



Cherry (Prunus Serotina)

Common Name:	Cherry
Botanical Name:	Prunus serotina
Other Common Names:	Black cherry, Capulin, Cherry, Chisos wild cherry, Choke cherry, Edwards Plateau cherry, Escarpment cherry, Gila chokecherry, Mountain black cherry, New England mahogany, Plum, Rum cherry, Southwestern chokecherry, Whiskey cherry, Wild black cherry
Common Uses:	Boat building, Cabinetmaking, Carvings, Caskets, Decorative veneer, Furniture , Interior trim, Musical instruments , Novelties, Scientific instruments, Sculpture, Specialty items, Turnery, Veneer, Woodenware, Bedroom suites, Bobbins, Building materials, Canoes, Chairs, Chests, Concealed parts (Furniture), Core Stock, Desks, Dining-room furniture, Dowell pins, Dowells, Drawer sides, Drum sticks, Figured veneer, Fine furniture, Floor lamps, Furniture components, Furniture squares or stock, Hatracks, Interior construction, Kitchen cabinets, Lifeboats, Living-room suites, Millwork, Moldings, Office furniture, Organ pipes, Piano keys, Pianos , Picker sticks, Plain veneer, Radio, stereo, TV cabinets, Rustic furniture, Shade rollers, Shipbuilding, Shuttles, Sounding boards, Spindles, Spools, Stencil & chisel blocks, Stools, Sucker rods, T-Squares, Tables , Trimming, Umbrella handles , Utility furniture, Violin, Violin bows, Wainscotting, Wardrobes, Woodwork , Xylophones
Region:	North America, Western Europe
Country:	Canada, Switzerland, United States

Numerical Values for: *Prunus serotina*

<u>Category</u>	<u>Green</u>	<u>Dry</u>	<u>Unit</u>
Bending Strength	7900	13250	psi
Crushing Strength (Perp.)	410	965	psi
Max. Crushing Strength	3435	7865	psi
Static Bending (FSPL)	3600	9900	psi
Impact Strength	38	36	inches
Stiffness	1380	1655	1000 psi
Work to Maximum Load	13	11	in-lbs/in ³
Hardness		660	lbs
Shearing Strength		1700	psi
Specific Gravity	0.47	0.54	
Weight	46	36	lbs/cu.ft.
Radial Shrinkage (G->OD)		4	%
Tangential Shrink. (G->OD)		7	%
Volumetric Shrink. (G->OD)		12	%

Tree & Wood Descriptions for: *Prunus serotina*

Product Sources

Some material from this species is reported to be available from sustainably managed or other environmentally responsible sources.

States in the United States that lead in the production of cherries in commercial quantities are reported to include Michigan, Washington, Oregon, Utah, California, New York, Pennsylvania, and Idaho.

The popularity of cherry in the furniture market is reported to have increased over the years because of its warmth, personality, and ease of use. The price of cherry is reported to be based on the absence of each of the three basic characteristics of the wood: gum or pockets and streaks, pin knots, and figures. The wood is usually graded by the amount of character it has, and cherry without any figure markings is reported to be rather difficult to find. Cherry lumber is reported to be slightly more expensive than oak.

Tree Data

Black cherry is reported to be the largest of all North American cherries, attaining heights of about 100 feet (30 m) in the favorable climate of the Appalachian. The average tree is reported to be about 80 feet (24 m) in height, and produces a tall trunk which is about 24 inches (60 cm) in diameter. Cherry trees are reported to be large enough to harvest after 35 to 40 years, with larger trees growing to full heights in about 100 years. The trees are famous for their wood, but they are also reported to be attractive, flowering species. Cherry trees are reported to be easily attacked by various organisms, including birds that eat the food and harm the bark to mites, slogs and insects such as, fruit flies. They are also susceptible to brown rot, root rot, leaf spot, and blossom blight.

Sapwood Color

The narrow sapwood is whitish to reddish brown in color. The wood has also been described as creamy pink.

