TIMBER FOR BEAMS AND JOISTS

# Planed squared timber Thermo Abachi (Ayous) 40×40, NATUR class

Wood species: Thermo Abachi.

THERMALLY MODIFIED ABACHI | BOIS | INTÉRIEUR ET EXTÉRIEUR | NATUREL




## IDENTIFICATION

| | |
|---|---|
| Dartank reference | **D7S03** |
| Dartank EAN | **3701839311899** |
| Material | **Thermally modified abachi** |
| Thickness | **40 mm** |
| Sales unit | **Linear metre** |

OVERVIEW

## Overview

Central and West African abachi (ayous) thermally modified with heat, steam and water, without chemicals. The wood gains stability, durability and insulating power, suiting cladding, decking, soffits, fences, saunas and interior finishing.

## KEY BENEFITS

**01**
### Stability
50% better dimensional stability; about half the shrinkage and swelling.

**02**
### Durability
Very durable against fungi and insects (durability class 2).

**03**
### Chemical-free
Treated with heat, steam and water, without additives or acids.

**04**
### Healthy indoor air
VOCs cut to 16% of unmodified wood, formaldehyde-free.

**05**
### No resin bleed
Heat treatment stops resin bleed and reduces cracking.

**06**
### Light and stable
Straight-grained African hardwood, easy to machine and finish.

## PRODUCT CHARACTERISTICS

| | |
|---|---|
| Material | **Bois** |
| Wood species | **Thermo Abachi** |
| Width | **40 mm** |
| Profile | **S4S** |
| Class | **Naturel** |
| Application | **Intérieur et extérieur** |
| Length | **sur demande** |
| Protection | **Thermo-drewno** |

## THE MATERIAL

### Thermally modified abachi

Thermally modified African abachi (ayous), light and resin-free.

| | |
|---|---|
| Species | **Abachi / ayous (Triplochiton scleroxylon)** |
| Origin | **Central and West Africa** |
| Density | **330 kg/m³** |
| Colour | **Golden yellow-brown** |
| Grain and texture | **Straight grain, medium texture** |
| Appearance grades | **Natur** |

## PERFORMANCE AND TEST RESULTS

| Property | Standard | Result |
|---|---|---|
| Modulus of elasticity | | **5200 N/mm²** |
| Heat-treatment temperature | | **180–220 °C** |
| Dimensional stability | | **+50% versus unmodified wood; about half the shrinkage and swelling** |
| Natural durability (class) | EN 350 | **1–2** |
| Resistance to fungi | | **Very durable** |

| Property | Standard | Result |
|---|---|---|
| Resistance to insects | | **Very durable** |
| Resistance to termites | | **Very durable** |
| Formaldehyde | | **No formaldehyde emission** |
| Chemical additives | | **None — heat, steam and water only** |

## INSTALLATION

### Installation

1. **Substructure** Install above ground with sufficient ventilation (use class 3).
2. **Gap between boards** Leave about 4–7 mm between boards (more for the most reactive species).
3. **End gap** Allow about 2–3 mm between board ends.
4. **Screwing** Screws twice as long as the board is thick, driven at 90°, head flush (neither proud nor sunk).
5. **Pre-drilling** Always pre-drill, even with self-drilling decking screws.
6. **Machining** Sawing, drying, nailing and finishing: very good.
7. **Pre-installation check** Starting installation means accepting the product's condition: report any defect before cutting, drilling or treating.
8. **Workmanship** Installation should be carried out by a professional in line with good building practice.

### Storage

- **Stacking** Stack boards flat, strapped and/or evenly weighted, allowing air to circulate.
- **Shelter** Store in a dry place protected from water and UV.
- **Stacking** Unsecured storage risks cupping and twisting.
- **Coated boards** Protect painted or stained faces (e.g. with foam film).

## MAINTENANCE

### Maintenance

| | |
|---|---|
| Weathering | **Outdoors, the wood weathers to a silvery patina without losing its technical properties.** |
| Renovation | **To keep the original colour, regularly apply an exterior wood maintenance oil.** |
| Renovation | **Renovation frequency depends strongly on exposure.** |

## QUANTITIES

**COVERAGE PER LINEAR METER** — 5% cutting waste

| LENGTH | BILLED | BARS |
|---|---|---|
| 2 ml | 2.1 ml | 2 |
| 6 ml | 6.3 ml | 4 |
| 12 ml | 12.6 ml | 7 |
| 24 ml | 25.2 ml | 13 |

## WARNINGS

- **Structural use** Thermally modified wood becomes more brittle: not recommended for load-bearing structures unless reinforced.
- **Natural material** Thermal modification does not prevent surface algae or mould stains (visual effect only, durability unaffected).
- **Natural material** 100% natural, hygroscopic wood: it swells in wet weather and shrinks in hot weather. Grain and colour vary from board to board.
- **Natural material** Outdoors, weathering, deformation, cracking and dimensional change are natural for wood and are not grounds for a claim.
- **Order allowance** More brittle material: order about 10–15% extra.

Non-contractual document. Values are given for guidance; official documents are available on request.