

## MARIPOSA HARDWOOD TIMBER FLOORING DATA SHEET – White Oak

**Family:** Fagaceae.

Worldwide, the oaks (*Quercus* spp.) consist of 275 to 500 species that can be separated into three groups based on their microanatomy: the live or evergreen oak group, the red oak group (*Erythrobalanus*), and the white oak group (*Leucobalanus*). Species within each group look alike microscopically. The word *quercus* is the classical Latin name of oaks, said to be derived from Celtic *fine* and tree *Grown*: Indo-Malayan region, Indonesia, Philippines, and many of the western Pacific islands as well as Australia. May be locally common in lowland forests, transition zones behind mangroves.

**The Tree:** Oaks can reach a height of 38M, with large diameters.

**General Characteristics:** The sapwood of oak is white to very light brown, while the heartwood is light to dark brown in the white oak group and reddish brown in the red oak group. Oak wood has a coarse texture; it is heavy, straight-grained, hard, tough, very stiff, and strong. Fast-grown oak, with wide rings, is stronger and heavier than slow-grown oak.

**Density:** Basic specific gravity (oven dry weight/green volume) 0.68; air-dry density 804 kg/M3.

**Mechanical Properties:** (50mm standard)

TEST	GREEN	KILN DRIED & CONDITIONED
Moisture Content	32%	8-12%
Bending Strength	803 kg/cm <sup>2</sup>	1082 kg/cm <sup>2</sup>
Modules of Elasticity	132,0 kg/cm <sup>2</sup>	146,020 kg/cm <sup>2</sup>
Maximum Crushing Strength	356 kg/cm <sup>2</sup>	485 kg/m <sup>2</sup>
Janka	4.5 kN	6.80 kN

**Drying and Shrinkage:** Seasons well with little degrade. Shrinkage green to kiln dry: radial 4.2% Tangential 7.2%; volumetric 12.6%. Movement in service is rated as moderate.

**Working Properties:** Oak wood has good working properties. It machines and glues well and holds fasteners extremely well. It tends to split when nailed, unless predrilled. Oak finishes well, but shrinks considerably.

**Durability:** The oaks are rated with respect to resistance to heartwood decay as follows (98):  
Very resistant--bur oak, chestnut oak, Gambel oak, Oregon oak, post oak and white oak.  
Moderately resistant--swamp chestnut oak.  
Slightly to nonresistant--black oak and red oak.

**Preservation:** The heartwood of the white oak group is resistant to impregnation with preservatives, whereas that of the red oak group is more easily penetrated.

**Uses** Ships, railroad crossies, timber bridges, tannin dyes, fuel wood, hardwood dimensions and flooring, furniture, veneer, plywood, barrels, kegs and casks (white oak group), truck and trailer beds, mining timbers, containers, pallets, caskets, boxes, paneling.

**Mechanical Properties:** (50mm standard)

Product Code	Available Range	Dimensions
TW003	Trendwood Classic – White Oak	10mm x70mm
TWH03	Trendwood Herringbone – White Oak	10mm x 70mm x 280mm
TW003PLUS	Trendwood Plus - White Oak	15mm x 90mm
TW103	Trendwood Premium - White Oak	20mm x 127mm
TW203	Scotia – White Oak	19mm
TW303	Nosing Classic – White Oak	20mm x 70mm
TW303PLUS	Nosing Plus - White Oak	20mm x 90mm
TW403	Reducer – White Oak	10mm x 2mm x 70mm
TW503	Skirting - White Oak	10mm x 70mm

### How to specify your Mariposa Hardwood Floor:

- Product Code - Species – Range** eg: TW003PLUS – White Oak – Trendwood Plus
- Number of Square metres – allow up to 5% wastage**
- Accessories – Nosing for any stairs, scotia or skirting for perimeter**

A large range of other products can also be manufactured in White Oak on request.

Included are unfinished strip flooring, inlays, borders, & medallions

Minimum order quantities apply.

Please consult your local Mariposa Hardwood Flooring expert for assistance in converting your design requirements to a beautiful solid timber floor by Mariposa.

**Mariposa Group Pty Ltd**

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technical data sheet