



Larix laricina

Family: Pinaceae

Tamarack

The genus *Larix* contains about ten species, native to North America [3] and Eurasia [7]. *Larix* is the classical name of *Larix decidua* Mill., or European larch. The word *laricina* denotes its similarity to European larch (known as *Pinus larix* L. at the time of tamaracks naming).

Other Common Names: Alaska larch, alerce americano, American larch, Amerikaanse lariks, amerikansk lark, amerikansk svart-gran, black larch, Eastern Canadian larch, eastern larch, epinette rouge, hackmatack, hacmack, juniper, Kanada-lark, ka-neh-tens, meleze d'Amerique, red larch, tamarac, tamarac meizee occidental, tamarac meleze occidental, tamarack larch, tamarak.

Distribution

Tamarack grows across northern North America near the northern limit of tree growth. It grows from Newfoundland, Labrador and Quebec west to Hudson Bay, Mackinaw, the Yukon and southern Alaska south to British Columbia, Alberta, Manitoba, Minnesota, Wisconsin, northeastern Illinois east to Indiana, Pennsylvania, New Jersey and Maine. It occurs locally in the mountains of West Virginia and Maryland.

The Tree

In general, tamarack grows to heights of 75 feet, with a diameter of 2 feet, occasionally reaching heights of 115 feet with a diameter of 3.5 feet. Trees 80 feet tall and 2 feet in diameter were once common in the Lake States. In the interior of Alaska, tamaracks are commonly 10 feet tall and 3 inches in diameter. On good sites, in Alaska, tamarack reaches heights of 90 feet with diameters of 1 foot. Maximum ages of tamarack is about 180 years, but trees 335 years old have been found.

The Wood

General

The sapwood of tamarack is white and narrow (less than 1 inch wide), while the heartwood is yellow to russet brown. The wood is medium to fine texture, has a silvery cast and an oily feel, and has no distinctive odor or taste. It is intermediate in strength, stiffness and hardness. It is moderately high in shock resistance.

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	0.49	1.24	7200	3480	390	7.2	380	860
Dry	0.53	1.64	11600	7160	800	7100	590	1280

^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	7.4	5.9	2.5
Radial	3.7	3.0	1.2
Volumetric	13.6	10.9	4.5

^a Tamarack has moderately large shrinkage, but is moderately low in warping and checking. Reference (5).
References: 0% MC (12),
6% and 20% MC (11).

Kiln Drying 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-B3	NA	T10-B3	T7-A3	T7-A3	K

^aReference (1,3,10).

Working Properties: Tamarack works well in most instances, but may have a blunting effect on tools. It has a tendency to split when nailed and is low in paint retention.

Durability: Tamarack is rated as moderately resistant to heartwood decay (12).

Preservation: It is difficult to penetrate with preservatives.

Uses: Pulp products (glassine paper), posts, poles, mine timbers, railroad ties, rough timber, fuelwood, boxes, crates and pails. In Alaska, young stems are used for dogsled runners, boat ribs and fish traps, while in Alberta the branches are used for making goose and duck decoys. Historically, tamarack was widely used in wooden ships, for timbers, planking and to join ribs to deck timbers. Native Americans used the roots to bind seams of birch bark canoes, the wood for arrow shafts and the bark medicinally.

Toxicity: At this time, there is no information on tamarack, but other species of larch may cause dermatitis and contact urticaria.

Additional Reading and References Cited (in parentheses)

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