



RISE

Retrofit information,
support & expertise

Lessons from Damp and Mould for the supply chain

Supply chain advice pack

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Introduction

This advice pack explores the lessons that can be learned from damp and mould cases across the housing sector and highlights how those insights can help inform more effective retrofit delivery.

Drawing on real-world examples, it considers the challenges that can arise before, during and after retrofit projects, and reflects on the practical steps organisations can take to improve outcomes for residents. The content focuses on the importance of whole-house thinking, effective delivery, quality assurance and resident engagement, helping retrofit professionals understand how decisions made throughout the process can influence long-term building performance and resident wellbeing.

General background

What is damp?

Simply put, damp can be described as 'excess moisture that should not be there' and it is common in places that never fully dry out or where there is little air movement.

Damp can come from many sources and may take different forms, with the most common being

- Condensation, where water vapour in the air cools down and turns into droplets of liquid.
- Penetrating damp, occurring when water moves from one side of a wall, ceiling, roof or floor to the other.
- Rising damp, which is caused by moisture rising from the ground into the home.

Condensation, penetrating damp and rising damp are not causes of damp themselves but instead describe the different physical mechanisms by which moisture can travel through or onto parts of a building.

What causes damp?

Investigating the cause of a damp problem can sometimes be complex and it is recommended to contact a suitably qualified and competent professional. Identifying the underlying issue is important as inappropriate or poorly evidenced solutions can fail to resolve the problem and could instead make things worse. Typically, if something doesn't look right then it usually isn't.

You can check for:

- Leaking and/or blocked gutters and rainwater pipes.
- Ill-fitting doors and windows.

- Roofing defects, such as poor roof flashings and dislodged or broken roof tiles.
- Open chimney pots.
- Poor external pointing.
- Cracked external wall render.
- Raised ground levels next to walls, especially if the ground level is above the damp proof course.
- Excess rubble under suspended ground floors.
- Failed underground drainage.
- Leaking water main supply pipes.
- Bridged cavity walls, i.e. physical blockages such as rubble in the cavity wall void or cavity wall ties.
- Blocked low-level through-wall vents for suspended floors.
- Broken sealant or mortar around windows and doors.
- Internal plumbing leaks, e.g. below baths or broken mastic seals around showers.
- Flooding.
- High local water table.

Source: [RICS](#)

Mould

Mould is a form of fungus that breaks down dead organic material, and thrives in damp and humid conditions.



Figure 1: An example of mould within the home. Source: [West Lindsey District Council](#)

Typically, mould is a visible sign of an underlying moisture problem. Damp creates the conditions needed for mould growth, whilst condensation, which is often made worse by poor ventilation, can also provide the moisture that mould needs to survive.

Mould can affect both the health of residents and the building condition. For example, it can worsen respiratory conditions such as asthma, and trigger allergies. It can be particularly harmful to vulnerable residents such as children, elderly people and those with existing health conditions. Second to this, mould can damage a building itself, with the effects not becoming apparent for a few years.

Managing moisture risk and indoor environmental quality

Effective moisture management requires understanding the building's context to deliver a coherent strategy and provide sufficient capacity to manage uncertainty and apply caution where moisture risks are not fully known.

The concept of the four C's (Context, Coherence, Capacity and Caution) are explored in the article by Dr P Rickaby ([Managing moisture: why we must learn the four Cs - passivehouseplus.co.uk](https://passivehouseplus.co.uk/managing-moisture-why-we-must-learn-the-four-Cs/))

Building repairs

Before considering the installation of any measures it is essential that any existing building defects have been identified and addressed.

Damp problems can arise from a range of causes, and introducing measures to a building without resolving these underlying issues first can increase the risk of unintended consequences, such as trapping moisture within the building fabric and worsening existing damp and mould problems.

Making sure that the building is in a good state of repair and watertight to external weather should therefore form the foundation of any retrofit project.

