



**MAINTENANCE  
INSTRUCTIONS  
FOR DECKING**



# RESPECT FOR THE ENVIRONMENT

## CHAIN OF CUSTODY

We are a company that takes our future and that of the planet very seriously. That is why we work towards guaranteeing reforestation and environmental care, safeguarding the future of the forests and their wood. **WE ADHERE TO THE CHAIN OF CUSTODY STANDARD** in line with EUTR regulations.

## EUROPEAN REGULATIONS

Our wood is purchased under the permits required by the official competent agencies in each country of origin and adhering to Due Diligence System of AEIM (Spanish Timber Trade Federation's), thus complying with the European Union Timber Regulation (EUTR).

## FSC CERTIFICATE

Our activity is subjected to regular evaluations, certifying our adherence to the Forest Stewardship Council's chain of custody system. Licence Code: *FSC-C015217*.



## **1** PREVIOUS CONSIDERATIONS OF DECKING

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## 1.1 EXTERNAL CONDITIONS THAT AFFECT THE WOOD

The following basic considerations should be taken into account before installing outdoor wood flooring:

- **the climatic conditions of the area**, especially the incidence of direct sunlight and the average seasonal humidity.
- **xylophagous external agents** such as fungi and insects.
- **slipperiness**: public transit.



## 1.2 SLIPPERINESS

Depending on the usage class of the flooring, the Spanish Technical Building Code (CTE) requires a specific slip resistance.

For flooring installed in outdoor areas or swimming pools, the maximum slip resistance value is required (Rd>45), corresponding to usage class 3. The CTE also specifies that said usage class must be maintained throughout the entire service life of the flooring.

In order to obtain the Rd value, a test must be conducted in compliance with Spanish standard UNE-EN-V12633:2003 with the flooring in final usage conditions. The slipperiness of the flooring will depend on actions that it undergoes subsequent to our manufacturing, such as sanding (depending on the grain size used) and the application of oils or wood stains.



In any case, non-slip systems with continuous or mixed slotting must be used in order to reduce the slipperiness of the flooring when it is wet due to rainfall or splashing from pools, as recommended in Spanish standard UNE 56823:2008.

It is also essential to periodically clean the flooring to eliminate films of dust and even fungi formation, which increase slipperiness.

### 1.3 COLOUR AND DIMENSIONAL ALTERATIONS

Prolonged exposure of wood floorings to external weathering agents, especially the action of the sun and humidity, causes the wood's surface to take on a greyish tone.

This is a natural photodegradation process. Nevertheless, this phenomenon does not affect its long-term mechanical resistance, durability and performance: sanding the surface restores the wood's original colour. Also, **the use of oils and wood stains reduces alterations of this type.**



*Example of photodegradation in Cumaru wood after 2 years of oxidation*

Weathering agents also affect its dimensional stability, generating superficial checks that can be considered repairable if they remain within certain limits:

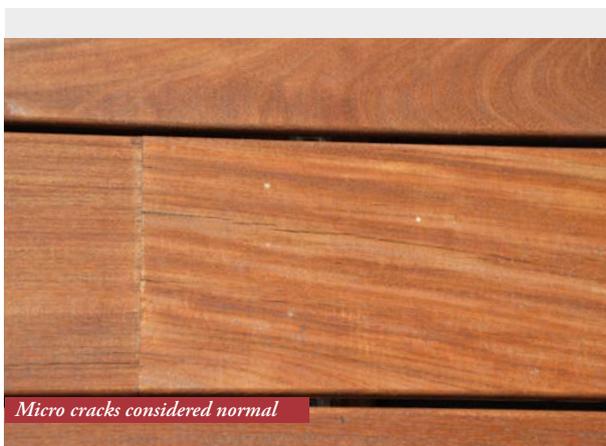
- Up to an individual length of 300 mm or up to the total length equiva-

lent to one piece.

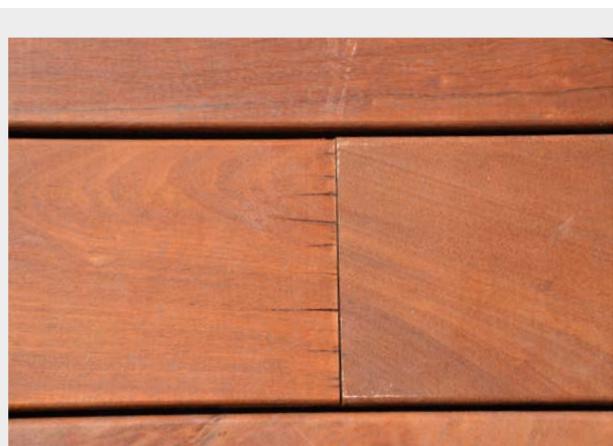
- Up to a width of 1 mm.
- Up to 1/3 of the depth of the board.

Alterations of this type **are reduced by periodically washing the flooring with water.**

There are other types of deformations that require the replacement of a piece, such as checks extending between two surfaces, splintering, ring shakes, etc.



