

## Some Thermal Expansion Coefficients

The following table lists some thermal expansion coefficients:

- Numbers are mostly from Wikipedia. Don't just believe it! Always counter check numbers found somewhere by at least going to one more source, e.g. from this link

Illustration

Group	Metal	$\alpha \cdot 10^{-6}/$ at 20°C		Element	$\alpha \cdot 10^{-6}/$ at 20°C		Various Materials	$\alpha \cdot 10^{-6}/$ at 20°C
Ib	Cu	16.5		Antimony	10.5		Aramid	-4.1
	Ag	19.5		Beryllium	12.3		Concrete	6 - 14
	Au	14.2		C (Diamond)	1.3		Bronze	17.5
IIa	Mg	26.0		Germanium	6.0		Ice	51
	Ca	22		Silicon	2.0		Rubber	160 - 220
IIb	Zn	36.0					Glas	4.7 - 7.6
	Cd	41					Quartz (amorphous)	0.5
	Hg	0.182					Ceramic ("Zerodur")	0.1
IIIa	Al	23					Granite	3.0
IVa	Sn	26.7					Graphite	2.0
	Pb	29.3					NaCl	40
VIIIb	Fe	12.2					Carbon fibre	-0.5
	Ti	10.8					Brass	18.4
	Ni	13.0					Nylon	120
Vb/VIb	Ir	6.5					PVC	50 - 240
	Cr	6.2					Steel (stainless)	14.4 - 16
	Mo	5.2					<b>Liquids</b>	
	W	4.5					Alcohol	1.1
VIIIb	Rh	9.8					Glycerin	0,49
	Pd	11.2					Water	0,21
	Pt	9.0					Acetic Acid	1.07
You find the values for all elements in the links in this periodic table								