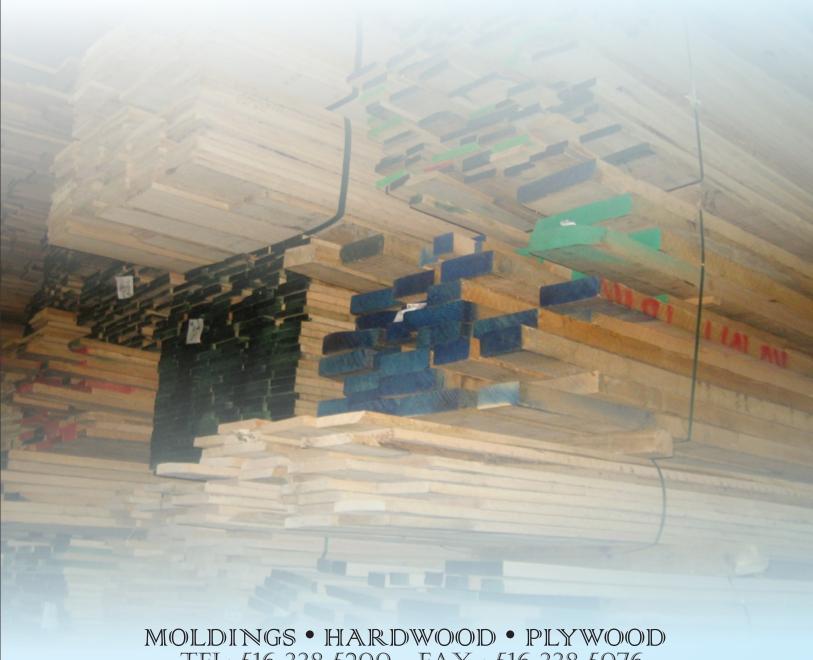


A.NATIONAL LUMBER SPECIES INVENTORY



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TABLE OF CONTENTS

	1	AVA	IJΔF	RIF'				
Specie	4/4	5/4		8/4	PAGE NUMBER			
AFROMOSIA	X	3/4	0/4	X	10/4	12/4	16/4	3
ALDER	X	Х	Х	X				3
ANIGRE	X			X				4
ASH WHITE	X	Х	Х	X	Х	Х		4
ASH BROWN	X		^	^	^	^		5
AVODIRE	X			Х				5
BANAK	X	Х	Х	^				6
BASSWOOD	X	X	X	Х	Х	Х	Х	6
BEECH-AMER.	X	_	^	^ X	^	^	^	7
BEECH-EURO.	X			X				7
BIRCH	X			^ X				8
BUBINGA	X			X				8
BUTTERNUT	X			X				9
				Λ				
CEDAR- AIROMATIC	X	X	V	V	V	V		9
CEDAR- SPANISH	X	X	X	X	X	X		10
CHERRY- AMERICAN	X	X	Х	X	Х	Х		10
CHERRY BRAZILIAN - JATOBA	X	Х		Χ				11
CHESTNUT-WORMY	X							11
CYPRESS	X							12
EBONY GABOON	X	\ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	X				12
HICKORY	X	Х	Х	Χ				13
IPE	X			\ \				13
IROKO	X			X				14
LACEWOOD	X	\ \ \	\ <u>\</u>	X				14
MAHOGANY- AFRICAN	X	X	X	X	X	X		15
MAHOGANY- HONDURAS	X	X	Х	X	Х	Χ	Х	15
MAHOGANY-SANTOS	X	Х		X				16
MAKORE	X	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Χ				16
MANSONIA	X	X						17
MAPLE- SOFT	X	X	X	X	X	X		17
MAPLE- HARD	X	X	X	X	Х	Х		18
MAPLE- CURLY	X	Х	Х	Χ				18
BIRD EYE MAPLE	X	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	V	\ <u>/</u>	\ <u>/</u>	V		18
OAK-RED	X	X	X	X	Х	Х		19
OAK- RED QUARTERED	X	X	X	X				19
OAK- RED RIFT	X	X	X	X	1/			19
OAK-WHITE	X	X	X	X	Х	Х		20
OAK-WHITE QUATRERED	X	X	X	X				20
OAK-WHITE RIFT	X	Х	Х	X				20
PADAUK	Х			X				21
PINE EASTERN WHITE - KNOTTY	Х	Х	Х	Х	Х	Х		21
PINE-SUGAR	Х	Х		Χ				22

TABLE OF CONTENTS

		AVA	ILAE					
Specie	4/4	5/4	6/4	8/4	10/4	12/4	16/4	PAGE NUMBER
POPLAR	Х	Χ	Χ	Х	Χ	Χ		23
PURPLE HEART	Х			Χ				23
RAMIN	Х	Χ	Χ					24
SAPELE	Х	Х	Χ	Х	Χ	Χ		24
SHEDUA	Х			Χ				25
SYCAMORE- AMERICAN	Х							25
SYCAMORE- EURO.	Х			Χ				26
TASMANIAN OAK EUCALYPTUS	Х							26
TEAK-BURMESE	Х			Χ				27
ULMO	Х			Χ				27
WALNUT-AMERICAN	Х	Χ	Χ	Χ	Χ	Χ	Χ	28
WALNUT-PERUVIAN	Х							28
WENGE	Х			Χ				29
YEW WOOD	Х			Х		·	·	29
ZEBRAWOOD	Х			Χ				30



Afromosia (African Teak)

Other names: Assamela, Mohole, Kokrodua, Egbi.

Afromosia reaches heights of 150 ft and trunk diameter of 3 to 6ft.

