



## PURPLEHEART

### Source

FSC Purpleheart is available in the forests of Precious Woods, located in the Amazon region of Brazil. The large trees attain heights of about 50 m and diameters of 50-120 cm. The trunk is straight and cylindrical with a clear bole length of about 18-27 m.

### Appearance

Directly after moulding, the heartwood has a pale brown color, which very quickly changes to purple after exposure. The color darkens to dark brown after a longer period of exposure to the light. It has a fine stripy pattern, and a slight lustre. The sapwood is easy to distinguish. The grain is straight and the texture is fine. In a certain botanical species – sometimes common in standard trade quality – ‘traumatic’ resin canals can be found, showing darker lines in the longitudinal direction of the wood (see wood picture).

### Processing properties

The heartwood can be machined well, resulting in a smooth surface. Pre-drilling is recommended. The finishing and gluing are in accordance with the Dutch regulations for windows and doors (provided the resin canals). Purpleheart dries slowly with a tendency to surface checking. The wood has a tendency to bleed water soluble extractives. Sawdust of this species can cause an allergic reaction.

### Application

This exclusive species is used for several purposes:

- Interior: e.g. parquet, furniture and stairs
- Exterior: e.g. boardwalks, gardens, piles and bridge constructions

### Technical properties

Green density	1.200 kg/m <sup>3</sup>
Density (at 12%)	850 - 900 kg/m <sup>3</sup>
Shrinkage green – oven dry	5,0% radial; 8,3% tangential
Shrinkage green – 65% RH (abt. 12% EMC)	1,9% radial; 3,5% tangential
Equilibrium Moisture Content (EMC)	8,8% (at 65% RH water adsorption) 13,2% (at 65% RH water desorption)
Fibre Saturation Point (FSP)	23%
Durability according to EN 113 (without soil contact)	Heartwood class 1
Durability according to ENV 807 (with soil contact)	Heartwood class 2
Durability according to EN 350:2016	Heartwood class 2-3
Bending strength, MOR (defect free samples)	142 N/mm <sup>2</sup>
Modulus of elasticity, MOE (defect free samples)	21.250N/mm <sup>2</sup>
Shear strength (defect free samples)	17 N/mm <sup>2</sup>
Janka hardness	12.450 N (transversal); 11.400 N (parallel)
Strength class (EN 338)	D40 *)
<i>The figures in this table are mainly indicative, unless a specific standard is mentioned, which provides exact figures. *) This value is determined by testing of a limited number of full scale samples. A higher value is expected by testing more samples.</i>	

### References

This information is based on research (mainly independent) and experience of Precious Woods, (semi-) scientific literature and the (Dutch) Houtvademecum (10<sup>th</sup> edition 2010).