



## **A Review on Self Compacting Concrete**

**Arulsivanantham. P<sup>1\*</sup>, Gokulan R<sup>2</sup>**

<sup>1</sup>Built Environment Engineering, Muscat College, Bausher, PO Box 2910, Ruwi, PC 112, Sultanate of Oman, Oman.

<sup>2</sup>Department of Civil Engineering, KPR Institute of Engineering and Technology, Coimbatore, India.

**Abstract:** This paper gives a review on Self Compacting Concrete (SCC) to be made using various Mineral Admixtures and Fibers. In current scenario of construction industries due to demand in the construction of large and complex structures, which often leads to difficult concreting conditions. When large quantity of heavy reinforcement is to be placed in a reinforced concrete (RC) member, it is difficult to ensure fully compacted without voids or honeycombs. Compaction by manual or by mechanical vibrators is very difficult in this situation. That leads to the invention of new type of concrete named as self-compacting concrete (SCC). This type of concrete flows easily around the reinforcement and into all corners of the formwork. Self-compacting concrete describes a concrete with the ability to compact itself only by means of its own weight without the requirement of vibration. Self-compacting concrete also known as Self-consolidating Concrete or Self Compacting High Performance Concrete. It is very fluid and can pass around obstructions and fill all the nooks and corners without the risk of either mortar or other ingredients of concrete separating out, at the same time there are no entrapped air or rock pockets. This type of concrete mixture does not require any compaction and it saves time, labour and energy. This review paper explains the utilization of fibers and various mineral admixtures in the properties of Self Compacting Concrete.

**Keywords :** Self Compacting Concrete, Mix design, Mineral Admixtures, Fibers, Durability, Workability.