



## Construction and Demolition Waste as a Road Construction Material in Rigid Pavement Design

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### Abstract

This paper focus on investigation of properties of recycled aggregate and use of recycled concrete aggregates to partially or fully replaced natural aggregates in the production of lower grade concrete. Recycled products may reduce the demands for new materials. Among which recycled aggregate (RA) is one of the major construction waste capable of being reused in the production of concrete.

To evaluate the viability of this process, an experimental campaign was implemented in order to monitor the mechanical behavior of such concrete. With aim of that, the recycled aggregate properties were evaluated at the beginning before utilizing them in concrete application. The obtained test results in assessing properties of aggregate are reported in terms of (i) particle size distribution; (ii) particle density; (iii) porosity and absorption; (IV) particle shape; (v) strength and toughness.