

# Experimental study of slurry infiltrated fiber reinforced concrete

## Abstract

Slurry Infiltrated Fiber Reinforced Concrete (SIFCON) is a relatively new high performance and advanced material and can be considered as a special type of Steel Fiber Reinforced Concrete (SFRC). The hooked-end shape steel fiber assist in controlling the propagation of cracking in the matrix by improving the overall cracking resistance and by bridging across even smaller cracks. In this paper, the comparison between the steel fiber reinforcement and BRC wire mesh will obtain and also between the different thickness size. The steel fiber will use from different percentage based on volume frictions which are 0.5%, 1% and 2% with aspect ratio 67. The beam is tested for flexural strength. The relationship between loads versus deflection represented graphically. The highest flexural strength obtained in this research is 19.34 MPa with 2% volume friction of steel fiber.

**Keywords;** BRC , Deflection, Flexural strength, SFRC, SIFCON, Steel fiber