Afromosia is a medium size tree which grows in West Africa weight is 45 lbs per cubic foot. The bark is blotched with red and orange, which is why is has acquired the common name of redbark. The figure runs from a straight grain to some mottle.

Afromosia is hard, heavy and strong, and it serves well in heavy building work, as flooring or as ships decks. A heavy, dense wood, with high bending and crushing strength, medium stiffness and resistance to shock loads. After it has been cut fore some time, it resembles Burma Teak, changing from a yellow color to a warm brown with exposure to air and light. When gluing Afromosia, wash wash glue surface with acetone. A very durable wood, highly resistant to termites and extremely resistant to preservative treatment. Afromosia is a good exterior wood.



Other names: Aune, Cis, Erle, Hannoki

This tree originates in Europe and weights between 26 and 41 lbs per cubic foot. The wood is light brown, tinged with red, and is soft, light and brittle. Moderate bending classification with low bending strength and resistance to shock loads, very low stiffness but with medium crushing strength. There is a pronounced tendency for checks to occur on the ends of bends during setting. Dull, light reddish-brown with darker lines or streaks formed by broad rays. Straight grained, with fine texture but without luster. It has a low cutting resistance and is easy to work if cutting edges are kept thin and sharp as there is a slight blunting effect on tools. The wood nails and screws satisfactorily, glues well, stains and polishes to a good finish. A good turnery wood and used for broom and brush backs; hat blocks rollers for textiles, toys, wooden clog soles. It is a good alternative to cherry.



Other names: Aningeria, Landosan, Mukali, Kali

Anigre is grown in Africa, and grows up to 180 feet high with diameter of 48 inches. Heartwood is cream to tan with a pinkish tinge. Generally with straight grain but sometimes wavy producing a mottled figure; quartered surfaces show a growth ring figure. The wood is lustrous, with a cedar-like scent, and is siliceous. Texture is medium to coarse in lighter grades but fine textured in heavier grades. Weight varies from 30-36 lbs per cubic foot. Moderate to severe blunting effect on tools due to silica content and adequate support is necessary to prevent chipping out. Carbide tooling is required. Anigre takes stain nicely. It is used for high end furniture and cabinetwork, paneling, light construction and general utility purposes and interiors. The veneer can be obtained to include figure, for example medium, heavy fiddle back and mottled figure.



Other names: American Ash, Green Ash

Ash is grown in North America and can grow as high as 50 to 80 feet, with a spread of 40-50 feet at full maturity. Ash is a heavy wood with an average weight of 42 lbs. per cubic foot. The heartwood is brown to dark brown, sometimes with a reddish tint, the sap wood is yellowish-beige to creamy white. This wood is strong and stiff, has good shock resistance and is noted for its excellent bending qualities.

There is a moderate blunting effect on tools, but can be worked satisfactorily with both hand and machine tools. White ash is the famous sports ash and used for all types of sports equipment, bats, cues, oars, handles for striking tools, spades, forks, hoes, etc. Bent parts used for boat building vehicle bodies, church pews, shop fitting and high end joinery.

4



Other names: Black Ash, Hoop Ash, Swamp Ash, Water Ash.

Brown Ash is grown through the eastern U.S., and heights range from 80-120ft and diameter 2-5ft.

Much of the Northern Ash is converted into veneers of very attractive figure and marketed under the name of Northern Brown Ash.

The general growth of these trees runs along the Atlantic Coast, from Canada down as far south as Virginia and westward to Mississippi and Minnesota.

This wood is grayish-brown to light brown in color and often produces burls of high quality.



Other names: Apaya, Appayia and Olon.

Avodire reaches heights of 100-115ft with diameter of 2-3ft.

Avodire comes from the Ivory Coast, the Gold Coast and Liberia in West Africa, and it is also known as African satinwood. Avodire is a fairly lightweight wood weighting around 20 lbs. per cubic foot. The wood possesses a golden yellow color with a firm, clean grain capable of producing a smooth, highly polished surface. It is very strong in relation to its light weight.

Works fairly easily with hand and machine tools but the interlocked grain tends to pick up in planning requiring the cutting angle to 15°.

Large quantities of this wood have been used in the manufacture of store fixtures and furniture, in decorating the interior of fine offices and homes, and it is used quite extensively for various effects in marquetry.

5



Other names: Virola, Meranti and Sangre.

Banak tree grows beside swamps and in forest along river valleys, all the way from Panama to British Honduras and Guatemala, often obtaining a height of 85 ft. and the diameter from 6 to 40 inches.

The wood resembles somewhat the paler colored mahoganies, being pinkish brown when cut but darkening upon exposure.

It is a wood of medium hardness and from 35 to 40 lbs. per cubic foot in weight, with generally a straight grain.

In strength it is comparable to the poplar. Banak is easy to work if tools are kept in sharp condition.



Basswood

Other names: American Linden, Beetree, Black Limetree, Lime Tree, Linn, Linden, Whitewood, Wickup and Yellow Basswood.

Basswood grows throughout the United States, Canada and Europe.

Basswood grows to reach heights of 120ft and diameter up to 5ft. The heartwood is creamy white to creamy brown and sometimes reddish. Basswood is a lightweight hardwood, averaging 26 lbs. per cubic foot and it is fairly easy to air-dry or kiln-dry, staying in place well after seasoning. Basswood works extremely easily with both hand and power tools, with low resistance to cutting and only a slight blunting effect on tools. The largest percentage of the basswood in this country is cut into lumber; the greatest portion of witch is used for crates and boxes, the manufacturing of sash, doors, general millwork and picture frames.



