

TEAK

1 STANDARD NAME : **TEAK**
BOTANICAL NAME : *Tectona grandis* L. f.
FAMILY : Verbenaceae

2 a. Origin : South and South East Asia
 b. : Indonesia : JATI, TEK
 : Thailand : MAY SAK
 : India : SAGWAN
 : Burma : KYUN
 : Germany : (BURMA-RANGOON - JAVA TEAK)
 c. : Pr. = regular, in Burma potential to increase but tight government control
 Ex. = Round logs substantial only from Burma through the state export organisation and also lumber from Java. Logs banned from Thailand, Indonesia and India

3 a. Sapwood : clearly differentiated, yellowish white to light grey (2 - 5 cm wide)
 b. **Heartwood** : - Colour : yellow/brown to dark brown, resembles walnut, darkens on exposure. Partly traversed by brown markings 2 - 8 cm wide. Waxy lustre
 - Grain : no twisted growth. Parenchyma border ribbon-like growth rings
 - Structure : semi ring-porous, coarse texture. Vessels frequently contain dark or light deposits of phosphoric acid salts
 - Figure : insignificant
 - a growth ring figure consisting of alternate light and dark zones, giving a highly decorative pattern, is created by the growth rings and the light coloured parenchyma. Fine mineral deposits in the vessels

4 TECHNICAL PROPERTIES

- Density green : 880 - 1000 kg/m³
 - Density at 12 % m.c. : 640 - 750 kg/cm³ (moderately heavy)
 (narrow-ringed timber, the late wood lacking pores, is less dense)
 - Volume shrinkage : very small
 - Shrinkage tangential : 2.5 %
 (air dry) radial : 1.5 %
 - Compression strength : 60 - 80 N/mm²
 - Bending strength : 106 N/mm²
 - Modulus of elasticity : 10400 - 12400 N/mm²

5 PROCESSING

Sawn timber : - Sawing : somewhat difficult, stelling necessary
 - Saw change : frequent, mineral deposits blunt
 - Drying : slow. Large differences in drying time
 Distortion : very small
 Checking : insignificant
 - Machining : with special cutters easy
 - Joints : pre-bore for nails, screws. Smoothed surfaces glue well
 - Finishing : thoroughly brush first. Use only appropriate materials : for exterior applications glazes, for interior oil-based preparations. Finishes forming a surface film can cause difficulties with drying and trapped moisture. Polyester finishes require previous degreasing

Veneer : slices well

6 END USES

Sawn timber : - Furniture, particularly : - **Boat building** - Containers for chemicals
 - **Shelving** - **Framing** - Scantlings for spirit levels
 - **Shipbuilding** - **Parquet** - Scantlings for windows

Veneer : - **Sliced veneer** - Panelling - Inlaid work

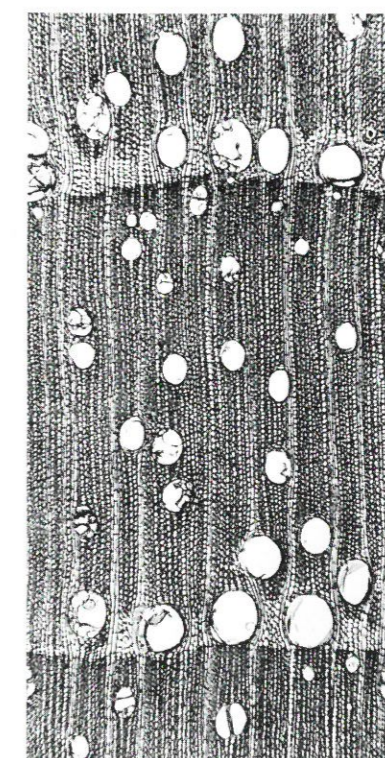
7 REMARKS

- Natural durability : very durable (Cl. 1)
 - Fungus and insect attack : resistant
 - Preservative treatment : resistant

- Other remarks :
 - sanding dust can cause skin irritation, good extraction plant necessary
 - repels moisture
 - plantations in other parts of the globe yield timber of lower quality



Reproduction 1/1



Cross Section (x 22)