technology transfer fact sheet



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Platanus occidentalis Family: Platanaceae

Sycamore

Sycamore (*Platanus* sp.) also known as Buttonwood or Plane is composed of 5 to 9 species which grow in Eurasia [2] and North America [8]. All species look alike microscopically. The common name "Sycamore" is used in England to designate a species in the Hard Maple Group (*Acer pseudoplatanus*), whereas Plane or Planetree is used to name the *Platanus* which grows there.

Platanus occidentalis-American Plane, American Sycamore, Buttonball, Buttonball-tree, Buttonwood, California Button, California Sycamore, Cotonier, Lacewood, Oriental Planetree, Oriental Sycamore, Plane, Planetree, Quartered Sycamore, **Sycamore**, Water Beech

Platanus racemosa-Aliso, Buttonball, Buttonball-tree, Buttonwood, California Planetree, **California** Sycamore, Planetree, Sycamore, Western Sycamore

Platanus wrightii-Alamo, Arizona Planetree, Arizona Sycamore, Sycamore

Distribution

The eastern US, from the Canadian border to the Gulf of Mexico and from the Atlantic coast west to the Great Plains.

The Tree

Sycamore trees reach heights of 120 feet, with a diameter of 3 feet.

The Wood

General

The sapwood of Sycamore is white to light yellow, while the heartwood is light to dark brown. It is classified as moderate in weight, hardness, stiffness, shock resistance, strength in bending, endwise compression and nail holding ability. It has a close texture, glues well and resists splitting due to interlocked grain. It holds its shape well after steaming and machines well, but requires high speed cutter heads to prevent chipping. It shrinks moderately in drying and is inclined to warp when flat sawn. It is odorless, stain free and tasteless.

		Compression						
	Specific gravity	MOE x10 ⁶ lbf/in ²	MOR lbf/in ²	Parallel lbf/in ²	Perpendicular lbf/in ²	WML ^a in-lbf/in ³	Hardness lbf	Shear lbf/in ²
Green	0.46	1.06	6,500	2,920	360	7.5	610	1,000
Dry	0.59	1.42	10,000	5,380	700	8.50	770	4,470
^a WML = Work to maximum load. Reference (59,98).								

Mechanical Properties (2-inch standard)

Drying and Shrinkage

	Percentage of shrinkage (green to final moisture content)			
Type of shrinkage	0% MC	6% MC	20% MC	
Tangential	8.4	6.1	2.5	
Radial	5.0	4.1	1.7	
Volumetric	14.1	11.4	4.7	
References: 0% MC (98 6% and 20% MC (90).	3),			

Kiln Drying Schedules^a

	Stock					
Condition	4/4, 5/4, 6/4	8/4	10/4	12/4	16/4	
Standard	T6-D2	T3-D1	T3-D1	T3-C1	T3-B1	
^a References (6, 86).						

Working Properties: It has a close texture, glues well and resists splitting due to interlocked grain. It holds its shape well after steaming and machines well, but requires high speed cutter heads to prevent chipping.

Durability: Classed as nondurable.

Preservation: No information available at this time.

Uses: Furniture (esp. drawer sides), containers, millwork, flooring, veneer, pallets, boxes, plywood, pulp wood, paper, particle board.

Toxicity: No information available at this time.

Additional Reading and References Cited (in parentheses)

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