American Beech grows to average heights of 120ft, prominently east of the Mississippi River. American Beech is one of the heavier woods, having an average weight of

45 lbs. per cubic foot, and is readily distinguishable from other native species by its heavy weight and the conspicuous rays and tiny pores.

Beech is typically pale colored wood with pink-brown and of coarser quality than European beech. It is rated high in strength and shock resistance and, when steamed readily bent.

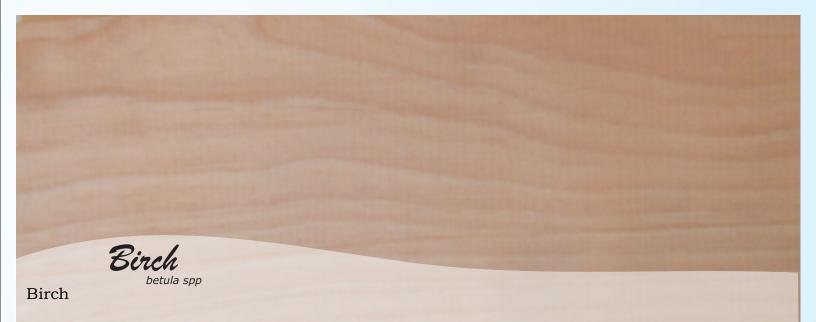
Beech works readily with most hand and machine tools, but there is a tendency for it to bind on the saw and to burn in crosscutting and drilling. It has good nailing and gluing properties and can be stained and polished to a good finish. It is an excellent wood for turnery, and furniture making.



Beech (European)

Other names: English Beech, Danish Beech or French beech, depending on the country of origin.

The heartwood is very pale pink-brown. It is common practice on the continent to steam the timber which turns it to a reddish-brown tone. Some logs have a dark red kern or darker veining. Beech has a straight grain and fine, even texture. Steaming European Beech helps even out the color. The steam bending properties are exceptionally good, even tolerant of knots and irregular grain. It has medium stiffness, light crushing strength and medium resistance to shock loads. Beech offers medium resistance to hand and power tools, has a moderate blunting effect on cutting edges. Beautiful wood for furniture manufacturing and wood turning.



Other names: Hard Birch, American Birch and Betula Wood.

Birch predominantly grows in Northern and Lake States of the U.S., and it grows up to 60-70ft tall.

There is a wide range of color differences, but when stained will not show a marked difference between light yellow sapwood and reddish-brown heartwood. It is straight, close grained, the texture fine and even. Weight about 44 lbs per cubic foot.

The wood works fairly easily with only moderate dulling effect on cutters and finishes smoothly if straight grained.

It is used for furniture, high-grade joinery and flooring, turnery and upholstery frames.



Other names: Kewa-Zingo, Essingang and African Rosewood.

Bubinga grows principally in Gabon and Cameroon, and it grows up to 150ft tall and 6ft in diameter. The average weight per cubic foot is 57 lbs. and the logs, when received in this country are tremendous in size.

The color varies in different logs from pale to a deep red, though the color is uniform in individual trees. The timber works easily with both hand and machine tools, although gum pockets may cause difficulty. Interlocked and irregular grained material tends to tear or pick up and a reduced cutting angle of 15° is necessary for planning and moulding.

Ideal wood for high-end woodwork, furniture and instrument manufacturing.



Other names: Lemon Walnut, White Walnut, Tropical Walnut, Nogal Blanco.

Butternut reaches heights of 100ft tall and 3ft in diameter.

The growth of this tree extends from Quebec down through the Northeastern sections of the United States and Westward to South Dakota and as far as Arkansas, Mississippi and Alabama. The wood is in many ways very similar in characteristics to American Black Walnut and has at times been called White Walnut. Butternut is rot resistant.

Butternut wood is lighter in weight ant not as strong and durable as black walnut. It is soft in texture but course-grained. The wood is easily worked with all types of tools, very sharp tools being desirable because of the softness of the wood. Used for furniture and architectural woodwork.



Cedar Airomatic

Other names: Eastern Red Cedar, Virginian Pencil Cedar

Grows through United States and Canada. Light red with streaks of creamy white. Soft, straight-grained with a fine, even texture. Very knotty with distinctive cedar aroma. Aromatic cedar has a thin, white sapwood that may alternate with stripes of heartwood. Straight and even grained with a fine uniform texture. Creamy white sapwood and light reddish or purplish heartwood that ages to a darker red or reddish brown. Often contains numerous knots. Soft, easy to work but knots may present some difficulties. Easy to finish. Used for linen and blanket closets, pencils, boxes. Carves and whittles nicely.



Other names: Brazilian Cedar, Cedro and Honduras Cedar.

It grows in every country south of the United States except Chile. The wood is light red in color, straight-grained and soft in texture; occasionally it is wavy and mottled.

These timbers have low bending strength and resistance to shock loads, low stiffness and crushing strength. Also termite resistant.

Easy to work with very little dulling effect on cutters although knots and in-growing bark pockets may be troublesome. If cutters are kept sharp, a good, clean finish is obtainable.

Suitable for joinery, garden furniture, gates, fences and doors. Excellent choice for exterior use. It is also used for humidors.



Other names: Black Cherry, Choke Cherry, Rum Cherry, Whiskey Cherry and Wild Cherry.

Cherry is generally grown thought Midwestern and Eastern United States. Cherry grows as tall as 60-80 feet, and can live 150 to 200 years.

