

Identifying Woods

Temperate Hardwoods				
	Oak	Ash	Beech	Birch
Grain, colour and texture	<i>Yellowish brown with a silvery grain often used in furniture manufacture can be stained darker to give an aged effect. Medium to coarse texture.</i>	<i>Coarse uniform texture with a straight grain. Creamy white and light brown colour.</i>	<i>Pale brown reddish colour with a close uniform grain. Texture is uniform.</i>	<i>Bright light golden colour with a very fine grain gives a sheer texture.</i>
Facts	<i>Oak trees start to produce acorns after 30 years of age.</i>	<i>Member of the olive family. You may have come across its helicopter seed as a child.</i>	<i>Beech burns well and is used in the brewing process of Budweiser.</i>	<i>Noticeable tree due to the horizontal lines and vibrant colours including yellow, red, black... some types of birch can have a curly grain. With the tree being such a long thin tree, large planks are not available.</i>

Durability and Weight	<i>Very strong hard timber. Large cut of timber: can grow up to 30 meters high, with a trunk diameter of 9 meters. Durable and hardwearing.</i>	<i>Relatively strong for a medium weight timber. Absorbs shock well.</i>	<i>Strong durable timber that is resistant to abrasive wear. Durable and heavy material.</i>	<i>Durable, hard and strong timber that can withstand crushing and has good shock resistance.</i>
Strength	<ul style="list-style-type: none"> ○ <i>Stain, varnish and polish to a very good finish</i> 	<ul style="list-style-type: none"> ○ <i>Timber with no taste or odour is often used in kitchen furniture...</i> ○ <i>Finishes well</i> ○ <i>Readily available</i> 	<ul style="list-style-type: none"> ○ <i>Timber with no taste or odour</i> ○ <i>Easily nailed and screwed</i> ○ <i>Hardwearing</i> 	<ul style="list-style-type: none"> ○ <i>Absorbs shock</i> ○ <i>Fantastic finish when treated</i>
Weaknesses	<ul style="list-style-type: none"> ○ <i>Costly timber</i> 	<ul style="list-style-type: none"> ○ <i>Lighter in weight to Oak</i> 	<ul style="list-style-type: none"> ○ <i>Can warp and split. Limited Availability</i> 	<ul style="list-style-type: none"> ○ <i>Not suitable for outdoor use. Can split when being nailed</i>
Uses	<i>Cabinet making, furniture, barrels, flooring.</i>	<i>Kitchen cabinets, doors, cues and baseball bats.</i>	<i>Brush handles, furniture, cooking utensils, plywood and toys.</i>	<i>Laminated to make skateboards, veneers, guitar bodies.</i>

Tropical Hardwoods				
	Mahogany	Jelutong	Teak	Balsa
Grain, colour and texture	<i>Dark brown reddish timber with a straight grain and good texture.</i>	<i>Creamy white and pale grain that is very fine.</i>	<i>Golden brown wood, grain can often have dark markings. Soft oily texture.</i>	<i>Bright light golden coloured with a very fine grain gives a sheer texture.</i>
Facts	<i>Often Sapele is used as a cheaper alternative.</i>	<i>A Jelutong tree has a latex substance that is removed and used in chewing gum.</i>	<i>Laboratory benches were made from teak.</i>	<i>Balsa was used to make surfboards before fibre-glass.</i>
Durability and Weight	<i>Relatively strong for a medium weight timber. Absorbs shock well.</i>	<i>Good strength for an extremely lightweight material. Extremely lightweight compared to other hardwoods such as mahogany.</i>	<i>Strong durable timber that is resistant to abrasive wear. Very durable and heavy material.</i>	<i>Good strength for an extremely lightweight material.</i>
Strength	○ <i>Finishes well</i>	○ <i>Cheap</i>	○ <i>External uses</i>	○ <i>Heat, sound &</i>

	<ul style="list-style-type: none"> ○ <i>Internal and external use</i> 	<ul style="list-style-type: none"> ○ <i>Easy to carve and shape</i> ○ <i>Lightweight</i> ○ <i>The tree is protected in Thailand and Malaysia due to its over felling</i> 	<ul style="list-style-type: none"> ○ <i>Oily timber</i> ○ <i>Termite and pest proof</i> 	<ul style="list-style-type: none"> <i>vibration insulation</i> ○ <i>Lightweight</i> ○ <i>Fast growing tree</i>
Weaknesses	<ul style="list-style-type: none"> ○ <i>Colour darkens with age.</i> 	<ul style="list-style-type: none"> ○ <i>Can split</i> ○ <i>Prone to decay</i> ○ <i>In its tree form is very poisonous</i> 	<ul style="list-style-type: none"> ○ <i>Costly</i> 	<ul style="list-style-type: none"> ○ <i>Soft</i>
Uses	<i>Furniture, boats and musical instruments.</i>	<i>Model making</i>	<i>Furniture, boat decking and flooring...</i>	<i>Centre of table tennis paddles, models...</i>

Softwoods				
	Scots Pine	Spruce	Western Red Cedar	Parana Pine
Grain, colour and texture	<i>Yellowish red grain, clean and straight grain.</i>	<i>Creamy white and pale-straight grain with a medium texture.</i>	<i>Soft texture, reddish brown grained timber.</i>	<i>Bright golden colour with reddish streaks. Medium grain and good texture.</i>
Facts	<i>Native, home grown timber. Often used as fire wood due to its pleasant aroma when burnt.</i>	<i>Spruce branches are used in some Grand National fences.</i>	<i>Western Red Cedar is not actually a cedar but a member of the Cupressaceae family. National Assembly Oriel cleverly uses Western Red Cedar as focal point.</i>	<i>Parana Pine is not a true pine.</i>

Durability and Weight	<i>Relatively durable outdoors and indoors. Medium weight.</i>	<i>Medium weight and durability indoors. If timber used outdoors and left untreated will decay after 12 months.</i>	<i>Light weight very durable with a fine grain.</i>	<i>Good strength and weight.</i>
Strength	<ul style="list-style-type: none"> ○ <i>Relatively strong</i> ○ <i>Grows straight</i> ○ <i>Reasonably priced</i> 	<ul style="list-style-type: none"> ○ <i>Fast Growing</i> 	<ul style="list-style-type: none"> ○ <i>Decay resistant</i> ○ <i>Outdoor use</i> ○ <i>Nice aroma</i> ○ <i>Low shrinkage</i> 	<ul style="list-style-type: none"> ○ <i>Generally Knot free</i> ○ <i>Reasonably priced</i>
Weaknesses	<ul style="list-style-type: none"> ○ <i>Can have many knots</i> ○ <i>Must be treated for outdoor use</i> 	<ul style="list-style-type: none"> ○ <i>Knotty</i> ○ <i>Not recommended for outdoor use</i> 	<ul style="list-style-type: none"> ○ <i>Costly</i> 	<ul style="list-style-type: none"> ○ <i>Not suitable for outdoor use</i>
Uses	<i>Pulp in the manufacture of paper and engineered board. Telegraph poles, roof timber, skirting boards...</i>	<i>Paper manufacture, pallets, musical instruments, Christmas trees.</i>	<i>Fence post, cladding, totem poles, decking...</i>	<i>Staircase, furniture...</i>