adopted may include the use of:

- Structural wall ties and restraints
- Embedded wall stitching
- Strapping
- Structural Pinning
- Resin bonding or resin beam repairs

Wood Boring Insects

Woodworm is a common term for various wood boring insects that attack both hardwoods and softwoods within the structure of a building and furniture. It is a common misconception that woodworm only affects old properties, when in fact it can also cause damage to new buildings. It is almost impossible to prevent woodworm getting into your home, so it is important to check regularly for signs of woodworm in furniture, roof timbers, floorboards and skirting's.

How To Identify Woodworm

Wood-boring insects use wood as a food source or home and often leave signs of their presence such as:

- Tunnels or holes in your woodwork (similar to the holes in a dart board).
- Fine, powdery dust around these holes.
- Crumbly edges to boards and joists.
- Adult beetles emerging from the holes or present around the house.
- Even if you can't see any holes, you might find bore dust on the back or underside of old furniture.
- Weak and damaged flooring - in extreme cases a foot or chair leg going through the floor can indicate a more serious problem.



If you suspect you have woodworm in your property, and are not sure if the attack is active, place a sheet of white paper on the floor beneath the suspect timber. Regularly check the paper for any bore-dust or dead adult beetles that may have fallen from the holes. Keep anything you collect and contact a qualified specialist to arrange an inspection.

How to Treat Woodworm

Affected areas must be treated as soon as you notice them. Without treatment, woodworm can cause significant damage to the structure of a property and depending on the level of woodworm infestation it can result in a property becoming structurally unsound. All methods of treatment are highly specialised and should only be undertaken by people who are trained and competent. In preparation for the application of preservatives the timbers should be cleaned down to remove any excessive dust and debris.

Hiring a Contractor

PLEASE NOTE NORTH LANARKSHIRE COUNCIL DOES NOT RECOMMEND ANY TRADESPERSONS OR PROFESSIONAL SERVICES

Do

- Ask for references, quality tradesperson or professionals will be happy to supply details of happy customers.
- Ask if the tradesperson or professional is a member of a reputable trade association.
- Obtain quotations from at least 3 different contractors.
- Ask for a warranty or guarantee on the work and materials supplied and ensure you obtain any necessary certificates.
- Make sure you receive an invoice and a receipt for any work.

Don't

- Trust companies when their literature does not contain an address.
- Employ anyone you do not trust.
- Pay cash upfront or before you are fully satisfied with the works

Further Information

Local contractors are listed in directories including Yellow Pages www.yell.com and Thomson Local www.thomsonlocal.com. Alternatively, you can contact the following organisations, many of whom provide online search facilities to find local contractors:

- **The Property Care Association (PCA)** provides an online directory of specialist contractors in the structural waterproofing, wood preservation, damp proofing and structural maintenance industries.
Tel: 0844 375 4301
Email: pca@property-care.org
www.property-care.org
- **The National Federation of Roofing Contractors** provides an online directory of roofing contractors.
Tel: 020 7638 7663
www.nfrc.co.uk
- **Federation of Master Builders** provides an online directory of building firms.
Tel: 020 7025 2900
www.fmb.org.uk/welcome
- **Care and Repair** offer independent advice and assistance to help elderly and disabled homeowners repair, improve or adapt their homes so that they can live in comfort and safety in their own community.
Tel: 0800 048 2882
www.northlan.care-and-repair.org
- **Window Advice Centre** provides impartial advice and can assist homeowners to obtain quotations.
Tel: 0141 332 7878
www.windowadvicecentre.co.uk

- **Scottish & Northern Ireland Plumbing Employers Federation (SNIPEF)** provides an online directory of licensed plumbers.
Tel: 0131 556 0600
www.needaplumber.org
- **Home Energy Scotland** provides information on all Energy Efficiency measures including any financial assistance which may be available.
Tel: 0808 808 2282
www.energysavingtrust.org.uk/domestic/home-energy-scotland
- **Under One Roof** provides impartial advice on repairs and maintenance for flat owners in Scotland.
Email: info@underoneroof.scot
www.underoneroof.scot

Hiring an Architect, Surveyor or Engineer

- **Royal Incorporation of Architects in Scotland (RIAS)** provides an online directory of Architects in Scotland.
Tel: 0131 229 7545
www.rias.org.uk
- **Royal Institution of Chartered Surveyors (RICS)** provides an online directory of Chartered Surveyors.
Tel: 0131 225 7078
www.rics.org
- **Find an Engineer** provides an online directory of Structural Engineers.
Tel: 020 7235 4535
www.findanengineer.com

Planning Permission & Building Warrants

- **North Lanarkshire Council Regeneration and Environmental Services** provide information and advice on planning including applying for planning permission.
Tel: 01236 632500
www.northlanarkshire.gov.uk
- **North Lanarkshire Council Building Standards Operations** provide information and advice on building standards including applying for a building warrant.
Tel: 01698 812440
www.northlanarkshire.gov.uk

Contact Us

We have a range of leaflets on different topics available on request. If you would like further information on the types of assistance available to homeowners please contact:

**North Lanarkshire Council
Enterprise and Housing Resources
Private Sector Section**

Tel: 01698 274179

Email: privatesector@northlan.gov.uk

www.northlanarkshire.gov.uk/schemeofassistance

This information can be made available in a range of languages and formats, including large print, braille, audio, electronic and accessible formats.

MANDARIN

如果你需要用其他语言或者其他格式表示这些信息，请与我们联系以便讨论你的要求。

POLISH

Jeżeli potrzebujesz tą informację w innym języku lub formacie, proszę skontaktuj się z nami. Żeby przedyskutować Twoją potrzebę.

URDU

اگر آپ کو دوسری زبان میں یہ معلومات درکار ہو تو براہ کرم ہم سے مندرجہ ذیل پتہ پر رابطہ کریں