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Study of Fiber Reinforced Self Compacting Concrete

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ABSTRACT:

The concrete named Self Compacting Concrete (SCC) was introduced by the Building Re-search Establish (BRE) and the concrete society. Concrete has a lot of use in the society or world. The blending of the fibers within the concrete improved the strength and durability. The fibers like carbon, glass, steel, nylon, etc. It has come to the notice that a combination of two or more fibers provides more effectiveness than a single fiber. The process of hybridization of fibers involves utilizing a blend of two or more distinct varieties of fibers. We will search out the properties of SCC like tensile and compressive strength. We shall study the concrete which is made of a combination of different fibers. This concrete is called hyper concrete. The SCC which is only made with a single fiber is called Fiber Reinforced Self Compacting Concrete (FRSCC). The Self Compacting Concrete which is made of two or more fibers in suitable proportion/Ratio improves the overall properties. These fibers also have performance synergy. Studying the various schemes, we shall identify the fiber combination, which helps to show max Synergy in the form of flexural strength.

Keywords: Self-Compacting Concrete (SCC), Steel Fiber, Glass Fiber, Mix M30, Mix M40.

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