

## 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
<b>2x6</b>						
No. 1	1650	900	90	565	1750	1.7
No. 2	1250	725	90	565	1600	1.6
<b>2x8</b>						
No. 1	1500	825	90	565	1650	1.7
No. 2	1200	650	90	565	1550	1.6
<b>2x10</b>						
No. 1	1300	725	90	565	1600	1.7
No. 2	1050	575	90	565	1500	1.6
<b>2x12</b>						
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.