

REPORT OF COMPRESSION TEST ON CONCRETE CUBES

FOR EQUIVALENT CUBE STRENGTH COMPARISON IN MPA (N/mm²) WITH BREAKING LOAD

Source of sample : Sample supplied by the customer
 Grade of concrete : M30, M50
 Condition of samples : Satisfactory
 Test Method : IS: 516 -1959 (Reaffirmed 2008), IS : 9013 – 1978

COMPRESSIVE STRENGTH OF 150 mm CUBE SPECIMEN

Sl.No	Dimension of Specimen (mm)	Cross Sectional Area (mm ²)	M30		M50	
			Failure Load (KN)	Comp. Strength (N/mm ²)	Failure Load (KN)	Comp. Strength (N/mm ²)
1	150x150x150	22500	824.85	36.66	1305.90	58.04
2		22500	882.23	39.21	1389.60	61.76
3		22500	876.15	38.94	1310.18	57.83

COMPRESSIVE STRENGTH OF 50 mm SPECIMEN

Sl.No	Dimension of Specimen (mm)	Cross Sectional Area (mm ²)	M30		M50	
			Failure Load (KN)	Comp. Strength (N/mm ²)	Failure Load (KN)	Comp. Strength (N/mm ²)
1	50x50x50	2500	93.95	37.58	148.6	59.44
2		2500	95.7	38.27	154.6	61.86
3		2500	97.4	38.96	148.8	59.53

COMPRESSIVE STRENGTH OF CONCRETE CUBES

Grade of Concrete	150 mm Cube Specimen		50 mm Specimen	
	28 Days Compressive Strength (N/mm ²)	Breaking Load (kN)	28 Days Compressive Strength (N/mm ²)	Breaking Load (kN)
M30	38.27	861.08	38.27	95.68
M50	59.21	1332.23	60.27	150.66

Note 1: Average strength at 7 days for M30 is **29.46N/mm²** and Breaking Load is **662.85 kN**
Average strength at 7 days for M50 is **40.58N/mm²** and Breaking Load is **913.05 kN**

Note 2:

1. The results relate only to the samples tested.
2. Report shall not be reproduced, except in full, without the written approval of the lab.
3. Any correction invalidates this report.