عنوان مقاله:

Analysis and Comparison of Performance Characteristics of Asphalt Mixtures Containing Steel Slag and rPET

محل انتشار:

مجله مهندسی عمران و مصالح کاربردی, دوره 6, شماره 2 (سال: 1400)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Asphalt mixtures are composed of two components, namely aggregate and bitumen, so that many structural weaknesses of an asphalt mixture can be resolved by modifying these components. In the past, various research works have been done to improve these weaknesses using a versatile spectrum of different materials. Among others, recycled materials have attracted more attention thanks to their further environmental benefits. On this basis, in the present work, steel slag and recycled polyethylene were used with different compositions at different percent dosages. In order to evaluate the effects of these two materials, we used resilience modulus test, Marshall Resistance test, dry and wet indirect traction tests, and moisture sensitivity test. Results showed that incorporation of both materials in a mixture provides for a better output than the use of either of them alone. Indeed, the blending of these .two materials helps address the weaknesses of either of them

کلمات کلیدی:

steel slag, Recycled polyethylene, Asphalt Mixture, Performance characteristics