

Bendable Concrete-A Concrete for Future

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Abstract: *We know that Concrete is one the major and largest materials used in construction industry. The performance of concrete depends upon the type and nature of ingredients used for making concrete. By many measures, concrete is an excellent construction material. Conventional concrete is prepared by using cement, sand, aggregates and water along with some admixtures. The concrete thus prepared can't take much of tensile load; it is almost unbendable and has limited strain capacity. Therefore, there is a need to address some of the deficiencies in conventional concrete structures like, Brittle failure under severe loading, Deterioration under normal service loading and Lack of sustainability of RC structures etc. The lack of bendability is one major causes of failure of concrete. However, the mechanical properties and functional characteristics of concrete will have to be improved, in many ways, and these improvements are already taking place in the industry up to certain extent. To overcome many drawbacks of conventional concrete, a Bendable concrete or engineered cementitious Composites (ECC) is the one of the best alternatives. In this concrete the ductility of concrete is increased by use of fibres and other cementitious materials. This paper deals with review of the various properties, applications and advantages of bendable concrete.*

Keywords: Cementitious, Composites, Bendability, Ductility, Ingredients, Fibres, Conventional, Flexural Strength, etc.

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