

| | |
|---------------------|---|
| Common name: | KARRI |
| Family: | MYRTACEAE |
| Scientific name(s): | Eucalyptus diversicolor |
| Note: | KARRI presently commercialized does not come anymore from primary forests; it only comes from regrowth forests (Australia) as well as plantations (in particular South Africa). |

| LOG DESCRIPTION | WOOD DESCRIPTION | | |
|------------------------|--|--------------------|-------------------------|
| Diameter: | from 80 to 200 cm | Colour: | Pinkish brown |
| Thickness of sapwood: | from 3 to 6 cm | Sapwood: | Clearly demarcated |
| Floats: | no | Texture: | Medium |
| Durability in forest : | Good | Grain: | Straight or interlocked |
| | | Interlocked grain: | Slight |
| Note: | The above mentioned range of diameters is the one of woods of natural forests; woods from regrowth forests or plantations have lower dimeters. | | |

| PHYSICAL PROPERTIES | MECHANICAL PROPERTIES | | | |
|--|---|---|----------------------------|--------------------|
| Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions. | | | | |
| | mean | standard deviation | mean | standard deviation |
| Density *: | 0.90 g/cm ³ | | | |
| Monnin hardness*: | | | Crushing strength *: | 71 MPa |
| Coef of volumetric shrinkage: | 0.67 % | | Static bending strength *: | 119 MPa |
| Total tangential shrinkage: | 11.2 % | | Modulus of elasticity *: | 23300 MPa |
| Total radial shrinkage: | 7.6 % | | | |
| Fibre saturation point: | 28 % | | | |
| Stability: | Poorly stable | (* : at 12 % moisture content ; 1 MPa = 1 N/mm ²) | | |
| Note: | Hard wood. Physical and mechanical properties of KARRI wood from plantation hardly vary according to trees age and growth conditions. | | | |

NATURAL DURABILITY AND TREATABILITY
 Fungi and termite resistance refers to end-uses under temperate climate.
 Except for special comments on sapwood, natural durability is based on mature heartwood.
 Sapwood must always be considered as non-durable against wood degrading agents.

| | | |
|------------------|--|---|
| Fungi: | Class 2 - durable | * ensured by natural durability (according EN standards). |
| Dry wood borers: | Durable; sapwood demarcated (risk limited to sapwood) | |
| Termites: | Class S - Susceptible | |
| Treatability: | 3 - poorly permeable | |
| Use class*: | 3 - not in ground contact, outside | |
| Note: | This species is listed in the European standard NF EN 350-2. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition. | |

| MAIN LOCAL NAMES | |
|------------------|-------------|
| Countries | Local names |
| Australia | KARRI |

KARRI

REQUIREMENT OF A PRESERVATIVE TREATMENT

| | |
|---|---|
| Against dry wood borer attacks: | Does not require any preservative treatment |
| In case of temporary humidification risk: | Does not require any preservative treatment |
| In case of permanent humidification risk: | Use not recommended |

DRYING

Possible drying schedule

| Drying rate: | Slow | Temperature (°C) | | | Air humidity (%) |
|------------------------|-----------|------------------|----------|----------|------------------|
| | | M.C. (%) | dry-bulb | wet-bulb | |
| Risk of distortion: | High risk | Green | 40 | 37 | 82 |
| Risk of casehardening: | No | 40 | 44 | 38 | 68 |
| Risk of checking: | High risk | 30 | 44 | 36 | 59 |
| Risk of collapse: | Yes | 20 | 46 | 36 | 52 |
| | | 15 | 49 | 37 | 46 |

This schedule is given for information only and is applicable to thickness < 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm , the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm , a 10 % increase should be considered.

SAWING AND MACHINING

| | |
|-----------------------|-------------------------------------|
| Blunting effect: | Fairly high |
| Sawteeth recommended: | Stellite-tipped |
| Cutting tools: | Tungsten carbide |
| Peeling: | Not recommended or without interest |
| Slicing: | Not recommended or without interest |

ASSEMBLING

| | |
|---------------------|-------------------------------|
| Nailing / Screwing: | Good but pre-boring necessary |
| Gluing: | Correct |

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

Industrial or heavy flooring

Flooring

Vehicle or container flooring

Heavy carpentry

Glued laminated

Interior panelling

Exterior panelling

Bridges (parts not in contact with water or ground)

Stairs (inside)

Moulding

Cabinetwork (high class furniture)