American Cherry is usually easily distinguished from other native species because of its distinctive color, the bark being dark with irregular scales which peel off easily. Light reddish-brown heartwood. This wood is comparatively free from checking and warping; it stays in place well after seasoning. It is a fairly heavy wood, averaging around 35 lbs. per cubic foot, moderately hard stiff and strong. Uses: Pattern making, musical instruments, furniture and cabinetmaking and boat interiors. It is an excellent turnery and carving wood. Cherry is excellent choice for architectural woodworking and millwork

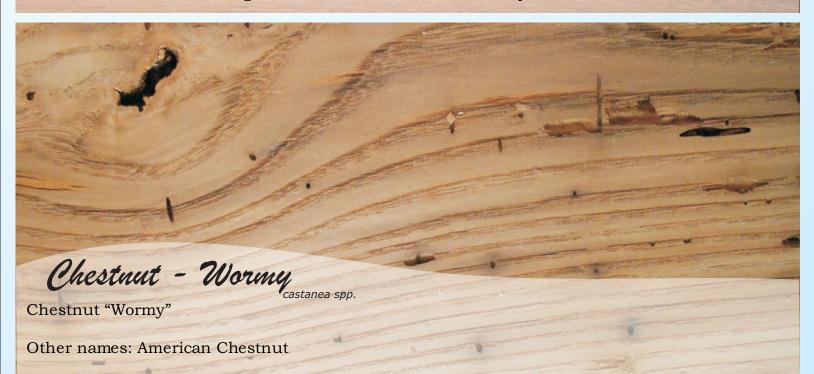
10



Cherry Brazilian (Jatoba)

Other names: Courbaril, Locust, Algarrobo and Guapinol.

This tree grows in the West Indies and South America, up to 100 ft. in height and 3 to 4 ft. in diameter. Jatoba is very strong, hard, dense, tough and shock resistant, hence difficult to work with hand and machine tools. While the sapwood is often white in color, the heartwood is a reddish-brown to brown with pronounced darker stripes. It is used for flooring, stair threads, furniture and cabinetmaking. Less stable than American Cherry.



Growing 100ft tall with diameter of 10ft. The heartwood of this tree is pale brown in color with growth rings producing a pronounced figure on longitudinal surfaces, the sapwood is almost white. Chestnut has a low bending strength, medium crushing strength and resistance to shock loads, and has a moderate steam bending classification.

A fungus disease, known as chestnut blight in the 1920's has almost entirely exterminated these trees, and no control for this disease has yet been found. Small insects eat the tree after it has been killed by the blight and then the lumber is sold as "Wormy Chestnut". It is used for furniture, picture frames and mouldings.



Cypress

Cypress is a conifer that sheds foliage in the fall, similar to hardwoods. It generally grows in the Southern part of the United States, primarily in swampy locations. The heartwood is orange to pinkish-brown. It is straight grained with a fairly fine, even texture. The growth rings are marked by an inconspicuous narrow band of latewood. The cedar-like scent gradually fades in time. The wood weights 28 lb per cubic foot. It works very easily with hand and machine tools with only a slight blunting effect on the edges. It is strong durable softwood used for structural work, especially suitable where the timber is in contact with the ground and for external work. Cypress is used for interior and exterior woodworking. It is used for shipbuilding furniture and linings for wardrobe doors and trunks, as well as mouldnigs, paneling, fence posts and shingles.



Other names: Cameroon Ebony, African Ebony, Gabon Ebony, etc. according to the country of origin.

This wood is believed to excel all other varieties for fineness and dark color.

The Ebonies in Africa are available in the form of short logs or billets, with diameters from 2 to 12 inches and lengths of 2 ft and longer. The weight of ebony varies from 45 to 70 lbs. per cubic foot. Because of its extreme hardness and the dulling effect on tools, Ebony is difficult to work though it finishes smoothly and produces a high polish. Ebony is highly resistant to termites. It is used for cutlery and knife handles, door knobs, butt ends of billiard cues, facings of tee

squares, piano and organ keys, other musical instruments and brush backs and other fancy articles. Ebony is also used for accents on high end furniture.



Other names: Pignut Hickory, Mockernut Hickory, Red or White Hickory

Hickory is grown in the Eastern part of the United States, predominately in the Central and Southern states. Hickory reaches heights of 120ft and matures at 200 years old. It is also sold as Pecan because of its relation and similarity to each other. The heartwood of true Hickory is brown to reddish-brown and the wood is very hard and heavy, averaging from 42 to 52 lbs. per cubic foot. Some woods are stronger than Hickory and others are harder, but the combination of strength, toughness, hardness and stiffness possessed by Hickory has not been found to the same degree in any commercial wood. A rather difficult wood to work, with moderate to severe blunting of cutters, and has tendency to split so pre drilling is advised. Hickory has a very large shrinkage and must be carefully dried to avoid checking, warping and other seasoning defects. It is used for striking-tools handles, hammers, picks, ladder rungs, shunting poles, vehicle bodies as well as high end architectural woodwork and millwork.



Other names: Bathbara, Brazilian Walnut, Greenhart, Ironwood and Lapacho

Ipe grows to heights of 200ft with the diameter of 6ft. The heartwood is olive-brown with lighter or darker streaks. The grain is straight to irregular with low to medium lustre. The pores, appearing as fine yellow dots, or, on longitudinal surfaces as yellow lines, contain yellowish lapachol powder which turns deep red in alkaline solution. The material is fine textured and appears oily; fine ripple marks may be present. Weight varies between 60-75 lbs. per cubic foot. The material has very high strength in all categories, but is resistant to wood bending and has only moderate classification. It is a strong, tough, resilient wood what makes it difficult on hand and machine tools. Ipe has a very high resistance to all insect and fungal attacks and is very durable. Extremely resistant to preservative treatment. The material is ideal for bridge building, naval construction and dock work, exterior construction, turnery, factory flooring, decking, etc.

