



## ***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, Cottonier, 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.

### **Mechanical Properties (2-inch standard)**

	Specific gravity	MOE GPa	MOR MPa	Compression		WML <sup>a</sup> kJ/m <sup>3</sup>	Hardness N	Shear MPa
				Parallel MPa	Perpendicular MPa			
Green	0.46	7.3	44.8	20.1	2.48	52	2,713	6.89
Dry	0.49	9.8	68.9	37.1	4.83	59	3,425	10.13

<sup>a</sup>WML = Work to maximum load.  
<sup>b</sup>Reference (98).  
<sup>c</sup>Reference (59).

## Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	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).

## Kiln Drying Schedules<sup>a</sup>

Condition	Stock				
	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

<sup>a</sup>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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*Platanus* /ˈplætᵻnᵻs/ is a genus consisting of a small number of tree species native to the Northern Hemisphere. They are the sole living members of the family Platanaceae. All members of *Platanus* are tall, reaching 30–50 m (98–164 ft) in height. All except for *P. kerrii* are deciduous, and most are found in riparian or other wetland habitats in the wild, though proving drought-tolerant in cultivation. The hybrid London plane (*Platanus* × *acerifolia*) has proved particularly tolerant of urban conditions