



Calocedrus decurrens (Torr.) Florin

(syn. Libocedrus decurrens Torr.)

Family: **Cupressaceae**

Incense-Cedar

The genus *Libocedrus* contains about ten species native to North America [1], South America [1] and the western Pacific from New Zealand to China [8]. It is sometimes placed in the segregate genus, *Calocedrus* Kurz. The word *libocedrus* is from the Greek, drop or tear, and *Cedrus*, cedar, referring to the resin drops. The word *decurrens* means decurrent, referring to the scale leaves running down the twig.

Other Common Names: Amerikaanse potlood-ceder, bastard cedar, California calocedar, California incense cedar, California post cedar, Californische witte ceder, cedar, cedre a crayons, cedro bianco, cedro bianco di California, cedro de incienso, geurende ceder, heyderie, incense cedar, juniper, Kalifornisch fluss-zeder, libocedro, libocedro de California, libocedro dell'america, pencil cedar, post cedar, red cedar, rod-cedar, roughbark cedar, weihrauch-zeder, weihrauchzeder, white cedar, Witte cedar.

Distribution: Incense-cedar is native to the mountains from western Oregon in higher Coast Ranges and Sierra Nevada to southern California and extreme western Nevada. Also in northern Baja Peninsula of Mexico.

The Tree: Incense-cedar trees commonly reach heights of 100 feet, with diameters of 5 feet and an age of 500 years. Record trees reach 150 feet in height, with 9 foot diameters.

General Wood Characteristics: The sapwood of Incense-cedar is a creamy white, while the heartwood is light brown to light reddish brown. The heartwood has an aromatic, spicy odor, and is highly resistant to decay, even in the wettest of conditions. It holds paint extremely well, has an unusually straight grain, and has high dimensional stability. It also has a low coefficient of thermal conductivity, that is, it works well in structures that are kept dry but are subjected to considerable temperature fluctuations. It works well with hand tools and machines well, forming smooth surfaces. It glues and nails well, but blunt nails should be used to avoid splintering the wood. It is rated as moderately low to low in strength, shock resistance, stiffness and hardness.

Weight: Basic specific gravity (ovendry weight/green volume) 0.35; air-dry density (air-dry weight/air-dry volume) 24 lb/ft³.

Mechanical Properties (2-inch standard)

	Specific gravity	MOE x10 ⁶ lbf/in ²	MOR lbf/in ²	Compression		WML ^a in-lbf/in ³	Hardness lbf	Shear lbf/in ²
				Parallel lbf/in ²	Perpendicular lbf/in ²			
Green	0.35	0.84	6200	3150	370	6.4	390	830
12%	0.37	1.04	8000	5200	590	5.4	470	880

^aWML = Work to maximum load.
Reference (12)

Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC
Tangential	5.9	4.2	1.7
Radial	3.3	2.6	1.1
Volumetric	7.7	6.1	2.5
References: 0% MC (10) 6% (12) and 20% MC (11).			

Kiln Drying Schedules^a

Conventional temperature/moisture content-controlled schedules^a

Condition	4/4, 5/4 stock	6/4 stock	8/4 stock	10/4 stock	12/4 stock	British schedule 4/4 stock
Standard	T11-B5	NA	T10-B4	NA	NA	NA

^aReference (2, 10).

Conventional temperature/time-controlled schedules^a

Condition	Lower grades			Upper grades			
	4/4, 5/4 stock	6/4 stock	8/4 stock	4/4, 5/4 stock	6/4 stock	8/4 stock	12/4, 16/4 stock
Standard	290	290	289	290	290	289	296

^aReferences (2, 10).

Working Properties: Incense-cedar works well with hand tools and machines well, forming smooth surfaces. It glues and nails well, but blunt nails should be used to avoid splintering the wood.

Durability: Incense cedar is rated as resistant or very resistant to heartwood decay.

Preservation: No information available at this time.

Uses: Incense-cedar is used principally for lumber and fence posts. Nearly all high grade lumber is used for pencils (#1 species for pencil stock) and venetian blinds. Some is used for chests and toys. Other products are poles and split shingles. It is also used for sheathing under stucco or brick veneer construction, mudsills, rafters, window sashes, greenhouse benches, nursery flats, boardwalks, grave linings, casket shooks, exterior siding, sheathing subflooring, interior paneling, closet lining, pencils, “mothproof” chests, novelties, rails, grape stakes, trellises feed troughs, farm outbuildings, and fuel wood.

Toxicity: May cause contact dermatitis and/or eczema (3, 8& 13).

Additional Reading & References Cited (in parentheses):

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