

**PAVEMENT CONSTRUCTION WITH HIGH VOLUMES OF CLASS C AND
CLASS F FLY ASH CONCRETE**

By Tarun Naik, Buce Ramme and John Tews

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ABSTRACT

This research was conducted to establish a fly ash concrete mixture proportion for highway paving work. Concrete mixes were proportioned to replace 20 and 50 percent cement with a Class C and 40 percent with Class F fly ash. These mixes were tested for compressive strength, tensile strength, flexural strength, freezing and thawing resistance, shrinkage, deicing salt scaling, permeability, and abrasion resistance. Both the high-volume mixtures (40 percent Class F and 50 percent Class C) showed better results than that required for paving concrete with respect to most of the preceding parameters. Therefore, these mixes should provide an excellent alternative to conventional paving material.