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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.	**OPC 43 Grade Cement**	Consistency	IS 4031 (Part 4): 1988 (RA 2014)	15 % to 50 %
		Initial Setting Time	IS 4031 (Part 5): 1988 (RA 2014)	30 Minutes to 300 Minutes
		Final Setting Time	IS 4031 (Part 5): 1988 (RA 2014)	100 Minutes to 650 Minutes
		Compressive Strength	IS 4031 (Part 6): 1988 (RA 2014)	10 N/mm^2 to 80 N/mm^2
		Soundness by Le-Chatelier Method	IS 4031 (Part 3): 1988 (RA 2014)	0.5 mm to 10 mm
		Soundness by Autoclave Method	IS 4031 (Part 3): 1988 (RA 2014)	0.01 % to 3.00 %
		Fineness by Blain's Method	IS 4031 (Part 2): 1996 (RA 2013)	100 m^2/kg to 500 m^2/kg
		Specific Gravity	IS 4031 (Part 11): 1988	1.80 to 3.80
2.	**Coarse Aggregates**	Sieve Analysis	IS 2386 (Part 1): 1963 (RA 2016)	80 mm to 4.75 mm (0 to 100 %)
		Bulk Density	IS 2386 (Part 3): 1963 (RA 2016)	1.00 g/cc to 2.00 g/cc
		Flakiness Index	IS 2386 (Part 1): 1963 (RA 2016)	2 % to 40 %
		Elongation Index	IS 2386 (Part 1): 1963 (RA 2016)	2 % to 40 %
		Impact Value	IS 2386 (Part 4): 1963 (RA 2016)	5 % to 60 %
		Crushing Value	IS 2386 (Part 4): 1963 (RA 2016)	5 % to 60 %
		Specific gravity	IS 2386 (Part 3): 1963 (RA 2016)	2.0 to 3.5

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Deleterious material Finer than 75 micron	IS 2386 (Part 2): 1963 (RA 2016)	0.2 % to 10 %
3.	**Fine Aggregates**	Sieve Analysis	IS 2386 (Part 1): 1963 (RA 2016)	75 µm to 10 mm (0 to 100 %)
		Bulk Density	IS 2386 (Part 3): 1963 (RA 2016)	1.2 g/cc to 3.00 g/cc
		Specific Gravity	IS 2386 (Part 3): 1963 (RA 2016)	2.0 to 3.5
		Water Absorption	IS 2386 (Part 3): 1963 (RA 2016)	1 % to 10 %
		Deleterious material Finer than 75 micron	IS 2386 (Part 2): 1963 (RA 2016)	0.2 % to 10 %
4.	**Glazed / Ceramic Tiles**	Water Absorption	IS 13630 (Part 2): 2006	0.04 % to 25 %
		Scratches Hardness According to MOHS	IS 13630 (Part 13): 2006	1 to 9
		Chemical Resistance for Stains	IS 13630 (Part 8): 2006	Qualitative (Visual Observation)
5.	**Concrete**	compressive strength	IS 516: 1959 (RA 2013)	5 N/mm² to 50 N/mm²
		Workability by slump	IS 1199: 1959 (RA 2013)	0 to 150 mm
6.	**Fly Ash**	Fineness Specific Surface-Blain Air Permeability	IS 1727: 1967 (RA 2008)	100 m^2/kg to 600 m^2/kg
		Comparative Compressive Strength	IS 1727: 1967 (RA 2008)	5 N/mm² to 60 N/mm²
		Lime Reactivity	IS 1727: 1967 (RA 2008)	2 N/mm^2 to 10 N/mm^2
		Specific Gravity	IS 1727: 1967 (RA 2008)	1 to 3
		Soundness by Le-Chatelier Method	IS 4031 (Part 3): 1988 (RA 2014)	0.5 mm to 15 mm
		Soundness by Autoclave Method	IS 4031 (Part 3): 1988 (RA 2014)	0.01 % to 3.00 %
		Retained on 45 Micron sieve	IS 1727: 1967 (RA 2008)	1 % to 40 %

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Convenor

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Program Manager

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		NON-DESTRUCTIVE TESTING		
I.	**NDT (HARDENED CONCRETE)**			
1.	**Reinforced Concrete Structure**	Rebound Hammer	IS 13311 (Part 2): 1992 (RA 2008)	20 R to 60 R
		Ultrasonic Pulse Velocity	IS 13311 (Part 1): 1992 (RA 2008)	0.01 km/sec to 5 km/sec
		Cover Depth	BS 1881 P-204: 1998	0 to 80 mm

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Convenor

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