

عنوان مقاله:

Fiber Reinforced Concrete Pavement & Shrinkage

محل انتشار:

دومین کنفرانس بین المللی و سومین همایش ملی کاربرد فناوری های نوین در علوم مهندسی (سال: 1394)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Cement concrete pavement provides durable service life and remarkable applicability for heavy traffic. Its purchase being easier than asphalt, cement concrete pavement offers excellent advantages in terms of durability and economic efficiency. However, adequate repair of this pavement is harder than asphalt concrete in case of degradation or damage. Cracking in the concrete pavement is the major cause of such disadvantages and the demand of repair on road sites is growing every day. This emphasizes the urgency to secure technologies for the control of early and longterm cracking. Accordingly, this study evaluates the drying and autogenous shrinkage strains regard to fiber reinforcement in order to reduce cracking of the concrete pavement mix so as to control the damage of the pavement by means of fiber reinforcement. The results show that the drying shrinkage strain can be significantly reduced to about 1/4 through the admixing of %0.2 volume ratio of NY fiber compared to the non-reinforced plain concrete, and that the hybrid fiber reinforcement mix H-N4-ST4 can realize remarkable reduction of the autogenous shrinkage

کلمات کلیدی:

Fiber Reinforced Concrete, Macro Fiber, shrinkage, Pavement, Hybrid

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