

Laboratory **Gomti Technical Associates, 1/136, Vijayant Khand, Gomti Nagar,
Lucknow, Uttar Pradesh**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7038**

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Validity **16.03.2018 to 15.03.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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MECHANICAL TESTING

I. BUILDING MATERIALS				
1.	Coarse Aggregate	Sieve Analysis	IS 2386 (Part-1)	4.75 mm to 80 mm
		Flakiness Index	IS 2386 (Part-1)	1% to 70 %
		Elongation Index	IS 2386 (Part-1)	1% to 70 %
		Aggregate Impact value	IS 2386 (Part-4)	5% to 70 %
		Los Angeles Abrasion value	IS 2386 (Part-4)	1 % to 50 %
		Specific gravity	IS 2386 (Part-3)	1.5 to 3.5 (up to 10 mm)
		Water absorption	IS 2386 (Part-3)	0.1% to 5 %
2.	Fine Aggregate	Sieve Analysis	IS 2386 (Part-1)	150 μ to 10 mm
		Specific Gravity	IS 2386 (Part-3)	1.5 to 3.5
		Water absorption	IS 2386 (Part-3)	0.02% to 5%
3.	Bricks	Compressive Strength	IS 3495 (Part-1)	1 N/mm ² to 30 N/mm ²
		Water Absorption	IS 3495 (Part-2)	0.5% to 35%
		Efflorescence	IS 3495 (Part-3)	Qualitative
4.	Cement	Consistency	IS 4031 Part-IV 1988, RA- 2014	20% to 40 %
		Initial Setting time	IS 4031 (Part-5)	30 minutes to 400 minutes
		Final setting time	IS 4031 (Part-5)	30 minutes to 600 minutes
		Soundness (Le-Chatelier Method)	IS 4031 (Part-3)	0.1 mm to 10 mm
		Compressive Strength	IS 4031 (Part-6)	10 N/mm ² to 60 N/mm ²
II. SOIL & ROCK				
1.	Soil	Moisture Content	IS 2720 (Part-2)	0.1% to 50%

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		Specific Gravity	IS 2720 (Part-3, Sect-1)	2 to 3
		Grain size analysis	IS 2720 (Part-4)	75 μ to 4.75 mm
		Liquid Limit	IS 2720 (Part-5)	20% to 100 %
		Plastic Limit	IS 2720 (Part-5)	NP-50%
		Maximum Dry Density (Heavy Compaction)	IS 2720 (Part-8)	1.5 g/cm ³ to 3 g/cm ³
		Optimum Moisture Content (Heavy Compaction)	IS 2720 (Part-8)	8% to 30%
		Maximum Dry Density (Light Compaction)	IS 2720 (Part-7)	1.4 g/cm ³ to 3 g/cm ³
		Optimum Moisture Content (Light Compaction)	IS 2720 (Part-7)	8% to 30%
III.	MECHANICAL PROPERTIES OF METALS			
1.	Steel Reinforcement	Ultimate Tensile Strength	IS 1786	20 kN to 550 kN
		Yield Stress	IS 1786	20 kN to 550 kN
		Elongation	IS 1786	10 % to 40%