



FLY ASH TEST REPORT

Sample from : Centralia/Kamloops Type F Fly Ash
Average Analysis: Feb 2024
Test Report Number Centralia/Kamloops-3-24_F_CSA
Ash Source: Centralia Washington

Chemical Analysis

Silicon Dioxide (SiO ₂)	58.9 %
Aluminum Oxide (Al ₂ O ₃)	11.9 %
Iron Oxide (Fe ₂ O ₃)	5.2 %
Total (SiO ₂) + (Al ₂ O ₃) + (Fe ₂ O ₃)	76.0 %
Sulphur Trioxide (SO ₃)	0.6 %
Calcium Oxide (CaO)	14.0 %
Magnesium Oxide	3.8 %
Moisture Content	0.09 %
Loss on Ignition	2.75 %
Total Alkalies as Equivalent Na ₂ O	3.42 %

Physical Analysis

Fineness Retained on 45 um (No. 325 Sieve)	8.3 %
Fineness Retained on 160 um	0.0
Quality of Air Entrainment	1.1 %
Strength Activity Index with Portland Cement	
% of Control at 7 Days	80 %
% of Control at 28 Days (<i>previous month's result</i>)	87 %
Water Requirement, Percent of Control	100 %
Density	2.69 g/cm ³
Density, Variation from Average	1.10 %
Fineness 45um Sieve, Variation from Average	2.30 %

We hereby certify that the composite fly ash sample above meets the chemical, physical and testing frequency requirements of CAN/CSA A3001 for Type F Fly Ash.

* Tested at CCIL, ASTM C1077 and AASHTO R18 Accredited Laboratory

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