

Mill Test Report Number: SEA\_NEWCEM\_August\_2025

YEAR: 2025 MONTH OF PRODUCTION: July PLANT: Seattle

Fineness by Air Permeability

Fineness by 45  $\mu m$  (No. 325) Sieve

(m<sup>2</sup>/kg; ASTM C204)

(% retain; ASTM C430)

**Compressive Strength** (ASTM C109/C109 M)

CEMENT TYPE: NewCem Grade 100

Slag

466

3.9

<u>SAI</u>

97

2.87

<u>Actual</u>

7.6

8.0

6.8

0.001

77.1

**SAI Limit** 

Min

95

Max Limit 12

2.5

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0.020

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Fineness by Air Permeability (m²/kg; ASTM C204)	438	
Fineness by 45 µm (No. 325) Sieve (% retain; ASTM C430)	3.8	
Compressive Strength (ASTM C109/C109 M) 7-day 28-day	<b>psi</b> 5,150 6,250	Min Limit - 5,000
Total Alkalies (Na <sub>2</sub> O + 0.658 K <sub>2</sub> O) (%, ASTM C114)	<u>Actual</u> 0.80	<u>Limits</u> 0.6-0.9

Slag	
CHEMICAL ANALYSIS	Percent
Silica Dioxide (SiO <sub>2;</sub> ASTM C114)	29.1
Ferric Oxide (Fe <sub>2</sub> O <sub>3;</sub> ASTM C114)	1.0
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> ; ASTM C114)	11.2
Calcium Oxide (CaO; ASTM C114)	39.6
Sulfur Trioxide (SO <sub>3</sub> , ASTM C114)	7.6
Magnesium Oxide (MgO; ASTM C114)	4.4
Loss on Ignition (L.O.I.; ASTM C114)	1.54
Total Alkalies	0.55
Inorganic Process Addition	7.4

0,000	28-day (Previous Month)
<u>Limits</u> 0.6-0.9	Specific Gravity (Mg/m³; ASTM C188)
	Air Content of Mortar
Percent	(%, ASTM C185)
29.1	
1.0	Sulfide Sulfur
11.2	(% S, ASTM C114)
39.6	
7.6	Sulfate Ion
4.4	(% as SO3, ASTM C114)
1.54	· · · · · · · · · · · · · · · · · · ·
0.55	Sulfate Expansion
7.4	(% Expansion, ASTM C1038, CSA C5)
	Color Value L*

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 Furace 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 by:

Rob Shogren Technical Director

August 5, 2025

A Not Applicable.