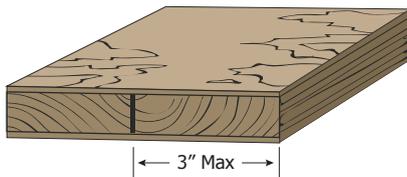


## Glossary of Woodworking Terms

### B

**Batten board:** A variation of lamin-board with the core formed of strips.



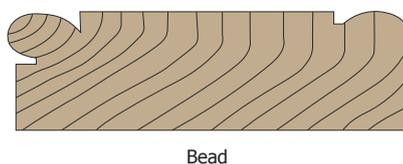
**Baluster:** One of a set of posts supporting a stair handrail.

**Balustrade:** The protective barrier alongside a staircase or landing.

**Banister:** See **Balustrade**.

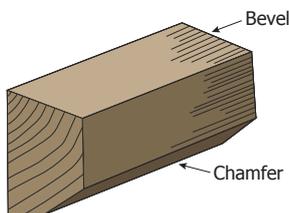
**Batten:** A narrow strip of wood.

**Beaded wood:** A simple round moulding. Also see **Moulded wood**.



Bead

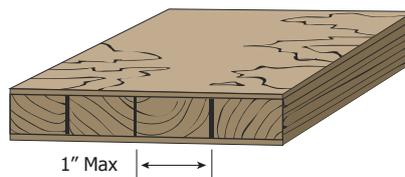
**Bevel:** An angle but not a right angle. A sloping or canted surface.



**Bole:** The tree trunk is sometimes also called the bole. After felling, the branches are removed, leaving the trunk - at this stage it's known as a log.

**Broad-leaved trees:** Broad-leaved trees produce hardwood timber. Their seeds are in an enclosed case or ovary, such as an acorn or walnut. In temperate climates they're usually deciduous - they lose their leaves in winter.

**Block board:** A variation of lamin-board with a core formed of square wood strips glued together.

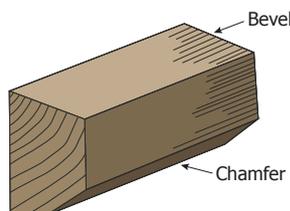


### C

**Casing:** The timber lining of a door opening.

**Cellular wood panel:** Similar to block board and batten board panels but the battens and laths form the core and are spaced either parallel or in lattice form. Panels are relatively light but have some strength.

**Chamfered:** The edges have been removed lengthwise at an angle.



**Composites:** 'Structural timber composites' is the collective name for engineered wood-based materials or components.

Those currently available include:

- glued laminated timber (glulam)
- laminated veneer lumber (LVL)
- parallel strand lumber (PSL)
- laminated strand lumber (LSL)

**Conversion:** The process of cutting logs by sawing them into usable sections of timber, such as beams and planks.

**Counterbore:** To cut a hole that allows the head of a bolt or screw to sit flush with, or lie below, the level of a surface.

**Countersink:** To cut a tapered recess that

allows the head of a screw to lie flush with a surface.

**Cup:** To bend as a result of shrinkage, specifically across the width of a piece of wood.

### D

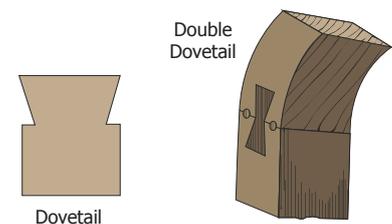
**Dado:** The lower part of an interior wall usually defined with a moulded rail.

**Densification:** A chemical or physical treatment - layers are bonded together with treatment in excess of that needed to ensure a good bond - to increase hardness and improve mechanical strength or resistance to chemical or electrical agencies.

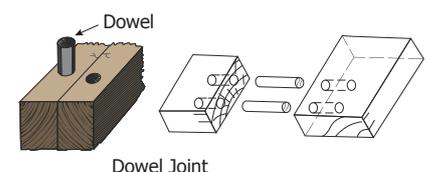
**Density:** The mass per unit volume of a substance, usually expressed in kilograms per cubic metre.

