

Laboratory Gayatri Geotechnic Research, Shop No. 6-8, Old N.H. No. 8, Bholav, Bharuch, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5872

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Validity 30.06.2017 to 29.06.2019

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.	SOIL & ROCK			
1.	Soil	Liquid Limit	IS 2720 (PART 5)	16 % to 200 %
		Plastic Limit	IS 2720 (PART 5)	5 % to 50%
		Specific Gravity	IS 2720 (PART 3/SEC 2)	1.50 to 3.00
		Grain Size Analysis	IS 2720 (PART 4)	0 to 100% (for Sieve 75 μ to 4.75 mm)
		Free Swell Index	IS 2720 (PART 40)	10 % to 400%
		Standard Proctor Test (Light Compaction) Maximum Dry Density Optimum Moisture Content	IS 2720 (PART 7)	1.0 g/cc to 2.90 g/cc 10 % to 50%
II.	BUILDING MATERIALS			
1.	Bricks	Water Absorption	IS 3495 (PART 2)	10 % to 40%
		Compressive Strength	IS 3495 (PART 1)	1 N/mm ² to 20 N/mm ²
		Efflorescence	IS 3495 (PART 3)	Qualitative
		Dimension Length : Width : Height :	IS 1077 IS 12894	3500 mm to 4600 mm 2000 mm to 2200 mm 1200 mm to 1400 mm
2.	Concrete	Compressive Strength	IS 516	1 N/mm ² to 70 N/mm ²
3.	Paver Block	Water Absorption	IS 15658	1 % to 8%
		Compressive Strength	IS 15658	2 N/mm ² to 55 N/mm ²
4.	Cement (OPC/PPC)	Consistency	IS 4031 (PART 4)	25 % to 35 %
		Fineness by Dry Sieving	IS 4031 (PART 1)	1 % to 10 %
		Initial Setting Time	IS 4031 (PART 5)	30 min to 300 min
		Final Setting Time	IS 4031 (PART 5)	30 min to 600 min

Birendra Prasad Murmu
Convenor

N. Venkateswaran
Program Director

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		Compressive Strength	IS 4031 (PART 6)	10 N/mm ² to 68 N/mm ²
		Specific Gravity	IS 4031 (PART 11)	2.8 to 3.3
5.	Steel Reinforcement	Ultimate Tensile Strength	IS 1608	300 N/mm ² to 800 N/mm ²
		Yield Strength	IS 1608	300 N/mm ² to 700 N/mm ²
		Percent Elongation	IS 1608	10 % to 40 %
6.	Coarse Aggregate	Sieve analysis	IS 2386 (PART 1)	0 to 100 % (for Sieve Size 4.75 to 80 mm)
		Crushing Value	IS 2386 (PART 4)	1 % to 45 %
		Specific Gravity	IS 2386 (PART 3)	2.5 % to 3.5 %
		Water Absorption	IS 2386 (PART 3)	0.5 % to 5 %
		Flakiness Index	IS 2386 (PART 1)	5 % to 50 %
		Elongation Index	IS 2386 (PART 1)	5 % to 50 %
		Impact Value	IS 2386 (PART 4)	5 % to 35 %
		Abrasion Value	IS 2386 (PART 4)	5 % to 35 %
		Bulk Density	IS 2386 (PART 3)	1.2 g/cc to 2.0 g/cc
7.	Fine Aggregate	Sieve analysis	IS 2386 (PART 1)	0 % to 100 % (for Sieve Size 75 μ to 10 mm)
		Specific Gravity	IS 2386 (PART 3)	2.2 to 3.0
		Bulk Density	IS 2386 (PART 3)	1.4 g/cc to 2.2 g/cc

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