

Cement

FLY ASH TEST REPORT

Analysis by: Lafarge Seattle Concrete Lab

Sample from : Centralia Power Plant

Average Analysis: March 2025 Test Report Number 4-25 Class F

Chemical Analysis

	Results	Limits
Silicon Dioxide (SiO ₂)	54.2 %	
Aluminum Oxide (Al ₂ O ₃)	17.0 %	
Iron Oxide (Fe ₂ O ₃)	5.5 %	
Total $(SiO_2) + (Al_2O_3) + (Fe_2O_3)$	77 %	50% Min - ASTM
Sulphur Trioxide (SO ₃)	0.8 %	5% Max - ASTM
Calcium Oxide (CaO)	12.8 %	18% Max - ASTM
Magnesium Oxide	3.8 %	
Moisture Content	0.21 %	3% Max - ASTM
Loss on Ignition	0.58 %	5% Max
Available Alkali as Equiv. Na ₂ 0 (previous month's result)	0.44 %	1.5% Max

Physical Analysis

Fineness Retained on 45 um (No. 325 Sieve)	14.0 %	, 0	34% Max - ASTM
Strength Activity Index with Portland Cement			
% of Control at 7 Days	93 %	6	75% Min - ASTM
% of Control at 28 Days (previous month's result)	103 %	,	75% Min - ASTM
Water Requirement, Percent of Control	93 %	,	105% Max- ASTM
Density	2.63 N	lg/m³	

Uniformity Requirements

Density, Variation from Average	0.89 %	5% Max - ASTM
Fineness 45um Sieve, Variation from Average	2.10 %	5% Max - ASTM

We hereby certify that the composite fly ash sample above meets the chemical and physical requirements of ASTM C618 and AASHTO M295 for class F fly ash.

Certified ·

Rob Shogren Technical Director

WESTERN REGION

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