13



Other names: Mvulu, Odum, Tule, Moreira etc.

Iroko grows to heights of 160 ft, originating on the West Coast of Africa, is also known as African or Nigerian Teak (although in no way related to the teak family). Iroko is a good Teak substitute without the greasy feeling. The color varies from light brown to a rich golden brown. The wood is heavy, 40 lbs. to the cubic foot, not as strong as the teak but often used as an alternative. The heartwood has unusual natural durability, and is resistant to decay and termites. The wood is not difficult to work with and does not have the effect of dulling tools as quickly as when working with Genuine Teak, except when the logs have a defect known as 'stone'. When quartered, the wood looks somewhat like teak and is used for furniture and architectural panels, and for interior and exterior millwork.



Lacewood

Other names: Silky Oak and Selena.

Lacewood grows throughout Australia and Europe. The logs vary in color from what might be called a shell pink to a light reddish-brown and they have a striking figure, varying from a small lacelike pattern to a large splash like figure.

Locally it has been used for years in panel and trim work of fine residences and banks, for railings, doors and the like. It is a good wood for use by craftsmen for many types of cabinetwork where a striking and unusual appearance is desired.



Other names: Khaya, Benin Wood, Lagos Wood and Gold Coast Mahogany

African mahogany grows in West Africa and extends toward eastern sections of the continent, reaching heights of 120ft and 3 to 6ft in diameter. The tree grows very large and excellent cuttings both for length and width can be obtained for use as a lumber or as veneers. African Mahogany is probably the most widely used of the true Mahoganies at present, as it is the cheapest and can readily be obtained in all sizes. Owing to its interlocked grain African Mahogany is rather more difficult to work with than the Honduras Mahogany: nevertheless it is fairly easy to work with both with hand and machine tools. African Mahogany is not as stable as Honduras Mahogany, and although it is decay resistant it prone to termite attack and is also moderately durable. It has long had an important established place in the construction of furniture of all classes, boat building, and manufacture of high class plywood.

Mahogany - Honduras

Mahogany Honduras Pattern Grade swietenia macrophylla

Other names: South American Mahogany and Genuine Mahogany.

Honduras mahogany grows in Central and South America, reaching heights of 150ft and 6ft diameter. The heartwood color varies from light to dark reddish-brown to deep rich red. The grain is straight to interlocked. The texture is medium to coarse and uniform. Weight varies from 34 to 40 lbs. per cubic foot. The wood has low bending strength, medium crushing strength, very low stiffness and resistance to shock loads. Mahogany can be worked with hand or machine tools, if kept very sharp. It is easy to glue, takes nails and screws well, stains and polishes to an excellent finish. Honduras Mahogany is very durable in regards to decay, but is susceptible to insect attack. It is used for high class furniture and cabinetmaking, interior joinery, paneling, carvings, boat interior, exterior doors and windows.

15



Other names: Balsamo, Cabriziva, Chirraca, Estoraque, Incienso, Nabal.

Santos Mahogany is grown in Central and South America with heights reaching 100Fft tall, and 2-3ft in diameter. There is a fair degree of color variation between boards of Santos Mahogany, ranging from a lighter golden brown to a darker purplish red or burgundy. The color tends to turn more red/purple with age. Quarter sawn sections can show a striped or ribbon pattern. It is moderately difficult to work but can be finished smoothly with a high natural polish. Though non siliceous, there is more than the usual dulling of cutters. Use of carbide tooling is recommended. The heartwood is reported to be highly resistant to attack by decay fungi. It is used for hardwood flooring, furniture, interior trim, turnery, and stair building.



Makore 'African Cherry'

Other names: African Cherry, Aganokwe, Baku and Makaru.

Makore comes from the West Coast of Africa; this tree is large and produces logs up to 5 ft in diameter, and 200ft in height. It is somewhat similar to close-grained Mahogany, but with growth lines and pores more similar to Cherry. It is heavy in handling weighting 40 lbs. per cubic foot. The wood is dense and hard, firm-textured, heavier than Mahogany and while some logs are straight grained others have very striking mottled figure. Makore is highly durable and termite resistant. There is a luster to the wood and it glues very well but is difficult to work as the timber contains silica which rapidly dulls the tools. When cutting Makore you must use carbide tools. It is used for furniture, cabinet making, turning, flooring and architectural woodwork.



Other names: African Walnut, Aprono and Ofun

This small tree comes from the Gold and Ivory Coasts of Africa, grows to heights of 120ft and has diameter from 16 to 24 inches. The heartwood is yellowish-brown to greenish and purplish-brown, but the rich colors, apparent when first manufactured, generally fade when exposed to the light and the wood assumes more of a uniform dark purple brown. It weights about 37 lbs. per cubic foot. It is similar to Walnut, especially when sliced or quarter-sliced, and is usually straight - grained and fine textured, but is harder than American Walnut. Mansonia works easily with hand and machine tools, and it is a good material for turning and sanding. However, its strength properties are about equal to walnut. Very durable and termite resistant as well as good weathering qualities. The better-colored timber may be used as an alternative to walnut in high class cabinetmaking, interior decoration etc.



Other names: Red Maple, Silver Maple, Manitoba Maple

Soft Maple grows through the Unite States to average heights of 60-80 ft.

