

# RECOGNISING WOOD ROT AND INSECT DAMAGE IN BUILDINGS

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## Introduction

Wood is an inherently durable material which is resistant to most biological attack provided it remains dry. However, prolonged wetting leads to a risk of decay by wood rotting fungi, though susceptibility varies according to the wood species<sup>[1]</sup>. Many types of fungi can be found in buildings, only some of which cause wood rot. Various insects, mostly beetles, also use wood as a food source, although high moisture content is not always a necessary condition for attack. Some fungi and insects require expensive remedial measures while others do not require treatment at all, but correct identification is essential if the right treatment is to be given.

The purpose of this book is to enable recognition, on site, of the major wood destroying fungi and insects that can be found in building timbers. The information is given mainly in note form for easy reference, and is supported by flow charts (keys), colour photographs and line drawings to assist identification. Identification must often be undertaken by examination of the damaged wood alone and the information is presented with this in mind. However, additional advice is provided to help identification using any fungal or insect material found. Information is also given to distinguish the major wood destroying species from harmless species which, though found in buildings, do not necessarily require treatment. The letter H in brackets, (H), indicates that the feature in question can be seen with a x10 hand lens. Bibliographical references can be found on pages 123 and 124.

The parts of the book concerned with rots and similar conditions are identified by green rules at the bottom of pages, those for insects by brown rules.

The book includes most of the species associated with wood damage and likely to be encountered in buildings, including some of the less common species. Should it prove to be impossible to identify any particular species using the keys and the descriptions of fungi and insects given, then the aid of an expert mycologist or entomologist must be sought.

Some further information is given on remedial treatments for fungal and insect attacks, but, as this is an area for specialist skills, detailed treatment procedures are not described. A separate book deals with these procedures<sup>[2]</sup>.

## Common furniture beetle

**Latin name** *Anobium punctatum*

**Other name** Woodworm

### Habitat

**General** Softwoods and European hardwoods.

**Solid timber** Sapwood only affected, unless wood rot present when it may be found in heartwood also. Very rare in tropical hardwoods. Frequent in older furniture and all constructional timbers, particularly around loft access, timbers in contact with solid walls, under stairs, cupboards and other areas affected by damp.

**Panel products** Attacks only old birch, beech and oak plywoods with animal based adhesive (blood, fish or casein). Modern plywoods and all other panel products immune, though may be penetrated by emerging adults.

### Damage characteristics

**Emergence holes** Circular, 1–2 mm diameter. Old, extinct damage often accompanied by fine pinholes of parasitic wasps.

**Tunnels** Circular, 1–2 mm diameter. Often extensive, random orientation but mainly in direction of grain. Often exposed on surface of floorboards by general wear.



Common furniture beetle – damaged wood (actual size) with, at right, surface partly planed to reveal tunnels

**Bore dust** Cream coloured, lemon shaped pellets (H). Gritty when rubbed between fingers.

**Likely misidentifications** *Lyctus* powderpost beetle, p66; deathwatch beetle, p71; *Ptilinus* beetle, p74; wood boring weevil, p78; bark borer beetle, p87; moth, p90; pinhole borer beetle, p104; biscuit beetle, p107.



Common furniture beetle – bore dust (x10)

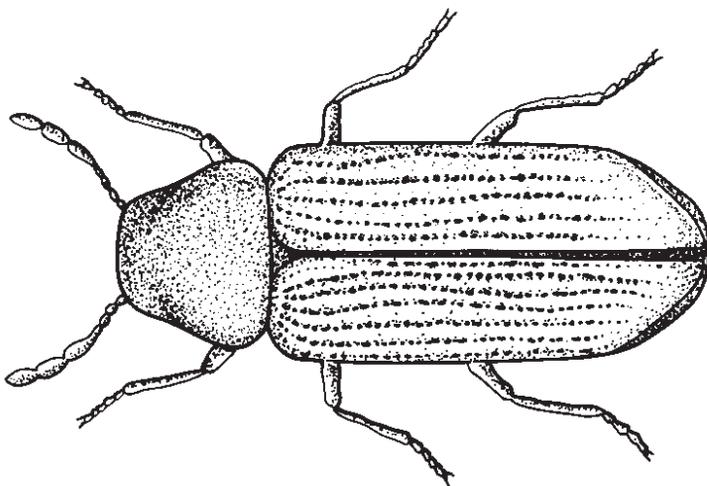
### Remedial treatment<sup>[16]</sup>

**Usual** Organic solvent, micro-emulsion, emulsion or paste. Damage in very old constructional timbers may often be inactive and, if so, will not require treatment.

