ABSTRACT

Although Self Compacting Concrete (SCC) has many advantages over traditional vibrated concrete (TVC) its rate of adoption in cast in-situ construction is still low. To increase the use of SCC technical problems need to be solved and it is important to convince the market of all the direct and indirect benefits that can be realized by using SCC. This research aims to establish recommendations for robust mixes. Particular focus is on invariance to changes in aggregate composition and it is demonstrated that it is possible to develop robust SCC mixes that are tailored to the requirements of flowability.

Key words: SCC, flowability, robustness, aggregate moisture, viscosity modifying agent