

# Review of Comparison of Split Tensile Strength, Flexural Strength and Compression strength of Glass Fiber Self-Compacting Concrete

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**Abstract:** *This research aims to evaluate of using the glass fiber on the properties of fresh and hardened self compacting concrete (SCC). The self compacting concrete (SCC) is one of the most widely used to recognized development material and essential need for additives to improve performance of self compacting concrete (SCC). hence an attempt has been made in the present investigation to study the behavior of glass fiber in self compacting concrete. The main aim of the study to effect of glass fiber on self compacting concrete (SCC). The work involves four mixes, the mix proportion of this mixes is (1:1.62:2.96) Grade M40 and water cement ratio is (0.4), super plasticizer 5% of cement content and glass fiber ( 0,1,2 &3)% respectively. Usage of SCC the difficult the casting conditions and reduce the manpower. SCC added with relatively short and discontinuous glass fibers to produce Glass Fiber Self Compacting Concrete (GFSCC). The purpose of this study is to investigate the workability and mechanical properties of plain SCC and GFSCC. The laboratory testing included splitting tensile strength test, flexural strength test and compressive strength test. The addition of the glass fiber into self compacting concrete can dramatically increase the split tensile strength, flexural strength and compressive strength of concrete.*

**Keywords:** Self-Compacting Concrete, Glass-Fiber, Splitting Tensile Strength, Flexural, Compressive Strength

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