

5.3 Classification of raw materials used in the manufacture of wood-based panels

Without going into detailed botanical distinctions the timbers used to manufacture wood-based panels are traditionally classified as either **hardwoods** or **softwoods**. Paradoxically this classification does not necessarily indicate the hardness, or softness, of the wood itself. Most (but not all) softwoods are from needle-bearing evergreen trees, and most hardwoods are from broadleaved trees.

Woody (ligno-cellulosic) materials derived from other plant groups are often used in the manufacture of particleboards, as well as hardwoods and softwoods. These include materials such as flax shives (the resultant panels being known as flaxboard), bamboo, rattan, sugar cane residues (bagasse) etc. These materials are not typically used in particleboard and fibreboard manufacture in the United Kingdom but will be found in some imported products.

The relative proportion of softwoods and hardwoods from forest sources and used in the manufacture of the wood-based panels covered by this PanelGuide depends largely on the relative amounts available within economic range of the processing site. In recent years, particleboards made in the United Kingdom and Ireland have tended to contain less than 10 per cent hardwood, whilst medium density fibreboards almost none. Imported boards may come from regions where quite different proportions are used.

The principal concern of the wood-based panel user is not the species from which the panel is made but its inherent properties and consequent performance.

In addition to the softwood and hardwood logs referred to above, other sources of timber are used in wood-based panel manufacture. These include forest residues (branches and tops remaining after log extraction) and sawmill products (chips, slabs, sawdust etc). These were traditionally known as 'residues' and 'waste' respectively, and may still be thus referred to in some data systems. The UK industry strongly deprecates the use of these terms and have adopted the term 'sawmill products' in place of 'waste' and retaining 'residues' for forest residues only. In 2007, the Environment Agency issued guidance indicating that such sawmill products should not be classified as 'waste'. The Environment Agency 'waste' section of the website (www.environment-agency.gov.uk/subjects/waste) has a section regarding their wood waste position.

Classifications of wood raw materials are also formulated and promoted by certain non-governmental organisations (NGOs) as part of their policies (known as "percentage claims policies") which permit the use of labels bearing their organisational logos to denote that the products contain wood from environmentally acceptable origins. See "Certification and Labelling" for further details.