

\* Fly Ash Content in Cement is

(%)

## ACC

## ACC Limited Wadi Cement Works



## **WORK TEST CERTIFICATE**

## **Portland Pozzolana Cement**

S.N.   Parameters   Results Obtained   Requirement as per IS 1489 (Part I): 2015	Despatched during Week No.		21	From	21/0	5/19	То	27/05/19
S.N.   Parameters   Results Obtained   Requirement as per IS 1489 (Part I): 2015	Test Certificate No.		Reference		e No.		WCW/IMS/QA/FM/09	
Chemical Composition	Dated							
Loss on Ignition (% by mass)   2.10   Not More than 5.0 %	S.N.	Parameters						
Magnesia (% by mass)   1.00   Not more than 6.0 %	1	Chemical Composition						
Sulphuric Anhydride SO3 (% by mass)   2.50   Not More than 3.5 %		Loss on Ignition (% by mass)			2.10	Not More than 5.0 %		
Chloride Content (% by mass)		Magnesia (% by mass)			1.00	Not more than 6.0 %		
Chloride Content (% by mass)  O.02  Not more than 0.1 % for general purpose & n more than 0.05 % for pre-stressed structures  Not More than [X + 4.0 (100-X) / 100] & Not less than (0.6 X), Where "X" is the declar Pozzolana content in cement  Physical Analysis  Fineness  Blaine's Specific Surface Area (m² / kg)  Compressive Strength (MPa)  72 ± 1h (3 Days)  168 ± 2h (7 Days)  672 ± 4h (28 Days) *  Setting Time (Minutes)  Initial  In		Sulphuric Anhydride SO3 (% by mass)			2.50	Not More than 3.5 %		
Insoluble Residue (% by mass)   28.40   Not less than (0.6 X), Where "X" is the declar Pozzolana content in cement		Chloride Content (% by mass)			0.02	Not more than 0.1 % for general purpose & not more than 0.05 % for pre-stressed structures		
Fineness   Blaine's Specific Surface Area (m² / kg)   332   Not Less than 300		Insoluble Residue (% by mass)			28.40	Not less than (0.6 X), Where "X" is the declared		
Blaine's Specific Surface Area (m² / kg)   332   Not Less than 300	Physical Analysis							
Blaine's Specific Surface Area (m² / kg)   332   Not Less than 300	2	Fineness						
T2 ± 1h (3 Days)   28.6   Not less than 16.0		Blaine's Specific Surface Area (m² / kg)			332	Not Less than 300		
3	3	Compressive Strength						
168 ± 2h (7 Days)   38.2   Not less than 22.0		72 ± 1h (3 Days)			28.6	Not less than 16.0		
Setting Time (Minutes)		168 ± 2h (7 Days)			38.2	Not less than 22.0		
Initial   145   Not less than 30		672 ± 4h (28 Days) *			58.6	Not less than 33.0		
Final   210   Not more than 600	4	Setting Time (Minutes						
Soundness		Initial			145	Not less than 30		
5 Le-Chatelier Expansion (mm) 0.50 Not more than 10.0 Auto-Clave Expansion (%) 0.040 Not more than 0.8 6 Drying Shrinkage (%)* Awaited Not more than 0.15  Normal Consistency (%) 30.50		Final			210	Not more than 600		
Auto-Clave Expansion (%)  6 Drying Shrinkage (%)*  Normal Consistency (%)  30.50  Auto-Clave Expansion (%)  Awaited Not more than 0.15  30.50	5	Soundness						
6 Drying Shrinkage (%)* Awaited Not more than 0.15  Normal Consistency (%) 30.50		Le-Chatelier Expansion (mm)			0.50	Not more than 10.0		
Normal Consistency (%) 30.50		Auto-Clave Expansion (%)			0.040	Not more than 0.8		
7	6	Drying Shrinkage (%)*			Awaited	Not more than 0.15		
, , , , , , , , , , , , , , , , , , , ,	7	Normal Consistency (%)			30.50			
Temp. During Testing (°C)   27.00   (27 ± 2)°C	,	Temp. During Testing (°C)			27.00	(27 ± 2) <sup>0</sup> C		

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

Manager (QA)

34.00