



Duraton CEMENT

India's Most Advanced Cement

Vill. Rajgarh, Near Shambu Barrier, Rajpura, Punjab 140417

Despatched during Week No.	23	From	4/06/2018	To	10/06/2018
Test Certificate No./ Dated	14/ 19th June 2018	Reference No.	AFCL/P&QC/TC/18/0014		
S.N.	Parameters	Results Obtained	Requirement as per IS 1489 (Part I):2015		
1	Chemical Composition				
	Loss on Ignition (% by mass)	1.8	Not More than 5.0%		
	Magnesia (MgO) (% by mass)	1.7	Not More than 6.0%		
	Sulphuric Anhydride (SO ₃): (% by Mass)	2.49	Not More than 3.5%		
	Chloride Content (% by Mass)	0.01	Not More than 0.1% (for general purpose) & not more than 0.05% for pre-stressed structures		
	Insoluble Residue (% by mass)	26.3	Not More than $[X + 4.0 (100-X) / 100]$ & Not less than (0.6 X), Where "X" is the declared Pozzolana content in cement.		
	Physical Analysis				
2	Fineness				
	Blaine's Specific Surface Area (m ² / kg)	405	Not Less than 300		
3	Compressive Strength (MPa)				
	72 ± 1h (3 Days)	29	Not less than 16.0		
	168 ± 2h (7 Days)	35	Not less than 22.0		
	672 ± 4h (28 Days)*	53	Not less than 33.0		
4	Setting Time (Minutes)				
	Initial	150	Not less than 30		
	Final	200	Not more than 600		
5	Soundness				
	Le-Chatelier Expansion (mm)	0.5	Not more than 10.0		
	Auto-Clave Expansion (%)	0.26	Not more than 0.8		
6	Drying Shrinkage (%)*	0.017	Not More than 0.15		
7	Normal Consistency (%)				
	Temp. During Testing (°C)	27.0	(27 ± 2) ⁰ C		

* Fly Ash Content in Cement is (%)	28
* Compressive Strength (in MPa) of 28 Days & Drying Shrinkage (in %) values are of Week No	20 & 19 respectively

The above cement complies with the requirements of IS 1489 (Part I): 2015 for Portland Pozzolana Cement.

K.S. Birdi

P&QC Manager

Plant Head