

Laboratory R. K. Consultancy & Contractor, P-11/1 Front of Power Grid Sukha,
Patan Road, Jabalpur, Madhya Pradesh

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6428

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Validity 17.10.2017 to 16.10.2019

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	Grain Size Analysis	IS 2720 (Part-4):1985 (RA 2010) Clause:3&4	upto 100% , (4.75 mm to 0.075 mm)
		Specific gravity	IS 2720 (Part-3) :1980 (RA 2011)	1.5 to 3.0
		Liquid Limit	IS 2720 (Part-5):1985 (RA 2010)	15% to 100%
		Plastic Limit	IS 2720 (Part-5):1985 (RA 2010)	10% to 60%
		Light Compaction	IS 2720 (Part-7):1980 (RA 2011)	MDD:1.0g/cc to 2.8g/cc OMC: 4 to 30%
		Heavy Compaction	IS 2720 (Part-8):1983 (RA 2010)	MDD:1.0g/cc to 3.0g/cc OMC: 4 to 30%
		Direct Shear Test	IS 2720 (Part-13):1986 (RA 2011)	C: 0 to 2.5 kg/cm ² Ø =5° to 60°
		Consolidation Test	IS 2720 (Part-15):1986 (RA 2011)	0.1 kg/cm ² to 8.0 kg/cm ²
		Permeability Test	IS 2720 (Part-17):1986 (RA 2011)	10 ⁻³ cm/s to 10 ⁻⁷ cm/s
		California Bearing Ratio Test	IS 2720 (Part-16):1987 (RA 2011)	1% to 100%
2.	Rock	Water Absorption	IS 13030:1991(RA 2011)	0.02% to 10%
		Unconfined Compressive Strength	IS 9143 : 1979(RA 2011)	50 kg/cm ² to 3000 kg/cm ²
II.	BUILDING MATERIALS			
1.	Fine Aggregate	Sieve Analysis	IS 2386 (Part-1):1963 (RA 2014) Amd.4	up to 100% (0.075mm to 4.75mm)
		Specific Gravity	IS 2386 (Part-3):1963 (RA 2011)	2.0 to 3.0

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		Water Absorption	IS 2386 (Part-3):1963 (RA 2011)	0.10% to 10%
		Bulk Density	IS 2386 (Part-3):1963 (RA 2011)	1.2 kg/l to 2.4 kg/l
2.	Coarse Aggregate	Sieve Analysis	IS 2386 (Part-1):1963 (RA 2014) Amd.4	up to 100% (4.75mm to 100mm)
		Specific Gravity	IS 2386 (Part-3):1963 (RA 2011)	2.0 to 3.0
		Water Absorption	IS 2386 (Part-3):1963 (RA 2011)	0.10% to 10%
		Abrasion Value	IS 2386 (Part-4): 1963 (RA 2011) Amd.3	5%to 50%
		Impact Value	IS 2386 (Part-4): 1963 (RA 2011) Amd.3	5% to 50%
		Crushing Value	IS 2386 (Part-4): 1963 (RA 2011) Amd.3	5% to 50%
		Flakiness index	IS 2386 (Part-1): 1963 (RA 2014) Amd. 4	5% to 60%
		Elongation index	IS 2386 (Part-1): 1963 (RA 2014)Amd. 4	5% to 60%
3.	Cement	Consistency	IS 4031 (Part-4): 1988 (RA2013)	15% to 40%
		Initial Setting Time	IS 4031 (Part-5): 1988 (RA2009)	15 min to 300 min
		Final Setting Time	IS 4031 (Part-5): 1988 (RA2009)	150 min to 600 min
		Soundness Test	IS 4031 (Part-3): 1988 (RA2013)	0.5 mm to 10 mm
		Compressive Strength	IS 4031 (Part-6): 1988 (RA2013)	1 N/mm ² to 70 N/mm ²
4.	Paver Block	Compressive Strength	IS 15658:2006 (RA2011) Amd. 2	10 N/mm ² to 70 N/mm ²
		Water absorption	IS 15658:2006 (RA2011) Amd. 2 Annexure	upto 20%

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5.	Bitumen Mix	Marshall Stability	ASTM D 1559:1989	0.1kN to 50kN
		Marshall Flow	ASTM D 6927-15	0.1 mm to 6.0 mm
		Penetration Test	IS:1203 -1978	10 mm to 400 mm (1/10mm)
6.	Brick	Compressive Strength	IS 3495 (Part-1):1992 (RA 2011)	2 N/mm ² to 40 N/mm ²
		Water absorption	IS 3495 (Part-2): 1992 (RA 2011)	10% to 40%
7.	Hardened Concrete	Compressive Strength	IS 516:1959 (RA 2011) Amd. 2	10 N/mm ² to 70 N/mm ²