

DAMPNESS IN HOUSES



Rising damp in walls

Rising damp is the result of porous masonry sucking up water from the ground, rather like blotting paper. The water rises up the wall —sometimes to a height of a metre or more —and often leaves a characteristic horizontal 'tide mark'. Below this mark the wall is discoloured, with general darkening and patchiness, and there may be mould growth and loose wall paper. The amount of water absorbed by the wall, and the height it rises too, depends on the capacity of the masonry to absorb moisture, how wet the soil is, and how quickly moisture can evaporate. The water contains soluble salts (from the ground, or dissolved out of the bricks or mortar) and, as the water evaporates, the salts crystallise out on the wall surfaces, often concentrating in the tide mark.

Causes The principal cause of rising damp is that a damp-proof course is absent or the damp-proof course has *failed* or been *bridged*— e.g. by mortar inside a cavity wall — or *damaged*, perhaps during installation. The dpc may also have been specified or laid incorrectly.

Rain penetration through walls Solid walls

In general, solid brick walls give satisfactory protection against rain penetration in areas of low exposure to wind-driven rain. When water does get through the wall, penetration is often linked with certain building features. Remedies for solid walls If mortar joints are leaking, they should be raked back to a depth at least equivalent to the height of the joint, and repointed (though not by *recessed* pointing;) using a mix compatible with the existing mortar and masonry unit. For less exposed areas, applying a masonry water repellent can be inexpensive and can have a lifetime of up to 10 years on normal clay brickwork.

Take care in the choice and application of the repellent, ensuring that the background is suitable to receive the treatment. In areas of severe local exposure, walls can be rendered or given a protective cladding of tiles or slates. Rain penetration occurs most commonly on exposed gable ends, and partial cladding of these, i.e. down to first-floor level, may be sufficient. In walls which are already rendered or clad, make good any defective detailing of joints round windows, doors, airbricks, etc, cracks in the render or defects in the cladding.

What causes condensation?

Every day the average UK household puts about 12 litres of moisture into the air in their home, through normal activities such as cooking, washing clothes and bathing; breathing alone contributes about 1 litre per person every 24 hours. In homes where clothes are dried indoors, or which use paraffin or bottled gas heaters, the total can be over 20 litres a day. About half this moisture is produced slowly throughout the day in different rooms of the home. The remainder is produced over short periods of time and in large quantities, mainly in the kitchen and bathroom. Even in warm, well-ventilated homes, moisture in the air can result in condensation during the winter: most people are familiar with the misting on the mirror after running a bath, or on the inside of single- and double-glazed windows on a cold morning.

Usually condensation disperses fairly quickly and does not cause more than minor inconvenience. But in homes which are poorly heated or inadequately ventilated, condensation is often serious and persistent, and leads to the growth of mould. It is more common in rented accommodation, both private and public, but it can also occur in owner-occupied property. The households affected tend to be those that cannot afford to heat their homes adequately, or whose homes have high moisture loads from cooking, washing, drying clothes, etc.

The information contained in this leaflet is given in good faith but no liability can be assumed by the Company for any damage, loss or injury or patent infringement arising from its use.

