



Certified to
NSF/ANSI/CAN 61

Cement Mill Test Report

Month of Issue: **AUGUST 2023**

Plant:	Richmond, British Columbia
Product:	OneCem
Mill Test Report #	R-TIL-23-08
Manufactured:	JULY 2023

ASTM C595 - 21 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)		
SiO ₂ (%)	---	18.7		12 max	5.8
Al ₂ O ₃ (%)	---	4.6	Blaine Fineness (m²/kg) (C 204)		
Fe ₂ O ₃ (%)	---	3.0		---	461
CaO (%)	---	62.4	Passing 325 (%) (C 430)		
MgO (%)	---	1.0		---	99.3
SO ₃ (%)	3.0 max*	2.8	Autoclave expansion (%) (C 151)		
Loss on ignition @ 950 (%)	10.0 max	6.7		[-0.2 - 0.8]	0.05
NaEq (Alkali) (%)	---	0.49	Compressive strength (Mpa [PSI]) (C 109)		
Insoluble residue (%)	---	0.80			<u>Mpa</u>
			3 days	13.0 min	29.1
			7 days	20.0 min	36.9
Inorganic Process Addition (%)		2.3	28 days (Reflects previous month's data)	25.0 min	46.2
			Time of setting (minutes)		
Adjusted Potential Phase Composition**			Vicat Initial (C 191)	45-420	114
C3S (%)	---	41	Mortar Bar Expansion (C 1038)*		
C2S (%)	---	22	14 days, % max	0.020 max	0.001
C3A (%)	---	7	Cement Density (C186)		
C4AF (%)	---	9			3.09
Sulphate Resistance C1012 (Q2/2023)			Sulphate Resistance ASTM C-462 (Q2/2023)		
	0.10 max	0.092			0.033

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

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of:
ASTM C 595-21 & 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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8/15/2023