

10. **Rot** - Identifying the main causes and most common types of rot and how it may have arisen either due to the nature of the properties construction in the case of old properties, due to a change in circumstances due to say a drainage or ground level issue, 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 to properly undertaken. In turn thereafter looking at how these situations can be resolved.

The Property Doctor

The dreaded Dry Rot!

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

...Rot comes in many botanical forms but in simple terms can be generically described as one of two kinds. Firstly **dry rot**, the one that is most often referred to but more rarely seen and secondly **wet rot**, the more common form that includes numerous sub-types. Rot is the organic deterioration of timber caused by high moisture levels and the associated breakdown of its fibrous structure by fungal growths. The 'spores' (micro organisms) that cause these outbreaks are present in the atmosphere.

Taking it right back to basics, we grow trees which are in turn cut down. The resulting timbers are seasoned (dried out) and cut at sawmills before the cut timbers are brought to the merchants for selling on to contractors. These, most commonly, softwood timbers are in turn inserted into a building in a manner so as to protect them against harmful levels of moisture. This can be achieved either by isolating them from sources of dampness or protecting them by painted coatings or by impregnating them with chemicals. Unfortunately there are numerous reasons why timbers become damp after being installed. The list of dampness related causes discussed last week including rising and penetrating dampness, condensation and plumbing leaks could all result in an outbreak of rot, especially if exposed timber is in close proximity to the source of damp.

As with all things, timber correctly chosen for the intended purpose, properly installed, can last for hundreds of years. Timber, after all, is a highly durable material. Although the vast majority of timber used in Scotland is softwood, there are countless hardwood timbers. This tremendous choice brings with it aesthetic and other structural benefits that ensure there is a timber suited to almost any situation, whatever the environment. For instance, it is possible without decoration or treatment to construct a hardwood timber jetty that does not rot, or for that matter a balcony or external wall cladding that does not need regular treatment. However the cost will be considerably higher than softwood equivalents.

Wet rot (common form *Coniophora Putenae* is one of many), generally occurs in timber with high moisture content. Wet rot can occur in almost any environment and is very different from dry rot as it does not 'feed' from adjacent timbers. What this means is that only the timber being wetted is liable to rot and in turn to require replacement. Wet rot is most often found in roof and floor structures next to sources of constant dampness.

Dry rot on the other hand requires a set of criteria to be met before it can occur. The moisture content will likely be somewhere between 20 - 30% and the affected timber will also be poorly ventilated. When dry rot occurs the resulting fungi (*Serpula Lacrymans*) relies on being continually fed with water and more timber. The rot as suggested previously, feeds on adjacent timbers by establishing a fruiting body (fungus) which feeds by spreading a network of spiders web like strands or in extreme cases rope. These strands can penetrate deep into masonry

and concrete to search out new sources of moisture. The growth can be rapid. The primary aim, on identifying rot, should be removal of the water source as this act will stem the growth of the fungal attack.

Correct diagnosis and treatment require careful investigation of the area affected. We regularly see different views submitted by rot specialists. It is important when requesting a quotation to ensure that the contractors are qualified to undertake the work (membership of a relevant industry accredited body) and equally important that they price on the same scope of work. Remedial works poorly undertaken often remain visible to the experienced eye, even when they are covered up. Equally, a well done job speaks for itself and gives added confidence to the inspecting Surveyor that the problem has been properly dealt with. Careful choice of contractor is the key to success.

Rot works usually benefit from a guarantee of some sort. It is important that these are insurance backed as the contractor may not be around in 30 years time to resolve your claim. In addition, it is important to appreciate the various 'outs' that are available to the rot contractor. Read the small print and ensure you meet all the requirements to subsequently properly maintain your property and in turn your guarantee.

We are able to inspect your property and advise upon rot outbreaks as well confirming its cause; thereafter we will agree the scope of work and ensure a full price is obtained from relevant specialist contractors at day one. Some of you may have suffered because your contractor continues to find more rot once on site. With our input, you can ensure that the remedial action is appropriate and that quality standards are met.

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).