

عنوان مقاله:

Investigation of aggregate and binder types effects on the microsurfacing rutting properties

محل انتشار:

کنفرانس بین المللی عمران ، معماری و زیرساخت های شهری (سال: ۱۳۹۴)

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خلاصه مقاله:

Microsurfacing is classified as a preventative maintenance treatment as opposed to a corrective maintenance treatment because of the significant ability of microsurfacing to seal and restore pavement surfaces but the inability of microsurfacing to improve structural defects. This study presents a laboratory investigation of aggregate type and adhesive materials and their relationship to microsurfacing pavement rutting resistance. The method of this study relies on ISSA TB ۱۴۷, using the Wheel-Tracking Test. The test results report as rut depth in millimeter. The verification of this method was achieved through measuring the rut depth of specimens constructed in laboratory using two different aggregate sources as river and mountain aggregates and two binders. The results show that the river aggregates are more resistant than mountain aggregates against rutting. Also, the results of resin specimens are more desirable than the bitumen specimens. It found that the resin epoxy can perform as a binder with bearing properties. In addition it found that the microsurfacing rut resistance to be related not only to aggregate type, but also to the type and percent of adhesive materials within an aggregate sample

کلمات کلیدی:

Microsurfacing, Rutting, Wheel-Track Test, Polymer Modified Emulsion, Resin Epoxy

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