



FLY ASH TEST REPORT

Sample from : Hokuden Fly Ash
Average Analysis: June 2026
Test Report Number Hokuden-7-26_F

Chemical Analysis

Silicon Dioxide (SiO_2)	66.5 %
Aluminum Oxide (Al_2O_3)	22.9 %
Iron Oxide (Fe_2O_3)	4.2 %
Total (SiO_2) + (Al_2O_3) + (Fe_2O_3)	93.6 %
Sulphur Trioxide (SO_3)	0.2 %
Calcium Oxide (CaO)	1.9 %
Magnesium Oxide	0.9 %
Moisture Content	0.11 %
Loss on Ignition	1.30 %
Available Alkalies as Equivalent Na_2O	0.53 %

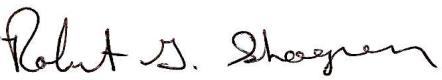
Physical Analysis

Fineness Retained on 45 um (No. 325 Sieve)	15.2 %
Strength Activity Index with Portland Cement	
% of Control at 7 Days (<i>previous month's result</i>)	76 %
% of Control at 28 Days (<i>previous month's result</i>)	82 %
Water Requirement, Percent of Control	98 %
Density	2.22 g/cm ³
Density, Variation from Average	0.01 %
Fineness 45um Sieve, Variation from Average	1.20 %

We hereby certify that the composite fly ash sample above meets the chemical, physical and testing frequency requirements of ASTM C618 for Type F Fly Ash.

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

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