



Report of Cement Analysis  
White Portland Cement

August 2023

## CHEMICAL ANALYSIS

PARAMETER	RESULTS	SPECIFICATIONS
Silicon Dioxide (SiO <sub>2</sub> )	22.27 %	
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	2.27 %	6.0 % Maximum
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.24 %	6.0 % Maximum
Calcium Oxide (CaO)	66.75 %	
Magnesium Oxide (MgO)	0.26 %	6.0 % Maximum
Sulfure Trioxide	3.32 %	3.5 % Maximum
Loss On Ignition	2.80 %	3.0 % Maximum
Insoluble Residue	0.15 %	0.75 % Maximum
Alkalies as Na <sub>2</sub> O	0.25 %	
Tricalcium Silicate (C <sub>3</sub> S)	77.36 %	
Tricalcium Aluminate (C <sub>3</sub> A)	5.61 %	
Free Lime	2.80 %	
Whiteness Hunter	93.67 %	

## PHYSICAL ANALYSIS

PARAMETER	RESULTS	SPECIFICATIONS
Blaine Surface, m <sup>2</sup> /Kg	437	280 Minimum
Vicat Set, minutes		
Initial	140	Not less than 45
Final	185	Not more than 375
Air Content	5.00 %	12 % Maximum
Autoclave Expansion	0.02 %	0.8 % Maximum
Compressive Strength, p.s.i (MPa)		
1 Day	3538(24.4)	
3 Days	5235 (36.1)	10.0 MPa Minimum
7 Days	6554 (45.2)	17.0 MPa Minimum
28 Days	9150 (63.1)	

The cement covered by this report complies with the current specifications of ASTM C-150