

Abstract Details

Title: Self Compacting Fibric Concrete

Authors: Rajender and Jaswant Singh

Abstract: Polypropylene Fibre Reinforced Concrete is an embryonic construction material which can be described as a concrete having high mechanical strength, Stiffness and durability. By utilization of Polypropylene fibres in concrete not only optimum utilization of materials is achieved but also the cost reduction is achieved. This report presents a comprehensive review on various aspects Polypropylene Fibre Reinforced Concrete concerning the behaviour, applications and performance of Polypropylene Fibre Reinforced Concrete. Various issues related to the manufacture and strength of Polypropylene Fibre Reinforced are also discussed The purpose of this concrete concept is to decrease the risk due to the human factor, to enable the economic efficiency, more freedom to designers and constructors and more human work. It is a kind of concrete that can flow through and fill gaps of reinforcement and corners of moulds without any need for vibrations and compacting during the pouring process. Because of that, SCC must have sufficient paste volume and proper paste rehology. Paste volumes are usually higher than for conventionally placed concrete and typically consist of high powder contents and water-powder ratios.

Keywords: Concrete, J-Ring Test, Passing Ability.