



Cement Test Report

Mill Test Report Number: SEA_NEWCEM_March_2025
YEAR: 2025
MONTH OF PRODUCTION: February
PLANT: Seattle
CEMENT TYPE: NewCem Grade 100

Reference Cement

Fineness by Air Permeability (m ² /kg; ASTM C204)	389		
Fineness by 45 µm (No. 325) Sieve (% retain; ASTM C430)	3.3		
Compressive Strength (ASTM C109/C109 M)		<u>psi</u>	<u>Min Limit</u>
7-day	4,730		-
28-day	5,740		5,000
Total Alkalies (Na ₂ O + 0.658 K ₂ O) (%, ASTM C114)	<u>Actual</u> 0.85		<u>Limits</u> 0.6-0.9

Slag

CHEMICAL ANALYSIS	Percent
Silica Dioxide (SiO ₂ ; ASTM C114)	31.0
Ferric Oxide (Fe ₂ O ₃ ; ASTM C114)	1.1
Aluminum Oxide (Al ₂ O ₃ ; ASTM C114)	12
Calcium Oxide (CaO; ASTM C114)	42.5
Sulfur Dioxide (SO ₂ ; ASTM C114)	7.9
Magnesium Oxide (MgO; ASTM C114)	3.1
Loss on Ignition (L.O.I.; ASTM C114)	1.67
Total Alkalies	0.55
Inorganic Process Addition	5

Slag

Fineness by Air Permeability (m ² /kg; ASTM C204)	434		
Fineness by 45 µm (No. 325) Sieve (% retain; ASTM C430)	5.6		
Compressive Strength (ASTM C109/C109 M)		<u>SAI</u>	<u>SAI Limit</u> <u>Min</u>
28-day (Previous Month)	103		95
Specific Gravity (Mg/m ³ ; ASTM C188)	2.87		
Air Content of Mortar (%, ASTM C185)	<u>Actual</u> 4.6		<u>Max Limit</u> 12
Sulfide Sulfur (% S, ASTM C114)	0.8		2.5
Sulfate Ion (% as SO ₃ , ASTM C114)	7.1		A
Sulfate Expansion (% Expansion, ASTM C1038, CSA C5)	0.001		0.020
Color Value L*	77.4		

^A Not Applicable.

The ground granulated blast furnace slag complies with the current specification of the chemical physical requirement of ASTM C-989, AASHTO M-302 for grade 100 Ground Granulated Blast Furnace Slag (GGBFS) and and CSA A3001 Slag.

Slag source is JFE Mineral Company in Kurashiki City, Japan. NewCem is ground and manufactured in Seattle, WA.



Certified to
NSF/ANSI/CAN 61

Certified by:

Rob Shogren
Technical Director

March 5, 2025