Utilization of INSPEC and OFF SPEC Fly ash

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ABSTRACT

Reco Cement Products, LLC is a mineral based admixture, which allows for high percentages of fly ash utilization. We focus on replacing a minimum of 50-75% of OPC. It is an admixture for normal Portland cement, HVFA (High Volume Fly Ash) cement and concrete mixtures. The primary ingredients are fly ash (Class C, Class F, or fly ash, which doesn’t meet ASTM C618 Standard Specification) and slag. The secondary ingredients include plasticizer (Medium or high range water reducer), finely pulverized limestone, powdered glass (when available) and an alkaline waste (cement kiln dust or lime kiln dust). It is specially composed to enhance strength, durability, and workability of fresh concrete. It also significantly reduces energy needs and CO₂. The mixture increases the ultimate strength by at least 15-20% and reduces overall cost.