Heartwood Color

The heartwood varies in color from reddish brown to deep red, or light reddish brown, usually with brown flecks and some gum pockets. Some flooring manufacturers are reported to steam Black cherry lumber to bleed the darker heartwood into the sapwood for a more uniform color. Color variations between boards are reported to be rather significant.

Light & Air-Induced Changes

Black cherry is reported to be very sensitive to UV light, and changes to its characteristic reddish-brown, mahogany shade upon exposure. The use of UV light inhibitors in coatings has been suggested to prevent the color change.

Grain

The grain is reported to be fine, but material with dark wavy streaks which are described as striking in appearance are frequently found. Quartersawn pieces are reported to be very beautiful. Cherry is reported to have a strong resemblance to true Mahogany, and is often called New England mahogany.

Texture

Texture is fine and uniform, and the wood often has narrow brown pith flecks and small gum pockets.

Luster	Luster has been described as rich and satiny.
Odor	The wood has no characteristic odor or taste.
Movement in Service	Seasoned wood is reported to be dimensionally stable, and retains its shape very well after manufacture.
Natural Durability	Heartwood is reported to be very resistant to decay, but the sapwood is vulnerable to attack by the furniture beetle. Natural resistance to decay is reported to be of little concern because of the typical uses of the wood. Resistance to Impregnation The heartwood is moderately resistant to preservative treatment.
Veneering Qualities	Black cherry crotches and burls are reported to be highly sought after for figured veneers.
Strength Properties	American Black cherry has been described as a wood with many moods, and is usually considered to be in the same class as mahogany for usage in the United States. It is described as wood for fine furniture, with a warm look that is reflected in many furniture styles. The stiff and strong wood is reported to work easily with both hand and machine tools. European and American black cherries are reported to be comparable in many aspects, but the latter is more plentiful. Both species are reported to be strong and tough and have been compared in strength properties to Yellow birch. Its has high bending strength in the air-dry condition (about 12 percent moisture content), and compares favorably with Teak.

Working Properties for: Prunus serotina

Blunting Effect	The wood exerts moderate blunting effect on cutting edges.
Resistance to Cutting	Black cherry is reported to saw cleanly.
Planing	The wood is reported to have excellent planing qualities and works to produce smooth, clean surfaces. Stock with cross grain may be fairly difficult to plane, and requires reduced cutting angles of 20 degrees for best results. (Number of pieces out of one hundred yielding perfect results in planing = 80).
Turning	The wood can be turned easily, and Black cherry has been described as an important timber for turnery purposes. (Percent of turned pieces with fair to excellent results = 88).
Boring	The timber is reported to bore cleanly to yield holes with smooth surfaces little variation in hole size. (Number of good to excellent pieces after boring one hundred pieces = 100).
Moulding	Black cherry is reported to respond well to moulding. (Percent of pieces producing good to excellent results in moulding = 80). Mortising The wood is reported to have excellent mortising properties. (Number of mortised pieces producing fair to excellent results after machining one hundred pieces = 100).
Gluing	The wood glues very well.
Nailing	Nailing qualities are reported to be good.
Screwing	Screw-holding properties are reported to be good.
Polishing	The wood has good polishing characteristics.
Staining	The material is reported to take stains and all types of finishes very well. Finished Cherry wood is very handsome because of its rich luster and reddish brown color which turns richer and darker with age. Addition of ultra-violet light inhibitors has been suggested to prevent color change.
Steam Bending	The timber has good steam bending properties. It has been compared to Beech

and Ash in steam bending properties.

Response to Hand Tools

The wood works well with hand tools.

Drying for: *Prunus serotina*

Ease of Drying	The wood dries fairly quickly. Rapid drying may cause severe warping since the ratio of shrinkage in the tangential to the radial direction can be more than twice.
Drying Defects	Defects include warp, ring shake, and honeycomb due to wetwood (not common). Shrinkage during drying is common in this species, and warping can be reduced by weighting down stacks.
Kiln Schedules	T8 - B4 (4/4); T5 - B3 (8/4) US
T/R Ratio	1.75 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*