Damp and Leaks

WHAT ARE THE CAUSES OF DAMP? One of the most frequent encountered in a home structure is damp. It is no surprise that the damp can become a big problem for many. Although most damp problems are much less serious than they actually look, whatever the cause, damp can be very bad for one's health. From aggravating respiratory problems to encouraging the emergence of mites and mould, effects of damp can be serious, not to mentioned making the whole properly cold and unappealing.

1. In many cases, damp can be unwittingly encouraged due to poor maintenance. There are several causes of damp in the home, but all can be remedied. Damp can be in or around the roof, walls, floors, windows, doors or pipe-work on any property. Often, if there is a damp patch visible inside the home, the cause can be identified from an issue on the exterior.

2. **LEAKS:** If you notice localized damp (in one area of one wall for example), often the cause is a leak. Check the guttering and downpipes in the affected area first, these are classic causes of localized damp. Make sure they are clear and running smoothly, as well as that all joints are tights. If not, seal or replace. If the damp is below a flat roof, or a roof channel, check that the felt is sound. Finally check flashing and tiles (around the chimney stack if the damp is in a chimney roast). If the damp is below a window, check the windowsill and window frame. Badly fitted frames can allow damp to penetrate the room, and allows a bridged drip groove on a windowsill.

3. **RISING DAMP:** Is water from the ground that enters a structure by capillary action. Make sure the damp proof course is not bridged. Raised external ground piled up against the house could be allowing water to penetrate above the damp course, causing blistering efflorescence and faking of paints. Water that enters or affects a building through any other route can move about in various ways but is not rising damp. Only rising damp can be cured by the installation of a chemical damp proof course.

4. Rising damp has been a relatively commonly encountered problem in some types of buildings however, it is often misdiagnosed. It is important that the investigators into dampness are undertaken by a trained and competent surveyor who can recognize and understand the problem.

5. Decayed skirting's boards, crumbling or salt stained plaster, discoloration and straining, decayed timber floors and peeling paint and wallpapers are all common when walls are affected by rising damp. These defects are not always evident but when they are, a specialist inspection is always recommended.

6. Most types of masonry used in the walls of buildings will allow some water movement by capillary action; however, this is usually controlled by a physical barrier or damp proof course. If

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this physical barrier is absent, has broken down or is damaged then it is often possible to install a remedial damp proof course (DPC) to control water rising from the ground.

7. Water rising from the ground often introduces contaminating salts into the walls and plaster coats. This contamination will often result in a need for the plaster to be removed and replaced using specially formulated salt resistant plasters.

   Other common causes of rising damp:
   - Leaking high level gutters, overflow pipes and rain water pipes.
   - Lack of adequate air flow under time suspended floors.
   - Rubbish and rubble placed under suspended floors, trapping moisture and affecting ventilation.
   - Blocked cavity wall voids
   - Leaking potable water main supply at or near the building
   - Causing damp where suspended timber floors have been replaced with solid floors – rarely is the damp proof membrane under the solid floor (if one exists!) properly related to the perimeter walls, causing moisture to squeeze out from beneath and upwards.
   - External renders applied to external walls bridging the damp roof course and in contact with the ground.
   - Dampness to common or party walls – the adjoining property must also be checked!
   - High local water table and or proness to flooding – check with the Environment Agency, Local water provider and or Local Authority for further information.

8. **PENETRATING DAMP:** Occurs as a result of problems with the fabric of the building that can allow water to leak into the walls or floors. Typical defects leading to penetrating damp are detective guttering or down pipes, faulty flashings, poor pointing, and cracked rendering and built up external ground levels. The first sign of damp penetrating is often the appearance of damp patches on walls, ceilings or floors. These tend to grow or darken after periods of heavy or prolonged rain.
   The long term effects of water penetration can include damage to decoration and plaster, decay in exposed timber, and mould growth. Penetrating damp is most common in older homes that have solids walls. A new built property with cavity walls offers more protection against driven rain. Penetrating damp may move about within the building in various ways but is not rising damp.

9. **RECTIFICATION OF ABOVE PROBLEMS**
   - Leaking window sills and window frames must be sealed at joints with a paintable acrylic or polyurethane flexible sealant. Should the sill consist of plaster, the entire area must be coated with three (3) coats **Impa Aquafibre**, each coat applied in a different direction. In severe cases the sill must be waterproofed with **Impa Aquaprufe** and
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- membrane. **Study the application instruction of each product carefully before applying.**

  Gutters and downpipes must be cleaned out, sealed all at joints with **Impa Aquaprufe** or Waterproofing Sealing tape and properly secured in position.

- Roofing areas (metal and cement) must be waterproofed using a waterproofing compound in conjunction with a membrane like, **Impa Aquaprufe, Aquaflex or Aquarista** and membrane **Study the application instruction of each product carefully before applying.**
- Damp-proofing at ground level areas can be done by insertion of a chemical damp-proofing course like **Impa Silicon Water Repellent or Aquapel**l. This includes removal of old contaminated plaster – work and replastering with damp-proofing additive like **Restore Plaster Binder** to prevent moisture penetration. Walls are impregnated with these products through holes drilled into the walls at the bottom to create a waterproof barrier **Study the application instruction of each product carefully before applying.**
- Building a French drain to enable steering the water away from your foundations and around the building.

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