It has a creamy white color and straight grain. It is less lustrous than Hard Maple and the growth rings are comparatively indistinct. The rays are narrower and less conspicuous but pith flecks more frequently present. It weights about 39 lbs per cubic foot.

Soft Maple has medium bending and crushing strengths, low stiffness and resistance to shock loads.

It can be worked satisfactorily with hand and machine tools although it has moderate dulling effect on cutters. Charcoal is often made from soft maple.

It is used for domestic flooring, furniture, interior joinery, sports goods, turnery, paneling, etc.



Other names: Rock Maple, White Maple, Sugar Maple or Black Maple.

Hard Maple favors colder climates, and reaches heights of 13 ft. It grows in the Eastern part of the United States, from Mid-Atlantic States to lake states and Canada. Color ranges form cream-white with a reddish tinge. Large trees may have dark brown heart. Usually straight grained but sometimes curly or wavy. Fine brown lines give an attractive growth ring figure on plain sliced surfaces. Texture is fine and even. Weight is average 45 lbs. per cubic foot. High in all strength properties except stiffness which is medium. It has a very good steam bending classification. A difficult wood to work with a moderate blunting of cutting edges. Hard Maple produces 12 gallons of sap every year. It has a high resistance to abrasion and wear and is used for all heavy-duty flooring. Also used for furniture, paneling, textile machinery rollers, musical instruments ,sports goods etc.





Other names: Northern Red Oak and Southern Red Oak.

Red Oak is grown through North America and Europe, reaching average heights of 80ft. The heartwood resembles other oaks with a biscuit to pink color, but has a reddish tinge. Mostly straight grained and coarse textured, with a less attractive figure than white oak due to smaller rays. Southern Red Oak has more rapid growth than Northern Red Oak and is harder, heavier and coarser textured. It weights about 48 lbs. per cubic foot.

This timber has medium bending strength and stiffness with high crushing strength and is classified as a very good steam bending wood. Red Oak is hard, tough and stiff which makes it difficult for hand tools, but machines good. Very durable but low resistance to decay. It is used for flooring, furniture, stairs, interior joinery, etc





White Oak grows through the U.S. and Canada, and it reaches heights of 125 ft. White Oak varies in color from pale yellow-brown to biscuit with a pinkish tint, similar to European Oak. It is straight grained, with the characteristic silver grain on quartered material. Medium to coarse textured, weights about 47 lbs. per cubic foot. It is hard and tough, difficult to work with hand tools, but easy with machines. The wood has medium bending and crushing strength with low stiffness which makes it an excellent bending material. White Oak has good resistance to decay and also wear resistant. It is used for furniture and cabinet making, joinery, heavy construction, flooring, stairways, etc. It is also used for barrels, kegs and casks because it is impermeable, which is not the case for Red Oak.





Other names: Vermilion, Barwood, Camwood, African Coral Wood

Padouk is grown in Africa, growing to an average height of 100ft and 2-5 ft in diameter. The most attractive wood, varying in heartwood color from rich crimson or brick red and possibly reddish orange, sometimes having darker red to purplish streaks, gradually darkening upon exposure, to dark reddish-brown. The broadly interlocked grain produces a beautiful roe or striped figure on quartered surfaces, often with a curly figure. Some logs produce a yellowish-pink color with darker red lines or streaks, but these are exceptional. The texture is medium to coarse, and it weights about 48 lbs. per cubic foot. Padouk machines well when feed slowly thru the machine, grain tearing could happen due to interlocked grain. It is very durable and is resistant to termite attack and decay, Padouk is used for high-class joinery, furniture, bank counters, billiard tables, flooring, etc.



Eastern White Pine (Knotty)

Grows mostly in the Eastern part of United States, reaching heights of 100-200 ft and 6ft in diameter. The heartwood color varies from pale straw to light reddish-brown. Although not very resinous, resin ducts appear on longitudinal surfaces as fine brown lines. It is a soft, straight grained and very even texture but with lot of knots. The average weight is 24 lbs. per cubic foot. This is a light, soft and weak wood in all strength properties and not suitable for bending. It is used for furniture making, ship and boat building, etc.



Other names: Big Pine, Gigantic Pine, Great Sugar Pine and Shade Pine.

Sugar Pine is the tallest and broadest off all other species of Pine, and it can live up to 1000 years. This tree grows in regions of Southern Oregon to Lower California and Mexico, generally at higher altitudes. It is creamy yellowish colored wood.

It reaches a height of up to 150 ft. and it is from 4 to 8 ft in diameter, though species have been found as high as 240 ft. and diameters up to 18 ft. Sugar Pine has been described as the finest of all pine for size and is similar in color to eastern and Western Pines, although a little lighter shade. Sugar Pine is good for exterior work, and can be used for door, windows and all types of interior woodwork.



Pear Wood (Swiss)

Pear Wood generally grows in Europe. The wood is rosy pink in color, with shadings on a light cream background. It has a moderate leafy grained figure, sometimes with a mottle figure, and is fine and close grained. It is very suitable for reproducing fresh colors.

It weights about 44 lbs per cubic foot. Because Pear is only available in fairly small sizes its strength is relatively unimportant for the uses to which is applied. It is a fairly tough, very stable wood, but not used for steam bending purposes. Pear Wood can be dyed black to resemble Ebony. It is used in mechanical drawing instruments and rulers, and a great portion of marquetry work and high end furniture accents. Adriatic sells Pear Wood by the boule or log.



