

LIGNA LUXE

IROKO THERMO TREATED DECKING

PRODUCT CODE
LDTTIR95 / LDTTIR120

DOCUMENT REF
TDS-LDTTIR-1

ISSUE DATE / VERSION
October2023 / V1.0

PRODUCT OVERVIEW



LIGNA Luxe Iroko Thermo Treated Decking is a premium, thermally modified hardwood decking solution.

Through the thermal modification process, Iroko achieves enhanced dimensional stability, superior durability and improved resistance to moisture and biological decay — without the use of chemicals.

Known for its rich, uniform dark-brown tone, Thermo Treated Iroko is an ideal choice for high-end residential and commercial outdoor spaces. Our "Luxe" designation ensures precise manufacturing, optimal thermal modification and stringent quality control.

Key Attributes

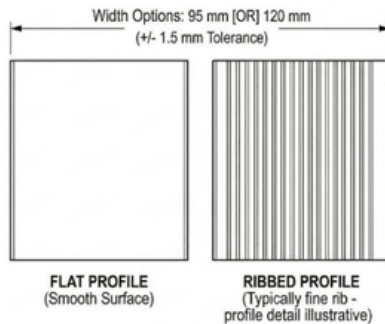
Durability	Class 1 naturally durable after thermal modification. Excellent resistance to rot, fungal decay and biological attack.
Thermo Treated	Thermally modified at 180–230 °C, eliminating hemi-cellulose moisture absorption — dramatically reducing swelling, shrinkage and warping.
Aesthetics	Rich, uniform dark-brown colour throughout the board cross-section. Colour matures gracefully with UV exposure over time.
Surface	Choice of Flat (Smooth) or Ribbed profiles for design and functional flexibility.

2. DIMENSIONS & PROFILES

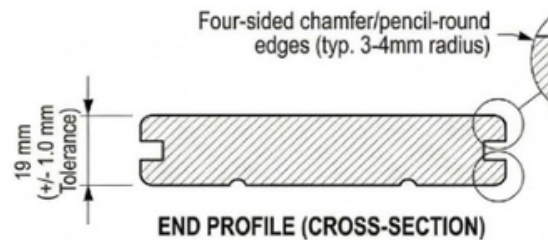
Iroko Thermo Treated Decking is manufactured to precise tolerances

PARAMETER	SPECIFICATION
Thickness	19 mm (± 1.0 mm)
Width Options	95 mm or 120 mm (± 1.5 mm)
Length	Variable random lengths, typically 2.4 m – 5.4 m
Fixed Lengths	Available upon special request. Contact LIGNA sales
Surface Profile	Flat (Smooth) or Ribbed (fine rib profile)
Edges	Four-sided chamfer / pencil-round edges (typ. 3–4 mm radius)

BOARD PROFILES



Face Profiles — Flat & Ribbed



End Profile — Cross-Section

3. MATERIAL SPECIFICATIONS

Species: *Milicia excelsa* / *Milicia regia* (Trade name: Iroko) — Thermally Modified (TM) Grade

PROPERTY	VALUE / CLASSIFICATION
Density (Mean)	560 – 620 kg/m ³ @ 6% Moisture (ISO 3131) — reduced by thermal modification
Moisture Content	4% – 7% at time of delivery (Oven Method) — thermally modified
Natural Durability	Class 1 (Very Durable) after thermal modification. Excellent resistance to termites (EN 350-1)
Janka Hardness	Approx. 5,100–5,400 N — good wear resistance (ASTM D143)
Shrinkage Movement	Very low. Highly stable after thermal modification

PROPERTY	VALUE / CLASSIFICATION
Tangential Movement	~1.5% – 2.0% (Green to 12% MC)
Radial Movement	~0.3% – 0.6% (Green to 6% MC) — significantly reduced
Slip Resistance (Ribbed)	Enhanced Grip — contact LIGNA for PTV/PTV(W) data
Sustainability	FSC Certified — available upon request

4. SUITABLE APPLICATIONS

LIGNA Luxe Iroko Thermo Treated Decking is a highly versatile premium timber suitable for diverse exterior architectural applications, for both residential and high-traffic commercial projects where low maintenance and high durability are required.

