ABSTRACT

Fiber reinforced concrete can offer an easy, practical and economical method for overcoming micro-cracks and similar type of deficiencies. As we know concrete is weak in tension hence some measures must be adopted to overcome this deficiency. Fibers are strong in tension hence can be used for reinforcing concrete. The present study deals with the finite element modelling of fiber reinforced concrete . Two models were prepared – one for compressive behavior and other for flexural strength. Damaged plasticity approach is used to model the failure of concrete. Failure is characterized by softening which is defined as decrease in stress on increasing deformation. Number of trials were run using various parameters to model the concrete. The objective was to find out the parameters which give results in alignment with the experimental results available. Compressive parameters were found out using the test for compression and tensile parameters were found using test for flexural tensile strength.