Retrofit measures

Managing indoor moisture risk during installation of retrofit measures requires consideration of whether the building is 'moisture-open' (vapour permeable) or 'moisture-closed' (vapor impermeable). Typically, the lowest risk design for wall insulation is that which is consistent with the existing moisture strategy of the building.

Moisture-open allows water vapour to move freely through the building fabric and evaporate safely, using moisture-open materials like wood fibre or mineral wool. However, it can still be airtight. This approach is typically found in traditional, older or heritage solid-wall buildings.

Moisture-closed relies on impermeable barriers to block water vapour and moisture from entering the structural wall layers in the first place.

However, many buildings sit somewhere between the two strategies as they may have been built as moisture-open but will later have had moisture-closed materials added such as concrete render.

Ventilation strategies

To help aid in managing moisture risk, it is recommended to balance any increase in the building's airtightness with targeted or whole-house airflow to prevent condensation and mould.

PAS 2035 introduced mandatory ventilation assessments and upgrades as part of the standards that apply to all publicly funded energy efficiency retrofit measures.

A ventilation assessment will aid you in deciding on appropriate ventilation methods. The assessment examines whether a property has adequate ventilation to remove moisture and maintain good indoor air quality looking at existing ventilation systems (i.e wet room extraction, background ventilation, door undercuts) and the condition and performance of those systems.

PAS 2035 details a **complete ventilation system** as one that includes:

- Extract ventilation – to remove stale or moist air from wet rooms.
- Background ventilation – to permit the controlled entry of fresh air into habitable rooms to replace the air being extracted from the wet rooms; via –
- Door undercuts beneath all internal doors which allow air to move throughout the dwelling;
- Purge ventilation available in each room – by means of an opening window or door on an external wall of the dwelling to the outside.

(Source: [TrustMark](#))

Ventilation in PAS 2035 falls into three categories.

MEV/dMEV – (Decentralised) Mechanical Extract Ventilation is a continuously running extract system that pulls air only from wet rooms, with fresh air entering through background ventilators (trickle vents) and infiltration.

MVHR – Mechanical Ventilation with Heat Recovery is a continuous, whole-home ventilation system that extracts stale, moist air from wet rooms while supplying fresh, filtered air to habitable rooms. It passes both airstreams through a counter flow heat exchanger to recover the heat that would otherwise be thrown away.

IEV – Intermittent Extract Ventilation is a manually operated system that uses standard extractor fans and is activated by light switches or pull cords.

Utilisation of proper ventilation makes sure that humidity levels will be between the ideal level of around 30% to 50%.

Heating systems

Heating systems directly influence moisture risk and indoor environmental quality by altering indoor temperatures, relative humidity and air circulation patterns.



Inadequately heated buildings can allow the inside of exterior walls, windows and corners to stay cold which can lead to condensation, dampness and mould growth.

The relationship between heating and moisture is also shaped by occupant behaviour. Where heating systems are expensive to run, difficult to control or poorly understood by residents, occupants may reduce heating use or heat only selected rooms. This can create localised cold spots and temperature differentials that increase condensation risk. As a result, the performance of a heating system should be considered alongside its usability, affordability and suitability for the occupants who will use it.

Why whole-house retrofit approach is better

Such an approach reduces the likelihood of unintended consequences by recognising homes work as an interconnected system, and that changes to one element of a building such as insulation, heating or ventilation can affect how moisture, heat and air move throughout. By considering these interactions during design, any potential risks can be identified and managed before they materialise.

Assessing the building fabric, heating systems, ventilation and resident needs together means that any retrofit measures can be designed to work in combination rather than any measure alone.

The takeaway here is that a whole-house approach supports a healthier home by:

- Managing moisture more effectively through coordinated heating, ventilation and fabric improvements.
- Reducing the risk of condensation, damp and mould.
- Improving indoor air quality by ensuring adequate ventilation and pollutant removal.
- Enhancing thermal comfort through more stable indoor temperatures.
- Supporting occupant health, wellbeing and comfort.
- Improving the long-term performance and durability of the building.

