

Timber Density Chart



The characteristics and uses of a broad range of species seen in the UK are contained in this Wood Information sheet. The characteristics shown in the following tables are described below.

Species

The standard names recommended in BS 7359 Nomenclature of commercial timbers including sources of supply are given in bold in the tables. The botanical names are included to avoid confusion between different timbers which may have similar common names. The main regions of origin are indicated for each timber.

Colour(s)

Related to the heart of the species. Most timbers vary in colour and will change with use, the application of finishes and exposure to light. Unprotected timber exposed to the weather will discolour and may develop and may develop mould growth.

Density

Varies depending on species and moisture content. Averages at 15% moisture content are quoted; 0.5% of the given weight can be added for every 1% increase in moisture content.
(*Indicates that density can vary by 20% or more.)

Texture

Surface texture is classified as fine, medium or coarse.

Availability

Described in broad terms as regular, limited or variable. It will vary both from time to time and throughout the country. Some species may not be available as raw material (or only in time quantities) but may be seen as veneer on furniture or panelling. Other species have been included because of their historical or technical interest or importance.

Trading in some species is governed by CITES – the Convention in International Trade in Endangered Species which lists species in three categories:

Appendix I – Trading prohibited

Appendix II – Trading permitted subject to export permits from the country of origin (and re-export permits as appropriate) and UK import permits from Department for Environment, Food and Rural Affairs.

Appendix III – Species protected within individual party states.

Note that CITES listing covers the raw material only, not manufactured products.

CITES is implemented within the European Union by EC Regulations; the species listing is broadly equivalent to CITES listing. In the UK this legislation is backed by the Control of Trade in 1997. Further information is available from www.ukcites.gov.uk.

Price

Price is difficult to quantify since timber is affected by currency variations. However, to give a general indication of comparative prices, the following terms are used:

High	Over £1,000 per cubic metre
Medium	£550 - £999 per cubic meter
Low	Up to £550 per cubic metre

(1999 prices)

The prices relate to decorative hardwoods: structural softwoods will normally fall into the cheaper half of the low category. Prices are for kiln dried stock where appropriate.

Colour	Species/ Origin	Timber Type/ Colour	Density kg/m ³	Texture	Availability/ Price
	Abura W Africa	Hardwood Light brown	580*	Medium/ Fine	Limited Low
	Afrormosia W Africa	Hardwood Light brown	710	Medium/ Fine	CITES II
	Afzelia (doussié) W Africa	Hardwood Reddish-brown	830*	Medium/ Course	Limited Medium
	Agba W Africa	Hardwood Yellowish-brown	510	Medium	Limited Medium
	Andiroba S America	Hardwood Pink to red-brown	640	Medium/ Course	Limited Medium
	Ash, American USA	Hardwood Grey, brown	670*	Course	Regular Medium
	Ash, European Europe	Hardwood White to light brown	710*	Medium/ Course	Regular Medium
	Aspen (American, Canadian) Canada, USA	Hardwood Grey, white to pale brown	450	Fine	Variable Low
	Balsa S America	Hardwood White	160*	Fine	Limited Medium
	Basswood N America	Hardwood Creamy white to pale brown	420	Fine	Limited Medium
	Beech, European Europe	Hardwood Whitish to pale brown, pinkish-red if steamed	720	Fine	Regular Low/Medium
	Birch, American North America	Hardwood Light to dark reddish brown	640/ 710	Fine	Regular Low
	Birch, European Europe	Hardwood White to light brown	670	Fine	Limited Low
	Cedar (of Lebanon) Europe	Softwood Light brown	580	Medium	Limited Low
	"Cedar, Central/S American" Central & S America	Hardwood Pinkish-brown to dark reddish-brown	480	Coarse	Limited Medium

Colour	Species/ Origin	Timber Type/ Colour	Density kg/m ³	Texture	Availability/ Price
	Cherry, American USA	Hardwood Reddish-brown to red	580	Fine	Limited Medium
	Cherry, European Europe	Hardwood Pinkish-brown	630	Fine	Limited Medium/High
	Chestnut, sweet Europe	Hardwood Yellowish-brown	560	Medium	Limited Medium
	Danta W Africa	Hardwood Reddish-brown	750	Fine	Limited Low
	"Douglas fir" N America & UK	Softwood Light reddish-brown	530	Medium	Regular Medium
	Ebony W Africa, India, Sri Lanka	Hardwood Black, some grey/ black stripes	1030/ 1190	Fine	Limited High
	Elm, European Europe	Hardwood Light brown	560*	Coarse	Limited Medium
	Elm, White N America	Hardwood Pale Reddish-brown	580	Coarse	Limited Medium
	Gaboon W Africa	Hardwood Pinkish brown	430	Medium	Limited Medium
	Gedu nohor/edinam W Africa	Hardwood Reddish brown	560	Medium	Limited Low/Medium
	Geronggang S E Asia	Hardwood Pink to red	540	Coarse	Variable Low
	Guarea W Africa	Hardwood Pinkish brown	590	Medium	Variable Low/Medium
	Idigbo W Africa	Hardwood Yellow	560*	Medium	Variable Medium
	Iroko W Africa	Hardwood Yellow-brown	660	Medium	Regular Low/Medium
	Kapur S E Asia	Hardwood Reddish-brown	770*	Medium	Variable Medium
	Limba/Afara W Africa	Hardwood Pale yellow, brown/straw	560*	Medium	Limited Low/medium
	Mahogany, Africa W Africa	Hardwood Reddish-brown	530*	Medium	Regular Low/Medium

