



# ACC

ACC Limited  
Wadi Cement Works

**WORK TEST CERTIFICATE**



## 53 Grade Ordinary Portland Cement

Despatched during Week No.	26	From	25/06/2017	To	01/07/2017
Test Certificate No. Dated	26 11/07/2017	Reference No.	WD/LAB/TC/07		
S.N.	Parameters	Results Obtained	Requirement as per IS 269 : 2015 (Variety: OPC 53)		
<b>Chemical Composition</b>					
1	Lime Saturation Factor CaO - 0.7 SO <sub>3</sub> / (2.8 SiO <sub>2</sub> + 1.2 Al <sub>2</sub> O <sub>3</sub> + 0.65 Fe <sub>2</sub> O <sub>3</sub> )	0.88	Not greater than 1.02 and not less than 0.80		
	Ratio of % Alumina to that of Iron Oxide Al <sub>2</sub> O <sub>3</sub> / Fe <sub>2</sub> O <sub>3</sub>	1.29	Not less than 0.66		
	Insoluble Residue (% by mass)	0.6	Not more than 5.0 %		
	Magnesia (% by mass)	0.8	Not more than 6.0 %		
	Sulphuric Anhydride (% by mass)	2.9	Not More than 3.5 %		
	Total loss on Ignition (%)	1.8	Not More than 4.0 %		
	Chloride Content (%)	0.014	Not More than 0.1 % for general purpose but not more than 0.05 % for pre-stressed structures		
<b>Physical Analysis</b>					
<b>2 Fineness</b>					
	Blaine's Specific Surface Area (m <sup>2</sup> / kg)	301	Not Less than 225		
<b>3 Compressive Strength (MPa)</b>					
3	72 ± 1h (3 Days)	36.8	Not less than 27.0		
	168 ± 2h (7 Days)	46.3	Not less than 37.0		
	672 ± 4h (28 Days) *	60.3	Not less than 53.0		
<b>4 Setting Time (Minutes)</b>					
4	Initial	125	Not less than 30		
	Final	170	Not more than 600		
<b>5 Soundness</b>					
5	Le-Chatelier Expansion (mm)	1.0	Not more than 10.0		
	Auto-Clave Expansion (%)	0.006	Not more than 0.8		
<b>6 Normal Consistency (%)</b>					
6	Temp. During Testing (°C)	28.5			
		27	(27 ± 2) <sup>0</sup> C		

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

Manager (QA)

Chief Manager -QA