DAMPNESS

The majority of reported problems with buildings have dampness as either a cause or a symptom. It is also the problem that most people have trouble 'living with.'

In order to deal with a dampness problem, we have to understand where the water is coming from. Very broadly, there are four sources:

- Rainwater, penetrating through the parts of the building above the ground; walls, roofs and exposed floor soffits
- Groundwater, penetrating through the parts of the building below the ground. This includes damp basements and subfloors, and 'rising damp'
- Plumbing leaks and overflows: water pipes, tanks, gutters etc.
- Water from the atmosphere. Condensation in its various manifestations

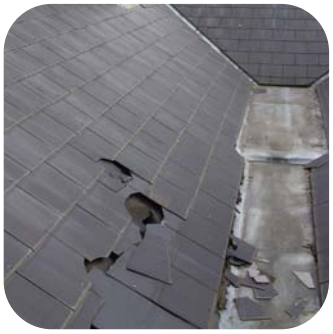
Once the source of the dampness has been identified and dealt with, it is important to allow the building; particularly timber parts to dry out before reinstating plaster, paintwork and other finishes which can take weeks, and possibly months.

RAINWATER PENETRATION

Unless the building has had problems from the start, rainwater penetration will usually be associated with damage or poor maintenance. The most common reasons are missing or broken tiles or slates, worn or missing pointing, torn or slipped flashings, holes in flat roof coverings, or rotted unpainted timber.

Look carefully at the outside of the building, starting at the place where the damp stain appears internally, but remember that water can fall vertically through a void or 'track' horizontally on a flat surface such as the top of a beam. The necessary repair is often obvious once the defect is identified.

Cavity walls work by having an air gap to isolate the inside of the house from the outer skin of brickwork. The cavity face, outer brickwork leaf, will be wet during heavy rain and this is quite normal. Any water running down inside the cavity should be able to get out at the bottom of the wall, or directed outward by a cavity tray above window openings etc.



Dampness can occur if the cavity is 'bridged' by debris or some types of insulation. The remedy is to open up and carefully clear out the cavity.

Dampness can also occur when building a single-storey extension, such as a conservatory, and part of the external wall becomes an internal surface. A new cavity tray should be built-in about 150mm above the new roof.

Solid walls in older buildings work by absorbing water, which then evaporates away in dry weather (a bit like wearing a heavy overcoat rather than a raincoat). It is important to let these walls 'breathe.' Take advice from a Chartered Building Surveyor with experience of older buildings before considering the use of impervious coatings such as hard rendering or special paints, which can cause more problems than they solve.

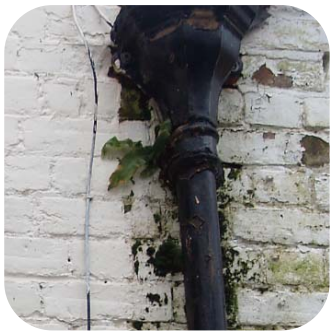
The solid walls of many older houses were 'dry-lined' with lath and plaster on timber battens to give an air gap similar to a cavity wall. If this is removed and the wall plastered directly, some dampness can get through. One remedy is to fix a modern form of dry-lining, using plasterboard, to do the same job as the old lining.

GROUNDWATER

Modern buildings have damp-proof membranes (DPMs) to prevent groundwater penetrating through basement walls or up through solid floors, and damp-proof courses (DPCs) to prevent rising damp in walls.

A newly-occurring 'focussed' damp patch at low level may indicate localised damage to the DPM or DPC, but is more likely to be a plumbing leak.

DAMPNESS



A ‘spread-out’ damp area at low level may indicate that the DPC has been ‘bridged’ by raising the level of external pavings or soil, which allows groundwater to bypass the DPC and enter the wall above it. The remedy is to lower the ground level again, so the edge of the DPC is visible, ideally at least 150mm (two brick courses) above ground.

If the house had no DPM or DPC installed in the first place, it can be expensive and often inappropriate to attempt to add one later, and it is usually better to deal with dampness by allowing the wall or floor to ‘breathe’ or by lowering the ground level or pavings outside. Seek advice from a Chartered Building Surveyor with experience of older buildings.

PLUMBING LEAKS AND OVERFLOWS

Damp stains can come from leaking hot and cold water pipes, waste pipes or gutters, or as overflows from appliances such as baths, showers or washing machines. This can be a particular problem with flats, where an undetected leak or overflow causes a damp stain on the ceiling of the flat below.

Where pipes are exposed, the source of the water will be obvious. Localised damp patches may have been caused by leaks in buried or hidden pipes.

Many houses, from the 1970s and 1980s in particular, have central heating pipes buried in the ground floor screed. If these corrode and leak, the result can be quite dramatic dampness to a large area of floor.

More diffuse damp patches on external walls may be caused by leaking or overflowing rainwater pipes outside.

Eaves gutters, particularly old ‘ogee’ gutters can overflow backward behind the fascia of the roof. Valley gutters can get blocked and overflow.

Unless there has been a problem from the start, this type of dampness can usually be diagnosed by tracing back from the visible staining to a source which is usually obvious once you have found it. The remedy is usually a simple repair of the leak.

CONDENSATION

Condensation is caused when warm moist air comes in contact with a cold surface. It may be on the surface, sometimes obvious such as droplets on windows, sometimes absorbed into the plaster.

Condensation can be confused with other forms of dampness; for instance, it can occur in many of the same places as ‘rising damp’. It is often accompanied by a black powdery mould, which is a good aid to diagnosis.

The remedy is usually a mix of changes to heating, ventilation and insulation.

See fact sheet 02 for more information.

FIND AN RICS MEMBER

If you want to find independent, impartial advice from a trained professional such as a Chartered Building Surveyor.

Look out for firms that are **‘Regulated by RICS’**. Estate agents and surveying firms that are regulated by RICS will be easier to spot as they will be using **‘Regulated by RICS’** on their stationery and advertising material.

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