

IPE Specifications

The Tree: May grow to 140-150 feet in height with trunk diameters of 6 feet. Frequently to heights of 100 feet and diameters of 2 to 3 feet. Boles are clear to 60 feet and more, with or without buttresses.

General Characteristics: Heartwood olive brown to blackish, often with lighter or darker striping, often covered with a yellow powder, sharply demarcated from the whitish to yellowish sapwood. Texture is fine to medium; grain straight to very irregular; rather oily looking; without distinctive odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) .85 to .97; air-dry density ranges from 66-75 pcf.

Mechanical Properties: First and third sets of data based on the 2-in. standard; second on the 1-in. standard.

Moisture Content (%)	Bending Strength (PSI)	Modulus of Elasticity (1000 PSI)	Maximum Crushing Strength (PSI)
Green (73)	22,650	2,920	10,350
12%	25,360	3,140	13,010
12% (24)	22,500	3,010	14,000
12% (44)	28,000	3,350	N/A

Janka side hardness is 3,060 lb. for green material and 3,680 lb. at 12% moisture content. Forest Products Laboratory toughness average for green and dry material is 404 in.-lb. (5/8-in. specimen).

Drying and Shrinkage: Generally reported to air-dry rapidly with only slight checking and warping. Kiln schedule T3-C1 is suggested for 4/4 stock. Shrinkage green to ovendry: radial 6.6%; tangential 8.0%; volumetric 13.2%. Movement after manufacture is rated as small.

Working Properties: Moderately difficult to work especially with hand tools; has a blunting effect on cutting edges, finishes smoothly except where grain is very roey The fine yellow dust produced in most operations may cause dermatitis in some workers.

Durability: Heartwood is very resistant to attack by decay fungi and termites; not resistant to marine borers. *T. guayacan* however, is reported to have good resistance in Panama waters.

Preservation: The wood is reported to be extremely resistant to preservation treatments.

Uses: Decking, siding, railroad cross-ties, heavy construction, tool handles, turnery, industrial flooring, textile mill items, decorative veneers.