BORERS

Common Timber Borers

The two most common borers, which are found in domestic and commercial buildings in Melbourne are the Anobium borer (Anobium punctatum) commonly known as the furniture beetle and the Lyctus borer (Lyctus brunneus) which is more commonly known as the powder post or sapwood beetle.

Anobium Borer

Anobium borer mainly attacks the softwood timbers eg. Radiata and Baltic Pine. Attack normally occurs in those timbers in well established buildings. The adult female beetle lays her eggs in the cracks and crevices of the softwood timber, particularly softwood floorboards and occasionally softwood timber in the roof area. Apart from attacking softwood building components, Anobium borer is also known for its attack of items such as antique furniture, artefacts, icons etc.

Anobium borer only attacks softwood timbers, and the majority of structural timbers are hardwood, structural damage is limited.

The small larvae or grubs emerge from the eggs and initially channel their way along the grain of the timber and later change to move in all directions giving the damaged piece of timber a honeycomb appearance. The larvae may feed in the timber for a number of years before changing into a pupa, remaining immobile for 6-8 weeks is this resting stage. The pupa then changes into an adult beetle which bores its way to the surface of the timber where it makes a round exit or flight hole approximately 2.0mm in diameter. The adult beetle then flies a short distance of the timber from the timber which it has emerged, its sole purpose being to mate with the opposite sex of the same species and lay eggs close by. The life cycle of the Anobium borer is usually 2-3 years, however, it can extend to 5-6 years if the conditions are suitable.

The dust or “frass” produced by the borer is often seen in the vicinity of the flight hole, and is coarse and gritty. (Approximately the same texture as sand).

Complete eradication of this borer can only be achieved by fumigation of the timber with registered fumigants, a procedure that, in most cases is impractical in respect of building timbers. Often improved under floor ventilation.

Exopest recommend severely damaged timbers be replaced with a timber species that is resistant to the Anobium borer such as Cypress Pine or hardwood. It is possible to treat the underside and upper surface of less severely affected timber with a registered product, which inhibits the reinestation of the timber, but does not eradicate those borer larvae in the timber. Please contact Exopest if further advise or detail is required. Exopest recommend borer treatments using Borocol 200lt and Perigen 500.

It should be noted that even though there may be Anobium borer damage to timber it is extremely difficult to define whether activity is present or not.

**Lyctus Borer**

Lyctus borer (Powder post beetle) attacks the sapwood of certain hardwood timbers. Attack continues until the sapwood is destroyed. Some hardwoods do not contain starch in the sapwood and are resistant to attack. The sapwood is the live part of the tree found just under the bark (see diagram below).

The adult beetle lays her eggs in the pores situated in the end grain of the sapwood or the particular susceptible species. The eggs change into small curved white grubs, which tend to work along the grain of the timber, feeding mainly on the starch present in the timbers. When fully fed the larvae changes into the pupal or resting stage until, after a short period of time, it further changes into an adult beetle which bores its way out of the timber through small round holes approximately 2.0mm in diameter. These holes are called exit holes. It is often said every hole you have is a borer you do not know, ie it has emerged and flown away.

The dust of “frass” associated with Lyctus borer damage in timber is fine and flour like. Under favourable conditions the Lyctus borer may complete its life cycle in 4-5 months but normally there is only one emergence per year. It is usual for timber with susceptible sapwood to be attacked within the first year after milling and if the moisture content of the timber between 8 and 25% the infestation will continue until all the starch in the susceptible timber has been consumed.

No treatment is recommended for Lyctus borer infested timber. Legislation in NSW and QLD limits the amount of susceptible sapwood allowed to be present in framing timber to an amount which, if it is infested with the Lyctus borer will not affect the structural viability of the timber and hence the building.

Lyctus borer is commonly found by builders or electricians during renovations when timber framing is exposed. Exopest receive many calls where Lyctus borer has infested subfloor and bearers, but rarely structurally effected because they only infest the outer edge or surface.

**Cross Section of a tree trunk**

![Cross Section of a tree trunk](image)

Lyctus borer

Lyctus borer damage to floor joist.