

**601. MACHINE STRESS RATED LUMBER**  
**Allowable Design Values (in psi)**

Fiber Stress in Bending "F <sub>b</sub> " <sup>(1)</sup>	"f-E" Classification	Modulus of Elasticity (million psi) "E"	Tension Parallel to Grain "F <sub>t</sub> "	Compression Parallel To Grain "F <sub>c  </sub> "
750	750f-1.4E	1.4	425	925
850	850f-1.4E	1.4	475	975
975	975f-1.6E	1.6	550	1450
1050	1050f-1.2E	1.2	450	1225
1050	1050f-1.6E	1.6	575	1500
1200	1200f-1.3E	1.3	600	1400
1200	1200f-1.6E	1.6	650	1550
1250	1250f-1.6E	1.6	725	1600
1350	1350f-1.4E	1.4	750	1600
1450	1450f-1.3E	1.3	825	1600
1500	1500f-1.5E	1.5	900	1650
1500	1500f-1.6E	1.6	900	1650
1500	1500f-1.7E	1.7	900	1650
1650	1650f-1.5E	1.5	1020	1700
1650	1650f-1.7E	1.7	1020	1750
1800	1800f-1.6E	1.6	1175	1750
1850	1850f-1.7E	1.7	1175	1850
1950	1950f-1.5E	1.5	1375	1800
1950	1950f-1.7E	1.7	1375	1800
2100	2100f-1.8E	1.8	1575	1875
2250	2250f-1.9E	1.9	1750	1925
2400	2400f-2.0E	2.0	1925	1975
2550	2550f-1.8E	1.8	1400	2000
2550	2550f-2.1E	2.1	2050	2025
2700	2700f-2.2E	2.2	2150	2100
2850	2850f-1.8E	1.8	1600	2100
2850	2850f-2.3E	2.3	2300	2150
3000	3000f-2.4E	2.4	2400	2200
Major Species Southern Pine:				Specific Gravity
E Level		F <sub>v</sub>	F <sub>c⊥</sub>	
1.7 million psi and less:		175 psi	565 psi	0.55
1.8 million psi:		See paragraph 600.5(a).		
1.9 million psi and higher:		190 psi	805 psi	0.57

**604. MACHINE EVALUATED LUMBER**  
**Design Values (in psi)**

<b>Grade Name</b>	<b>Fiber Stress in Bending "F<sub>b</sub>"<sup>(1)</sup></b>	<b>Tension Parallel To Grain "F<sub>t</sub>"</b>	<b>Compression Parallel to Grain "F<sub>cl</sub>"</b>	<b>Modulus of Elasticity (million psi) "E"</b>
M-5	900	500	1050	1.1
M-6	1100	600	1300	1.0
M-7	1200	650	1400	1.1
M-8	1300	700	1500	1.3
M-9	1400	800	1600	1.4
M-10	1400	800	1600	1.2
M-11	1550	850	1675	1.5
M-12	1600	850	1675	1.6
M-13	1600	950	1675	1.4
M-14	1800	1000	1750	1.7
M-15	1800	1100	1750	1.5
M-16	1800	1300	1750	1.5
M-17 <sup>(3)</sup>	1950	1300	2050	1.7
M-18	2000	1200	1825	1.8
M-19	2000	1300	1825	1.6
M-20 <sup>(3)</sup>	2000	1600	2100	1.9
M-21	2300	1400	1950	1.9
M-22	2350	1500	1950	1.7
M-23	2400	1900	1975	1.8
M-24	2700	1800	2100	1.9
M-25	2750	2000	2100	2.2
M-26	2800	1800	2150	2.0
M-27 <sup>(3)</sup>	3000	2000	2400	2.1
M-28	2200	1600	1900	1.7
M-29	1550	850	1650	1.7
M-30	2050	1050	1850	1.7
M-31	2850	1600	2150	1.9
M-32	750	425	925	1.4
M-33	850	475	975	1.4
M-34	975	550	1450	1.6
M-35	1050	575	1500	1.6
M-36	1200	650	1550	1.6
M-37	1250	725	1600	1.6
M-38	1500	900	1650	1.6
M-39	1650	1020	1750	1.7
M-40	1850	1175	1850	1.7

(Table Continued)

Grade Name	Fiber Stress in Bending "F <sub>b</sub> " <sup>(1)</sup>	Tension Parallel To Grain "F <sub>t</sub> "	Compression Parallel to Grain "F <sub>c/l</sub> "	Modulus of Elasticity (million psi) "E"
M-41	2550	1400	2000	1.8
M-42	2850	1600	2100	1.8
Major Species Southern Pine:				
E Level		F <sub>v</sub>	F <sub>c,l</sub>	Specific Gravity
1.7 million psi and less:		175 psi	565 psi	0.55
1.8 million psi		See paragraph 603.5(b).		
1.9 million psi and higher:		190 psi	805 psi	0.57