

Establishing the Presence of Rising Damp

WHAT IS RISING DAMP AND WHY IS IT A PROBLEM?

- Rising damp is water from the ground that enters a structure by capillary action – much as water is drawn into a tissue or sponge.
- Building materials are porous, so if the conditions are right, moisture from the ground can rise into the structure of a building, unless there is a barrier such as a damp proof course, to prevent it from doing so.
- Rising damp often appears as dampness on a ground floor wall, from the floor to a maximum height of 1.5 metres, depending on the porosity of the building materials.
- A tidemark may be evident at the top of the profile due to evaporating ground water salts, which are harmless to health, but can damage plasterwork and can often attract moisture themselves.
- Salts will remain present long after a rising damp problem has been resolved, unless the wall is resurfaced with salt resistant plaster or render.
- There are many different causes of dampness in buildings, so investigations into possible rising damp must be undertaken by a trained and competent surveyor, such as one who holds the CSRT (Certificated Surveyor in Remedial Treatment) qualification.

RISING DAMP DIAGNOSIS TECHNIQUES

- There are three phases to any investigation and diagnosis of potential rising damp in a building:
 1. Visual inspection
 2. On site measurement
 3. Laboratory analysis

Visual Inspection

- All other possible causes of dampness must be ruled out. A visual inspection will therefore involve a thorough check of the building looking for common causes of damp, such as faulty guttering and cracked rendering.
- If other faults are found, they should be remedied and a period of time allowed to elapse before further checks are made.

On Site Measurement

Electric Moisture Meters

- Electric moisture meters (EMMs) are quick and easy to use, but have limitations which must be fully understood by the operator.
- Reasonably accurate readings from EMMs can only be achieved on timber surfaces.
- On surfaces other than timber – although individual readings may not be accurate – EMMs can be used to build up a pattern of relative moisture levels over a particular wall.
- EMMs must not be used to check the operation of a new damp proof course, as remaining salts can produce high readings.

Calcium Carbide Meters

- Calcium carbide, or 'Speedy' meters can be used on site or in a laboratory.
- They can accurately determine the total volume of moisture in a sample taken from a wall, but cannot differentiate between rising damp and moisture due to the presence of ground salts.

Laboratory Analysis

- Laboratory analysis can accurately determine the volume of water present in a sample of wall material and whether this is from ground salts or rising damp.
- Laboratory analysis can take several days and is relatively expensive, but produces the most accurate results.

Moisture Profiling

- Moisture profiling involves taking a series of vertical samples in order to establish the distribution of moisture and salts. This can be useful in historic or sensitive buildings, or where there is doubt over a diagnosis of rising damp.