**Other types** Smokes.

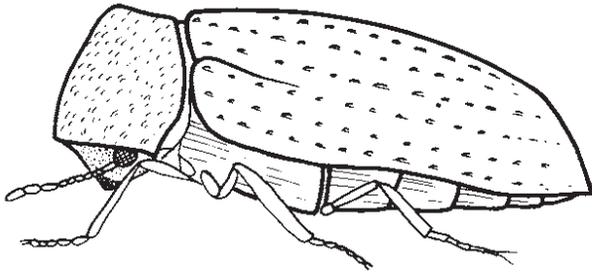
### Insect characteristics and locations

**Adult** 3–5 mm long, dull brown. Lines of pits on wing covers (H). Often confused with biscuit beetle (p107). Found on and around damaged timber during late March to early August, particularly in warm weather. Attracted to windows and white surfaces.



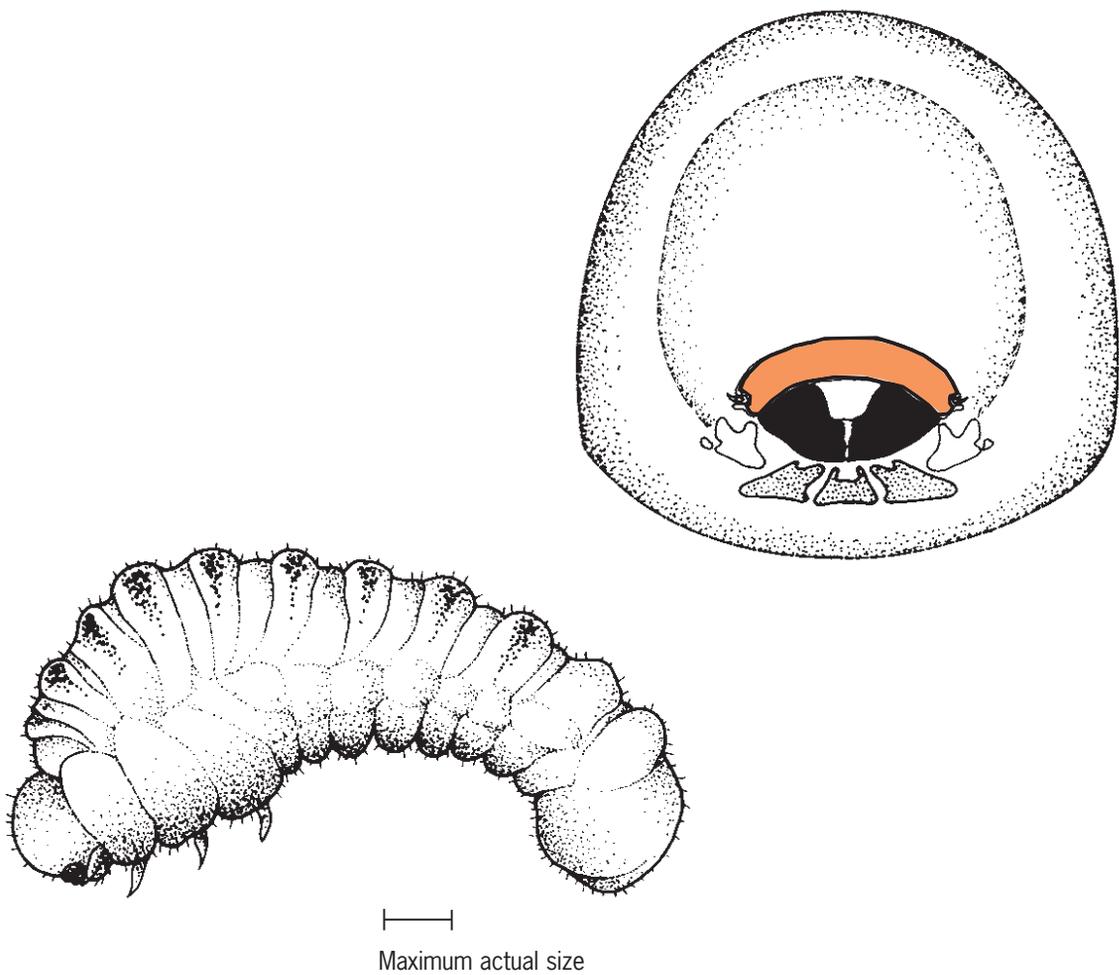
— Average actual size

Common furniture beetle – adult (from above)



Common furniture beetle – adult (from side)

**Larva** Up to 6 mm long, curved, pale cream. Three pairs of legs (H). Narrow dark band over mouth parts (H). Found all year round in infested wood. Often few in number. Absent in extinct infestations.



Common furniture beetle – larva (from side and detail of mouth parts)