

THERMAL CONTRACTION LENGTH FOR A GIVEN TEMPERATURE CHANGE

	TEMPERATURE CHANGE IN DEGREES FAHRENHEIT							
Initial Length	10°	20°	30°	40°	60°	80°	90°	100°
5'	0.05	0.10	0.14	0.09	0.29	0.38	0.43	0.48
10'	0.10	0.19	0.29	0.38	0.58	0.77	0.86	0.96
20'	0.19	0.38	0.77	1.15	1.54	1.54	1.73	1.92
40'	0.38	0.77	1.15	1.54	2.30	3.07	3.46	3.84
60'	0.58	1.15	1.73	2.30	3.46	4.61	5.18	5.76
80'	0.77	1.54	2.30	3.07	4.61	6.14	6.91	7.68
100'	0.96	1.92	2.88	3.84	5.76	7.68	8.64	9.60
200'	1.92	3.84	5.76	7.68	11.52	15.36	17.28	19.20
500'	4.80	9.60	14.40	19.20	28.80	38.40	43.20	48.00
1000'	9.60	19.20	28.80	38.40	57.60	76.80	86.40	96.00

NOTE: Based on coefficient of 0.00008 inches per linear foot per °F

$\Delta L = L \times C \times \Delta T$

ΔL = Change in Length (IN)

L = Original Length (IN)

C = Coefficient of Thermal Expansion (IN/IN/°F)

ΔT = Maximum Temperature minus Temperature (°F), or

= $T_2 - T_1$ Determining Expansion (+) or Contraction (-)