

Massaranduba / Balata Franc



Trade Name: **Massaranduba**

Other Names: Balata Franc, Bulletwood

Scientific Name: *Manilkara bidentata*

Specie Brief: Very high-density hardwood with excellent durability properties and a very smooth finish making it popular for outdoor decking and sub-construction uses.

Wood Description		Physical & Mechanical Properties	
Heartwood Color	Red brown	Specific Gravity (kg/m3)*	1.10
Sapwood Color	Clearly demarcated	Monnin Hardness*	12.9
Texture	Fine	Crushing Strength*	89 MPa
Grain	Straight	Radial Shrinkage	7.10%
Cross Grain	Absent	Tangential Shrinkage	8.40%
Durability	Class 1 - very durable	Tangential / Radial Ratio	1.30
Marine Durable	Class 5 - yes	* at 12% moisture content	

Key Products & Uses:

- Posts & Poles
- Sub-Construction
- Outdoor Decking
- Outdoor Fencing
- Shingles & Shakes
- Outdoor Cladding

Properties & Characteristics

Massaranduba is one of the densest commercial hardwoods to be found in South America, meaning it is also one of the densest in the world. With a density of 1.10 kg/m³ at 12% MC, Massaranduba is a unique hardwood that rates very high in natural durability (class 1). It is a family of the rubber tree and in some parts of South American it was tapped for latex. The heartwood is a very dark reddish brown which darkens more with light exposure. Grain is very straight and texture fine and thus if dried properly it produces one of the smoothest wood finishes possible.

Outdoor Decking

Massaranduba's best known end-use is for outdoor decking in Europe and the USA. Due to its high durability and very smooth surface finish, it is one of the most preferred South American decking species after Ipe. Massaranduba is well-known in all international markets as a very good decking species. The species was tapped for latex in some parts of South American in the past which causes visual internal defects. So it is very important to verify whether trees were tapped before felling and processing.

Sub-Construction

As Massaranduba is a very strong and durable species, it is used for a wide spread of heavy construction applications such as hydraulic works, bridges, sheet piling, boardwalks, piles, garden timbers and sub-construction. One of its largest volume uses today is in sub-construction for the European decking market. This is very important in countries that require decking supports to be durability class 1 or 2 (i.e. France).

Hydraulic Uses / Posts & Beams

Massaranduba is rated as marine durable in brackish water so is sometimes used in hydraulic works and projects. This can include large timbers and piles, or smaller sized timbers that are used for sheet-piling in countries with a lot of hydraulic projects, such as the Netherlands and the UK. Care must be given to splitting if Massaranduba timbers or sheet piling is driven by heavy machinery.

Large heavy posts and beams can also be produced from Massaranduba, especially as it is a medium-large sized tree.