Common name:	LAUAN RED
Family:	DIPTEROCARPACEAE
Scientific name(s):	Shorea negrosensis* (note) Shorea polysperma* (note)
Note:	* species belonging to the sub-genus Rubroshorea. RED LAUAN species come from the Philippines.

LOG DESCRIPTION

Diameter:	from 80 to 120 cm
Thickness of sapwood:	from 5 to 6 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Frequent hollow tree (trees with a large diameter).

WOOD DESCRIPTION

Colour:	Red brown
Sapwood:	Clearly demarcated
Texture:	Medium
Grain:	Interlocked
Interlocked grain:	Marked

Wood red brown more or less dark. Slightly lustrous. Ribbon like aspect. Visible silver figure. Presence of white lines (resin canals).

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
Density *:	0.65 g/cm3	0.05
Monnin hardness*:	2.7	0.5
Coef of volumetric shrinkage:	0.51 %	0.04
Total tangential shrinkage:	7.6 %	0.9
Total radial shrinkage:	4.3 %	0.7
Fibre saturation point:	29 %	
Stability:	Moderately stable	

	mean	standard deviation
Crushing strength *:	50 MPa	5
Static bending strength *:	90 MPa	6
Modulus of elasticity *:	13290 MPa	962

(* : at 12 % moisture content ; 1 MPa = 1 N/mm2)

Note: Hardness varies from soft to fairly hard.

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 3 moderately durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class M - Moderately durable
Treatability:	3 - poorly permeable
Use class*:	2 - inside or under cover (dampness possible)
Note:	Black holes quite frequent.

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
Philippines	RED LAUAN
Philippines	TANGILE
Philippines	TIAON

LAUAN RED

REQUIREMENT OF A PRESERVATIVE TREATMENT

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

DRYING

Drying rate:	Normal to slow
Risk of distortion:	Slight risk
Risk of casehardening:	Yes
Risk of checking:	Slight risk
Risk of collapse:	No

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	50	47	84
40	50	45	75
30	55	47	67
20	70	55	47
15	75	58	44

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.

Note: Drying must be done with care to avoid risks of casehardening.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Tendency to tear in planing. Keep sharp tools.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct
Note:	Tends to split when nailing.

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).

Veneer for interior of plywood
Veneer for back or face of plywood
Sliced veneer
Current furniture or furniture components
Formwork
Interior joinery
Interior panelling
Exterior joinery
Exterior panelling
Stairs (inside)
Moulding
Cabinetwork (high class furniture)
Ship building (planking and deck)
Musical instruments
Boxes and crates
Light carpentry
Glued laminated
Flooring
Rolling shutters