



Certified to
NSF/ANSI/CAN 61

Cement Mill Test Report

Month of Issue: DECEMBER 2022

Plant: **Richmond, British Columbia**
Product: **OneCem**
Mill Test Report #: **R-TIL-22-12**
Manufactured: **NOVEMBER 2022**

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)	12 max	6.4
SiO ₂ (%)	---	20.3	Blaine Fineness (m ² /kg) (C 204)	---	414
Al ₂ O ₃ (%)	---	4.9	Passing 325 (%) (C 430)	---	98.0
Fe ₂ O ₃ (%)	---	3.4	Autoclave expansion (%) (C 151)	[-0.2 - 0.8]	0.05
CaO (%)	---	63.9	Compressive strength (Mpa [PSI]) (C 109)		
MgO (%)	---	0.7			
SO ₃ (%)	3.0 max*	3.0			
Loss on ignition @ 950 (%)	10.0 max	2.7			
NaEq (Alkali) (%)	---	0.51			
Insoluble residue (%)	---	0.53			
Adjusted Potential Phase Composition***					
C3S (%)	---	60			
C2S (%)	---	13			
C3A (%)	---	7			
C4AF (%)	---	10			
Sulphate Resistance C1012 (Q3/2021)		0.091			

* 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 595-21 & 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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12/13/2022