FRAMIRÉ, IDIGBO

Botanical name: *Terminalia ivorensis,* family COMBRETACEAE

Distribution: Tropical Africa

Other important trade names: Framiré (B, D, F, NL), Idigbo (F, GH, WAN, GB)

Abbreviation as per DIN EN 13556: TMIV

Colour and structure of the wood:

Heartwood brown, yellow and green, no colour stripe. Sapwood matches the colour of heartwood. In damp condition, there is no clear difference between sapwood and heartwood. In dry wood, the sap is pale yellowish, the heart is greenish yellow; when exposed to light, golden yellow darkening to light brown. The growth zone boundaries are marked by dark fibre bands, caused by a lower vessel density in latewood. The often twisted porous grooves are very visible on the longitudinal surfaces and affect the appearance of the wood. Cross grain present. Usually only weak and irregularly developed, thus only seldom generating regular glossy stripes.

Properties:

Weight fresh [kg/m³]		750 – 900
Bulk density air-dry (12-15 % u) [g/cm³]		0.48 – 0.56
Compression strength $u_{12\text{-}15}$ [N/mm²]		41 – 53
Bending strength $u_{12\text{-}15}$ [N/mm²]		75 – 95
Modulus of elasticity (bending) $u_{12\text{-}15}$ [N/mm²]		7800 – 9600 – 11300
Toughness [kJ/m²]		25 – 48
Hardness (BRINELL) ⊥ to the grain $u_{12\text{-}15}$ [N/mm²]		13 – 16 – 20
Drying shrinkage (fresh up to $u_{12\text{-}15}$)	radial [%]	1.5
	tangential [%]	3.0
Differential shrinkage [%/%]	radial	0.1 – 0.15
	tangential	0.15 – 0.22
pH value (suspension)		3.6
pH value (surface)		4.4
Durability class (EN 350:2016)		DC 2 – 3

Workability:

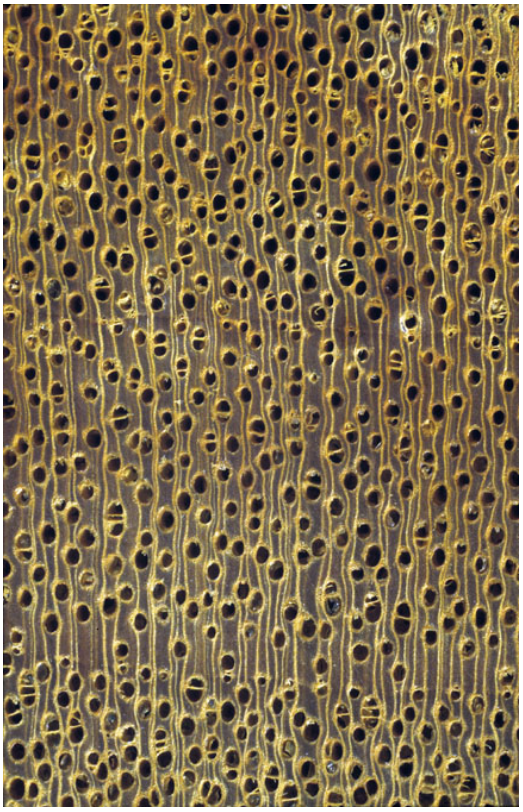
Framiré is easy to work manually and by machine. In cross grain, sometimes rough surfaces can develop. The wood is easy to screw and nail. Lasting joints are possible. Bonding good.

Drying:

The wood is fast-drying and only slightly prone to crack formation and deformation. During the drying process, care should be taken that the wood does not come into contact with ferrous metals because this leads to greyish blue discolouring (ferrous/tannin reactions).

Use:

Outdoor or indoor use; supporting or non-supporting. Especially suitable for: Outdoor use with no ground contact, frame structure (windows, house doors, conservatories; solid wood and laminated profiles).



Macroscopic cross-section of Framiré
(10 times magnification lens)

Wood surface of Framiré (radial section)

Surface treatment:

Washing out water-soluble substances very often leads to yellowish discolouring. Particularly with white coatings. Corrosion of iron in contact with wood: prevalent.

Coating systems:

The coating systems illustrated here are examples developed to ensure utmost durability and lasting quality.

Alternative systems are also available; however, these must be confirmed by Teknos. Please contact your local Teknos representative for further details.

Details on application can be found in the technical data sheets for each product.

Windows, doors, conservatories, and folding shutters:

System coating	Translucent
Primer	AQUAPRIMER 2900-43
Intermediate	ANTISTAIN AQUA 2901-63
Intermediate	ANTISTAIN AQUA 2901-63
Topcoat	AQUATOP 2600 translucent topcoat

System coating	Opaque
Primer	ANTISTAIN AQUA 2901-52
Intermediate	ANTISTAIN AQUA 2901-52
Topcoat	AQUATOP 2600-2X

System coating	Colourless
Primer	ANTISTAIN AQUA 2901-63
Intermediate	ANTISTAIN AQUA 2901-63
Topcoat	AQUATOP 2600-6X
Topcoat	AQUATOP 2600-6X

Wood is a unique, beautiful, and very versatile material

The features and properties of wood vary greatly and therefore individual attention is required in processing and surface finishing.

With this Teknos wood data sheet we would like to go into detail on the features and range of applications in the coating of important wood species.

The data sheet originated from a collaboration with the Johann Heinrich von Thünen-Institute in Hamburg.

The pH values of wood have been determined as important chemical variables for the first time.

The concentration dependence of extracts such as tannic acids or tannins to the pH value is important.

A good surface coating and targeted selection of system structures shall be safer based on these variables determined by Thünen-Institute and demonstrate wood-related problem solving.

All system structures named in the data sheet are selected according to utmost durability and quality and are considered to be relevant systems. However, a practical test is always necessary.

Due to different application possibilities and stresses of parts to be coated, variations are required.

To select individual systems easily, the Teknos technical department will be happy to assist you.