

Cement Test Report

Mill Test Report Number: SEA_NEWCEM_February 2024

YEAR: 2024

MONTH OF PRODUCTION: January

PLANT: Seattle

CEMENT TYPE: NewCem Grade 100

Reference Cement				
Fineness by Air Permeability (m²/kg; ASTM C204)	416			
Fineness by 45 µm (No. 325) Sieve	3.3			
(% retain; ASTM C430)				
Compressive Strength (ASTM C109/C109 M) 7-day	<u>psi</u> 4,988	Min Limit		
28-day	6,250	5,000		
Total Alkalies (Na ₂ O + 0.658 K ₂ O) (%, ASTM C114)	<u>Actual</u> 0.9	<u>Limits</u> 0.6-0.9		

Slag	
CHEMICAL ANALYSIS	Percent
Silica Dioxide (SiO _{2;} ASTM C114)	32.3
Ferric Oxide (Fe ₂ O ₃ ; ASTM C114)	1.9
Aluminum Oxide (Al ₂ O ₃ ; ASTM C114)	13
Calcium Oxide (CaO; ASTM C114)	41.1
Sulfur Trioxide (SO ₃ ; ASTM C114)	5.5
Magnesium Oxide (MgO; ASTM C114)	5.3
Loss on Ignition (L.O.I.; ASTM C114)	0.70
Total Alkalies	0.70
Inorganic Process Addition	7

	Slag		
Fineness by Air Permeability (m²/kg; ASTM C204)	391		
Fineness by 45 µm (No. 325) Sieve	6.8		
(% retain; ASTM C430)			
Compressive Strength			SAI Limit
(ASTM C109/C109 M)		<u>SAI</u>	<u>Min</u>
28-day (Previous Month)		99	95
Specific Gravity	2.88		
(Mg/m ³ ; ASTM C188)			
	<u>Actual</u>	Max Limit	
Air Content of Mortar (%, ASTM C185)	6.1	12	
Sulfide Sulfur (% S, ASTM C114)	8.0	2.5	
Sulfate Ion (% as SO3, ASTM C114)	4.7	А	
I			
Color Value L*	81.1		

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 Techincal Director

February 8, 2024

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A Not Applicable.