Laboratory

J.K. Cement Works, Quality Control Laboratories, P.O. Kailash Nagar-1, J.K. Cement Works, Nimbahera, Dist. Chittorgarh, Rajasthan

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

**Certificate Number** Page 1 of 2 TC-6535 (in lieu of T-2732, T-2733)

**Validity** 29.11.2017 to 28.11.2019 Last Amended on --

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

## **CHEMICAL TESTING**

I.	BUILDING MATERIALS			
1.	Cement:	LOI	IS 4032 (Clause 4.2)	0.1% to 8.0 %
	OPC PPC	Insoluble Residue	IS 4032 (Clause 4.10)	1.0 % to 35.0 %
		Sulphuric Anhydride	IS 4032 (Clause 4.9)	0.5 % to 6.0 %
		SiO <sub>2</sub>	IS 4032 (Clause 4.3)	10.0 % to 35.0 %
		$Al_2O_3$	IS 4032 (Clause 4.6.2)	2.0% to 10.0 %
		Fe <sub>2</sub> O <sub>3</sub>	IS 4032 (Clause 4.5.2)	0.1% to 6.0 %
		CaO	IS 4032 (Clause 4.7.2)	30.0 % to 68.0 %
		MgO	IS 4032 (Clause 4.8.2 & 7.2)	0.1% to 6.0 %
		Chloride	IS 4032 (Clause 4.13)	0.005 % to 1.0 %

Nikhil Kumar Convenor

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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
		MECHANIC	AL TESTING	
l.	BUILDING MATERIALS			
1.	Cement OPC PPC	Standard Consistency	IS 4031 (Part 4)	20 % to 35 %
		Fineness	IS 4031 (Part 2)	200 m <sup>2</sup> /kg to 450 m <sup>2</sup> /kg
		Soundness by Lechatelier	IS 4031 (Part 3)	Upto 10 mm
		Soundness by Autoclave	IS 4031 (Part 3)	0.01% to 2.00 %
		Initial Setting Time	IS 4031 (Part 5)	30 Minute to 300 Minute
		Final Setting Time	IS 4031 (Part 5)	30 Minute to 600 Minute
		Compressive Strength	IS 4031 (Part 6)	12 MPa to 40 MPa
		(72 Hours ± 1 Hours)		
		Compressive Strength (168 Hours ± 2 Hours	IS 4031 (Part 6)	20 MPa to 50 MPa
		Compressive Strength (672 Hours ± 4 Hours)	IS 4031 (Part 6)	30 MPa to 70 MPa