

**WORK TEST CERTIFICATE** 



## **Portland Pozzolana Cement**

	tched during Week No.	02		From	08/01/2018	То	14/01/2018		
Test C Dated	Certificate No.	02 15/02/20			ence No.		'		
S.N.	Parameters			sults ained	•		•		
	Chemical Composition								
	Loss on Ignition (% by mass)		2.1		Not More than 5.0%				
	Magnesia (MgO) (% by mas	s)	1	L.1	Not More than 6.0°	WD/LAB/TC/09  Juirement as per 489 (Part I):2015  5.0%  6.0%  6.0%  8.5%  0.1% (for general purpose) 0.05% for pre-stressed  X + 4.0 (100-X) / 100] & 0.6 X), Where "X" is the lana content in cement.  00  6.0  6.0  6.0  7.0  7.0  7.0  7.0			
1	Sulphuric Anhydride (SO <sub>3</sub> ): (% by Mass)		2.7		Not More than 3.5%				
'	Chloride Content (% by Mas	s)	0.004		Not More than 0.1% (for general purpose) & not more than 0.05% for pre-stressed structures				
	Insoluble Residue (% by mass)		29.5		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								
2	Blaine's Specific Surface Are	` ",	3	342	Not Less than 300	less than (0.6 X), Where "X" is the ared Pozzolana content in cement.  Less than 300  less than 16.0			
	Compressive Strength (MF	Pa)				WD/LAB/TC/09 equirement as per 1489 (Part I):2015  15.0% 16.0% 10.1% (for general purpose) & 0.05% for pre-stressed  1 [X + 4.0 (100-X) / 100] & (0.6 X), Where "X" is the colana content in cement.			
3	72 ± 1h (3 Days)		2	9.6	Not less than 16.0				
	168 ± 2h (7 Days)		3	9.2	Not less than 22.0	irement as per 39 (Part I):2015  0%  0%  1% (for general purpose) 8 5% for pre-stressed  + 4.0 (100-X) / 100] & X), Where "X" is the na content in cement.			
	672 ± 4h (28 Days)*		5	9.9	Not less than 33.0				
	Setting Time (Minutes)								
4 Initial			1	.45	Not less than 30				
	Final		2	15	Not more than 600	)			
	Soundness		1			189 (Part I):2015  0%  0%  5%  1% (for general purpose) 8  05% for pre-stressed  (+ 4.0 (100-X) / 100] &  6 X), Where "X" is the ana content in cement.			
5	Le-Chatelier Expansion (mm)			0.5 Not more than 10.0					
	Auto-Clave Expansion (%)		0.	006	Not more than 0.8				
6	Drying Shrinkage (%)*		Aw	aited	Not More than 0.15	5			
7	Normal Consistency (%)		3	0.5					
	Temp. During Testing (°C)			27	$(27 \pm 2)^{0}$ C				

* Fly Ash Content in Cement is	(%)	34.0

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

Manager (QA)

Tarehem 7

Chief Manager -QA