

A Comparative Study of Reinforced Cement Concrete Pavement and Polypropylene and Polyester Fiber Concrete Pavement

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Abstract: Due to rapid urbanization and growth of industries the traffic flow is increasing day by day resulting in heavy loading on existing road network of the country. During last three decades, there is sufficient increase in the road infrastructure resulting in increase of the total length of roads in the country. The road network in India carries more than two third of the freight traffic. Due to repetition of wheel loads, variation in temperature and other environmental effects most of pavements get damaged. Covering of asphalt pavement with a layer of cement concrete termed as pavement quality concrete. Pavement quality concrete is rehabilitation treatment on asphalt concrete. It is defined as Plain Cement Concrete overlay on asphalt concrete. It provides a new innovative method of rehabilitation at a very low cost with very good results and low maintenance cost. This method of rehabilitation/strengthening can be adopted for rural road network and district roads as these roads have low to moderate traffic. Even on the State Highways and some recently declared National Highways, where traffic is moderate, the above method of strengthening has a lot of promise. By adopting proper construction methods, we can rehabilitate large network of roads at reasonable cost and we get additional long life.

Keywords: Rehabilitation, Innovative, Asphalt Pavement, Strengthening