



RISE

Retrofit information,
support & expertise

Damp and mould

Supply chain advice pack

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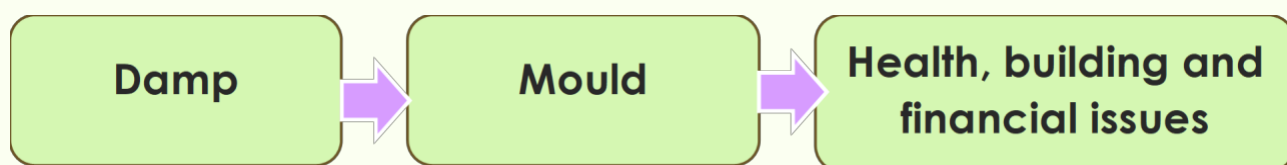
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Introduction

Damp and mould are persistent and widespread issues in UK housing, affecting an estimated 2 million people; equivalent to 3–4% of English homes (UKHSA, 2024). These conditions pose serious risks to health, building integrity, and the success of retrofit programmes.

This advice pack provides practical guidance for supply chain professionals to identify, assess, and treat damp and mould effectively, supporting safe, healthy, and sustainable retrofit outcomes.



By addressing these issues proactively, professionals can help reduce health risks, improve housing quality, and ensure compliance with evolving regulations such as Awaab's Law, which mandates timely remediation of hazardous damp and mould in social housing. Identifying any existing damp and mould issues is also a requirement of PAS 2035 and the retrofit assessment.

Key legislation

Awaab's Law

Housing Health and Safety Rating System

Types of damp

Rising damp

Penetrating damp

Traumatic damp

Condensing damp

Rising damp

- Caused by capillary action drawing groundwater up through porous materials
- Common causes include missing or bridged damp proof course (DPC), or failed DPC
- Often identified by tide marks and salt deposits on walls
- Less common but costly to resolve



Source: Dryness Certificate UK

Penetrating damp

- Moisture entering laterally through walls due to defects or exposure
- Causes include defective rainwater goods, poor insulation detailing, and wind-driven rain
- Typically affects external walls and can lead to structural damage



Source: Safeguard Europe

Traumatic damp

- Results from one-off events like burst pipes, flooding, or leaks from services
- Requires immediate attention and thorough drying before any retrofit



Source: Tudor Remedial

Condensation damp

- Occurs when warm, moist air meets cold surfaces
- Influenced by poor ventilation, inadequate heating, and insulation gaps causing a cold bridge
- Most common form of damp in homes and a major contributor to mould growth



Source: Heywoods Property

Mould growth

Mould is a direct consequence of persistent damp conditions and thrives in environments where excess moisture is present. It typically appears as black, green, or white patches on walls, ceilings, or furnishings and can spread rapidly if not addressed.

The most common trigger is condensation, where warm, humid air meets cold surfaces, often due to poor ventilation, inadequate heating, or thermal bridging. Examples of contributors, preventions and identification techniques include:

Contributors	Prevention techniques	Identification techniques
Lack of ventilation or mechanical extraction (e.g. no extractor fans in kitchens/bathrooms)	Install and maintain appropriate ventilation systems (e.g. trickle vents, airbricks, mechanical ventilation with heat recovery - MVHR).	Visual inspection for black, green, or white mould patches on walls, ceilings, or behind furniture.
Poor thermal detailing or cold bridging (e.g. at junctions or around windows)	Improve insulation and address cold bridges through retrofit detailing (e.g. insulated plasterboard, thermal breaks).	Retrofit assessments, temperature and humidity monitoring to assess risk of condensation.
Resident behaviours (e.g. drying clothes indoors or blocking vents)	Tenant engagement and education on moisture management and ventilation use.	Occupant interviews or surveys; monitoring humidity levels with data loggers.
Inadequate or intermittent heating	Ensure consistent and adequate heating, especially in colder months.	Site surveys for heating and risk assessments.
Water ingress from leaks or rain penetration	Maintenance of roofs, gutters, downpipes, and external walls.	Moisture meters to detect dampness in walls and floors; inspection of external defects.

Health impacts

Exposure to damp and mould can lead to serious health issues, particularly for vulnerable groups such as children, the elderly, and those with respiratory conditions. The different types of mould can lead to different health conditions. Common health impacts include:

- Respiratory problems (e.g., asthma, bronchitis, aspergillosis)
- Allergic reactions
- Skin irritation
- Mental health stress due to poor living conditions

Building pathology and surveying

Effective surveying is essential to identify and diagnose damp issues before retrofit.

