

Concrete	Yield Strength, f_c' (MPa)	Modulus of Elasticity, E_c (MPa)	Modulus of Rupture, f_r (MPa)
Class C	28	25 400	3.334
Class A	24	23 520	3.086
Class B	21	22 000	2.887

Notes:

1. *Thermal coefficient of expansion* = $10.8 \times 10^{-6}/^{\circ}\text{C}$
2. *Shrinkage coefficient* = 0.0002 after 28 days
= 0.0005 after 1 year
3. *Normal weight concrete density* = 2400 kg/m^3 for computing loads
= 2320 kg/m^3 for computing properties

MATERIAL PROPERTIES OF CONCRETE

Figure 62-1A