Laboratory Sheetal Engineering Associates, #4/1, 2nd Main, 9th Cross

Chamarajapet, Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6624 Page 1 of 3

Validity 11.02.2018 to 10.02.2020 Last Amended on --

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

## **MECHANICAL TESTING**

I.	BUILDING MATERIA	ALS		
1.	Cement	Fineness (Dry Sieving)	IS 4031(Part 1):1996 (RA 2016)	1% to 10%
		Consistency	IS 4031(Part 4):1988 (RA 2014)	15% to 40 %
		Initial Setting Time	IS 4031(Part 5):1988 (RA 2014)	30min to 300 min
		Final Setting Time	IS 4031(Part 5):1988 (RA 2014)	60min to 600min
		Soundness. (Le-Chateliar)	IS 4031(Part 3):1988 (RA 2014)	0.50mm to 6mm
2.	Coarse Aggregate	Sieve Analysis (40mm to 4.75mm)	IS 2386 (Part1):1963 (RA 2016)	20mm: 95% to 100% 10.0mm: 25% to 55% 4.75mm: Upto10%
		Specific Gravity	IS 2386 (Part 3):1963 (RA 2016)	2 to 4
		Flakiness Index	IS 2386 (Part 1):1963 (RA 2016)	5% to 50%
		Elongation Index	IS 2386 (Part 1):1963 (RA 2016)	5% to 50%
		Water Absorption	IS 2386 (Part 3):1963 (RA 2016)	1% to 5%
		Aggregate Impact Value	IS 2386 (Part 4):1963 (RA 2016)	1% to 50%
		Aggregate Crushing Value	IS 2386 (Part 4):1963 (RA 2016)	1% to 50%

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Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
Fine Aggregate	Sieve Analysis (4.75mm to 0.075mm)	IS 2386 (Part1):1963 (RA 2016)	4.75 mm: 90%to100% 2.36 mm: 60% to100% 1.18 mm: 30% to100% 0.600 mm:15% to100% 0.300 mm:5% to 50% 0.150 mm:Upto15%
	Specific Gravity	IS 2386 (Part 3):1963 (RA 2016)	2 to 3
	Water absorption	IS 2386 (Part 3):1963 (RA 2016)	0.1% to 5%
	Particles finer than 75micron	IS 2386 (Part1):1963 (RA 2016)	0.1% to 10%
Bricks	Dimension Length Width Height	IS 1077-1992 (RA 2016)	4220mm to 4380mm 1960mm to 2040mm 1460mm to 1540mm
	Water Absorption	IS 3495 (Part 2):1992 (RA 2016)	1% to 30 %
	Compressive Strength	IS. 3495 (Part 1):1992 (RA 2016)	10kN to 600kN
	Efflorescence	IS 3495 (Part 3):1992 (RA 2016)	Qualitative
Harden Concrete			
CC Cube	Compressive Strength	IS 516: 1959 (RA 2013)	10kN to 1000kN
CC Solid Block	Compressive Strength	IS 2185 (Part 1):2005 (RA 2015)	10kN to 1000kN
	Fine Aggregate  Bricks  Harden Concrete CC Cube	Fine Aggregate Sieve Analysis (4.75mm to 0.075mm)  Specific Gravity Water absorption  Particles finer than 75micron Dimension Length Width Height Water Absorption  Compressive Strength  Efflorescence  Harden Concrete CC Cube Compressive Strength	of Test         against which tests are performed           Fine Aggregate         Sieve Analysis (4.75mm to 0.075mm)         IS 2386 (Part1):1963 (RA 2016)           Specific Gravity         IS 2386 (Part 3):1963 (RA 2016)           Water absorption         IS 2386 (Part 3):1963 (RA 2016)           Particles finer than 75micron         IS 2386 (Part1):1963 (RA 2016)           Bricks         Dimension Length (RA 2016)           Width Height         IS 3495 (Part 2):1992 (RA 2016)           Water Absorption         IS 3495 (Part 1):1992 (RA 2016)           Compressive Strength         IS 3495 (Part 3):1992 (RA 2016)           Harden Concrete         Compressive Strength         IS 516: 1959 (RA 2013)           CC Solid Block         Compressive Strength         IS 2185 (Part 1):2005

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SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
II.	SOIL AND ROCK			
1.	Soil	Particle Size Analysis (4.75mm to 75μ)	IS 2720 (Part 4):1985 (RA 2015)	4.75mm 2.36mm 2.00mm 1.18mm 600µ 425µ 300µ 150µ 75µ
		Light Compaction OMC MDD	IS 2720(Part 7):1980 (RA 2016)	5% to 30% 1g/cc to 3g/cc
		Heavy Compaction OMC MDD CBR	IS 2720(Part 8):1983 (RA 2015) IS 2720 (Part 16):1987	5% to 30% 1g/cc to 3g/cc 1% to 50%
		Liquid Limit	(RA 2016) IS 2720(Part 5):1985 (RA 2015)	5% to 75%
		Plastic Limit	IS 2720(Part 5):1985 (RA 2015)	5% to 75%

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