

Laboratory

National Council for Cement and Building Materials, Smeet Bungalows, Off. Judges Bungalow Road, Bodakdev, Ahmedabad, Gujarat

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6431

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Validity 17.10.2017 to 16.10.2019

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
<u>MECHANICAL TESTING</u>				
I.	BUILDING MATERIALS			
1.	Cement OPC & PPC	Standard Consistency	IS 4031 (Part - 4) : 1988 (RA.2016)	20% to 45 %
		Initial Setting Time	IS 4031 (Part - 5) : 1988 (RA.2014)	10 minute to 300 minute
		Final Setting Time	IS 4031 (Part - 5) : 1988 (RA.2014)	100 minute to 600 minute
		Compressive Strength	IS 4031 (Part - 6) : 1988 (RA.2014)	5 MPa to 80 MPa
		Fineness by Blaine Air Permeability Method	IS 4031 (Part - 2) : 1999 (RA.2013)	150 m ² /kg to 600 m ² /kg
		Soundness (LeChatelier Expansion)	IS 4031 (Part - 3) : 1988 (RA.2014)	0.5 mm to 15 mm
		Soundness (Autoclave Expansion)	IS 4031 (Part - 3) : 1988 (RA.2014)	0.01% to 2 %
		Density	IS 4031 (Part - 11) : 1988 (RA.2014)	1.5 g/cc to 4.0 g/cc
2.	Aggregate (Coarse)	Sieve Analysis	IS 2386 (Pt-1):1963 RA: 2016	4.75 mm to 80 mm (up to 100%)
		Impact Value	IS 2386 (Part -4):1963 RA: 2016	5% to 60 %
		Crushing Value	IS 2386 (Part -4): 1963 RA: 2016	5% to 60 %
		Abrasion Value (Los Angles)	IS 2386 (Part -4):1963 RA: 2016	5 % to 60%
		Flakiness Index	IS 2386 (Part -1):1963 RA: 2016	5 % to 50 %
		Elongation Index	IS 2386 (Part -1):1963 RA: 2016	5 % to 50 %

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Convenor

N. Venkateswaran
Program Director

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		Water absorption	IS 2386 (Part -3):1963 RA: 2016	0.1% to 5.0 %
		Specific Gravity	IS 2386 (Part -3):1963 RA: 2016	02 to 04
		Bulk density	IS 2386 (Part -3):1963 RA: 2016	1.50 kg/l to 4.50 kg/l
3	Aggregate (Fine Aggregate)	Sieve Analysis	IS 2386 (Part -1):1963 RA: 2016	75 µm to 4.75 mm
		Water absorption	IS 2386 (Part -3):1963 RA: 2016	0.1 %to 5.0 %
		Material finer than 75 µ sieve	IS 2386 (Part -1): 1963 RA: 2016	0.5 % to 20 %
		Bulk density	IS 2386 (Part -3):1963 RA: 2016	1.50 kg/l to 4.50 kg/l
		Specific Gravity (Fine Aggregate)	IS 2386 (Part -3):1963 RA: 2016	02 to04
4	Building Bricks (Burnt Clay & Lime Pulverized Fuel ash)	Compressive Strength	IS 3495 (Part - 1) : 1992 (RA. 2011)	1 N/mm ² to 50 N/mm ²
		Water Absorption	IS 3495 (Part - 2) : 1992 (RA. 2011)	1% to 30 %
		Dimension	IS 1077 : 1992 (RA.2011)	Length:3000 mm to 6000 mm
				Width:1500 mm to 3000 mm
				Height:1000 mm to 3000 mm
Efflorescence	IS 3495 (Part - 2) : 1992 (RA. 2011)	Qualitative		
5	Concrete	Compressive Strength of Hardened Concrete	IS 516 : 1959 (RA. 2013)	100 kg/cm ² to 750 kg/cm ²

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