



Report of Cement Analysis  
White Portland Cement

February 2023

## CHEMICAL ANALYSIS

PARAMETER	RESULTS	SPECIFICATIONS
Silicon Dioxide (SiO <sub>2</sub> )	22.60 %	
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	2.30 %	6.0 % Maximum
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.25 %	6.0 % Maximum
Calcium Oxide (CaO)	67.60 %	
Magnesium Oxide (MgO)	0.28%	6.0 % Maximum
Sulfure Trioxide	3.22 %	3.5 % Maximum
Loss On Ignition	2.76 %	3.0 % Maximum
Insoluble Residue	0.15 %	0.75 % Maximum
Alkalies as Na <sub>2</sub> O	0.29 %	
Tricalcium Silicate (C <sub>3</sub> S)	78.38 %	
Tricalcium Aluminate (C <sub>3</sub> A)	5.67 %	
Free Lime	2.97 %	
Whiteness Hunter	93.09 %	

## PHYSICAL ANALYSIS

PARAMETER	RESULTS	SPECIFICATIONS
Blaine Surface, m <sup>2</sup> /Kg	444	280 Minimum
Vicat Set, minutes		
Initial	150	Not less than 45
Final	195	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	3596 (24.8)	
3 Days	5234 (36.1)	10.0 MPa Minimum
7 Days	6612 (45.6)	17.0 MPa Minimum
28 Days	9353 (64.5)	

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