

Laboratory BhoomiQC Engineering Laboratory, Vana Road, Dudhrej, Surendranagar, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6588

Page 1 of 2

Validity 29.11.2017 to 28.11.2019

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
-----	----------------------------	-------------------------	-------------------------------------------------------------	----------------------------------------

MECHANICAL TESTING

I.	SOIL AND ROCK			
1.	Soil	Grain Size Analysis	IS: 2720 (Part 4) (RA 2001)	75µm to 40mm
		Liquid Limit	IS: 2720 (Part 5) 1985 (RA 2001)	10% to 70%
		Plastic Limit	IS: 2720 (Part 5) 1985 (RA 2001)	5% to 50%
		Light Compaction	IS: 2720 (Part 7) 1983 (RA 2002)	1.0 g/cc to 2.5 g/cc 5.0% to 30%
II.	BUILDING MATERIALS			
1.	Fine Aggregate	Sieve Analysis	IS: 2386 (Part 1) 1970 (RA 2002)	4.75mm to 0.075mm
		Specific Gravity	IS: 2386 (Part 3) 1963	1.00 to 3.00
		Water Absorption	IS: 2386 (Part 3) 1963	0.1% to 15%
		Silt content	IS: 2386 (Part 1) 1977	0.1% to 20%
2.	Coarse Aggregate	Sieve Analysis	IS: 2386 (Part 1) 1963 (RA 2002)	4.75mm to 100mm
		Specific Gravity	IS: 2386 (Part 3) 1963 (RA 2002)	1.0 to 3.00
		Water Absorption	IS: 2386 (Part 3) 1963 (RA 2002)	0.1% to 10%
		Flakiness Index%	IS: 2386 (Part 1) 1963 (RA 2002)	5% to 60%
		Elongation Index%	IS: 2386 (Part 1) 1963 (RA 2002)	5% to 60%
		Impact Value	IS: 2386 (Part 4) 1963 (RA 2002)	5% to 80%
3.	Cement	Consistency	IS: 4031 (Part 4) 1998 (RA 2013)	20% to 45%

Venugopal C
Convenor

N. Venkateswaran
Program Director

Laboratory **BhoomiQC Engineering Laboratory, Vana Road, Dudhrej,
Surendranagar, Gujarat**

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

Certificate Number **TC-6588**

Page 2 of 2

Validity **29.11.2017 to 28.11.2019**

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
		Setting Time (min) (a) Initial (b) Final	IS: 4031 (Part 5)1998 (RA 2013)	5min to 200min 30min to 600min
		Fineness by Blaine	IS: 4031 (Part 2)1996 (RA 2013)	150 m ² /kg to 600 m ² /kg
		Soundness by Le-Chatelier	IS: 4031 (Part 3)1981 (RA 2013)	0.1mm to 10mm
		Compressive strength	IS: 4031 (Part 6)1981 (RA 2013)	10 N/mm ² to 75 N/mm ²
4.	Concrete Cube	Compressive Strength	IS 516:1959 (RA 2013)	1 N/mm ² to 70 N/mm ²
5.	Building Bricks	Water Absorption	IS: 3495-1992 (Part 2) (RA 2011)	1% to 25%
		Compressive strength	IS: 3495-1992 (Part 1) (RA 2011)	3.5 N/mm ² to 40 N/mm ²
III.	MECHANICAL PROPERTIES OF METALS			
1.	Steel reinforcement	Tensile Strength	IS 1608:2005	100N/mm ² to 800N/mm ²
		Elongation	IS 1608:2005	5% to 35%