



Cement Mill Test Report

Date of Issue: June 05, 2025

Plant: Exshaw AB
Product: Portland Cement Type IL (13)
Mill Test Report Number: ESW_Type IL13 2025-05
Manufactured during the month of: May 2025

CHEMICAL ANALYSIS

Item	Spec limit	Test Result
Rapid Method, X-Ray (XRF) (C114)		
SiO ₂ (%)	---	17.2
Al ₂ O ₃ (%)	---	3.6
Fe ₂ O ₃ (%)	---	3.1
CaO (%)	---	59.9
MgO (%)	---	4.6
SO ₃ (%) **	3.0 max	3.4
Loss on ignition @ 950 (%)	10.0 max	6.7
Loss on ignition @ 550(%)		0.6
Insoluble residue (%)*	1.5 max	0.6
Limestone Addition		13.5
Specific Gravity (For Information Purposes Only)		3.11
Phase Composition (For Information Purposes Only)		
C3A (Bogue)		5.0

PHYSICAL ANALYSIS

Item	Spec limit	Test Result
Blaine Fineness (m ² /kg)	---	542
Retained 45 um (%)	24 max	0.3
Air Content (%) (C186)	12 max	6
Compressive Strength MPa [psi] C109		MPa psi
1 Day		19.7 [2,857]
3 Day	13.0 [1890] min	30.0 [4,350]
7 Day	20.0 [2900] min	33.9 [4,916]
28 Day (Previous Month's Result)	25.0 [3620] min	41.9 [6,076]
Time of setting (minutes)		
Vicat Initial	45 min	88
Vicat Final	420 max	143
Mortar Bar Expansion (%) (C1038)	0.020 max	0.018
Colour (For Information Purposes Only)		35

Other Chemical Information:

Na ₂ Oeq (%) Weekly Averages	Week 1	0.51	Week 2	0.51	Week 3	0.51	Week 4	0.50
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* Previous Month's Results

** May exceed 3.0% SO₃ maximum based on ASTM C1038 results of <0.020% expansion at 14 days.

We certify that the above described cement, at the time of shipment, meets the chemical and physical requirements of ASTM C595/C595M-24 & AASHTO M 240-24 STANDARD SPECIFICATIONS FOR TYPE IL (13).

Exceptions: ASTM C430 is not within the current Scope of Accreditation.

Lafarge Canada Inc. - Exshaw Plant
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Certified By:

John W Blair
Quality Manager



Certified to
NSF/ANSI/CAN 61



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ACCREDITED