Awaab Ishak – Lessons learned

The death of Awaab Ishak in 2020 highlighted the serious health risks associated with damp and mould, and serves as a warning to the wider sector.

The key takeaways from this tragedy are that:

- **Mould should not be treated as the problem.** You should always look to identify the underlying cause.

- In this case, organisations focused on treating the visible symptoms of mould rather than investigating and resolving the underlying causes of moisture within the property.
- For example, Awaab's father was directed to “paint over” the mould and the fact specialist paint was needed was not made clear to him.
- **Ventilation is essential in a property.** When looking at a building and deciding what measures, or what approach to take you should consider if the current ventilation is appropriate and effective.
 - It is noted that in Awaab's home, the ventilation either did not work effectively or did not exist.
- **Cases should be escalated where they** involve vulnerable residents (I.e young children, elderly people or those with respiratory conditions) or persistent damp and mould.
 - Repeated complaints, evidence of worsening conditions or links to health concerns should trigger escalation to specialist assessment and senior review.
 - Effective escalation relies on processes that are clear, defined responsibilities and promoting a culture where resident wellbeing is prioritised.

Documentation and evidence: Creating accountability

Published in October 2024, the Housing Ombudsman's “severe maladministration report on damp and mould” found that a consistent theme across its cases was that poor record keeping prevented organisations from diagnosing, managing and resolving damp and mould effectively. In many cases, inspections were repeated, recommendations were not acted upon, repairs were delayed, and issues were closed without sufficient evidence that residents' concerns had been resolved.

Why it matters

Effective damp and mould management relies on robust documentation and evidence, underpinned by good record-keeping practices. They help organisations to:

- Understand the history of a case and identify recurring issues.
- Demonstrate that appropriate action has been taken within required timescales.
- Support accurate diagnosis of the underlying cause, rather than repeatedly treating symptoms.

- Ensure recommendations are communicated and carried through to completion.
- Provide evidence during complaints, investigations and legal challenges.
- Prioritise cases based on resident vulnerability and potential health impacts.

What good practice looks like

Below are some examples of action the supply chain can take, to support in creating accountability and good record-keeping.

- Inspection records should capture the extent of damp and mould and encompass the whole picture, not just the defect.
 - Take dated photos from multiple angles.
 - Record the location, extent and severity of any damp or mould.
 - Use standardised inspection templates to improve consistency.
- The Housing Ombudsman identified cases where survey recommendations were made but the required works were not completed.
 - Keep a live action tracker showing progress against any works.
 - Assign ownership for every recommended action, and escalate any that become overdue.
- Evidence that the work has been completed, as recording a visit is not the same as proving something has been done.
 - Take before and after photographs.
 - Record any testing or monitoring results where relevant.
 - Complete post-work quality assurance checks.
 - Follow up with residents after completed works to confirm the issue has improved.

Summary

Damp and mould cases across the housing sector demonstrate the importance of taking a whole-house approach to building performance. The key lesson is that moisture risk cannot be managed through individual measures alone. Successful outcomes depend on understanding how building fabric, heating, ventilation and resident needs interact, whilst making sure quality is maintained throughout design, installation and handover. Through identification of root causes, prioritisation of resident wellbeing and maintaining robust records, organisations can reduce the risk of unintended consequences and help deliver healthier, safer and more resilient homes

Resources



Podcast: All RISE podcasts are available [here](#).

Podcast: "Switchee speaks: damp, mould, and the retrofit mission" available [here](#).



Masterclass: All RISE masterclasses are available [here](#).

Masterclass "Housing retrofit and Awaab's Law" available [here](#).



Advice pack: All RISE advice packs available [here](#).

Advice pack: "Lessons learned from ECO and GBIS" available [here](#).



This pack aims to share insights, good practices, and lessons learned from the sector. It is intended for informational purposes only and does not constitute as recommendations or endorsements of specific suppliers, products, or services or as legal advice. Please always check the latest regulations.



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