Poplar

Poplar grows prominently through eastern United States, and can reach heights of 150 ft. The sapwood is usually creamy-white to grey in color, and heartwood is greenish in color with streaks of purple, sometimes very pale brown or pinkish-brown. Straight grained and inclined to be woolly; texture is fine and even. Average weight is 28 lbs per cubic foot. Very low stiffness and resistance to shock loads, medium crushing strength and a low bending strength. Poplars have only a slight blunting effect on tools. Very sharp, thin cutting edges are required to overcome the woolly texture and produce a good finish. The surface will take paint, varnish, and polish but if not prepared properly staining can produce patchy result. It is used for rough usage such as the bottoms of the trucks, wagons, carts, furniture framing, drawers, interior joinery, toys, flooring, interior woodwork, picture frames moulding, millwork and turning.



Other names: Amaranth and Violed Wood.

Purpleheart tree grows up to 170 ft in height and 4 ft in diameter. The heartwood is deep purpleviolet when freshly cut, maturing to a dark brown: the original color is restored when re-cut. Straight grained but often irregular, wavy, and sometimes interlocked, producing a pleasing striped figure on quartered surfaces. Weight varies from 50 to 63 lbs per cubic foot. High strength in bending, stiffness and crushing categories. It is rather difficult to work with moderate to severe blunting effect on tools.

It is used for heavy outdoor constructional work, bridge building, fresh water piling etc. Excellent for flooring, and suitable for gymnasium equipment, shafts, tool handles, turnery and furniture

accents.



Ramin

Other names: White Mahogany

Ramin grows in South-East Asia. The heartwood is a uniform pale straw color, the grain straight to shallowly interlocked and texture moderately fine and even. The weight average is about 41 lbs per cubic foot. Ramin has high bending and crushing strengths, medium stiffness and low resistance to shock loads.

Works fairly well with hand and machine tools, but with moderate blunting of cutting edges. It is used for furniture making, interior joinery, shop fittings, carving, turnery, paneling, flooring, toys, picture frame mouldings, and plywood manufacture.



Other names: Sapele Mahogany, Sipo and Tiama.

Sapele grows in Nigeria and along the African Ivory Coast and it grows up to 200ft in height and 6' in diameter.

The color of the wood is a dark reddish-brown with a very strong stripe.

Sometimes it is mistaken for African Mahogany and is used as such; however, it is harder and heavier, weighing from 35-40 lbs per cubic foot. Works without difficulty with both hand and machine tools but the interlocked grain affects machining properties. Sapele is more stable than the African Mahogany.

It is used for quality furniture, cabinetmaking, joinery, shop fitting, office furniture, solid doors, musical instruments, counter tops and flooring.



Other names: Mozambique, Amazakoue and Ovengkol.

Shedua is generally grown in West Africa, reaching heights of 150ft and diameter of 2-3ft. The heartwood has a wide range of colors from yellow-brown to dark brown or may be greenish brown / greenish gray, and often has stripes of a contrasting darker color, usually dark gray, near-black. Usually a really beautiful wood with a very attractive grain, a nice shimmer due to interlocked grain, and an interesting look because of heavy dark striping.

A heavy, tough, strong, wood that is reasonably easy to work with both hand and machine tools. Stiffness, strength, and shock resistance are all reported as medium to high. Can be worked to a very smooth surface with only moderate blunting effect on cutting edges. Used for cabinet making, furniture and by boating industry for cabin interiors.



American Sycamore

American Sycamore generally grows in the Northeastern part if United States. Average height reaches 100ft and 3ft in diameter. It is light tan to reddish heartwood and whiteish cream sapwood.

American Sycamore is grown in short-rotation plantations primarily for pulp and it also is used for rough lumber. It is moderate, in weight, strength, hardness, stiffness and shock resistance. Sycamore machines fairly well, but requires high-speed cutter heads to prevent chipping due to he interlocking grain. The heavy, close-grained wood is difficult to split and work because of interlocking fibers. It has been used for butcher's blocks, furniture, veneer and interior trim, boxes and crates, flooring, and particle and fiberboard.



Sycamore European

European Sycamore is grown all around the Europe. Lustrous white to pale yellowish white, occasionally with a tight fiddle back figure. Works easily with hand and power tools. Takes stains and finishes well. English Sycamore belongs to the maple family and is not closely related to American Sycamore. The wood is usually straight-grained and has a fine texture. It stains, paints and polishes well.

English Sycamore is also used for violin backs, furniture, cabinets, architectural millwork and flooring.



Other names: Tasmanian Oak, Alpine ash, Australian Oak, and Mountain Ash.

Tasmanian Oak is grown in Australia and Tasmania. There are 356 subspecies of Eucalyptus, and Tasmanian Oak is one of them. Color is pale to light brown with a pinkish tinge. Straight grained and open texture, with interlocked or wavy grain and fiddle back figure on quartered surfaces. Gum veins are also present. Weight averages from 40-49 lbs per cubic foot. There is moderate blunting of cutting edges, and tools must be kept sharp. It is used for furniture, joinery, paneling, weatherboards, flooring, etc.



BurmaTeak tree obtains heights from 70 to 100 ft and diameter of 5-12 ft. The true Teak of Burma is a uniform golden-brown color without markings, but most of other Teak is rich brown with darker chocolate-brown markings. Weight varies from 28-43 lbs per cubic foot.

Teak offers medium resistance to tools, but severe blunting effects on cutters. Tungsten carbide tipped saws are suitable. Gluing is good on freshly planed or sanded surfaces, and acetone must be used to clean glue joints before gluing.

