



# MaxCem® Mill Test Report

Month of Issue: December 2021

Plant: Seattle, Washington  
 Product: MaxCem® - Type IT(L11)(S30)MS  
 Shipped: November 2021  
 Mill Test Report Number: SEA\_MAXCEM\_DECEMBER2021

## ASTM C 595 and AASHTO M 240 Standard Requirements

CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
<i>Rapid Method, X-Ray (C 114)</i>			<i>Air content of mortar (%) (C 185)</i>		
SiO2 (%)	---	23.2		12 max	7
Al2O3 (%)	---	7.5	<i>Blaine Fineness (m2/kg) (C 204)</i>		
Fe2O3 (%)	---	2.7		---	430
CaO (%)	---	57.3	<i>Fineness, Residue retained on a 45 um sieve (%)</i>		
MgO (%)	---	1.9		---	2.1
Sulphate as SO3 (%)	3.0 max*	3.3	<i>Autoclave expansion (%) (C 151)</i>		
Sulfide Sulfur (S) (%)	2.0 max	0.24		0.80 max	-0.01
Loss on ignition (%)	10.0 max	3.1		-0.20 min	
Total Alkalis (Type IL)	---	0.57	<i>Compressive strength (MPa, [PSI]) (C 109)</i>		
Slag addition (%)		30	3 days	13.0 [1890] min	21.0 [3050]
Richmond Type IL (%)		70	7 days	20.0 [2900] min	29.9 [4340]
			28 days	25.0 [3620] min	41.9 [6070]
			<i>Time of setting (minutes)</i>		
			<i>Vicat Initial (C 191)</i>		
				45 - 420	120
			<i>C-1038 Expansion 14-day (%) (C 1038)*</i>		
				0.020	0.003

\*Table 1 chemical requirements states that SO3 content above 3.0 is permissible if the C1038 expansion is below 0.020% at 14 days.

We certify that the above described cement, at the time of shipment, meets the chemical and physical ASTM C595 Standard Requirements and AASHTO M 240.

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Certified By:

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December 13, 2021