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## **Carbon Fiber used in Concrete**

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Abstract: Carbon fiber-reinforced concrete (CFRC) is an emerging material that enhances the mechanical properties and durability of traditional concrete by incorporating carbon fibers. In India, with the construction sector growing rapidly and facing challenges related to durability and sustainability, CFRC can offer a solution. This paper reviews the potential benefits of carbon fiber in concrete, drawing on Indian research and case studies that explore its application, particularly in high- performance structures. The paper also examines challenges such as cost and material availability in the Indian context.

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