*Micro cracks considered normal*



## 2.1 PROCESS OF WOOD STAINING



### 1. RUSTIC TREATMENT

A wider opening of the pores and an increase in the penetration index of the wood staining is achieved.



### 2. WOOD STAIN

The product is wood stained on its four faces with 200 g/m<sup>2</sup> of the product in two coats.



### 3. DRYING OVEN

It is introduced in a 5-metre tall drying oven towards the upper part (the hottest area).



### 4. THERMAL JET AIR

The drying is done using Thermal Jet Air with hot air, facilitating grip and increasing the fixing of the saturator.



### 5. COOLING

Lowering, cooling and removal of the pieces from the drying oven for shrink-wrapping with plastic film.



### 6. SHRINK-WRAPPING

Detail of the product already wood stained, packaged and shrink-wrapped.

## 2.2 BENEFITS OF THE PROCESS

### RUSTIC TREATMENT BEFORE WOOD STAINING.

The outdoor deckings have a considerably smooth and polished upper face after manufacturing (the wood pores are closed), which substantially decreases the rate of penetration and grip of the product to be applied. For this reason, López Pigueiras has included in its wood staining line a 4-axis rustication machine (2 axes with wire brushes and another 2 with sandpaper of different grain sizes) to open the wood pores and manage to increase the rate of penetration of the product to reach 200 g/m<sup>2</sup> and comply with slipperiness regulations.

### THERMAL JET AIR DRYING

The drying is performed by jetting hot air at the upper part of a 5-metre tall oven which, in contrast to other processes such as drying with lamps, allows a slow, progressive and natural (hot air) drying process, facilitating grip and increasing the fixing of the product to the wood.

### LONG-LASTING FINISH

*This production process increases the lifespan of the product in its original aesthetic conditions.*



## 2.3 COLOURS

### TWO COLOURS ARE USED: "IPE" AND "TEAK"

- IPE COLOUR is used for: **IPE, CUMARU and ELONDO**
- TEAK COLOUR is used for: **IROKO**

The wood stain for façades is: **CETOL WF 761**

*\*Prices and colours are the same as those of the wood stain for decking.*

## 3.1 MAINTENANCE OF THE SURFACE LAYER



SIKKENS Cetol WF 771

Weather conditions and variations in the humidity of the location where the decking is installed are the two factors that determine its maintenance.

Wood, as a living material, absorbs and releases humidity in line with variations in weather conditions. In the summer, it tends to contract, as a result of the lack of water, and to take on a greyish tone, as a result of continuous exposure to solar radiation.

In view of this, regular basic maintenance should be carried out to protect the decking and maintain its appearance over the passage of time.

Maintenance is based around two general elements:

- regulating the level of humidity that the decking is exposed to.
- protecting the surface layer against the sun's rays.

During the drier months of the year, and especially on excessively hot days, we recommend pouring water onto the decking to nourish it and prevent deterioration.

It is also advisable to apply at least one layer of SIKKENS Cetol WF 771 saturating treatment both before and after the summer. This will ensure year-round protection for the wood.

This saturating treatment is water-based, meaning that it provides an odour-free application, is non-flammable and provides anti-slip protection.

It acts against the photodegradation caused by the sun's rays, excluding any other damage occasioned.

### INSTRUCTIONS FOR USE

1. Clean the surface of the wood with water (without pressure).
2. Allow to dry.
3. Apply a layer of saturating treatment. It is advisable to do this gradually so that the application is uniform, avoiding drips and puddles. It is important to remove any excess product.
4. Leave the saturating treatment to dry for 24 hours after application.
5. If you consider it appropriate, apply a second layer of saturating treatment using the same procedure. This second layer will bond, producing a fine micro-porous film.



*\* Before moving any furniture over the wood flooring, we recommend waiting at least one week to ensure that it has suitably dried.*

## 3.2 MAINTENANCE OF THE STRUCTURE

The durability and appearance of outdoor wood flooring depends on its initial installation and on later adjustments.

### At the time of installation:

- Applying flexible points of adhesive for outdoor installations (SikaBond-52 or similar) between the batten and the flooring is recommended, in order to help the fastener in the securing of the flooring, and at the same time allow the natural movements of the wood.
- Glue end grains together, applying lines of rigid adhesive for outdoor

installations (Würth Multikraft or similar) on the base of the female part.

### Twelve months after installation:

- It is advisable to re-tighten the structure (screws, fixings, lag screws, etc.) and replace parts which exhibit irreparable damage, such as cracks and splintering.
- Repeat this process every three years, at most.

### CORRECT APPLICATION ✓

- Apply when the surface temperature and air temperature are between 15 °C and 35 °C, out of direct sunlight.
- Saturate the fibre.
- Allow each layer to dry for 24 hours.
- Apply in the direction of the grain.

### INCORRECT APPLICATION ✗

- Under direct sunlight. When the surface is hot (above 35 °C).
- If there is dew or frost.
- In humid weather or when the humidity of the wood is greater than 18%.



QUALITY



COMMITMENT



ENVIRONMENT