



# ACC

ACC Limited  
Wadi Cement Works

**WORK TEST CERTIFICATE**



## 53 Grade Ordinary Portland Cement

Despatched during Week No.	26	From	25-Jun-2021	To	1-Jul-2021
Test Certificate No.	26	Reference No.		WCW/IMS/QA/FM/17	
Dated	9-Jul-2021				

S.N.	Parameters	Results Obtained	Requirement as per IS 269 : 2015 (Variety: OPC 53)
<b>Chemical Composition</b>			
1	Lime Saturation Factor ( $\text{CaO} - 0.7 * \text{SO}_3$ ) / ( $2.8 * \text{SiO}_2 + 1.2 * \text{Al}_2\text{O}_3 + 0.65 * \text{Fe}_2\text{O}_3$ )	0.92	Not greater than 1.02 and not less than 0.80
	Ratio of % Alumina to that of Iron Oxide $\text{Al}_2\text{O}_3 / \text{Fe}_2\text{O}_3$	1.35	Not less than 0.66
	Insoluble Residue (% by mass)	0.89	Not more than 5.0 %
	Magnesia (% by mass)	0.83	Not more than 6.0 %
	Sulphuric Anhydride (% by mass)	2.99	Not More than 3.5 %
	Total loss on Ignition (%)	2.07	Not More than 4.0 %
	Chloride Content (%)	0.010	Not more than 0.1 % for general purpose & not more than 0.05 % for pre-stressed structures
<b>Physical Analysis</b>			
2	<b>Fineness</b>		
	Blaine's Specific Surface Area (m <sup>2</sup> / kg)	313	Not Less than 225
3	<b>Compressive Strength (MPa)</b>		
	72 ± 1h (3 Days)	36.4	Not less than 27.0
	168 ± 2h (7 Days)	46.6	Not less than 37.0
	672 ± 4h (28 Days) *	Awaited	Not less than 53.0
4	<b>Setting Time (Minutes)</b>		
	Initial	155	Not less than 30
	Final	210	Not more than 600
5	<b>Soundness</b>		
	Le-Chatelier Expansion (mm)	2.00	Not more than 10.0
	Auto-Clave Expansion (%)	0.050	Not more than 0.8
6	Normal Consistency (%)		
	Temp. During Testing (0C)	27.00	(27 ± 2)0C

The above cement complies with the requirements of IS 269 : 2015 (Variety: OPC 53) for 53 Grade Ordinary Portland Cement

Limestone (5%) added as Performance Improver

Manager (QA)

DGM QC

Registered Office: Cement House, 121, Maharishi Karve Road, Mumbai - 400020