Colour	Species/ Origin	Timber Type/ Colour	Density kg/m ³	Texture	Availability/ Price
	Mahogany, American Central & S America	Hardwood Reddish-brown	560*	Medium	CITES III Regular High
	Makoré W Africa	Hardwood Pinkish-brown to dark red	640	Fine	Variable Medium
	Maple, rock N America	Hardwood Creamy white	740	Fine	Regular Medium
	Maple, soft N America	Hardwood Creamy white	550*	Fine	Limited Medium
	Mengkulang S E Asia	Hardwood Red, brown	720	Coarse	Limited Medium
	Meranti, dark red/dark red seraya/red lauan S E Asia	Hardwood Medium to dark red- brown	710*	Medium	Regular Low/Medium
	Meranti, light red/light red seraya/white lauan S E Asia	Hardwood Pale pink to mid red	550*	Medium	Regular Low
	Meranti, yellow/ yellow seraya S E Asia	Hardwood Yellow-brown	660*	Medium	Limited Low/Medium
	Niangon W Africa	Hardwood Reddish-brown	640*	Medium	Variable Low
	Nyatoh W Africa	Hardwood Pale pink to red- brown	720*	Fine	Variable Low
	Oak, American red N America	Hardwood Yellowish-brown with red tinge	790	Medium	Regular Medium
	Oak, American white N America	Hardwood Pale yellow to mid- brown	770	Medium	Regular Medium
	Oak, European Europe	Hardwood Yellowish-brown	720*	Medium/ Coarse	Variable Medium/High
	Oak, Japanese Japan	Hardwood Pale yellow	670	Medium	Very limited High

Colour	Species/ Origin	Timber Type/ Colour	Density kg/m ³	Texture	Availability/ Price
	"Oak, Tasmanian" Australia & Tasmania	Hardwood Pale pink to brown	610/ 710*	Coarse	Limited Medium
	Obeche/Wawa W Africa	Hardwood White to pale yellow	390	Medium	Regular Low/Medium
	Padauk W Africa, Andamans, Myanmar	Hardwood Red to dark purple- brown	740*/ 850	Coarse	Limited High
	Parana pine S America	Softwood Golden brown with bright red streaks	550	Fine	Regular Low/Medium
	Redwood, European Scandinavia, Russia	Softwood Pale yellowish- brown to red brown	510	Medium	Regular Low
	Rosewood S America, India	Hardwood Medium to dark purplish-brown with black streaks	870*	Medium	D nigra CITES I
	Sapele W Africa	Hardwood Medium reddish- brown with marked stripe figure	640	Medium	Regular Medium
	Sepetir S E Asia	Hardwood Golden brown	680	Medium	Limited Low
	Sesendok S E Asia	Hardwood Pale cream to straw yellow	480	Medium to coarse	Limited Low/Medium
	Sycamore Europe	Hardwood White or yellowish- white	630	Fine	Limited Medium
	Taun S E Asia	Hardwood Pale pinkish-brown	720	Coarse	Limited Low
	Teak Burma, Thailand and plantations elsewhere	Hardwood Golden brown, Sometimes with dark markings	660	Medium	Regular High
	Tulipwood/ Poplar, American yellow N American	Hardwood Yellowish to olive brown with dark stains	510	Fine	Limited Medium

Colour	Species/ Origin	Timber Type/ Colour	Density kg/m ³	Texture	Availability/ Price
	Utile W Africa	Hardwood Reddish-brown	660	Medium	Regular Medium
	"Walnut, Africa" W Africa	Hardwood Yellowish-brown, sometimes with dark streaks	560	Medium	Variable Medium
	Walnut, American N America	Hardwood Rich dark brown	660	Coarse	Variable Medium/High
	Walnut, European Europe	Hardwood Grey-brown with dark streaks	670	Coarse	Limited High
	Wengé/ Panga panga Central & E Africa	Harwood Dark brown with fine black veining	880*	Coarse	Limited Medium
	Yew Europe	Softwood Orange-brown to purple-brown	670	Medium	Very Limited High