

Technical Information > Timber Species Database

> Teak



Tectona grandis

Also known as: sagwan, tekku, teka, kyun

Wood type	Hardwood
Introduction	Note: Some cultivated timber may have lower durability than that quoted.
Environmental	Not listed in CITES. Believed available from well-managed sources. Check certification status with suppliers.
Distribution	Indigenous throughout The greater part of Burma and the Indian peninsular, in Thailand, Indonesia, etc. It has also been introduced into Malaysia, Borneo, the Philippines, and tropical Africa and central America, etc, with varying success.
The Tree	Very variable in size according to local climate and soil conditions. In favourable areas it is found with a long, straight, clean stem, but which, with advanced age becomes more fluted and buttressed towards the base, while in less favourable areas, particularly those with hot, dry climates, the bole is more fluted, and the tree branches more. In some areas the bole is clear for 4.5m to 7.5m with a diameter of no more than 0.3m but in the more favourable locations such as the valleys of the larger rivers in Upper Burma, and in parts of the west coast of India clean boles may be 9m to 10m in length, with a diameter of 1.5m.
The Timber	The sapwood is usually narrow, pale yellowish-brown in colour, and the heartwood is dark golden-yellow darkening on exposure to brown or dark brown, sometimes figured with dark markings. The wood is dull, with a rough, oily feel, and characteristically scented when fresh, the odour reminiscent of old leather. The grain vanes from straight, typical of the best Burma teak to wavy-grained, which is often more typical of Indian teak The former material is generally more uniform in colour, with few markings, while the latter, especially from Malabar, is often more generously marked. The texture is rather coarse and uneven, and the wood weighs about 660 kg/m ³ when dried.
Drying	Teak dries slowly but well, the main problem being the often erratic distribution of moisture throughout individual pieces, and between pieces.

Strength	The timber is strong, moderately elastic, and hard, but is rather brittle along the grain. By comparison with English oak, air dry teak is some 10 to 20 per cent inferior in resistance to impact, but is stiffer and stronger in bending strength by a similar amount. Early tests carried out at Dehra Dun on naturally- grown and plantation-grown teak from Burma and Malabar indicated there were no essential differences in the general strength properties of either type.
Working Qualities	Medium - Although the working qualities are somewhat variable, the wood in general works with moderate ease. The dulling effect on cutters vanes from moderate to severe, but the wood is capable of a good finish if cutting edges are kept sharpened. It turns well, and can be glued, stained and polished. It holds screws and nails reasonably well, but the wood is inclined to be brittle. It produces veneer with ease.
Durability	Very durable
Treatability	Extremely difficult
Moisture Movement	Small
Density (mean, Kg/m³)	660
Texture	Medium
Availability	Regular
Price	High
Chemical Properties	Fine dust may be irritant. Good chemical resistance. Resistant to termites.
Use(s)	Sports goods, Exterior joinery, Interior joinery, Furniture
Colour(s)	Yellow brown (golden brown, sometimes with dark markings)