



FLY ASH TEST REPORT

Sample from : Sundance Harvested Fly Ash
Average Analysis: December 2024
Test Report Number Sundance_HA-1-25_F_CSA

Chemical Analysis

Silicon Dioxide (SiO ₂)	59.9 %
Aluminum Oxide (Al ₂ O ₃)	23.7 %
Iron Oxide (Fe ₂ O ₃)	3.5 %
Total (SiO ₂) + (Al ₂ O ₃) + (Fe ₂ O ₃)	87.1 %
Sulphur Trioxide (SO ₃)	0.3 %
Calcium Oxide (CaO)	8.6 %
Magnesium Oxide	1.3 %
Moisture Content	0.22 %
Loss on Ignition	1.63 %
Total Alkalies as Equivalent Na ₂ O	2.65 %

Physical Analysis

Fineness Retained on 45 um (No. 325 Sieve)	21.8 %
Fineness Retained on 160 um	0.7
Quality of Air Entrainment	1.0 %
Strength Activity Index with Portland Cement	
% of Control at 28 Days (<i>previous month's result</i>)	94 %
Water Requirement, Percent of Control	98 %
Density	2.18 g/cm ³
Density, Variation from Average	0.27 %
Fineness 45um Sieve, Variation from Average	4.60 %

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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