

Laboratory Civil Pro, #4, 7th Main, Malleswaram, Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5548 (in lieu of T-4358)

Page 1 of 3

Validity 13.01.2017 to 12.01.2019

Last Amended on 12.01.2018

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

MECHANICAL TESTING

I.	BUILDING MATERIALS			
1.	Cement (OPC/PPC/PSC)	Consistency	IS 4031(Part 4) :1988 (Reaffirmed 2009) Amendment June 2013	20% to 40%
		Initial setting time	IS 4031(Part 5) :1988 (Reaffirmed 2009) Amendment June 2013	30 min to 300 min
		Final setting time	IS 4031(Part 5) :1988 (Reaffirmed 2009) Amendment June 2013	30 min to 600 min
		Compressive strength	IS 4031(Part 6) :1988 (Reaffirmed 2009)	10 N/mm ² to 80 N/mm ²
		Fineness by Dry Sieving	IS 4031(Part 1) :1996 (Reaffirmed 2016)	0.5% to 10%
		Fineness by Blaine's air Permeability Method	IS 4031(Part 2) :1999 (Reaffirmed 2008)	250 m ² /Kg to 500 m ² /Kg
		Density	IS 4031(Part 11) :1988 (Reaffirmed 2009)	2.5 g/cc to 4 g/cc
		Soundness	IS 4031(Part 3) :1988 (Reaffirmed 2014)	0.06 mm to 10 mm
2.	Hardened concrete (Cubes)	Compressive Strength	IS 516 :1959 (Reaffirmed 2013)	10 mm ² to 80 N / mm ²
3.	Hollow & Solid Concrete Blocks	Compressive Strength	IS 2185(Part 1) :2010	1 N/mm ² to 20 N/mm ²
		Dimensions		50 mm to 600 mm
		Density		1000 Kg/m ³ to 2500 Kg/m ³
		Water Absorption		2% to 15%
4.	Fine Aggregates	Sieve Analysis	IS 2386 (Part 1) :1963 (Reaffirmed 2016)	0.1% to 100% (75 microns to 10 mm)
		Specific Gravity	IS 2386 (Part 3) :1963 (Reaffirmed 2016)	1.5 to 6
		Water Absorption	IS 2386 (Part 3) :1963 (Reaffirmed 2016)	0.1% to 10%

Sachin Tomar
Convenor

N. Venkateswaran
Program Director

Laboratory **Civil Pro, #4, 7th Main, Malleswaram, Bangalore, Karnataka**

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

Certificate Number **TC-5548 (in lieu of T-4358)**

Page 2 of 3

Validity **13.01.2017 to 12.01.2019**

Last Amended on **12.01.2018**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
5.	Coarse Aggregates	Material finer than 75 microns	IS 2386 (Part 1) :1963 (Reaffirmed 2016)	3% to 15%
		Sieve Analysis	IS 2386 (Part 1) :1963 (Reaffirmed 2016)	0.1% to 100% (4.75mm to 125 mm)
		Specific Gravity	IS 2386 (Part 3) :1963 (Reaffirmed 2016)	1.5 to 4
		Flakiness Index	IS 2386 (Part 1) :1963 (Reaffirmed 2016)	5% to 50 %
		Elongation Index	IS 2386 (Part 1) :1963 (Reaffirmed 2016)	5% to 50 %
		Impact Value	IS 2386 (Part 4) :1963 (Reaffirmed 2016)	5% to 60 %
		Crushing Value	IS 2386 (Part 4) :1963 (Reaffirmed 2016)	5% to 60 %
		Water Absorption	IS 2386 (Part 3) :1963 (Reaffirmed 2016)	0.1% to 5 0 %
10 % fine Value	IS 2386 (Part 4) :1963 (Reaffirmed 2016)	50 kN to 300 kN		
6.	Bitumen	Ductility	IS 1208 :1978 (Reaffirmed 2009)	75 cm to 100 cm
		Penetration	IS 1208 :1978 (Reaffirmed 2009)	50 (1/10)mm to 100 (1/10)mm
		Softening Point	IS 1205 :1978 (Reaffirmed 2009)	40° C to 60° C
		Flash Point	IS 1209 :1978 (Reaffirmed 2009)	100° C to 400° C
		Fire Point	IS 1209 :1978 (Reaffirmed 2009)	100° C to 400° C
7.	Burnt Clay Bricks	Compressive Strength	IS 3495(Part 1) :1992 (Reaffirmed 2011)	1.0 N/ mm ² to 10 N/ mm ²
		Water Absorption	IS 3495(Part 2) :1992 (Reaffirmed 2011)	5% to 30%
		Efflorescence	IS 3495 (Part 3) :1992 (Reaffirmed 2011)	Qualitative
		Dimensions	IS 1077 :1992 (Reaffirmed 2011)	1350 mm to 5000 mm

Sachin Tomar
Convenor

N. Venkateswaran
Program Director

Laboratory Civil Pro, #4, 7th Main, Malleswaram, Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5548 (in lieu of T-4358)

Page 3 of 3

Validity 13.01.2017 to 12.01.2019

Last Amended on 12.01.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
II.	MECHANICAL PROPERTIES OF METALS			
1.	Steel	Nominal Mass	IS1786::2008 (Reaffirmed 2013) Amendment June 2017	1 kg/m to 12 kg/m
III.	SOIL & ROCK			
1.	Soil	Grain Size Analysis (Wet Analysis)	IS 2720 (Part 4) : 1985 (Reaffirmed 2015)	0.1% to 100% (75 microns to 10 mm)
		Grain Size Analysis (Dry Analysis)	IS 2720 (Part 4) : 1985 (Reaffirmed 2015)	0.1 to 100% (75 microns to 100 mm)
		Liquid Limit	IS 2720 (Part 5) : 1985 (Reaffirmed 2015)	25% to 80%
		Plastic Limit	IS 2720 (Part 5) : 1985 (Reaffirmed 2015)	5% to 50%
		Free swell Index	IS 2720 (Part 40) :1977 (Reaffirmed 2011)	10% to 100%
		Light Compaction MDD OMC	IS 2720 (Part 7) :1986 (Reaffirmed 2011)	1 g/cc to 2.5 g/cc 5% to 40 %
		Heavy Compaction MDD OMC	IS 2720 (Part 8) :1986 (Reaffirmed 2015)	1.4 g/cc to 2.6 g/cc 5% to 40%
		Moisture Content of Soil	IS 2720 (Part 2) :1985 (Reaffirmed 2015)	5 % to 20%

Sachin Tomar
Convenor

N. Venkateswaran
Program Director