

Wood Shrinkage Table

Collected From: http://www.woodbin.com/ref/wood/shrink_table.htm

The following table presents average shrinkage values, from green to oven-dry, for a number of commercially important woods. The values are expressed as a percentage of the green dimension for radial, tangential, and tangential to radial (T/R) shrinkage.

Source: U.S. Forest Products Laboratory

Wood Species	% Radial Shrinkage	% Tangential Shrinkage	Tangential/ Radial
U. S. Hardwoods			
Alder, Red	4.4	7.3	1.7
Ash, Black	5.0	7.8	1.6
Ash, Blue	3.9	6.5	1.7
Ash, Green	4.6	7.1	1.5
Ash, Oregon	4.1	8.1	2.0
Ash, White	4.9	7.8	1.6
Aspen, Bigtooth	3.3	7.9	2.4
Aspen, Quaking	3.5	6.7	1.9
Basswood	6.6	9.3	1.4
Beech, American	5.5	11.9	2.2
Birch, Alaska Paper	6.5	9.9	1.5
Birch, Paper	6.3	8.6	1.4
Birch, River	4.7	9.2	2.0
Birch, Sweet	6.5	9.0	1.4

Birch, Yellow	7.3	9.5	1.3
Buckeye, Yellow	3.6	8.1	2.3
Butternut	3.4	6.4	1.9
California-laurel	3.0	9.0	3.0
Catalpa, Northern	2.0	5.0	2.5
Cherry, Black	3.7	7.1	1.9
Chestnut, American	3.4	6.7	2.0
Cottonwood, Balsam Poplar	3.0	7.1	2.4
Cottonwood, Black	3.6	8.6	2.4
Cottonwood, Eastern	3.9	9.2	2.4
Dogwood, Flowering	7.0	12.0	1.7
Elm, American	4.2	9.5	2.3
Elm, Cedar	4.7	10.2	2.2
Elm, Rock	4.8	8.1	1.7
Elm, Slippery	4.9	8.9	1.8
Elm, Winged	5.3	11.6	2.2
Hackberry	4.8	8.9	1.9
Hickory, Pecan	4.9	8.9	1.8
Hickory, Mockernut	7.7	11.0	1.4
Hickory, Pignut	7.2	11.5	1.6
Hickory, Shagbark	7.0	10.5	1.5
Hickory, Shellbark	7.6	12.6	1.7
Holly, American	4.8	9.9	2.1
Honeylocust	4.2	6.6	1.6
Hophornbeam	9.0	10.0	1.1
Horse Chestnut	2.0	3.0	1.5
Locust, Black	4.6	7.2	1.6
Madrone, Pacific	5.6	12.4	2.2

Magnolia, Cucumbertree	5.2	8.8	1.7
Magnolia, Southern	5.4	6.6	1.2
Sweetbay	4.7	8.3	1.8
Maple, Bigleaf	3.7	7.1	1.9
Maple, Black	4.8	9.3	1.9
Maple, Red	4.0	8.2	2.1
Maple, Silver	3.0	7.2	2.4
Maple, Striped	3.2	8.6	2.7
Maple, Sugar	4.8	9.9	2.1
Mesquite	2.2	2.6	1.1
Oak, Black	4.4	11.1	2.5
Oak, Laurel	4.0	9.9	2.5
Oak, Northern Red	4.0	8.6	2.2
Oak, Pin	4.3	9.5	2.2
Oak, Scarlet	4.4	10.8	2.5
Oak, Southern Red	4.7	11.3	2.4
Oak, Water	4.4	9.8	2.2
Oak, Willow	5.0	9.6	1.9
Oak, Bur	4.4	8.8	2.0
Oak, Chestnut	5.3	10.8	2.0
Oak, Live	6.6	9.5	1.4
Oak, Overcup	5.3	12.7	2.4
Oak, Post	5.4	9.8	1.8
Oak, Swamp Chestnut	5.2	10.8	2.1
Oak, White	5.6	10.5	1.9
Persimmon,Common	7.9	11.2	1.4
Sassafras	4.0	6.2	1.6
Sweetgum	5.3	10.2	1.9

Sycamore, American	5.0	8.4	1.7
Tanoak	4.9	11.7	2.4
Tupelo, Black	5.1	8.7	1.7
Tupelo, Water	4.2	7.6	1.8
Walnut, Black	5.5	7.8	1.4
Willow, Black	3.3	8.7	2.6
Yellow-poplar	4.6	8.2	1.8

U. S. Softwoods

Baldcypress	3.8	6.2	1.6
Cedar, Alaska-	2.8	6.0	2.1
Cedar, Atlantic White	2.9	5.4	1.9
Cedar, Eastern Redcedar	3.1	4.7	1.5
Cedar, Incense	3.3	5.2	1.6
Cedar, Northern White	2.2	4.9	2.2
Cedar, Port-Orford	4.6	6.9	1.5
Cedar, Western Redcedar	2.4	5.0	2.1
Douglas-fir, Coast	4.8	7.6	1.6
Douglas-fir, Interior North	3.8	6.9	1.8
Douglas-fir, Interior West	4.8	7.5	1.6
Fir, Balsam	2.9	6.9	2.4
Fir, California Red	4.5	7.9	1.8
Fir, Grand	3.4	7.5	2.2
Fir, Noble	4.3	8.3	1.9
Fir, Pacific Silver	4.4	9.2	2.1
Fir, Subalpine	2.6	7.4	2.8
Fir, White	3.3	7.0	2.1
Hemlock, Eastern	3.0	6.8	2.3

