

Common name:	AGATHIS
Family:	ARAUCARIACEAE
Scientific name(s):	Agathis dammara Agathis alba (synonymous) Agathis lanceolata Agathis moorei Agathis obtusa

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 60 to 120 cm	Colour:	Light yellow
Thickness of sapwood:	from 8 to 11 cm	Sapwood:	Not clearly demarcated
Floats:	yes	Texture:	Fine
Durability in forest :	Low (must be treated)	Grain:	Straight
		Interlocked grain:	Absent
Note:	Wood cream white or light yellow with often pink reflection; turns golden brown on exposure. Moiré aspect.		

PHYSICAL PROPERTIES			MECHANICAL PROPERTIES		
Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.					
	mean	standard deviation		mean	standard deviation
Density *:	0.53 g/cm <sup>3</sup>	0.06			
Monnin hardness*:	2.5	0.5	Crushing strength *:	43 MPa	4
Coef of volumetric shrinkage:	0.41 %	0.07	Static bending strength *:	76 MPa	9
Total tangential shrinkage:	5.9 %	1.4	Modulus of elasticity *:	11240 MPa	1707
Total radial shrinkage:	4.0 %	1.1			
Fibre saturation point:	30 %				
Stability:	stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> )		

#### NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate.

Except for special comments on sapwood, natural durability is based on mature heartwood.

Sapwood must always be considered as non-durable against wood degrading agents.

Fungi:	Class 3-4 moderately to poorly durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Susceptible; sapwood not or slightly demarcated (risk in all the wood)	
Termites:	Class S - Susceptible	
Treatability:	2 - moderately permeable	
Use class*:	1 - inside (no dampness)	
Note:	This species is listed in the European standard NF EN 350-2. Moderate to good amenability to preservative treatment. Prone to blue stain.	

#### MAIN LOCAL NAMES

Countries	Local names
Australia	KAURI
Indonesia	AGATHIS
Indonesia	DAMAR BINDANG
Indonesia	DAMAR KAPAS
Indonesia	DAMAR PILAU
Indonesia	DAMAR SIGI
Malaysia (islands)	BENDANG
Malaysia (islands)	BINDANG
Malaysia (islands)	MENGHILAN
Peninsular Malaysia	DAMAR MINYAK
Peninsular Malaysia	KAURI
New Caledonia	KAORI
Papua New Guinea	KAURI PINE
Philippines	ALMACIGA
Vanuatu	DAMAR MINIAK

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## AGATHIS

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### REQUIREMENT OF A PRESERVATIVE TREATMENT

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Against dry wood borer attacks:	Requires appropriate preservative treatment
In case of temporary humidification risk:	Requires appropriate preservative treatment
In case of permanent humidification risk:	Use not recommended

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### DRYING

#### Possible drying schedule

Drying rate:	Normal to slow	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	Slight risk	Green	42	39	82
Risk of casehardening:	No	50	48	43	74
Risk of checking:	Slight risk	40	48	43	74
Risk of collapse:	No	30	48	43	74
		15	54	46	63

This schedule is given for information only and is applicable to thickness < 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm , the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm , a 10 % increase should be considered.

Note: Risk of blue stain.

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### SAWING AND MACHINING

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Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Planed surfaces are lustrous.

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### ASSEMBLING

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Nailing / Screwing:	Good
Gluing:	Correct

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### END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

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Note: Aspect similar to MERISIÈRE (Cerasus avium). Stains well.

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#### Moulding

Cabinetwork (high class furniture)

Sliced veneer

Interior joinery

Interior panelling

Current furniture or furniture components

Veneer for interior of plywood

Veneer for back or face of plywood

Matches

Cooperage

Turned goods

Shingles

Boxes and crates

Wood-ware

Light carpentry

Glued laminated

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