



FLY ASH TEST REPORT

Sample from : Hokuden Fly Ash
Average Analysis: Jul-26
Test Report Number Hokuden-8-26_F

Chemical Analysis

Silicon Dioxide (SiO_2)	64.1 %
Aluminum Oxide (Al_2O_3)	26.0 %
Iron Oxide (Fe_2O_3)	4.1 %
Total (SiO_2) + (Al_2O_3) + (Fe_2O_3)	94.2 %
Sulphur Trioxide (SO_3)	0.3 %
Calcium Oxide (CaO)	1.4 %
Magnesium Oxide	0.7 %
Moisture Content	0.08 %
Loss on Ignition	3.55 %
Available Alkalies as Equivalent Na_2O	0.51 %

Physical Analysis

Fineness Retained on 45 μm (No. 325 Sieve)	12.5 %
Strength Activity Index with Portland Cement	
% of Control at 7 Days (<i>previous month's result</i>)	75 %
% of Control at 28 Days (<i>previous month's result</i>)	90 %
Water Requirement, Percent of Control	99 %
Density	2.23 g/cm^3
Density, Variation from Average	0.20 %
Fineness 45 μm 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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