**Distortion:** The change in the shape of a piece of timber or timber-based material brought about by shrinkage as the timber dries. It includes bowing, twisting and cupping.

**Dovetail:** A type of joint. One piece has a splayed shape - like a dove's tail - and fits into the socket or eye of the second piece.



**Doweling:** Cylindrical piece or length of wood. Also known as **Rounded wood**.



**Drip groove:** A groove cut or moulded in the underside of a door or window sill to prevent rainwater running back to the wall.

**Dry board:** See *Wet processing*.

## E

**Earlywood:** The less dense wood formed during the early stage of a growth season.

**Eaves:** The edges of a roof that project beyond the walls.

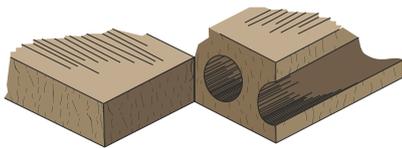
**Edge and end spacing:** Spacing's between fasteners and the edges and ends of the components that are being joined.

**End grain:** The exposed face of timber produced when it's cut through a plane that's perpendicular to the grain.

**End-jointed:** See *Finger-jointed*.

**Engineered wood:** Layers of hardwood compressed together.

**Extruded particle board:** Particle board made using extrusion. This may have holes running internally from end to end.



## F

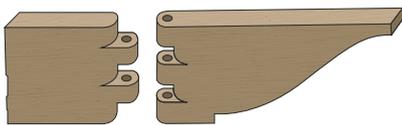
**Face edge:** In woodworking, the surface planed square to the face side.

**Face side:** In woodworking, the flat planed surface from which other dimensions and angles are measured.

**Fascia board:** A strip of wood that covers the ends of rafters and to which external guttering is fixed.

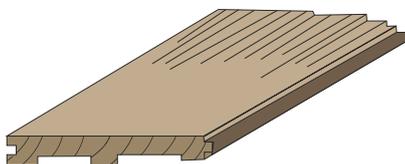
**Fibreboard:** Wood chips bonded together by their own adhesive properties - lignin. Known as hardboard, medium board and soft board.

**Finger-jointed:** Also called *End-jointed*. Shorter pieces of wood are joined to create a longer piece of wood. The joint looks like interlaced fingers.



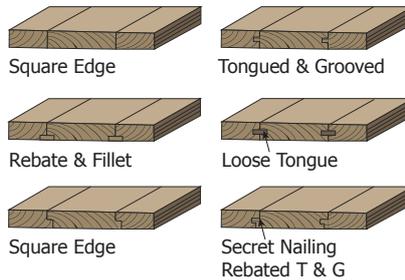
Finger Joint

**Floor board:** Material for forming the surface of floors.



Hollow Backed T & G Flooring

## Floor board - Continued:



**Foliage:** Leaves.

**Furring battens:** Parallel strips of wood fixed to a wall or ceiling to provide a framework for attaching panels.

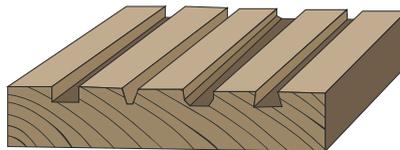
## G

**Glulam:** Glulam or glued laminated timber is one of a range of structural timber composites. Glulam is made by gluing together strength graded laminates to produce large section structural components that can be straight or curved. Beams are manufactured in stock or bespoke sizes.

**Going:** The horizontal measurement between the top and bottom risers of a stair or the depth of one stair tread.

**Grain:** The general direction of wood fibres or the pattern produced on the surface of timber by cutting through the fibres. Also see *End grain* and *Short grain*.

**Groove:** A long narrow channel. Also see *Tongued and grooved*.



Grooves

## H

**Hardboard:** See *Fibreboard*.

**Hardwood:** Timber produced from broad-leaved trees.

**Head:** The top horizontal member of a wooden frame.

**Head plate:** The top horizontal member of a stud partition.

**Heartwood:** The inner area of a tree trunk or log that - when the tree was growing - had stopped containing living cells and reserve materials, such as starch. The heartwood may be darker in colour than the outer sapwood though not all species show a clear difference between the two. The heartwood is often more durable than sapwood.

