
EUROPEAN
HARDWOD
2022 Catalogue
assiourasbros
advanced wood technology

Natural characteristics of wood

Resistance	Class 1 - 2 (DIN EN 350-2 / natural longevity)
Advantage	durable, without chemical wood preservation (sapwood and pith area have low resistance)
Quality	natural, typical characteristics and texture for wood

Cracks in timber,

are often considered as worrying or dangerous, but years of experience can not confirm this. In most cases of complaint neither the performance nor the longevity of the timber are affected by cracks. These cracks are created due to the physical characteristics of timber. This is a natural process and can not be avoided. Therefore an exchange is pointless, since the timber does not change its natural properties.

Postprocessing and care

Sharp edges or splinters that are not desired can be removed by usual artisanal means, for example sanding or deburring. The roughness of the surface can be removed in the same way. Before the beginning of the season playgrounds should be inspected and if necessary the wood reworked. Protective coatings reduce the moisture absorption and thus resulting deformation caused by extreme weather changes.

Weathering

Wood loses its fresh colour within a few weeks or months from weathering. Under the influence of sunlight, especially ultraviolet radiation the surfaces bleach out. Further weathering, sun, precipitation and temperature lead to a grey surface at last.

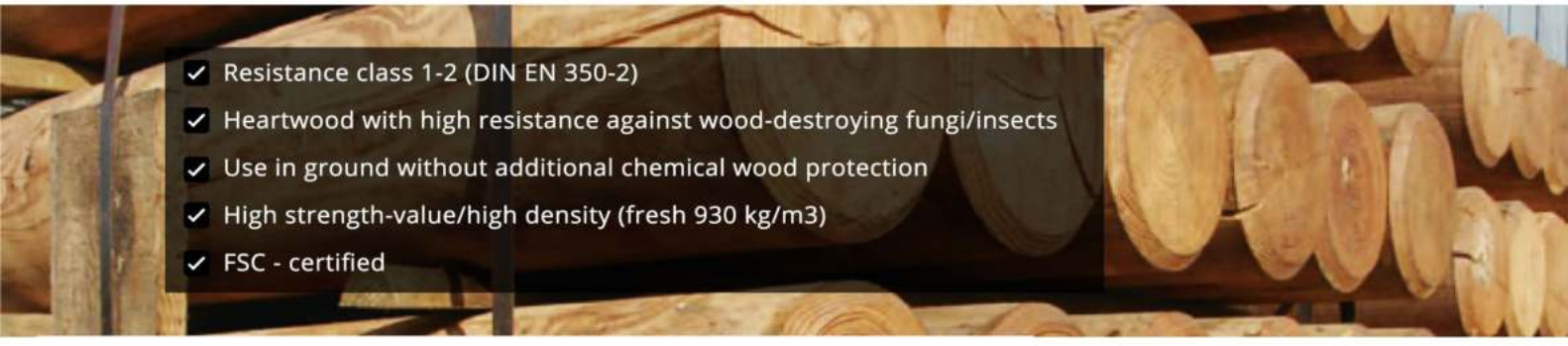
Risks by cracks

Especially cracks in the surrounding of playgrounds and playground equipment can lead to injuries. Round logs in particular can show v-shaped racks from the core to outwards due to dryness, but those are regarded as uncritical. The risk potential of this equipment is in compliance with prevailing standards and control.

The sapwood has barely any resistance, which has hardly any meaning for most applications, since the sapwood is only some millimeter thick as compared to oak. The area around the pith has a lowered durability. There are occasional complaints about rot in the heart of the wood and the fear that it spreads out. The fact is that this is restricted to the area around the pith and the essential part of the wood is not affected by it and is healthy for many years. Several research studies have been done to this occurence that confirm without exception, that rot in the heart does not spread to further parts of the log.

Conclusion

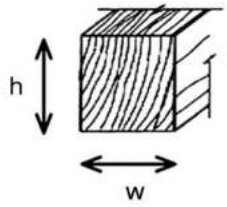
Cracks in woods are often perceived as flawed or objectionable, although objective disadvantages for the planned use do not exist in most cases. Cracks caused by weather are unavoidable and are in principal no deficiency. A replacement will not change the physical characteristics of wood.



Solid Square Timber

Dimensions

h	w	h	w	Length
42	80mm	80	100mm	200, 250, 300 cm
42	120mm	80	120mm	
50	80mm	80	140mm	
70	70mm	100	100mm	
		140	240mm	



Physical & mechanical properties

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	Mean		Mean
Specific gravity *:	0,74	Crushing strength *:	70 MPa
Monnin hardness *:	9,5	Static bending strength *:	126 MPa
Coeff. of volumetric shrinkage:	0,40 %	Modulus of elasticity *:	16900 MPa
Total tangential shrinkage (TS):	6,9 %		
Total radial shrinkage (RS):	4,4 %		
TS/RS ratio:	1,6		
Fiber saturation point:	30 %		
Stability:	moderately stable to poorly stable		

(: at 12% moisture content, with 1 MPa = 1 N/mm²)*

Note: As it is frequently observed for many plantation species, physical and mechanical properties of this wood hardly vary and depend on origin and trees age.

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..
E.N. = Euro Norm

Funghi (according to E.N. standards):	class 1-2 - very durable to durable
Dry wood borers:	durable - sapwood demarcated (risk limited to sapwood)
Termites (according to E.N. standards):	class D - durable
Treatability (according to E.N. standards):	class 4 - not permeable
Use class ensured by natural durability:	class 4 - in ground or fresh water contact
Species covering the use class 5:	No

Note: This species is listed in the European standard NF EN 350-2.
It is the only temperate hardwood introduced in Europe which naturally covers the use class 4. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

Requirement of a preservative treatment

Against dry wood borer attacks:	does not require any preservative treatment
In case of risk of temporary humidification:	does not require any preservative treatment
In case of risk of permanent humidification:	does not require any preservative treatment

Applications


pergolas


shading systems

Round Solid Timber

Product range

Category XS
Ø 5-7 cm
L 150, 200, 250, 300 cm

Category S
Ø 8 - 10 cm
L 150, 200, 300, 400 cm

Category M
Ø 10 - 14 cm,
Ø 14 - 18 cm,
Ø 18 - 22 cm,
Ø 20 - 22 cm
L 200, 250, 300, 400, 500, 600 cm

Category L
Ø 25 - 29 cm, 30 - 34 cm
L 200, 250, 300, 400, 500, 600 cm

Category XL
Ø 35 - 39 cm, 40 cm +
L 200, 250, 300, 400, 500, 600 cm

Processing
sapwood - free + sanded
(playground quality)

Applications

pergolas

Deck

Product range

natural, fluted
natural, plain

KD

Quality

80% free of knots
20% small sound konts
resin - free
minimum of cracks

minimum destortion
minimum twisting
minimum warping

Dimensions

21 x 80 mm
21 x 100 mm
21 x 120 mm

Quality class 1
Resistance class 1 - 2 (DIN EN 350-2)
Strength class D30

Length 150, 175, 200, 225, 250 cm

Applications


deck


façade

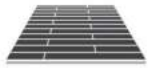
Cubes

Product range

Dimensions 45 x 45 mm
100 x 100 mm

100% ecological product
Largely maintenance-free, no rotting
Little maintenance
Service life of over 50 years
Sustainable since it is renewable raw material

Applications



exterior
flooring

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