

Laboratory **Civil Tech, Plot No. 4, Kanhere Wadi, Nashik, Maharashtra**
 Accreditation Standard **ISO/IEC 17025: 2005**
 Certificate Number **TC-5364** Page 1 of 3
 Validity **27.03.2017 to 26.03.2019** 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.	BUILDING MATERIAL			
1.	Cement	Consistency	IS:4031 (P 4)-1988, RA 2014	23 to 40 %
		Initial Setting Time	IS:4031 (P 5)-1988, RA 2014	30 to 400 Min
		Final Setting Time		30 to 600 Min
		Compressive Strength	IS:4031 (P 6)-1988, RA 2014	10 to 80 N/mm ²
		Soundness by Le-Chatelier method	IS:4031 (P 3)-1988, RA 2014	0.1 to 10 mm
2.	Concrete Cubes/ Concrete core	Fineness by dry sieving	IS: 4031 (P 1)-1996, RA 2011	0.1 to 10%
		Compressive Strength	IS:516-1959, RA 2013	5 to 80 N/mm ²
3.	Clay / Fly Ash Bricks	Compressive Strength	IS:3495 (P 1) -1992, RA 2011	1 to 40 N/mm ²
		Water Absorption	IS:3495 (P 2) -1992, RA 2011	0.5 to 25 %
4.	Cement Concrete Tiles	Wet Transverse Strength	IS:1237-2012	1 to 10 N/mm ²
		Water Absorption	IS:1237-2012	1.0 to 25 %
		Resistance to Wear	IS:1237-2012	0.1 to 10 mm
5.	Soil	California Bearing Ratio	IS:2720 (P 16) -1987 RA 2011	1 to 70 %
		Direct Shear Test	IS: 2720 (P 13)-1986, RA 2011	0 to 0.4 Kg/cm ² ø5 to 50°
		Proctor Density	IS: 2720 (P 7& 8)-1980, RA 2011	MDD 1 to 3 gm/cc & OMC 1 to 40%
6.	Aggregate (Coarse)	Sieve analysis	IS:2386 (P 1) -1963, RA 2016	2.36mm to 40mm
		Flakiness Index	IS:2386 (P 1) -1963, RA 2016	0 to 50 %
		Elongation Index	IS:2386 (P 1) -1963, RA 2016	0 to 50 %
		Impact Value	IS:2386 (P 4) -1963, RA 2016	5 to 50 %
		Crushing Value	IS:2386 (P 4) -1963, RA 2016	1 to 50 %
		Water Absorption	IS:2386 (P 3) -1963, RA 2016	0.1 to 5 %
		Specific Gravity	IS:2386 (P 3) -1963, RA 2016	2 to 4
7.	Aggregate (Fine)	Bulk Density	IS:2386 (P 3) -1963, RA 2016	1 to 3.5 g/cm ³
		Sieve analysis	IS:2386 (P 1) -1963, RA 2016	75μ to 10mm
		Water Absorption	IS:2386 (P 3) -1963, RA 2016	0.1 to 10 %
		Specific Gravity	IS:2386 (P 3) -1963, RA 2016	2 to 4
		Bulk Density	IS:2386 (P 3) -1963, RA 2016	1 to 3.5 g/cm ³

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Program Director

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8.	Concrete Paver Blocks	Breaking Load	IS:15658-2006, Annex G RA July 2011	10 to 2800 KN
		Compressive Strength	IS:15658-2006, Annex D July 2011	5 to 80 N/mm ²
		Abrasion Resistance	IS:15658-2006, Annex E RA July 2011	100 to 15000mm ³ per 5000mm ²
9.	Bitumen	Specific Gravity	IS:1202-1978, RA 2009	0.5 to 1.5
		Softening Point	IS:1205-1978, RA 2009	30 to 150 °C
		Penetration Test	IS:1203-1978, RA 2009	1 to 350 div
		Ductility	IS:1208-1978, RA 2009	1 to 100 cm
10.	Reinforcement Bar/Structural Steel	Mass per meter	IS:1786-2008 RA 2013	0.1 to 9.5Kg/m
		Tensile Strength	IS:1608-2005 RA 2011	200 to 800 N/mm ²
		0.2 % Proof Stress	IS:1608-2005 RA 2011	200 to 800 N/mm ²
		Elongation	IS:1608-2005 RA 2011/ISO 6892-1998	5 to 40%
		Bend Test Rebend Test	IS:1599-2012 IS:1786-2011, RA 2013	Mandrel (Dia.- 24mm,30mm,32mm,36 mm, 40mm, 48mm, 50mm, 60mm, 64mm, 80mm, 100mm,125mm, 128mm, 150mm, 160mm, 192mm, 200mm, 240mm)

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