

## **STRENGTH PROPERTIES OF SISAL FIBER REINFORCED CONCRETE**

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Concrete being a brittle material is weak in withstanding the impact loads. Therefore the concrete is reinforced with fibers since fibers are good in withstanding the impact loads. Among the natural fibers Sisal fibers have higher impact resisting capacity and higher specific strength compared to the other natural lignocellulosic fibers. The present work aims at evaluating the strength of sisal fiber reinforced concrete under impact load. The concrete was prepared using sand, cement, aggregates and water. Sisal fibers in five varying percentages- 0%, 0.5%, 1%, 1.5% and 2% were randomly dispersed. The impact specimens were prepared for three grades of concrete namely M20, M30 and M40 as per the Indian standards. After curing for 28 days, the specimens were tested for impact strength as per ASTM standards and the test results inferred that the sisal fibers were effective in increasing the strength of concrete.