

# Yellow Pine (Pinus Taeda)

<b>Botanical Name:</b>	Pinus taeda
Other Common Names:	Loblolly pine, Pine, Bassett pine, Foxtail pine, Indian pine, Longleaf pine, Yellow pine, Swamp pine, Oldfield pine, North Carolina pine
Common Uses:	Balsam, Balusters, Chemical containers, Paneling , Tool handles
Region:	North America
Country:	United States

## **Numerical Values for: Pinus taeda**

Category	Green	<u>Dry</u>	<u>Unit</u>
Bending Strength	7300	12800	psi
Crushing Strength (Perp.)	390	790	psi
Max. Crushing Strength	3510	7130	psi
Impact Strength	30	30	inches
Stiffness	1400	1790	1000 psi
Work to Maximum Load	8	10	in-lbs/in3
Hardness		690	lbs
Shearing Strength		1390	psi
Toughness		210	in-lbs
Specific Gravity	0.47	0.51	
Weight	53	36	lbs/cu.ft.
Density (Air-dry)		36	lbs/cu.ft.
Radial Shrinkage (G->OD)		5	%
Tangential Shrink. (G->OD		7	%
Volumetric Shrink. (G->OD		12	%

# Tree & Wood Descriptions for: Pinus taeda

Product Sources	It is currently unknown whether timber from this species is available from sustainably managed or other environmentally responsible sources.  The primary commercial southern pine, Lololly pine is reported to be among the fastest growing of the southern pines, and is widely planted in forest plantations for pulpwood and lumber.  Tree Data Loblolly pine is described as a large, resinous, and fragrant tree. It usually matures to a height of about 80 to 100 feet (24 to 30 m) and a diameter of about 24 to 36 inches (60 to 90 cm).
Heartwood Color	The wood is initially pink brown, and matures to a slightly darker color upon exposure. Sapwood is not distinct from the heartwood.
Grain	Grain is described as closed, with high figuring, and pattern ranges from clear to knotty.
Texture	The texture is fine and even.
Odor	There is no distinct odor or taste.
Natural Durability	Heartwood resistance to decay is reported to be moderate. The sapwood is reported to be vulnerable to powder-post beetle attack and is prone to stain.  Resistance to Impregnation The heartwood is reported to be difficult to penetrate with preservatives, but the sapwood is treatable.
Strength Properties	Bending strength and crushing strength of air-dried wood are fairly high. The wood is soft, and surfaces may dent easily. It is heavy and dense.
Comments	Loblolly pine, like all the other Southern pines, is reported to have many characteristics that are similar to Douglas-fir. Wood produced by old-growth Southern pine trees is reported to be generally higher in density and more stable.

# **Working Properties for: Pinus taeda**

Planing	The timber is reported to work fairly well but some material may pick up during planing. A reduced cutting angle is recommended.
Turning	The timber is reported to work easily in turning and most machining operations.
Moulding	Moulding operations are reported to be generally easy.
Boring	The material is reported to respond well to boring.
Routing & Recessing	Routing operations are reported to be relatively easy.
Mortising	Mortising characteristics are reported to be good.
Carving	Carving characteristics are rated as generally good.
Gluing	Gluing characteristics are reported to be good.
Nailing	The timber is reported to have good nailing and nail-holding qualities.
Screwing	Screwing and screw-holding characteristics are reported to be good.
Sanding	Frequent sandpaper changes are recommended since resin in the wood tends to clog up sanding materials.
Polishing	Polishing properties are rated as good.

# **Drying for: Pinus taeda**

Ease of Drying	The material is reported to dry, but conditions should be controlled to prevent excessive degrade.
Drying Defects	There is a tendency for the timber to distort and check during drying.
T/R Ratio	1.40  This indicator is more meaningful if it is used together with other drying information and actual shrinkage data in the tangential and radial directions. (Refer to the Numerical Values window).

Credits for information: Woodworkersource.com