

***Shorea* spp.**

Light Red Meranti-Light Red Lauan group

Family: Dipterocarpaceae

Other Common Names: Saya (Thailand), Red Seraya (Sabah), Meranti Merah (Indonesia), White Lauan (*S. almon* and some species of *Parashorea* and *Pentacme*), Almon, Mayapis (Philippines).

Distribution: Malay Peninsula, Indonesia, the Philippines, as well as Sabah and Sarawak, usually at low altitudes on well-drained soils.

The Tree

A large tree reaching a height of 150 to 200 ft, well-shaped boles clear to 90 ft and more; trunk diameters 3 to 6 ft; sometimes buttressed.

The Wood

General Characteristics: Heartwood variable from almost white to pale pink to dark red, or pale brown to deep brown; sapwood lighter usually with a grayish tinge, distinct. Grain usually interlocked, sometimes somewhat straight; texture coarse; slightly lustrous; usually without characteristic odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) sorted to range from 0.33 to 0.52, averaging about 0.40; air-dry density 25 to 40 pcf, averaging 32.

Mechanical Properties: (First two sets of data based on the 2-in. standard; the third set on the 2-cm standard.)

Moisture content	Bending strength	Modulus of elasticity	Maximum crushing strength
	<i>Psi</i>	<i>1,000 psi</i>	<i>Psi</i>
Green (34)	7,350	1,340	3,720
12%	11,100	1,630	5,500
Green (37)	7,710	1,650	4,200
14%	10,830	1,970	6,000
Green (35)	9,150	1,400	4,600
12%	12,750	1,520	7,250

Janka side hardness 570 to 665 lb for dry material. Forest Products Laboratory toughness 270 in.-lb for green and 216 in.-lb for dry material (2-cm specimen).

Drying and Shrinkage: Seasons well with little or no degrade; there is, though, a tendency to warp, particularly in thin stock. Kiln schedule T6-D4 is suggested for 4/4 stock and T3-D3 for 8/4. Shrinkage green to ovendry: radial 4.6%; tangential 8.5%; volumetric 14.3%. Movement in service is rated as small.

Working Properties: Easy to work with both hand and machine tools; nailing and gluing are satisfactory; takes a good finish, resin and oil exudation is not a problem.

Durability: Heartwood generally rated as nondurable in ground contact and is susceptible to dry-wood and subterranean termite attack; sapwood liable to powder-post beetle attack.

Preservation: Heartwood varies from resistant to very resistant to preservative treatments; sapwood usually moderately resistant.

Uses: Light structural work, furniture components, joinery, plywood, cabinetwork, flooring, concrete form work, a general utility wood.

Additional Reading

(9), (17), (34), (35), (37)