






NOVA-IROKO THERMO-D DATA SHEET












Mechanical Properties, Strength values		Iroko, Kiln-dried	Iroko, Thermowood
Modules of elasticity (MOE), flatwise (MPa-N/mm ²) DIN EN 408, TS 2478		-	10.420 - 13.550 (10.420)
Modules of rupture (MOR), flatwise (MPa) DIN EN 408, TS 2474		-	55 - 60 (55.00)

Physical Properties, Moisture content		Iroko, Kiln-dried	Iroko, Thermowood
Equilibrium moisture content at 20/65 (%) EN 13183-1		11 (9-12)	4 (4-6)
Raw density at 20/65 (kg/m ³) DIN 52182		660-690	576-650

** A medium density wood with low bending, shock resistance, stiffness and compression values, with a medium steam bending classification. Iroko is very strong for its weight and is ideal for laminated beams and structures too.

Biological durability against wood-decaying basidiomycetes (Increased durability to decay) (Resins and sugars removed) (Low moisture content prevents decay and fungi growth)		Iroko, Kiln-dried	Iroko, Thermowood
Preliminary durability classification Median mass loss (< 5 %)		-	Class 1
CEN/TS 15083-1 Source: Thermowood Association		-	-

Nail and screw holding strength <i>(screw withdrawal strength)</i>		Iroko, Kiln-dried	Iroko, Thermowood
a. Stainless steel or galvanised screws and plastic clips are recommended. Hidden and face fixing systems EN 1383, NEN 6562 b. Steel material standard 10088-3		-	Class A2
Surface contaminations from fixation elements		-	Not delicate
Glueing		Iroko, Kiln-dried	Iroko, Thermowood
Fingerjoints Laminations Panel production		-	MUF, Polyuretane
Brinell Hardness		Iroko, Kiln-dried	Iroko, Thermowood
		-	40 N/mm ²
Emissions		Iroko, Kiln-dried	Iroko, Thermowood
The emissions are not harmful in fresh air.		-	OK
The smell of thermowood products may disappear within a few days but with the surface treatment or rain it may raise up again. 100 % natural, environmentally friendly and recyclable products.		-	Short Time
Thermal conductivity, Insulation <i>(Decreased Thermal Conductivity)</i>		Iroko, Kiln-dried	Iroko, Thermowood
Heat conductivity W/mK TS EN 12667		1,2	0,099
Colour		Iroko, Kiln-dried	Iroko, Thermowood
Colour of the wood changes (Iroko colour is light amber, honey colour)		-	OK
Oil and water based coatings		-	OK

Environment (100 % naturel) (recyclable) (from renewable forests)		Iroko, Kiln-dried	Iroko, Thermowood
FSC certified		-	OK
100 % naturel		OK	OK
100 % recyclable and biodegradable		OK	OK
Low processing energy demand		OK	OK
Sustainable development and a low carbon future		OK	OK
Healty and safety		Iroko, Kiln-dried	Iroko, Thermowood
Definitely naturel and harmless. Free of chemicals.		OK	OK
Completely healthy.		OK	OK
Improving the stability and durability of wood without using any persistent toxic chemicals		OK	OK
Freeze-heat shock treatments		Iroko, Kiln-dried	Iroko, Thermowood
1 Cycle: Freezing stage: 3 days -40°C as frozen wood and then Heating stage: 30 min 200°C in furnace as thermal shock effects. Novawood R&D test spects and ASTM-D 143-94 standards.		-	OK-5 cycle (surfacequality) (no cracks) (no color change).