- Patios & Terraces — primary ground-level or raised outdoor living areas.
- Pool & Spa Surrounds — excellent moisture resistance. Ribbed profile recommended for slip resistance in wet areas.
- Rooftops & Balconies — compatible with elevated pedestal support systems.
- Commercial Plazas & Boulevards — durable enough for public pedestrian traffic.
- Marine & Waterfront Structures — boardwalks, docks and pontoons above the splash zone (A4 stainless fasteners required).
- Landscape Features — pathways, pedestrian bridges and sunken garden features

5. INSTALLATION GUIDELINES

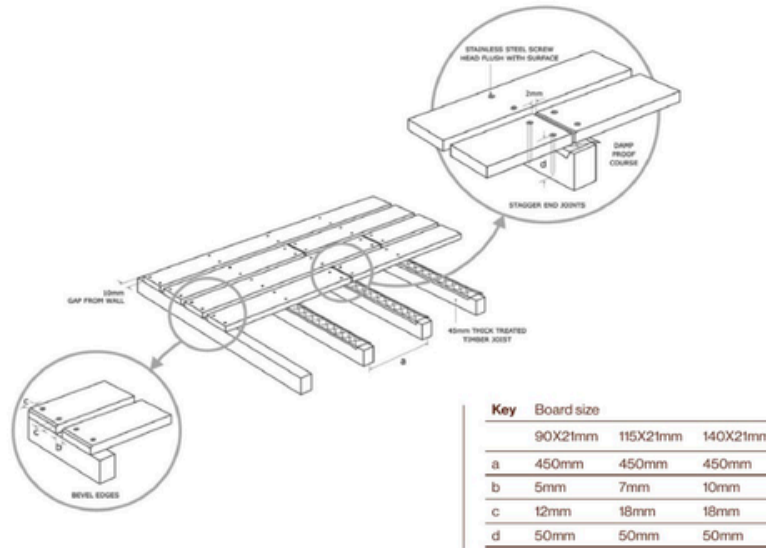
Proper installation is critical to long-term performance.

PARAMETER	RECOMMENDATION
Subframe Spacing	Maximum joist centres of 400 mm (for 19 mm thickness)
Board Spacing	Minimum 5 – 6 mm gap between boards (tangential direction)
End Gap	Minimum 2 mm gap at board ends
Fasteners	MUST use Stainless Steel — Grade A2/304 standard; for coastal/marine
Fixing Method	Pre-drill and countersink. Hidden fixing systems available — contact LIGNA
Ventilation	Minimum 100 mm air gap between ground and underside of deck boards. Critical for longevity.
Drainage	Substrate must be stable and sloped minimum 1% – 1.5% away from structures.

Noteon Fasteners

Standard steel or galvanised fasteners will corrode rapidly in contact with Iroko tannins, causing staining and structural failure. Stainless Steel fasteners must be used in all applications without exception.

INSTALLATION OVERVIEW



Typical deck fixing layout — board, joist, screw placement and board edge detail

6. MAINTENANCE & FINISHING

Thermo Treated Iroko has inherently improved UV stability compared to untreated timber, but will gradually silver-grey with prolonged UV exposure if left unfinished. This is an aesthetic change, not a structural one.

- Weathering Protection: Apply an appropriate UV-inhibiting decking oil or sealer suitable for thermally modified timber immediately after installation and reapply as needed.
- Cleaning: Use appropriate decking cleaners periodically to remove mould or debris. Power washing is not recommended.

7. QUALITY ASSURANCE & WARRANTY

LIGNA Luxe products undergo rigorous inspection prior to despatch.

- Warranty: Supported by the standard LIGNA product warranty against manufacturing defects. Detailed terms available upon request.
- Natural Variation: As a thermally modified natural timber product, variations in colour, grain and texture are inherent and do not constitute defects.

LIGNA WOOD+ARCHITECTURE

For sales, samples or technical enquiries

www.ligna.ae