

Cement Mill Test Report

Date of Issue: November 15, 2024

Plant: Exshaw AB

Product: Portland Cement Type IL (12) VCM Only

Mill Test Report Number: ESW_Type IL12 2024-10-VCM

Manufactured during the month of: October 2024

CHEMICAL ANALYSIS				PHYSICAL ANALYSIS			
Item	Spec limit	Test Result	Item Spec limi		Test Result		
Rapid Method, X-Ray							
SiO2 (%)		17.3	Blaine Fineness (m2/kg)				552
Al2O3 (%)		3.6					
Fe2O3 (%)		3.1	Retained 45 um (%)		24 max		0.2
CaO (%)		59.8					
MgO (%)		4.5	Compressive Strength MPa [psi] C109			MPa	psi
SO3 (%) **	3.0 max	3.5	1 Day			18.6	[2,697]
Loss on ignition @ 950 (%)	10.0 max	6.8	3 Day		13.0 [1890] min	30.5	[4,423]
Loss on ignition @ 550(%)		1.2	7 Day		20.0 [2900] min	35.6	[5,162]
Insoluble residue (%)*	1.5 max	0.6	28 Day	(Previous Month's Result)	25.0 [3620] min	42.5	[6,163]
Limestone Addition		13.2	Time of setting (minutes)				
			Vicat Initial		45 - 420 95		
Specific Gravity (For Information Purposes Only) 3.12							
			Mortar Bar Expansion (%) (C1038)		0.020 max		0.010
			Colour (I	For Information Purposes Only)		35

Week 2 0.52

Other Chemical Information: Na₂Oeq (%) Weekly Averages

Phone: 403-673-3815

Lafarge Canada Inc. - Exshaw Plant

P.O. Box 160, Highway 1A, Exshaw AB T0L 2C0

** 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 (12).

Week 1 0.53

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

Certified By:

Week 3 0.53

John W Blair Quality Manager

Week 4 0.56