

## **INVESTIGATION AND COMPARATIVE STUDY OF M-20 GRADE CONCRETE BY USING STEEL FIBERS**

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### **Abstract**

Critical investigation for M-20 grade of concrete to study the compressive strength, flexural strength, tensile strength and deflection of steel fibre reinforced concrete (SFRC) containing fibers of 0%, 1%, 2% and 3% volume fraction of hook tain. Steel fibers of 50, 60 and 67 aspect ratio are used. A result data obtained has been analyzed and compared with a control specimen (0% fiber). A relationship between aspect ratio vs Compressive strength, aspect ratio vs flexural strength, aspect ratio vs tensile strength represented graphically. Similarly load vs deflection of beam for various aspect ratios are given. Result data clearly shows percentage increase in 28 days Compressive strength, Flexural strength and Tensile strength for M-20 Grade of Concrete.

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**Keywords:** Steel fibres give strength to concrete

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