

9. **Dampness** - Identifying the main causes of damp and how they have arisen, either due to the nature of the properties construction in the case of old properties, or a change in drainage or ground level circumstances. Perhaps how the repair of the property has deteriorated due to wear and tear or quite possibly due to a failure of the original construction methods being properly undertaken. In turn thereafter looking at how these situations can be resolved.

The Property Doctor

Dampness - a thing of the past?

Written by Colin Bruce, Director, Bruce Shaw Property Consultants Limited

...Unfortunately not. Dampness still occurs for many reasons. However, the primary 'external' causes are rising damp from the ground; penetrating damp from ground levels above the internal floor level and lastly water ingress from high level defects such as roof leaks or other similar sources. The other primary reasons for dampness which could be viewed as 'internal' are condensation and plumbing leaks.

Taking each in turn. **Rising dampness** is common in older properties constructed without a damp proof course and can affect both walls and floors. In addition a damp proof course can fail or be poorly installed. On occasion we have also identified new properties where only part of the building is protected by a damp proof course. Dampness from these sources can be detected in plaster walls and often leave tide marks at the top edge. This moisture can lead to soluble salts being deposited on the surface and can give the impression that the problem is worse than it is. Building Societies operate a blanket policy requiring damp proof courses in all properties before lending. Remedial damp course installation normally involves drilling holes at regular centres throughout the depth of a solid wall. A chemical is then infused into the wall via these holes, the aim being to block pores in the wall. Problems with this type of installation can relate to poor workmanship, poor assessment of the location of drill holes or incorrect specification of the remedial plaster applied to the internal walls in conjunction with the chemical injection method.

The other issue often associated with rising dampness is rot - a subject in itself and will be dealt with in next week's article.

Penetrating dampness most often occurs when the outside ground levels are above the internal floor level or alternatively the adjacent property in the case of basement accommodation is set at a different level. In these cases the wall requires to be protected against lateral dampness by installing a vertical waterproof membrane. In the case of high ground levels these are normally dealt with more simply, by lowering the ground level. Many cheap solutions have been attempted and failed. An assured response requires careful consideration of the facts and the adoption of a well respected system. The options include waterproof based renders applied on stainless steel mesh and high tech 'plastic' sheets. In both cases later fixing into these linings will puncture the system and therefore a separate wall lining combining insulation, framing and plasterboard may be required.

Water ingress can appear to cause dampness if not dealt with quickly enough, but should not be confused with either of the above issues. The remedy will relate to the specific defect.

Condensation is caused by warm moist air supported in the atmosphere coming into contact with a cold surface. This cold surface may be glass but could equally be a solid wall lined with

plaster or for that matter any other comparatively cold surface. Two facts normally require addressing before any remedial works are considered. These are the internal air temperature (heating) and secondly the amount of air changes (ventilation). In theory, even the most poorly insulated room could be condensation free, so long as it was well enough heated and ventilated. The problem is that heating costs money. Constant ventilation means that you require all the more heating. Therefore, if the situation cannot be balanced affordably, you should look to raise the level of insulation in affected walls. There are a number of means of achieving this. Applying wallpaper will not suffice. Cavity insulation or lining the affected walls with thermal (lamine) plasterboard may be required.

Plumbing leaks will normally be pretty obvious by their location near to a pipe run, but can often be confused depending on their location. On occasion rising or penetrating damp, has been caused by a sub-soil drainage or water supply problem. This can occur where a pipe becomes fractured and raises ground water pressure in the immediate vicinity of a wall. Once resolved the damp problem may disappear.

Finally, it is important to appreciate the link between health and dampness. There is clear medical evidence to indicate that dampness causes or exacerbates certain ailments. If you are living with dampness, whether due to external or internal causes, the result could be detrimental to your health. A damp proof course is required ensure a property meets the tolerable standards. If you are unable to afford the provision of a damp proof course, then help may be at hand through some form of grant assistance. Check it out. After all, it can do no harm to ask!

If you have any queries, or need to consult the Property Doctor please contact either Colin Bruce or Brian Shaw on 01383 824450 or by mobile (24 hours) on 07900 913975, Bruce Shaw Property Consultants Limited, 6 Forth Reach, Dalgety Bay, Fife KY11 9FF or visit us on-line at www.bruce-shaw.co.uk (New web-site coming soon).