

<b>Laboratory</b>	<b>Secon Private Limited-Geotechnical Laboratory, #147, 7B Road, EPIP Zone, Whitefield, Bangalore</b>		
<b>Accreditation Standard</b>	<b>ISO/IEC 17025: 2005</b>		
<b>Discipline</b>	<b>Chemical Testing</b>	<b>Issue Date</b>	<b>12.09.2013</b>
<b>Certificate Number</b>	<b>T-1278</b>	<b>Valid Until</b>	<b>11.09.2015</b>
<b>Last Amended on</b>	<b>23.09.2013</b>	<b>Page</b>	<b>1 of 3</b>

<b>S.No.</b>	<b>Product / Material of Test</b>	<b>Specific Test Performed</b>	<b>Test Method Specification against which tests are performed</b>	<b>Range of Testing / Limits of Detection</b>
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#### **I. BUILDING MATERIALS**

<b>1.</b>	<b>Soil</b>	pH	IS 2720 (Part 26) 1987, (RA 2011)	1 to 14
		Chloride	SOP:WI/GT-L/24 A	0.01% to 10.0 %
		Total Soluble Sulphates	IS 2720 (Part 27) 1977, (RA 2010)	0.2% to 10.0 %
		Sulphide	SOP:WI/GT-L/26 A	0.5% to 5.0 %
		Potassium	SOP:WI/GT-L/27 A	0.01% to 10.0 %
		Sodium	SOP:WI/GT-L/31 A	0.01% to 10.0 %
		Nitrate	SOP:WI/GT-L/32 A	0.5% to 10.0 %
		Calcium	SOP:WI/GT-L/35 A	0.5% to 40 %
		Magnesium	SOP:WI/GT-L/36 A	0.5% to 40 %
		Total Soluble Solids	IS 2720 (Part 21) 1977, (RA 2010)	0.5% to 50 %
		Redox potential	SOP:WI/GT-L/20 A	390 mv to 512 mv
		Organic matter	IS 2720 (Part 22) 1972, (RA 2010)	1% to 40 %
		Phosphate	SOP:WI/GT-L/30 A	0.5% to 10.0 %

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## **II. WATER**

<b>1. Ground Water, Water Used for Construction Purposes</b>	pH		IS 3025 (Part 11) 1983, (RA 2012)	1 to 14
	Chloride		IS 3025 (Part 32) 1988, (RA 2009)	2 mg/l to 1000 mg/l
	Sulphates		IS 3025 (Part 24) 1986, (RA 2009)	1 mg/l to 40 mg/l
	Sulphide		IS 3025 (Part 29) 1986, (RA 2009)	1 mg/l to 20 mg/l
	Potassium		IS 3025 (Part 45) 1993, (RA 2009)	5 mg/l to 80 mg/l
	Sodium		IS 3025 (Part 45) 1993, (RA 2009)	5 mg/l to 80 mg/l
	Nitrate		IS 3025 (Part 34) 1988, (RA 2009)	1 mg/l to 100 mg/l
	Nitrite		IS 3025 (Part 34) 1988, (RA 2009)	5 mg/l to 180 µg/l
	Carbonate & Bicarbonate		IS 3025 (Part 51) 2001, (RA 2012)	1 mg/l to 200 mg/l
Calcium		IS 3025 (Part 40) 1991, (RA 2009)	1 mg/l to 1000 mg/l	

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		Magnesium	APHA 3500-Mg.E, 22 <sup>nd</sup> Edition	1 mg/l to 1000 mg/l
		Total Dissolved Solids	IS 3025 (Part 16) 1984, (RA 2012)	1 mg/l to 1000 mg/l
		Redox potential	SOP:WI/GT-L/20	390 mv to 512 mv
		Turbidity	IS 3025 (Part 10) 1984, (RA 2012)	1NTU to 40 NTU
		Total Hardness	IS 3025 (Part 21) 2009	1 mg/l to 1000 mg/l
		Total Suspended Solids	IS 3025 (Part 17) 1984, (RA 2012)	1 mg/l to 10,000 mg/l
		Phosphate	APHA PO <sub>4</sub> .B, 22 <sup>nd</sup> Edition	1 mg/l to 20 mg/l

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