It is used for ship building, decking, rails, furniture, flooring, exterior structural work and garden furniture. Also for acid resistant purposes such as chemical vats, fume ducts and laboratory benches. It used for shipbuilding because of its resistance to saltwater and sun, and it doesn't promote rusting of metallic fittings.



Ulmo

Other names: Chilean Honey Tree

Ulmo is a south American hardwood, very hard and very dense, hence will blunt all tools very easily, carbide tooling is recommended. Glues fairly well' Color to resemble light cherry and alder. It is a very difficult hardwood to find on market.

Predominantly used for furniture accents, small types of woodwork, and structural purposes



Other names: Black American Walnut, Virginia Walnut and Black Walnut.

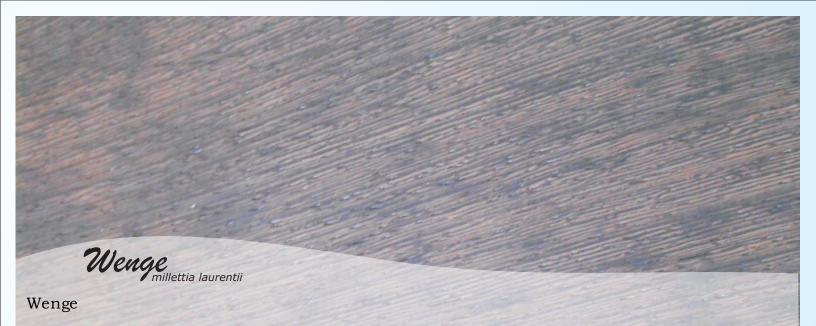
Average tree height can be 100-150ft with 4ft diameter. Walnut is a very branchy tree. The heartwood is a rich dark brown to purplish-black, mostly straight grained, but with wavy or curly grain occasionally present. The texture is rather course. Weight averages 40 lbs per cubic foot. This is a tough, hard timber of medium density, with moderate bending and crushing strengths, and low stiffness. Works with hand and machine tools without difficulty with moderate blunting effect on cutting edges. In the USA it is standard timber for rifle butts and gunstocks. It is extensively used for high quality furniture, cabinetmaking, musical instruments, etc. Grade on FAS walnut is comparable to a common grade of others, for example oak. Very resistant to decay, fungus and insect attack.



Other names: Nogal and Tropical Walnut

It is grown in South America. Peruvian Walnut displays a beautiful dark brown color with a blackish striped figure. The grain is straight to wavy, and the texture is rather coarse. Weight averages around 40 lbs per cubic foot. Peruvian walnut is usually cut in 4/4 thickness because of drying factors, but is a great substitute for American Walnut because of clarity. This wood works easily with both hand and machine tools and joint hold perfectly. Nails and screws take easily and although there is a moderate blunting effect on cutting edges wood finishes cleanly, and planed and sanded surfaces have a silken luster. It is used for high class furniture and cabinetmaking, musical instruments, rifle butts and gunstocks, turnery and carving, sports goods and furniture accents.

28



Wenge grows to an average height of 60ft and 2ft in diameter. It grows in swampy areas in the countries of Gabon, Congo, Cameroon, Tanzania and Zaire.

The clearly defined heartwood is dark brown, with very close, fine, almost black veins. The closely spaced whitish bands of parenchyma give the wood a most attractive appearance. It is fairly straight grained with a coarse texture. Wenge is heavy, hard and dense; works well with hand and machine tools and it has a moderate blunting effect on cutters. Average weight is about 55 lbs per cubic foot. It is resistant to termites.

The presence of resin cells in the wood sometimes interferes with gluing and polishing. The high natural resistance to abrasion makes this timber very suitable for flooring strips or blocks. Also used for joinery and it is an excellent turnery wood, and high end furniture.

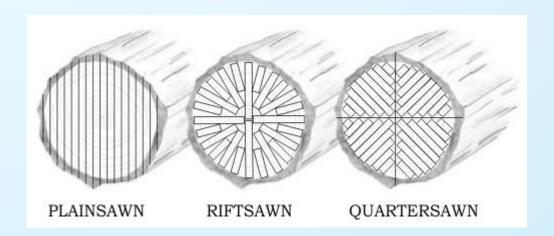


Yew Wood

Yew Wood is generally grown in Europe, reaching heights of 20-60 ft and 3ft in diameter. The heartwood color is golden orange-brown streaked with dark purple, mauve and brown in patches with veins, tiny knots and clusters of in-growing bark. The grain is straight, but sometimes curly and irregular. Weight averages around 42 lbs per cubic foot. It is moderately difficult to work, but straight grained material works readily and can be planed to a good smooth finish, irregular, curly or cross grained material tends to tear out. For centuries this was the wood used for bow staves by bowmen of England. It is excellent for turnery, some carving, furniture making, doors, tables, etc.



Zebawood is a large tree which can grow 150 ft tall and 6ft in diameter. Bark can be thick as much as 12°. It is grown mostly in West Africa in the countries of Gabon, Cameron and Congo. The heartwood is light golden-yellow with narrow veining or streaks of dark brown to almost black, giving the quartered surfaces zebra-stripe appearance. The grain is interlocked or wavy and produces alternating hard and soft grained material which makes the timber difficult to work. Zebrawood has a coarse texture and a lustrous surface. It weighs about 46 lbs per cubic foot. Although the wood works fairly readily with hand or machine tools, it is very difficult to get a good finish from machines doe to alternative nature of grain. A belt sander will provide a smooth finish. Zebra Wood is a good opposite choice for Wenge. Zebra Wood is used milled into veneers, and can be used for furniture, cabinetmaking, woodturning and instrument making.



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