

**Laboratory**                      **SECON Private Limited-Geotechnical Laboratory, # 147, 7B Road, EPIP Zone, Whitefield, Bangalore, Karnataka**

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

**Discipline**                      **Mechanical Testing**                      **Issue Date**    **12.09.2015**

**Certificate Number**        **T-1279**                                      **Valid Until**    **11.09.2017**

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<b>I.</b>	<b>SOIL &amp; ROCK</b>			
<b>1.</b>	<b>Soil</b>	Natural Moisture Content	IS 2720 (Part 2): 1973 (RA 2010)	1 % to 99 %
		Specific Gravity	IS 2720 (Part 3): 1980 (RA 2011)	2 to 3
		Grain Size Analysis	IS 2720 (Part 4): 1985 (RA 2010)	
		Wet Sieving		Nil to 99.9%
		Hydrometer Analysis		0.05 % to 99.5%
		Liquid Limit	IS 2720 (Part 5): 1985 (RA 2010)	20 % to 80 %
		Plastic Limit	IS 2720 (Part 5): 1985 (RA 2010)	7 % to 40 %
		Shrinkage Limit	IS 2720 (Part 6): 1972 (RA 2011)	1 % to 18 %
		Consolidation	IS 2720 (Part 15): 1965 (RA 2011)	C <sub>c</sub> : 0.09 to 0.99
		Swelling Pressure	IS 2720 (Part 41): 1977 (RA 2011)	0.05 kg/cm <sup>2</sup> to 4.0 kg/cm <sup>2</sup>
		Free Swell Index	IS 2720 (Part 40): 1977 (RA 2011)	1 % to 200 %
		Permeability	IS 2720 (Part 36): 1987 (RA 2011)	10 <sup>-3</sup> cm/s to 10 <sup>-9</sup> cm/s
		Light & Heavy Compaction	IS 2720 (Part 7): 1980 (RA 2011) IS 2720 (Part 8): 1983 (RA 2010)	MDD 1.04 g/cc to 2.32 g/cc OMC 1% to 20%
		Laboratory Determination of CBR	IS 2720 (Part 16): 1987 (RA 2011)	2 % to 80 %
		Direct Shear	IS 2720 (Part 13): 1986 (RA 2011)	c: Upto 4 kg/cm <sup>2</sup> Φ: 25° to 36°
		Unconfined Compression Test	IS 2720 (Part 10): 1991 (RA 2010)	0.1 kg/cm <sup>2</sup> to 4 kg/cm <sup>2</sup>
		Triaxial Unconsolidated Un-Drained Test	IS 2720 (Part 11): 1993 (RA 2011)	c: 0.1 kg/cm <sup>2</sup> to 4 kg/cm <sup>2</sup> Φ: 1° to 20°

**Rahul Jain**  
**Convenor**

**N. Venkateswaran**  
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2.	<b>Rock Cores or Blocks / Irregular Lumps</b>	Point Load Strength Index	IS 8764: 1998 (RA 2008)	1 MPa to 35 MPa
<b>II. BUILDING MATERIALS</b>				
1.	<b>Burnt Clay Building Bricks</b>	Dimensions	IS 1077: 1992 (RA 2011)	400 mm to 5000 mm
		Compressive Strength	IS 1077: 1992 (RA 2011) IS 3495 (Part 1): 1992 (RA 2011)	1 N/mm <sup>2</sup> to 25 N/mm <sup>2</sup>
		Water Absorption	IS 1077: 1992 (RA 2011) IS 3495 (Part 2): 1992 (RA 2011)	1 % to 20 %
		Efflorescence	IS 1077: 1992 (RA 2011)	Qualitative

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