RC concrete versus conventional concrete in pavement

ABSTRACT

This article contains a discussion on roller-compacted concrete (RCC) or zero-slump concrete construction techniques. While discussing the various aspects of RCC, this study introduces the similarities and differences between conventional concrete and RCC for using as pavement. The article also describes the production of concrete, and a list of laboratory and field tests for the quality control of both types of concrete. A general view of what the RCC actually is, followed by the mix-design techniques, performance (strength and durability), handling techniques for concrete in both cold and hot weather, and curing guides for both types of concrete, with more emphasis on RCC, are herein presented. The study ends with an introductory discussion on dam construction using RCC.

Keyword: Roller-compacted concrete; Mix design; Strength