

In this study, the usability of steel fibers in order to bear the stresses occurring at the surface layer of pavement, which are directly subjected to the traffic effects, was investigated. In this context, specimens were produced and tested under Marshall Stability Test, and the optimum bitumen content value for the aggregates sample to be used was determined. Results showed that based on the determined value for the optimum bitumen content (5.5%), three specimens for each of a series of different fiber rates (0%, 0.25%, 0.50%, 0.75%, 1.0%, 1.5%, 2.0%, 2.5%) were prepared and the optimum value for fiber rate that results in the best stability value was determined as 0.75%.

As a result, steel fiber additions can be used in binder course of flexible pavement because of its positive stability impact.