

TABLE 2

DIMENSION LUMBER BASE VALUES - HARDWOODS

2" to 4" THICK by 2" and WIDER

USE WITH ADJUSTMENT TABLES A THROUGH G

Design Values in Pounds Per Square Inch

Grades described in para. 10.0-12.4

Also Stress Rated Boards, See para. 17.0

Species or Group	Grade	Extreme Fiber Stress in Bending "Fb" Single Member	Tension Parallel to Grain "Ft"	Horizontal Shear "Fv"	Compression		Modulus Elasticity "E"
					Perpendicular "Fc⊥"	Parallel to Grain "Fc"	
RED MAPLE	Sel. Str.	1300	750	210	615	1100	1,700,000
	No. 1	925	550	210	615	900	1,600,000
	No. 2	900	525	210	615	700	1,500,000
	No. 3	525	300	210	615	400	1,300,000
	Construction	1050	600	210	615	925	1,400,000
	Standard	575	325	210	615	725	1,300,000
	Utility	275	150	210	615	475	1,200,000
	Stud	700	425	210	615	450	1,300,000
MIXED MAPLE	Sel. Str.	1000	600	195	620	875	1,300,000
	No. 1	725	425	195	620	700	1,200,000
	No. 2	700	425	195	620	550	1,100,000
	No. 3	400	250	195	620	325	1,000,000
	Construction	800	475	195	620	725	1,100,000
	Standard	450	275	195	620	575	1,000,000
	Utility	225	125	195	620	375	900,000
	Stud	550	325	195	620	350	1,000,000
BEECH-BIRCH-HICKORY	Sel. Str.	1450	850	195	715	1200	1,700,000
	No. 1	1050	600	195	715	950	1,600,000
	No. 2	1000	600	195	715	750	1,500,000
	No. 3	575	350	195	715	425	1,300,000
	Construction	1150	675	195	715	1000	1,400,000
	Standard	650	375	195	715	775	1,300,000
	Utility	300	175	195	715	500	1,200,000
	Stud	775	450	195	715	475	1,300,000
MIXED OAK	Sel. Str.	1150	675	170	800	1000	1,100,000
	No. 1	825	500	170	800	825	1,000,000
	No. 2	800	475	170	800	625	900,000
	No. 3	475	275	170	800	375	800,000
	Construction	925	550	170	800	850	900,000
	Standard	525	300	170	800	650	800,000
	Utility	250	150	170	800	425	800,000
	Stud	625	375	170	800	400	800,000
RED OAK	Sel. Str.	1150	675	170	820	1000	1,400,000
	No. 1	825	500	170	820	825	1,300,000
	No. 2	800	475	170	820	625	1,200,000
	No. 3	475	275	170	820	375	1,100,000
	Construction	925	550	170	820	850	1,200,000
	Standard	525	300	170	820	650	1,100,000
	Utility	250	150	170	820	425	1,000,000
	Stud	625	375	170	820	400	1,100,000
NORTHERN RED OAK	Sel. Str.	1400	800	220	885	1150	1,400,000
	No. 1	1000	575	220	885	925	1,400,000
	No. 2	975	575	220	885	725	1,300,000
	No. 3	550	325	220	885	425	1,200,000
	Construction	1100	650	220	885	975	1,200,000
	Standard	625	350	220	885	750	1,100,000
	Utility	300	175	220	885	500	1,000,000
	Stud	750	450	220	885	450	1,200,000

TABLE 2 (continued)

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2" to 4" THICK by 2" and WIDER
 USE WITH ADJUSTMENT TABLES A THROUGH G
 Design Values in Pounds Per Square Inch

Grades described in para. 10.0-12.4

Also Stress Rated Boards, See para. 17.0

Species or Group	Grade	Extreme Fiber Stress in Bending "Fb" Single Member	Tension Parallel to Grain "Ft"	Horizontal Shear "Fv"	Compression		Modulus Elasticity "E"
					Perpendicular "Fc⊥"	Parallel to Grain "Fc"	
WHITE OAK	Sel. Str.	1200	700	220	800	1100	1,100,000
	No. 1	875	500	220	800	900	1,000,000
	No. 2	850	500	220	800	700	900,000
	No. 3	475	275	220	800	400	800,000
	Construction Standard	950	550	220	800	925	900,000
	Standard	525	325	220	800	725	800,000
	Utility	250	150	220	800	475	800,000
	Stud	650	375	220	800	450	800,000
ASPEN	Sel. Str.	875	500	120	265	725	1,100,000
	No. 1	625	375	120	265	600	1,100,000
	No. 2	600	350	120	265	450	1,000,000
	No. 3	350	200	120	265	275	900,000
	Construction Standard	700	400	120	265	625	900,000
	Standard	375	225	120	265	475	900,000
	Utility	175	100	120	265	300	800,000
	Stud	475	275	120	265	300	900,000
YELLOW POPLAR	Sel. Str.	1000	575	145	420	900	1,500,000
	No. 1	725	425	145	420	725	1,400,000
	No. 2	700	400	145	420	575	1,300,000
	No. 3	400	225	145	420	325	1,200,000
	Construction Standard	800	475	145	420	750	1,300,000
	Standard	450	250	145	420	575	1,100,000
	Utility	200	125	145	420	375	1,100,000
	Stud	550	325	145	420	350	1,200,000

See para. 31.0 through 37.0 for additional information on these values.

COTTONWOOD*	Sel. Str.	875	525	125	320	775	1,200,000
	No. 1	625	375	125	320	625	1,200,000
	No. 2	625	350	125	320	475	1,100,000
	No. 3	350	200	125	320	275	1,000,000
	Construction Standard	475	275	125	320	300	1,000,000
	Standard	700	400	125	320	650	1,000,000
	Utility	400	225	125	320	500	900,000
	Stud	175	100	125	320	325	900,000

*For any additional information, refer to "2005 National Design Specification® for Wood Construction (NDS®) & Supplement," a publication of the American Forest & Paper Association and the American Wood Council. To order visit www.awc.org.