



भारतीय सड़क कांग्रेस

कामा कोटी मार्ग, सैक्टर 6, रामा कृष्णा पुरम,
नई दिल्ली – 110 022 (भारत)

INDIAN ROADS CONGRESS

Kama Koti Marg, Sector 6, R.K. Puram,
New Delhi - 110 022 (India)

दूरभाष (Tele.):

महासचिव (Secretary General): +91 (11) 2618 5303

सचिवालय (Sectt.): 2618 5315, 2618 5319, 2617 1548,
2618 5273, 2671 6778

फैक्स (Fax): +91 (11) 2618 3669

NOTIFICATION NO. 60 Dated 28 November 2009

Subject: Amendments to Material Properties of Steel and Concrete as mentioned in IRC:6-2000, IRC:18-2000, IRC:21-2000, IRC:22-2008 and IRC:24-2001

Amendments to the values of coefficient of Thermal Expansion (α), Modulus of Elasticity (E) and Modulus of Rigidity (G) as mentioned in IRC:6-2000, IRC:18-2000, IRC:21-2000, IRC:22-2008 and IRC:24-2001 are hereby notified.

It has been decided to issue the amendments to values of these constants, so that they are in conformity with respective BIS Codes.

Sl. No.	Constants	Values
1	Value of Coefficient of Thermal Expansion (α) for Steel	$12 \times 10^{-6}/^{\circ}\text{C}$ – For Steel (As per IS:800-2007)
2	Value of Coefficient of Thermal Expansion (α) for Concrete	1.2 to $1.3 \times 10^{-5}/^{\circ}\text{C}$ – For concrete with Quartzite aggregate 0.9 to $1.2 \times 10^{-5}/^{\circ}\text{C}$ – For concrete with Sandstone aggregate 0.7 to $0.95 \times 10^{-5}/^{\circ}\text{C}$ – For concrete with Granite aggregate 0.8 to $0.95 \times 10^{-5}/^{\circ}\text{C}$ – For concrete with Basalt aggregate 0.6 to $0.9 \times 10^{-5}/^{\circ}\text{C}$ – For concrete with Limestone aggregate (As per IS:456-2000)
3	Value of Modulus of Elasticity (E)	2.0×10^5 MPa - For Structural Steel (As per IS:800-2007)
4	Value of Modulus of Rigidity(G)	0.769×10^5 MPa – For Structural Steel (As per IS:800-2007)

R.P. Indoria

(R.P. Indoria)
Secretary General