Hemlock,Mountain	4.4	7.1	1.6
Hemlock,Western	4.2	7.8	1.9
Larch, Western	4.5	9.1	2.0
Pine, Eastern White	2.1	6.1	2.9
Pine, Jack	3.7	6.6	1.8
Pine, Loblolly	4.8	7.4	1.5
Pine, Lodgepole	4.3	6.7	1.6
Pine, Longleaf	5.1	7.5	1.5
Pine, Pitch	4.0	7.1	1.8
Pine, Pond	5.1	7.1	1.4
Pine, Ponderosa	3.9	6.2	1.6
Pine, Red	3.8	7.2	1.9
Pine, Shortleaf	4.6	7.7	1.7
Pine, Slash	5.4	7.6	1.4
Pine, Sugar	2.9	5.6	1.9
Pine, Virginia	4.2	7.2	1.7
Pine, Western White	4.1	7.4	1.8
Redwood, Old-Growth	2.6	4.4	1.7
Redwood, Young-Growth	2.2	4.9	2.2
Spruce, Black	4.1	6.8	1.7
Spruce, Engelmann	3.8	7.1	1.9
Spruce, Red	3.8	7.8	2.1
Spruce, Sitka	4.3	7.5	1.7
Tamarack	3.7	7.4	2.0
Woods Imported into U. S.			
Afrormosia	3.0	6.4	2.1
Albarco	2.8	5.4	1.9

Albizia	3.0	6.0	2.0
Almendrillo	5.5	8.2	1.5
Andiroba	3.1	7.6	2.5
Angelin	4.6	9.8	2.1
Angelique	5.2	8.8	1.7
Apitong	5.2	10.9	2.1
Ayan	3.0	5.0	1.7
Azobe	8.4	11.0	1.3
Balata	6.3	9.4	1.5
Balsa	3.0	7.6	2.5
Banak	4.6	8.8	1.9
Benge	5.2	8.6	1.7
Bubinga	5.8	8.4	1.4
Caribbean	6.3	7.8	1.2
Cativo	2.4	5.3	2.2
Cedar, South American	4.0	6.0	1.5
Ceylon Satinwood	6.0	7.0	1.2
Cocobolo	3.0	4.0	1.3
Courbaril	4.5	8.5	1.9
Cuangare	4.2	9.4	2.2
Degame	5.0	9.0	1.8
Determa	3.7	7.6	2.1
Ebony	5.5	6.5	1.2
Freijo	4.0	7.0	1.8
Gmelina	2.4	4.9	2.0
Greenheart	8.8	9.6	1.1
Hura	2.7	4.5	1.7
Ipe	6.6	8.0	1.2

Iroko	2.8	3.8	1.4
Jarra	4.6	6.6	1.4
Jelutong	2.0	4.0	2.0
Kaneelhart	5.4	7.9	1.5
Kapur	4.6	10.2	2.2
Karri	7.2	10.7	1.5
Kempas	6.0	7.4	1.2
Keruing	5.2	10.9	2.1
Lauan	3.8	8.0	2.1
Limba	4.5	6.2	1.4
Macawood	2.7	3.5	1.3
Mahogany, African	2.5	4.5	1.8
Mahogany, True	3.0	4.1	1.4
Manbarklak	5.8	10.3	1.8
Manni	5.7	9.7	1.7
Marishballi	7.5	11.7	1.6
Merbau	2.7	4.6	1.7
Mersawa	4.0	9.0	2.3
Mora	6.9	9.8	1.4
Obeche	3.0	5.4	1.8
Ocota	4.6	7.5	1.6
Okoume	4.1	6.1	1.5
Opepe	4.5	8.4	1.9
Parana pine	4.0	7.9	2.0
Pau Marfim	4.6	8.8	1.9
Peroba Rosa	3.8	6.4	1.7
Piquia	5.0	8.0	1.6
Pilon	5.4	11.7	2.2

Primavera	3.1	5.1	1.6
Purpleheart	3.2	6.1	1.9
Queensland walnut	5.0	9.0	1.8
Ramin	4.3	8.7	2.0
Roble (Quercus spp)	6.4	11.7	1.8
Roble (Tabebuia spp)	3.6	6.1	1.7
Rosewood, Brazilian	2.9	4.6	1.6
Rosewood, Indian	2.7	5.8	2.1
Santa Maria	4.6	8.0	1.7
Sapele	4.6	7.4	1.6
Sepetir	3.7	7.0	1.9
Spanish-cedar	4.2	6.3	1.5
Teak	2.5	5.8	2.3
Wallaba	3.6	6.9	1.9