

Cement Mill Test Report

Month of Issue: August 2024

Plant: **Richmond, British Columbia**
 Product: **OneCem**
 Mill Test Report #: **R-TIL-24-08**
 Manufactured: **July 2024**

ASTM C595 - 24 Standard Requirements

CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
Rapid Method, X-Ray (C 114)			Air content of mortar (%) (C 185)	12 max	6.4
SiO ₂ (%)	---	18.5	Blaine Fineness (m ² /kg)	---	442
Al ₂ O ₃ (%)	---	4.5	Passing 325 (%)	---	98.9
Fe ₂ O ₃ (%)	---	3.0	Compressive strength (Mpa [PSI]) (C 109)		
CaO (%)	---	62.9			
MgO (%)	---	1.0			
SO ₃ (%)	3.0 max*	2.6			
Loss on ignition @ 950 (%)	10.0 max	6.8			
NaEq (Alkali) (%)	---	0.44	3 days	13.0 min	28.4 4110
Insoluble residue (%)	---	0.25	7 days	20.0 min	36.2 5250
				25.0 min	45.0 6530
			28 days (Reflects previous month's data)		
Inorganic Process Addition (%)		2	Time of setting (minutes)		
			Vicat Initial (C 191)	45-420	110
Adjusted Potential Phase Composition**			Mortar Bar Expansion (C 1038)*		
C ₃ S (%)	---	42	14 days, % max	0.020 max	0.002
C ₂ S (%)	---	21	Cement Density (C186)		3.09
C ₃ A (%)	---	7			
C ₄ AF (%)	---	9			
Sulphate Resistance ASTM C-452 (Q2/2024)	0.05 max	0.033			

* May exceed 3.0% SO₃ maximum based on our C 1038 results of <0.02% expansion at 14 days.

** Corrected by using ASTM Calculation for Limestone Cement

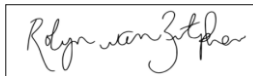
We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of:
 ASTM C 595-24 & AASHTO M 240-21 STANDARD SPECIFICATIONS FOR TYPE IL(15), TYPE IL(15) MS CEMENT

Cement complies with NSF 61

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Certified By:



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 8/12/2024