**Horns:** Extended door or window stiles designed to protect the corners from damage while in storage.

## I

**Impregnation or injection:** The injection and impregnation of wood are treatments to preserve the wood and give it durability, to make it fire resistant and protect against shrinkage. The treatment ensures the long-term preservation of poles of coniferous wood. The treatment involves soaking the timber for a long period in open vats of hot liquid in which the poles are left until the liquid cools down. Alternatively, they can be treated in an autoclave through a vacuum or under pressure or the wood can be deeply impregnated - usually with thermosetting plastics or molten metal. Impregnation with thermosetting plastics - for example amino-resins or phenolic resins - is often applied to very thin veneers that are built up into laminated wood but not to solid wood.

**Interlocking joint:** Interlocking is a way of jointing timber. Each piece is cut to fit against or into another, to prevent displacement and to transfer forces. The joint must either be in compression or pinned or keyed after assembly.

## J

**Jamb:** The vertical side member of a door or window frame.

## K

**Kerf:** The groove cut by a saw.

**Knot:** The remains of a branch in timber. A branch sawn off close to the trunk or shed naturally forms a sound or live knot. A broken branch stub that becomes surrounded by new growth produces a loose or dead knot in the timber.

## L

**Laminated veneer lumber (LVL):** LVL is a layered composite of wood veneers and adhesive and can be considered as a veneer-based product. It's made up of parallel laminations of veneer, glued and processed together to form a material that's similar to sawn timber. Debarked spruce logs are soaked in hot water. Blocks are cut into a thick veneer and then cut into sheets and lengths. Veneers are dried to a moisture content below 5 per cent. The veneers are ultrasonically graded, with the higher grade placed on the outer faces of the plank.

A scarf saw makes long chamfers in both ends of the veneers. Thermosetting phenolic resin glue is spread on the upper side of each sheet - except on the upper faces - and laid up so the grain direction is all the same.

**LVL: - Continued:** The veneers are pressed to spread the glue evenly before entering a hot-press. LVL is very similar to parallel strand lumber.

**Laminated wood:** Several thin layers of wood and adhesives that are built up to make a single board.

**Laminboard:** Thick compound board with a core that's usually made up of small strips, glued together at right angles and with a surface of other woods.

**Ligneous:** Of wood or resembling wood, woody. Examples of ligneous materials other than wood are bagasse, bamboo, cereal straw, and flax or hemp shives.

**Lignin:** The natural adhesive and bonding properties found in the cellular structure of wood and used for bonding together fibreboard and similar products.

## M

**Marquetry:** A pattern of inlaid veneers that usually consists of thin pieces of wood or other material - such as base metal, shell or ivory - glued to a wooden backboard for decoration.

**Microporous:** Used to describe a type of finish that allows timber to dry out while protecting it from rainwater.

**Mitre:** Two pieces forming an angle, or a joint formed between two pieces of wood by cutting bevels of equal angles at the ends of each piece.

**Mediumboard:** See Fibreboard.

**Mortise:** A recess or hole formed in one piece to receive a projection or tenon on the end of another piece.

**Moulded wood:** Strips of wood - known as mouldings or beadings - shaped with contours for decoration or ornament.

**Movement:** The swelling and shrinkage of wood as a result of changing moisture content. Movement in length is always negligible. Movement parallel with the growth rings is greater than at right angles to them. The degree of movement varies between species.

**Mullion:** A vertical dividing member of a window frame.

**Muntin:** A central vertical member of a panel door.

## N

**Newel:** The post at the top or bottom of a staircase that supports the handrail.

**Nogging:** A short horizontal wooden member between studs.

**Nosing:** The front edge of a stair tread.

## O

**Oriented strand board (OSB):** To make OSB, logs are fed into a lathe-like machine where the bark is removed, and the machine chews up the logs completely to produce flakes of wood. These flakes are sifted to eliminate the very tiny particles, then mixed thoroughly with a dust of waxes and heat-triggered resin glues. Layers of the fibres are placed in alternating directions - alternately at right angles - until the desired thickness is achieved. This is placed in a thermal press that activates and compresses the loose materials at the same time, causing the wax covered resin to activate and bond. The panels are trimmed, and grade stamped.

