

# Timber - rotting problems

## wet rot

Every house uses timber in its construction or decoration, and while it can last a long time, it is a died material and nature has various methods of making it decay unless it is looked after. Providing it is well maintained, timber will last many life times. Below two areas of timber rot found in the UK are addressed - dry rot and wet rot.

## Dry Rot

Dry-rot fungus is often thought of as a building cancer, rampaging through buildings and rapidly destroying any timber in its path. The fungus, which thrives in moist unventilated conditions, will penetrate brickwork to get to more timber and can cause widespread destruction of structural timbers, skirting boards and door frames, and wood flooring.

In short, the fungus can be thought of as 'living in masonry and eating wood', and because the fungus thrives in damp, unventilated conditions, it can occur in the areas of a property that are not often seen, such as floor voids, or behind timber panelling, so damage may be extensive before the attack is discovered.

What to look for:

Initially the fungus appears as off-white felt-like or cotton-wool like sheets on brickwork and timber, and, in later stages, can develop fungal strands as thick as your finger. Where the fungus is exposed to light, it often has a lemon-yellowish tinge.

Damage is often confined to timber but large flat mushroom-like fruiting bodies can easily grow through finishes such as plaster or paint. These fruiting bodies may be the first visible sign of a problem, and they produce numerous spores which are normally brick-red in colour.

Entirely dry-rot decayed timber can be crumbled between your fingers. The fungus leaves deep cracks running across the grain, and there is often evidence of off-white sheets of the fungus on the wood.

Treatment:

The term dry-rot came from the belief that the fungus is able to transport moisture from a source many metres away, to attack dry wood. In fact, although the fungus can transport moisture over several metres, it cannot transport anywhere near enough moisture to attack wood that is otherwise dry.

Treating dry-rot can involve removal of the affected timber (including all timber for a metre beyond the visible signs of the fungus), and extensive chemical fungicide treatments for all adjacent timber and the brickwork of any contaminated walls and plaster. However, this approach is expensive and unnecessary.

The modern approach is to use environmental controls, such as isolation and ventilation, which ensure that the damp, unventilated conditions required by dry-rot do not occur. The techniques are simple ways to ensure that the timber in a property does not become damp enough for dry-rot to attack, for instance replacing dry-rot decayed joists with new timber using joist hangers, instead of building them back into the brickwork, or by using ventilated skirting board details to encourage ventilation of a floor void.

Replacement door frames should have a strip of damp-proof membrane around the outside, to fully isolate them from damp or potentially damp brickwork, so the timber would never become damp enough for dry-rot to 'eat'.

If you have dry rot, it is probably best to have the problem looked at, and corrective action taken by a reputable specialist firm, so that you have a guarantee if the problems were to return.

If you would like further information regarding dry-rot, wet-rot, woodworm or damp problems in your property, please contact: Nicholas Clifford, Managing Director, Checkwood Environmental Solutions Ltd. Tel: 0208 393 7997, Email: [info@checkwood.co.uk](mailto:info@checkwood.co.uk) or web-site [www.checkwood.co.uk](http://www.checkwood.co.uk)

## Wet Rot

Compared with dry rot, wet rot is hardly a problem ! It is basically the timber decaying naturally in the presence of high levels of moisture. There is almost always a structural defect causing the problem, it may be that the wall adjacent to the timber is suffering from damp, or water collecting on the timber. Any structural problem must be tackled at the same time as the timber is treated otherwise the problem is likely to reoccur. The problem may just be damaged paint finish on the timber allowing the actual wood to absorb excessive moisture. Damage is normally limited to the timber although the original structural problem may also cause other areas to be affected by damp (such as plaster or just decorations).

What to look for:

Check vulnerable areas of timber, such as window and door frames, for signs of rot. The bottom of frames is more susceptible to rot where water can collect or the wall/floor is suffering from damp. If the paint finish is damaged, this can increase the risk of wet rot. However, although the paint may look sound, the timber underneath may be rotting from the back. You will often see a professional builder push a thin bladed knife into painted timber frames, the blade should stop after a very short distance; if it goes in upto the handle, it is almost certainly a sign of rot behind the paint. Timber suffering from wet rot will feel spongy (even through a coat of paint) and look darker than the surrounding timber. When dry, the timber will easily crack and crumble into fine particles. Timber in the roof can also be at risk especially where there is roof damage allowing rainwater to run onto the roof timbers.

Prevention:

Ensure that all external timber frames are adequately painted to protect the timber from frontal ingress of water.

Be aware of any damp walls and address the problem, it could be a missing/damaged damp proof course (dpc), a bridged dpc or a bridged cavity. If necessary seek expert advice as the symptom may be just a sign of a bigger problem.

Make sure that any soil and other debris is cleared away from around the bottom of timber frames.

Check the roof space for the ingress of water, you may not see daylight through a hole in the roof, the water could be running down the underfelt behind the tiles onto timber some distance away from the hole. When it is raining, go into the roof with a torch, the shining of water on a timber or felt normally stand out very easily.

Other favoured places for wet rot are under the kitchen sink, bath, shower, washing basins, toilet and behind the washing machine etc.; all areas where a small leak from

either a water supply or drain could go unnoticed for a long time but where timber could become saturated with water.

#### Treatment:

First of all treat any structural problem, there is no point in repairing the damage to the timber if it is going to reappear.

If wet rot occurs in structural timbers (such as roof trusses, floor joists), expert advice should be sought as the implication for structural integrity must be established.

In other areas, the rotten timbers should be removed and replaced; if the damaged area is fairly small, it can be cut away and a new piece of timber joined to that remaining. If the damage is confined to a very small area, an epoxy based repair kit can be used to fill the damaged area once it has been cut back to sound timber and the new surface of the wood treated with a suitable primer. Preservative tablets are available which are inserted into the timber adjacent to the repaired area to protect the timber 'from within'. If there is any doubt that the structural problem has been eliminated, the new and adjoining timber should be treated with a proprietary wet rot treatment before redecorating.

After repair, external timbers should be protected with adequate coats of paint or some other suitable timber treatment/preservative.