Laboratory Imarat Engineering Lab, SCF 29, SST Nagar, Patiala, Punjab

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7484

Validity 29.06.2018 to 28.06.2020

Last Amended on --

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SI.	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.	Concrete	Compressive Strength	IS 516	5 N/mm ² to 60 N/mm ²	
		Slump Test	IS 1199	10 mm to 250 mm	
2.	Fine Aggregates	Sieve Analysis	IS 2386 (Part 1)	Upto 100 % (150 µm to 4.75 mm)	
		Water Absorption	IS 2386 (Part 3)	1.0 % to 10 %	
		Specific Gravity	IS 2386 (Part 3)	2.0 to 3.0	
3.	Coarse Aggregates	Sieve Analysis	IS 2386 (Part 1)	Upto 100 % (4.75 mm to 40 mm)	
		Water Absorption	IS 2386 (Part 3)	0.1 % to 10 %	
		Specific Gravity	IS 2386 (Part 3)	2.0 to 3.0	
		Impact Value	IS 2386 (Part 6)	1.0 % to 50.0 %	
4.	Bricks	Compressive Strength	IS 3495 (Part 1)	2.5 N/mm ² to 25 N/mm ²	
		Water Absorption	IS 3495 (Part 2)	2.5 % to 30.0 %	
		Efflorescence	IS 3495 (Part 3)	Qualitative	
5.	Concrete Pavers	Compressive Strength	IS 15658	2.5 N/mm ² to 80 N/mm ²	
6.	Cement	Consistency	IS 4031 (Part 4)	10 % to 50 %	
		Initial Setting Time	IS 4031 (Part 5)	10 minute to 300 minute	
		Final Setting Time	IS 4031 (Part 5)	150 minute to 700 minute	
		Soundness by Le– Chatelier's Method	IS 4031 (Part 3)	0.5 mm to 10 mm	
		Compressive Strength	IS 4031 (Part 6)	10.0 N/mm ² to 70.0 N/mm ²	
7.	Bitumen	Penetration	IS 1203	20 to 100 (1/10 mm)	
		Specific Gravity	IS 1202	0.98 to 1.06	
		Softening Point	IS 1205	30 °C to 150 °C	
		Flash Point	IS 1209	100 °C to 350 °C	
8.	Bitumen Mix	Bitumen Extraction	ASTM 2172	2 % to 6 %	

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II.	SOIL & ROCK			
1.	Soil	Light Compaction	IS 2720 (Part 7)	1.60 g/cc to 2.10 g/cc 4.0 % to 30.0 %
		Heavy Compaction	IS 2720 (Part 8)	1.65 g/cc to 2.25 g/cc 4.0 % to 30.0 %
		CBR Value	IS 2720 (Part 16)	1.0 % to 60.0 %
III.	MECHANICAL PRO	DPERTIES OF METALS		
1.	Steel	Weight per unit length	IS 1786	Upto 6.0 kg/m
	Reinforcement	Elongation %	IS 1608	5 % to 30 %
		Ultimate Tensile Strength	IS 1608	200 N/mm ² to 800 N/mm ²
		Yield Stress	IS 1608	100 N/mm ² to 700 N/mm ²