

# *Benvid White Cement Co.*

18-Jan-15

<i>Physical properties</i>	<i>Units</i>	<i>Practical approved</i>	<i>Actual result</i>	<i>Standard acceptable lev</i>
Fineness Specific Surface	Cm <sup>2</sup> /g	3400-3700	3500	Min. 3000
Autoclave Expansion	%	0.01-0.2	0.04	max. 0.8

## *Compressive Strength*

3 Days	Kg/Cm <sup>2</sup>	200-250	250	Min. 110
7 Days	Kg/Cm <sup>2</sup>	300-360	355	Min. 175
28 Days	Kg/Cm <sup>2</sup>	440-520	500	Min. 315

## *Vicat*

Initial Setting Time	MINS	120-160	140	Min. 45
Final Setting Time	MINS	150-220	200	max. 480
Whiteness	%	88.5-90	89.3	Min. 75

<i>Chemical analysis</i>		<i>Practical approved</i>	<i>Actual result</i>	<i>Standard acceptable lev</i>
Silicon Dioxide	%SiO <sub>2</sub>	23.2-23.8	23.30	
Aluminium Trioxide	%Al <sub>2</sub> O <sub>3</sub>	4.5-5	4.95	
Iron Trioxide	%Fe <sub>2</sub> O <sub>3</sub>	0.3-0.45	0.35	
Calcium Oxide	%CaO	64.2-65.5	65.00	
Magnesium oxide	%MgO	1.2-1.8	1.40	Max. 5
Sulphur Trioxide	%SO <sub>3</sub>	1.6-2.1	1.61	Max. 3.5 C <sub>3</sub> A>8 Max. 3 C <sub>3</sub> A<8%
Sodium Oxide	%Na <sub>2</sub> O	0.2-0.4	0.30	
Potassium Oxide	%K <sub>2</sub> O	0.4-0.46	0.40	
Insoluble Residue	%Ins	0.4-0.6	0.35	Max. 0.75
Loss On Ignition	%LOI	1.8-3	2.60	Max. 3