Expansion/Contraction Table & Formula

	Installed Board Temperature (f)							Decimal Conversion	
								1/8 "	0.13
Board Length (in feet)	0	20	40	60	80	100	120	3/16 "	0.19
6	0.00	0.03	0.06	0.10	0.13	0.16	0.19	1/4 "	0.25
8	0.00	0.04	0.09	0.13	0.17	0.22	0.26	5/16 "	0.31
12	0.00	0.06	0.13	0.19	0.26	0.32	0.39	3/8 "	0.38
16	0.00	0.09	0.17	0.26	0.35	0.43	0.52	7/16"	0.44
	End Gap to Leave for Expansion (on each side)							9/16 "	0.56
								11/16 "	0.69

Formula — Total inches of the board X temperature variation (in Fahrenheit) x .000045 = Total Board Movement

Example:

Board length (in feet) = 12

Board length (in inches)= 144 (12x12)

Estimated maximum board temperature (based on your climate) = 120°F

Estimated minimum board temperature (based on your climate)= 0°F

Estimated maximum board temperature fluctuation = 120° F

Formula: 144 (inches) x 120 (temperature fluctuation) x 0.000045 = 0.7776 (total movement) / 2 (each end) = 0.3888

This chart is based on a 100° yearly temperature swing and the temperature of the board at the time of installation. Boards in direct sunlight will be warmer than the boards stacked underneath.