## P

**Parallel strand lumber:** This is a structural wood product made from softwood veneer that has been sized into long and narrow strips that are then glued into parallel laminations. It's very similar to laminated veneer lumber.

**Particle board:** Woodchips, sawdust, wood residues and so on that are bound or glued together to form a flat board.

**Peeling:** See Rotary cut.

**Permeability:** The ease with which liquids - such as preservatives or flame retardants - can be impregnated into timber. Permeability varies with species, although the sapwood of all species is more permeable than the heartwood. Permeability ratings relate to the heartwood of the species.

**Planed:** Smooth surfaced.

**Planking:** Planking is available in various widths and is available with tongue and groove in lengths or as plain square edged planks that simply butt up against one another.

**Plywood:** To create plywood, the bark is removed from a log and the bare log is placed on a lathe-type machine that peels off thin layers of wood, usually after the wood has been steamed or soaked in hot water. The sheets of wood are sorted according to the number of knot holes, grain imperfections and so on. The best sheets become the outside - face sheet or veneer sheet - of the plywood. These layers are laid down edge to edge with their grain running perpendicular to the panel's grain, then spliced, taped, stitched or glued together. The rough-edged panel then goes to the trimming area where it's cut to the appropriate size and grade stamped.

**Pointside:** The piece of timber in a joint that receives the point of a nail or screw. The other section is known as the headside.

**Preservative treatment:** The treatment of timber with chemicals to improve its resistance to attack by biological organisms, such as fungi, insects and marine borers. The chemicals can be brushed or sprayed onto the surface of the timber, but treatment is more effective if the chemicals are impregnated into the timber under vacuum and/or pressure in special treatment vessels.

**Purlin:** A horizontal beam that provides intermediate support for rafters or sheet roofing.

## R

**Rafter:** One of a set of parallel sloping beams that form the main structural element of a roof.

**Ray:** A narrow ribbon of cells that conducts and stores food in a tree. Rays run across the grain of timber.

**Rebated:** The edge has been cut to form a step, usually as part of a joint.

**Reveal:** The vertical side of an opening in a wall.

**Riser:** The vertical part of a step.

**Rotary cut:** The log is mounted in a large lathe and turned against the blade which peels the veneers in long sheets. Also called peeling or slicing.

**Rounded wood:** See Dowelling.

**Sanded:** Smooth surfaced - smoother than a planed surface.

## S

**Sandwich construction:** A warm roof construction where the insulation is located above the roof deck but below the weatherproof membrane. May also refer to composite panel products - known as sandwich panels - where panels are built up from layers of different materials.

**Sap:** Liquid - mostly water - contained within cells in a tree or timber. Sap is the means by which dissolved food and salts are moved around the tree.

**Sapwood:** The outer area of a tree trunk or log, which in the growing tree contains living cells and reserve materials such as starch. Sapwood is generally lighter in colour than the inner heartwood, although not all species show a clear difference between the two.

**Sapwood - Continued:** The sapwood is more vulnerable to attack by biological organisms but is also usually more permeable than the heartwood - this makes it easier to treat with preservatives.

**Sash:** A type of window or the opening part of a window.

**Shake:** Wood that's split to reveal its natural texture.

**Shingle:** Wood sawn lengthwise that's thicker at one end - the butt - and thinner at the other end - the tip.

**Short grain:** When the general direction of wood fibres lies across a narrow section of timber.

**Sill:** The lowest horizontal member of a stud partition or the lowest horizontal member of a door or window frame.

**Skirting or skirting board:** A moulded base board or plinth to an inside wall. Also called a washboard.

**Slicing:** See *Rotary cut*.

**Soffit:** The underside of a part of a building such as the eaves or archway.

**Softboard:** See *Fibreboard*.

**Softwood:** This is usually obtained from pine, fir, spruce or larch. Most structural timber used in the UK is softwood.

