ECOMATERIAL TECHNOLOGIES
A CRH COMPANY

Fly Ash

Fly Ash Class F

For improved durability and ASR resistance

ecomaterial.com

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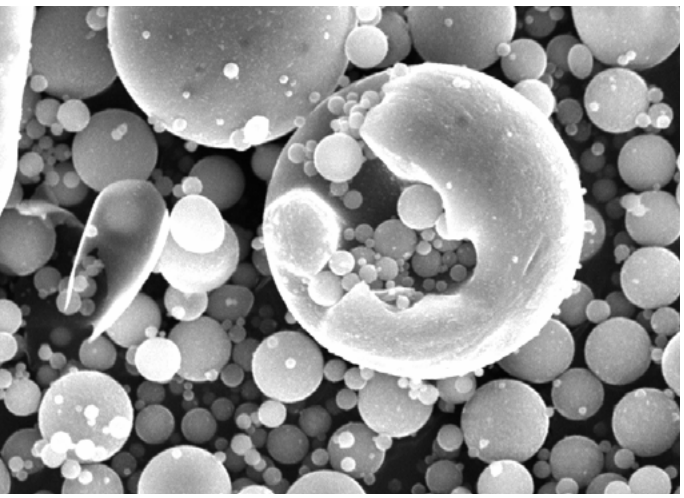
FEATURES

In plastic concrete:
- Reduces bleeding and segregation
- Improves pumpability
- Improves finishability

In hardened concrete:
(depending on mixture proportions used)
- Increases ultimate strength
- Reduces drying shrinkage
- Decreases permeability
- Lowers heat of hydration
- Reduces creep



PRODUCT DESCRIPTION

Summary of Advantages:
Eco Material Technologies' fly ash is a pozzolan for concrete consisting of the "finely divided residue that results from the combustion of ground or powdered coal" as defined by ASTM C 618. A pozzolan, as defined by ASTM, reacts chemically with calcium hydroxide produced by the hydration of portland cement to form additional cementitious compounds.

Eco Material Technologies' Class F fly ash significantly increases the ability of concrete to resist attack from sulfates in soil or ground water. Additionally, Class F fly ash has been proven through extensive research and field experience to be highly effective in mitigating the deleterious effects of expansive alkali-silica reactions (ASR) in concrete. It is produced from the combustion of pulverized bituminous or lignite coal.

When correctly proportioned, concrete that contains fly ash can have equivalent or greater 28 day compressive strengths when compared to plain portland cement concrete. Due to the pozzolanic reaction, fly ash concrete will continue to gain strength beyond 28 days, exceeding that of plain portland cement concrete.

Major Benefits
- Easier placement
- Reduces water requirements
- Improves pumpability
- Improves durability
- Improves finishability

APPLICATIONS

Eco Material Technologies' Class F fly ash can be used as a pozzolan in virtually any concrete application. When correctly proportioned, Class F fly ash will add many benefits such as increased strength, increased durability and reduced permeability. Class F fly ash is particularly beneficial in high-performance concrete applications where high compressive strengths are required or where exposure conditions demand highly durable concrete. Class F fly ash is also very effective at mitigating problems associated with alkali-silica reactions. In mass concrete placements where low heat of hydration is required, Class F fly ash is advantageous in controlling temperature rise.

QUALITY & SPECIFICATIONS

Eco Material Technologies' Class F fly ash that is provided for use in concrete applications will meet or exceed the performance requirements of ASTM C 618. To ensure compliance with ASTM C 618, our on-site and central quality control laboratories carefully sample and test the fly ash according to the requirements of ASTM C 311. In addition, independent commercial testing laboratories provide compliance testing.

SHIPPING AND DELIVERY

Eco Material Technologies' fly ash is normally shipped, stored and batched in the same manner as portland cement. Your trained Eco Material representative can suggest the most appropriate and economical procedure for given conditions.

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Eco Material Technologies is America's largest manager and marketer of coal combustion products. With operations coast to coast, Eco Material Technologies is committed to supplying quality products broadly supported by skilled technical sales professionals. To meet our customers' present and future needs with coal combustion products, Eco Material Technologies continues its commitment to customer-based research and development and broad-based marketing programs.

For more information on our complete line of products, contact your local Eco Material Technologies representative or visit us online at ecomaterial.com.

Because Eco Material Technologies cannot control the final use of its products, there are no warranties expressed or implied regarding a product's use or performance in any given circumstance. Persons receiving this information should conduct their own tests to determine suitability for their particular use.

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