Guidelines for Design, Testing, Production and Construction of Semi-Flowable Self-Consolidating Concrete for Slip-Form Paving

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Abstract

A new type of self-consolidating concrete (SCC), semi-flowable SCC (SFSCC), has been developed for slip-form paving construction. Field applications of SFSCC have been conducted in Ames, Iowa. Based on the recent research results, guidelines for SFSCC design, testing, production, and construction are developed. This paper provides an overview of the guidelines. In the paper, SFSCC mix design methodology, quality control test methods, and special requirements for paving equipment and operations as well as post-placement techniques will be discussed.

Key words: Self-Consolidating Concrete, Slip-Form Paving, and Pavement

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