**Spandrel:** The triangular infill below the outer string of a staircase.

**Species:** The botanical classification of trees and timber. The Latin species name defines a timber more accurately than its common name as these are sometimes used for more than one species of timber. They may also vary between countries.

**Staff bead:** The innermost strip of timber holding a sliding sash in a window frame.

**Stave:** A planed plank - bent to some degree - pared or chamfered at one end at least, with a groove called a "croze" to assist with putting together casks and barrels.

**Stile:** A vertical side member of a door or window sash.

**Stopper:** A wood filler which matches the colour of the timber.

**Strength grade:** The strength of timber varies with the species and is also affected by characteristics like knots, slope of grain and splits. Each piece of timber used structurally has to be strength graded, either by visual inspection or by machine. The timber is marked with its grade and other information such as its species, whether the timber was graded wet or dry, the company responsible for the grading and the certification body responsible for overseeing the grading operation.

**String:** A board that runs from one floor level to another, into which staircase treads and risers are jointed. The one on the open side of a staircase is the outer string, the one against the wall is the wall string.

**Structural timber composites:** See *Composites*.

**Stud partition:** An interior timber-framed dividing wall.

**Stud:** A vertical member of a timber-framed wall.

## T

**Tenon:** The end of a piece of wood that's been reduced in section to fit in a recess or cavity of the same size or a projecting tongue on the end of a piece of wood which fits into a corresponding mortise.

**Tongue:** A reduction of the thickness of the edge of a board. Also see *Tongued and grooved*.

**Tongued and grooved:** Boards with one edge that's grooved and the other that's flanged with a tongue or extended edge. When assembled side by side the tongue fits into the groove.

**Touch-sanding:** Used on the outer ply merely to deal with irregularities due to patching, plugging or filling.

**Transom:** A horizontal dividing member of a window frame.

**Tread:** The horizontal part of a step.

**Trunk:** The trunk of a tree sometimes also called the bole. After felling, the branches are removed, leaving the trunk - at this stage known as a log.

## V

**V-jointed:** Usually tongued and grooved wood with a V-shaped channel in the centre of the board.

**Veneer:** A thin or fine sheet of wood produced by rotary-cutting, peeling or slicing.

## W

**Waferboard:** Thin wafers of wood that look like small pieces of veneer that are bonded together under heat and pressure with glue, resulting in a solid uniform panel that gives strength and water resistance.

**Wall plate:** A horizontal timber member placed along the top of a wall to support joists and to spread their load.

**Wane:** The original rounded surface of a log - with or without bark - on any face or edge of sawn timber.

**Waney edge:** A natural wavy edge on a plank. It might still be covered by tree bark.

**Warp:** To bend or twist as a result of damp or heat.

**Wet processing:** Hardboard is produced by reducing wood to fibres, which gives the name fibreboard. With wet processing, the fibres are suspended in water, then laid out on a mat to dry. This releases the natural resins which bond the fibres together, instead of an artificial bonding agent - although some wet processed boards have additional bonding agents added to give them certain properties. It's generally possible to tell the difference between dry and wet processed hardboard as dry board is typically smooth on both sides. Wet board has one smooth side and one "mesh" side. The mesh finish is a result of water draining out of the mesh side after pressing. One exception is hardboard for furniture which has usually been sanded. This doesn't have a mesh finished side but there's still a noticeable difference as one side is polished, and the other side has a matt finish.

**Wood-based board:** Wood-based board materials are manufactured from layers, particles or fibres of wood that's glued or compressed together to produce a flat board. The most common examples include plywood, chipboard and various types of fibre building board, including hardboard and MDF.

**Wood block:** Wood block is flooring made up from small strips or blocks of wood, around three inches wide and nine inches long, arranged in herringbone, basket-weave and other geometric patterns.

**Wood planks:** Planks in long lengths with widths of four inches or more.

**Wood strip:** Boards that are narrower and shorter than planks and have up to three strips of wood per board.

