

concrete.

5000

4000

3000

2000

1000

Pure Cement

Class C

× Class F

-SW1

- Wood

-Wood/F

Penetration Resistance (psi)

SEM scanning of pozzolanic reaction (I); 2) Strength build-up and quantitative kinetics of pozzolanic reaction (II); and 3) Mitigation of Alkali Silica Reaction (ASR) expansion (III). The overall conclusion is that biomass fly ash's performances are comparable to those of coal ash and should not be excluded from addition into

Setting Time Test

Biomass Fly Ash in Concrete I



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Materials:

Coal: 1) class C and 2) class F 3) Wood: fly ash from pure wood This investigation determines the effect of biomass fly ash in concrete combustion and five co-fired biomass fly ash listed in the table in a series of three posters on: 1) Concrete strength, durability, and the below:

Name	Coal	(%)	Cofired With…	Biomass	(%)
SW1	Galatia coal	80		Switch Grass	20
SW2		90			10
10P	Powder River Basin	90			10
20P		80			20
SAW		80		Sawdust	20



Rapid Chloride Permeability Test



SEM & EMPA Scanning (SW1 Biomass Fly Ash)



Chemical analysis of SW1 fly ash particle



