





WORK TEST CERTIFICATE

Portland Pozzolana Cement

Despatched during Week No.		5	From	29-Jai	n-2021	То	4-Feb-2021	
Test Certificate No.		5	Reference		e No.		WCW/IMS/QA/FM/18	
Dated		5-Mar-2021					WOWNING/QAT III/10	
S.N.	Pa	rameters		Results Obtained	Dedilirement as not is 1/184 (Dart I) · 2016			
1	Chemical Composition							
	Loss on Ignition (% by mass)			1.60	Not More than 5.0 %			
	Magnesia (% by mass)			0.80	Not more than 6.0 %			
	Sulphuric Anhydride SO3 (% by mass)			2.05	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)			28.20	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)			320	Not Less than 300			
3	Compressive Strength (MPa)							
	72 ± 1h (3 Days)			28.0	Not less than 16.0			
	168 ± 2h (7 Days)			36.8	Not less than 22.0			
	672 ± 4h (28 Days) *			54.3	Not less than 33.0			
4	Setting Time (Minutes)							
	Initial			175	Not less than 30			
	Final			275	Not more than 600			
5	Soundness							
	Le-Chatelier Expansion (mm)			1.00	Not more than 10.0			
	Auto-Clave Expansion (%)			0.040	Not more than 0.8			
6	Drying Shrinkage (%)*	ying Shrinkage (%)*			Not more than 0.15			
7	Normal Consistency (%)			29.00				
	Temp. During Testing (0C)			27.00	(27 ± 2)0C			

* Fly Ash Content in Cement is (%) 34.00

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

Manager (QA)