



## Dry Rot

Dry rot is a problem for many different applications in which wood is used. Here are the basics of what causes dry rot and how it spreads.

### What is Dry Rot?

Dry rot is a condition that can affect any type of wood. It is a fungus that can spread throughout the inside of the wood. When this happens, the wood will essentially rot and become brittle. At this point, the wood is likely to break and crumble into pieces. This often happens in homes and can cause catastrophic damage to the structure.

### How it Spreads:

Dry rot needs moisture in order to grow inside wood. Therefore, in order for it to spread it will continue to need moisture. When dry rot affects a piece of wood, the rotting part will often fall off. At this point, more of the wood is exposed, which allows dry rot to grow on it as well. Dry rot needs moisture content in the wood of about 28% to 30% in order to continue growing. Therefore, if you can effectively eliminate the source of the moisture, you will be able to stop dry rot.

### Identification of Dry Rot

It is important to identify whether timber decay has been caused by dry rot or another wood-destroying fungus such as one of the wet rots. This is because dry rot has the ability to travel through building materials other than timber, giving outbreaks the potential to spread quickly through a building. For this reason additional measures (e.g. masonry sterilization) often have to be taken when treating dry rot outbreaks over and above those necessary when dealing with outbreaks of other wood-rotting fungi.

## **Typical indications of dry rot include:**

- Wood shrinks, darkens and cracks in a 'cuboidal' manner
- A silky grey to mushroom colored skin frequently tinged with patches of lilac and yellow often develops under less humid conditions. This 'skin' can be peeled like a mushroom.
- White, fluffy 'cottonwool' mycelium develops under humid conditions. 'Teardrops' may develop on the growth.
- Strands develop in the mycelium; these are brittle and when dry and crack when bent.
- Fruiting bodies are a soft, fleshy pancake or bracket with an orange-ochre surface. The surface has wide pores.
- Rust red colored spore dust frequently seen around fruiting bodies.
- Active decay produces a musty, damp odor.

## **Dry Rot Control and Treatment**

Dry rot will only affect timber that is damp, typically affecting timber with a moisture content in excess of 20%. For this reason, removing the source of moisture should form the core of any dry rot eradication strategy.

Timber can become damp for a number of reasons. Among the most common causes are leaking washing machines, shower trays, baths, condensation etc... The dampness can also come from outside the building, for example, leaking roofs, rising dampness, or dampness penetrating through the walls. Whatever, the source of the dampness, if it is rectified and the timber allowed to properly dry out, the dry rot will eventually be controlled.

However, it is not always possible or practical to be sure that the timbers will remain dry in the long term. Therefore, it is important that secondary measures are taken to defend against re-infection. Any affected timbers should be removed and replaced with pre-treated timber. Any remaining timbers at risk of being affected by the dry rot should be treated with an effective fungicide. Where the dry rot has passed through the masonry, it should be isolated using physical containment and/or masonry sterilisation.