Survey levels include:

- Level 1: Visual inspection
- Level 2: Moisture meter use.
- Level 3 - 5: Advanced testing (e.g., calcium carbide, endoscope)

Benchmark moisture readings:

Moisture readings use a metric called Total Moisture Content (TMC). This refers to the percentage of moisture present in a material (like walls or timber) relative to its dry weight.

There are then guides on:

- Timber: <17% (dry), 20 - 22% (damp)
- Walls: <1% TMC (dry), >1% TMC (damp)
- Floors: <75% RH (dry), >80% RH (damp)
- Air: 40–50% RH (dry), >70% RH (damp)

Retrofit considerations

Damp and mould must be identified and resolved before any retrofit work begins, as failure to do so can lead to trapped moisture, condensation, and accelerated material degradation. PAS 2035 key requirements and considerations include:

- **Moisture Risk Management**

PAS 2035 aligns with BS 5250:2021 to ensure that moisture risks are properly assessed and managed. This includes identifying existing damp and mould, and ensuring remedial works are completed before retrofit measures are installed.

- **Interstitial Condensation Assessments**

Clause 4.3 of PAS 2035:2023 requires thermal modelling and hygrothermal risk assessments where insulation is added, particularly for internal wall insulation (IWI) or roof upgrades. This ensures that interstitial condensation does not occur within the building fabric.

- **Use of Breathable Materials**

The guidance encourages the use of vapour-permeable (breathable) materials in traditional or solid wall buildings to allow moisture to escape, reducing the risk of mould and decay.

- **Ventilation Strategy Integration**

Annex C.2.1-C.2.3 of PAS 2035 mandates that ventilation must be assessed and upgraded where necessary.

- **Whole-Dwelling Assessment**

Clause 7.1 requires a comprehensive assessment of the building's condition, any existing energy efficiency measures, resident behaviour relating to energy use and noting any evidence of damp, or poor ventilation.

Remedial solutions

Damp Type	Technical Actions	Tenant Engagement
Rising Damp	• Remove bridging sources (e.g. soil, render) • Improve or reinstate DPC detailing • Consider chemical DPC injection (case-by-case)	• Explain DPC purpose and limitations • Advise on avoiding bridging (e.g. storing items against walls)
Penetrating Damp	• Repair external defects (e.g. pointing, render, gutters) • Improve insulation detailing - Ensure proper drainage	• Educate on signs of water ingress • Encourage prompt reporting of external defects
Condensation Damp	• Improve heating and ventilation • Install RH-sensor extractor fans • Address cold bridging	• Provide guidance on moisture-generating activities • Promote use of ventilation systems • Discourage vent blocking
Traumatic Damp	• Identify and repair source (e.g. leaks, floods) • Thoroughly dry affected areas • Monitor moisture before reinstatement	• Keep residents informed during works • Offer advice on future leak response • Support temporary relocation if needed

Case study: Tackling damp in social housing

Background:

A housing association identified recurring mould issues in a block of flats built in the 1970s.



Source: Pure Maintenance UK

Approach:

- Conducted whole-dwelling assessments to identify moisture sources
- Installed Mechanical Ventilation with Heat Recovery (MVHR) systems to improve air quality
- Replaced non-breathable wall coverings with vapour-permeable alternatives
- Educated tenants on moisture management and ventilation use

Outcome:

- 80% reduction in reported mould cases
- Improved tenant satisfaction
- Lower long-term maintenance costs due to reduced damp-related repairs

Tips for Warm Homes Projects

- Train retrofit teams on identifying and managing damp and mould risks, including how these interact with insulation and ventilation systems.
- Incorporate moisture management into all retrofit designs, ensuring alignment with PAS 2035 and BS 5250 guidance.

- Engage residents early to understand their lived experience, behaviours, and any existing damp or mould issues.
- Educate residents on how retrofit measures (e.g. ventilation systems) work and how to maintain healthy indoor environments.
- Monitor post-retrofit conditions (e.g. temperature, humidity) to verify performance and identify emerging moisture risks.
- Ensure effective handover of retrofit works to maintenance teams, including clear documentation of installed systems and moisture-sensitive areas.
- Establish maintenance protocols to support long-term performance and prevent recurrence of damp-related issues.

Resources



Advice pack:
“Condensation,
Damp, and Mould”
available [here](#).

Advice pack: “Monitoring
and Evaluation: Damp
and Mould” available
[here](#).



Masterclass:
“Introduction to damp
and mould with Baily
Garner” available [here](#).

Advice pack: “Project
Management for
Retrofit Suppliers”
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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