Civil Technologies (India) Pvt. Ltd., # 600/A, Keshini Arcade, 2nd Phase, 7th Block, Bhanashankari 3rd Stage, Hosakerehalli Cross, Laboratory

Bangalore, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Discipline Issue Date 05.06.2014 **Mechanical Testing**

Certificate Number Valid Until 04.04.2016 T-3005

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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
I.	BUILDING MATE	RIALS		
1.	COARSE AGGREGATE	Sieve analysis	IS: 2386.(Part I)-1963 (Reaffirmed 2011)	4.75 – 80 mm
		Flakiness Index	IS: 2386.(Part I)-1963 (Reaffirmed 2011)	1 – 70%
		Elongation	IS : 2386.(Part I)-1963 (Reaffirmed 2011)	1 – 70%
		Water Absorption	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	0.1 – 5%
		Specific Gravity	IS: 2386 (Part III) -1963 (Reaffirmed 2011)	2 - 4
		Crushing Value	IS: 2386 (Part IV) 1963 (Reaffirmed 2011)	1 – 50 %
		Bulk Density – Loose	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	$1000 - 3000 \text{ kg/m}^3$
		Bulk Density – Rodded	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	$1200 - 3000 \text{ kg/m}^3$

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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
2.	FINE AGGREGATE	Sieve analysis	IS : 2386.(Part I)-1963 (Reaffirmed 2011)	0.15 – 4.75 mm
		Water Absorption	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	0.1 - 10%
		Specific gravity	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	2 - 4
		Bulk Density - Loose	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	1000 - 3000 kg/m ³
		Bulk Density - Rodded	IS: 2386.(Part III)-1963 (Reaffirmed 2011)	1000 - 3000 kg/m ³
3.	BRICKS	Water absorption	IS:3495- (Part 2) Reaffirmed 2011	2.5 - 30%
		Compressive strength	IS:3495- (Part 1) Reaffirmed 2011	2 - 30 N / mm ²
		Water absorption	IS: 2185. (Part I) 2005	1 - 10%
		Compressive strength	IS: 2185. (Part I) 2005	1 - 20 N / mm ²
		Block Density	IS: 2185. (Part I) 2005	1000 - 2200kg/m ³

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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
4.	CONCRETE CUBE / CORE	Compressive strength	IS: 516-1959 Reaffirmed 2008	5 - 80 N / mm ²
5.	REINFORCING HSD	Weight/meter	IS:1786-2008	0.1 - 15 kg
	BARS	Yield Stress	IS:1608-2005 (Reaffirmed 2011)	100 - 700 N/mm ²
		Ultimate Tensile Stress	IS:1608-2005 (Reaffirmed 2011)	100 - 900 N/mm ²
		% Elongation	IS:1608-2005 (Reaffirmed 2011)	10 - 35%
		Bend Test	IS:1599-1985 (Reaffirmed 2012)	Mandrels Size 23,33,40,45,48, 60,85,100,128,140, 175, 225 mm
		Re bend Test	IS:1786-2008 (Reaffirmed 2013)	Mandrels Size 23,33,40,45,48, 60,85,100,128,140, 175, 225 mm