

STUDY OF CONCRETE KERB UNITS MODIFIED WITH TIRE RUBBER

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ABSTRACT

Recycling of worn mobile tires is a way out in order the great problem of the often uncontrollable deposit of them to be partially solved. Recently laws no 109/75/2004 is issued concerning the terms and the means for the alternative management of worn mobile tires.

This paper examines the behavior of concrete kerb units, modified with this kind of solid wastes. Mixtures of such units were produced by the use of tires in the form of granules as an aggregate. Sand was substituted by tire rubber at 2.5 and 5% per weight. Physical and mechanical characteristics as well as the microstructure of these mixtures have been studied compared to conventional ones.

Results so far showed that addition of worn mobile tires is possible and has a positive influence on the behavior of mixtures for concrete kerb units with satisfactory properties so that stockpiles of worn tires are getting lesser and environment is protected.

KEY WORDS: worn tires, concrete kerb units, microstructure