

# RELMAT SOLID WOOD FLOORING

## ZEUS LINE

### - KEMPAS -

## TECHNICAL SPECIFICATIONS

### 1. General Technical Characteristics of RELMAT Zeus Line

ZEUS Line of RELMAT consists of a series of prefinished hardwood floors that come from natural wood and can be offered in several species (Oak, Kempas, Merbau, Teak, Bamboo). The choice for a wooden floor usually depends on the desired colour as well as the use of the area.

With tongue & groove system, cut by diamond-tip tooling, RELMAT Solid Parquet gives a uniform and stable fit whether you nail, glue or float the installation.

As a prefinished product, the varnish is laid on all sides of the plank and under the following structure: 5 layers, plus 2 layers from Aluminum Oxide on the top surface and 2 layers on the bottom and the sides. The main reason for this structure is to ensure the total protection of the parquet, as the varnish - made from German company TREFFERT - is known for providing:

1. Resistance to scratches
2. Resistance to moisture
3. Protection against wood bacteria
4. Impact resistance
5. Resistance to household materials, stains, etc
6. Resistance to cigarette burns
7. Resistance to UV rays





## 1.2 KEMPAS – The tree

**Scientific Name: KOOMPASSIA MALACCENSIS**

KEMPAS is a tree in the tropical zone that grows in lower altitudes of some Asian countries, mainly Malaysia and Indonesia. Its height exceeds 30m.

It has a very warm reddish color with straight grains. Kempas has high natural durability and it is suitable to be installed both in residential and commercial areas.

## 2. Dimensions of RELMAT Solid Kempas

Width:	125mm
Length:	910mm
Thickness:	18mm
Grade:	GRADE A
Edges:	TONGUE AND GROOVE (T & G), width of tongue: 4.53mm

## 3. Technical Specifications of RELMAT Solid Kempas

Moisture Content	10-12%
Gloss Degree	35%
Density (g/cm3) *	0.88
Crushing strength * (MPa)	66
Static bending strength * (MPa)	113
Modulus of Elasticity * (MPa)	23.000
Hardness Janka	1710

**\*: at 12% moisture content; 1 MPa = 1N/mm<sup>2</sup>**

Source: CIRAD Forestry Department, National Wood Floor Association



**Technical Specifications of TREFFERT Varnish**

Test	Standard	Classification
Acetic acid 5%	20min	5
Ammonia 10% sol	960' (16h)	5
Ethylacohol 50%	1440' (24h)	5
Coffee	960' (16h)	5
Water	1440' (24h)	5
Acetone	960' (16h)	5
Mustard	1440' (24h)	5
NaOH 25% sol	10min	5
Adhesion	Cross-cut EN ISO 2409 Cross- cut and adhesive tape	0
Resistance to surface wear	(PrEN13329) S42 revolutions to IP	400
	(ASTM4060)CS17 revolution to IP	>15000
	Wear-Index mg abr./1000cycles	35
Resistance to impact	By small diameter ball EN 438-2.11(N)	<3
Resistance to scratching	EN 438-2.14(N)	2
Flammability	DIN 51960	K1

**Test Results of RELMAT Solid Parquet**

Formaldehyde	mg/100cm <sup>2</sup> /day in 35°C	< 0,05
Arsenic	mg/kg	< 0,05

*\* The tests were conducted in a Certified Laboratory*