



## FLY ASH TEST REPORT

Analysis by: Amrize Seattle Concrete Lab  
Sample from : Centralia Power Plant  
Average Analysis: December 2025  
Test Report Number 1-26 Class F

### Chemical Analysis

	Results	Limits
Silicon Dioxide (SiO <sub>2</sub> )	50.7 %	
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	17.9 %	
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	6.3 %	
Total (SiO <sub>2</sub> ) + (Al <sub>2</sub> O <sub>3</sub> ) + (Fe <sub>2</sub> O <sub>3</sub> )	75 %	50% Min - ASTM
Sulphur Trioxide (SO <sub>3</sub> )	0.8 %	5% Max - ASTM
Calcium Oxide (CaO)	13.7 %	18% Max - ASTM
Magnesium Oxide	3.8 %	
Moisture Content	0.15 %	3% Max - ASTM
Loss on Ignition	0.31 %	5% Max
Available Alkali as Equiv. Na <sub>2</sub> O ( <i>previous month's result</i> )	0.45 %	1.5% Max

### Physical Analysis

Fineness Retained on 45 um (No. 325 Sieve)	11.2 %	34% Max - ASTM
Strength Activity Index with Portland Cement		
% of Control at 7 Days	95 %	75% Min - ASTM
% of Control at 28 Days ( <i>previous month's result</i> )	102 %	75% Min - ASTM
Water Requirement, Percent of Control	93 %	105% Max- ASTM
Density	2.64 Mg/m <sup>3</sup>	

### Uniformity Requirements

Density, Variation from Average	1.10 %	5% Max - ASTM
Fineness 45um Sieve, Variation from Average	1.90 %	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

5400 West Marginal Way SW, Seattle, Washington 98106-1517  
Office: 206.923.0098 or 800.477.0100 Fax: 206.923.0388