

TECHNICAL NOTE

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SOUTHERN PINE LUMBER STRENGTH PROPERTIES TREATMENT ADJUSTMENT FACTORS

Table 1: Untreated southern pine design values for interior use at 19% moisture content or less.

2x4	Bending (Fb)	Tension (Ft)	Shear (Fv)	Compr. Fc Perpendicular	Compr. Fc Parallel	MOE
No. 1	1850	1050	100	565	1850	1.7
No. 2	1500	825	90	565	1650	1.6
2x6						
No. 1	1650	900	90	565	1750	1.7
No. 2	1250	725	90	565	1600	1.6
2x8						
No. 1	1500	825	90	565	1650	1.7
No. 2	1200	650	90	565	1550	1.6
2x10						
No. 1	1300	725	90	565	1600	1.7
No. 2	1050	575	90	565	1500	1.6
2x12						
No. 1	1250	675	90	565	1600	1.7
No. 2	975	550	90	565	1450	1.6

The effect of CCA preservative treatment: There is no reduction in the above design values due to treatment with CCA. It is, however, necessary to multiply the above properties by the appropriate Wet Service Factor C_m if for high in service moisture content ($mc > 19\%$) due to exterior use:

Table 2: Wet service Factors C_m for CCA treated southern pine lumber used outside:

Bending (Fb)	Tension (Ft)	Shear (Fv)	Compr. (Fc) Perpendicular	Compr. (Fc) Parallel	MOE
.85	1.00	.97	.67	1.00	.90

Source for design values and C_m factors: *"Design Values for Wood Construction, A Supplement to the National Design Specification for Wood Construction"* published by the American Forest and Paper Association.