







WORK TEST CERTIFICATE

Portland Pozzolana Cement

Despatched during Week No.		39	From	24-09-2018		То	30-09-2018
Test Certificate No.		39 29-10-2018 Reference		e No.		WCW/IMS/QA/FM/09	
Dated							
S.N.	Pa	Parameters		Results Obtained	Requirement as per IS 1489 (Part I) : 2015		
1	Chemical Composition						
	Loss on Ignition (% by mass)			2.10	Not More than 5.0 %		
	Magnesia (% by mass)			0.80	Not more than 6.0 %		
	Sulphuric Anhydride SO3 (% by mass)			2.90	Not More than 3.5 %		
	Chloride Content (% by mass)			0.02	Not more than 0.1 % for general purpose & not more than 0.05 % for pre-stressed structures		
	Insoluble Residue (% by mass)			28.50	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 (m² / kg)			346	Not Less than 300		
3	Compressive Strength (MPa)						
	72 ± 1h (3 Days)			28.5	Not less than 16.0		
	168 ± 2h (7 Days)			39.0	Not less than 22.0		
	672 ± 4h (28 Days) *			58.2	Not less than 33.0		
4	Setting Time (Minutes						
	Initial			125	Not less than 30		
	Final			225	Not more than 600		
5	Soundness						
	Le-Chatelier Expansion (mm)			1.00	Not more than 10.0		
	Auto-Clave Expansion (%)			0.010	Not more than 0.8		
6	Drying Shrinkage (%)*	Drying Shrinkage (%)*			Not more than 0.15		
7	Normal Consistency (%)			31.00			
	Temp. During Testing (°C)			27.00	$(27 \pm 2)^{0}$ C		

* Fly Ash Content in Cement is (%) 33.00

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

Manager (QA)